No. 11751.

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Friday 1st June. 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

LERWICK

Pressure	Time	M.S.L.	Surf	Freezing
	03h G.M.T.	1023·4 mb	1013·2 mb	678 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	44	39	320	08
1000	06·2	42	38	288	15
950		41	40	287	17
900	34·7	51	-02	285	18
850		47	-07	284	18
800	66·5	41	-10	278	21
750		36	-15	267	19
700	101·8	33	-28	257	18
650		24	-37	247	20
600	141·7	17	-43	245	21
550		10	-13	245	23
500	187	2·00	-13	245	23
450			-13	-25	245	23
400	240·3	-26	-40	250	29
350		-40	-54	259	28
300	304·7	-54		264	30
250		-72		255	31
200	388·2	-88		257	28
170		-78		259	21
150		-71		265	16
130		-69		267	12
110		-67		266	08
100	531·2	-66		273	07
90		-63		300	06
80		-61		250	05
70					
60					

Inversion 958 mb 37° - 900 mb 51°
Isothermal 807 - 792 mb 41°

Tropopause: I 195 mb - 69° 39,400

STORNOWAY

Pressure	Time	M.S.L.	Surf	Freezing
	03h G.M.T.	1024·9 mb	1023·2 mb	730 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	42	41	Calm	
1000	06·6	47	43	"	
950		51	41	"	
900	35·3	49	31	"	
850		44	15	"	
800	67·0	40	11	"	
750		35	-02	159	07
700	102·2	29	-07	163	11
650		26	-10	167	09
600	142·1	20	-15	160	10
550		13	-07	160	13
500	188·0	04	-07	170	12
450		-06	-18	181	13
400	242·0	-17	-32	186	16
350		-32	-48	185	18
300	307·6	-48		176	21
250		+68		174	22
200	392·2	-84		173	23
170		-76		211	07
150		-69		234	04
130		-68		200	09
110		-67		212	05
100	535·6	-66		221	06
90		-65			
80		-64			
70					
60					

Inversion 1023 mb 42° - 976 mb 51°
Isothermal 976 - 927 mb 51°
810 - 800 " 40°
700 - 670 " 29°

Tropopause: II 208 mb - 84° 38,300

LEUCHARS

Pressure	Time	M.S.L.	Surf	Freezing
	03h G.M.T.	1024·6 mb	1023·7 mb	720 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	38	37	Calm	
1000	06·4	52	40	107	03
950		52	06	110	05
900	35·1	47	04	114	06
850		43	-23	114	04
800	66·7	41	-21	119	07
750		36	-17	125	09
700	101·9	30	-22	139	10
650		25	-35	140	14
600	141·8	20	-32	140	15
550		13	-13	143	16
500	187·7	03	-20	139	18
450		-09	-30	147	21
400	241·3	-21	-41	141	24
350		-35	-53	132	22
300	306·2	-51		130	31
250		-69		143	33
200	390·3	-90		145	31
170		-80		139	18
150		-76		168	08
130		-71		143	06
110				For Rest	
100				of Winds	
90					
80				See Page 3.	
70					
60					

Inversion 1024 mb 38° - 997 mb 55°

Tropopause: I 192 mb - 92° 40,000

ALDERGROVE

Pressure	Time	M.S.L.	Surf	Freezing
	03h G.M.T.	1024·1 mb	1019·5 mb	720 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	43	37	100	06
1000	06·5	48	39	105	08
950		45	31	106	09
900	35·0	39	26	099	11
850		36	-20	096	13
800	66·2	36	-20	108	15
750		34	-30	113	17
700	101·4	30	-33	120	18
650		24	-11	133	17
600	141·1	15	-20	132	18
550		09	-14	126	19
500	186·5	-01	-23	120	24
450		-12	-33	116	28
400	239·7	-23	-45	116	33
350		-37	-57	118	39
300	304·3	-54		122	47
250		-70		126	45
200	388·8	-71		126	25
170		-65		136	09
150		-67		140	08
130		-64			
110					
100					
90					
80					
70					
60					

Inversion 1015 mb 43° - 995 mb 50°
873 .. 36° - 850 - 39°
Isothermal 794 - 767 mb 35°

Tropopause: II 227 mb - 76° 36,200

LIVERPOOL

Pressure	Time	M.S.L.	Surf	Freezing
	03h G.M.T.	1022·7 mb	1020·7 mb	738 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	42	35	Calm	
1000	06·1	45	36	090	15
950		46	32	112	17
900	34·6	40	25	128	18
850		42	13	113	17
800	66·0	38	09	099	18
750		33	02	104	21
700	101·1	30	-09	114	22
650		25	-07	118	22
600	140·9	18	-11	120	23
550		09	-18	113	25
500	186·5	-01	-25	111	27
450		-11	-34	114	30
400	239·7	-25	-46	114	35
350		-40	-60	120	40
300	303·9	-56		122	54
250		-73		122	46
200	388·1	-76		127	25
170		-70		130	13
150		-69		142	10
130		-69		152	10
110		-64		161	08
100	532·6	-65		187	07
90		-63			
80	(85	-62			
70	mb)				
60					

Inversion 1021 mb 42° - 1006 mb 46°
971 - 44° - 950 .. 46°
900 .. 40° - 885 - 44°
Isothermal 766 - 750 mb 33°

Tropopause: II 231 mb - 76° 35,900

DOWNHAM MARKET

Pressure	Time	M.S.L.	Surf	Freezing
	03h G.M.T.	1020·7 mb	1016·1 mb	724 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	45	43	040	10
1000	05·5	47	43		
950		51	40	091	21
900	34·2	44	34	090	19
850		38	14	088	18
800	65·8	40	08	086	17
750		35	-04	083	18
700	101·0	30	-09	086	19
650		26	-00	097	23
600	140·9	19	-03	103	25
550		11	-10	101	26
500	186·7	01	-20	102	28
450		+10	-29	106	36
400	240·2	-22	-39	111	42
350		-37	-52	114	43
300	305·0	-52		110	48
250		-72		109	46
200	389·7	-66		113	20
170		-67		132	08
150		-64		137	09
130		-63		153	09
110		-60		203	09
100	536·1	-60		239	07
90		-60		257	12
80		-60		260	09
70					
60					

Inversion 1016 mb 45° - 969 mb 53°
869 - 42° - 850 - 43°

Tropopause: I 232 mb - 76° 35,900

LARKHILL

Pressure	Time	M.S.L.	Surf	Freezing
	03h G.M.T.	1018·0 mb	1001·7 mb	750 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	45	41	030	12
1000	04·8	45	41		
950		52	45	082	25
900	33·5	47	38	104	26
850		46	35	088	17
800	65·2	40	34	083	14
750		32	29	063	12
700	100·3	25	21	072	14
650		24	13	086	18
600	139·9	16	-06	096	18
550		08	-11	111	14
500	185·3	-01	-21	102	17
450		-11	-32	104	21
400	238·6	-25	-45	097	18
350		-38	-58	085	18
300	303·1	-53		087	14
250		-66		109	19
200	388·0	-76		114	15
170		-69		107	14
150		-67		137	09
130		-67		137	08
110		-66		162	07
100	532·6	-66		147	07
90		-66		188	14
80		-65		206	10
70		-64		206	12
60		-69		270	06

Inversion 1001·7 mb 45° - 989 mb 47
967 .. 46° - 945 - 53°
-100 .. 25° - 688 - 28°
Isothermal 890 - 850 mb 46°

Tropopause: I 220 mb - 77° 36,900

CAMBORNE

Pressure	Time	M.S.L.	Surf	Freezing
	03h G.M.T.	1015·9 mb	1005·9 mb	720 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	53	49		
1000	04·5	53	48		
950		52	42		
900	33·4	52	46		
850		46	42		
800	66·2	40	35		
750		36	30		
700	100·6	30	29		
650		21	17		
600	140·2	18	16		
550		11	-03		
500	186·0	09	-09		
450		+06	-17		
400	239·9	-17	-29		
350		-30	-42		
300	305·7	-44			
250		-59			
200	392·2	-66			
170		-59			
150		-58			
130		-56			
110		-59			
100	590·2	-59			
90		-58			
80		-57			
70		-58			
60	(068	-58			
	mb)				

For Winds See Page 3.

Inversion 917 mb 50° - 900 mb 52°
635 .. 18° - 624 .. 20°
Isothermal 1006 - 963 mb 53°

Tropopause: I 213 mb - 70° 38,000

VALENTIA

Pressure	Time	M.S.L.	Surf	Freezing
	03h G.M.T.	1020·6 mb	1019 mb	750 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	43	41	070	02
1000	05·5	45	42	066	02
950		47	39	060	02
900	34·0	40	34	138	06
850		40	21	151	08
800	65·5	38	-05	111	11
750		32	-08	122	11
700	100·5	25	-09	126	11
650		20	-10	138	11
600	139·9	14	-17		
550		07	-14		
500	185·3	-02	-20		
450		-12	-31		
400	238·4	-25	-44		
350		-40	-55		
300	302·6	-55			
250		-73			
200	387·7	-65			
170		-63			
150		-62			
130		-62			
110		-64			
100	534·5	-62			
90		-60			
80					
70					
60					

Inversion 1019 mb 43° - 981 mb 49°
877 .. 37° - 837 .. 42°

Tropopause: I 250 mb - 73° 34,100

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LERWICK

Pressure	Time	M.S.L.	Surf	Freezing
	09h G.M.T.	1023·3 mb	1013·3 mb	720 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	50	44	310	12
1000	06·3	45	41	383	09
950		42	37	328	12
900	34·6	44	29	302	16
850		45	10	287	18
800	66·2	39	10	276	21
750		39	06	274	21
700	101·5	30	-02	275	16
650		25	-10	262	16
600	141·4	18	-14	255	18
550		10	-13	254	21
500	187·0	-01	-11	261	21
450		-11	-19	257	24
400	240·4	-23	-31	257	24
350		-36	-45	250	26
300	305·2	-51		252	29
250		-68		251	38
200	389·6	-82		248	37
170		-70		263	17
150		-66		263	15
130		-63		261	11
110		-61		285	07
100	539·9	-59		306	07
90		-58		261	07
80		-56		267	05
70		-55			
60					

Inversion 912 mb 39° - 892 mb 47°
Isothermal 1003 - 986 mb 45°

Tropopause: II 210 mb - 82° 38,000

STORNOWAY

Pressure	Time	M.S.L.	Surf	Freezing
	09h G.M.T.	1024·1 mb	1022·5 mb	737 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·9	49	45	15	008
1000	06·5	43	37	Calm	
950		54	25	"	
900	35·2	48	22	"	
850		44	21	"	
800	66·9	38	24	139	05
750		33	08	183	09
700	102·0	31	-10	183	08
650		27	-22	177	10
600	142·0	20	-20	174	18
550		14	-15	181	13
500	187·9	04	-13	190	16
450		-04	-21	182	21
400	242·0	-16	-33	178	19
350		-30	-45	177	22
300	307·8	-46		175	28
250		-62		169	34
200	393·4	-81		176	28
170		-74		199	10
150		-66		211	06
130		-61		215	04
110		-61		221	07
100	538·4	-59		226	05
90		-60		213	09
80		-57		260	06
70		-54		230	03
60					

Inversion 990 mb 42° - 962 mb 55°
Isothermal 900 - 879 mb 48°

Tropopause: I 193 mb - 83° 40,000

LEUCHARS

Pressure	Time	M.S.L.	Surf	Freezing
	09h G.M.T.	1023·5 mb	1022·7 mb	715 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	57	44	Calm	
1000	06·4	53	37	093	05
950		51	29	103	06
900	35·1	49	19	108	06
850		45	11	108	06
800	66·8	41	03	099	05
750		36	-01	102	05
700	102·1	30	-06	121	10
650		24	-09	124	14
600	142·0	21	-02	148	16
550		15	-03	156	16
500	188·0	09	-11	154	18
450		-06	-18	193	18
400	241·9	-18	-29	143	21
350		-31	-42	144	28
300	307·5	-47		198	32
250		-63		149	29
200	393·0	-81		152	30
170		-75		159	12
150		-68		165	06
130		-66		186	09
110		-65		220	09
100	536·9	-63		239	06
90		-61		240	06
80		-61		215	06
70					
60					

Isothermal 991 - 950 mb 51°

Tropopause: II 196 mb - 83°

ALDERGROVE

Pressure	Time	M.S.L.	Surf	Freezing
	09h G.M.T.	1023·0 mb	1013·4 mb	740 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	55	39	100	05
1000	06·3	54	38	100	06
950		43	31	101	09
900	34·8	40	21	102	09
850		41	15	117	10
800	66·1	36	08	123	14
750		33	03	125	14
700	101·2	29	-04	124	06
650		24	-09	124	20
600	141·0	17	-09	133	17
550		09	-13	139	22
500	186·6	00	-21	138	23
450		-11	-31	142	26
400	240·0	-23	-42	142	29
350		+39	-56	140	35
300	304·6	-52		138	42
250		-68		143	42
200	389·4	-79		142	27
170		-68		145	14
150		-69		149	09
130		-69		176	10
110		-69		195	06
100	539·4	-62		212	02
90		-61		180	05
80		-61			
70					
60					

Inversion 872 mb 37° - 850 mb 41°
Isothermal 800 - 780 mb 36°

Tropopause: II 215 mb - 77° 37,900

LIVERPOOL

Pressure	Time	M.S.L.	Surf	Freezing
	09h G.M.T.	1022·0 mb	1020·0 mb	711 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	52	40	090	08
1000	06·0	49	38	094	11
950		47	33	103	12
900	34·6	42	30	111	12
850		41	07	109	12
800	66·0	39	04	101	15
750		35	-05	110	19
700	101·2	31	03	121	22
650		25	04	115	20
600	141·1	19	-01	118	19
550		11	-10	122	20
500	186·9	02	-19	123	23
450		-08	-26	120	28
400	240·6	-20	-36	120	31
350		-34	-49	117	39
300	305·9	-50		119	44
250		-67		125	45
200	390·8	-72		112	25
170	(195	-67			
150	mb)				
130					
110					
100					
90					
80					
70					
60					

Inversion 1000 mb 99° - 988 mb 50°
837 .. 40° - 867 .. 43°
Isothermal 823 - 790 mb 39°

Tropopause: I 205 mb - 78° 38,600

DOWNHAM MARKET

Pressure	Time	M.S.L.	Surf	Freezing
	09h G.M.T.	1020·2 mb	1015·7 mb	713 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	57	49	045	13
1000	05·5	53	48	066	18
950		51	40	073	20
900	34·2	44	35	079	23
850		41	22	085	20
800	65·8	38	13	090	17
750		36	06	094	18
700	101·0	31	14	093	20
650		27	05	097	24
600	141·0	21	-01	104	26
550		13	-04	103	25
500	187·0	04	-08	107	27
450		-07	-15	104	34
400	240·9	-17	-25	104	36
350		-32	-41	106	39
300	306·4	-49		108	45
250		-62		118	45
200	392·5	-67		112	24
170		-60		139	15
150		-58		153	09
130					
110					
100					
90					
80					
70					
60					

Inversion 966 mb 49° - 950 mb 51°
Isothermal 872 - 850 mb 41°
785 - 762 .. 37°
670 - 660 .. 28°

Tropopause: I 208 mb - 71° 38,300

LARKHILL

Pressure	Time	M.S.L.	Surf	Freezing
	09h G.M.T.	1017·8 mb	1001·6 mb	738 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	53	47	050	15
1000	04·8	52	46		
950		49	40	055	25
900	33·4	49	35	075	21
850		45	28	077	10
800	65·1	37	21	064	10
750		33	03	085	15
700	100·1	27	-07	098	12
650		22	-14	089	12
600	139·6	13	-05	089	15
550		06	-19	097	29
500	185·5	01	-16	076	14
450		-10	-24	057	09
400	237·6	-29	-50	101	25
350		-42		102	22
300	303·9	-51		080	16
250		-66		120	29
200	389·5	-63		107	14
170		-59		164	09
150		-59		161	06
130		-58		195	06
110	120	-58			
100	mb)				
90					
80					
70					
60					

Inversion 970 mb 46° - 932 mb 52°
Isothermal 585 - 566 mb 09°

Tropopause: II 231 mb - 75° 35,600

CAMBORNE

Pressure	Time	M.S.L.	Surf	Freezing
	09h G.M.T.	1017·9 mb	1007·2 mb	745 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	53	48	080	03
1000	04·8	52	48	091	06
950		49	43	079	09
900	33·5	50	47	069	15
850		45	40	074	18
800	65·3	39	35	084	17
750		33	30	088	16
700	100·5	27	24	088	14
650		20	17	086	12
600	140·0	14	10	085	11
550		08	04	073	12
500	185·5	01	-16	076	14
450		-10	-24	057	09
400	238·9	-22	-37	083	14
350		-35	-52	082	19
300	303·9	-51		080	16
250		-66		120	29
200	389·5	-63		107	14
170		-59		164	09
150		-59		161	06
130		-58		195	06
110	120	-58			
100	mb)				
90					
80					
70					
60					

Inversion 950 mb 46° - 900 mb 50°
Isothermal 525 - 514 mb 03°

Tropopause: I 218 mb - 72° 37,000

VALENTIA

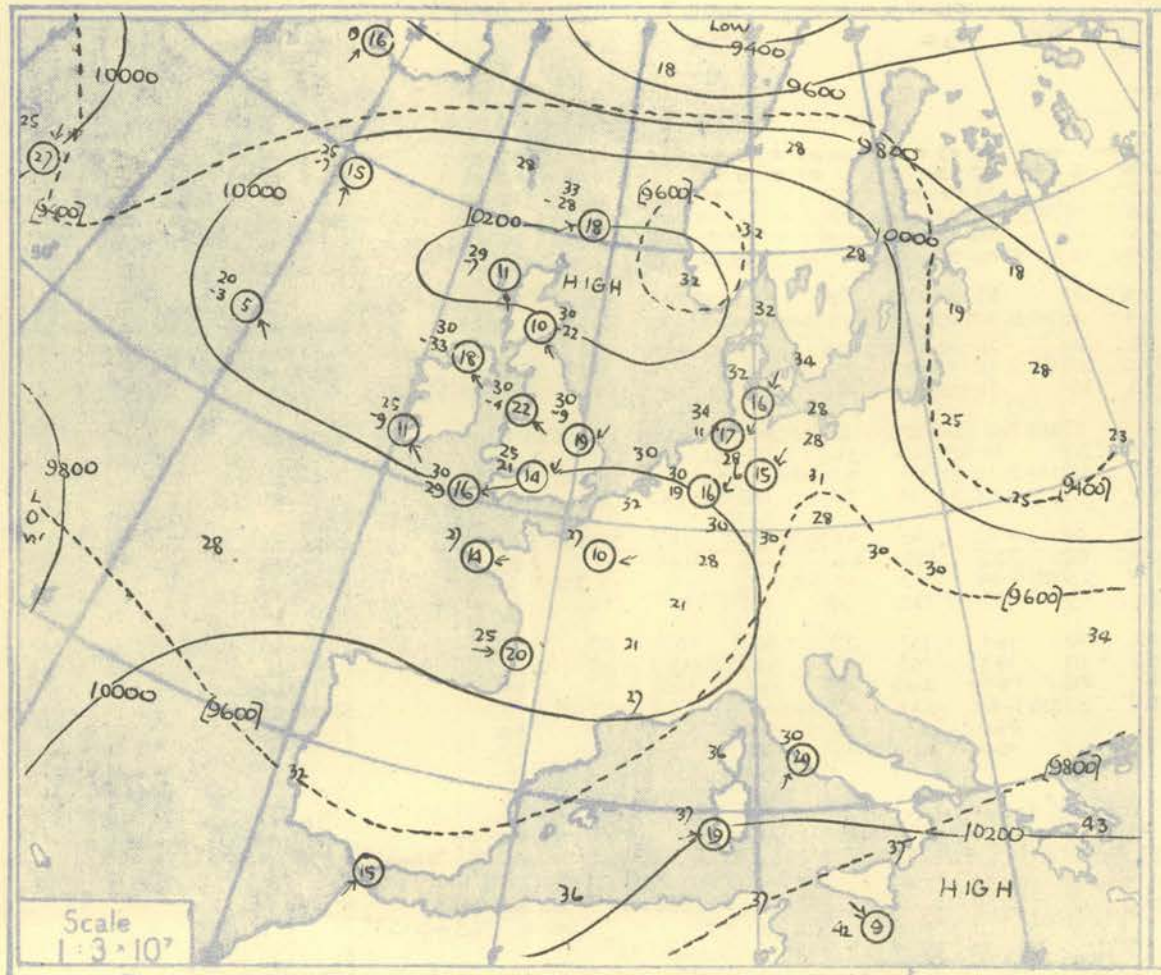
Pressure	Time	M.S.L.	Surf	Freezing
	G.M.T.	mb	mb	mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf					
1000					
950					
900					
850					
800					
750					
700					
650					
600					
550					
500					
450					
400					
350					
300					
250					
200					
170					
150					
130					
110					
100					
90					
80					
70					
60					

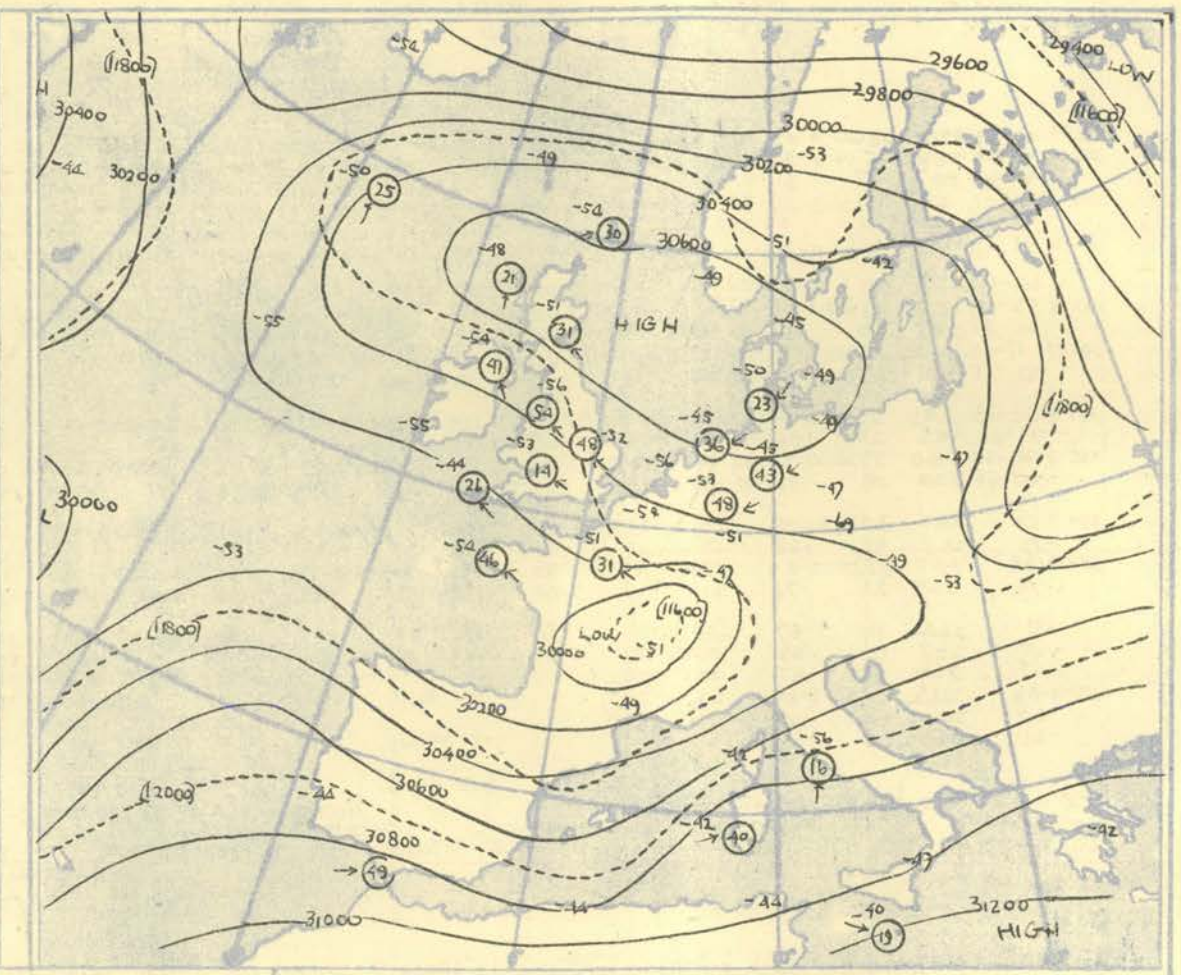
Tropopause:

Friday 1st June. 1951.

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb. and 300 mb., levels at about 03h G.M.T.



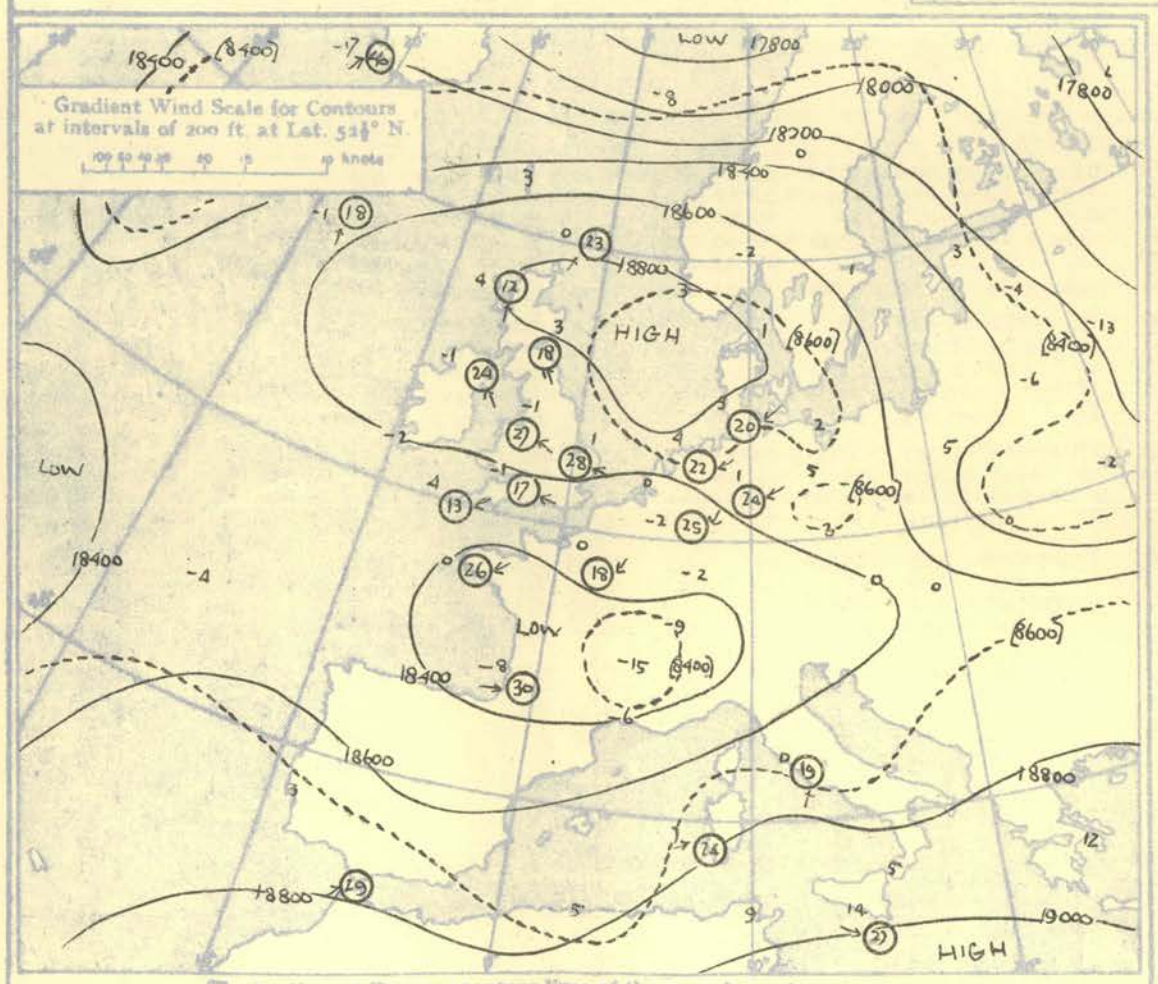
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.



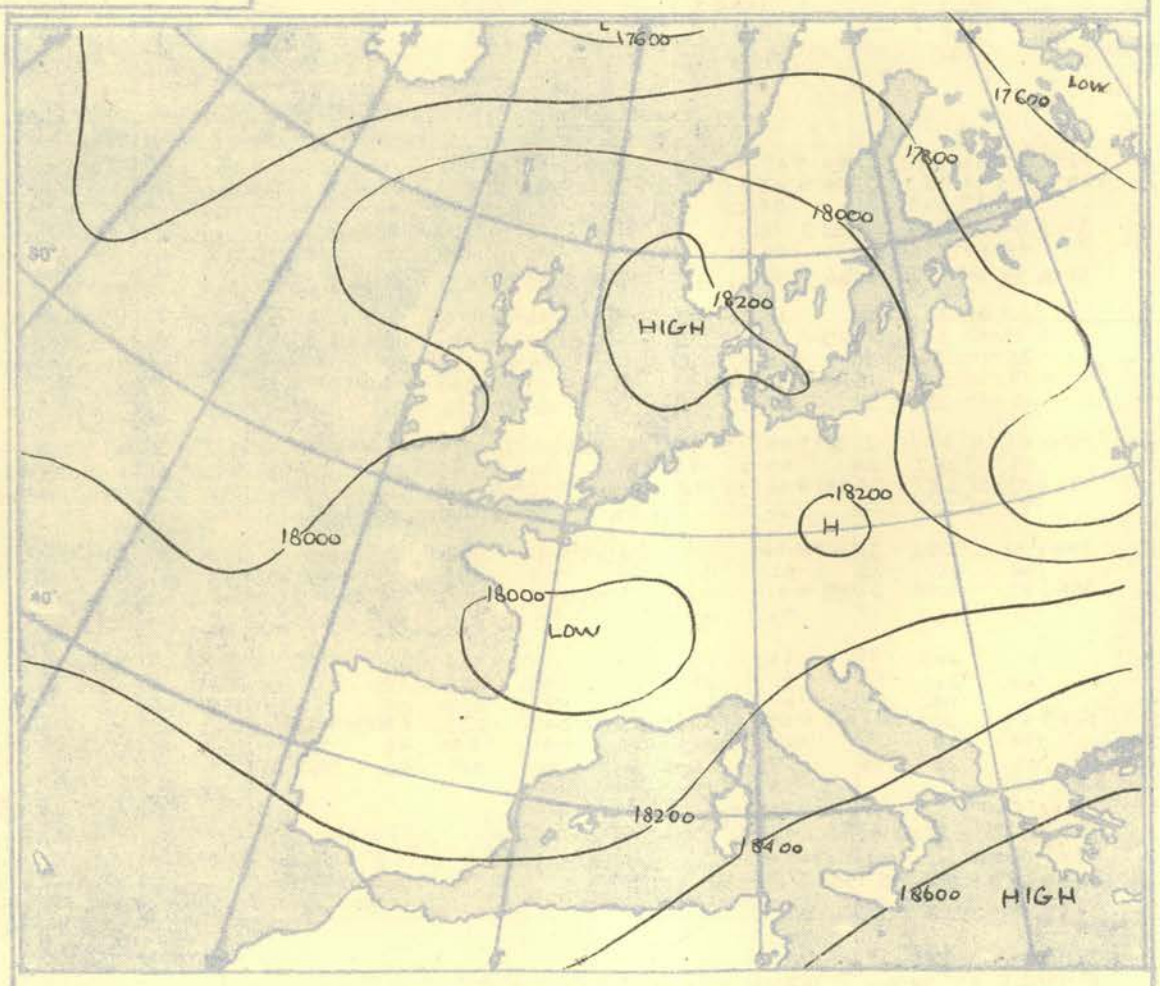
The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

knots



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500 - 1000mb.

Friday 1st June. 1951. Page 3

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	48·1N 17·0W	47·7N 12·3W	52·12N 02·12W										
Time	12h	19h	1452h										Time
M.S.L.	1018 mb	1018 mb	1018 mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	M.S.L.
Surf	1014 mb	1015 mb	1016·5 mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	Surf
Freezing	780	735	718										Freezing

Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Pressure mb
Surf		55	54		53	48	00·4															Surf
1000	049	55	51	05·1	53	51	05·0															1000
950		47	43		48	43																950
900		41	38		45	41	34·1	47	41													900
850		39	25		41	29		40	38													850
800		34	29		38	25	65·6	39	12													800
750		28	25		34	29																750
700	99·7	23	23	100·3	26		100·9	30	22													700
650		18	18		19																	650
600		09	04		14		140·7	17														600
550		01	01		01																	550
500	183·7	-12		184·9	-02		186·3	-01														500
450																						450
400							239·7	-23														400
350																						350
300							304·3	-53														300
250																						250
200																						200
170																						170

Cloud
1/8 Cu. 960-900mb
4/8 As.

Cloud
9/8 St. 950-930mb
4/8 Cs.

Cloud
2 Sc.
8/8 850-820mb

DIRECTION (degrees from N) and VELOCITY (knots) of UPPER WINDS at heights above M.S.L.

Place	Leuchars		Camborne		Camborne		Cirrus		Shoeburyness		Rumlby		Leuchars		Castle Archdale		Cirrus 52·5N 20·0W		Leeming		Place
Time	03h		03h		09h		09h		09h		09h		15h		15h		21h		21h		Time
Type	Pilot		Pilot		Pilot								Pilot								Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Surf.			Calm				090	04	030	14	080	14			180	08*	080	03	350	02	Surf.
1,000			100	15			080	06	050	21	080	22			130	05	070	07	030	05	1,000
2,000			090	15			080	06	060	19	100	20			130	05	060	08	Calm		2,000
3,000			082	16			080	07	070	25	080	09			120	05	060	08	030	07	3,000
4,000			062	14			080	10	070	27	080	15			150	08	060	09	010	12	4,000
5,000			056	14					070	21	080	19			140	05	040	08	070	07	5,000
6,000			054	15					070	19	080	16			190	05	030	06			6,000
8,000			075	16					090	17					200	04			080	11	8,000
10,000			093	16			060	05	090	18					190	06			100	12	10,000
14,000			100	15			120	15	100	19					200	14					14,000
18,000			083	12			100	06	100	28					200	17					18,000
24,000			080	14			090	12	100	34					(20,000')						24,000
30,000			117	26					100	40											30,000
40,000			134	11					120	19											40,000
50,000	209	05	159	07	212	07			210	15			218	06							50,000
60,000	153	06	180	05	194	09			230	04			235	07							60,000
	(58,000')		(53,000')		(57,000')				(55,000')				(64,000')								

NEPHOSCOPE OBSERVATIONS

Place	St. Eval		Honiley		Aldergrove								Place
Time Type	09h	A:	12h	Ci	15h	Ci							Time Type
Dir. Vel.	090	25	110	35	150	90							Dir. Vel.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	CIRRUS			CIRRUS			CIRRUS			CIRRUS			WEATHER OBSERVER				WEATHER OBSERVER				WEATHER OBSERVER							Ship
Lat/Long	52·5N 20·0W			52·5N 20·0W.			52·5N 20·0W			52·5N 20·0W			58·9N 19·3W				59·0N 19·2W				59·0N 19·1W				59·0N 19·1W							Lat/Long
Time	03h	G.M.T.		09h	G.M.T.		14h	G.M.T.		21h.	G.M.T.		03h.	G.M.T.			09h.	G.M.T.			15h	G.M.T.			21h.	G.M.T.			G.M.T.			Time
M.S.L.	1021	mb			mb		1019	mb			mb		1022	mb			1022	mb			1022	mb			1021	mb			mb			M.S.L.
Surf	1021	mb			mb		1019	mb			mb		1022	mb			1022	mb			1022	mb			1021	mb			mb			Surf
Freezing	715	mb			mb		815	mb			mb		755	mb			710 & 820	mb			830 & 725	mb			820	mb			mb			Freezing

Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf		55	51	060	04							55	49	090	02																					Surf
1000	05·8	54	45	110	07						05·2	52	46	089	06																					1000
950		52	32	122	07							46	36	089	08																					950
900	34·6	45	27	120	07						33·8	42	29	073	08																					900
850		37	23	112	06							36	21	055	08																					850
800	65·9	29	18	105	06						65·1	30	13	012	13																					800
750		21	12	090	05	No Radio Sonde Ascent Available						23	04	007	11	No Radio Sonde Ascent Available																					750
700	100·4	20	-03	114	05						99·6	19	00	033	08																					700
650		18	-15	100	08							18	-13																							650
600	189·8	14	-23	097	14						138·8	11	-18																							600
550		05	-26	114	13	See Page 3 for Winds.						04	-23			See Page 3 for Winds																					550
500	185·0	-04	-29								184·0	-04	-27																							500
450		-15	-33									-14	-30																							450
400	237·9	-26	-39								237·1	-24	-36																							400
350		-39										-40	-53																							350
300	302·2	-55									301·7	-52																								300
250		-72										-63																								250
200	386·7	-71									387·9	-60																								200
170		-66										-59																								170
150		-66										-58																								150
130		-68										-58																								130
110		-69										-58																								110
100	531·5	-68									536·2	-57																								100
90		-68										-57																								90
80		-67										-56																								80
70		-66										-56																								70
60		-65										-56																								60
	(50mb)	-64										-52																								
												-49																								
												-45																								

Inversion
721 mb 16° - 690 mb 21°
Isothermal
952 - 950 mb 52°
603 - 600 mb 14°

Inversion
957 mb 55° - 950 mb 46°

Inversion
850 mb 32° - 830 mb 35°
Isothermal
830 - 779 mb 35°

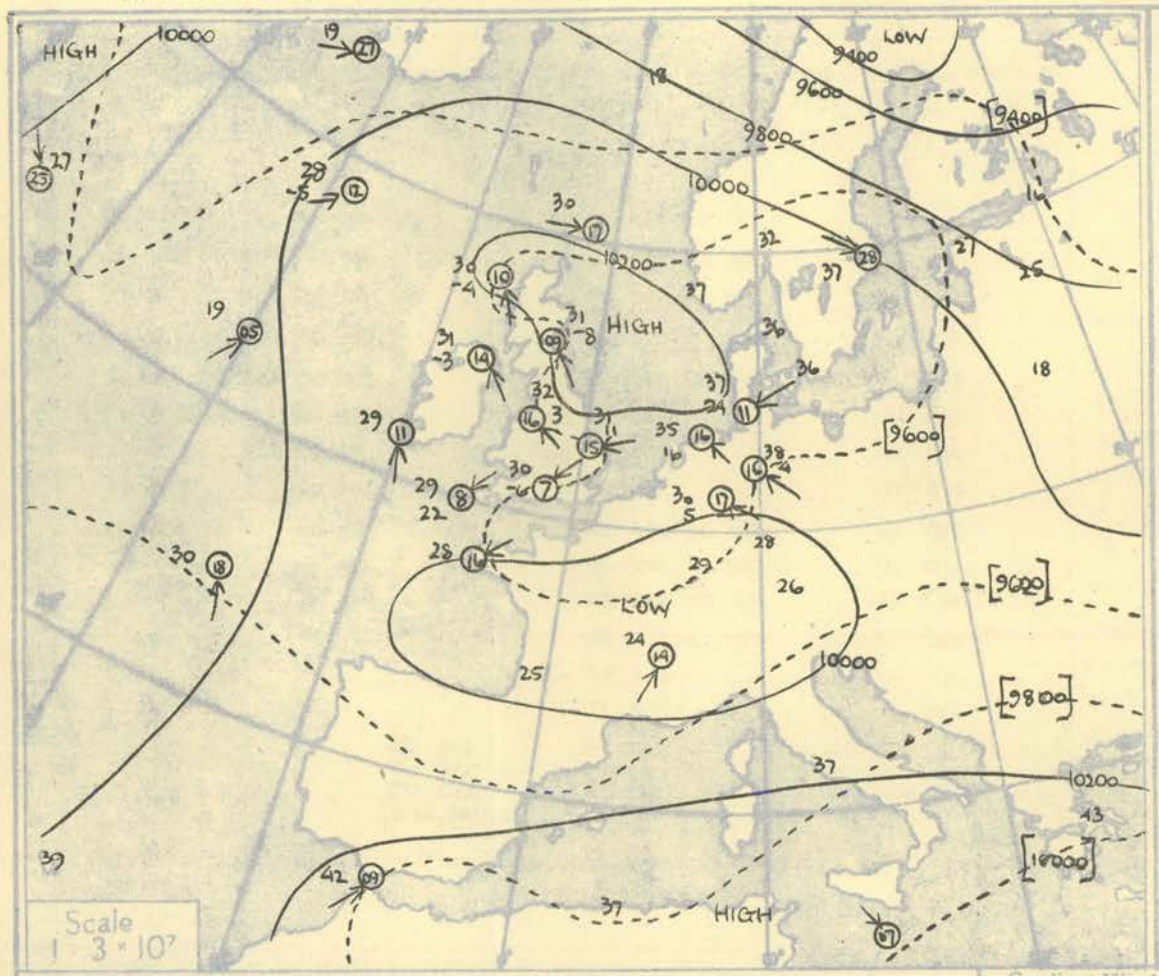
Inversion
816 mb 31° - 781 mb 36°
Isothermal
629 - 616 mb 22°

Inversion
789 mb 28° - 772 mb 33°
758 " 32° - 750 " 38°

Inversion
778 mb 26° - 758 mb 30°
Isothermal
973 - 950 mb -46°

Tropopause	I 241 mb -76° 34,800'		II 270 mb -62° 32,500'		I 216 mb -79° 37,300'		II 240 mb -64° 35,500'		NR. 236 mb -73° 35,100'		I 237 mb -74° 35,200'		Tropopause

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (In knots) OF WINDS at the 700 mb., and 300 mb., levels at about 15h G.M.T.



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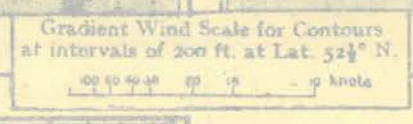
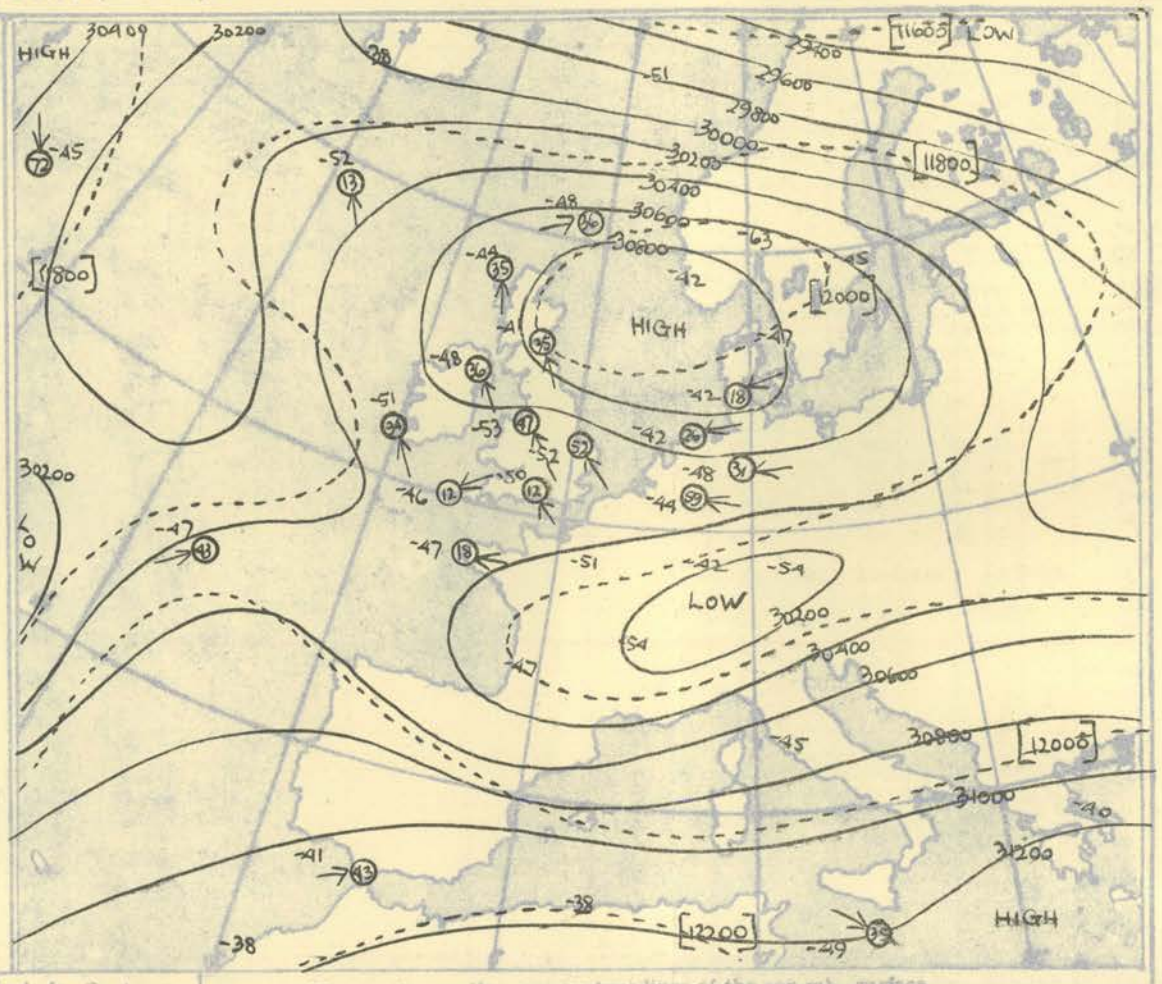
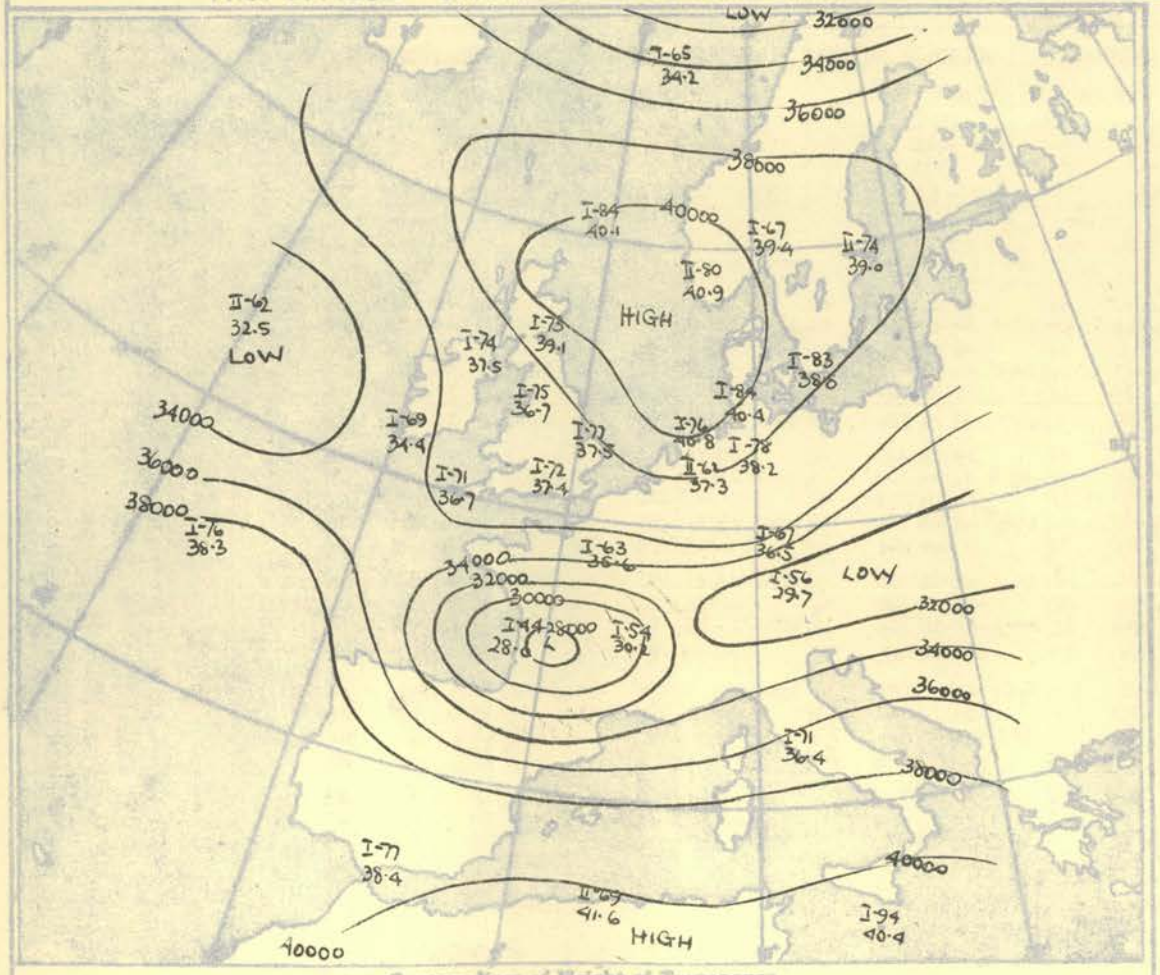
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.





The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

TROPOPAUSE CHART at about 15h G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Little change in the situation apart from continuation of steady warming over much of Europe

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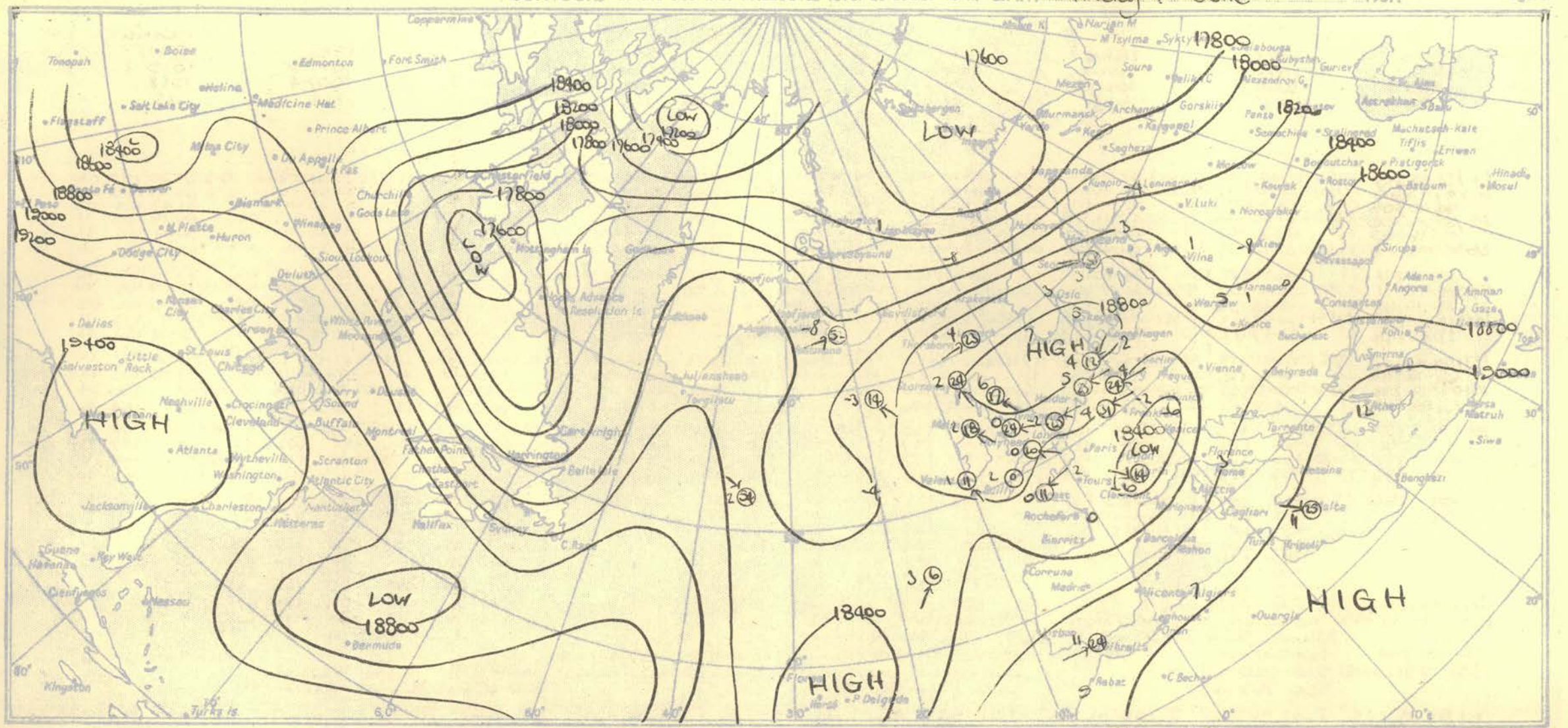
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Friday 1st June 1951.


17800
17600
18000
18400
18200
18600
18800
19000
19200
LOW
HIGH
LOW
18800
HIGH
18400
LOW
HIGH
LOW
18800
HIGH
18400
HIGH
Tonopah
Boise
Edmonton
Fort Smith
Coppermine
Salt Lake City
Medicine Hat
Flagstaff
Miles City
Prince Albert
Du Appelle
Las Vegas
Santa Fe
Denver
Bismarck
Winnipeg
Huron
Dodge City
Omaha
Kansas City
Dallas
Galveston
Little Rock
St. Louis
Chicago
Nashville
Cincinnati
Cleveland
Buffalo
Atlanta
Wytheville
Washington
Scranton
Atlantic City
Jacksonville
Charleston
Hatteras
Montreal
Halifax
Sydney
Bermuda
Kingston
Turks Is.
Cienfuegos
Guane
Havana
Key West
Nassau
Churchill
Gods Lake
Chesterfield
Nottingham Is.
Resolution Is.
Julianshaab
Godthaab
Stornoway
Thorshavn
Reykjavik
Murmansk
Archangel
Soura
Marjan M
M Tsyima
Sykt'yvkar
Jelabouga
Kubyshev
Gurjev
Alexandrov G.
Gorskii
Panza
Semachiki
Stalingrad
Saratov
Astrakhan
Baku
Mechetsch-Kale
Tiflis
Erivan
Batoum
Hinadi
Mosul
Aleppo
Adana
Angora
Ankara
Gaza
Konia
Smyrna
Constantza
Warsaw
Kaunas
Riga
Tallinn
Leningrad
Moscow
Kazan
Kuibyshev
Saratov
Rostov
Kursk
Kharkov
Kiev
Minsk
Vilna
Tarnopol
Kosice
Oslo
Skagen
Copenhagen
Berlin
Hamburg
Vienna
Belgrade
Munich
Frankfurt
Prague
Athens
Messina
Florence
Rome
Naples
Tripoli
Malta
Benghazi
Tobruk
Siwa
Matruh
Alexandria
Haifa
Beirut
Damascus
Baghdad
Mosul
Tehran
Abadan
Basra
Kuwait
Bahrein
Dhahran
Riyadh
Jeddah
Aden
Asmara
Khartoum
Port Sudan
Wadi Halfa
Kufra
Sollum
Tobruk
Benghazi
Tripoli
Malta
Algiers
Oran
Tangier
Rabat
Casablanca
Gibraltar
Lisbon
Madrid
Barcelona
Valencia
Alicante
Malaga
Cadiz
Seville
Gibraltar
Corunna
Biarritz
Bordeaux
Rochefort
Brest
Cherbourg
Paris
Tours
Lyons
Marseilles
Nice
Corsica
Sardinia
Sicily
Ajaccio
Bizerta
Tunis
Sfax
Gabes
Tripoli

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Friday 15 June 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15 hrs G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	Valentia
Pressure: Time	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.
Pressure: M.S.L.	1023·5 mb	1022·5 mb	1022·4 mb	1024·3 mb	1019·5 mb	1015·8 mb	1016·1 mb	1017·5 mb	1019·7 mb
Pressure: Surf	1013·4 mb	1020·9 mb	1021·6 mb	1011·7 mb	1017·5 mb	1014·4 mb	1000·6 mb	1007·4 mb	1018 mb
Pressure: Freezing	720 mb	712 mb	683 mb	708 mb	700 mb	715 mb	725 mb	723 mb	725 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Valentia Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	51	45	315	12	00·4	55	46	030	15	0·2	58	50	110	09	02·6	64	41	100	04	0·6	66	45	075	08	01·2	68	45	045	13	04	67	47	060	12	02·9	55	48	calm		0·3	58	50	250	06	Surf
1000	6·34	53	50	310	07	061	56	41	027	05	06·1	56	40	128	09	05·9	61	40			05·4	62	36	088	15	05·2	60	44	052	23	04·5	66	45			05·1	58	47	calm		5·3	56	48	265	05	1000
950	44	40	306	07		56	5003		06	53	40	126	09	51	35	110	06	55	34	101	11	51	40	066	18	58	38	059	16	52	45	067	12		51	43	184	02	950
900	34·7	35	36	300	12	382	51	30	144	07	350	49	21	115	07	34·7	46	14	128	07	34·4	48	35	123	09	34·1	45	32	060	17	337	49	32	058	13	33·9	46	41	085	08	-	40	19	180	11	900
850		45	16	295	17		45	30	145	08		46	05	110	09		44	13	130	07		40	28	117	09		39	18	059	17		42	23	054	11		46	39	096	12		55	21	173	12	850
800	66	24	00	286	17	670	39	25	154	05	66·8	42	-13	110	06	66·3	38	-14	144	06	66·0	40	03	089	14	65·5	36	-1	077	13	65	43	39	100	08	65·7	41	34	111	10	65·7	29	9	166	11	800
750		36	-1	278	18		86	14	188	09		38	-10	118	07		38	-2	148	09		36	10	112	13		35	08	067	14		35	-1	045	07		35	25	048	05		23	13	164	10	750
700	101·5	30	-10	271	11	1023	30	4	137	10	102·1	31	-8	143	05	101·7	31	-5	147	14	101·3	32	03	122	16	100·7	31	11	097	13	100	36	-6	038	07	101·0	29	22	047	08	101·0	18	04	163	08	700
650		25	-16	263	18		24	-15	196	11		49	05	157	13		26	-36	150	13		26	-2	104	08		25	11	093	20		25	-11	063	08		24	14	046	08		08	-5	152	09	650
600	141·3	18	-20	255	17	142·1	20	-28	182	18	142·2	22	05	153	14	141·6	19	-26	151	13	141·2	15	-6	108	15	140·6	18	06	097	21	140·4	19	-4	067	10	140·5	17	06	096	04	140·7	01	-13	153	11	600
550		12	-16	244	21		12	-17	182	19		14	06	155	17		12	-40	148	18		10	-13	112	20		09	00	100	21		10	-18	104	16		10	-5	103	05		-5	-24	155	13	550
500	187	10	-13	243	23	187	30	-20	184	24	188	30	-2	157	17	187	40	-24	144	18	186	50	-17	113	29	186	42	-14	104	25	186	00	-26	106	20	186	50	-49	L.V		186	-13	-36	157	22	500
450		-6	-24	244	30		-4	-16	185	25		-5	-31	153	18		-8	-31	148	21		-11	-28	124	24		-12	-31	109	30		-10	-35	101	21		-8	-26	072	05		-31	-45	153	28	450
400	241	0	-18	-36	241	15	241	9	-19	-35	185	27	242	-4	-22	155	16	241	-1	-20	-35	150	25	240	-1	-24	-40	122	31	235	-3	-22	-42	115	42	235	-4	-22	-45	103	24	240	3	-19	-31	064	06	235	-8	-51	156	24	400
350		-32	-45	238	32		-34	-52	183	20		-26	-35	166	24		-33	-45	146	30		-36	-39	125	38		-31	-07	116	51		-35	-58	110	18		-33	-51	065	03		-09		164	36	350
300	306	4	-48	235	34	307	1	-49	185	35	306	3	-41	165	35	306	4	-48	140	36	304	6	-33	125	47	304	1	-32	115	52	304	3	-50	117	12	305	7	-46	078	12	304	5	-42	170	41	300
250		-65		241	36		-62		174	44		-58		161	37		-66		147	31		-69		129	37		-68		118	45		-64		113	10		-62		103	12		-60		187	13	250
200	291	5	-81		237	26	292	1	-65		132	25	295	6	-72		167	25	295	8	-75		157	25	291	7	-71		147	15	288	5	-71		126	18	285	5	-65		112	10	291	5	-66		177	10	289	9	-53		160	11	200
170		-70		233	19		-62		214	14		-55		191	14		-63		165	14		-65		166	10		-67		145	09		-61		125	05		-61		191	04		-55		202	10	170
150		-64		266	17		-54		207	13	see p3 for remainder of winds.						-62		186	09		-63		173	08		-63		118	12		-60		153	05		-60		228	04		-57		187	13	150
130		-62					-52		235	12							-61		196	08		-63		184	08							-59		183	03		-60		228	07		-56				130
110							-50		203	10							-58		194	08		-60		243	05							-57		157	03		-59		195	06		-55				110
100						541	4	60	326	03						536	6	-55	194	09	536	0	-55	188	04						537	1	-57	172	05	539	5	-55	145	06	535	9	-53			100
90							-58		271	03							-55		204	05		-58		196	08							-55		207	10		-58		196	06		-51				90
80							-59		226	06							-55		213	07		-56		248	10							-53		229	09		-58		212	06						80
70							-06		233	07							-55		234	08		-54		261	10							-51		241	06		-58		203	08						70
60		Inversion 890 m 38°-864 m 45° Isothermal 864-850 m 45°					-55		313	05		Inversion 1021 m 55°-985 m 57° Isothermal 985-960 m 57° 800-765 m 39°					-55		213	08		Inversion 695 m 31-685 m 32°					-53		L.V			Inversion 910 m 45°-900 m 46° 880 m 38°-772 m 41° Isothermal 900-881 m 46°					-55					Inversion 843 m 39°-818 m 41° 755 m 34°-727 m 38°						Inversion 855 m 39°-857 m 40° 750 m 35°-772 m 37°						Isothermal 709-696 m 30°						Isothermal 900-840 m 46°						Inversion 832 m 38°-810 m 41°					60
Tropopause	I 191 m/s -84° 40100'					I 208 m/s -80° 38300'					I 204 m/s -75° 38100'					I 217 m/s -74° 37500'					I 223 m/s -75° 36800'					I 215 m/s -77° 37500'					I 216 m/s -72° 37400'					I 223 m/s -71° 36100'					I 230 m/s -69° 34400'					Tropopause

21 hrs G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE
Pressure: Time	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.
Pressure: M.S.L.	1022·4 mb	1020·9 mb	1021·0 mb	1019·1 mb	1018·4 mb	1018·2 mb	1016·1 mb	1017·7 mb
Pressure: Surf	1012·3 mb	1019·3 mb	1020·2 mb	1010·1 mb	1016·4 mb	1013·7 mb	1000·4 mb	1001·0 mb
Pressure: Freezing	738 mb	754 mb	725 mb	712 mb	718 mb	718 mb	708 mb	758 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·1	48	41	085	05	00·4	49	46	010	08	0·2	45	43	100	06	02·6	54	36	calm		0·6	58	40	100	06	01·2	54	43	015	10	04	56	48	030	09	02·5	51	49	calm							Surf
1000	06·0	47	41	050	11	05·7	47	39	025	12	05·7	49	38	035	06	05·3	54	35	140	04	05·1	58	35	104	21	04·9	48	44	040	15	04	56	48			05·0	52	48	L.V							1000
950	43	43	060	08		53	32	044	07	51	26	032	08		54	43	146	03		54	33	103	16		50	35	060	15		55	43	055	15		54	40	050	04							950
900	34·3	38	38	310	07	34·6	48	35	108	05	34·3	47	17	035	08	34·2	50	16	102	06	33·3	47	21	106	07	33·5	45	34	068	11	33·4	49	37	065	12	33·5	50	42	080	04							900
850		36	13	256	06		42	33	152	06		44	05	032	06		44	05	103	07		41	13	069	07		41	20	065	10		41	33	066	10		44	38	054	03							850
800	65·6	35	-26	293	08	66·2	37	20	179	09	65·9	34	-2	053	06	65·8	33	-5	122	08	65·4	37	16	081	08	65·0	38	08	075	12	65·0	38	18	040	09	63·1	38	31	008	06							800
750		34	-30	282	18		32	04	171	12		35	-5	055	03		36	-10	130	09		35	-12	093	11		34	09	067	11		35	05	025	07		31	46	006	07							750
700	100·7	28	-24	274	18	101·2	26	-1	184	13	101·1	25	-7	129	08	101·1	31	-19	133	10	100·6	30	-4	030	11	100·1	30	01	054	12	100·2	31	00	063	04	100·8	26	10	022	07							700
650		23	-38	266	19		20	06	202	10		24	08	142	13		25	05	144	13		25	-6	108	14		24	10	102	15		27	-1	070	07		22	05	069	03							650
600	140	4	-18	-42	264	24	140	6	-14	-6	207	13	140	9	17	12	160	15	140	5	-18	-6	151	15	140	4	18	05	057	18	139	7	-17	05	057	18	140	2	-26	-4	070	07	140	5	14	02	015	03	600
550		11	-47	250	26		08	-3	138	18		05	04	171	16		03	-10	160	17		03	00	121	16		03	-1	103	18		15	-9	052	11		08	-14	008	03							550
500	186	2	-31	246	26	186	1	-24	197	21	186	4	00	-5	178	15	186	5	00	-15	151	18	185	9	00	-14	121	18	185	4	01	-15	116	18	186	1	04	-17	055	14	185	3	-1	-23	321	03	500
450		-5	-35	247	27		-13	-27	196	24		-11	-48	174	20		-5	-21	143	20		-11	-33	155	19		-10	-28	118	25		-7	-27	108	14		-12	-35	273	03							450
400	239	8	-22	-35	244	27	239	3	-24	-34	192	31	239	8	-23	-32	178	21	240	1	-19	-28	148	22	239	3	-23	-44	131	26	238	8	-22	-40	118	36	239	5	-18	-37	116	12	239	1	-24	-46	294	03	400
350		-35	-52	242	52		-38	-45	153	33		-36	-46	174	15		-31	-40	150	17		-37	-57	155	36		-37	-53	122	46		-30	-48	133	08		-38	-59	255	01							350
300	304	8	-49	258	35	303	9	-54	203	31	304	6	-51	172	29	305	7	-46	149	20	304	0	-53	135	35	303	5	-53	124	45	305	8	-43	208	03	303	7	-52	224	09							300
250		-61		234	41		-72		195	45		-61		173	44		-61		158	27		-68		155	31		-70		126	46		-57		195	04		-67		203	07							250
200	389	4	-84	236	37	351	8	-80	197	27	388	4	-84	177	32	351	8	-72	150	12	388	5	-71	160	12	387	9	-76	136	15	350	0	-63	038	04	388	9	-63	172	06							200
170		-71		250	18		-70		224	16		-73		183	10		-67		178	14		-67		162	08		-69		127	06		-62		139	05		-66		214	05							170
150		-67		259	16		-70		216	11		-69		203	12		-63		188	11		-65		175	06		-67		158	03		-58		180	04		-65		182	05							150
130		-65		265	13		-70		221	12		-69		240	04		-63		199	07		-65		219	05		-67		228	05		-59		160	04		-64		227	10							150
110		-61		273	06		-65					-67		222	04		-63		229	06		-61		212	07		-65		239	05		-57					-65		251	05							110
100	534	4	-61	298	08						532	8	-67			537	8	-63	176	03	534	9	-61			532	7	-65	234	07	(113)				534	6	-64	223	06							100
90		-61		304	07													-62	184	05								-64	257	08						-63											90
80	(85)	-63																-60	236	11																(88)	-63										80
70																		-61	245	11																										70
60		Inversion 875 m 37°-863 m 38° 850 m 36°-800 m 39° Isothermal 645-628 m 22°					Inversion 1000 m 47°-970 m 55°					Inversion 1006 m 48°-952 m 51°					Inversion 1000 m 54°-975 m 56° Isothermal 1010-1000 m 54° 815-780 m 39°					Isothermal 1016-1000 m 58° 775-750 m 35°					Inversion 982 m 46°-970 m 50° Isothermal 970-950 m 50°					Inversion 1000 m 56°-993 m 57° Isothermal 875-785 m 38°					Inversion 1007 m 51°-975 m 56° 713 m 25°-651 m 27°					60
Tropopause	I 197 m/s -85° 39200'										I 200 m/s -86° 38500'					II 213 m/s -70° 37600'					I 217 m/s -75° 37400'					I 210 m/s -80° 37800'					I 211 m/s -65° 38200'					II 216 m/s -75° 37400'										Tropopause

No. 11752. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Saturday 2nd June 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

03h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	02h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.
Pressure: M.S.L.	1021·4 mb	1018·2 mb	1019·6 mb	1018·5 mb	1017·7 mb	1017·3 mb	1016·9 mb	1016·7 mb	1017 mb
Pressure: Surf	1011·2 mb	1016·6 mb	1018·7 mb	1009·0 mb	1015·7 mb	1012·7 mb	1000·6 mb	1006·1 mb	1015 mb
Pressure: Freezing	761 mb	793 mb	723 mb	745 mb	722 mb	710 mb	730 mb	768 mb	

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	44	41	100	04		46	45			00·2	40	40			02·6	42	35	120	04	00·6	46	41	Calm		01·2	41	40	340	06	04·4	44	43	060	05	02·9	48	47	00	000	00·3	47	45	Calm		Surf
1000	05·7	42	38	082	06	04·8	49	46			05·3	43	43			05·0	45	39	140	09	04·8	48	39	125	07	04·6	43	42	035	06	04·5	49	43			04·5	52	51	Calm		04·6	51	45	134	01	1000
950		38	35	041	04		54	43				44	37				48	36	157	07		49	29	124	07		99	27	036	06		51	33	054	12		56	37	"			52	44	132	02	950
900	33·8	34	31	357	05	33·7	47	32			33·6	45	25			33·6	45	32	168	08	33·4	44	29	059	06	33·1	45	30	043	06	33·2	46	31	026	10	33·4	49	90	"		33·4	47	39	144	07	900
850		39	26	327	06		40	29				42	22				40	25	164	10		40	19	054	09		41	09	046	06		39	30	005	10		42	36	337	03		42	35	165	10	850
800	65·2	37	12	298	08	65·2	33	29			65·1	38	03			65·2	37	18	169	08	64·8	38	09	083	09	64·5	38	04	061	06	64·7	36	18	018	07	65·1	36	30	332	06	65·1	38	34	180	10	800
750		30	02	283	10		28	09				34	20	For Winds			33	07	154	09		35	01	101	08		34	06	072	10							31	18	332	09		33	29			750
700	100·1	25	08	265	14	100·0	29	17			100·3	30	12			100·2	27	06	152	10	100·0	29	11	108	07	99·7	31	07	078	12	99·8	30	02	045	06	100·1	28	01	324	08	100·2	28	24			700
650		21	18	254	18		19	01				24	16	See			23	06	158	10		23	06	127	09		25	07	104	09		23	01	045	05		20	00	291	05		20	16			650
600	139·6	15	15	250	25	139·4	13	09			140·1	15	13			139·8	16	02	158	12	139·7	16	05	130	10	139·6	18	00	102	07	139·5	16	07	074	05	139·5	12	07	275	03	139·7	12	07			600
550		06	15	247	28		05	12				08	04	Page 3.			08	06	156	12		07	05	135	10		10	11	114	17		08	14	087	06		06	16	234	06		05	04			550
500	184·9	02	19	295	34	184·6	04	20			185·6	01	06			185·3	01	11	157	15	186·1	02	16	154	10	185·3	03	21	113	29	184·9	00	22	107	07	184·8	02	23	276	06	184·9	02	10			500
450		12	24	292	36		14	24				10	24				12	18	156	15		12	28	150	18		09	32	119	29		11	34	109	09		13	34	277	14		13	25			450
400	238·1	24	33	290	34	237·5	27	35			239·1	19	32			238·5	24	30	169	21	238·2	25	31	147	22	238·9	23	44	123	27	238·3	23	47	103	07	237·8	26	47	265	11	238·0	25	38			400
350		38	48	236	40		42					34	46				37	43	165	16		39	54	152	38		37	55	123	30		36	59	121	08		40	60	256	12		37	51			350
300	302·6	64		233	47	301·5	67				304·2	52				303·3	50		164	15	302·6	54		153	42	303·6	63		127	30	302·3	48		137	04	302·0	54		212	11	302·6	52				300
250		70		231	54		73					64					64		170	16		68		166	27		68		130	33		65		193	05		69		201	15		44				250
200	386·8	81		232	43	386	77				388·6	78				389·2	69		182	18	387·5	72		185	14	388·1	79		129	18	388·8	75		101	06	386·8	72		236	12	388·7	63				200
170		68		255	16		66					67					67		197	14		66		199	08		68		128	07		68		229	02		67		252	12		61				170
150		65		262	17		66					65					65		206	16		66		212	09		66		191	09		66		255	05		66		232	09		60				150
130		64		271	13		65					63					62		224	12		64		239	09		66		247	05		64		223	08		66		265	09		61				130
110		63		300	09		65					63					63		229	09		63		253	05		65		252	05		65		259	07		67					61				110
100	532·1	62		277	06	530·4	65				534·2	63				535·3	63		220	05	533·3	61		227	04	533·3	63		252	07	533·9	64		281	04						536·0	61				100
90		62		292	05		69					62					62		208	05		61		233	09		62		257	06		62		225	08							61				90
80		60		310	05		64														(84 mb)	60					62		269	06		61		222	13							58				80
70		59		293	02		61																								61													70
60	(63 mb)	55																																												60
	Inversion 900 mb 34°-872mb 40 Isothermal 960-927 mb 38°					Inversion 1017 mb 46°-966mb 55					Inversion 1019 mb 40°-990mb 45 950 " 44°-915 " 46°					Inversion 1009 mb 42°-990mb 50 Isothermal 990-972 mb 50°					Inversion 1016 mb 46°-980mb 62 Isothermal 863-843 mb 40°					Inversion 1013 mb 41°-959mb 50					Inversion 1001 mb 44°-960mb 62 883 mb 39°- 780 " 369 000 " 52°- 850-55° 754 " 30°- 742 - 31° Isothermal 592 - 576 mb 10°					Inversion 1006 mb 48°-1000mb 62					Inversion 1016 mb 47°-981mb 55°				
Tropopause	II 210mb-81° 37,600'	II 224 mb-81° 36,300'	I 198mb-79° 39,100'	I 220 mb-70° 36,900'	I 214mb-76° 37,300'	I 202mb-80° 38,700'	I 203 mb -76° 38,600'	I 232 mb-75° 35,700'	II 269mb-63° 32,700'	Tropopause

09h G.M.T.

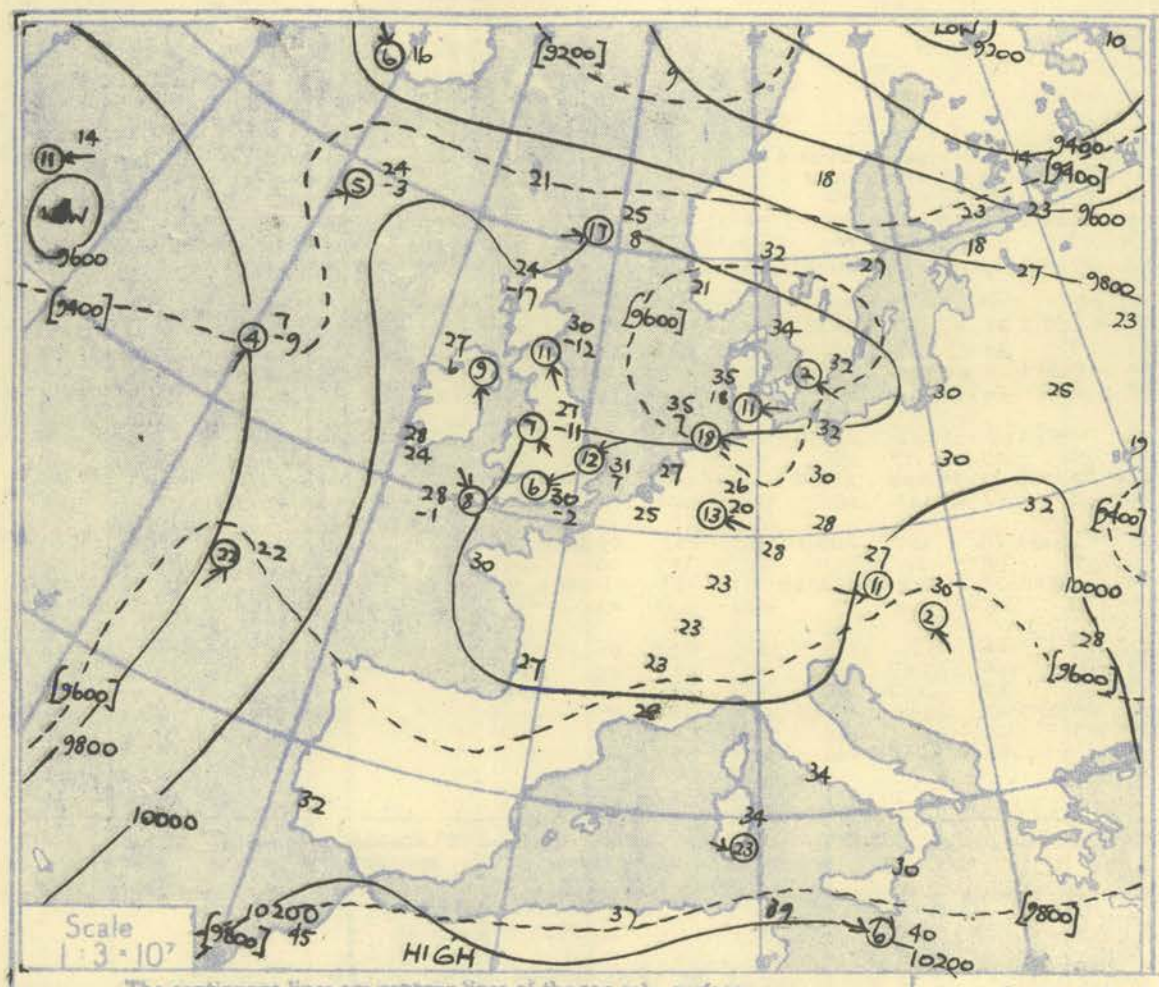
Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	G.M.T.
Pressure: M.S.L.	1020·1 mb	1016·5 mb	1018·4 mb	1016·5 mb	1016·5 mb	1016·5 mb	1016·3 mb	1015·7 mb	mb
Pressure: Surf	1009·9 mb	1019·9 mb	1017·6 mb	1007·1 mb	1014·5 mb	1012·0 mb	1002·2 mb	1005·3 mb	mb
Pressure: Freezing	750 mb	768 mb	718 mb	746 mb	727 mb	712 mb	723 mb	737, 760 mb	mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	45	39	100	03		46	45	Calm		00·2	54	48	110	08	02·6	53	39	Calm		00·6	55	43	160	03	01·2	52	43	390	07	04·4	51	46	030	07	02·9	61	51	Calm							Surf
1000	05·3	43	38	097	09	04·9	45	40	"		04·9	50	46	124	04	04·6					04·5	62	39	140	09	04·5	50	42			04·9	51	46			04·4	61	51								1000
950		36	36	094	08		51	33	"			45	41	128	05		51	30	160	06		48	31	027	09		44	43	170	07		51	39	018	09		56	42	213	04							950
900	33·4	38	22	081	06	33·1	48	35	224	06	33·4	45	37	127	06	33·4	46	31	161	06	33·1	44	30	036	10	33·1	46	34	Calm		33·1	44	33	017	08	33·5	49	42	247	04						900
850		38	23	023	03		42	22	189	06		43	21	135	08		42	19	160	09		42	10	028	06		42	23	060	02		40	24	019	09		42	34	283	05							850
800	64·7	36	27	304	09	64·7	36	10	172	09	65·0	41	12	149	10	64·8	36	04	162	07	64·6	38	00	045	04	64·7	40	11	068	04	64·6	38	11	003	06	65·1	37	30	317	07						800
750		32	18	304	12		30	-04	172	15		35	06	167	13		32	-07	180	07		33	-05	087	04		35	13	091	04		35	12	331	06		32	26	341	11							750
700	99·8	26	01	276	15	100·6	26	13	184	17	100·2	30	06	169	12	99·8	27	20	190	08	99·7	29	10	130	09	99·9	31	16	094	04	99·8	29	19	326	07	100·4	28	18	343	08						700
650		19	03	251	21		20	02	198	20		24	07	169	13		20	02	190	11		23	10	146	07		25	11	060	07		23	08	339	05		21	08	331	06							650
600	139·2	13	00	249	23	140·0	13	05	199	19	140·0	17	08	169	15	139·2	11	04	179	12	139·3	16	09	150	08	139·7	20	09	085	07	139·5	17	01	336	03	139·8	13	02	281	07						600
550		06	06	249	21		06	11	204	18		09	12	187	14		06	10	171	17		08	04	162	09		12	07	116	13		09	07	359	03		07	07	282	11							550
500	184·5	01	16	298	30	185·2	04	17	199	19	185·5	00	17	170	14	184·4	03	19	170	18	184·7	01	15	174	12	185·5	01	13	103	13	186·0	01	17	060	01	185·2	01	14	279	11						500
450		11	20	245	33		14	21	200	19		10	28	180	28		15	30	173	18		12	28	176	15		10	24	094	15		11	27	131	07		13	24	256	13							450
400	237·8	24	34	241	37	238·2	26	33	195	19	239·0	21	36	188	35	237·3	27	42	174	21	237·9	25	40	171	24	238·9	22	36	104	17	238·4	21	37	142	16	238·3	25	35	276	15						400
350		38	49	235	43		39	49	194	21		36	49	189	39		40	57	172	17		38	53	172	31		36	46	109	15		35	50	139	17		37	49	282	15							350
300	302·4	54		234	46	302·8	50		195	23	303·9	52		187	39	301·7	53		176	21	302·4	53		175	30	303·9	51		118	14	303·5	48		153	05	303·0	53		285	29							300
250		67		231	53		64		202	19		65		189	42		68		173	33		66		182	23		65		120	15		64		290	02		67		272	24							250
200	387·3	71		243	28	388·4	69		208	19	389·3	70		210	19	386·7	70		205	26	387·4	75		202	12	389·0	73		121	15	389·1	72		298	08	387·9	78		277	22							200
170	(190	64					61		212	21		63		210	11		71		208	12		68		247	10		63		170	02		62		295	05		65		267	14							170
150	mb)						59		218	11		61		232	11		72		208	10		62		224	09		61		200	06		63		270	05		65		248	14							150
130							59		233	09		57		247	07		71		200	06		61		193	05		61		248	06		64		260	06		63		239	12							130
110							58		226	05		52		200	05		60		195	09		62		212	08		59		210	07		61		228	07		62		248	11							110
100						536·1	58				537·4	65		230	07	531·3	61		186	11	533·7	61		207	12	535·9	58		245	08	535·4	60		216	08	534·0	62		217	09							100
90												57		261	10		59					59		267	09		54		244	08		59		223	08		61		184	10							90
80												57										57		260	06							59		224	05		59		206	09							80
70												53										57										58		232	10		57		225	09							70
60																																56		228	06		56		229	08							60
	Inversion 950 mb 36°-923mb 38° 905 " 37°- 891 " 39° 815 " 35°- 800 - 36° Isothermal 891 - 855 mb 39°					Inversion 992 mb 44°- 973mb 58°					Inversion 973 mb 43°- 928mb 47°										Inversion 792 mb 32°- 737mb 33 Isothermal 884 - 849 mb 42°					Inversion 942 mb 44°- 928mb 48° Isothermal 964 - 942 mb 44°					(157 mb) 55 Inversion 975 mb 49°- 950mb 51° 860 " 39°- 850 " 40°									Isothermal 760 - 732 mb 32°										
Tropopause	I 210mb -78° 37,700'	II 230mb-70° 36,900'	I 215mb-73° 37,400'	I 228mb-73° 35,800'	I 205mb-76° 38,300'	I 208 mb-77° 38,100'	I 210mb-73° 37,900'	II 200mb-78° 38,800'		Tropopause

METEOROLOGICAL 11 JUN 1951 LIBRARY

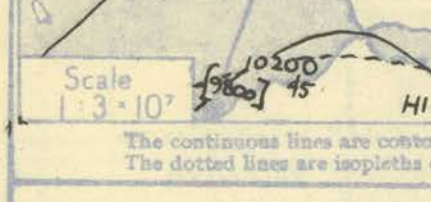
Saturday 2nd June 1951.

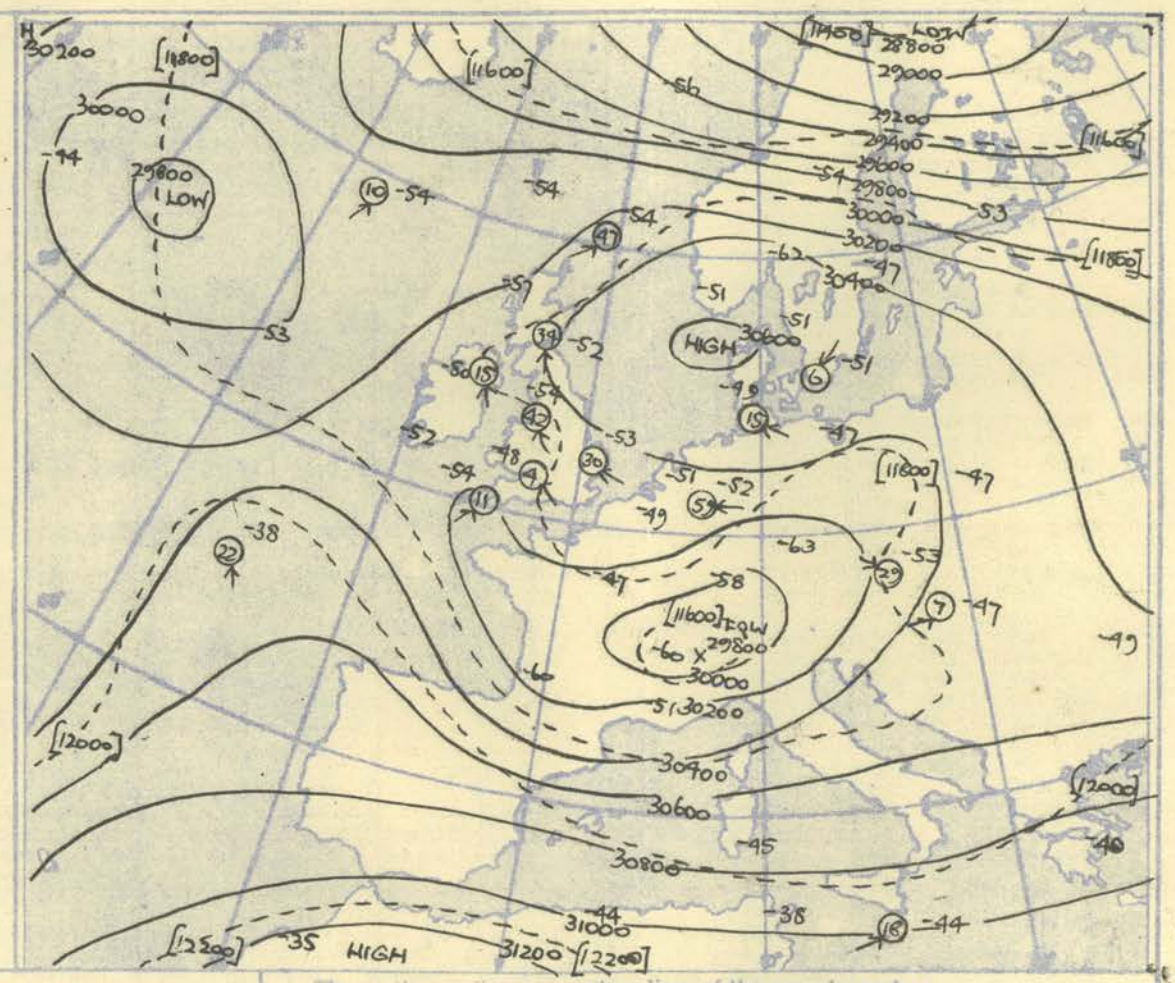
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb. and 300 mb., levels at about 03h G.M.T.



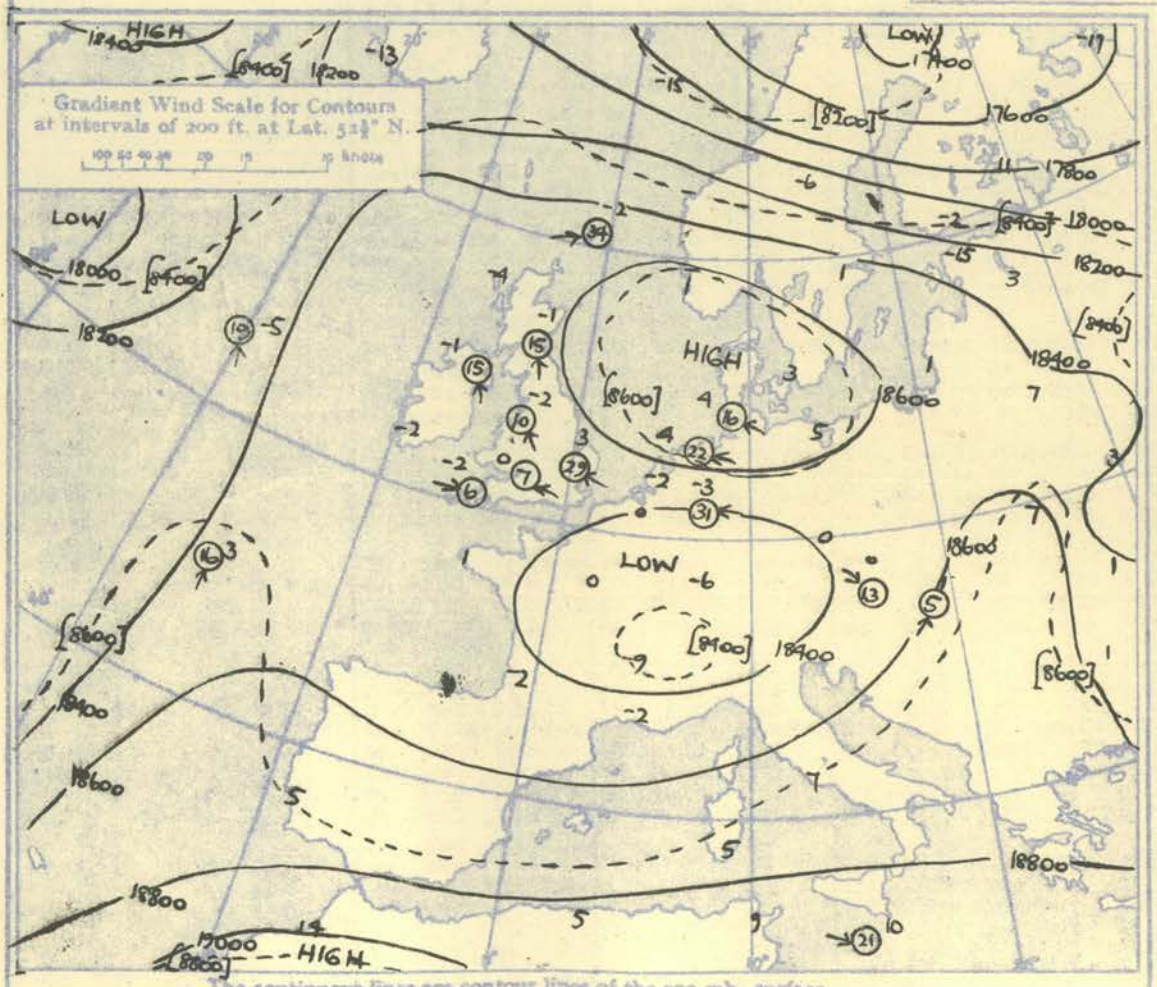
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours
at intervals of 200 ft. at Lat. 52½° N.

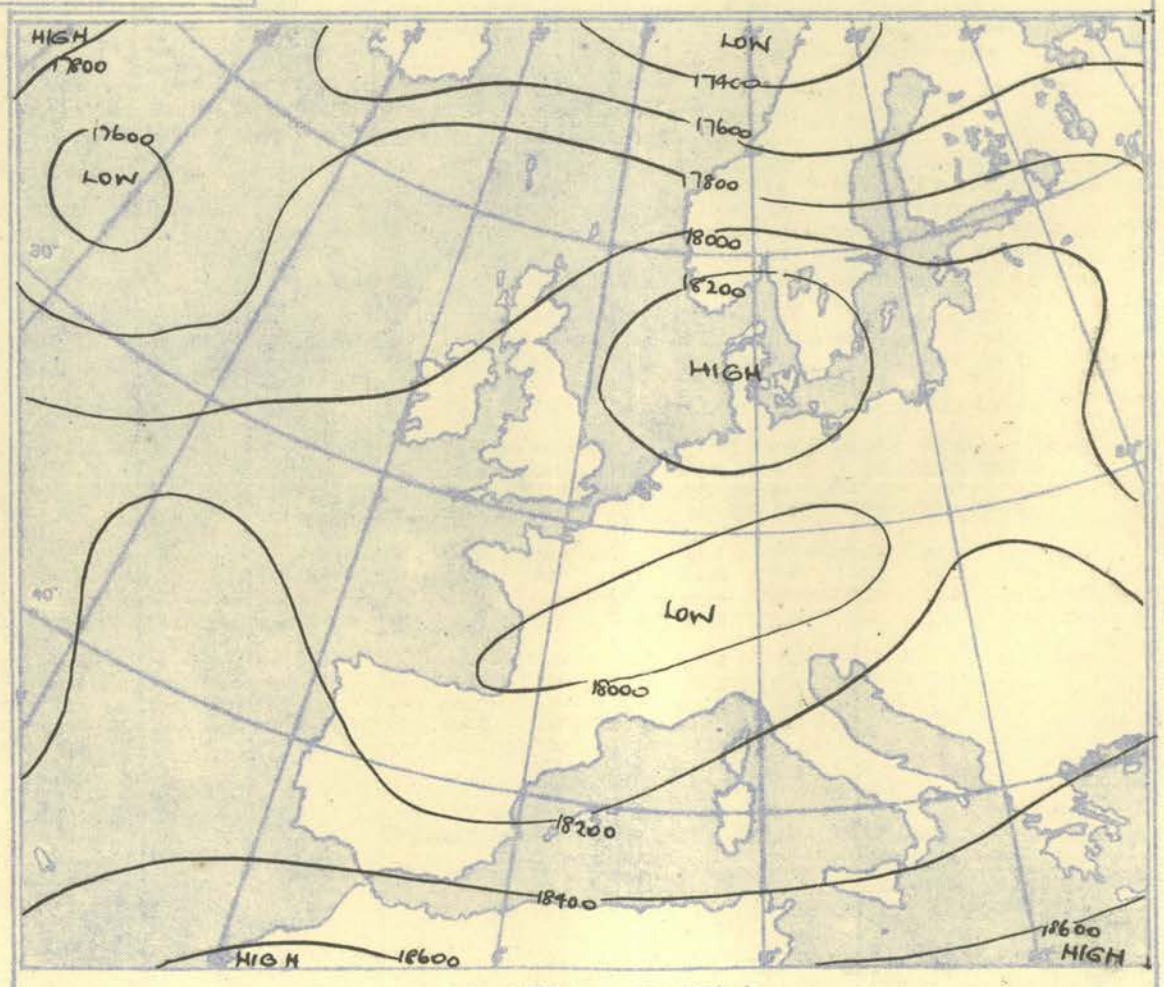




The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500-1000mb.

Saturday 2nd June 1951. Page 3

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

Pressure mb	52 12N 02 12W Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Pressure mb
Time	1351																					
Pressure M.S.L. mb	1014																					
Pressure Surf mb	1012·5																					
Pressure Freezing mb	733																					
Surf	00·4																					Surf
1000	03·9																					1000
950		55	39																			950
900	32·9	47	37																			900
850		41	18																			850
800	64·5	38	20																			800
750																						750
700	99·7	30	18																			700
650																						650
600	139·6	17																				600
550																						550
500	185·2	-01																				500
450																						450
400	238·5	-25																				400
350																						350
300	303·0	-53																				300
250																						250
200																						200
170																						170

DIRECTION (degrees from N) and VELOCITY (knots) of UPPER WINDS at heights above M.S.L.

Feet	Place: Cirrus 52·5N 20·0W Dir.	Vel.	Leuchars Dir.	Vel.	Ronaldsway Dir.	Vel.	Cirrus 52·5N 20·0W Dir.	Vel.	Eglinton Dir.	Vel.	Lympne Dir.	Vel.	Ronaldsway Dir.	Vel.	Camborne Dir.	Vel.	Cirrus 52·5N 20·0W Dir.	Vel.	Leuchars Dir.	Vel.	Feet
Time	03h		03h		09h		09h		09h		15h		15h		21h		21h		21h		Time
Type			Pilar												Pilar				Pilar		Type
Surf.	Calm		Calm		090	08	090	06	Calm		360	08	120	07	Calm		120	08	120	05	Surf.
1,000	100	06	115	07	130	09	090	06	020	01	360	09	130	07	227	05	120	11	Land V		1,000
2,000	100	06	115	07	110	09	110	05	130	03	030	10	190	07	228	05	120	12	"		2,000
3,000	100	07	116	07	140	03	120	06	200	06	030	08	200	07	227	05	120	13	"		3,000
4,000	100	07	117	07	050	02	140	10	180	07	030	07	210	06	230	04	120	15	"		4,000
5,000	100	07	117	07	080	01	160	12	160	08	330	07	190	03	274	04	120	11	"		5,000
6,000	120	06	117	07	220	01			170	05	270	08	280	09	340	03			"		6,000
8,000	180	05	127	10	160	03			220	03	360	07	210	09	Land V				"		8,000
10,000	180	09	146	11	180	06	190	13	200	04	020	10	230	06	"		160	09	180	04	10,000
14,000	180	18	179	12	140	13	170	18	180	17	040	12	200	14	238	04	190	24	189	09	14,000
18,000	160	14	175	15	190	15	170	23	170	22	010	15	210	25	260	08			198	20	18,000
24,000	160	16	174	28	210	22	170	35			(16,000')		200	23	249	11	170	36	196	37	24,000
30,000	170	22	180	34	(22,000')		200	45	180	40			(20,000')		257	14	(21,000')		203	39	30,000
40,000	(28,000')		204	17					(29,000')						261	12			222	16	40,000
50,000			249	12											(35,000')				236	06	50,000
			276	09																	
			(55,000')																		

NEPHOSCOPE OBSERVATIONS

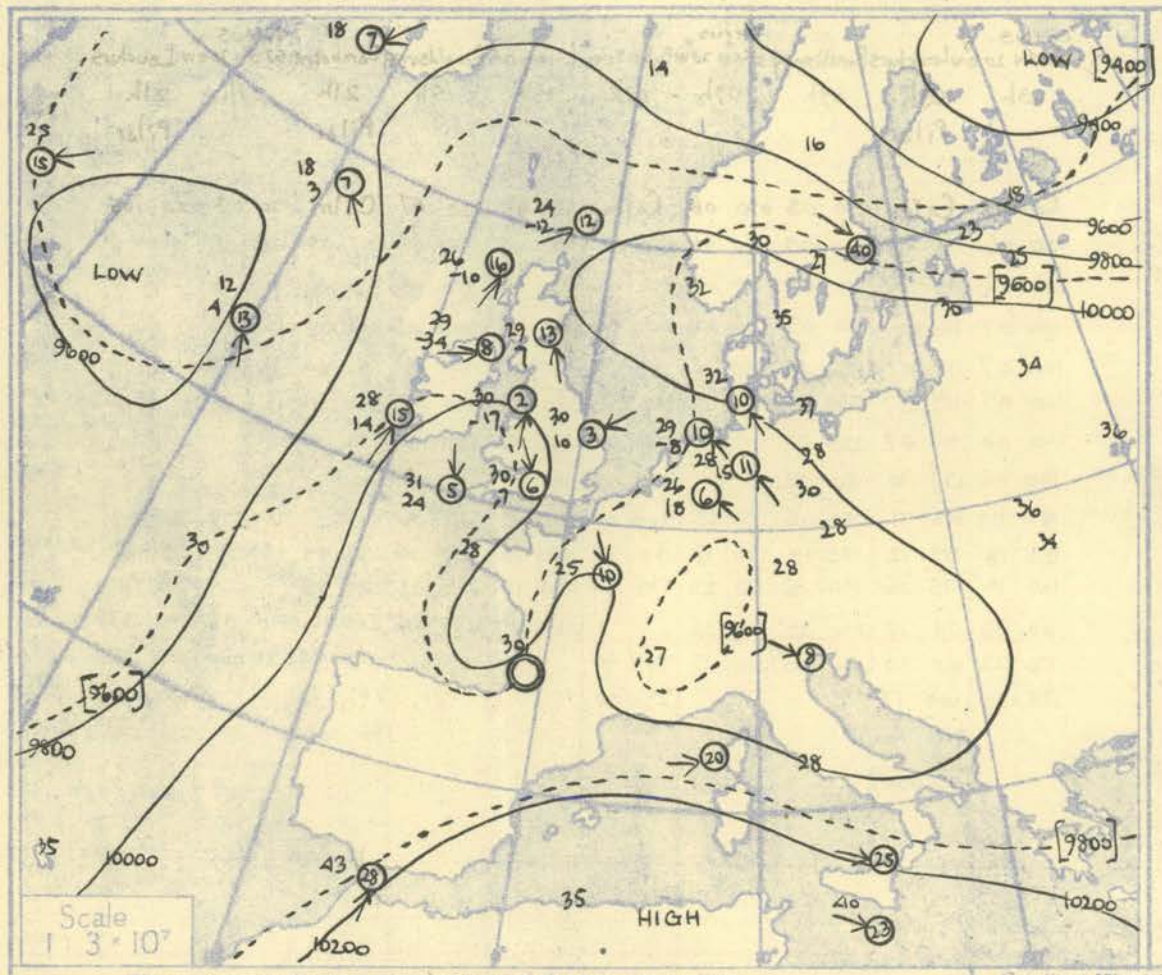
	Place	Time Type	Dir. Vel.
Place	Castle Archdale		
Time Type	12h. Ac		
Dir. Vel.	240 18		

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

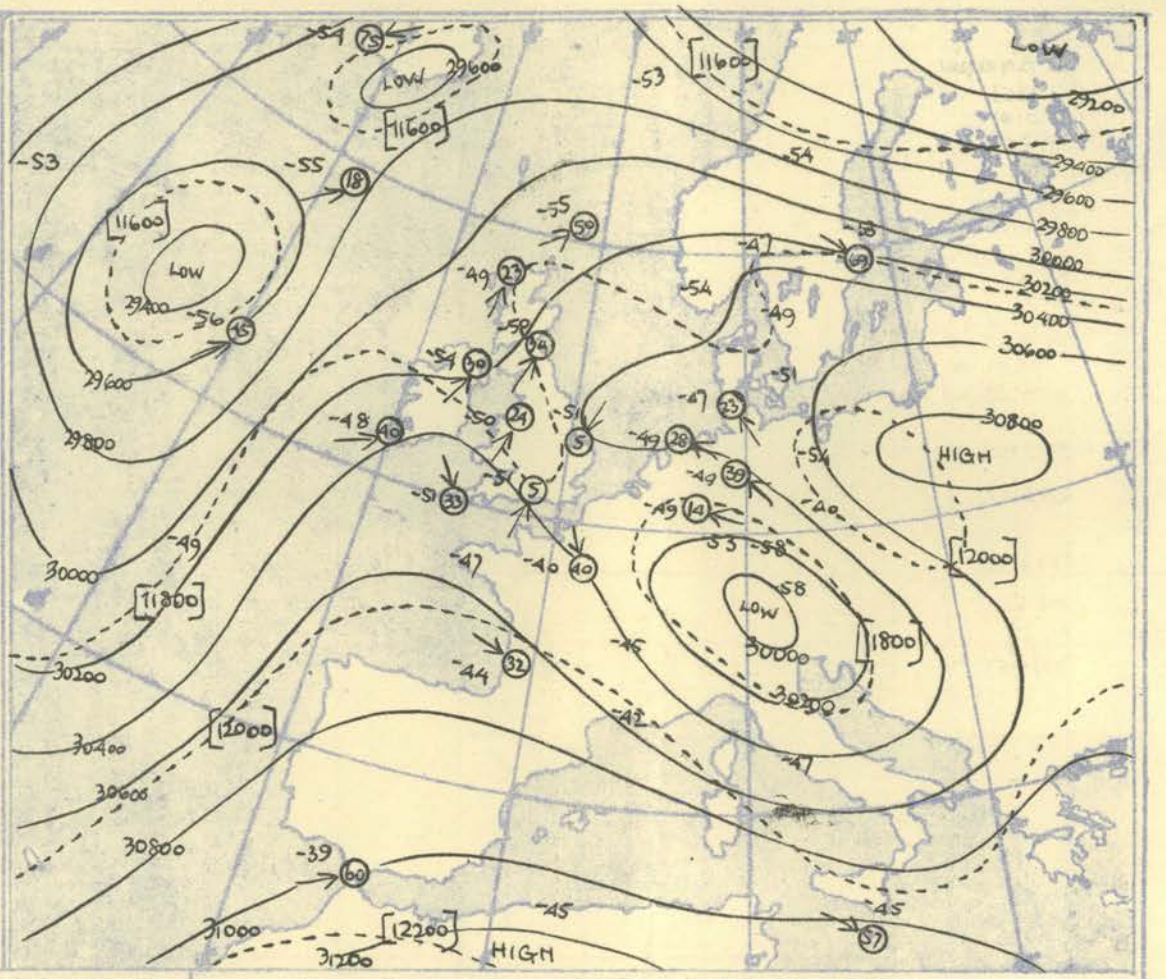
	CIRRUS	CIRRUS	CIRRUS	CIRRUS	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER	
Lat/Long	52·5 N 20·0W		52·5 N 20·0W		59·1 N 18·9W	59·2N 18·8W	59·2N 18·8W	59·2 N 18·7W	
Pressure Time	03h. G.M.T.	09h. G.M.T.	15h. G.M.T.	15h. G.M.T.	03h. G.M.T.	09h. G.M.T.	15h. G.M.T.	21h. G.M.T.	G.M.T.
Pressure M.S.L.	1014 mb	mb	1010 mb	mb	1020 mb	1018 mb	1016 mb	1014 mb	mb
Pressure Surf	1014 mb	mb	1010 mb	mb	1020 mb	1018 mb	1016 mb	1014 mb	mb
Pressure Freezing	mb	mb	855 mb	mb	835 mb	830 mb	855 mb	835 mb	mb

Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf		54	26	CALM			56	49	150	11		51	49	180	06		52	48	090	06		51	49	150	10		51	49	115	07		Surf
1000	04·1	54	45			02·8	52	46	156	11	05·3	48	44	195	06	04·8	49	47	188	03	04·3	49	45	176	03	03·8	50	47	115	06		1000
950		45	39				46	38	158	11		46	37	230	06		44	44	221	04		43	34	166	02		45	37	115	08		950
900	32·4	39	33			31·2	37	32	160	12	37·8	40	31	236	07	33·2	41	38	220	05	32·6	39	32	155	02	32·3	40	30	112	10		900
850		32	27				31	26	160	12		34	27	226	07		35	26	220	06		31	26	143	03		34	25	109	10		850
800	63·4	30	09			62·2	25	19	160	10	64·9	27	22	211	06	64·2	28	23	193	04	63·5	24	16	134	03	63·4	27	21	108	11		800
750		26	-01	No Radio-Sonde Ascent Available	See top of page for Winds		20	10	163	08	No Radio Sonde Ascent Available	28	20	209	04		20	17	162	02		18	12	134	06		21	16	108	12		750
700	98·1	23	-09			96·4	12	02	170	13		24	-03	210	05	98·6	23	06	CALM		97·6	18	03	135	07	97·6	13	09	106	12		700
650		16	-13				11	-08	169	16		17	-03	214	07		16	-01	239	04		13	-02	140	07		15	05	110	09		650
600	137·3	10	-18			135·2	06	-13	180	22	138·7	11	-09	214	09	137·8	09	-08	225	06	136·5	06	-12	148	07	136·5	09	-22	113	07		600
550		03	-23				-03	-18	198	23		04	-15	213	09		02	-07	212	11		-01	-13	153	07		02	-35	172	09		550
500	182·4	-05	-30			179·6	-13	-23	196	26	183·7	-04	-18	212	10	182·8	-04	-20	211	17	181·1	-08	-28	178	10	181·4	-07	-28	180	17		500
450		-15	-39				-20	-39	180	32		-12	-35	209	12		-15	-34	215	19		-17	-27	205	18		-19	-32	192	27		450
400	235·2	-26				231·8	-34	-52	187	36	236·8	-25	-46	205	11	235·6	-27	-41	211	19	233·7	-29	-46	218	22	233·9	-29	-35	194	23		400
350		-39					-45		194	40		-40	-53	203	10		-41		207	16		-42		222	17		-42		195	21		350
300	299·7	-53				295·4	-56		202	45	301·1	-54		203	10	299·6	-57		198	17	297·8	-55		217	18	297·8	-55		195	27		300
250		-70					-57					-70		198	09		-61		174	10		-67		204	10		-69		212	27		250
200	384·7	-66				382·6	-56				386·3	-65		162	09	386·2	-51		168	06	384·1	-55		195	09	383·9	-55		239	05		200
170		-61					-55					-59		132	06		-51		117	02		-53		174	07		-55		155	06		170
150		-62					-57					-58		125	06		-52					-53		170	04		-54		140	03		150
130		-63					-59					-58		120	04						(1200ft)	-53		024	03		-54		038	06		130
110		-64										-61		024	07												-54		035	04		110
100	531·4	-65									534·1	-61		028	08											533·7	-53		035	02		100
90		-66										-61		030	06												-54		035	04		90
80		-65										-60		041	03												-55		130	06		80
70		-64										-59		056	05												-55		105	05		70
60		-62																													60
		-60																													
	(506) -58																														
Tropopause	Isothermal 841-800mb 30° 755-750mb 26° Inversion 750mb 26°-734mb 27° I 225 mb -73° 36,000'					Inversion 700 mb 12°-685mb 14° Isothermal 500-497mb -13° 451-450 mb -20° II 300mb -56° 29,500'					Inversion 985mb 40°-965mb 47° 770mb 22°-750mb 28° II 250 mb -70° 34,000'					Inversion 750mb 20°-724mb 24° Isothermal 724-710mb 24° 532-518 mb 0° II 278 mb -65° 31,600'					Inversion 727mb 15°-696mb 19° II 261mb -67° 32,700'					Inversion 695mb 12°-687mb 19° Isothermal 760-746 mb 21° II 261 mb -69° 32,800'					Tropopause

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (In knots) OF WINDS at the 700 mb., and 300 mb., levels at about 15h G.M.T.

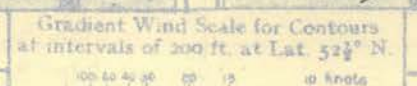


The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

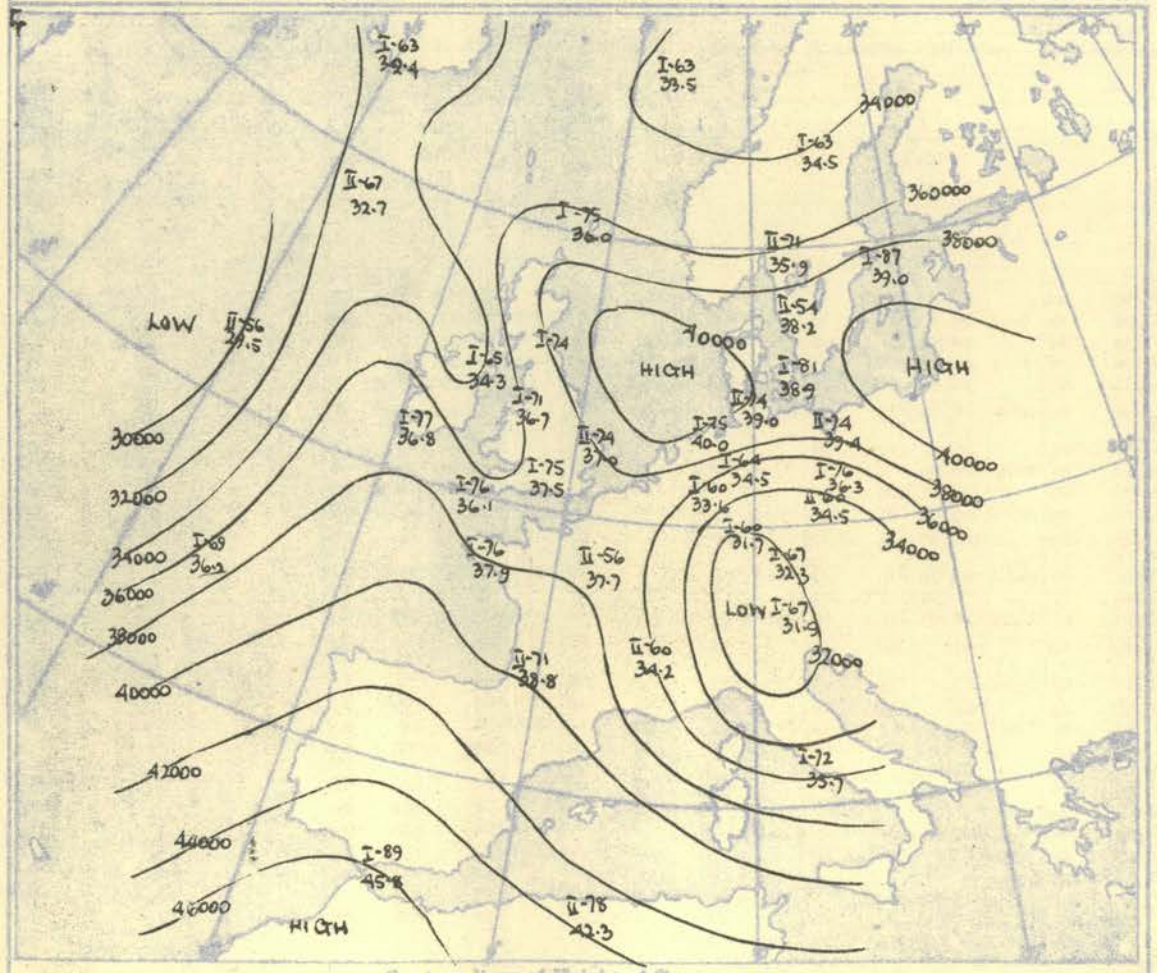


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.



TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Notable warming over Greenland; cooling at the two weather vessels west of the British Isles.

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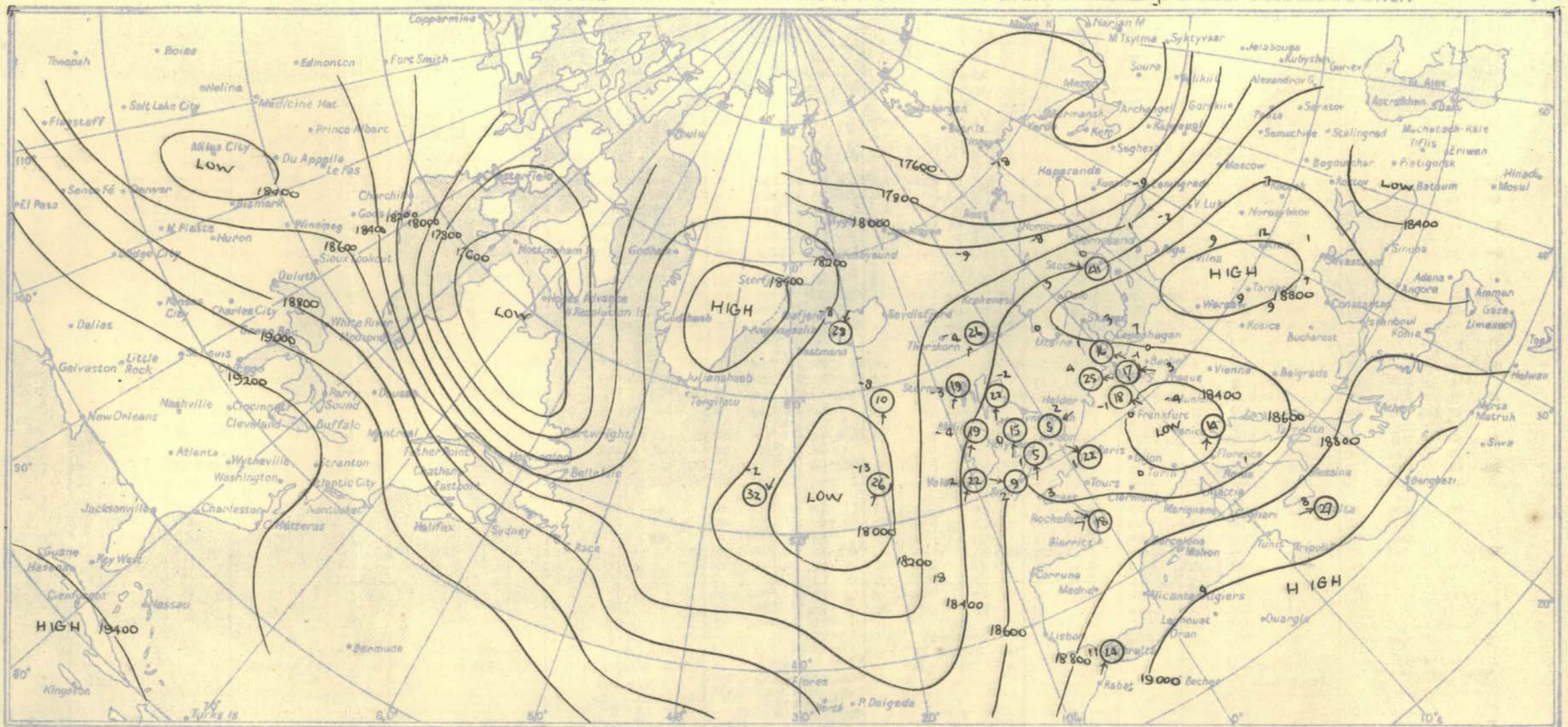
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Saturday 2nd June. 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Saturday 2nd June. 1951.

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Saturday 2nd June 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

LERWICK

15h G.M.T.
Time
M.S.L. 1018·6 mb
Surf 1008·5 mb
Freezing 769 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	47	38	095	11
1000	04·9	45	37		
950		40	29	117	09
900	33·2	41	22	L.V.	
850		38	19	"	
800	64·6	35	08	"	
750		30	-03	225	09
700	99·5	24	-12	232	12
650		18	-21	237	18
600		11	-30	242	20
550	138·7	05	-04	232	28
500	183·8	-04	-12	230	26
450		-15	-22	223	30
400	236·7	-25	-37	223	35
350		-39	-52	218	45
300	301·0	-55		218	50
250		-70		226	42
200	386·1	-62		249	22
170		-62		247	16
150		-59		249	11
130		-57		257	08
110		-57		246	07
100	534·3	-57		248	07
90		-56		295	06
80		-54		L.V.	
70		-52		"	
60		-49			

Inversion
925 mb 40° - 900 mb 41°
Isothermal.
974 - 925 mb 40°

Tropopause I 226 mb -75° 36,000

STORNOWAY

15h G.M.T.
Time
M.S.L. 1014·4 mb
Surf 1012·8 mb
Freezing 790 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	58	46	170	05
1000	04·0	57	40		
950		52	35	210	10
900	32·9	47	35	222	10
850		40	30	198	15
800	64·4	33	22	193	18
750		28	06	204	16
700	99·2	26	-10	202	16
650		18	-10	205	15
600	138·4	09	-10	216	16
550		02	-11	216	18
500	183·3	-03	-17	205	19
450		-12	-22	203	21
400	236·5	-23	-34	194	24
350		-35	-46	200	23
300	301·5	-49		191	23
250		-58		208	28
200	387·7	-73		197	30
170		-68		202	20
150		-61		216	18
130		-61		211	15
110		-61		225	13
100	534·2	-61		234	08
90		-61		256	09
80		-61		265	08
70		-59		266	04
60		-55		256	03
		-51		249	03
		-51		215	09

Isothermal.
745 - 715 mb 27°

Tropopause II 208 mb -73° 37,800

LEUCHARS

15h G.M.T.
Time
M.S.L. 1016·4 mb
Surf 1015·6 mb
Freezing 738 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	54	47	110	08
1000	04·4	53	45	124	03
950		44	39	124	04
900	33·1	44	31	132	03
850		41	25	152	04
800	64·6	38	17	160	05
750		33	08	166	09
700	99·7	29	17	171	13
650		22	18	180	14
600	139·3	15	10	189	12
550		07	05	185	15
500	184·7	-02	-16	183	22
450		-12	-27	187	29
400	237·9	-23	-40	189	31
350		-36	-51	191	38
300	302·8	-50		194	34
250		-67		200	32
200	388·1	-72		200	20
170		-62		216	16
150		-63		218	13
130		-63		223	10
110		-60		261	12
100	534·6	-59		263	09
90		-59		276	07
80		-58		248	06
70		-56		251	12
60		-56			

Tropopause I 207 mb -74° 38,500

ALDERGROVE

15h G.M.T.
Time
M.S.L. 1014·1 mb
Surf 1004·9 mb
Freezing 740 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	63	45	180	03
1000	04·0	62	44		
950		56	41	183	04
900	33·0	49	41	179	05
850		42	32	166	05
800	64·7	36	23	164	05
750		33	-08	194	04
700	99·8	29	-34	242	08
650		21	-17	227	13
600	139·3	14	-30	210	14
550		07	-31	207	16
500	184·6	-04	-27	202	19
450		-16	-33	196	24
400	237·4	-27	-46	191	27
350		-40	-60	196	28
300	301·7	-54		211	30
250		-65		218	32
200	387·7	-62		212	21
170		-62		217	18
150		-62		222	15
130		-59		215	12
110		-58		227	14
100	535·3	-57		243	11
90		-57		249	10
80		-54		217	06
70		-55		200	05
60		-53		247	05

Isothermal.
790 - 760 mb 35°
727 - 715 " 30°

Tropopause I 247 mb -65° 34,300

LIVERPOOL

15h G.M.T.
Time
M.S.L. 1014·2 mb
Surf 1012·2 mb
Freezing 715 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	67	41	260	05
1000	04·0	63	37	264	09
950		56	30	285	05
900	33·1	48	26	017	02
850		42	16	044	02
800	64·6	38	-03	331	03
750		35	-11	257	02
700	99·9	30	-17	193	02
650		24	07	181	07
600	139·5	18	-01	203	09
550		10	-11	211	13
500	185·3	00	-24	204	15
450		-11	-37	200	18
400	238·6	-24	-43	209	16
350		-36	-58	205	21
300	303·4	-50		209	24
250		-65		195	25
200	388·9	-68		216	17
170		-62		222	15
150		-60		232	14
130		-60		237	10
110		-58		250	10
100	536·5	-56		253	08
90		-55		252	07
80		-54		232	06
70		-53		252	09
60		-52		248	09
		-52		276	07
		-53			
		-53			
	(38mb)				

Inversion
800 mb 38° - 783 mb 39°
223 - 210 - 69°
Isothermal.
863 - 833 mb 42°

Tropopause I 223 mb -71° 36,750
I 208 - 71° 37,800

DOWNHAM MARKET

15h G.M.T.
Time
M.S.L. 1015·0 mb
Surf 1010·7 mb
Freezing 715 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	59	42	350	10
1000	04·2	56	40		
950		48	37	338	04
900	32·9	47	32	266	03
850		42	19	229	07
800	64·5	40	02	262	02
750		35	03	270	01
700	99·7	30	10	064	03
650		25	07	078	04
600	139·5	20	-03	078	05
550		12	-13	085	04
500	185·5	02	-17	092	05
450		-10	-26	098	08
400	239·1	-21	-36	091	08
350		-36	-49	048	05
300	303·9	-51		020	05
250		-65		050	04
200	389·3	-72		108	02
170		-62		241	04
150		-61		243	12
130		-60		247	10
110		-58		268	09
100	536·5	-57		239	09
90		-57		249	12
80		-59		264	06

Inversion
920 mb 45° - 900 mb 47°
Isothermal.
860 - 830 mb 42°

Tropopause II 220 mb -74° 37,000

LARKHILL

15h G.M.T.
Time
M.S.L. 1014·7 mb
Surf 999·0 mb
Freezing 717 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	63	43	Calm	
1000	04·1				
950		55	36	342	05
900	33·1	47	32	308	05
850		40	26	305	06
800	64·7	39	10	313	05
750		35	02	338	06
700	99·9	30	07	338	06
650		25	04	331	06
600	139·7	19	-03	327	07
550		10	-12	289	04
500	185·4	01	-21	217	05
450		-10	-32	184	06
400	238·8	-22	-45	174	07
350		-36	-57	187	08
300	303·7	-51		203	05
250		-67		274	05
200	388·9	-71		274	12
170		-62		252	10
150		-60		253	12
130		-63		247	12
110		-59		259	10
100	535·9	-57		232	08
90		-56		226	09
80		-55			
70		(85mb)			

Inversion
827 mb 31° - 812 mb 40°

Tropopause I 213 mb -75° 37,500

CAMBORNE

15h G.M.T.
Time
M.S.L. 1015·0 mb
Surf 1004·6 mb
Freezing 722 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	62	52	337	02
1000	04·2	61	46		
950		57	47	239	07
900	33·3	51	46	285	05
850		46	39	302	06
800	65·1	40	34	343	09
750		35	30	360	07
700	100·3	29	29	347	05
650		24	14	330	01
600	140·0	18	05	306	06
550		11	-07	294	07
500	185·7	02	-12	273	09
450		-08	-27	309	14
400	239·4	-19	-40	300	18
350		-34	-44	307	25
300	304·6	-51		307	33
250		-68		305	29
200	389·4	-74		282	20
170		-67		264	16
150		-62		262	20
130		-66		281	14
110		-67		268	12
100	535·6	-61		269	12
90		-60			
80		(95mb)			

Inversion
660 mb 23° - 646 mb 25°
Isothermal.
770 - 750 mb 35°

Tropopause I 230 mb -76° 36,000

VALENTIA

15h G.M.T.
Time
M.S.L. 1014·0 mb
Surf 1012 mb
Freezing 735 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	60	46	180	11
1000	03·8	59	44	176	11
950		56	39	162	09
900	32·8	50	37	181	09
850		44	34	18	11
800	64·5	38	31	178	16
750		34	28	179	17
700	99·8	28	14	181	15
650		22	03	210	16
600	139·4	16	03	225	20
550		10	-06	237	22
500	185·1	02	-02	241	22
450		-09	-20	243	23
400	238·8	-19	-40	250	28
350		-32	-52	248	38
300	304·1	-48		246	40
250		-66		244	43
200	389·4	-70		237	28
170		-61		228	18
150		-60		223	16
130		-60		221	17
110		-59		227	19
100	536·8	-58		232	13
90		-56		233	11
80					
70					
60					

Tropopause I 222 mb -77° 36,800

LERWICK

21h G.M.T.
Time
M.S.L. 1017·6 mb
Surf 1007·4 mb
Freezing 780 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	44	38		
1000	04·7	42	37		
950		36	34		
900	32·7	43	23		
850		39	24		
800	64·1	35	12		
750		29	08		
700	98·9	24	02		
650		16	-04		
600	138·1	13	03		
550		05	-02		
500	183·3	-06	-11		
450		-16	-23		
400	236·1	-26	-33		
350		-42			
300	300·2	-56			
250		-68			
200	385·1	-72			
170		-64			
150		-64			
130		-63			
110		-62			
100	531·4	-61			
90		-60			
80		-60			
70		-58			
60		-57			

(64mb)
Inversion
935 mb 34° - 896 mb 44°
Isothermal
620 - 600 mb 13°

Tropopause II 220 mb -74° 36,600

STORNOWAY

21h G.M.T.
Time
M.S.L. 1014·1 mb
Surf 1012·5 mb
Freezing 762 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	52	45	300	03
1000	03·8	52	44		
950		52	42	236	05
900	32·5	48	36	224	16
850		43	34	201	18
800	64·1	37	27	190	16
750		30	11	194	14
700	99·1	27	01	220	14
650		22	-04	236	12
600	138·7	15	-12	215	09
550		07	-05	204	11
500	184·1	-02	-12	199	12
450		-13	-23	197	18
400	237·2	-24	-35	180	23
350		-38	-49	201	13
300	301·8	-54		200	14
250		-67		180	20
200	387·7	-60		214	14
170		-58		212	13
150		-56		229	16
130		-55		241	16
110		-54		228	07

Inversion
975 mb 52° - 960 mb 53°
Isothermal.
1012 - 975 mb 52°

Tropopause II 260 mb -67° 33,200

LEUCHARS

21h G.M.T.
Time
M.S.L. 1015·9 mb
Surf 1015·1 mb
Freezing 759 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	49	45		
1000	04·2	47	44		
950		41	40		
900	36·7	47	24		
850		42	16		
800	64·2	37	04		
750		31	10		
700	99·1	26	16		
650		19	14		
600	138·4	10	06		
550		02	-04		
500	183·2	-08	-24		
450		-20	-34		
400	235·6	-32	-50		
350		-44			
300	299·4	-55			
250		-68			
200	384·8	-71			
170		-69			
150		-66			
130		-65			
110		-66			
100	523·7	-65			
90		-65			

Inversion
953 mb 40° - 910 mb 48°
790 - 35° - 778 - 36°
725 - 25° - 712 - 27°

Tropopause I 238 mb -71° 34,800

ALDERGROVE

21h G.M.T.
Time
M.S.L. 1013·1 mb
Surf 1003·6 mb
Freezing 742 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	58	48	150	03
1000	03·5	58	47		
950		55	41	201	03
900	32·5	51	36	243	03
850		43	29	264	03
800	64·2	35	25	270	04
750		32	22	254	08
700	99·3	26	17	250	12
650		19	11	247	13
600	138·6	11	00	241	15
550		04	-16	236	25
500	183·7	-03	-31	245	36
450		-10	-43	259	40
400	237·1	-20	-50	266	40
350		-35	-58	269	38
300	302·1	-50		262	40
250		-70		264	42
200	387·0	-70		242	25
170		-62		231	16
150		-64		235	12
130		-61		237	11
110		-61		215	08
100	533·6	-61		196	07
90		-60		182	05

Isothermal
767 - 742 mb 32°

Tropopause II 235 mb -74° 35,400

LIVERPOOL

21h G.M.T.
Time
M.S.L. 1013·4 mb
Surf 1011·4 mb
Freezing 724 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	55	45		
1000	03·7	58	43		
950		55	38		
900	32·8	51	16		
850		44	09		
800	64·4	39	00		
750		34	-07		
700	99·6	31	05		
650		25	06		
600	139·4	19	-06		
550		12	-11		
500	185·2	02	-22		
450		-08	-31		
400	238·9	-20	-40		
350		-33	-51		
300	304·2	-48			
250		-64			
200	389·8	-73			
170		-63			
150		-63			
130		(153mb)			

Inversion
1011 mb 55° - 1000 mb 58°
Isothermal.
1000 - 975 mb 58°

Tropopause I 200 mb -73° 38,900

DOWNHAM MARKET

21h G.M.T.
Time
M.S.L. 1014·8 mb
Surf 1010·2 mb
Freezing 721 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	51	43	043	06
1000	04·0				
950		49	31	355	09
900	32·6	47	10	295	10
850		43	03	292	10
800	64·2	39	05	320	10
750		35	09	023	03
700	99·4	30	12	360	04
650		24	07	321	04
600	139·2	18	-02	345	04
550		12	-09	078	06
500	185·0	01	-16	295	05
450		-10	-25	019	03
400	238·4	-25	-37	350	06
350		-38	-50	344	09
300	302·9	-54		333	14
250		-69		325	09
200	387·5	-72		293	06
170		-65		280	10
150		-64		267	08
130		-63		258	06
110		-64		244	06
100	533·3	-63		242	09

Isothermal.
992 - 955 mb 50°

Tropopause I 210 mb -80° 37,800

LARKHILL

21h G.M.T.
Time
M.S.L. 1014·2 mb
Surf 998·5 mb
Freezing 712 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	60	45	Calm	
1000	03·9				
950		56	39	359	02
900	33·0	49	35	347	06
850		43	27	349	12
800	64·8	39	17	342	11
750		35	13	322	09
700	100·0	31	10	326	07
650		24	03	300	09
600	139·8	17	-01	297	05
550		10	-12	314	05
500	185·4	02	-23	310	06
450		-09	-33	306	07
400	238·9	-23	-46	302	12
350		-37	-58	315	21
300	303·7	-51		322	15
250		-67		310	20
200	389·0	-67		276	14
170		-61		270	13
150		-60		262	12
130		-59		237	08
110		-59			
100	(124mb)				

Inversion
998 mb 60° - 983 mb 64°

Tropopause I 226 mb -72° 36,400

CAMBORNE

21h G.M.T.
Time
M.S.L. 1015·0 mb
Surf 1004·4 mb
Freezing 739 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	57	55	Calm	
1000	04·2	53	51		
950		54	45		
900	33·1	49	41		
850		43	38		
800	64·8	39	35	For	
750		34	27	winds	
700	100·0	28	21		
650		26	11	See	
600	139·7	16	01		
550		09	-05	page	
500	185·3	01	-10	3:	
450		-10	-19		
400	238·8	-21	-29		
350		-34	-41		
300	303·8	-50			
250		-67			
200	388·5	-76			
170		-65			
150		-63			
130		-62			
110		(140mb)			

Inversion
1000 mb 53° - 950 mb 54°

Tropopause I 210 mb - 83° 37,600

VALENTIA

21h G.M.T.
Time
M.S.L.
Surf
Freezing

Tropopause

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RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

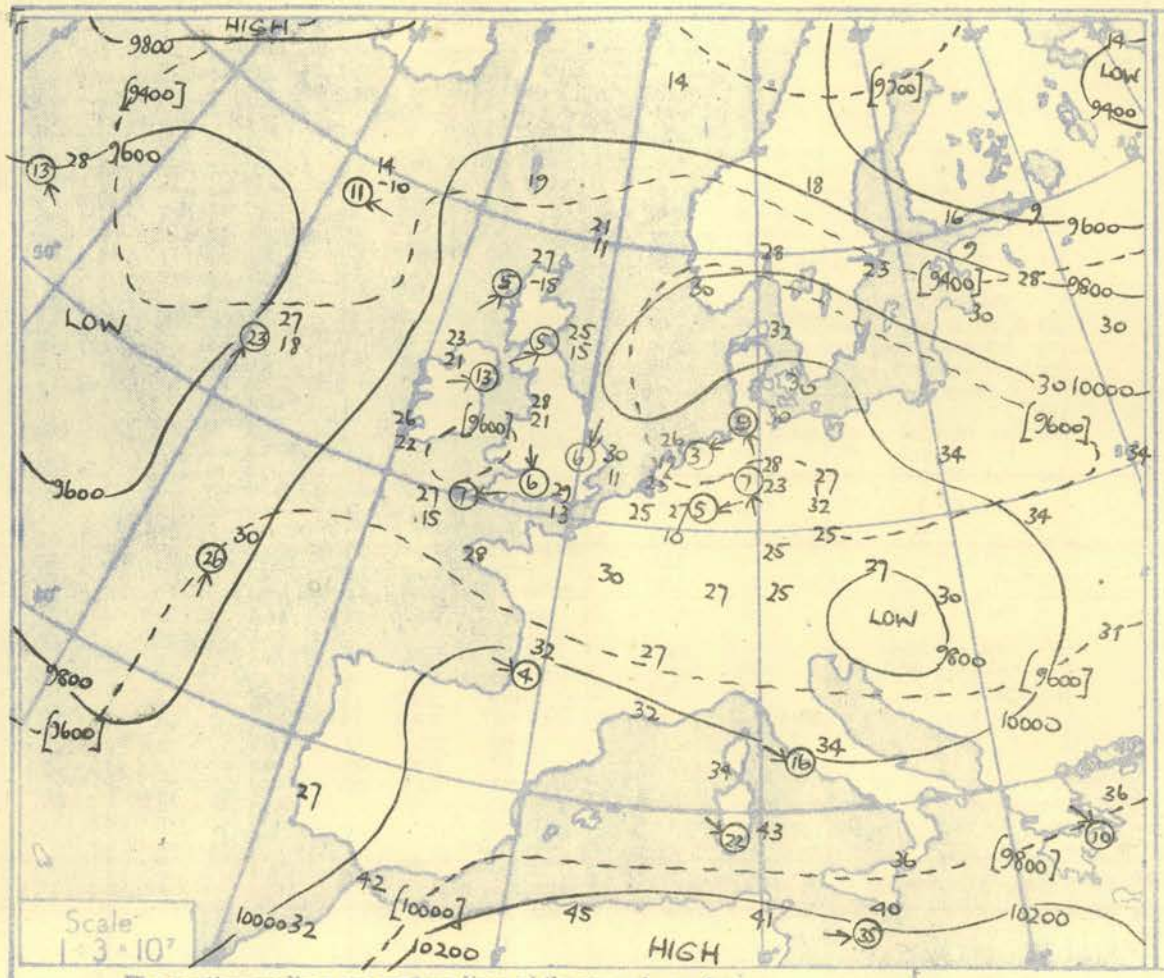
03h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.
Pressure: M.S.L.	1017·4 mb	1014·5 mb	1015·9 mb	1019·0 mb	1014·4 mb	1015·4 mb	1015·0 mb	1014·7 mb	1012·5 mb
Pressure: Surf	1007·2 mb	1012·8 mb	1015·1 mb	1004·4 mb	1012·3 mb	1010·8 mb	998·7 mb	1004·1 mb	1011 mb
Pressure: Freezing	776 mb	760 mb	761 mb	768 mb	724 mb	717 mb	739 mb	750 mb	770 mb

| Pressure mb | LERWICK Height ft./100 | LERWICK Temp. °F. | LERWICK Dew °F. | LERWICK Wind Dir. ° | LERWICK Wind Vel. knots | STORNOWAY Height ft./100 | STORNOWAY Temp. °F. | STORNOWAY Dew °F. | STORNOWAY Wind Dir. ° | STORNOWAY Wind Vel. knots | LEUCHARS Height ft./100 | LEUCHARS Temp. °F. | LEUCHARS Dew °F. | LEUCHARS Wind Dir. ° | LEUCHARS Wind Vel. knots | ALDERGROVE Height ft./100 | ALDERGROVE Temp. °F. | ALDERGROVE Dew °F. | ALDERGROVE Wind Dir. ° | ALDERGROVE Wind Vel. knots | LIVERPOOL Height ft./100 | LIVERPOOL Temp. °F. | LIVERPOOL Dew °F. | LIVERPOOL Wind Dir. ° | LIVERPOOL Wind Vel. knots | DOWNHAM MARKET Height ft./100 | DOWNHAM MARKET Temp. °F. | DOWNHAM MARKET Dew °F. | DOWNHAM MARKET Wind Dir. ° | DOWNHAM MARKET Wind Vel. knots | LARKHILL Height ft./100 | LARKHILL Temp. °F. | LARKHILL Dew °F. | LARKHILL Wind Dir. ° | LARKHILL Wind Vel. knots | CAMBORNE Height ft./100 | CAMBORNE Temp. °F. | CAMBORNE Dew °F. | CAMBORNE Wind Dir. ° | CAMBORNE Wind Vel. knots | VALENTIA Height ft./100 | VALENTIA Temp. °F. | VALENTIA Dew °F. | VALENTIA Wind Dir. ° | VALENTIA Wind Vel. knots | Pressure mb |
|---|---|---|---|---|---|---|---|---|---

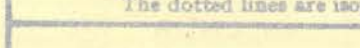
Sunday 3rd June. 1951.

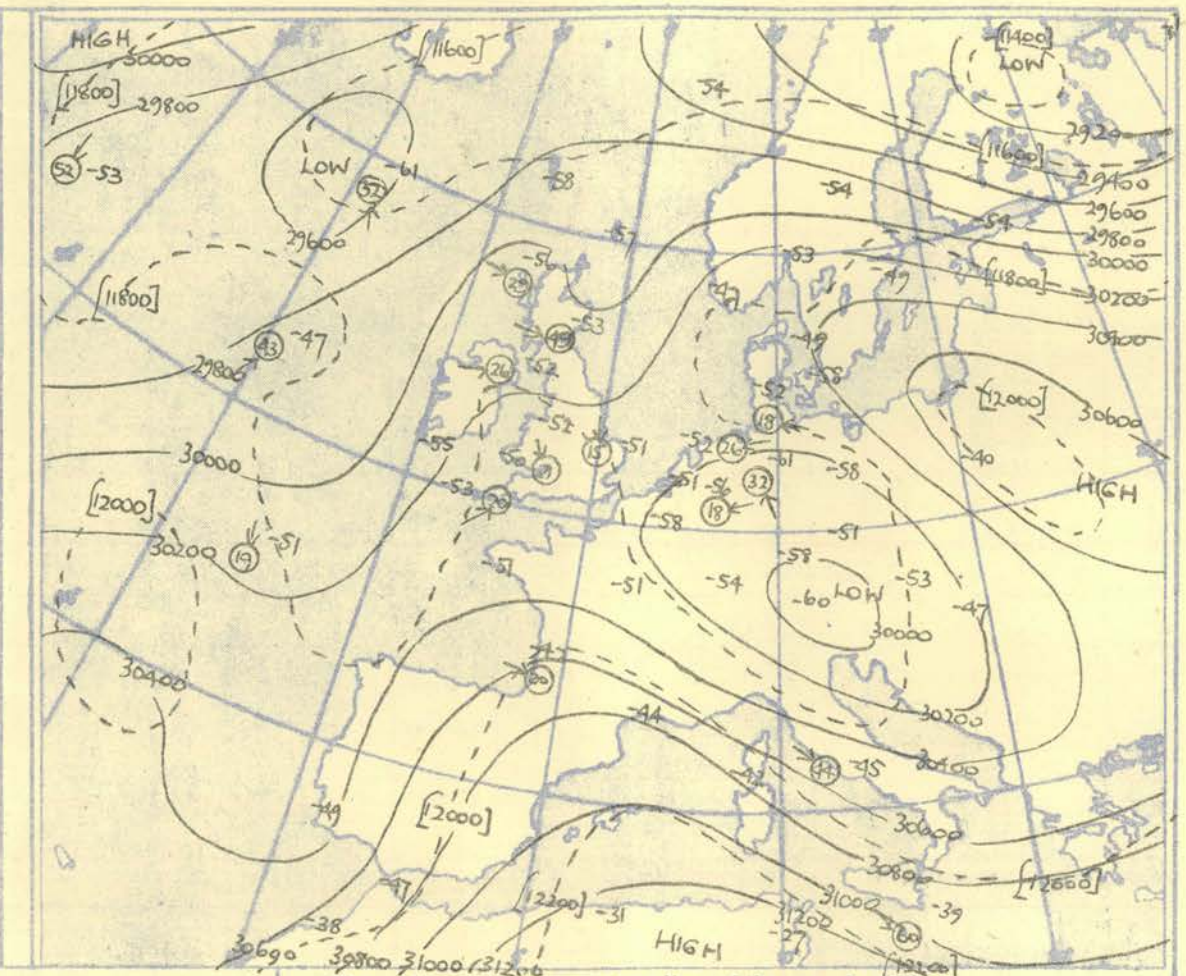
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb. and 300 mb., levels at about 03h G.M.T.



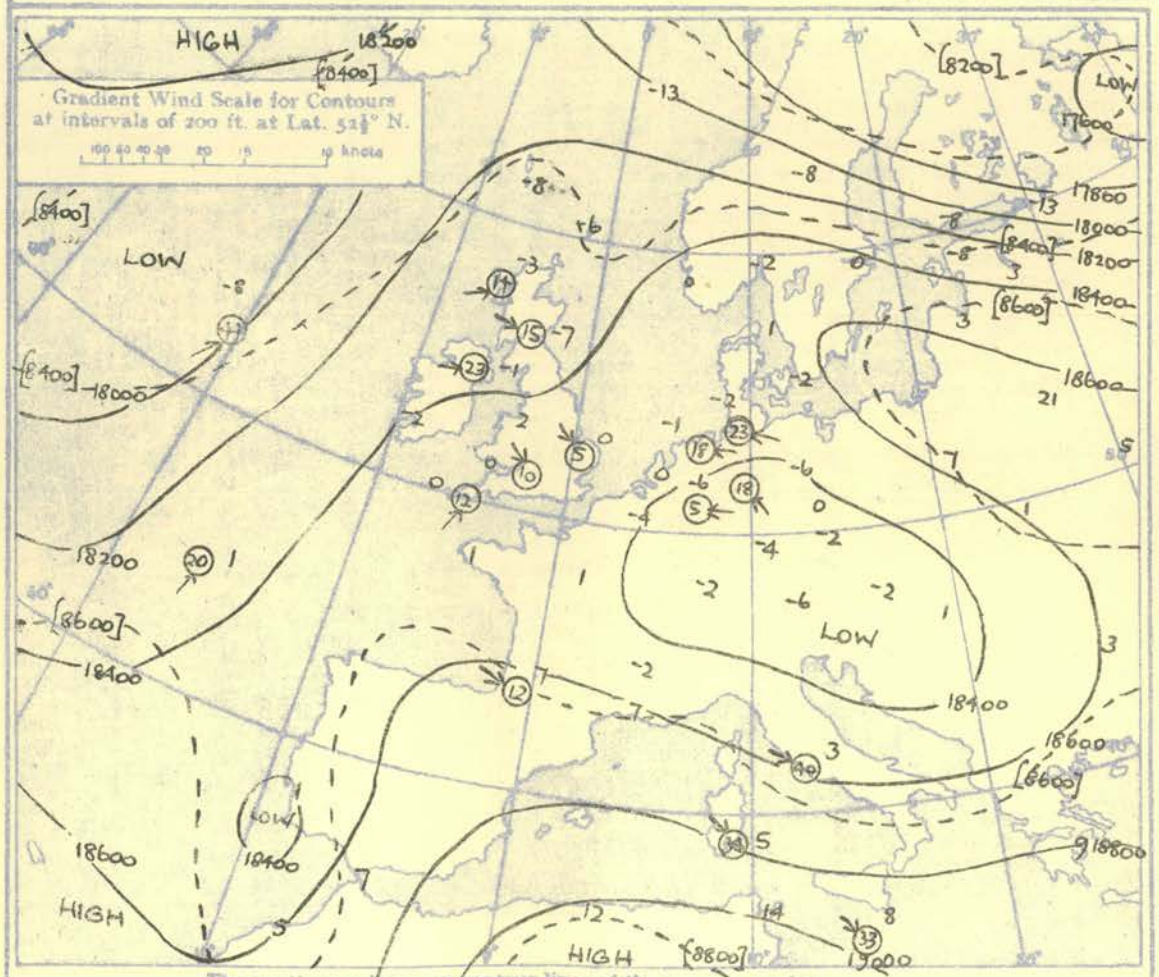
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

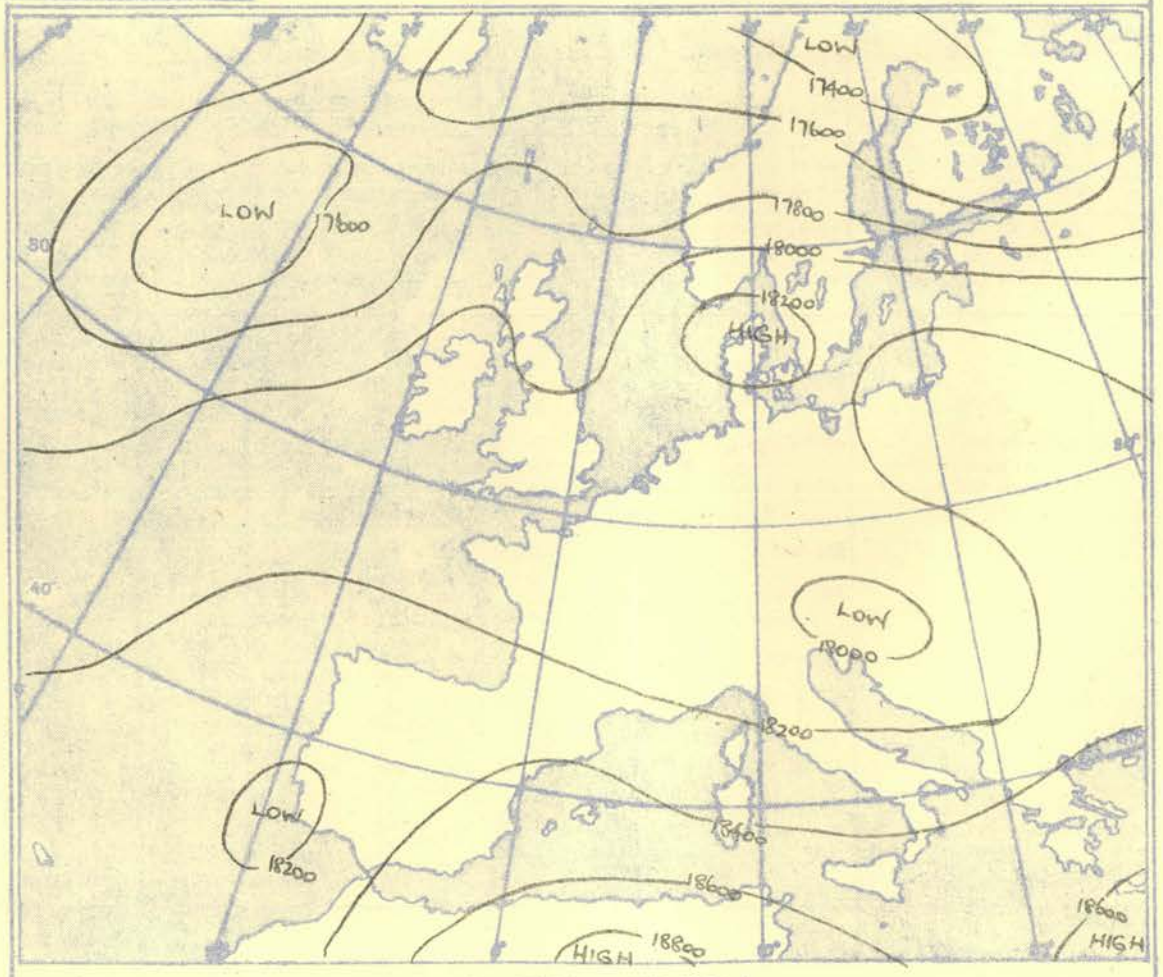




The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500 - 1000mb.

LIBRARY 13 JUN 1951 OFFICE

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

Pressure		52·12N 02·12W																						
	Time	1923h																						
	M.S.L.	1015 mb			mb			mb			mb			mb			mb			mb			mb	
	Surf	1013·5 mb			mb			mb			mb			mb			mb			mb			mb	
	Freezing	730			mb			mb			mb			mb			mb			mb			mb	
Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew
Surf	00·4																							
1000	09·2																							
950																								
900	33·5	52	43																					
850		44	41																					
800	65·9	39	22																					
750																								
700	100·7	28	23																					
650																								
600	140·3	16	11																					
550																								
500	186·1	01																						
450																								
400	233·1	-23																						
350																								
300	309·6	-59																						
250																								
200																								
170																								

Cloud.
2 Sc.
8
830-800mb

Time M.S.L.	Pressure mb
Surf	Surf
1000	1000
950	950
900	900
850	850
800	800
750	750
700	700
650	650
600	600
550	550
500	500
450	450
400	400
350	350
300	300
250	250
200	200
170	170

DIRECTION (degrees from N) and VELOCITY (knots) of UPPER WINDS at heights above M.S.L.

Place	Leuchars		Cirrus 52·5N 20·8W		Aldergrove		Castle Archdale		Ronaldsway		Leuchars		Cirrus 52·5N 20W		Tiree					
Time	03h		09h		09h		15h		15h		15h		21h		21h					
Type	Pilar				Pilar						Pilar									
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.			090	20			190	08	140	05			170	14	090	04				
1,000			110	23			180	09	160	03			170	13	170	19				
2,000			120	28			170	07	160	03			180	19	170	16				
3,000			120	30			170	15	140	03			180	20	160	16				
4,000			160	30			170	15	210	05			180	18	170	11				
5,000			160	28			180	13	250	03			190	17	150	13				
6,000							180	15	260	01										
8,000													180	21	150	11				
10,000			180	32									180	21	170	17				
14,000			170	31									180	26	190	16				
18,000			190	32									170	30						
24,000			200	18									160	35						
30,000			200	20									(20,000')							
40,000	277	13	(26,000')																	
50,000	280	09			211	09					226	12								
	(43,000')				197	09					249	10								
					(55,000')						263	11								
											(62,000')									

Place	Time	Type	Dir.	Vel.

NEPHOSCOPE OBSERVATIONS

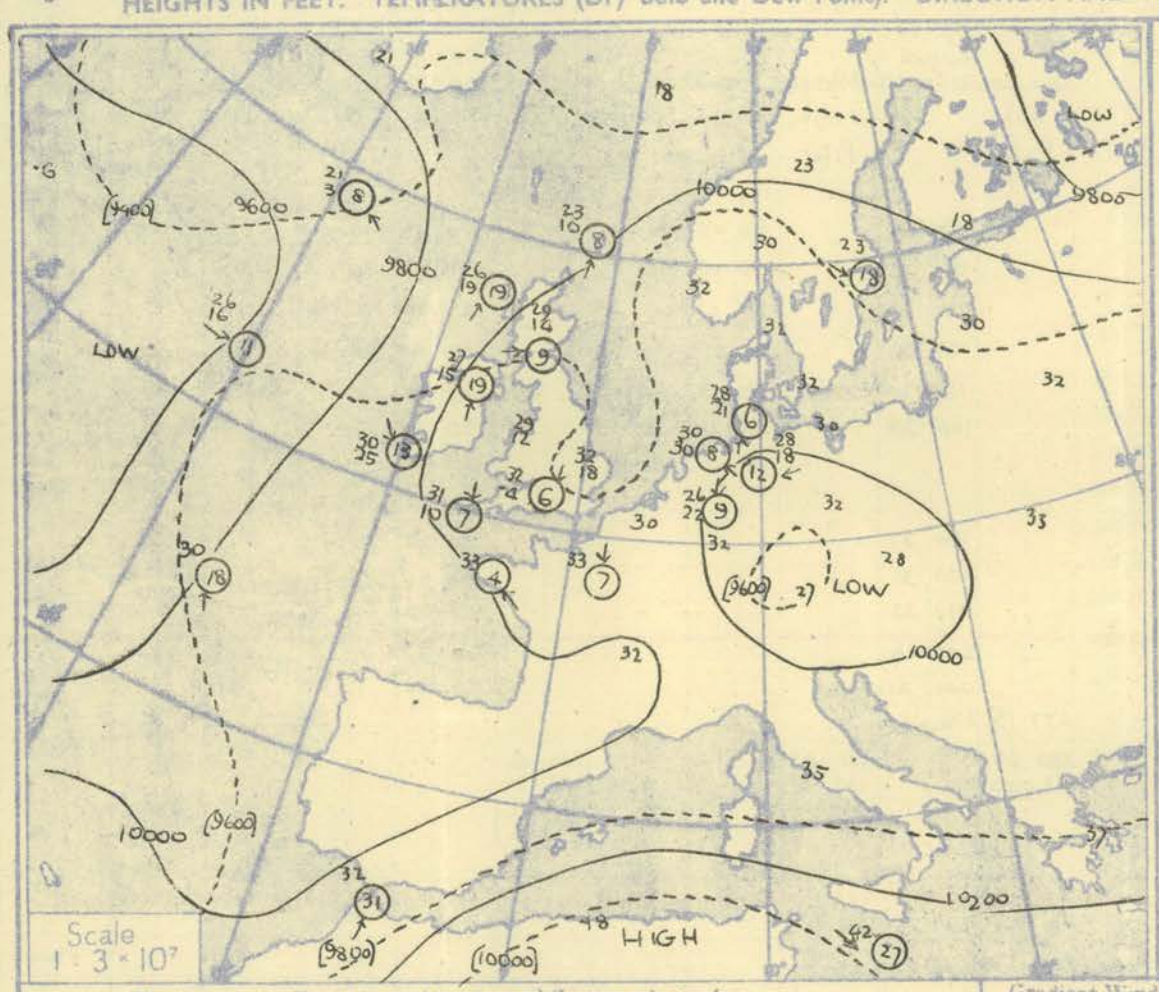
NONE REPORTED.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

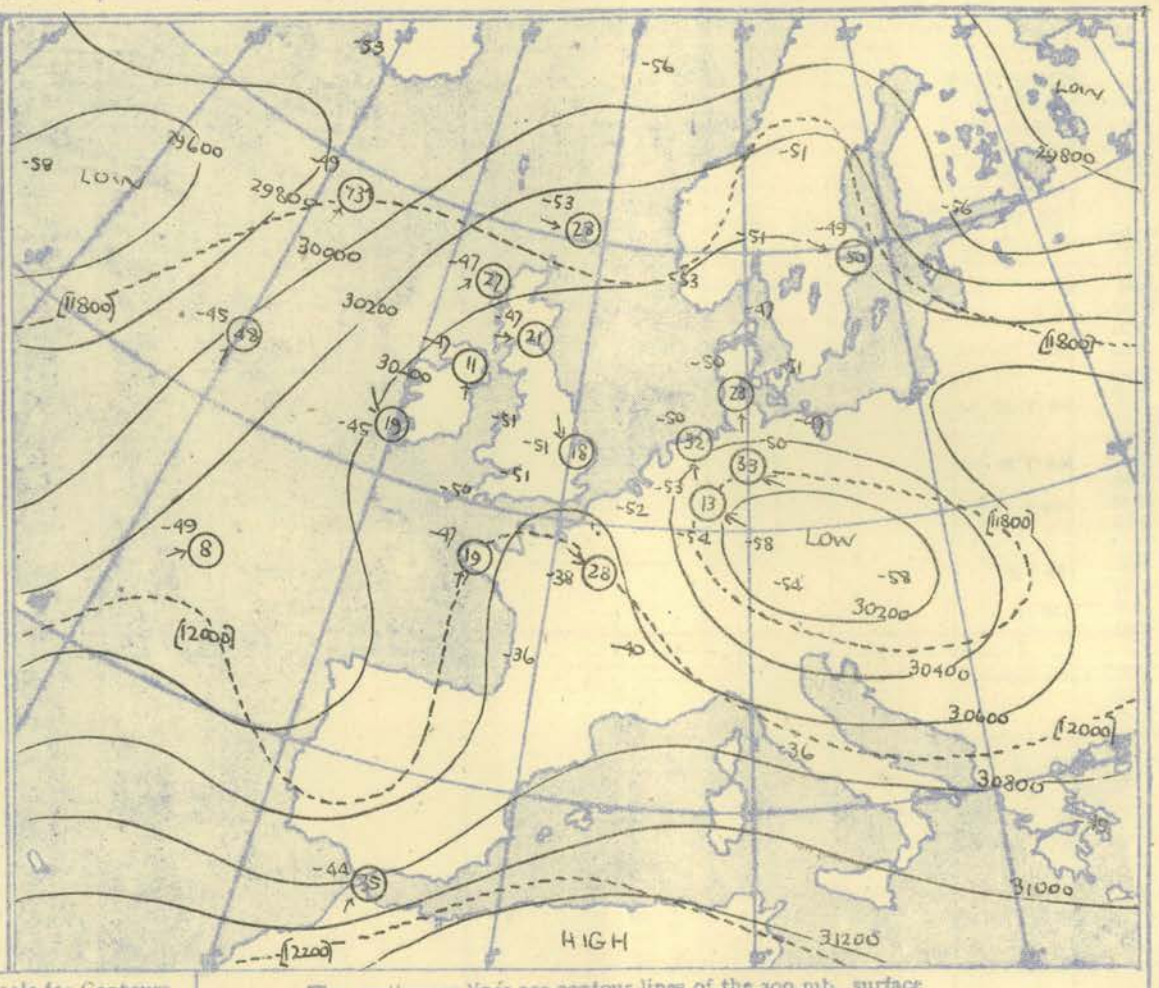
Ship	CIRRUS	CIRRUS	CIRRUS	CIRRNS	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER		
Lat/Long	52·5N 20·0W		52·5N 20·0W		59·2N 18·6W	59·2N 18·9W	59·2N 19·0W.	59·2N 19·0W		
Time	03h. G.M.T.	09h. G.M.T.	15h. G.M.T.	21h. G.M.T.	03h. G.M.T.	09h. G.M.T.	15h. G.M.T.	21h. G.M.T.	G.M.T.	
M.S.L.	1005 mb	mb	1001 mb	mb	1014 mb	1013 mb	1013 mb	1012 mb	mb	
Surf	1005 mb	mb	1001 mb	mb	1014 mb	1013 mb	1013 mb	1012 mb	mb	
Freezing	805 mb	mb	755 mb	mb	860 mb	850 mb	850 mb	775 mb	mb	

Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf		54	47	130	16		57	54	170	16							50	48	115	10		51	48	100	12		53	48	100	17		51	48	095	21	Surf
1000	01·6	53	46	126	16	00·4	57	54	171	16						08·7	48	48	112	10	03·5	49	45	107	18	03·6	51	47	092	21	03·1	50	48	094	24	1000
950		46	43	111	18		56	46	180	22							43	39	112	12		43	37	101	16		43	36	094	19		43	43	096	25	950
900	30·2	40	38	113	19	29·2	47	41	190	24						32·0	37	34	111	13	31·9	38	29	096	16	31·9	38	32	109	15	31·5	39	34	099	23	900
850		36	33	137	19		43	36	189	30							31	30	110	15		31	26	095	18		32	29	117	11		33	29	106	18	850
800	61·4	31	28	168	18	61·0	38	29	187	30						62·8	24	20	107	16	62·9	26	18	092	16	62·9	27	15	117	09	62·7	34	24	114	15	800
750		26	24	185	17	No Radio Sonde Ascent	21	23	182	31	No Radio Sonde Ascent						17	13	098	13		23	11	080	11		27	06	117	09		29	17	117	16	750
700	96·2	21	18	191	23		26	16	179	31		96·1				97·0	14	-10	095	11	97·3	18	00	065	06	97·5	21	07	119	08	97·4	22	12	129	14	700
650		14	05	195	24	Available	20	12	183	34	Available						13	12	114	08		13	13	110	07		13	06	125	07		16	08	143	14	650
600	135·2	06	-05	196	21		15	07	183	31		135·6				135·5	06	-14	145	09	136·1	05	-10	135	14	136·4	05	-03	134	12	136·5	09	01	120	23	600
550		02	-18	196	34	See top of Page for Winds	11	-02	201	25	See top of page for Winds						-03	-22	155	14		-02	-09	126	20		00	-11	161	12		03	-04	197	28	550
500	180·0	-08	-25	210	44		02	-11	194	28		181·3				179·8	-13	-25	157	15	180·5	-12	-18	134	18	181·0	-09	-20	166	12	181·5	-05	-08	208	29	500
450		-14	-24	223	44		-08	-21	196	35							-23	-35	145	18		-21	-26	134	13		-20	-33	162	11		-15	-18	210	26	450
400	233·1	-20	-28	191	33	234·8	-21		196	38						231·8	-33	-44	132	22	232·7	-30	-36	139	12	233·4	-28	-47	172	13	234·3	-26	-30	210	32	400
350		-33	-44	205	42		-32		196	40							-45		143	34		-44		125	15		-38	-58	190	41		-38	-44	212	45	350
300	298·4	-47		192	43	300·8	-45		201	48						295·3	-61		155	32	296·3	-60		107	16	298·1	-49		217	77	298·9	-49		215	48	300
250		-65					-60										-63		160	20		-56		130	09		-63		228	53		-62		223	38	250
200	384·0	-71				387·7	-56									381·3	-57		142	09	383·8	-53		159	11	384·9	-54		213	28	385·8	-57		176	17	200
170		-64															-57		150	08		-52		180	10		-54		197	13		-55		162	05	170
150		-64															-59		165	09		-53		185	10		-55		182	11		-57				150
130		-63																				-53		180	10		-53		182	11		-57				130
110		-63																				-52		159	06		-54		130	07		-56				110
100	530·2	-62																			534·1	-51				534·9	-54		088	12	534·5	-56				100
90		-62																																		90
80																																				80
70		Isothermal																																		70
60		910 - 890 mb 40°																																		60
		450 - 444 mb -14°																																		
							Inversion																			Inversion					Inversion					
							915 mb 45° - 900 mb 47°																			800 mb 27° - 763 mb 29°					830 mb 31° - 800 mb 34°					
							Isothermal																									Isothermal				
							900 - 899 mb 47°																									682 - 666 mb 19°				
							609 - 583 mb 15°																														
Tropopause	II 230 mb -72° 35,500'		I 240 mb -62° 35,000'		II 280 mb -67° 31,000'		I 300 mb -60° 29,600'		I 241 mb -63° 34,600'		I 242 mb -68° 39,500'																								Tropopause

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., and 300 mb., levels at about 15h G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

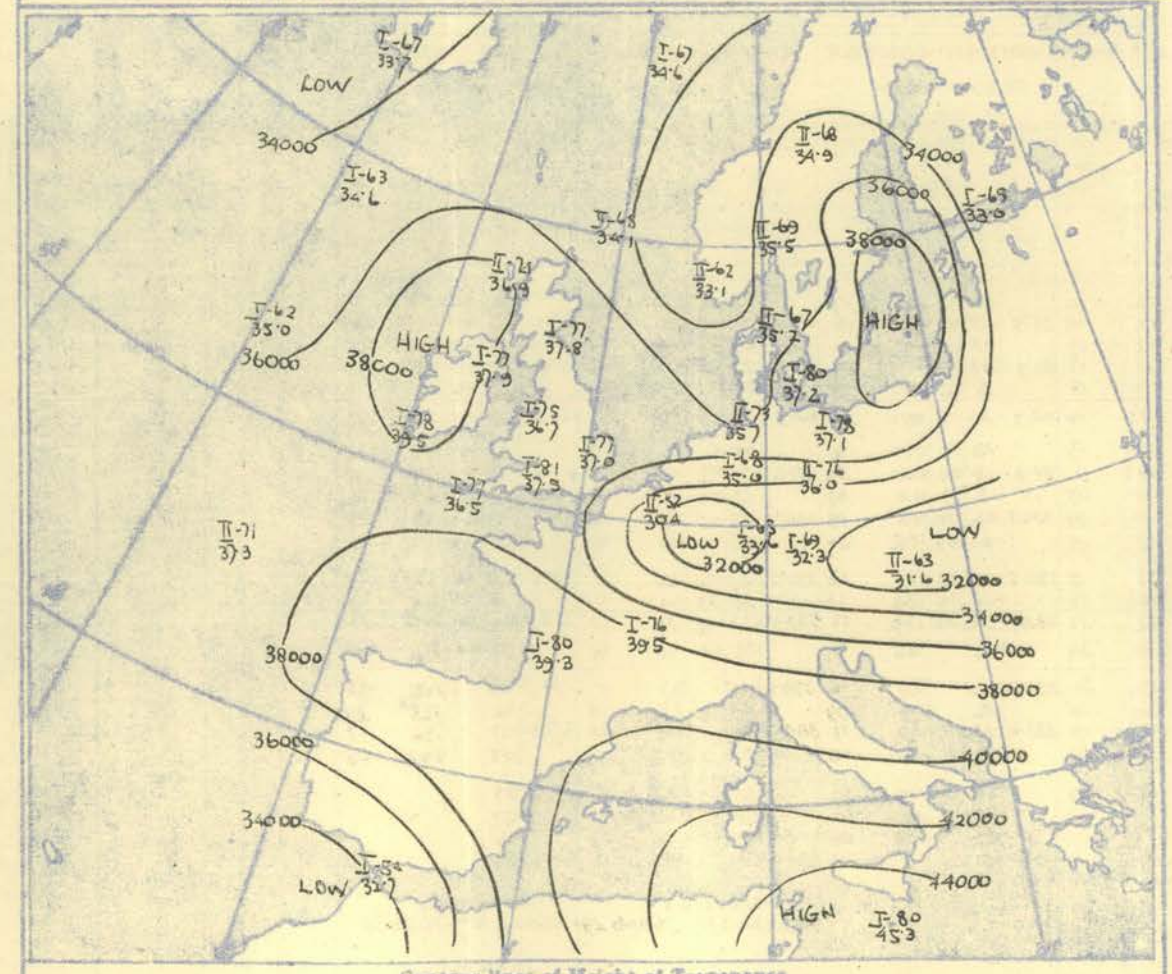


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

60 50 40 30 20 10 Knots

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Note movement of cold trough to west of British Isles: this northwest movement towards the area between Iceland and Greenland was of importance in giving fine spell of British Isles.

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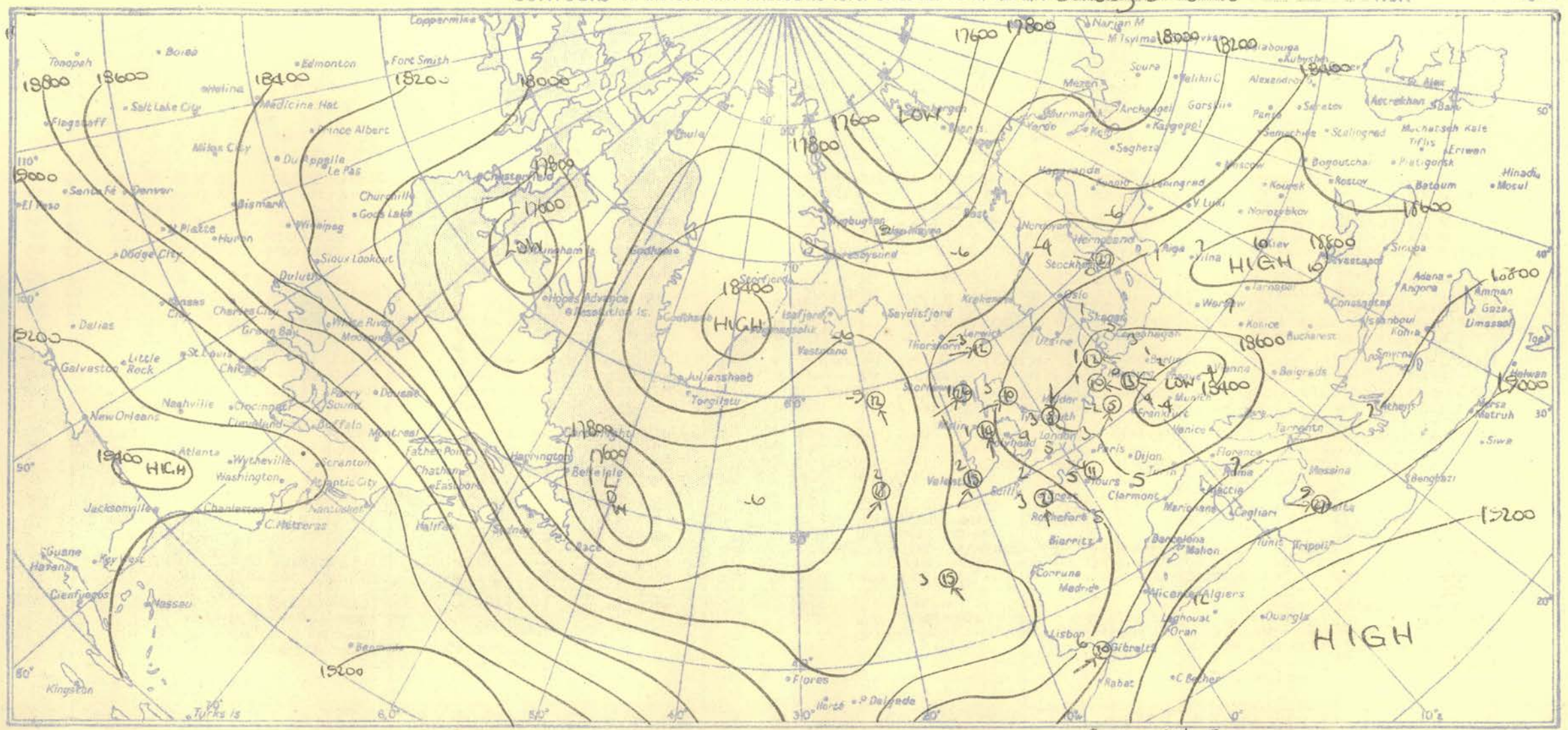
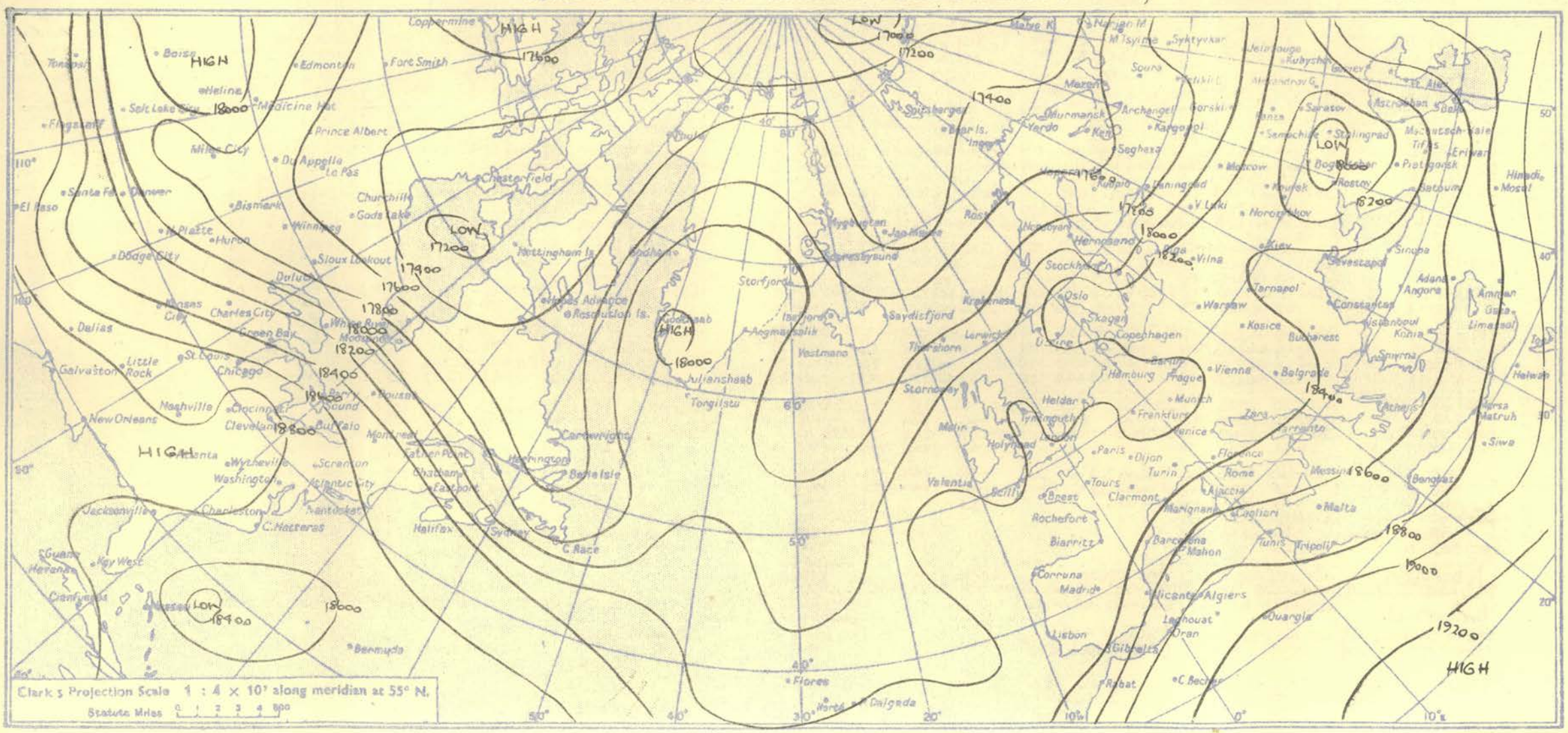
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Sunday 3rd June 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Sunday 3rd June. 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Sunday 3rd June 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15 hrs G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Pressure: Time	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.
M.S.L.	1018·7 mb	1016·9 mb	1017·1 mb	1014·6 mb	1014·9 mb	1015·6 mb	1014·5 mb	1014·8 mb	1014 mb
Surf	1008·6 mb	1014·3 mb	1016·3 mb	1005·3 mb	1012·9 mb	1011·3 mb	999·0 mb	1004·9 mb	1012 mb
Freezing	762 mb	763 mb	720 mb	746 mb	721 mb	700 mb	700 mb	705 mb	715 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	02·7	52	42	090	06
1000	04·9	48	40		
950		46	38	110	07
900	33·4	46	31	122	06
850		41	25	127	06
800	64·9	37	17	136	03
750		30	14	225	08
700	999	23	10	184	03
650		15	06	290	08
600	159	12	02	282	11
550		06	-3	263	11
500	184·3	-3	-16	271	12
450		-12	-25	273	14
400	231·5	-24	-29	280	21
350		-36	-50	290	29
300	302·1	-53		285	28
250		-68		291	33
200	367·7	-62		263	17
170		-60		251	15
150		-59		248	10
130		-58		248	09
110		-58		256	13
100	535·8	-61		262	11
90		-57		251	10
80		-56		264	09
70		-55			
60		winds by theodolite.			
		Inversion 264 mb 41°-255 mb 46°, 255 mb 46°-220 mb 47°, 670 mb 18°-650 mb 19°			

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	0·4	54	48	Calm	
1000	04·5	52	47	108	06
950		55	25	131	07
900	33·0	50	37	204	14
850		45	25	195	20
800	65·3	38	21	195	20
750		30	26	200	19
700	100·3	22	18	208	17
650		19	14	214	17
600	139·3	13	08	224	18
550		05	-1	231	19
500	184·8	-4	-11	234	24
450		-14	-24	243	25
400	231·8	-25	-38	230	24
350		-38	-50	218	21
300	302·2	-55		242	17
250		-72		265	15
200	386·8	-68		249	15
170		-61		231	11
150		-60		230	08
130		-58		241	12
110		-57		236	04
100	534·0	-56		231	03
90		-56		223	04
80		-55			
70					
60					
		Isothermal 955 mb 46°, 600-582 mb 14°			

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	0·2	55	48	120	07
1000	04·7	47	40	L.V	
950		53	38	L.V	
900	33·4	51	14	L.V	
850		46	03	349	09
800	66·2	41	03	315	04
750		33	05	320	04
700	100·5	29	14	268	05
650		23	07	254	07
600	140·2	17	-2	269	07
550		11	-9	267	10
500	185·7	01	-17	253	15
450		-7	-26	251	15
400	236·3	-22	-34	254	13
350		-33	-41	248	13
300	305·1	-47		262	21
250		-64		278	13
200	389·2	-76		282	23
170		-63		241	15
150		-56		234	12
130		-56		224	09
110		-56		213	09
100	536·9	-56		224	08
90		-56		218	08
80		-56		228	09
70		-57		243	09
60		-57			
		Inversion 1014-975 mb 56°, 600-582 mb 14°			

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	0·2	55	48	140	08
1000	04·0				
950		55	40	166	12
900	33·4	53	32	185	13
850		47	29	200	14
800	66·2	40	23	203	14
750		33	20	188	16
700	100·4	27	15	186	15
650		23	11	186	15
600	140·2	19	04	178	15
550		15	-3	176	17
500	186·1	01	-12	173	14
450		-9	-26	181	12
400	235·3	-21	-33	196	12
350		-33	-45	167	11
300	305·4	-47		165	11
250		-64		160	11
200	388·4	-74		228	10
170		-64		249	10
150		-62		239	09
130		-62		226	14
110		-60		220	09
100	536·5	-59		215	12
90		-57		215	10
80		-57		221	09
70		-55			
60					
		Inversion 658 mb 22°-638 mb 25°			

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	0·6	60	46		
1000	04·2	67	47		
950		62	50		
900	33·3	53	40		
850		47	30		
800	65·5	42	21		
750		36	19		
700	100·7	29	12		
650		25	04		
600	140·8	20	-6		
550		13	-18		
500	186·7	04	-24		
450		-8	-35		
400	240·4	-24	-42		
350		-34	-50		
300	305·5	-31			
250		-50			
200	388·5	-65			
170		-55			
150		-51			
130		-53			
110		-56			
100	535·7	-54			
90		-52			
80		-51			
70		-50			
60		(72)			

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	01·2	65	50	330	10
1000	04·4	62	48		
950		53	43	001	07
900	33·0	48	34	347	10
850		43	32	353	12
800	65·0	40	18	336	10
750		36	17	356	07
700	100·3	32	18	011	06
650		25	11	003	08
600	140·2	19	-3	357	03
550		13	-13	294	04
500	186·1	03	-25	027	06
450		-9	-31	034	15
400	239·7	-21	-46	028	16
350		-36	-55	060	16
300	304·6	-51		315	18
250		-70		308	20
200	388·4	-67		272	14
170		-61		280	09
150		-59		251	09
130		-60		261	12
110		-58		240	08
100	531·1	-57		236	08
90		-56		222	06
80		-53		215	09
70		-53		236	09
60		-53			

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	01·2	65	48	Calm	
1000	04·1				
950		60	46		
900	33·1	54	47	179	09
850		49	44	107	11
800	64·6	39	31	094	15
750		35	08	102	14
700	100·2	31	10	108	07
650		25	03	135	07
600	140·1	19	08	165	03
550		12	-3	203	10
500	185·8	02	-16	215	14
450		-10	-25	201	14
400	238·3	-21	-37	203	13
350		-34	-47	209	18
300	304·5	-50		211	21
250		-68		220	29
200		-78			
170		(205)			
150					
130					
110					
100					
90					
80					
70					
60					
		Inversion 513 mb 12°-505 mb 14° Isothermal 800-740 mb 39° 700-682 mb 31° 525-508 mb 4°			

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	02·3	61	53	190	10
1000	03·8	60	53	187	11
950		53	43	148	14
900	32·8	47	43	156	12
850		45	36	031	16
800	64·5	40	34	183	15
750		35	30	183	13
700	99·9	30	25	183	13
650		25	18	187	14
600	159·7	16	10	196	15
550		09	03	207	16
500	185·5	02	-6	210	15
450		-10	-18	201	13
400	238·8	-22	-33	202	12
350		-34	-47	253	08
300	307·5	-63		307	15
250		-63		301	15
200	390·0	-71		277	15
170		-71		251	17
150		-66		230	12
130		-63		219	13
110		-63		212	17
100	535·5	-64		217	16
90		-61		218	15
80		-61		213	14
70		-57		220	11
60		-56		220	11
		Isothermal 800-740 mb 39° 700-682 mb 31° 525-508 mb 4°			

Tropopause	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
	II 250 mb -68° 34100'	II 220 mb -74° 36900'	I 213 mb -77° 37800'	I 212 mb -77° 37900'	I 223 mb -75° 36700'	I 220 mb -77° 37000'	I 215 mb -81° 37500'	I 225 mb -77° 36500'	I 195 mb -78° 39500'

21 hrs G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	
Pressure: Time	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	G.M.T.
M.S.L.	1015·7 mb	1016·5 mb	1018·1 mb	1015·6 mb	1015·6 mb	1016·4 mb	1015·5 mb	1015·4 mb	mb
Surf	1009·5 mb	1014·9 mb	1017·3 mb	1006·1 mb	1013·6 mb	1011·9 mb	999·6 mb	1005·0 mb	mb
Freezing	779 mb	763 mb	748 mb	750 mb	732 mb	726 mb	726 mb	715 mb	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	02·7	46	42		
1000	05·2	43	42		
950		40	28		
900	33·7	40	29		
850		41	20		
800	65·2	35	16		
750		29	11		
700	100·1	24	04		
650		20	-6		
600	139·3	14	-11		
550		05	-12		
500	184·7	-4	-14		
450		-14	-27		
400	231·7	-25	-35		
350		-38	-45		
300	302·3	-53			
250		-70			
200	386·9	-70			
170		-65			
150		-62			
130		-62			
110		-61			
100	533·6	-60			
90		-59			
80		-59			
70	(85)	-63			
60		Inversion 963 mb 43°-937 mb 47° Isothermal 937-917 mb 47° 890-868 mb 44°			

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	0·4	54	48	Calm	
1000	04·5	52	47	108	06
950		55	25	131	07
900	33·0	50	37	204	14
850		45	25	195	20
800	65·3	38	21	195	20
750		30	26	200	19
700	100·3	22	18	208	17
650		19	14	214	17
600	139·7	13	08	224	18
550		05	-1	231	19
500	184·8	-4	-11	234	24
450		-14	-24	243	25
400	238·8	-25	-38	230	24
350		-38	-50	218	21
300	302·2	-55		242	17
250		-72		265	15
200	386·8	-68		249	15
170		-61		231	11
150		-60		230	08
130		-58		241	12
110		-57		236	04
100	534·0	-56		231	03
90		-56		223	04
80		-55			
70					
60					
		Inversion 1015-990 mb 54° 695 mb 21-682 mb 28° Isothermal 575-563 mb 12°			

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	0·2	56	46	100	04
1000	04·3	47	46	113	09
950		49	36	113	07
900	33·5	50	17	083	04
850		46	03	064	07
800	66·3	40	18	011	04
750		33	15	353	02
700	100·3	27	11	233	02
650		21	05	280	04
600	139·7	14	08	280	06
550		06	-2	296	06
500	185·5	-3	-9	290	12
450		-12	-19	178	13
400	238·2	-23	-32	178	13
350		-37	-47	180	13
300	302·8	-52		181	21
250		-66		164	14
200	388·0	-71		234	06
170		-67		242	09
150		-63		242	12
130		-63		241	13
110		-62			
100					
90					
80					
70					
60					
		Inversion 978 mb 43°-936 mb 53° 675 mb 22°-647 mb 23° Isothermal 575-563 mb 12°			

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	0·6	60	51		
1000	04·3	62	50		
950		56	40		
900	33·6	51	38	193	12
850		46	33	203	12
800	66·5	41	27		
750		35	22		
700	100·7	27	15		
650		21	08		
600	140·3	17	-11		
550		10	-21		
500	185·9	00	-31		
450		-11	-39		
400	238·2	-24	-37		
350		-39	-49		
300	303·6	-65			
250		-73			
200	387·6	-70			
170		-65			
150		-64			
130		-64			
110		-61			
100	535·3	-61			
90		-59			
80		-58			
70		-56			
60		(75)			
		Inversion 1019 mb 60°-983 mb 64° 685 mb 19-622 mb 26°			

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	01·2	50	44	320	07
1000	04·4	58	48	calm	
950		54	45	360	11
900	33·1	49	17	353	13
850		43	13	001	15
800	64·8	40	06	360	14
750		36	14	360	10
700	100·0	28	14	360	07
650		22	05	001	06
600	139·6	15	-7	004	10
550		07	-20	003	11
500	185·0	-3	-29	003	07
450		-16	-40	025	07
400	231·8	-29	-51	021	08
350		-44	-55	353	08
300	301·4	-61		327	13
250		-80		310	18
200	383·4	-87		300	13
170		-76		286	08
150		-74		279	08
130		-74		277	09
110		-74		275	09
100	525·4	-70		273	08
90		-70		249	09
80		-71		252	09
70		-70			
60					
		Inversion 1012 mb 50°-992 mb 51° 965 mb 51-950 mb 53° 782 mb 38-768 mb 39° Isothermal 752-966 mb 51°			

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	04·4	58	49	calm	
1000	04·7				
950		56	46	099	03
900	33·3	51	42	067	07
850		45	37	055	10
800	65·1	41	21	037	12
750		38	13	122	06
700	100·6	32	10	120	05
650		25	07	148	07
600	140·5	18	05	168	08
550		09	-2	170	07
500	186·1	-2	-11	180	05
450		-10	-22	217	08
400	239·6	-22	-30	210	13
350		-36	-44	210	16
300	304·4	-54		220	18
250		-68		275	15
200	389·5	-75		262	11
170		-69		237	11
150		-64		240	08
130		-64		249	10
110		-65		250	09
100	534·7	-65		241	06
90		-63		238	06
80					
70					
60					
		Inversion 1005 mb 51-981 mb 55°			

Tropopause	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne
	I 219 mb -79° 36200'	II 232 mb -80° 35700'	II 215 mb -82° 37500'	II 233 mb -71° 35500'	II 234 mb -80° 35600'	222 mb -94° 36300'	I 224 mb -86° 36200'	I 216 mb -79° 37300'

No. 11754. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Monday 4th June. 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

METEOROLOGICAL OFFICE LIBRARY 13 JUN 1951 VALENTIA

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	G.M.T.
Pressure: M.S.L.	1020·9 mb	1017·0 mb	1020·0 mb	1016·9 mb	1017·0 mb	1017·6 mb	1016·6 mb	1015·3 mb	mb
Pressure: Surf	1010·1 mb	1015·4 mb	1019·2 mb	1007·3 mb	1015·0 mb	1013·1 mb	1000·9 mb	1009·9 mb	mb
Pressure: Freezing	775 mb	750 mb	724 mb	740 mb	729 mb	710 mb	728 mb	723 mb	710 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	41	41		
1000	05·4	41	41		
950		47	20		
900	33·8	45	25		
850		42	11		
800	65·2	35	18		
750		30	-02		
700	100·1	26	-10		
650		20	11		
600	139·5	12	04		
550		05	-07		
500	184·5	-01	-10		
450		-15	-23		
400	237·5	-25	-33		
350		-36	-43		
300	302·3	-51			
250		-69			
200	386·6	-81			
170		-69			
150		-63			
130		-64			
110		-65			
100	531·9	-64			
90		-64			
80		-63			
70		-60			
60		-58			
(1057 mb)		-57			

Inversion 977 mb 41° - 950 mb 47°
900 .. 45° - 887 .. 46°
Isothermal 1010 - 977 mb 41°
950 - 933 .. 47°

Tropopause: I 204 mb -83° 38,300

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·9	55	45	Calm	
1000	04·6	57	47		
950		58	46	184	09
900	33·7	50	38	206	18
850		46	33	198	21
800	65·5	39	28	200	15
750		32	24	211	16
700	100·6	26	19	210	19
650		20	13	215	14
600	140·0	19	08	225	11
550		06	00	218	14
500	185·3	-03	-09	215	21
450		-19	-22	217	24
400	238·3	-25	-39	233	24
350		-38	-56	233	24
300	302·9	-53		219	20
250		-69		214	12
200	387·3	-75		248	16
170		-68		227	08
150		-66		259	11
130		-64		254	08
110		-63			

Inversion 1015 mb 55° - 963 mb 60°
Isothermal 872 - 850 mb 46°

Tropopause: II 218 mb -81° 36,900

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	46	45	Calm	
1000	06·3	44	43	168	03
950		45	36	112	04
900	33·8	49	15	092	04
850		46	20	091	06
800	65·6	41	15	027	07
750		35	10	004	05
700	100·8	29	10	299	03
650		24	06	220	06
600	140·4	17	06	220	05
550		10	01	227	05
500	186·0	01	-07	221	05
450		-09	-18	203	09
400	239·6	-20	-28	176	07
350		-33	-42	198	09
300	309·8	-49		200	09
250		-66		162	11
200	389·7	-79		189	08
170		-73		231	09
150		-66		279	09
130		-66		264	07
110		-64		267	06
100	534·6	-63		260	03
90		-63		243	09
80		-62		293	09
70		-60		222	09
60		-59		285	09

Inversion 670 mb 41° - 929 mb 51°
670 .. 23° - 661 .. 26°
Isothermal 605 - 595 mb 17°
712 - 704 .. 30°

Tropopause: I 205 mb -80° 38,400

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	52	47	Calm	
1000	04·6	54	48		
950		57	45	172	04
900	33·7	52	44	177	06
850		45	37	180	06
800	65·5	38	32	192	09
750		33	26	218	10
700	100·6	26	21	231	09
650		21	15	225	08
600	140·1	14	03	217	07
550		06	00	212	06
500	185·4	-04	-09	203	04
450		-13	-19	182	03
400	238·4	-25	-30	208	05
350		-38	-42	104	05
300	303·0	-56		102	04
250		-67		323	12
200	388·2	-69		265	10
170		-66		250	11
150		-69		243	07
130		-65		235	09
110		-62		232	09
100	539·2	-62			

Inversion 100 mb 52° - 985 mb 59°
Isothermal 700 - 678 mb 26°
656 - 545 .. 06°

Tropopause: I 225 mb -71° 36,500

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	54	48		
1000	04·7	55	47		
950		57	45		
900	33·9	52	41		
850		47	38		
800	65·6	40	33		
750		35	24		
700	100·9	27	20		
650		23	11		
600	140·7	19	03		
550		12	-20		
500	186·5	03	-18		
450		-08	-17		
400	290·2	-19	-26		
350		-52	-38		
300	305·8	-46			
250		-63			
200	391·5	-76			
170		-72			
150		-65			
130		-66			
110		-66			
100	536·3	-65			
90		-65			
80		-66			
70		-63			

Inversion 1015 mb 54° - 955 mb 58°
Isothermal 666 - 656 mb 24°

Tropopause: II 208 mb -76° 38,200

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	44	42	060	05
1000	04·7	43	39	011	09
950		41	38	002	08
900	33·3	50	-03	028	08
850		47	-09	031	08
800	65·1	43	-03	023	07
750		38	16	011	07
700	100·5	30	06	018	07
650		25	00	060	05
600	140·3	20	-20	061	06
550		11	-34	075	05
500	186·2	03	-41	039	07
450		-10	-52	057	06
400	239·7	-22	-55	063	04
350		-37	-60	291	05
300	304·3	-54		320	13
250		-72		316	16
200	388·3	-75		307	09
170		-65		302	09
150		-65		269	09
130		-64		306	05
110		-63		242	06
100	534·9	-64		238	07
90		-61		248	07

Inversion 950 mb 41° - 935 mb 53°
Isothermal 676 - 665 mb 27°

Tropopause: I 219 mb -84° 37,500

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	56	48	030	03
1000	04·8	55	47		
950		53	42	035	09
900	33·6	48	40	031	10
850		44	29	034	16
800	65·4	41	12	098	13
750		37	11	058	12
700	100·8	30	14	057	10
650		23	02	050	05
600	140·5	17	-11	028	03
550		11	-20	147	03
500	186·2	01	-30	162	07
450		-09	-33	150	08
400	239·8	-22	-38	162	08
350		-35	-47	184	07
300	304·8	-49		216	10
250		-66		256	06
200	390·2	-68		305	07
170		-61		274	07
150		-59		255	06
130		-58		248	06
110		-57		291	08
100	538·0	-56		273	05
90		-54		247	03
80		-52			

Inversion 986 mb 52° - 955 mb 59°
Isothermal 695 - 625 mb 22°
600 - 582 .. 17°

Tropopause: I 220 mb -79° 37,100

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	53	45	136	05
1000	04·2	54	46		
950		55	43	113	10
900	33·2	49	29	101	15
850		44	33	105	21
800	64·9	41	27	115	13
750		35	07	117	08
700	100·1	31	09	112	08
650		26	06	113	05
600	140·1	19	02	158	09
550		08	-03	168	10
500	185·3	-02	-13	175	05
450		-13	-21	250	03
400	238·5	-25	-33	286	03
350		-39	-47	299	07
300	302·9	-56		L and V	
250		-73		339	12
200	387·4	-68		248	06
170		-63		259	07
150		-63		247	07
130		-63		227	08
110		-61		265	04

Inversion 1005 mb 53° - 976 mb 58°
Isothermal 713 - 700 mb 31°

Tropopause: I 232 mb -77° 35,600

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	50	48	Calm	
1000	04·4	50	46		
950		54	45	163	04
900	33·4	50	40	169	19
850		45	38	169	17
800	66·2	40	31	162	14
750		35	21	147	14
700	100·6	31	21	140	13
650		25	18	140	13
600	140·4	17	12		
550		09	04		
500	186·0	00	-07		
450		-09	-16		
400	239·6	-20	-22		
350		-31	-38		
300	305·2	-48			
250		-66			
200	390·2	-81			
170		-72			
150		-70			
130		-64			
110		-67			
100	534·3	-65			
90		-65			
80		-64			
70		-62			
60		-60			
		-60			
(1041 mb)		-60			

Inversion 1014 mb 50° - 992 mb 56°

Tropopause: I 206 mb -83° 38,400

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Pressure: Time	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	G.M.T.
Pressure: M.S.L.	1021·9 mb	1018·3 mb	1020·5 mb	1018·1 mb	1018·3 mb	1018·5 mb	1017·2 mb	1016·3 mb	mb
Pressure: Surf	1010·9 mb	1016·7 mb	1019·7 mb	1008·6 mb	1016·3 mb	1013·9 mb	1001·3 mb	1005·8 mb	mb
Pressure: Freezing	760 mb	730 mb	753 mb	732 mb	743 mb	688 mb	716 mb	720 mb	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	48	44	080	04
1000	05·6	45	41	090	04
950		49	31	115	03
900	34·2	46	29	171	02
850		42	28	230	03
800	65·8	37	31	325	04
750		31	28	Winds	
700	100·8	24	22		
650		21	17	by	
600	140·2	14	11		
550		07	01	Theodolite.	
500	185·5	-04	-07		
450		-13	-19		
400	238·7	-22	-32		
350		-34	-44		
300	303·8	-50			
250		-67			
200	388·8	-70			
170		-62			
150		-60			
130		-58			
110		-59			
100	536·3	-59			
90		-57			
80		-56			
70		-54			
60		-52			
		-48			

Inversion 995 mb 44° - 967 mb 49°
689 .. 22° - 675 .. 23°
Isothermal 967 - 939 mb 49°
605 - 590 .. 18°

Tropopause: I 217 mb -80° 37,200

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·9	55	48	Calm	
1000	04·9	59	49		
950		56	44	206	09
900	34·0	52	41	188	08
850		46	33	165	06
800	65·9	40	27	149	09
750		34	25	172	09
700	101·1	28	18	229	08
650		22	12	261	09
600	140·7	16	08	265	09
550		09	00	263	10
500	186·3	00	-11	232	19
450		-09	-21	221	18
400	239·9	-20	-33	235	18
350		-33	-47	240	18
300	305·3	-46		234	19
250		-64		228	21
200	390·9	-70		246	13
170		-60		257	12
150		-61		259	09
130		-59		250	09
110		-56		229	09
100	538·6	-56		234	06
90		-56		227	06
80		-53		218	04
70		-50			

Inversion 1017 mb 55° - 1005 mb 59°

Tropopause: I 219 mb -76° 37,100

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	51	50	Calm	
1000	05·7	46	46	Land V	
950		51	30	"	
900	33·3	44	28	040	06
850		46	20	022	07
800	66·0	38	13	002	07
750		32	18	343	06
700	101·0	24	21	Land V	
650		22	14	"	
600	140·6	15	08	224	06
550		06	-03	Land V	
500	185·8	-02	-15	170	05
450		-12	-24	205	09
400	239·0	-24	-29	214	09
350		-39	-45	206	12
300	303·6	-54		200	12
250		-72		185	13
200	388·1	-71		214	09
170		-66		270	07
150		-66		260	08
130		-65		247	08
110		-62		254	09
100	539·0	-61		262	06
90		-60		237	06

Inversion 977 mb 49° - 956 mb 51°
694 .. 23° - 665 .. 24°
Isothermal 956 - 932 mb 51°

Tropopause: I 225 mb -76° 36,200

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	62	49	Calm	
1000	05·0	61	47	195	03
950		57	43	125	04
900	34·2	54	40	102	06
850		48	35	118	05
800	66·2	42	30	173	04
750		39	23	195	03
700	101·5	28	20	Land V	
650		22	07	"	
600	141·2	16	02	042	07
550		07	-04	Land V	
500	186·6	-01	-10	"	
450		-08	-20	115	02
400	239·9	-23	-33	006	03
350		-36	-45	358	05
300	309·8	-50		346	29
250		-63		332	29
200	390·6	-68		310	11
170		-65		282	09
150		-62		249	10
130		-61		240	09
110		-61		258	05
100	537·3	-59			

Isothermal 963 - 930 mb 57°

Tropopause: I 221 mb -70° 37,000

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	57	51		
1000	05·0	55	47		
950		57	44		
900	34·1	52	43		
850		46	36		
800	65·9	39	26		
750		33	24		
700	101·0	27	19		
650		22	09		
600	140·6	18	-03		
550		08	-01		
500	186·1	-01	-08		
450		-11	-17		
400	239·4	-24	-30		
350		-38	-44		
300	303·9	-59			
250		-67			
200	389·0	-66			
170		-62			
150		-61			
130		-61			
110		-59			
100	536·4	-57			
90		-55			
80		-55			
70		-53			
60		-50			

Inversion 992 mb 54° - 950 mb 57°

Tropopause: I 220 mb -72° 36,900

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	53	43	360	08
1000	06·0	49	40		
950		42	38	062	13
900	33·5	50	02	062	13
850		47	03	055	12
800	65·3	43	04	046	11
750		38	00	041	09
700	100·7	32	08	038	07
650		25	-01	042	04
600	140·6	20	-13	075	05
550		11	-31	086	05
500	186·4	08	-39	073	09
450		-08	-45	070	06
400	240·1	-21	-53	090	06
350		-36	-59	253	04
300	305·1	-50		319	06
250		-67		307	07
200	390·1	-73		308	07
170		-61		312	06
150		-57		271	05
130		-59		268	05
110		-58		278	07
100	537·9	-56		293	07
90		-64		293	05
80		-53		192	04
70		-52			

Inversion 950 mb 42° - 923 mb 52°

Tropopause: I 220 mb -77° 37,000

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	56	48	030	03
1000	04·8	55	47		
950		53	42	035	09
900	33·6	48	40	031	10
850		44	29	034	16
800	65·4	41	12	098	13
750		37	11	058	12
700	100·8	30	14	057	10
650		23	02	050	05
600	140·5	17	-11	028	03
550		11	-20	147	03
500	186·2	01	-30	162	07
450		-09	-33	150	08
400	239·8	-22	-38	162	08
350		-35	-47	184	07
300	304·8	-49		216	10
250		-66		256	06
200	390·2	-68		305	07
170		-61		274	07
150		-59		255	06
130		-58		248	06
110		-57		291	08
100	538·0	-56		273	05
90		-54		247	03
80		-52			

Inversion 986 mb 52° - 955 mb 59°
Isothermal 695 - 625 mb 22°
600 - 582 .. 17°

Tropopause: I 220 mb -79° 37,100

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	60	48	110	08
1000	04·5	59	46		
950		56	41	116	20
900	33·5	51	33	114	17
850		47	22	110	10
800	65·4	41	19	108	07
750		39	19	115	06
700	100·8	30	17	120	07
650		24	08	116	11
600	140·7	17	-02	123	07
550		07	-02	175	04
500	186·1	-03	-12	093	03
450		-13	-23	136	03
400	239·3	-24	-33	L and V	
350		-37	-47	065	05
300	303·9	-53		050	10
250		-71		053	07
200	388·4	-72		310	04
170		-65		294	04
150		-63		278	05
130		-62		217	03
110		-61			
100	(109 mb)	-61			

Inversion 779 mb 38° - 767 mb 39°
Isothermal 988 - 950 mb 56°

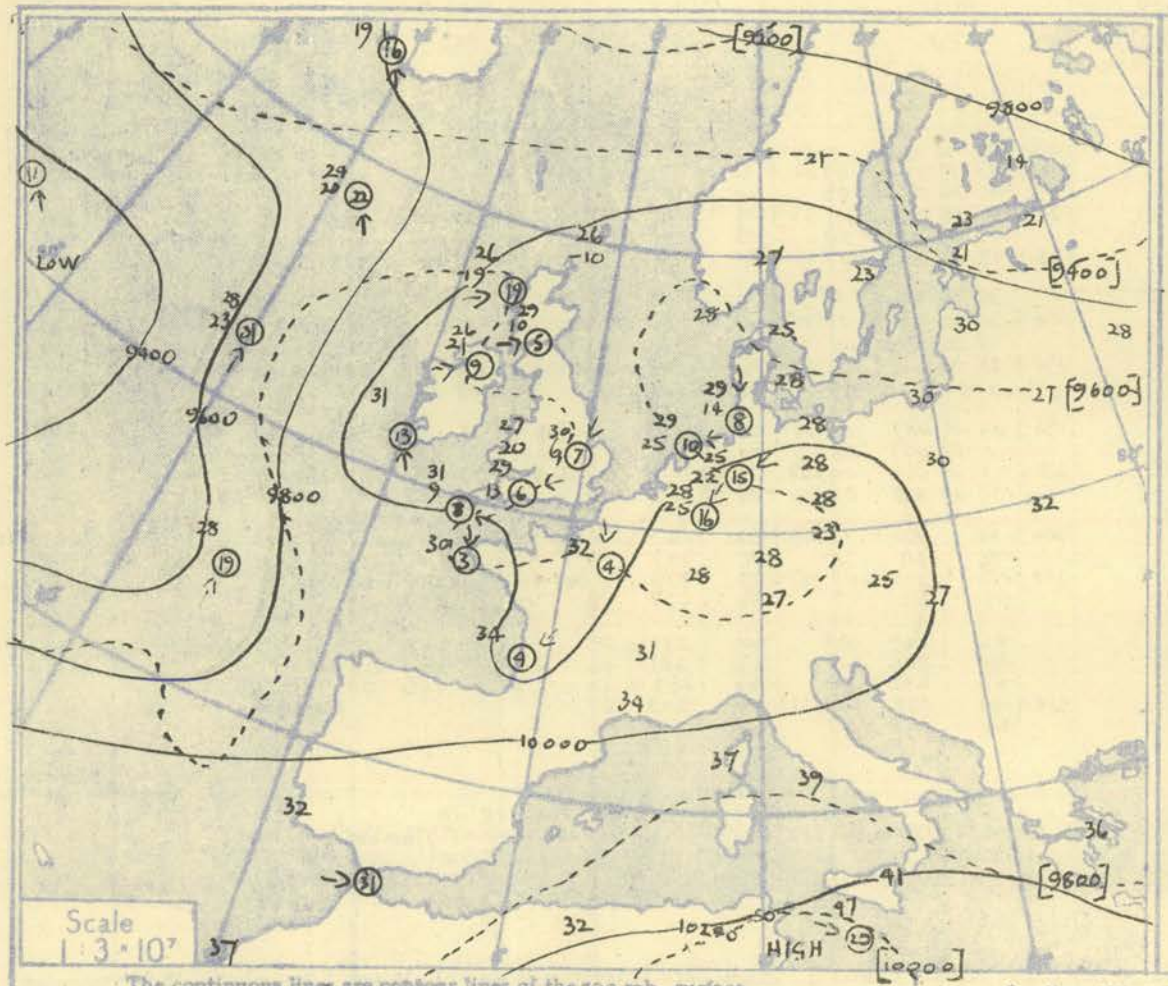
Tropopause: I 218 mb -78° 37,000

Station	VALENTIA
Pressure: Time	G.M.T.
Pressure: M.S.L.	mb
Pressure: Surf	mb
Pressure: Freezing	mb

Tropopause: —

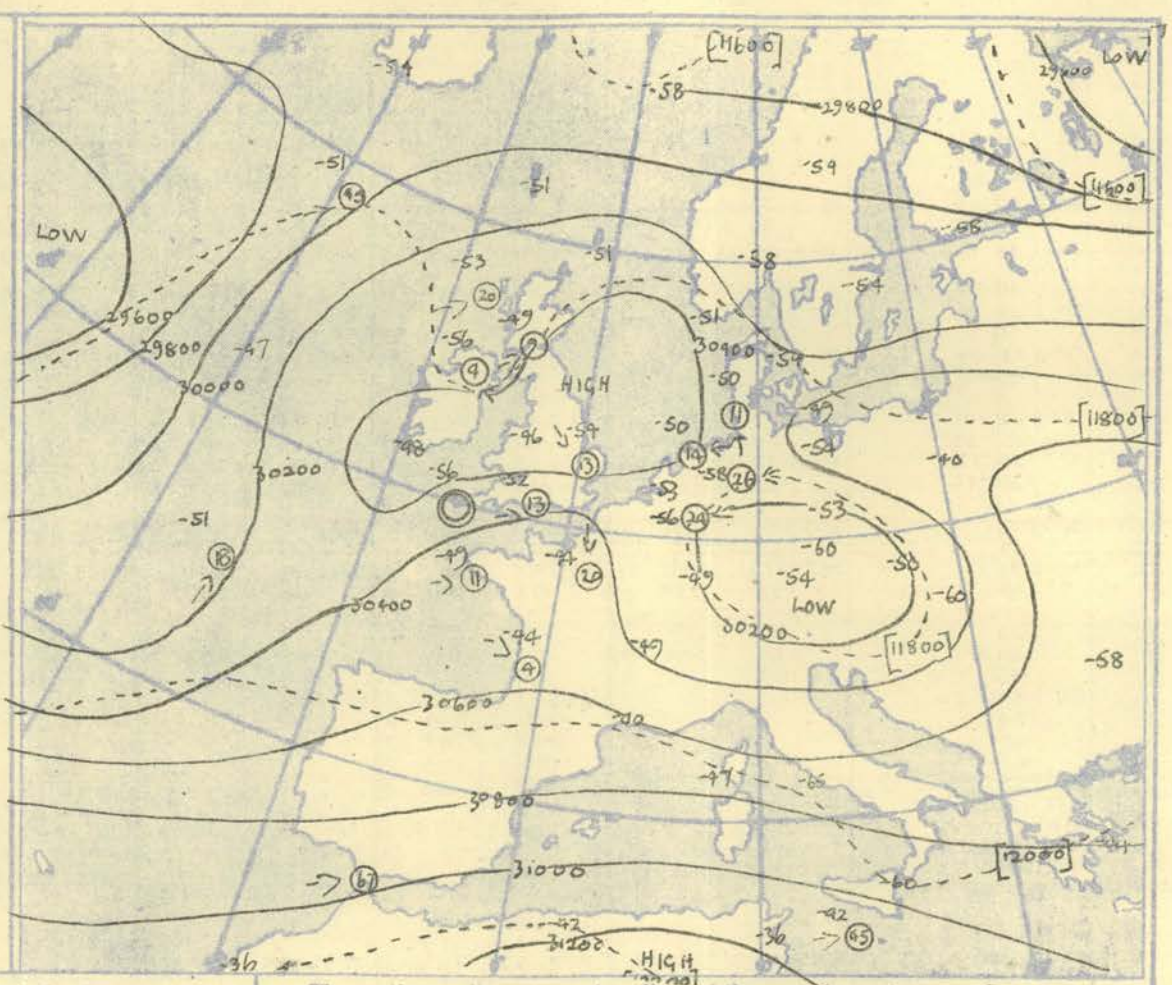
Monday 4th June 1951.

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb. and 300 mb., levels at about 03h G.M.T.

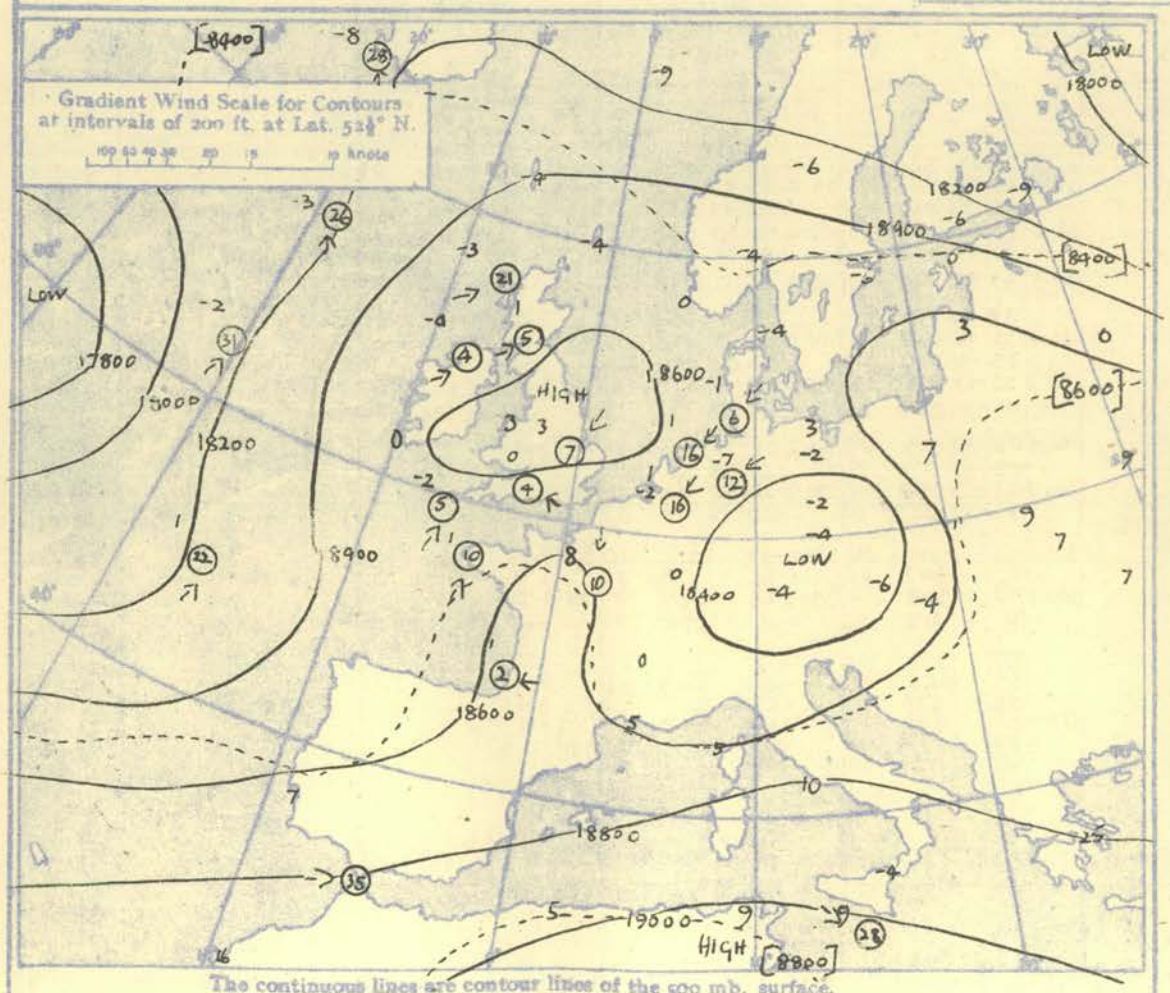


The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

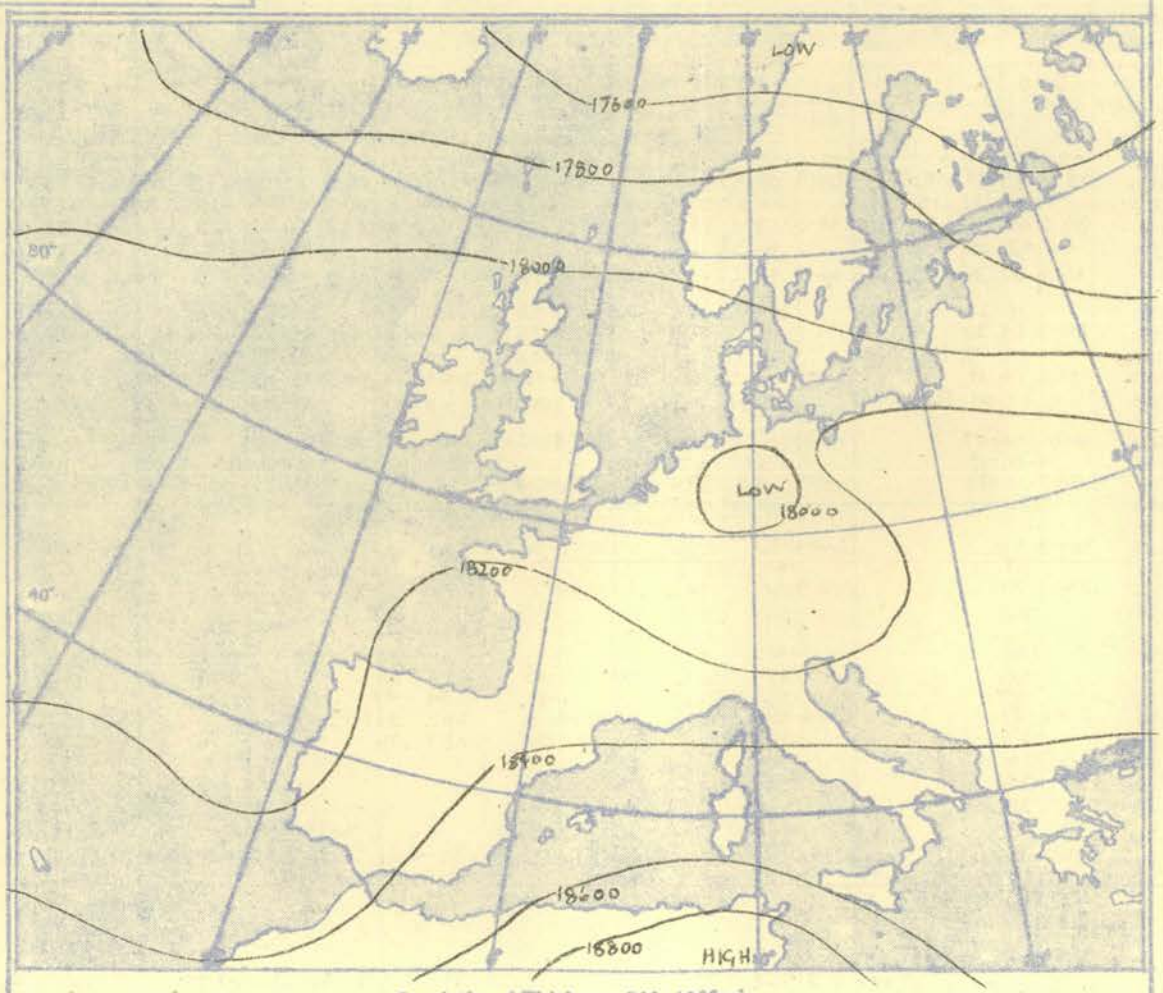
Gradient Wind Scale for Contours
at intervals of 200 ft. at Lat. 52½° N.



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500 - 1000mb.

Monday 4th ~~May~~ June

METEOROLOGICAL OFFICE 13 JUN 1951

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	58·1°N 17·0°W	47·7°N 12·3°W	52°12'N 2°12'W																			
Time	12 hrs	1345 hrs	1355 hrs																			Time
Pressure M.S.L.	1005 mb	1011 mb	1018 mb	mb			mb			mb			mb			mb			mb			Pressure M.S.L.
Surf	1006 mb	1007 mb	1016·3 mb	mb			mb			mb			mb			mb			mb			Surf
Freezing	730 mb	720 mb	715 mb	mb			mb			mb			mb			mb			mb			Freezing

Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Pressure mb
Surf	—	56	55	—	55	54	0·4	—	—																Surf
1000	2·7	55	—	30	55	—	0·5	0	—																1000
950		50	48		52	52		—	—																950
900		50	50		54	54	2·4	50	39																900
850		45	42		51	51		45	30																850
800		42	41		45	39	0·6	41	23																800
750		35	34		36	—		—	—																750
700	31·6	28	—	29·6	30	—	1·3	31	21																700
650		22	—		21	—		—	—																650
600		15	—		14	—	1·4	13	12																600
550		09	—		08	—																			550
500				18·3	00	—	1·8	00	—																500
450								—	—																450
400							2·0	5	2·5																400
350								—	—																350
300	Cloud			Cloud			3·0	0	3·3																300
250	5 8Sc 280-340			1 8Sc 270-300																					250
200	2 8Ac 200-TNR			4 8Ac 500-510			Cloud. Patches Cs 420-335 mb																		200
170	N&C NR. Surface wind. S. 11-16 kts			2 8Sc 550-580 Surface wind. S.E. 11-16 kts																					170

Pressure mb	Direction (degrees from N) and Velocity (knots) of UPPER WINDS at heights above M.S.L.																				Pressure mb
Place	Ronaldsway		Inverness		St Eval		Ronaldsway		Lyneham		Wick		Leuchars								Place
Time	02hrs		14hrs		14hrs		14hrs		14hrs		15hrs		15hrs								Time
Type																					Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Surf.	030	06	030	12	130	14	050	01	040	04	140	10									Surf.
1,000	050	05	080	10	140	18	110	06	030	05	150	17									1,000
2,000	100	02	050	04	120	16	120	04	040	03	160	08									2,000
3,000	130	04	240	01	050	19	070	08	120	07	030	01									3,000
4,000	270	03	240	03	060	16	130	04	140	08	090	01									4,000
5,000	290	04	230	06	060	12	100	06	130	10	270	05									5,000
6,000	290	05	230	03	050	17			140	10	230	03									6,000
8,000	030	01	211	11					090	08	230	07									8,000
10,000	190	04	230	13					030	10	230	08									10,000
14,000	190	09							130	12											14,000
18,000	(12000')								140	06											18,000
24,000									150	10											24,000
30,000									200	10											30,000
40,000																					40,000
50,000													27606 25208 (58000')								50,000

NEPHOSCOPE OBSERVATIONS

Place															Place
Time Type															Time Type
Dir. Vel.															Dir. Vel.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	CIRRUS	CIRRUS	CIRRUS	CIRRUS	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER		Ship
Lat/Long	52·5N 20·0W	52·5N 20·0W	52·5N 20·0W	52·5N 20·0W	59·2N 18·7W	59·1N 18·5W	59·1N 18·4W	59·1N 18·4W		Lat/Long
Time	03L G.M.T.	09L G.M.T.	15L G.M.T.	21L G.M.T.	03L G.M.T.	09L G.M.T.	15L G.M.T.	21L G.M.T.	G.M.T.	Time
Pressure M.S.L.	1003 mb		1005 mb		1009 mb	1008 mb	1012 mb	1014 mb	mb	Pressure M.S.L.
Surf	1003 mb		1005 mb		1009 mb	1008 mb	1012 mb	1014 mb	mb	Surf
Freezing	750 mb		740 mb		765 mb	735 mb	735 mb		mb	Freezing

Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf		56	54	160	16		56	54	140	18		50	49	100	26		52	52	140	19		54	52	160	20		53	52	155	12					Surf
1000	1·1	55	54	158	16	1·6	55	54	140	19	2·5	49	47	100	31	2·3	51	51	157	26	3·2	52	49	162	30	3·9	52	51	167	15					1000
950		51	50	159	22		51	50	140	22		44	41	102	35		50	50	155	28		47	41	169	26		49	45	168	18					950
900	29·3	46	45	172	22	30·5	46	46	149	22	30·9	41	36	105	39	31·1	48	48	155	26	31·8	41	35	174	24	32·6	45	41	170	20					900
850		41	40	171	22		43	40	141	22		39	32	118	28		43	43	155	22		38	32	177	24		45	19	173	24					850
800	61·6	34	34	170	24	62·2	38	37	148	29	62·3	35	32	129	27	62·8	40	37	155	22	63·2	35	28	177	24	64·3	42	25	187	27					800
750		32	28	179	30		33	33	159	36		30	27	137	24		34	32	154	22		33	15	178	24		36	29	194	27					750
700	96·8	28	23	182	31	99·5	29	29	172	32	97·3	24	20	143	22	98·1	27	19	161	23	98·3	30	02	176	26	99·7	30	25	192	25					700
650		22	20	179	21		23	22	174	34		19	16	148	24		20	15	163	28		24	-03	180	27		22	15	170	20					650
600	136·4	14	14	177	20	137·4	16	14	176	33	126·7	13	07	150	24	137·6	13	09	165	27	138·1	18	00	187	26	139·4	13	03	184	21					600
550		05	05	174	26		07	03	171	37		04	-01	157	24		05	06	175	27		10	-01	193	24		08	02	183	19					550
500	181·9	-02	-02	181	31	183·0	02	-06	172	39	181·9	-03	-08	167	26	182·8	-03	-07	188	30	183·8	02	-07	193	22	184·9	02	-06	183	17					500
450		-11	-11	177	37		-06	-19	168	36		-12	-18	181	27		-12	-18	190	31		-07	-17	193	30		-09	-19	183	18					450
400	235·2	-21	-21			237·0	-18	-34	170	39	235·0	-23	-30	189	42	235·9	-29	-31	186	34	237·6	-19	-29	193	40	238·6	-19	-36	186	20					400
350		-32					-30					-37	-44	194	36		-39	-46	184	38		-30	-44	197	40		-32	-50	191	21					350
300	300·5	-47				302·7	-45				299·8	-51		196	45	300·6	-51		193	45	303·4	-45		204	42	304·0	-48		195	21					300
250		-63					-62					-70		205	44		-68		197	39		-60		220	52		-67		207	31					250
200	386·1	-68				388·8	-69				385·2	-62		215	33	386·1	-63		195	31	390·2	-61		227	40	389·1	-64		225	24					200
170		-65					-64					-60		217	20		-59		211	21		-55		214	24		-62		259	19					170
150		-65					-62					-61		220	22		-58		206	15		-55		199	18		-62		231	19					150
130		-64					-62				(113 mb)	-67					-58		206	14		-55		195	12		-61		228	11					130
110		-64					-62										-58		207	14		-54		195	12		-59		215	09					110
100	532·2	-63				535·4	-62									539·4	-56		206	14	539·7	-53		195	08	536·5	-58		198	07					100
90		-63					-60									(98 mb)	-56					-51		198	02		-58		198	07					90
80		-63					-58															-49		195	12		-55		198	08					80
70		-62					-55															-46		197	11		-51		198	06					70
60		-62					-53															-44		197	06									60
							-49														(55 mb)	-44												
							-46																											
						(30 mb)	-41																											

Isothermal 795 mb 33° - 780 mb 33°

Isothermal 900 - 875 mb 46° 550 - 544 :: 07° 500 - 495 :: 02°

Isothermal 872 - 861 mb 41° 822 - 800 :: 40°

Inversion 900 mb 45° - 875 mb 46°

Tropopause	I 214 mb - 75° 37,200'			I 218 mb - 72° 37,100'	I 237 mb - 73° 35,000'	II 234 mb - 71° 35,400'	II 238 mb - 69° 35,900'	I 217 mb - 80° 37,200'		Tropopause

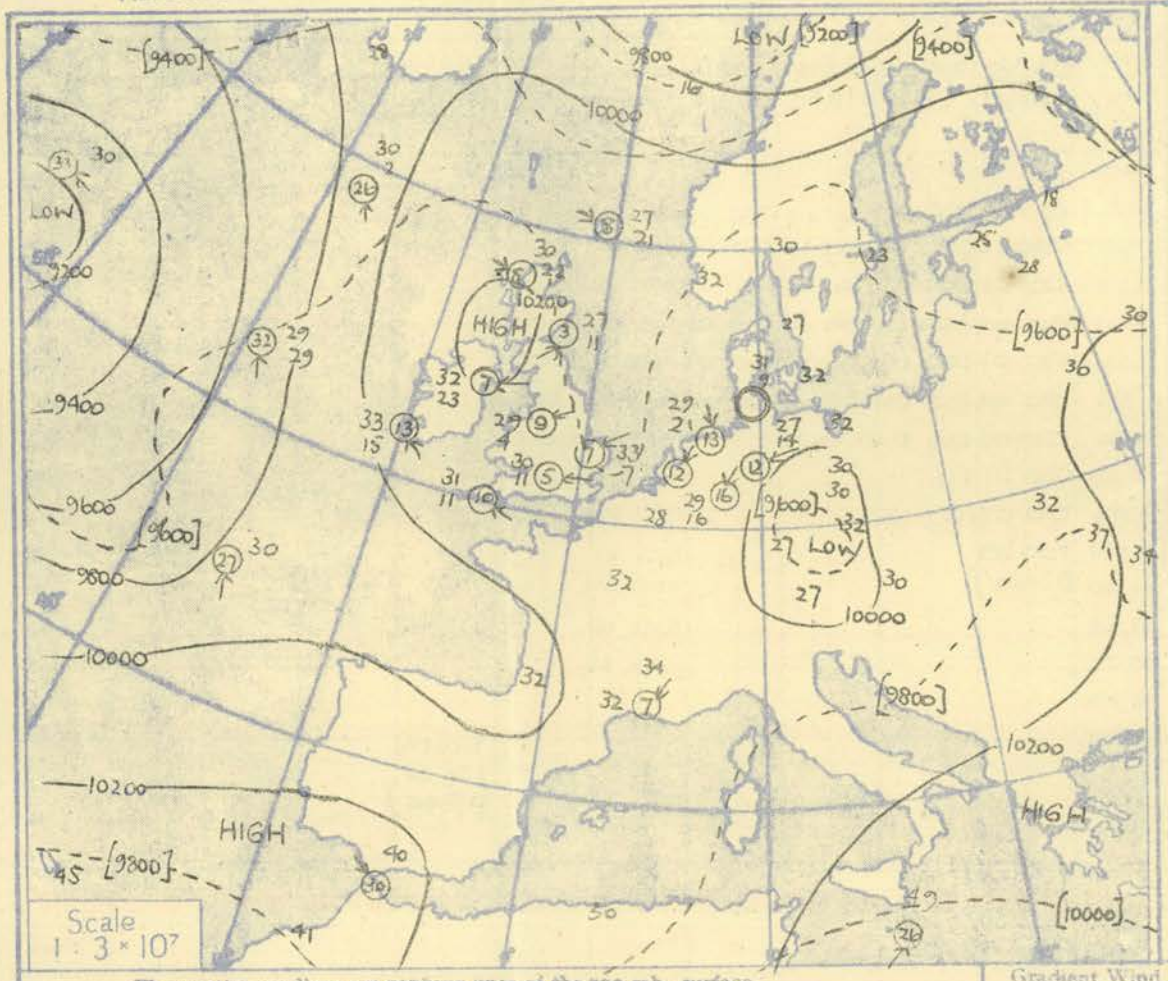
For winds see top of page.

For winds see top of page.

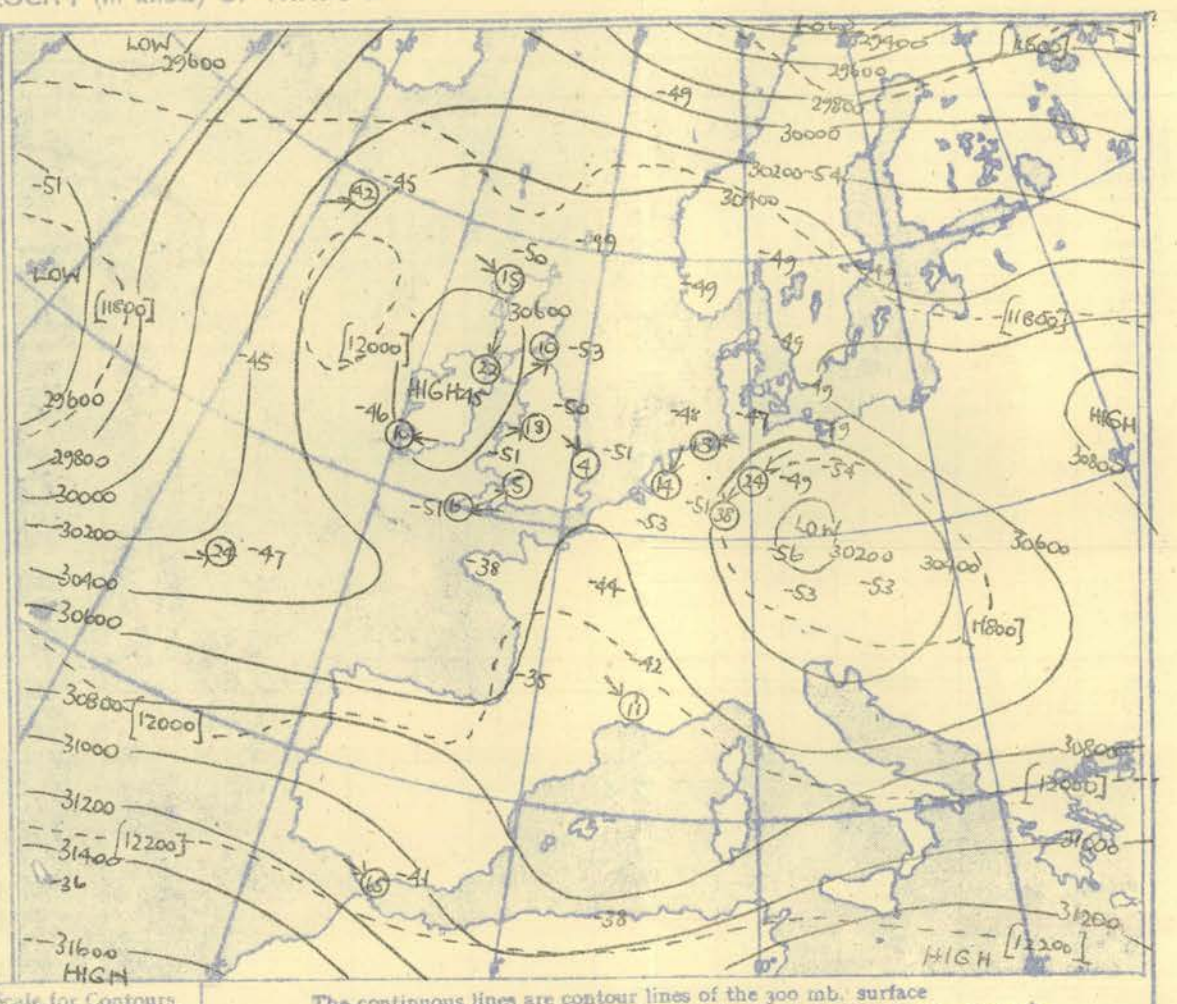
NO RADIO SONDE ASCENT AVAILABLE

NO RADIO SONDE ASCENT AVAILABLE

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (In knots) OF WINDS at the 700 mb., and 300 mb., levels at about 15h G.M.T.



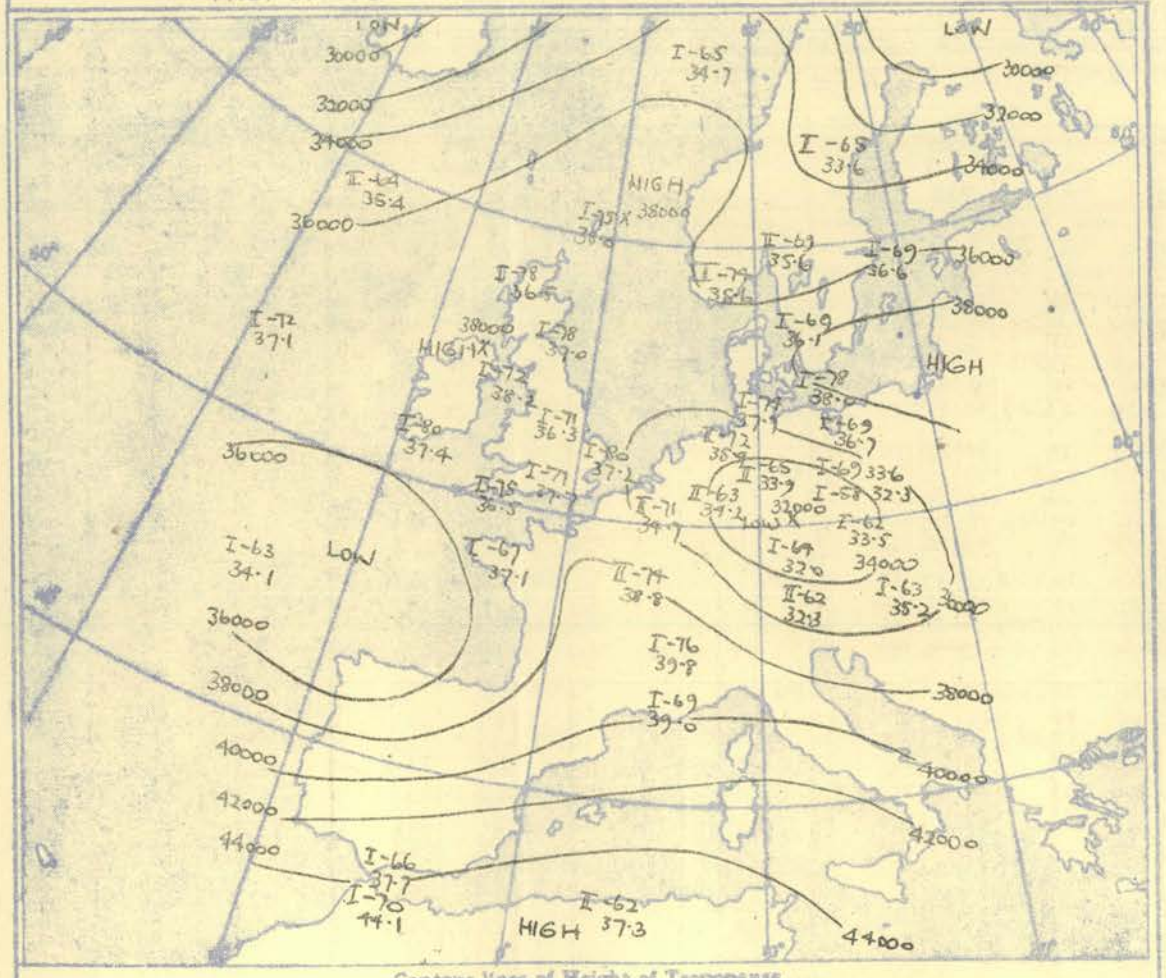
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

TROPOPAUSE CHART at about 15h G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Note persistence of thundery cold pool over Germany.

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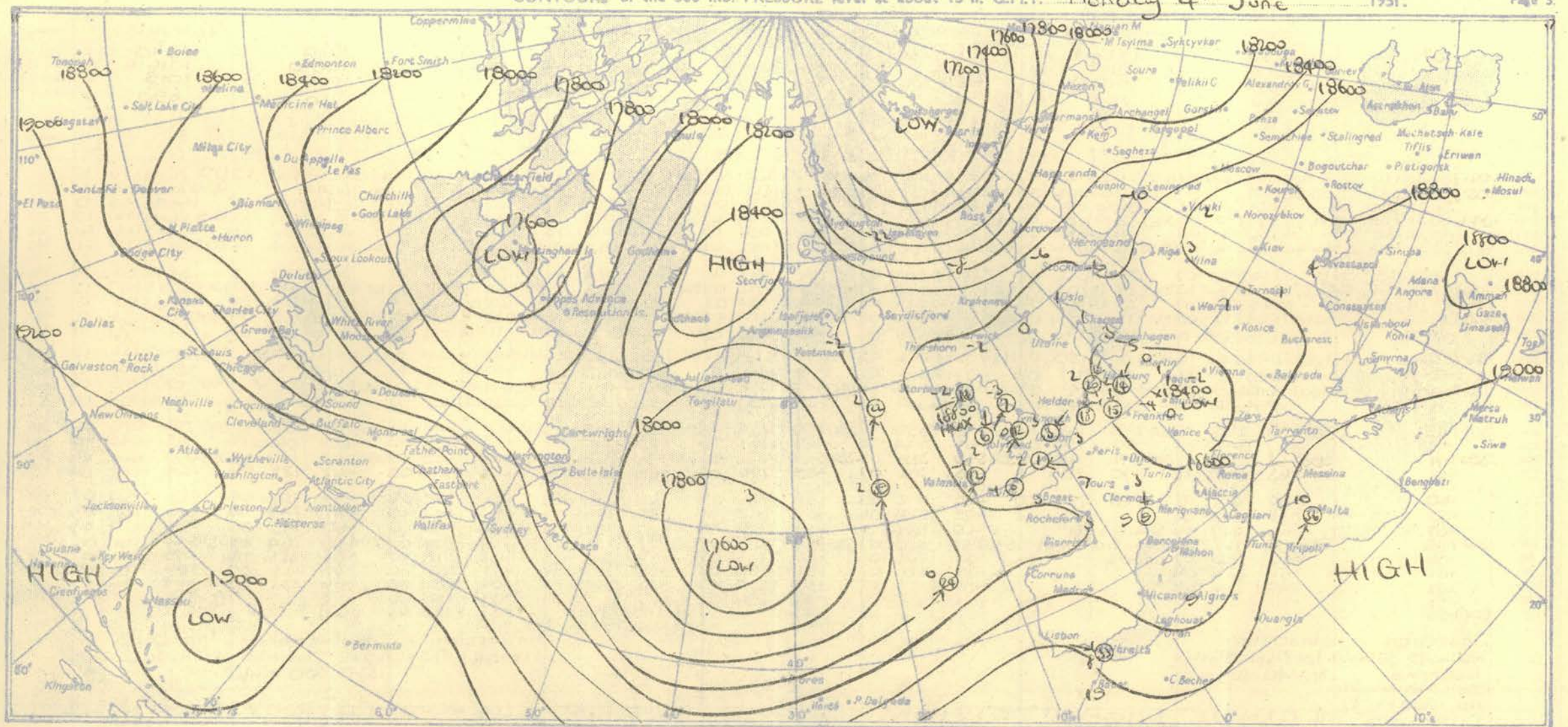
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Monday 4TH June 1951.


18800
18600
18400
18200
18000
17800
17600
17400
17200
17000
LOW
HIGH
19000
18800
18600
18400
18200
18000
17800
17600
LOW
HIGH
HIGH
LOW
LOW
HIGH
LOW
HIGH
LOW
HIGH

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Monday 4th June 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15 hrs G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	15 hrs G.M.T.	1021.6 mb	1011.8 mb	755 mb
STORNOWAY	15 hrs G.M.T.	1019.8 mb	1018.2 mb	715 mb
LEUCHARS	15 hrs G.M.T.	1020.7 mb	1019.9 mb	742 mb
ALDERGROVE	15 hrs G.M.T.	1016.6 mb	1009.2 mb	700 mb
LIVERPOOL	15 hrs G.M.T.	1018.0 mb	1016.0 mb	726 mb
DOWNHAM MARKET	15 hrs G.M.T.	1018.2 mb	1013.8 mb	693 mb
LARKHILL	15 hrs G.M.T.	1016.9 mb	1001.5 mb	712 mb
CAMBORNE	15 hrs G.M.T.	1017.0 mb	1006.6 mb	710 mb
Valentia	15 hrs G.M.T.	1016.6 mb	1013 mb	690 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Valentia Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	51	45	180	07	0·4	61	50	060	07	0·2	58	50	120	07	02·6	72	48	100	07	0·6	72	51	Calm		01·2	64	44	070	06	04·4	66	43	030	06	02·9	65	48	110	15	0·3	72	51	170	10	Surf
1000	05·8	48	43	125	06	05·5	64	54			05·7	57	42	114	03	05·2	70	46	105	06	05·0	63	47	120	06	05·1	60	46			04·3	66	49			04·1	64	48			4·5	70	50	165	11	1000
950		51	28	155	03		58	51	Calm			56	20	090	06		63	44	104	06		61	32	076	04		45	38	056	06		58	46	053	08		53	48	113	18		61	45	135	13	950
900	34·6	50	31	254	06	34·7	52	44	280	05	34·7	55	17	052	06	34·7	58	29	100	07	34·4	54	28	044	07	33·9	49	26	074	05	33·8	49	41	063	06	33·3	53	33	114	15	33·9	52	41	126	15	900
850		46	32	260	08		45	36	281	03		46	30	021	06		52	31	102	01		47	24	055	10		47	10	078	03		48	20	061	06		47	23	106	13		44	31	122	20	850
800	66·3	57	31	267	05	66·4	62	29	286	07	66·5	40	26	006	06	66·9	44	29	105	08	66·3	41	08	062	09	65·6	41	13	083	06	65·7	43	19	086	06	66·3	45	24	104	14	65·6	41	21	129	21	800
750		51	22	269	09		57	26	276	07		55	18	323	04		58	27	099	07		56	20	067	08		51	11	084	10		58	15	057	07		58	15	101	11		58	13	158	17	750
700	101·4	27	21	284	08	101·7	30	22	268	08	101·8	27	11	208	03	101·4	31	23	078	07	101·6	29	4	072	09	100·9	33	6	083	07	101·2	30	11	090	03	101·4	31	11	116	10	101·0	33	13	147	13	700
650		15	14	298	11		23	14	285	07		25	12	151	04		27	12	072	05		25	-10	108	03		26	04	088	04		25	01	139	04		26	-1	130	06		27	03	138	08	650
600	140·8	16	05			141·4	16	04	253	09	141·2	15	04	196	08	142·4	20	09	040	04	141·4	18	-10	180	05	140·5	19	-6	091	03	141·0	15	-7	110	03	141·3	18	01	115	05	140·5	15	03	158	11	600
550		08	-2				08	-8	246	14		06	-7	194	07		11	00	355	06		08	-12	189	07		12	-8	070	04		11	-16	093	05		03	01	128	07		10	-5	176	11	550
500	186·2	-2	-12			186·4	-2	-14	246	14	186·5	-3	-21	135	07	185·2	02	-7	003	06	186·9	00	-16	208	12	186·7	03	-25	087	03	185·9	02	-24	130	01	186·8	-1	-42	L.Y		186·7	-1	-13	188	12	500
450		-12	-22				-10	-30	241	12		-14	-26	178	06		-7	-18	015	08		-11	-26	211	11		-10	-36	125	03		-10	-28	180	07		-11	-21	L.Y			-9	-24	152	07	450
400	235	-21	-31			240	-21	-43	249	14	239·5	-23	-28	141	04	242·0	-19	-30	346	12	240·3	-27	-35	211	14	240·3	-23	-46	191	02	240·4	-21	-40	173	07	240·1	-13	-31	L.Y		240·7	-19	-31	115	03	400
350		-34	-44				-34	-54	276	10		-37	-42	183	03		-31	-46	347	15		-35	-49	157	18		-36	-57	163	02		-34	-47	183	08		-35	-45	L.Y			-31	-43	163	04	350
300	304·7	-49				305·3	-50	284	153	04	305·2	-53	-26	103	07	305·5	-45		356	22	305·2	-50		234	18	305·1	-51		233	09	305·0	-51		206	05	305·0	-51		070	19	305·7	-46		076	10	300
250		-64					-67	306	25			-70		155	03		-64		344	20		-64		262	20		-63		300	08		-63		318	05		-63		060	06		-65		049	10	250
200	350	1-71				350	3-68	276	183	08	348	6-72		214	05	353	5-69		328	12	352	1-66		283	05	352	1-70		318	07	350	0-69		303	05	350	1-69		257	05	351	0-75		002	06	200
170		-61					-63	272	15			-70		255	11		-63		302	07		-55		276	05		-60		326	06		-62		314	05		-62		288	06		-64		257	06	170
150		-60					-60	273	11			-65		294	07		-60		264	05		-58		282	06		-60		310	05		-62		293	06		-59		290	04		-63		230	08	150
130		-55					-58	262	06								-59		274	06		-57		249	11		-58		274	06		-60		263	05		-61		247	06		-61		251	06	130
110		-67					-56	237	06								-60		264	12		-56		254	08		-57		282	07		-60		245	08		-60		213	03		-61		229	06	110
100	331·7	-56				331	-54	227	07	See p3 for remainder of winds.						340	-58		260	07	339	-55		263	05	337	-58		253	07	337	-57		264	07	337	-58		264	03	332	-56		201	08	100
90		-56					-55	230	07								-55		224	05		-55		246	03		-56		267	03		-58		278	08		-58		286	06		-53		207	07	90
80		-61					-51	232	06								-51		221	07		-51		260	07		-55		310	06		-57		257	08		-57		221	07		-56		212	08	80
70		-62					-49	236	06								-51					-52		270	03		-53		326	04		-54		250	08		-56		231	03		-54		226	07	70
60		-51																				-47		243			-43					-50		136	03		(53)					(65)	-54				60
		(54)	-60																			(49)	-45																						

Inversion 1000 mb 49 - 931 mb 52°. Isothermal 931 - 920 mb 52°. 726 - 700 mb 27°.

Inversion 1018 mb 61 - 993 mb 65°. Inversion 818 mb 40 - 804 mb 40°.

Inversion 928 mb 46 - 900 mb 49°.

Inversion 886 mb 47 - 870 mb 50°.

Isothermal 950 - 764 mb 61°. 850 - 800 mb 43°.

Inversion 818 mb 40 - 800 mb 41°.

Tropopause	I 210 mb -75° 38000'					II 221 mb -78° 36500'					I 220 mb -78° 37000'					I 210 mb -72° 38200'					I 228 mb -71° 36300'					I 218 mb -80° 37200'					I 214 mb -77° 37700'					I 225 mb -75° 36800'					I 217 mb -80° 37400'					Tropopause

21 hrs G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	21 hrs G.M.T.	1021.6 mb	1011.5 mb	750 mb
STORNOWAY	21 hrs G.M.T.	1020.9 mb	1019.3 mb	760 mb
LEUCHARS	21 hrs G.M.T.	1021.1 mb	1020.3 mb	742 mb
ALDERGROVE	21 hrs G.M.T.	1019.3 mb	1009.6 mb	735 mb
LIVERPOOL	21 hrs G.M.T.	1018.3 mb	1016.3 mb	734 mb
DOWNHAM MARKET	21 hrs G.M.T.	1018.7 mb	1014.3 mb	706 mb
LARKHILL	21 hrs G.M.T.	1017.2 mb	1001.3 mb	700 mb
CAMBORNE	21 hrs G.M.T.	1017.6 mb	1007.1 mb	725 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	48	45	180	01	0·4	56	51	Calm		0·2	50	46	Calm		02·6	66	53	100	03	0·6	62	45	Calm		01·2	49	44	030	05	04·4	56	48	050	05	02·9	55	50	Calm						Surf
1000	05·8	48	43	225	06	05·7	59	51			05·7	52	44	144	06	05·3	63	51	103	03	05·1	64	46	086	12	05·1	48	42	050	09	04·7	52	48			04·8	61	51							1000
950		51	34	240	05		53	48	002	04		56	38	106	05		63	43	097	07		57	40	059	11		54	26	056	11		57	45	060	11		57	47	034	10						950
900	34·5	50	30	262	07	34·5	52	46	348	03	34·7	53	26	021	08	34·7	56	42	094	08	34·3	52	38	088	05	33·8	51	18	055	11	33·8	50	37	070	10	34·0	52	43	057	12					900
850		44	31	270	13		45	40	236	04		47	38	025	10		48	35	075	10		46	35	048	08		47	17	057	11		46	18	060	07		47	42	084	14						850
800	66·2	38	31	277	16	66·8	41	33	215	06	66·6	41	34	018	11	66·7	41	31	072	13	66·2	43	28	027	07	65·6	42	18	061	16	65·7	43	23	042	03	65·9	44	13	086	13					800
750		32	26	282	18		35	29	255	06		33	28	046	12		34	28	062	08		34	25	057	05		37	4	066	10		38	16	041	07		37	24	105	06						750
700	101·3	25	20	288	18	102·1	28	22	261	05	101·8	26	23	007	05	102·0	28	20	051	08	101·5	30	18	086	07	101·0	31	13	067	07	101·1	32	13	049	02	101·3	33	12	087	08					700
650		20	12	288	20		24	16	254	12		22	15	003	05		23	15	045	06		24	01	077	04		25	08	065	04		25	04	095	02		28	03	094	07						650
600	140·3	14	07	295	15	141·8	15	09	270	12	141·4	15	04	L.Y.		141·6	15	04	043	10	141·3	26	-4	110	04	140·8	18	00	051	04	141·0	19	-7	123	01	141·3	20	08	086	05					600
550		05	00	287	13		08	00	268	11		07	-08	173	05		07	-1	030	03		10	-6	184	04		14	-12	076	06		11	-17	150	05		10	-1	073	06						550
500	186·0	-4	-32	87	21	187·2	-1	-9	277	11	186·8	-2	-14	175	07	186·9	-1	-10	034	08	187·0	00	-10	202	07	186·7	04	-15	065	07	186·7	02	-25	136	05	187·0	02	-14	066	06					500
450		-13	-19	252	27		-11	-21	263	09		-13	-20	155	06		-12	-21	036	12		-12	-26	205	12		-8	-26	075	05		-10	-36	151	06		-9	-21	088	03						450
400	239·1	-23	-29	258	31	240·6	-21	-36	269	14	239·9	-25	-32	070	05	240·1	-25	-31	055	15	240·2	-25	-33	202	13	240·5	-20	-34	116	05	240·4	-22	-45	162	06	240·6	-21	-31	106	05					400
350		-36	-42	258	32		-33	-46	255	12		-40	-46	L.Y			-36	-50	013	20		-38	-48	241	16		-34	-50	215	04		-36	-56	178	03		-33	-46	L.Y							350
300	309	-52		257	34	305	-49		319	16	304	1-57		L.Y		304	-50		019	27	304	-51		220	21	305	-45		236	09	305	-52		248	06	305	-52		052	07						300
250		-71		255	31		-67		321	23		-72		024	06		-68		004	43		-65		224	16		-64		271	07		-69		310	01		-69		047	05						250
200	288	-67		255	26	290	-74		313	18	288	-67		323	07	290	-70		344	13	290	-67		326	11	291	-75		335	05	289	-69		318	09	290	-78		298	09						200
170		-63		300	19		-64		298	12		-64		303	09		-66		324	09		-63		304	07		-71		315	08		-63		300	02		-68		285	06						170
150		-62		293	15		-62		285	11		-63		305	10		-64		280	07		-63		306	06		-66		325	08		-61		308	05		-66		293	08						150
130		-60		297	11		-61		279	09		-61		285	08		-63		274	03		-63		298	05		-66		331	06		-64		330	05		-65		290	04						130
110		-61		283	12		-59		282	08							-62		266	07		-60					-66		300	07		-59		290	05		-66		261	05						110
100	335	-58		291	09	335	-58		277	07						336	260		260	05		(121)				335	-65		300	07	336	-61		272	03	335	-66		266	05						100
90		-58		302	11		-56																				-64		292	07		-60					-64		285	03						90
80		-57		308	07																						-65		288	05							-63		266	03						80
70		-55		311	04																						-63		291	07						(64)	-60									70
60		(63)	-63																								-63		308	05						Inversion										60
																											-62		294	03						1007 mb 59 - 1000 mb 64°										

Inversion 1000 mb 48 - 935 mb 52°. Isothermal 1011 - 1000 mb 48°.

Inversion 1019 mb 56 - 993 mb 60°. Isothermal 993 - 958 mb 60°. 850 - 825 mb 45°.

Inversion 1020 mb 50 - 997 mb 57°. Isothermal 700 - 678 mb 26°.

Inversion 1016 mb 62 - 1000 mb 69°. 713 mb 29 - 700 mb 30°. Isothermal 953 - 930 mb 57°.

Inversion 982 mb 47 - 960 mb 54°. Isothermal 960 - 941 mb 54°.

Inversion 1001 mb 56 - 985 mb 61°. Isothermal 876 - 862 mb 47°.

Inversion 1007 mb 59 - 1000 mb 64°.

Tropopause	I 232 mb -78° 35800'					I 215 mb -82° 37800'					I 236 mb -76° 36400'					I 229 mb -75° 36100'					I 225 mb -71° 36600'					D 194 mb -80° 39700'					II 226 mb -76° 36500'					I 212 mb -79° 37800'									Tropopause

No. 11755. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Tuesday 5th June 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

03Z

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	03Z G.M.T.	03Z G.M.T.	03Z G.M.T.	03Z G.M.T.	03Z G.M.T.	03Z G.M.T.	03Z G.M.T.	03Z G.M.T.	03Z G.M.T.
Pressure: M.S.L.	1021·6 mb	1021·1 mb	1021·5 mb	1020·2 mb	1019·8 mb	1019·4 mb	1018·6 mb	1017·7 mb	1017·4 mb
Pressure: Surf	1011·4 mb	1019·5 mb	1020·6 mb	1010·4 mb	1017·8 mb	1014·8 mb	1002·3 mb	1007·0 mb	1016 mb
Pressure: Freezing	769 mb	728 mb	743 mb	750 mb	720 mb	713 mb	710 mb	706 mb	700 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	47	47			00·4	51	45	CALM		00·2	42	41	CALM		02·6	53	43	090	04	00·6	48	40	CALM		01·2	46	44	030	07	04·4	46	44	090	07	02·9	52	46	CALM		00·3	58	41			Surf
1000	5·8	46	42			5·7	58	51			5·6	47		321	03	5·4	60	50	093	06	5·3	53	42	107	15	5·2	48	46	038	12	5·0	47	44			4·8	54	49			4·7	59	43	113	11	1000
950		48	21				56	45	110	03		55		340	04		58	44	090	05		55	29	114	15		52	27	040	12		52	40	091	08		56	53	090	08		57	43	144	18	950
900	34·4	48	30			34·8	51	46	190	04	34·5	53		006	05	34·6	54	38	078	08	34·3	50	26	123	15	34·0	51	04	044	12	33·8	48	37	091	05	33·9	50	49	090	09	33·8	52	41	146	16	900
850		42	37				46	40	220	05		47		029	10		48	35	060	15		47	21	103	15		47	15	058	12		45	28	126	03		45	40	092	09		47	28	143	14	850
800	66·0	36	30			66·7	40	30	268	07	66·4	40		034	13	66·6	40	29	058	15	66·1	41	18	088	16	65·9	42	07	062	12	65·5	41	08	102	04	56·7	43	26	092	08	65·7	44	08	141	14	800
750		29	26				35	27	270	06		33		041	09		32	23	065	13		37	12	100	18		37	00	063	10		37	12	050	08		39	15	092	07		38	05	136	14	750
700	100·9	22	19			102·0	29	23	262	06	101·6	26		049	07	101·7	25	18	054	11	101·5	29	15	121	10	101·3	30	12	049	07	100·8	31	09	059	05	101·3	31	10	085	07	101·1	32	11	128	11	700
650		18	10				21	15	267	08		22		028	05		23	13	063	12		23	-01	148	04		23	06	007	06		24	02	124	03		26	00	111	07		26	11	134	09	650
600	140·1	10	-05			141·6	13	07	272	10	141·2	19		327	03	141·4	14	02	070	15	141·1	17	-09	130	03	141·0	19	-09	023	05	140·6	18	-10	128	05	141·1	19	-07	093	06	141·1	20	03	133	06	600
550		03	-11				05	-01	263	10		09		247	03		06	-09	064	15		09	-22	131	03		12	-22	057	07		10	-20	087	01		10	-08	070	05		11	00	129	06	550
500	185·1	-06	-13			186·8	-04	-11	263	08	186·7	-02		224	04	186·7	-02	-17	052	16	186·6	-01	-16	174	05	186·8	00	-28	078	07	186·3	01	-28	185	01	186·8	00	-10	085	04	186·9	01	-10			500
450		-16	-23				-13	-21	284	11		-13		187	04		-11	-20	031	15		-13	+23	187	11		-10	-34	061	05		-10	-39	150	03		-08	-24	L4V			-09	-23			450
400	237·9	-27	-33			239·9	-24	-33	278	12	239·8	-23		086	02	240·0	-25	-36	038	19	239·7	-25	-37	187	13	240·2	-23	-47	351	03	239·7	-23	-51	186	09	240·4	-20	-34	040	04	240·5	-20	-40			400
350		-41					-37	-47	285	14		-37		045	06		-38	-49	034	22		-38	-47	198	17		-39	-59	319	02		-37	-60	196	06		-32	-49	063	04		-32	-44			350
300	302·0	-56				304·5	-53		298	16	304·6	-52		016	08	304·6	-52		026	36	304·2	-53		198	24	304·8	-53		321	02	304·5	-51		275	03	305·8	-48		026	04	305·8	-48				300
250		-74					-72		318	20		-70		028	20		-67		020	39		-66		210	12		-71		342	05		-66		253	07		-67		344	05		-66				250
200	386·3	-70				388·7	-70		310	17	389·2	-73		354	12	389·4	-75		007	27	389·7	-66		325	06	389·2	-70		338	09	390·4	-64		318	06	391·2	-69		344	08	391·0	-71				200
170		-65					-66		306	14		-67		340	09		-67		339	09		-62		320	07		-64		311	09		-58		346	07		-61		320	07		-64				170
150		-64					-66					-65		323	09		-68		336	06		-62		304	07		-63		309	11		-59		285	06		-62		296	10		-65				150
130		-64										-66		312	10		-67		315	09		-62		301	07		-63		304	07		-59		300	09		-63		302	09		-64				130
110		-61										-64		325	08		-67		312	08		-61		296	06		-61		279	07		-59		320	06		-62		292	05		-61				110
100	532·6	-61									534·8	-63		313	05	534·1	-66		304	07	536·7	-61		305	06	535·7	-62		283	07	538·1	-58		285	03	539·1	-61		290	10	537·2	-62				100
90		-61										-62		296	05		-65		296	08		-61		282	03		-61		287	05		-58		287	05		-60		297	07		-63				90
80		-59										-61		271	06		-64		270	04		-61		252	03		-60		280	03		-57		262	06		-60		310	05		-61				80
70		-56															-62		231	05		-64		246	04		-58		316	04	(75 mb)	-56					-59								70
60																						-67		302	04																			60
	Inversion 1000 mb 46°- 966 mb 49° 937 -47°- 915 -- 50°			Inversion 1020 mb 51°- 998 mb 60°			Inversion 1021 mb 42°- 968 mb 55°			Inversion 1010 mb 53°- 1000 mb 60° 693 -- 24°- 685 - 26°			Inversion 1018 mb 48°- 988 mb 56° 802 -- 40°- 790 -- 42°			Inversion 1015 mb 46°- 958 mb 52°			Inversion 1002 mb 46°- 982 mb 53°			Inversion 1007 mb 52°- 982 mb 58° 856 -- 44°- 836 - 46°			Inversion 1016 mb 58°- 985 mb 60°																						
	Isothermal 700 - 675 mb 22°						Isothermal 968 - 923 mb 55° 661 - 638 -- 22°									Isothermal 958 - 908 mb 52°			Isothermal 875 - 850 mb 45°			Isothermal 681 - 660 mb 28°																						
Tropopause	I 233 mb -79° 35,500'	I 218 mb -82° 37,000'	I 228 mb -78° 36,200'	I 219 mb -79° 37,000'	I 231 mb -69° 36,000'	I 217 mb -79° 37,300'	I 232 mb -72° 35,900'	I 225 mb -74° 36,600'	I 218 mb -76° 37,300'	Tropopause
Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA.	Station

09Z

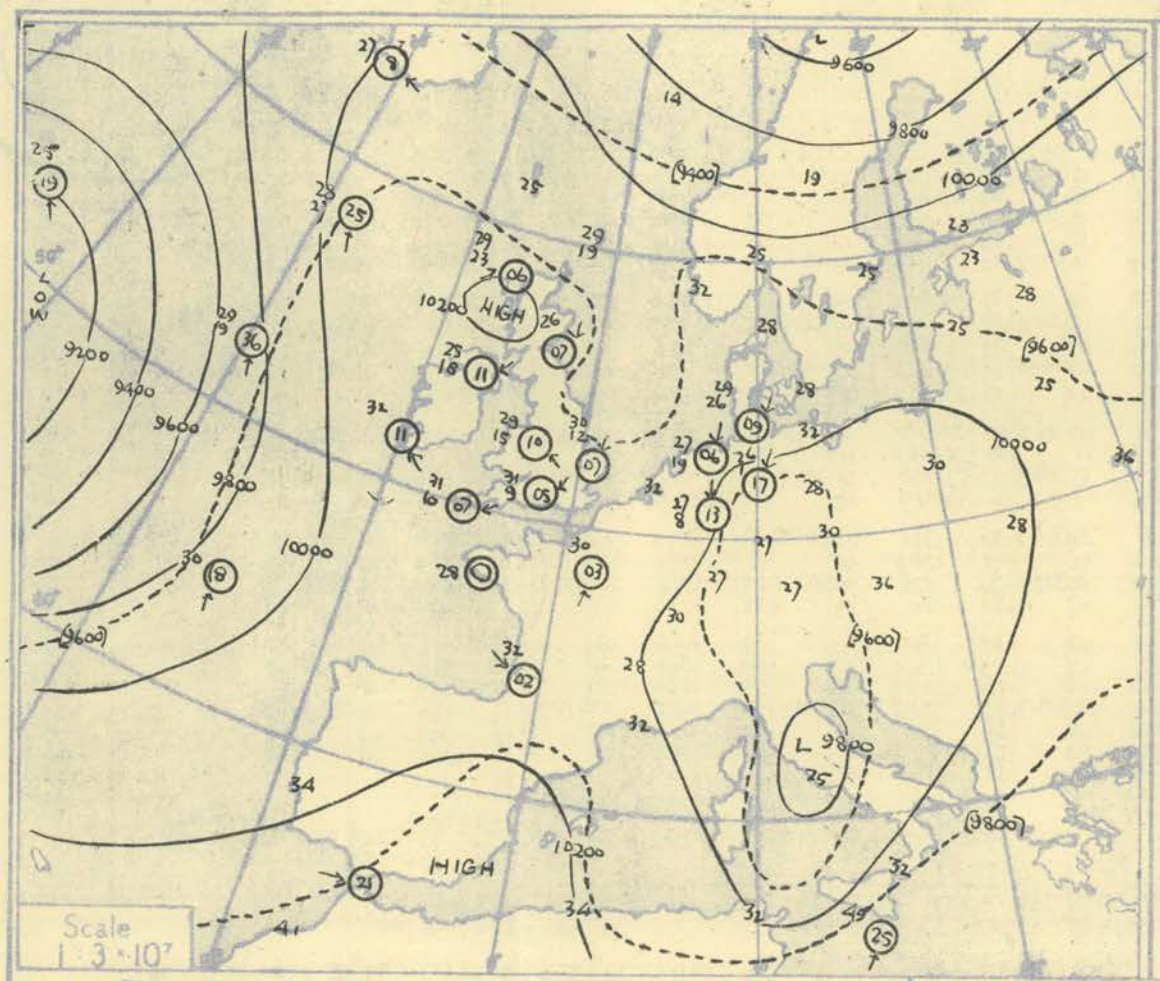
Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE		Time
Pressure: Time	09Z G.M.T.	09Z G.M.T.	09Z G.M.T.	09Z G.M.T.	09Z G.M.T.	09Z G.M.T.	09Z G.M.T.	09Z G.M.T.	G.M.T.	Time
Pressure: M.S.L.	1021·3 mb	1020·5 mb	1021·3 mb	1020·4 mb	1020·2 mb	1018·7 mb	1018·5 mb	1017·3 mb	mb	M.S.L.
Pressure: Surf	1011·2 mb	1019·9 mb	1020·5 mb	1010·9 mb	1018·2 mb	1014·3 mb	1002·4 mb	1006·8 mb	mb	Surf
Pressure: Freezing	747 mb	724 mb	731 mb	740 mb	730 mb	712 mb	719 mb	710 mb	mb	Freezing

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	50	48	CALM		00·4	58	50			00·2	58	49	CALM		02·6	62	46	110	05	00·6	61	43	CALM		01·2	56	44	330	13	04·4	51	49	030	09	02·9	61	47	100	07						Surf
1000	5·7	48	45	109	02	5·9	58	46			5·9	54	43	244	06	5·6	61	47	100	07	5·6	56	36	150	06	5·2	54	44			5·0					4·7	60	46	118	10						1000
950		47	28	296	04		56	44				58	30	360	09		57	40	100	07		54	32	093	10		51	33	020	16		53	43	049	08		55	43	106	10						950
900	34·3	47	40	294	12	35·0	52	39			35·0	54	33	052	11	34·8	54	29	096	09	34·5	51	28	068	14	33·9	52	16	024	11	33·8	49	34	085	03	33·7	48	36	081	09						900
850		44	41	293	15		47	32				48	33	065	10		47	27	087	14		44	21	062	12		47	12	014	10		43	32	099	04		48	25	086	07						850
800	66·0	39	35	291	18	66·8	42	25			67·0	42	33	041	08	66·7	41	21	082	18	66·3	39	18	064	09	65·8	41	06	001	14	65·5	40	15	078	05	65·5	41	26	092	09						800
750		32	29				36	26				34	25	090	09		34	15	076	16		34	18	068	08		36	09	353	13		35	11	073	05		36	19	099	09						750
700	101·1	29	24			102·1	28	21			102·4	30	18	043	09	101·0	25	09	065	15	101·6	28	13	061	09	101·1	31	-05	025	10	100·7	30	07	078	05	100·8	31	18	117	06						700
650		20	16				22	16				24	11	050	12		23	00	068	16		23	01	069	10		25	-12	070	12		23	00	092	04		26	08	088	04						650
600	140·6	14	09			141·7	15	08			142·1	18	05	037	09	141·5	15	-07	072	15	141·2	17	-08	087	09	140·9	21	-18	067	13	140·4	16	-07	129	04	140·7	18	02	095	05						600
550		06	02				08	00				10	-12	296	03		07	-08	080	14		09	-16	115	10		11	-16	061	12		08	-17	120	04		07	-03	695	04						550
500	185·8	-04	-08			187·1	-01	-12			187·7	01	-18	248	05	186·9	-02	-17	092	14	186·7	-01	-24	134	11	186·6	00	-25	063	06	185·9	01	-23	142	10	186·2	-04	-14	058	02						500
450		-15	-19				-10	-20				-10	-23	261	03		-10	-27	075	28		-13	-30	145	15		-10	-37	065	07		-11	-34	155	11		-14	-24	L4V						450
400	238·8	-24	-28			240·7	-17	-27			241·3	-19	-35	027	04	240·3	-23	-39	056	25	239·9	-25	-41	148	15	240·0	-23	-50	025	07	239·2	-25	-47	173	14	239·1	-27	-36	"						400
350		-35	-40				-30	-40				-31	-46	061	06		-35	-50	044	31		-38	-51	165	20		-38	-58	033	05		-39	-59	171	11		-36	-45	"						350
300	303·8	-50				306·5	-46				306·9	-48		035	14	305·4	-47		039	38	304·4	-53		158	18	304·6	-52		133	04	303·8	-53		193	07	303·6	-54		321	06						300
250		-68					-64					-66		095	19		-64		036	39		-69		147	14		-67		009	03		-71		240	07		-69		345	08						250
200	386·7	-66									392·6	-65		356	11	391·2	-68		006	11	389·6	-66		010	07	389·7	-69		025	08	388·9	-64		334	07	388·4	-71		316	14						200
170		-62										-64		350	08		-66		348	09		-66		346	06							-60		326	06		-64		310	09						170
150		-61										-60		307	07		-64		355	07		-62		325	08							-61		335	07		-64		308	01						150
130		-61										-61		338	08		-63		339	08		-63		311	06							-61		333	09		-63		313	05						130
110		-59										-59		330	09		-62		334	07		-63		322	09							-59		293	07		-63		313	07						110
100	536·0	-53									539·8	-58		322	07	537·6	-61		304	05	536·1	-60		311	07						536·3	-59		284	05	534·5	-63		303	06						100
90		-54										-57		273	06		-59		328	06		-58		301	09							-59		313	07		-63		293	04						90
80		-53										-59					-57		278	10		59														-63		283	06						80
70		-51															-54																			-61								70
60																																				-58								60
	Inversion 950 mb 47°- 929 mb 48°			Inversion 1020 mb 58°- 979 mb 59°			Inversion 1000 mb 54°- 968 mb 58°			Inversion 683 mb 22°- 670 mb 25°			Inversion 790 mb 38°- 773 mb 39° 687 -- 25°- 675 - 26°			Inversion 965 mb 49°- 920 mb 54°			Inversion 990 mb 49°- 963 mb 54°			Inversion 811 mb 45°- 850 mb 58°																						
	Isothermal 985 - 950 mb 47° 929 - 919 -- 48°						Isothermal 968 - 942 mb 58°						Isothermal 1010 - 1000 mb 56°						Isothermal 880 - 820 mb 43°			Isothermal 690 - 675 mb 30°																						
Tropopause	I 228 mb -76° 36,000'	NR.	I 216 mb -76° 37,700'	I 220 mb -73° 37,100'	II 245 mb -71° 34,800'	I 214 mb -75° 37,500'	I 239 mb -75° 35,200'	II 235 mb -74° 36,500'		Tropopause
Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE		Station

METEOROLOGICAL OFFICE 13 JUN 1951

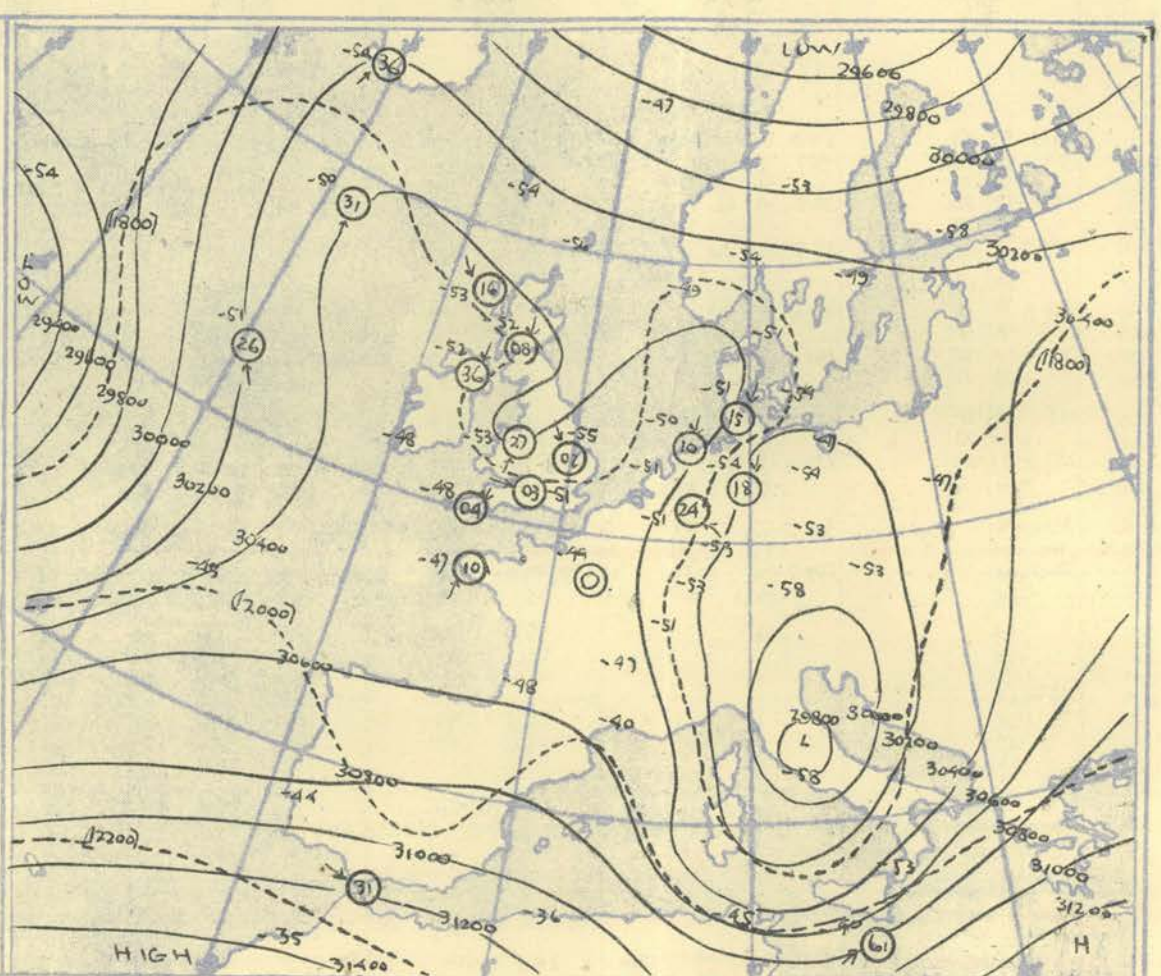
Tuesday 5th June. 1951.

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb. and 300 mb., levels at about 03h G.M.T.

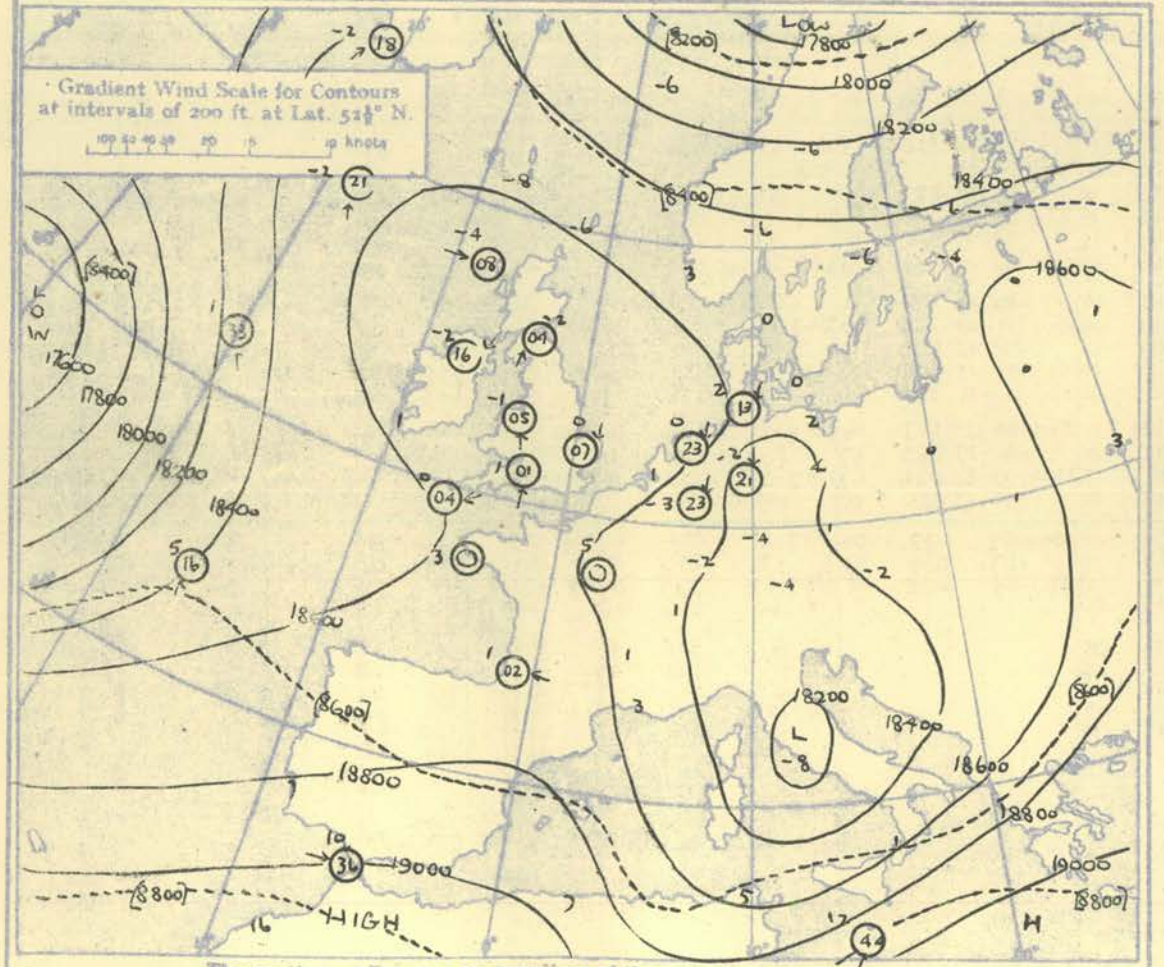


The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

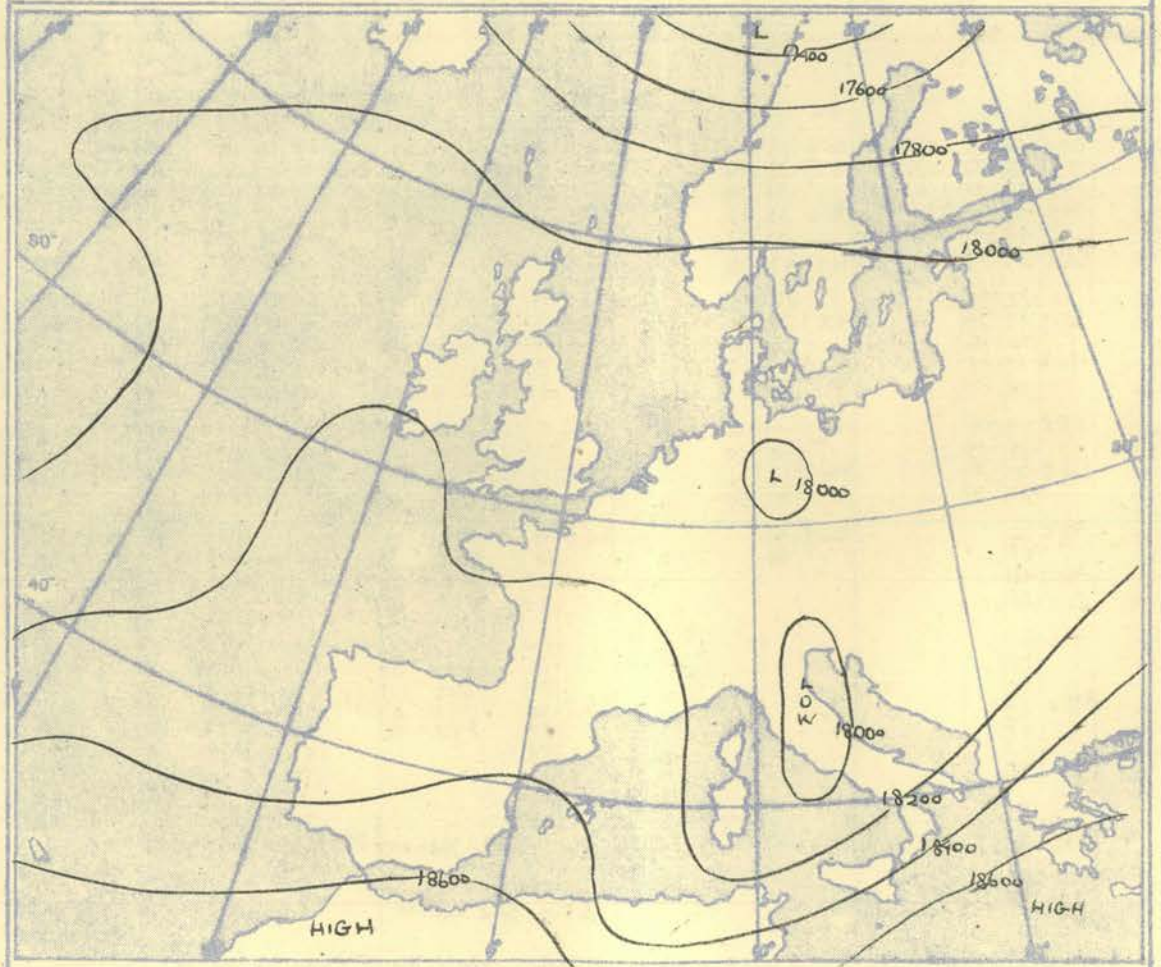
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 - 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500 - 1000mb.

Tuesday 5th June. 1951. Page 3

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	59° 12'N 22° 12'W																																	
Pressure: Time	1410L																																	
Pressure: M.S.L.	1018 mb																																	
Pressure: Surf	1016.5 mb																																	
Pressure: Freezing	722 mb																																	
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Time M.S.L. Surf Freezing	Pressure mb
Surf	0·4																																	Surf
1000	5·0																																	1000
950																																		950
900	34·3	52	34																															900
850		45	20																															850
800	66·1	41	24																															800
750																																		750
700	101·5	29	29																															700
650																																		650
600	141·3	18	12																															600
550																																		550
500	187·0	00																																500
450																																		450
400	236·4	-25																																400
350																																		350
300	305·0	-54																																300
250																																		250
200																																		200
170																																		170

cloud:- Ci variable small amounts 375 - 325 mbs (Mainly 1/8)

DIRECTION (degrees from N) and VELOCITY (knots) of UPPER WINDS at heights above M.S.L.

Place	Wick		Lympne		Leeming		Ronaldsway		Cirrus 52·5N 20·0W		Shoeburyness		Downham Market		Castle Archdale		Ronaldsway		Downham Market		Place
Time	03L		09L		09L		09L		09L		09L		15L		15L						Time
Type													PILAR								Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Surf.	CALM		360	07	020	05	070	13	130	28	360	02			110	08	020	09	350	03	Surf.
1,000	"		030	10	010	11	090	16	140	33	010	18			120	25	090	13	080	15	1,000
2,000	330	02	020	12	050	16	110	15	140	38	010	17			090	15	110	15	060	18	2,000
3,000	360	03	350	09	060	15	110	13	140	38	360	17			120	15	110	12	050	23	3,000
4,000	270	01	350	12	060	12	130	10	140	40	360	17					120	13	050	22	4,000
5,000	290	03	350	09			090	04	150	41	350	17			080	10	110	12	070	21	5,000
6,000	260	06	360	11	050	11	060	07			360	16			110	15	130	08	070	14	6,000
8,000	300	11	360	04	020	14	080	12			020	13			110	21	090	09	070	12	8,000
10,000	330	11	040	05	060	12	100	11	120	45	050	12			110	18	100	10	060	09	10,000
14,000			050	08	100	07	100	12	140	42					110	16	110	11	040	09	14,000
18,000			050	08	150	08	100	11	140	34					090	17	110	13	020	05	18,000
24,000					170	10	110	18	140	36					080	16	(17,000')		360	12	24,000
30,000							120	19	(20,000')						050	28			350	08	30,000
40,000													316 (45,000')	12	(28,000')				340	08	40,000
50,000													285	13					330	10	50,000
																			330	07	60,000
																			330	08	70,000
																			030	11	
																			(77,000')		

METEOROLOGICAL OFFICE LIBRARY 13 JUN 1951

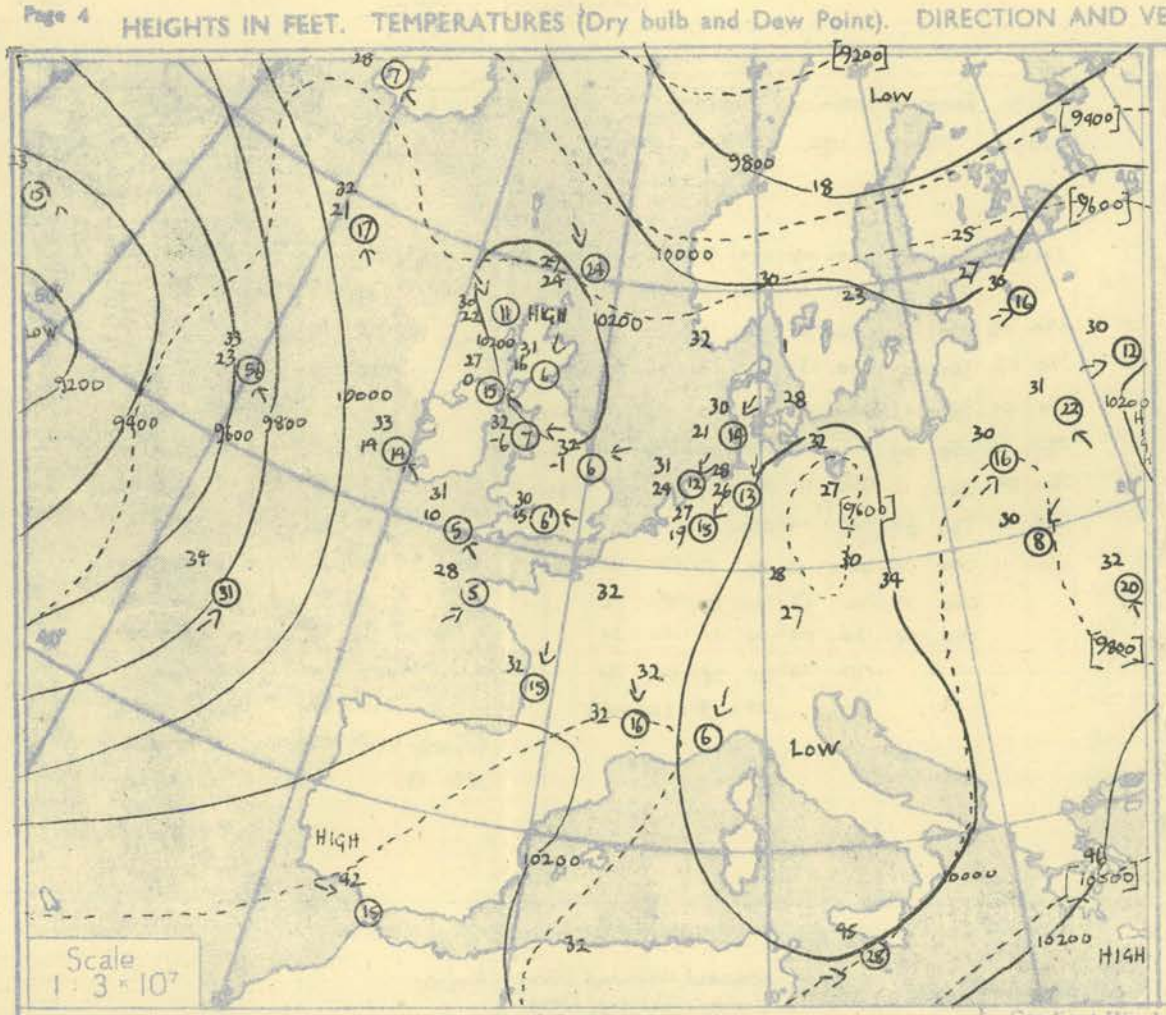
NEPHOSCOPE OBSERVATIONS

Place	Swinderby		Tern Hill		Defford		Holyhead Valley		Holyhead Valley		Aston Down		Hanley								Place
Time Type	09L	Ci	09L	Ci	09L	Ci	12L	Ci	15L	Cc	15L	Ci	15L	Ci							Time Type
Dir. Vel.	170	10	130	15	130	15	130	15	130	45	210	15	190	10							Dir. Vel.

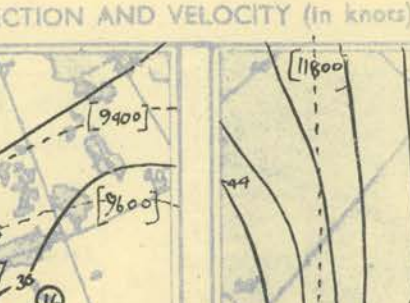
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

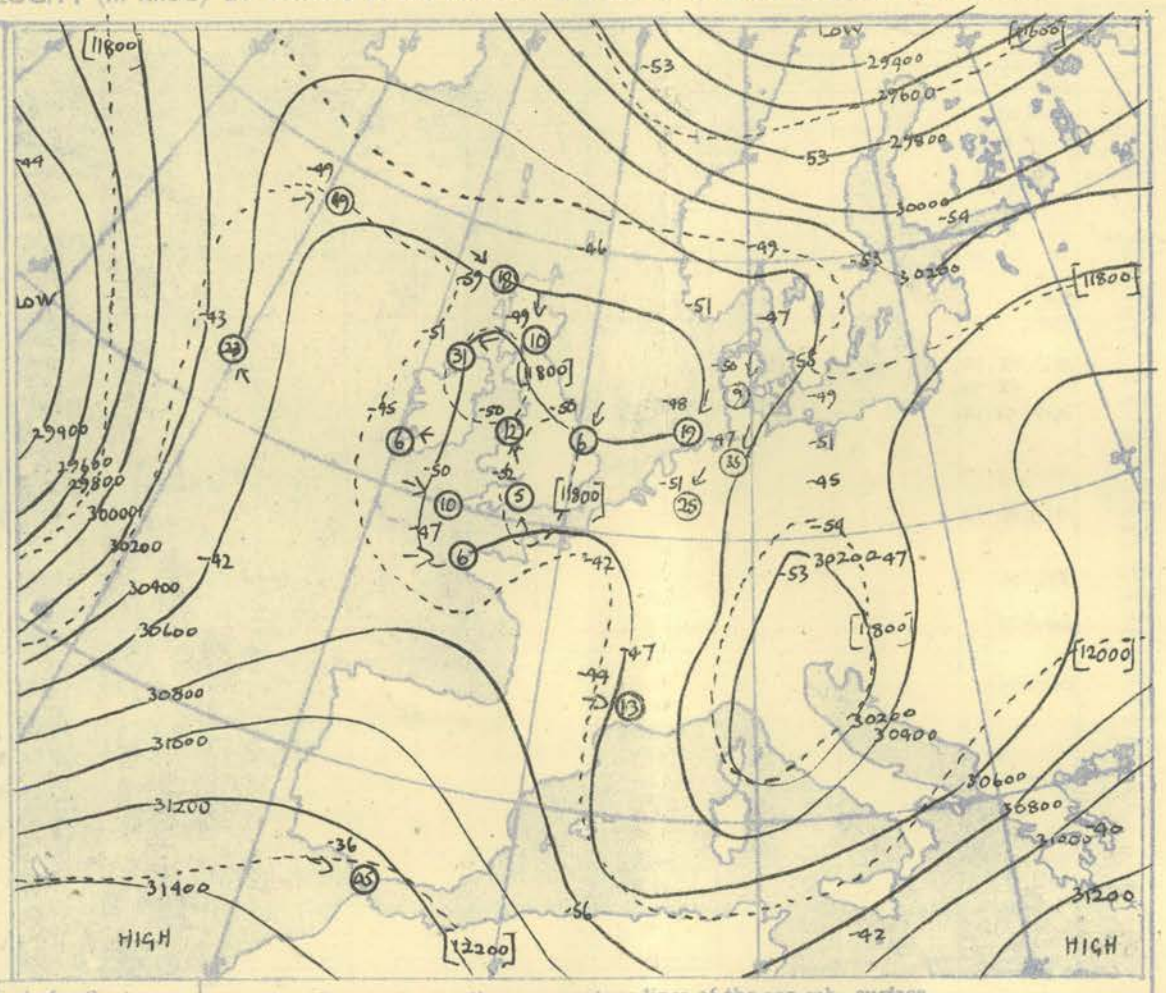
Ship	Cirrus				Cirrus				Cirrus				Weather Observer				Weather Observer				Weather Observer				Weather Observer								Ship
Lat/Long	52·5°N 20·0°W				52·5°N 20·0°W				52·5°N 20·0°W				59·1°N 18·2°W				59·1°N 18·2°W				59·1°N 18·9°W				59·2°N 18·9°W								Lat/Long
Pressure: Time	03h G.M.T.				09h G.M.T.				15h G.M.T.				03h G.M.T.				09h G.M.T.				15h G.M.T.				21h G.M.T.				G.M.T.				Time
Pressure: M.S.L.	1006 mb				mb				1003 mb				1016 mb				1017 mb				1018 mb				1018 mb				mb				M.S.L.
Pressure: Surf	1006 mb				mb				1003 mb				1016 mb				1017 mb				1018 mb				1018 mb				mb				Surf
Pressure: Freezing	720 mb				mb				695 mb				725 mb				790 mb				700 mb				710 mb				mb				Freezing
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf		56	54	130	24	No						56	52	110	31	No		62	52	150	15		53	52	110	11		55	52	100	21		52	45	110	21	Surf
1000	01·9	55	53	130	24						01·1	56	52	112	32			51	51	155	18	09·7	52	48	137	30	09·9	56	52	114	18	08·0	56	52	114	18	1000
950		48	46	141	28							50	49	132	36			48	48	153	17		50	39	142	23		56	46	125	28		56	45	132	18	950
900	30·7	46	42	147	32						30·0	48	45	136	34		33·2	51	35	151	16	33·4	45	31	144	19	39·0	52	48	129	28	39·0	52	31	141	22	900
850		42	39	152	36							45	40	131	46			48	22	152	21		44	32	150	20		47	30	137	25		48	17	145	27	850
800	62·4	39	33	159	36						61·9	41	34	132	49		65·2	42	34	155	25	65·0	39	30	153	21	66·0	44	27	146	21	66·0	43	14	150	28	800
750		35	27	153	40	Available For Winds						36	29	135	48	Available		36	31	158	27		34	27	155	17		37	23	149	19		36	11	154	22	750
700	97·7	29	17	150	36						97·4	33	23	136	56		100·5	28	27	169	27	100·2	25	19	156	17	101·5	32	21	146	17	101·3	30	11	150	21	700
650		23	11	148	38							27	14	130	54			21	20	182	30		17	11	161	18		29	12	142	14		23	15	145	18	650
600	137·5	15	05	157	33	See Top					137·5	20	04	130	52		140·1	18	12	187	27	139·2	08	03	175	24	141·2	16	04	147	13	141·0	15	12	145	17	600
550		09	-03	169	34							13	-06	133	46			07	06	184	20		03	-02	185	22		11	-02	159	14		07	03	154	11	550
500	183·1	01	-16	164	33	of Page					183·5	06	-02	136	34		186·4	-02	-04	179	21	184·2	-05	-12	190	21	186·8	00	-13	176	18	186·4	-03	-09	164	06	500
450		-07		150	33							-03		132	28			-09	-18	183	25		-03	-20	194	22		-09	-24	189	18		-12	-22	170	07	450
400	236·8	-20		155	32						237·8	-13		142	32		238·7	-17	-35	182	28	237·2	-26	-33	196	26	290·4	-19	-34	198	19	239·6	-21	-37	177	09	400
350		-35		155	31							-25		143	21			-32	-98	180	32		-40	-47	195	30		-32	-46	200	22		-35	-60	212	12	350
300	301·9	-51		167	26						309·1	-43		143	23		303·9	-60		179	31	301·5	-56		198	28	305·7	-49		212	22	304·7	-50		215	18	300
250		-66		182	26							-62		142	25			-66		194	40		-74		210	29		-64		235	18		-66		222	21	250
200	387·1	-68		156	30						389·6	-75		143	26		389·1	-51		229	33	385·0	-80		226	36	391·3	-67		257	19	390·2	-65		294	18	200
170	(195 mb)	-67										-67						-65		225	20		-73		248	24		-58		252	13		-61		258	09	170
150																		-63		229	18		-71		246	21		-62		260	10		-62		291	06	150
130												-64						-63		249	11		-71		239	12		-61		264	08		-59		342	05	130
110												-64						+64		211	07		-70		226	08	(120 mb)	-61					-57		Calm		110
100											535·7	-64					528·4	-75		188	07		-70									538·0	-54		327	03	100
90												-63					(097 mb)	-65					-67									(095 mb)	-52				90
80												-62											-69														80
70												-60											-60														70
60												-58											-55														60
												-57											-53														
												-55																									
											093mb	-54																									
	Inversion 591mb 13° - 580mb 19° Isothermal 950 - 917mb 98° 863 - 850 " 42°								Isothermal 1003 - 1000mb 56° 960 - 950 " 50°								Inversion 938mb 97° - 886mb 62°				Inversion 880mb 92° - 863mb 46° Isothermal 663 - 653mb 18° 573 - 550 " 3°				Inversion 1018 mb 55° - 970mb 38° Isothermal 609 - 600 mb 16°				Inversion 1018 mb 52° - 979mb 59°				
Tropopause	I 221mb -72° 36,700'								I 298 mb -82° 38,100'				I 218mb -78° 37,100'				II 210mb -82° 37,500'				I 223mb -71° 36,900'				II 237mb -71° 35,500'								Tropopause

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., and 300 mb., levels at about 15h G.M.T.



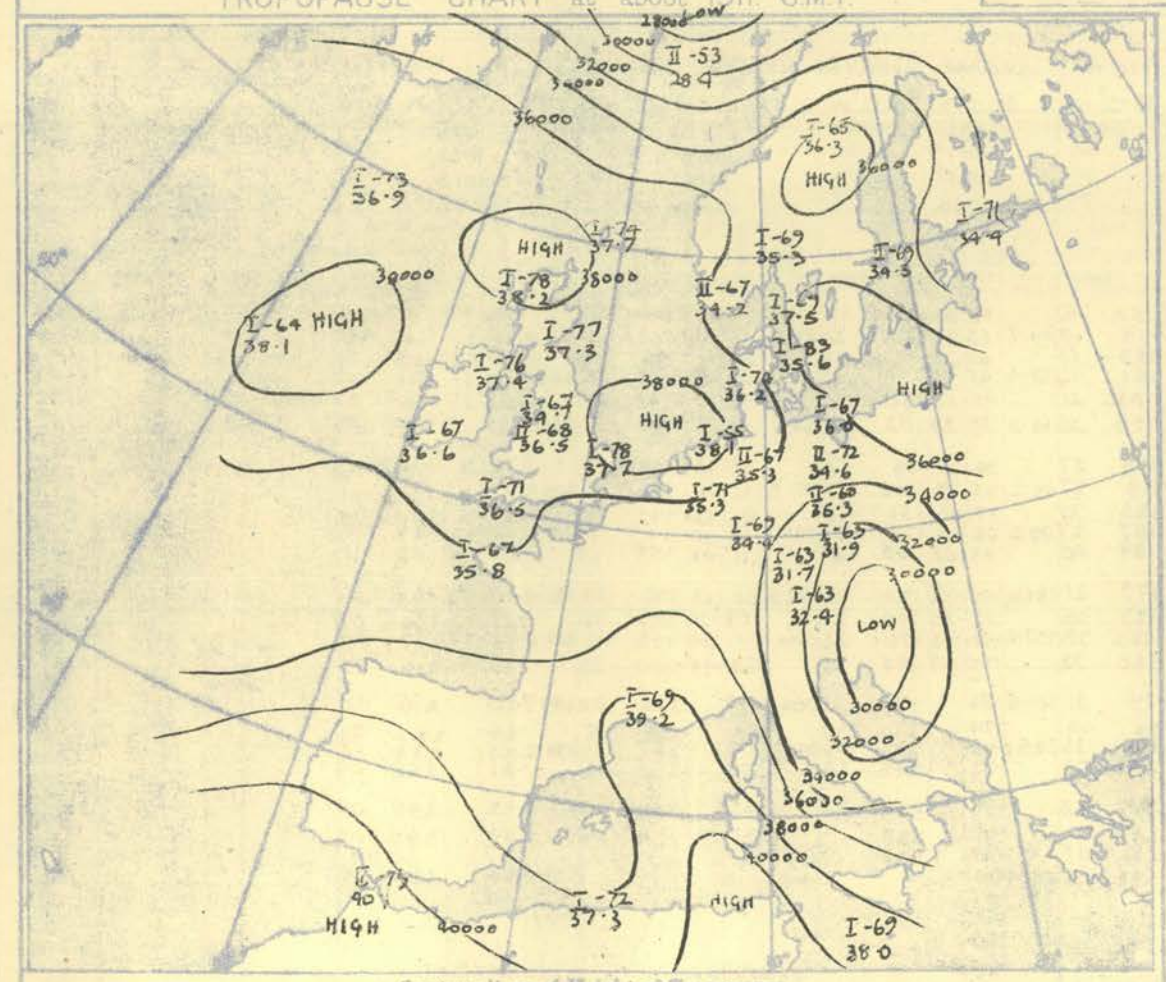
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.





The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Southward advection of cold air occurred over northern Norway and there was some penetration of cold air towards the Azores.

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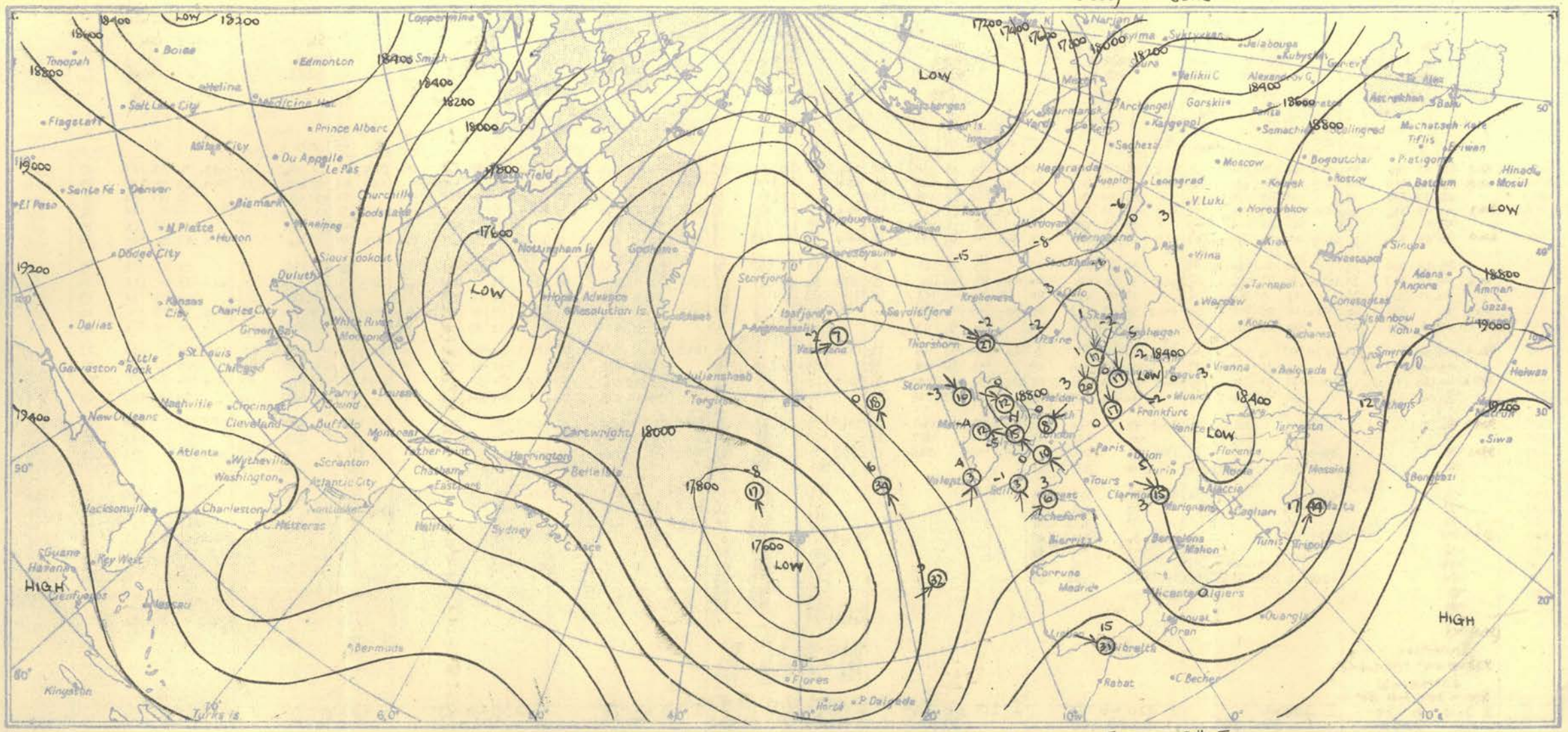
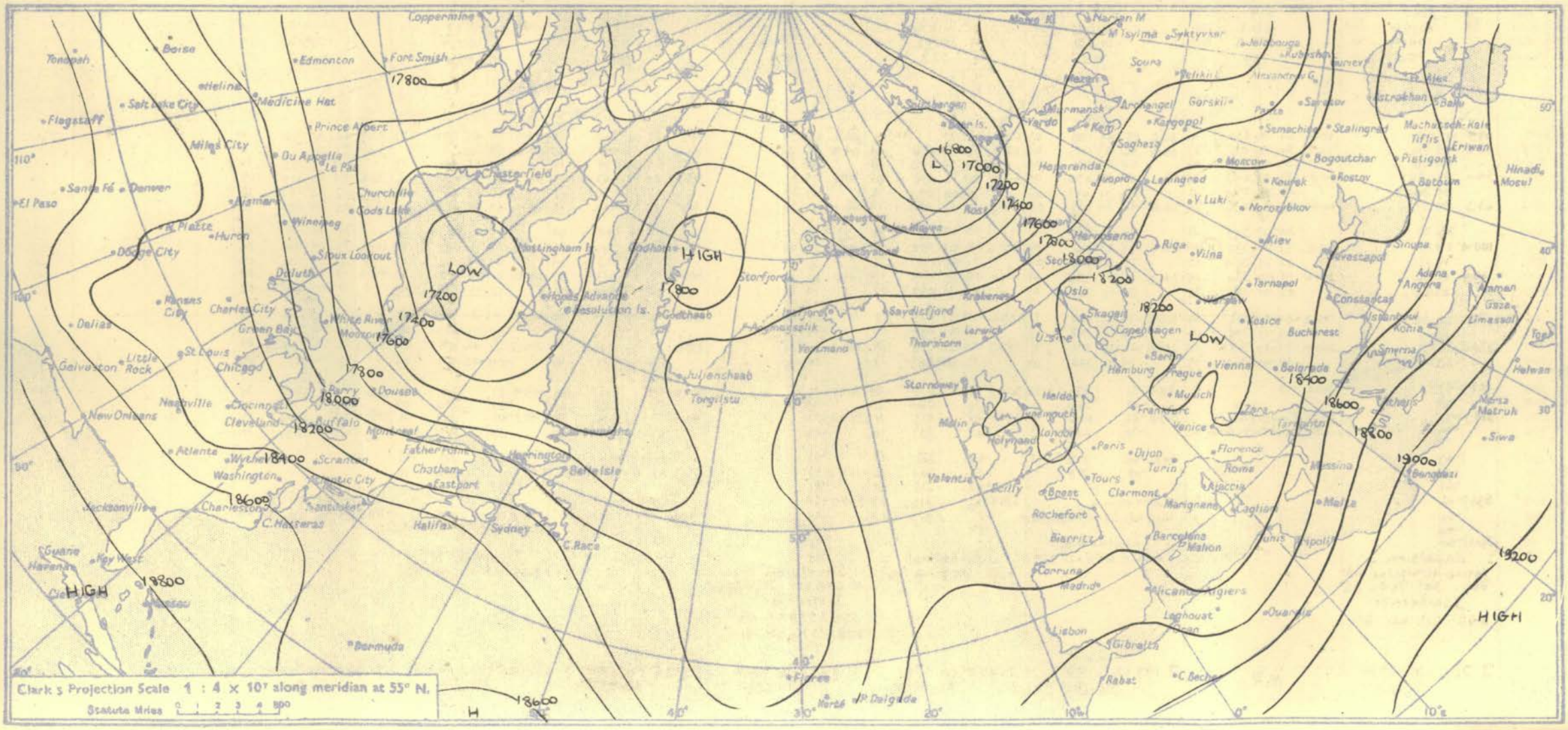
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Tuesday 5th June 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Tuesday 5th June 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Tuesday 5th June 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15h G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Pressure: Time	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.
Pressure: M.S.L.	1021·2 mb	1021·4 mb	1020·3 mb	1019·5 mb	1018·0 mb	1017·7 mb	1016·8 mb	1016·9 mb	1016·3 mb
Pressure: Surf	1011·2 mb	1019·8 mb	1019·5 mb	1010·1 mb	1016·0 mb	1013·3 mb	1001·3 mb	1006·4 mb	1014 mb
Pressure: Freezing	737 mb	713 mb	715 mb	740 mb	700 mb	700 mb	717 mb	706 mb	680 mb

Pressure mb	Lerwick Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Stornoway Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Leuchars Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Aldergrove Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Liverpool Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Downham Market Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Larkhill Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Camborne Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Valentia Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	55	47	180	06	00·4	60	50	340	12	00·2	66	49	110	05	02·6	72	40	150	07	00·6	73	34	110	05	01·2	65	45	010	12	04·4	68	48	020	05	02·9	65	49	090	07	00·3	71	52	150	07	Surf
1000	05·8	52	45	125	04	05·9	59	47	037	09	05·7	62	43	181	03	05·4	68	36	148	10	05·1	71	26	090	10	04·9					04·7	64	48	096	12	04·4	69	51	147	08	1000
950		45	34	053	12		57	45	028	07		59	34	131	04		58	28	148	08		64	25	086	09		55	34	028	14		58	44	055	06		56	42	096	10		62	47	134	11	950
900	34·3	47	43	336	09	35·0	51	39	019	06	34·9	56	27	062	05	34·6	51	21	142	12	34·6	57	24	095	10	34·0	20	27	034	11	33·9	51	39	066	05	33·8	51	42	090	10	33·8	54	41	124	12	900
850		43	36	311	12		46	28	004	08		50	32	030	06		47	12	104	12		49	20	107	10		46	21	037	12		45	36	086	02		47	23	115	08		48	38	126	15	850
800	66·0	38	32	306	21	66·8	42	29	339	08	67·0	43	33	015	05	66·4	40	02	099	16	66·6	42	10	088	10	65·7	40	17	033	12	65·7	40	29	105	05	65·8	44	18	126	09	65·8	44	31	122	19	800
750		33	28	306	22		37	26	324	08		36	26	013	05		33	05	103	16		39	-09	067	09		38	11	046	06		35	21	105	08		38	16	135	07		38	23	119	18	750
700	101·2	29	24	307	24	102·4	30	22	326	11	102·5	31	16	021	06	101·5	27	00	106	15	102·1	32	-06	081	07	101·1	32	-01	064	06	101·1	30	15	089	06	101·3	31	10	117	05	101·4	33	19	128	14	700
650		22	17	300	22		22	13	316	11		25	14	037	06		22	-10	103	14		26	-12	101	10		27	-11	068	09		25	06	098	04		26	03	127	02		28	05	134	13	650
600	140·9	16	11	293	25	142·6	15	05	318	09	142·2	19	07	347	04	141·1	15	-4	099	10	142·1	22	-21	118	09	141·1	21	-07	059	07	140·8	17	-01	149	04	141·2	19	-04	168	03	141·5	21	03	191	10	600
550		08	-03	299	27		08	-02	326	08		09	-03	319	09		07	-21	113	12		14	-31	148	13		11	-11	056	11		12	-09	145	08		09	-10	156	03		12	-13	154	06	550
500	186·3	-02	-09	301	27	187·4	-03	-11	326	10	187·9	00	-16	271	12	186·4	-04	-30	115	12	188·1	03	-31	146	15	186·8	00	-22	050	08	186·5	00	-20	150	10	186·8	-01	-17	205	03	187·4	04	-10	187	03	500
450		-12	-19				-12	-21	325	12		-09	-22	300	09		-13	-36	108	16		-09	-39	149	16		-11	-35	039	09		-12	-31	157	07		-11	-28	269	04		-04	-22	024	01	450
400	239·6	-20	-30			240·6	-22	-32	316	10	241·5	-20	-34	313	07	239·5	-24	-46	096	21	241·7	-20	-47	153	18	240·2	-23	-46	014	07	239·7	-24	-38	164	11	240·1	-23	-40	272	07	241·5	-16	-33	092	01	400
350		-33	-43				-34	-44	310	14		-34	-46	353	10		-31	-58	068	26		-33	-52	157	15		-37	-56	023	06		-38	-54	183	08		-35	-51	280	09		-29	-45	067	08	350
300	304·9	-46				305·8	-49		321	18	306·8	-49		360	10	304·2	-51		062	31	306·9	-50		159	12	305·0	-50		024	06	304·3	-52		162	05	305·1	-50		292	10	307·4	-45		065	06	300
250		-60					-63		329	23		-67		048	12		-68		052	28		-67		132	10		-69		346	06		-70					-66		293	23		-61		055	07	250
200	391·1	-72				390·9	-75		327	26	392·1	-65		001	10	389·3	-67		046	13	392·8	-61		036	06	389·6	-74		001	06	389·4	-65				390·7	-64		319	11	394·0	-64		382	08	200
170		-61					-65		317	16		-60		333	13							-57		332	08							-60					-63		298	12		-60				170
150		-59				451·2	-61		326	12	453·3	-59		320	13							-56		325	07	Isothermal					450·7	-59					-62		296	14		-60		289	13	150
130		-58					-60					-58		312	08							-57		310	10	863 - 850 mb 46°						-60				(131mb)	-60					-58		290	08	130
110		-58					-59					-57		312	11							-56		302	08	800 - 766 mb 40°						-58										-61		285	04	110
100	538·7	-56				537·7	-59				540·2	-56		309	07						541·8	-53		306	07						537·3	-57									541·8	-56		271	05	100
90		-54										-55		307	08							-51		319	05							-55										-57		247	04	90
80		-54					Inversion					-53		302	07							-49		291	05						(88mb)	-55										-56		242	04	80
70		-54					1000mb 59° - 975mb 60°					-52		295	08							-47		286	09																		-55		239	04	70
60		-51									651·0	-50										-44		313	09																			60
		-49																				-44		335	06																			
		-47																				(42mb) -44																							
	(34mb)	-45																				Inversion																							
	Inversion																					772 mb 40° - 765 mb 41°																							
	933 mb 44° - 884 mb 48°																					631 mb 24° - 628 " 25°																							
	Isothermal																					248 " -67° - 237 " -65°																							
	810 - 800 mb 38°																																												
Tropopause	I 214 mb -74° 37,700'					I 208 mb 38,200'					I 220 mb -77° 37,300'					I 215 mb -76° 37,400'					I 248 mb -67° 34,700' II 228 mb -68° 36,500'					I 213 mb -78° 37,700'					I 230 mb -73° 36,100'					I 226 mb -71° 36,500'					I 228 mb -67° 36,600'					Tropopause

21h G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Pressure: Time	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	G.M.T.
Pressure: M.S.L.	1021·6 mb	1021·1 mb	1020·6 mb	1018·6 mb	1017·8 mb	1017·7 mb	1016·1 mb	1016·0 mb	mb
Pressure: Surf	1011·4 mb	1019·5 mb	1019·0 mb	1009·2 mb	1015·8 mb	1015·1 mb	1000·4 mb	1005·6 mb	mb
Pressure: Freezing	750 mb	739 mb	734 mb	728 mb	691 mb	700 mb	696 mb	702 mb	mb

Pressure mb	Lerwick Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Stornoway Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Leuchars Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Aldergrove Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Liverpool Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Downham Market Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Larkhill Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Camborne Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	47	43			00·4	54	50	030	10	00·2	55	44	080	03	02·6	66	39	CALM		00·6	65	38			01·2	52	46	360	10	04·4	59	45	040	05	02·9	57	42	110	10						Surf
1000	05·8	45	41			05·7	56	51	035	27	05·4	56	43	045	04	05·2	66	37	106	06	04·9	66	40			04·8	51	46	053	20	04·5	59	45			04·4	58	44								1000
950		40	38				57	46	041	08		60	40	036	04		59	25	100	06		60	34				54	36	054	19		59	41	042	13		59	56	122	16							950
900	34·0	42	41			34·9	53	33	047	08	34·6	54	38	036	04	34·4	53	12	095	05	34·2	53	31			33·7	50	37	047	13	33·7	52	35	064	06	33·6	54	50	128	13						900
850		39	39				47	28	065	11		48	39	037	05		48	04	093	12		47	29				47	25	058	12		45	27	067	05		47	38	146	08							850
800	65·3	34	31			66·8	41	34	036	08	66·6	41	34	029	08	66·3	42	-09	088	14	66·1	41	25			65·5	42	23	069	12	65·6	43	25	053	04	65·6	45	24	145	05						800
750		32	27				34	27	343	11		34	28	028	11		35	-08	077	12		38	17				38	19	060	09		38	16	057	08		39	19	135	05							750
700	100·4	28	18			102·0	27	22	333	14	101·9	27	23	018	09	101·6	28	-03	092	10	101·7	33	08			101·0	32	09	049	07	101·0	33	11	052	07	101·2	32	14	110	06						700
650		19	12				20	14	324	15		23	20	001	09		21	-12	102	12		26	02				27	04	076	09		27	04	076	02		26	09	116	06							650
600	139·9	15	06			141·6	14	07	320	14	141·5	15	09	356	08	141·1	15	-20	096	13	141·7	22	-07			140·9	17	01	043	07	141·0	21	-04	108	02	141·2	19	02	125	03						600
550		07	-01				05	-01	320	14		06	-02	337	09		09	-31	099	12		14	-09				09	-07	048	06		13	-13	143	07		11	-05	126	02							550
500	185·2	-01	-08			186·3	-04	-09	286	09	186·8	-02	-12	300	12	186·6	-02	-37	095	12	187·7	04	-18			186·4	-01	-17	040	05	186·9	02	-21	145	07	187·0	02	-13	220	09						500
450		-11	-18				-13	-19	274	10		-12	-24	308	12		-13	-47	097	14		-05	-26				-12	-27	020	06		-09	-30	143	08		-09	-25	237	05							450
400	238·5	-22	-31			240·0	-22	-27	39	18	240·0	-22	-29	311	11	239·7	-25	-55	092	18	241·7	-16	-35			239·6	-25	-39	002	08	240·5	-21	-40	174	09	240·7	-22	-36	275	09						400
350		-33	-42				-34	-43	305	19		-35	-41	338	10		-37	-60	085	22		-29	-45				-39	-50	011	07		-36	-45	179	07		-37	-50	297	12							350
300	303·7	-47				305·2	-47				305·0	-51		353	12	304·3	-53		077	28	307·7	-42				304·0	-54		019	08	305·4	-51		217	04	305·3	-54		290	25							300
250		-63										-67		360	11		-70		064	27		-58					-70		357	09		-69		270	09		-66		297	24							250
200	389·3	-77					Inversion				389·8	-82		006	19	389·1	-68		015	11	395·2	-55				388·5	-73		336	09	391·3	-62		313	11	391·1	-63		304	30							200
170		-64					1019 mb 69° - 969 mb 58°					-70		345	15		-67		327	10		-52					-67		309	09		-58		324	13		-63		331	11							170
150		-62									449·1	-68		318	12		-66		332	13		-52				Inversion					452·8	-59		317	12												150
130		-63										-68		318	15		-65		344	12		-52				983 mb 49° - 966 mb 54°						-58		309	10												130
110		-61															-62		315	08		-51									(116mb)	-57															110
100	535·7	-62										Inversion					-63		320	08	540·0	-50				Isothermal					Inversion					Inversion										100
90		-61										1019 mb 55° - 950 mb 60°					-61		317	08		-49				966 - 931 mb 54°					1000 mb 59° - 995 mb 64°					1006 mb 57° - 967 mb 60°										90
80		-60															-58					-46															845 mb 40° - 834 " 48°										80
70	(75mb)	-60																				-45																								70
60	Inversion											Isothermal					Isothermal					-45										Isothermal															60
	980 mb 40° - 912 mb 43°											670 - 648 mb 23°					1009 - 995 mb 66°					Inversion										855 - 833 mb 45°														
	880 " 34° - 784 " 35°																					1016 mb 65° - 1000 mb 66°																									
	Isothermal																					Isothermal																									
	645 - 615 mb 18°																					1000 - 988 mb 66°																									
																						809 - 776 mb 41°																									
Tropopause	I 200 mb -77° 38,900'					N.R.					I 197 mb - 83° 39,100'					I 229 mb -75° 36,000'					I 237 mb -60° 35,800'					I 225 mb -77° 36,500'					I 250 mb -69° 34,400'					I 239 mb -68° 35,200'										Tropopause

No. 11756 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Wednesday 6th June 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

METEOROLOGICAL OFFICE LIBRARY 14 JUN 1951

03h G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	03h	1021·8 mb	1011·6 mb	767 mb
STORNOWAY	03h	1020·6 mb	1019·0 mb	735 mb
LEUCHARS	03h	1019·6 mb	1018·8 mb	758 mb
ALDERGROVE	03h	1018·4 mb	1008·6 mb	730 mb
LIVERPOOL	03h	1018·2 mb	1016·2 mb	719 mb
DOWNHAM MARKET	03h	1017·5 mb	1013·0 mb	700 mb
LARKHILL	03h	1017·2 mb	1000·9 mb	709 mb
CAMBORNE	03h	1015·6 mb	1005·3 mb	718 mb
VALENTIA	03h	1014·8 mb	1013·[illegible] mb	716 mb

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	46	39			00·4	50	48	360	15	00·2	46	41	Calm	
1000	05·8	44	38			05·6	50	46	040	18	05·2	50	39	054	06
950		38	34				54	46	045	10		51	40	051	07
900	33·8	32	32			39·5	48	40	039	08	34·1	49	41	021	05
850		30	22				43	36	336	09		45	36	349	06
800	69·9	36	13			66·2	39	32	338	10	65·8	39	35	333	07
750		30	09				34	27	338	11		31	28	332	09
700	99·8	25	04			101·9	28	20	318	08	100·9	25	22	336	09
650		20	00				19	15	324	09		21	17	331	09
600	139·2	13	-07			140·9	11	07	329	13	140·3	19	06	329	09
550		05	-17				04	-01	320	15		05	-01	333	11
500	184·4	-03	-27			185·9	-05	-12	317	16	185·5	-05	-12	330	16
450		-14	-37				-12	-23	320	16		-14	-18	313	16
400	237·4	-26	-47			238·9	-24	-33	317	25	238·5	-25	-29	318	14
350		-40	-60				-36	-62	312	14		-38	-93	329	15
300	301·7	-52				303·7	-51		313	14	303·1	-53		333	12
250		-69					-70		307	17		-71		332	16
200	386·9	-65				388·1	-73		312	26	387·9	-70		334	19
170		-58					-67		326	19		-65		337	17
150		-61					-65		326	15		-64		338	12
130		-60					-63		323	14		-63		323	13
110		-59					-62		327	11		-62		321	12
100	534·5	-59				534·1	-62		319	08	533·7	-61		324	10
90		-59					-62		316	09		-60		334	11
80		-59					-61								
70		-56													
60															
	(165 mb)														

Inversion 900 mb 32° - 885 mb 33°, 850 - 30° - 820 .. 38°

Inversion 998 mb 50° - 970 mb 56°, Isothermal 1019 - 998 mb 50°

Inversion 1019 mb 46° - 983 mb 55°, Isothermal 950 - 920 mb 51°, 670 - 650 .. 21°

Pressure mb	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	51	30	150	05	00·6	49	39			01·2	45	44	340	07
1000	04·9	54	30			04·9	59	37			04·7	50	43		
950		61	30	158	09		55	39				56	29	063	17
900	34·1	54	27	156	10	33·9	51	39			33·7	51	34	070	17
850		47	22	142	14		46	35				45	23	073	13
800	65·9	40	17	135	16	65·8	40	28			65·6	40	17	068	09
750		34	10	116	18		36	19				36	15	067	09
700	101·1	29	-02	104	18	101·2	30	16			101·0	32	00	057	10
650		23	-10	095	13		24	08				25	01	043	07
600	140·8	17	-18	100	09	141·0	17	01			140·8	17	-06	004	06
550		08	-30	109	14		09	-08				09	-16	332	06
500	186·3	00	-41	124	11	186·5	+01	-17			186·3	-02	-26	346	06
450		-12	-47	114	10		-13	-28				-13	-37	353	11
400	239·5	-22	-46	108	14	239·5	-27	-40			239·5	-29	-45	348	13
350		-34	-57	074	05		-40	-53				-38	-66	350	10
300	304·5	-61		073	24	303·7	-55				304·1	-54		008	09
250		-66		073	28		-72					-70		016	12
200	390·1	-65		360	13	388·4	-67				388·7	-70		360	12
170		-60		340	10		-67					-66		339	09
150		-69		391	10		-67					-63		325	19
130		-62		312	12		-64					-64		315	12
110		-62		331	13		-68					-64		306	13
100	536·8	-60		297	08	533·8	-66				534·9	-63		305	13
90		-61		305	10		-63					-61		308	09
80		-60		307	10										
70		-68		382	07										
60		-58		360	09										

Inversion 1010 mb 51° - 975 mb 69°

Inversion 1016 mb 99° - 996 mb 56°, Isothermal 996 - 958 mb 56°, 779 - 766 .. 38°, 700 - 684 .. 30°

Inversion 1013 mb 95° - 985 mb 56°, Isothermal 985 - 942 mb 56°

Pressure mb	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·9	45	35	Calm		02·9	55	43	110	10	00·3	55	45	090	07
1000	09·6	46	36			04·9	56	44			03·9	54	46	099	07
950		54	41	057	09		59	47	113	14		53	44	139	11
900	33·5	51	31	339	02	33·5	52	43	135	13	32·8	50	33	149	14
850		47	29	357	03		45	36	135	09		47	37	198	14
800	65·4	42	19	010	09	65·4	42	05	138	05	64·6	42	27	143	15
750		37	08	050	04		37	13	192	06		37	24	141	14
700	100·7	31	03	055	03	100·8	30	10	147	07	100·0	30	21	147	13
650		27	-03	085	04		24	-01	168	06		23	10	150	15
600	140·7	19	-11	113	09	140·6	18	-08	191	06	139·8	17	05	150	18
550		11	-17	145	09		09	-10	199	08		09	-06		
500	186·3	01	-22	121	05	186·2	-01	-15	207	07	185·3	-01	-13		
450		-10	-31	176	06		-11	-28	244	10		-10	-24		
400	239·7	-24	-43	155	06	239·5	-22	-41	255	07	238·8	-19	-37		
350		-38	-55	201	05		-36	-54	268	17		-32	-49		
300	309·3	-52		265	05	304·6	-51		287	20	309·1	-48			
250		-69		307	13		-65		306	40		-61			
200	389·6	-65		326	16	390·0	-70		309	29		-61			
170		-62		324	13		-66		300	17		-69			
150		-62		297	12		-66		299	19		-68			
130		-62		318	11		-67		303	10					
110		-61		299	12		-65		293	09					
100	536·7	-60		283	13	536·3	-66		286	09					
90		-61					-65		287	12					
80							-66								
70						(75 mb)	-67								
60															

Inversion 1001 mb 45° - 982 mb 55°, Isothermal 982 - 958 mb 55°

Inversion 1005 mb 55° - 985 mb 61°, 841 .. 44° - 825 .. 45°

Inversion 1013 mb 55° - 996 mb 58°, Isothermal 930 - 900 mb 50°

Tropopause	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
	I 230mb -73° 35,700'	II 220mb -80° 36,800'	I 210 mb -82° 37,700'	I 220 mb -72° 37,000'	I 238 mb -75° 35,200'	II 290 mb -79° 36,100'	II 291 mb -71° 35,000'	II 232 mb -70° 35,800'	I 221 mb -79° 36,900'

09h G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	09h	1022·2 mb	1012·1 mb	825 mb
STORNOWAY	09h	1020·5 mb	1018·9 mb	735 mb
LEUCHARS	09h	1020·1 mb	1019·3 mb	741 mb
ALDERGROVE	09h	1017·9 mb	1008·0 mb	745 mb
LIVERPOOL	09h	1017·5 mb	1015·5 mb	720 mb
DOWNHAM MARKET	09h	1016·7 mb	1012·5 mb	700 mb
LARKHILL	09h	1016·0 mb	1000·2 mb	700 mb
CAMBORNE	09h	1019·3 mb	1003·9 mb	710 mb
VALENTIA		G.M.T. mb	mb	mb

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	48	38			00·9	54	48	090	15	00·2	55	46		
1000	05·9	44	35			05·6	50	44	040	16	05·5	52	41		
950		37	31				49	44	054	18		49	46		
900	34·0	32	26			39·3	50	39	074	15	39·2	46	44		
850		30	23				46	34	067	14		43	36		
800	69·9	30	-07			66·1	40	26	051	14	65·9	43	33		
750		27	-22				34	26	020	17		33	27	For Winds	
700	99·5	22	-07			101·2	27	20	328	24	101·0	27	22		
650		17	-03				20	12	301	36		21	19	See	
600	138·7	11	-10			140·6	11	05	307	38	140·5	15	05		
550		03	-19				05	-03	320	22		07	-01	Page 3.	
500	183·7	-05	-31			185·7	-04	-14	320	17	185·9	-04	-13		
450		-16	-42				-12	-29	326	16		-12	-22		
400	236·9	-30	-54			238·7	-24	-33	319	27	239·2	-21	-33		
350		-40	-60				-36	-46	295	20		-35	-49		
300	300·5	-65				303·6	-49		309	16	309·3	-50			
250		-73					-65		295	29		-66			
200	386·2	-66				389·5	-65				389·3	-68			
170		-56					-59					-65			
150		-56					-60					-62			
130		-69					-59					-66			
110		-56					-59					-66			
100	535·3	-53				537·2	-56				536·0	-60			
90		-51					-54					-58			
80	(185	-51					-53					-56			
70	mb)											-55			
60															

Inversion 869 mb 28° - 825 mb 32°

Inversion 935 mb 98° - 900 mb 50°

Inversion 895 mb 93 - 863 mb 47°

Pressure mb	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	63	48	110	03	00·6	64	40	Calm		01·2	61	47	035	10
1000	04·9	63	47	112	06	04·8	61	38	097	05	04·7	58	47	036	18
950		58	57	112	08		55	35	098	07		55	34	051	15
900	34·1	51	33	110	10	33·8	50	35	103	10	33·7	51	36	069	15
850		45	29	111	15		45	34	100	12		46	38	070	13
800	65·9	38	18	118	12	65·6	40	28	096	14	65·5	40	33	069	09
750		33	15	118	09		36	20	108	14		35	24	059	08
700	100·8	26	06	122	11	101·0	29	09	124	11	100·9	32	18	097	07
650		20	-02	110	13		25	06	133	09		25	13	027	05
600	140·2	14	-10	120	09	140·8	18	00	146	10	140·7	17	01	334	05
550		09	-17	134	06		09	-08	147	10		10	-13	353	05
500	185·8	00	-28	154	04	186·4	00	-19	179	10	186·4	01	-21	295	05
450		-13	-30	103	17		-11	-29	185	10		-11	-30	307	10
400	238·9	-29	-39			239·7	-23	-37	183	11	239·8	-23	-41	323	10
350							-36	-47	171	11		-38	-53	331	05
300						304·5	-51		139	07	309·3	-54		135	05
250							-65		125	06		-71		162	05
200						389·9	-66		207	10	388·9	-69		319	12
170							-63		323	14		-66		320	13
150							-65		314	14		-65		305	14
130							-61		336	15		-63		327	17
110							-61		340	11		-61		328	12
100						536·8	-59		315	11	535·1	-60		309	09
90							-59		318	10		-59		308	07
80							-58		347	08		-57		302	07
70							-55		317	07		-55		303	06
60						(062 mb)	-52								

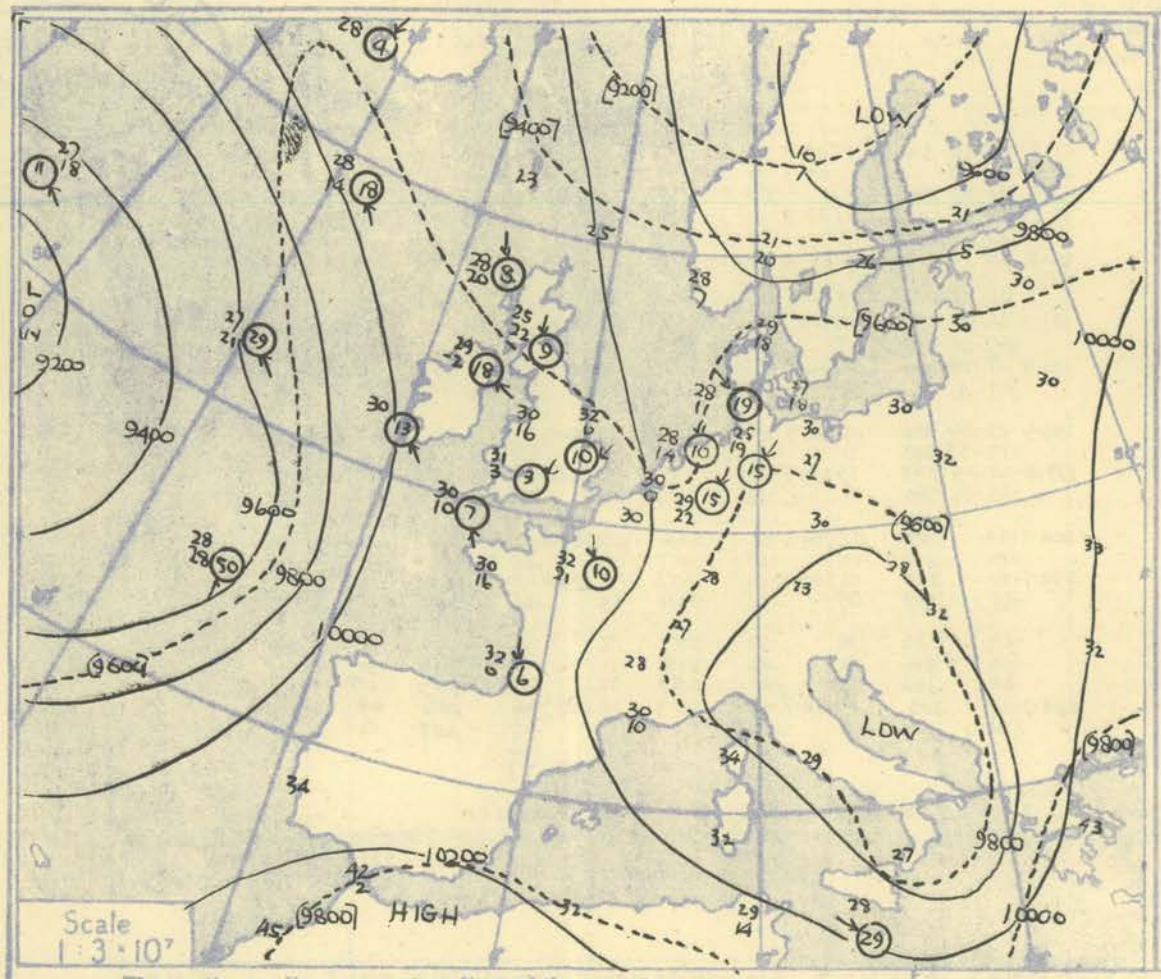
Inversion 975 mb 54° - 955 mb 55°, 903 - 866 mb 47°

Isothermal 994 mb 59° - 923 mb 59°

Tropopause	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
	I 250 mb -73° 33,900'	I 228 mb -74° 36,100'	II 220 mb -77° 36,800'	N.R.	I 227 mb -72° 36,400'	I 225 mb -78° 36,300'	I 230 mb -68° 36,100'	I [illegible] mb -64° 37,000'	

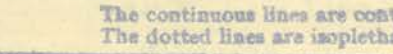
Wednesday 6th June 1951.

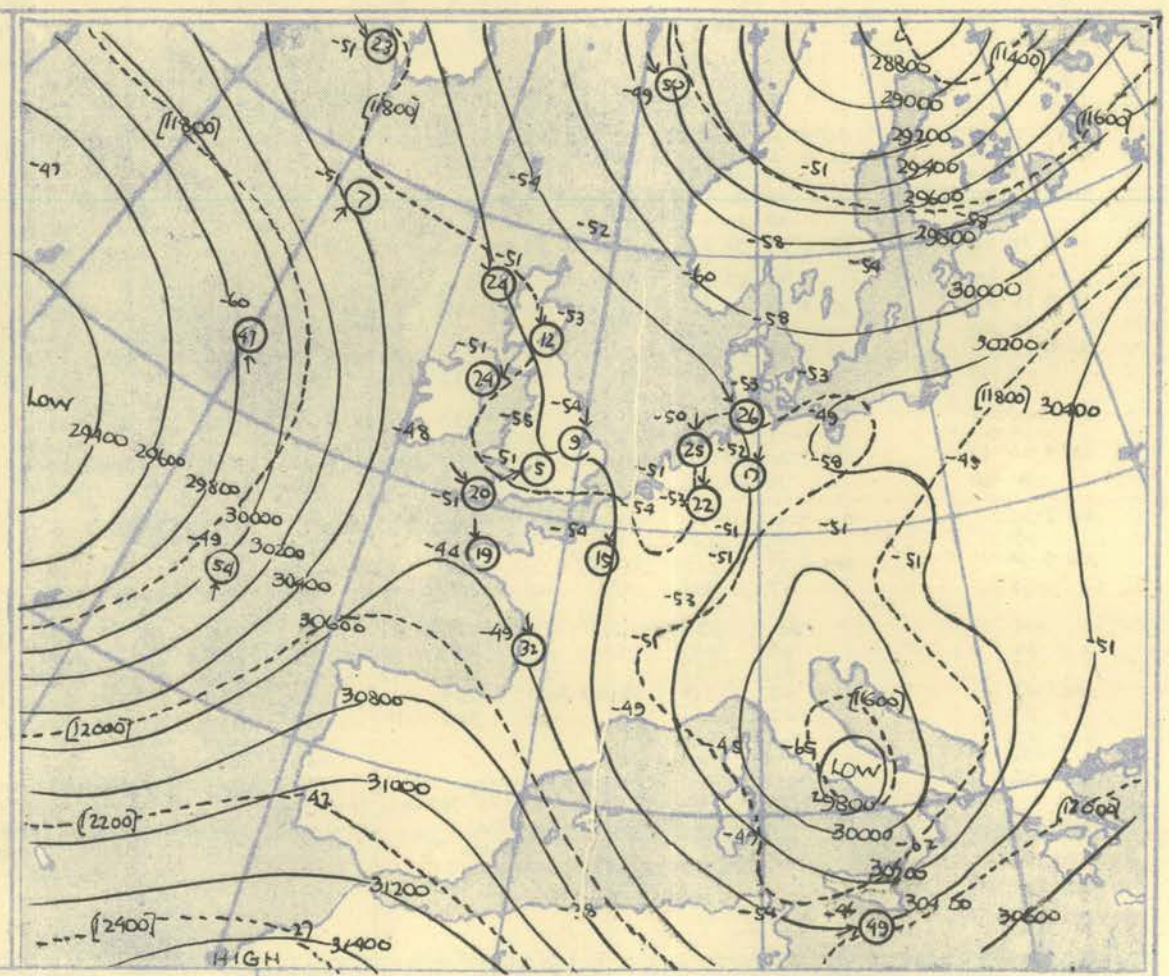
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb. and 300 mb., levels at about 03h G.M.T.



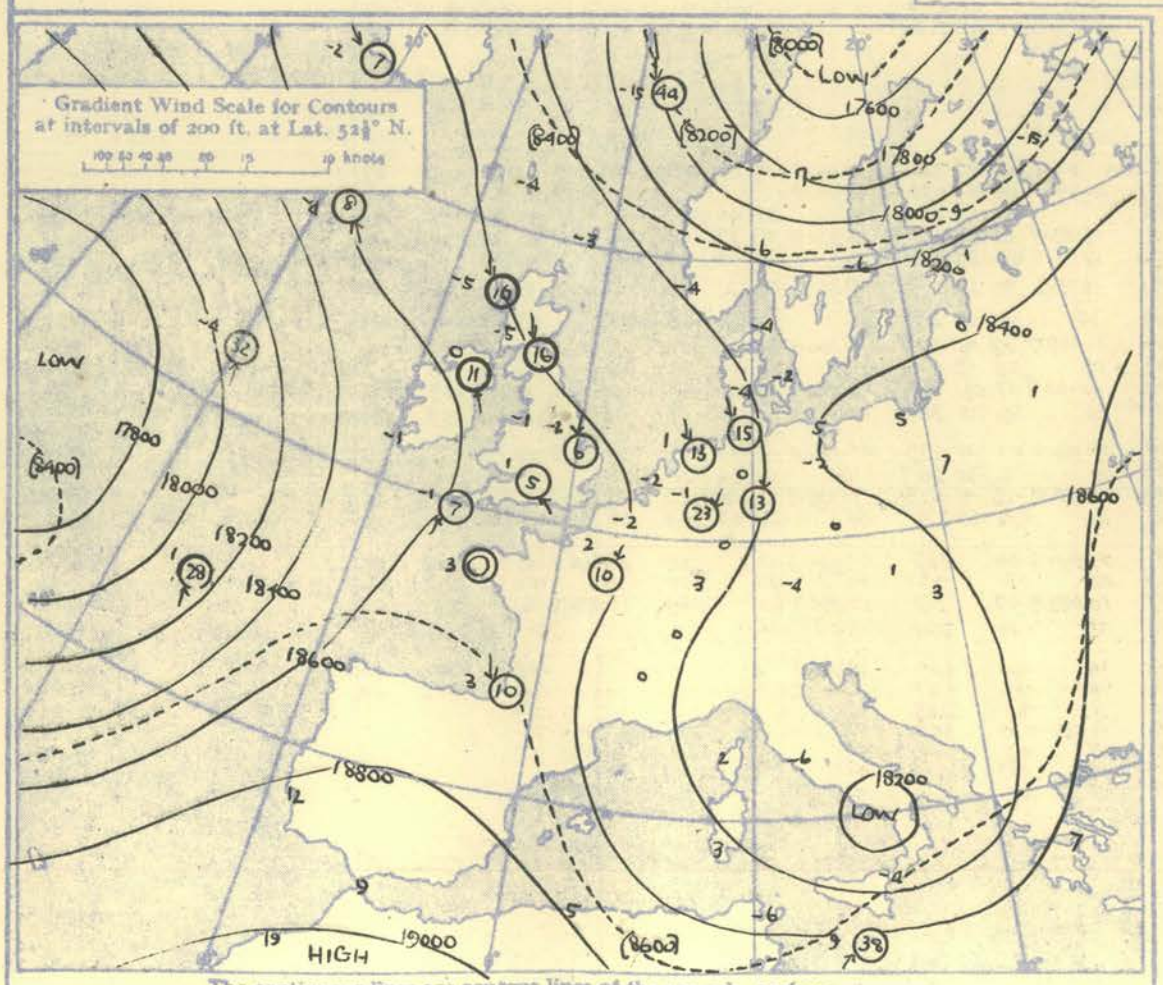
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours
at intervals of 200 ft. at Lat. 52½° N.

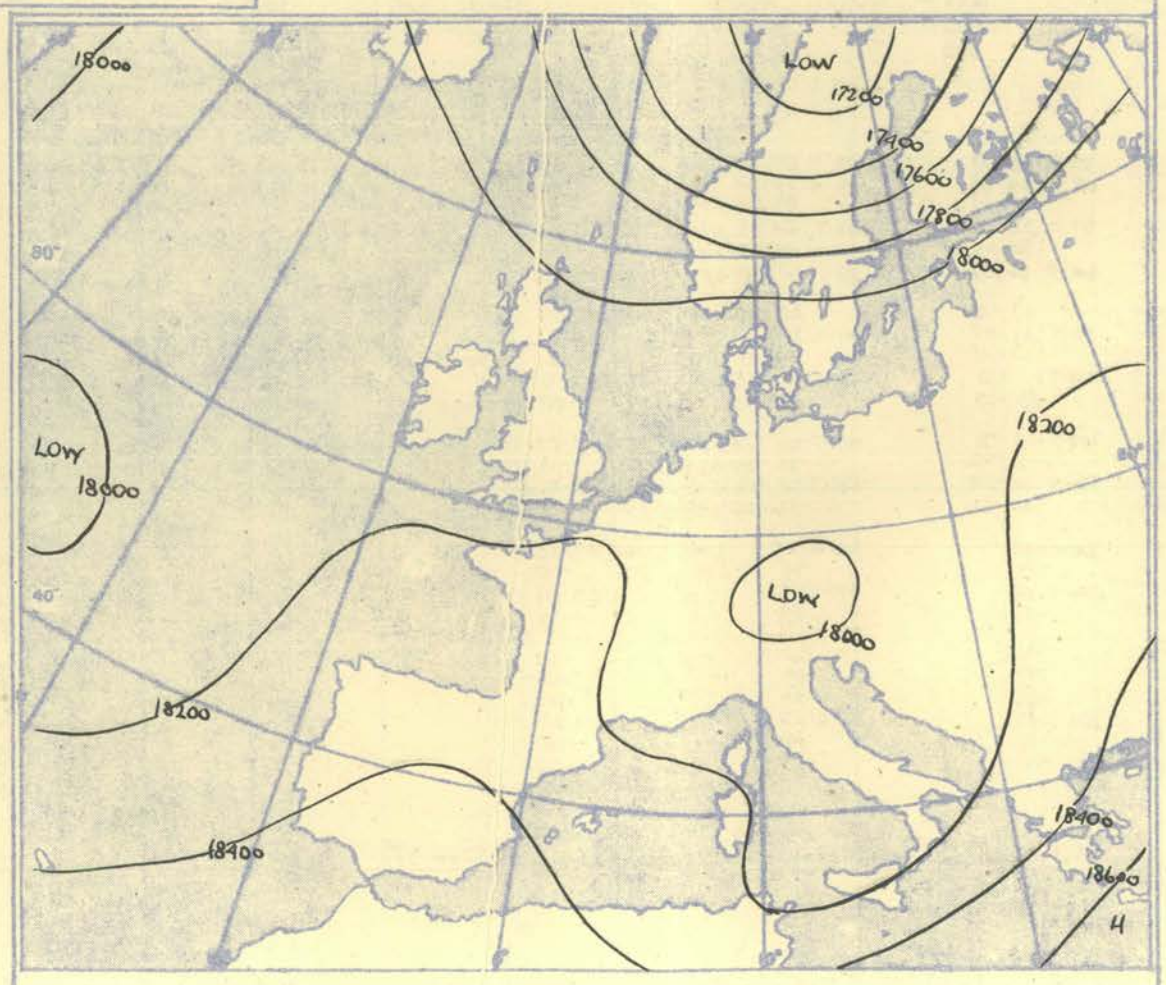




The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500-1000mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	48°N 17°W	97·7°N 123°W	52°12'N 02°W										
Time	12h	14h	14 10h										Time
Pressure M.S.L.	996 mb	999 mb	1016 mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	Pressure M.S.L.
Surf	993 mb	996 mb	1014·5 mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	Surf
Freezing	735 mb	760 mb	726 mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	Freezing

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Pressure mb
Surf		56	56		56	56	00·4															Surf
1000	-1·1			-0·2			04·5															1000
950		53	53		52	52																950
900		48	48		51	51	33·7	53	40													900
850		41	41		45	40		46	36													850
800		35	35		38	33	65·6	40	11													800
750		33	33		30	30																750
700	24·6	29	29	25·4	28	23	100·9	30	28													700
650		24	24		22																	650
600		19	19		15		140·8	17	14													600
550		10	10		10																	550
500	80·3	01		81·3	02		186·4	-01														500
450																						450
400							239·7	-24														400
350																						350
300							309·5	-22														300
250																						250
200																						200
170																						170

Cloud
8 St.
5 980-910 mb
8 N.st.
8 720-570 mb
8 Ast.
8 480 - T.N.R.
Mod. clear ice in cloud.
650 - 590 mb
S. 23-27 kts

Cloud.
8 N.st
8 980-890 mb
7 Ac
8 790-710 mb
8 A st.
8 480 mb T.N.R.
W.
23-27 kts

DIRECTION (degrees from N) and VELOCITY (knots) of UPPER WINDS at heights above M.S.L.

Place	Lympne		Lympne		Cirrus 52·5N 20°W		Aldergrove		Larkhill		Leuchars		Leuchars		Stornoway		Liverpool		Camborne		Place
Time	03h		09h		09h		09h		09h		09h		15h		15h		15h		21h		Time
Type							Pilar		Pilar		Pilar		Pilar		Pilar		Pilar		Pilar		Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Surf.	360	10	030	08	100	28					090	08			040	20	360	05			Surf.
1,000	030	20	030	15	110	45					090	06			070	25	351	04			1,000
2,000	080	09	020	15	120	52					035	06			060	18	126	06			2,000
3,000	070	11	070	08	130	42					020	06			053	13	134	11			3,000
4,000	080	10	060	15	130	40					338	07			015	08	128	14			4,000
5,000	070	09	150	19	130	40					326	09			336	08	126	15			5,000
6,000	070	08	060	11							330	10			325	10	119	15			6,000
8,000	060	07	050	13	120	41					330	14			311	13	121	13			8,000
10,000			060	12							323	15			307	16	146	09			10,000
14,000			090	11	120	42					332	12			326	19	176	11			14,000
18,000					120	44					305	14			328	21	204	11			18,000
24,000					120	99					317	18			327	22	210	07			24,000
30,000					(20,000')		072	15			314	20			315	27	194	03			30,000
40,000							327	16			321	18			330	26	299	19			40,000
50,000							316	12	322	13	326	17	290 (60,000')	09	(38,000')		290 (49,000')	13	316 L and V (56,000')	10	50,000
							328 (54,000')	08													

NEPHOSCOPE OBSERVATIONS

Place	St. Eval	St. Eval
Time Type	12h Ci	15h Ci
Dir. Vel.	280 50	250 30

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER	CIRRUS	CIRRUS	CIRRUS	CIRRUS		Ship
Lat/Long	59·2N 18·4W	59·2N 18·4W	59·2N 18·7W	59·2N 18·7W	52·5N 20·0W	52·5N 20·0W	52·5N 20·0W	52·5N 20·0W		Lat/Long
Time	03L G.M.T.	09L G.M.T.	15L G.M.T.	21L G.M.T.	03L G.M.T.	09L G.M.T.	15L G.M.T.	21L G.M.T.	G.M.T.	Time
Pressure M.S.L.	1019 mb	1019 mb	1019 mb	1018 mb	1003 mb	mb	1002 mb	mb	mb	Pressure M.S.L.
Surf	1019 mb	1019 mb	1019 mb	1018 mb	1003 mb	mb	1002 mb	mb	mb	Surf
Freezing	735 mb	730 mb	715 mb	720 mb	795 mb	mb	750 mb	mb	mb	Freezing

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Lew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf		53	51	085	17		50	50	100	23		52	51	110	25		51	49	110	28		56	54	120	24																		Surf
1000	5·1	57	43	129	18	5·1	54	51	102	27	5·2	50	46	112	31	4·9	49	42	105	31	1·1	55	54	120	23						7	55	55	110	27									1000
950		58	43	140	20		59	47	113	22		56	39	111	27		52	46	105	28		51	49	123	24							49	49	123	30									950
900	34·3	53	40	152	20	34·2	57	45	115	19	34·2	54	40	109	24	33·7	50	40	105	25	23·0	47	44	136	44						29·4	46	46	126	35									900
850		47	36	160	21		49	39	112	18		48	38	107	22		49	25	104	25		42	39	142	42							42	42	120	40									850
800	66·2	40	27	155	16	66·3	41	32	117	17	66·1	41	34	104	22	65·7	42	32	102	24	61·7	38	34	135	46						61·1	37	37	120	44									800
750		33	24	138	16		34	26	120	15		36	24	101	21		36	26	099	22		33	28	130	37							32	32	120	48									750
700	01·4	23	14	138	18	01·6	28	21	121	18	01·5	30	19	097	20	01·1	30	18	099	18	96·9	27	21	132	29						96·3	27	27	120	44									700
650		23	07	138	14		21	15	124	17		24	12	098	16		23	09	101	16		20	14	132	32							22	22	120	47									650
600	41·0	15	04	140	11	41·2	16	07	130	18	41·4	18	05	102	18	40·7	16	05	101	16	36·4	12	00	132	29						36·1	16	16	120	40									600
550		06	-03	140	11		07	01	123	18		08	-02	118	16		08	-02	101	16		04	-18	132	34							09	09	120	18									550
500	86·3	04	-10	133	08	86·6	-01	-07	103	15	87·0	01	-12	140	10	86·1	02	-15	102	12	81·6	04	-29	152	32	No Radio Sonde					81·8	06	06	120	47	No Radio Sonde									500
450		-12	-22	127	08		-06	-23	091	09		-02	-29	162	06		-09	-28	105	05		-14	-41	166	55							-04	-05											450
400	39·5	-22	-35	130	10	40·4	-18	-32	059	07	40·9	-17	-38	173	03	39·8	-13	-36	CALM		34·5	-23		151	45	Ascent Available					36·1	-16	-19			Ascent Available									400
350		-35	-48	141	04		-32	-42	175	05		-32	-48	191	05		-34	-49	266	02		-42		155	38							-31	-35											350
300	04·3	-51		229	07	06·0	-44		193	10	06·4	-47		204	05	05·0	-50		270	12	98·3	-60		135	47	For winds see					01·6	-46	-53			For winds see									300
250		-68		217	17		-60		210	20		-63		206	14		-64		284	15		-80		135	52							-67												250
200	81·4	-72		255	18	92·3	-73		215	14	(215 mb)	-67				90·5	-69		290	07	80·5	-80				top of page.					86·6	-73				top of page									200
170		-68		304	10		-66		277	09							-61		279	05		-73										-62												170
150		-67		327	07		-60		241	03							-65		283	04		-78										-62												150
130		-67		CALM			-64		254	03							-63		290	03		-81										-64												130
110		-65		342	03		-62		330	05							-62		080	09		-79										-64												110
100	34·5	-65		342	06	38·5	-61		024	05						37·1	-61		057	06	22·0	-78									32·6	-62												100
90							-60		044	05							-59		045	05		-77										-61												90
80							-59		032	03							-56		035	05												-59												80
70																	-53		356	06												-56												70
60																	-51		357	04												(64 mb) -54												60

Inversion 1019 mb 53°-985 mb 62°
Isothermal 450 - 432 mb -12°

Inversion 1019 mb 50°-950 mb 59°
Isothermal 453 - 438 mb -07°

Inversion 990 mb 49°-970 mb 57°
Inversion 878 mb 48°-867 mb 51°
Isothermal 950 - 918 mb 52°
Isothermal 502 - 492 mb 52°

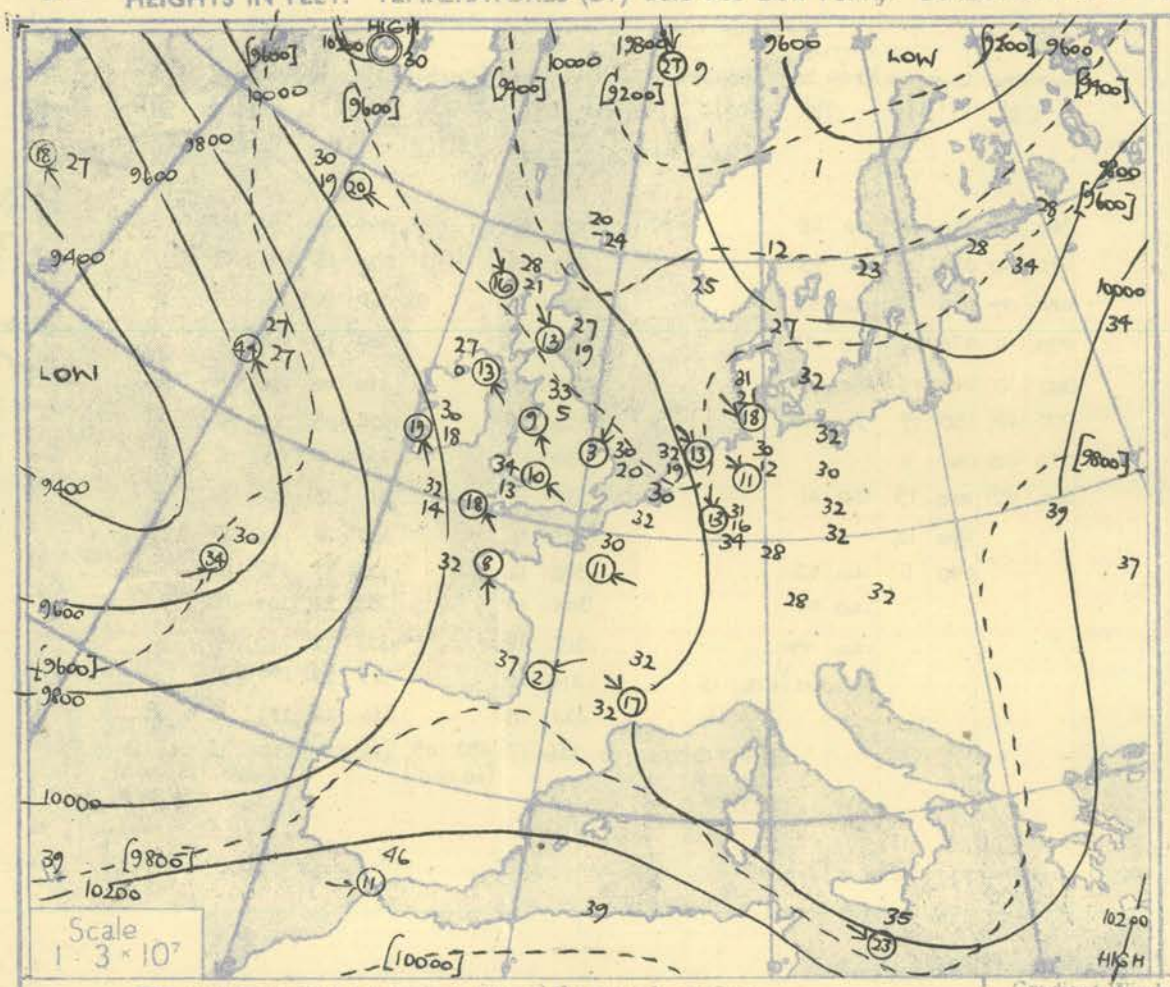
Inversion 973 mb 45°-950 mb 52°
Isothermal 562 - 547 mb 04°

Inversion 521 mb 05°-500 mb 06°
Isothermal 500 - 495 mb 06°

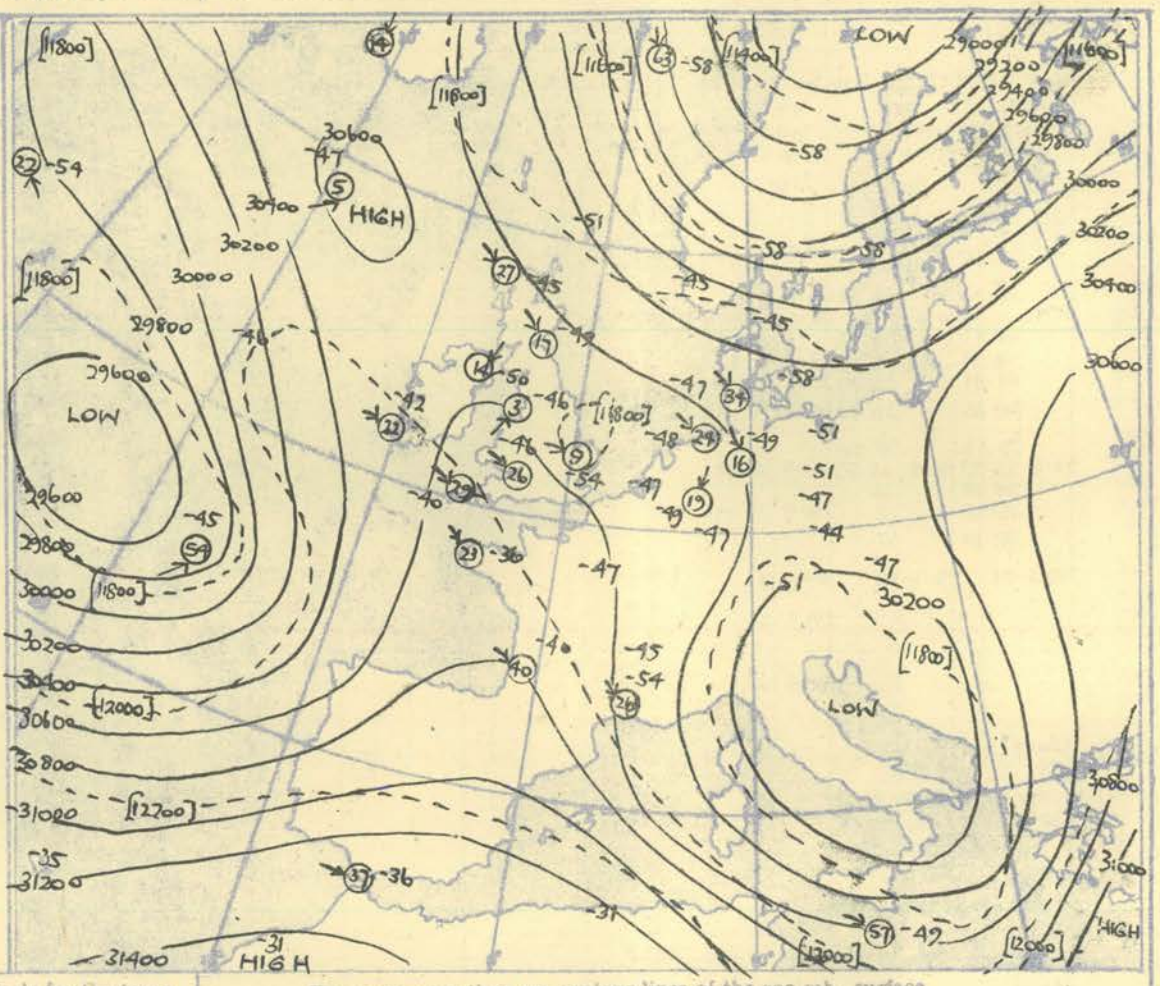
Tropopause	I 221 mb - 76° 36,900'	I 205 mb - 74° 38,700'	I 230 mb - 68° 36,300'	I 212 mb - 74° 37,600'	I 229 mb - 88° 35,200'			I 200 mb - 73° 38,700'			Tropopause

METEOROLOGICAL LIBRARY 14 JUN 1951 OFFICE

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., and 300 mb., levels at about 15h G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

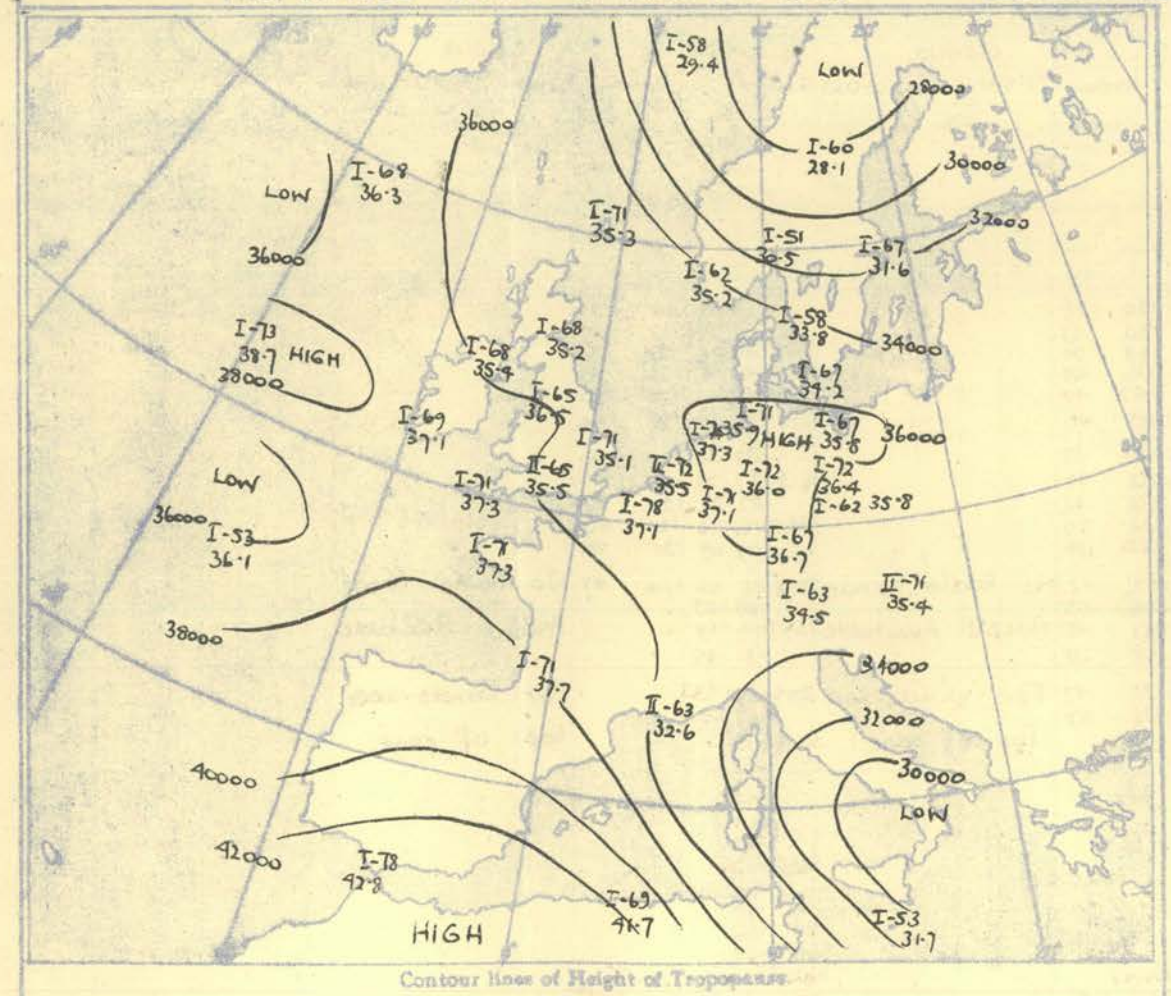


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

100 60 40 30 20 15 10 knots

TROPOPAUSE CHART at about 15h G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Southward advection of cold air over Norway continued and there was further penetration of cold air towards Portugal, but a warm ridge continued to be maintained from France to Greenland.

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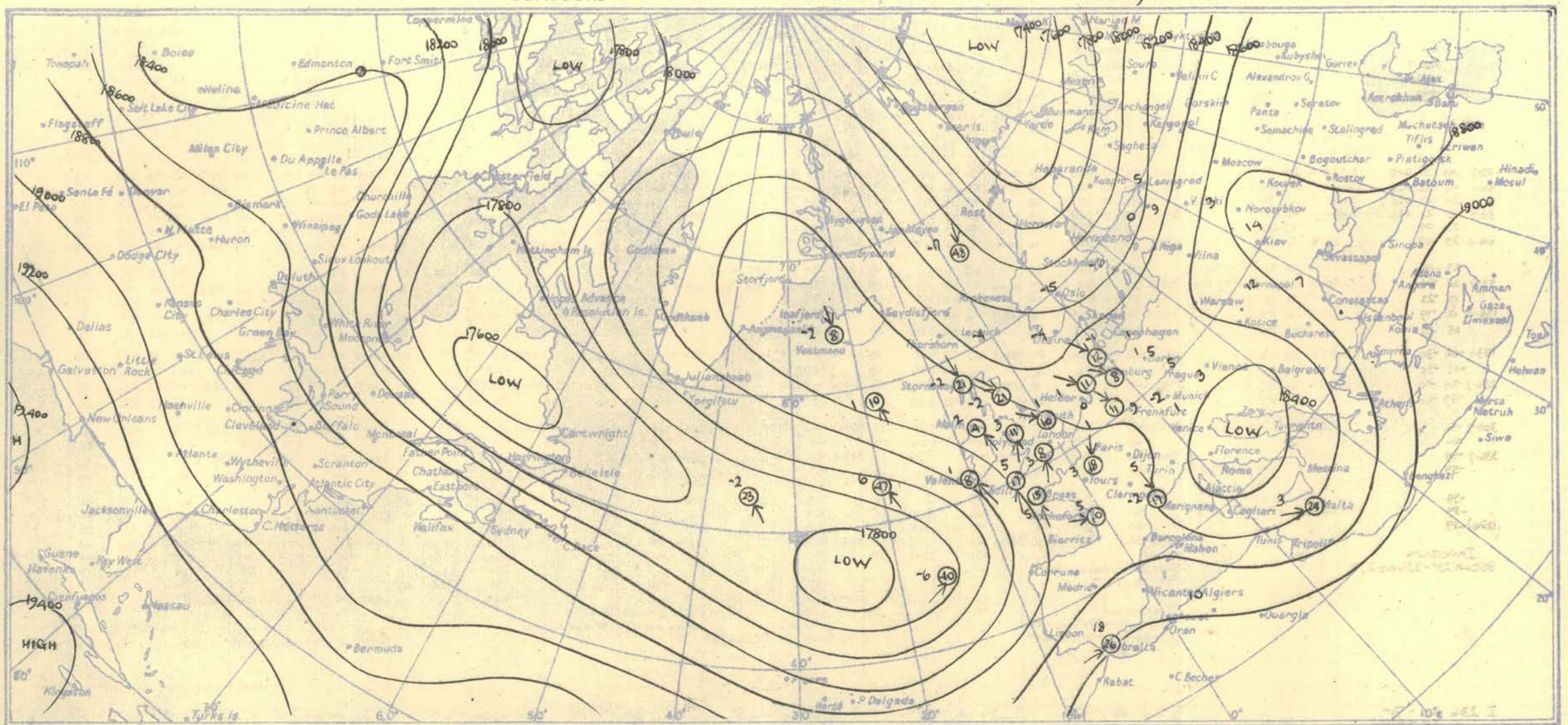
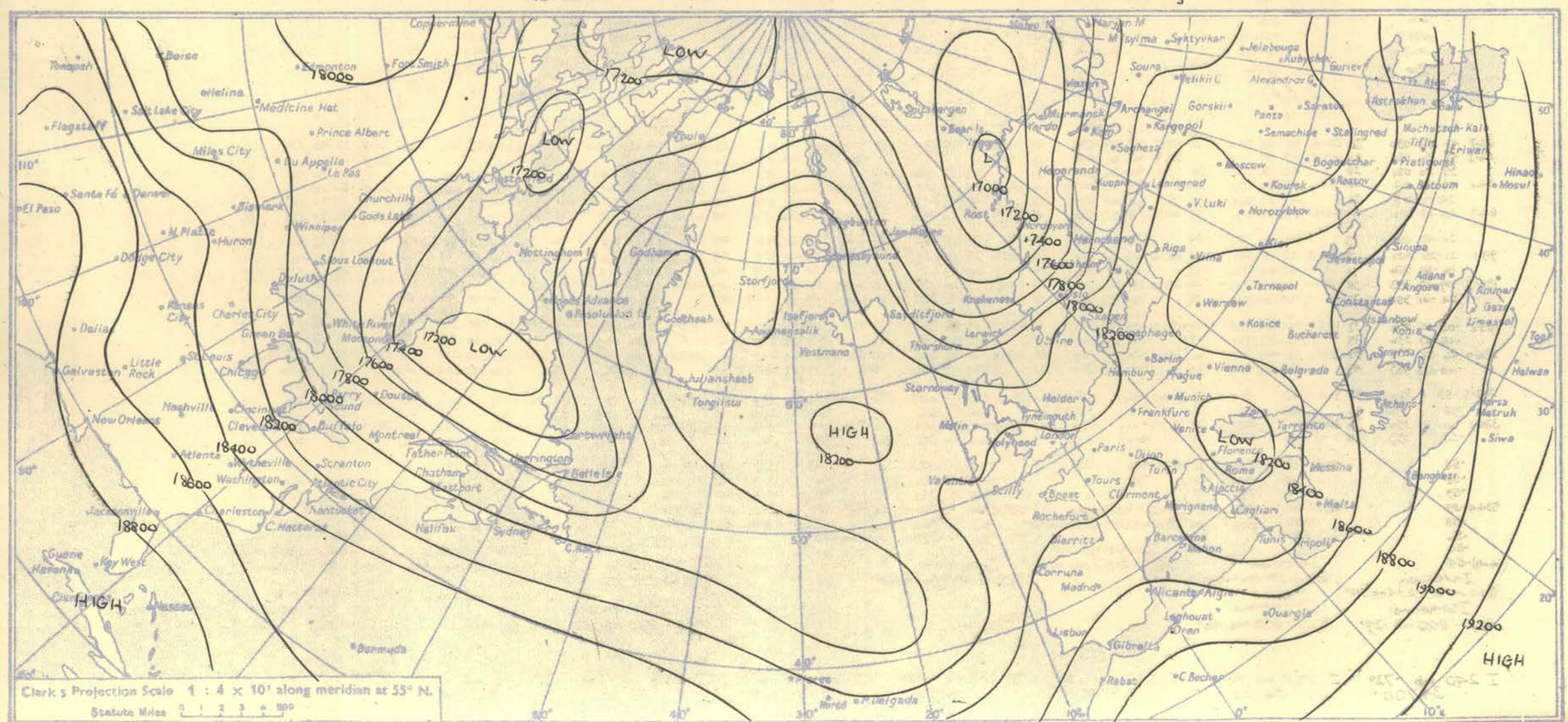
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Wednesday 6th June 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Wednesday 6th June 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Wednesday 6th. June 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15h. G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h G.M.T.	15h G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.
Pressure: M.S.L.	1022·7 mb	1021·1 mb	1021·0 mb	1016·3 mb	1015·0 mb	1016·3 mb	1014·3 mb	1013·7 mb	1011·5 mb
Pressure: Surf	1012·6 mb	1019·5 mb	1020·2 mb	1007·4 mb	1013·0 mb	1011·8 mb	998·9 mb	1003·5 mb	1010 mb
Pressure: Freezing	938 mb	735	740	731	694	711	670	700	720

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	48	33	045	21	00·4	55	44			00·2	54	47	090	13	02·6	73	46	110	09	00·6	70	47			01·2	69	41	020	12	04·4	72	54	085	03	02·9	66	50	113	10	00·3	68	49	120	15	Surf
1000	06·1	41	26	028	21	05·7	53	40			05·7	50	45	141	09	04·7	70	44	114	09	04·2	68	45			04·5	64	39	052	14	04·1					03·8	65	49			03·1	67	53	120	16	1000
950		34	23	032	21		47	36				42	35	117	08		61	38	115	10		64	38				56	40	062	10		62	48	110	08		59	44	125	17		60	46	125	23	950
900	33·9	28	20	026	21	34·2	42	33			34·1	44	33	063	09	34·1	53	35	117	18	33·7	58	38			33·6	52	37	083	10	33·6	56	44	115	12	33·1	64	40	127	15	32·4	52	41	132	29	900
850		23	09				45	06				42	32	356	15		49	29	117	12		47	38	045	06		48	42	120	13		49	34	133	13							46	35	135	26	850
800	04·4	25	08			65·8	40	11			65·7	39	33	324	16	66·1	41	16	116	15	65·8	42	34			63·5	41	32	035	05	65·6	42	21	121	11	65·1	44	21	137	07	64·2	41	26	137	24	800
750		23	-18				34	21	For Winds See Page 3			32	25	316	20		35	18	111	14		37	21	For Winds See Page 3.			35	28	035	05		37	20	120	12		38	19	143	07		35	25	135	21	750
700	98·8	20	-24			101·0	28	21			100·8	27	19	312	13	101·4	27	13	118	13	101·3	35	05			100·9	30	20	026	03	101·0	34	13	119	10	100·6	32	14	146	08	99·5	30	18	141	19	700
650		17	-22				21	13				21	14	313	14		22	00	126	13		27	01				23	11	353	06		28	07	127	08		26	13	153	10		25	11	136	21	650
600	138·0	12	-19			140·5	14	09			140·4	14	06	313	16	140·9	16	-16	121	07	141·3	20	-04			140·8	18	02	336	04	141·1	20	00	143	08	140·6	19	08	166	15	139·3	17	03	133	21	600
550		05	-21				07	-02				06	-02	305	20		09	-24	100	03		12	-10				09	-08	320	07		12	-08	165	09		11	01	167	19		10	-05	102	12	550
500	183·1	-04	-30			185·8	-02	-13			145·7	-02	-12	304	21	186·5	02	-29	108	04	187·2	03	-28			186·4	01	-17	299	10	187·0	03	-17	193	08	186·4	05	-09	182	17	185·0	01	-19	047	08	500
450		-12	-38				-12	-22				-11	-23	312	22		-11	-29	094	08		-07	-26				-11	-30	284	12		-08	-27	200	11		-07	-18	203	15		-05	-32	314	05	450
400	236·3	-24	-50			239·0	-21	-31			239·0	-21	-38	310	18	239·9	-22	-41	069	13	241·0	-19	-34			239·7	-24	-41	283	12	240·7	-20	-37	232	11	240·3	-15	-24	237	18	239·0	-14	-43	270	08	400
350		-37	-60				-32	-43				-34	-49	309	24		-35	-51	058	16		-31	-48				-28	-52	290	10		-32	-48	285	13		-27	-35	268	22		-27	-53	270	20	350
300	300·9	-51				304·6	-45				304·2	-49		310	17	305·0	-50		038	14	306·5	-46				304·3	-54		269	09	306·1	-46		293	26	306·6	-40	-49	277	29	305·2	-42		268	23	300
250		-66					-60					-65		309	27		-64		006	11		-61					-68		276	11		-61		295	51		-58		271	38		-60		241	20	250
200	386·7	-59									390·2	-64		311	22	391·2	-60		321	15	393·4	-59				389·6	-63		303	20	392·9	-59		305	24	392·2	-74		281	29	391·8	-66		233	11	200
170		-59										-60		308	18		-60		310	10		-57					-63		314	18		-57		308	15		-66		279	24		-61		221	06	170
150		-59										-58		305	16		-59		311	14		-55				4506	-62		317	14	4547	-58		305	13		-65		273	14		-60		228	06	150
130		-59										-58		322	09		-56		310	10		-55					-60		288	12		-54		292	12		-63		310	18		-60		248	05	130
110	(1256)	-59										-56		319	11		-55		304	10		-53					-58		302	10		-53		298	11		-61		288	11		-60		251	05	110
100											538·5	-56		327	12	5399	-53		275	10	542·7	-53				537·4	-56		308	11	542·2	-52		303	10	539·4	-59		257	09	539·3	-57		250	04	100
90																	-53		285	09		-50					-55		307	09		-50		326	04		-58		270	09		-54		248	04	90
80																	-51					-48					-53		325	11		-50		320	02		-56		265	08		-54		250	06	80
70																						-48					-50		301	11		-51		320	02		-55		265	07		-54				70
60																					(68mb)	-48									-49					649·2	-54		265	06	(64mb)	-52				60
	Inversion 850mb 23°-836mb 27°					Inversion 900 mb 42°-875 mb 47°					for continuation See Page 3. Inversion 921 mb 41°-887 mb 45° 853 mb 41°-840 mb 43°										Inversion 763 mb 36°-745 mb 38°					Inversion 920 mb 51°-900 mb 52°										Inversion 858 mb 48°-850 mb 49°					Inversion 479 mb -05°-467 mb -03°					
Tropopause	I 236 mb -71° 35,300'	N.R.	II 241 mb -68° 35,200'	I 239 mb -68° 35,300	I 229 mb -65° 36,500'	I 240 mb -71° 35,100'	II 240 mb -64° 35,500'	I 200 mb -74° 39,300'	I 221 mb -69° 37,100'	Tropopause

21h. G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	G.M.T.
Pressure: M.S.L.	1023·2 mb	1021·4 mb	1021·4 mb	1015·5 mb	1015·2 mb	1016·8 mb	1015·6 mb	1011·9 mb	mb
Pressure: Surf	1013·0 mb	1019·8 mb	1020·4 mb	1006·0 mb	1013·2 mb	1012·4 mb	998·6 mb	1001·4 mb	mb
Pressure: Freezing	930 mb	726	746	732	720	722	734	710	mb

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	43	30	030	20	00·4	49	42	040	20	00·2	49	43	080	08	02·6	60	50	100	10	00·6	66	42	115	12	01·2	54	43	030	07	04·4	59	52	130	05	02·9	57	48	130	12						Surf
1000	06·2	42	31	024	21	05·8	47	39			05·8	46	41	069	18	04·2					04·3	65	40	117	24	04·7	53	43								03·9					03·3						1000
950		35	30	021	23		42	36	076	24		40	36	061	21		59	39	095	18		61	36	121	22		53	44	065	11		57	49	090	15		61	36	125	24						950
900	34·1	27	23	019	21	34·1	37	30	077	20	34·0	35	32	047	15	33·4	53	35	118	15	33·6	54	33	140	20	33·5	50	40	043	11	33·0	51	40	087	19	32·4	54	40	142	17						900
850		24	17	017	22		42	25	055	10		41	40	289	15		47	32	142	14		47	33	139	08		46	38	023	11		44	32	098	20		57	29	147	11						850
800	64·7	29	-14	016	24	65·6	40	06	001	07	65·5	38	37	290	21	65·3	40	26	146	14	65·5	42	30	104	08	65·9	41	32	013	11	64·8	40	21	109	14	64·4	42	29	152	06						800
750		24	-17	013	23		35	26	322	09		33	29	305	20		34	22	126	14		35	23	106	09		35	23	001	06		34	15	125	11		38	22	152	09						750
700	99·1	21	-25	001	18	100·8	29	19	345	10	100·6	26	24	314	18	100·6	27	13	109	15	100·8	30	09	137	09	100·7	30	15	331	03	100·0	30	08	146	09	99·8	30	19	167	11						700
650		16	-29	356	21		21	00	336	13		19	17	320	19		20	03	110	11		24	00	149	06		24	03	314	04		24	02	150	07		23	15	177	11						650
600	138·2	09	-33	353	28	140·4	14	02	335	14	140·0	11	04	303	21	140·2	17	-10	134	05	140·6	17	-03	196	09	140·4	17	-04	313	05	139·8	17	-04	176	07	139·5	17	06	181	12						600
550		04	-41	350	32		08	-09	344	15		04	-08	301	18		09	-10	200	06		09	-12	224	10		18	-15	298	07		08	-12	198	08		09	-04	187	16						550
500	183·2	-05	-45	355	32	185·8	-01	-24	333	19	185·1	-05	-16	313	18	185·7	00	-18	287	02	186·2	00	-18	229	07	185·9	-01	-26	281	10	185·2	-02	-20	315	13	185·0	01	-06	212	18						500
450		-15	-47	336	35		-11	-35	351	15		-15	-25	315	19		-10	-28	082	02		-11	-26	225	10		-12	-38	264	16		-15	-28	226	14		-08	-13	222	15						450
400	236·0	-26	-56	338	35	239·1	-22	-48	340	16	238·0	-24	-37	314	18	239·1	-21	-38	068	06	239·5	-23	-40	248	10	239·1	-26	-49	258	21	238·1	-26	-39	228	18	238·7	-19	-29	241	16						400
350		-40	-60	335	43		-36	-52	326	24		-40	-50	314	21		-35	-51	026	13		-37	-53	281	11		-38	-58	268	18		-38	-47	259	25		-30	-37	256	25						350
300	300·3	-53		329	43	303·9	-53		317	29	302·2	-56		317	24	304·1	-50		007	15	304·3	-52		253	09	303·7	-52		282	23	302·7	-52		286	40	304·5	-45		271	29						300
250		-68		330	42		-65		324	33		-71		318	24		-64		356	19		-65		286	13		-66		293	30		-69		289	48		-67		271	36						250
200	386·2	-60		330	35	389·6	-61		328	22	387·5	-61		326	19	389·7	-67		344	14	390·2	-64		303	21	389·3	-65		296	24	387·6	-70		296	23	389·6	-72		272	17						200
170		-58		333	26		-62		334	20		-60		312	13		-65		328	26		-64		290	21		-64		301	21		-69		298	21		-69		268	11						170
150		-58				450·7	-59		339	16	448·8	-62		327	15		-67		326	21		-63		319	18	449·9	-63		306	18	447·6	-67		290	15		-66		272	12						150
130		-58					-60		334	18		-62					-62		321	11		-61		317	15		-62		311	16		-67		301	12		-68		216	07						130
110		-59					-60		347	15							-64		321	12		-61		317	10		-61		312	10							-65		261	11						110
100	534·9	-59				537·1	-58		341	13						535·6	-64		321	06	537·1	-59		316	10	535·9	-61		317	09						534·6	-62									100
90		-58					-57		323	08							-62		322	06		-57		314	05		-60		317	09																90
80		-56					-57										-59		323	06	(83mb)	-55					-60																				80
70		-54																																													70
60	(66mb)	-54																																													60
	Inversion 860 mb 21°-834 mb 29° Isothermal 834-800 mb 29°					Inversion 900 mb 37°-863 mb 42° Isothermal 863-850 mb 42°					Isothermal 850-837 mb 41° Inversion 894 mb 35°-858 mb 42°					Inversion 989 mb 58°-965 mb 60°										Inversion 975 mb 52°-950 mb 53° Isothermal 911-890 mb 50°					Isothermal 726-710 mb 31° Inversion 999 mb 59°-985 mb 61°					Isothermal 1001-977 mb 57° 771-750 " 38° Inversion 977 mb 57°-950 mb 61° 518 " 2°-510 mb 3°									
Tropopause	I 240 mb -72° 34,700'	I 229 mb -69° 36,100'	I 253 mb -71° 33,900'	II 222 mb -72° 36,900'	II 247 mb -66° 34,600'	I 228 mb -70° 36,200'	I 232 mb -76° 35,800'	I 217 mb -80° 37,300'	Tropopause

A. 11757.

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

METEOROLOGICAL OFFICE LIBRARY 15 JUN 1951 CAMBORNE

03h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.
Pressure: M.S.L.	1023·2 mb	1021·7 mb	1021·5 mb	1016·4 mb	1017·4 mb	1017·9 mb	1015·3 mb	1010·3 mb	1008·5 mb
Pressure: Surf	1012·9 mb	1020·0 mb	1020·7 mb	1006·7 mb	1015·4 mb	1013·3 mb	999·2 mb	999·8 mb	1007 mb
Pressure: Freezing	930 mb	740 mb	790 mb	758 mb	759 mb	737 mb	724 mb	710 mb	690 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	40	34		
1000	06·1	40	34		
950		38	30		
900	34·0	28	27		
850		27	15		
800	69·6	28	10		
750		29	-01		
700	99·0	21	-07		
650		15	-07		
600	138·1	08	-09		
550		00	-14		
500	182·7	-09	-25		
450		-13	-32		
400	235·1	-31	-44		
350		-93			
300	298·9	-57			
250		-69			
200	384·7	-57			
170		-58			
150		-58			
130		-58			
110		-58			
100	533·3	-57			
90		-56			
80		-55			
70		-55			
60	(72 mb)				

Inversion 868 mb 25° - 836 mb 29°
Isothermal 1013 - 1000 mb 40°
835 - 817 .. 29°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	45	38	060	10
1000	05·8	43	36	078	27
950		37	30	091	23
900	33·8	34	27	091	18
850		41	-13	070	11
800	65·1	37	-07	356	06
750		33	00	345	07
700	100·2	27	01	342	10
650		20	-03	355	12
600	139·7	15	-11	002	13
550		07	-20	006	22
500	185·1	-03	-29	010	13
450		-15	-39	359	16
400	238·0	-28	-52	357	18
350		-41		347	24
300	302·1	-66		339	26
250		-73		337	21
200	386·7	-67		334	24
170		-64		347	18
150		-64		346	16
130		-64			

Inversion 891 mb 34° - 855 mb 41°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
1000	00·2	46	40	090	12
950	05·7	43	37	067	15
900	33·7	32	29	069	09
850		33	32	345	06
800	69·8	33	33	316	12
750		31	26	316	18
700	99·7	25	20	316	22
650		18	10	317	22
600	139·0	11	00	320	16
550		06	-16	326	18
500	184·2	-02	-29	330	18
450		-13	-48	335	15
400	237·4	-29	-50	338	16
350		-37	-60	322	17
300	302·0	-53		314	21

Inversion 872 mb 31° - 826 mb 36°
Isothermal 922 - 900 mb 32°
780 - 750 .. 31°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
1000	02·6	51	45	100	12
950	04·4	50	44		
900	33·2	54	41	121	19
850		47	36	127	16
800	65·1	39	32	129	15
750		31	25	128	13
700	100·2	27	16	128	13
650		20	-02	125	08
600	139·7	15	-08	210	03
550		10	-12	276	06
500	185·2	-00	-17	298	05
450		-11	-25	312	05
400	238·6	-21	-39	313	13
350		-37	-47	319	15
300	303·5	-49		332	21
250		-62		314	30
200	389·5	-64		308	20
170		-64		326	15
150		-64		287	12
130		-59		338	13
110		-59		303	06
100	536·3	-62		296	08
90		-62		323	08

Inversion 982 mb 49° - 911 mb 55°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
1000	00·6	49	44	100	08
950	04·7	48	42	110	21
900		47	36	127	18
850	33·3	50	39	140	13
800		45	38	127	05
750	65·1	38	31	086	08
700	100·2	26	15	141	08
650		19	03	190	10
600	139·6	13	-02	218	10
550		06	-10	239	08
500	184·8	-05	-15	280	08
450		-17	-25	289	07
400	237·5	-27	-36	296	06
350		-40	-47	296	07
300	301·8	-52		333	09
250		-65		303	17
200	387·5	-66		299	26
170		-64		309	18
150		-64		290	15
130		-65		308	13
110		-62		304	11
100	534·0	-62		296	10
90		-62		309	10
80		-62		328	12
70		-62			
60	(75 mb)				

Inversion 934 mb 47° - 900 mb 50°
Isothermal 960 - 934 mb 47°
718 - 690 .. 26°
245 - 226 .. -67°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
1000	01·2	49	46	360	05
950	04·8	48	45		
900		45	42	036	15
850	33·3	43	40	027	15
800		46	39	017	12
750	65·1	40	34	020	13
700	100·2	28	19	310	05
650		23	08	245	06
600	139·9	17	-01	234	07
550		07	-12	266	08
500	186·3	-03	-21	273	13
450		+13	-30	275	16
400	238·3	-25	-39	274	15
350		-37	-49	266	19
300	302·9	-54		274	27
250		-66		282	41
200	388·5	-64		297	28
170		+64		298	20
150		-64		286	18
130		-63		303	17
110		-63		306	12
100	539·9	-59		303	10
90		-60		284	12

Inversion 907 mb 42° - 868 mb 48°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
1000	04·4	50	46	090	09
950	04·2				
900		52	46		
850	33·0	50	40		
800		46	28		
750	64·8	39	21		
700		35	16		
650	100·0	30	10		
600		25	02		
550	139·8	18	-03		
500		09	-11		
450	185·4	-02	-17		
400		-11	-18		
350	238·8	-20	-25		
300		-32	-38		
250	304·2	-46			
200		-63			
170	390·0	-69			
150		-65			
130		-66			
110		-64			
100		-65			
90		-62			
80		-59			
70		-58			
60					

Inversion 990 mb 50° - 933 mb 53°
Isothermal 999 - 990 mb 50°
674 - 664 .. 27°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
1000	02·9	55	48	110	18
950	02·8				
900		55	98	128	27
850	31·9	56	50	142	23
800		50	47	153	19
750	64·1	44	40	159	15
700		38	35	169	12
650	99·6	30	30	160	11
600		23	22	192	10
550	139·5	16	19	159	15
500		09	05	182	13
450	185·3	05	01	223	20
400		-03	-06	239	20
350	239·5	-12	-15	251	22
300		-24	-28	260	20
250	306·3	-38	-44	258	21
200		-54		257	16
170	393·6	-73		250	19
150		-71		236	15
130		-69		237	11
110		-67		265	08
100		-68		256	10
90	538·3	-66		262	08
80		-64		269	06
70		-62		295	07
60	(79 mb)	-61			

Inversion 978 mb 51° - 925 mb 59°
550 - 09° - 542 .. 10°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
1000	00·3	63	44	100	20
950	02·3	62	43	102	21
900		59	43	128	29
850	31·6	55	43	142	30
800		49	37	143	28
750	63·7	43	38	141	28
700		38	27	137	28
650	99·2	33	26		
600		27	23		
550	139·3	22	19		
500		16	14		
450	185·7	10	07		
400		03	-01		
350	240·8	-08	-15		
300		-22	-27		
250	307·8	-38	-44		
200		-58			
170	394·2	-83			
150		-69			
130		-67			
110		-69			
100		-69			
90	538·2	-67			
80		-65			
70		-64			
60		-64			
		-62			
		-63			

(1047-64 mb)
Isothermal 969 - 934 mb 59°

Tropopause	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
	I 255 mb -71° 33,400'	I 240 mb -76° 35,000'	N.R.	I 221 mb -69° 36,800'	II 295 mb -67° 39,500' I 216 .. -70° 37,200'	I 227 mb -70° 36,200'	I 225 mb -73° 36,500'	I 182 mb -80° 41,200'	II 200 mb -83° 39,900'

09h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	G.M.T.
Pressure: M.S.L.	1022·7 mb	1022·2 mb	1021·9 mb	1016·2 mb	1017·4 mb	1017·9 mb	1014·9 mb	1010·0 mb	mb
Pressure: Surf	1012·9 mb	1020·6 mb	1021·1 mb	1006·7 mb	1015·4 mb	1013·3 mb	998·9 mb	999·4 mb	mb
Pressure: Freezing	841 mb	721 mb	750 mb	760 mb	774 mb	730 mb	725 mb	742 mb	mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	46	31		
1000	06·0	41	28		
950		34	24		
900	33·9	27	19		
850		33	08		
800	64·8	29	-06		
750		24	-15		
700	99·2	20	-04		
650		16	-09		
600	138·3	09	-13		
550		01	-20		
500	183·0	-08	-27		
450		-17	-36		
400	235·7	-28	-45		
350		-40	-56		
300	299·9	-55			
250		-69			
200	385·6	-57			
170		-57			
150		-57			
130		-57			
110		-57			
100	(120 mb)				
90					
80					
70					
60					

Inversion 890 mb 26° - 859 mb 34°
Isothermal 750 - 732 mb 29°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
1000	00·4	48	35	080	12
950	05·9	45	33	077	18
900	34·0	36	17	102	16
850		39	-13	094	10
800	65·3	36	-29	068	07
750		34	-30	054	09
700	100·5	28	-34	055	09
650		20	-40	065	10
600	140·0	14	-33	051	12
550		07	-38	029	11
500	185·2	-03	-46	012	13
450		-14	-48	006	11
400	238·2	-26	-54	005	13
350		-38	-58	015	13
300	302·7	-52		015	18
250		-68		349	14
200	388·5	-60		338	19
170		-68		336	17
150		-57		337	16
130		-59		354	15
110		-57		338	10
100	536·9	-55		329	10
90		-53		360	12
80		-50			

Inversion 915 mb 33° - 875 mb 40°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
1000	00·2	49	38	080	09
950	05·9	45	35	076	18
900		35	26	057	13
850	33·9	28	19	022	11
800		32	19	347	07
750	64·9	32	00	330	13
700	99·6	26	12	334	15
650		19	-01	349	14
600	139·4	13	-12	357	12
550		05	-20	006	13
500	184·5	-05	-29	002	13
450		-17	-39	353	15
400	237·2	-28	-49	344	16
350		-40	-60	338	15
300	301·4	-54			

Inversion 896 mb 29° - 865 mb 32°
830 .. 32° - 807 .. 35°
Isothermal 865 - 830 mb 32°
807 - 776 .. 35°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
1000	02·6	53	45		
950	04·4	52	44		
900		48	40		
850	33·1	52	43		
800		46	39		
750	65·0	34	32		
700	100·1	28	14		
650		24	-02		
600	139·8	17	-09		
550		11	-11		
500	185·5	00	-25		
450		-12	-32		
400	238·9	-19	-38		
350		-32	-52		
300	304·4	-46			
250		-60			
200	391·2	-57			
170		-56			
150		-55			
130		-58			
110		-55			
100	540·0	-67			
90		-55			
80		-56			
70		-53			
60					

Inversion 921 mb 45° - 900 mb 52°
Isothermal 711 - 695 mb 28°
610 - 600 .. 17°
458 - 440 .. -12°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
1000	00·6	54	44	100	08
950	04·7	51	42	104	12
900		42	36	099	14
850	33·2	46	37	076	11
800		44	31	075	11
750	64·9	37	27	112	10
700	99·8	28	21	123	10
650		21	11	130	06
600	138·8	13	-02	135	03
550		09	-08	221	02
500	183·5	01	-17	395	03
450		-10	-22	318	06
400	235·5	-23	-36	308	10
350		-34	-50	297	09
300	298·3	-50		317	11
250		-69		284	27
200	381·0	-77		291	40
170		-79		288	24
150		-76		296	17
130		-79		306	14
110		-75		302	13
100	522·8	-73		313	11
90		-72		318	09
80		-69		297	09
70		-66			
60	(77 mb)	-65			

Inversion 937 mb 40° - 910 mb 46°
Isothermal 910 - 862 mb 46°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
1000	01·2	50	41	050	12
950	04·8	49	41	052	13
900		41	37	052	17
850	33·1	37	35	049	18
800		45	34	032	17
750	64·8	40	31	018	12
700	100·1	28	08	347	06
650		23	-03	309	07
600	139·8	17	-09	277	11
550		08	-14	267	12
500	185·2	-03	-17	264	11
450		+13	-22	267	10
400	238·2	-27	-36	276	18
350		-40	-48	283	19
300	302·6	-51		292	30
250		-64		292	41
200	388·6	-62		288	29
170		-61		296	24
150		-59		292	15
130		-59		290	10
110		-57		317	10
100	536·6	-65		294	09
90		-53		268	06
80		-52		261	07
70		-51		278	11

Inversion 902 mb 36° - 880 mb 45°
Isothermal 880 - 850 mb 45°
471 - 465 .. -9°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
1000	04·4	53	47	070	16
950	04·1				
900		45	37	082	18
850	32·8	51	33	098	15
800		47	32	102	14
750	64·7	39	25	104	14
700		35	18	113	14
650	100·0	29	08	118	09
600		25	-03	135	08
550	139·9	18	-04	170	11
500		07	-06	193	12
450	185·4	01	-08	228	13
400		-07	-15	261	13
350	239·2	-19	-29	285	22
300		-28	-37	290	34
250	305·3	-42		281	38
200		-60		276	40
170	391·7	-75		275	32
150		-65		276	16
130		-63		277	14
110		-62		280	12
100		-62		294	09
90	538·0	-59			
80		-57			
70	(098 mb)				
60					

Inversion 950 mb 45° - 932 mb 54°
Isothermal 700 - 682 mb 29°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
1000	02·9	53	51		
950	02·7				
900		59	54		
850	31·8	52	47		
800		47	43		
750	63·8	40	38		
700		33	32		
650	99·0	30	28		
600		24	22		
550	138·7	17	15		
500		12	08		
450	184·5	04	00		
400		-08	-13		
350	238·2	-18	-29		
300		-29	-37		

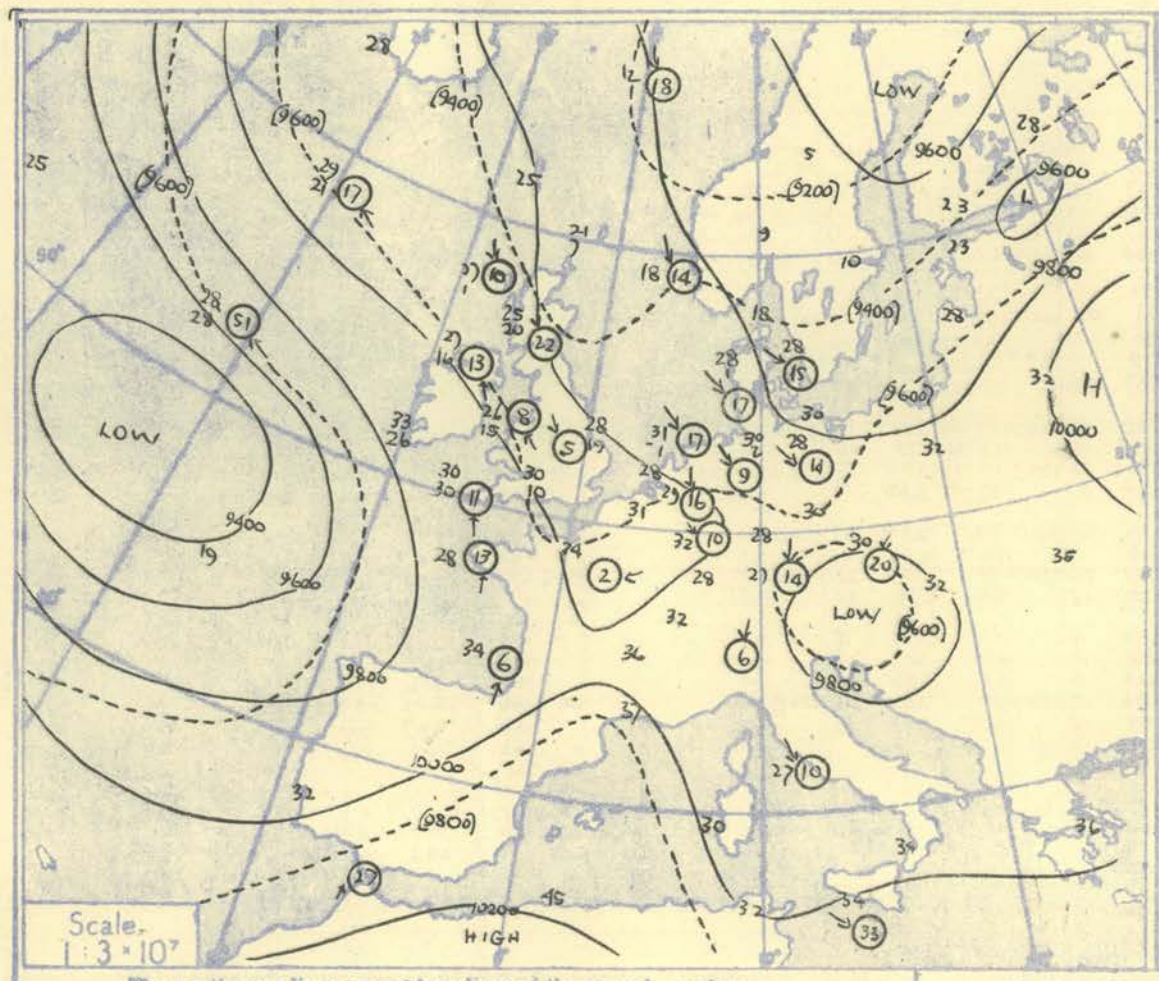
Inversion 982 mb 51° - 950 mb 59°

Tropopause	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
	I 234 mb -71° 36,200'	I 240 mb -69° 35,000'	N.R.	I 223 mb -70° 36,800'	I 211 mb -86° 37,100'	I 223 mb -67° 36,500'	I 212 mb -74° 38,000'	N.R.	

For Winds See Page 3.

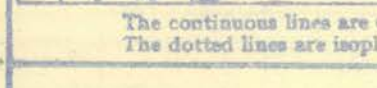
Thursday 7th June 1951.

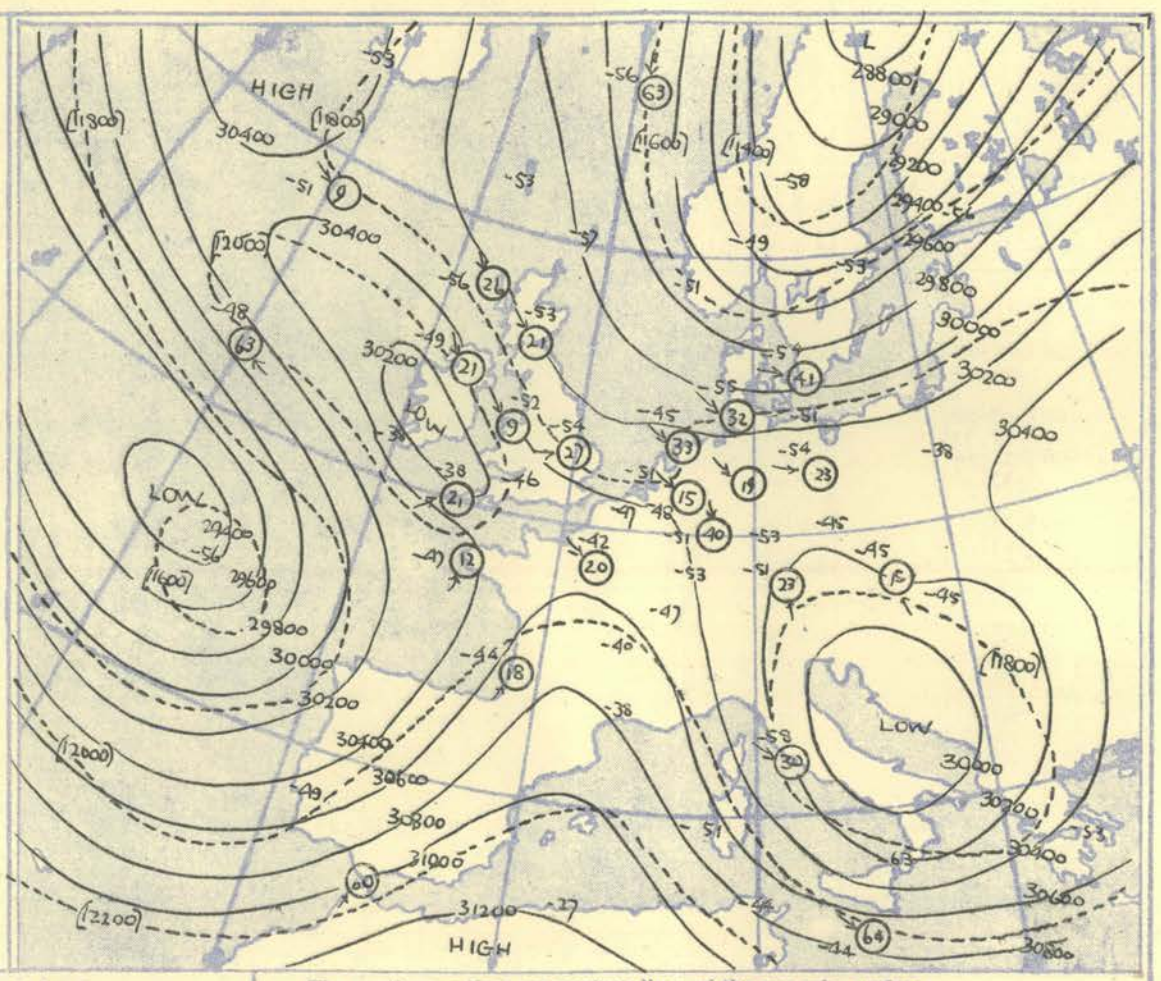
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb. and 300 mb., levels at about 03h G.M.T.



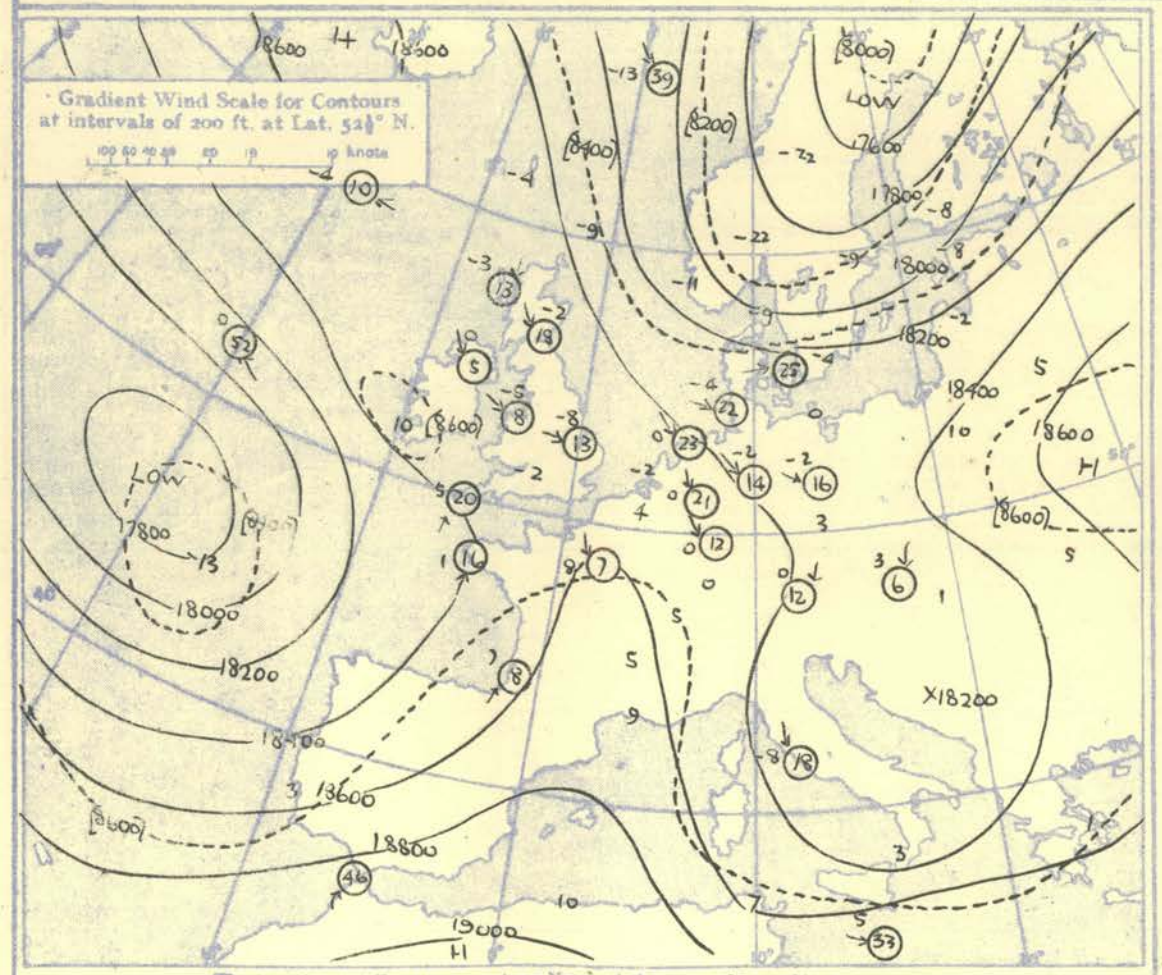
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

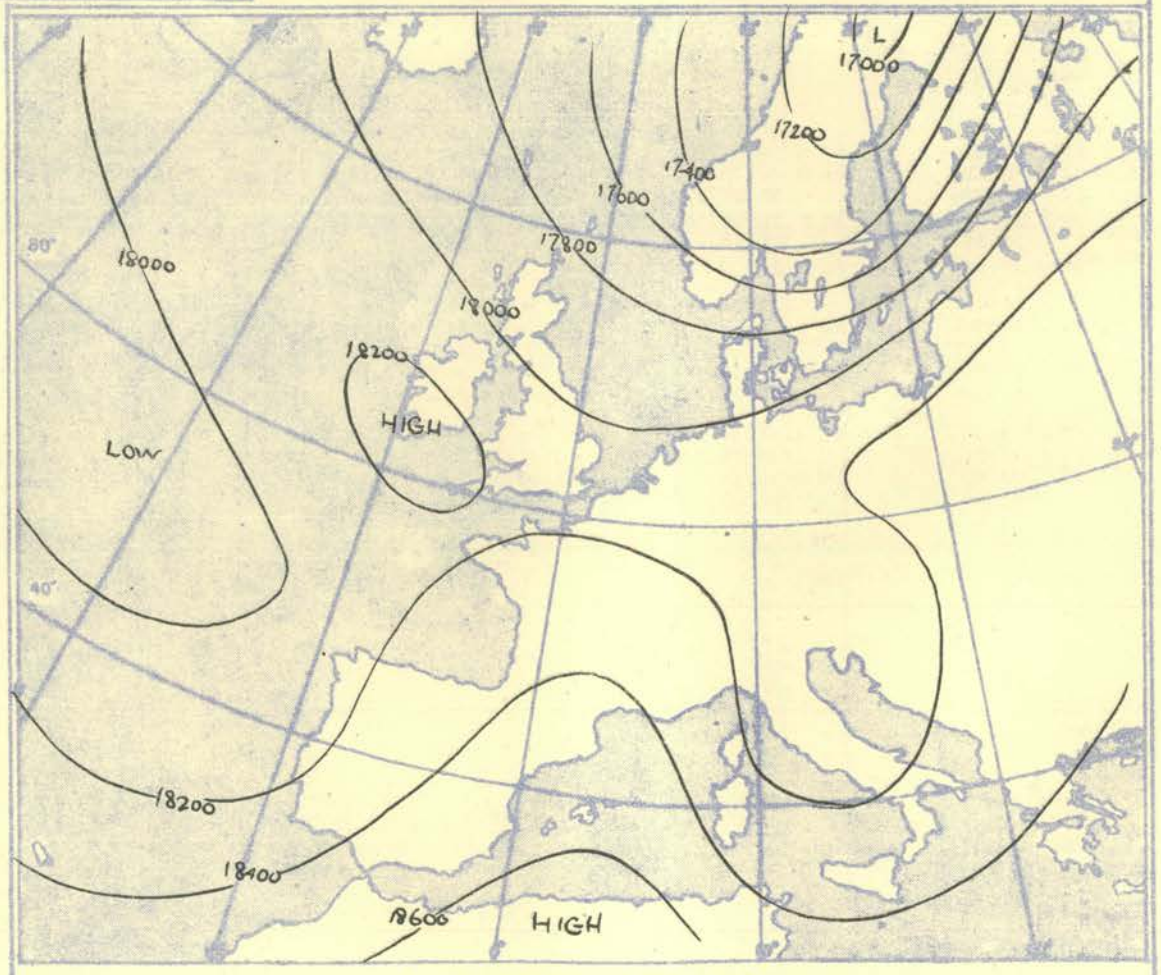




The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



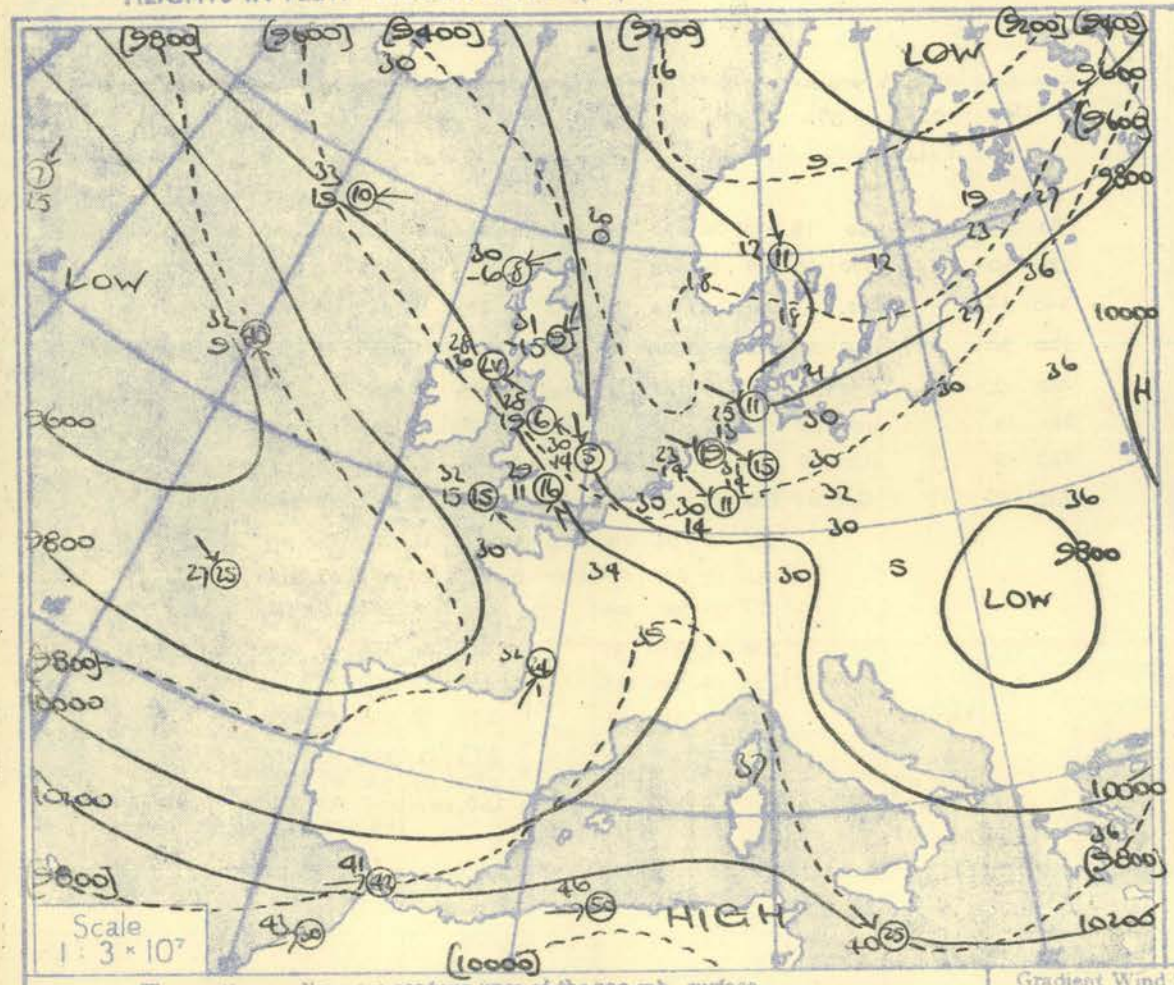
Isopleths of Thickness 500-1000mb.

Thursday 7th June 1951 Page 3

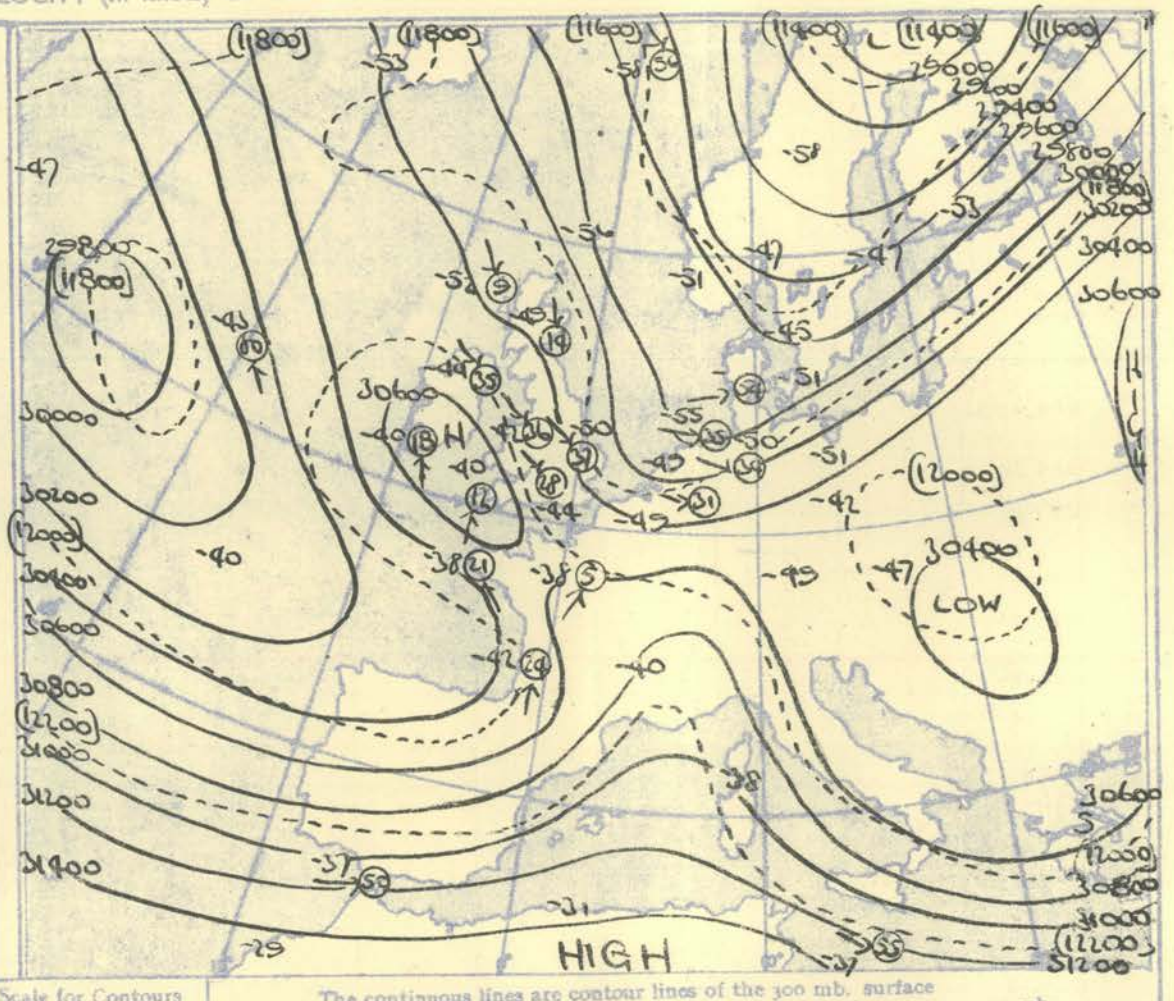
AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

| Pressure | | |

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (In knots) OF WINDS at the 700 mb., and 300 mb., levels at about 15h G.M.T.

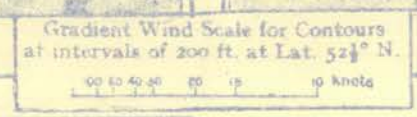


The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

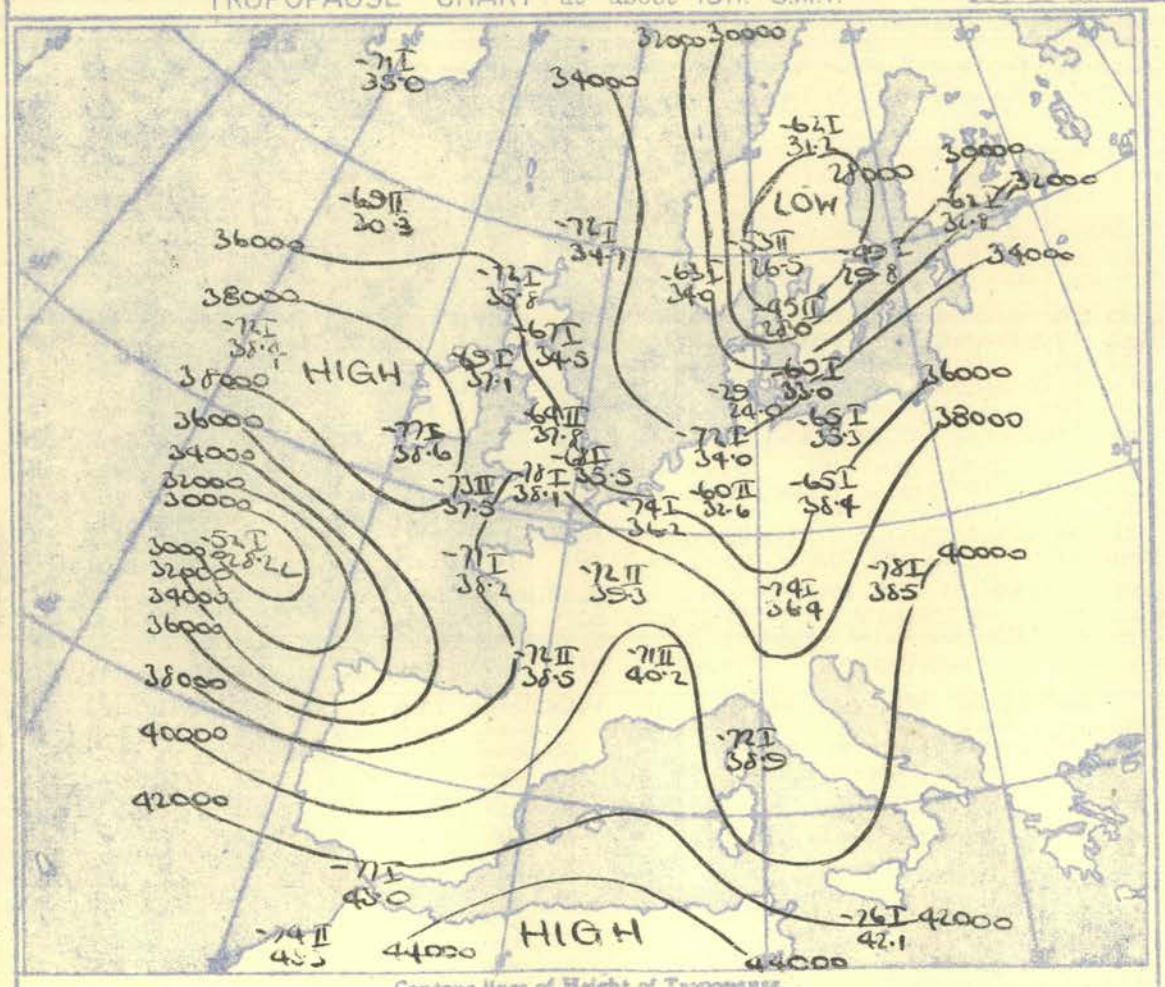


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.



TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Thermal pattern very stable, the dominant fectures being the ridge from France Northwestwards to Greenland and the cold trouns over Scandinavia and the Central Atlantic.

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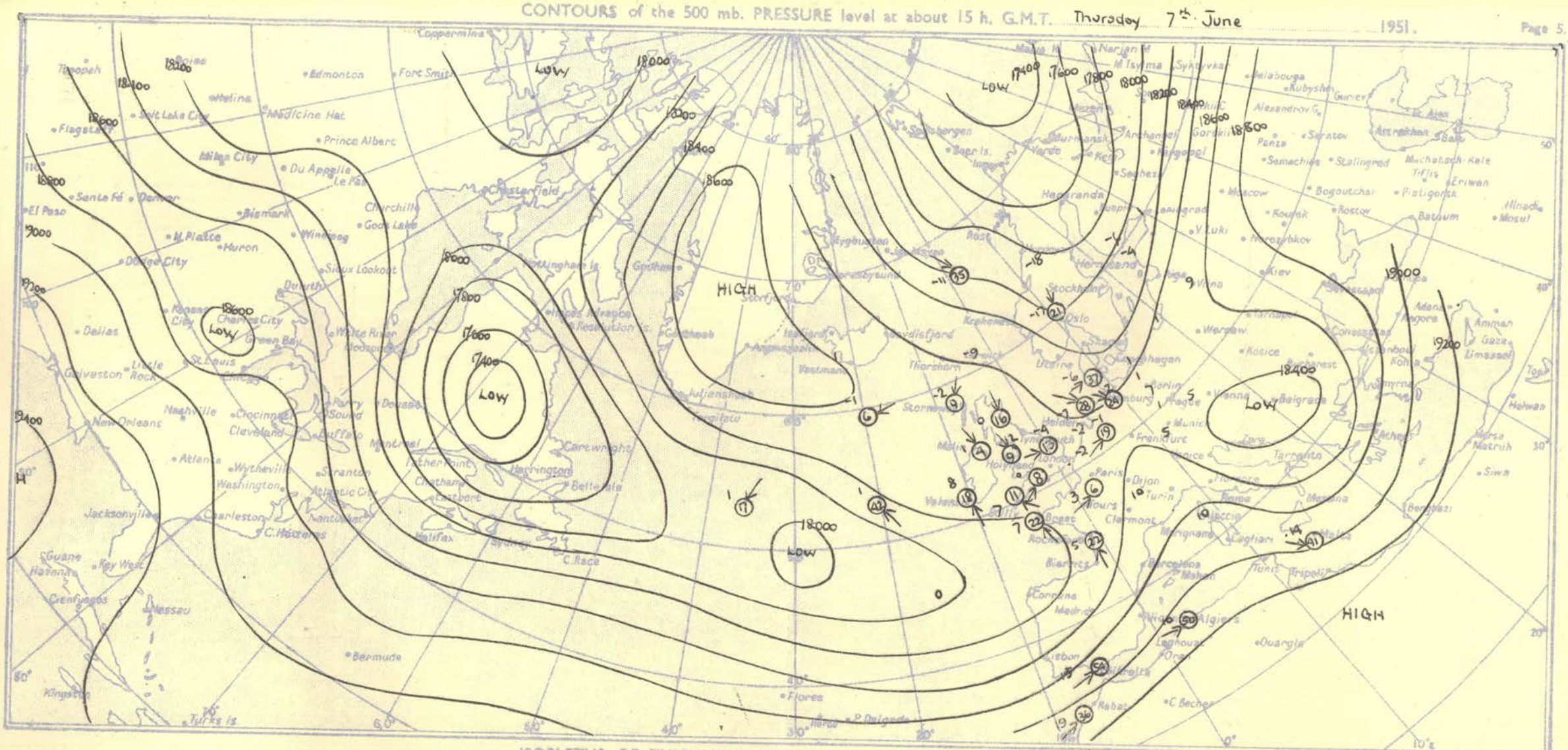
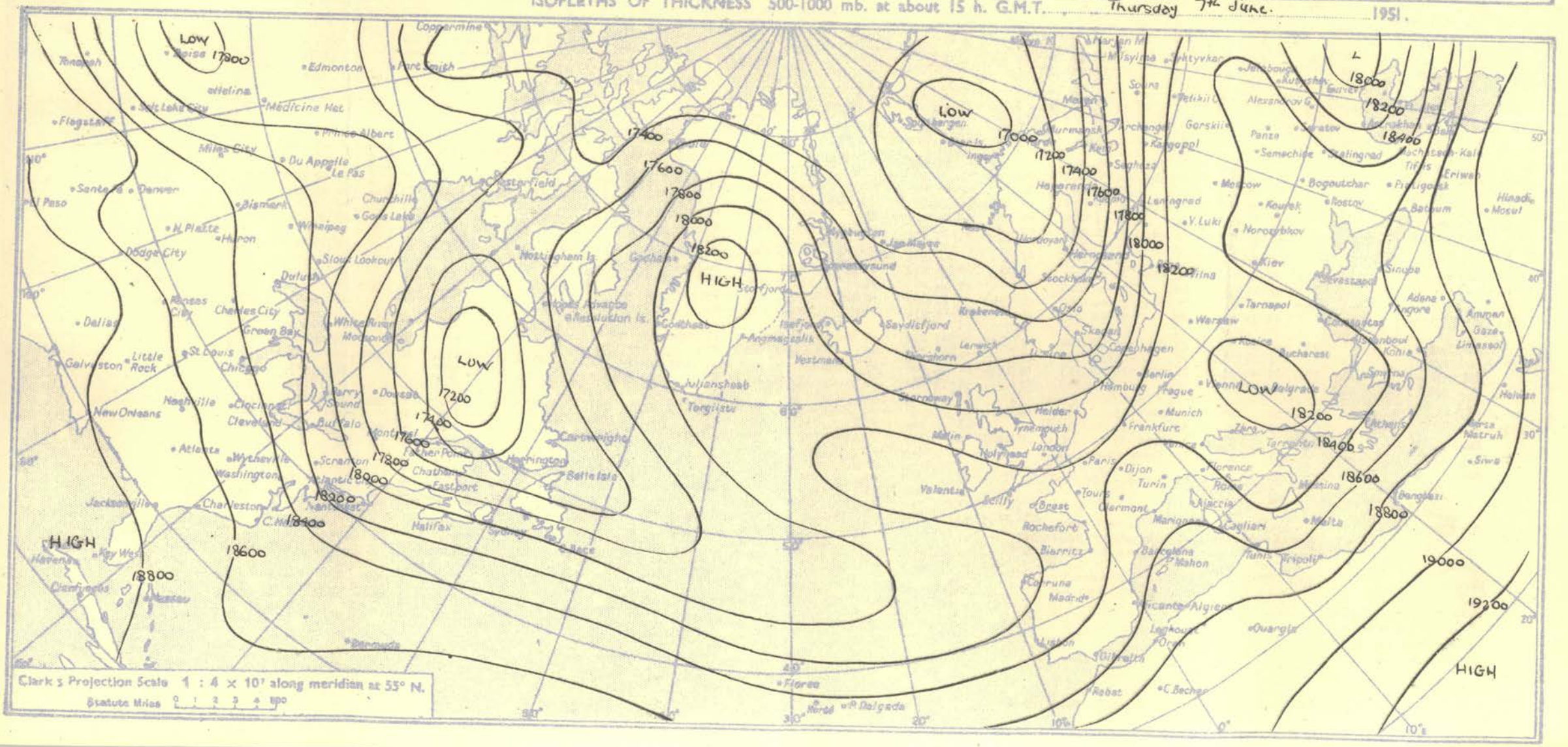
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Thursday 7th June 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Thursday 7th June. 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, [illegible]

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

LERWICH

Pressure — Time 15h. G.M.T. | M.S.L. 1022.5 mb | Surf 1012.4 mb | Freezing 942 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.7	47	33	070	17
1000	06.0	40	27	043	16
950		33	22	026	15
900	33.8	27	20	023	10
850		25	11	017	10
800	64.3	29	01	006	10
750		25	01		
700	98.8	20	00		
650		16	-06		
600	137.9	11	-11		
550		02	-19		
500	182.8	-09	-28		
450		-19	-36		
400	235.2	-30	-47		
350		-42			
300	299.1	-56			
250		-69			
200	384.4	-60			
170		-59			
150		-60			
130		-59			
110		-59			
100	521.5	-56			
90		-56			
80		-56			
70		-56			
60		-51			
		-54			
	(49mb)	-53			

Inversion 875 mb 24° - 800 mb 29°

Tropopause: I 240 mb - 72° 34,700'

STORNOWAY

Pressure — Time 15h. G.M.T. | M.S.L. 1020.7 mb | Surf 1019.1 mb | Freezing 720 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
00.4	52	41	050	15
05.6	47	36	056	28
	43	32	107	18
34.0	39	29	112	20
	44	08	112	12
65.5	40	02	106	09
	35	-02	085	08
100.1	30	-06	065	08
	25	-10	049	06
140.4	17	-17	019	07
	08	-25	030	07
186.0	-01	-30	026	09
	-13	-43	030	11
238.0	-25	-54	027	08
	-38		340	09
302.7	-52		325	09
	-70		310	11
388.0	-66		328	17
	-61		331	16
449.0	-63		340	15
	-64		335	12
	-64		338	11
534.6	-62			

Inversion 902 mb 39° - 865 mb 45°

Tropopause: I 230 mb -72° 35,800'

LEUCHARS

Pressure — Time 15h. G.M.T. | M.S.L. 1021.3 mb | Surf 1020.5 mb | Freezing 706 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
00.2	54	40		
05.8	45	32		
	39	20		
33.9	32	27		
	38	-10		
65.2	36	-22		
	34	-30		
100.4	31	-15		
	23	-10		
140.1	17	+20		
	09	-33		
185.6	00	-31		
	-13	-43		
238.9	-21	-50		
	-35	-58		
303.9	-49			
	-66			
390.3	-60			
	-56			
	-58			
	-58			
	-55			
539.3	-56			
	-56			
	-54			
	-55			

For Winds See Page 3

Inversion 900 mb 32° - 868 mb 38°

Isothermal 725 - 706 mb 32° 431 - 408 mb -18°

Tropopause: I 247 mb -67° 34,500'

ALDERGROVE

Pressure — Time 15h. G.M.T. | M.S.L. 1016.9 mb | Surf 1007.7 mb | Freezing 738 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
02.6	59	46	100	15
04.7	57	48		
	47	38	097	15
33.4	47	37	116	14
	45	34	128	12
65.2	41	33	130	12
	34	27	110	12
100.4	28	20	096	14
	21	12	105	13
140.1	17	03	094	07
	10	-08		
185.7	01	-17	334	04
	-08	-27	338	09
239.3	-19	-37	325	16
	-30	-47	312	23
305.4	-44		301	35
	-59		296	40
391.6	-63		309	22
	-61		309	17
	-54		310	07
	-56		317	08
	-52		303	06
540.7	-52		286	08
	-51		324	09
	-49		355	06
	-47		288	06
652.7	-47		320	07

Low

Inversion 923 mb 45° - 889 mb 48°

Isothermal 939 - 923 mb 45°

Tropopause: I 221 mb - 69° 37,100'

LIVERPOOL

Pressure — Time 15h. G.M.T. | M.S.L. 1016.5 mb | Surf 1014.4 mb | Freezing 720 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
00.6	59	45	090	17
04.6	57	44	094	12
	51	41	104	09
33.3	44	37	101	16
	42	35	085	11
65.0	44	31	066	10
	37	25	080	07
100.5	29	19	117	06
	24	07	122	06
140.3	18	-07	217	01
	11	-12	338	04
186.6	02	-15	334	09
	-08	-27	318	12
239.8	-17	-33	311	15
	-30	-50	306	21
305.7	-42		307	36
	-56		301	29
393.0	-64		297	27
	-55		291	19
	-56		297	14
	-59		284	13
	-56		306	12
542.0	-54		297	07
	-52		297	09
	-50		299	09
	-48		296	06
	-46		307	06
	-45		292	03
	-43		258	08
(33mb)	-42			

Inversion 875 mb 40° - 860 mb 48°

Isothermal 815 - 800 mb 44°

Tropopause: II 216 mb -64° 37,800'

DOWNHAM MARKET

Pressure — Time 15h. G.M.T. | M.S.L. 1016.8 mb | Surf 1012.5 mb | Freezing 720 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
01.2	57	39	065	11
04.6	51	35		
	44	23	054	19
33.1	37	30	047	18
	42	25	033	15
64.6	40	25	019	14
	36	20	003	09
99.9	30	14	343	05
	22	04	311	04
139.7	19	-03	278	08
	06	-10	263	12
184.9	-04	-13	272	13
	-13	-25	290	11
238.1	-24	-35	292	12
	-37	-48	300	20
302.9	-50		294	37
	-64		288	47
388.9	-61		287	27
	-60		288	18
450.2	-60		289	14
	-58		289	14
	-60		278	14
536.8	-57		295	12
	-55		287	12
	-52		287	11
	-51		280	03

Inversion 900 mb 37° - 878 mb 42°

Isothermal 878 - 830 mb 42°

Tropopause: I 235 mb - 68° 35,500'

LARKHILL

Pressure — Time 15h. G.M.T. | M.S.L. 1013.0 mb | Surf 997.3 mb | Freezing 728 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
04.4	53	47	060	18
03.6				
	53	38		
32.6	47	37		
	48	33		
64.5	41	28		
	35	23	For Winds See Page 3	
99.8	29	16		
	26	06		
139.7	18	-08		
	09	-07		
185.3	00	-09		
	-08	-15		
238.9	-18	-25		
	-28	-37		
304.8	-44			
	-61			
390.7	-74			
	-65			
450.9	-63			
	-63			
	-60			
537.1	-57			
	-54			

CAMBORNE

Pressure — Time 15h. G.M.T. | M.S.L. 1008.6 mb | Surf 998.2 mb | Freezing 700 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
02.9	59	52	100	30
02.4				
	59	50		
31.6	56	46		
	50	41		
63.7	45	26		
	39	22	For Winds See Page 3	
99.3	32	15		
	27	06		
139.3	23	16		
	15	09		
185.5	07	02		
	-01	-11		
240.1	-12	-19		
	-25	-31		
306.7	-40	-46		
	-58			
393.3	-70			
	-60			
	-56			
	-55			
	-54			
542.1	-54			
	-53			
	-53			
	-51			
	-50			
(504mb)	-48			

Inversion 970 mb 55° - 942 mb 60°

Isothermal 607 - 590 mb 23°

Tropopause: II 217 mb - 73° 37,500'

VALENTIA

Pressure — Time 15h. G.M.T. | M.S.L. 1008 mb | Surf mb | Freezing 700 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
00.3	61	54	110	12
02.5	60	54	108	14
	55	51	110	24
31.6	50	46	122	31
	47	41	124	29
63.6	42	34	130	22
	36	29	125	22
99.0	32	26	118	20
	29	22	122	20
139.2	23	17	120	20
	16	11	112	19
185.6	08	02	117	18
	01	-09	129	14
240.3	-10	-20	139	10
	-24	-33	151	12
306.9	-40	-51	166	18
	-58		152	20
393.5	-71		154	18
	-55		150	09
	-55		146	07
	-54		085	04
	-53		CALM	
543.0	-52		CALM	
(538mb)	-51			

Tropopause: I 207 mb -77° 38,600'

LERWICH

Pressure — Time 21h. G.M.T. | M.S.L. 1022.1 mb | Surf 1011.9 mb | Freezing 808 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.7	45	32		
1000	05.9	43	32		
950		35	26		
900	33.7	28	22		
850		33	15		
800	64.7	31	07		
750		27	00		
700	99.3	23	-01		
650		17	-06		
600	138.5	11	-11		
550		03	-19		
500	183.5	-08	-27		
450		-19	-37		
400	235.9	-30	-48		
350		-44			
300	299.7	-60			
250		-66			
200	385.7	-56			
170		-58			
150		-58			
130		-58			
110		-58			
100	534.2	-58			
90		-56			
80		-53			
70		-52			
60		-50			
	(68mb)				

Inversion 880 mb 25° - 863 mb 33°

Isothermal 863 - 829 mb 33°

Tropopause: II 265 mb -66° 32,600'

STORNOWAY

Pressure — Time 21h. G.M.T. | M.S.L. 1019.4 mb | Surf 1017.3 mb | Freezing 735 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
00.4	52	41	040	08
05.2	50	37	069	21
	45	33	083	12
33.7	40	29	093	04
	40	19	085	03
	38	01	105	02
	34	-01	090	03
100.3	29	00	048	04
	22	-06	024	06
139.9	14	-13	032	09
	06	-20	006	09
185.4	-03	-28	354	09
	-14	-38	356	07
238.1	-25	-47	320	08
	-38	-58	310	11
302.6	-52		300	14
	-68		310	20
388.5	-59		319	20
	-59		336	18
450.0	-59		341	19
	-62			

Inversion 905 mb 40° - 868 mb 42°

Isothermal 832 - 793 mb 38°

Tropopause: I 248 mb -69° 34,300'

LEUCHARS

Pressure — Time 21h. G.M.T. | M.S.L. 1020.8 mb | Surf 1020.0 mb | Freezing 747 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
00.2	46	39	090	04
05.5	44	37	065	05
	37	34	065	10
33.5	30	29	058	10
	36	19	055	09
64.6	37	06	045	08
	32	00	027	07
99.6	26	-06	010	10
	20	-11	005	14
139.0	15	-16	014	12
	07	-22	359	12
184.2	-05	-32	001	11
	-12	-38	359	10
237.3	-24	-49	353	10
	-40	-60	345	15
301.7	-52		338	15
	-66		321	14
388.0	-57		318	19

For continuation of Winds See Page 3.

Inversion 900 mb 30° - 885 mb 36° 885 mb 36° - 860 mb 38°

Isothermal 807 - 787 mb 37°

Tropopause: I 247 mb -67° 34,300'

ALDERGROVE

Pressure — Time 21h. G.M.T. | M.S.L. 1016.6 mb | Surf 1007.1 mb | Freezing 747 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
02.6	53	44	090	10
04.5	52	39		
	46	38	100	22
33.1	44	37	084	13
	44	34	078	05
64.8	41	32	061	06
	33	27	075	07
99.9	24	19	082	08
	17	09	082	06
139.2	14	-03	080	10
	06	-13	072	08
184.4	-03	-27	063	07
	-12	-42	037	09
237.6	-24	-56	348	13
	-35	-58	320	26
304.1	-45		315	33
	-63		306	43
388.4	-74		305	30
	-63		310	17
	-63		304	07
	-64		317	08
	-62		331	07
534.8	-61		309	07
	-61			

Inversion 662 mb 17° - 624 mb 18°

Isothermal 922 - 824 mb 44°

Tropopause: I 219 mb -72° 36,900' II 200 mb -74° 38,836'

LIVERPOOL

Pressure — Time 21h. G.M.T. | M.S.L. 1015.9 mb | Surf 1013.9 mb | Freezing 731 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
00.6	52	38	075	10
04.3	50	37	080	23
	44	34	094	19
32.7	38	30	102	12
	44	35	054	10
64.4	39	29	029	13
	34	25	030	13
99.7	28	19	035	06
	23	02	034	03
139.4	17	-11	043	06
	09	-13	031	06
184.9	00	-19	020	05
	-09	-27	350	07
238.5	-20	-42	321	09
	-32	-54	313	25
304.1	-45		306	42
	-61		294	43
390.5	-63		296	23
	-61		288	15
	-60		302	13
	-59		310	10
	-59		298	12
	-58		307	11
538.6	-59		278	07
	-53		308	11
	-52		292	11
	-51			

Inversion 900 mb 38° - 878 mb 46°

Tropopause: II 226 mb -69° 36,500'

DOWNHAM MARKET

Pressure — Time 21h. G.M.T. | M.S.L. 1016.3 mb | Surf 1011.8 mb | Freezing 721 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
01.2	48	36	045	10
04.4	46	35		
	40	33	057	16
32.5	34	27	057	14
	44	01	050	12
64.0	42	14	031	10
	36	20	003	07
99.3	29	16	323	06
	23	03	313	07
138.9	16	-02	303	12
	07	-06	298	11
184.3	00	-16	300	09
	-10	-27	301	13
237.7	-22	-34	297	18
	-33	-48	303	29
303.2	-43		292	44
	-60		285	48
390.4	-63		290	27
	-59		291	18
451.5	-59		288	15
	-57		292	12
	-56		299	10
538.7	-56		344	06

Inversion 900 mb 34° - 888 mb 45°

Tropopause: II 238 mb -64° 35,200'

LARKHILL

Pressure — Time 21h. G.M.T. | M.S.L. 1012.8 mb | Surf 996.4 mb | Freezing 712 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
04.4	54	43	070	14
03.6				
	49	41	073	25
32.1	51	36	084	23
	47	23	096	20
64.0	41	28	106	15
	35	18	121	12
99.3	31	10	148	10
	24	13	162	10
139.0	16	-04	162	08
	07	-04	182	05
184.4	00	-06	261	03
	-10	-15	282	07
237.9	-20	-37	307	12
	-32	-46	291	19
303.3	-49		280	19
	-66		269	24
388.6	-67		266	10
	-63		288	10
449.4	-62		284	10
	-60		276	10
	-60			
(107mb)	-60			

Inversion 996 mb 59° - 990 mb 55° 926 mb 44° - 900 mb 51°

Tropopause: I 217 mb - 80° 37,200'

CAMBORNE

Pressure — Time 21h. G.M.T. | M.S.L. 1007.6 mb | Surf 997.1 mb | Freezing 736 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
02.9	55	49	090	25
02.1				
	54	46	094	37
31.1	56	43	107	27
	50	40	115	18
63.2	43	36	120	13
	34	28	119	11
98.5	29	14	100	15
	24	09	104	20
138.3	17	07	116	22
	13	03	114	17
184.1	03	-04	110	13
	-04	-13	106	18
238.2	-18	-26	108	19
	-31	-39	121	12
303.9	-46		126	13
	-65		133	14
389.1	-77		151	15
	-62		LAV	
	-60		LAV	
	-61		284	06
	-60		274	08
535.9	-60			

Inversion 972 mb 53° - 904 mb 57°

Isothermal 580 - 555 mb 14°

Tropopause: I 204 mb -79° 38,500'

No. 11758 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Friday 8th June 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

METEOROLOGICAL OFFICE LIBRARY 18 JUN 1951 VALENTIA

03h. G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	03h G.M.T.	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.
Pressure: M.S.L.	1020·7 mb	1019·1 mb	1019·4 mb	1016·7 mb	1016·3 mb	1015·2 mb	1012·4 mb	1005·5 mb	1005·6 mb
Pressure: Surf	1010·4 mb	1017·4 mb	1018·5 mb	1007·6 mb	1014·2 mb	1010·7 mb	996·1 mb	994·9 mb	1008 mb
Pressure: Freezing	946 mb	718 mb	750 mb	740 mb	732 mb	717 mb	710 mb	726 mb	745 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	40	32			00·4	43	43	060	05	00·2	44	39	050	05	02·6	44	38	090	15
1000	05·4	39	31			05·0	43	41			05·1	43	38	055	12	04·5				
950		32	27				42	33	055	05		36	32	073	08		42	36	091	18
900	33·1	26	21			33·3	40	32	007	02	33·1	29	28	072	06	32·8	42	23	078	14
850		31	12				42	29	039	01		37	12	067	06		44	28	058	12
800	63·7	28	04			64·8	39	14	042	03	64·2	36	04	057	06	64·5	38	25	030	10
750		25	-03				36	08	344	03		32	00	032	07		33	19	025	10
700	98·2	21	-08			100·1	30	04	311	05	99·2	27	-04	021	09	99·7	27	13	044	07
650		15	-04				23	00	320	04		20	-13	005	10		22	01	102	06
600	137·3	10	-11			139·8	16	-05	348	02	138·6	13	-18	010	08	139·2	16	-14	087	18
550		00	-20				08	-12	252	02		03	-29	010	09		09	-21	095	13
500	181·9	-09	-28			188·2	-01	-21	288	07	183·6	-07	-38	010	10	184·8	00	-30	103	08
450		-20	-38				-12	-31	292	09		-18	-47	002	10		-12	-42	022	08
400	234·2	-32	-49			238·4	-25	-42	304	11	236·1	-31	-58	335	10	238·1	-22	-49	353	17
350		-44					-38	-54	305	17		-45		318	12					
300	297·8	-59				303·0	-52		312	22	299·5	-61		309	14					
250		-69					-66		315	30		-70		309	20					
200	383·2	-57				289·1	-58		317	21	384·6	-61		323	18					
170		-56					-58		326	17		-63		334	16					
150		-60				450·7	-58		320	15	449·6	-63		332	14					
130		-60					-61		336	10		-62		326	12					
110		-59					-60		347	12		-61		330	08					
100	531·6	-57				537·1	-59		347	10	531·6	-61		334	08					
90	(95mb)	-56					-58		352	06		-60		320	08					
80							-59		318	06		-59		323	08					
70							-63					-57								
60						645·9	-64													

Pressure mb	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	40	36	CALM		01·2	45	37	035	06	04·4	43	38	060	15	02·9	51	47	090	25	00·3	57	48	070	07
1000	04·3	39	32	096	12	04·1	44	36			03·3					01·5					02·6	56	47	075	16
950		35	30	096	15		39	33	062	16		39	36	074	26		47	44	106	34		53	43	098	20
900	32·2	38	25	093	14	32·2	32	20	062	13	31·7	49	32	097	21	30·2	55	48	107	29	31·6	52	41	102	19
850		41	08	080	11		42	-02	061	09		47	35	105	17		49	43	114	24		46	29	102	18
800	63·6	41	-05	077	09	63·7	41	-07	050	06	68·6	42	30	101	14	62·3	43	39	113	26	63·4	40	24	105	21
750		35	02	064	08		36	-07	358	05		36	20	110	12		36	35	108	27		33	18	102	24
700	98·8	28	00	072	07	99·0	30	-01	329	06	99·0	31	13	121	09	97·5	29	29	108	26	98·6	28	08	090	25
650		22	-05	082	05		22	-07	313	06		24	07	135	09		22	22	105	26		22	12		
600	138·4	15	15	090	05	138·6	15	-17	312	07	138·8	15	-01	142	09	137·2	16	16	103	21	138·3	16	09		
550		06	-24	082	06		07	-20	326	05		08	-08	131	06		10	09	127	25		11	02		
500	183·7	-04	-33	057	07	183·9	-03	-28	329	05	184·2	-01	-06	152	03	182·9	02	00	109	14	184·2	03	-06		
450		-13	-41	002	09		-13	-41	320	09		-10	-15	277	06		-07	-12	109	14		-06	-15		
400	236·7	-25	-51	320	10	237·0	-23	-50	308	15	237·8	-17	-32	271	05	236·4	-19	-24	118	17	238·1	-18	-26		
350		-39	-59	300	18		-34	-59	296	24		-30	-47	267	10		-33	-39	090	18		-30	-41		
300	301·3	-51		300	29	302·0	-48		286	39	303·6	-45		286	13	301·9	-49		102	21	303·7	-46			
250		-65		302	33		-65		286	42		-61		286	15		-68		113	15		-64			
200	386·9	-64		303	19	388·4	-57		288	17	389·4	-81		280	14	386·7	-78		124	09	389·0	-82			
170		-61		312	08		-59		287	14		-67		238	05		-63		215	06		-64			
150		-61		282	06	449·9	-59		290	15	449·4	-63		248	08		-61		239	04		-61			
130		-62		298	11		-57		288	14		-62		283	11		-61		281	06		-61			
110		-61		300	10		-57		297	11		-63		297	10		-62		306	09		-62			
100	534·2	-61		300	12	536·9	-57		300	12	535·3	-61		291	11	533·4	-62		310	06	536·5	-63			
90		-61		303	11		-55		295	10		-61		284	12		-63					-63			
80		-59		305	10		-54		260	09		-62		280	12							-63			
70		-57		293	09							-60		278	11							-63			
60		-57									643·9	-59		293	09										
											(55mb)	-60													

Inversion 900 mb 26° - 850 mb 31°

Inversion 880 mb 39° - 850 mb 42°; Isothermal 1017 - 965 mb 43°

Inversion 890 mb 27° - 883 mb 36°; 883 mb 36° - 823 mb 38°

Inversion 960 mb 41° - 935 mb 42°; 920 mb 40° - 868 mb 46°; 660 mb 21° - 644 mb 22°; Isothermal 810 - 790 mb 38°; 605 - 595 mb 16°

Inversion 923 mb 33° - 882 mb 41°; 859 mb 40° - 840 mb 43°

Inversion 900 mb 32° - 884 mb 43°

Inversion 950 mb 34° - 883 mb 43°

Inversion 930 mb 51° - 966 mb 53°; 595 mb 15° - 586 mb 17°

	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Tropopause	I 260 mb -71° 32,800'	I 242 mb -68° 34,900'	I 263 mb -72° 32,600'	N.R.	I 221 mb -71° 36,600'	I 244 mb -67° 34,600'	I 200 mb -81° 38,900'	I 210 mb -82° 37,600'	I 200 mb -82° 38,900'

09h. G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Pressure: Time	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	G.M.T.
Pressure: M.S.L.	1018·7 mb	1018·1 mb	1018·4 mb	1015·9 mb	1014·2 mb	1013·9 mb	1010·6 mb	1006·6 mb	mb
Pressure: Surf	1008·5 mb	1016·5 mb	1017·6 mb	1006·2 mb	1012·2 mb	1009·4 mb	994·5 mb	996·0 mb	mb
Pressure: Freezing	830 mb	728 mb	728 mb	719 mb	718 mb	714 mb	700 mb	709 mb	mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	45	29			00·4	50	39	020	05	00·2	49	37	02·6	48	39	110	10
1000	05·0	42	27			05·0	48	38			04·9	46	39	04·3	47	38		
950		35	24				40	32	054	09		36	30		39	33	094	14
900	32·9	28	21			33·3	39	28	037	06	32·9	29	28	32·6	45	22	080	14
850		28	19				40	02	001	05		42	09		44	-01	066	12
800	63·5	31	15			64·6	38	18	349	03	64·2	38	05		40	-14	085	10
750		23	16				34	-10	CALM			34	03		35	-16	093	09
700	97·9	19	11			100·0	28	-08	CALM		99·4	29	-02	99·5	30	-19	098	08
650		15	04				21	-13	309	08		25	-11		23	-26	095	09
600	136·9	10	-12			139·3	14	-16	268	06	139·1	16	-17	139·2	16	-24	112	08
550		02	-21				05	-23	259	08		07	-23		08	-33	112	07
500	181·7	-08	-31			184·5	-05	-32	301	12	184·4	-03	-32	184·6	-01	-41	084	06
450		-19	-38				-16	-42	320	16		-14	-42		-12	-50	005	06
400	234·1	-30	-44			237·3	-27	-50	328	19	237·4	-27	-53	237·8	-22	-55	342	12
350		-43					-41		328	19		-42			-36	-59	342	30
300	297·9	-56				301·5	-55		321	19	301·4	-56		302·9	-48		337	29
250		-69					-66		323	21		-68			-64		334	35
200	383·8	-55				387·5	-57		326	23	387·2	-57		388·6	-68		329	19
170		-55					-56		334	15		-56			-60		310	06
150		-56				449·3	-58		334	10	449·1	-57		449·6	-59		310	07
130		-59					-57		338	10		-59			-61		320	06
110		-60					-54		345	09		-55			-59		319	10
100	(104mb)	-60				536·5	-54		006	09	536·1	-53		536·5	-58		315	09
90							-53		017	09		-53		(99mb)	-56			
80							-52		346	08					-56		323	05
70																		
60																		

Pressure mb	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	50	36	100	12	01·2	53	38	060	10	04·4	51	40	050	15	02·9	50	49	100	20
1000	03·9	48	35	100	15	03·8	47	33			02·9					01·8				
950		41	30	096	14		40	30	057	16		42	34	068	21		45	42	117	33
900	32·1	36	20	091	15	32·0	39	28	069	14	31·4	47	30	080	19	30·3	41	37	105	23
850		43	01	089	10		42	05	061	12		48	30	084	14		39	34	099	20
800	63·6	41	-09	084	11	63·6	42	-11	045	12	63·2	43	28	085	12	61·6	39	28	093	24
750		36	-12	076	09		36	-15	020	09		38	21	096	10		37	32	099	24
700	98·9	31	-13	077	09	98·9	30	-20	002	07	98·7	32	12	101	08	97·1	31	25	112	27
650		24	-17	088	07		24	-25	351	05		26	08	097	08		26	18	112	29
600	138·7	16	-24	059	87	138·6	17	-30	013	03	138·6	17	-01	059	08	136·9	19	15	112	26
550		07	-31	044	06		09	-39	033	04		08	-09	072	06		14	09	112	13
500	184·0	-03	-40	030	05	184·1	-02	-49	016	06	184·1	00	-13	073	07	182·9	05	00	105	11
450		-13	-50	011	05		-12	-53	349	06		-08	-17	291	05		-05	-10	115	11
400	237·1	-23	-56	317	09	237·4	-23	-56	289	13	237·8	-16	-30	309	09	237·0	-15	-21	105	14
350		-37	-60	313	12		-33	-60	285	24		-28	-40	274	07		-27	-34	120	16
300	301·8	-50		301	22	302·6	-48		272	34	For continuation of Winds see page 3					303·1	-45		110	20
250		-63		294	24		-64		276	38							-63		103	18
200	308·1	-61		303	15	308·6	-63		276	19						389·0	-68		125	10
170		-59		307	09		-59		287	15							-58		214	04
150		-60		315	11	450·0	-59		284	14							-57		273	10
130		-58		314	08		-58		290	09							-56		275	09
110		-57		306	10		-57		274	13						(118mb)	-55			
100	536·5	-56				536·8	-58		286	15										
90	(99mb)	-56					-57		292	14										
80							-55		280	12										
70							-52													
60																				

For Winds See Page 3

Inversion 864 mb 24° - 830 mb 32°; 715 mb 18° - 692 mb 20°

Inversion 931 mb 38° - 850 mb 40°

Inversion 893 mb 28° - 870 mb 41°; 870 mb 41° - 844 mb 43°; Isothermal 758 - 741 mb 34°; 677 - 657 mb 26°

Inversion 950 mb 39° - 879 mb 48°

Inversion 905 mb 34° - 880 mb 43°; Isothermal 880 - 850 mb 43°

Inversion 910 mb 35° - 888 mb 43°

For continuation of Winds see page 3

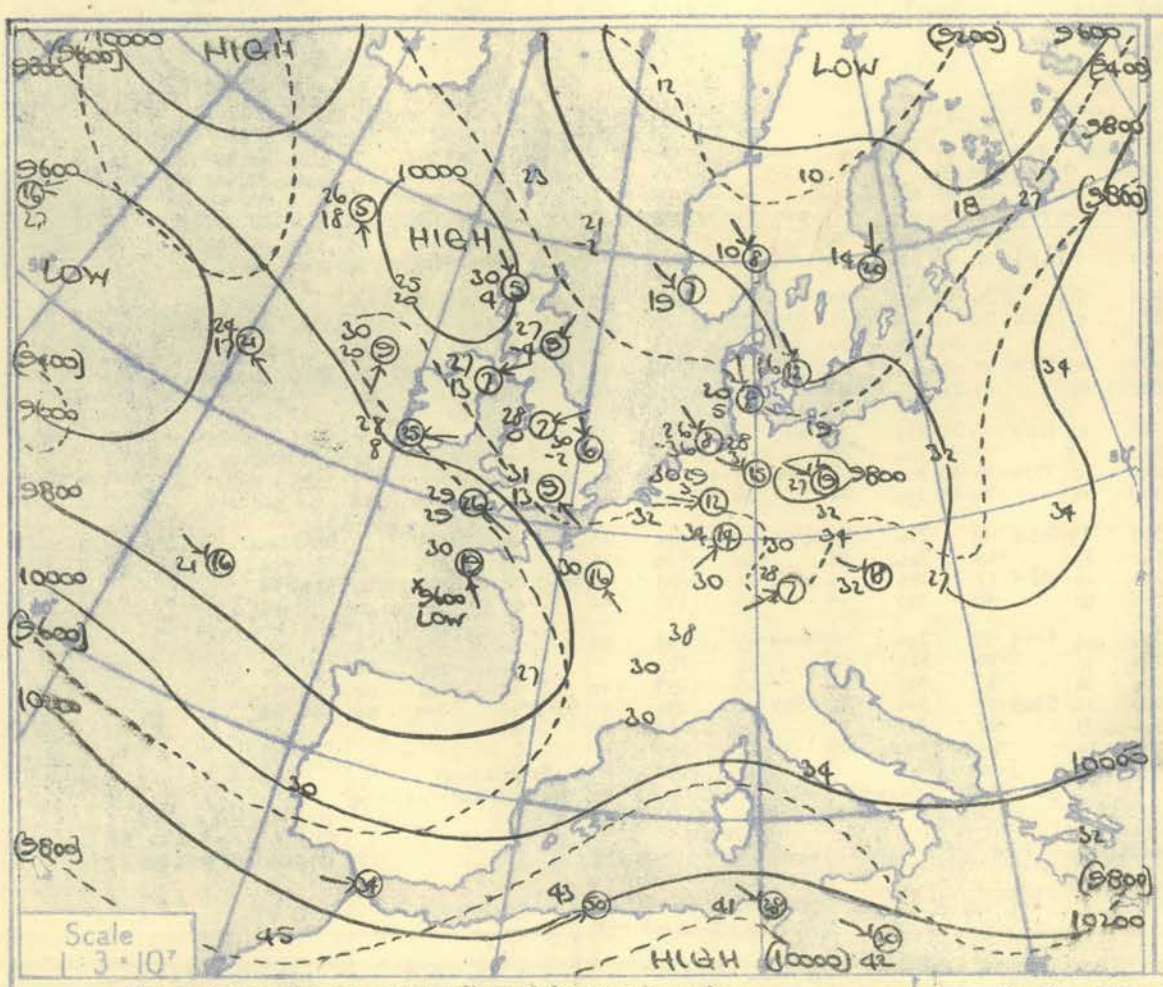
Inversion 935 mb 40° - 850 mb 48°

Inversion 800 mb 33° - 784 mb 42°; Isothermal 921 - 872 mb 41°

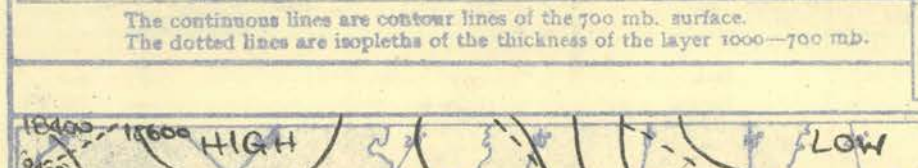
	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Tropopause	I 254 mb -70° 33,400'	II 255 mb -66° 33,500'	I 246 mb -69° 34,400'	I 216 mb -74° 37,300'	I 237 mb -66° 35,200'	II 236 mb -68° 35,400'	N.R	I 213 mb -77° 37,500'	Tropopause

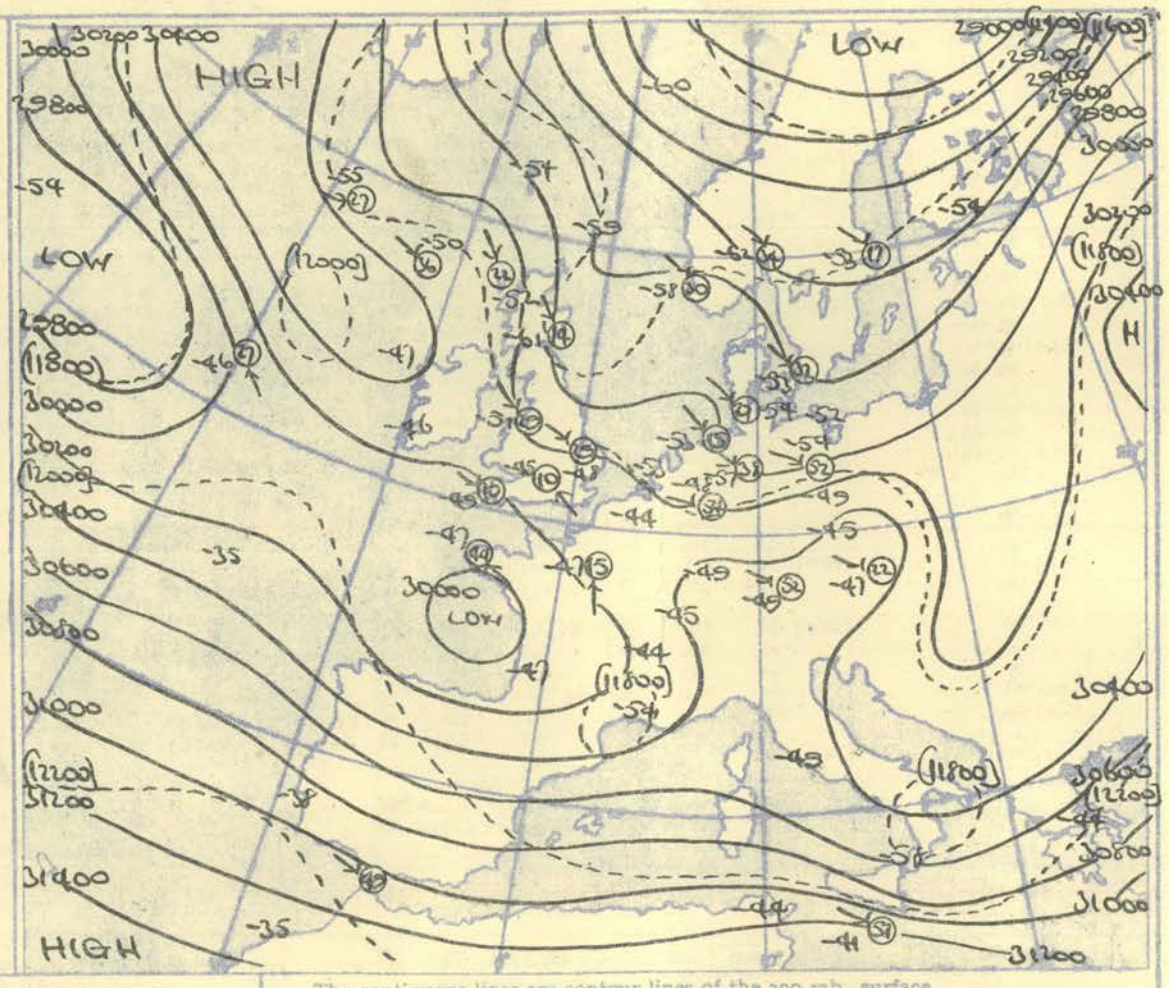
June 8TH 1951.

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb. and 300 mb., levels at about 03h G.M.T.

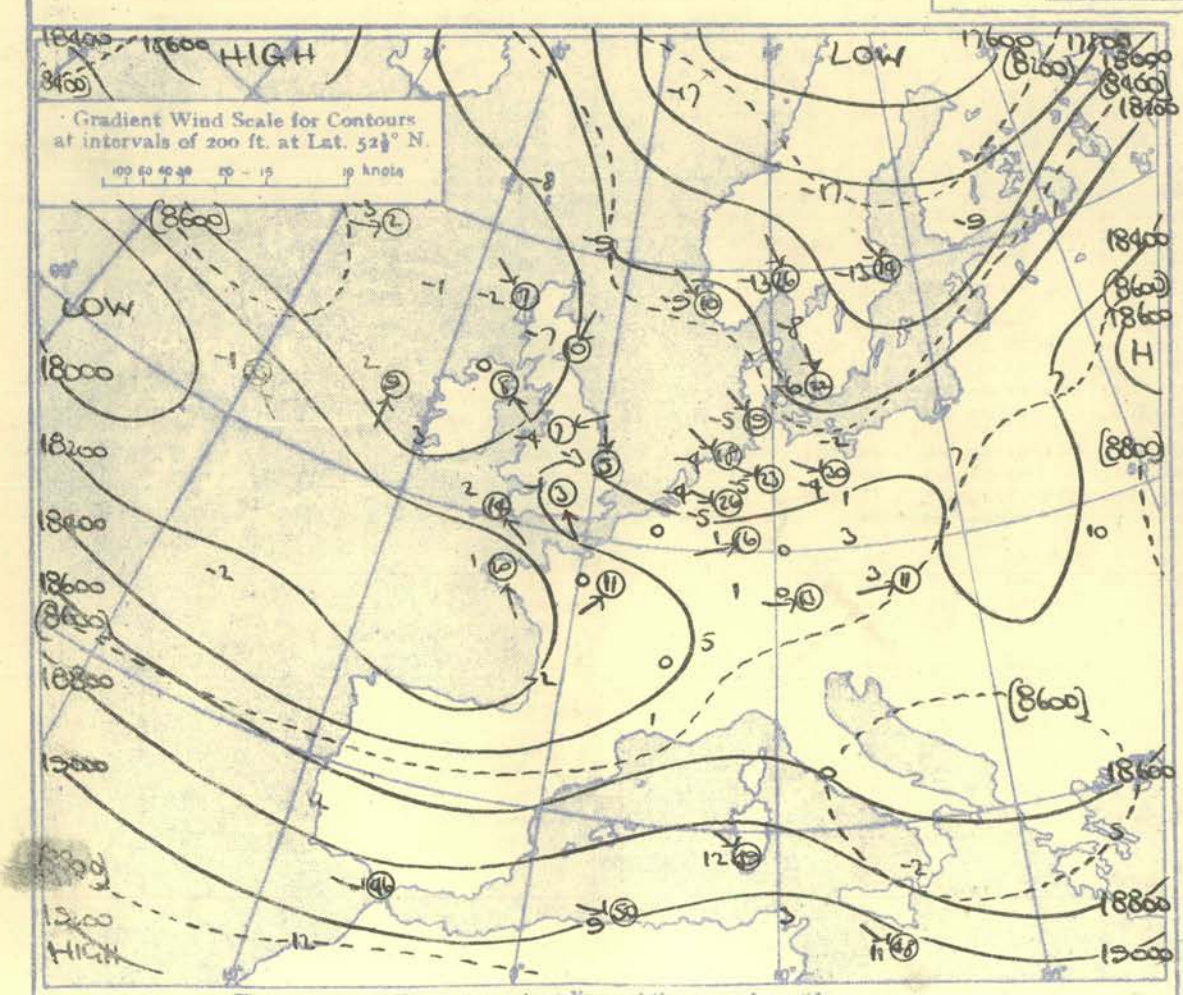


The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

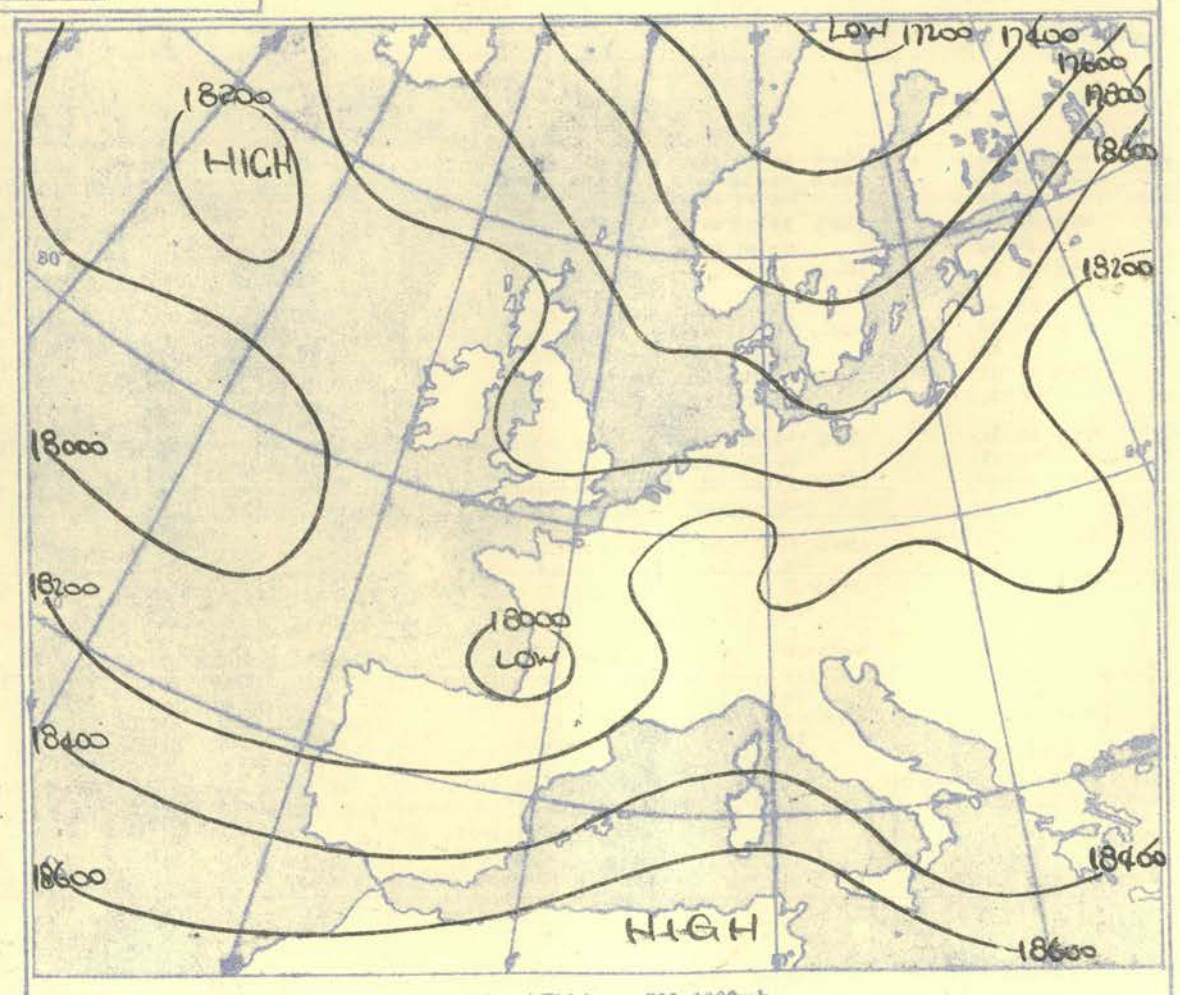




The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500-1000mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

Pressure		48·1 N 17·0 W	47·7 N 12·2 W.	52·12'N 02°12'W																			
	Time	12h.	15h.	15h.																			
	M.S.L.	1009 mb	1008 mb	1011 mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	Time M.S.L. Surf Freezing
	Surf	1005 mb	1004 mb	1010·5 mb																			Pressure
	Freezing	790 mb	760 mb	700 mb																			

Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Pressure mb
Surf		56	55		56	52	00·4																				Surf
1000	02·4	55		02·1	55		03·0																				1000
950		49	45		50	48																					950
900		44	42		48	44	31·9	45																			900
850		38	34		42	39		47																			850
800		33	32		36	36	63·7	44																			800
750		28			31	31																					750
700	97·3	21		97·5	26		99·3	32																			700
650		15			21																						650
600		09			13		139·2	17																			600
550		01			06																						550
500	181·2	-06		182·2	-09		184·7	-02																			500
450																											450
400	Cloud.			Cloud.			Inversion																				400
350	2/8 Sc			6/8 Sc			900 mb 49·6°F																				350
	960-890 mb			910-900 mb			850 mb 47·1°F																				
300				1/8 S.C. NR																							300
250	Surface Wind																										250
200	L T V.																										200
170																											170

DIRECTION (degrees from N) and VELOCITY (knots) of UPPER WINDS at heights above M.S.L.

Place	Larkhill		Ronaldsway		52·5N 28W Cirrus		Leuchars		Shoeburyness		Lympne		Speke		52·5N 20W Cirrus		Aldergrove					
Time	09h.		09h.		09h.		09h.		09h.		1330h		1230		21h.		21h.					
Type																						
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.					110	13	060	06	030	23	040	18			100	07						
1,000			100	17	100	08	064	05	070	24	030	29	100	06	110	13						
2,000			090	21	110	07	064	06	110	20	050	25	090	12	110	13						
3,000			070	25	120	08	065	07	110	12	070	17	100	14	110	14						
4,000			060	15	120	08	066	07	110	10	070	14	090	11	110	14						
5,000			090	21	130	09	065	08	080	07	070	03	090	21	110	11						
6,000			090	20			061	07	070	05	060	11	100	09	110	10						
8,000							051	06	130	05	080	09	110	05								
10,000					130	21	044	07	110	05	020	04	100	04	110	11						
14,000					120	20	019	06	060	04	060	06	060	07	080	19						
18,000					120	30	326	04	310	04			010	05	100	40						
24,000					140	44	298	10	290	18												
30,000	247	14			140	64	318	18	260	26												
40,000	260	07					323	18	270	09							290	13				
50,000	285	08					315	08	270	15							290	15				
60,000	294	13					321 (56,000')	09	280 (58,000')	15							280 (55,000')	16				

NEPHOSCOPE OBSERVATIONS

Place													
Time Type													
Dir. Vel.													

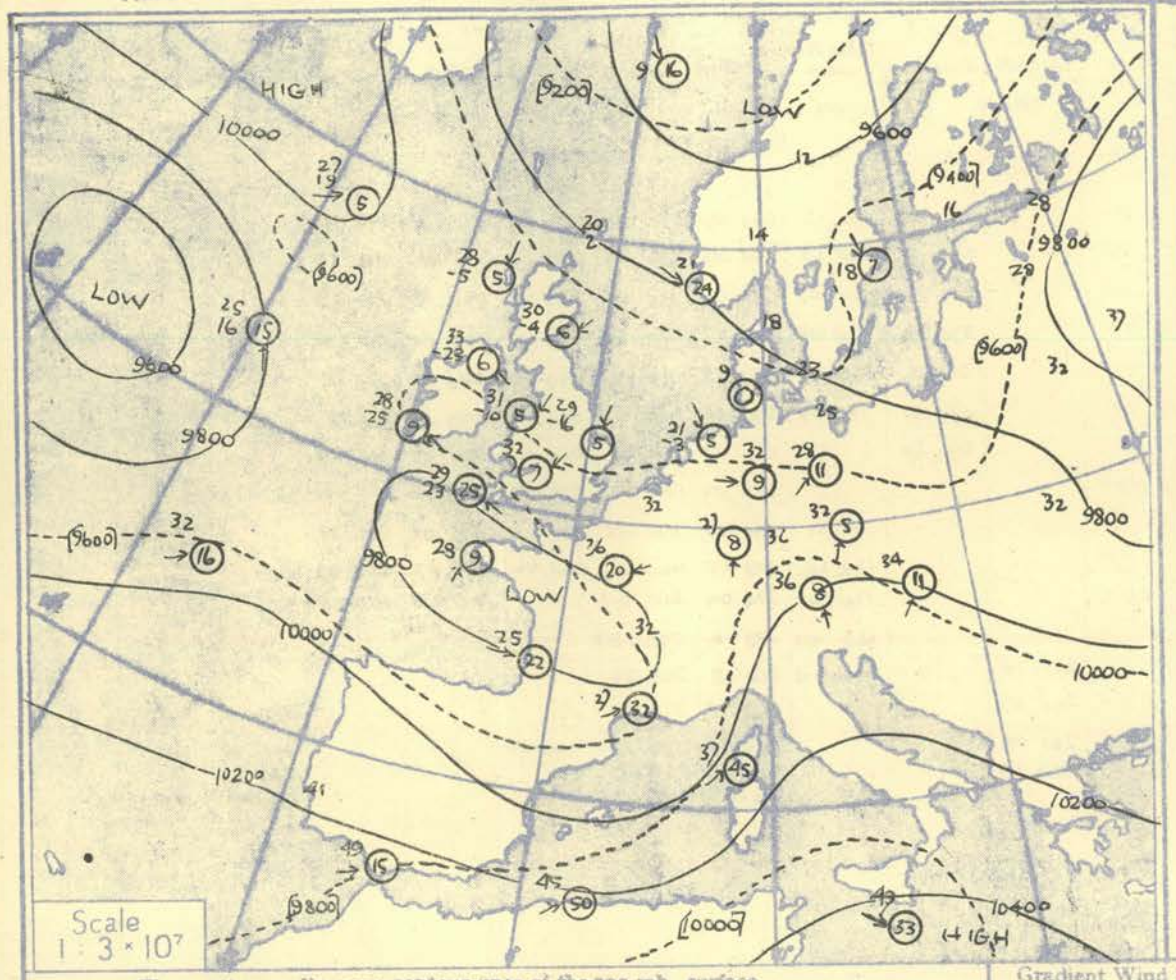
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	CIRRUS	CIRRUS	CIRRUS	CIRRUS	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER RECORDER	Ship
Lat/Long	52·5N 20·0W	52·5N 20·0W.	52·5N 20·0W.	52·5N 20·0W	58·6N 17·4W	58·5N 17·2W.	58·2N 16·3W.	58·0N 15·8W.	54·5N 12·4W.	Lat/Long
Time	03h. G.M.T.	09h. G.M.T.	15h. G.M.T.	21h. G.M.T.	03h. G.M.T.	09h. G.M.T.	15h. G.M.T.	21h. G.M.T.	03h. G.M.T.	Time
M.S.L.	1006 mb	mb	1007 mb	mb	1017 mb	1016 mb	1016 mb	1015 mb	1013 mb	M.S.L.
Surf	1006 mb	mb	1007 mb	mb	1017 mb	1016 mb	1016 mb	1015 mb	1013 mb	Surf
Freezing	800 mb	mb	780 mb	mb	750 mb	730 mb	730 mb	760 mb	725 mb	Freezing

Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf		56	53	120	15		56	54	110	12		51	49	105	22		50	47	105	25		53	47	105	18	Surf
1000	01·8	55	52	122	16	02·0	56	54	113	17	04·5	49	48	093	24	04·3	49	48	092	26	04·3	51	43	097	21	1000
950		50	46	129	18		51	49	120	14		44	43	097	19		45	45	102	20		49	40	105	15	950
900	30·6	45	40	126	25	30·9	45	45	127	12	33·0	42	39	107	12	32·5	48	42	152	07	33·0	48	42	109	10	900
850		40	35	130	24		41	39	139	15		44	31	138	06		46	40	176	07		46	39	239	05	850
800	62·1	34	30	137	13	62·4	35	31	140	18	64·7	38	29	154	06	64·2	40	23	169	06	64·8	40	34	252	05	800
750		28	24	129	21		28	21	151	15		32	25	155	07		35	21	164	06		33	26	260	03	750
700	97·0	24	17	123	21	97·4	25	16	140	15	99·8	26	18	158	05	99·5	27	22	152	05	100·0	27	19	262	05	700
650		19	04	119	24		20	08	130	22		19	-01	163	06		22	09	152	03		21	11	270	03	650
600	136·4	12	-02	118	25	136·8	13	-03	131	23	139·2	13	-14	166	04	139·1	16	00	287	05	139·6	16	04	272	04	600
550		05	-13	115	30		05	-06	140	20		07	-21	179	04		09	-22	284	05		10	-10	272	05	550
500	187	-01	-18	128	35	182·2	-01	-11	127	36	184·5	-03	-30	219	02	184·6	-01	-19	278	06	185·1	00	-14	276	09	500
450		-09	-20	135	40		-08	-18	116	56		-12	-35	220	02		-07	-25	266	10		-09	-23	285	14	450
400	235·3	-18		123	64	235·9	-19	-30	117	56	237·7	-23	-42	227	08	238·1	-21	-37	256	18	238·7	-21	-36	279	22	400
350		-30		117	67		-30		111	63		-37	-54	245	22		-36	-50	262	31		-33	-48	277	30	350
300	301·0	-46		120	77	301·7	-43		110	69	302·5	-50		258	27	303·0	-48		278	37	304·1	-46		271	52	300·8	50		270	47	304·1	-47		274	19	300
250		-62					-56					-67		258	39		-59		289	40		-65		291	51		-65		266	49		-66		252	13	250
200	389·0	-69				389·3	-52				387·7	-70		313	29	389·8	-60		282	17	390·2	-64		295	30	386·9	-59		288	24	389·5	-65		252	12	200
170		-61					-48					-66		323	08		-53		295	02		-57		302	12		-68		309	13		-61		244	01	170
150		-59					-49					-62					-53	Calm				-57		295	06		-59		312	13		-59		242	12	150
130	(158 mb)						-50										-56	"				-57		288	07		-59		315	10		-60		265	15	130
110							-51										-55	"				-57		290	06		-57		311	07						110
100						540·8	-52									539·0	-54				538·8	-57		291	05	535·3	-57		311	08	(119 mb)					100
90							-52										-52	003	02			-55		295	04		-57		317	07						90
80							-52										-50	021	03			-53														80
70							-52										-48	067	09																	70
60							-52																													60
		Isothermal 701 - 700 mb 24°				(40 mb)	53	Isothermal 100 - 1000 mb 56° 851 - 850 - 41° 752 - 723 - 28°				Inversion 910 mb 40° - 885 mb 46° Isothermal 885 - 870 mb 46°					Inversion 950 mb 45° - 900 mb 48° 756 - 340 - 750 - 38°					Isothermal 984 - 955 mb 50° 942 - 870 " 48° 759 - 743 " 33°					Inversion 965 mb 44° - 948 mb 45° Isothermal 932 - 870 mb 43°					Isothermal 1000 - 950 mb 56°				
Tropopause	I 212 mb -72° 37·400'			I 225 mb -62° 36·500'		I 225 mb -74° 38·400'			I 214 mb -65° 37·500'		I 227 mb -72° 36·400'			II 247 mb -67° 34·300'		I 220 mb -79° 37·000'										Tropopause

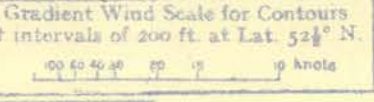
METEOROLOGICAL OFFICE LIBRARY 18 JUN 1951

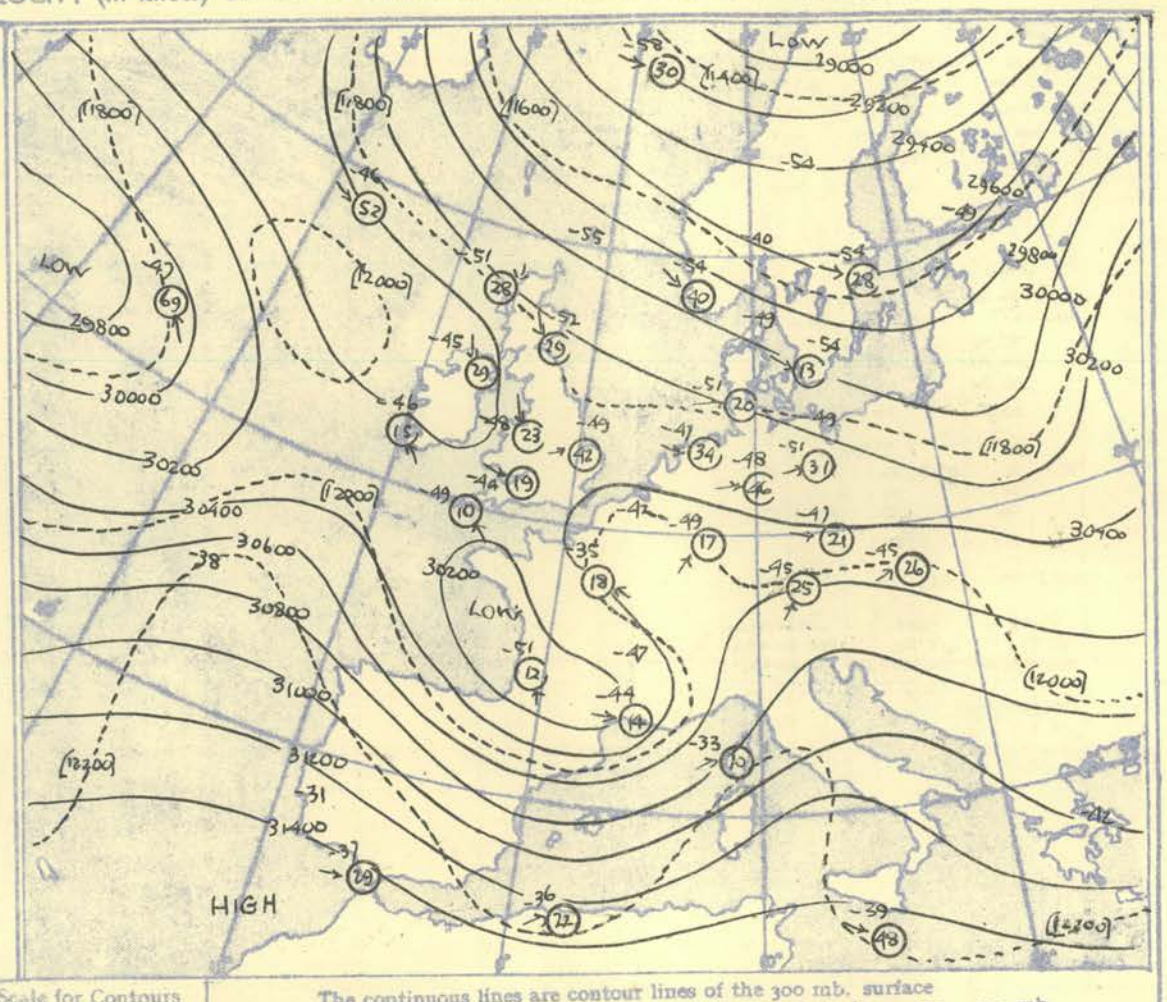
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., and 300 mb., levels at about 15h G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

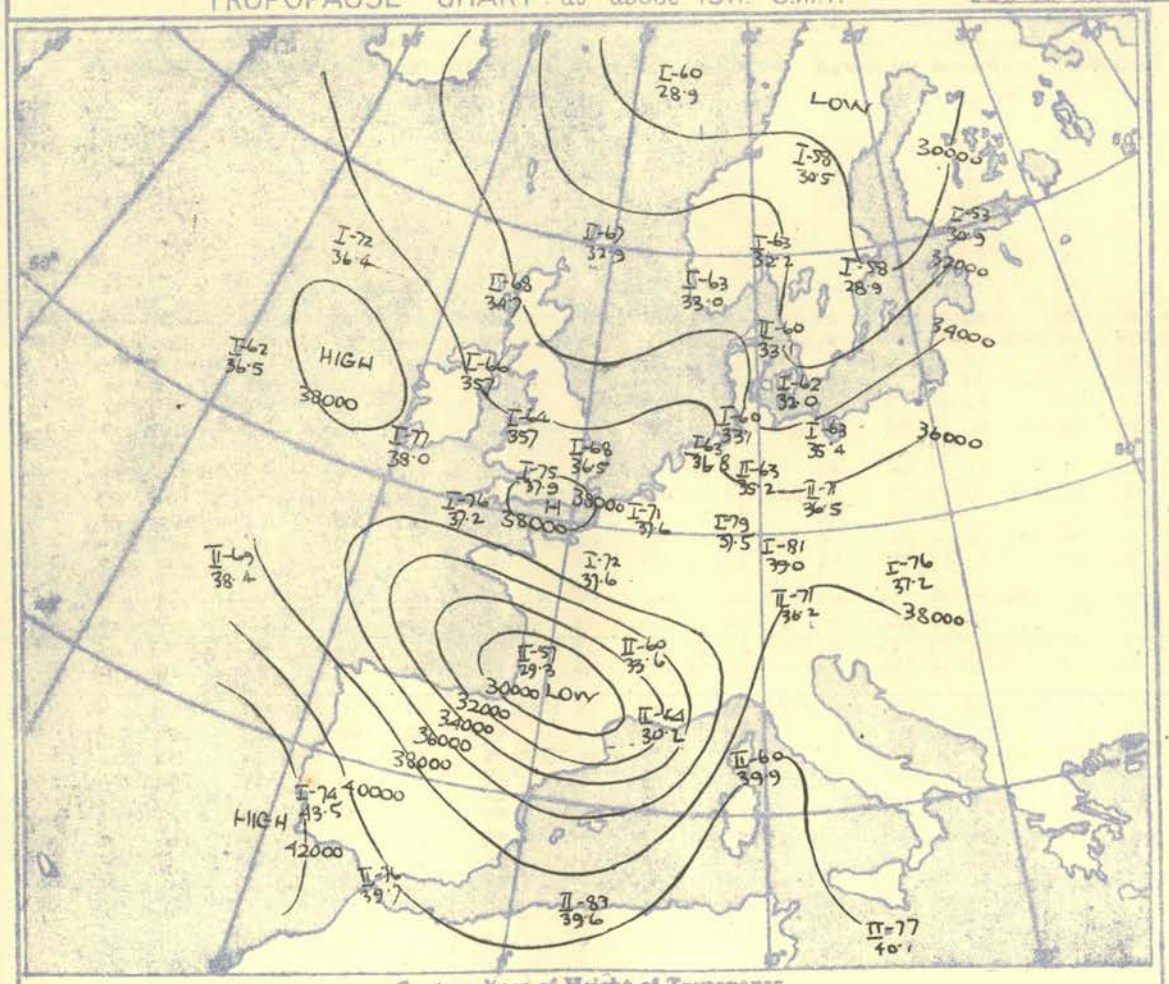
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.





The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Little change in thermal pattern but the main ridge was tending to become weaker in the south east leaving the main centre over Greenland.

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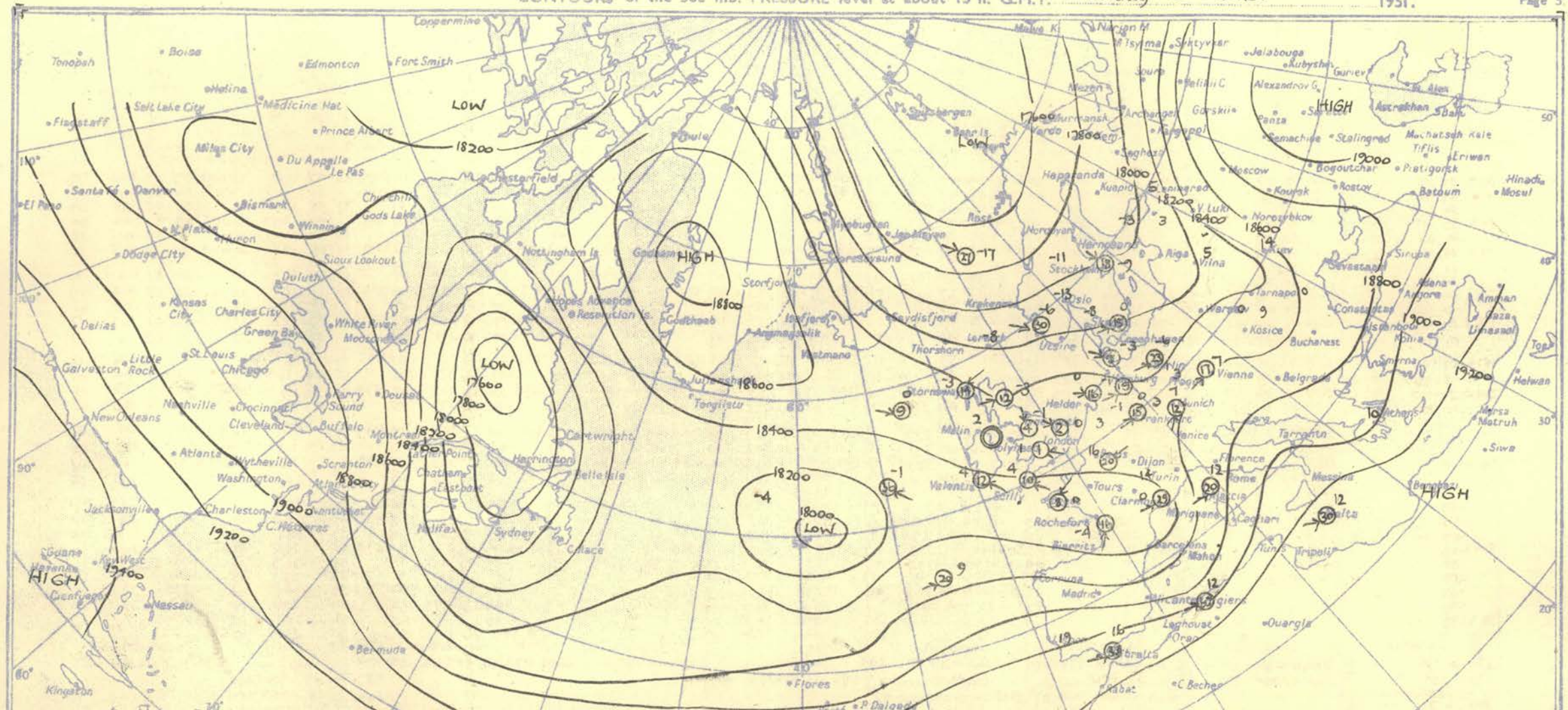
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Friday 8th June. 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Friday 8th June 1951.

Clark's Projection Scale 1 : 4 × 10⁷ along meridian at 55° N.
Statute Miles 0 1 2 3 4 500

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Friday 8th June 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

LERWICK

Pressure	15h G.M.T.	21h G.M.T.
Time		
M.S.L.	1016·6 mb	1015·4 mb
Surf Pressing	1006·5 mb	1005·3 mb
	905	900

Pressure mb	15h Height ft./100	15h Temp. °F.	15h Dew °F.	15h Wind Dir. °	15h Wind Vel. knots	21h Height ft./100	21h Temp. °F.	21h Dew °F.	21h Wind Dir. °	21h Wind Vel. knots
Surf	02·7	49	35			02·7	43	37	350	06
1000	4·4	47	34			4·1	42	35	313	09
950		39	30				36	30	304	13
900	32·5	32	27			32·1	32	28	302	15
850		30	26				26	18	301	15
800	63·3	28	20			62·7	26	12	304	17
750		24	17				22	08	303	21
700	97·7	20	02			97·0	18	05	299	22
650		16	03				13	05	295	25
600	136·8	09	-09			135·8	07	00	290	27
550		01	-15				01	-05	286	28
500	181·6	-08	-20			180·6	-07	-18	286	27
450		-18	-26				-18	-31	287	32
400	234·0	-31	-40			233·2	-29	-43	294	34
350		-40	-60				-42		295	35
300	298·1	-55				297·2	-57		294	40
250		-64					-70		293	44
200	384·3	-54				383·0	-57		291	39
170		-52					-52		289	24
150		-54					-54		290	21
130		-57					-57		293	20
110		-55					-58		318	19
100	534·1	-56				532·5	-58		315	10
90		-56					-58			
80		-54								
70		-51								
60		-49								
	(53 mb)	-49								

Inversion 811 mb 27°–800 mb 28°; 870 .. 29°–860 .. 31°
Isothermal 800 – 771 mb 28°; 377 – 360 .. 38°

Tropopause: I 260 mb – 67°, 32,900'

STORNOWAY

Pressure	15h G.M.T.	21h G.M.T.
Time		
M.S.L.	1016·7 mb	1015·0 mb
Surf Pressing	1015·1 mb	1013·4 mb
	790	770

Pressure mb	15h Height ft./100	15h Temp. °F.	15h Dew °F.	15h Wind Dir. °	15h Wind Vel. knots	21h Height ft./100	21h Temp. °F.	21h Dew °F.	21h Wind Dir. °	21h Wind Vel. knots
Surf	00·4	52	39	030	15	00·4	47	40	040	15
1000	4·6	48	38			4·0	46	39	047	20
950		43	26	036	13		41	31	044	10
900	32·8	41	17	CALM		32·3	39	20	013	05
850		40	-03	"			36	23	309	09
800	64·2	38	-14	"		63·6	34	11	271	05
750		33	-12	"			30	-04	267	06
700	99·3	28	-05	031	05	98·5	24	-06	258	08
650		21	-09	039	09		19	-11	248	10
600	138·7	12	-17	037	12	137·8	12	-15	259	16
550		05	-28	040	12		04	-20	273	20
500	183·9	-03	-34	040	14	182·9	-05	-25	277	21
450		-15	-42	035	15		-12	-30	300	24
400	236·9	-25	-50	031	18	235·8	-28	-44	308	22
350		-37	-57	030	19		-41		304	16
300	301·6	-51		017	3	300·2	-54		298	19
250		-67					-70		300	18
200	388·2	-53				386·0	-56		299	14
170		-54					-54		313	08
150		-55					-54		320	08
130							-57		339	09
110							-55		315	05
100						533·4	-57		279	06
90							-56		270	07
80							-55		266	07
70							-55		266	05
60										

Inversion 950 mb 43°–942 mb 44°; 900 .. 41°–883 .. 42°
Isothermal 800 – 764 mb 37°

Tropopause: I 244 mb – 68°, 34,700'

LEUCHARS

Pressure	15h G.M.T.	21h G.M.T.
Time		
M.S.L.	1016·8 mb	1015·4 mb
Surf Pressing	1016·0 mb	1014·6 mb
	719	753

Pressure mb	15h Height ft./100	15h Temp. °F.	15h Dew °F.	15h Wind Dir. °	15h Wind Vel. knots	21h Height ft./100	21h Temp. °F.	21h Dew °F.	21h Wind Dir. °	21h Wind Vel. knots
Surf	00·2	55	39	110	05	00·2	49	43	090	06
1000	4·6	48	34	103	09	4·1	47	43	080	05
950		40	31	098	10		41	39	070	07
900	32·8	37	20	068	09	32·3	37	30	066	09
850		40	-08	047	07		41	15	056	05
800	64·2	37	04	066	08	63·6	36	08	025	04
750		35	02	050	05		31	06	L.V	
700	99·4	30	-04	062	06	98·6	27	00	248	04
650		24	-13	285	03		21	-07	267	07
600	139·2	17	-19	268	06	138·1	14	-15	267	12
550		08	-24	270	06		05	-23	274	13
500	184·6	-03	-33	278	12	183·3	-09	-29	281	14
450		-15	-42	280	14		-13	-36	291	18
400	237·7	-23	-49	291	14	236·3	-26	-45	295	23
350		-35	-58	304	17		-39	-51	300	22
300	302·5	-52		314	29	300·8	-52		298	26
250		-63		308	29		-65		307	35
200	389·1	-55		298	19	386·9	-58		293	26
170		-55		284	15		-56		298	20
150		-57		297	12		-58		289	12
130		-57		306	12		-60		289	12
110		-55		296	08		-60		292	14
100	538·6	-55		299	09	535·3	-60		290	12
90		-55		309	14		-59		285	11
80		-49		276	07		-58		293	11
70		-48		293	08		-56			
60		-47								

Inversion 905 mb 36°–874 mb 42°
Isothermal 800 – 764 mb 37°

Tropopause: II 266 mb – 63°, 32,800'

ALDERGROVE

Pressure	15h G.M.T.	21h G.M.T.
Time		
M.S.L.	1013·9 mb	1013·1 mb
Surf Pressing	1004·4 mb	1003·4 mb
	697	727

Pressure mb	15h Height ft./100	15h Temp. °F.	15h Dew °F.	15h Wind Dir. °	15h Wind Vel. knots	21h Height ft./100	21h Temp. °F.	21h Dew °F.
Surf	02·6	59	42	100	12	02·6	55	38
1000	3·8	58	40			3·6	54	
950		46	35	095	15		48	
900	32·4	43	20	101	14		42	
850		46	-06	102	12		42	
800	64·1	43	-24	096	08	63·8	39	
750		38	-14	103	07		35	
700	99·5	33	-27	102	06	99·1	28	
650		25	-31	110	05		22	
600	139·4	21	-40	141	02	138·6	15	
550		12	-46	L.V			09	
500	185·3	07	-54	"		184·0	04	
450		-07	-50	"			-01	
400	239·2	-17	-59	318	13	237·8	-20	
350		-32	-59	310	22		-32	
300	309·8	-45		323	29	303·0	-46	
250		-62		321	36		-63	
200	391·7	-55		301	13	390·2	-58	
170		-53		310	11		-58	
150		-52		266	08		-58	
130		-54		280	11		-58	
110		-54		295	11		-58	
100	541·7	-52		298	09	539·1	-58	
90		-50		298	09		-58	
80		-50		290	09		-58	
70		-49		268	06		-58	
60								

Inversion 908 mb 42°–882 mb 47°
Isothermal 918 – 908 mb 42°

Tropopause: I 235 mb – 66°, 35,700'

LIVERPOOL

Pressure	15h G.M.T.	21h G.M.T.
Time		
M.S.L.	1011·6 mb	1011·6 mb
Surf Pressing	1009·6 mb	1009·6 mb
	705	700

Pressure mb	15h Height ft./100	15h Temp. °F.	15h Dew °F.	15h Wind Dir. °	15h Wind Vel. knots	21h Height ft./100	21h Temp. °F.	21h Dew °F.	21h Wind Dir. °	21h Wind Vel. knots
Surf	00·6	62	39	070	15	00·8	56	41	100	10
1000	3·2	60	38	076	18	3·2	56	41	090	18
950		52	34	086	14		50	38	098	13
900	32·1	43	29	097	12	31·9	44	33	094	08
850		47	15	100	11		44	24	036	05
800	63·7	43	00	090	09	63·6	41	15	020	05
750		39	-04	079	05		35	29	003	04
700	99·1	31	-10	053	05	98·9	32	-16	353	03
650		26	-14	057	04		25	-18	327	03
600	138·9	18	-21	037	04	138·7	18	-27	319	02
550		09	-29	005	03		09	-32	312	03
500	184·4	-01	-38	017	04	184·3	00	-42	303	05
450		-10	-45	043	08		-09	-51	302	08
400	239·2	-17	-59	318	13	238·8	-21	-54	322	13
350		-34	-57	328	15		-35	-58	318	24
300	303·0	-49		322	23	302·9	-49		319	34
250		-60		303	27		-64		320	40
200	389·7	-59		293	16	388·9	-62		294	24
170		-56		281	12		-60		276	15
150		-55		286	09		-61		293	15
130		-56		283	13		-61		295	14
110		-55		287	12		-61		284	12
100	539·1	-53		307	11	536·5	-60			
90		-53		284	06		-59			
80		-53		278	08					
70		-48		276	11					
60		-50		269	15					
		-49		293	11					
		-46		313	07					
		-41								

Inversion 886 mb 41°–850 mb 49°

Tropopause: I 233 mb – 64°, 35,700'

DOWNHAM MARKET

Pressure	15h G.M.T.	21h G.M.T.
Time		
M.S.L.	1011·7 mb	1011·4 mb
Surf Pressing	1006·7 mb	1006·9 mb
	740	695

Pressure mb	15h Height ft./100	15h Temp. °F.	15h Dew °F.	15h Wind Dir. °	15h Wind Vel. knots	21h Height ft./100	21h Temp. °F.	21h Dew °F.	21h Wind Dir. °	21h Wind Vel. knots
Surf	01·2	60	40	015	10	01·2	51	44	015	08
1000	3·1	58	39			3·1	50	43		
950		47	34	042	15		44	39	048	11
900	31·7	40	30	052	13	31·6	46	20	058	11
850		43	10	069	08		45	-16	056	12
800	63·2	41	-03	059	07	63·3	42	-25	050	11
750		39	-04	049	05		36	-23	046	04
700	98·4	29	-10	046	05	98·6	31	-26	037	06
650		26	-19	047	05		26	-36	016	05
600	138·2	19	-25	049	04	138·5	17	-43	341	05
550		09	-33	052	03		08	-47	323	06
500	183·8	00	-40	323	02	183·9	-01	-56	322	04
450		-10	-48	295	03		-13	-54	302	07
400	237·2	-23	-57	257	08	237·2	-25	-58	286	15
350		-35	-69	276	22		-40	-60	285	20
300	302·2	-49		260	42	301·8	-55		288	30
250		-64		262	43		-65		281	30
200	388·3	-61		269	18	386·6	-71		284	21
170		-61		282	15		-66		281	15
150		-59		275	14		-66		285	14
130		-60		278	14		-65		287	16
110		-58		286	14		-67		277	15
100	536·4	-57		282	12	534·9	-67		270	11
90		-56		286	12		-67		271	15
80							-65		291	06

Inversion 890 mb 38°–863 mb 44°

Tropopause: I 224 mb – 68°, 36,500'

LARKHILL

Pressure	15h G.M.T.	21h G.M.T.
Time		
M.S.L.	1008·9 mb	1009·9 mb
Surf Pressing	998·3 mb	994·0 mb
	700	710

Pressure mb	15h Height ft./100	15h Temp. °F.	15h Dew °F.	15h Wind Dir. °	15h Wind Vel. knots	21h Height ft./100	21h Temp. °F.	21h Dew °F.	21h Wind Dir. °	21h Wind Vel. knots
Surf	04·4	63	45	055	10	04·4	54	44	040	05
1000	2·3					2·7				
950		55	38	061	11		55	35	049	15
900	31·5	47	33	064	08	31·7	49	37	065	07
850		46	27	069	09		43	28	031	02
800	63·3	43	25	072	08	63·5	42	26	302	03
750		37	16	066	07		36	20	357	05
700	98·8	32	07	053	07	98·8	31	11	016	05
650		25	01	035	07		24	03	035	05
600	138·6	17	-06	045	05	138·5	15	-01	015	04
550		07	-14	093	04		07	-04	317	03
500	184·2	01	-15	110	01	183·7	-02	-13	304	05
450		-07	-22	271	11		-10	-29	300	14
400	237·9	-20	-39	262	08	237·2	-22	-42	294	20
350		-31	-50	276	15		-36	-55	300	21
300	303·6	-44		268	19	302·2	-51		302	24
250		-62		245	16		-70		282	20
200	389·5	-68		283	09	386·9	-68		284	12
170		-60		280	07		-63		285	14
150		-59		276	10		-64		289	17
140		-57		280	12		-64		284	19
130		-57		281	14		-64		277	14
120	537·8	-57		275	14	534·8	-63		276	15
110		-58		286	10		-62			
100		-58		263	13					
90		-58		267	11					
80		-58		283	15					
70		-57		265	10					
60		-57		286	15					
		-56		282	09					
	(55 mb)	-55		278	10					

Inversion (48 mb) 47°–(35 mb) 55°

Tropopause: I 210 mb – 75°, 37,800'

CAMBORNE

Pressure	15h G.M.T.	21h G.M.T.
Time		
M.S.L.	1008·9 mb	1009·0 mb
Surf Pressing	998·1 mb	998·4 mb
	722	700

Pressure mb	15h Height ft./100	15h Temp. °F.	15h Dew °F.	15h Wind Dir. °	15h Wind Vel. knots	21h Height ft./100	21h Temp. °F.	21h Dew °F.	21h Wind Dir. °	21h Wind Vel. knots
Surf	02·9	53	47	115	15	02·9	52	50	157	06
1000	2·4					2·4				
950		47	45	121	22		52	50	151	16
900	31·0	50	49	120	21	31·3	48	46	140	16
850		45	42	129	18		46	42	124	18
800	62·9	44	33	143	20	63·1	42	36	122	22
750		37	27	123	23		38	23	123	20
700	98·4	29	23	113	25	98·5	32	03	122	19
650		23	18	116	24		26	19	138	19
600	138·1	18	14	122	21	138·4	18	10	159	13
550		14	05	140	12		13	03	163	08
500	184·1	04	-07	131	10	184·3	03	-07	159	08
450		-08	-14	136	17		-07	-17	187	12
400	237·9	-18	-26	113	24	238·1	-19	-29	181	15
350		-32	-43	126	09		-34	-49	174	13
300	303·3	-49		116	10	303·6	-46		134	15
250		-67		112	14		-62		132	12
200	388·8	-62		L.V		389·4	-73		168	07
170		-57		286	07		-62		228	05
150		-57		290	09		-59		249	05
130		-56		263	15		-58		261	10
110		-57		281	13		-58		275	09
100	537·8	-58		286	10	537·0	-58		269	10
90		-58		267	11		-56		273	11
80		-58		283	15		-56		271	12
70		-57		265	10		-55		273	09
60		-57		286	15		-53		266	06
		-56		282	09	(55 mb)	-56			
		-55		278	10					

Inversion 937 mb 45°–900 mb 50°; 600 .. 18°–585 .. 19°
Isothermal 858 – 811 mb 45°

Tropopause: I 217 mb – 76°, 37,200'

VALENTIA

Pressure	15h G.M.T.	21h G.M.T.
Time		
M.S.L.	1009·6 mb	
Surf Pressing	1008 mb	
	730	

Pressure mb	15h Height ft./100	15h Temp. °F.	15h Dew °F.	15h Wind Dir. °	15h Wind Vel. knots
Surf	00·3	57	52	290	04
1000	2·6	56	51	310	04
950		51	44	038	04
900	31·5	49	41	066	06
850		47	34	091	18
800	63·3	41	30	105	18
750		34	27	113	12
700	98·6	28	25	108	09
650		22	19	108	08
600	138·3	16	01	107	12
550		08	-05	111	17
500	184·0	04	-06	128	12
450		-06	-21	130	11
400	238·0	-17	-29	127	11
350		-30	-46	120	10
300	303·6	-46		134	15
250		-62		132	12
200	389·4	-73		168	07
170		-62		228	05
150		-59		249	05
130		-58		261	10
110		-58		275	09
100	537·0	-58		269	10
90		-56		273	11
80		-56		271	12
70		-55		273	09
60		-53		266	06
		-56			

Isothermal 875 – 850 mb 47°

Tropopause: I 210 mb – 77°, 38,000'

LERWICK

Pressure	21h G.M.T.
Time	
M.S.L.	1015·4 mb
Surf Pressing	1005·3 mb
	900

Pressure mb	21h Height ft./100	21h Temp. °F.	21h Dew °F.	21h Wind Dir. °	21h Wind Vel. knots
Surf	02·7	43	37	350	06
1000	4·1	42	35	313	09
950		36	30	304	13
900	32·1	32	28	302	15
850		26	18	301	15
800	62·7	26	12	304	17
750		22	08	303	21
700	97·0	18	05	299	22
650		13	05	295	25
600	135·8	07	00	290	27
550		01	-05	286	28
500	180·6	-07	-18	286	27
450		-18	-31	287	32
400	233·2	-29	-43	294	34
350		-42		295	35
300	297·2	-57		294	40
250		-70		293	44
200	383·0	-57		291	39
170		-52		289	24
150		-54		290	21
130		-57		293	20
110		-58		318	19
100	532·5	-58		315	10
90		-58			

Inversion 863 mb 25°–830 mb 28°

Tropopause: I 250 mb – 70°, 33,600'

STORNOWAY

Pressure	21h G.M.T.
Time	
M.S.L.	1015·0 mb
Surf Pressing	1013·4 mb
	770

Pressure mb	21h Height ft./100	21h Temp. °F.	21h Dew °F.	21h Wind Dir. °	21h Wind Vel. knots
Surf	00·4	47	40	040	15
1000	4·0	46	39	047	20
950		41	31	044	10
900	32·3	39	20	013	05
850		36	23	309	09
800	63·6	34	11	271	05
750		30	-04	267	06
700	98·5	24	-06	258	08
650		19	-11	248	10
600	137·8	12	-15	259	16
550		04	-20	273	20
500	182·9	-05	-25	277	21
450		-12	-30	300	24
400	235·8	-28	-44	308	22
350		-41		304	16
300	300·2	-54		298	19
250		-70		300	18
200	386·0	-56		299	14
170		-54		313	08
150		-54		320	08
130		-57		339	09
110		-55		315	05
100	533·4	-57		279	06
90		-56		270	07
80		-55		266	07
70		-55		266	05
60					

Isothermal 957 – 922 mb 41°

Tropopause: I 247 mb – 71°, 34,300'

LEUCHARS

Pressure	21h G.M.T.
Time	
M.S.L.	1015·4 mb
Surf Pressing	1014·6 mb
	753

Pressure mb	21h Height ft./100	21h Temp. °F.	21h Dew °F.	21h Wind Dir. °	21h Wind Vel. knots
Surf	00·2	49	43	090	06
1000	4·1	47	43	080	05
950		41	39	070	07
900	32·3	37	30	066	09
850		41	15	056	05
800	63·6	36	08	025	04
750		31	06	L.V	
700	98·6	27	00	248	04
650		21	-07	267	07
600	138·1	14	-15	267	12
550		05	-23	274	13
500	183·3	-09	-29	281	14
450		-13	-36	291	18
400	236·3	-26	-45	295	23
350		-39	-51	300	22
300	300·8	-52		298	26
250		-65		307	35
200	386·9	-58		293	26
170		-56		298	20
150		-58		289	12
130		-60		289	12
110		-60		292	14
100	535·3	-60		290	12
90		-59		285	11
80		-58		293	11
70		-56			
60					

Inversion 908 mb 36°–968 mb 42°

Tropopause: II 252 mb – 65°, 33,600'

ALDERGROVE

Pressure	21h G.M.T.
Time	
M.S.L.	1013·1 mb
Surf Pressing	1003·4 mb
	727

Pressure mb	21h Height ft./100	21h Temp. °F.	21h Dew °F.	21h Wind Dir. °	21h Wind Vel. knots
Surf	02·6	55	38	100	06
1000	3·6	54			
950		48		108	11
900	32·2	43		106	10
850		42		104	11
800	63·8	39		102	09
750		35		114	03
700	99·1	28		115	03
650		22		174	03
600	138·6	15		212	07
550		09		219	07
500	184·1	00		230	07
450		-10		280	10
400	237·6	-20		287	14
350		-32		294	20
300	302·9	-46		304	30
250		-63		310	29
200	388·9	-62		293	18
170		-60			
150		-61			
130		-61			
110		-61			
100	536·5	-60			
90	(95 mb)	-59			

Inversion 880 mb 41°–863 mb 43°

Tropopause: NR.

LIVERPOOL

Pressure	21h G.M.T.
Time	
M.S.L.	1011·6 mb
Surf Pressing	1009·6 mb
	700

Pressure mb	21h Height ft./100	21h Temp. °F.	21h Dew °F.	21h Wind Dir. °	21h Wind Vel. knots
Surf	00·6	56	41	100	10
1000	3·2	56	41	090	18
950		50	38	098	13
900	31·9	44	33	094	08
850		44	24	036	05
800	63·6	41	15	020	05
750		35	29	003	04
700	98·9	32	-16	353	03
650		25	-18	327	03
600	138·7	18	-27	319	02
550		09	-32	312	03
500	184·3	00	-42	303	05
450		-09	-51	302	08
400	238·8	-21	-54	322	13
350		-35	-58	318	24
300	302·9	-49		319	34
250		-64		320	40
200	388·9	-62		294	24
170		-60		276	15
150		-61		293	15
130		-61		295	14
110		-61		284	12
100	536·5	-60			
90	(95 mb)	-59			

Inversion 872 mb 41°–847 mb 46°

Isothermal 1010 – 992 mb 56°

Tropopause: I 222 mb – 71°, 36,800'

DOWNHAM MARKET

Pressure	21h G.M.T.
Time	
M.S.L.	1011·4 mb
Surf Pressing	1006·9 mb
	695

| Pressure mb | 21h Height ft./100 | 21h Temp. °F. | 21h

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RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

03h. G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Time	03h.	03h.	03h.	03h.	03h.	03h.	03h.	03h.	03h.
M.S.L.	1014.2 mb	1013.7 mb	1014.2 mb	1011.6 mb	1012.0 mb	1011.1 mb	1011.3 mb	1009.1 mb	1007.4 mb
Surf	1004.0 mb	1012.1 mb	1013.3 mb	1001.9 mb	1009.9 mb	1006.6 mb	995.0 mb	998.5 mb	1006 mb
Freezing	930 mb	815 mb	792 mb	750 mb	715 mb	740 mb	734 mb	693 mb	740 mb

Pressure mb	Height ft./100	°F.	°F.	Dir. °	Vel. knots
Lerwick					
Surf	02·7	39	37	360	01
1000	03·7	38	36		
950		34	30	344	12
900	31·6	29	26	338	11
850		24	16	330	09
800	62·1	21	08	311	14
750		22	10	302	19
700	96·4	16	08	297	22
650		09	00	285	27
600	135·0	05	-05	282	34
550		-03	-15	280	35
500	179·4	-10	-26	280	38
450		-20	-35	280	45
400	231·6	-31	-43	276	45
350		-45		261	53
300	295·2	-58		279	59
250		-70		283	59
200	381·4	-54		286	36
170		-52		283	29
150		-51		278	23
130		-56		313	21
110		-57		298	12
100	531·4	-57		309	14
90		-56		320	12
80		-55		298	09
70	(72 mb)	-54			
60					

Inversion 850 mb 24° - 839 mb 27°

Isothermal 811 - 768 mb 24° 635 - 616 mb 07°

Pressure mb	Height ft./100	°F.	°F.	Dir. °	Vel. knots
Stornoway					
Surf	00·4	48	41	080	03
1000	03·7	45	39		
950		41	34	071	12
900	31·9	37	32	101	07
850		34	24	121	10
800	62·9	31	07	037	15
750		27	-15	274	11
700	97·6	21	-14	276	10
650		15	-15	275	13
600	136·6	08	-19	273	14
550		01	-25	277	19
500	181·2	-07	-32	278	23
450		-19	-37	276	24
400	233·8	-28	-46	281	24
350		-43		284	30
300	297·6	-58		286	42
250		-68		290	37
200	383·0	-57		294	32
170					
150					
130					
110					
100					
90					
80					
70					
60					

Isothermal 865 - 840 mb 34° 790 - 770 mb 30°

Pressure mb	Height ft./100	°F.	°F.	Dir. °	Vel. knots
Leuchars					
Surf	00·2	43	41	020	03
1000	03·8	42	41	037	05
950		38	35	058	06
900	31·9	35	31	094	07
850		36	14	114	07
800	62·9	33	09	171	07
750		29	09	220	07
700	97·6	23	02	260	09
650		16	-05	278	10
600	136·7	11	-10	278	11
550		02	-17	281	11
500	181·6	-08	-26	281	11
450		-18	-35	274	21
400	234·1	-30	-42	285	27
350		-45		286	44
300	297·6	-59		294	46
250		-70		295	40
200	382·8	-59		291	26
170		-60		284	21
150	444·0	-63		286	13
130		-61		294	12
110		-62		297	10
100	580·0	-62		283	09
90		-61		275	09
80		-59		304	08
70		-56			
60					

Inversion 922 mb 34° - 850 mb 36°

Pressure mb	Height ft./100	°F.	°F.	Dir. °	Vel. knots
Aldergrove					
Surf	02·6	46	39	115	10
1000	03·1				
950		48	40	122	19
900	31·6	43	34	124	13
850		40	11	132	07
800	63·1	38	06	140	07
750		32	04	174	06
700	98·2	27	-02	192	08
650		22	-07	224	10
600	137·7	14	-15	235	10
550		06	-23	236	09
500	183·0	-02	-27	228	15
450		-10	-33	255	16
400	236·4	-20	-42	268	20
350		-32	-59	284	16
300	301·8	-47		289	21
250		-64		289	23
200	387·6	-64		273	21
170		-59		278	15
150		-58		272	14
130		-57		282	14
110		-60		283	14
100	535·6	-60		288	14
90		-59		274	10
80					
70					
60					

Inversion 1002 mb 46° - 950 mb 48° 860 mb 39° - 843 mb 41°

Isothermal 843 - 832 mb 41°

Pressure mb	Height ft./100	°F.	°F.	Dir. °	Vel. knots
Liverpool					
Surf	00·6	42	39	CALM	
1000	03·2	44	40	110	15
950		44	37	128	12
900	31·6	38	32	144	08
850		44	15	144	03
800	63·0	40	07	163	03
750		36	04	248	02
700	98·3	31	-02	250	03
650		24	-09	236	05
600	138·1	17	-15	245	08
550		07	-23	259	08
500	183·5	-01	-31	272	10
450		-10	-39	277	15
400	236·9	-21	-50	280	21
350		-34	-57	292	21
300	302·1	-49		292	27
250		-67		292	26
200	387·3	-70		278	23
170		-63		278	20
150		-58		272	14
130		-57		282	14
110		-60		283	14
100	534·1	-61		278	18
90		-62		287	19
80		-61		287	15
70		-61			
60					

Inversion 1010 mb 43° - 986 mb 48° 874 mb 38° - 848 mb 45°

Isothermal 904 - 874 mb 38°

Pressure mb	Height ft./100	°F.	°F.	Dir. °	Vel. knots
Downham Market					
Surf	01·2	47	46	010	08
1000	03·0	47	46		
950		51	42	074	11
900	31·6	45	36	100	10
850		41	20	140	06
800	63·1	40	-23	CALM	
750		33	-26	CALM	
700	98·2	30	-33	CALM	
650		23	-38	CALM	
600	137·8	15	-42	268	05
550		06	-50	276	08
500	183·1	-03	-57	288	10
450		-13	-54	298	14
400	236·2	-24	-57	262	21
350		-37	-60	308	30
300	300·9	-51		309	35
250		-67		307	37
200	386·3	-67		284	26
170		-62		281	19
150	447·2	-62		281	16
130		-63		277	15
110		-62		286	19
100	533·0	-61		287	23
90		-61		278	15
80		-62			
70		-61			
60					

Inversion 1007 mb 47° - 961 mb 52° 864 mb 40° - 825 mb 44°

Isothermal 728 - 700 mb 30°

Pressure mb	Height ft./100	°F.	°F.	Dir. °	Vel. knots
Larkhill					
Surf	04·4	42	40	CALM	
1000	03·0				
950		50	40	135	06
900	31·5	46	38	235	06
850		42	31	267	07
800	63·2	42	16	286	03
750		34	15	246	03
700	98·5	30	07	287	02
650		24	00	232	03
600	138·3	16	-02	230	07
550		08	-12	249	07
500	183·7	01	-20	266	10
450		-08	-33	289	15
400	237·5	-20	-38	286	22
350		-33	-54	281	17
300	302·7	-49		275	17
250		-66		272	16
200	387·8	-70		272	18
150		-60		274	16
130		-58		261	17
110		-60		268	17
100	448·8	-61		260	18
90		-61		272	21
80		-60		282	20
70		-59		288	17
60		-58		281	14
	643·9	-57		286	15

Inversion 995 mb 42° - 950 mb 50° 850 mb 42° - 814 mb 44°

Pressure mb	Height ft./100	°F.	°F.	Dir. °	Vel. knots
Camborne					
Surf	02·9	53	52	180	05
1000	02·5				
950		50	50	200	21
900	31·2	44	44	192	18
850		42	42	192	15
800	62·8	38	34	194	13
750		33	32	189	16
700	98·1	33	16	180	15
650		27	02	189	16
600	138·1	21	-09	182	16
550		11	-09	190	16
500	183·9	03	-01	184	19
450		-05	-11	178	21
400	237·9	-16	-26	179	23
350		-29	-44	178	26
300	303·9	-45		180	27
250		-60		129	27
200	390·4	-68		250	27
150		-64		259	22
130		-58		261	17
110		-58		264	28
100	(23 mb)	-58			

Inversion 864 mb 41° - 850 mb 42°

Isothermal 750 - 700 mb 33°

Pressure mb	Height ft./100	°F.	°F.	Dir. °	Vel. knots
Valentia					
Surf	00·3	54	46	120	06
1000	02·0	53	45	113	07
950		48	43	084	10
900	30·7	44	41		
850		42	39		
800	62·3	37	33		
750		33	29		
700	97·3	27	23		
650		20	16		
600	136·8	14	08		
550		07	-11		
500	182·2	-03	-21		
450		-12	-25		
400	235·4	-24	-33		
350		-38	-47		
300	299·8	-53			
250		-63			
200	385·9	-59			
170		-57			
150		-60			
130		-60			
110		-62			
100	533·9	-61			
90		-61			
80					
70					
60					

Isothermal 910 - 877 mb 44°

	Pressure mb
	Surf
	1000
	950
	900
	850
	800
	750
	700
	650
	600
	550
	500
	450
	400
	350
	300
	250
	200
	170
	150
	130
	110
	100
	90
	80
	70
	60

Tropopause: Lerwick I 250 mb - 70° 33,900'; Stornoway II 254 mb -68° 33,300'; Leuchars I 257 mb -71° 33,000'; Aldergrove I 216 mb -75° 37,100'; Liverpool I 220 mb -76° 36,800'; Downham Market I 230 mb -73° 35,800'; Larkhill I 213 mb -78° 37,500'; Camborne I 190 mb -70° 40,100'; Valentia I 258 mb -66° 33,300'

09h. G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	
Time	09h.	09h.	09h.	09h.	09h.	09h.	09h.	09h.	G.M.T.
M.S.L.	1013.4 mb	1012.5 mb	1012.8 mb	1009.9 mb	1010.2 mb	1011.0 mb	1010.5 mb	1009.1 mb	mb
Surf	1003.3 mb	1010.9 mb	1017.0 mb	1000.1 mb	1008.2 mb	1006.5 mb	994.7 mb	998.6 mb	mb
Freezing	921 mb	845 mb	800 mb	700 mb	707 mb	700 mb	729 mb	738 mb	mb

Pressure mb	Height ft./100	°F.	°F.	Dir. °	Vel. knots
Lerwick					
Surf	02·7	44	36	050	09
1000	03·6	43	35		
950		36	29	004	09
900	31·6	29	25	353	08
850		25	21	342	09
800	62·1	20	13	330	09
750		16	06	305	16
700	95·9	12	-02	294	19
650		09	-09	284	23
600	134·5	05	-19	283	27
550		-01	-24	281	32
500	179·0	-09	-27	271	36
450		-19	-30	267	45
400	231·4	-29	-40	271	50
350		-42		269	57
300	295·8	-54		268	64
250		-59		272	54
200	382·8	-49		279	33
170		-48		277	27
150		-49		275	25
130		-48		275	15
110		-52		278	13
100	534·7	-54		276	12
90		-52		282	10
80		-51		304	10
70		-50			
60		Isothermal			

Isothermal 796 - 692 mb 19°

Pressure mb	Height ft./100	°F.	°F.	Dir. °	Vel. knots
Stornoway					
Surf	00·4	48	39	040	18
1000	03·3	47	38		
950		39	30	050	15
900	31·5	37	24	088	10
850		38	24	CALM	
800	62·5	27	12	120	06
750		27	-35	046	05
700	97·1	22	-39	133	07
650		15	-36	277	13
600	136·2	10	-23	281	15
550		02	-13	273	19
500	181·0	-07	-29	275	25
450		-16	-32	276	29
400	233·7	-27	-39	279	36
350		-40	-53	275	35
300	298·1	-51		269	44
250		-63		274	37
200	384·9	-54		280	30
170		-48		276	22
150	447·8	-49		275	15
130		-51			
110					
100					
90					
80					
70					
60					

Inversion 800 mb 27° - 783 mb 30°

Isothermal 933 - 882 mb 37° 817 - 306 mb -50°

Pressure mb	Height ft./100	°F.	°F.	Dir. °	Vel. knots
Leuchars					
Surf	00·2	50	44	080	05
1000	03·5	49	43	061	06
950		39	35	080	06
900	31·7	33	29	101	06
850		36	08	128	05
800	62·8	32	04	205	03
750		29	05	276	07
700	97·6	26	02	260	09
650		20	-04	249	10
600	137·0	13	-13	258	18
550		05	-20	264	22
500	182·1	-06	-33	254	24
450		-15	-41	254	24
400	235·0	-24	-45	272	30
350		-33	-50	279	39
300	300·2	-47		277	47
250		-63		277	48
200	386·1	-66		278	35
170		-56		276	24
150	447·7	-55		275	20
130		-58		276	16
110		-58		271	19
100	534·9	-55		267	11
90		-56		267	09
80		-56		282	09
70		-54		282	07
60	645·3	-51		283	06
		-48			

Inversion 890 mb 32° - 855 mb 37°

Isothermal 755 - 730 mb 29°

Pressure mb	Height ft./100	°F.	°F.	Dir. °	Vel. knots
Aldergrove					
Surf	02·6	52	45	100	10
1000	02·6				
950		46	40	108	13
900	31·2	41	36	120	09
850		40	29	178	07
800	62·4	39	06	197	06
750		35	06	196	07
700	97·7	31	07	197	07
650		24	03	226	09
600	137·6	19	-01	228	12
550		12	-07	220	12
500	183·4	03	-21	218	12
450		-04	-23	236	16
400	237·4	-15	-37	214	14
350		-28	-52	212	13
300	303·5	-41		204	16
250		-56		206	14
200	390·1	-80		238	15
170		-63		245	11
150		-57		260	13
130		-56		266	15
110		-57		268	15
100	537·5	-57		270	15
90		-55		254	14
80		-57		266	14
70		-55		278	18
60					

Inversion 950 mb 46° - 925 mb 48° 823 mb 38° - 790 mb 49°

Pressure mb	Height ft./100	°F.	°F.	Dir. °	Vel. knots
Liverpool					
Surf	00·6	53	41		
1000	02·8	52	41		
950		44	34		
900	31·2	37	29		
850		43	18		
800	62·7	41	07		
750		36	01		
700	98·0	31	-04		
650		24	-10		
600	137·7	15	-14		
550		06	-23		
500	183·1	-01	-30		
450		-10	-39		
400	236·5	-21	-48		
350		-34	-57		
300	301·7	-50			
250		-67			
200	386·9	-64			
170		-56			
150		-58			

Inversion 878 mb 34° - 850 mb 43°

Isothermal 850 - 815 mb 43°

Pressure mb	Height ft./100	°F.	°F.	Dir. °	Vel. knots
Downham Market					
Surf	01·2	53	50	CALM	
1000	03·0				
950		47	47	110	06
900	31·7	47	42	142	05
850		41	34	172	06
800	63·4	43	-06	190	06
750		36	-20	203	07
700	98·8	32	-25	213	08
650		26	-36	220	12
600	138·6	17	-43	231	13
550		10	-48	246	10
500	184·2	01	-54	240	15
450		-09	-51	243	15
400	237·8	-20	-60	266	19
350		-33	-60	271	21
300	303·2	-48		268	23
250		-66		267	26
200	388·9	-63		257	21
150		-57		260	22
130		-55			
110					
100	452·4	-55			
90	(454)	-56			
80					
70					
60					

Inversion 811 mb 37° - 793 mb 39° 522 mb 6° - 513 mb 7°

Pressure mb	Height ft./100	°F.	°F.	Dir. °	Vel. knots
Larkhill					
Surf	04·4	52	48	140	02
1000	02·9				
950		48	45		
900	31·6	45	44		
850		41	40		
800	63·1	38	37		
750		34	33		
700	98·4	29	16		
650		25	19		
600	138·2	17	-13		
550		10	-05		
500	183·9	04	-06		
450		-05	-15		
400	237·9	-16	-25		
350		-28	-37		
300	303·8	-44			
250		-60			
200	390·5	-63			
150		-55			
130					
110					
100	452·4	-55			
90	(454)	-56			
80					
70					
60					

Inversion 811 mb 37° - 793 mb 39° 522 mb 6° - 513 mb 7°

For Winds See Page 3

Pressure mb	Height ft./100	°F.	°F.	Dir. °	Vel. knots
Camborne					
Surf	02·9	55	54	210	08
1000	02·5				
950		50	49	239	27
900	31·2	45	44	248	26
850		38	38	251	25
800	62·7	37	31	252	23
750		33	17	237	21
700	97·9	27	04	205	20
650		20	-13	188	22
600	137·3	14	-25	202	22
550		05	-42	216	21
500	182·5	-04	-50	213	21
450		-16	-57	198	24
400	235·3	-27	-59	194	34
350		-38	-59	171	36
300	300·0	-52		156	41
250		-55		181	28
200	387·7	-51		225	24
170		-52		241	18
150	450·3	-55		258	21
130		-55		257	20
110		-55		270	17
100	537·8	-54		262	13
90		-53			
80	(88 mb)	-52			
70					
60					

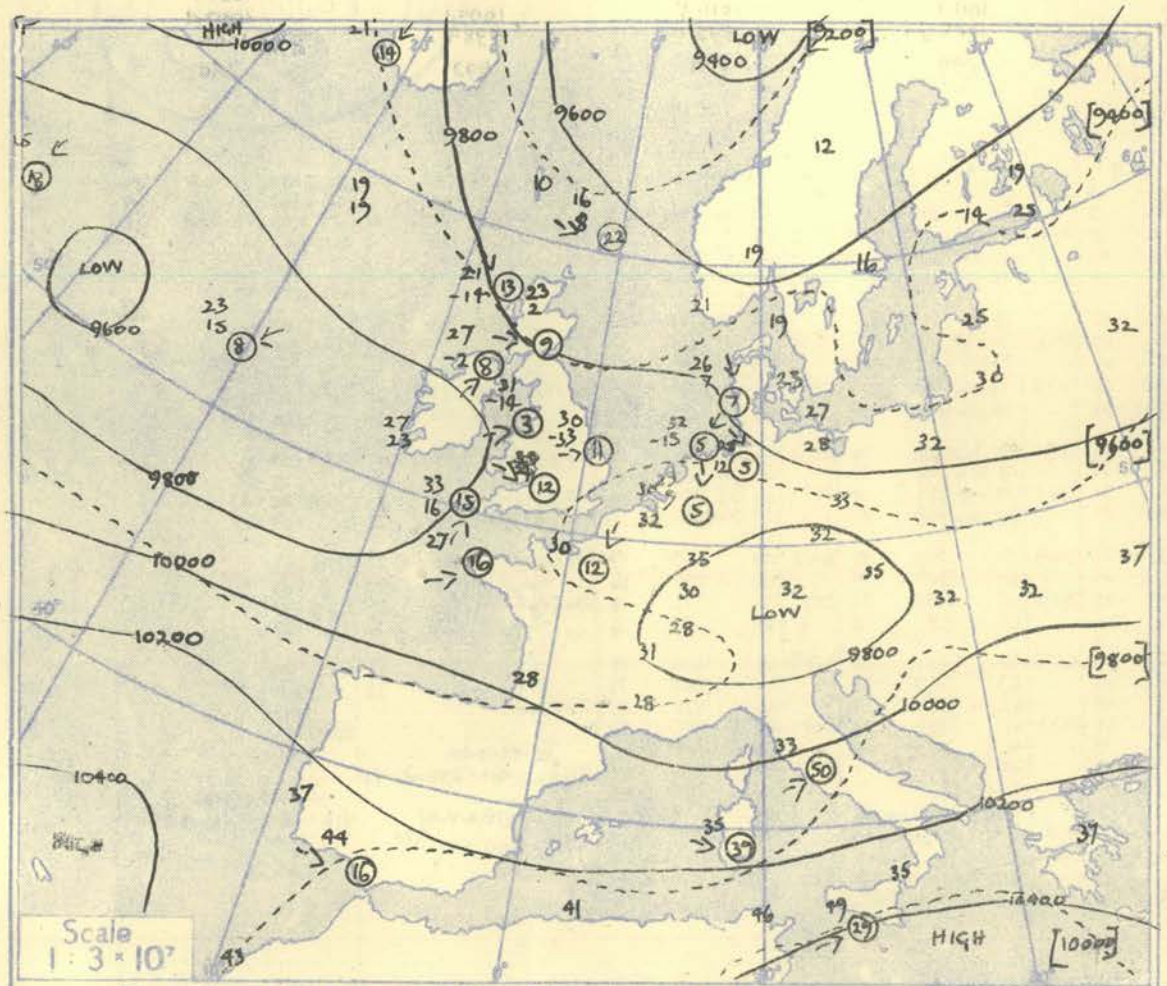
Isothermal 850 - 805 mb 38°

	Pressure mb
	Surf
	1000
	950
	900
	850
	800
	750
	700
	650
	600
	550
	500
	450
	400
	350
	300
	250
	200
	170
	150
	130
	110
	100
	90
	80
	70
	60

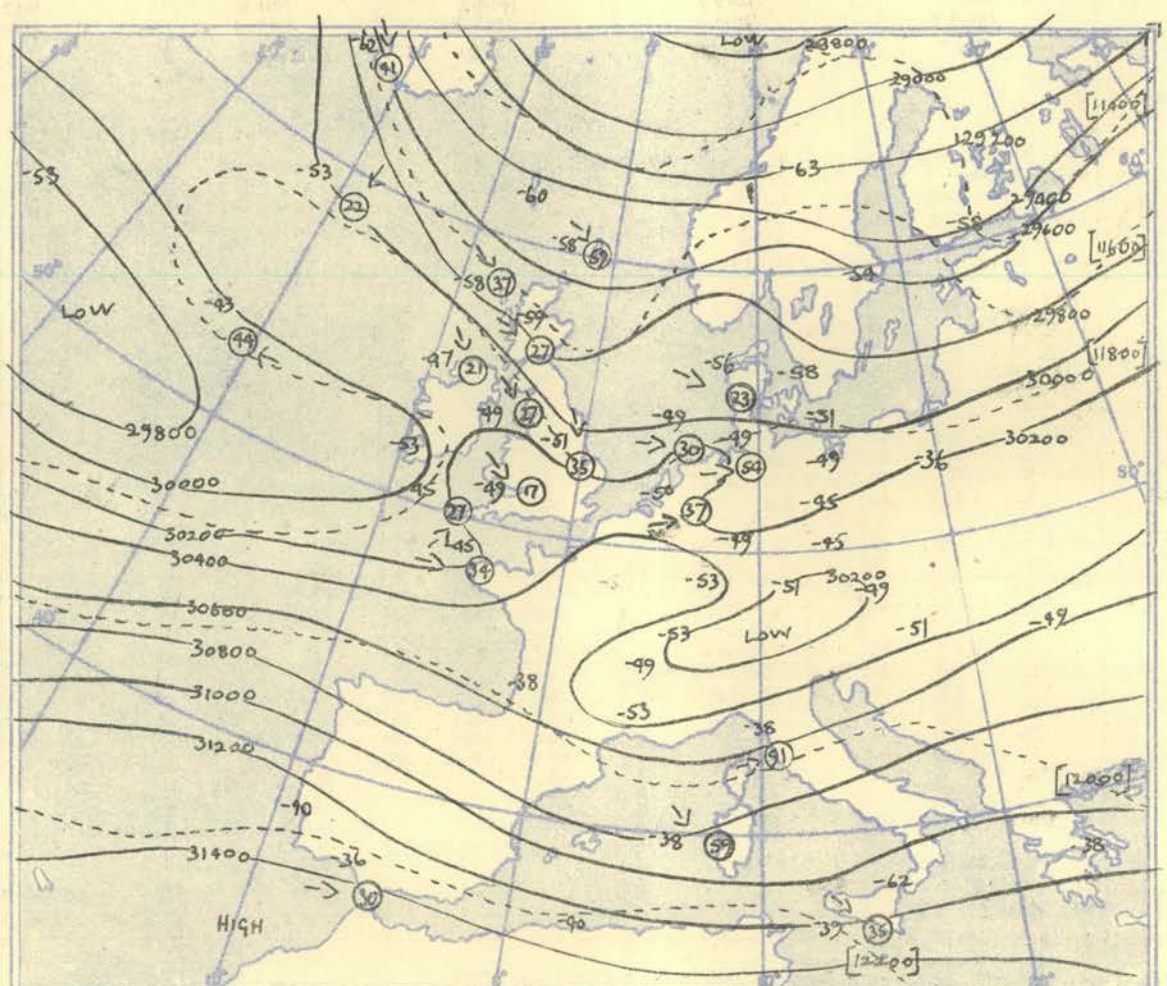
Tropopause: Lerwick I 263 mb - 82° 32,400'; Stornoway II 250 mb -63° 33,700'; Leuchars I 217 mb -74° 37,000'; Aldergrove I 195 mb - 82° 39,500'; Liverpool I 232 mb -75° 35,600'; Downham Market I 225 mb -74° 36,300'; Larkhill I 224 mb -67° 36,600'; Camborne II 285 mb -63° 32,100'

Saturday 9th June 195..

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.

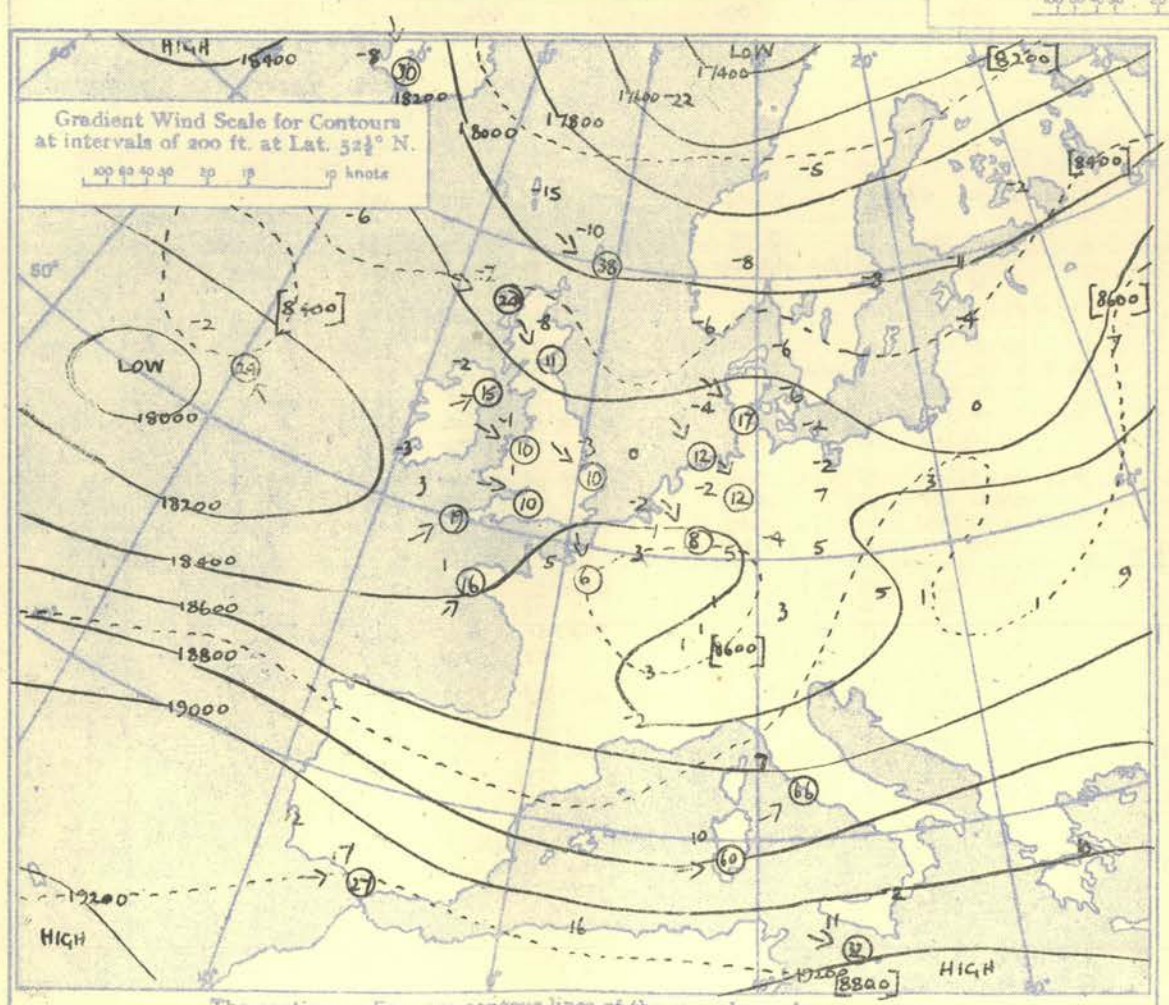


The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

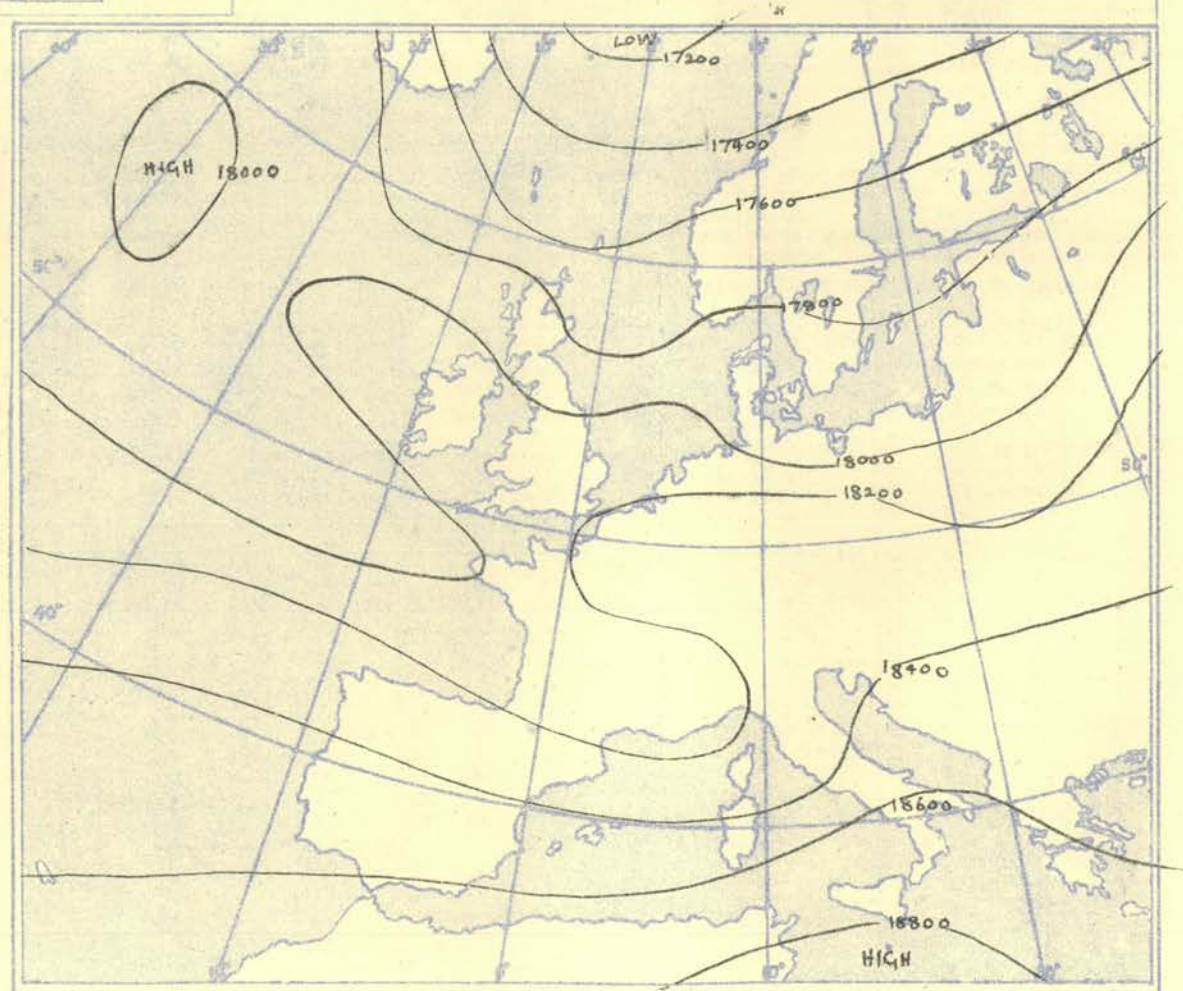


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours
at intervals of 200 ft. at Lat. 52½° N.
100 60 40 30 20 15 10 knots



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.

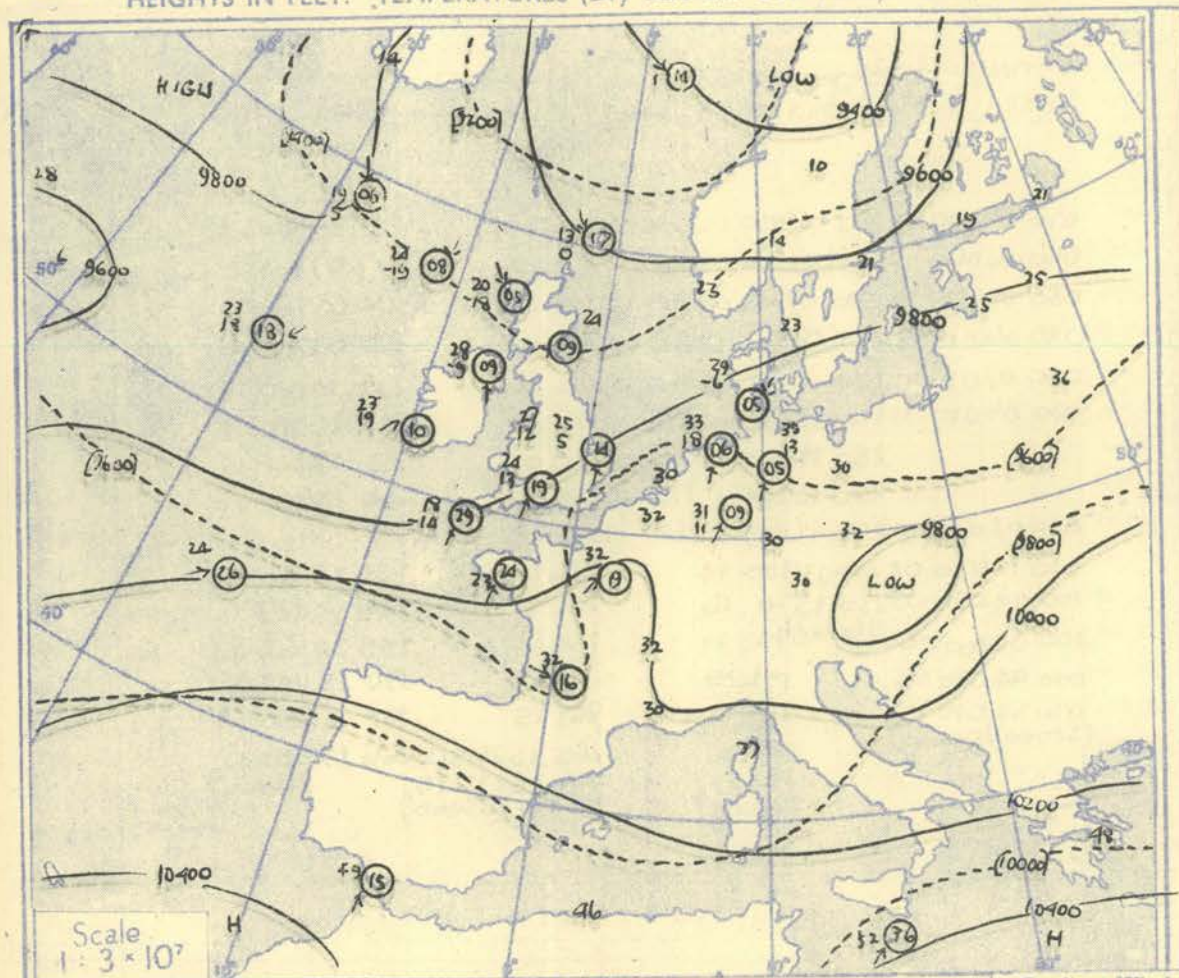


Isopleths of Thickness 500 - 1000mb.

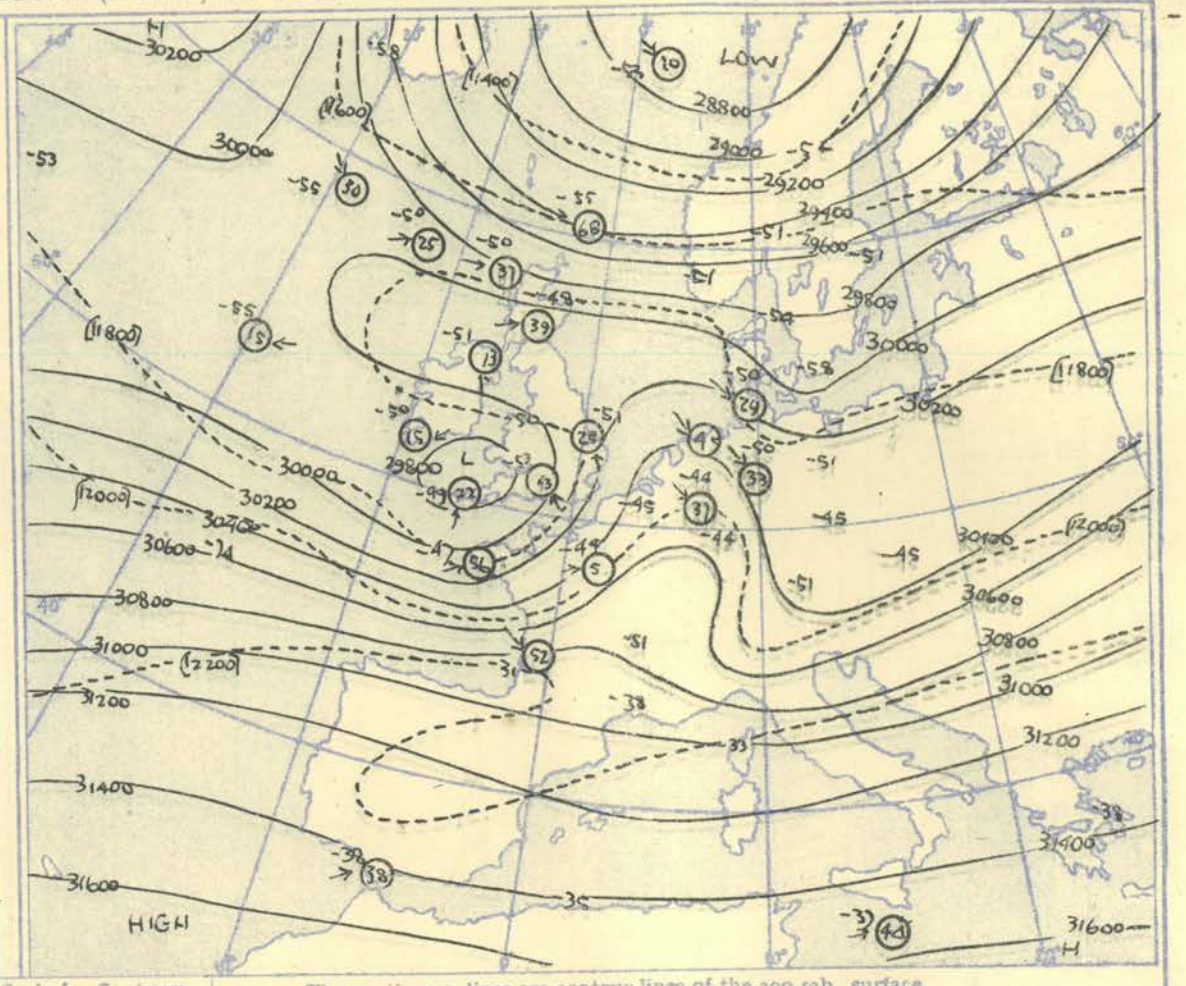
AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

| | | |

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

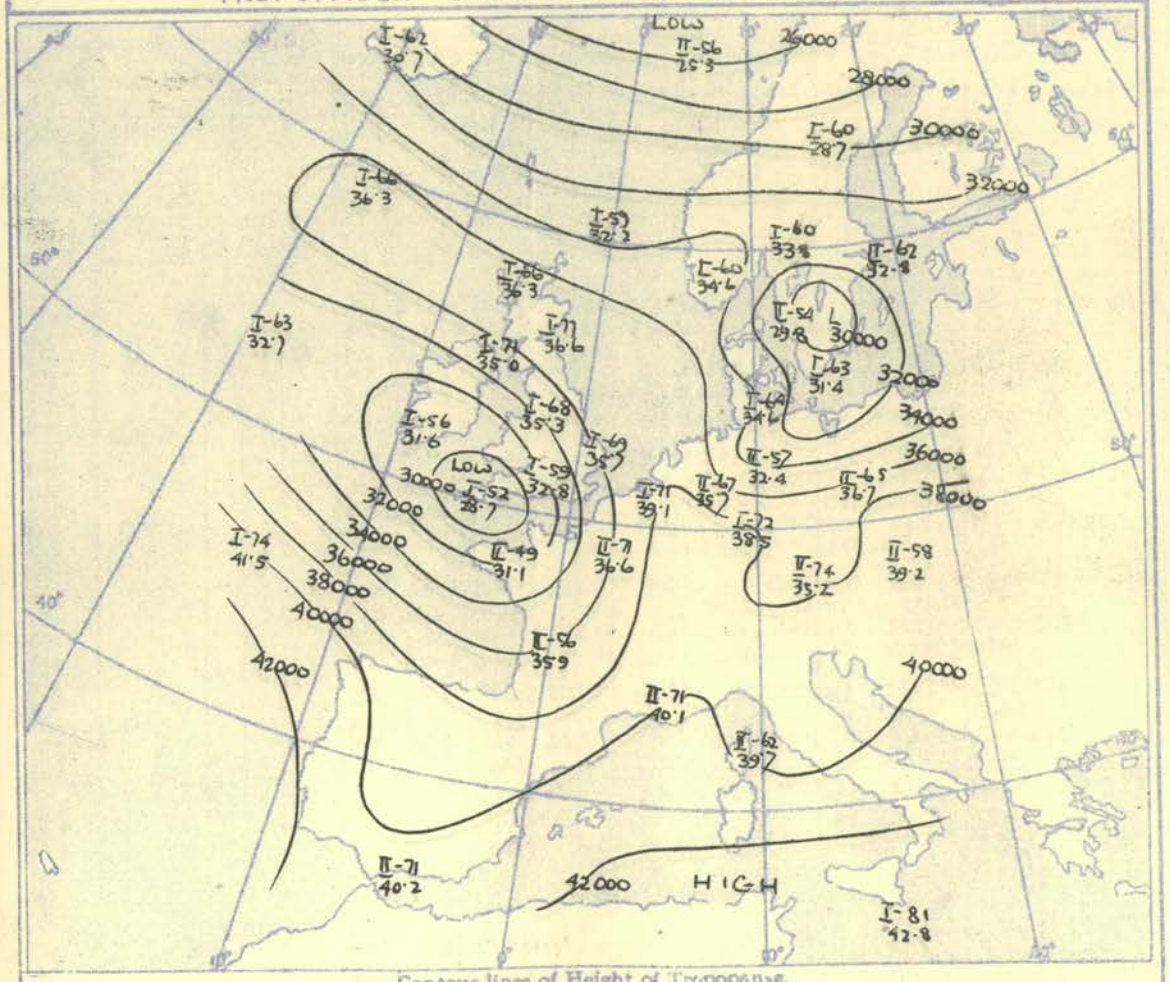


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N

100 50 40 30 20 15 10 knots

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Static situation north of about 60°N though with some southward penetration of cold air over the Norwegian Sea. More fluid conditions in lower latitudes. Continuing very warm over Western Greenland.

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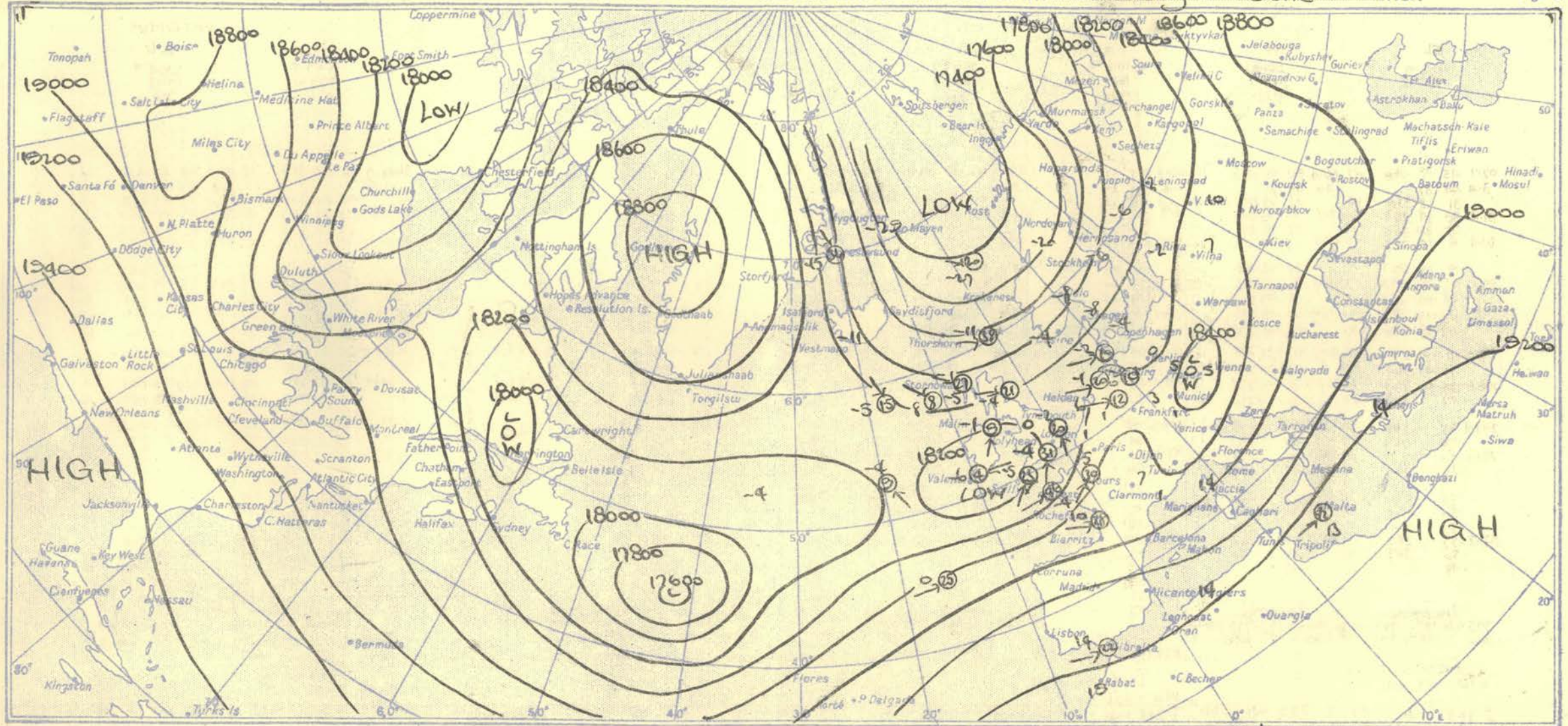
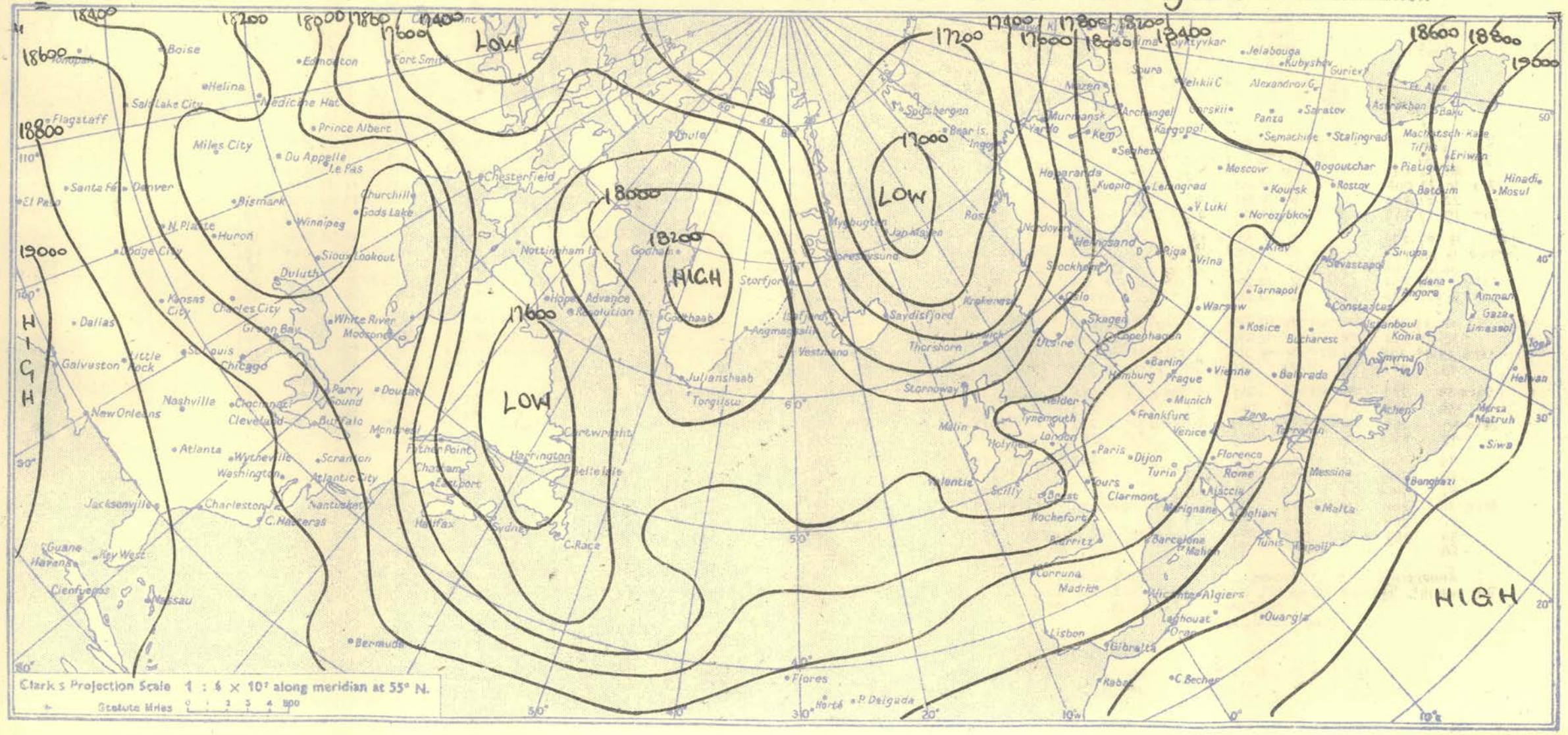
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Saturday 9TH June 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Saturday 9TH June 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON ..... Saturday ..... 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15h G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	15h G.M.T.	1012·9 mb	1002·8 mb	911 mb
STORNOWAY	15h G.M.T.	1011·8 mb	1010·7 mb	838 mb
LEUCHARS	15h G.M.T.	1010·6 mb	1009·8 mb	780 mb
ALDERGROVE	15h G.M.T.	1007·2 mb	997·8 mb	739 mb
LIVERPOOL	15h G.M.T.	1007·0 mb	1005·0 mb	742 mb
DOWNHAM MARKET	15h G.M.T.	1008·5 mb	1004·1 mb	752 mb
LARKHILL	15h G.M.T.	1009·0 mb	993·4 mb	776 mb
CAMBORNE	15h G.M.T.	1009·4 mb	999·0 mb	805 mb
VALENTIA	15h G.M.T.	1009·8 mb	1003 mb	780 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	45	33	060	07	00·4	50	40	045	15	00·2	57	42			02·6	60	45	040	10	00·6	62	46			01·2	66	45			04·4	61	53	230	06	02·9	58	53	210	10	00·3	58	52	230	16	Surf
1000	3·4	44	32			3·2	49	37			3·0	53	37			2·0	50	39	045	09	1·9	61	46			2·4					2·5					2·6					1·3	57	51	230	13	1000
950		31	28	320	04		42	33	049	14		42	29				53	43				57	43				53	47	236	16						98	44	228	24		49	45	234	17	950
900	31·4	30	24	293	06	31·5	37	30	057	16	31·1	36	23			30·8	44	34	079	08	30·3	45	38			31·5	48	40			31·5	46	41	240	17	31·3	43	39	237	23	30·1	43	41	240	18	900
850		25	20	300	07		33	26	077	06		33	22				40	29	098	09		42	34				39	36				41	38	249	19		37	33	237	23		38	37	252	19	850
800	61·8	19	14	307	12	62·5	27	17	102	06	62·1	33	11			64·3	37	15	129	08	62·4	39	29			63·0	38	29			63·1	35	33	256	17	62·6	31	26	234	25	61·6	34	33	251	15	800
750		18	06	297	18		24	-06	148	04		30	04	For			30	20	160	10		33	20				32	19	For			28	27	253	16		25	21	237	27		30	23	242	12	750
700	95·3	13	00	285	17	96·9	20	-18	296	05	96·9	24	00	winds		97·5	28	09	177	09	97·6	27	12			98·1	25	05	winds		98·1	25	13	235	19	97·3	18	-04	233	29	96·5	23	19	235	10	700
650		08	-09	285	12		14	-09	269	12		17	-05				21	04	179	08		20	11				20	-09				20	05	230	24		13	-23	210	24		19	05	235	07	650
600	139·2	03	-19	283	21	85·9	09	-01	273	17	136·1	11	-10			137·1	13	02	168	08	137·0	13	-02			137·5	14	-15			137·5	12	-03	222	25	136·1	07	-30	206	24	135·8	11	-08	194	04	600
550		-03	-24	276	30		02	-08	275	21		05	-14	See			04	-03	170	09		06	-03				04	-23	See			04	-11	211	29		00	-37	200	30		01	-32	138	06	550
500	178·6	-11	-31	271	38	180·8	-05	-34	278	27	181·3	-04	-22			182·2	-01	-08	194	09	182·2	00	-06			182·6	-03	-19			182·5	-04	-21	188	31	180·9	-05	-30	198	23	180·8	-06	-39	090	09	500
450		-23	-41	269	41		-15	-39	276	29		-13	-36	page			-10	-18	195	08		-08	-16				-09	-17	page			-15	-30	168	33		-17	-30	196	25		-13	-42	086	13	450
400	230·6	-34	-50	269	47	233·7	-25	-40	273	32	234·3	-22	-44			235·6	-21	-30	186	15	235·9	-19	-29			236·1	-22	-30			235·3	-26	-39	154	34	233·5	-30	-45	193	24	233·9	-22	-49	081	16	400
350		-47		268	57		-37	-54	270	34		-33	-51	3.			-35	-44	169	15		-33	-44				-35	-44	3.			-41		158	31		-41		183	23		-36	-58	080	16	350
300	293·8	-55		266	68	298·5	-50		268	37	299·6	-48				300·7	-51		159	13	301·1	-50				301·1	-51				297·8	-53		145	43	297·6	-49		205	22	298·7	-50		082	15	300
250		-56		267	45		-60		262	42		-65					-66		167	10		-64					-65				-57		178	35		-47		240	29		-53		073	18	250
200	381·6	-50		274	34	385·1	-60		274	35	385·2	-64				386·6	-55		255	11	387·1	-59				387·2	-59				387·1	-51		228	37	386·8	-45		256	23	386·6	-51		288	09	200
170		-49		269	18		-53		279	25		-56					-52		264	16		-51					-54				-50		242	26		-49		256	27		-49		268	17	170
150		-48		271	21		-52		276	21		-54					-54		264	17		-56					-56				-56		250	22		-52		266	24		-51		266	20	150
130		-50		273	13		-50		265	21		-56					-52		266	16		-54					-56				-57		256	23		-56		255	24		-55		264	21	130
110		-52		271	11		-49		280	13		-56					-51		274	15		-54					-58				-57		270	18		-56		255	23		-56		275	19	110
100	533·3	-52		282	06	535·9	-49		263	18	533·4	-55				537·4	-50		250	16	537·0	-54				536·5	-56				536·9	-56		265	21	537·2	-56		258	21	537·1	-56		268	20	100
90		-50		307	06		-48		310	12		-57										-51					-55				-54		267	19		-57		265	18		-56		272	19	90
80		-48					-47					-55										-53					-53				-52		262	18		-56		265	18		-56		274	18	80
70												-55										-49									-51		260	15		-53		264	16		-54		261	14	70
60												-56										-48									-51		260	13	(63 mb)	-54				(65 mb)	-53				60
												-53																			-50													

Inversion 795 mb 18° – 785 mb 20°; 306 .. -55° – 291 .. -57°
Isothermal 630 – 614 mb 05°

Inversion 780 mb 25° – 773 mb 26°; 650 .. 14° – 640 .. 15°
Isothermal 850 – 826 mb 33°

Inversion 826 mb 33° – 807 mb 34°
Isothermal 822 – 800 mb 37°

Inversion 522 mb 00° – 513 mb 01°
Isothermal 819 mb 36° – 800 mb 38°; 515 .. -09° – 491 .. -02°
Isothermal 660 – 636 mb 20°; 279 – 270 .. -58°; 247 – 237 .. -67°

Inversion 735 mb 22° – 717 mb 23°; 531 .. -02° – 517 .. -01°
Isothermal 659 – 648 mb 13°

Isothermal 756 – 740 mb 30°

Tropopause	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
	I 263 mb – 59° 32,200'	I 222 mb – 66° 36,300'	I 218 mb – 77° 36,600'	I 236 mb – 71° 35,000'	I 235 mb – 68° 35,300'	I 231 mb – 69° 35,700'	I 262 mb – 59° 32,800'	I 313 mb – 52° 28,700'	I 276 mb – 56° 31,600'

21h G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	21h G.M.T.	1012·3 mb	1002·1 mb	919 mb
STORNOWAY	21h G.M.T.	1011·2 mb	1009·6 mb	866 mb
LEUCHARS	21h G.M.T.	1010·1 mb	1009·3 mb	815 mb
ALDERGROVE	21h G.M.T.	1006·2 mb	996·8 mb	765 mb
LIVERPOOL	21h G.M.T.	1006·3 mb	1004·3 mb	785 mb
DOWNHAM MARKET	21h G.M.T.	1007·9 mb	1003·4 mb	784 mb
LARKHILL	21h G.M.T.	1008·9 mb	993·0 mb	800 mb
CAMBORNE	21h G.M.T.	1009·5 mb	998·5 mb	810 mb
	G.M.T.	mb	mb	mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	42	35	040	01	00·4	47	41	050	18	00·2	48	44	080	08	02·6	54	43			00·6	54	52	CALM		01·2	53	50			04·4	51	49	230	03	02·9	53	50	210	08						Surf
1000	3·3	42	35			3·0	46	40			2·7	47	43			1·7					1·8					2·1					2·4					2·6										1000
950		36	32	021	10		39	35	060	21		41	38	073	08		48	38				49	45	243	09		52	45				50	46	236	14		48	47	243	22						950
900	31·2	30	27	006	10	31·2	36	30	054	16	31·0	36	35	075	09	30·4	43	30			30·4	44	39	252	16	30·9	46	42			31·1	44	40	236	15	31·2	43	38	248	22						900
850		22	21	329	12		30	26	048	12		35	34	098	05		40	25				38	32	250	14		40	36				37	30	231	18		37	30	246	23						850
800	615	19	17	299	11	621·1	24	23	029	07	62·1	30	26	112	05	61·9	35	05			61·8	34	25	245	15	62·5	34	31			62·5	32	19	222	23	62·5	31	26	247	24						800
750		16	07	279	12		21	17	332	09		25	11	LIGHT			30	14				28	21	228	16		29	27	For			26	18	226	21		24	13	256	29						750
700	95·4	10	00	248	11	96·3	16	11	275	03	96·8	24	06	248	07	96·8	23	15			96·6	21	14	196	11	97·3	23	18	winds		97·2	18	15	227	19	97·0	20	00	264	29						700
650		06	-08	266	16		13	09	278	09		17	-01	270	12		18	09				18	08	162	10		16	09				14	-14	223	18		13	-15	275	18						650
600	133·7	01	-14	278	23	135·1	06	-22	284	14	136·0	10	-08	259	16	136·0	10	-02			(135·7)	11	03	154	10	136·5	10	01	see		136·1	05	-02	195	15	135·8	04	-22	278	20						600
550		-06	-21	280	27		-01	-33	282	18		02	-01	247	21		02	-05				02	-09	137	08		01	-07	see			-02	-12	189	15		-05	-32	279	27						550
500	171·7	-14	-27	273	39	171·7	-09	-39	282	22	181·0	-06	-15	243	17	180·9	-05	-11			180·6	-08	-17	130	08	181·3	-07	-19			180·4	-13	-18	188	18	180·0	-15	-39	280	34						500
450		-24	-37	273	43		-18	-42	277	25		-16	-30	249	18		-13	-18				-17	-32	127	12		-17	-34	page			-25	-30	178	17		-26	-42	274	33						450
400	229·6	-33	-44	278	52	232·2	-29	-49	269	31	233·8	-25	-35	251	25	234·0	-22	-27			233·2	-29	-45	125	22	233·9	-30	-42	page		232·2	-36	-43	163	17	231·6	-37	-57	270	33						400
350		-43		261	67		-42		266	38		-35	-39	245	29		-36	-42				-40	-56	110	31		-41		3.			-49		148	21		-43		270	32						350
300	293·4	-56		264	57	296·3	-54		262	41	298·8	-50		239	24	298·8	-51				297·4	-56		112	29	298·1	-54				295·5	-53		193	17	295·4	-46		273	35						300
250		-56		267	53		-63		260	42		-66		242	24		-64					-61		102	18		-57					-49		240	22		-46		271	39						250
200	381·0	-50		269	39	382·1	-60		272	35	384·6	-60		258	21	384·7	-58				384·2	-54		243	17	385·5	-50				384·2	-48		250	24	384·7	-48		273	28						200
170		-48		270	28		-54		268	25		-57		266	20		-55					-53		262	20		-53					-51		254	24		-54		273	27						170
150		-49		269	21		-56		270	20		-57		268	19		-55					-55		265	19		-53					-55		258	26		-59		267	24						150
130		-50		256	12		-57		276	21							-57					-56		269	19		-55					-59		265	23		-59		268	19						130
110		-51		263	20		-55		276	19							-58					-56		266	22		-58					-60		261	18	(113 mb)	-59									110
100	532·5	-51		266	12	531·2	-55		277	15	For rest of					534·1	-59				533·9	-58		272	19	535·3	-59				533·7	-60		263	21											100
90		-51		266	10		-54		280	14	winds see page 3						-60				(91 mb)	-57									-60		262	20											90
80		-50		268	09		-54		289	09							-57														-60		271	19											80
70		-50					-55		289	04																					-60		270	18											70
60																																			(65 mb)	-60											60

Inversion 810 mb 18° – 785 mb 20°

Inversion 938 mb 38° – 920 mb 39°; 763 .. 19° – 744 – 21°; 666 – 12° – 650 – 13°

Isothermal 783 – 705 mb 25°; 538 – 527 .. -01°

Isothermal 677 – 650 mb 18°

Inversion 1003 mb 53° – 981 mb 55°

Inversion 993 mb 51° – 972 mb 52°

Tropopause	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
	I 294 mb – 58° 29,700'	I 218 mb – 70° 36,500'	I 236 mb – 71° 34,700'	I 225 mb – 68° 35,900'	I 258 mb – 63° 32,900'	I 288 mb – 57° 30,700'	I 333 mb – 53° 27,300'	I 328 mb – 47° 27,300'	

No. 11760 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Sunday 10th June 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

METEOROLOGICAL OFFICE LIBRARY 12 JUN 1951

LERWICK

Pressure	Time	M.S.L.	Surf	Freezing
	03h. G.M.T.	1012.0 mb	1001.7 mb	929 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.7	36	34	030	03
1000	03.1	36	33		
950		35	30	018	04
900	31.0	29	24	358	04
850		23	16	339	03
800	61.3	16	13	324	04
750		14	03	300	04
700	95.0	09	-04	290	09
650		05	-14	285	15
600	133.2	00	-13	277	24
550		-08	-20	265	39
500	177.1	-15	-28	262	40
450		-26	-35	260	49
400	228.8	-34	-44	256	55
350		-46		252	58
300	292.1	-60		256	66
250		-58		260	47
200	379.1	-52		260	28
170		-52		269	21
150		-52		272	20
130		-51		271	16
110		-51		266	10
100	530.0	-52		271	11
90		-52		278	10
80		-51			
70					
60					

Inversion 1002 mb 36° - 985 mb 40°

Tropopause: II 300 mb -60° 29,200'

STORNOWAY

Pressure	Time	M.S.L.	Surf	Freezing
	03h. G.M.T.	1011.5 mb	1009.9 mb	904 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.4	46	40	060	12
1000	03.1	45	40		
950		38	34	064	17
900	31.1	32	28	046	12
850		27	22	025	08
800	61.7	23	15	014	06
750		20	09	348	05
700	95.8	15	00	323	07
650		10	-19	312	09
600	134.5	05	-22	290	21
550		-02	-27	288	23
500	178.9	-11	-35	278	15
450		-21	-35	275	17
400	231.1	-32	-44	276	25
350		-46		264	40
300	294.5	-59		258	45
250		-65		263	39
200	380.6	-55		267	28
170		-53		268	29
150	442.9	-53		273	19
130		-55		274	17
110		-56		279	14

Inversion 805 mb 26° - 785 mb 22°; 267 mb -64° - 261 mb -63°

Isothermal 700 - 690 mb 15°; 650 - 636 mb 10°

Tropopause: I 237 mb -67° 34,600'

LEUCHARS

Pressure	Time	M.S.L.	Surf	Freezing
	03h. G.M.T.	1009.9 mb	1009.0 mb	850 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.2	43	39	050	02
1000	02.6	42	38		
950		40	34	145	05
900	30.7	33	31	077	09
850		30	26	059	11
800	61.6	28	24	037	12
750		23	07	004	11
700	96.0	21	03	293	12
650		14	-04	253	15
600	135.0	08	-10	254	17
550		-01	-09	268	20
500	179.4	-11	-18	263	19
450		-19	-30	255	21
400	231.8	-31	-40	246	25
350		-45		256	27
300	295.3	-61		253	21
250		-69		267	21
200	381.1	-54		270	21
170		-55		269	21
150	443.2	-54		272	20
130		-55		272	18

Isothermal 892 - 850 mb 32°

Tropopause: I 255 mb -72° 32,900'

ALDERGROVE

Pressure	Time	M.S.L.	Surf	Freezing
	03h. G.M.T.	1006.1 mb	996.1 mb	760 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.6	49	45		
1000	01.5				
950		46	44		
900	30.1	44	39		
850		40	36		
800	61.6	34	31		
750		30	20		
700	096.4	23	14		
650		18	06		
600	135.6	09	01		
550		01	-05		
500	180.4	-06	-11		
450		-13	-17		
400	233.4	-24	-28		
350		-36	-41		
300	298.3	-51			
250		-65			
200	384.2	-57			
170		-54			
150		-55			
130		-56			
110		-56			
100	533.6	-57			

Inversion 693 mb 22° - 677 mb 23°

Isothermal 786 - 760 mb 32°

Tropopause: I 227 mb -70° 35,800'

LIVERPOOL

Pressure	Time	M.S.L.	Surf	Freezing
	03h. G.M.T.	1006.2 mb	1004.2 mb	795 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.6	49	48	CALM	
1000	01.7				
950		48	44	258	12
900	30.4	43	39	260	10
850		39	35	256	09
800	61.8	33	29	257	09
750		26	23	257	04
700	96.5	22	08	264	08
650		17	-08	263	06
600	135.7	10	-16	213	03
550		01	-18	121	04
500	180.4	-09	-27	110	06
450		-21	-31	094	06
400	232.6	-33	-42	046	11
350		-45		056	28
300	296.0	-59		038	26
250		-57		006	12
200	382.9	-53		284	19
170		-55		274	23
150		-57		277	20
130		-59		268	26
110		-59		268	20
100	531.6	-60		272	23
90		-60		268	22
80		-59		267	18
70	(726)	-57			

Inversion 1004 mb 49° - 995 mb 53°

Isothermal 737 - 723 mb 24°

Tropopause: I 270 mb -61° 31,900'

DOWNHAM MARKET

Pressure	Time	M.S.L.	Surf	Freezing
	03h. G.M.T.	1007.5 mb	1003.0 mb	798 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01.2	52	51	210	10
1000	02.0	52	51		
950		49	44	264	20
900	30.7	44	40	258	18
850		38	35	255	17
800	62.0	32	28	231	15
750		26	23	248	13
700	96.8	22	17	243	12
650		13	09	237	10
600	135.8	09	-22	229	07
550		00	-35	208	06
500	180.5	-10	-36	152	08
450		-21	-35	119	10
400	232.6	-33	-42	101	10
350		-46		108	10
300	296.1	-54		151	07
250		-47		246	12
200	385.1	-46		297	22
170		-50		264	27
150	448.1	-53		263	24
130		-55		259	23
110		-57		266	20
100	535.5	-57		266	23
90		-57		266	24
80		-57		285	26

Inversion 735 mb 24° - 717 mb 25°

Isothermal 650 - 628 mb 13°

Tropopause: I 312 mb -56° 28,750'

LARKHILL

Pressure	Time	M.S.L.	Surf	Freezing
	03h. G.M.T.	1009.4 mb	993.2 mb	811 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04.4	45	44	230	03
1000	02.5				
950		48	44	248	18
900	31.1	43	34	257	21
850		37	29	263	22
800	62.4	31	22	263	21
750		25	16	262	19
700	97.0	21	03	270	18
650		15	-24	274	17
600	136.0	06	-24	271	17
550		-03	-21	283	15
500	180.4	-13	-36	287	14
450		-23	-47	309	14
400	232.3	-34	-55	332	14
350		-45		327	17
300	296.3	-47		296	22
250		-45		276	27
200	385.8	-45		269	26
170		-47		268	31
150	449.0	-51		271	28
130		-56		267	24
110		-57		263	23
100		-57		263	23
90		-58		268	23
80		-59		267	24

Inversion 993 mb 45° - 970 mb 50°

Isothermal 732 - 720 mb 23°

Tropopause: II 353 mb -45° 26,000'

CAMBORNE

Pressure	Time	M.S.L.	Surf	Freezing
	03h. G.M.T.	1009.3 mb	998.7 mb	810 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.9	53	52	209	08
1000	02.5				
950		48	47	245	24
900	31.1	43	40	252	25
850		37	34	262	20
800	62.4	31	28	270	18
750		25	21	274	20
700	96.9	18	14	277	21
650		13	03	276	25
600	135.8	08	-09	273	27
550		-01	-23	281	25
500	180.5	-07	-38	290	23
450		-18	-43	292	25
400	233.0	-31	-52	293	27
350		-42		291	50
300	297.2	-49		292	46
250		-52		293	58
200	385.3	-54		290	41
170		-55		285	36
150		-56		277	29
130		-59		272	27
110		-62		273	21
100	533.9	-62		262	20
90		-62		278	15
80		-61		282	18
70		-61		246	18
60		-60			

Inversion 312 mb 50° - 290 mb -47°

Tropopause: I 28900' 312 mb -50°; I 36500' 219 mb -57°

VALENTIA

Pressure	Time	M.S.L.	Surf	Freezing
	03h. G.M.T.	1006.3 mb	1005 mb	760 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.3	49	46	CALM	
1000	01.7	49	46	CALM	
950		48	43	CALM	
900	30.4	45	34	321	05
850		39	31	328	06
800	61.8	35	25	321	05
750		31	14	299	04
700	96.8	29	-01	294	06
650		22	03	308	09
600	136.4	14	-05	305	15
550		05	-13	319	19
500	181.6	-03	-18		
450		-12	-28		
400	234.8	-25	-41		
350		-37	-55		
300	299.4	-50			
250		-66			
200	385.6	-57			
170		-57			
150		-57			
130		-58			
110		-60			
100	534.1	-59			
90		-58			
80		-58			
70	(736)	-57			
60					

Inversion 735 mb 29° - 710 mb 30°

Tropopause: I 288 mb -67° 34,900'

LERWICK

Pressure	Time	M.S.L.	Surf	Freezing
	09h. G.M.T.	1012.5 mb	1002.7 mb	927 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.7	46	35		
1000	03.4	44	33		
950		36	29		
900	31.3	29	25		
850		23	19		
800	61.5	18	12		
750		12	05		
700	95.2	10	-03		
650		05	-13		
600	133.3	-02	-19		
550		-16	-27		
500	177.0	-27	-33		
450		-27	-43		
400	228.6	-37	-53		
350		-46			
300	291.8	-55			
250		-51			
200	380.3	-48			
170		-47			
150		-48			
130		-49			
110		-50			
100	532.3	-51			
90		-49			
80		-49			
70		-49			
60					

Isothermal 734 - 724 mb 11°

Tropopause: I 300 mb -55° 29,200'

STORNOWAY

Pressure	Time	M.S.L.	Surf	Freezing
	09h. G.M.T.	1013.7 mb	1012.1 mb	900 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.4	47	40	060	12
1000	03.7	45	39		
950		38	32	049	18
900	31.8	32	27	053	16
850		26	19	030	12
800	62.5	25	09	014	09
750		21	-02	359	08
700	96.8	16	-04	356	09
650		11	-10	333	11
600	135.4	05	-16	307	13
550		-02	-24	288	20
500	179.8	-11	-28	274	20
450		-21	-36	273	36
400	231.9	-33	-45	269	39
350		-44		276	45
300	295.3	-61		276	44
250		-59		272	43
200	381.8	-53		274	30
170		-51		267	25
150	444.5	-51		257	24
130		-51		256	21
110		-54		271	15
100	532.8	-51		272	15
90		-51		260	13
80		-51		254	11
70		-51		253	09
60	644.2	-48			

Inversion 850 mb 26° - 842 mb 27°

Isothermal 815 - 780 mb 25°

Tropopause: I 265 mb -69° 32,200'

LEUCHARS

Pressure	Time	M.S.L.	Surf	Freezing
	09h. G.M.T.	1011.1 mb	1010.3 mb	819 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.2	52	42	090	10
1000	03.0	50	41		
950		42	36	042	10
900	31.3	36	32	033	10
850		33	29	027	05
800	62.4	30	25	030	05
750		23	19	306	04
700	96.8	20	10	278	14
650		16	08	282	20
600	135.8	08	-05	279	20
550		01	-10	274	22
500	180.5	-07	-21	277	18
450		-16	-31	281	20
400	233.2	-28	-40	281	20
350		-41		272	20
300	297.5	-53		258	25
250		-64		271	42
200	383.9	-54		273	34
170		-53		276	25
150	446.3	-52		269	20
130		-53		265	30
110		-53		210	09
100	534.3	-54		195	08
90		-55			

Inversion 870 mb 32° - 838 mb 34°; 719 mb 18° - 700 mb 20°

Tropopause: I 230 mb -67° 35,400'

ALDERGROVE

Pressure	Time	M.S.L.	Surf	Freezing
	09h. G.M.T.	1008.7 mb	999.0 mb	790 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.6	52	45	065	08
1000	02.3				
950		44	40	065	11
900	30.8	44	37	060	13
850		40	32	045	12
800	62.3	33	26	020	05
750		29	14	306	03
700	97.0	24	16	277	05
650		18	10	277	06
600	136.2	09	04	282	07
550		04	-11	286	11
500	181.2	-06	-16	302	15
450		-14	-25	308	18
400	234.1	-23	-40	295	23
350		-34	-52	293	30
300	299.3	-48		285	31
250		-61		293	46
200	385.8	-61		275	32
170		-62		278	33
150		-52		270	27
130		-53		264	27
110		-56		267	29
100		-51		263	27
90		-59		260	22
80		-59		265	24
70		-54		287	15

Inversion 942 mb 43° - 922 mb 45°

Tropopause: I 220 mb - 68° 36,600'

LIVERPOOL

Pressure	Time	M.S.L.	Surf	Freezing
	09h. G.M.T.	1008.3 mb	1006.3 mb	817 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.6	57	51	CALM	
1000	02.3	56	50		
950		48	44	248	06
900	30.9	42	40	251	06
850		38	35	254	06
800	62.2	29	25	257	07
750		26	16	264	04
700	96.8	20	09	270	04
650		15	03	276	12
600	135.8	10	-11	285	10
550		01	-12	290	14
500	180.6	-08	-18	296	17
450		-18	-26	303	18
400	233.2	-27	-39	314	21
350		-40	-49	319	27
300	297.5	-59		315	34
250		-68		315	39
200	383.2	-57		296	24
170		-59		278	26
150		-54		276	25
130		-57		281	23
110		-57		264	25
100	532.5	-57		267	25
90		-57		271	24
80		-56		273	17
70	(676)	-53			

Isothermal 871 - 812 mb 38°; 790 - 773 mb 28°

Tropopause: II 240 mb -70° 34,500'

DOWNHAM MARKET

Pressure	Time	M.S.L.	Surf	Freezing
	09h. G.M.T.	1008.6 mb	1004.3 mb	804 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01.2	55	50	260	12
1000	02.4				
950		47	44	280	18
900	31.0	44	40	277	16
850		38	33	274	18
800	62.4	31	26	274	16
750		28	15	281	13
700	97.0	23	10	289	13
650		17	05	291	12
600	136.2	10	01	305	15
550		01	-07	314	19
500	181.0	-08	-21	325	18
450		-21	-26	340	17
400	233.2	-30	-38	348	21
350		-42		354	24
300	297.5	-49		346	29
250		-48		322	26
200	386.6	-45		283	25
170		-46		271	24
150	450.1	-48		264	25
130		-49		265	28
110		-52		261	23
100	538.6	-52		260	21
90		-50		262	21
80		-51		261	23

Isothermal 772 - 742 mb 28°

Tropopause: I 312 mb -51° 28,800'

LARKHILL

Pressure	Time	M.S.L.	Surf	Freezing
	09h. G.M.T.	1010.2 mb	994.5 mb	784 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04.4	57	51	260	08
1000	02.8				
950		51	45	259	09
900	31.6	44	38	252	12
850		38	32	251	16
800	63.0	33	29	256	18
750		28	23	262	16
700	97.9	23	15	274	15
650		18	00	299	12
600	137.1	12	-14	327	15
550		05	-21	315	18
500	182.3	-05	-31	324	22
450		-16	-39	325	21
400	234.9	-30	-50	316	28
350		-38	-57	336	43
300	299.5	-46		327	53
250		-54		304	45
200	388.1	-49		290	37
170		-46		278	33
150	451.4	-49			
(144 mb)		-50			

Tropopause: I 255 mb - 55° 33,400'

CAMBORNE

Pressure	Time	M.S.L.	Surf	Freezing
	09h. G.M.T.	1010.7 mb	1001.2 mb	774 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.9	55	53	220	08
1000	02.9				
950		49	47	237	24
900	31.6	45	42	250	16
850		40	37	265	12
800	63.1	35	29	262	16
750		30	26	263	17
700	98.0	24	17	258	16
650		22	08	273	11
600	137.5	17	-19	304	13
550		11	-38	308	14
500	183.2	04	-52	313	20
450		-07	-45	318	23
400	237.1	-17	-52	316	26
350		-31	-58	297	31
300	302.7	-46		297	38
250		-60		293	46
200	389.7	-62		284	52
170		-56		285	39
150		-56		284	30
130		-55		269	28
110		-60		280	27
100	538.4	-58		277	26
90		-56		259	20
80		-58		266	19
70		-59		276	17
60	647.9	-57			

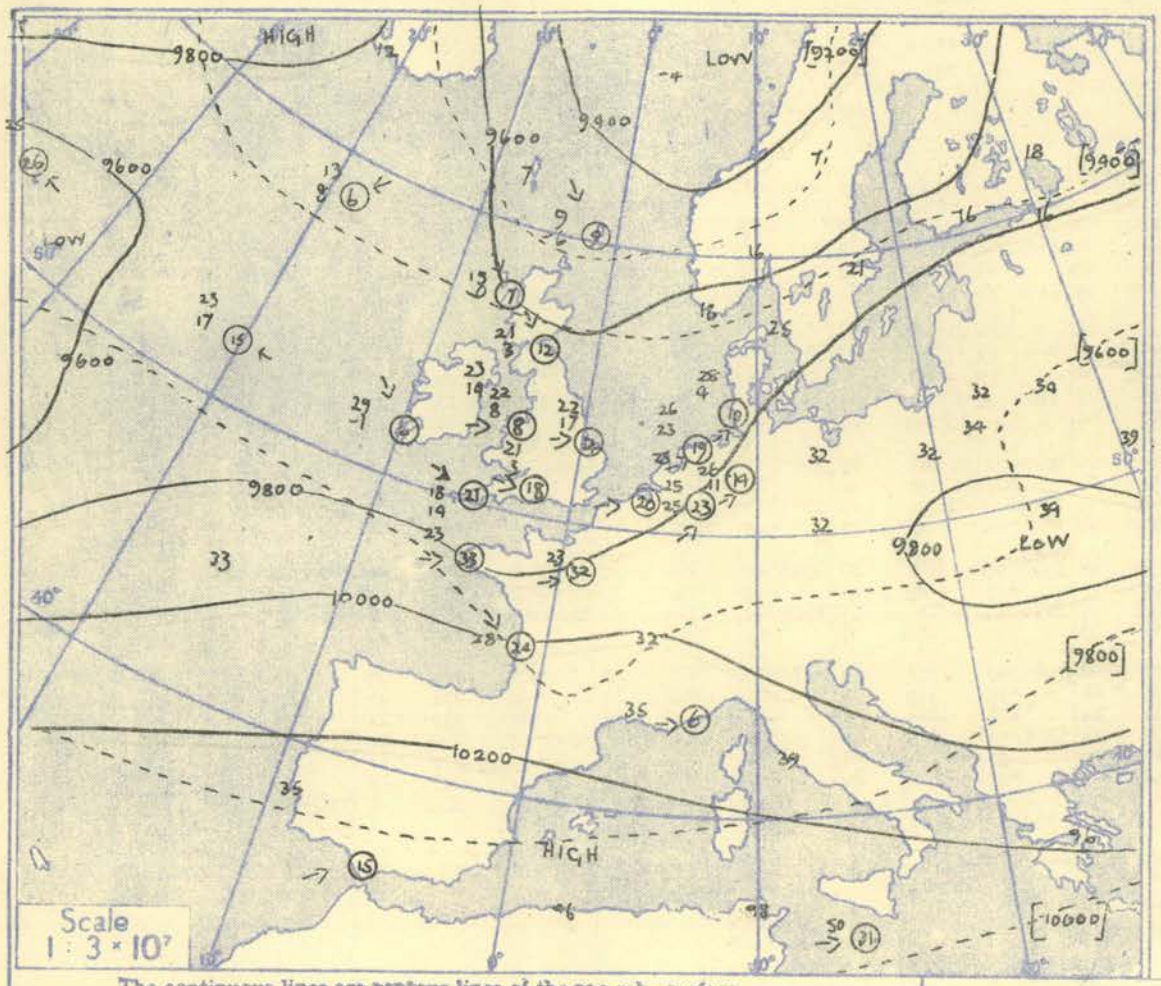
Inversion 678 mb 21° - 650 mb 22°

Isothermal 750 - 734 mb 30°

Tropopause: I 225 mb -63° 36,500'

Sunday 10th June 1951.

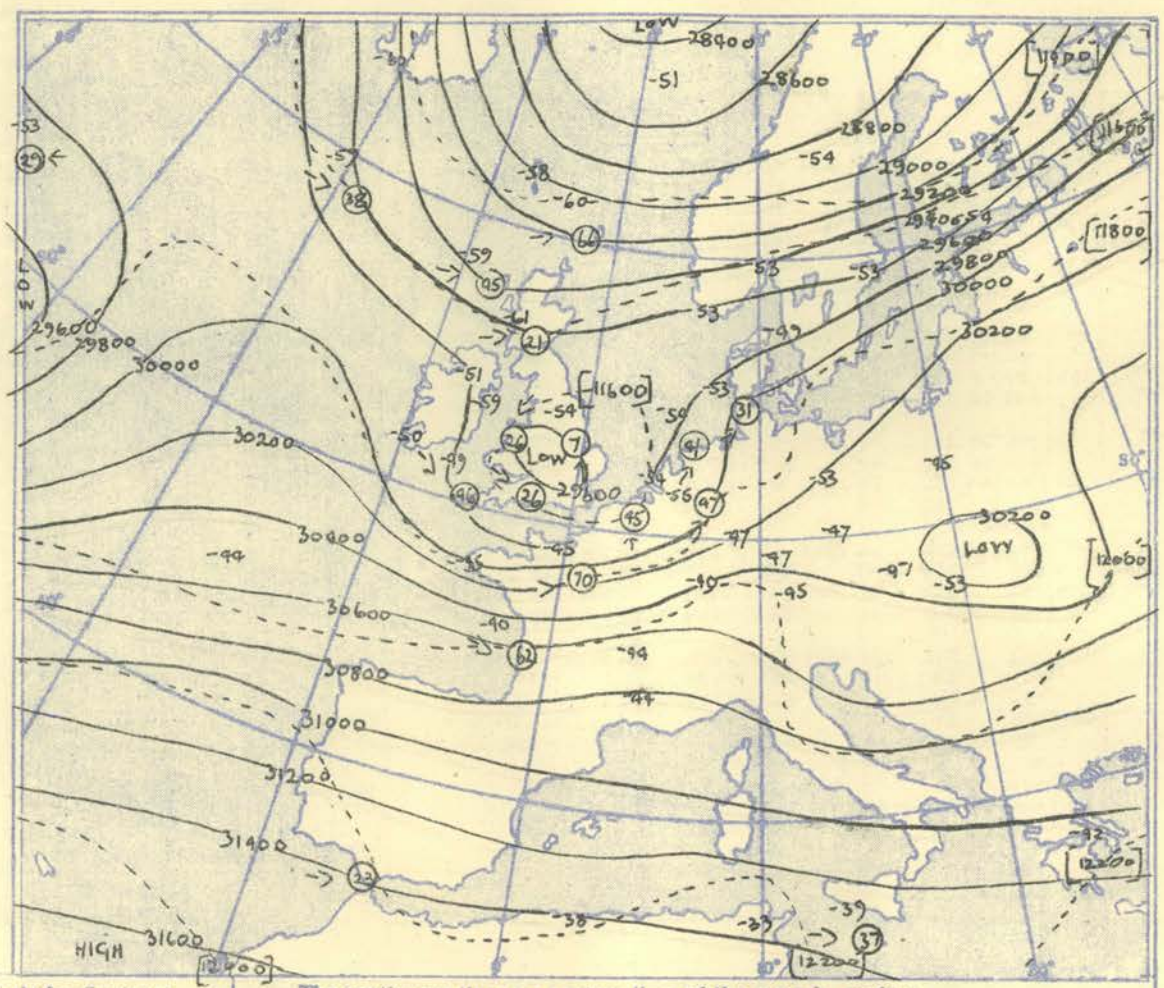
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.



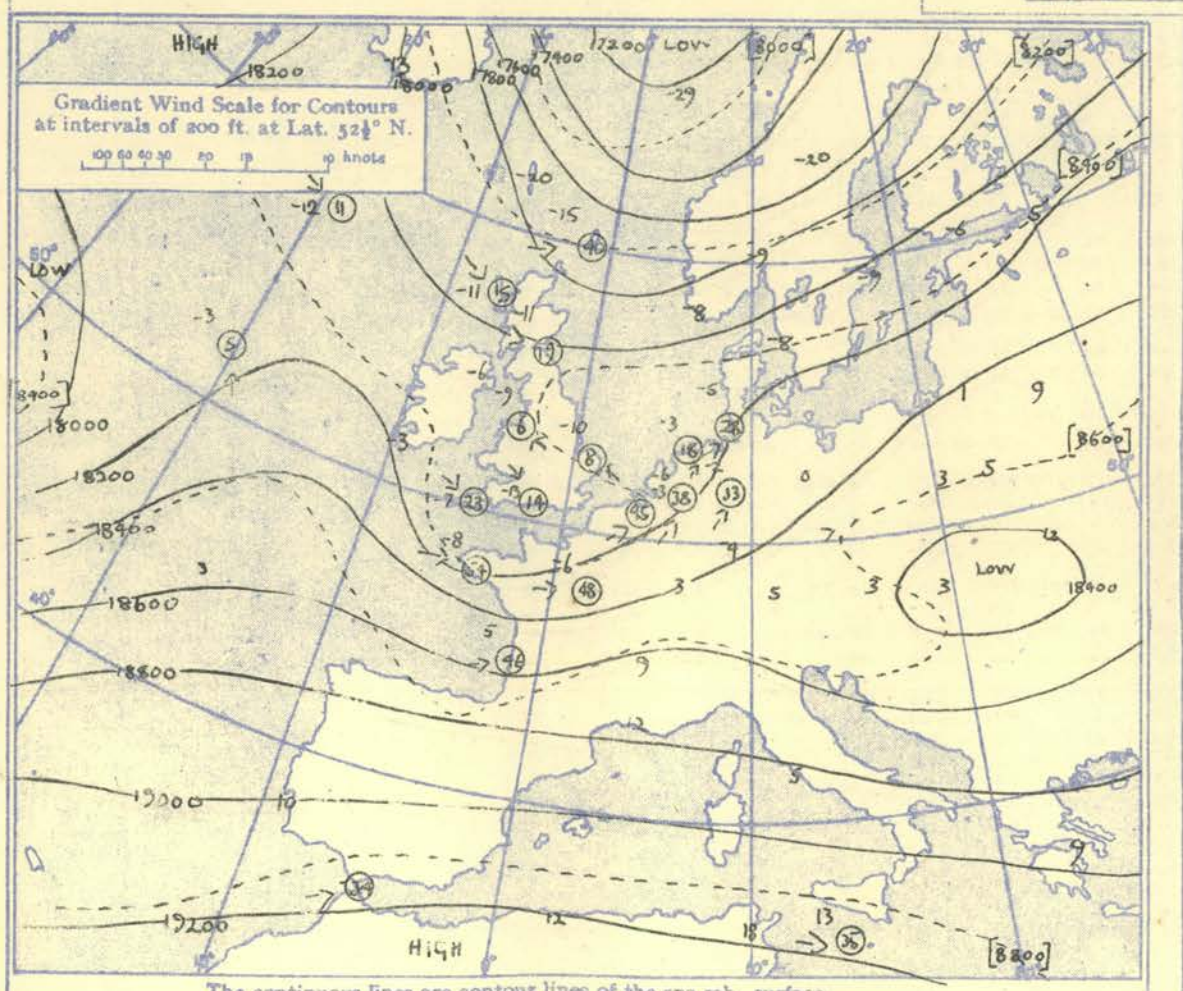
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

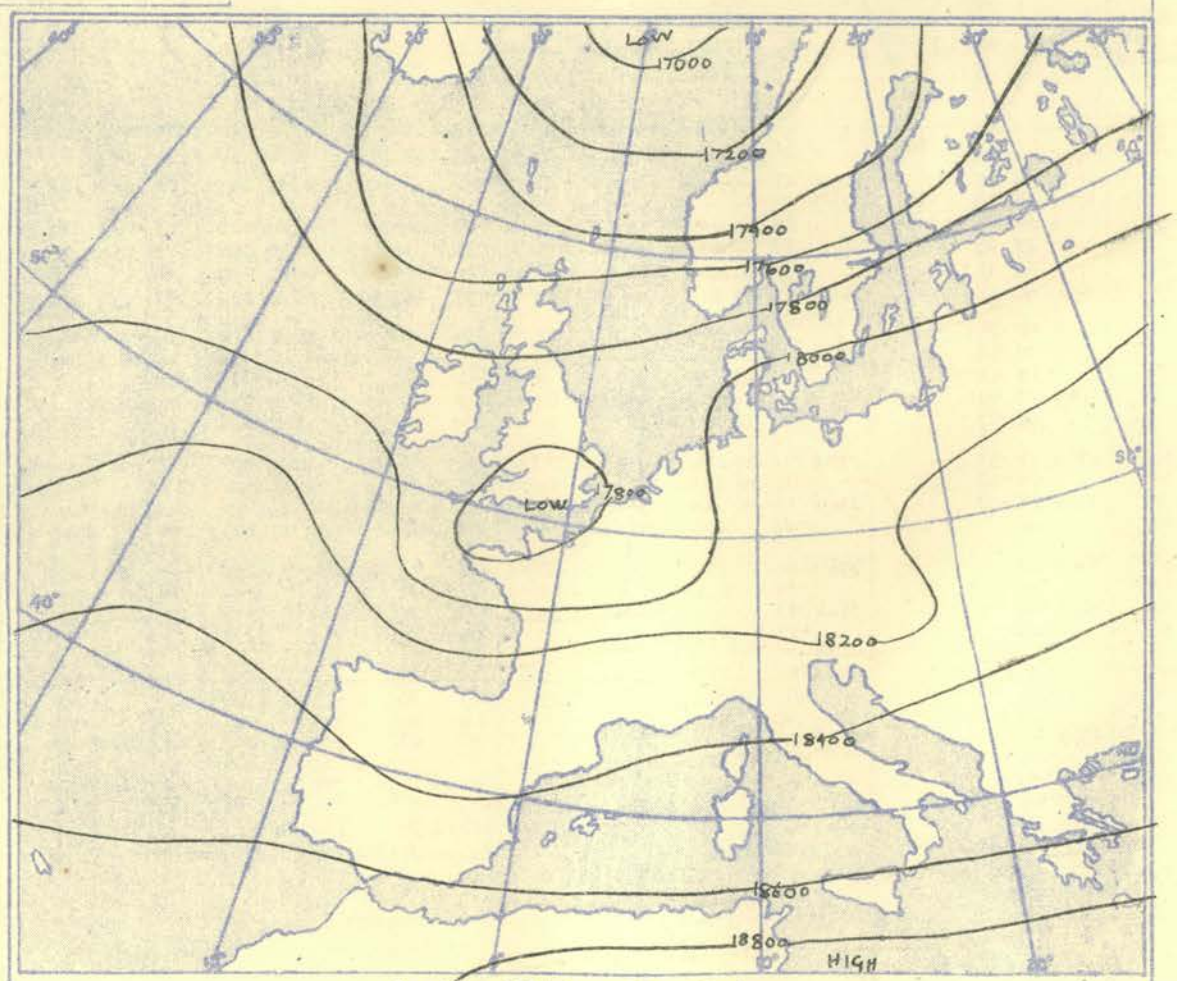
100 60 40 30 20 15 10 knots



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500-1000mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

52.12 N 02.12 W.

Pressure																											
Time	1410h.																										Time
M.S.L.	1011 mb			mb			mb			mb			mb			mb			mb			mb			mb		M.S.L.
Surf	1009.5 mb			mb			mb			mb			mb			mb			mb			mb			mb		Surf
Freezing	785			mb			mb			mb			mb			mb			mb			mb			mb		Freezing
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Pressure mb
Surf	0.4																					Surf
1000	3.0																					1000
950																						950
900	32.0	48	42																			900
850		41	37																			850
800	63.6	34	34																			800
750																						750
700	98.9	23																				700
650																						650
600	137.9	14	05																			600
550																						550
500	183.1	-09																				500
450																						450
400	236.3	-23																				400
350																						350
300	301.1	-50																				300
250																						250
200	Cloud																					200
170	Cu 4/8																					170
	912-683 mb																					
	Sc 7/8																					
	762-712 mb																					

DIRECTION (degrees from N) and VELOCITY (knots) of UPPER WINDS at heights above M.S.L.

Place	Downham Market		Castle Acre dale		Aldergrove																Place
Time	15h.		21h.		21h.																Time
Type																					Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Surf.	340	19	120	05	080	10															Surf.
1,000	320	12	110	07	086	12															1,000
2,000	303	11	120	15	085	13															2,000
3,000	292	16	120	11	070	11															3,000
4,000	288	17	080	06	062	07															4,000
5,000	277	17	110	06	036	06															5,000
6,000	267	15	200	02	026	06															6,000
8,000	243	11	280	06	266	05															8,000
10,000	238	09			254	10															10,000
14,000	277	12			279	21															14,000
18,000	293	21			265	24															18,000
24,000	296	36			270	32															24,000
30,000	310	51			279	51															30,000
40,000	302	37			278	48															40,000
50,000	(35,000')				270	49															50,000
					270	27															
					(52,000')																

NEPHOSCOPE OBSERVATIONS

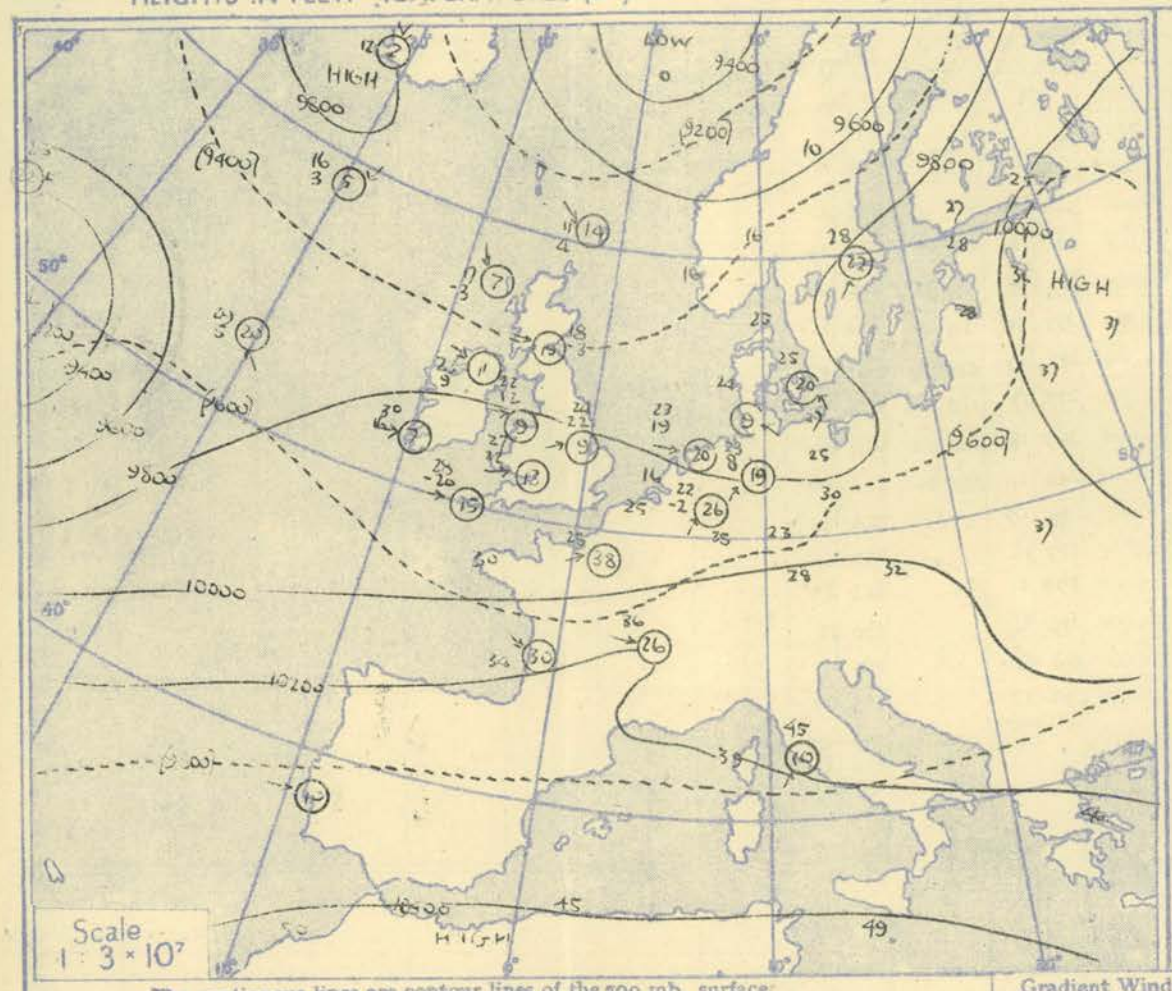
Place												Place
Time Type												Time Type
Dir. Vel.												Dir. Vel.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

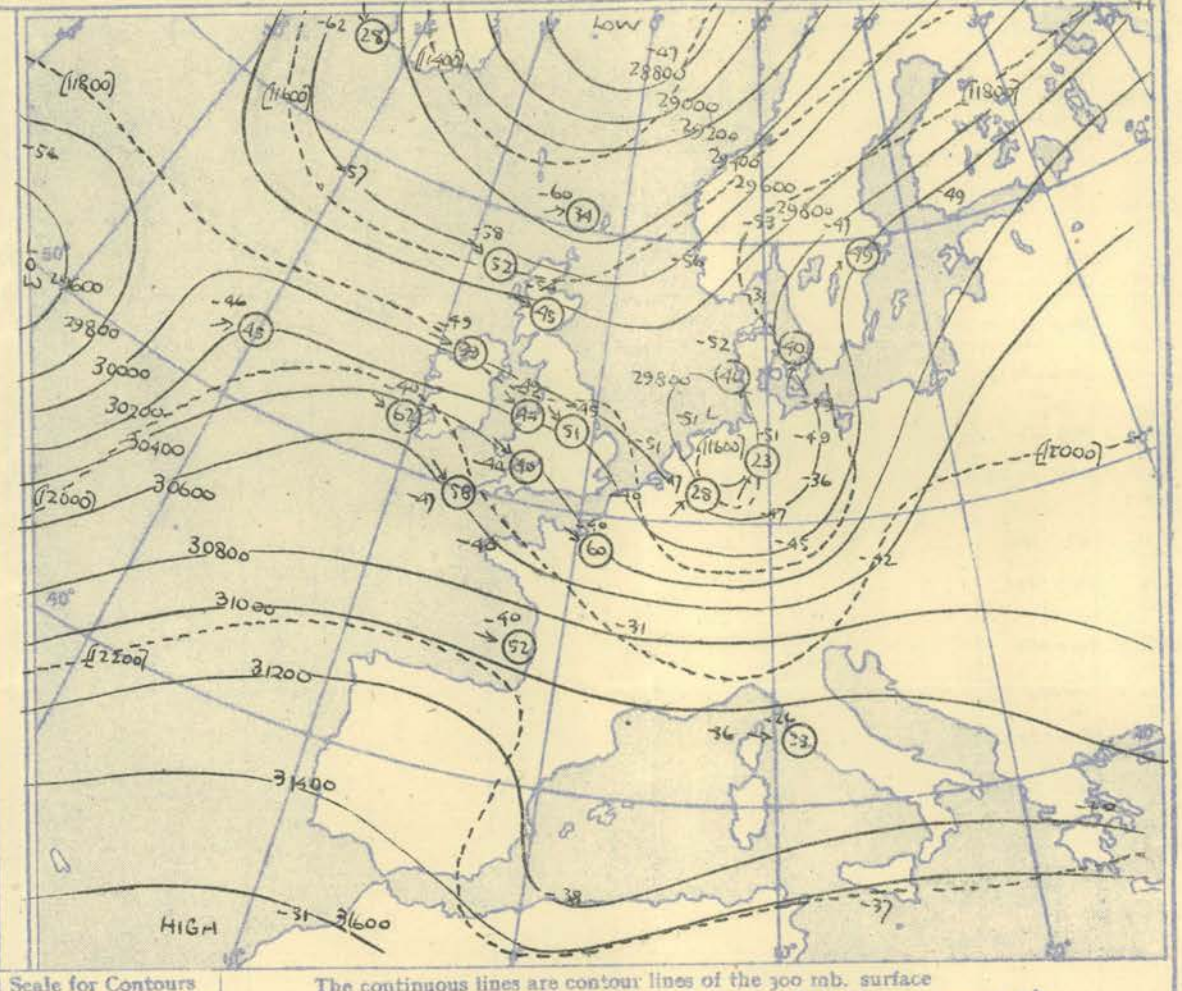
Ship	WEATHER EXPLORER				WEATHER EXPLORER				WEATHER EXPLORER				WEATHER EXPLORER				WEATHER RECORDER				WEATHER RECORDER				WEATHER RECORDER								Ship
Lat/Long	59.1N 19.0W				59.1N 19.0W				59.1N 19.2W				59.1N 19.1W				52.2N 20.0W				52.4N 19.9W				52.6N 20.0W.				52.5N 20.0W.				Lat/Long
Pressure Time	03L G.M.T.				09L G.M.T.				15L G.M.T.				21L G.M.T.				03L G.M.T.				09L G.M.T.				15L G.M.T.				21L G.M.T.				Time
M.S.L.	1016 mb				1016 mb				1017 mb				1017 mb				1008 mb				1008 mb				1006 mb				1001 mb				M.S.L.
Surf	1016 mb				1016 mb				1017 mb				1017 mb				1008 mb				1008 mb				1006 mb				1001 mb				Surf
Freezing	880 mb				870 mb				890 mb				890 mb				795 mb				750 mb				760 mb				735 mb				Freezing
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. ° Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. ° Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. ° Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. ° Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. ° Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. ° Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. ° Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. ° Vel. knots	Pressure mb
Surf		49	44	100 17		49	39	075 20		48	37	100 18		49	35	100 20		56	35	100 16		56	53	120 17		57	55	130 18		56	55	110 30	Surf
1000	04.3	47	42	116 13	04.5	49	41	090 18	04.7	46	35	099 15	04.5	47	34	098 21	02.2	55	51	103 01	02.1	55	52	117 14	01.8	56	54		02	55	53		1000
950		41	37	118 11		43	37	100 21		39	28	096 16		39	29	103 20		50	42	099 15		49	42	117 11		51	47	130 18		49	47	120 37	950
900	32.5	34	29	115 10	32.8	36	30	106 19	32.8	33	21	093 15	32.6	33	25	103 18	30.9	45	37	097 16	30.8	45	38	117 15	30.6	46	41	150 30	28.9	44	43	126 40	900
850		29	26	105 10		30	25	108 13		28	13	090 13		26	19	107 12		40	33	120 20		42	42	141 35		41	36	150 29		42	42	141 35	850
800	63.3	23	19	088 10	63.7	27	19	111 11	63.6	26	10	082 11	63.2	24	15	101 09	62.3	33	27	094 14	62.3	34	28	136 12	62.1	36	30	139 22	60.5	39	39	165 34	800
750		18	14	055 09		24	19	110 10		20	05	061 10		23	04	070 07		27	23	093 15		33	21	157 14		30	26	156 19		33	31	157 32	750
700	97.4	13	08	027 06	98.1	19	12	351 10	97.9	16	03	053 05	97.5	17	06	055 07	97.0	23	17	092 15	97.2	26	12	184 14	97.1	29	05	174 20	95.7	27	33	155 30	700
650		09	04	007 06		12	05	338 09		08	05	085 03		10	04	046 04		20	09	111 08		23	06	201 13		24	10	187 18		21	09	170 33	650
600	135.8	03	02	358 06	136.5	04	04	345 04	136.4	01	12	268 03	136.1	04	07	270 03	136.5	16	02	173 04	136.8	17	04	203 12	136.9	18	12	203 18	135.2	14	08	166 27	600
550		03	10	316 07		04	12	306 08		06	21	277 11		02	16	272 09		07	18	168 04		10	15	208 14		10	02	213 22		06	16	185 36	550
500	186.1	-12	-21	309 11	181.2	-10	-19	293 19	180.6	-12	-27		180.5	-12	-23		181.8	-03	-29	151 05	182.5	02	-22	223 15	182.7	03	-23	225 18	180.4	-04	-21	175 30	500
450		-21	-25	Max		-20	-28	Max		-23	-41			-23	-35	ELEVATION		-15	-42	245 05		-09	-29	234 16		-08	-33	223 28		-18	-30	163 37	450
400	232.3	-33	-37	Elevation	233.5	-31	-40	Elevation	232.4	-35	-50		232.4	-34	-49		234.8	-22	-53	285 28	236.1	-19	-32	233 30	236.5	-20	-33	215 30	233.0	-30	-42	171 36	400
350		-43		285 30		-43		282 41		-45				-46				-24	-57			-31	-40	236 31		-31	-46	234 48		-44		171 39	350
300	295.9	-59		274 38	297.4	-59		276 43	295.9	-57		245 55	295.8	-57		245 55	(388 mb)				301.7	-48		236 36	302.1	-46		238 45	296.9	-59		182 23	300
250		-59		295 30		-62		276 43		-58				-60		257 40						-60		243 41		-62		223 64		-61		202 49	250
200	382.7	-50		279 26	384.0	-53		277 30	383.1	-51		264 21	382.7	-53		264 21					388.1	-63		247 56	388.3	-63		224 35	383.3	-54		218 45	200
170		-50		272 18		-51		277 15		-49				-53		263 20						-56		253 30		-59		240 46		-56		210 33	170
150		-52		288 12		-49		278 15		(185 mb)				-52		287 19						-56		230 28		-57		219 39		-54		222 33	150
130						-51		278 11						-53		309 17						-57		233 24		-58		245 40					130
110						-50		281 09						-53		273 12						-57		236 27		-56		233 35					110
100					535.2	-50		281 09					533.0	-54		241 12					537.0	-56		238 17	536.8	-55		240 36					100
90						-50								-54		227 12						-55		239 15		-56		221 31					90
80					(72 mb)									-49		243 10					(86 mb)					-56		221 24					80
70														-45		268 01										-54		221 17					70
60																										-51		219 15					60
																										-48		220 13					
																										-44		241 15					
					Isothermal 1016 - 988 mb 49°				Inversion 850 mb 28° - 833 mb 30°				Inversion 832 mb 24° - 798 mb 26°				Isothermal. 725 - 715 mb 24°				Isothermal. 823 - 810 mb 37° 700 - 680 - 26°				Isothermal. (35 mb) 930 - 918 mb 48° 550 - 836 .. 10° Inversion. 750 mb 30° - 727 mb 32°				Isothermal. 884 - 860 mb 43°				
Tropopause	I 274 mb -65° 31.500				I 260 mb -64° 32.800				I 289 mb -60° 30.400				II 283 mb -61° 30.800				NR.				I 213 mb -68° 37.200				II 230 mb -69° 36.000				II 300 mb -59° 29.700				Tropopause

Sunday 10th June. 1951.

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

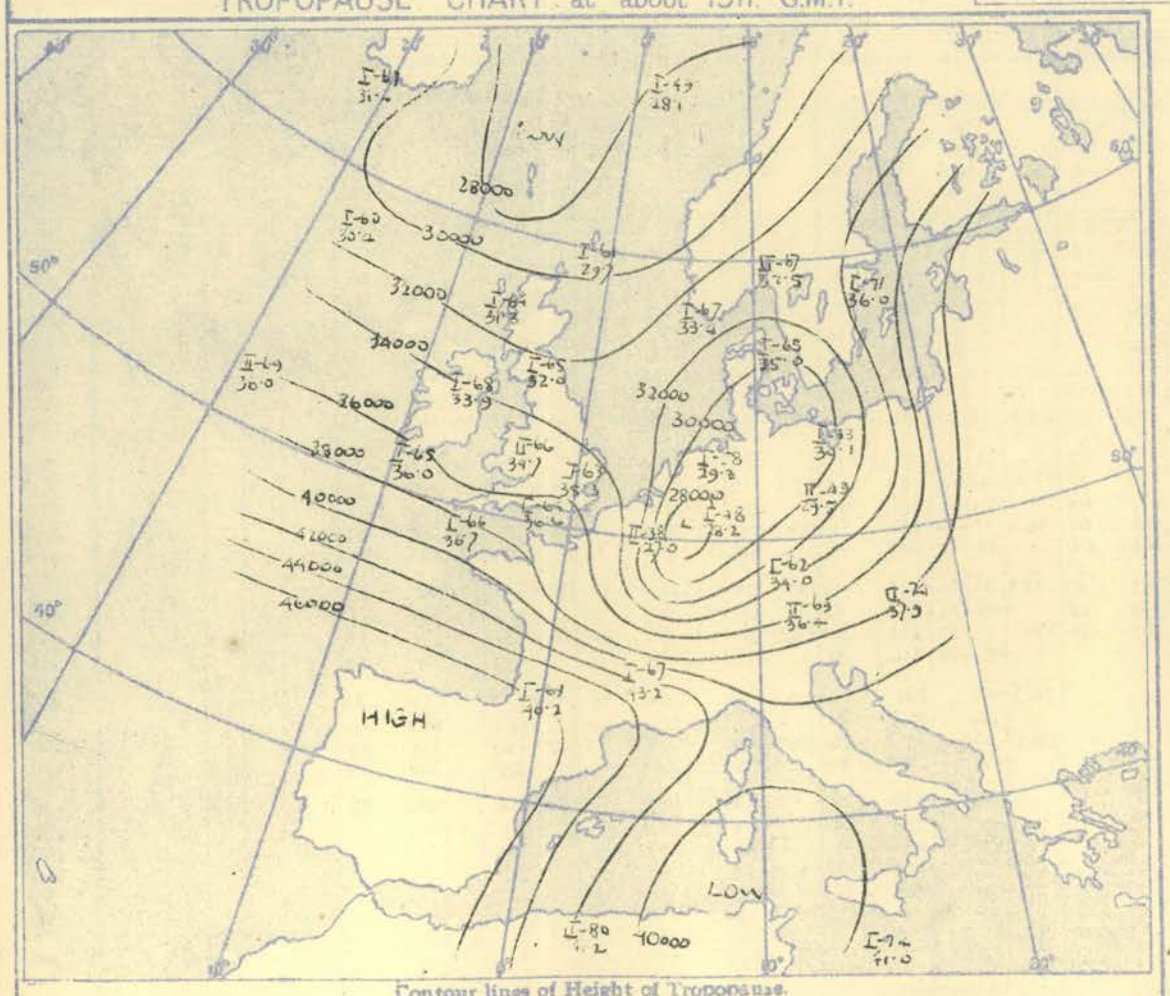


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N

100 80 40 30 20 15 9 knots

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Little of note to report. Continuation of the features noted yesterday

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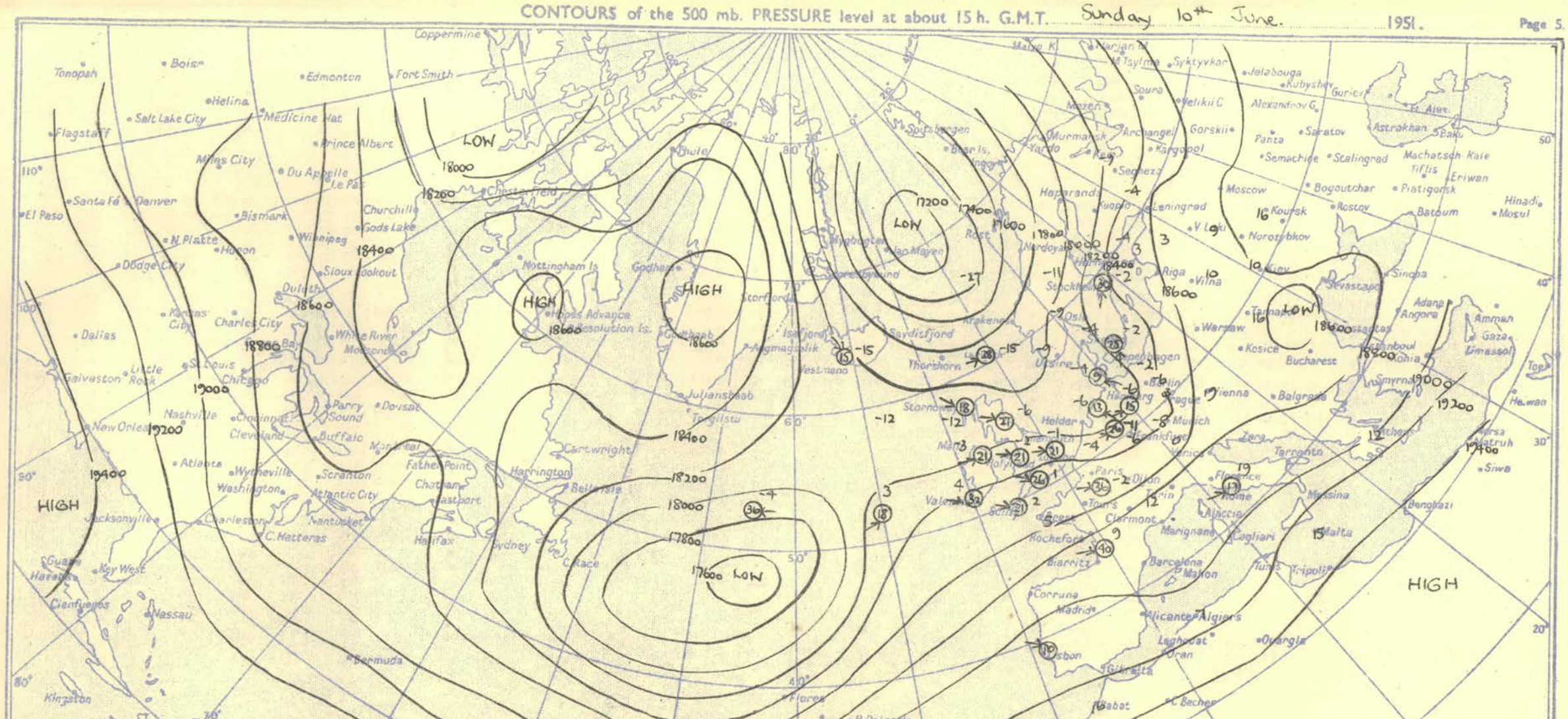
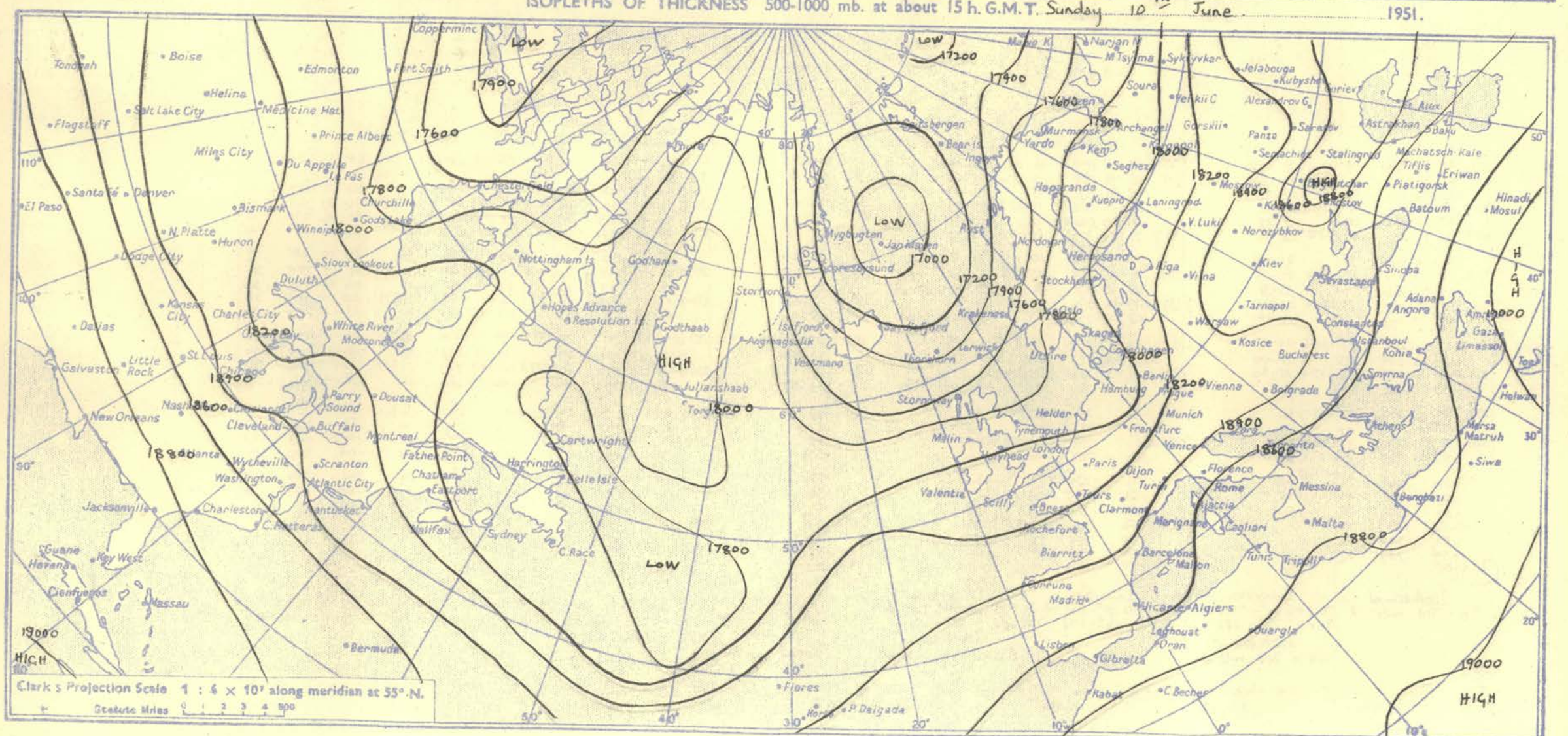
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Sunday 10th June. 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Sunday 10th June 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Sunday 19 ... 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

LERWICK

15h G.M.T.
Pressure: Time 1015·5 mb; M.S.L. 1005·4 mb; Surf 922 mb; Freezing mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	027	45	35	070	04
1000	4·1	44	35		
950		36	30	040	09
900	32·1	30	27	002	09
850		25	22	346	06
800	62·5	20	18	327	06
750		14	12	310	10
700	96·3	11	04	293	14
650		07	-08	293	15
600	134·6	02	-18	293	15
550		-05	-27	287	19
500	178·7	-15	-35	280	28
450		-25	-44	280	30
400	230·4	-38	-55	280	28
350		-52		281	33
300	293·0	-60		267	34
250		-52		264	37
200	381·0	-48		255	28
170		-50		259	26
150		-48		257	21
130		-50		266	19
110		-52		253	14
100	532·8	-51		280	12
90		-50		262	10
80	(83 mb)	-50			

Inversion 713 mb 10° - 691 mb 11°

Tropopause: I 234 mb - 61° 29,700'

STORNOWAY

15h G.M.T.
Pressure: Time 1015·5 mb; M.S.L. 1013·9 mb; Surf 880 mb; Freezing mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
	004	53	41	060	15
	4·2	49	38		
		40	29	053	13
	32·4	34	25	030	06
		28	20	018	07
	63·2	27	11	041	06
		23	05	351	05
	97·6	17	-03	340	07
		11	-11	328	09
	136·3	04	-18	317	15
		-03	-24	305	14
	180·6	-12	-32	287	18
		-21	-40	282	30
	232·7	-32	-50	276	41
		-45		278	48
	296·3	-58		282	52
		-58		274	45
	383·5	-49		270	32
		-47		274	27

Isothermal 850 - 813 mb 28°

Tropopause: I 278 mb - 64° 31,300'

LEUCHARS

15h G.M.T.
Pressure: Time 1014·0 mb; M.S.L. 1013·2 mb; Surf 817 mb; Freezing mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
	002	55	43	100	10
	3·8	52	41	075	09
		41	31	067	10
	32·1	36	27	056	13
		30	23	348	10
	63·1	30	20	309	11
		22	07	286	11
	97·4	18	-03	267	17
		15	-08	265	19
	136·3	08	-07	269	20
		02	-11	276	22
	181·2	-06	-24	280	27
		-17	-30	278	28
	233·8	-29	-44	272	30
		-41		275	31
	298·0	-54		281	45
		-61		281	54
	384·7	-53		274	39
		-51		274	30
		-52		279	29
		-52		278	26
		-55		263	25
	535·2	-55		271	27
		-53		275	12
		-51		251	19
		-51		267	13
		-51		266	17

Inversion 837 mb 28° - 817 mb 32°

Tropopause: I 269 mb -65° 32,000'; I 231 " -64° 35,300'

ALDERGROVE

15h G.M.T.
Pressure: Time 1011·1 mb; M.S.L. 1001·6 mb; Surf 795 mb; Freezing mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
	026	59	46	100	10
	3·0				
		47	31	090	09
	31·6	41	31	084	10
		39	27	072	11
	62·9	33	22	030	18
		26	10	288	11
	97·6	23	09	283	11
		18	-05	276	12
	136·9	12	-10	273	16
		04	-17	269	18
	182·0	-03	-26	269	21
		-13	-34	275	24
	235·1	-25	-44	279	29
		-36	-56	277	35
	300·0	-49		276	39
		-68		273	41
	386·0	-58		279	26
		-54		272	30
		-52		270	36
		-50		270	32
		-53		273	30
	536·7	-51		286	24
		-50		269	22
		-51		251	26
	(78 mb)	-49		249	22
		-47			

Isothermal 889 - 860 mb 40°; 700 - 684 " 23°

Tropopause: I 250 mb - 68° 33,700'

LIVERPOOL

15h G.M.T.
Pressure: Time 1010·1 mb; M.S.L. 1008·1 mb; Surf 770 mb; Freezing mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
	000·6	63	50	360	05
	2·8	61	48	360	09
		54	45	315	06
	31·7	46	40	297	06
		40	36	281	01
	63·2	36	31	273	08
		29	21	270	08
	98·1	22	12	271	09
		19	-16	272	11
	137·5	14	-34	270	18
		06	-09	273	19
	182·8	-02	-24	278	21
		-13	-36	280	29
	236·0	-21	-52	292	31
		-35	-58	293	42
	301·0	-49		293	44
		-64		284	40
	387·4	-56		284	41
		-54		278	34
		-54		270	33
		-53		269	29
		-53		279	22
	537·5	-52		272	22
		-51		251	22
		-50			
	(78 mb)	-50			

Isothermal 695 - 675 mb 21°; 660 - 641 " 19°

Tropopause: II 244 mb - 66° 34,700'

DOWNHAM MARKET

15h G.M.T.
Pressure: Time 1011·3 mb; M.S.L. 1006·9 mb; Surf 777 mb; Freezing mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
	012	57	54		
	3·1				
		52	45		
	320	47	41		
		41	35		
	635	35	30		
		29	25		
	985	24	22		
		22	16		
	137·9	14	02		
		07	-05		
	183·3	-01	-12		
		-11	-18		
	236·6	-21	-26		
		-33	-40		
	302·0	-45			
		-58			
	389·5	-54			
		-51			
		-50			
		-53			
		-54			
	540·1	-53			
		-52			
		-52			
		-52			
		-53			

For winds see page 3.

Tropopause: I 237 mb - 63° 35,300'

LARKHILL

15h G.M.T.
Pressure: Time 1011·8 mb; M.S.L. 996·1 mb; Surf 773 mb; Freezing mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
	004·4	59	53	260	03
	3·3				
		54	46	266	09
	32·3	48	42	266	09
		41	37	261	11
	63·8	35	32	255	12
		30	27	261	12
	98·9	27	22	263	13
		22	17	268	16
	138·5	19	-01	277	18
		11	-25	288	21
	184·3	01	-35	285	26
		-06	-31	292	28
	238·1	-19	-38	292	37
		-31	-49	293	38
	303·9	-44		295	40
		-60		283	44
	391·0	-56		288	45
		-53		280	40
		-54		284	36
		-55		286	34
		-55		271	24
	(104 mb)	-56			

Inversion 644 mb 21° - 633 mb 22°

Tropopause: I 225 mb - 64° 36,600'

CAMBORNE

15h G.M.T.
Pressure: Time 1012·6 mb; M.S.L. 1002·2 mb; Surf 772 mb; Freezing mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
	029	59	53	200	10
	3·5	59	53		
		52	49	225	18
	32·4	45	44	232	12
		39	37	248	13
	63·8	35	31	266	14
		29	24	272	15
	98·8	28	-20	274	15
		25	-17	283	14
	138·6	19	-15	281	20
		11	-20	273	21
	184·3	02	-29	276	21
		-09	-41	279	31
	238·0	-18	-58	284	44
		-31	-58	289	47
	303·6	-47		286	58
		-61		289	60
	390·2	-63		283	57
		-62		282	49
		-57		283	38
		-55		278	26
		-59		271	32
	533·5	-61		269	31
		-59		276	22
		-58		268	20
		-56		263	16
		-55		254	14
		-57		247	08
		-55		275	07
		-54			

Inversion 734 mb 28° - 711 mb 29°; 659 " 24° - 640 " 26°

Isothermal 825 - 809 mb 36°

Tropopause: I 223 mb - 66° 36,700'

VALENTIA.

15h G.M.T.
Pressure: Time 1011·1 mb; M.S.L. 1009 mb; Surf 725 mb; Freezing mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	003	58	54	295	05
1000	3·0	54	50	285	05
950		50	47	231	05
900	31·8	44	41	172	06
850		39	36	124	06
800	63·2	35	32	116	06
750		34	24	171	04
700	98·4	30	16	257	01
650		24	09	259	12
600	138·2	18	02	264	16
550		11	-04	263	20
500	184·0	04	-17	272	32
450		-04	-30	275	36
400	238·2	-14	-26	273	41
350		-26	-40	275	50
300	304·6	-40	-55	275	62
250		-58		275	68
200	391·7	-65		273	59
170		-62		273	56
150		-57		271	43
130		-56		267	33
110		-55		252	30
100	540·1	-54		254	30
90		-54		264	26
80		-54		262	24
70		-54		252	21
60	(54 mb)	-53		244	18

Isothermal 515 - 493 mb 04°

Tropopause: I 232 mb - 65° 36,000'

LERWICK

21h G.M.T.
Pressure: Time 1018·7 mb; M.S.L. 1008·7 mb; Surf 925 mb; Freezing mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	027	42	37	335	04
1000	4·7	41	36		
950		36	32	012	06
900	32·9	28	25	011	08
850		23	22	352	08
800	63·1	16	12	302	09
750		12	02	310	13
700	96·8	11	-10	319	15
650		07	-13	306	17
600	135·1	01	-17	292	19
550		-07	-24	292	25
500	179·1	-17	-33	288	27
450		-27	-42	284	33
400	230·5	-40	-54	283	33
350		-53		282	37
300	292·7	-65		280	41
250		-55		277	42
200	380·0	-50		270	33
170		-50		267	28
150		-50		263	24
130		-52		261	29
110		-52		270	15
100	531·1	-52		273	12
90		-53		244	14
80		-54		237	12
70	(73 mb)	-55			

Isothermal 750 - 714 mb 12°

Tropopause: II 803 mb - 65° 29,100'

STORNOWAY

21h G.M.T.
Pressure: Time 1017·3 mb; M.S.L. 1015·7 mb; Surf 880 mb; Freezing mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
	004	48	39		
	4·7	46	37		
		41	30		
	32·9	35	28		
		28	22		
	63·6	22	14		
		21	-09		
	97·8	19	-23		
		10	-31		
	136·4	03	-36		
		-05	-48		
	180·6	-14	-48		
		-24	-44		
	232·4	-35	-50		
		-46			
	295·7	-60			
		-69			
	381·4	-58			
		-56			
		-53			
		-55			
		-56			

Inversion 962 mb 40° - 918 mb 41°; 800 " 22° - 782 " 23°

Isothermal 735 - 708 mb 20°

Tropopause: I 255 mb -71° 33,000'

LEUCHARS

21h G.M.T.
Pressure: Time 1016·7 mb; M.S.L. 1015·9 mb; Surf 841 mb; Freezing mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
	002	47	43	090	06
	4·5	46	41	083	10
		40	34	073	15
	32·7	35	31	050	15
		31	29	010	11
	63·7	28	24	332	08
		21	18	288	10
	98·0	19	12	268	15
		15	05	271	18
	137·0	09	-08	276	22
		02	-12	277	27
	181·9	-06	-17	277	25
		-17	-28	283	33
	234·7	-26	-39	284	39
		-39	-51	286	43
	299·3	-51		286	52
		-67		286	55
	385·4	-57		280	45
		-52		282	40
		-51		279	31
		-53		275	21
		-56		260	33
	535·5	-56		260	23
		-55		283	23
		-54		255	18
		-55		250	19
		-53			

Inversion 887 mb 30° - 841 mb 32°; 717 " 16° - 697 " 20°

Isothermal 535 - 517 mb 02°

Tropopause: I 250 mb -67° 33,800'

ALDERGROVE

21h G.M.T.
Pressure: Time 1014·0 mb; M.S.L. 1004·5 mb; Surf 782 mb; Freezing mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
	026	52	46		
	3·7	51	46		
		45	44		
	32·5	44	41		
		40	31		
	64·0	34	25		
		29	25		
	98·8	21	13		
		21	08		
	138·1	12	-05		
		04	-09		
	183·3	+01	-18		
		-11	-29		
	236·7	-21	-35		
		-30	-42		
	302·4	-44			
		-60			
	388·9	-69			
		-64			
		-60			
		-57			
		-58			
		-60			
	536·3	-58			
		-59			
		-60			
		-60			
		-59			

For winds see page 3.

Inversion 935 mb 44° - 920 mb 46°; 683 " 18° - 650 " 21°

Isothermal 266 - 254 mb -60°

Tropopause: II 266 mb -60° 32,800'; I 240 " -63° 35,000'

LIVERPOOL

21h G.M.T.
Pressure: Time 1012·8 mb; M.S.L. 1010·8 mb; Surf 769 mb; Freezing mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
	000·6	57	51		
	3·5	56	50		
		50	46		
	32·2	46	43		
		40	37		
	63·7	35	32		
		30	26		
	98·7	23	18		
		18	14		
	138·0	12	01		
		05	-20		
	183·2	-02	-29		
		-11	-44		
	236·5	-21	-46		
		-33	-55		
	301·7	-48			
		-61			
	388·4	-58			
		-55			
		-55			
		-56			
		-57			
	537·6	-55			
		-57			
		-56			
	(74 mb)	-55			

Inversion 934 mb 48° - 920 mb 49°; 660 - 17° - 645 - 19°

Isothermal 266 - 254 mb -60°

Tropopause: II 266 mb -62° 32,700'

DOWNHAM MARKET

21h G.M.T.
Pressure: Time 1015·0 mb; M.S.L. 1010·4 mb; Surf 779 mb; Freezing mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
	012	55	49	020	06
	4·1	54	50		
		50	44	273	05
	32·7	46	43	281	06
		40	37	287	07
	64·3	34	31	298	08
		29	25	292	10
	99·1	24	19	268	10
		18	14	248	12
	138·4	11	05	264	18
		06	-09	278	25
	183·6	-03	-25	295	25
		-11	-37	292	29
	236·9	-21	-52	292	35
		-36	-57	290	36
	301·8	-52		286	34
		-63		294	42
	388·0	-57		296	53
		-56		286	41
		-58		288	33
		-61		276	33
		-60		270	24
	536·5	-58		267	26
		-58		267	24
				271	24

Isothermal 970 - 950 mb 50°; 983 - 466 " -07°

Tropopause: II 266 mb - 62° 32,700'

LARKHILL

21h G.M.T.
Pressure: Time 1014·4 mb; M.S.L. 998·5 mb; Surf 775 mb; Freezing mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
	004·4	55	53	CALM	
	3·7				
		53	46	246	09
	32·7	46	41	247	09
		42	37	255	09
	64·3	36	33	260	08
		29	26	256	06
	99·3	29	08	268	11
		24	-12	281	18
	139·1	16	-07	283	26
		07	-15	272	29
	189·4	-04	-23	280	30
		-13	-33	288	40
	237·5	-21	-42	292	51
		-36	-57	290	56
	302·4	-51		297	70
		-65		296	74
	388·2	-62		294	55
		-59		289	44
		-58		287	35
		-57		284	30
		-62		270	27
	535·9	-61		270	19
		-59		257	18
		-58			

Inversion 899 mb 55° - 885 mb 57°; 726 " 27° - 690 " 36°

Tropopause: I 241 mb - 67° 35,000'

CAMBORNE

21h G.M.T.
Pressure: Time 1014·8 mb; M.S.L. 1004·2 mb; Surf 708 mb; Freezing mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
	029	54	53	CALM	
	4·0				
		50	47	252	10
	32·8	46	41	261	13
		41	36	270	13
	64·4	38	33	274	16
		36	29	281	19
	99·7	31	19	289	21
		26	05	293	20
	139·6	20	-06	295	26
		13	-21	294	34
	185·6	04	-12	297	32
		-06	-18	304	36
	239·7	-15	-35	308	42
		-28	-43	306	54
	305·8	-44		307	65
		-57		308	67
	392·3	-69		303	62
		-64		305	48
		-61		306	44
		-62		303	45
	(111 mb)	-62			

Inversion 800 mb 38° - 785 mb 39°; 210 " -72° - 200 " -69°

Tropopause: I 210 mb -72° 38,300'; I 186 " -72° 40,800'

HMSO Press, MO, Dunstable

No. 11761

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Monday 11th. June 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

METEOROLOGICAL OFFICE 20 JUN 1951 LIBRARY

03h. G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	03h.	1020·9 mb	1010·6 mb	950 mb
STORNOWAY	03h.	1018·7 mb	1017·1 mb	885 mb
LEUCHARS	03h.	1018·5 mb	1017·8 mb	870 mb
ALDERGROVE	03h.	1015·2 mb	1005·5 mb	788 mb
LIVERPOOL	03h.	1015·4 mb	1013·4 mb	783 mb
DOWNHAM MARKET	03h	1016·3 mb	1011·7 mb	763 mb
LARKHILL	03h	1017·0 mb	1000·7 mb	705 mb
CAMBORNE	03h.	1016·1 mb	1005·5 mb	700 mb
VALENTIA	03h.	1011·8 mb	1010 mb	705 mb

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	027	33	30	005	07	004	45	43	CALM		002	42	41	060	05	026	50	44																												Surf
1000	035	35	28	004	13	050	43	40			049	41	40	078	09	041	49	44			042	52	49			044	49	48	045	07	044	45	45	220	02	032	51	51	CALM		003	55	51	160	09	1000
950		32	24	011	10		39	34	102	17		38	37	098	07		46	44				49	46			045	51	48			045	46	46			044	51	50			032	54	50	156	11	950
900	031	26	19	007	09	033	34	29	092	12	030	35	34	111	08	026	43	39			032	45	40	206	08	033	52	48	190	07		51	49	238	06		52	35	205	13		49	46	139	22	900
850		20	14	349	06		28	28	109	05		30	29	099	06		40	27				40	35				44	27	220	09	033	52	49	232	06	031	44	30	243	11		45	39			850
800	063	18	06	346	08	063	24	19	206	06	063	27	23	LNV		064	34	21			064	34	29			064	37	30	226	10	064	34	28	249	07	064	41	21	253	15	063	46	29			800
750		15	02	328	10		20	07	230	07		23	19	246	10		27	15	For Winds See Page 3.			28	21				30	26	250	10		31	19	256	11		37	10	261	17		39	21			750
700	097	11	02	301	13	098	17	05	223	06	098	19	11	241	14	098	26	06			099	36	10			099	25	20	265	10	099	31	19	267	14	100	32	04	263	20	099	31	28			700
650		05	07	293	16		11	09	214	06		17	03	260	18		19	01				22	05				19	05	273	12		24	17	267	17		27	14	265	22		23	21			650
600	135	02	13	289	24	136	04	16	227	10	137	12	10	269	20	138	12	09			138	14	06			139	16	12	276	23	139	17	23	267	21	140	22	00	270	24	139	17	04			600
550		09	23	284	31		03	18	262	18		06	13	268	20		05	23				06	15				09	13	282	30		10	33	278	27		14	23	272	28		11	13			550
500	179	19	30	277	31	180	11	20	265	31	182	05	23	268	22	183	05	21			184	01	22			185	01	22	281	30	185	01	23	289	33	186	06	35	266	34	184	07	22			500
450		30	41	274	36		19	28	263	37		13	28	273	30		15	53				10	33				09	35	279	32		06	40	290	42		03	36	265	33		06	30			450
400	230	44		271	36	233	30	35	269	44	235	24	40	273	39	236	26	56			237	19	43			238	17	41	287	39	239	19	48	288	45	240	14	38	268	36	238	17	37			400
350		56		277	36		42		270	52		37	47	275	49		37	60				33	56				30	54	295	52		33	55	290	51		28	52	268	42		30	49			350
300	292	64		275	49	297	51		273	69	300	47		277	54	300	51				303	48				304	46		296	60	304	47		290	60	306	43		266	61	304	43				300
250		60		277	48		68		272	67		06		283	46		68					65					62	293	70		63		292	75		61		270	58		52				250
200	278	53		271	34	283	53		270	45	286	65		279	53	286	66				288	69				290	66		294	60	290	70		285	63	293	72		269	60	291	67				200
170		52		265	33		52		265	34		59		274	41		57					63					61		287	51		65		282	47		62		268	47		58				170
150		52		263	29	446	53		267	30		59		276	36		59					61				451	59		280	43	451	61		283	42		59		269	50		57				150
130		53		261	33		53		264	25		60		273	33		58					60					57		280	33		61		287	47		61					58				130
110		55		257	18		53		267	21		61		262	31		60					61					60		278	29		63		287	39				Inversion			62				110
100	528	55		268	18	533	56		258	24	533	62		268	22	534	61				535	62				538	59		271	24	536	65		282	32						539	62				100
90		55		268	12		55		261	19		61		271	27		62					63					60		273	20		64		280	23	975 mb 50° - 950 mb 52°						63				90
80		56				Isothermal						60		267	24													59		270	20		63		277	21											80
70	(75mb)	56				320 - 310 mb -48°						59		266	20													61		278	18		61		249	19											70
60	Inversion										Inversion															Inversion					645	60		256	09						Isothermal						60
	1011 mb 33° - 988 mb 37°										850 mb 30° - 835 mb 31°															720 mb 26° - 710 mb 27°					1012 mb 49° - 987 mb 52°					Inversion					900 - 850 mb 45°				
	Isothermal																				Isothermal					Isothermal					Isothermal					1001 mb 45° - 962 mb 52°					611 - 586 mb 17°				
	838 - 820 mb 19°																				1013 - 986 mb 52°					987 - 950 mb 52°					Isothermal										Inversion				
	762 - 750 mb 15°																															775 - 750 mb 31°										850 mb 45° - 800 mb 46°				
Tropopause	I 281 mb - 67° 39,500'					I 245 mb - 69° 34,000'					II 245 mb - 68° 34,300'										I 220 mb - 72° 37,000'					I 203 mb - 68° 38,700'					I 208 mb - 74° 38,300'					I 190 mb - 74° 40,400'					II 220 mb - 67° 37,100'					Tropopause

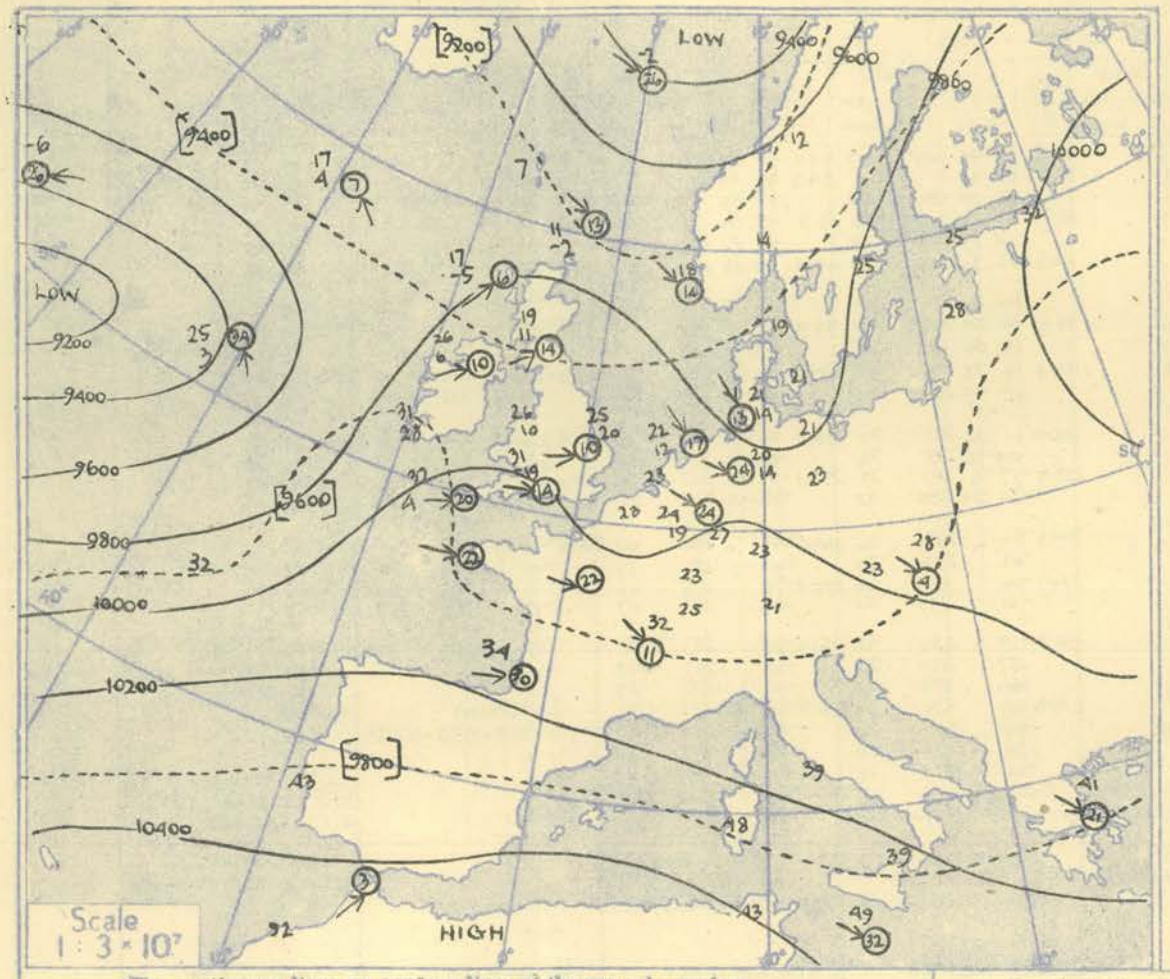
09h. G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	09h.	1022·1 mb	1011·9 mb	954 mb
STORNOWAY	09h.	1018·1 mb	1016·5 mb	859 mb
LEUCHARS	09h.	1019·7 mb	1018·9 mb	867 mb
ALDERGROVE	09h.	1015·2 mb	1005·5 mb	775 mb
LIVERPOOL	09h.	1016·7 mb	1014·7 mb	700 mb
DOWNHAM MARKET	09h.	1018·0 mb	1013·5 mb	762 mb
LARKHILL	09h.	1018·6 mb	1002·1 mb	723 mb
CAMBORNE	09h.	1015·8 mb	1005·4 mb	705 mb
				G.M.T. mb mb mb

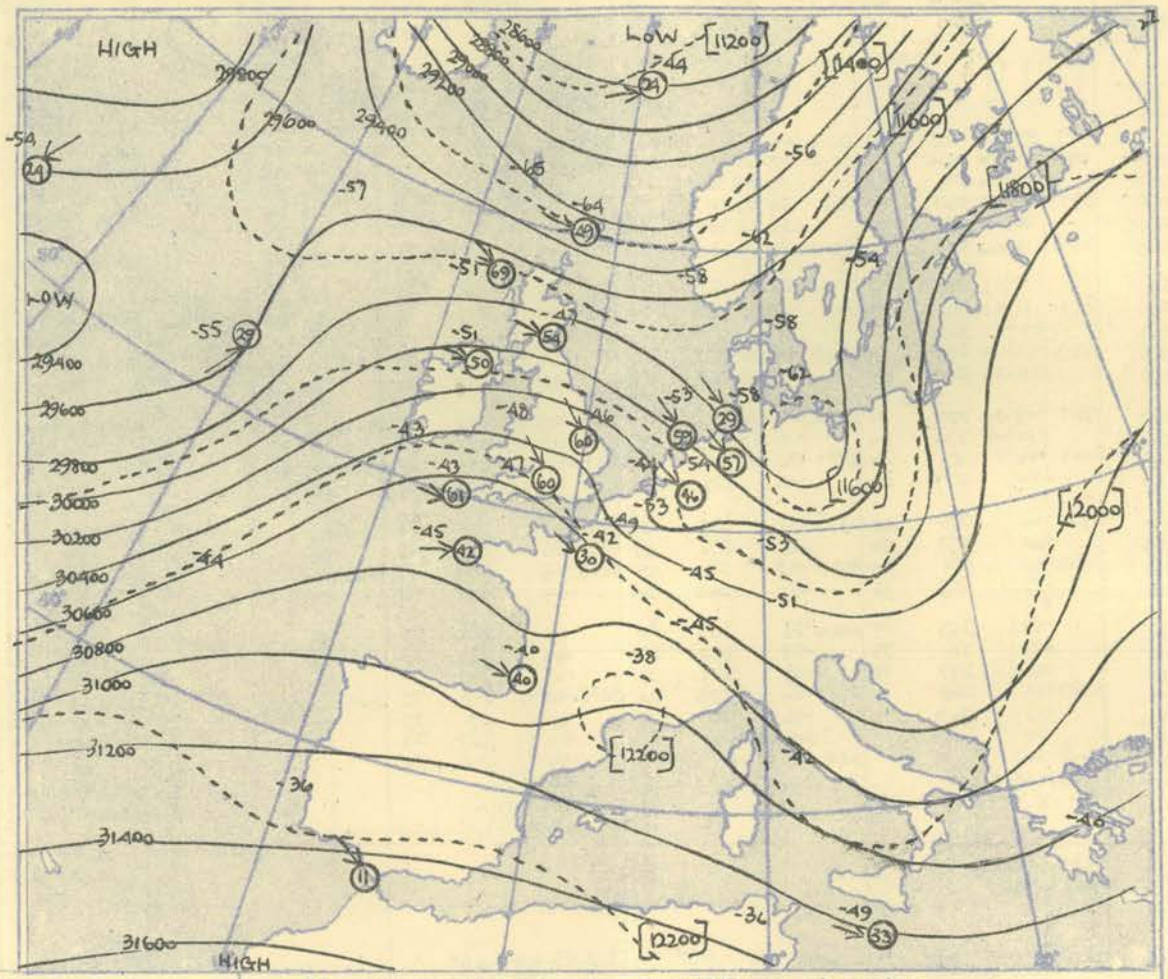
Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	027	32	32	040	08	004	49	41	100	07	002	51	44																																		Surf
1000	059	41	28	053	10	049	47	39	112	16	053	48	42			026	52	48	120	09	006	55	52	150	08	010	56	53	100	05	044	52	47	170	04	029	57	54	160	10						1000
950		31	22	051	10		41	34	120	15		41	38			041	51	47			046	53	50	151	16	049					051	51	46			044	56	51								950
900	225	26	15	056	09	331	35	26	123	07	335	35	32			045	44	126	22		047	45	166	13		053	50	194	06			50	37	202	09		051	48	180	22							900
850		22	08	049	11		31	22	127	05		30	27			032	43	88	137	22	033	43	90	187	14	033	47	40	215	10	033	45	27	226	10	033	52	39	205	21						850
800	637	17	02	033	10	639	26	20	157	05	643	29	25				39	36	154	19		38	33	187	14		41	36	206	09		41	27	227	10		50	16	216	20							800
750		15	-03	016	09		20	12	214	04		25	15	For Winds See Page 3.		064	34	22	168	12	064	33	30	193	13	065	38	31	196	09	068	37	22	245	13	065	45	25	227	17						750
700	975	11	-08	310	09	981	15	10	268	12	988	20	10				30	06	218	14	990	35	10	218	11		30	26	220	11		36	18	255	16		39	35	231	22							700
650		05	-12	280	15		11	01	259	22		20	04				22	-05	225	20		32	03	235	12	1004	30	11	258	12	1006	29	07	257	19	1009	31	27	237	22							650
600	1357	-01	-20	274	21	1368	07	-06	254	25	1381	13	00			1386	16	09	230	23		26	-13	245	19			24	05	276	25		26	-08	271	21		27	20	245	26							600
550		-10	-26	269	23		-01	-15	259	22		06	-03				07	-02	234	24		17	-13	251	22	1404	19	01	279	23	1404	18	-10	273	24	1410	22	04	249	29							550
500	1793	-19	-33	265	27	1814	-10	-21	256	39	1834	00	-11				10	-19	258	25		09	-17	277	27			11	-09				12	-26	268	28			15	04	247	30							500
450		-29	-43	267	35		-19	-28	259	41		-09	-23			841	00	-19	236	36	855	03	-19	236	30	1856	01	-22	281	30	1853	01	-23	289	33	1864	06	-35	266	34	1848	07	-22				450
400	2305	-48	-50	267	41	2338	-28	-37	258	52	2370	19	-36				-10	-32	233	36		-07	-42	266	40		-09	-35	279	32		-06	-40	290	42		-03	-36	265	33		-06	-30				400
350		-50		273	62		-41		257	60	2376	-22	-44	234	48		-31	-45			2392	-17	-43	259	41	2402	-13	-35	281	37	2398	-21	-37	257	39	2410	-18	-25	260	46	2388	-17	-37				350
												-35	-57	240	53							-31	-52	250	49		-27	-46	279	45		-32	-45	263	45		-31	-35	247	47		-30	-49			
300	2925	-57		276	83	2979	-56				3025	-47									3049	-46		255	57	3064	-42		280	67	3052	-49		262	56	3066	-45		241	56							300
250		-67		275	67		-67					-65				3025	-52		236	57		-62		260	66		-60		280	60		-62		267	60		-61		252	69							250
200	3797	-54		267	39	3841	-52				3887	-64					-67		230	61		-67		257	63		-66		282	61	3910	-72		269	60	3932	-67		247	63							200
170		-53		266	34		-50					-59				3883	-61		245	63		-59		263	46				277	48		-61		266	49		-63		250	53							170
150		-54		264	30	4470	-50				4502	-53					-57		256	66		-55		259	44																						150
130		-52		263	27												-59		248	44		-54		269	45																						130
110		-54		262	30												-55					-55		265	38																						110
100	5294	-54		259	18												-57				5375	-57		268	36	5399	-57		268	36	5378	-65		266	27	5404	-65		249	34							100
90		-55		252	16												-56					-57		265	30		-57		265	30		-64		265	22		-68										90
80		-56		245	19												-54					-54		259	20		-54		259	20		-59		260	11												80
70		-55		248	10												-52					-52		261	18		-52		261	18		-57															70
60		-54															-51					-51		255	21		-51		255	21																	60
	Isothermal																-50					-50		253	13		-50		253	13																	
	912 - 892 mb 26°																(49mb)					(49mb)					(48mb)					(68mb)															
	780 - 742 mb 15°																Inversion					Inversion					Inversion					Inversion															
																	925 mb 43° - 912 mb 45°					788 mb 31° - 766 mb 35°					978 mb 51° - 950 mb 53°					985 mb 48° - 962 mb 52°					921 mb 50° - 897 mb 52°									
																	504 mb -01° - 493 mb 01°					593 mb 08° - 522 mb 09°					816 mb 63° - 800 mb 38°					Isothermal					Isothermal									
																	Isothermal					240 mb -66° - 225 mb -64°					737 mb 28° - 707 mb 31°					788 - 750 mb 36°					940 - 921 mb 50°									
																	766 - 745 mb 35°					Isothermal					Isothermal											897 - 870 mb 52°									
	I 250 mb -67° 33,200'					I 254 mb -69° 32,500'					I 245 mb - 67° 34,500'					I 230 mb -70° 35,900'					I 240 mb -66° 35,300'					I 200 mb -72° 39,300'					I 194 mb -73° 39,700'					I 208 mb -69° 38,300'									Tropopause
Tropopause																	II 220 mb -68° 51,200'																													

Monday 11th. June 1951.

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (In knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.



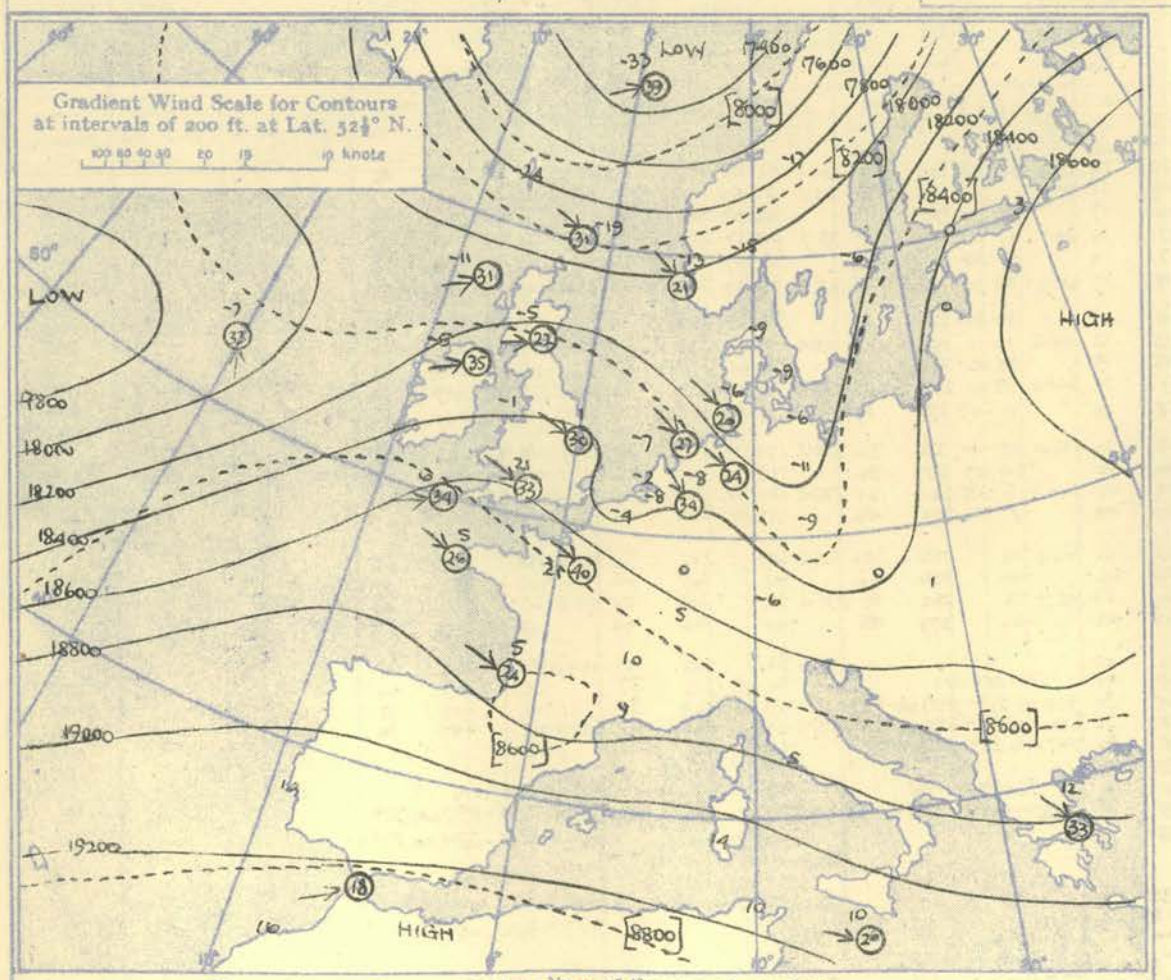
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.



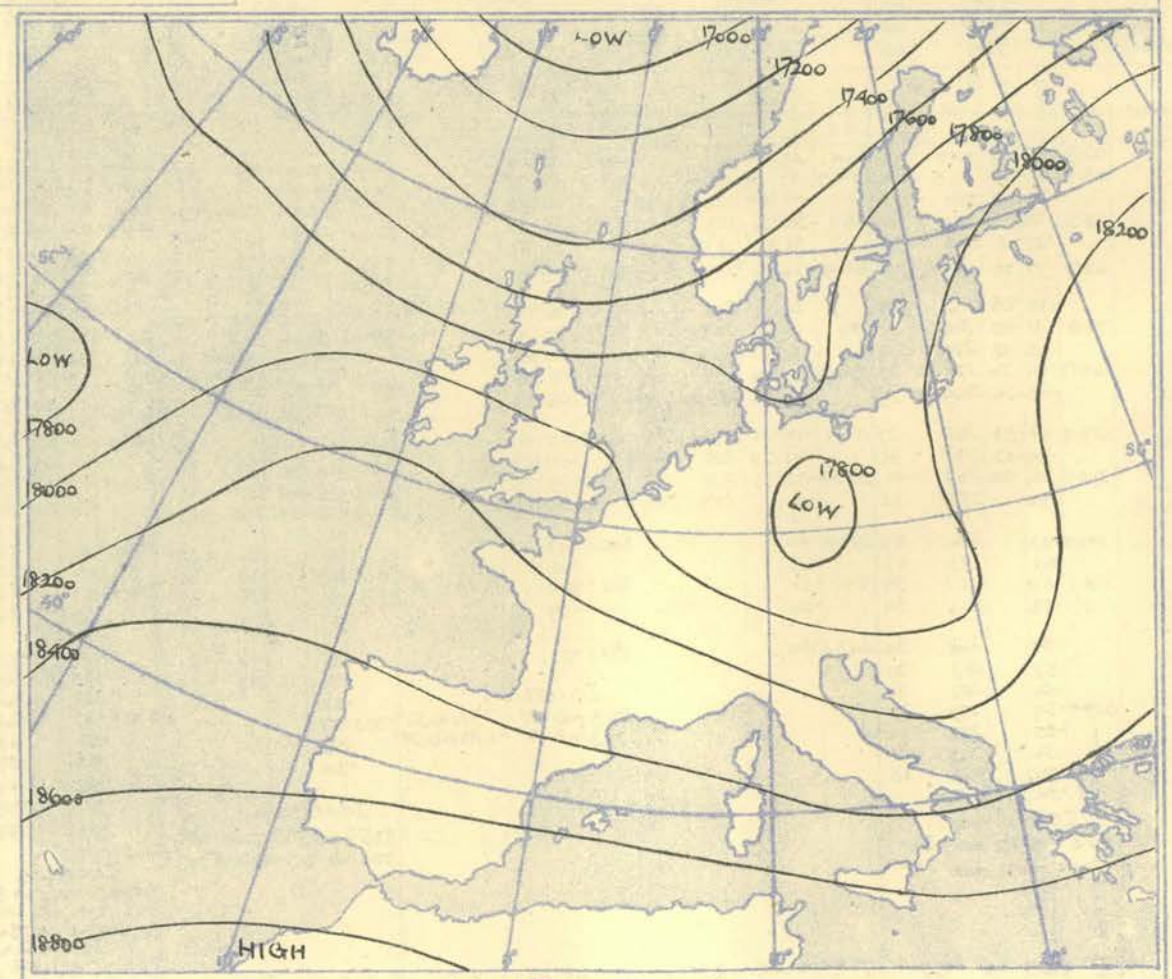
The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

100 80 60 40 30 20 15 10 knots



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500-1000mb.

Monday 11th June 1951. Page 8

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

Pressure	48·1N 17·0W	47·6N 12·3W	52° 12'N 02° 12'W																							
Time	1244L	1423L	1410L																						Time	Pressure
M.S.L.	1005 mb	1008 mb	1016·5 mb	mb			mb			mb			mb			mb			mb			mb			M.S.L.	
Surf	1001 mb	1005 mb	1015·0 mb	mb			mb			mb			mb			mb			mb			mb			Surf	
Freezing	720 mb	710 mb	680 mb	mb			mb			mb			mb			mb			mb			mb			Freezing	

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Pressure mb
Surf	01·0	58	53	01·0	59	57	00·4																		Surf
1000	1·3			2·4			4·6																		1000
950		51	51		55	49																			950
900	30·1	45	43	31·4	48	36	33·9	54																	900
850		44	36		48	28		47																	850
800	61·9	43	22	63·3	45	13	65·9	43																	800
750		34	19		38	22																			750
700	97·2	29	24	98·8	31		101·5	36																	700
650		20			23																				650
600	137	13		139	12		141·6	21																	600
550		03			01																				550
500	182	-07		183	-05		187·7	06																	500
450																									450
400							241·6	-20																	400
350																									350
300							307·0	-47																	300
250																									250
200																									200
170																									170
	cloud:-			cloud:-			cloud:-																		
	4/8 Sc 940-900 mb			4/8 Sc 960-900 mb			4/8 Cu 880-840 mb																		
	4/8 Sc 930-910 mb			5/8 AS NR.			3/8 AS 700-665 mb																		
	6/8 Ac 540-4xx mb			Isothermal 900-850mb 48°			3/8 AS 655-625 mb																		
							6/8 Ci 320-T·N·R.																		

DIRECTION (degrees from N) and VELOCITY (knots) of UPPER WINDS at heights above M.S.L.

Place	Aldergrove		Lympne		Leuchars		Lympne		Stornoway		Rineanna		Aldergrove								Place
Time	03L		09L		09L		15L		15L		21L		21L								Time
Type	PILAR				PILAR								PILAR								Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Surf.	080	10	240	04	110	12	070	05			250	10	180	10							Surf.
1,000	100	09	210	09	120	18	190	16			220	19	158	16							1,000
2,000	102	08	230	08	122	17	200	15			220	22	194	13							2,000
3,000	102	06	230	08	129	13	200	17			220	24	194	12							3,000
4,000	095	07	220	10	134	10	200	21			220	17	200	12							4,000
5,000	098	09	220	13	131	10	220	21					208	14							5,000
6,000	124	08	240	12	150	08	230	20					221	17							6,000
8,000	220	08	230	07	254	14	240	15					242	16							8,000
10,000	255	10			291	30	270	20					250	17							10,000
14,000	245	23			242	22	250	17					244	32							14,000
18,000	260	35			266	29	270	30					248	37							18,000
24,000	271	48			265	46							247	55							24,000
30,000	270	50			268	60			240	37			242	79							30,000
40,000	271	48			266	50			240	17			227	48							40,000
50,000	267	37			263	31			250	17			242	29							50,000
	260	26			262	25			(44,000')				232	30							
	(55,000')				(53,000')								(52,000')								

NEPHOSCOPE OBSERVATIONS

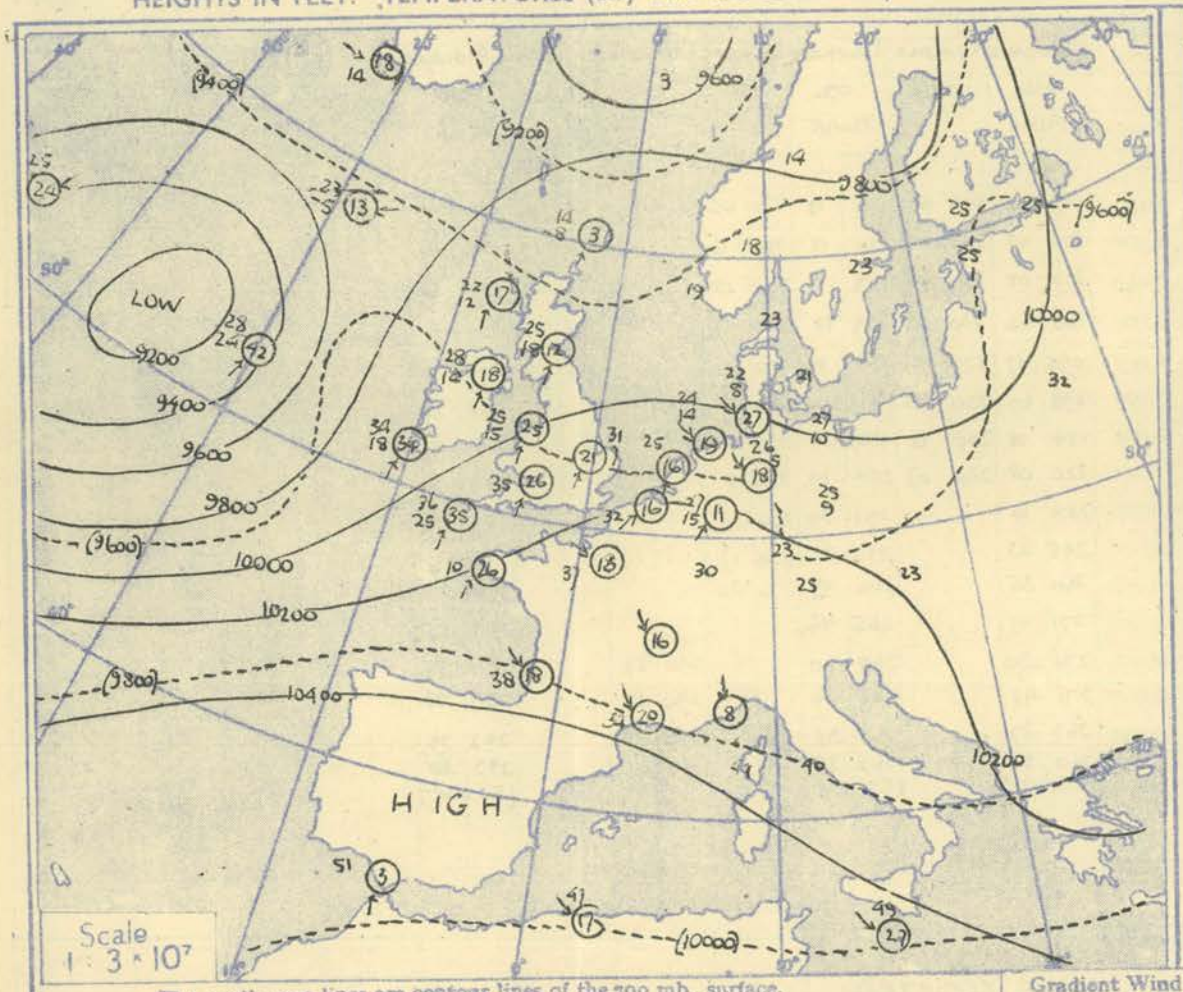
Place													Place
Time Type	NONE	REPORTED.											Time Type
Dir. Vel.													Dir. Vel.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

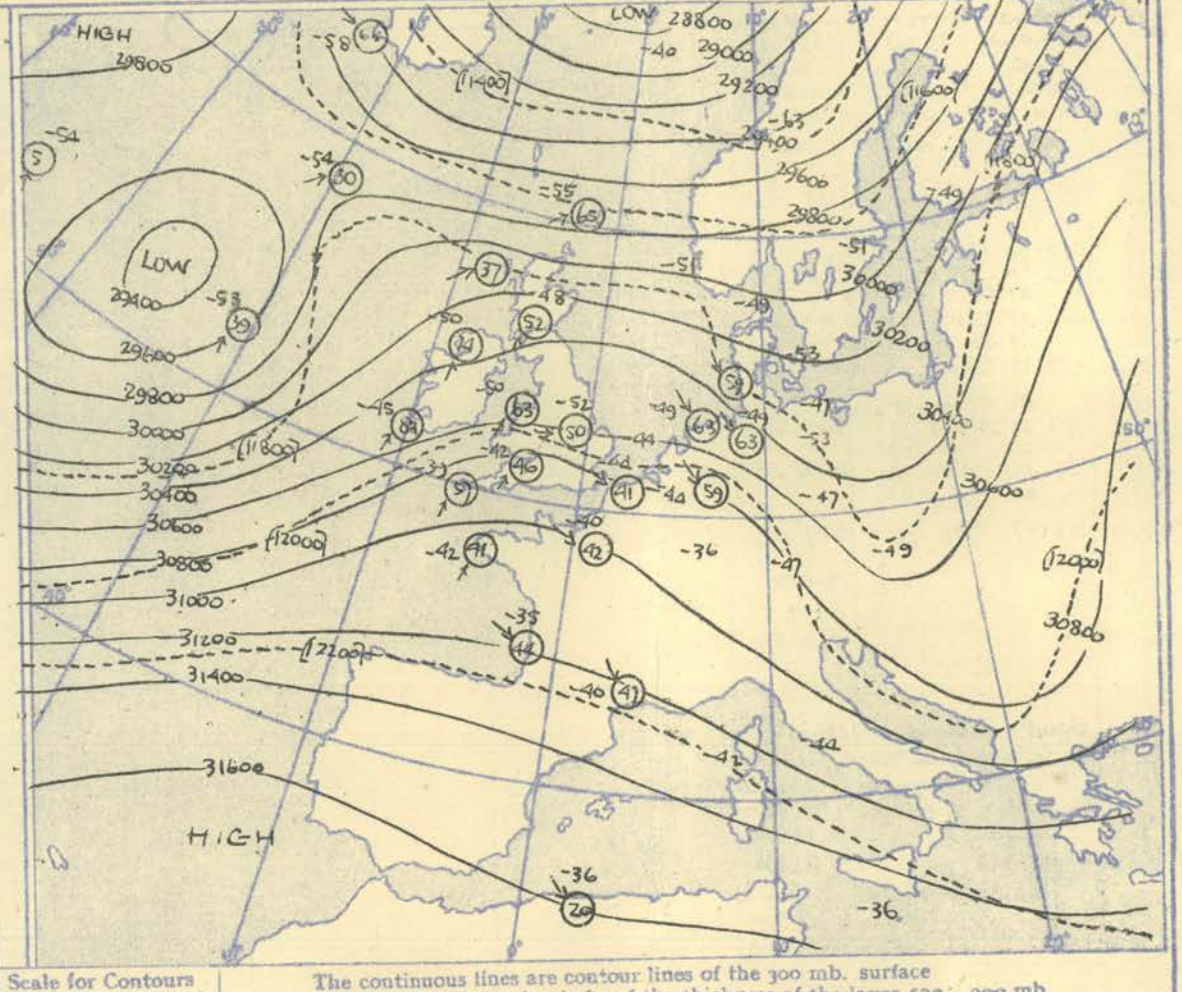
Ship	WEATHER RECORDER	WEATHER RECORDER	WEATHER RECORDER	WEATHER RECORDER	WEATHER EXPLORER	WEATHER EXPLORER	WEATHER EXPLORER	WEATHER EXPLORER		Ship
Lat/Long	52·6 N 20·1W	52·7N 20·5 W.	52·7N 20·6W.	52·6N 20·5W	59·2 N 19·4W	59·3N 19·4W.	59·2N 19·3W.	59·0N 18·9W.		Lat/Long
Time	03L	09L	15L	21L	03L	09L	15L	21L	G.M.T.	Time
M.S.L.	997 mb	993 mb	992 mb	995 mb	1016 mb	1013 mb	1009 mb	1003 mb	mb	M.S.L.
Surf	997 mb	993 mb	992 mb	995 mb	1016 mb	1013 mb	1009 mb	1003 mb	mb	Surf
Freezing	770 mb	740 mb	740 mb	750 mb	900 mb	890 mb	855 +790 mb	800 mb	mb	Freezing

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf		56	54	130	20		56	54	160	22		57	56	190	28		57	55	195	17		48	37	100	19		48	41	090	21		49	43	070	26		51	46	050	28							Surf
1000	-0·7					-01·9					-02·3					-01·5					04·2	46	36	100	21	03·7	46	40	090	20	02·6	49	41	064	26	00·9	51	47							1000
950		52	48	163	21		53	52	159	20		53	53	201	29		52	49	206	21		39	32	100	23		39	35	090	20		42	38	070	26		46	44	065	31							950
900	28·1	48	38	170	24	27·0	50	50	164	22	26·6	47	47	208	34	27·3	46	43	208	23	32·3	32	25	102	19	31·9	33	30	090	20	30·9	37	34	075	26	29·4	40	34	068	31							900
850		41	34	171	21		45	42	165	23		43	43	212	35		41	38	211	31		26	21	108	15		27	24	090	20		31	29	077	24		37	35	073	24							850
800	59·7	35	30	173	29	58·8	39	39	165	24	58·3	38	38	213	34	58·9	37	30	219	29	63·0	23	13	109	13	62·6	23	19	093	18	61·9	33	12	086	24	60·7	32	31	083	15							800
750		30	14	172	29		33	29	163	25		33	32	216	34		32	22	226	26		22	07	103	15		23	09	092	15		28	00	088	22		27	22	104	12							750
700	94·6	25	03	163	34	94·0	27	21	163	25	93·4	28	24	224	42	93·8	25	15	223	23	97·2	17	04	103	07	96·9	19	05	092	12	96·7	23	-05	089	13	95·5	25	03	39	10							700
650		18	00	166	34		22	-01	163	23		22	14	213	45		19	07	214	23		10	00	103	02		13	02	090	06		18	-02	066	09		17	02	122	09							650
600	133·9	11	00	168	31	133·5	15	09	163	25	133·0	13	08	214	40	133·2	13	07	196	21	135·8	03	-07	330	06	133·8	08	-02	Max		135·9	09	-05	067	07	134·6	09	01	095	07							600
550		02	-09	168	34		08	-02	163	24		07	-04	218	38		07	-08	200	20		-05	-14	335	09		-01	-07				00	-10	065	05		01	-04	027	03							550
500	178·8	-07	-16	169	33	178·9	00	-11	171	21	178·2	-03	-18	235	41	178·4	-02	-25	226	20	180·0	-04	-23	273	05	180·3	-11	-16	Elevation		180·6	-06	-18	188	03	179·4	-07	-10	289	10							500
450		-17	-24	180	34		-11	-21	196	24		-14	-29	238	39		-13	-30	231	17		-26	-35	273	12		-19	-27				-16	-23	205	13		-17	-20	278	16							450
400	231·4	-29	-38	200	34	232·2	-23	-33	197	29	231·2	-28	-44	235	39	231·5	-24	-51	227	21	231·7	-35	-46	270	09	232·8	-25	-39	288	14	233·4	-23	-30	211	20	232·1	-29	-33	225	18							400
350		-42		192	35		-3)	-43	190	37		-42		230	41		-38	-58	245	31		-45		Max.			-32	-45				-38	-44	235	24		-43									350
300	295·4	-35		188	29	296·8	-54		199	33	295·2	-53		228	39	295·9	-55		225	23	295·3	-57		Elevation		298·4	-40	-51			298·1	-54		246	30	296·0	-57		Above							300
250		-64		181	28		-47		206	27		-50		230	36		-66		253	35		-66		254	55		-47					-67		243	17		-61									250
200	382·3	-54		198	33	385·9	-45		207	24						382·9	-49		212	24	381·2	-57		251	21	388?	-38		252	11	384·6	-49		265	18	382·4	-51		Radar.							200
170		-54		218	29		-45		216	27						(180mb)	-49					-56		245	11		-38		259	13	(175mb)	-47					-51									170
		-54		224	31		-45		217	24												-54					-36		268	09							-51		Elevation.							
150																					(15)mb																-50									150
130		-56		205	26		-49		220	23																										-53									130
110		-59		200	30		-48		225	18																																		110
100	531·6	-61		197	24	539·1	-50		223	19																										533·3	-51								100
90		-62					-49		222	20																											-51	290	12							90
80		-61					-47		222	16																											-49	250	12							80
70		-60					-45		227	13																																				70
60							-43		229	09																																				60
							-45		229	10																																				
						(48mb)	-45																																								
				Isothermal							Isothermal					Isothermal					Inversion					Inversion					Isothermal					Inversion									
				920-900 mb 50°							680-668 mb 25°					778-760 mb 33°					800 mb 23° - 793 mb 25°					802 mb 23° - 778 mb 26°					1009 mb - 1000 mb 49°					750 mb 27° - 731 mb 28°									
																																								730 " 27° - 718 " 28°									
																																								Isothermal									
																																								1003-1000 mb 51°									
Tropopause	I 255 mb -67° 33,000'			I 286 mb -58° 30,700'			I 290 mb -55° 30,200'			I 255 mb -69° 33,000'			J 256 mb -68° 32,900'			II 250 mb -47° 33,700'			I 250 mb -67° 33,700'			I 257 mb -68° 32,900'																							Tropopause

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

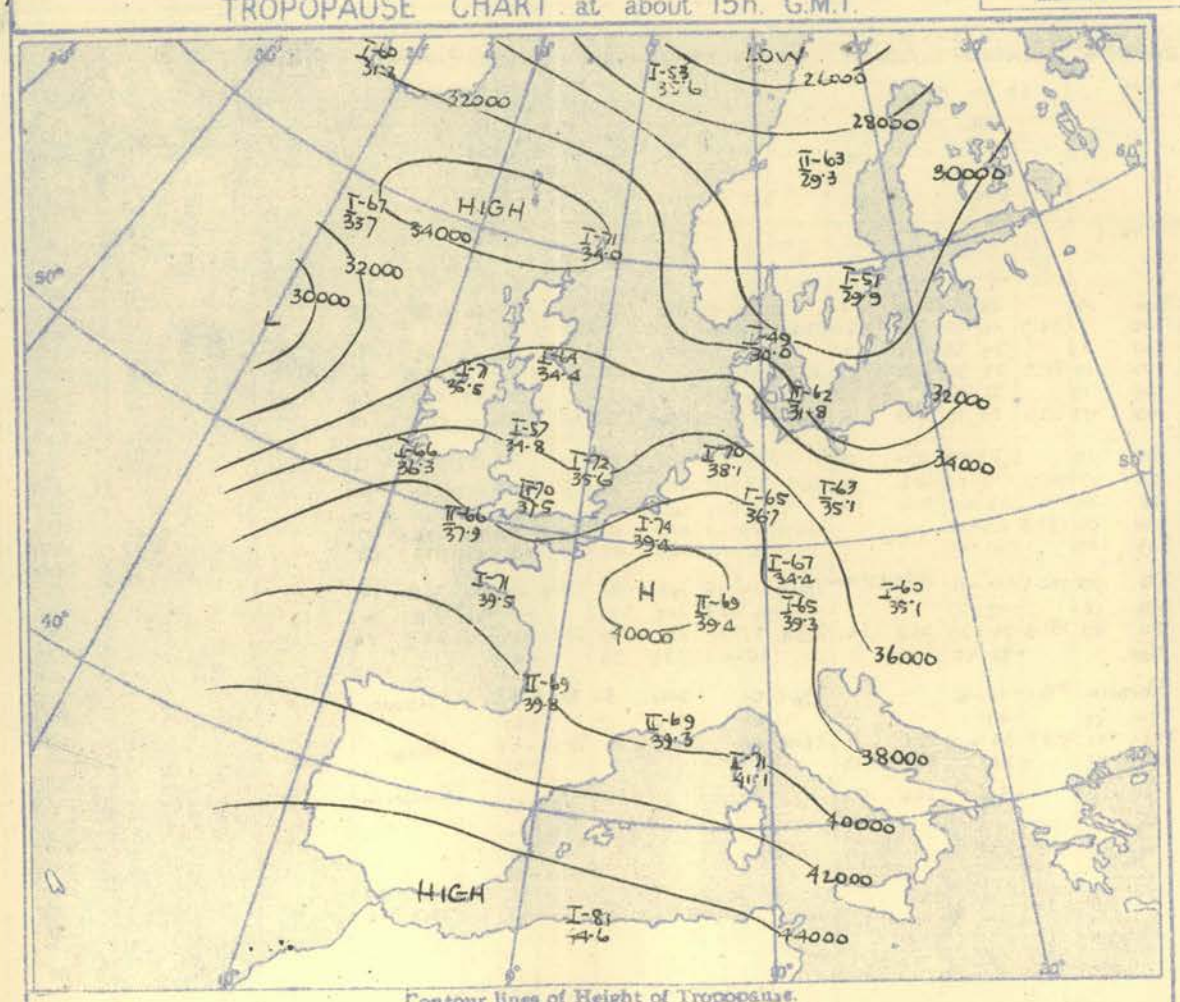


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N

100 60 40 30 20 15 10 knots

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Some warming occurred over the Brithist Isles as a weak warm ridge approached from the southwest, and the cold trough over Germany progressed slowly eastward.

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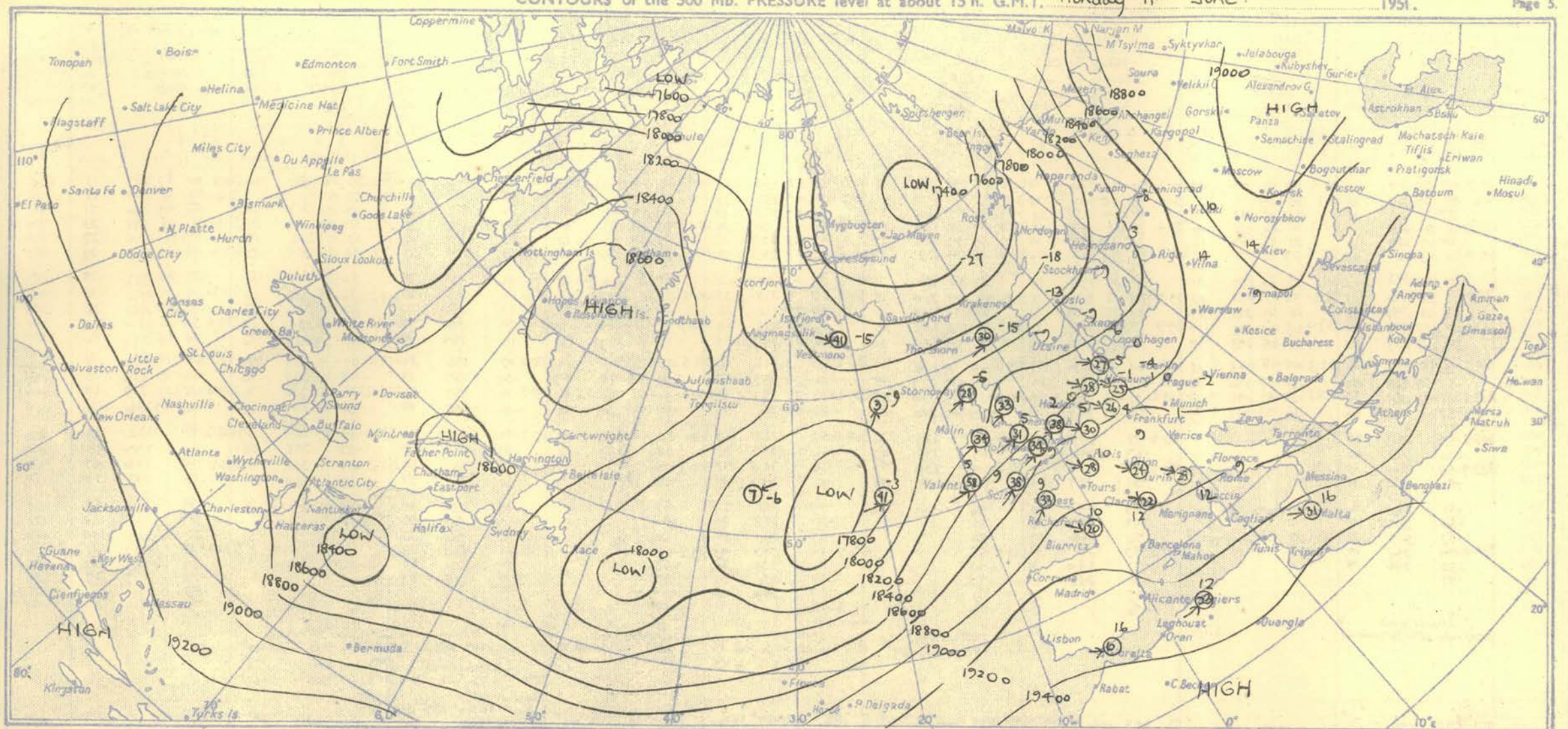
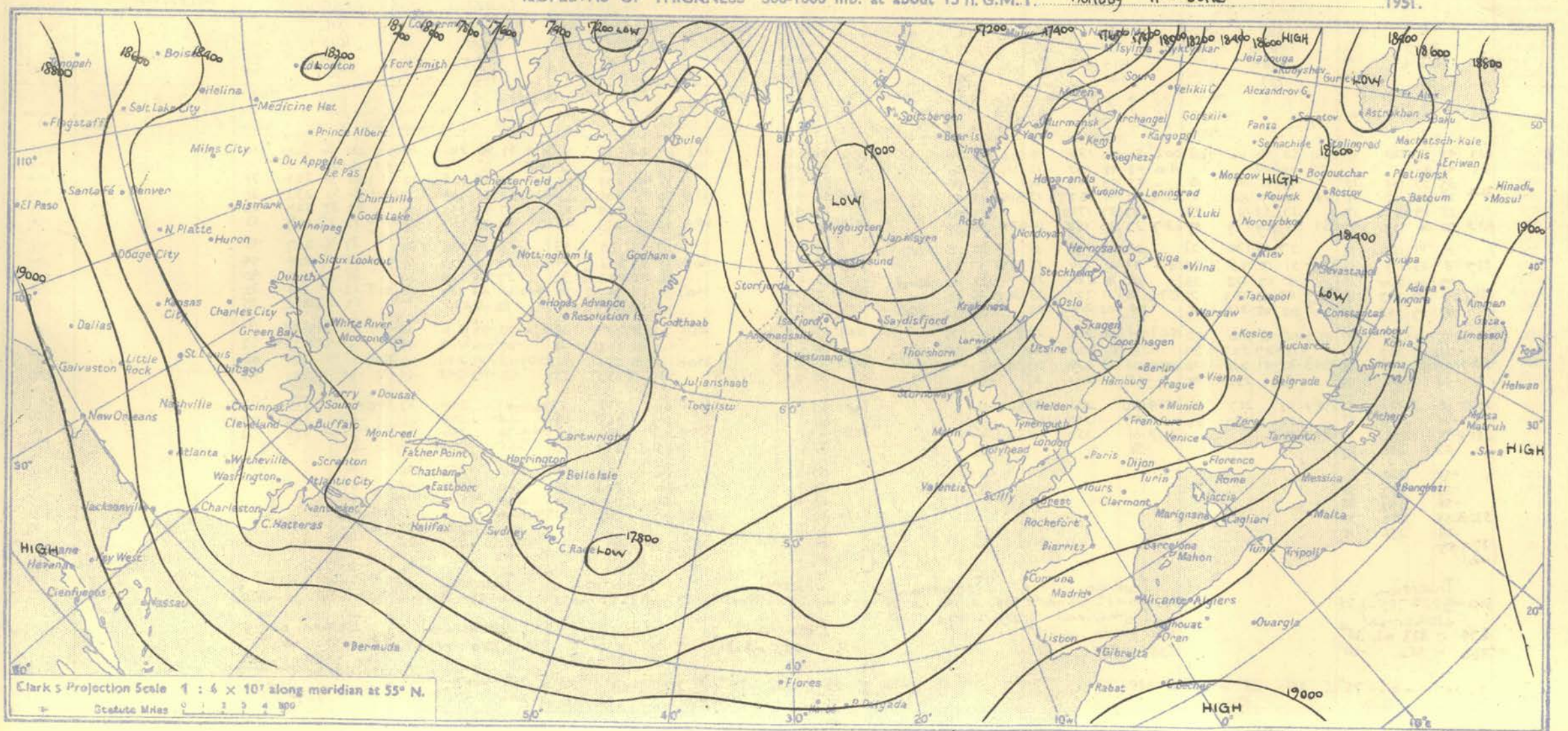
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Monday 11th June 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Monday 11th. June 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Monday 11th June. 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15L G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	15L	1022·4 mb	1012·3 mb	912 mb
STORNOWAY	15L	1015·9 mb	1013·3 mb	834 mb
LEUCHARS	15L	1019·1 mb	1018·3 mb	790 mb
ALDERGROVE	15L	1013·1 mb	1003·4 mb	743 mb
LIVERPOOL	15L	1015·7 mb	1013·7 mb	738 mb
DOWNHAM MARKET	15L	1017·2 mb	1012·8 mb	713 mb
LARKHILL	15L	1017·0 mb	1001·4 mb	680 mb
CAMBORNE	15L	1015·1 mb	1004·7 mb	670 mb
VALENTIA.	15L	1009·5 mb	1008 mb	680 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	49	31	110	09	00·4	55	41	100	04	00·2	50	46	120	16	02·6	59	49	160	15	00·6	61	52	150	07	01·2	67	54	CALM		04·4	65				02·9	59	58	180	10	00·3	60	57	215	13	Surf
1000	6·0	45	29	103	15	4·1	54	39			5·1	48	45	109	28	3·5					4·3	59	49	151	12	4·8	64	52			4·8	65				4·2	58	57			2·6	59	56	224	15	1000
950		37	25	100	12		48	34	123	17		41	39	118	22		48	44	162	24		53	37	173	13		57	49	191	08		56		187	15		54	51	217	28		55	49	220	21	950
900	33·9	31	21	095	11	32·7	41	30	138	16	33·4	38	37	132	18	32·2	42	39	169	24	33·2	46	40	190	14	34·0	50	44	193	09	33·9	50		196	15	33·2	54	51	227	38	31·6	50	41	221	23	900
850		26	09	088	10		34	26	152	15		35	34	155	14		39	39	187	24		41	34	224	15		42	39	196	12		50		210	16		52	47	232	37		49	36	220	27	850
800	64·4	21	03	109	05	63·8	29	23	171	18	64·6	33	32	189	14	63·6	38	24	193	26	64·8	39	27	235	18	65·6	36	32	194	15	65·9	45		229	23	65·4	48	40	234	32	63·6	44	34	219	29	800
750		20	-01	148	03		25	20	199	21		29	28	192	15		33	20	196	21		34	20	227	21		34	18	236	17		41		240	26		42	33	236	31		39	25	222	28	750
700	98·6	14	-08	226	03	98·3	22	17	232	17	99·5	25	18	204	12	98·8	28	14	204	18	100·1	25	15	215	25	100·8	31	07	247	21	101·6	35		246	26	101·2	36	25	237	35	99·2	34	18	229	34	700
650		08	-13	246	11		15	09	233	14		21	12	229	17		23	16	218	20		24	19	212	38		26	-08	257	23		28		247	27		30	04	236	37		39	09	230	39	650
600	137·0	01	-19	257	16	137·4	09	01	232	14	139·3	15	09	235	22	138·5	16	08	233	25	139·7	19	14	232	50	140·7	19	-11	260	30	141·8	24		246	32	141·4	24	-09	234	39	139·4	20	06	236	42	600
550		-07	-27	257	22		02	-08	243	19		10	06	233	27		09	-04	235	21		13	05	247	54		12	-16	257	36		19		254	30		18	-25	239	36		14	-08	241	50	550
500	180·9	+15	-31	253	30	182·3	-05	-15	243	28	185·0	01	-05	236	33	184·0	00	-12	238	34	185·6	05	-04	246	51	186·5	02	-13	261	38	188·2	09		255	34	187·8	09	-31	239	38	185·5	05	-18	240	58	500
450		-23	-38	268	40		+14	-27	240	33		-09	-15	240	39		-09	-19	237	45		-06	-20	252	52		-08	-36	274	49		-04		257	33		-03	-36	234	46		-06	-29	239	58	450
400	232·8	-31	-43	268	53	235·3	+25	-42	246	37	238·6	-21	-26	245	39	237·6	-21	-32	236	54	239·6	-20	-38	257	61	240·1	-21	-48	271	46	242·5	-16		257	44	242·2	-15	-42	236	50	239·4	-18	-39	238	64	400
350		-42		266	60		-36	-53	241	39		-34	-39	245	47		-35	-45	230	67		-34	-48	251	55		-35	-53	269	42		-26		249	45		-24	-50	239	54		-30	-47	236	70	350
300	296·8	-55		263	65						303·8	-48		248	52	302·7	-50		237	74	304·8	-50		255	63	305·1	-52		270	50	308·7	-42		265	46	308·8	-39	-59	239	57	305·2	-45		232	84	300
250		-70		263	62							-63		246	57		-67		226	87		-66		254	81		-68		272	72		-59		269	60		-55		248	68		-61		237	85	250
200	382·9	-53		260	39						390·9	-55		254	50	388·5	-64		236	67	390·7	-56		247	55	390·7	-66				395·2	-70		261	63	396·3	-67		249	68	392·0	-60		226	67	200
170		-51		255	39							-51		247	44		-56		235	98		-51		249	45		-55					-62		259	51		-65		244	57		-80		233	57	170
150		-51		260	30	For rest of						-49		244	44		-56		235	50		-49		248	47		-52					-64		256	49		-62		240	58		-54		238	49	150
130		-50		254	29							-44		247	36		-51					-53		248	39		-56					-57		255	46							-54		235	42	130
110		-52		247	21	Winds see page 3.						-50		264	37		-54					-57		238	34		-60					-62		250	39							-51		229	44	110
100	534·0	-54		240	19						542·3	-52		261	37	538·3	-55				540·7	-57		245	29	539·5	-63				542·8	-64		247	37						542·2	-53		227	38	100
90		-52		246	19							-52		249	31		+57					-56		234	34		-58					-67		244	37							-54		227	36	90
80		-51										-51		246	43		+55					-48		250	31		-55					-63		224	22							-55		227	29	80
70												-49		241	24		+51					-47		248	36		-54					-55										-57				70
60												-46					+50				(63 mb)	-46					-53					-52										-50				60
	Inversion 800 mb 21°-762 mb 22°										Isothermal 867-822 mb 39°						Inversion 688 mb 23°-636 mb 27° 245 " -68°-238 " -65°					Inversion 772 mb 32°-740 mb 35°					Inversion 882 mb 48°-858 mb 50° Isothermal 885-872 mb -20° Max wind:- 213 mb 38,200' 259° 78Kts										Isothermal 881 - 900 mb 54° 858 - 834 " 52° 217 - 205 " -66°										
Tropopause	I 245 mb -71° 34,000'					NR.					I 248 mb -64° 34,400'					I 235 mb -71° 35,500'					I 245 mb -68° 34,800' I 227 " -69° 36,900'					I 236 mb -72° 35,600'					I 220 mb -70° 37,500'					I 193 mb -68° 40,300'					I 230 mb -66° 36,300'					Tropopause

21L G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	21L	1020·8 mb	1010·6 mb	931 mb
STORNOWAY	21L	1012·6 mb	1010·8 mb	797 mb
LEUCHARS	21L	1014·8 mb	1014·0 mb	800 mb
ALDERGROVE	21L	1010·2 mb	1000·5 mb	747 mb
LIVERPOOL	21L	1012·5 mb	1010·5 mb	739 mb
DOWNHAM MARKET	21L	1015·8 mb	1011·5 mb	704 mb
LARKHILL	21L	1016·3 mb	1000·4 mb	700 mb
CAMBORNE	21L	1015·1 mb	1004·6 mb	700 mb
VALENTIA				

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	43	38	120	10	00·4	50	46	110	08	00·2	50	50	130	14	02·6	52	50			00·6	61	53			01·2	64	53	175	10	04·4	51	56	210	14	02·9	56	56	200	10						Surf
1000	5·5	42	30			3·3	49	44			4·0	48	48	141	12	3·1	51	50			3·5	59	49			4·4			175	12	4·5					4·1	56	56								1000
950		35	27	124	18		46	41	138	16		43	43	148	14		48	48				53	48				58	50	193	23		55	55	205	22		52	51	224	31						950
900	33·4	28	16	115	18	31·8	41	37	162	21	32·4	41	41	162	15	31·8	45	45			32·4	49	46			33·6	50	45	206	23	33·6	52	52	219	27	33·1	51	51	232	21						900
850		25	09	115	18		37	33	181	27		37	37	176	16		43	40				44	40				45	32	224	21		47	47	235	29		47	38	229	33						850
800	63·8	22	08	129	14	63·1	33	29	177	27	63·7	32	32	182	14	63·4	36	34			64·1	40	35			65·4	43	38	233	25	66·6	43	43	237	31	66·0	42	25	227							800
750		19	-01	151	12		27	23	170	27		26	26	192	15		32	25	For			34	28				37	33	239	33		38	30	230	31		37	16	227	93						750
700	97·9	13	-03	173	13	97·9	21	15	168	24	98·4	21	21	210	18	98·6	27	23			99·3	27	20			100·8	31	21	243	34	101·1	32	18	222	30	100·4	32	-17	224	44						700
650		09	-10	200	15		15	07	172	23		16	16	220	18		21	10	winds			26	22				27	06	242	32		27	06	228	30		28	-32	219	40						650
600	136·3	04	-09	199	18	136·9	09	02	187	21	137·6	12	11	221	23	138·0	13	02			138·9	21	-19			140·7	18	08	241	32	141·2	19	16	237	33	140·5	22	-39	219	32						600
550		-02	-09	267	23		02	-05	218	16		04	02	216	22		05	-12	see			12	-27				12	06	245	37		12	06	245	37		12	-46	222	35						550
500	180·1	-11	-17	271	31	181·7	-06	-15	210	22	182·7	-04	-06	221	27	183·2	-04	-25			184·1	01	-34			186·5	02	-28	247	33	187·0	03	-05	236	42	186·4	02	-54	223	41						500
450		-21	-27	267	90		-18	-29	227	24		-15	-17	230	27		-14	-34	page			-10	-36				-10	-42	245	42		-07	-15	238	44		-10	-45	224	52						450
400	232·9	-31	-57	260	36	234·3	-30	-41	232	26	235·6	-28	-32	234	24	236·2	-27	-46			238·2	-21	-36			240·0	-22	-41	251	45	240·9	-18	-29	243	49	240·1	-17	-41	225	66						400
350		-44		258	44		-43		225	29		-43		221	27		-41		3.			-35	-47				-34	-43	255	55		-31	-42	243	48		-29	-47	229	63						350
300	296·5	-60		253	42	298·1	-58		217	39	299·4	-60		231	35	300·4	-56				302·2	-52				305·1	-50		258	51	306·4	-47		249	52	306·0	-44		235	67						300
250		-74		252	48		-66		237	36		-67		248	60		-69					-66					-69		268	59		-65		256	66		-62		232	85						250
200	381·9	-55		256	39	384·4	-50				384·7	-61		251	45	386·1	-59				388·7	-63				389·9	-68		256	68	391·9	-74		256	71	392·1	-74		238	72						200
170		-53		258	32							-58					-56					-58					-65		255	50		-65		254	49		-65									170
150		-58		252	30												-55					-57					-56		252	48		-61		251	46		-66									150
130		-53		252	33												-58					-57					-60		246	38		-60		251	48		-58									130
110		-54		252	28																	-60					-69		244	31		-65		241	40		-61									110
100	532·3	-55		258	21																537·0	-59				538·7	-67		243	27	538·1	-66		235	32	104 mb	-62									100
90		-54		256	15																	-58										-66		242	28											90
80	(87 mb)	-55																				-57										-62		257	25											80
70																					(72 mb)	-56									(75 mb)	-62													70
60																																														60
	Inversion 800 mb 22°-785 mb 23° Isothermal 874 - 823 mb 25° 560 - 550 " -01°										Inversion 951 mb 43°-936 mb 44° Isothermal 650 - 630 mb 16° 535 - 522 " 01°					Isothermal 968 - 930 mb 48° 891 - 870 " 45°					Inversion 665 mb 22°-655 mb 23° Isothermal 632 - 595 mb 21°					Inversion 822 mb 42°-800 mb 43°					Inversion 974 mb 54°-955 mb 56° Isothermal 235 - 220 mb -71°					Inversion 930 mb 50°-911 mb 52° Isothermal 815 - 772 mb 42° Max wind:- 232 mb 36,300' 239° 102 Kts										
Tropopause	I 247 mb -75° 33,100'					I 257 mb -68° 33,100'					II 258 mb -73° 33,100'					I 25 mb -70° 33,300'					I 221 mb -74° 36,700'					I 222 mb -80° 36,900'					I 235 mb -71° 35,800' I 206 " -76° 38,500'					I 196 mb -75° 39,700'										Tropopause

No. 11762

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.

Tuesday 12th June

METEOROLOGICAL LIBRARY VALENTIA 10 JUN 1964 OFFICE

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

03Z

Station	Time	Pressure M.S.L.	Surface	Freezing
LERWICK	03Z G.M.T.	1017·6 mb	1016·9 mb	920 mb
STORNOWAY	03Z G.M.T.	1007·8 mb	1006·2 mb	778 mb
LEUCHARS	03Z G.M.T.	1010·0 mb	1009·2 mb	753 mb
ALDERGROVE	03Z G.M.T.	1008·3 mb	998·1 mb	761 mb
LIVERPOOL	03Z G.M.T.	1010·2 mb	1008·2 mb	719 mb
DOWNHAM MARKET	03Z G.M.T.	1013·4 mb	1009·1 mb	709 mb
LARKHILL	03Z G.M.T.	1014·0 mb	998·1 mb	714 mb
CAMBORNE	03Z G.M.T.	1013·4 mb	1002·9 mb	700 mb
VALENTIA	03Z G.M.T.	1005·5 mb	1004 mb	750 mb

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surface	02·7	43	33	110	14	00·4	50	45	150	12	00·2	50	50	110	07	02·6	54	52	200	07	00·6	58	56			01·2	59	57	170	12	04·4	56	55	230	05	02·9	55	55	200	10	00·3	53	53	180	14	Surface
1000	04·5	42	33			02·1	50	44			02·7	49	49			02·1					02·8	58	56			03·7					03·8					03·7					01·5	56	53	179	16	1000
950		36	29	119	21		47	40	161	21		46	46	118	07		52	50	226	07		53	50				55	53	215	27		54	54	221	21		51	51	224	29		52	49	177	24	950
900	32·5	30	17	127	21	30·7	42	36	178	21	31·2	44	44	130	17	30·9	48	47	230	10	31·8	50	46			32·8	52	51	230	24	32·8	52	52	224	26	32·6	48	47	226	30	30·4	47	43			900
850		30	02	154	18		40	33	187	18		40	40	138	14		42	37	228	18		45	38				47	46	228	36		47	47	226	31		44	19	228	32		42	38			850
800	63·1	21	13	176	15	62·1	35	31	197	17	62·7	36	36	174	10	62·5	37	33	208	24	63·6	39	27			65·0	43	41	225	33	64·9	43	43	225	35	64·3	40	02	234	32	62·1	38	29			800
750		23	07	198	13		29	25	207	19		32	32	202	12		31	26	202	26		34	06				39	36	226	34		37	37	224	25		36	29	230	35		32	23			750
700	97·5	17	12	216	11	97·0	28	18	215	18	97·8	26	23	233	17	97·5	26	15	215	20	98·8	30	05			100·5	31	28	226	39	100·6	36	30	231	41	99·6	32	32	229	40	97·2	26	10			700
650		15	10	213	11		16	09	216	19		21	09	240	21		21	03	234	19		25	03				22	20	225	37		24	09	234	45		26	36	226	45		19	08			650
600	136·6	07	02	205	15	136·1	09	01	221	24	137·3	15	04	234	21	136·9	11	-01	230	27	138·6	16	01			140·3	17	-30	223	35	140·4	17	-08	229	41	139·5	18	-42	225	46	136·5	12	03			600
550		-01	-06	206	19		02	-10	229	21		06	-05	238	29		03	-04	228	40		08	-07				10	-48	223	35		07	-02	218	45		09	-18	224	42		02	-05			550
500	181·0	-08	-13	218	24	180·9	-06	-19	235	21	182·6	-01	-17	238	30	181·9	-07	-12	226	38	183·9	-04	-14			185·9	01	-54	224	38	185·8	-01	-05	223	56	185·7	-01	-54	226	50	181·5	-07	-15			500
450		-20	-24	230	27		-17	-32	229	22		-11	-25	237	24		-17	-23	226	30		-14	-22				-13	-39	228	43		-10	-12	227	56		-09	-51	227	50		-16	-24			450
400	233·4	-31	-36	230	31	233·6	-29	-44	236	27	235·9	-24	-37	236	29	234·6	-27	-33	205	29	236·8	-25	-37			239·2	-22	-35	233	54	239·3	-21	-24	221	55	238·5	-22	-55	224	57	234·2	-29	-37			400
350		-44		232	34		-43		247	22		-36	-46	234	37		-41		202	36		-38	-47				-35	-44	234	59		-33	-36	216	69		-36	-59	223	57		-43				350
300	297·0	-60		239	31	297·4	-59		245	41	300·9	-50		236	45	298·8	-53		266	42	301·4	-52				304·2	-51		232	61	304·5	-50		218	77		-49				298·0	-59				300
250		-72		245	37		-65		250	44		-65		231	58		-58		211	45		-69					-69		238	75		-66		218	81	(310 mb)						-49				250
200	382·4	-55		251	33	383·6	-63		237	31						384·9	-55		229	36	386·9	-60				389·0	-69		241	55	390·1	-65		231	57						286·3	-46				200
170		-51		248	39		-55		235	31							-55		232	35		-59					-59		247	46		-63										-50				170
150		-53		249	33		-52		241	29							-55		232	30		-58					-58		247	41	(195 mb)										-52				150
130		-50		248	31		-53		230	27							-55		246	26		-59					-64		246	36											-52				130
110		-53		252	27		-66										-57		235	23		-58					-62		246	22											-53				110
100	337·0	-54		249	24												-58		239	24	536·2	-61				536·3	-62															-56				100
90		-54															-58		232	24		-62																			-59				90
80		-54																				-58																			-53				80
70	(86 mb)																					-57																							70
60																						-60																							60
	Isothermal 900- 821 mb 30° 7:7- 745· 23° 696- 681- 16°					Isothermal 1006 - 975 mb 50°					Inversion 914 mb 45° - 928 mb 46°										Isothermal 932- 915 mb 51° 750- 732- 34° 697- 671- 29° 563- 550- 08°										Inversion 963 mb 54° - 954 mb 55°					Inversion 908 mb 47° - 900 mb 48°					Isothermal 1004 - 1000 mb 56°									
Tropopause	I 260 mb -74° 32·700·					I 264 mb -68° 32·600·					I 225 mb -74° 36·100·					I 253 mb -69° 33·400·					I 239 mb -70° 35·000·					I 210 mb -78° 37·900·					I 226 mb -71° 36·500·					N.R.					I 281 mb -65° 31·200·					Tropopause

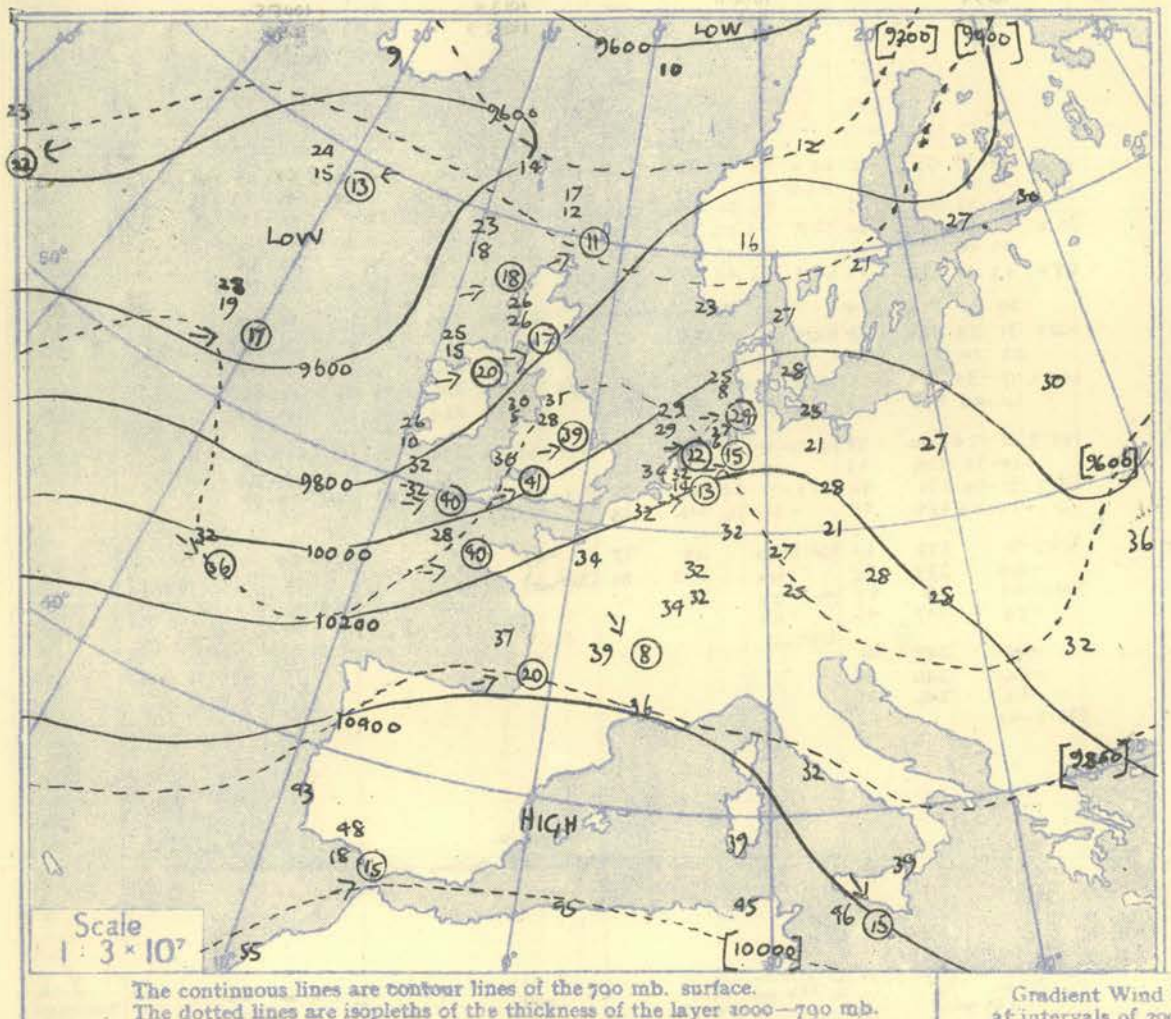
09Z

Station	Time	Pressure M.S.L.	Surface	Freezing
LERWICK	09Z G.M.T.	1011·8 mb	1001·7 mb	820 mb
STORNOWAY	09Z G.M.T.	1005·0 mb	1003·6 mb	771 mb
LEUCHARS	09Z G.M.T.	1006·9 mb	1006·1 mb	730 mb
ALDERGROVE	09Z G.M.T.	1005·2 mb	3969 mb	768 mb
LIVERPOOL	09Z G.M.T.	1008·7 mb	1006·7 mb	785 mb
DOWNHAM MARKET	09Z G.M.T.	1011·6 mb	1007·2 mb	718 mb
LARKHILL	09Z G.M.T.	1012·6 mb	996·9 mb	714 mb
CAMBORNE	09Z G.M.T.	1011·8 mb	1001·3 mb	739 mb

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surface	02·7	46	37	130	16	00·4	50	48	150	05	00·2	52	51	Calm		02·6	58	55	150	05	00·6	60	51	180	06	01·2	59	59	190	09	04·4	60	55	240	09	02·9	51	55	190	12						Surface
1000	03·1	45	37			01·4	50	47			01·9	51	50	203	09	01·8					02·4	59	49			03·2	58	58			03·5					03·2										1000
950		37	31	128	18		48	45	193	21		47	46	203	11		52	49	163	09		52	46	200	12		54	54	219	20		52	47	236	15		51	49	229	34						950
900	31·2	36	14	137	20	30·1	46	43	199	23	30·5	46	46	193	12	30·7	47	44	175	09	31·3	46	43	212	14	32·3	50	49	227	17	32·9	47	42	241	25	32·1	47	38	239	33						900
850		34	29	149	21		41	38	192	22		44	40	226	07		41	38	182	11		41	40	229	18		46	45	226	16		45	34	241	33		41	38	242	38						850
800	623	31	27	171	20	61·7	35	32	207	17	62·2	39	38	278	12	62·3	36	33	188	12	62·8	34	33	232	22	64·3	41	40	230	22	64·2	43	36	240	38	63·6	37	29	236	40						800
750		26	23	193	19		30	28	221	16		34	31	234	12		31	28	198	14		31	15	228	24		35	24	224	33		37	08	238	38		33	24	235	42						750
700	96·7	20	18	193	18	96·7	26	16	223	19	97·4	29	25	212	15	97·3	26	22	203	18	99·8	29	05	232	30	99·6	30	02	234	38	98·8	28	14	236	49											700
650		13	08	204	15		18	10	206	19		23	14	210	19		18	14	178	16		22	-03	232	32		23	-18	237	36		22	-06	231	39		21	08	236	51						650
600	135·7	10	01	230	17	136·1	11	07	183	16	137·1	16	08	212	21	136·7	11	06	160	20	137·4	15	-12	225	36	139·3	17	-23	239	39	139·2	13	-03	230	43	138·3	13	-07	235	51						600
550		01	-11	236	21		04	00	192	21		07	01	224	23		00	-08	175	18		06	-14	217	36		09	-21	226	38		09	-14	225	45		05	-12	235	53						550
500	180·5	-07	-20	231	25	181·1	-05	-14	208	27	182·5	-02	-06	215	28	181·5	-01	-19	183	17	182·7	-03	-24	219	33	184·9	00	-32	220	40	184·6	-03	-22	225	45	183·4	-05	-21	235	50						500
450		-18	-31	266	18		-16	-27	227	17		-12	-15	200	25		-17	-28	179	18		-14	-33	219	40		-08	-38	215	48		-13	-33	224	49		-15	-32	239	51						450
400	233·1	-31	-42	263	22	234·0	-27	-37	166	15	235·7	-24	-30	202	36	234·2	-29	-40	173	19	235·7	-24	-47	210	50	238·6	-19	-38	200	51	237·6	-25	-43	219	51	236·2	-27	-43	236	48						400
350		-44		246	27		-39	-50	190	22		-37	-49	204	35		-42		180	24		-36	-57	200	58		-31	-43	184	48		-37	-56	207	50		-39	-50	253	47						350
300	296·7	-60		251	42	298·4	-54		190	24	300·9	-53		201	38	298·2	-56		183	29	300·4	-52		185	63	304·2	-45		189	57	302·2	-53		195	57	300·5	-54		248	51						300
250		-72		249	45		-71		189	23		-65		212	39		-55		202	29		-55		209	48		-63		186	63		-47		215	50		-50		254	57						250
200	382·3	-52		240	31	384·5	-53		214	27	387·1	-52		227	39	386·0	-48		229	27	388·4	-50		229	38	390·7	-56		225	46	389·3	-55		240	50	390·0	-50		250	51						200
170		-52		237	34		-48		236	25		-49		239	26		-49		238	32		-46		233	33		-51		242	37		-49		247	40		-51		243	48						170
150		-52		234	33		-48		239	29		-48		236	28		-50		244	32		-45		248	37		-51		239	35		-53		247	34		-52		243	38						150
130		-52		236	37		-46		248	27		-51		225	28		-48		243	28		-49		251	33		-52		236	39		-54		246	38		-55		243	33						130
110		-51		246	15							-50		241	18		-50		241	24		-49		247	22		-53		237	35		-58		242	26		-57		243	36						110
100	533·1	-52		245	08						538·5	-50		233	25	537·8	-51		240	25	540·7	-50		231	25	541·5	-55		239	28	539·2	-58		232	22	539·1	-57		243	21						100
90		-49		240	08							-47		247	18		-50		242	23		-51		234	29		-57		239	25		-57														90
80		-49										-49		239	21		-50		250	20		-48		254	19		-50		238	23		(88 mb)														80
70	(88 mb)											-45										-49							239	24																70
60																					(63 mb)																									60
	Inversion 928 mb 33° - 894 mb 37° 650- 13° - 630- 14°					Inversion 873 mb 43° - 840 mb 45° Isothermal 574- 540 mb 47°					Isothermal 630 - 620 mb 15°					Isothermal 774 - 708 mb 31°					Inversion 841 mb 44° - 826 mb 45° Isothermal 883 - 850 mb 45° 788 - 776 - 41° 603 - 588 - 13°																															
Tropopause	I 253 mb -73° 33·100					I 243 mb -73° 34·300					I 246 mb -66° 34·200					I 295 mb -57° 30·200					I 269 mb -58° 32·400					I 225 mb -71° 36·600					I 258 mb -63° 33·400					I 303 mb -54° 29·800										Tropopause

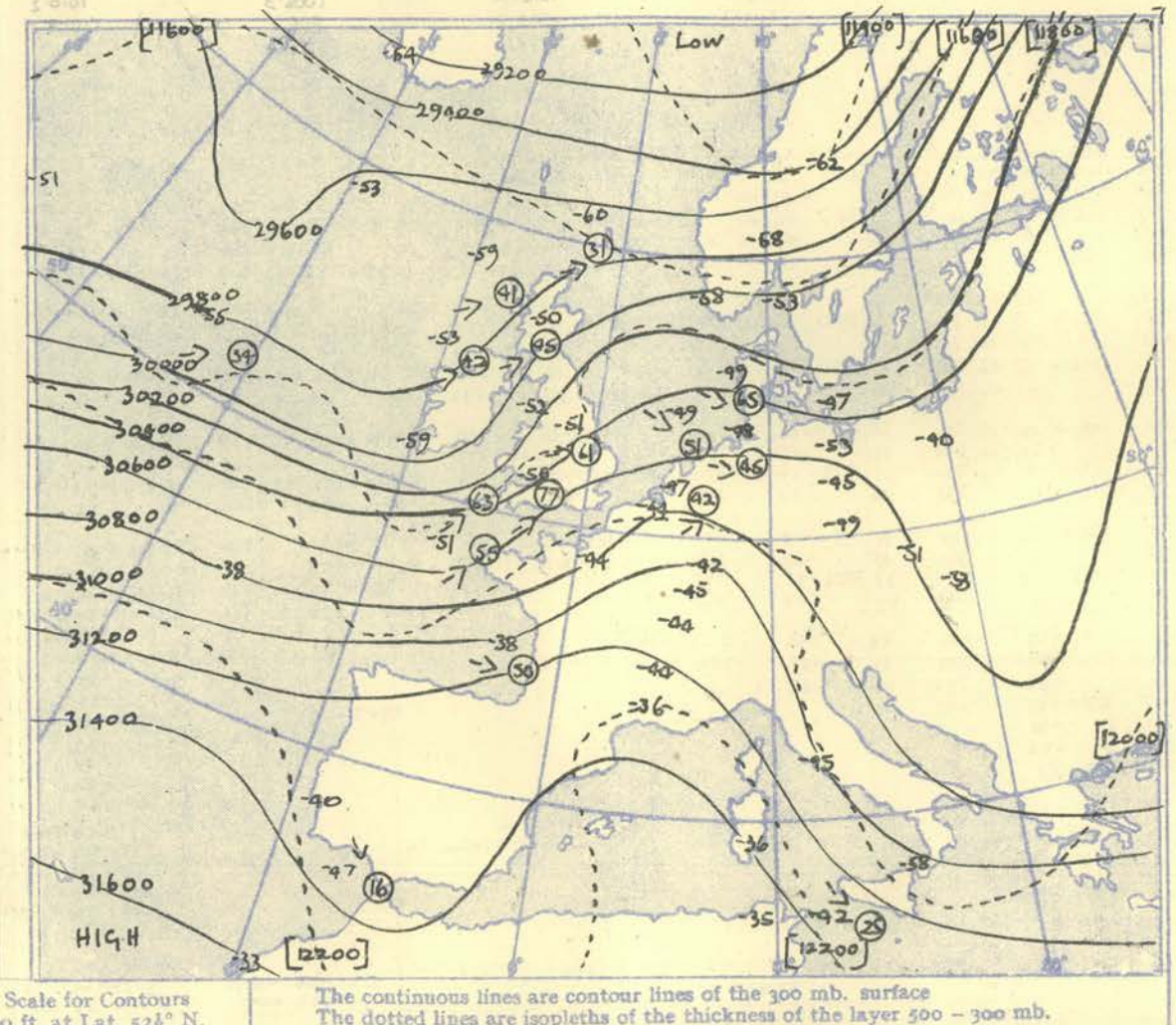
Tuesday 12th June 1951.

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb. levels at about 03 h. G.M.T.

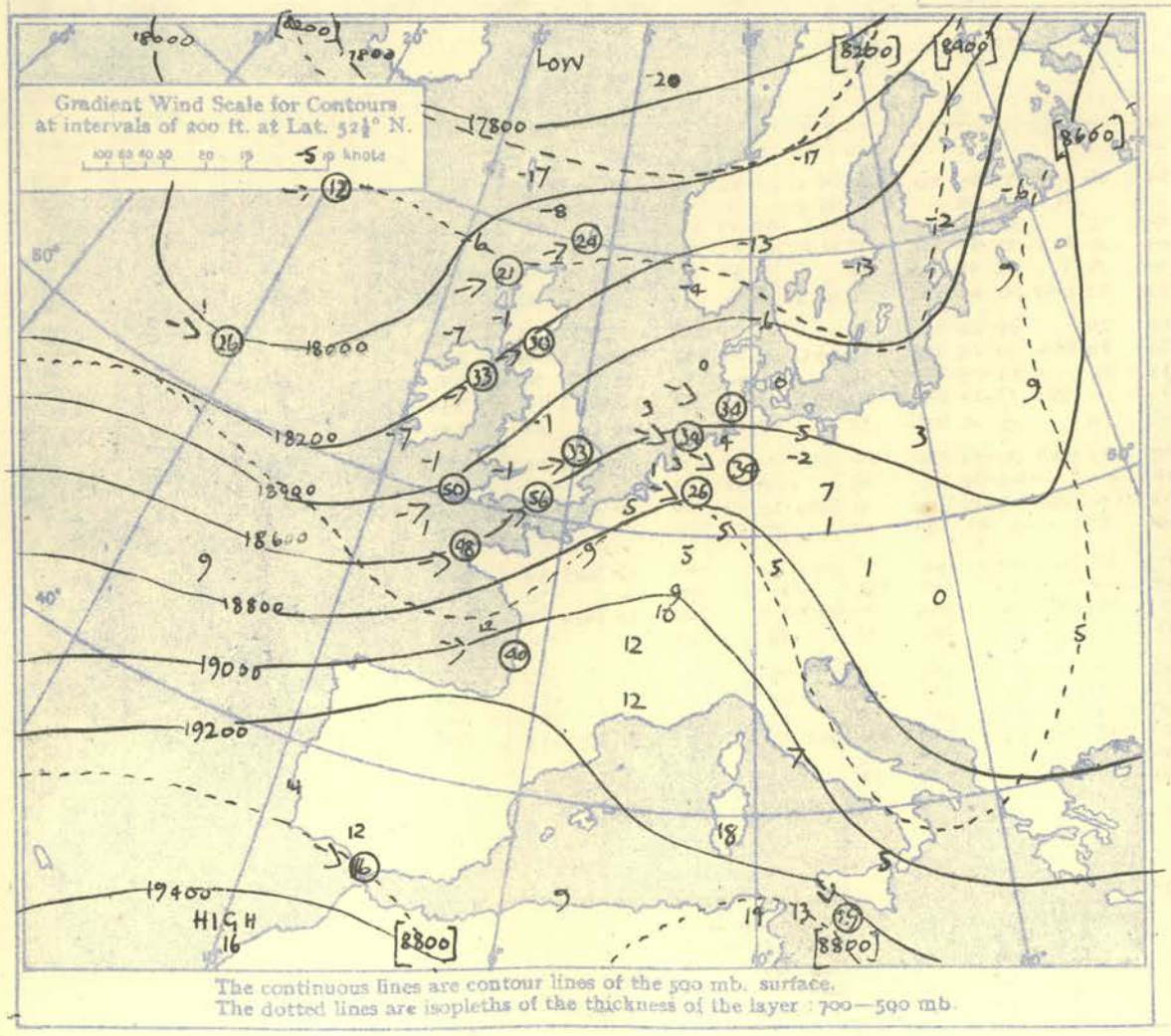


The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

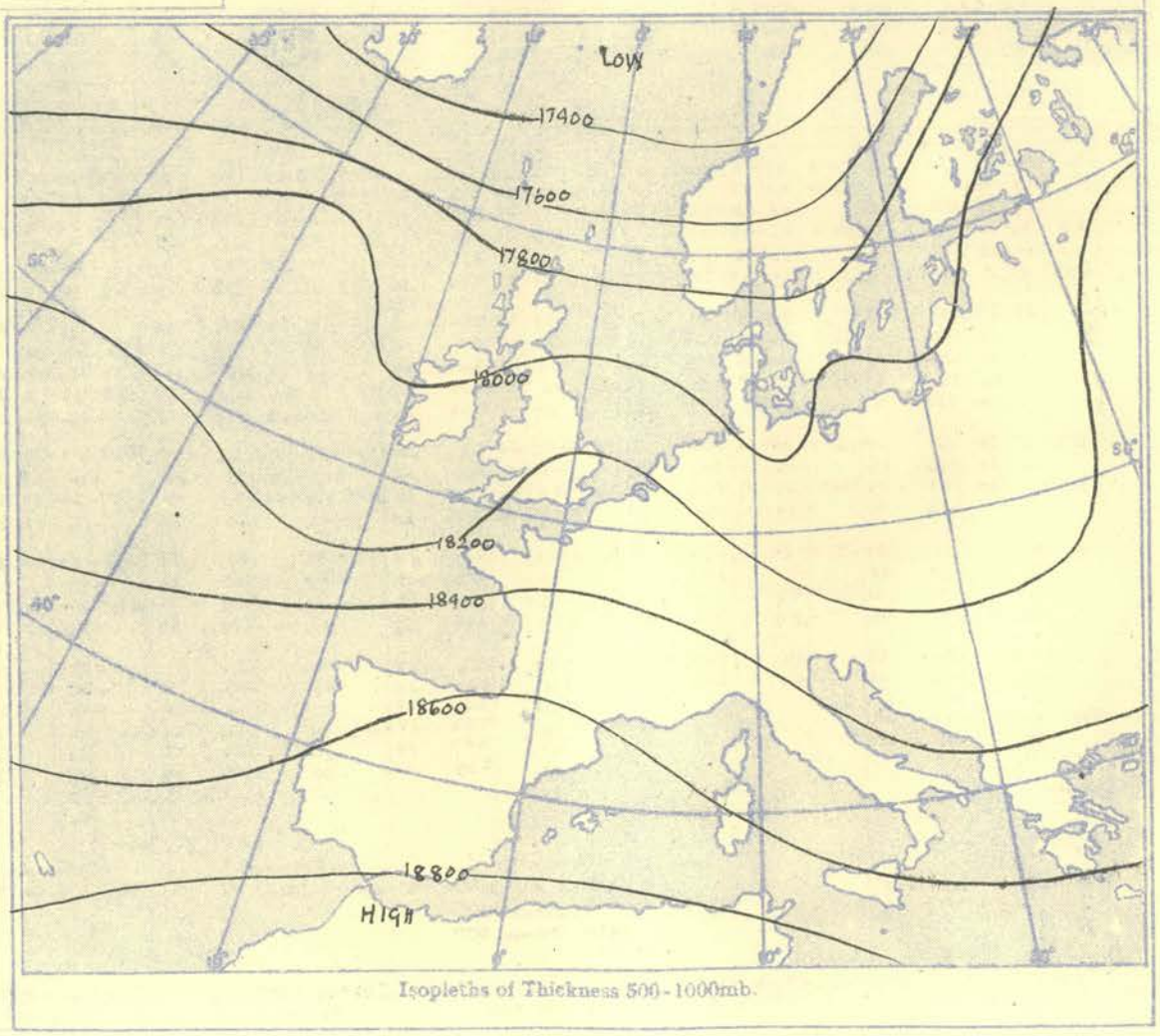
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500-1000mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

52·12N 02·12W

Pressure																																			
Time	1445L																																		
M.S.L.	1009 mb			mb			mb			mb			mb			mb			mb			mb			mb			Time M.S.L.	
Surf	1007·5 mb			mb			mb			mb			mb			mb			mb			mb			mb			Surf	Pressure
Freezing	750 mb			mb			mb			mb			mb			mb			mb			mb			mb			Freezing	

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Pressure mb
Surf	0·4																								Surf
1000	2·5																								1000
950																									950
900	31·5	48	46																						900
850		42																							850
800	632	37																							800
750																									750
700	983	27																							700
650																									650
600	1317	06																							600
550																									550
500	1827	-05																							500
450																									450
400	2358	-25																							400
350																									350
300	3007	-55																							300
250																									250
200																									200
170																									170

Cloud.
4/8 - 6/8 Cu + Sc.
910 - 810 mb.
7/8 As
715 - 600 mb
2/8 As
550 - 500 mb

DIRECTION (degrees from N) and VELOCITY (knots) of UPPER WINDS at Feet above M.S.L.

Place	Aldergrove		Camborne		Collinstown		Shoeburyness		Lympne		Stornoway											
Time	03L		03L		03L		10L		13L		15L											
Type	Pilot		Pilot								Pilot											
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.					210	13	210	13	230	14												
1,000					210	24	230	20	240	23												
2,000					200	20	230	24	250	25												
3,000					230	19	240	25	250	35												
4,000							240	30	290	35												
5,000							240	37	250	48												
6,000							240	41	250	31												
8,000							240	40	240	38												
10,000							230	43														
14,000							230	41														
18,000																						
24,000							220	51														
30,000			210	63			190	15														
40,000			235	54			240	45														
50,000			230	47			250	38														
60,000	251	14	(45,000)				220	20			239	17										
							(55,000)				239	15										
											(68,000)											

Place	Aldergrove		Camborne		Collinstown		Shoeburyness		Lympne		Stornoway											
Time	03L		03L		03L		10L		13L		15L											
Type	Pilot		Pilot								Pilot											
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.					210	13	210	13	230	14												
1,000					210	24	230	20	240	23												
2,000					200	20	230	24	250	25												
3,000					230	19	240	25	250	35												
4,000							240	30	290	35												
5,000							240	37	250	48												
6,000							240	41	250	31												
8,000							240	40	240	38												
10,000							230	43														
14,000							230	41														
18,000																						
24,000							220	51														
30,000			210	63			190	15														
40,000			235	54			240	45														
50,000			230	47			250	38														
60,000	251	14	(45,000)				220	20			239	17										
							(55,000)				239	15										
											(68,000)											

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NEPHOSCOPE OBSERVATIONS

Place	Aldergrove	Camborne																				
Time Type	03L Pilot	03L Pilot																				
Dir. Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.					210	13	210	13	230	14												
1,000					210	24	230	20	240	23												
2,000					200	20	230	24	250	25												
3,000					230	19	240	25	250	35												
4,000							240	30	290	35												
5,000							240	37	250	48												
6,000							240	41	250	31												
8,000							240	40	240	38												
10,000							230	43														
14,000							230	41														
18,000																						
24,000							220	51														
30,000			210	63			190	15														
40,000			235	54			240	45														
50,000			230	47			250	38														
60,000	251	14	(45,000)				220	20			239	17										
							(55,000)				239	15										
											(68,000)											

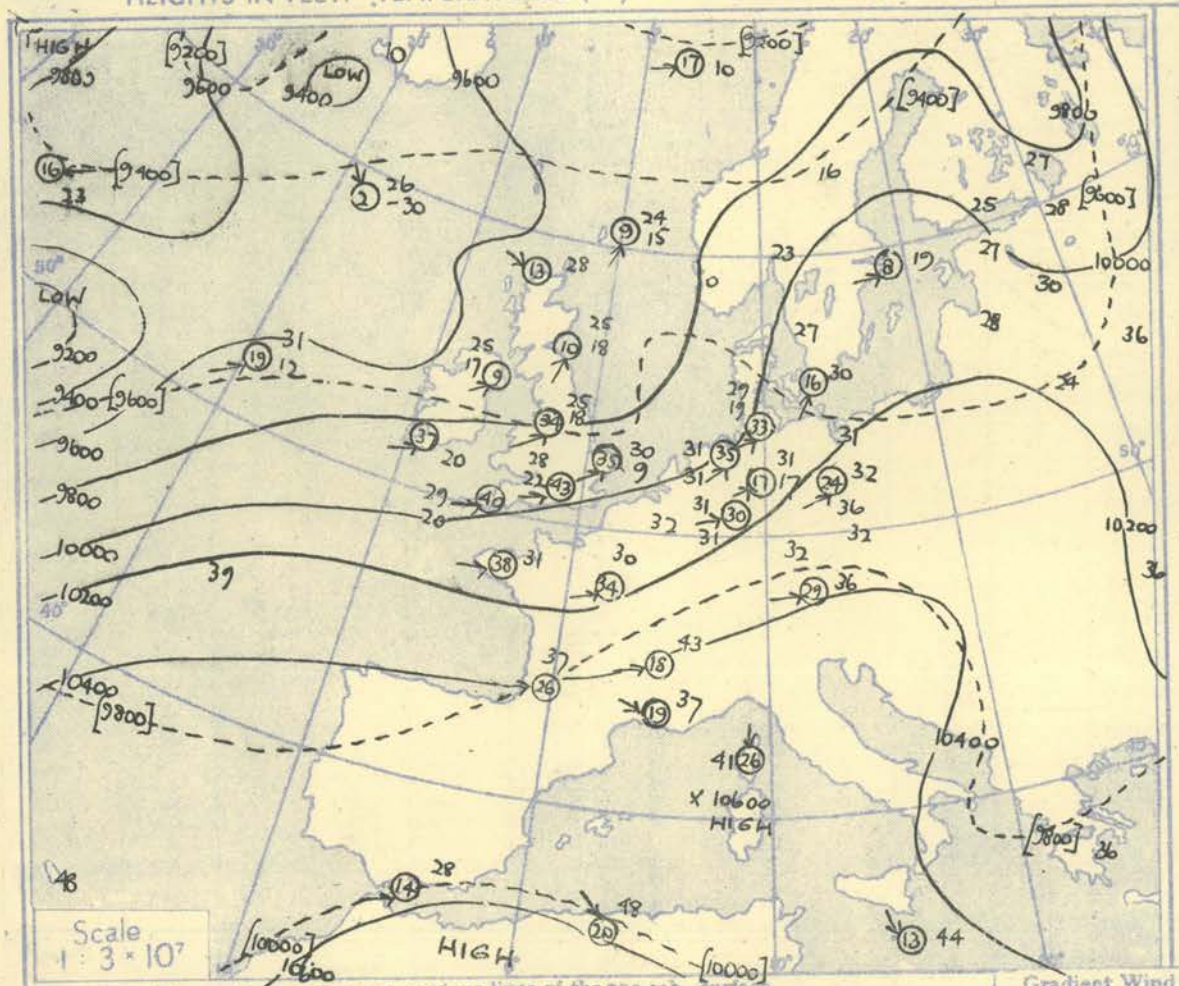
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	WEATHER RECORDER						WEATHER RECORDER						WEATHER RECORDER						WEATHER RECORDER						WEATHER EXPLORER						WEATHER EXPLORER					
Lat/Long	52·4N			20·5W			52·3N			20·6W			52·5N			20·4W			52·2N			20·4W			59·0N			19·1W			58·9N			19·2W		
Time	03L G.M.T.						09L G.M.T.						15L G.M.T.						21L G.M.T.						03L G.M.T.						09L G.M.T.					
Pressure M.S.L.	997 mb						999 mb						1003 mb						1000 mb						1001 mb						1001 mb					
Pressure Surf	997 mb						999 mb						1003 mb						1000 mb						1001 mb						1001 mb					
Pressure Freezing	740 mb						710 mb						710 mb						725 mb						770 mb						785 mb					

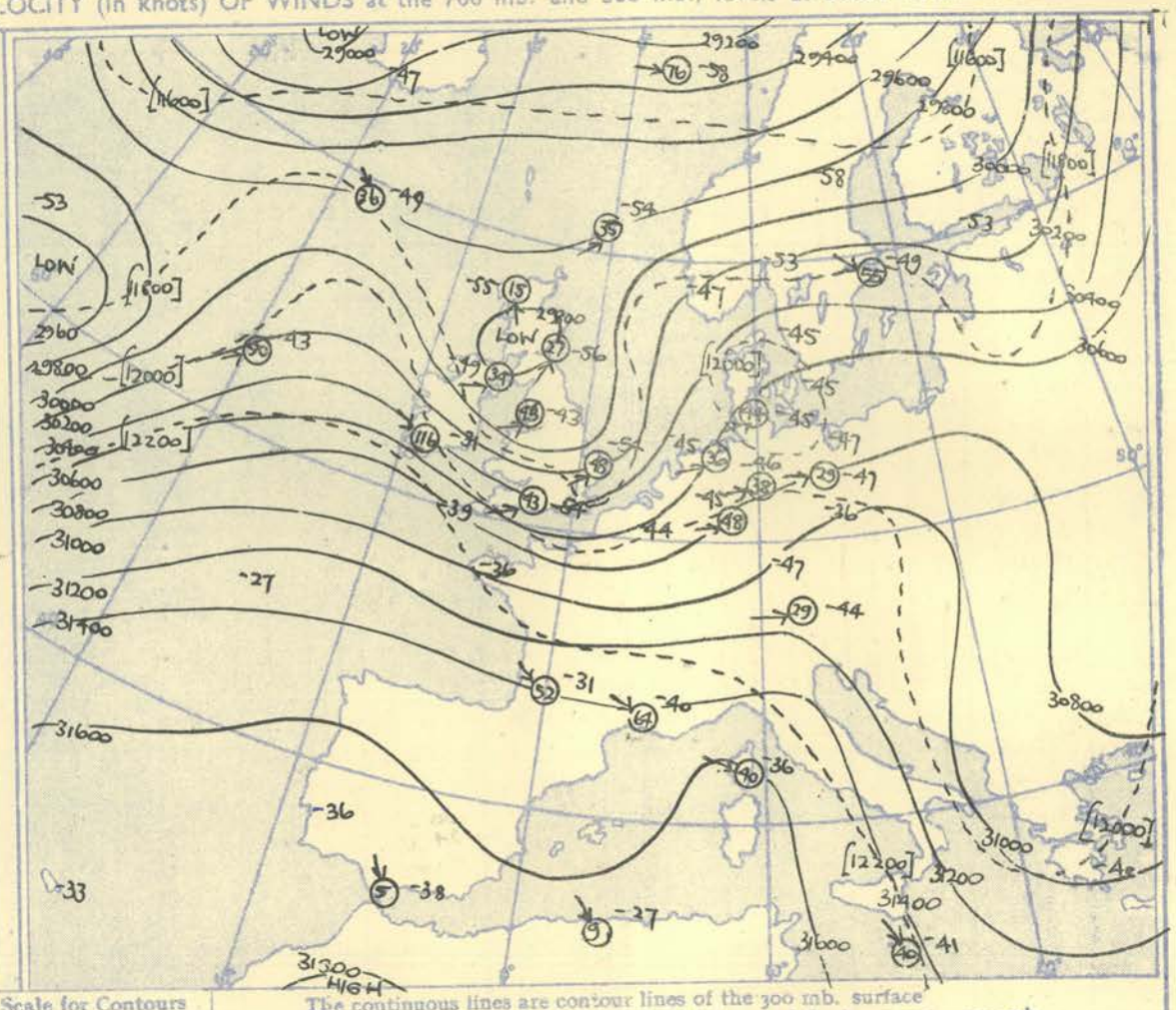
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf		57	55	230	12		56	55	280	12		56	53	250	10		56	56	170	16		50	46	030	28		50	43	020	24		50	44	014	23		50	43	020	16	Surf
1000	-9					-2					8	56	53			1	56	56			3					2	50	43	020	24	5								1000
950		53	51	246	09		51	47	279	11		51	51	248	09		52	52	155	14		46	42	042	26		50	43	020	24		45	35	015	20	7	50	42			950
900	23·0	48	45	255	13	28·6	46	45	278	15	29·6	46	46	248	09	28·9	48	48	159	17	28·8	42	38	039	25	23·6	39	36	027	23	29·0	40	32	017	20	29·1	39	32	357	13	900
850		48	39	257	16		43	39	278	17		41	40	245	11		44	44	171	15		39	34	042	22		35	31	028	23		35	27	022	20		32	25	352	13	850
800	59·7	38	33	254	15	60·2	38	32	285	25	61·2	39	32	242	15	60·6	39	38	180	17	60·2	35	30	060	17	59·8	33	29	035	16	60·9	32	22	017	10	60·3	33	09	337	06	800
750		33	26	256	09		35	26	292	25		36	22	242	21		34	32	169	19		30	25	081	13		25	21	050	09		27	11	345	03		28	-08	241	05	750
700	94·9	28	19	258	17	95·4	31	17	290	27	96·5	31	12	240	19	95·9	30	29	163	23	95·0	24	15	076	12	94·5	23	12	036	07	95·0	26	-30	309	02	95·0	24	-01	246	12	700
650		22	09	258	18		23	07	283	27		27	-02	233	17		27	24	194	25		18	02	061	08		18	-02	331	08		20	-40	278	06		17	-03	245	15	650
600	134·5	17	-01	255	19	135·2	16	-03	280	21	136·5	19	-16	229	19	135·9	22	18	198	46	134·3	11	00	354	07	133·7	11	-10	292	06	134·4	13	-44	266	11	134·3	13	-13	232	19	600
550		10	-15	254	23		07	-08	275	27		11	-31	231	22		14	09	203	45		04	-07	272	09		03	-24	253	06		06	-50	260	15		05	-15	284	27	550
500	180·2	01	-25	254	26	180·5	-03	-20	283	29	182·2	02	-49	226	36	182·0	05	00	194	42	179·3	-05	-15	245	12	178·6	-05	-30	262	11	179·7	03	-40	252	15	129·5	-04	-25	240	28	500
450		-10	-32	254	31		-14	-34	287	27		-06	-60	240	42		-04	-11	203	41		-15	-25	233	13		-15	-38	237	16		-12	-32	248	15		-13	-33	238	27	450
400	233·6	-24	-36	254	29	233·5	-26	-47	295	36	236·2	-14	-37	253	39	236·1	-15	-22	229	38	232·2	-27	-37	235	17	231·4	-26	-47	257	14	232·9	-24	-55	260	17	232·6	-24	-44	225	31	400
350		-38	-54	254	29		-34	-53	283	35		-26	-39	240	62		-27	-25	216	33		-40	-49				-38	-58	313	12		-35	-58	281	28		-39	-56	232	33	350
300	298·1	-55		245	34	298·7	-41		280	119	302·5	-43		240	90	302·3	-40	-49	212	76	296·5	-53				296·0	-52		305	12	297·9	-49		281	36	297·1	-53		236	45	300
250		-55		246	36		-60		272	113		-59		240	93		-46		219	77		-55					-60		329	10		-58		252	29		-59		232	46	250
200	386·7	-42		256	32	386·3	-54		270	53	389·4	-59		233	49	392·2	-49		218	61	389·4	-48				383·1	-48		255	20	386·5	-49		271	24	384·8	-50		240	37	200
170		-46		251	34		-54		276	33		-54		238	45		-49		218	63		-46					-47		258	15		-49		258	22		-49		240	27	170
150		-49		251	27		-54		278	24		-50		238	30		-47					-46				(160 mb)	-46					-50		243	24		-46		240	21	150
130		-53		267	28		-52		242	27		-48		238	25							-46		243	14							-49		242	25						130
110		-53		253	25	(120 mb)	52					-46		238	23							-47		248	22							-48		246	23						110
100	538·5	-51		253	28						540·8	-44		238	15						537·0	-47		233	16						537·5	-48		241	13						100
90		-52		253	23						(37 mb)	-43										-47		228	12							-48		267	18						90
80		-55		253	19																	-47		249	12						(78 mb)	-48									80
70																						-45		263	14																70
60																																									60
	Isothermal 900 - 850 mb 48°					Inversion 777 mb 34° - 750 mb 35° Isothermal 877 - 848 mb 48°					Isothermal 1003 - 1000 mb 56°															Inversion 735 mb 22° - 713 mb 25° Isothermal 1001 - 1000 mb 50° 868 - 850 " 35° 812 - 795 " 33°					Inversion 760 mb 27° - 733 mb 28° Isothermal 1002 - 1000 mb 50° 758 - 750 " 27°					Inversion 844 mb 31° - 810 mb 34° Isothermal 646 - 619 mb 16°					
Tropopause	I 276 mb - 67° 31,600'					I 245 mb - 63° 34,100'					I 230 mb - 67° 37,100'					I 313 mb - 39° 29,200'					I 275 mb - 60° 31,700'					I 236 mb - 65° 34,700'					I 270 mb - 57° 32,100'					I 279 mb - 58° 31,200'					Tropopause

Tuesday 12th June 1951.

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

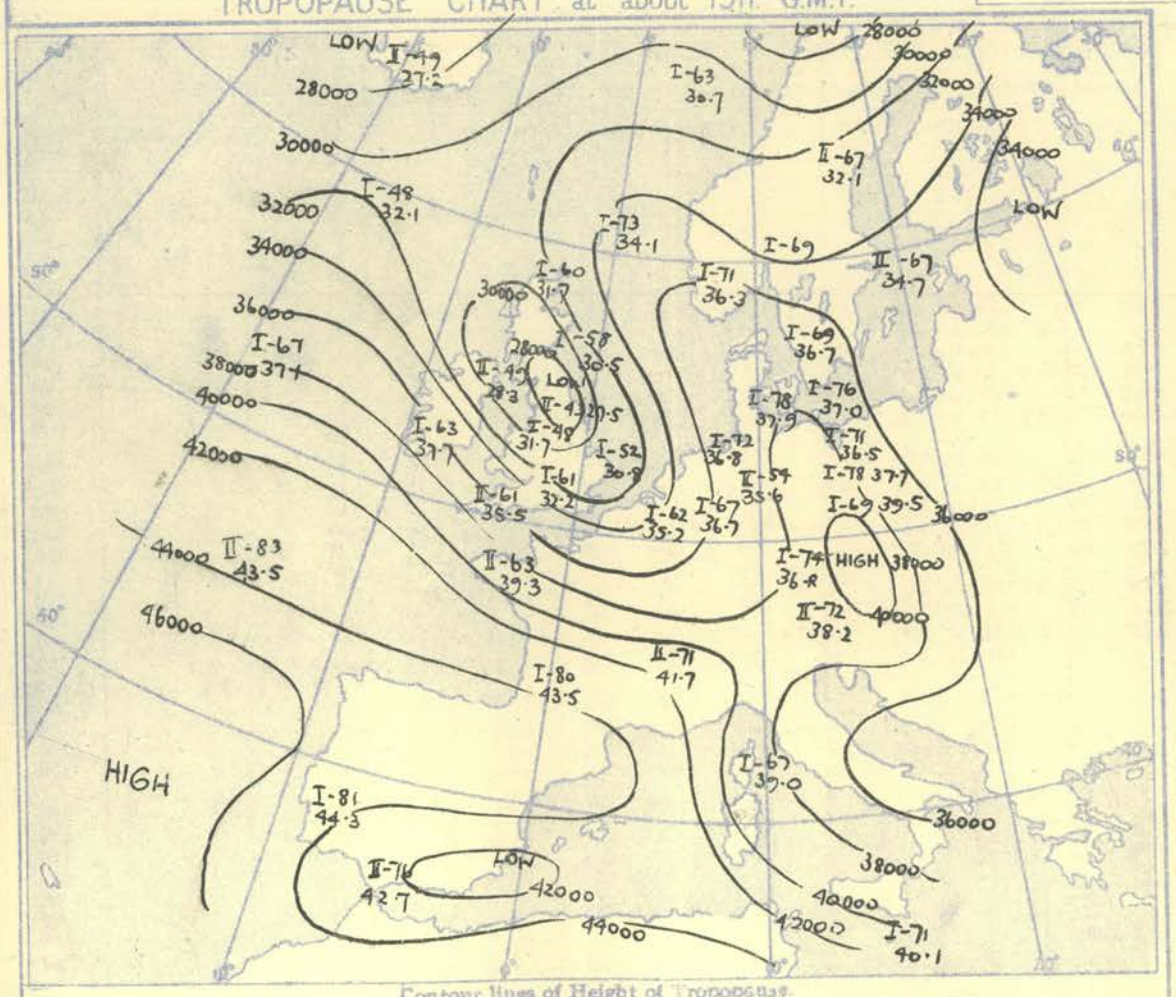


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N

100 80 40 30 20 15 10 knots

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

A weak warm ridge crossed the British Isles followed by a small but sharp cold trough. The air in both the ridge and the trough was unstable, numerous spheric observations were recorded and the relationship between the thickness pattern and the surface analysis was unusual

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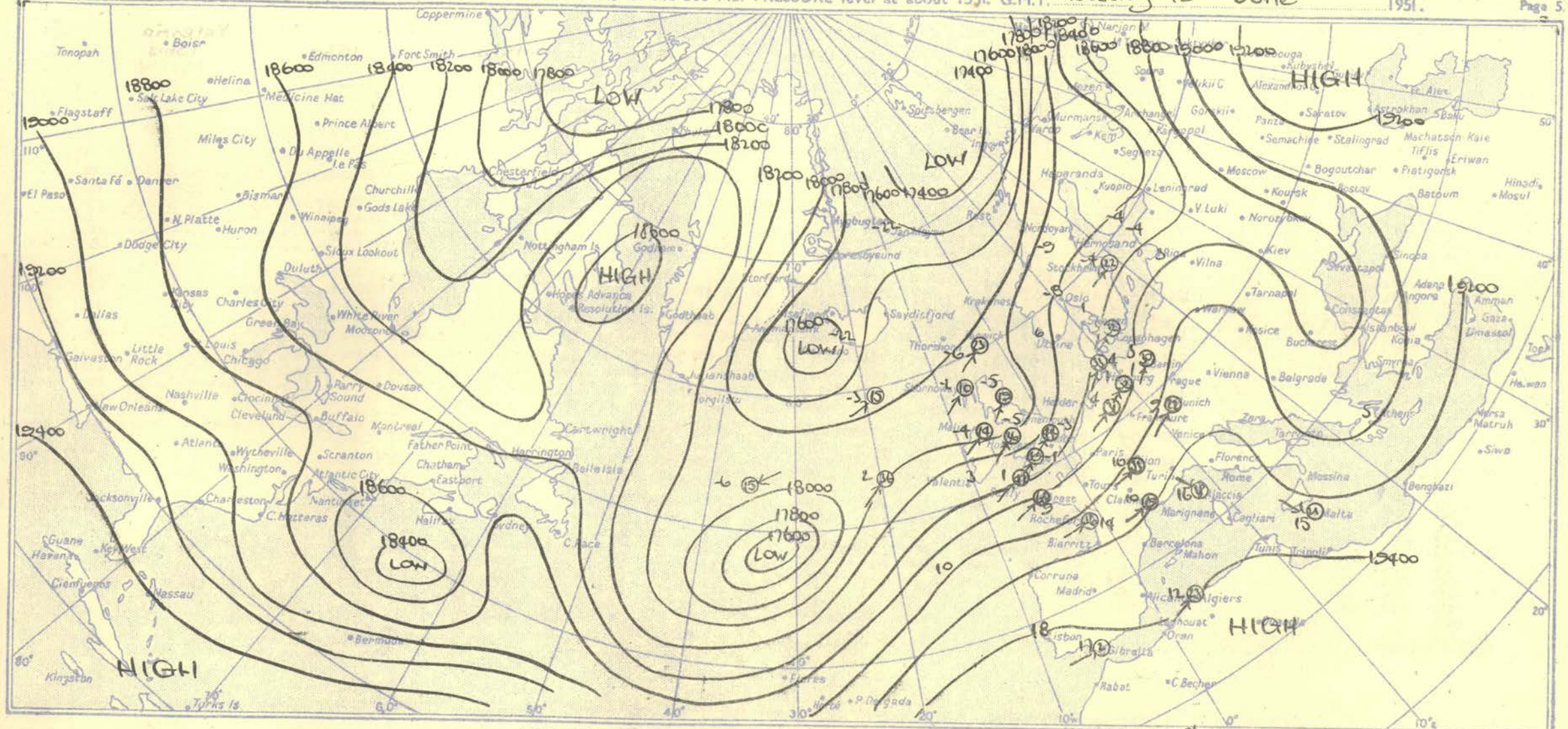
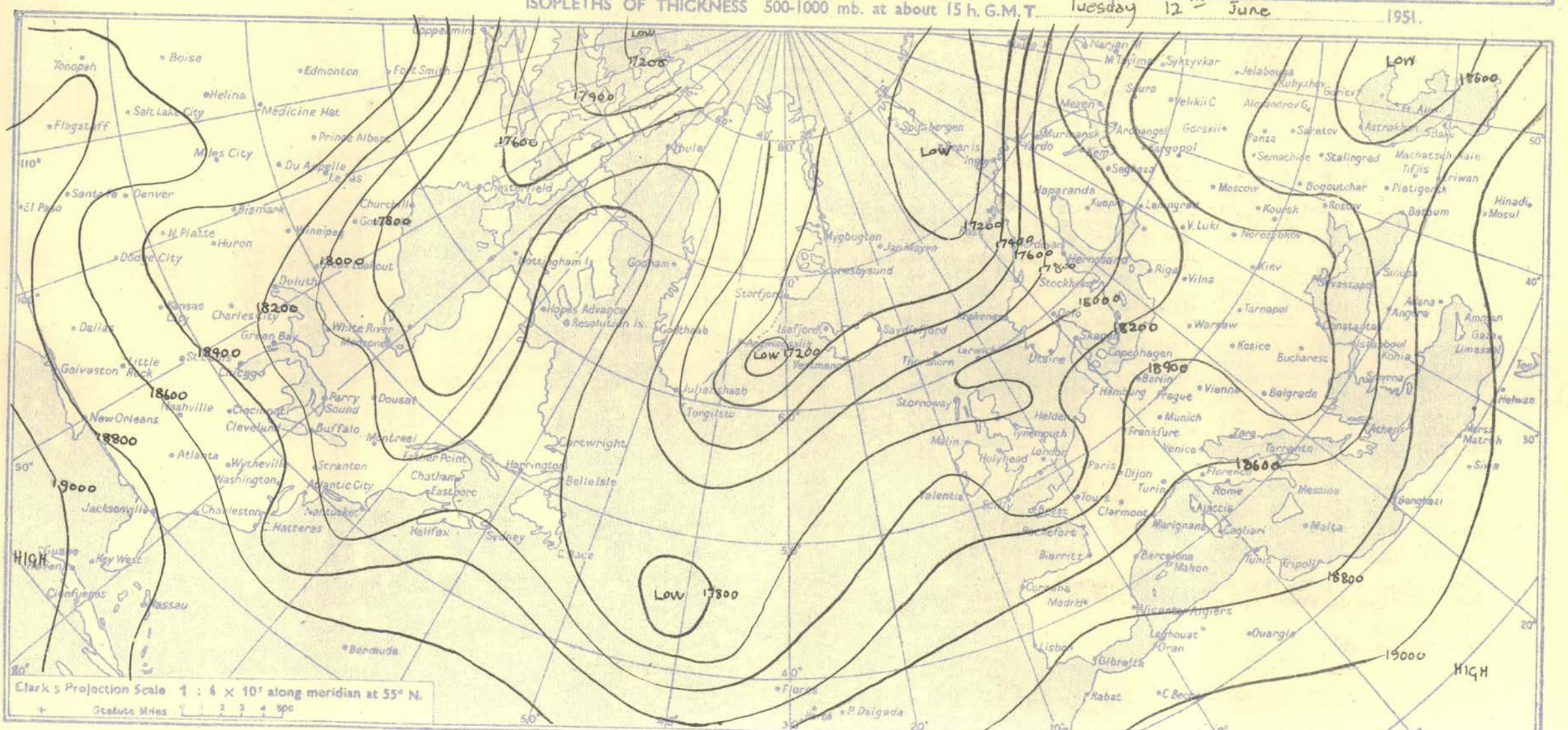
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Tuesday 12 th June 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Tuesday 12 th June 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON

Tuesday 12 June 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	Valentia	Station
Pressure: Time	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	Time
M.S.L.	1008·4 mb	1004·3 mb	1005·4 mb	1003·4 mb	1006·6 mb	1009·8 mb	1011·8 mb	1013·3 mb	1007·4 mb	M.S.L.
Surf	998·4 mb	1002·7 mb	1004·6 mb	994·1 mb	1004·6 mb	1005·5 mb	996·3 mb	1002·8 mb	1006 mb	Surf
Freezing	783 mb	747 mb	758 mb	750 mb	755 mb	718 mb	736 mb	725 mb	690 mb	Freezing

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Valentia Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	47	45	130	15	0·4	58	52	220	10	0·2	55	57	160	01	02·6	65	53	190	05	0·6	62	54	180	08	01·2	68	51	210	26	04·4	64	55	230	19	02·9	60	55	200	18	0·3	60	55	240	14	Surf
1000	02·3					01·1	58				01·5	58	57			01·0					01·8	61	52			02·8	67	50			03·3					03·7					2·0	59	54	243	15	1000
950		40	38	132	22		53		230	11		51	50	221	09		53	47	184	07		54	49	199	18		60	46	225	28		54	49	225	28		52	48	247	36		53	50	256	27	950
900	30·6	42	39	149	27	9·4	47		225	13	0·3	47	46	224	11	30·0	48	44	202	07	30·8	47	43	210	23	32·1	53	42	230	26	32·4	49	45	235	33	32·7	47	44	254	40	31·0	46	43	259	32	900
850		39	34	170	18		43		224	06		42	39	220	08		43	36	219	06		42	37	222	28		45	38	240	25		43	40	243	37		41	36	256	40		44	40	261	32	850
800	62·0	34	28	187	13	61·5	38		237	10	61·9	37	33	207	08	61·7	35	26	225	05	62·4	36	31	229	33	63·9	38	31	243	28	64·1	38	35	245	44	64·2	38	33	256	39	62·7	41	33	260	33	800
750		27	24	190	10		32		267	11		31	26	203	10		32	23	204	06		31	26	234	33		36	14	241	30		33	29	251	45		35	26	256	38		37	31	261	34	750
700	56·8	24	15	192	09	56·6	28		285	13	56·9	25	18	195	10	56·8	25	17	207	09	57·5	25	18	234	34	59·2	30	09	235	35	59·3	28	22	252	43	59·5	29	2·0	258	40	58·2	33	20	259	37	700
650		19	05	192	10		26		270	11		18	08	189	12		18	12	227	13		18	13	230	33		23	01	255	33		21	13	248	40		24	15	263	40		29	10	259	41	650
600	136	12	-3	195	14	136	01	4	245	11	136	12	-2	191	13	136	13	07	230	15	136	12	03	234	31	138	08	15	-5	278	40	138	09	14	07	248	43	139	11	07	263	42	138	14	12	-5	263	44	600
550		03	-14	197	18		07		241	08		04	-5	199	17		06	-3	254	13		04	-6	235	34		05	-14	226	39		07	02	251	47		10	-1	268	42		14	-9	264	44	550
500	181	4	-6	208	20	181	4	-5	247	10	181	3	-5	201	19	181	3	-4	249	14	181	8	-5	242	36	184	03	-2	224	44	184	3	-1	256	49	184	3	01	265	47	184	5	03	265	47	500
450		16	-20	212	18		12		235	14		15	-25	202	19		14	-24	241	18		17	-30	255	39		13	-38	228	39		8	-48	260	46		11	-24	263	48		7	-29	274	55	450
400	233	9	-27	-39	213	18	234	5	-24	193	15	234	1	-28	-36	193	20	234	2	-27	-36	245	21	234	5	-29	-45	259	42	257	1	-25	-44	236	43	257	9	-22	-34	262	46	258	3	-19	-35	273	72	258	6	-9	-35	283	80	400
350		41			217	19		40			196	16		43		183	25		40	49	255	27		40	55	257	46		37	55	243	47		37	48	264	45		25	40	284	100		17	44	283	111	350
300	298	1	54		214	25	298	1	55		175	18	298	1	56		190	27	298	4	49		222	34	299	0	43		250	43	301	7	54		248	48	306	6	59		263	43	304	7	59	56			306	4	31	52	277	116	300
250		71			220	33		51			219	18		50			218	24		47			261	34		45			258	37		48			246	37		51			264	57		56					49					250
200	288	5	57		234	28	287	2	53		242	21	286	5	47		244	32	288	0	42		259	35	288	6	44		253	31	290	3	46		244	44	290	7	50		271	52	292	2	60				288	0	57				200
170		50			232	27		39			242	23		47			241	29		45			254	33		45			258	27		46			258	38		52			261	46		60					53					170
150		49			238	24		39			245	21		47			236	24		46			255	36		45			249	33		49			248	35		55			261	44		58					48					150
130		51			237	21								50			244	31		48			246	36		43			261	29		53			240	29		54			256	35		56					48					130
110		49			235	22								50			247	29		50			249	25		51			249	31		51			246	30		53			255	35		57					47					110
100	304	7	48		238	20			See p3 for remainder of winds.			552	3	52		245	27	304	0	50		246	23	304	0	52		253	30	304	1	52		262	29	304	1	54		261	32	304	1	58				304	6	47				100
90		52			250	16								51			242	24		49			248	24		50			268	22		51			256	13		54			250	26		58					47					90
80		50			234	19								50			246	25								48			237	12		50			250	14		52			247	20		65					47					80
70		49			235	26								49			243	22								47			226	18		49			229	12		52			265	11		68					(86)					70
60		46			242	21								45												43			257	14								52			260	09												60
		43																								(56)	41									(57)	52																

Inversion 950 mb 40 - 900 mb 42°

Isothermal 900 - 885 mb 47°
739 - 725 mb 31°

Isothermal 832 - 800 mb 43°

Isothermal 785 - 750 mb 36°

Isothermal 823 - 786 mb 38°

Isothermal 440 - 378 mb -9°

	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE		
Tropopause	I 245 mb -73° 34100'	I 278 mb -60° 31700'	I 290 mb -58° 30500'	II 321 mb -49° 28300'	I 332 mb -43° 27300' I 177 mb -48° 31700'	I 290 mb -57° 30800'	I 274 mb -61° 32200'	I 251 mb -61° 33500'	I 218 mb -65° 37100'	Tropopause
Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE		Station
Pressure: Time	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	G.M.T.	Time
M.S.L.	1005·9 mb	1004·8 mb	1005·1 mb	1005·2 mb	1008·0 mb	1010·7 mb	1013·9 mb	1016·8 mb	mb	M.S.L.
Surf	996·0 mb	1003·2 mb	1004·3 mb	995·7 mb	1006·0 mb	1006·3 mb	998·0 mb	1006·0 mb	mb	Surf
Freezing	763 mb	750 mb	763 mb	750, 738 mb	750 mb	769 mb	711 mb	719, 710 mb	mb	Freezing

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	01·7	48	48	100	08	0·4	56	52	030	05	0·2	58	56	260	06	02·6	60	53	230	04	0·6	58	53	240	08	01·2	61	52	220	15	4·4	56	54	240	14	01·9	57	54	250	14						Surf
1000	01·6					01·3	56	51			01·4	57	56			01·4					02·1	57	52			02·9					3·8					04·5	56	53	244	32						1000
950		46	46	100	10		52	49	249	03		52	48	262	11		55	48	235	06		54	50	253	23		55	46	245	37		52	49	244	30		49	47	215	32							950
900	30·1	44	44	122	19	30·2	48	40	252	04	30·3	47	44	263	15	30·4	48	42	240	10	31·1	50	46	261	27	31·9	48	42	251	33	32·8	47	45	258	33	33·2	44	43	261	32						900
850		42	42	156	08		42	38	272	05		42	39	260	12		44	38	243	11		44	41	268	30		41	37	255	39		42	39	264	38		39	37	266	39							850
800	61·7	36	36	177	06	61·7	38	31	292	06	61·3	37	34	257	07	62·1	38	32	249	11	62·8	38	31	270	31	63·5	36	32	257	39	64·4	36	34	265	40	64·7	37	30	266	37						800
750		30	30	184	07		32	22	302	04		36	27	257	06		37	25	256	12		32	25	263	31		30	26	257	36		33	19	266	42		36	18	267	40							750
700	96·7	25	13	192	08	91·2	25	15	310	05	96·9	26	13	253	06	97·3	27	20	263	14	98·0	29	17	268	29	98·5	24	18	259	35	99·6	31	08	268	42	100·0	31	07	268	40						700
650		18	04	197	10		18	03	308	04		21	12	247	10		23	13	270	18		24	08	268	26		17	03	262	33		24	03	269	43		24	-6	268	41							650
600	136	11	-4	190	11	136	5	11	03	273	04	136	3	14	02	250	11	136	9	17	09	268	22	137	8	17	-4	271	30	137	7	12	-8	265	39	139	4	17	-6	269	45	139	8	18	-14	271	46	600
550		02	-11	193	12		03	-6	226	07		05	-6	265	11		10	-11	266	26		03	-17	275	37		07	-25	271	46		08	-19	272	48		15	-25	274	57							550
500	180	3	-7	-47	207	14	181	5	-7	-14	213	11	181	5	-3	-17	276	12	182	5	01	-23	270	36	183	4	00	-26	273	45	183	1	-02	-40	272	51	184	9	-2	-34	282	57	185	6	05	-9	274	61	500
450		-18	-29	207	17		-18	-26	210	15		-14	-27	286	12		-10	-33	273	39		-12	-34	260	43		-14	-48	270	54		-5	-41	285	82		-5	-11	275	67							450
400	225	5	-30	-39	208	18	234	1	-29	-38	207	16	234	5	-27	-40	291	12	236	0	-22	-44	271	35	236	6	-26	-40	274	42	236	1	-27	-38	274	50	235	7	-25	-48	282	87	239	9	-12	-33	275	70	400
350		-44			200	22		-41			207	18		-42			301	18		-33	-54	283	62		-28	-51	292	97		-42			275	52		-28	-56	288	96		-26	-37	274	71	350
300	297	1	-60		187	31	297	9	-59		217	19	298	5	-53		281	26	301	6	-55	-55	288	113	302	4	-42		282	126	300	4	-49		275	69	304	7	-46		280	102	306	3	-41		277	77	300
250		-66			211	26		-56			258	30		-44			275	37		-48			285	130		-61			292	109		-54			279	81		-61			255	102		-57			282	85	250
200	283	2	-52		139	23	285	5	-58		263	33	287	8	-45		274	36	290	4	-56		256	75	289	8	-54		283	70	288	5	-52		276	48	290	7	-68		293	81	288	0	-73						200
170		-62			246	24		-58			253	29		-47			265	29		-55			280	61		-56			290	40		-56			274	48		-62			271	45		-77								170
150		-52			248	22		-50			255	28		-47			257	32		-56						-57			283	37		-57			271	40		-60			265	35		-70								150
130		-54			246	21		-52			258	23		-49			270	29		-55						-55			273	31		-55			269	32		-63			265	25		-67								130
110		-52			243	19		-50			244	25		-48			238	29		-55						-60			285	25		-60			267	24		-63			271	22		-63								110
100	301	7	-59		245	21	301	6	-58		244	23	300	4	-48		254	29	301	0	-55																							302	6	-64				100
90		-54			253	17		-51			245	19		-51						-52																												90
80		-50			240	17		-51			246	12								-53																												80
70																				-53																												70
60																																																		60

Inversion 910 mb 43 - 853 mb 44°

Isothermal 975 - 943 mb 46°

Isothermal 800 - 785 mb 38°

Isothermal 730 - 708 mb 27°

Inversion 542 mb -34 - 530 mb -33°

Isothermal 750 - 738 mb 32°
360 - 350 mb -33°
330 - 312 mb -33°

Inversion 390 mb -29 - 369 mb -24°

Isothermal 715 - 693 mb 29°

Isothermal 643 - 633 mb 16°
596 - 586 mb 11°
504 - 483 mb -49°

Max wind 33100' 279 96 kts 254 mb

Inversion 710 mb 31 - 744 mb 35°

Isothermal 487 - 443 mb -5°

Inversion 818 mb 35 - 797 mb 38°

Isothermal 797 - 770 mb 38°

Tropopause	I 262 mb -70° 32600'	I 295 mb -60° 30000'	I 295 mb -54° 30100'	II 360 mb -55° 25700' I 220 mb -60° 38600'	I 245 mb -62° 34300'	II 250 mb -54° 34000'	I 218 mb -73° 37200'	I 183 mb -78° 41100'		Tropopause

HMSO Press MO Dunstable

No. 11769

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.

Wednesday 13th June. 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	03Z	03Z	03Z	03Z	03Z	03Z	03Z	03Z	03Z
G.M.T.									
M.S.L.	1005·8 mb	1006·7 mb	1007·6 mb	1009·0 mb	1012·0 mb	1013·9 mb	1017·0 mb	1018·8 mb	1018 mb
Surf	995·9 mb	1005·1 mb	1006·8 mb	999·5 mb	1010·0 mb	1009·5 mb	1001·1 mb	1008·2 mb	1009 mb
Freezing	770 mb	775 mb	785 mb	730 mb	734 mb	720 mb	693 mb	668 mb	mb

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	VALENTIA Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Pressure mb
Surf	027	49	49	Calm		004	48	47	Calm		002	50	50	260	03	026	51	51	240	07	006	56	52	Calm		012	54	52	240	12	044	55	52	240	08	029	56	53	210	10	003	56	55			Surf
1000	015					018	52	52			021	51	50			025	51	48	248	14	025	56	51	237	15	038	54	52			047					051	55	52	230	24	028	55	54			1000
950		47	47	336	05		48	48	220	05		51	47	272	12							50	46	266	22		53	51	258	33		49	46	263	27		50	49	249	28		51	49			950
900	301	44	44	323	05	304	43	43	220	07	309	46	40	277	10	317	46	43	252	14	320	44	39	274	27	327	48	45	272	32	334	44	40	267	32	339	49	42	258	31	307	48	40			900
850		39	38	310	05		38	34	210	05		41	36	243	09		41	37	248	14		38	32	267	33		43	38	275	31		39	31	272	36		47	36	267	31		45	28			850
800	661	35	34	302	05	617	33	23	204	06	624	34	28	257	09	629	39	32	250	15	635	37	19	266	33	663	37	31	277	28	649	41	04	275	38	658	43	36	269	36	635	39	30			800
750		30	24	287	06		29	16	166	09		27	24	257	10		34	20	247	19		34	17	271	33		32	25	277	29		38	01	277	38											750
700	964	26	13	283	06	965	23	09	178	08	972	23	19	291	12	981	28	12	256	23	987	31	03	275	36	996	30	17	277	31	1003	33	-10	278	36	1014	36	19	267	41	988	36	33			700
650		19	03	275	08		17	04	201	10		19	11	308	13		26	07	256	29		25	07	274	37		26	02	277	38		28	-23	275	36		30	23	21.5	44		27	24			650
600	1359	12	-04	254	08	1357	11	-02	203	11	1366	15	02	296	13	1379	18	-04	256	33	1385	19	-21	269	39	1395	20	-10	277	40	1404	22	-47	276	39	1417	26	12	267	49	1389	22	14			600
550		02	-11	232	08		02	-13	217	16		06	-13	274	17		11	-16	296	36		11	-33	273	42		13	-23	281	43		14	-07	278	47		17	06	263	57		14	08			550
500	1808	-07	-19	238	10	1805	-07	-27	231	21	1818	-05	-26	267	22	1837	03	-31	256	40	1843	04	-45	273	54	1854	05	-34	285	51	1865	08	01	282	56	1882	09	04	262	62	1852	08	03			500
450		-17	-27	235	11		-16	-37	247	15		-15	-32	264	25		-04	-15	256	54		-03	-14	277	65		00	-29	285	68		00	-10	279	59		00	-03	268	57		-02	-07			450
400	2334	-30	-39	219	10	2333	-26	-48	251	27	2347	-26	-49	275	48	2379	-13	-21	258	65	2385	-16	-29	283	70	2400	-09	-27	285	75	2411	-11	-22	280	66	2430	-08	-12	265	54	2397	+10	+15			400
350		-44		211	15		-34	-57	270	41		-36	-54	285	80		-28	-33	260	72		-29	-40	283	80		-23	-40	291	76		-24	-34	281	66		-22	-28	264	63		-23	-30			350
300	2910	-59		207	24	2938	-49		277	73	2996	-48		288	87	3041	-42		268	93	3045	-44		282	77	3068	-40	-53	293	90	3077	-40	-50	284	78	3101	-37	-45	265	67	3065	-38	-47			300
250		-63		252	23		-62		275	70		-60		289	94		-57					-62		279	98		-58		293	106		-58		280	84		-54		264	78		-54				250
200	3833	-54		240	23	3852	-58		259	42	3865	-56		275	48	3910	-63				3906	-73		283	79	3937	-72		290	84	3942	-75		282	77	3974	-72				3935	-70				200
170		-54		256	28		-54		253	34		-58		274	39		-62					-70		271	61		-66		285	57		-79		287	66		-79					-78				170
150		-54		249	24		-55		251	34		-58		282	44		-60					-64		268	59		-63		281	48		-79		286	57		-76					-76				150
130		-54		244	28		-55		257	28		-57		287	29		-59					-59		278	31		-61		272	33		-70		276	39		-69					-67				130
110		-54		254	21		-55		250	22		-54		262	22		-58					-60		240	27		-60		263	20		-64		280	27							-63				110
100	5333	-54		245	17	5348	-55		246	24	5355	-57		247	25	5381	-56				5368	-62		259	17	5401	-60		251	20	5371	-64		257	24							-63				100
90		-55		243	17		-55		239	25		-57		261	21		-56					-62		273	23		-62		241	13												-63				90
80							-55		251	22		-55		246	19							-60					-61															-64				80
70							-55																																			-65				70
60																																										-65				60
	Isothermal 958 - 931 mb 47° 824 - 810 - 36°					Inversion 788 mb 31° - 775 mb 32° 1005 - 48° - 1000 - 52° 360 - -36° - 348 - -37°					Inversion 1007 mb 50° - 994 mb 53° Isothermal 994 - 969 mb 53° 728 - 710 - 24°										Inversion 840 mb 37° - 820 mb 38° 800 - 31° - 788 - 38° Isothermal 1010 - 1000 mb 56° 727 - 700 - 31° 222 - 212 - -70°					Inversion 865 mb 00° - 855 mb 01° Isothermal 1009 - 958 mb 54° 750 - 720 - 32°					Inversion 853 mb 38° - 820 mb 42°					Inversion 931 mb 48° - 918 mb 50° Isothermal 774 - 721 mb 36°					Inversion 930 mb 27° - 636 mb 29° Isothermal 915 - 900 mb 48° 784 - 750 - 36° 700 - 680 - 30°				
Tropopause	I 261 mb -70° 32.600					I 248 mb -63° 33.800					II 238 mb -62° 34.800 I 220 - -65° 36.600					II 200 mb -69° 39.100					II 222 mb -70° 37.000 I 200 - -73° 39.100					I 192 mb -74° 40.200					I 179 mb -80° 41.600					II 184 mb -78° 41.500					I 170 mb -78° 42.800					Tropopause

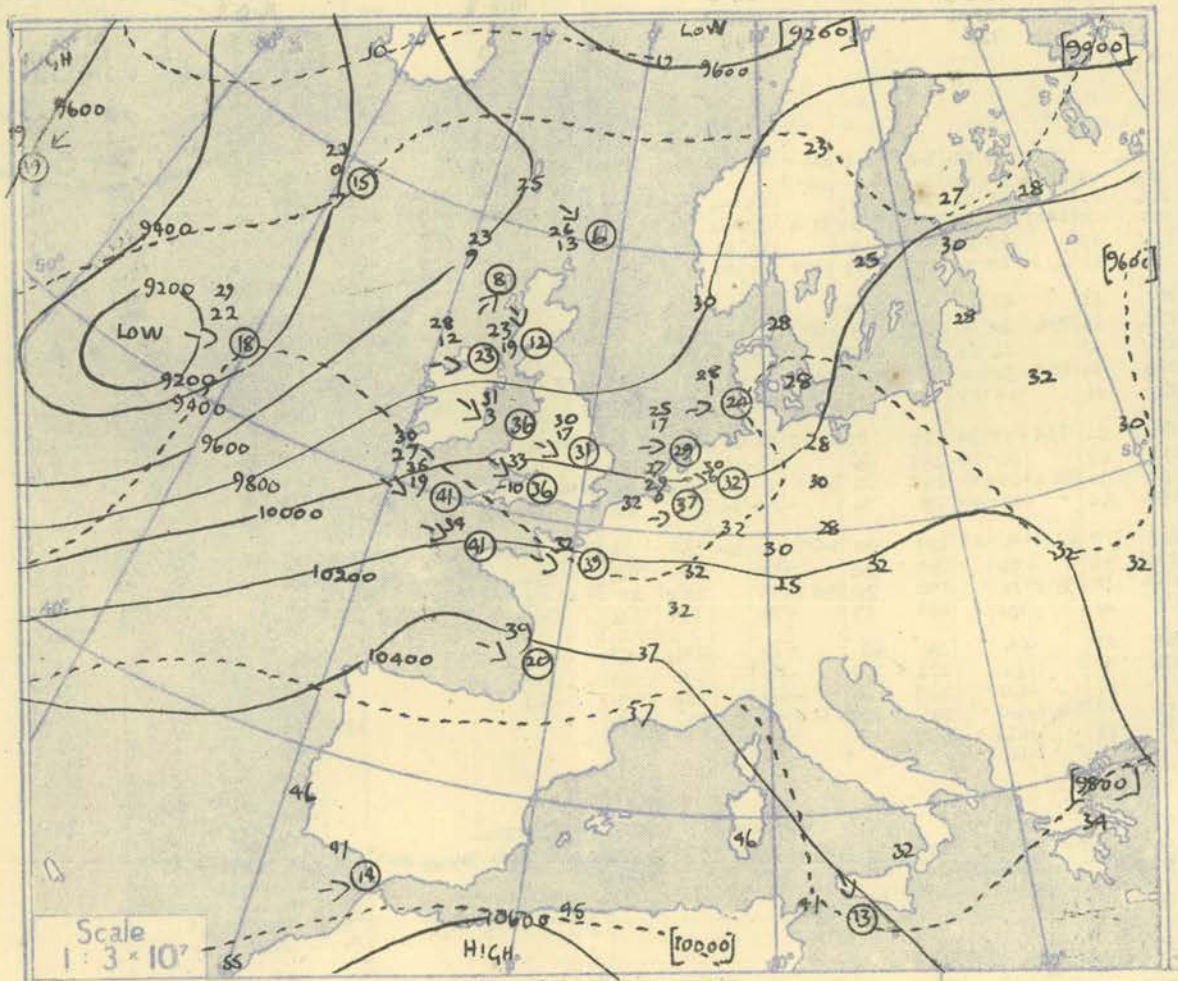
Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE		
Pressure: Time	09Z	09Z	09Z	09Z	09Z	09Z	09Z	09Z	G.M.T.	
M.S.L.	1007·3 mb	1007·0 mb	1009·4 mb	1009·6 mb	1014·1 mb	1017·2 mb	1020·1 mb	1018·6 mb	mb	
Surf	997·7 mb	1005·4 mb	1008 mb	1000·1 mb	1012·1 mb	1012·8 mb	1003·0 mb	1008·0 mb	mb	
Freezing	738 mb	768 mb	730 mb	713 mb	746 mb	714 mb	670 mb	639 mb	mb	

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Pressure mb
Surf	027	50	49			005	55	50			002	60	57	Calm		026	57	53	180	10	006	59	52			012	60	54	230	17	044	59	53	240	11	029	56	52	190	25						Surf
1000	021					019	54	50			026	58	55			029	51	48	189	20	029	57	51			048	58	52			053	58	52			050	55	55								1000
950		46	45				50	46				49	46	238	13		51	46	254	26		53	48				51	46	254	26		51	48	240	20		48	40	206	36						950
900	307	47	41			307	47	41			314	49	44	239	14	315	48	40	198	33	328	48	43			336	47	40	257	22	342	48	43	254	21	336	43	20	224	31						900
850		44	32				42	33				45	39	241	15		43	39	204	36		46	38				44	35	264	23		47	34	251	25		40	12	235	29						850
800	623	38	28			623	36	27			632	38	34	241	15	631	36	33	206	32	646	39	35			658	41	27	274	28	650	43	31	250	29	652	44	21	234	39						800
750		33	23				30	25				32	27	238	22		35	32	224	37		33	28				36	19	281	39		37	17	251	35		39	17	234	43						750
700	975	27	14			912	28	18			982	27	19	235	22	984	31	27	236	39	998	31	29			1007	31	21	279	42	1016	35	12	251	36	1009	37	12	234	47						700
650		20	07	For			18	11				23	08	243	24		27	23	235	48		26	24				27	22	280	47		30	14	262	41		33	08	240	51						650
600	1369	12	-03	winds		1365	13	02			1375	17	-01	247	30	1385	21	16	239	39	1398	26	18			1398	21	15	276	50	1419	25	12	263	44	1414	27	07	245	54						600
550		03	-11				05	-07				09	-09	245	29		13	06	244	52		18	10				15	09	276	51		17	02	267	48		18	03	246	55						550
500	1819	-07	-21			1817	-05	-21			1884	-01	-13	257	29	1845	05	-11	245	60	1862	10	04			1872	10	01	277	52	1886	10	01	269	53	1878	10	-03	248	60						500
450		-18	-33	See			-16	-26				-07	-13	264	33		-04	+32	240	70		02	-06				02	-09	276	52		01	-10	271	57		00	-11	254	57						450
400	2345	-29	-45			2346	-24	-34			2382	-17	-24	266	45	2387	-13	-46	244	92	2411	-08	-15			2420	-09	-24	271	57	2432	-07	-13	268	60	2426	-07	-17	247	58						400
350		-38	-53	page			-38	-48				-31	-46	263	78		-18	-35	246	89		-20	-30				-22	-37	276	65		-20	-28	266	68		-19	-27	247	62						350
300	2991	-49		9.		2991	-52				3082	-42		262	111	3061	-32	-44			3084	-34	-46			3091	-35	-51	276	73	3106	-34	-44	271	74	3102	-33	-41	256	66						300
250		-60					-57					-53		269	105		-46					-49					-53		277	87		-50		275	84		-51		254	67						250
200	3867	-57				3864	-54				3908	-60		268	74	3952	-61				3967	-67				3970	-68		286	82	3987	-69		277	78	3984	-70		261	69						200
170		-47					-53					-57		253	58		-60					-70					-71		279	65		-76		286	65		-77									170
150		-49					-52					-55		261	39							-59										-70		270	44		-80		264	54						150
130		-49					-51					-54		261	34							-55					-67		279	46		-63		271	32		-68									130
110		-48					-50					-50										-53					-63					-60		275	18		-63									110
100	5325	-49				5317	-51				5406	-50									5448	-57				5432	-59				5438	-62		261	13	5420	-63									100
90							-51															-53					-57					-62		253	17		-61									90
80							-49															-50					-54					-60		223	18		-65									80
70																						-54					-53					-54					(82 mb)									70
60																						-48																								60
	Inversion 713 mb 43° - 700 mb 47°					Inversion 713 mb 24° - 703 mb 26°					Inversion 950 mb 49° - 925 mb 51°					Inversion 775 mb 35° - 760 mb 36° Isothermal 769 - 734 mb 51° 395 - 370 - -14°					Inversion (Slomb) 869 mb 45° - 846 - 41° 716 mb 30° - 704 mb 31° 620 - 23° - 600 - 26° 538 - 15° - 529 - 16° 296 - -35° - 291 - -34°					Inversion 813 mb 38° - 800 mb 41° 544 - 140 - 533 - 19° Isothermal 465 - 454 mb 03°					Inversion 921 mb 47° - 836 mb 49°					Inversion 837 mb 39° - 803 mb 45° Isothermal 728 - 681 mb 37°					
Tropopause	II 270 mb -60° 32.100					I 269 mb -63° 32.200					II 220 mb -60° 37.000					I 189 mb -63° 40.700					I 178 mb -74° 42.200					I 175 mb -73° 41.000					II 182 mb -75° 41.000					I 150 mb -80° 46.600										Tropopause

METEOROLOGICAL OFFICE 21 JUN 1951

Wednesday 13th June 1951.

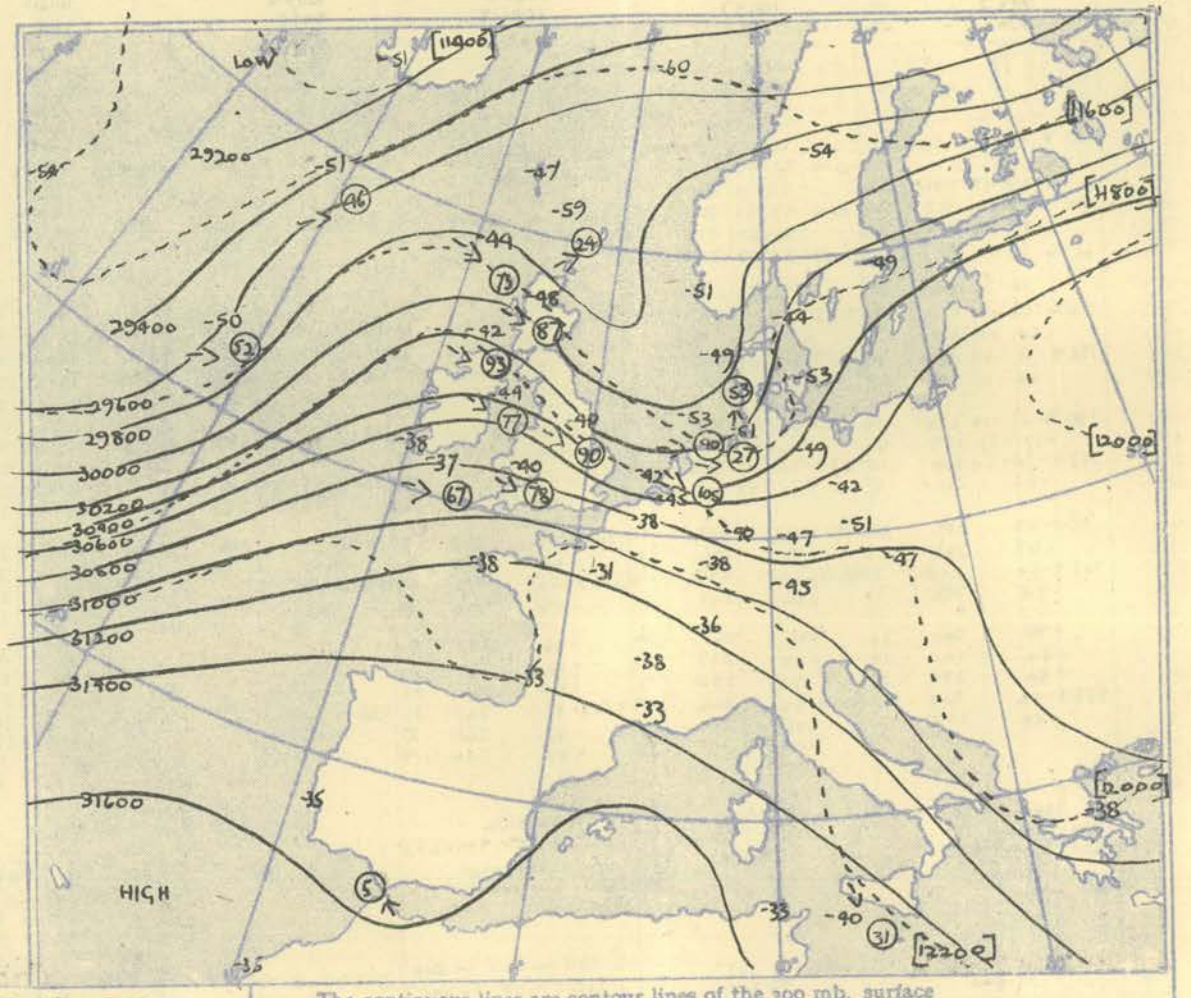
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.



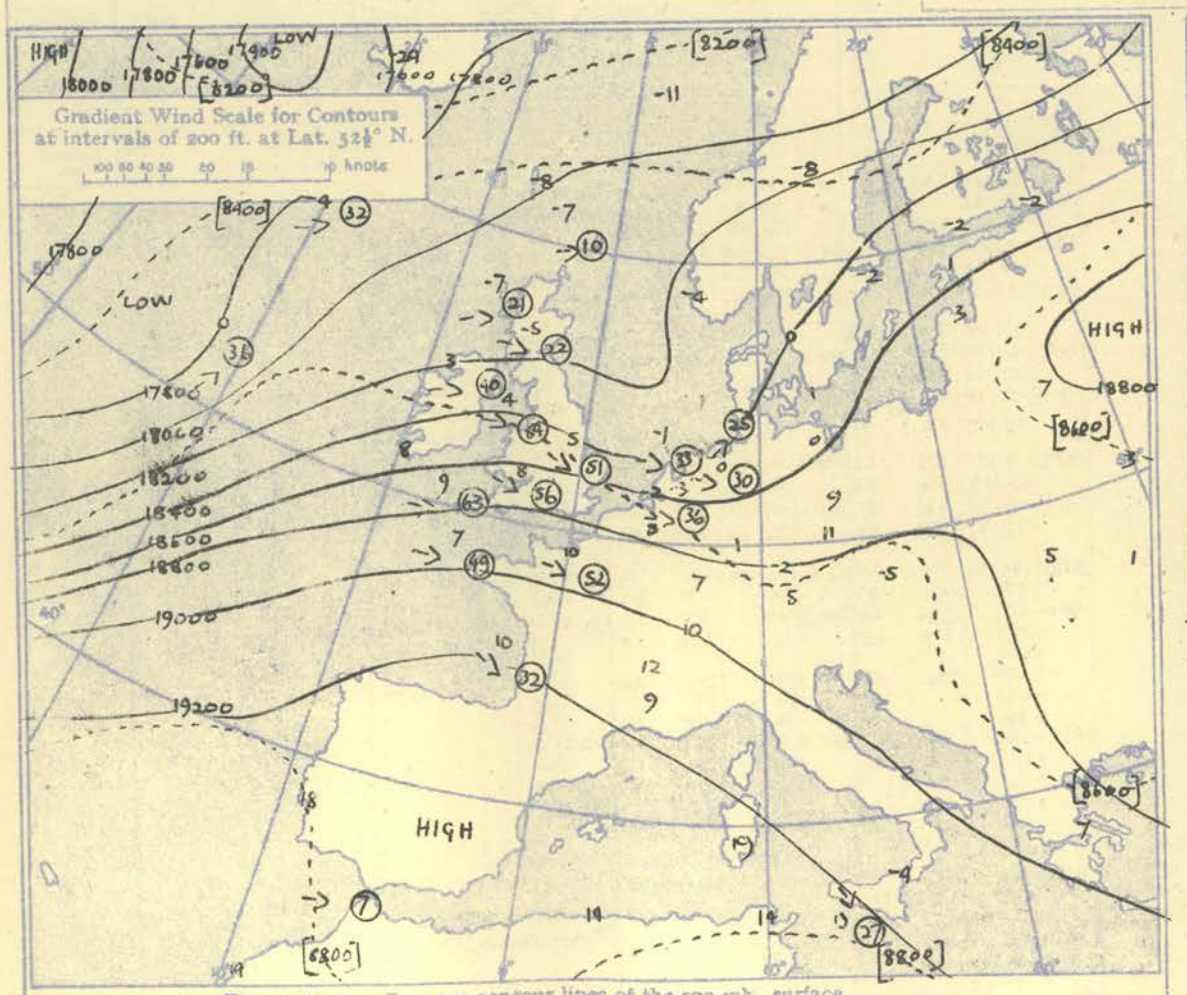
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

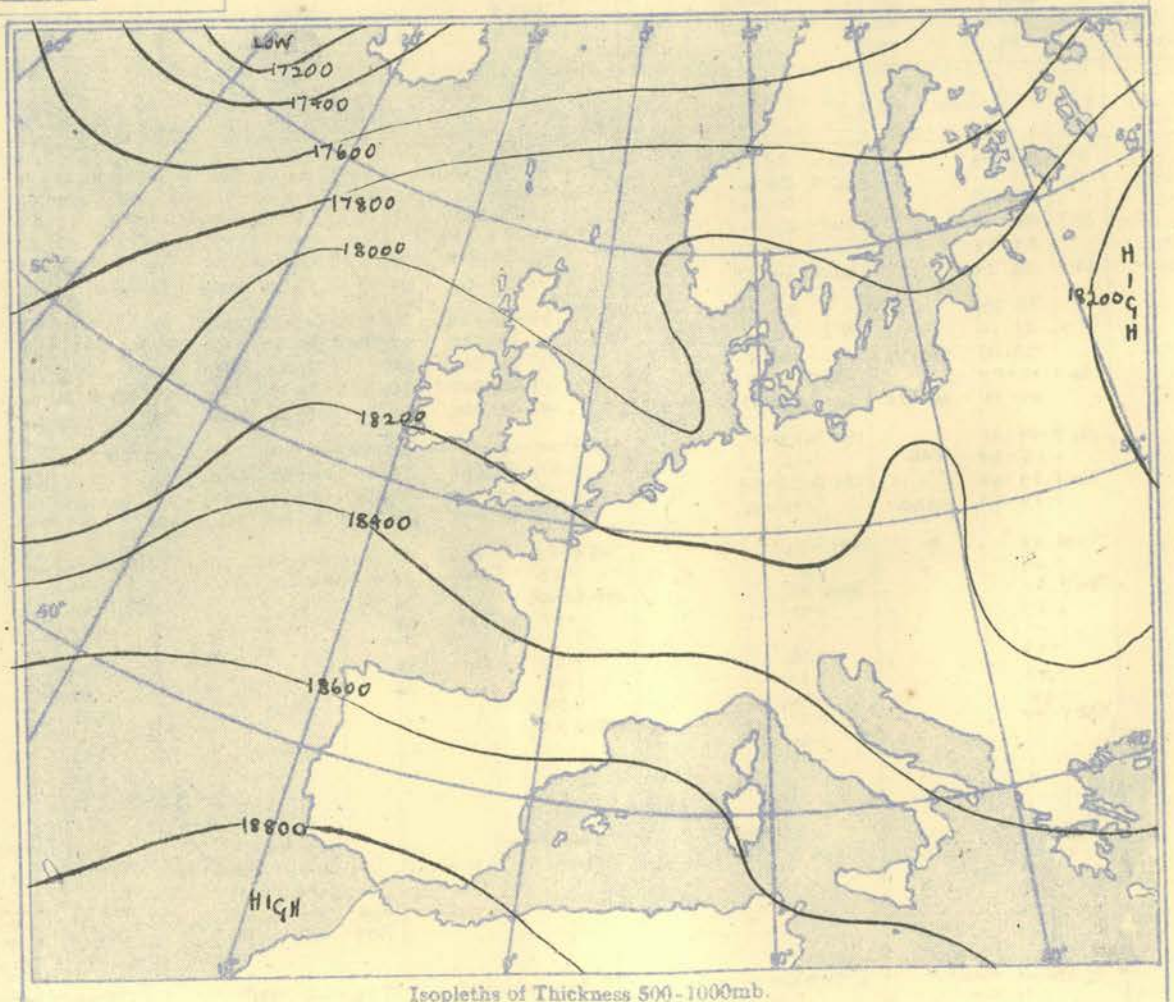
100 50 40 30 20 15 10 knots



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500-1000mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	48·1N 17·0W	46·0N 15·0W.	52·1N 02·1W.																			
Pressure: Time	12L	1330L	1415L																			Time
Pressure: M.S.L.	1006 mb	1013 mb	1017 mb																			M.S.L.
Pressure: Surf	1002 mb	1009 mb	1015·5 mb																			Surf
Pressure: Freezing	660 mb	640 mb	675 mb																			Freezing
Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Pressure mb
Surf		59	55		56	56	0·4															Surf
1000	01·6			03·6			0·7															1000
950		52	48		55	55																950
900		46	45		54	49	33·7	49	40													900
850		41	41		49	44		49	45													850
800		44	26		45	45	6·57	43	42													800
750		40	18		42	42																750
700	97·8	36	27	100·6	36	34	101·4	36	34													700
650		31	12		33	22																650
600		26	23		26		141·7	23														600
550		20	03		19																	550
500	184·8	09		187·6	09		188·0	07														500
450																						450
400							2425-14															400
350																						350
300	Clouds.			Clouds.			Clouds.															300
250																						250
200	8/8 Sc			8/8 Sc			8/8 Sc															200
170	910-850mb			1000-930mb			852-840mb															170
				8/8 Ac			4/8 Sc															
				830-690mb			797-738mb.															
				1/8 Ac			4/8 Ac															
				490-478mb			560-549mb.															
							4/8 Ac															
							516-506mb.															
							5/8 Ci															
							410-384mb.															
							Inversion															
							881mb, 44°.															
							850mb 49°.															

DIRECTION (degrees from N) and VELOCITY (knots) of UPPER WINDS at heights above M.S.L.

Place	Stornoway		Lerwick		Shoeburyness																	Place
Time	09L		09L		13L																	Time
Type	Pilot.		Pilot.																			Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Surf.	160	07	312	14	240	13																Surf.
1,000	170	09	301	10	250	23																1,000
2,000	184	11	313	08	250	24																2,000
3,000	193	14	326	07	250	25																3,000
4,000	194	15	325	09	270	25																4,000
5,000	195	15	320	08	280	27																5,000
6,000	195	15	316	08	280	30																6,000
8,000	191	18	309	05	270	30																8,000
10,000	196	19	304	03	260	32																10,000
14,000	197	18	242	09	270	44																14,000
18,000	226	30	219	08	270	52																18,000
24,000	228	40	239	16	280	58																24,000
30,000	227	40	281	45	280	73																30,000
40,000	(26,000')		256	35	280	74																40,000
50,000			253	24	260	29																50,000
			253	24	240	15																
			(53,000')		(55,000')																	

METEOROLOGICAL LIBRARY 21 JUN 1951 OFFICE

NEPHOSCOPE OBSERVATIONS

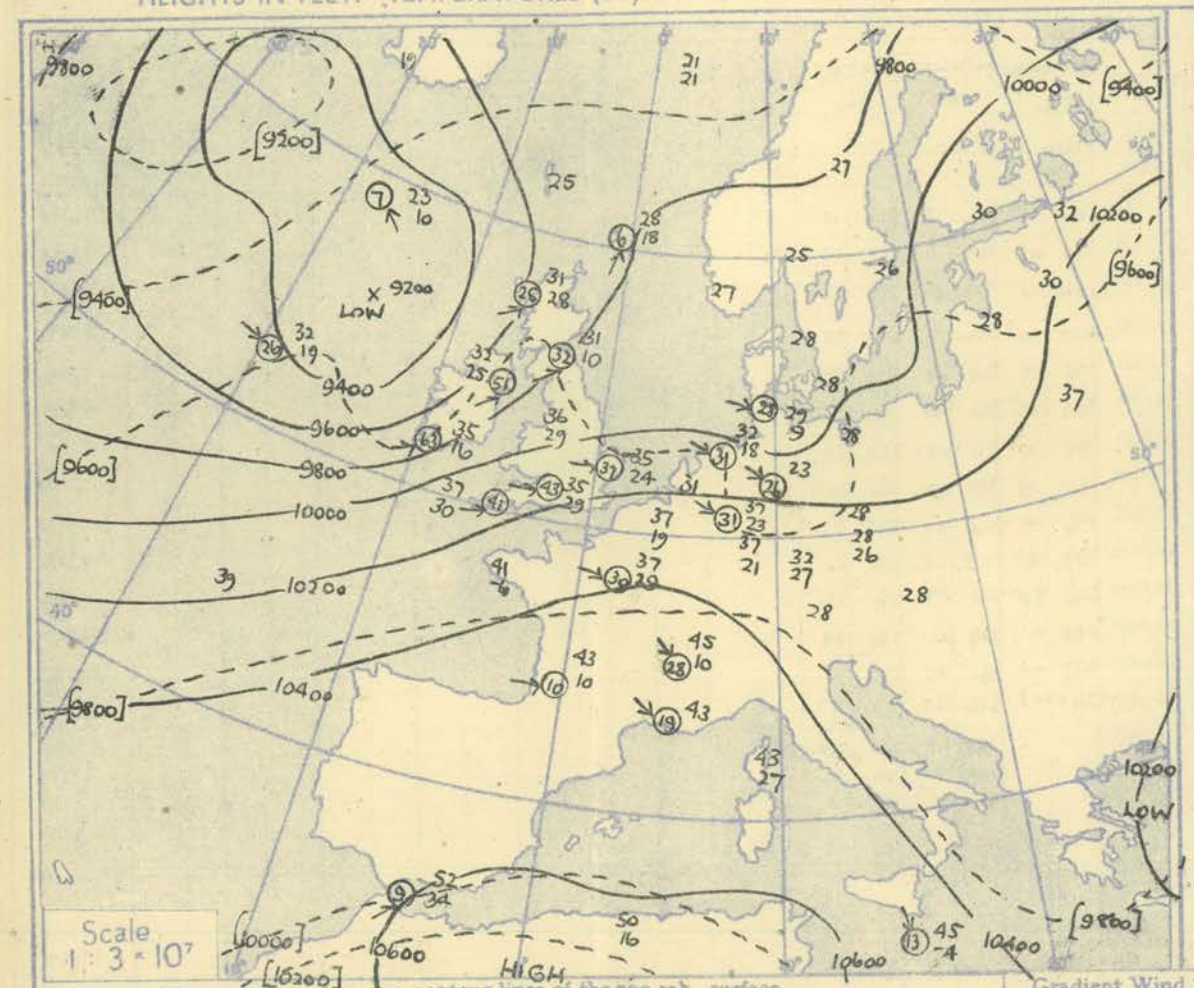
Place													Place
Time Type													Time Type
Dir. Vel.													Dir. Vel.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	WEATHER EXPLORER				WEATHER EXPLORER				WEATHER EXPLORER				WEATHER EXPLORER				WEATHER RECORDER				WEATHER RECORDER				WEATHER RECORDER								Ship
Lat/Long	59·1N		19·2W		59·1N		19·2W		59·1N		19·1W		59·1N		19·1W		52·3N		20·3W		52·3N		20·3W		52·3N		20·1W						Lat/Long
Pressure: Time	03L		G.M.T.		09L		G.M.T.		15L		G.M.T.		21L		G.M.T.		03L		G.M.T.		09L		G.M.T.		15L		G.M.T.				G.M.T.		Time
Pressure: M.S.L.	1001		mb		999		mb		997		mb		996		mb		992		mb		989		mb		992		mb				mb		M.S.L.
Pressure: Surf	1001		mb		999		mb		997		mb		996		mb		992		mb		989		mb		992		mb				mb		Surf
Pressure: Freezing	365 ~ 790		mb		800 ~ 870		mb		795		mb		780		mb		740		mb		730		mb		700		mb				mb		Freezing
Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf		49	40	030	14		49	38	010	13		50	43	360	15		50	46	340	16		57	57	180	22		57	56	180	15		56	53	340	20		53	49	350	25					Surf
1000	3	49	41			-4					-8					-1·2					-2·3					-3·2					-2·2				5·								1000
950		42	36	002	14		42	34	012	09		42	40	025	14		44	43	346	17		55	51	172	22		54	53	224	08		51	47	331	21		48	44	344	25					950
900	28·6	36	29	013	13	27·9	36	31	015	09	27·6	37	35	025	17	27·2	40	40	360	15	26·7	50	46	185	22	25·7	49	47	223	10	26·6	46	42	331	26	29·1	43	40	333	22					900
850		30	25	018	08		31	21	018	08		38	37	027	19		38	37	027	19		44	40	187	20		45	42	222	12		45	38	328	21		37	35	323	21					850
800	59·7	33	-01	009	05	59·0	32	11	145	05	58·8	33	32	140	07	58·5	34	32	042	07	58·4	39	34	194	16	57·5	40	36	232	13	58·3	42	31	323	21	60·5	36	33	227	21					800
750		27	-03	225	07		25	09	151	07		27	25	108	07		29	26	060	06		34	29	216	14		34	30	229	15		37	25	309	19		31	27	315	17					750
700	94·4	23	00	202	15	93·6	22	10			93·6	23	19	130	07	93·4	22	17	082	05	93·6	29	22	211	18	92·8	29	24	219	12	93·8	32	19	286	26	93·6	26	23	295	13					700
650		15	-06				14	-10				14	09	166	10		17	09	144	06		24	16	201	21		22	19	220	14		27	11	268	22		19	15	284	12					650
600	133·5	10	-19			132·6	09	-18			132·7	10	00	187	10	132·7	09	01	174	08	133·4	17	08	198	24	132·5	15	-04	224	16	133·8	21	05	260	26	135·1	13	09	269	16					600
550		04	-25				01	-30	184	20		03	-10	185	16		02	-09				10	01	198	31		06	-20	229	13		13	-07	256	27		07	03	243	29					550
500	178·5	04	-28	220	32	177·4	07	-38	185	21	177·6	06	-16	181	23	177·5	06	-16	Max		179·0	00	-09	197	36	177·9	02	-15	233	13	177·7	04	-18	237	31	180·4	02	-07	225	29					500
450		15	-37	220	29		15	-45	189	29		16	-21	188	30		14	-25	elevation			12	-20	195	33		13	-32	269	15		05	-26	237	33		12	-18	227	35					450
400	231·4	25	-48	197	32	230·2	27	-55	202	30	230·4	25	-33	188	39	230·4	26	-37			232·2	26	-40	191	42	231·0	21	-47	275	19	233·7	17	-37	230	48	233·6	25	-38	232	33					400
350		39	-59	207	36		39	-59	210	32		39	-49	176	27		35	-50	185	38		38	-55	200	51		38	-58	261	26		31	-50	226	41		36	-54	200	33					350
300	298·9	51		210	46	294·8	50		206	40	294·8	53		188	22	295·0	50		202	47	296·8	50		221	52	295·9	38	-59	240	49	299·3	46		245	37	298·5	49		203	34					300
250		62		238	49		66		196	35		56		198	35		54		192	39		47		212	60		42		232	63		54		243	62		51		207	52					250
200	283·2	51		234	34	281·6	50		197	31	282·9	44		219	39	283·3	46		210	32	285·6	50		231	58	286·3	46		232	59	287·1	55		229	71	286·9	49		222	48					200
170		50		227	30		50		219	28		44		227	33		45		205	27		52		222	45		49		224	48		51		229	55		50		225	44					170
150		50		214	28		50		226	27		44		196	26		45		211	21		53		223	39		49		217	36		53		232	45		51		210	42					150
130		51		216	24		51		228	31		44		216	31		47		199	27	(190 mb)	55					49		232	31		51		232	42		50		223	36					130
110							51		235	21		43		210	24		45		212	27							49		216	29		51		226	21		49		208	31					110
100						532·9	53		224	27	536·7	44		205	33	536·6	45		211	25							48		232	24		51		233	20	538·4	49		211	27					100
90							49		204	24		42		197	18		46		213	20							47		232	24							49		209	24					90
80												39					45		199	26							47		232	21							49								80
70																	44		219	19							47		232	12															70
60																	43		226	15	(68 mb)	47																							60
	Inversion 850mb 30°- 820 mb 34°					Inversion 857 mb 30°- 832 mb 37°					Inversion 881 mb 35°- 864 mb 38°					Inversion 900 mb 40°- 885 mb 41°					Isothermal 720 - 690 mb 29°					Isothermal 588 - 550 mb 45°					Inversion 845 mb 36°- 809 mb 37°													
	Isothermal 735 - 721 mb 26°					Isothermal 762 - 728 mb 25°					Isothermal 850 - 835 mb 37°																	495 - 490 " 05°																			
						627 - 610 " 16°																																								
Tropopause	I 250 mb -71° 34,300'					I 240 mb - 71° 34,300'					I 272 mb - 62° 31,800'					II 271 mb - 57° 31,600'					I 300 mb - 50° 29,700'					I 325 mb - 49° 27,800'					II 275 mb -54° 32,000'					I 276 mb - 52° 31,500'													Tropopause

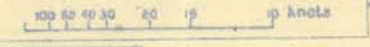
Wednesday 13th June 1951

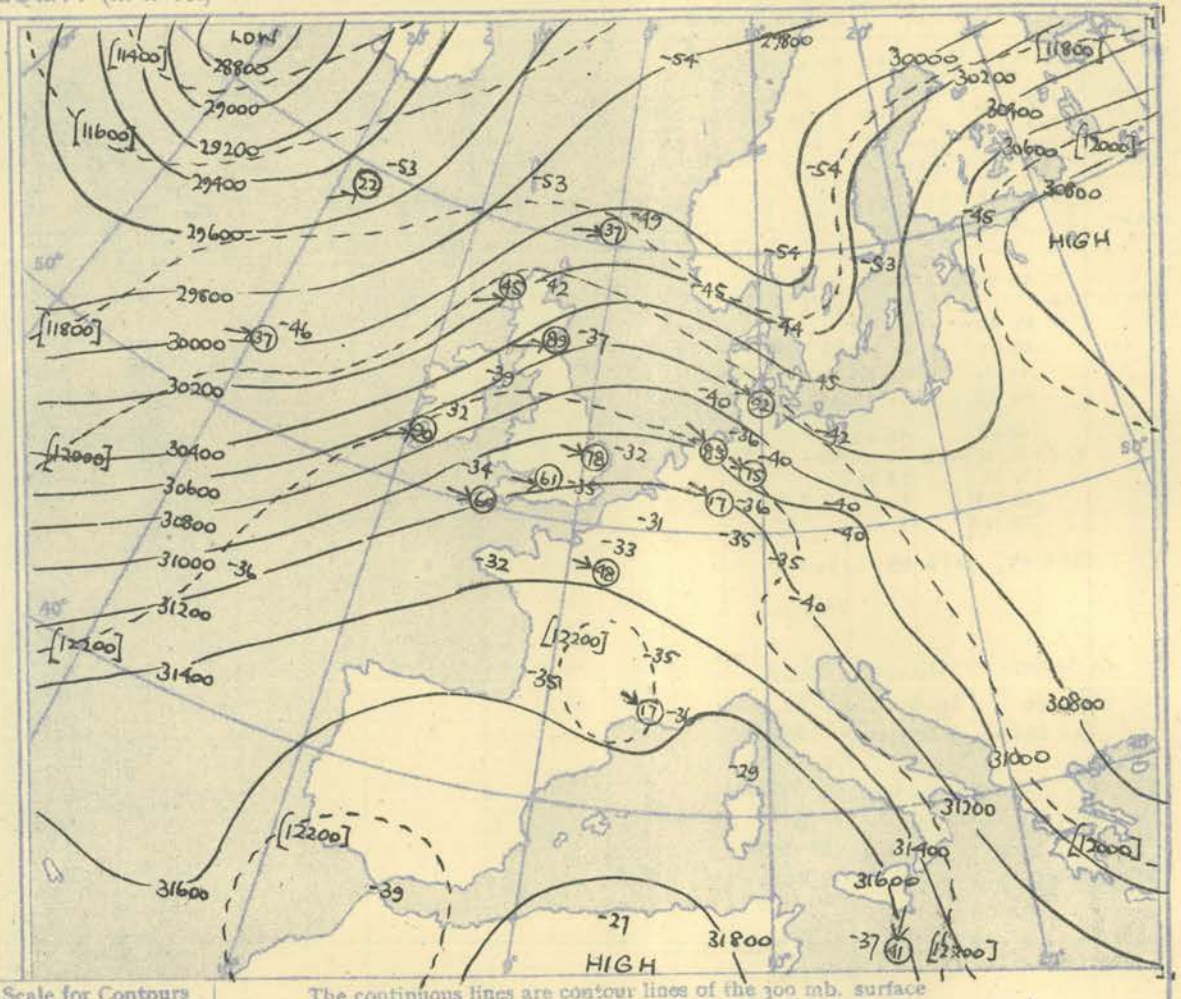
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

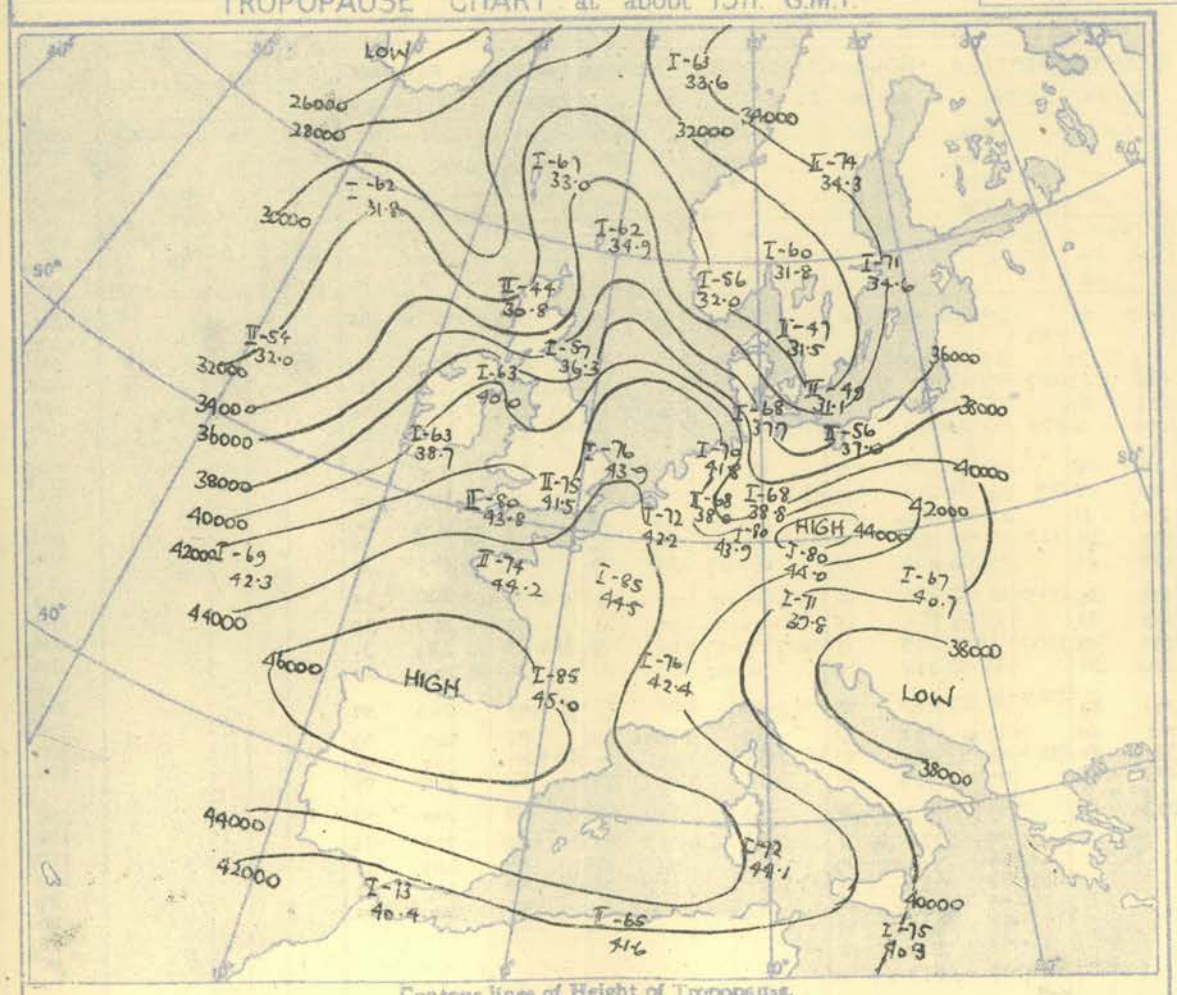
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N





The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Marked cooling occurred between Iceland and Greenland early in the period and the cold trough in the Central Atlantic subsequently intensified. A further warm ridge reached Ireland from the southwest and the small cold trough which crossed the British Isles on the 12th linked with an old cold trough over the Balkans.

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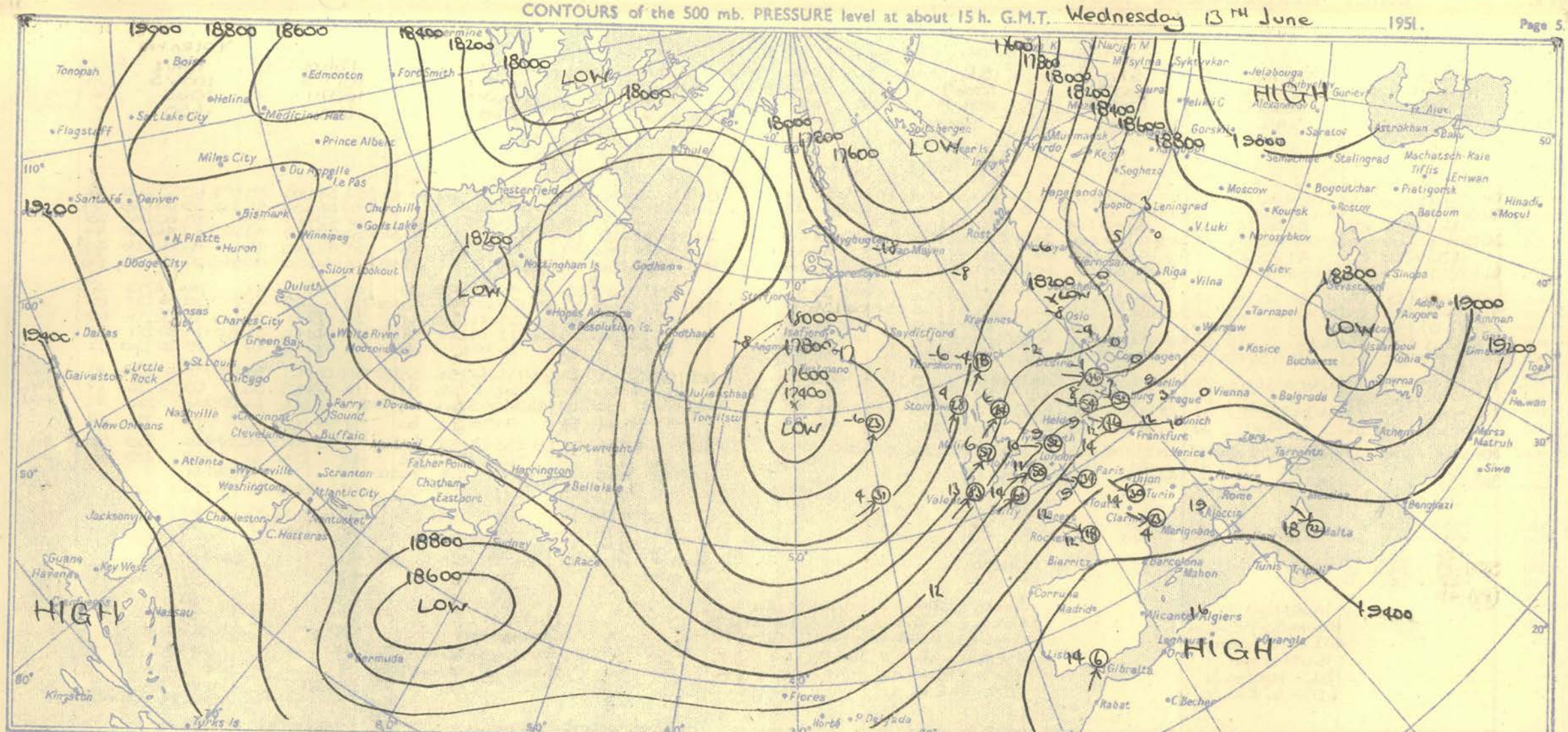
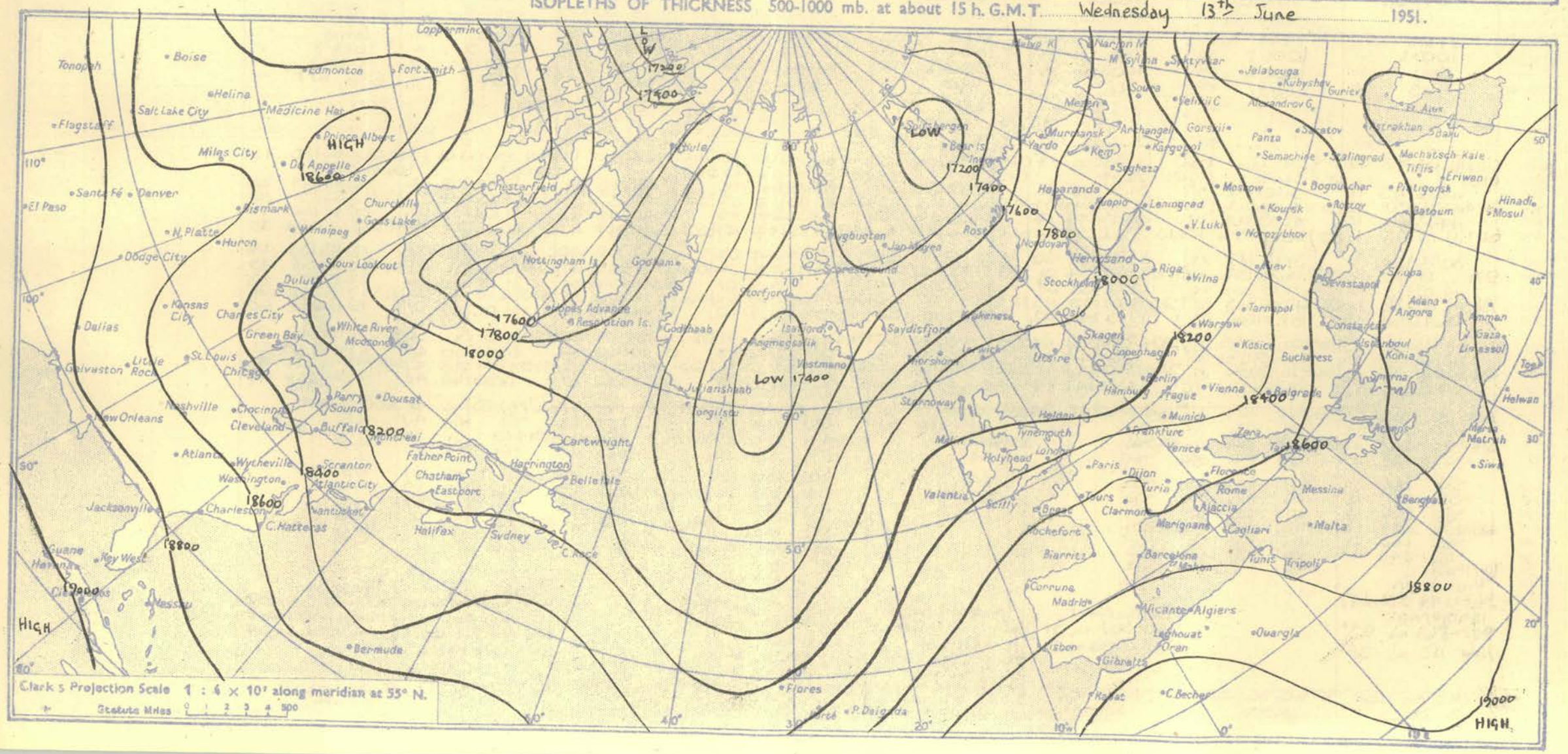
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Wednesday 13TH June 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Wednesday 13th June 1951.



Clark's Projection Scale 1 : 4 × 10⁷ along meridian at 55° N.

Statute Miles 0 1 2 3 4 500

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15 hrs G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	Valentia
Pressure: Time	15 hrs G.M.T.	15 hrs G.M.T.	15 hrs G.M.T.	15 hrs G.M.T.	15 hrs G.M.T.	15 hrs G.M.T.	15 hrs G.M.T.	15 hrs G.M.T.	15 hrs G.M.T.
M.S.L.	1008.6 mb	1004.6 mb	1009.3 mb	1006.1 mb	1013.6 mb	1017.5 mb	1019.1 mb	1017.5 mb	1006.5 mb
Surf	998.6 mb	1003.0 mb	1008.5 mb	996.6 mb	1011.6 mb	1013.1 mb	1003.4 mb	1007.1 mb	1005 mb
Freezing	750 mb	747 mb	710 mb	700 mb	653 mb	669 mb	630 mb	620 mb	650 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Valentia Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	53	48	200	06	0·4	54	50	170	07	0·2	55	56	220	14	02·6	63	58	200	20	0·6	62	51			01·2	67	55	210	18	04	46	52	230	20	02·9	58	54	180	25	0·3	60	55	210	22	Surf
1000	02·3					01·2	55	49			02·8	58	55			01·7					03·7	62	48			04·3	61				03·5	61	52			04·8	57	54	205	42	1·8	59	54	209	29	1000
950		48	47	213	03		51	47	181	17		55	49	214	30		56	51	200	30		59	53	227	47		54	46	217	31		51	49	218	41		52	50	205	39	950
900	30·9	46	40	209	09	30·0	47	44	184	20	31·4	47	43	221	34	30·8	52	48	199	39	32·7	48	46			34·1	55	48	199	29	34·3	55	50	186	35	33·8	55	49	217	43	30·7	47	46	203	44	900
850		40	36	209	08		42	39	183	21		42	38	227	36		47	41	224	37		45	39				48	32	246	30		51	47	243	36		51	47	230	46		42	41	226	44	850
800	26·6	39	32	200	06	61·6	38	36	185	21	63·0	38	35	238	30	62·7	42	33	223	41	64·0	42	36			66·1	44	15	250	33	66·4	46	28	247	38	65·9	46	41	230	46	62·3	57	36	206	50	800
750		32	23	183	06		32	30	188	23		35	34	237	32		38	19	220	47		39	33				33	10	262	33		40	40	249	39		42	36	236	42		36	17	223	57	750
700	98·0	28	16	185	06	96·8	31	28	185	25	98·3	31	30	235	34	98·2	32	09	220	51	100·1	36	29			101·7	35	24	259	37	102·1	35	29	249	43	101·7	37	30	239	41	97·7	35	16	231	65	700
650		23	07	157	03		26	21	194	28		27	26	232	33		29	-5	219	48		31	22				30	11	258	40		34	13	250	48		34	17	241	48		32	-3	231	69	650
600	137·4	13	-3	206	16	136·8	20	-3	218	32	138·4	21	19	236	30	138·3	23	-19	226	53	140·3	24	03			141·9	23	10	254	49	142·5	28	14	248	51	142·3	29	14	240	53	138·1	26	03	231	68	600
550		04	-11	212	16		11	-18	219	29		12	10	234	26		16	-25	230	53		18	-42				16	10	256	48		20	10	252	56		21	07	245	61		19	-19	230	73	550
500	182·8	-4	-19	222	18	182·6	04	-32	214	28	184·4	06	04	236	44	184·4	06	-33	229	57	187·0	10	-48			188·1	08	-32	263	52	189·1	11	-6	256	55	189·0	14	04	243	61	184·7	13	-46	234	83	500
450		-11	-27	235	20		-4	-37	215	32		-5	-3	233	60		-1	-47	233	72		05	-14				03	-32	263	60		01	-8	256	48		04	-7	245	55		05	-32	233	87	450
400	235·9	-21	-37	250	28	236·7	-15	-35	229	37	238·4	-15	-32	239	65	236·5	-9	-41	253	78	242·0	-6	-22			243·1	-6	-32	260	64	243·3	-10	-25	262	54	242·4	-6	-18	246	61	239·6	-6		235	82	400
350		-33	-45	257	36		-27	-44	232	33		-24	-35	253	87		-23	-48	240	79		-20	-37				-17	-28	264	68		-21	-29	252	63		-18	-44	240	69		-19		238	84	350
300	301·1	-49		254	37	302·9	-42		235	45	305·2	-37	-46	253	89	306·7	-29	-39	236	88	308·3	-34	-50			310·7	-52	-47	266	78	311·2	-35	-53	257	61	311·8	-33	-39	240	60	307·4	-32		239	90	300
250		-61		250	46		-46		239	72		-51		261	59		-50					-50					-49		268	82		-53		256	63		-48		236	62		-47		209	61	250
200	388·3	-53		252	43	392·2	-47		250	57	394·2	-46				398·8	-65					-53				399·1	-68		275	73	398·7	-72		254	70	400·3	-68		252	63	396·1	-62				200
170		-53		249	34							-49					-65					(238)				-76		272	63		-77		251	50		-78		240	68		-65				170
150		-53		250	33							-52					-59									-69		256	36		-71		262	35		-73		238	33		-68				150
130		-51		245	34							-55					-64									-61		274	32		-66					-71		234	28		-69				130
110		-49		253	27												-63									-56		261	18		-58					-63					-55				110
100	503·1	-49		245	25											541·9	-52									549·2	-56		271	18	543·4	-59				546·6	-61				543·5	-57				100
90		-48		242	26												-53										-54					-56					-62					-58				90
80	(88)	-48																														-53					-59					-55				80
70																																-52					-56					-55				70
60																																(61)	-51				-55					Isothermal				60
						Inversion										Inversion					Inversion										Inversion					-58					784-750 mb 36°				
						1000 mb 53°-983 mb 52°										462 mb 2°-454 mb 0°					858 mb 6°-844 mb 3°										950 mb 43°-900 mb 33°										534-522 mb 17°				
						612 mb 18°-605 mb 21°										270 mb 3°-215 mb -6°					479 mb 6°-469 mb 8°										685 mb 33°-650 mb 34°										Inversion				
						Isothermal										Isothermal					Isothermal																						719 mb 34°-700 mb 35°				
						736-700 mb 31°										828-816 mb 44°					1012-1000 mb 62°																						Isothermal				
						693-674 mb 30°										792-766 mb 41°																											710-700 mb 31°				
Tropopause	I 240 mb -62° 34500'					II 294 mb -44° 30800'					I 232 mb -57° 36300'					I 194 mb -67° 40000'					NR.					I 165 mb -76° 43900'					II 185 mb -75° 41500'					II 165 mb -80° 43800'					I 249 mb -63° 38700'					Tropopause

21 hrs G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE
Pressure: Time	21 hrs G.M.T.	21 hrs G.M.T.	21 hrs G.M.T.	21 hrs G.M.T.	21 hrs G.M.T.	21 hrs G.M.T.	21 hrs G.M.T.	21 hrs G.M.T.
M.S.L.	1007.2 mb	1001.8 mb	1006.1 mb	1004.7 mb	1012.3 mb	1016.7 mb	1017.9 mb	1016.8 mb
Surf	997.1 mb	1000.2 mb	1005.3 mb	995.2 mb	1010.3 mb	1012.4 mb	1002.2 mb	1006.3 mb
Freezing	768 mb	758 mb	728 mb	740 mb	667 mb	667 mb	654 mb	650, 677 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	01·1	46	46	195	09	0·4	54	54	130	05	0·2	56	55	220	14	02·6	62	52	220	15	0·6	60	56	200	10	01·2	61	51	190	12	04·4	59	51	210	15	02·9	60	55	180	15	Surf
1000	01·5					0·5	57	52			01·7	55	54			01·3					03·4	59	54	214	17	04·7					05·0	58	50			04·6	55	55							1000
950		46	43	145	18		51	49	188	18		51	51	219	33		57	49	225	30		55	48	214	24		55	48	215	34		55	48	219	32		55	53	221	32	950
900	30·4	45	36	158	15	29·2	46	43	213	22	30·5	50	49	236	34	30·4	50	46	225	35	32·3	47	43	224	35	30·8	55	48	227	41	34	55	49	227	39	33·7	53	53	231	39	900
850		44	33	162	13		42	39	214	27		45	42	244	24		44	41	226	39		48	32	237	46		52	45	248	45		51	49	237	42		48	48	230	42	850
800	62·1	37	28	175	13	60·7	36	34	196	30	62·3	39	38	250	26	62·2	39	36	226	42	64·2	44	15	244	47	65·9	46	40	248	42	66·2	46	45	239	41	65·9	47	47	234	46	800
750		30	26	176	13		31	27	187	28		34	34	234	30		33	30	233	38		39	04	244	52		44	37	248	40		41	39	243	37		43	43	235	44	750
700	97·1	27	13	170	16	95·7	26	21	196	30	97·6	29	29	234	31	97·4	27	23	240	41	99·7	35	-13	245	56	101·9	37	21	250	41	102·0	39	37	251	41	101·8	36	33	238	49	700
650		20	07	175	19		21	13	202	24		23	22	235	38		28	06	239	50		30	-16	245	57		30	22	254	44		31	29	250	46		32	27	243	53	650
600	136·5	12	03	186	20	135·2	15	07	203	20	137·5	22	08	233	45	137·4	25	-12	238	54	140·0	24	-30	246	62	142·3	24	16	256	48	142·5	26	14	249	54	142·3	27	19	242	54	600
550		06	-12	220	19		08	01	203	25		17	-3	244	47		18	-27	241	58		19	-36	248	70		18	-42	266	53		21	01	247	57		19	-22	242	60	550
500	181·7	-3	-35	224	19	180·7	01	-40	199	31	183·7	07	-12	245	44	183·8	09	-35	240	53	186·0	10	-52	249	73	188·7	11	-32	258	55	189·1	11	01	247	50	188·9	11	02	243	51	500
450		-12	-44	228	22		-9	-29	199	31		-3	-25	248	61		-1	-25	241	75		00	-28	252	78		00	-10	260	56		01	-9	256	49		01	-12	240	52	450
400	234·8	-24	-48	233	23	234·3	-20	-39	198	32	236·0	-13	-33	248	78	236·5	-9	-29	242	83	241·0	-13	-36	263	78	243·3	-11	-20	258	63	243·9	-12	-11	245	45	243·7	-13	-22	242	51	400
350		-39	-53	236	20		-32	-50	196	42		-24	-49	249	84		-21	-34	244	86		-23	-47	251	78		-25	-33	236	61		-22	-39	260	48		-22	-30	238	44	350
300	299·3	-52		239	27	299·7	-44		214	36	304·6	-40	-60	248	39	303·7	-36	-59	237	92	307·1	-38	-58	252	81	310·1	-37	-51	253	67	310·8	-30	-53	253	49	310·5	-29	-52			300
250		-51		246	62		-47		231	57		-53					-48		244	58		-55		244	65		-54		258	63		-55		254	47		-55					250
200	356·8	-51		248	42	359·3	-48		242	62	359·2	-51				359·4	-61				359·9	-67		250	69	359·7	-68		255	57	359·4	-69		251	50	359·7	-72				200
170		-52		248	37		-50		241	50		-60					-64					-74		254	50		-75		263	48		-75		252	50		-77					170
150		-53		248	34		-51		241	42		-55					-60					-70		250	39		-72		262	44		-81		249	47		-79					150
130		-55		251	25		-53		236	42		-53					-58					-64		253	32		-68		258	38		-66		253	38		-76					130
110		-52		246	28		-52		231	30		-51										-59		260	14		-63		259	24		-67		260	27		-70					110
100	529·0	-54		247	29	540·1	-52		234	26	541·6	-54										-58				541·1	-65		262	14	541·8	-68		256	20		-66					100
90		-55		200	22		-51		235	22		-50										Max wind					-65					(84)	-66				(102)					90
80		-55		245	18		-52		237	18		-53										245° 96 kt																				80
70		(85)	-53					-53				-54										210 mb																				70
60												-54										21500'																				60
		Inversion														Inversion					Inversion					Isothermal					Inversion					Inversion									
		568 mb 44°-533 mb 47°										Isothermal				681 mb 27°-662 mb 28°					860 mb 43°-850 mb 48°					955 - 818 mb 53°					550 mb 50°-517 mb 54°					585 mb 52°-532 mb 54°									
		Isothermal										950-907 mb 51°				Isothermal					210 mb -10°-185 mb -6°										Isothermal					850 mb 47°-815 mb 49°									
		908-863 mb 45°										638-595 mb 22°				908-681 mb 27°					Isothermal										782-763 mb 43°					677 mb 32°-666 mb 34°									
		736-712 mb 28°														660-620 mb 28°					891-880 mb 46°										589-572 mb 25°														
																440 mb -3°					742-725 mb 38°																									
Tropopause	I 265 mb -60° 32500'					I 260 mb -50° 32900'					I 200 mb -63° 39300'					T 185 mb -66° 41000'					I 210 mb -70° 38500' I 163 mb -76° 43400'					I 151 mb -79° 44200'					I 193 mb -81° 45100'					I 205 mb -72° 39200'					Tropopause

HMSO Press MO, Dunstable

No. 11764

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.

Thursday 14th June. 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

METEOROLOGICAL OFFICE 2 VALENTIA 2 JUN 1951

03Z

Station	Pressure	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE
	Time	03Z G.M.T.	03Z G.M.T.	03Z G.M.T.	03Z G.M.T.	03Z G.M.T.	03Z G.M.T.	03Z G.M.T.	03Z G.M.T.
	M.S.L.	1004·3 mb	1000·5 mb	1006·1 mb	1005·3 mb	1012·6 mb	1016·6 mb	1017·7 mb	1016·1 mb
	Surf	994·3 mb	998·9 mb	1005·3 mb	995·8 mb	1010·6 mb	1011·9 mb	1001·7 mb	1005·6 mb
	Freezing	750 mb	745 mb	677 mb	696 mb	679 mb	663 mb	630 mb	645 mb

Pressure mb	LERWICK Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	°Dew °F	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	49	49	160	08	00·4	52				00·2	57	53	230	15	02·6	58	52			00·6	59	50	200	15	01·2	59	50	185	14	04·9	57	54	220	12	02·9	56	56	180	15	Surf
1000	01·1					00·1					01·7	57	54			01·4					03·5	58	50	222	21	04·5	58	49	214	28	04·8	56	53			04·4	55	55			1000
950		47	47	169	19		51	50				52	49	231	35		51	46				53	47	229	27		56	53	237	36		54	53	228	27		54	54	221	33	950
900	29·7	45	45	167	19	28·9	47	46			30·7	50	47	237	34	30·2	46	41			32·4	49	26	244	48	33·6	54	51	243	37	33·8	52	52	238	36	34·5	53	53	228	37	900
850		42	42	192	19		43	42				44	40	241	35		42	38				50	48	245	38		50	44	239	39		50	50	231	38		42	39	850
800	61·3	38	38	212	21	60·5	38	37			62·4	38	37	243	32	61·9	43	32			64·3	45	18	244	48	66·8	46	45	245	44	65·9	46	44	240	40	66·7	44	41	236	41	800
750		32	32	206	21		33	32				32	31	244	30		38	17																					750
700	96·4	27	27	191	18	95·5	27	23				26	23	244	34	97·5	33	00				40	36	244	45		41	40	241	43		43	42	238	45		43	42	238	45	700
650		20	18	180	17		20	10				29	15	247	53		28	19	For			30	06	246	48		31	26	253	50		34	04	245	49		33	28	233	47	650
600	135·8	14	04	173	20	135·0	17	-01			137·7	23	02	247	54	137·6	24	37			140·2	28	14	245	55	141·9	27	36	254	51	142·5	28	11	244	50	143·2	26	19	231	51	600
550		08	04	173	19		09	13				14	12	252	36		17	43	winds			20	07	247	61		20	06	255	52		20	01	243	51		21	05	234	60	550
500	181·2	01	08	176	18	180·6	00	24			183·7	02	21	252	56	183·8	06	06	See		186·8	10	01	246	61	188·5	09	00	255	49	189·1	11	00	246	52	189·8	11	02	237	63	183·9	07	03	500
450		10	16	187	13		10	34				09	28	256	68		03	26				00	18	248	63		04	13	254	51		00	10	250	48		09	03	232	57		03	09	450
400	234·6	22	29	186	12	234·1	21	47			238·1	13	36	256	78	238·1	14	22	page		241·4	10	19	250	67	242·7	14	24	253	54	243·8	11	31	249	45	244·4	12	16	229	57	238·2	16	20	400
350		37	46	189	10		34	59				29	47	264	76		27	35				24	32	244	64		27	36	252	51		23	43	245	48		27	31	231	58		25	33	350
300	299·3	52		227	21	299·3	47				304·1	44		251	91	304·3	42				308·2	40	50	243	63	308·9	44		252	51	310·6	39	55	245	41	310·7	41		233	51	304·7	40	52	300
250		52		250	45		54					57		256	97		61					57		243	63		59		254	52		55		240	40		58		227	49		58		250
200	387·7	50		250	41	387·5	52				391·1	63				390·6	69				395·3	69		241	51	395·3	73		253	46	399·8	71		238	46	397·4	71		232	46	392·3	61		200
170		50		250	41		52					64					65					74		235	43		75		260	40		71		238	42		75		232	43		63		170
150		51		248	32		52										59					74		247	40		72		253	28		67		246	30		70		232	37		(158 mb)		150
130		53		248	29		52										60					74		261	36		76		253	25		64		249	23		69		231	33				130
110		51		249	27		52										64					62		249	27		66		246	27		63		223	23		77							110
100	538·7	52		242	23						538·6	63									539·7	59		246	17	539·3	67		249	25	541·8	64		229	26		64							100
90		52		237	25							56				537·4	59					63		260	08		66					62		241	17		66							90
80		53										59										65										60												80
70	(831 mb)											58									(85 mb)										(83 mb)												70
60												58																														60

Isothermal. 999- 966 mb 52° / 285- 273- -50°

Inversion 697 mb 25°- 677 mb 32°

Inversion 836 mb 41°- 810 mb 44°

Inversion 890 mb 46°- 860 mb 50° / 640- 29°- 630- 30° / 175- -75°- 165- -72° / Isothermal. 230- 220 mb -63°

Inversion 722 mb 36°- 704 mb 38° / Isothermal 965- 931 mb 56°

Inversion 965 mb 53°- 940 mb 55° / Isothermal. 745- 707 mb 40°

Inversion 800 mb 44°- 777 mb 45° / Isothermal 711- 700 mb 40°

Isothermal 727- 700 mb 33°

Tropopause	I 296 mb -53° 30·200					II 260 mb -54° 33·000					I 221 mb -67° 37·000 / I 186 mb -67° 40·600					II 236 mb -67°					I 175 mb -75° 42·300 / I 153 -75° 45·000					II 210 mb -72° 38·500					I 187 mb -75° 41·200					II 210 mb -70° 38·700					I 238 mb -61° 35·500					Tropopause

09Z

Station	Pressure	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE
	Time	09Z G.M.T.	09Z G.M.T.	09Z G.M.T.	09Z G.M.T.	09Z G.M.T.	09Z G.M.T.	09Z G.M.T.	09Z G.M.T.
	M.S.L.	1004·0 mb	1000·4 mb	1006·0 mb	1005·7 mb	1012·3 mb	1016·3 mb	1018·0 mb	1016·8 mb
	Surf	994·1 mb	998·8 mb	1005·8 mb	996·2 mb	1010·3 mb	1011·9 mb	1002·1 mb	1006·4 mb
	Freezing	750 mb	718 mb	642 mb	710 mb	650 mb	660 mb	627 mb	659 mb

Pressure mb	LERWICK Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	51	51	Calm		00·4	54	51	180	10	00·8	59	54	230	13	02·6	59	52	200	15	00·6	61	50			01·2	63	56	210	15	04·4	57	56	200	10	02·9	57	57	203	12	Surf
1000	01·0					00·1					01·8	58	54			01·5					03·4	59	49			04·5	61	55			04·9					04·7	57	57			1000
950		52	48	202	12		51	50	204	27		52	49	232	30		51	47	215	30		52	45				56	52	233	28		53	52	230	27		53	53	226	27	950
900	29·8	49	42	212	12	28·9	48	47	207	30	30·8	48	45	240	26	30·4	45	43	221	34	32·7	45	40			33·7	53	49	242	33	34·0	54	52	240	24	33·6	51	51	227	30	900
850		44	39	230	14		44	40	208	33		43	41	244	24		41	40	232	40		41	38				52	44	244	39		51	49	234	36		50	50	233	35	850
800	61·5	37	33	234	16	60·6	39	33	207	32	62·5	37	35	241	28	62·0	40	36	234	38	64·0	42	46			65·9	47	39	249	46	66·3	49	47	233	38	65·8	46	43	242	40	800
750		32	28	234	16		35	27	201	28		39	28	236	35		35	17	230	39			41	02				43	34	246	40		43	38	235	39		41	40	237	42	750
700	96·6	29	20	230	16	95·9	31	21	199	27	98·1	35	05	235	42	97·4	31	05	226	43	99·6	38	02			101·7	37	31	245	39	102·3	37	33	232	41	101·8	36	36	226	42	700
650		21	13	227	16		24	08	198	29		33	18	236	43		25	21	221	49		32	19	For			30	23	244	41		34	18	230	44		31	31	217	36	650
600	136·1	14	03	229	18	135·8	20	06	196	33	138·6	24	13	230	48	137·2	18	32	220	58	140·1	24	17			142·1	24	07	241	45	142·0	29	01	227	50	142·0	26	25	226	49	600
550		08	05	235	21		16	43	193	33		19	04	224	50		14	40	218	60		17	13	winds			18	05	240	48		24	04	227	51		18	16	226	60	550
500	181·5	01	15	244	27	182·0	09	49	201	36	185·1	10	00	226	47	183·1	05	51	218	66	186·5	09	05			188·4	07	06	243	60	190·0	15	04	227	53	188·6	11	04	227	65	500
450		09	27	252	37		02	57	200	41		01	07	229	55		03	57	219	73			01	07				01	09	246	62		02	09	230	53		02	05	227	70	450
400	235·0	21	38	253	51	236·3	17	57	209	57	239·7	12	17	234	64	237·3	15	42	219	80	241·2	09	19	See		242·9	14	22	243	51	245·0	09	20	233	50	243·6	10	18	227	73	400
350		32	48	255	60		29	56	214	67		23	30	232	76		27	51	216	87		23	34	page			27	38	242	52		22	34	233	55		21	29	226	72	350
300	300·6	45		254	75	302·2	43		218	72	306·6	36	43	232	85	303·5	40	60	219	94	308·2	38	46	3.		309·1	43		242	48	312·0	38	49	236	55	310·7	37	46	227	70	300
250		56		256	70		51		213	67		54		225	79		54		208	100		51					61		243	52		56		233	53		53				250
200	388·2	58		248	48	390·3	52		219	57	395·1	57		239	92	391·1	70				396·6	64				395·9	65		243	43	399·2	69		242	50	398·5	66				200
170		49		249	39		50		209	36		51					57					69					70		245	33		64		239	44						170
150		54		253	33		50		214	31		47					50					65					65		244	29		58		254	28		63				150
130		49		239	24		46		209	27		49					54					64					64		244	21		60		248	24		61				130
110		50		234	20		42		217	21		56					59					62					59		243	15		63		250	17						110
100	539·0	52		232	19	543·5	44		216	23	546·6	40					59				(115 mb)					541·9	58		213	08	547·1	53		248	11	545·2	58				100
90		52		248	21		43		210	23							56										59		152	18		57		220	09		58				90
80		51																														57					58				80
70		51																														(85 mb)					59				70
60	(78 mb)																																				(72 mb)				60

Inversion 965 mb 51°- 950 mb 52° / Isothermal 944 mb- 935 mb 51° / 950- 932- 52°

Inversion 256 mb -53°- 250 mb -51° / Isothermal. 625- 604 mb 21°

Inversion 783 mb 35°- 768 mb 39° / Isothermal. 768- 748 mb 39°

Inversion 823 mb 38°- 795 mb 41° / Mean Wind. 208° 110 kts 245 mb 34·800 ft.

Inversion 826 mb 39°- 800 mb 42° / 760- 40°- 744- 42°

Inversion 963 mb 55°- 938 mb 57° / 890- 52°- 865- 53°

Inversion 950 mb 53°- 927 mb 56° / 680- 35°- 667- 36° / 555- 28°- 546- 25°

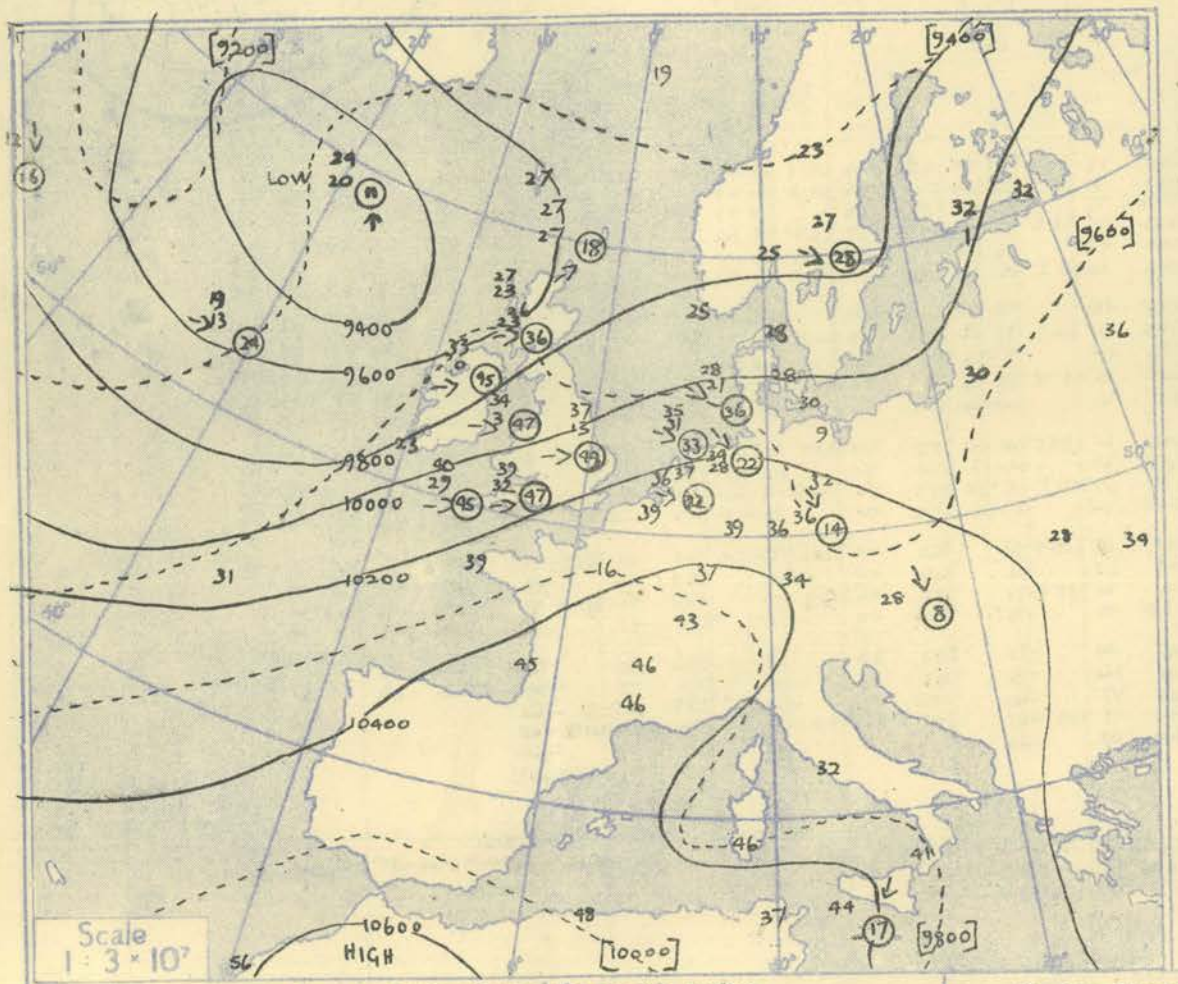
Inversion 915 mb 50°- 868 mb 51° / Isothermal. 550- 527 mb 18°

Tropopause	I 250 mb -56° 34·000					I 220 mb -56° 37·000					I 230 mb -58° 36·500					I 195 mb -72° 39·600					I 172 mb -70° 42·800					I 228 mb -66° 36·700					I 200 mb -69° 39·900					I 211 mb -68° 38·800					Tropopause

For winds see page 3.

Thursday 14th June 1951.

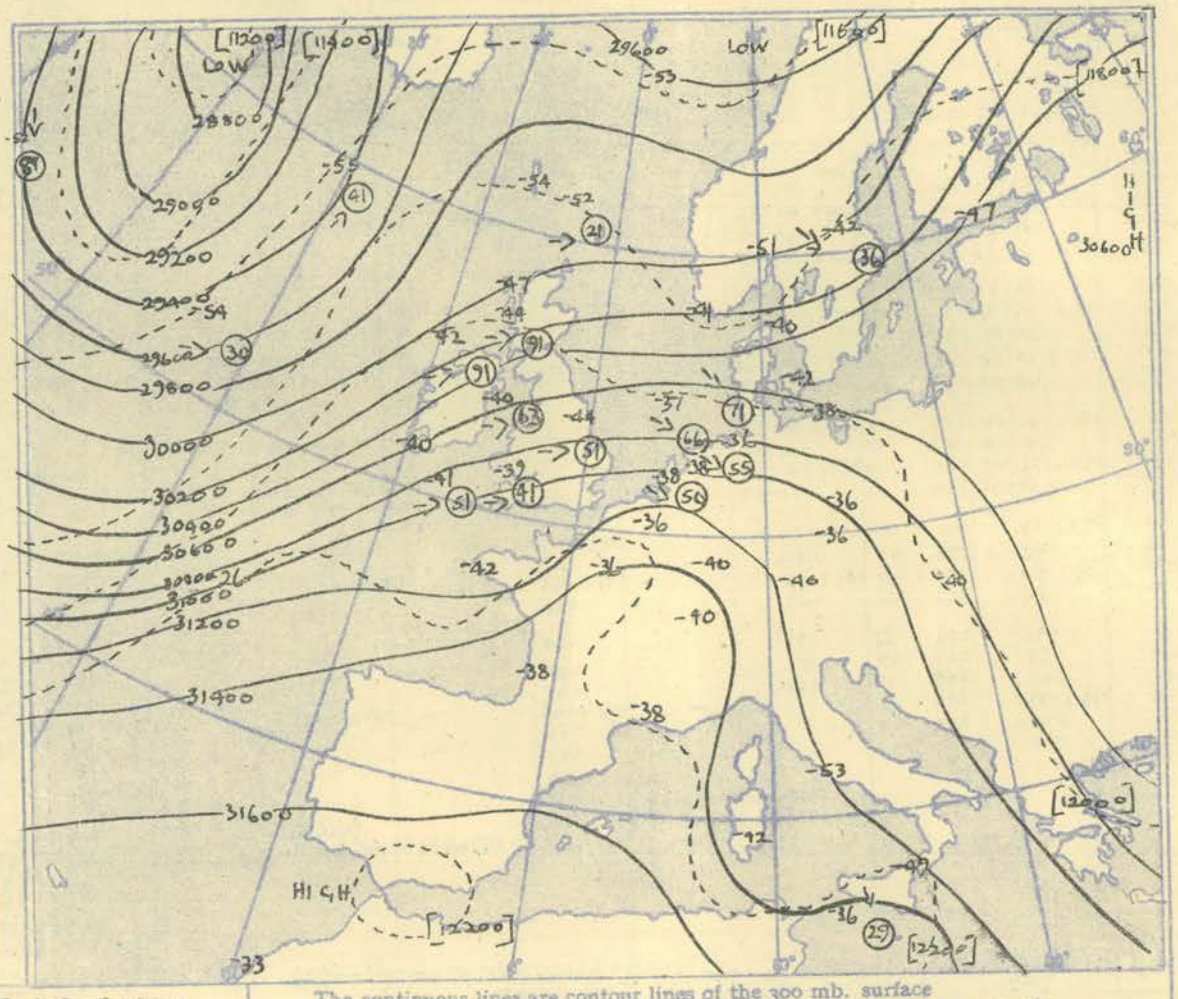
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.



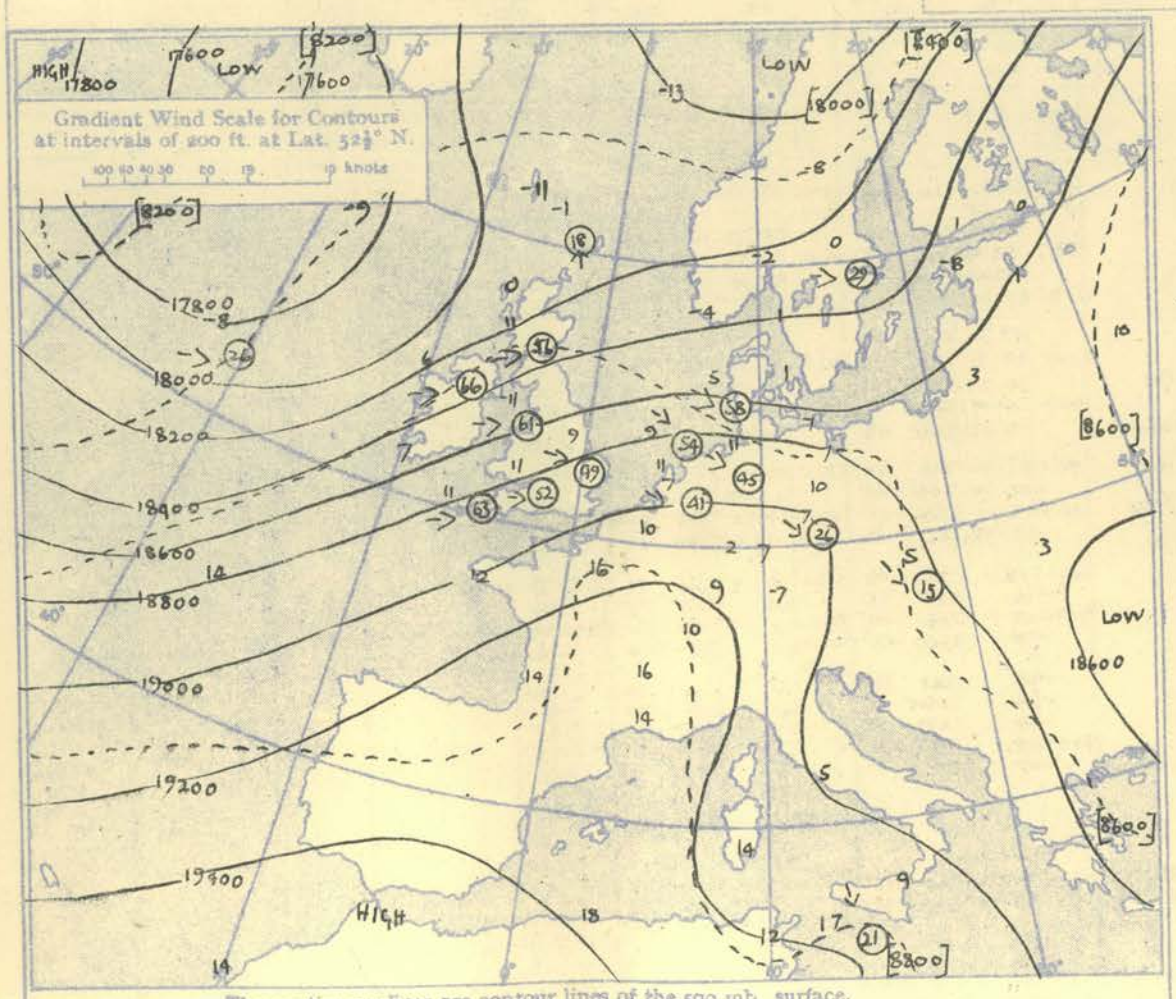
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

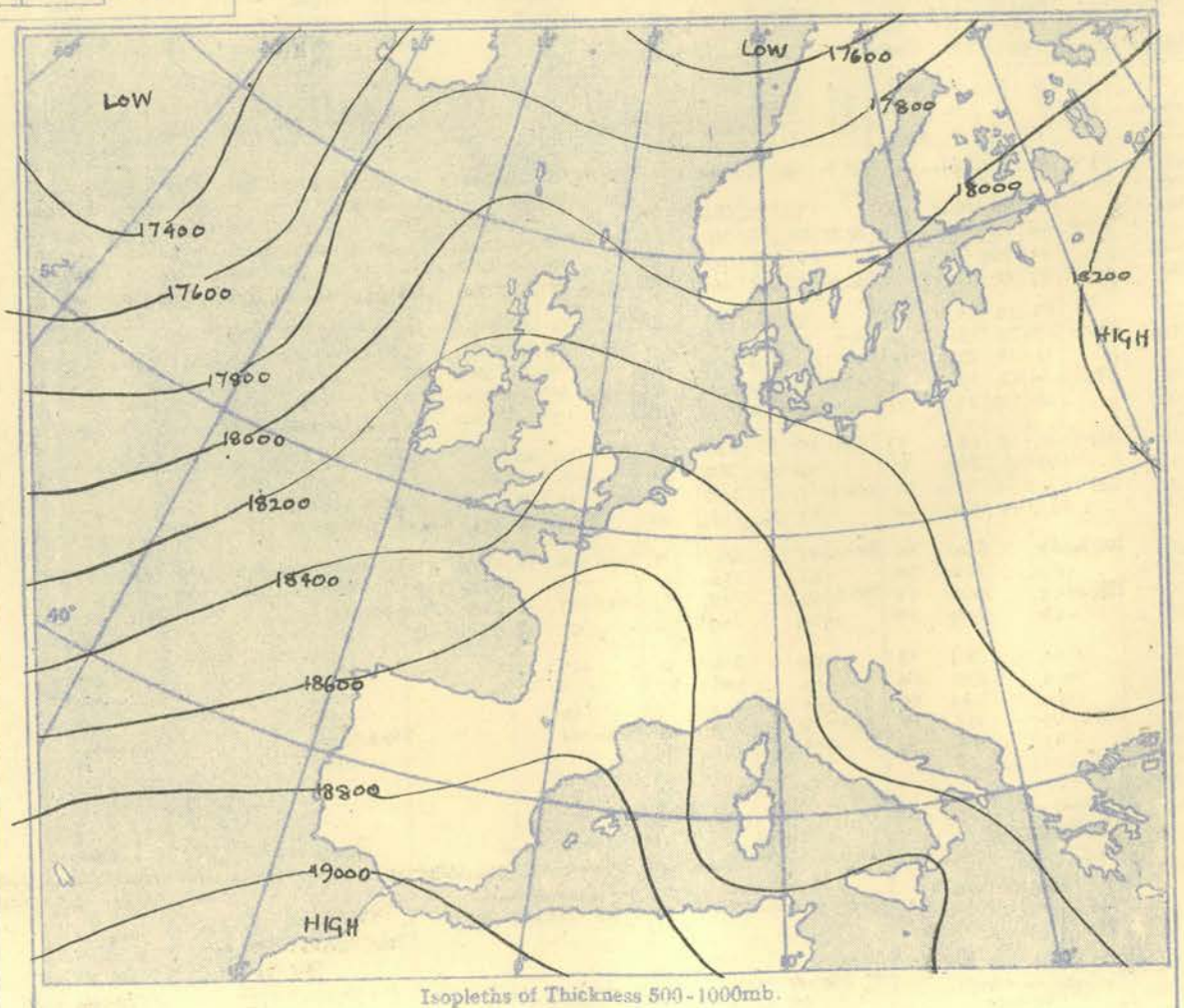
100 50 40 30 20 15 10 knots



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500-1000mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

53.12 N 02.12 W.

Pressure — Time 1405h. M.S.L. 1016.5 mb. Surf 1015.0 mb. Freezing 678 mb.

Pressure mb	Height ft./100	°F.	Dew °F.
Surf	00.4		
1000	04.6		
950			
900	33.5	48	46
850		46	32
800	65.4	44	39
750			
700	101.1	35	
650			
600	141.3	24	
550			
500	187.5	06	
450			
400	241.8	-15	
350			
300	307.9	-45	
250			
200		Cloud.	
170		2/8 Sc	
		910-890 mb	
		3/8-4/8 Sc	
		880-850 mb	
		8/8 As	
		770-588 mb	
		2/8 Cs	
		520-500 mb.	

Time M.S.L. Surf Freezing Pressure — mb

Pressure mb	Height ft./100	°F.	Dew °F.
Surf			
1000			
950			
900			
850			
800			
750			
700			
650			
600			
550			
500			
450			
400			
350			
300			
250			
200			
170			

DIRECTION (degrees from N) and VELOCITY (knots) of UPPER WINDS at heights above M.S.L.

Place	Aldergrove		Lympne		Liverpool		Shoeburyness		Aldergrove											
Time	03h.		09h.		09h.		09h.													
Type																				
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.	200	20	210	08	200	24	210	15												
1,000	206	30	240	16	220	36	230	25												
2,000	222	37	230	26	228	36	240	20												
3,000	230	40			234	39	240	35												
4,000	237	40	240	31	237	37	240	36												
5,000	233	39	230	36	238	41	240	33												
6,000	233	39	240	24	240	43	240	30												
8,000	235	42	250	23	239	46	240	28												
10,000	234	45	240	31	238	48	230	30												
14,000	231	54			239	51	230	34												
18,000	236	66			231	64	230	37												
24,000	236	78			229	72	240	46	227	86										
30,000	238	91			227	64	240	56	221	110										
40,000					229	59	240	40												
50,000					233	33	250	20												
53,000					232	22	240	08												
57,000					232	05	(85,000')													

NEPHOSCOPE OBSERVATIONS

Place											
Time Type											
Dir. Vel.											

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	WEATHER RECORDER	WEATHER RECORDER	WEATHER RECORDER	WEATHER RECORDER	WEATHER EXPLORER	WEATHER EXPLORER	WEATHER EXPLORER	WEATHER EXPLORER		
Lat/Long	52.3 N 20.1W	52.5 N 20.W	52.4N 20.1W	52.5N 20.0W	59.1N 19.1W.	59.0N 18.8W	59.0 N 18.8W	59.2N 18.6W		
Time	03h. G.M.T.	09h. G.M.T.	15h. G.M.T.	21h. G.M.T.	03h. G.M.T.	09h. G.M.T.	15h G.M.T.	21h. G.M.T.	G.M.T.	
Pressure M.S.L.	1007 mb	1010 mb	1012 mb	1013 mb	995 mb	997 mb	1000 mb	1000 mb	mb	
Pressure Surf	1007 mb	1010 mb	1012 mb	1013 mb	995 mb	997 mb	1000 mb	1000 mb	mb	
Pressure Freezing	840 mb	875 mb	mb		790 mb	785 mb	mb		mb	

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		30	46	290	26
1000	02.0	49	45		
950		43	43	300	17
900	30.3	39	37	304	18
850		33	33	319	18
800	61.3	27	27	313	20
750		23	23	277	20
700	95.7	19	13	260	24
650		14	03	250	26
600	134.7	09	-08	256	22
550		01	-16	258	22
500	179.5	-08	-22	243	26
450		-19	-27	244	27
400	232.0	-29	-37	229	36
350		-42		229	42
300	296.1	-54		232	30
250		-51		235	42
200	384.6	-48		213	42
170	(18346)	-50			

Tropopause: II 282 mb -58° 30,800'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	02.8	51	37	330	15
		50	41	286	15
		43	35	285	17
31.1		36	29	283	17
		28	23	277	18
61.9		22	19	280	22
		20	16	275	28
96.1		20	10	270	28
		13	03	244	25
134.9		04	-04	242	27
		-03	-10	239	28
	179.2	-12	-21	228	33
		-24	-39	219	38
231.0		-39	-40	217	40
		-46		208	49
	394.4	-87		207	52
		-48		206	48
	(210mb)	-40			

Inversion 765 mb 18° - 735 mb 22°

Isothermal 665 - 650 mb 13°

I 285 mb -58° 30,500'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	03.4	53	40		
		51	39	252	18
		44	34	251	19
31.8		36	30	253	21
		30	25	259	25
62.6		25	10	257	25
		18	05	254	25
96.7		12	03	253	27
		06	00	250	30
135.0		00	-05	232	34
		-08	-14	216	42
	178.9	-17	-24	219	43
		-29	-39	226	44
230.2		-39	-51	222	45
		-49		217	45
	293.1	-60		303	44
		-43		230	44
382.9		-40		230	35
		-39		224	30
		-43		218	33
		-44		211	34
		-46		208	27
536.9		-46		208	27
		-49		208	24
		-48			

I 300 mb - 60° 29,300'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	03.6	52	44	260	20
		50	42	259	19
		45	38	251	15
32.0		39	32	264	21
		33	24	277	20
63.0		27	19	283	21
		21	11	273	22
97.2		14	-01	280	22
		06	-08	283	23
135.5		-02	-17	274	23
		-11	-23	253	22
	179.1	-21	-34	231	28
		-31	-41	216	36
230.1		-40	-59	225	28
		-44		246	43
	293.9	-41		261	47
		-39		255	42
384.9		-40		252	33
		-41		222	37
		-42		221	31
		-44		213	29
		-44		227	24
539.1		-42		224	24
		-43		243	15

I 322 mb -45° 27,800'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	-01.3	49	44	300	28
		44	42	305	26
27.2		41	40	324	20
		38	36	006	06
58.5		33	31	028	04
		28	26	083	04
93.3		24	20	132	04
		16	11	140	05
132.4		10	02	153	12
		01	-08		
	177.2	-09	-42		
		-18	-41		
229.7		-28	-56	165	29
		-40	-47	185	36
	294.1	-55		179	41
		-52		179	35
382.0		-46		183	34
		-46		188	29
		-47		203	25
		-50		196	21
		-48		191	21
539.3		-49		184	21
(960)		-50			

Isothermal 918 - 900 mb 41°

I 281 mb - 63° 30,700'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	-00.8	49	38	270	26
		43	38	276	28
27.5		35	32	278	22
		39	36	276	08
58.7		34	31	192	09
		28	27	145	09
93.6		24	19	190	08
		19	05	175	16
132.9		10	-03	152	15
		03	-19	142	19
	177.9	-05	-28	148	24
		-16	-35	154	20
230.7		-26	-40	150	28
		-39	-49	137	31
	295.2	-52		163	31
		-55		145	28
383.7		-43		178	27
		-41		161	27
	(166mb)	-41			

Inversion 876 mb 34° - 850 mb 39°

I 268 mb -59° 32,200'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	-00.1	49	36	230	18
		44	35	232	19
28.3		37	31	232	23
		32	27	236	24
59.4		31	12	238	22
		30	00	236	17
94.2		23	-38	235	18
		16	-13	231	18
133.3		10	-13	201	13
		00	-20	163	18
	178.1	-07	-27	190	25
		-19	-26	138	36
236.5		-30	-40	136	38
		-41		124	42
	294.5	-55		123	43
		-58		133	35

Inversion 869 mb 35° - 850 mb 36°

Isothermal 885 - 869 mb 35° 850 - 757 mb 31°

I 261 mb -63° 32,400'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	00.1	51	39	230	21
		43	32	220	23
28.5		36	26	231	25
		32	15	225	27
59.3		30	00	209	24
		25	-15	206	24
94.0		18	-19	201	24
		10	-29	192	24
132.6		02	-31	182	25
		-04	-25	164	24
	176.8	-10	-33	139	33
		-22	-38	126	46
229.0		-32	-47	112	47
		-45		112	51
	292.6	-58		105	52
		-49		117	29
381.0		-43		143	18
		-43		149	16
		-45		180	15
		-43		175	15
		-45		147	15
534.7		-46		146	15
		-44		146	14
		-45		146	13
	697.5	-46		146	13
	(50mb)	-45		146	14
		-45		146	08

Inversion 882 mb 33° - 864 mb 34°

Isothermal 828 - 800 mb 30° 519 - 500 mb -10°

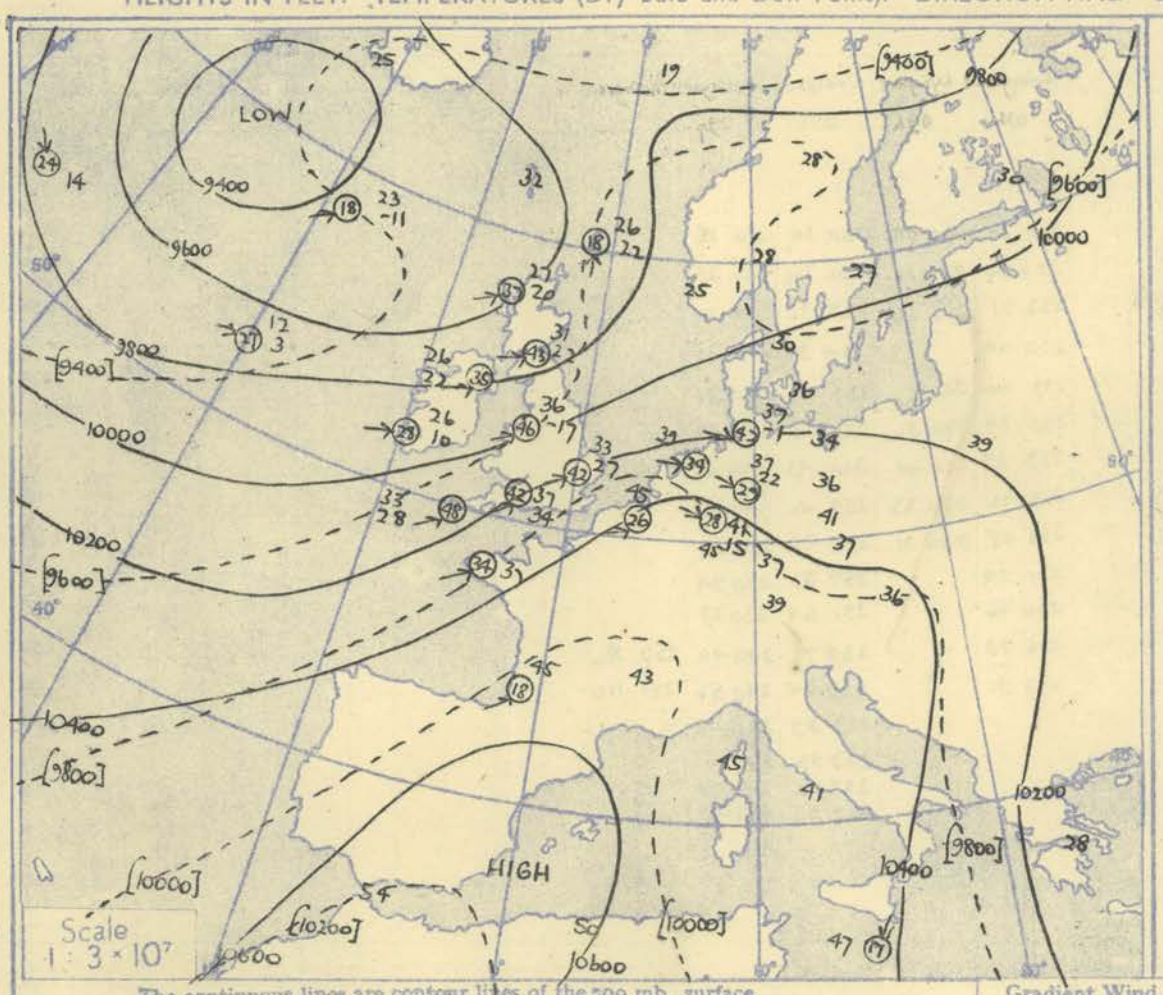
II 293 mb -60° 29,700'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots

Tropopause

Thursday 14th June 1951.

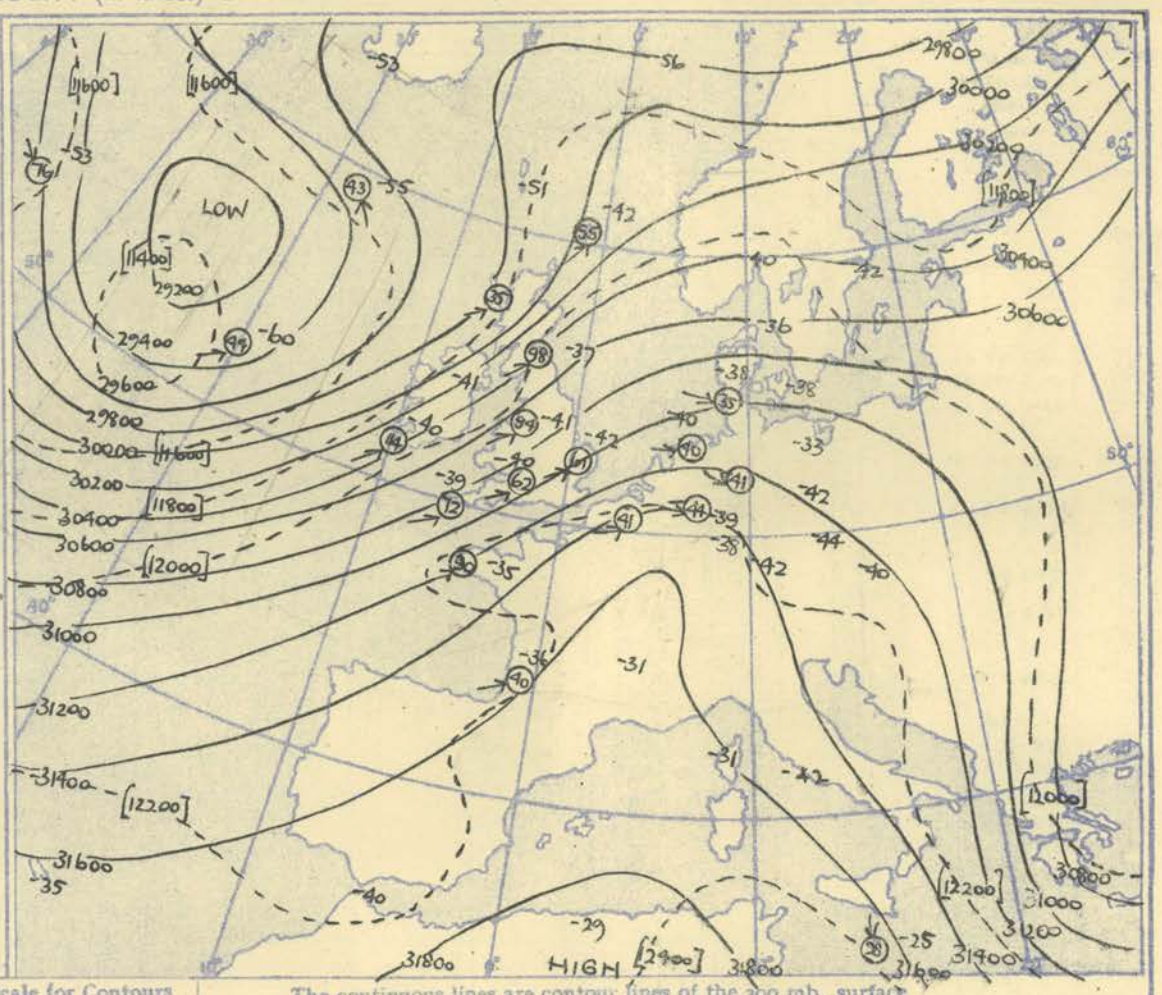
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

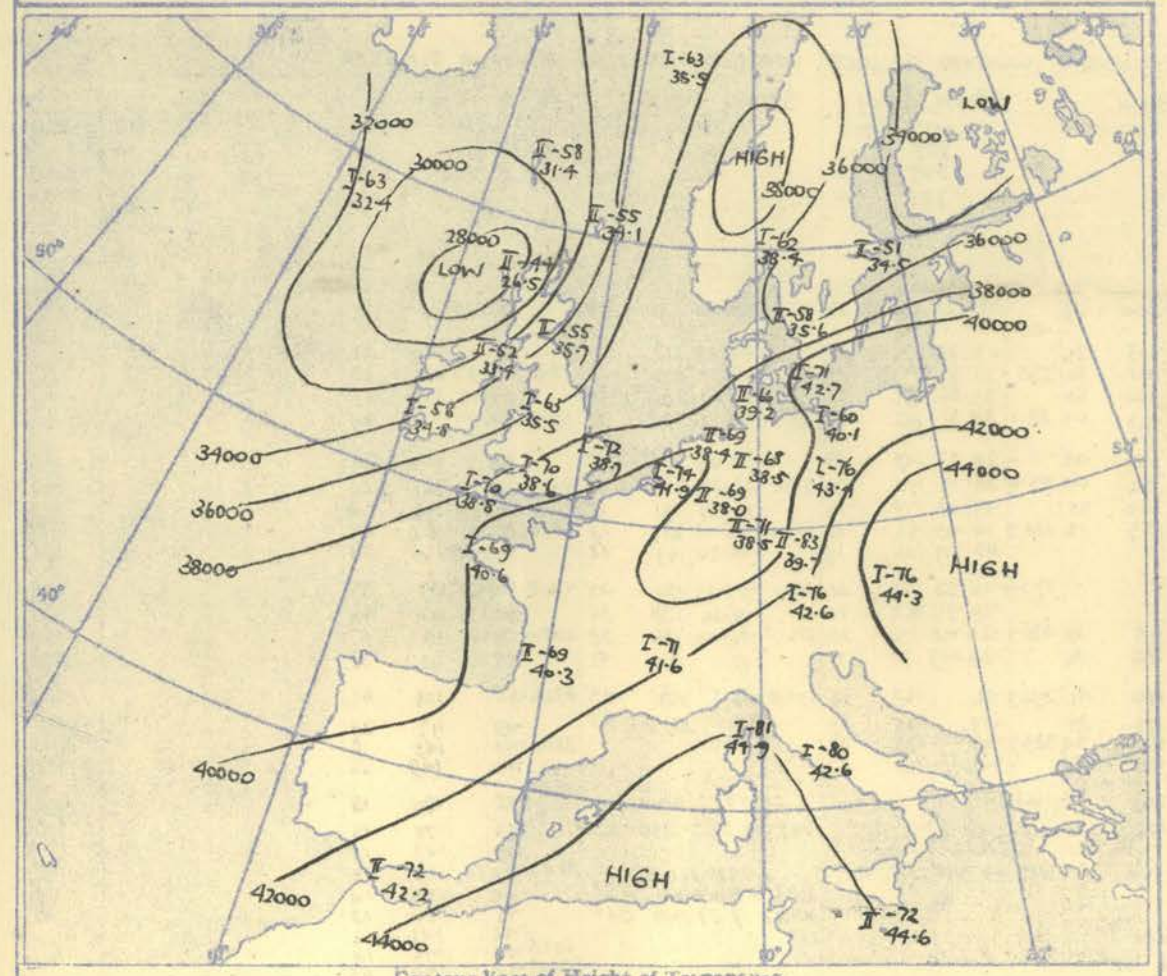
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

100 50 40 30 20 15 10 knots



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Rather typical thickness pattern associated with low pressure area between Scotland and Iceland. Otherwise little of note.

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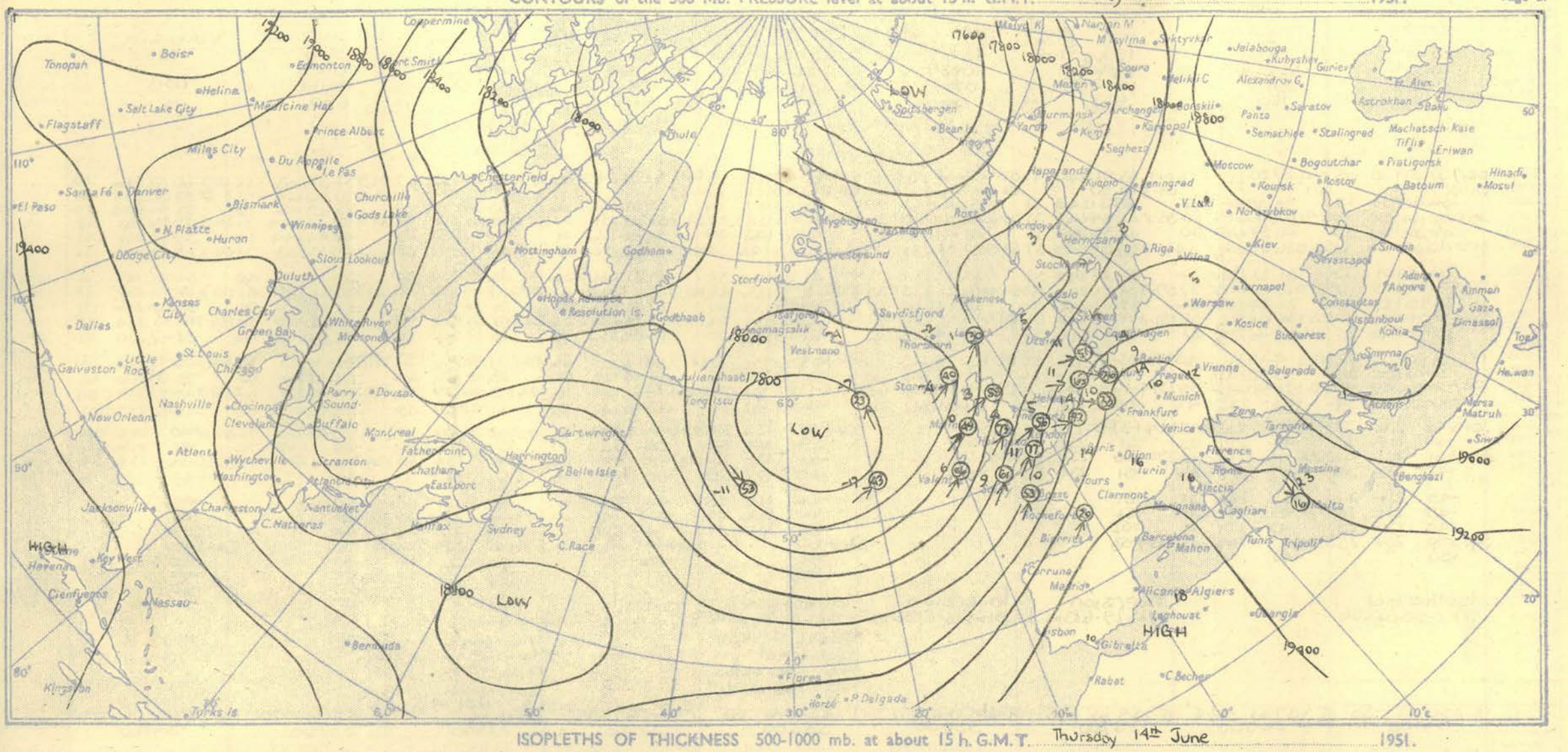
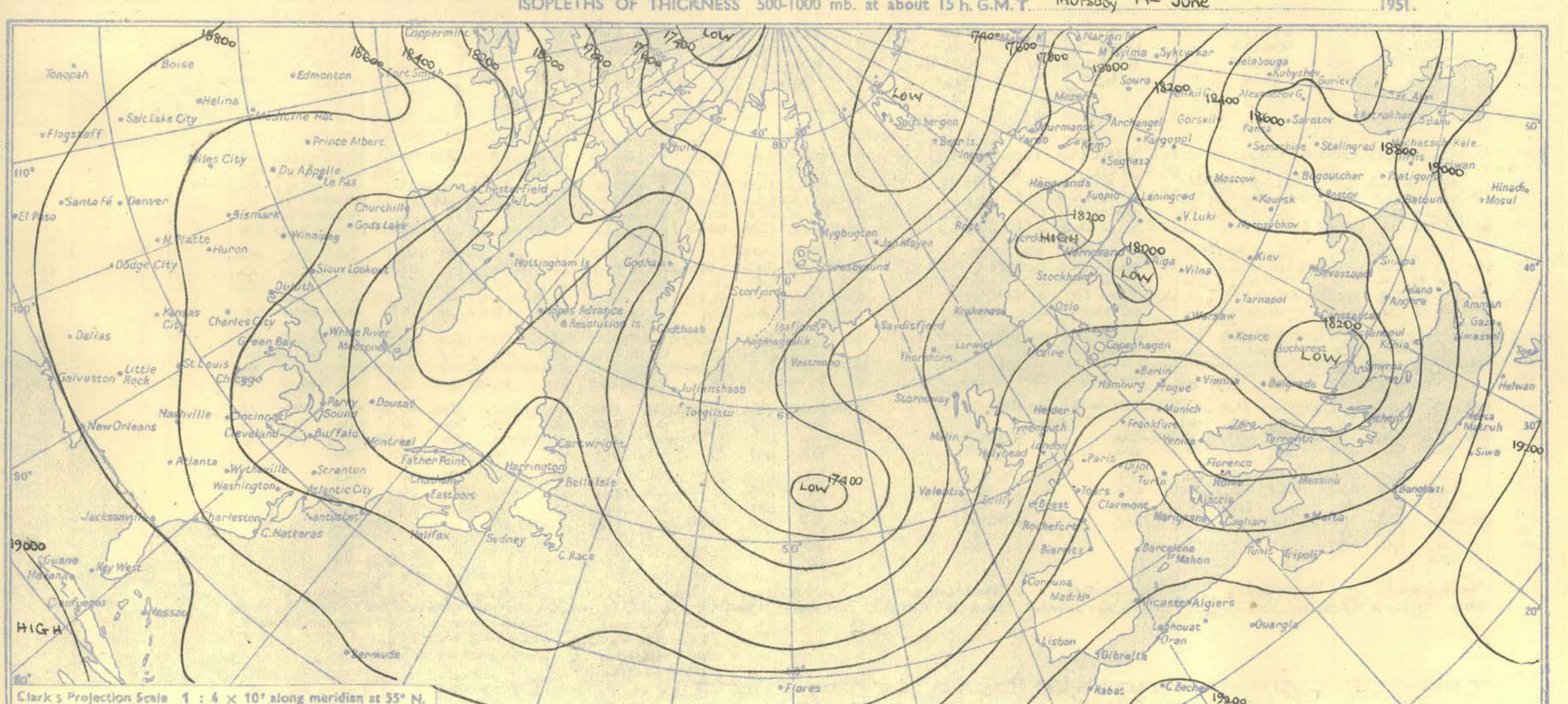
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Thursday 14th. June 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Thursday 14th June 1951.



Clark's Projection Scale 1 : 4 × 10⁷ along meridian at 55° N.

Statute Miles 0 1 2 3 4 500

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Thursday 14th June 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15 hrs G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	Valentia
Pressure: Time	15 hrs G.M.T.	15 hrs G.M.T.	15 hrs G.M.T.	15 hrs G.M.T.	15 hrs G.M.T.	15 hrs G.M.T.	15 hrs G.M.T.	15 hrs G.M.T.	15 hrs G.M.T.
Pressure: M.S.L.	1003·6 mb	1000·4 mb	1006·5 mb	1005·8 mb	1013·8 mb	1016·2 mb	1017·5 mb	1018·3 mb	mb
Pressure: Surf	993·8 mb	995·8 mb	1000·7 mb	999·3 mb	1011·8 mb	1011·9 mb	1001·9 mb	1007·8 mb	1013 mb
Pressure: Freezing	238 mb	760 mb	677 mb	750 mb	667 mb	688 mb	661 mb	690 mb	811 mb

Pressure mb	LERWICK Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Valentia Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	57	51	155	05	0·4	57	53	215	12	0·2	62	58	240	13	02·6	56	54	270	20	0·6	65	45	120	15	01·2	68	55	245	17	4·4	63	58	230	07	02·9	58	57	203	12	0·3	60	52	220	10	Surf
1000	01·0					0·1					01·8	62	57			02·4					00·8	63	49	122	15	04·5					4·9					05·0	57	56	224	15	3·9	58	50	268	11	1000
950		56	50	188	13		51	49	237	27		55	51	245	31		52	47	263	29		56	49	127	24		59	52	241	26		55	51	231	14		53	49	236	19		52	42	263	14	950
900	30·0	52	44	190	19	8·9	45	43	229	29	30·8	48	44	248	33	31·3	47	42	259	23	32·8	45	41	135	28	33·7	52	48	231	28	34·0	49	48	233	32	33·9	47	44	244	22	32·7	46	36	261	18	900
850		46	39	197	19		41	38	227	30		43	39	248	38		41	41	241	23		43	37	143	34		54	46	226	31		50	50	235	39		45	44	244	25		39	32	251	21	850
800	61·9	40	35	204	46	0·5	36	32	231	34	62·5	39	34	249	37	62·9	37	37	257	27	64·7	45	19	143	38	65·9	45	38	235	33	66·2	46	43	235	38	65·7	44	42	239	38	64·2	36	27	243	21	800
750		34	28	191	18		31	27	233	36		33	27	245	38		32	32	238	33		41	08	140	38		42	32	241	36		41	40	234	39		39	18	233	44		32	21	242	22	750
700	57·1	26	22	175	18	5·5	27	20	229	37	57·7	31	22	241	43	58·0	26	21	235	33	60·3	36	-1	136	46	61·7	33	27	243	42	62·0	37	34	233	42	61·3	33	28	229	48	59·3	26	10	239	28	700
650		20	15	183	19		21	14	228	36		28	07	241	50		22	19	240	38		30	-6	135	52		27	21	242	41		31	26	232	47		27	21	226	51		20	03	236	38	650
600	86·5	13	04	190	21	5·1	14	08	228	36	61·8	21	-4	235	53	63·1	15	-3	232	42	64·9	22	-14	134	62	64·9	21	14	243	46	67·2	25	20	235	51	67·4	23	05	229	51	63·7	14	-3	234	45	600
550		10	-20	208	25		05	-6	234	37		13	-13	240	55		08	-14	226	45		15	-15	133	70		14	06	240	53		19	17	232	51		14	00	229	56		08	-17	230	51	550
500	82·1	01	-35	205	20	80·3	-4	-15	236	40	83·7	03	-25	238	58	83·1	00	-29	225	49	86·0	09	-39	131	73	81·9	08	-42	235	56	82·1	11	06	232	58	82·0	09	-6	223	61	84·0	00	-19	223	56	500
450		-9	-43	208	34		-16	-75	241	43		-8	-36	236	66		-11	-38	223	53		-3	-27	130	73		-4	-43	235	60		03	-8	230	60		01	-18	216	59		-9	-37	226	62	450
400	25·7	-20	-54	209	40	23·1	-28	-40	243	39	23·4	-16	-47	235	75	23·6	-21	-47	230	65	24·0	-33	-53	131	50	24·2	-14	-32	234	56	24·1	-9	-36	239	62	24·3	-11	-29	228	68	23·8	-15	-46	213	86	400
350		-30	-37	213	54		-43		235	42		-24	-53	228	96		-31	-56	227	90		-26	-41	132	88		-27	-43	240	54		-23	-48	237	49		-24	-41	227	66		-16	-62	222	103	350
300	30·5	-45		216	55	29·7	-44		231	35	30·4	-37	-60	232	98	30·2	-41																														300
250		-55		218	55		-44		214	45		-51		231	81		-53																														250
200	38·5	-51		228	42	38·5	-44		214	45	39·2	-53		232	68	39·5	-50																														200
170		-48		233	36		-47		214	45		-51		234	60		-43																														170
150		-43		231	34		-53		220	38		-51																																		150
130		-49		231	25		-49		223	31		-52																																		130
110		-49		238	25		-47		221	22		-52																																		110
100	54·5	-50		238	25	53·9	-48		206	23	54·3	-52																																		100
90		-50					-48																																						90
80																																													80
70																																													70
60																																													60
	Isothermal 987-950 mb 56°						Inversion 727 mb 29-683 mb 33°						Inversion 691 mb 25-678 mb 26°						Inversion 823 mb 46-785 mb 49° 752 mb 2-486 mb 3° Isothermal 815-800 mb 45° 780-763 mb 42°						Inversion 877 mb 48-850 mb 54(51)-52°						Inversion 700 mb 49-668 mb 51(37)-55° 577 mb 22-570 mb 23° Isothermal 469-458 mb 8°						Isothermal 828-809 mb 37°					
Tropopause	II 250 mb -55° 34100'			II 347 mb -44° 26500'			II 235 mb -55° 35700'			II 260 mb -52° 33400'			I 240 mb -63° 35500'			I 207 mb -72° 38700'			I 212 mb -70° 38600'			I 197 mb -70° 38800'			I 247 mb -58° 34800'			Tropopause
Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	Station

21 hrs G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Pressure: Time	21 hrs G.M.T.	21 hrs G.M.T.	21 hrs G.M.T.	21 hrs G.M.T.	21 hrs G.M.T.	21 hrs G.M.T.	21 hrs G.M.T.	21 hrs G.M.T.	G.M.T.
Pressure: M.S.L.	1002·9 mb	1005·4 mb	1008·3 mb	1013·1 mb	1014·4 mb	1016·4 mb	1017·8 mb	1018·9 mb	mb
Pressure: Surf	993·0 mb	1003·8 mb	1008·1 mb	1003·6 mb	1012·4 mb	1012·1 mb	1002·1 mb	1001·3 mb	mb
Pressure: Freezing	763 mb	866 mb	769 mb	812 mb	763 mb	674 mb	690 mb	700 mb	mb

Pressure mb	LERWICK Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·1	52	52	200	08	0·4	51	43	250	20	0·2	59	52	210	12	02·6	54	47			0·6	60	49	220	15	01·2	61	56	216	12	4·4	58	56	240	04	02·3	55	54	210	07						Surf
1000	0·7					01·5	50	42			01·4	58	52			03·6					04·0	58	47	235	26	04·6	60	54	252	20	4·3	58	56			05·2	54	53	237	15						1000
950		49	45	235	21		42	35	249	41		52	47	264	26		48	42				52	43	239	30		55	48	250	22		52	50	245	16		51	44	247	16						950
900	29·5	48	44	238	19	29·8	33	26	247	33	31·3	46	43	268	24	32·2	42	36			32·9	47	39	253	23	33·7	50	46	243	28	33·9	48	43	241	16	33·3	44	40	252	18						900
850		43	36	224	18		36	18	240	29		40	36	271	27		37	31				41	35	258	20		49	36	240	26		47	38	238	16		43	37	250	21						850
800	61·1	37	32	218	18	60·8	32	-8	241	32	62·8	35	31	265	34	63·5	30	25			64·5	36	29	256	19	65·7	48	37	238	33	65·7	44	38	234	33	65·7	41	24	240	24						800
750		30	29	221	20		26	-9	242	32		30	26	252	39		29	12				31	22	244	27		42	35	235	42		39	36	233	44		38	12	232	30						750
700	96·1	25	22	225	21	95·4	18	-6	235	30	97·8	29	22	243	40	98·2	23	10			99·6	30	06	235	35	101·3	33	31	234	43	101·4	34	29	232	44	101·0	32	00	233	33						700
650		20	15	232	21		11	-22	227	29		23	08	239	40		16	08				28	-4	241	36		29	25	238	46		26	23	233	45		28	-15	232	48						650
600	135·5	13	00	234	22	134·1	04	-23	229	32	137·5	17	-1	237	40	137·2	07	-2			139·4	15	-23	237	41	141·7	22	15	240	47	141·6	21	07	233	47	141·2	22	-13	229	51						600
550		05	-4	231	26		-4	-26	229	32		10	-12	241	36		03	-20				12	-23	236	55		14	06	240	49		15	00	235	56		14	-21	227	54						550
500	180·7	-4	-47	233	29	178·4	-13	-36	223	30	183·2	-02	-28	234	45	182·1	-6	-29			185·2	03	-36	234	60	187·8	09	-11	241	58	187·7	07	-12	235	54	187·2	05	-23	227	61						500
450		-16	-52	235	25		-24	-51	220	30		-8	-36	233	53		-17	-38				-8	-43	229	69		00	-21	236	55		-4	-23	228	56		-5	-21	226	67						450
400	233·5	-28	-40	229	30	230·2	-37	-60	216	34	233·6	-10	-45	233	57	234·7	-30	-51			235·0	-17	-42	228	89	240·4	-12	-34	231	59	242·0	-14	-30	227	59	241·3	-14	-28	215	72						400
350		-41		243	37		-49		201	44		-26	-53	236	50		-39	-58				-27	-47	227	92		-25	-42	239	60		-26	-41	226	37		-26	-39	223	78						350
300	297·7	-52		234	48	298·4	-53		218	48	302·2	-59	-56	237	101	299·2	-50				303·2	-44		229	87	303·0	-41		236	62	303·8	-42		230	60	303·7	-41		215	78						300
250		-46		229	33		-48		222	44		-57		226	104		-61					-61			88		-59		238	58		-59		232	57		-56		226	81						250
200	338·9	-46		232	34	338·5	-45		221	39	339·1	-56				338·7	-59				339·9	-61		225	87	339·6	-67		243	59	339·4	-70		232	62	339·6	-73		228	78						200
170		-46		228	32		-48		217	31		-50					-54					-58		227	57		-64		239	49		-66		232	60		-64										170
150		-50		230	30		-50		213	26		-50					-59					-57		225	49		-61		234	39		-64		237	51		-63										150
130		-49		224	25		-50		209	33		-50					-64					-58		229	31		-66		235	39		-67		233	36		-64										130
110		-50		220	21		-51		201	21		-55					-64					-59		231	17		-62		240	31		-65		232	23		-63										110
100	336·9	-51		224	19	335·2	-49				341·7	-57					-61				340·3	-57		228	18	341·9	-62		245	22	340·3	-66				340·5	-65										100
90		-52		235	41												-60										-63										-65										90
80		-51		242	14																	-57															-64										80
70		-50																				-57															(25) -64										70
60																																																	60
	Isothermal 964-910 mb 49°						Inversion 900 mb 33-876 mb 38°						Inversion 755 mb 30-735 mb 32°						Inversion 775 mb 26-750 mb 29°						Inversion 736 mb 30-724 mb 31°						Inversion 875 mb 48-840 mb 50° Isothermal 840-819 mb 50° 641-624 mb 27° 531-520 mb 11°						Inversion 887 mb 46-860 mb 48° Isothermal 703-740 mb 39° 564-545 mb 15°						Inversion 983 mb 53-968 mb 53° 889 mb 43-868 mb 46°											
Tropopause	I 300 mb -52° 29700'			I 307 mb -54° 29000'			I 240 mb -61° 35100'			I 236 mb -65° 35000'			I 223 mb -70° 36800'			I 226 mb -71° 37000'			I 207 mb -74° 38700'			I 195 mb -74° 40000'																									Tropopause

HMSO Press 130 Ex-stock

No. 1165. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Friday 15th June 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

METEOROLOGICAL OFFICE 23 JUN 1951 RECEIVED

03h. G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	03h.	1004·6 mb	994·6 mb	805 mb
STORNOWAY	03h.	1009·4 mb	1007·7 mb	870 mb
LEUCHARS	03h.	1012·4 mb	1011·6 mb	751 mb
ALDERGROVE	03h.	1014·7 mb	1005·0 mb	831 mb
LIVERPOOL	03h.	1015·4 mb	1013·4 mb	790 mb
DOWNHAM MARKET	03h.	1017·2 mb	1012·7 mb	682 mb
LARKHILL	03h.	1018·4 mb	1002·3 mb	682 mb
CAMBORNE	03h.	1019·3 mb	1008·8 mb	724 mb
[illegible]	G.M.T.	[illegible] mb	[illegible] mb	[illegible] mb
[illegible]	03h.	1015·9 mb	1014 mb	806 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	48	46	260	30	00·4	46	40	240	05	00·2	47	46	250	06
1000	01·2					02·5	40	40			03·3	47	44		
950		45	45	254	36		42	35	260	26		46	40	258	20
900	29·7	40	40	254	35	30·8	36	29	260	28	31·8	42	35	267	25
850		37	36	248	30		30	25	269	27		38	31	263	34
800	61·0	31	31	239	26	61·6	23	19	268	27	63·1	31	28	251	35
750		28	21	228	26		24	16	263	28		32	13	243	35
700	95·9	23	10	223	27	96·0	20	02	255	27	98·1	24	10	233	34
650		16	04	228	28		15	-06	242	25		16	03	283	39
600	135·1	10	-18	234	30	135·0	07	-11	230	24	137·3	13	-13	230	47
550		02	-11	229	30		-01	-16	226	24		06	-23	227	45
500	180·0	-07	-24	224	31	179·5	-10	-24	223	27	182·5	-01	-31	229	48
450		-16	-37	218	31		-20	-33	217	31		-13	-39	222	61
400	232·6	-30	-49	216	36	231·8	-32	-45	213	29	235·6	-24	-49	222	69
350							-43		216	35				224	82
300		Continued as				295·6	-47		210	42				222	96
250							-47		210	43					
200		Pilot on Page 3.				385·2	-44		215	44					
170							-43		218	34					
150							-45		208	27					
130							-48								
110															
100															
90															
80															
70															
60															
	Isothermal 995-985mb. 48° 907-880mb. 40° 794-770mb. 30° 750-728mb. 28°					Inversion 800mb. 23°-775mb. 26° Isothermal 1008-980mb. 46°					Inversion 1012mb. 47°-972mb. 48° 793mb. 31°-775mb. 36°				
Tropopause	N.R.					I 320mb. -50° 28,100'					N.R.				

Pressure mb	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	49	44	Calm		00·6	56	51	220	10	01·2	54	52	230	07
1000	03·9	49	44			04·2	54	49	247	18	04·7	55	51	273	23
950		46	35	258	15		49	44	258	12		52	42	264	23
900	32·1	40	31	254	16	32·9	45	40	269	12	33·3	46	40	253	20
850		35	29	253	22		39	35	254	18		46	34	236	22
800	63·5	28	19	247	30	64·4	33	29	250	19	65·3	44	13	233	34
750		26	07	232	33		27	17	244	26		38	30	230	45
700	98·1	19	10	232	33	99·2	26	06	233	36	100·9	33	16	233	16
650		12	01	235	33		19	-05	230	39		29	-09	235	48
600	136·9	07	-10	230	39	138·6	16	-17	226	45	141·1	23	-18	236	54
550		-01	-21	224	39		07	-30	225	55		15	-24	235	55
500	181·5	-09	-24	218	49	184·0	-03	-39	225	60	187·2	07	-10	231	60
450		-21	-35	215	62		-13	-18	221	66		-04	-18	230	65
400	233·8	-28	-44	211	81	237·1	-22	-44	222	75	241·5	-13	-26	229	65
350		-39	-53	211	91		-34	-47	221	81		-24	-40	231	73
300	298·2	-48		216	99	302·3	-48		223	105	308·1	-40	-56	228	72
250		-49		214	74		-60		224	101		-57		229	74
200	387·3	-46		223	58	389·1	-60		237	79	395·1	-64		226	74
170		-47		219	50		-58		228	57		-63		232	63
150		-51		214	49		-57		232	49		-61		230	51
130		-52					-60		228	48		-61		234	39
110		-52					-61		229	37		-62		228	34
100	538·7	-51				537·4	-60		227	27	542·1	-64		224	22
90		-55					-59		218	26		-63		230	12
80							-61		212	21		-61		233	18
70							-62		221	20					
60							-60		221	07					
	Inversion 1005mb. 49°-990mb. 50° 788mb. 26°-772mb. 27° Max wind:- 292mb. 215° 120kts. 30,400'					Inversion 745mb.-720mb. 28° Isothermal 618-606mb. 16°					Inversion 1013mb. 54°-992mb. 56° 875mb. 45°-850mb. 46° 822mb. 48°-800mb. 44° Isothermal 719-693mb. 33°				
Tropopause	I 270mb. -51° 32,200'					I 229mb. -63° 36,000'					I 211mb. -68° 38,400'				

Pressure mb	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	[illegible] Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	52	52	Calm		02·9	54	53	225	05	00·3	52	51		
1000	05·0	52	52			03·3	53	52	240	15	04·3	51	50		
950		51	44	260	13		48	47	257	15		48	47		
900	33·8	46	39	251	15	04·0	47	36	269	17	33·0	43	41		
850		44	27	245	21		42	32	264	20		37	35		
800	65·5	39	04	236	30	65·6	39	27	253	27	64·3	31	29		
750		35	04	232	36		35	18	244	30		26	23		
700	100·8	34	-24	231	42	100·9	28	06	241	32	98·9	20	13		
650		28	-51	230	45		26	-13	237	39		15	04		
600	140·9	21	-55	232	55	140·8	20	-20	232	42	137·8	07	-06		
550		11	-39	231	56		11	-32	231	54		00	-14		
500	186·7	01	-35	227	59	186·5	01	-43	230	60	182·6	-08	-30		
450		-07	-25	227	67		-09	-38	228	65		-17	-39		
400	240·5	-17	-31	226	71	240·1	-19	-34	223	76	238·1	-26	-48		
350		-29	-42	227	74		-30	-29	224	93		-38			
300	306·5	-43		228	72	305·9	-44		220	90	299·8	-47			
250		-59		225	85		-58		225	92		-60			
200	393·0	-68		225	78	392·7	-61		218	78	387·6	-48			
170		-63		228	61		-56		228	59		-52			
150		-61		231	55		-57		230	49		-52			
130		-63		221	42		-63		229	39	(139 mb)	-52			
110		-65		228	30		-62		221	26					
100	539·6	-63				540·6	-61		227	36					
90							-61								
80						(083 mb)	-60								
70															
60															
	Inversion 1002mb. 52°-993mb. 53° Isothermal 886-865mb. 45° 763-718mb. 35°					Inversion 923mb. 45°-900mb. 47° 693mb. 27°-677mb. 29° Isothermal 831-800mb. 39°									
Tropopause	I 220mb. -71° 37,300'					I 220mb. -68° 37,300'					I 250mb. -60° 33,900'				

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf					
1000					
950					
900					
850					
800					
750					
700					
650					
600					
550					
500					
450					
400					
350					
300					
250					
200					
170					
150					
130					
110					
100					
90					
80					
70					
60					

09h. G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	09h.	1008·3 mb	998·3 mb	856 mb
STORNOWAY	09h.	1011·6 mb	1009·5 mb	850 mb
LEUCHARS	09h.	1014·4 mb	1013·6 mb	820 mb
ALDERGROVE	09h.	1015·8 mb	1006·1 mb	833 mb
LIVERPOOL	09h.	1017·0 mb	1015·0 mb	789 mb
DOWNHAM MARKET	09h.	1017·8 mb	1013·2 mb	700 mb
LARKHILL	09h.	1019·3 mb	1008·5 mb	717 mb
CAMBORNE	09h.	1021·0 mb	1010·5 mb	732-704 mb
[illegible]	G.M.T.	[illegible] mb	[illegible] mb	[illegible] mb

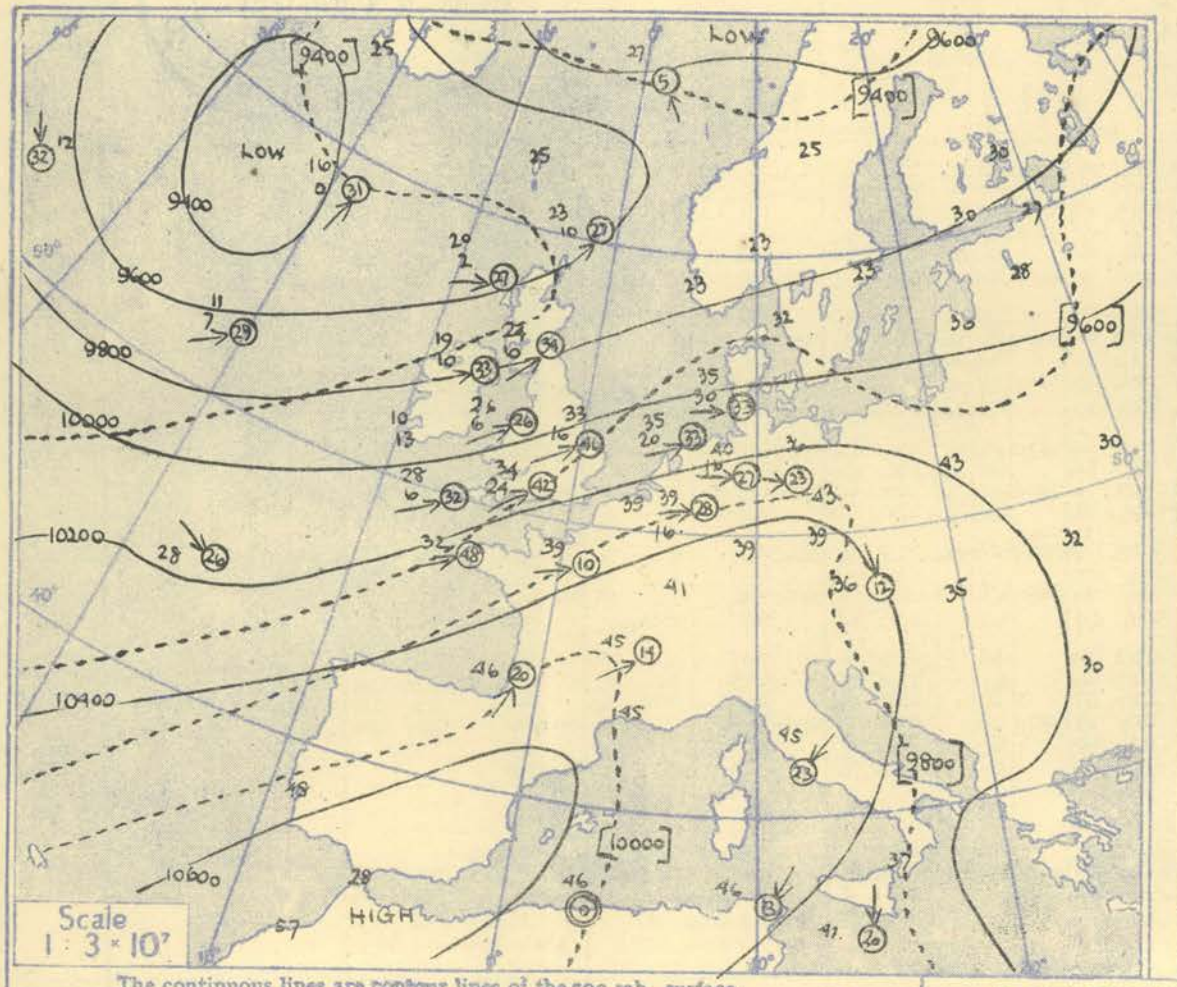
Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	52	45			00·4	53	43	240	08	00·2	59	50	250	11
1000	02·2					03·0	52	43			03·8	56	47		
950		42	39				46	37	240	18		46	40	258	22
900	30·6	37	30			31·5	38	31	248	19	32·4	40	33	265	18
850		31	22				32	24	256	22		35	30	265	18
800	61·0	29	13			62·5	27	20	268	22	63·5	30	24	257	27
750		23	07				24	05	266	18		30	17	255	28
700	96·0	21	02			96·8	17	-09	254	21	98·2	23	09	253	29
650		14	-06				10	-01	241	21		14	03	248	28
600	135·0	06	-09			135·4	03	-02	241	21	137·2	08	-04	246	27
550		00	-14				-05	-11	236	20		-01	-13	250	32
500	179·7	-07	-24			179·6	-13	-21	234	22	181·8	-10	-20	243	36
450		-20	-35				-20	-30	236	22		-22	-32	240	42
400	232·1	-30	-41			231·8	-31	-43	230	20	233·3	-31	-45	238	50
350		-43					-46		220	19		-30	-51	241	83
300	296·1	-49				295·5	-49		219	30	299·0	-43		238	83
250		-43					-42		230	83		-49		241	68
200	386·3	-41				385·9	-38		219	35	388·5	-41		216	51
170		-42					-40		209	27		-41		231	42
150		-42					-40		202	00		-44		225	52
130		-46					-40					-49		219	39
110		-45										-52		210	32
100	540·2	-45									541·2	-55		205	30
90												-58		201	36
80												-47		267	21
70												-49			
60															
	Isothermal 940-808mb. 30°					Inversion 770mb. 23°-760mb. 25°					Inversion 775mb. 27°-753mb. 31° Max wind:- 238° 90kts. 28,000'				
Tropopause	I 310mb. -51° 28,800					I 320mb. -53° 28,200'					I 282mb. -48° 31,300'				

Pressure mb	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	53	49	200	08	00·6	56	52	290	05	01·2	61	52	240	08
1000	04·3	52	44			02·7	54	50	288	12	04·9	59	51		
950		45	39	212	10		48	44	269	09		53	46	266	13
900	32·8	40	33	216	13	33·3	43	40	237	06	33·8	48	40	260	11
850		34	27	202	17		38	35	245	11		41	35	253	12
800	63·9	28	21	236	21	64·7	33	30	252	12	65·5	41	22	248	20
750		26	14	241	12		28	25	248	15		36	11	247	28
700	98·4	19	10	238	24	99·5	22	18	244	21	100·8	32	-05	246	36
650		10	01	238	28		15	10	246	26		28	-18	241	41
600	137·0	01	-08	240	31	138·6	09	-16	249	42	140·9	21	-27	240	47
550		-04	-13	238	34		05	-37	245	50		13	-35	241	51
500	181·2	-12	-24	240	41	183·7	-02	-52	243	55	186·9	04	-45	242	52
450		-16	-31	247	60		-11	-53	242	63		-06	-52	239	63
400	233·8	-26	-42	246	65	237·0	-22	-55	238	69	241·0	-14	-32	233	78
350		-36	-51	240	65		-35	-58	237	76		-25	-39	227	92
300	298·7	-48		235	65	302·1	-48		228	81	307·5	-40	-53	220	97
250		-54		234	65		-58		232	77		-55		225	98
200	387·2	-46		223	50	389·1	-50		224	68	395·1	-59		220	79
170		-43		232	51		-51		229	57		-52		231	60
150		-47		223	44		-50		226	49		-55		230	37
130		-49		214	41		-51		229	45		-57		216	32
110		-50		214	40		-53		222	30		-55		227	23
100	539·5	-46		226	29	540·8	-51		223	22	544·8	-55		231	27
90		-47		209	23		-53		236	19		-57			
80		-49		195	23	(085 mb)	-54					-55			
70		-49		200	22							-55			
60															
	Isothermal 720-709mb. 23°										Inversion 838mb. 39°-816mb. 42° Max wind:- 293mb. 224° 109kts. 31,200				
Tropopause	I 264mb. -55° 32,800'					I 258mb. -59° 33,500'					I 218mb. -66° 37,600'				

Pressure mb	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	[illegible] Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	60	53	280	07	02·9	56	52	250	06					
1000	05·3	59	52			05·7	54	50	251	15					
950		51	46	273	11		48	45	260	14					
900	34·1	45	40	272	12	34·4	45	42	264	17					
850		43	30	279	18		42	36	263	20					
800	65·7	38	25	269	24	66·0	38	28	259	23					
750		35	14	256	28		33	09	247	25					
700	100·9	31	01	250	43	101·2	31	-08	248	30					
650		26	-13	247	40		27	-22	249	35					
600	140·9	21	-37	248	44	141·2	21	-27	245	37					
550		13	-34	244	47		12	-34	240	46					
500	186·7	02	-42	240	50	187·4	02	-42	236	48					
450		-07	-50	237	58		-09	-51	234	51					
400	240·6	-16	-38	230	70	240·8	-18	-58	234	55					
350		-29	-43	224	79		-30	-57	227	54					
300	306·7	-41		220	91	306·6	-43		233	58					
250		-57		220	91		-56		230	72					
200	393·9	-61		220	73	394·2	-59		234	66					
170		-56		226	60		-55								
150		-57		231	44		-54								
130		-64		228	45		-56								
110		-59		237	36		-61								
100	541·7	-56		235	25	543·2	-59								
90		-54		218	17		-57								
80		-51					-56								
70							-56								
60							-56								
	Inversion 878mb. 41°-860mb. 44°					Inversion 732 mb. 32°-723 mb. 35°									
Tropopause	I 220mb. -65° 36,300					I 216mb. -62° 37,700									

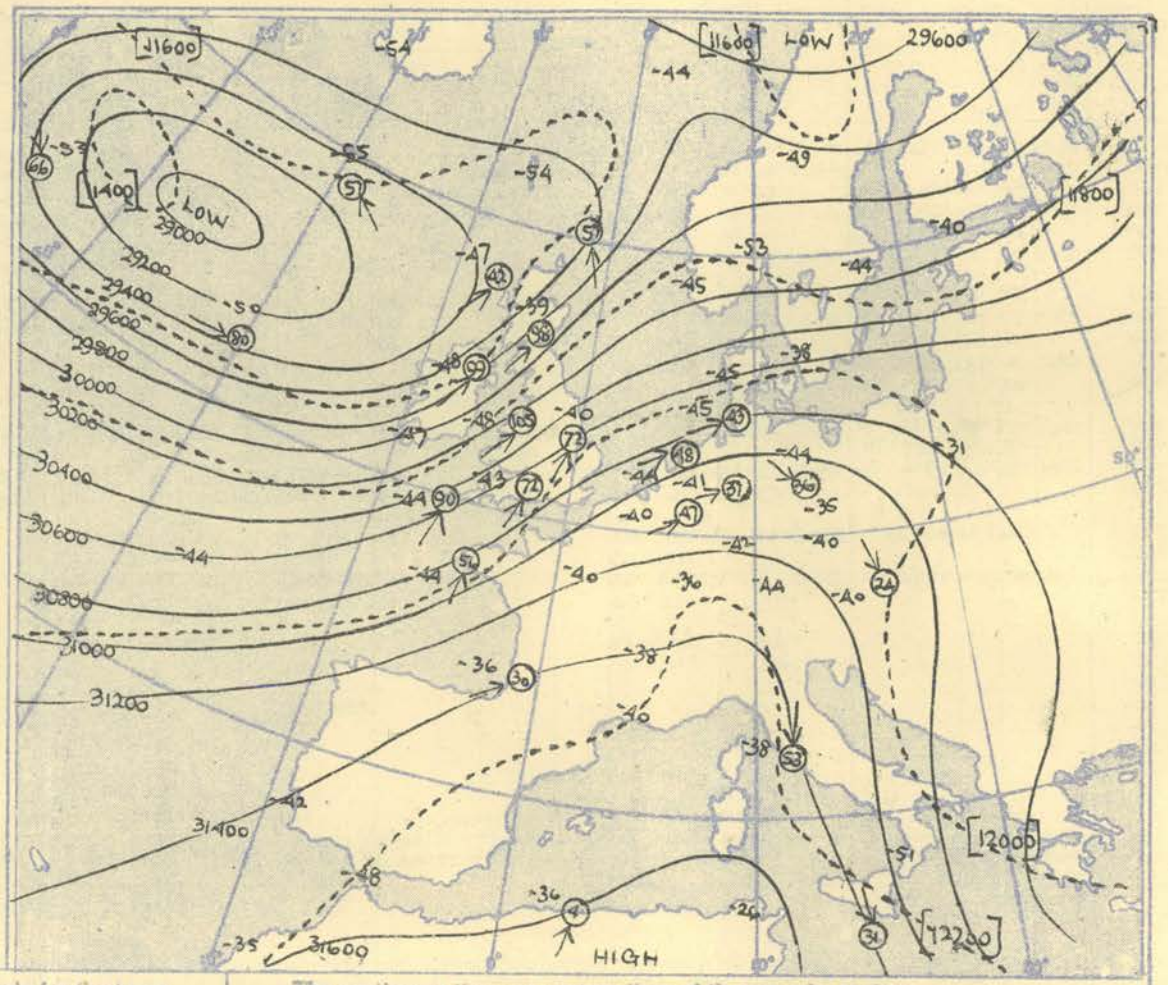
Friday 15th June 1951.

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.

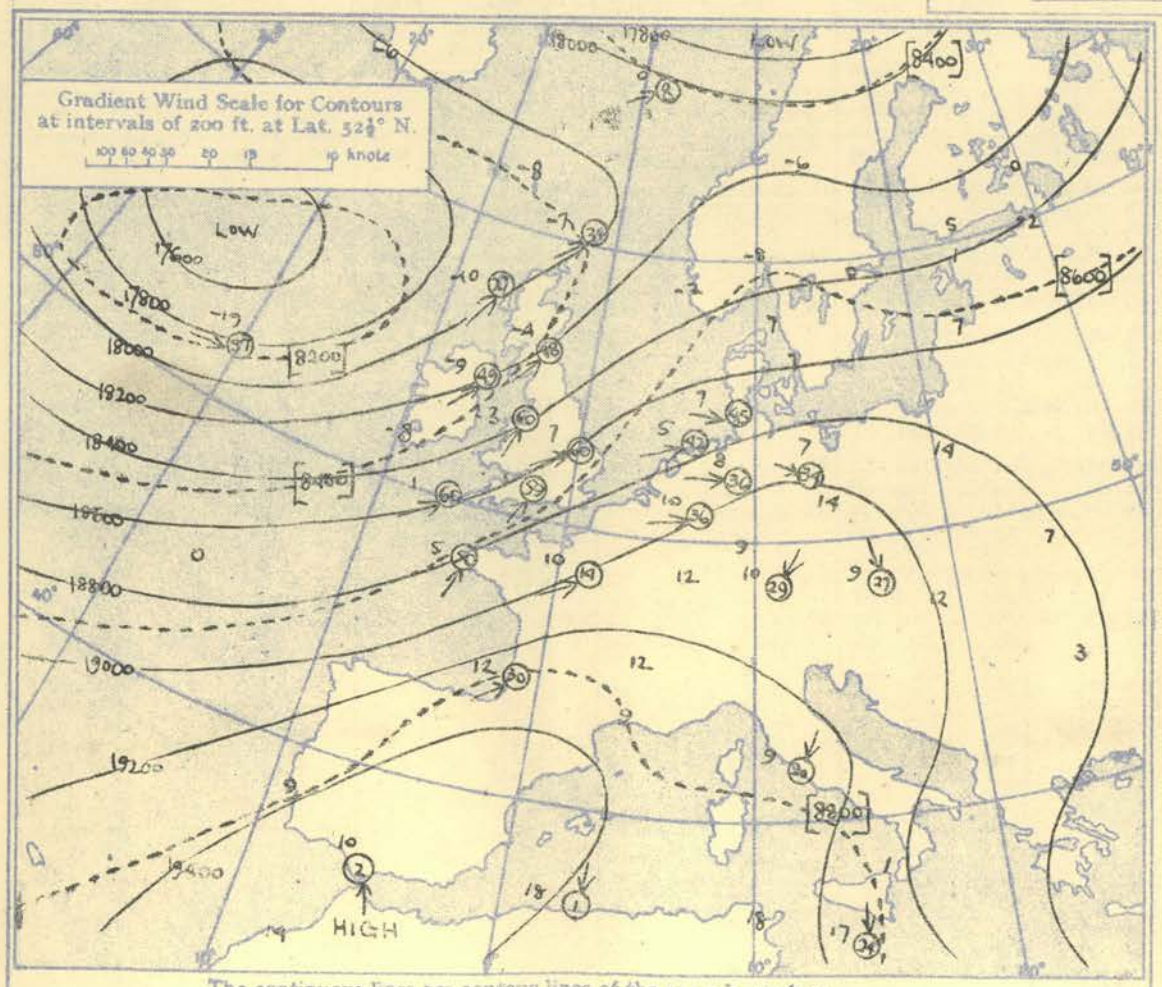


The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

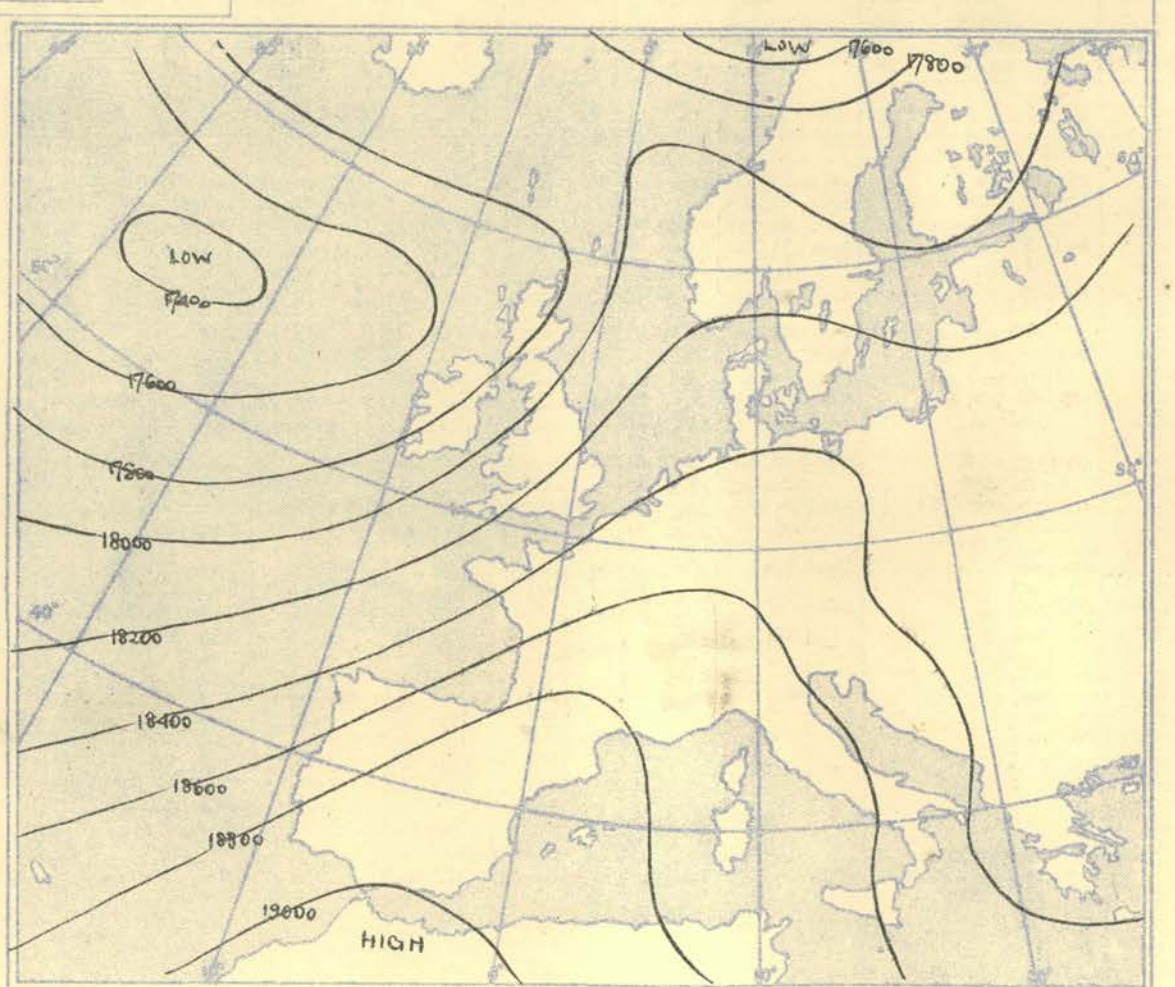
Gradient Wind Scale for Contours
at intervals of 200 ft. at Lat. 52½° N.
100 60 40 30 20 15 10 knots



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500-1000mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

Pressure		48·1N. 17·0W.	47·6N. 12·3W.	52·12N. 02·12W.																			
	Time	1246h.	1421h.	15h.																			
	M.S.L.	1023 mb	1024 mb	1019·0 mb		mb		mb		mb		mb		mb		mb		mb		mb		mb	Time M.S.L.
	Surf	1019 mb	1020 mb	1017·5 mb		mb		mb		mb		mb		mb		mb		mb		mb		mb	Surf
	Freezing	750 mb	735 mb	783 mb																			Freezing

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Pressure mb
Surf	01·0	56	45	01·0	57	52	00·4																		Surf
1000	07·2			06·5	54	50	05·0	65	63																1000
950		46	42		49	42																			950
900	35·7	40	33	35·2	42	35	34·3	48	41																900
850		34	32		37	23		41	35																850
800	66·8	33	17	66·5	37	17	65·9	38	27																800
750		31	29		38	15																			750
700	102·0	25	25	102·0	27		100·8	25	23																700
650		17	14		21																				650
600	141·0	10		142·0	14		140·5	15																	600
550		00			06																				550
500	186·0	08		187·0	04		185·7	03																	500
450																									450
400							238·9	22																	400
350																									350
300							304·5	48																	300
250																									250
200																									200
170																									170
	Cloud. 2/8 Cu 940-910mb.			Cloud. 2/8 Cu 950-840mb. 2/8 Sc 970-950mb. Isothermal 850-800mb. 37°			Cloud. 4/8 Cu Sc 840-720mb.																		

DIRECTION (degrees from N) and VELOCITY (knots) of UPPER WINDS at heights above M.S.L.

Place	Lerwick		Leuchars		Castle Archdale		Ronaldsway		Lerwick		Lympne										Place
Time	03L		03L		09L		09L		09L		15L										Time
Type	Pilar		Pilar						Radar												Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Surf.					210	10	240	13	250	24	230	08									Surf.
1,000					210	21	230	15	236	35	230	14									1,000
2,000					220	08	230	12	251	31	250	20									2,000
3,000					230	14	240	14	258	27	250	12									3,000
4,000					220	15	240	20	253	24	250	10									4,000
5,000							250	25	249	20											5,000
6,000							240	22	242	21											6,000
8,000									236	21											8,000
10,000									241	27											10,000
14,000									220	28											14,000
18,000									209	23											18,000
24,000	224	57							200	36											24,000
30,000	229	35	222	98					209	42											30,000
40,000	231	27	221	90					204	37											40,000
50,000	238 (52.000')	22	(34.000')						204	20											50,000
									198 (53.000')	21											

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NEPHOSCOPE OBSERVATIONS

Place											Place
Time Type											Time Type
Dir. Vel.											Dir. Vel.

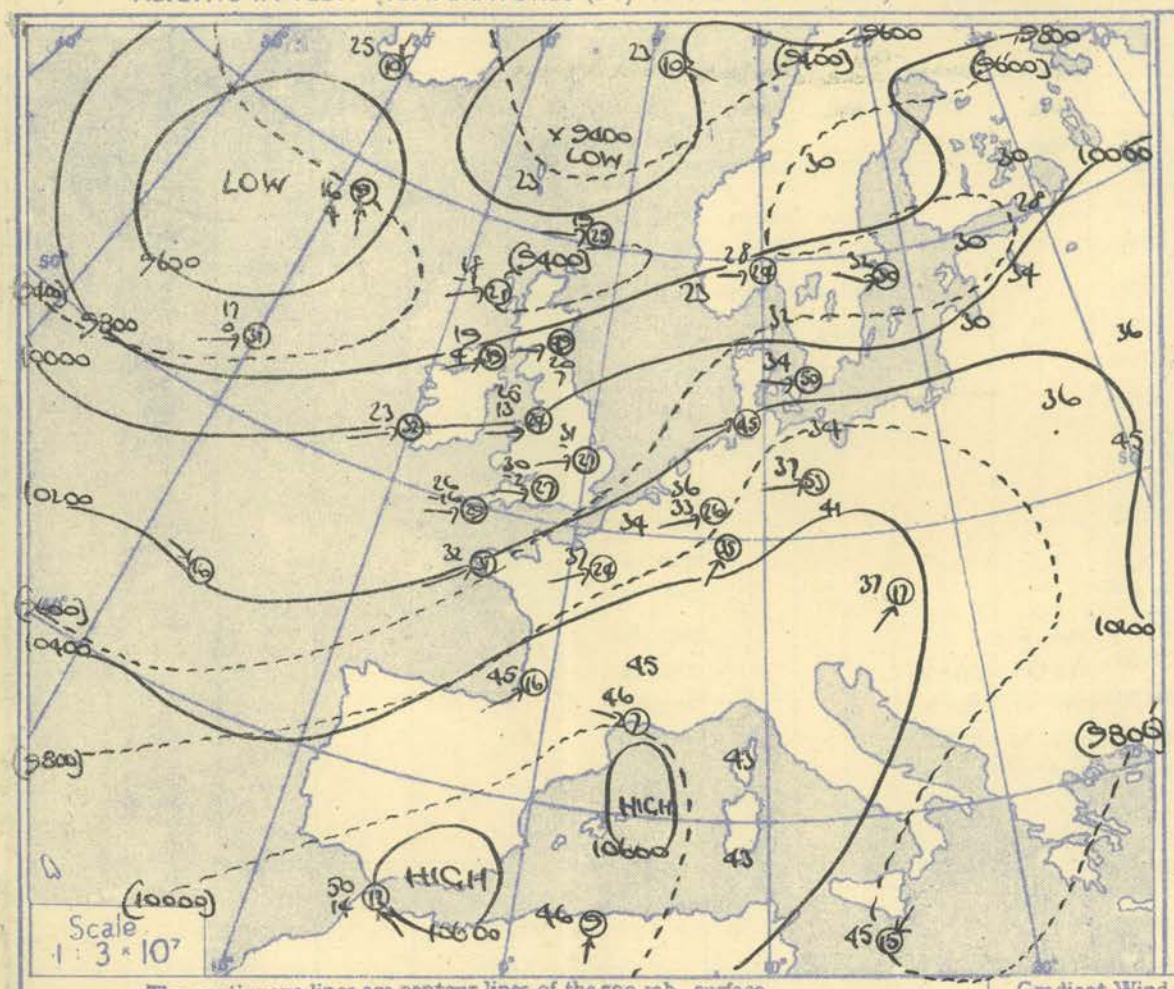
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	WEATHER RECORDER.	WEATHER RECORDER	WEATHER RECORDER.	WEATHER RECORDER	WEATHER EXPLORER	WEATHER EXPLORER	WEATHER EXPLORER.	WEATHER EXPLORER.		Ship
Lat/Long	52·4N 19·8W	52·5N 20·0W.	52·5N 19·8W.	52·6N 19·4W.	59·2N 18·5W.	59·2N 18·6W	58·9°N 19·3°W	59°N 19·1°W		Lat/Long
Time	03L G.M.T.	09L G.M.T.	15L G.M.T.	21L G.M.T.	03L G.M.T.	09L G.M.T.	15hrs G.M.T.	21 hrs G.M.T.	G.M.T.	Time
Pressure M.S.L.	1013 mb	1012 mb	1011 mb	1009 mb	1001 mb	1003 mb	1006 mb	1007 mb	mb	M.S.L.
Surf	1013 mb	1012 mb	1011 mb	1009 mb	1001 mb	1003 mb	1006 mb	1007 mb	mb	Surf
Freezing	870 mb	870 mb	840 mb	850 mb	820 mb	860 mb	840 mb	840 mb	mb	Freezing

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf		50	44	260	14		52	45	260	25		53	44	240	27		52	46	235	28		50	41	190	21		50	47	200	21	-	51	41	200	08	-	53	40	Calm									Surf
1000	03·6	48	42	263	14	03·3	49	43	253	24	03·1	52	43	233	19	02·4	51	45	220	29	00·3	50	41			00·8					1·5	51	41			2·0	52	39									1000
950		42	38	259	22		41	37	252	21		46	36	243	21		43	38	205	30		46	42	193	23		44	37	210	19		46	39	200	07		45	36	No winds									950
900	31·9	35	32	248	23	31·5	35	32	250	21	31·6	39	29	246	23	30·7	37	31	205	30	28·8	39	34	198	27	29·2	37	22	210	20	30·0	40	33	199	06	30·5	38	31	target									900
850		29	26	235	23		29	28	250	30		53	24	245	31		32	27	212	40		34	29	201	30		31	17	210	22		33	26	200	06		33	26	above									850
800	62·7	24	20	231	27	62·3	24	18	250	36	62·7	27	19	242	31	61·7	28	21	215	42	59·9	31	21	197	30	60·1	27	11	210	20	61·1	25	20	199	08	61·5	27	17	maximum									800
750		18	14	234	28		18	10	249	38		21	03	241	29		21	16	212	40		25	10	189	30		21	06	212	18		23	10	179	07		22	07										750
700	96·7	11	07	240	29	96·3	10	04	244	33	96·9	17	00	242	31	96·0	15	08	211	37	94·9	18	00	188	31	94·3	14	00	215	15	95·5	16	04	141	03	95·8	15	08	roar									700
650		05	01	232	37		02	03	244	36		10	12	235	33		09	04	211	36		11	13	186	25		06	11	206	11		08	17	117	10		08	18	elevation									650
600	134·9	03	07	232	36	134·3	04	07	245	38	135·5	02	19	241	39	134·4	02	18	212	40	133·0	02	26	181	27	132·7	02	18	167	06	133·9	00	19	091	12	134·3	00	30									600
550		12	17	238	44		11	14	238	54		07	26	243	32		06	16	218	43		05	34	168	31		12	27	133	05		10	20	068	16		09	35										550
500	178·4	19	28	240	57	178·0	16	19	239	75	179·5	17	33	208	31	178·5	17	27	213	43	177·2	11	36	137	32	176·1	24	42	115	07	177·7	20	36	053	18	178·1	20	42	073	22								500
450		25	36	259	74		23	28	232	76		36	42	262	30		25	37	214	44		21	38	116	32		27	51	093	26		23	41	070	38		21	42	051	48								450
400	230·0	33	46	259	76	229·9	32	40	240	79	230·1	38	48	271	31	230·1	37	44	215	45	229·5	30	43	098	60	229·4	34	54	087	68	230·0	30	47	080	67	230·0	29	42	045	60								400
350		42		260	85		40	48	205	80		49		263	38		50		216	54		43		086	76		45		077	93		44		072	68		44		059	63								350
300	294·1	50		249	80	294·3	49		244	78	294·2	45		249	47	293·0	54		230	49	293·3	55		107	57		56					298·6	45		054	40	298·7	56		052	32								300
250		48		251	55		49		230	66		40		231	42		42		236	44		44		132	28	(303mb)						41		043	32		45		039	18								250
200	383·1	45		261	50	383·6	43		227	39	385·0	40		248	32	382·9	42		240	32	382·7	42		134	12						384·1	39		072	09	383·1	42		055	07								200
170		45					41		239	36		42		246	33		44		225	30		43		133	10							38		153	10		44		055	07								170
	(178mb)																																														
150							45		243	34		43		246	27		46		225	27		43		135	14							40		156	12		42		055	05								150
130							45		241	30		44		246	17		47		224	22		44		209	33												43		083	03								130
110							46					43		246	15		46		223	18		44		174	14												43		128	14								110
100						537·1	46				539·3	41		246	16	536·0	46		222	10	536·7	46		123	12											537·2	44		140	15								100
90							47										47		220	12		46		156	19												42		152	15								90
80							48										48		218	12		46		174	08												41		165	14								80
70							49										(75mb)					47																43		202	06								70
60							50															(75mb)														(61)	44								60
				Isothermal. 735-720mb 13°							Inversion 714mb 16°-700mb 17°										Inversion 1000mb 50°-887mb 51° Isothermal. 1001-1000mb 51° 880-792 " 31° 760-750 " 25°												Isothermal 1006-954 mb 51° 483-455 mb -24° Inversion 455mb-24°-439 mb-22°									Inversion 487mb-23°-454mb -20°									
Tropopause	I 284mb -53° 30.600'			I 262mb -56° 32.400'			I 340mb -50° 26.700'				I 325mb -58° 27.500'					I 292mb -56° 29.940'					HR.					I 316 mb -52° 28200'					I 303 mb -57° 29100'																					Tropopause

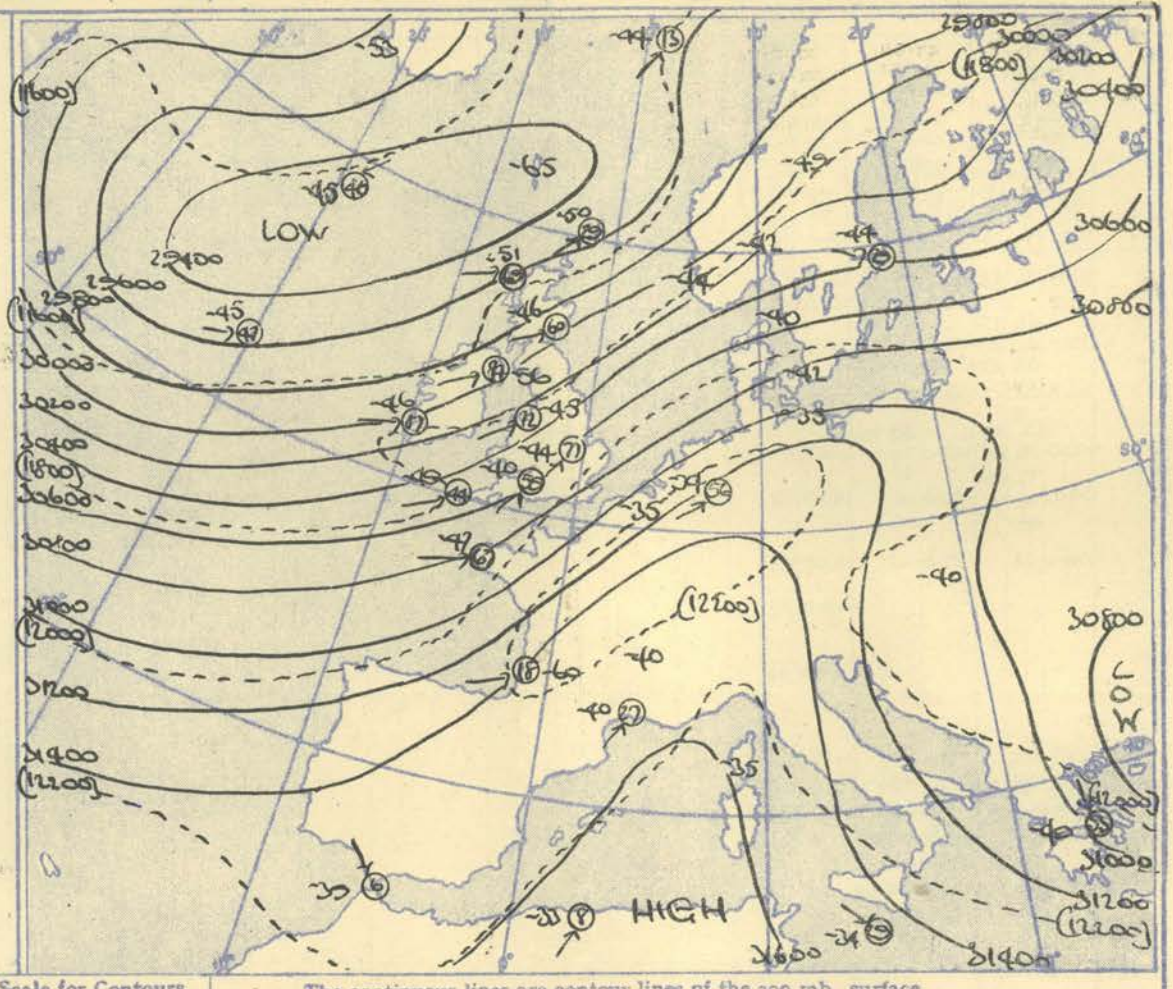
June 18th 1951.

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



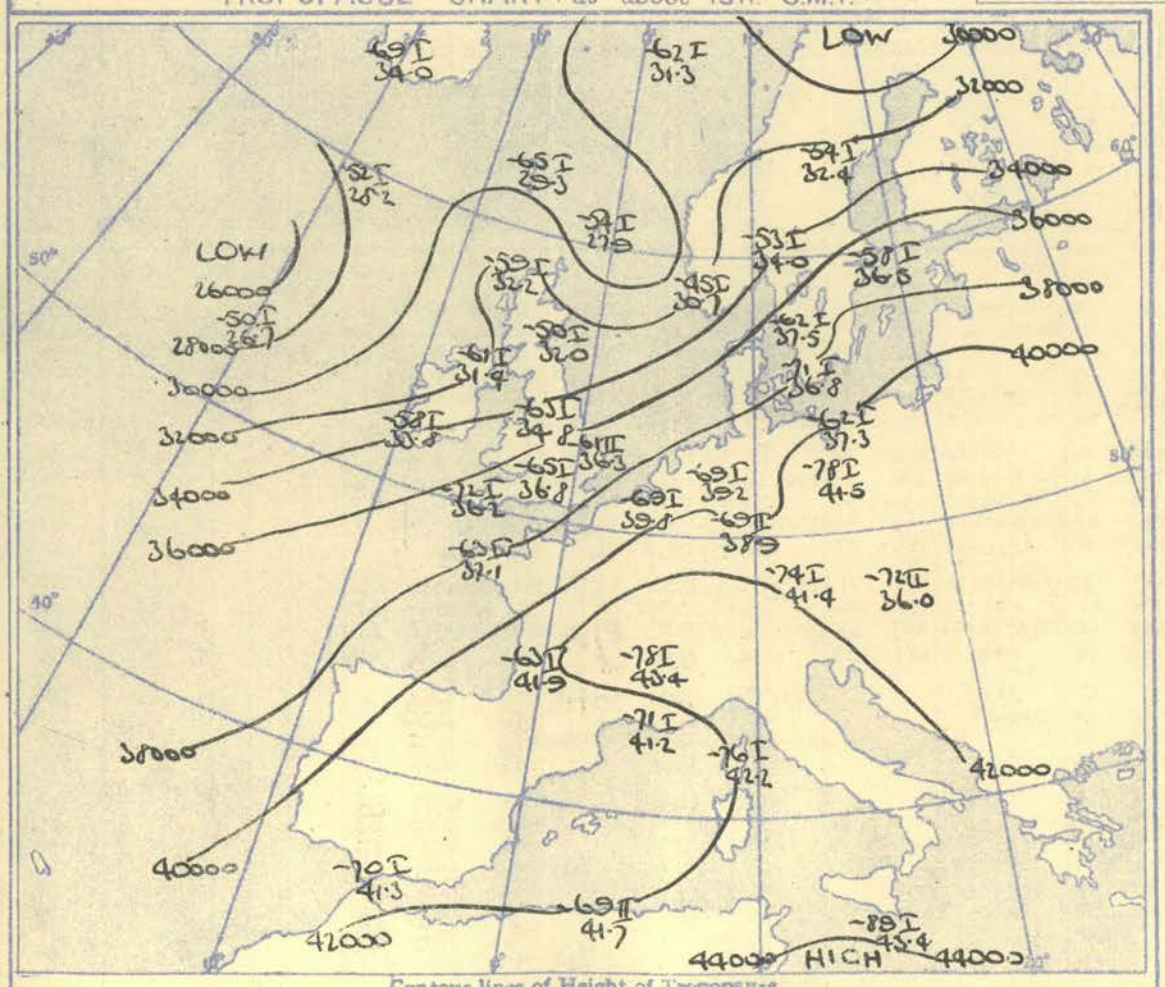
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Little of note apart from persistance of surface low in association with the cold pool which had become isolated on the upper air charts.

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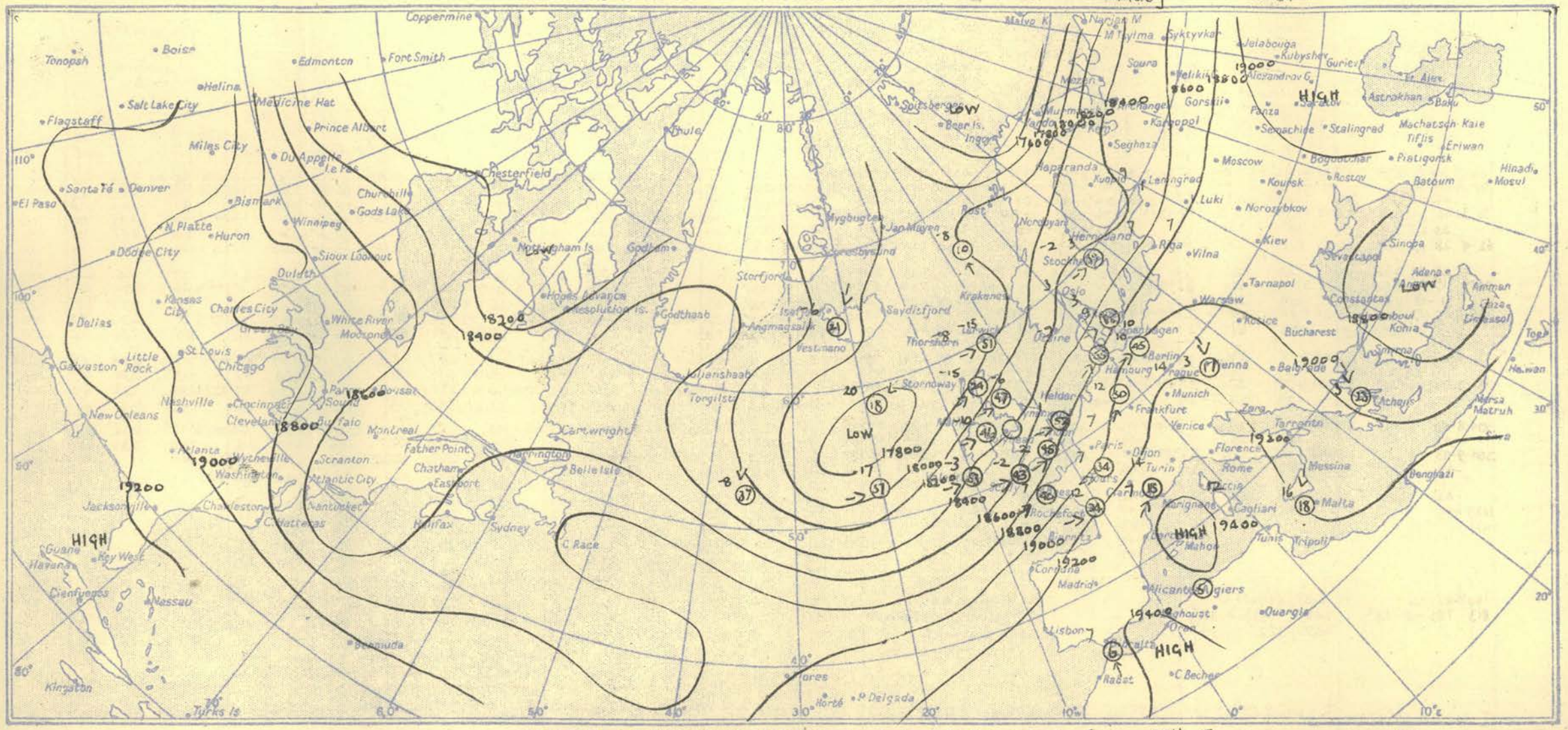
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Friday 15th June 1951.


Coppermine
Tonopah
Boise
Edmonton
Fort Smith
Helina
Salt Lake City
Medicine Hat
Prince Albert
Flagstaff
Miles City
Du Appelle
Le Pas
Chesterfield
Santa Fé
Denver
Churchill
Bismark
Gods Lake
El Paso
N. Platte
Winnipeg
Huron
Dodge City
Sioux Lookout
Duluth
Kansas City
Charles City
Green Bay
Dallas
White River
Modena
Galveston
Little Rock
St. Louis
Chicago
New Orleans
Nashville
Cincinnati
Cleveland
Buffalo
Montreal
Atlanta
Wytheville
Washington
Scranton
Atlantic City
Father Point
Chatham
Eastport
Harrington
Belle Isle
Cartwright
Jacksonville
Charleston
C. Hatteras
Nantucket
Halifax
Sydney
C. Race
HIGH
Guane
Key West
Havana
Cienfuegos
Nassau
Bermuda
Kingston
Turks Is.
LOW
Nottingham Is.
Godhavn
Storfjord
Hopes Advance
Resolution Is.
Godthaab
Angmagssalik
Julianshaab
Torgilstu
Vestmano
Isafjord
Saydisfjord
Stornoway
Thorshavn
Lerwick
Krakenes
Bear Is.
Spitsbergen
Mygbugten
Jan Mayen
Bossbysund
Ingoy
Mulvo K.
Narjan M.
M. Tsylma
Syktyvkar
Soura
Mezen
Murmansk
Archangel
Kem
Kargopol
Seghoza
Lapphranda
Kuopio
Nordvan
Hernosand
Stockholm
Oslo
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Turin
Florence
Rome
Ajaccio
Cagliari
Marignane
Barcelona
Mahon
Corunna
Madrid
Lisbon
Alicante
Algiers
Laghouat
Oran
Gibraltar
Tunis
Tripoli
Malta
Messina
Benghazi
Cyrene
Tarrento
Zara
Riga
Vilna
Kiev
Moscow
Leningrad
Luki
Norozubkov
Kursk
Rostov
Batoum
Mosul
Hinadi
Astrakhan
Baku
Gurieff
Jelabouga
Kubyshev
Alexandrov G.
Gorskii
Saratov
Panza
Semachine
Stalingrad
Machatsch Kale
Tiflis
Eriwan
Piatigorsk
Bogoutchar
Sevastopol
Sinopa
Tarnapol
Warsaw
Kosice
Bucharest
Constantza
Istanbul
Konia
Smyrna
Belgrade
Athens
Adana
Angora
Ammon
Gaza
Limassol
Haifa
Beirut
Damascus
Mersa Matruh
Siwa
Helwan
Aden
Quargla
Tobruk
Sfax
Constantine
Algiers
Oran
Gibraltar
Rabat
C. Bechar
Agadir
Tenerife
Canary Is.
Azores
Flores
Horta
P. Delgada
Madeira
Porto Santo
Cape Verde Is.
Dakar
St. Louis
Bathurst
Freetown
Monrovia
Takoradi
Accra
Lagos
Port Harcourt
Douala
Fernando Po
Libreville
Pointe Noire
Luanda
Ascension
St. Helena
Tristan da Cunha
Gough I.
Cape Town
Port Elizabeth
East London
Durban
Lourenco Marques
Beira
Salisbury
Bulawayo
Johannesburg
Pretoria
Kimberley
Windhoek
Walvis Bay
Swakopmund
Keetmanshoop
Port Nolloth
Upington
Bloemfontein
Mafeking
Francistown
Broken Hill
Kalgoorlie
Perth
Geraldton
Carnarvon
Learmonth
Port Hedland
Broome
Darwin
Alice Springs
Mount Isa
Cloncurry
Townsville
Cairns
Brisbane
Charleville
Longreach
Rockhampton
Bundaberg
Maryborough
Toowoomba
Dalby
Roma
Cunnamulla
Thargomindah
Windorah
Birdsville
Oodnadatta
Woomera
Ceduna
Port Lincoln
Adelaide
Mount Gambier
Port Augusta
Broken Hill
Wilcannia
Menindee
Hay
Deniliquin
Albury
Wagga
Cootamundra
Bathurst
Orange
Dubbo
Coonabarabran
Moree
Tamworth
Armidale
Grafton
Lismore
Coffs Harbour
Port Macquarie
Newcastle
Sydney
Wollongong
Nowra
Batemans Bay
Canberra
Cooma
Yarrawonga
Shepparton
Bendigo
Ballarat
Melbourne
Warrnambool
Portland
Mildura
Swan Hill
Horsham
Hamilton
Mount Gambier
Robe
Naracoorte
Keith
Bordertown
Wudinna
Streaky Bay
Ceduna
Eucla
Esperance
Albany
Bunbury
Busselton
Margaret River
Geraldton
Meekatharra
Wiluna
Leonora
Laverton
Kalgoorlie
Norseman
Balladonia
Eucla
Forrest
Ceduna
Port Lincoln
Whyalla
Port Pirie
Port Augusta
Woomera
Coober Pedy
Oodnadatta
Alice Springs
Tennant Creek
Katherine
Darwin
Wyndham
Kununurra
Halls Creek
Fitzroy Crossing
Broome
Port Hedland
Marble Bar
Nullagine
Newman
Wittenoom
Tom Price
Onslow
Carnarvon
Shark Bay
Denham
Kalbarri
Geraldton
Dongara
Three Springs
Moora
Northam
Merredin
Kellerberrin
Narrogin
Wagin
Katanning
Albany
Esperance

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Friday 15th June 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15h G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	15h	1010·4 mb	100·5 mb	845 mb
STORNOWAY	15h	1013·1 mb	1011·5 mb	848 mb
LEUCHARS	15h	1015·4 mb	1014·6 mb	826 mb
ALDERGROVE	15h	1015·1 mb	1005·6 mb	807 mb
LIVERPOOL	15h	1017·4 mb	1015·4 mb	776 mb
DOWNHAM MARKET	15h	1018·3 mb	1013·9 mb	735 mb
LARKHILL	15h	1020·7 mb	1005·1 mb	718 mb
CAMBORNE	15h	1022·7 mb	1012·2 mb	788 mb
VALENTIA	15h	1020·1 mb	1018 mb	830 mb

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	54	45	245	17	00·4	56	44	200	07	00·2	63	47	250	08	02·4	62	50	150	08	00·6	65	51	260	07	01·2	69	49	220	12	04·4	65	51	280	08	02·9	61	55	280	08	00·3	58	45	230	10	Surf
1000	02·8	54	45			03·6	54				04·3	61	45	261	24	04·2	60	48	153	12	04·9	62	50	263	10	06·1	66	49			05·8	69	50			06·8	66	50	262	18	05·5	56		233	12	1000
950		46	40	255	30		46		216	20		51	36	255	18		49	40	174	15		53	46	243	17		57	48	249	17		55	43	264	12		48	42	260	14		49		242	14	950
900	31·3	40	33	264	26	32·1	39		215	19	33·1	45	36	295	12	32·9	42	33	200	19	33·8	47	38	234	2234·3	51	46	251	19	34·8	47	38	260	12	35·0	42	35	242	1334·1	42		247	15	900
850		33	27	266	25		33		222	18		36	31	237	16		37	29	212	20		41	33	222	21		44	42	251	14		40	33	258	11		36	30	249	18		35		247	15	850
800	62·4	28	16	263	26	63·1	27		233	18	69·4	31	27	241	22	69·2	31	20	225	21	65·3	34	27	231	21	66·0	37	27	251	14	66·3	37	27	254	13	66·3	33	18	253	21	65·3	30		246	19	800
750		25	01	262	26		23		231	17		26	15	251	24		25	15	228	28		30	18	242	21		32	-07	251	19		32	18	256	20		29	03	253	23		27		246	20	750
700	96·9	19	-10	260	25	97·5	18		231	21	98·9	20	07	247	29	98·8	19	04	228	39	00·3	26	13	251	24	01·1	31		250	27	01·5	30	-02	251	29	01·1	26	-16	250	29	00·0	23		242	32	700
650		11	-19	252	25		09		225	29		13	-02	249	34		15	-08	229	44		22	-15	249	33		25		247	31		26	-14	252	32		22	-19	250	34		18		237	39	650
600	135·6	04	-17	247	23	136·1	02		218	25	137·8	06	-10	243	29	137·8	07	-14	236	40	39·8	15	-12	248	39	40·9	18		245	35	41·4	21	-19	092	39	40·6	12	-22	243	36	39·3	12		237	42	600
550		-05	-19	250	23		05		213	23		-01	-19	245	36		-01	-17	241	40		06	-16	248	46		10		246	43		09	-31	241	40		06	-32	238	40		05		236	45	550
500	179·8	-15	-25	250	21	180·2	-15		216	24	182·5	-06	-31	251	47	182·4	-10	-27	243	46	185·1	-01	-22	243	51	186·5	01		244	52	187·1	02	-38	237	45	186·8	-02	-42	239	43	184·5	-03		239	55	500
450		-26	-36	242	24		-27		220	29		-17	-38	251	48		-20	-36	240	49		-11	-34	240	58		-08		241	56		-08	-32	238	50		-11	-50	238	47		-13		231	67	450
400	231·4	-36	-45	234	22	231·6	-39		230	40	235·2	-27	-37	244	57	234·6	-30	-45	240	59	238·5	-19	-40	238	61	240·1	-20		235	54	240·8	-20	-59	238	50	239·0	-22	-50	239	49	237·6	-25		231	67	400
350		-47		227	25		-43		247	67		-37	-48	242	57		-42		236	16		-31	-48	237	70		-31		235	62		-33	-60	236	53		-35	-58	236	46		-35		231	82	350
300	209·8	-50		233	24	295·4	-51		246	69	300·0	-46		241	67	298·5	-56		230	89	309·1	-45		238	72	305·7	-44		227	77	306·1	-98		232	59	304·0	-49		232	44	302·6	-46		232	87	300
250		-42		227	34		-53		237	49		-49		236	61		-58		234	65		-61		238	64		-59		223	90		-60		228	74		-66		238	35		-58		232	103	250
200	384·9	-43		227	29	383·8	-48		228	33	389·2	-42		238	47	385·8	-50		232	48	391·6	-50		231	57	392·9	-60		228	65	392·8	-61		228	60	389·7	-63		230	55	(233	-58				200
170		-43		219	35		-46		218	27		-46		237	49		-52					-48		232	49		-56		234	59		-57		226	56		-61		229	58	mb)					170
150		-42		224	31		-46		211	30		-46		227	40		-51					-50		231	52		-53		233	44		-57		224	51		-58		221	43						150
130	1139	-45					-45		215	30		-47		229	33		-51					-50		224	40		-56		220	32		-60		230	39		-59		225	41						130
110	mb)											-47		218	32		-52					-50		208	25		-60		218	29		-60		225	31		-63		217	31						110
100											542·3	-44		226	33	536·9	-49				543·2	-51		217	24	541·8	-62		226	37	540·9	-61		201	28	537·3	-62		223	25						100
90												-49										-98		231	15		-58		232	28		-64		203	30		-61		235	30						90
80																						-97		216	12		-55		211	15		-60		238	20		-59									80
70																						-97					-54		193	14		-57		184	18		-58									70
60																											-53					-57		202	08		-58									60
	Isothermal 813·783 mb 28°					Isothermal 740·723mb 22° 407·372·· -39°										Inversion 700 mb 19°·685mb 20° Isothermal 412·398mb -30°																																		
																																-57		140	06	(55	-58									
																																(43 mb)	-55			mb)									
																																Inversion 750 mb 32°·722mb 33° Isothermal 829·800 mb 37°				Inversion 760mb 28°·742mb 30° Isothermal 813·795 mb 33°					Isothermal 369·359mb 33°				
Tropopause	I 322mb·54° 27,900					I 267mb·59° 32,200					I 273mb·50° 32,000					I 277mb·61° 31,500					I 295 mb·63° 34,800					II 229mb·61° 36,300					I 225 mb·65° 36,800					I 228mb·72° 36,200					II 255mb·58° 33,800					Tropopause

21h G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	21h	1013·0 mb	1003·0 mb	838 mb
STORNOWAY	21h	1013·5 mb	1011·9 mb	850 mb
LEUCHARS	21h	1015·0 mb	1014·2 mb	820 mb
ALDERGROVE	21h	1016·6 mb	1007·0 mb	828 mb
LIVERPOOL	21h	1018·8 mb	1016·8 mb	800 mb
DOWNHAM MARKET	21h	1019·1 mb	1014·7 mb	765 mb
LARKHILL	21h	1021·3 mb	1005·5 mb	700 mb
CAMBORNE	21h	1023·2 mb	1012·6 mb	733 mb
VALENTIA		mb	mb	mb

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	49	45	240	07	00·4	53	47	220	08	00·2	55	49	230	09	02·6	54	38	270	12	00·6	58	46	230	10	01·2	62	50	230	09	04·9	59	53	260	06	02·9	54	50	250	05						Surf
1000	03·5	49	46			03·7	52	46			04·1	54	48	209	14	04·5					05·2	56	44	232	18	05·3	62	49	263	18	05·9	58	51			06·3	53	49	241	18						1000
950		95	33	295	23		45	39	226	19		50	42	216	18		48	33	270	19		51	90	232	21		56	44	262	18		52	47	282	10		47	43	250	16						950
900	32·0	39	30	244	27	32·2	39	34	222	18	32·7	44	38	221	18	33·1	41	30	260	20	34·0	45	32	242	22	34·4	48	40	265	18	34·8	46	44	259	1235·0	44	39	255	16						900
850		34	25	241	32		32	28	225	23		36	32	222	18		35	30	250	21		39	22	250	17		42	36	252	17		41	39	246	15		39	29	249	20						850
800	63·0	27	21	239	33	63·2	28	18	226	22	63·9	30	25	220	19	64·3	29	18	246	26	65·4	32	27	247	18	66·0	36	28	248	12	66·3	35	31	248	1646·4	38	20	210	20						800
750		21	14	243	29		23	02	231	23		23	19	217	20		23	06	240	23		30	22	237	23		29	08	239	13		29	22	246	18		34	07	254	21						750
700	97·3	19	05	249	21	97·6	16	-10	227	25	98·3	17	10	226	22	98·8	17	-08	235	29	00·2	25	-02	239	28	01·0	29	-12	236	22	01·4	32	08	243	2201·6	28	12	249	24						700
650		11	-03	251	22		08	-15	223	31		12	04	236	33		12	-11	228	33		20	04	241	30		25	-12	238	25		25	-14	245	24		22	05	246	31						650
600	136·1	03	-10	249	23	135·9	-02	-18	221	33	137·1	06	-05	239	36	137·5	06	-14	226	35	39·6	12	-02	235	36	40·8	16	-17	237	30	41·2	16	-17	245	29	41·2	16	-05	245	36						600
550		-06	-21	249	25		-09	-18	214	39		-01	-13	239	37		-01	-18	235	38		02	-12	233	39		08	-25	236	35		10	-25	247	37		09	-16	242	42						550
500	180·1	-16	-29	250	28	179·7	-18	-16	222	39	181·6	-11	-23	237	39	182·1	-10	-25	232	36	189·5	-05	-23	236	43	186·3	00	-34	240	40	186·7	00	-36	243	92	186·8	00	-26	237	44						500
450		-26	-38	249	29		-28	-36	223	52		-23	-34	232	45		-21	-34	237	45		-12	-32	236	54		-10	-44	241	46		-11	-45	240	49		-11	-36	233	50						450
400	231·6	-36	-48	255	39	231·0	-39	-46	222	54	233·6	-39	-46	236	58	234·3	-32	-46	234	48	237·7	-22	-39	236	57	239·8	-21	-50	236	45	2901	-22	-55	238	50	290·1	-22	-48	229	54						400
350		-43		256	59		-49		218	61		-42		238	62		-44		227	60		-33	-50	234	73		-33	-59	239	48		-33	-59	239	46		-33	-56	227	48						350
300	295·5	-51		246	51	299·0	-57		214	42	297·5	-52		236	74	298·0	-55		230	74	303·1	-45		231	78	305·2	-47		240	42	305·4	-98		242	41	305·2	-98		242	53						300
250		-51		239	29		-96		208	30		-58		239	55		-56		225	73		-60		238	76		-65		239	42		-63		246	40		-67		246	57						250
200	384·0	-46		226	32	383·1	-93		215	25	385·3	-98		231	43	385·6	-50		230	54	389·6	-61		233	55	391·5	-59		231	50	391·6	-60		230	53	390·9	-60		227	54						200
170		-46		228	29		-94					-98		229	39		-52		222	37		-55		231	53		-54		229	50		-59		234	48		-58		236	49						170
150		-44		215	21							-95		223	31		-53		226	37		-56		229	47		-54		229	46		-58		230	45		-60		227	95						150
130		-47		212	24							-51		219	56		-51		220	31		-53		228	41		-60		225	37		-59		232	38		-62		230	30						130
110		-46		217	21							-48		234	12		-50		218	32		-56		224	35		-62		220	33		-62		211	32		-61		232	30						110
100	536·0	-47		207	16						537·4	-52		224	15	536·6	-51		213	26	539·2	-55				540·1	-59		223	22	539·6	-60		242	21	538·5	-60										100
90		-50		201	12							-50		226	16		-53		190	23	(594 mb)	-56					-62		211	16		-69		203	16	(598 mb)	-60										90
80	(085 mb)	-52										-49					-54										-59		201	16		-61														80
70																											-59		186	07															70
60																											-59																		60
	Isothermal 719·700mb 19°					Isothermal 583·573mb -05°					Isothermal 386·370 mb 37°										Inversion 773mb 29°·775mb 31° Isothermal 727·715 mb 27°					Inversion 750 mb 29°·732mb 30° Isothermal 1015·991 mb 62° 713·683·· 29°					Inversion 750 mb 29°·735mb 36°					Isothermal 890·796 mb 38°																
Tropopause	I 268mb·57° 31,900					I 307mb·58° 28,900					I 250 mb·58° 33,675					I 276mb·60° 31,700					I 230 mb·68° 36,100					I 229mb·68° 36,200					I 232 mb·69° 36,000					I 223mb·75° 36,800															Tropopause

HMSO Pr.2251 MO. Dunstable

No. 11166. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Saturday 16th June, 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

03h. G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	03h.	1013·5 mb	1003·5 mb	843 mb
STORNOWAY	03h.	1013·5 mb	1011·9 mb	852 mb
LEUCHARS	03h.	1015·5 mb	1014·7 mb	809 mb
ALDERGROVE	03h.	1017·1 mb	1007·5 mb	844 mb
LIVERPOOL	03h.	1018·8 mb	1017·8 mb	772 mb
DOWNHAM MARKET	03h.	1021·3 mb	1016·6 mb	738 mb
LARKHILL	03h.	1023·1 mb	1006·7 mb	724 mb
CAMBORNE	03h.		1012 mb	780 mb
VALENTIA	03h.		1017·8 mb	1016 mb / 800 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	48	41	200	03	00·4	47	45	210	03	00·2	49	47	260	10	02·6	46	41	220	05	00·6	51	45	200	06	01·2	49	44	225	08	04·4	46	45	Calm		02·9	48	48	180	04	00·3	53	50				Surf
1000	03·6	48	41			03·7	48	44			04·1	49	46	249	21	04·7					05·4	51	45	237	15	05·7	54	48	267	20	06·1	47				06·2	51	51	233	15	4·8	52	48				1000
950		46	39	216	16		43	36	218	17		46	41	276	21		46	41	223	19		47	39	256	11		51	41	262	18		47		259	12		47	41	247	16		47	44				950
900	32·0	39	31	213	18	32·1	38	30	217	20	32·6	41	36	278	21	33·1	39	35	223	24	34·0	43	36	277	06	34·5	46	38	254	17	34·7	43		249	13	34·8	43	32	264	18	33·4	42	37				900
850		38	27	211	22		32	23	215	23		34	29	262	18		38	27	233	26		36	30	259	09		41	34	247	20		39		243	16		37	28	253	18		36	28				850
800	63·1	26	23	214	22	63·0	26	20	217	24	63·8	31	21	252	24	64·0	28	18	225	28	65·2	31	21	244	17	66·0	35	24	242	23	66·1	37		238	20	66·2	39	15	240	21	64·6	32	22				800
750		21	20	223	24		21	08	219	25		26	12	248	25		22	10	223	28		29	03	241	24		33	11	242	24		35		243	20		35	04	234	23		26	16				750
700	37·3	15	05	228	28	97·2	15	03	222	27	98·5	20	05	247	25	98·5	19	05	219	32	100·0	24	04	244	31	101·0	28	09	245	26	101·3	28		242	22	101·4	28	01	238	26	99·2	19	13				700
650		10	04	225	31		07	02	221	32		13	01	241	24		10	00	223	34		19	05	244	36		23	13	238	31		21		239	29		22	08	243	30		12	06				650
600	136·8	04	12	231	37	135·6	01	08	222	35	137·4	06	00	237	27	137·1	01	07	228	36	139·4	12	12	242	39	140·7	15	4	235	36	140·8	14		240	34	141·0	15	12	244	31	138·0	05	00				600
550		07	13	235	41		09	18	225	41		02	10	235	34		06	13	231	27		01	19	239	43		08	19	237	41		05		238	38		07	21	241	36		03	09				550
500	179·9	16	22	234	39	179·4	18	29	226	45	181·9	11	17	231	41	181·2	15	22	229	45	184·3	07	30	237	46	186·1	00	28	234	46	186·0	04		238	42	186·4	01	35	240	44	182·4	12	19				500
450		23	30	226	36		29	40	227	48		22	27	232	48		25	32	230	51		18	46	235	52		10	38	233	50		12		238	44		10	43	242	54		24	33				450
400	231·7	33	40	226	42	230·5	42		227	55	234·0	32	35	226	53	232·9	35	42	230	61	236·9	29	50	239	60	239·5	19	50	231	47	239·2	21		239	53	239·9	19	52	240	57	234·0	34	45				400
350		44		225	44		53		223	49		43		233	55		47		226	65		39	59	237	75		29	56	236	60		31		238	62		29	56	241	69		47					350
300	295·3	37		226	41	293·0	53		216	50	298·0	50		232	59	296·2	58		226	70	301·4	49		234	87	305·5	42		236	63	304·8	45		243	61	305·9	42		241	73	297·7	52					300
250		56		226	33		47		217	35		56		233	59		60		225	64		61		236	96		57		242	65		61		241	60		59		253	71		52					250
200	383·0	47		223	28	386·2	47					47		229	42	335·0	50		229	48	388·3	56		229	57	392·3	73		238	61	390·8	77		240	56	392·3	71		246	60	385·7	53					200
170		47		220	25		48					48		217	35		52		227	44		55		232	52		59		233	56		63		235	49		59		233	51		52					170
150		48		215	22		51		224	31		53		224	40		57		229	46		59		230	45		62		233	48		60		234	31		52					150
130		47		218	17		52		231	36		52		228	30		55		237	34		55		231	44		61		226	46		59		231	42		55					130
110		49		202	15		48		217	18		55		231	31		54		227	30		59		231	33		63		223	37		58		240	30		54					110
100	535·4	48		214	15		47		206	14	538·1	47		226	25	533·9	53		226	25	537·6	57		230	20	540·4	59		231	27	537·4	61		237	33	540·2	59		240	24					100
90		50		224	18		49		214	14		49		214	18		60		235	12		58		221	22		58		232	24		60		210	15							90
80		52		240	07		50							210	17		54		214	18		56		208	21		59		225	16		61		213	27							80
70		52		208	06												57		203	10		57		207	14		60		214	11		62										70
60		53		212	09												58				(667) mb			186	12						661 mb												60
	(850)	51		148	09																					(650) mb	57																	
	(840) mb	49																																												
						Inversion 1012 mb. 47°–996 mb. 48°					Isothermal 1015–1000 mb. 49° 836–814 mb. 38°					Inversion 1007 mb. 46°–983 mb. 48°					Inversion 807 mb. 30°–785 mb. 34° Isothermal 1018–1000 mb. 51° 717–700 mb. 24°					Inversion 1017 mb. 49°–1000 mb. 52° Isothermal 782–750 mb. 33°					No humidities					Inversion 1006 mb. 46°–984 mb. 50° 805 mb. 36°–780 mb. 38°											
Tropopause	I 268 mb. -64° 31,600′					II 337 mb. -53° 25,600′					I 257 mb. -58° 33,100′					I 266 mb. -63° 32,200′					I 238 mb. -64° 35,000′					I 200 mb. -78° 39,200′					I 200 mb. -77° 39,100′					II 216 mb. -64° 37,600′					II 325 mb. -52° 28,000′					Tropopause

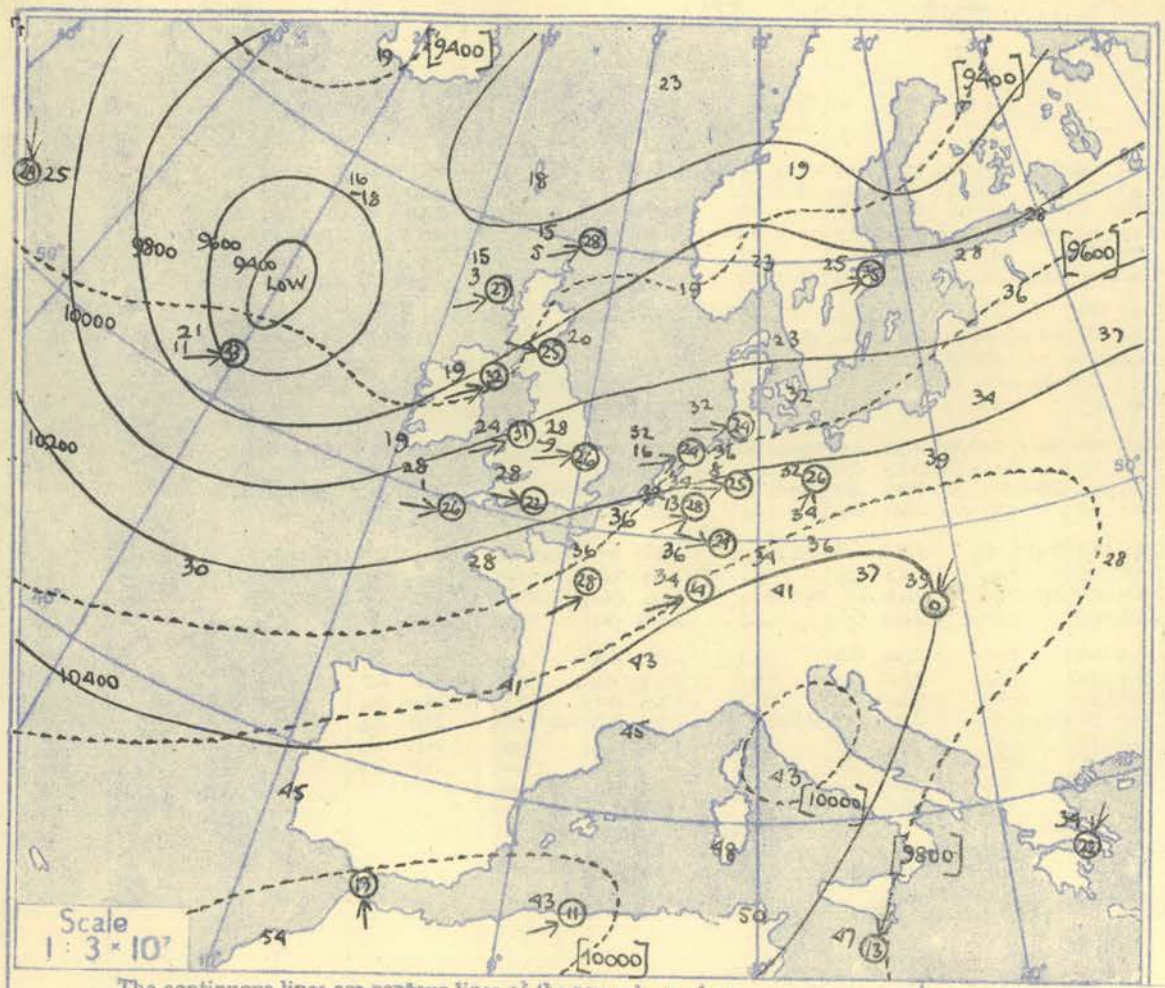
09h. G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	09h.	1013·3 mb	1003·4 mb	844 mb
STORNOWAY	09h.	1013·3 mb	1011·7 mb	862 mb
LEUCHARS	09h.	1016·4 mb	1015·6 mb	819 mb
ALDERGROVE	09h.	1016·2 mb	1006·7 mb	831 mb
LIVERPOOL	09h.	1019·8 mb	1017·8 mb	779 mb
DOWNHAM MARKET	09h.	1021·6 mb	1017·2 mb	740 mb
LARKHILL	09h.	1022·5 mb	1006·5 mb	743 mb
CAMBORNE	09h.		1012 mb	740 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	55	40	260	10	00·4	49	46	180	07	00·2	61	50	230	08	02·6	54	46	200	15	00·6	58	46	240	08	01·2	57	45	230	08	04·4	56	49	230	03	02·9	56	52	190	08	Surf
1000	03·6	54	40			03·6	48	45			04·5	58	47	209	13	04·4	53	48			05·4	55	43	240	12	05·9	53	41	230	15	06·1	55	48			06·4	53	48	213	18	1000
950		46	35	231	11		42	39	215	14		48	46	217	17		45	39	214	24		47	38	242	12		49	33	232	14		47	40	231	08		47	43	217	16	950
900	32·1	39	28	226	11	31·9	36	33	218	15	33·1	41	37	228	21	32·9	40	34	216	26	34·0	40	33	250	15	34·6	44	32	233	14	34·7	41	32	236	12	34·7	41	38	221	15	900
850		33	23	212	14		31	28	222	13		35	31	243	28		38	28	225	25		35	24	254	16		40	20	235	17		39	20	245	18		35	30	224	18	850
800	63·2	29	19	216	16	62·8	26	23	219	11	64·3	30	25	244	27	64·0	28	20	230	26	65·2	30	18	236	16	66·0	39	03	237	16	66·0	38	16	247	22	66·0	38	23	222	24	800
750		22	18	218	18		20	18	220	15		27	11	236	23		22	18	234	26		30	01	222	27		32	12	239	16		38	10	243	23		34	12	226	28	750
700	97·6	16	04	218	19	97·0	14	10	228	19	98·7	20	05	230	26	98·3	16	08	238	28	100·0	25	02	223	32	101·1	26	02	238	21	101·1	27	02	237	24	101·2	26	06	228	33	700
650		11	05	218	19		08	02	227	20		13	07	227	28		08	00	237	35		17	07	225	39		20	11	235	27		20	05	237	29		16	04	231	37	650
600	136·2	02	13	216	19	135·5	01	08	229	21	137·8	06	00	226	29	136·7	00	07	235	38	139·2	09	11	226	43	140·5	12	21	233	33	140·6	12	12	238	35	140·4	10	15	232	42	600
550		08	23	215	22		07	20	233	22		01	08	233	29		07	16	237	34		01	20	231	49		05	27	239	36		03	21	239	39		02	23	233	42	550
500	180·2	17	31	211	22	179·5	17	35	239	20	182·3	10	18	231	34	180·7	15	26	239	33	183·9	08	31	238	56	185·7	04	41	240	44	185·6	05	29	236	49	185·3	06	30	237	45	500
450		30	43	211	28		28	45	249	27		21	28	227	41		26	38	237	36		18	39	230	64		12	49	236	55		14	37	237	56		17	41	233	54	450
400	231·4	41		216	35	230·9	39	54	248	27	234·5	32	43	228	45	232·3	38	50	246	34	236·3	29	48	229	72	238·8	21	62	236	63	238·6	23	45	237	59	237·9	28	51	238	62	400
350		52		216	39		51		249	30		44		234	50		50		243	40		40	60	233	87		31	63	239	70		35	56	239	63		38	58	240	65	350
300	294·0	55		216	36	293·6	57		234	31	298·4	49		235	56	295·3	57		235	52	300·8	48		238	104	304·4	42		237	71	303·6	49		236	65	302·4	53		238	70	300
250		46		216	33		46		222	30		45		232	41		55		233	55		60		233	96		59		232	68		68		229	59		76		232	66	250
200	383·0	43		215	27	383·1	41		219	25	388·0	45		229	44	383·1	50		231	43	387·8	57		237	87	391·0	65		230	60	389·0	64		231	52	386·1	75		238	67	200
170		42		214	28		43		218	22		45		228	31		50		222	35		54		231	47		55		234	48		59		231	46		67		232	47	170
150		43		233	21		45		214	22		46		223	33		52		225	29		52		227	40		55		235	40		58		229	40		70		228	43	150
130		46		207	13		46		204	17		47		231	30		50		234	29		52		230	35		54		228	38		58		219	37		66		231	45	130
110		42		215	15		40		199	15		41		225	25		50		197	23		50		218	40		56		215	26		56		221	19		67		233	32	110
100	537·0	47		210	12	537·7	39		214	15	541·6	41		208	17	534·5	49		214	21	538·4	52		228	25	540·5	56				537·3	56		219	16	530·9	64		215	21	100
90		48		200	12		46		237	16		43		187	16		49		232	09		51					53					56					65		221	20	90
80		46		197	09		43		187	11		44		165	12		52		175	10																	65		229	15	80
70		47		178	08		43		186	09		47		198	11																										70
60		48										51																													60
											Isothermal 781–758 mb. 28°										Inversion 800 mb. 30°–779 mb. 32°					Isothermal 976–938 mb. 49° 858–823 mb. 40°					Inversion 874 mb. 38°–823 mb. 41°											
Tropopause	I 328 mb. -59° 27,600′					I 318 mb. -60° 28,300′					I 320 mb. -61° 28,200′					I 296 mb. -58° 29,800′					II 246 mb. -61° 34,400′					I 211 mb. -72° 38,000′					II 234 mb. -72° 35,600′					II 230 mb. -82° 35,800′					Tropopause

Saturday 16th June 1951.

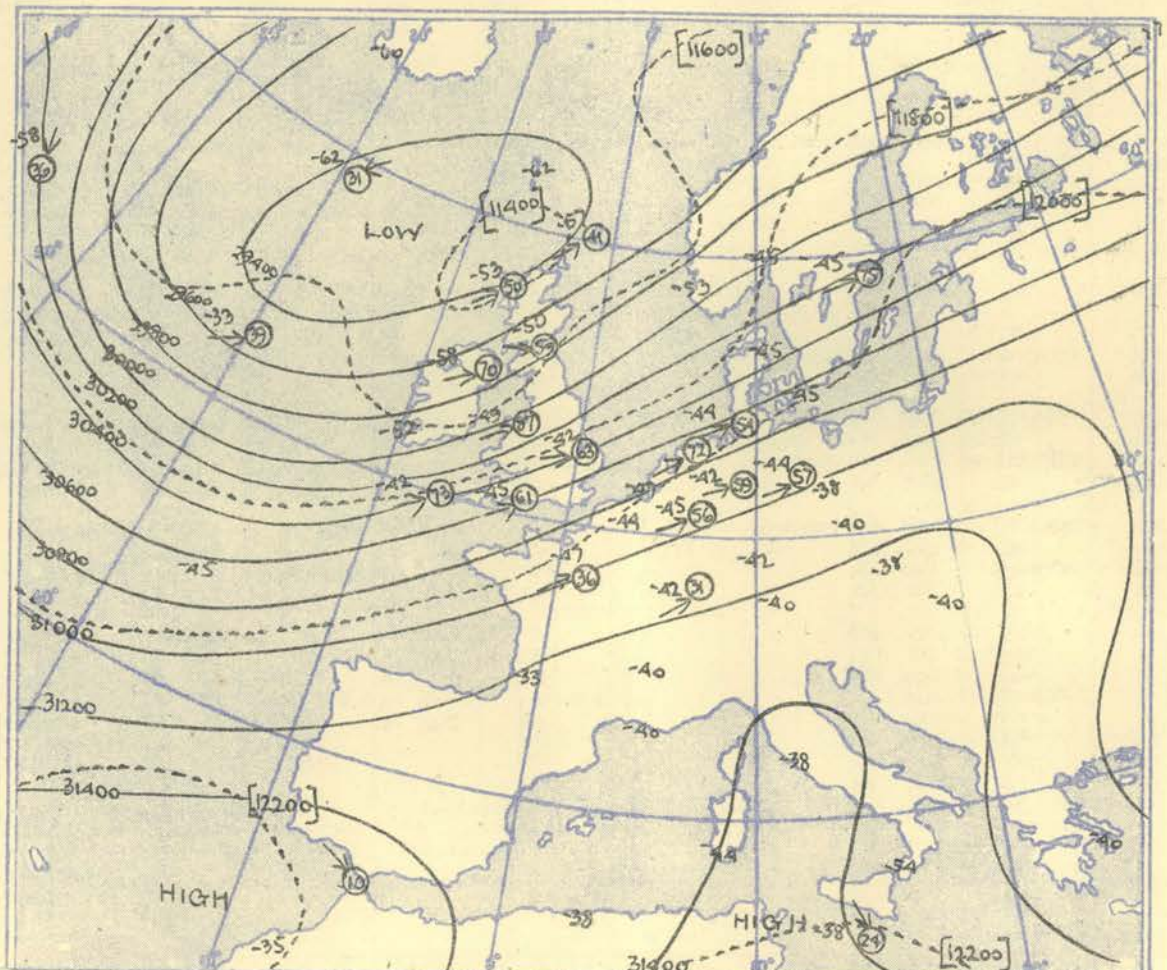
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.



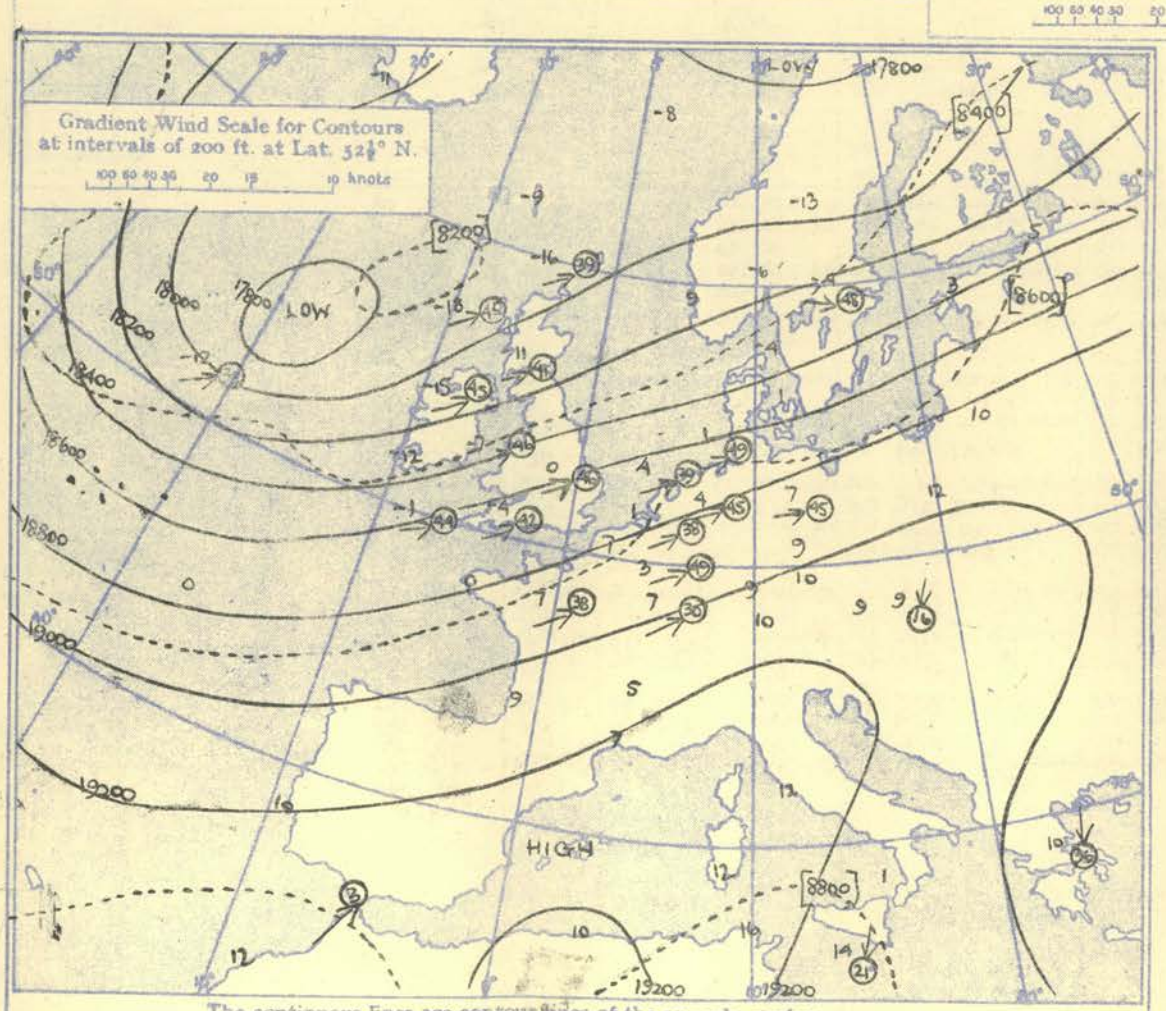
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

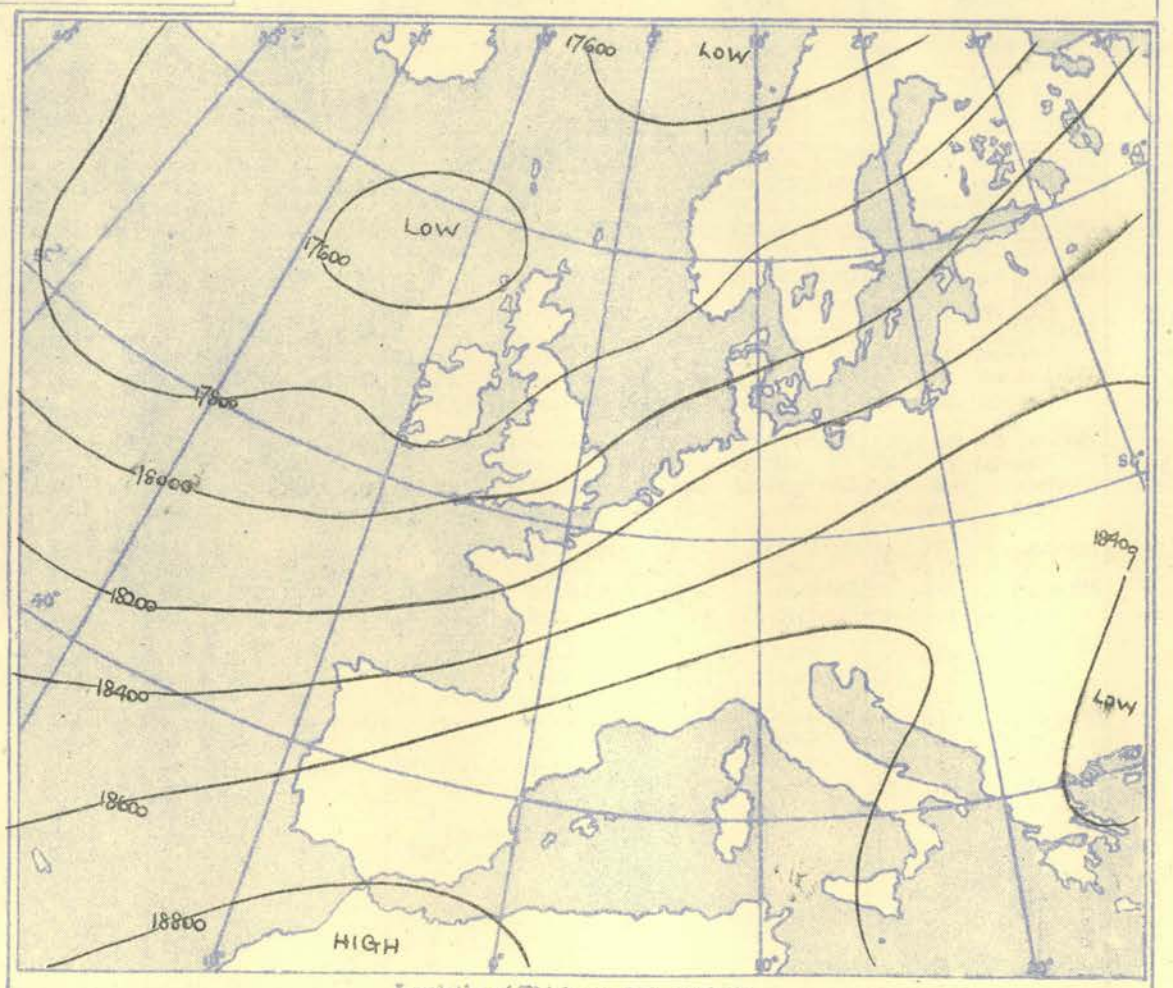
100 60 40 30 20 15 10 knots



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500-1000mb.

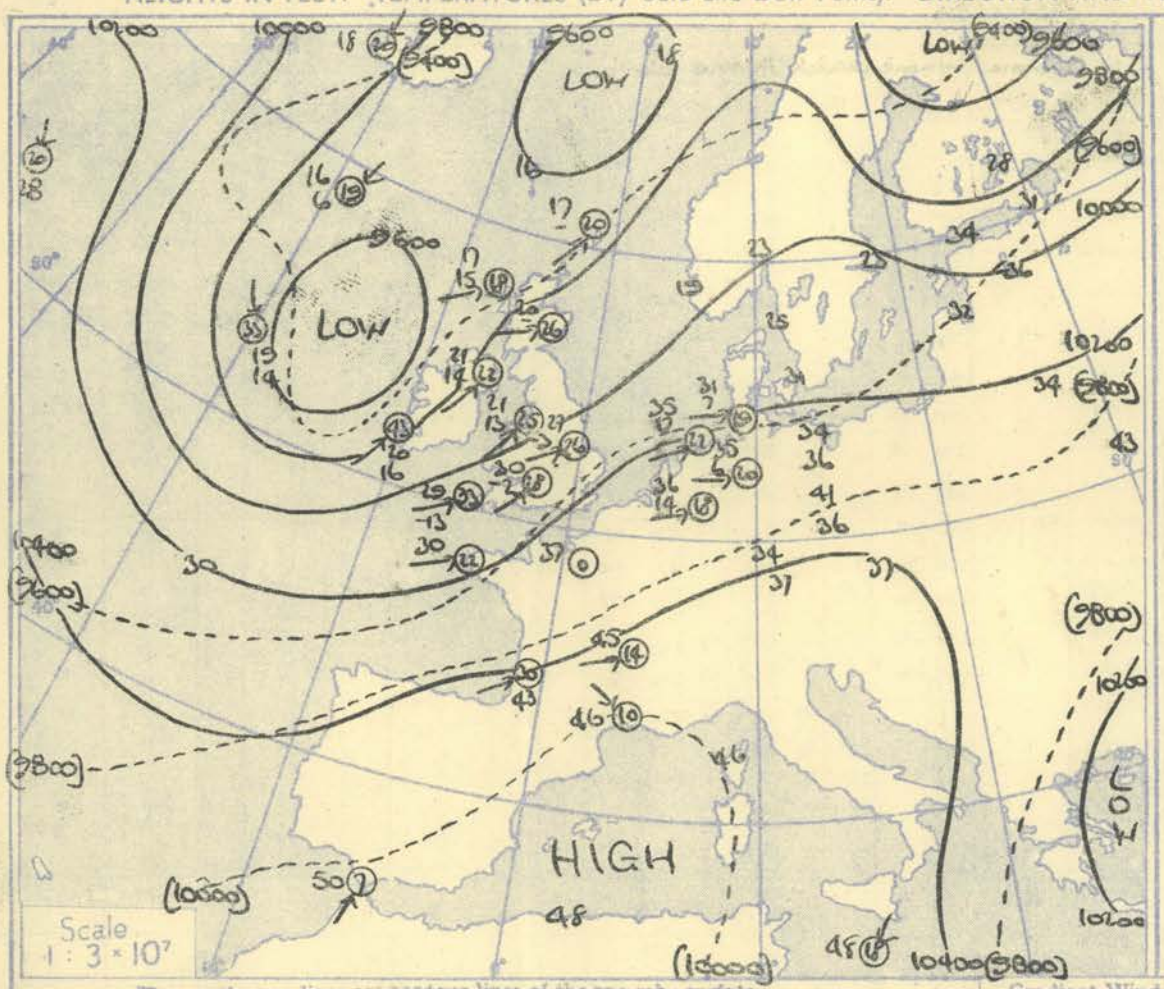
METEOROLOGICAL OFFICE LIBRARY 2 - JUL 1951

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

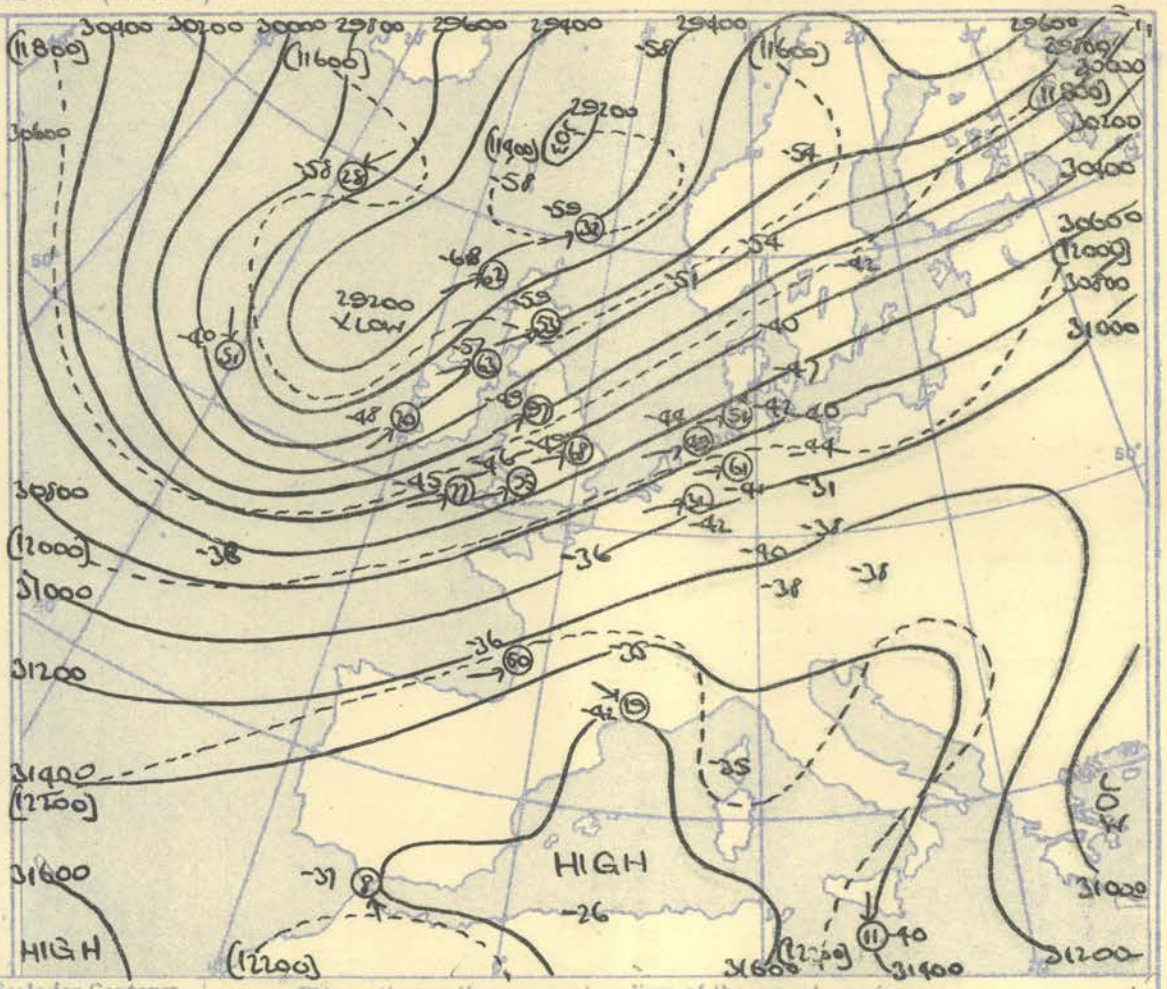
| Pressure | | |

June 16TH 1951.

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

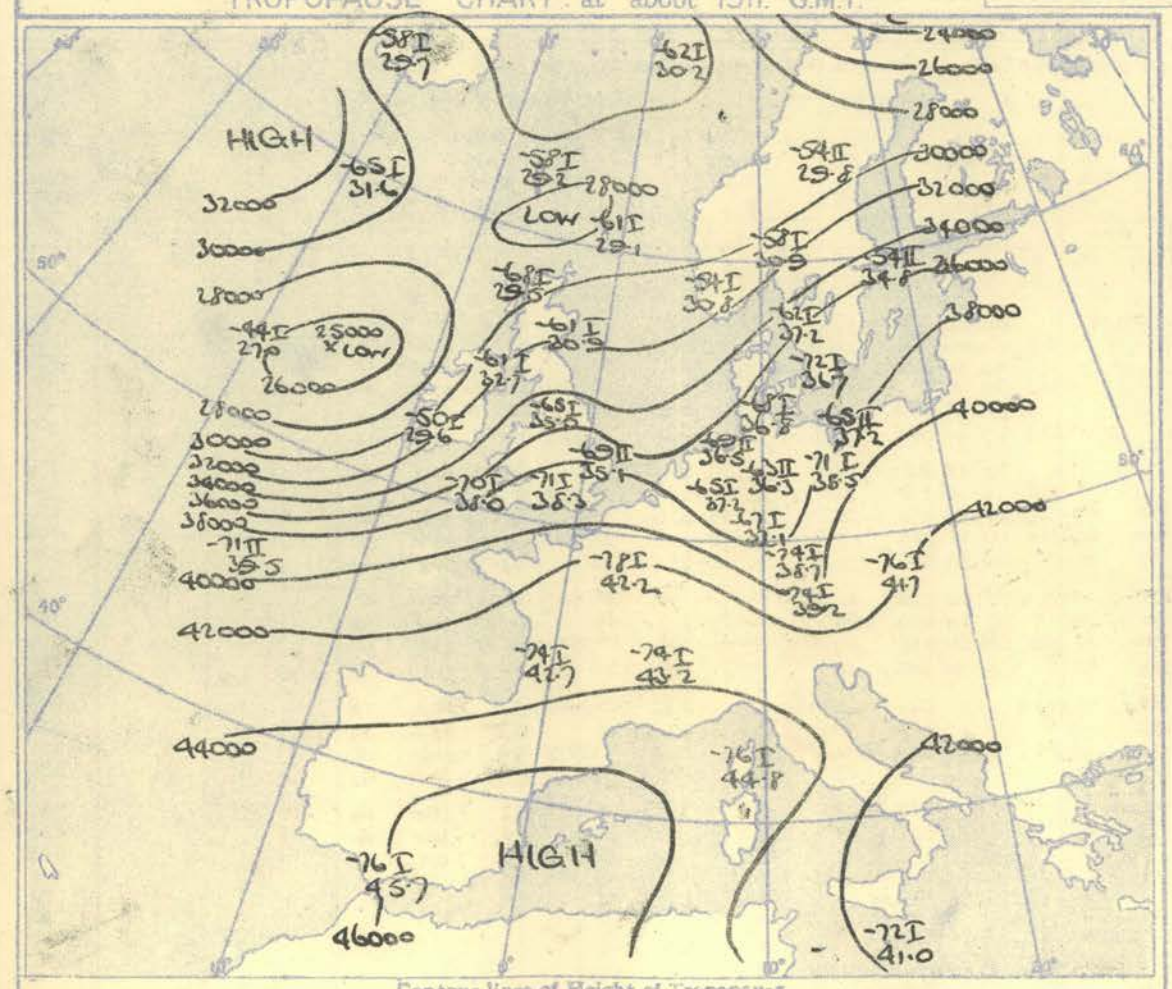


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N

100 80 60 50 40 30 20 15 10 knots

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

The cold trough in East Atlantic narrowed markedly due to a combination of advective and dynamical warming in Mid-Atlantic: This had the effect of moving the axis about 20° longitude Eastwards in 24 hours.

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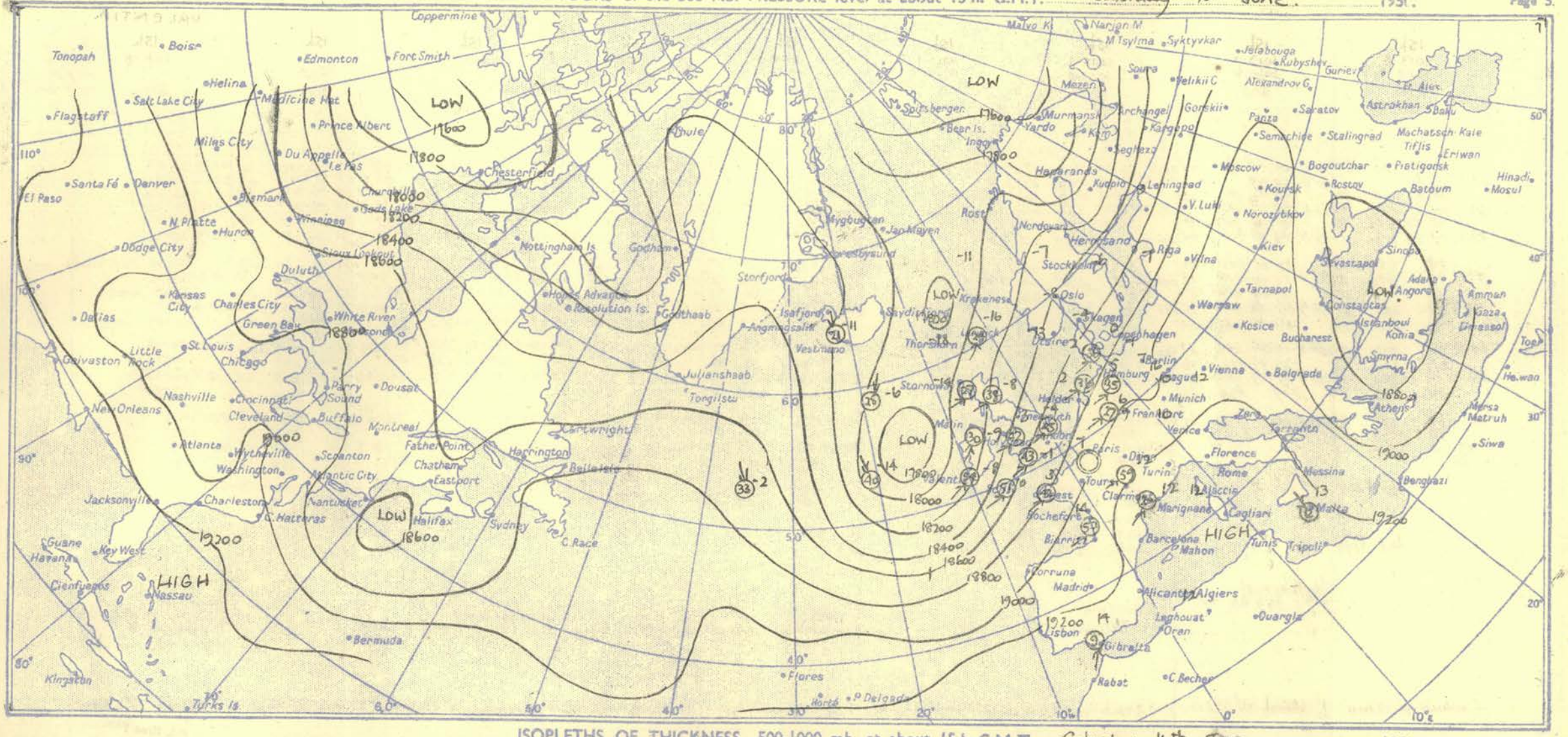
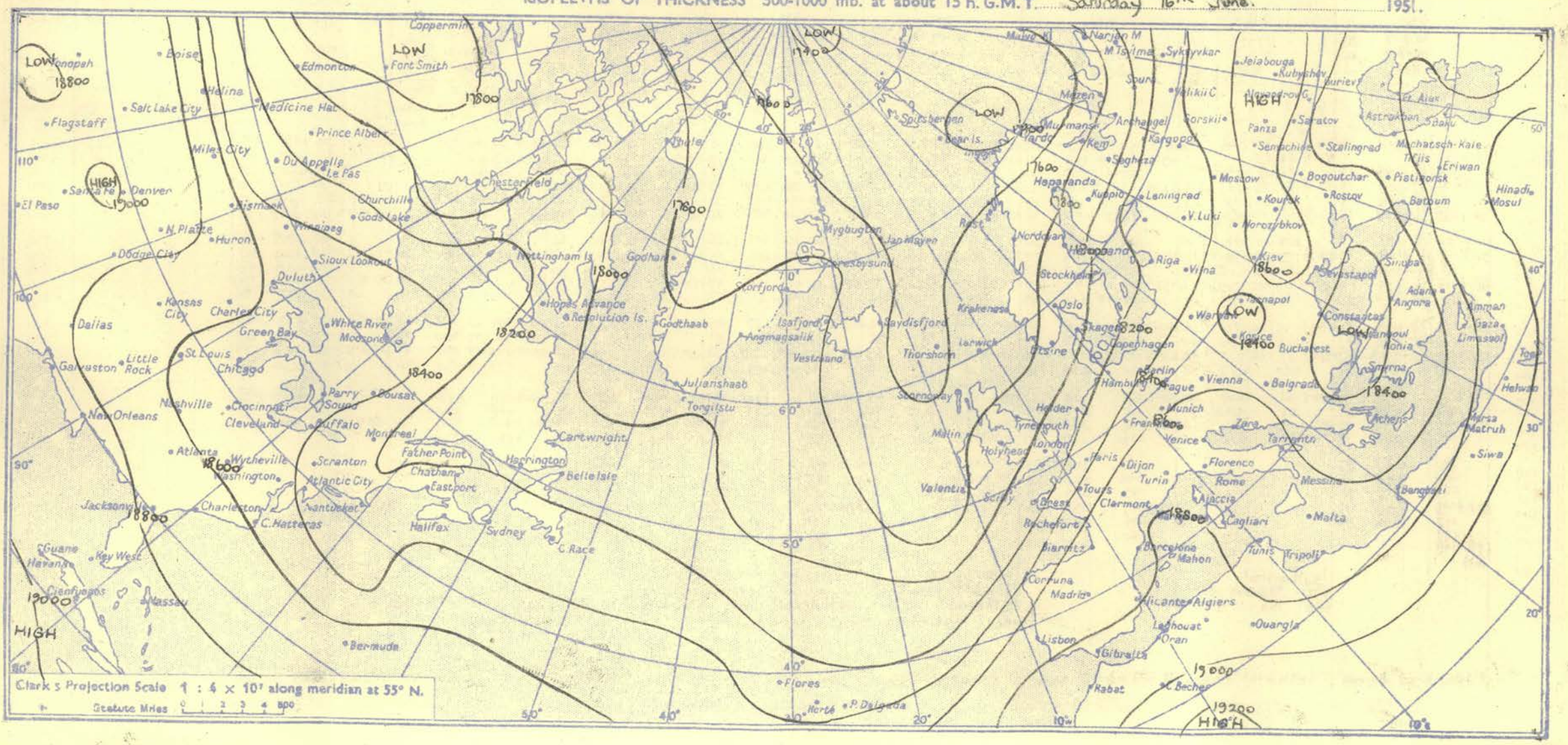
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Saturday 16th June. 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Saturday 16th June. 1951.



DAILY AEROLOGICAL RECORD

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15h G.M.T.

Station	Pressure: Time	M.S.L.	Surf	Freezing
LERWICK	15h	1013·3 mb	1003·1 mb	829 mb
STORNOWAY	15h	1013·2 mb	1011·6 mb	893 mb
LEUCHARS	15h	1015·2 mb	1014·4 mb	809 mb
ALDERGROVE	15h	1013·1 mb	1003·7 mb	800 mb
LIVERPOOL	15h	1018·9 mb	1016·4 mb	810 mb
DOWNHAM MARKET	15h	1020·1 mb	1015·7 mb	793 mb
LARKHILL	15h	1020·5 mb	1009·6 mb	716 mb
CAMBORNE	15h	1010 mb		806 mb
VALENTIA	15h	1011·8 mb	1010 mb	835 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	57	43	245	07	00·4	52	47	010	05	00·2	66	54	260	09	02·6	58	55		
1000	03·6	55	41			03·6	50	47			04·3	61	49	226	15	03·6				
950		49	37	225	09		44	41	317	10		51	41	220	16		51	43		
900	32·1	40	32	226	16	32·0	38	37	270	12	33·1	43	37	220	20	32·4	46	38		
850		34	26	227	18		33	32	227	16		37	37	228	23		39	34		
800	63·3	29	23	226	17	63·0	28	25	211	10	64·4	31	26	229	22	63·8	32	28		
750		24		225	18		23	21	216	10		25	21	232	22		27	23	For Winds	
700	97·7	17		216	20	97·4	17	15	218	18	99·0	20		231	26	98·5	21	14		
650		10		207	24		10	05	227	19		12		235	26		14	03		
600	136·3	03		215	21	136·9	03	-08	219	25	137·9	08		242	26	137·5	08	-11	See	
550		+05		215	26		-05	-23	223	24		00		242	27		-01	-10		
500	180·5	-16		216	29	180·2	-14	-34	219	27	180·6	-08		241	38	182·1	-09	-17	Page 3.	
450		-27		216	25		-25	-39	219	36		-18		239	38		+17	-27		
400	231·9	-40		233	29	231·9	-35	-49	225	45	235·1	-30		241	40	234·7	-29	-41		
350		-53		233	33		-49		228	51		-45		243	48		-41			
300	294·4	-59		231	32	294·7	-68		224	62	298·5	-59		241	53	298·7	-57			
250		-50		226	30							-58		234	48		-55			
200	(298	-50		228	28						385·6	51		231	44	386·5	-45			
170	mb)											-49		234	39		-44			
150				For Rest								-50		230	31		-46			
130				of Winds								-46		231	28					
110				See Page								-50		219	19					
100											587·5	49		213	13					
90				3.								-48		205	17					
80												-48								
70																				
60																				
						Isothermal 977 - 963 mb 96°					Isothermal 733 - 720 mb 23°									
Tropopause	I 305 mb -61° 29,100'					I 300 mb -68° 29,500'					I 284 mb -61° 30,900'					I 268 mb -61° 32,200'				

Pressure mb	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	56	50	200	10	01·2	67	44	230	10	04·4	63	50	250	08	02·9	59	52	190	10	00·3	56	47		
1000	05·1	57	51	200	18	05·6	64	43	219	12	05·6	62	49			05·8	57	51	211	21	03·2	55	46		
950		49	44	219	19		55	41	223	14		53	38	222	13		50	46	213	20		48	40		
900	33·8	44	39	219	20	39·7	47	39	225	16	34·6	45	34	217	12	34·8	45	40	219	18	31·8	41	34		
850		36	31	213	17		39	28	225	18		38	32	217	13		38	31	225	19		34	27		
800	65·1	31	27	212	16	66·2	40	00	225	19	66·0	41	24	219	19	65·9	31	26	231	24	62·9	30	26		
750		28	21	213	17		33	09	228	20		36	04	217	23		34	03	224	33		22	18	For Winds	
700	99·8	21	13	218	25	101·4	27	-03	231	26	101·3	30	-02	219	28	100·9	29	-13	226	33	97·3	20	16		
650		17	-09	230	40		21	-09	232	31		24	-10	226	30		22	-13	224	36		14	08	See	
600	139·0	13	-14	230	93	140·9	13	-24	231	37	141·0	17	-17	227	35	140·5	16	-17	224	42	132·6	07	-02		
550		04	-26	232	93		07	-30	233	39		09	-24	232	37		10	-34	226	42		00	-09	Page 3.	
500	184·1	-03	-39	233	42	186·2	-04	-40	236	45	186·5	-01	-34	234	43	186·1	00	-36	228	51	181·0	-08	-18		
450		-15	-50	232	46		-13	-49	237	50		-09	-42	233	49		-10	-45	230	55		-14	-30		
400	237·0	-26	-68	235	58	239·3	-22	-55	237	62	240·1	-19	-48	232	54	239·6	-20	-55	229	58	233·9	-26	-43		
350		-36	-89	234	83		-24	-57	235	71		-31	-63	231	61		-31	-59	228	69		-39	-56		
300	301·9	-49		233	97	309·9	-49		234	68	305·7	-46		232	75	306·1	-45		227	17	298·3	-48			
250		-62		235	95		-66		237	76		-62		236	82		-62		227	87		-39			
200	389·0	-49		235	58	290·6	-62		234	61	391·9	-68		234	71	391·3	-66		226	87	389·0	-38			
170		-49		229	57							-60		237	59		-58		228	57	(157	-40			
150		-60		234	32							-56		235	50		-57		228	55	mb)				
130		-46		243	31							-54		228	39		-54								
110		-45										-55		218	31		-55								
100	(104	-48									590·8	-56		230	30	540·3	-54								
90	mb)											-52		219	27		-52								
80												-52		213	23		-55								
70												-53		213	12		-55								
60												-60		234	09		-55								
												-51				(050)	-54								
	Inversion 1016 mb 56° - 1000 mb 57°					Inversion 830 mb 39° - 815 mb 42° Isothermal 855 - 830 mb 39° 572 - 559 .. 08°					Inversion 821 mb 34° - 800 mb 41°					1049 mb 51					Inversion 732 mb 19° - 710 mb 21° Isothermal 490 - 472 mb -10°				
Tropopause	I 240 mb -65° 35,000'					II 242 mb -69° 35,100					I 210 mb -71° 38,300					I 211 mb -70° 38,000'					I 303 mb -50° 29,600'				

21h G.M.T.

Station	Pressure: Time	M.S.L.	Surf	Freezing
LERWICK	21h	1013·2 mb	1003·2 mb	828 mb
STORNOWAY	21h	1012·2 mb	1010·6 mb	890 mb
LEUCHARS	21h	1013·9 mb	1012·6 mb	809 mb
ALDERGROVE	21h	1010·1 mb	1000·5 mb	820 mb
LIVERPOOL	21h	1015·3 mb	1013·3 mb	804 mb
DOWNHAM MARKET	21h	1017·5 mb	1013·1 mb	728 mb
LARKHILL	21h	1018·2 mb	1002·2 mb	729 mb
CAMBORNE	21h	1007 mb		770 mb
VALENTIA		G.M.T.	mb	mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	51	45	210	09	00·4	51	47	045	05	00·2	55	45	220	08	02·6	52	49	170	15
1000	03·5	51	45			03·3	49	45			03·6	54	44	199	21	02·7				
950		45	41	209	13		46	41	109	05		50	40	207	22		48	43	189	26
900	32·0	41	37	207	15	31·8	40	32	159	08	32·9	45	33	203	22	31·9	43	35	198	24
850		35	31	215	15		33	28	179	12		38	25	196	18		36	30	200	23
800	63·1	30	26	223	16	62·9	29	15	193	15	63·7	31	21	190	18	62·6	30	27	187	25
750		26	19	231	18		24	10	197	14		26	19	192	20		24	23	183	32
700	97·7	18	11	230	19	97·3	15	06	198	11	98·3	20	06	199	22	97·1	18	16	184	32
650		10	00	228	24		11	05	215	21		10	00	198	27		11	05	182	34
600	136·9	04	-16	229	28	135·9	04	-02	205	26	137·2	07	-07	198	29	135·9	05	00	186	39
550		-04	-24	230	30		-04	-11	197	39		04	-18	205	28		-06	-08	186	46
500	180·7	-13	-30	232	36	180·1	-15	-22	193	36	182·2	-06	-28	207	30	180·3	-11	-16	187	46
450		-22	-35	236	43		-26	-34	205	46		-17	-31	203	36		-21	-29	192	55
400	222·7	-34	-42	243	50	231·7	-37	-46	214	48	234·8	-30	-42	204	36	232·4	-35	-43	195	63
350		-99		247	51		-50		213	54		-44		214	40		-99		197	70
300	256·6	-63		245	59	294·5	-61		220	42	298·6	-58		219	50	295·6	-57		202	63
250		-52		239	31		-51		206	29		-53		217	48		-50		210	90
200	283·6	-46		227	21	283·0	-46		216	20	286·5	-48		234	35	289·2	-95		212	30
170		-85		229	15		-44		212	15		-46		223	30		-46		211	28
150		-98		227	21		-45					-47		213	25		-98			
130		-95		225	13							-45		220	28		-50			
110		-95		219	11							-95		215	14					
100	537·2	-96		226	11						539·5	-97		235	16					
90		-97		228	09							-99		247	06					
80		-99										-50								
70	(76	-99																		
60	mb)																			
						Isothermal 970 - 956 mb 47° 800 - 782 .. 29°										Inversion 593 mb -7° 533 mb -6° Isothermal 1001 - 986 mb 52°				
Tropopause	I 286 mb -64° 30,600'					I 305 mb -63° 29,200'					II 292 mb -60° 30,500'					I 304 mb -68° 29,300'				

Pressure mb	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	59	43	210	12	01·2	62	48	240	02	04·4	52	46	230	19	02·9	55	53	180	07					
1000	04·2	59	45	210	18	04·9	61	42			05·0	53	47			04·8	54	52	213	27					
950		52	43	210	17		57	42	242	06		50	32	226	16		49	46	220	29					
900	33·1	45	36	207	13	33·9	50	39	214	08	33·7	47	21	231	20	33·5	45	37	223	30					
850		39	28	207	24		43	36	193	11		43	13	228	24		39	29	220	28					
800	64·5	31	21	207	26	65·7	35	30	186	20	65·3	39	04	218	25	64·9	33	24	227	27					
750		20	15	211	26		35	-08	204	26		36	01	213	28		31	07	227	27					
700	99·2	24	07	216	28	100·7	29	-08	212	27	100·5	29	-04	211	34	99·9	27	-04	222	37					
650		18	-03	213	36		21	-16	214	30		22	-12	215	38		21	-16	225	46					
600	138·5	10	-11	215	43	140·3	13	-26	218	33	140·1	17	-19	219	38	139·4	15	-22	226	46					
550		02	-18	217	47		06	-36	219	38		06	-28	217	44		08	-30	229	48					
500	183·3	-06	-29	219	48	185·6	-03	-43	222	41	185·5	-02	-35	221	47	184·8	-03	-41	228	52					
450		-15	-38	221	51		-13	-53	220	45		-12	-95	220	49		-14	-52	226	59					
400	236·1	-27	-49	222	54	238·5	-24	-57	226	54	238·7	-25	-58	225	60	237·8	-26	-58	229	79					
350		-40	-60	219	63		-34		229	65		-37	-59	229	76		-47	-60	226	76					
300	300·5	-51		220	90	303·6	-98		227	75	303·4	-50		225	91	302·5	-50		250	22					
250		-61		221	83		-65		227	84		-65		225	58		-59		219	58					
200	287·8	-52		223	60	289·6	-63		234	76	289·5	-60		231	60	289·8	-53		226	57					
170		-51		228	95		-60		226	50		-56		225	50		-53								
150		-51		231	41		-59		226	42		-57		228	41		-53								
130		-52		221	33		-57		226	41		-57		225	39		-53								
110		-52		221	36						(123	-58					-55								
100	538·6	-52		233	33						mb)					330·9	-56								
90		-51		231	22												-55								
80		-51		225	21																				
70	(71	-51																							
60	mb)																								
	Inversion 746 mb 22° - 734 mb 26° Isothermal 1013 - 1000 mb 59°					Inversion 786 mb 33° - 772 mb 37°					Inversion 1002 mb 52° - 994 mb 55° Isothermal 950 - 929 mb 50°														
Tropopause	I 248 mb -61° 34,100'					I 219 mb -71° 57,000'					I 240 mb -68° 38,200'					I 250 mb -59° 34,200'									

HMSO Press, MO, Dunstable

No. 1767 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Sunday 17th June, 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

LERWICK

Pressure — Time 03h. G.M.T.; M.S.L. 1012·3 mb; Surf 1002·3 mb; Freezing 808 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	48	48	200	02
1000	03·3	48	48		
950		46	41	197	13
900	31·8	42	33	198	19
850		37	28	199	22
800	68·1	31	25	201	21
750		24	17	206	19
700	97·6	18	10	213	19
650		12	-03	221	22
600	136·4	05	-05	222	24
550		-04	-13	217	24
500	180·8	-11	-20	221	27
450		-22	-30	222	31
400	233·0	-32	-40	221	36
350		-47		216	40
300	296·2	-62		220	44
250		-54		221	34
200	383·7	-47		218	23
170		-46		219	19
150		-46		218	18
130		-48		217	15
110		-46		199	10
100	536·5	-47		170	06
90		-47		193	06
80		-48		206	06
70	(072 mb)	-52			
60					

Isothermal 980 -950 mb. 46°

Tropopause: I 285 mb. -67° 30,700'

STORNOWAY

Pressure — Time 03h. G.M.T.; M.S.L. 1008·2 mb; Surf 1006·6 mb; Freezing 820 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	50	47	070	08
1000	02·2	50	46		
950		46	41	110	21
900	30·7	40	34	135	22
850		34	30	139	23
800	61·8	30	26	139	23
750		26	20	140	21
700	96·4	19	14	143	20
650		12	06	155	20
600	135·3	05	-04	160	16
550		-02	-12	172	18
500	179·7	-11	-22	174	20
450		-22	-34	164	23
400	231·7	-35	-48	159	27
350		-50		159	30
300	294·5	-63		171	45
250		-55		192	19
200	382·3	-48		200	16
170		-48		200	19
150		-48			

Isothermal 1007 -987 mb. 50° 844 - 827 mb. 33°

Tropopause: I 293 mb. -64° 30,000'

LEUCHARS

Pressure — Time 03h. G.M.T.; M.S.L. 1011·0 mb; Surf 1010·2 mb; Freezing 838 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	52	47	Calm	
1000	03·0	51	46	196	21
950		46	42	202	22
900	31·5	41	35	203	24
850		34	31	194	30
800	62·6	30	27	188	30
750		22	18	183	32
700	97·0	17	16	189	31
650		11	10	192	30
600	135·6	04	01	195	34
550		-04	-20	194	43
500	179·9	-12	-23	192	50
450		-21	-36	191	53
400	281·9	-35	-44	192	57
350		-49		194	59
300	295·1	-58		200	63
250		-53		202	47
200	382·8	-51		219	37
170		-49		211	30
150		-51		224	27
130		-51		233	20
110		-50		206	15
100	534·1	-50		196	18
90		-52		171	07
80		-56			

Tropopause: II 305 mb. -58° 29,200'

ALDERGROVE

Pressure — Time 02h. G.M.T.; M.S.L. 1007·6 mb; Surf 997·9 mb; Freezing 843 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	47	44	180	14
1000	02·1				
950		45	41	206	33
900	30·5	39	32	204	30
850		33	29	197	27
800	61·5	26	24	197	29
750		19	14	196	35
700	95·6	13	07	195	36
650		06	00	193	36
600	133·9	-01	-08	195	33
550		-10	-20	196	31
500	177·6	-21	-35	195	30
450		-32	-46	198	33
400	228·4	-44		197	52
350		-48		203	49
300	292·0	-48		207	45
250		-44		220	33
200	381·7	-47		220	33
170		-47		216	21
150		-48		224	13
130		-51			
110		-51			
100	533·4	-51			

Inversion 998 mb. 47° -979 mb. 48°

Tropopause: I 387 mb. -46° 23,600'

LIVERPOOL

Pressure — Time 03h. G.M.T.; M.S.L. 1012·6 mb; Surf 1010·6 mb; Freezing 810 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	53	47	180	15
1000	03·4	54	47	183	21
950		49	41	201	25
900	32·1	43	35	207	27
850		37	30	207	24
800	63·4	31	26	206	29
750		24	19	207	32
700	98·0	19	14	214	33
650		12	07	216	36
600	136·8	05	00	211	47
550		01	-13	210	58
500	181·4	-09	-26	209	63
450		-21	-36	209	68
400	233·6	-31	-52	213	69
350		-43		218	80
300	297·5	-56		219	70
250		-56		218	70
200	384·9	-51		224	47
170		-52		224	38
150		-54		220	36
(135 mb)		-54			

Inversion 1011 mb. 53° -1000 mb. 54° 575 mb. 00° -556 mb. 02°

Tropopause: I 265 mb. -64° 32,400'

DOWNHAM MARKET

Pressure — Time 03h. G.M.T.; M.S.L. 1016·1 mb; Surf 1011·7 mb; Freezing 777 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	49	44	200	08
1000	04·3	50	43		
950		49	42	209	19
900	33·0	45	23	201	21
850		40	17	193	20
800	64·3	34	04	203	21
750		30	-04	211	28
700	99·2	25	-07	212	26
650		19	-12	210	39
600	138·6	13	-21	215	42
550		04	-30	220	45
500	183·7	-06	-36	218	48
450		-16	-45	221	57
400	236·3	-29	-56	220	60
350		-38	-58	228	87
300	300·9	-49		225	86
250		-65		227	111
200	387·1	-61		227	69
170		-59		225	50
150		-61		222	53
130		-61		236	39
110		-57		220	24
100	535·1	-60		221	17
90		-62		223	10
80		-60			
70		-61			
60		-62			
		-64			

Inversion 1012 mb. 49° -988 mb. 51° Isothermal 750 -729 mb. 30°

Tropopause: I 232 mb. -70° 35,600'

LARKHILL

Pressure — Time 03h. G.M.T.; M.S.L. 1017·1 mb; Surf 1001·0 mb; Freezing 785 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	48	48	240	07
1000	04·6				
950		48	44	214	20
900	33·2	44	33	228	18
850		38	26	230	20
800	64·6	33	16	216	32
750		30	03	216	35
700	99·4	25	-05	221	37
650		21	-09	220	40
600	138·8	14	-22	228	44
550		06	-30	228	45
500	184·0	-04	-38	225	46
450		-15	-48	225	57
400	236·9	-27	-59	225	70
350		-35	-59	225	91
300	301·9	-46		222	109
250		-61		226	111
200	388·7	-58		225	69
170		-57		223	56
150		-57		225	48
130		-57		228	42
110		-57		236	27
100	537·7	-58		226	24
90		-59		211	21
80		-58		198	18
70		-60		196	12
60	(066 mb)	-61			

Inversion 1001 mb. 48° -966 mb. 49° Isothermal 805 - 794 mb. 33°

Tropopause: II 239 mb. -65° 36,000'

CAMBORNE

Pressure — Time 03h. G.M.T.; M.S.L. 1015·6 mb; Surf 1005·0 mb; Freezing 800 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	50	50	203	08
1000	04·2	51	51	226	27
950		48	47	232	29
900	32·8	41	38	243	28
850		37	26	241	30
800	64·1	32	15	239	33
750		28	03	237	33
700	98·8	23	-17	233	39
650		19	-15	236	48
600	138·2	13	-06	232	48
550		02	-16	228	57
500	183·2	-04	-27	231	64
450		-15	-40	233	69
400	236·0	-28	-50	233	60
350		-42		233	68
300	300·1	-52		231	81
250		-56		224	81
200	387·8	-53		230	68
170		-53		230	50
150		-54		227	42
130		-55		231	44
110		-57		231	45
100	537·6	-58			

Inversion 1005 mb. 50° -982 mb. 52° 663 mb. 18° -634 mb. 20°

Tropopause: I 264 mb. -58° 32,700'

VALENTIA

Pressure — Time 03h. G.M.T.; M.S.L. 1009·2 mb; Surf 1007 mb; Freezing mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	50	47		
1000	02·5	50	47		
950		47	44		
900	31·0	40	37		
850		33	29		
800	62·0	28	24		
750		22	19		
700	96·3	16	09		
650		10	03		
600	134·9	03	-05		
550		-06	-16		
500	179·9	-16	-26		
450		-27	-39		
400	230·5	-39	-50		
350		-47			
300	294·2	-44			
250		-41			
200	384·2	-45			
170		-45			
150		-48			
130		-49			
110		-50			
100	536·6	-50			
90		-50			
80					
70					
60					

Isothermal Surf. - 1000 mb. 50°

LERWICK

Pressure — Time 09h. G.M.T.; M.S.L. 1010·3 mb; Surf 1000·3 mb; Freezing 812 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	51	50	200	07
1000	02·8	51	50		
950		48	45	174	15
900	31·4	43	35	175	18
850		37	31	175	23
800	62·7	30	23	172	23
750		23	18	173	22
700	97·1	15	10	181	25
650		06	02	180	28
600	135·5	05	-13	178	27
550		-02	-28	185	28
500	179·9	-11	-23	186	31
450		-23	-31	186	32
400	231·8	-36	-43	184	32
350		-50		186	33
300	294·7	-61		200	42
250		-50		202	30
200	382·9	-45		211	19
170		-45		202	18
150		-46		210	16
130		-44		201	09
110		-45		183	08
100	536·2	-42		180	06
90		-44		164	06
80		-47		181	07
70	(074 mb)	-47			
60					

Inversion 950 mb. 48° -945 mb. 49° Isothermal 968 -950 mb. 48° 642 - 600 mb. 05°

Tropopause: I 296 mb. -62° 29,700'

STORNOWAY

Pressure — Time 09h. G.M.T.; M.S.L. 1005·7 mb; Surf 1004·1 mb; Freezing 808 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	50	47	180	05
1000	01·5	50	47		
950		45	40	200	10
900	30·0	40	35	201	13
850		35	31	201	14
800	61·1	31	27	182	10
750		26	18	157	14
700	95·7	21	14	135	18
650		05	09	121	19
600	134·7	08	-01	111	19
550		-01	-13	104	22
500	179·3	-11	-24	107	22
450		-23	-36	105	22
400	231·2	-36	-48	087	34
350		-50		095	27
300	294·6	-45		130	16
250		-38		180	16
200	385·4	-38		195	15
170		-40		210	15
150		-39		194	13
130		-37		189	11
110		-36		175	12
100		-36		176	13
90		-36			

Tropopause: I 345 mb. -52° 26,200'

LEUCHARS

Pressure — Time 09h. G.M.T.; M.S.L. 1007·5 mb; Surf 1006·7 mb; Freezing 812 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	54	49	180	10
1000	02·0	53	48	192	15
950		46	40	192	15
900	30·6	42	35	192	18
850		37	30	202	16
800	61·8	30	26	198	18
750		23	21	194	23
700	96·3	18	11	185	32
650		10	04	183	30
600	134·9	01	-05	192	35
550		-06	-13	188	41
500	179·0	-15	-20	181	39
450		-26	-31	186	47
400	230·6	-37	-48	183	59
350		-41		184	60
300	294·7	-45		187	51
250		-44		203	38
200	384·9	-40		219	30
170		-43		219	24
150		-45		220	22
130		-44		195	18
110		-45		190	22
100	538·7	-44		194	12
90		-46		191	13
80		-48		182	11
70		-50			

Inversion 374 mb. -40° -369 mb. -39°

Tropopause: I 320 mb. -47° 28,000'

ALDERGROVE

Pressure — Time 09h. G.M.T.; M.S.L. 1006·0 mb; Surf 995·4 mb; Freezing 846 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	50	44	240	12
1000	01·3				
950		43	39	245	19
900	29·7	37	35	247	21
850		33	32	250	21
800	60·7	27	27	252	17
750		22	18	258	18
700	95·0	17	11	258	18
650		09	02	257	17
600	133·5	01	-08	256	17
550		-08	-21	253	19
500	177·4	-18	-31	255	19
450		-30	-41	251	19
400	228·4	-44		240	18
350		-42		234	22
300	292·4	-41		225	27
250		-40		226	27
200	383·1	-43		218	31
170		-43		215	32
150		-43		217	22
130		-47		212	20
110		-46		196	17
100	536·7	-45		209	16
90		-42		190	12
80		-44		195	11

Tropopause: II 400 mb. -44° 22,800'

LIVERPOOL

Pressure — Time 09h. G.M.T.; M.S.L. 1009·8 mb; Surf 1007·8 mb; Freezing 822 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	58	46	200	20
1000	02·7	57	45		
950		50	42	208	25
900	31·4	42	37	220	28
850		35	28	226	36
800	62·6	29	24	231	37
750		24	15	252	36
700	97·0	18	05	231	38
650		11	00	229	43
600	138·7	03	-15	223	42
550		-05	-26	218	47
500	179·9	-14	-33	214	51
450		-22	-43	219	85
400	231·8	-33	-55	218	95
350		-41		211	98
300	295·8	-50		219	93
250		-48		221	60
200	384·9	-46		219	47
170		-49		217	40
150		-49		219	30
130		-49		219	26
110		-46		219	30
100	536·7	-45		219	29
90		-48			
80		-52			

Inversion 300 mb. -50° -295 mb. -48° Isothermal 772 - 742 mb. 24° 688 - 674 mb. 16° Max wind:- 219° 108 kts 325 mb. 27,800'

Tropopause: I 300 mb. -50° 29,500' I 260 mb. -50° 32,700'

DOWNHAM MARKET

Pressure — Time 09h. G.M.T.; M.S.L. 1014·5 mb; Surf 1010·1 mb; Freezing 772 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	59	47	230	12
1000	04·0	56	45	226	24
950		50	42	227	24
900	32·7	45	35	229	26
850		39	29	227	30
800	64·1	33	18	223	35
750		30	02	221	39
700	99·0	26	-14	218	43
650		23	-08	216	44
600	138·6	16	-12	214	49
550		08	-22	218	54
500	184·0	-01	-35	221	52
450		-12	-46	224	53
400	237·2	-26	-56	225	60
350		-36	-66	223	69
300	302·1	-45		224	103
250		-56		222	114
200	389·7	-57		223	78
170		-53		223	60
150		-51		225	47
130		-55		218	38
110		-54		215	37
100	539·7	-53			

Tropopause: II 243 mb. -58° 34,700'

LARKHILL

Pressure — Time 09h. G.M.T.; M.S.L. 1015·4 mb; Surf 999·6 mb; Freezing 792 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	57	46	250	13
1000	04·3				
950		47	39	245	20
900	32·9	42	31	241	25
850		36	22	236	28
800	64·2	33	11	227	32
750		27	-04	228	35
700	98·8	22	-09	227	40
650		16	-09	228	48
600	138·0	13	-26	230	55
550		03	-29	230	55
500	183·0	-08	-38	230	57
450		-20	-47	227	62
400	235·3	-32	-57	228	69
350		-44		226	82
300	299·3	-50		226	123
250		-61		226	99
200	386·3	-57		220	71
170		-51		238	48
150		-50		233	40
130		-55		213	33
110		-55		217	35
100	536·2	-54		226	26
(093 mb)		-53			

Inversion 327 mb. -47° -315 mb. -46° Isothermal 693 - 680 mb. 21°

Tropopause: I 250 mb. -61° 33,800'

CAMBORNE

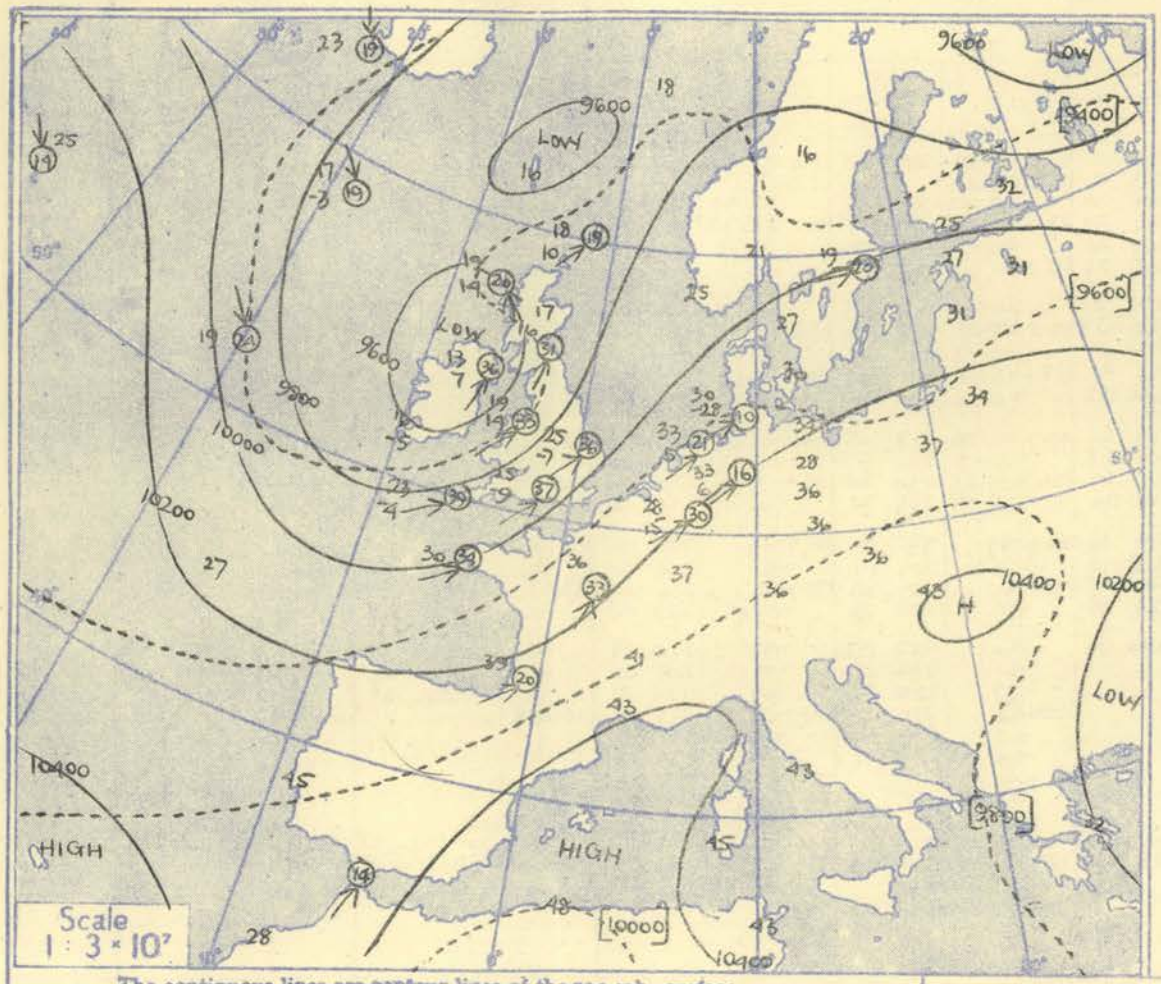
Pressure — Time 09h. G.M.T.; M.S.L. 1015·6 mb; Surf 1005 mb; Freezing 810 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	56	49	230	14
1000	04·3	55	48		
950		48	43	242	25
900	33·0	41	38	248	27
850		37	28	251	30
800	64·3	32	22	253	30
750		27	15	256	28
700	99·0	23	05	253	30
650		17	-09	253	36
600	138·2	11	-18	243	37
550		05	-19	243	60
500	183·4	-04	-26	237	64
450		-14	-31	237	70
400	236·4	-25	-42	234	75
350		-38	-55	232	76
300	300·9	-51		236	80
250		-57		230	86
200	388·7	-52			
170		-50			
150		-50			
130		-53			
110		-52			
100	539·8	-53			
90		-53			
80		-51			
70		-51			
60	(063 mb)	-51			

Tropopause: II 269 mb. -56° 32,500'

Sunday 17th June 1951.

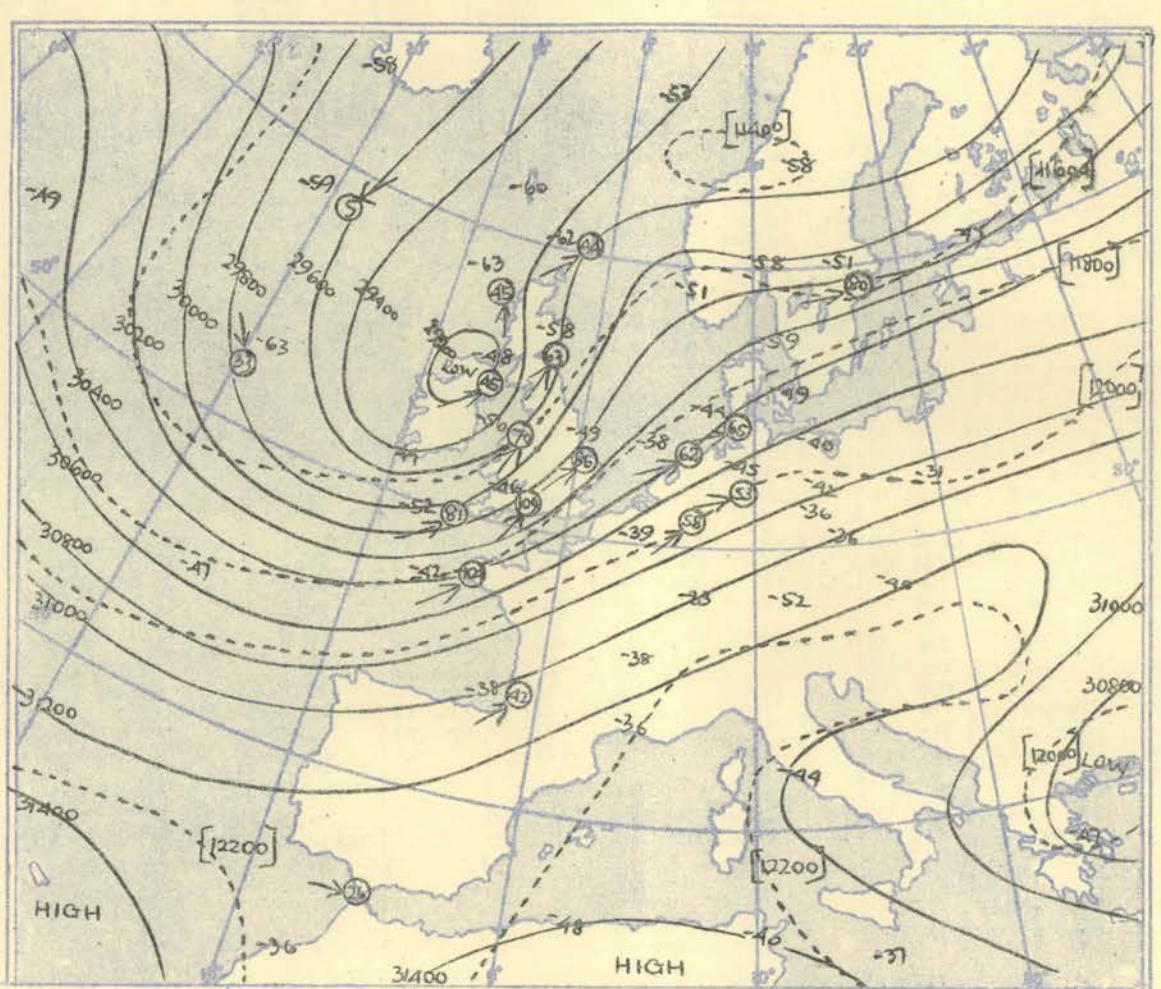
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.



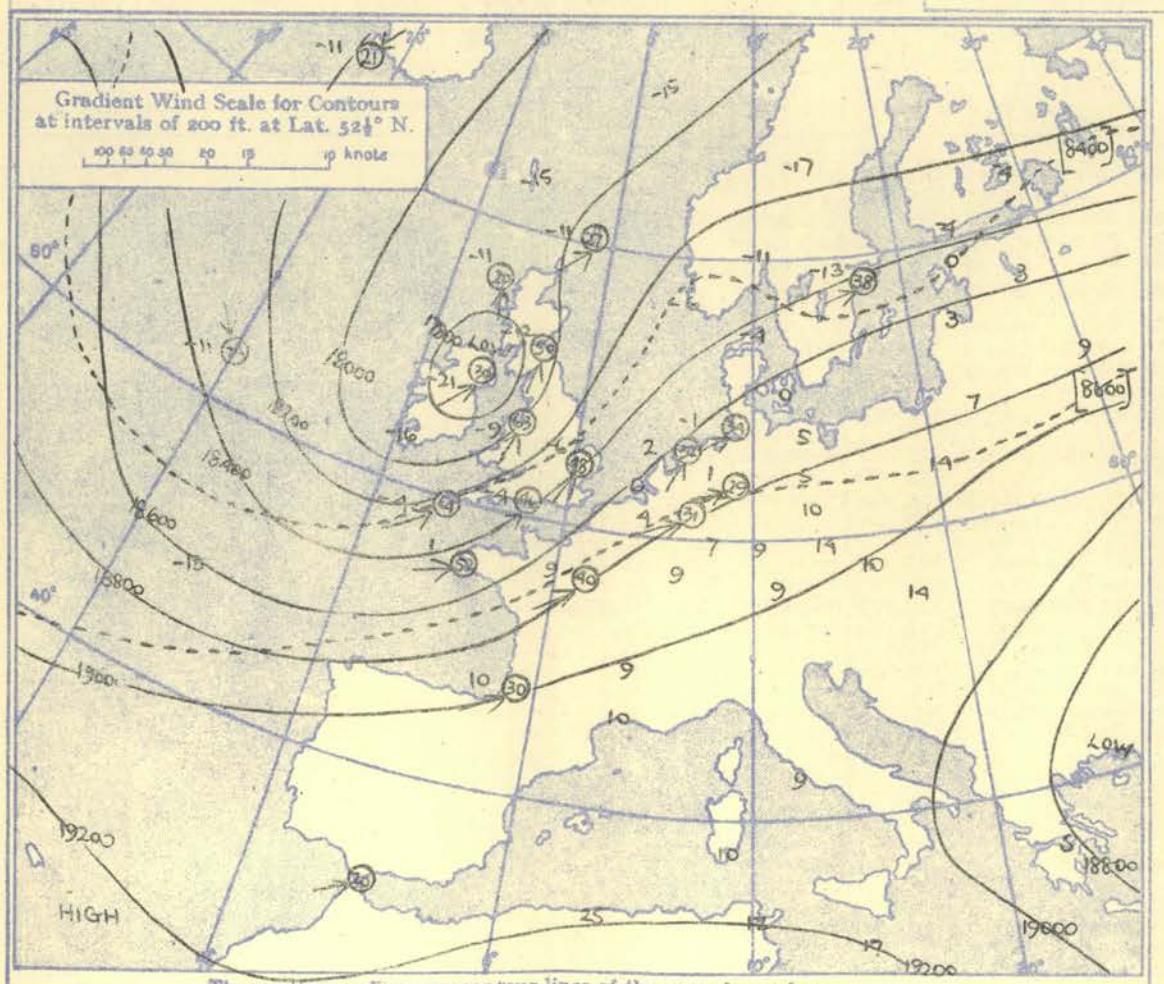
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

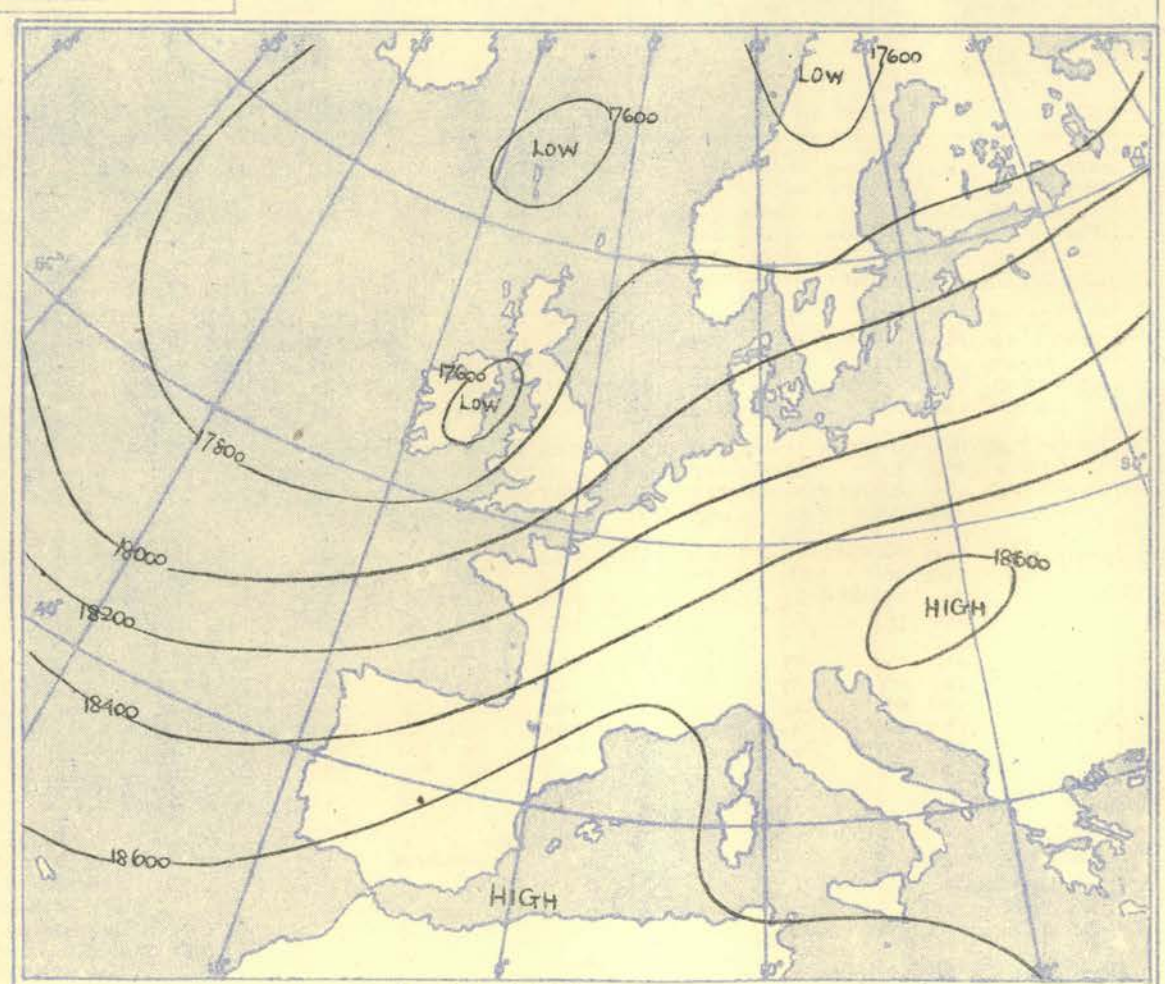
100 60 40 30 20 15 10 knots



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500-1000mb.

METEOROLOGICAL OFFICE 2 - JUL 1951

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

62·12 N. 02·12 W. 15h.

Pressure	Time	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	Time M.S.L. / Surf / Freezing Pressure
	M.S.L.	1012										
	Surf	1010·5										
	Freezing	808										

Pressure mb	Height ft./100	°F.	Dew °F.	Height ft./100	°F.	Dew °F.	Height ft./100	°F.	Dew °F.	Height ft./100	°F.	Dew °F.	Height ft./100	°F.	Dew °F.	Height ft./100	°F.	Dew °F.	Height ft./100	°F.	Dew °F.	Pressure mb
Surf	00·4																					Surf
1000	03·3																					1000
950																						950
900	32·2	45	41																			900
850		38	34																			850
800	63·6	31	29																			800
750																						750
700	98·5	23	16																			700
650																						650
600	137·5	08																				600
550																						550
500	182·4	-08																				500
450																						450
400	235·1	-29																				400
350																						350
300	299·4	-51																				300
250																						250
200																						200
170																						170

Cloud.
3-4/8 Cu Sc
860-780mb.
Inversion
800mb 30°
779mb. 31°

DIRECTION (degrees from N) and VELOCITY (knots) of UPPER WINDS at heights above M.S.L.

Place	Lympne		Ronaldsway		Aldergrove																Place
Time	15h.		15h.		21h.																Time
Type					Pilar																Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Surf.	230	15	240	19	270	10															Surf.
1,000	230	13	230	24	277	14															1,000
2,000	225	17	240	25	280	20															2,000
3,000	240	26	240	15	281	23															3,000
4,000	240	22	240	25	280	28															4,000
5,000	240	32	240	30	282	28															5,000
6,000	240	30	240	28	281	29															6,000
8,000					278	26															8,000
10,000					271	25															10,000
14,000					252	22															14,000
18,000					244	22															18,000
24,000					240	28															24,000
30,000					245	37															30,000
40,000					228	27															40,000
50,000					197	17															50,000

NEPHOSCOPE OBSERVATIONS

Place													Place
Time Type				None reported.									Time Type
Dir. Vel.													Dir. Vel.

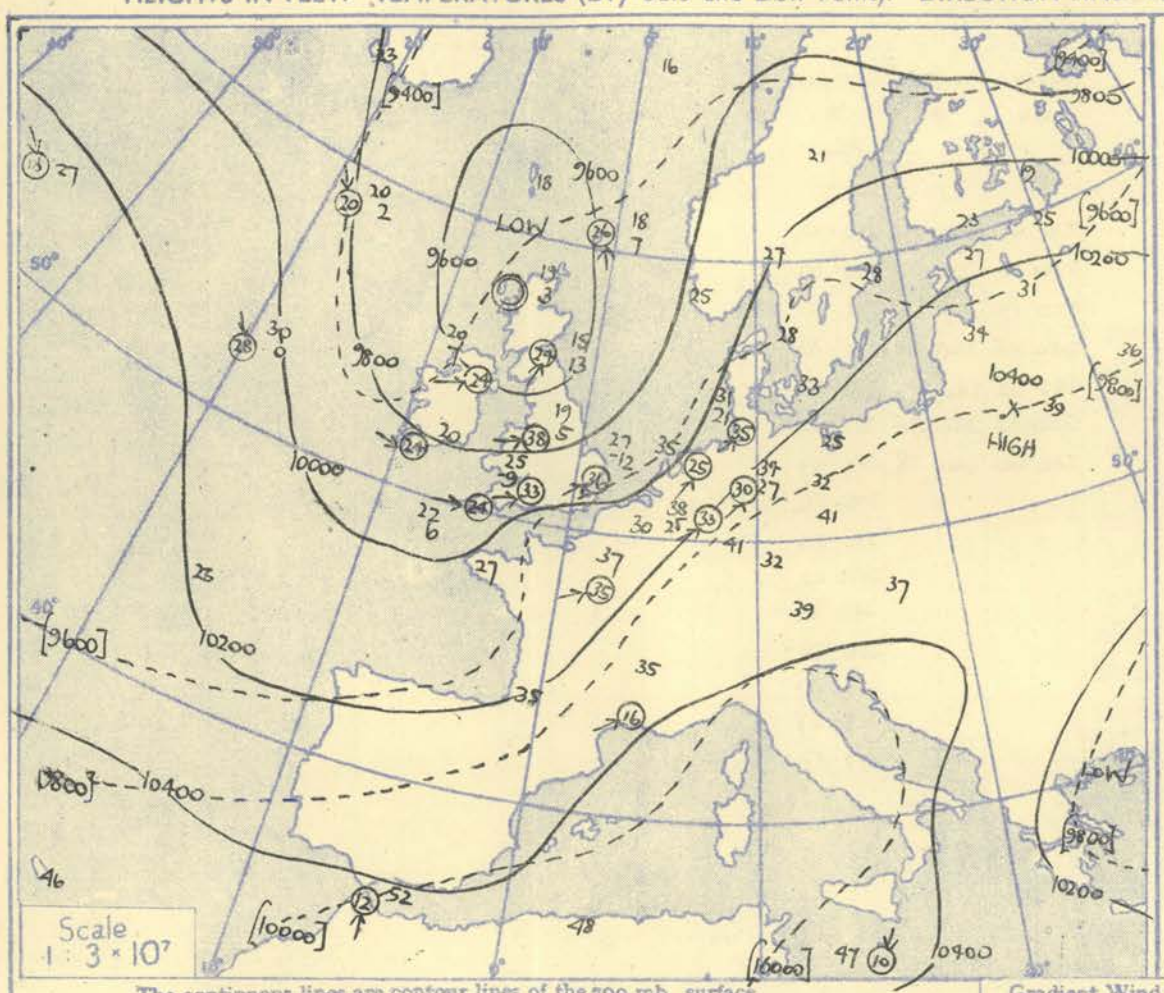
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	WEATHER RECORDER	WEATHER RECORDER	WEATHER RECORDER	WEATHER RECORDER	WEATHER EXPLORER	WEATHER EXPLORER	WEATHER EXPLORER	WEATHER EXPLORER		Ship
Lat/Long	52·4N 20·2W	52·6 N 20·2W	52·5N 20·1W	52·4N 20·0W	58·9 N 19·1 W	58·8N 19·0W	58·7N 19·1W	59·0N 19·1W		Lat/Long
Time	03L G.M.T.	09L G.M.T.	15L G.M.T.	21L G.M.T.	03L G.M.T.	09L G.M.T.	15L G.M.T.	21L G.M.T.	G.M.T.	Time
M.S.L.	1018 mb	1020 mb	1021 mb	mb	1015 mb	1015 mb	1015 mb	1015 mb	mb	M.S.L.
Surf	1018 mb	1020 mb	1021 mb	mb	1015 mb	1015 mb	1015 mb	1015 mb	mb	Surf
Freezing	850 mb	855 mb	725 mb	mb	870 mb	830 - 870 mb	830 mb	825 mb	mb	Freezing

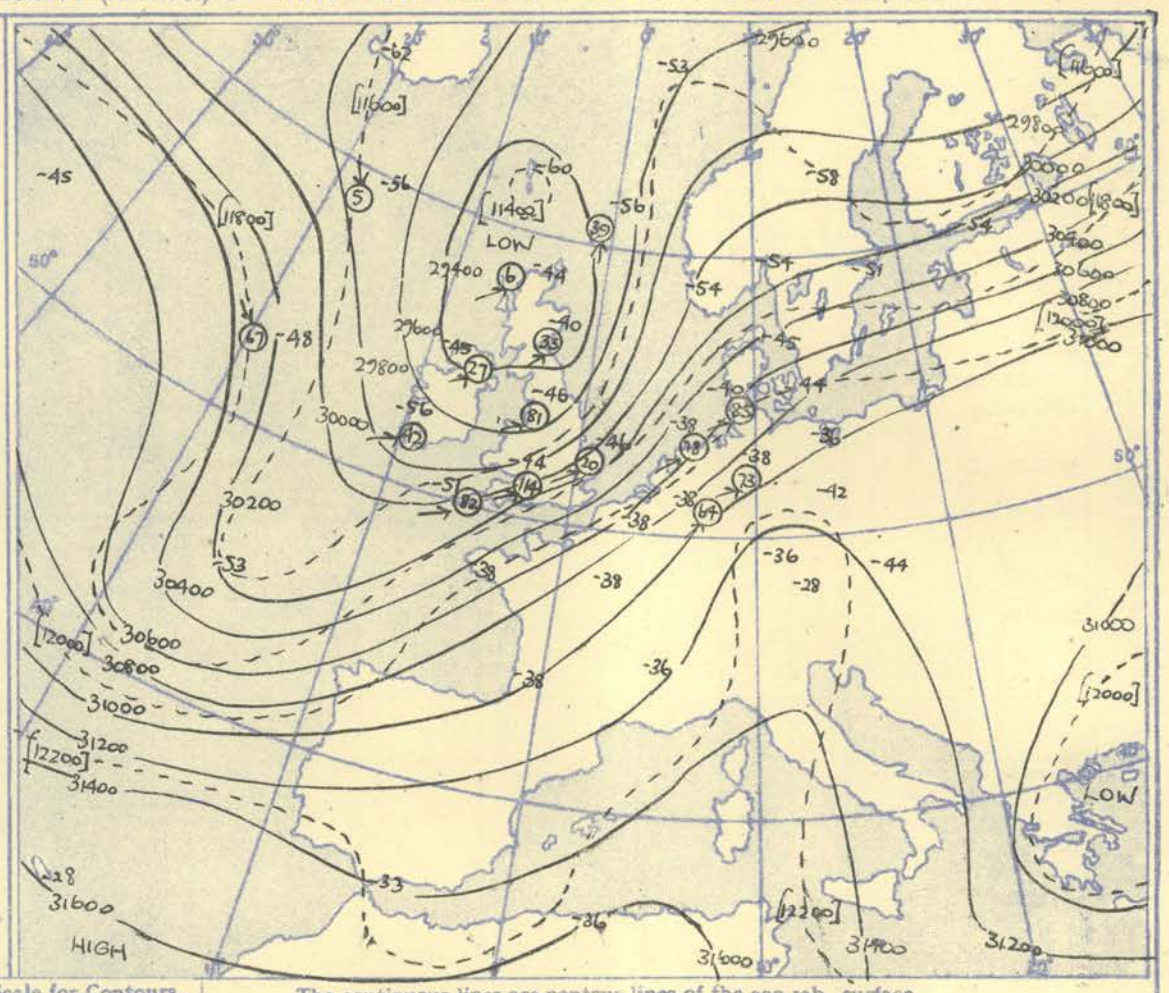
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf		53	46	320	20		53	45	325	21		53	48	310	18							47	43	010	06		50	41	340	14		50	42	310	12		51	44	310	18						Surf
1000	5·0	51	44	314	18	5·5	50	45	328	18	5·9	51	47	295	15						6·2	48	43	354	09	4·0	49	41	343	11	4·1	48	40	315	10	4·0	49	43	315	19						1000
950		45	39	318	20		43	39	329	19		46	42	296	16							42	38	320	13		43	37	345	12		42	33	317	12		46	29	322	20						950
900	33·4	38	31	319	26	33·9	37	34	331	28	34·4	41	40	297	17						32·5	36	32	322	15	32·4	37	33	346	14	32·5	41	26	323	15	32·5	41	24	325	20						900
850		32	27	320	29		32	29	333	32		37	36	297	19							29	27	330	17		33	24	004	18		35	22	323	16		35	17	325	20						850
800	64·4	28	24	320	26	64·9	28	21	329	30	65·7	36	23	297	23						63·4	25	20	330	20	63·4	30	07	017	18	63·7	27	15	324	15	63·6	28	13	325	23						800
750		24	12	323	27		26	05	317	28		34	02	299	27							21	08	330	18		25	01	014	20		22	11	330	17		21	06	325	19						750
700	98·8	19	09	324	24	99·5	20	00	326	33	100·8	30	00	210	28						97·6	17	-03	334	19	97·9	20	00	003	21	98·1	20	02	335	20	97·8	17	05	325	20						700
650		12	03	326	31		13	-11	333	33		22	01	314	30							12	-03	347	24		13	-03	359	23		14	-04	339	20		13	-03	324	20						650
600	137·6	05	-09	326	35	138·4	06	-19	336	34	140·4	14	00	345	35						136·4	05	-09	353	11	136·7	05	-11	360	24	136·9	04	-11	340	20	136·6	05	-10	323	18						600
550		-02	-24	326	36		-02	-23	335	41		07	-12	318	40							-02	-16	357	23		-03	-17	352	19		-04	-18	330	20		-03	-18	330	20						550
500	182·1	-11	-33	328	34	182·8	-13	-28	331	41	185·8	-01	-11	331	39	NOT AVAILABLE					180·8	-12	-28	254	18	181·1	-11	-26	344	12	181·3	-11	-27	330	17	181·0	-12	-29	335	20						500
450		-22	-41	330	32		-25	-39	327	43		-10	-16	328	46							-22	-39	341	05		-21	-31	357	08		-20	-37	330	06		-23	-40	327	13						450
400	234·2	-33	-50	328	35	234·6	-36	-56	325	43	239·2	-24	-30	321	47						232·8	-33	-47	341	01	233·2	-33	-42	359	08	233·6	-30	-44	343	10	232·8	-35	-52	320	05						400
350		-49		328	37		-49		325	50		-36	-41	327	52							-45		161	03		-46		359	06		-43		022	01		-48		160	08						350
300	297·2	-63		320	33	297·6	-61		325	54	304·1	-48		321	67						296·2	-59		029	05	296·6	-59		018	11	297·5	-56		330	05	296·1	-57		325	13						300
250		-59		321	36		-55		322	45		-62		325	61							-50		002	19		-55		004	17		-58		331	11		-59		326	21						250
200	383·8	-53		315	30	384·9	-51		313	26	389·5	-48		334	36						384·5	-46		015	17	384·6	-44		338	21	384·7	-50		333	17	383·4	-50		325	16						200
170		-53		315	21		-50		330	16		-48		318	22							-47		018	12		-47		343	17		-46		348	17		-50		322	12						170
150		-54		294	20		-51		343	14		-46		313	14							-46		352	12		-47		005	12		-46		347	12		-49		322	11						150
130		-55		321	14		-49		017	12		-44		320	13							-47		352	10		-45		040	12		-46		325	11		-47		320	02						130
110		-55		320	11		-47		070	06		-44		321	08							-45		172	02		-44		067	06		-46		335	10		-45		321	10						110
100	583·6	-54		322	05	536·6	-47		095	98	544·7	-40		CALM							531·4	-44		172	01	537·9	-44		006	06	538·6	-44		335	06	538·8	-45		348	03						100
90		-54		322	08		-49					-37										-46		CALM			-45		008	05		-44		155	04		-43		031	03						90
80																											-47		134	09		-44		155	03		-45		048	12						80
70																																-44		155	04		-47										70
60																																-44															60
	Isothermal 766 - 740 mb 24°					Inversion 817 mb 27° - 775 mb 29°					Inversion 825 mb 35° - 800 mb 36° Isothermal 800 - 770 mb 36°										Inversion 850 mb 29° - 844 mb 31°					Inversion 865 mb 31° - 850 mb 33° Isothermal 850 - 845 mb 33°					Inversion 950 mb 42° - 932 mb 44°					Inversion 962 mb 46° - 958 mb 47° Isothermal 690 - 665 mb -24°					
Tropopause	II 287 mb - 66° 30,700'					II 292 mb - 62° 30,400'					I 250 mb - 62° 34,300'										I 294 mb - 61° 30,100'					I 295 mb - 60° 30,100'					I 264 mb - 63° 32,900'					II 272 mb -61° 31,800'										Tropopause

Sunday 17th June. 1951.

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

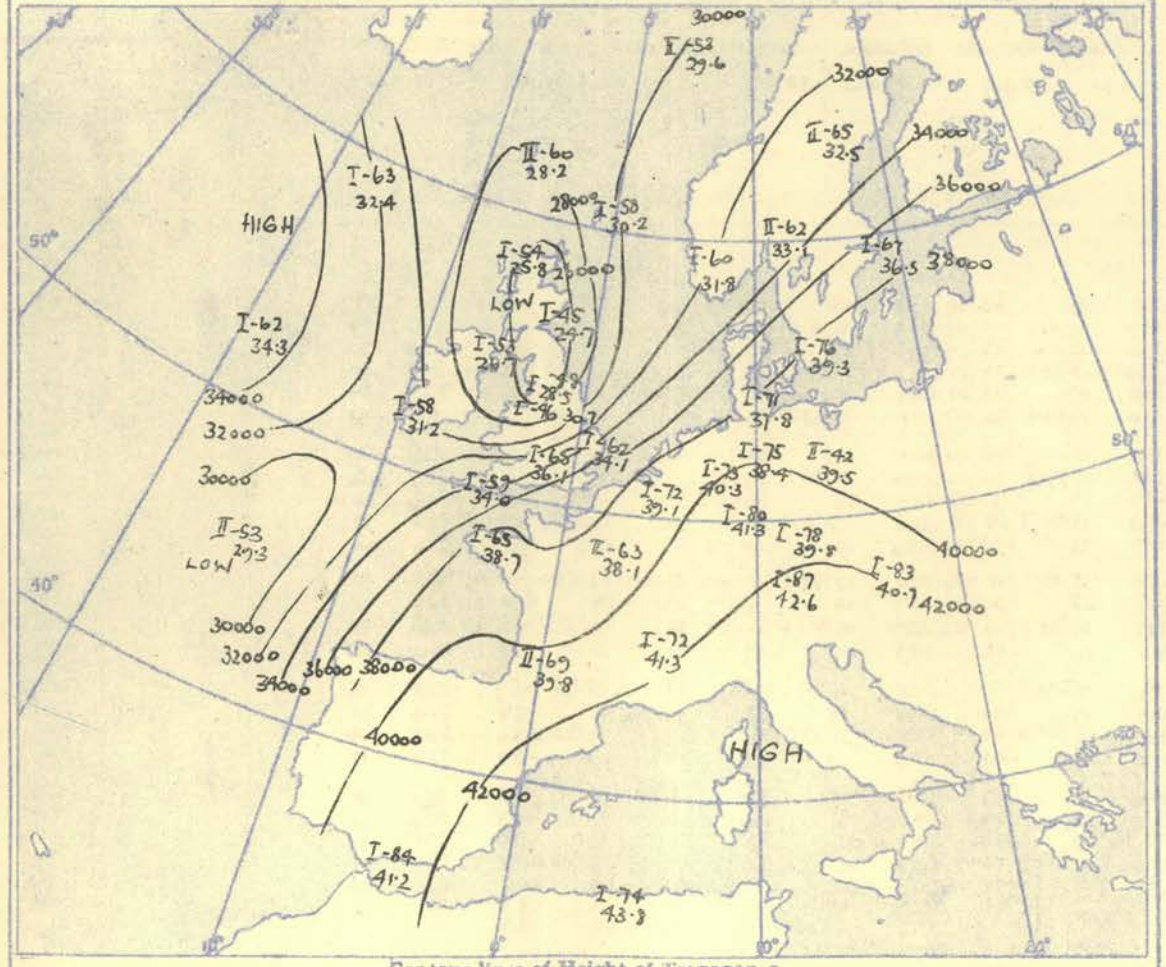


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N

100 80 60 40 30 20 15 10 knots

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

The cold trough off the western coasts of the British Isles moved eastwards to a position across Scotland and Ireland. A strong westsouthwest thermal gradient persisted across Northwest Europe.

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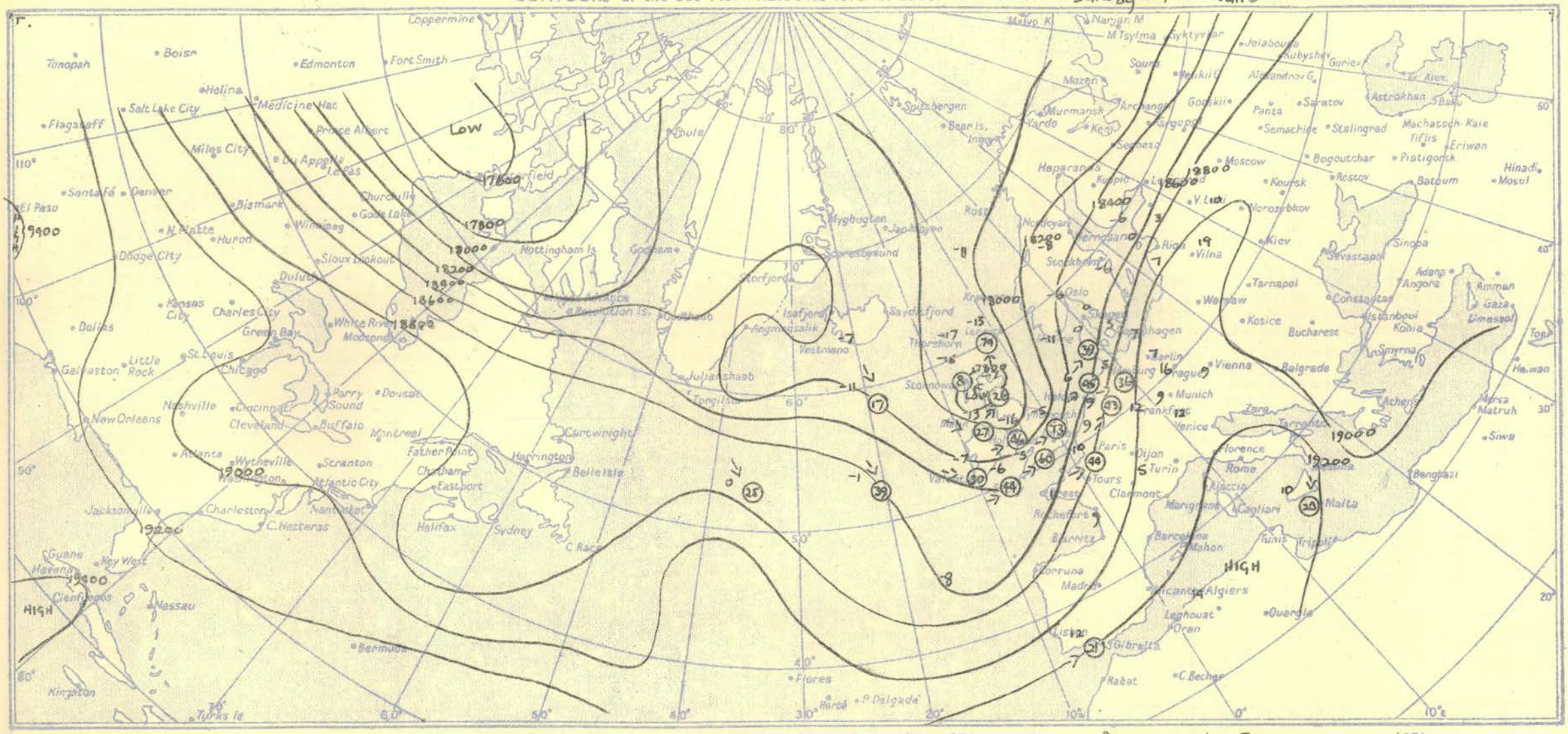
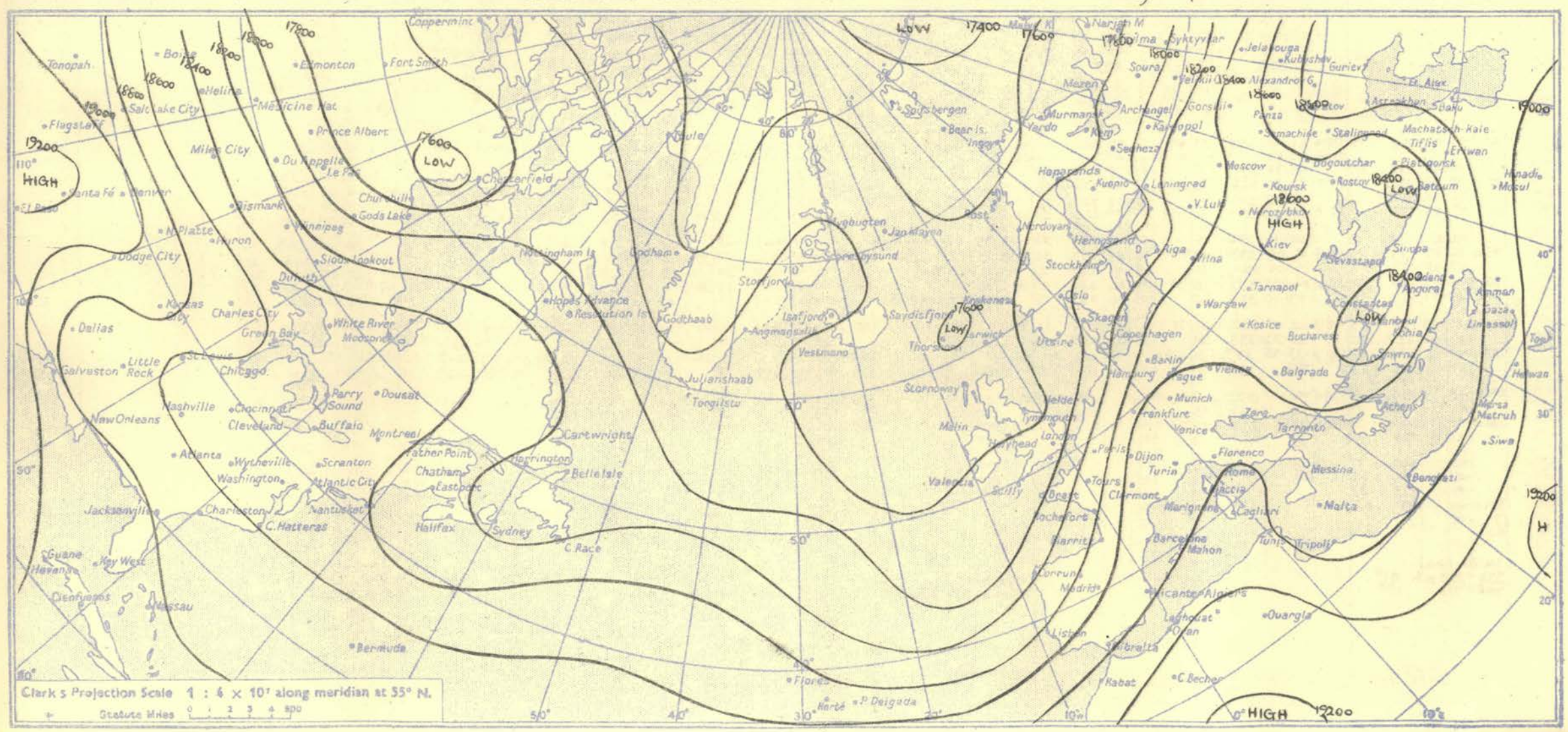
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Sunday 17th June 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Sunday 17th. June 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON Sunday 17 June 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.
M.S.L.	1007·8 mb	1009·9 mb	1005·4 mb	1006·5 mb	1009·6 mb	1013·1 mb	1014·4 mb	1017·1 mb	1016·5 mb
Surf	997·8 mb	1002·8 mb	1004·6 mb	996·9 mb	1007·6 mb	1008·8 mb	998·8 mb	1006·6 mb	1015 mb
Freezing	806 mb	818 mb	832 mb	828 mb	820 mb	788 mb	758 mb	800 mb	830 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	51	49	150	13	00·4	55	46	070	05	00·2	52	99	130	03	02·6	55	45	270	15	00·6	61	43	220	25	01·2	65	42	230	15	04·4	64	48	260	18	02·9	69	50	260	14	00·3	68	48	290	08	Surf
1000	02·1					01·2	59	46			01·5	61	95	215	18	01·7					22·7	60	43			03·7	64	42			04·0					04·7	67	48	255	24	04·9	55	45	285	10	1000
950		46	46	146	23		98	90	Calm			45	41	220	13		98	40	280	15		61	38	227	33		27	41	236	23		55	41	242	21		48	43	251	23		40	40	295	16	950
900	30·6	41	38	140	20	29·8	91	35	"		30·0	41	35	220	13	30·9	42	33	274	20	31·5	93	32	231	36	32·8	99	39	238	25	33·1	99	36	255	23	32·4	91	40	260	21	33·1	41	39	293	20	900
850		37	32	151	18		36	29	"			34	31	220	16		35	30	272	24		36	24	233	38		91	35	237	25		42	30	258	23		37	34	256	21		34	27	286	22	850
800	61·9	31	29	168	17	61·0	29	23	"		61·1	28	25	219	15	61·6	29	26	270	21	62·7	30	23	237	36	64·3	34	29	235	28	64·8	37	23	252	21	64·7	32	24	262	22	64·2	29	22	280	23	800
750		24	22	170	20		25	14	"			23	21	215	22		26	18	268	21		23	14	239	34		26	32	235	31		31	08	242	24		28	15	263	22		25	16	276	23	750
700	96·4	18	17	169	26	95·5	19	03	"		95·4	15	13	216	29	96·2	20	09	260	24	97·2	19	05	241	38	99·2	27	12	239	36	99·7	26	09	299	33	99·5	22	06	260	24	98·6	20	08	269	24	700
650		11	07	165	30		12	07	"			08	06	215	26		12	06	265	24		11	01	245	39		19	21	228	46		19	16	246	39		18	00	259	21		12	01	270	26	650
600	135·1	05	09	159	32	134·2	03	13	"		133·9	01	02	216	28	135·1	05	04	272	27	135·8	03	11	243	41	138·6	15	22	226	59	139·1	15	18	245	49	138·7	13	06	252	36	137·4	08	01	270	28	600
550		00	12	157	29		05	20	122	11		07	11	209	27		02	13	275	29		06	23	240	42		05	32	226	57		06	28	292	57		04	15	247	36		02	07	272	30	550
500	1793	13	23	164	34	178·4	15	32	112	08	177·9	17	20	222	26	179·5	13	25	280	27	179·9	16	36	244	46	183·8	05	37	226	73	184·3	05	31	238	60	183·7	06	23	242	44	182·3	07	17	270	30	500
450		21	28	167	38		24	42	078	07		27	31	225	21		25	38	290	27		27	47	241	39		16	48	226	75		16	41	235	60		17	33	240	54		18	28	261	30	450
400	231·3	39	43	168	39	230·2	36	50	028	16	229·3	39	46	220	21	231·4	36	49	297	30	231·3	41		240	48	236·6	28	56	225	80	237·2	26	51	229	78	236·3	28	49	239	55	234·8	20	41	259	33	400
350		46		168	39		53		029	15		44		217	24		51		302	24		49		231	74		34	57	225	110		33	58	228	100		40	55	233	66		41		252	35	350
300	299·7	56		168	39	293·7	44		209	06	293·3	40		213	33	294·8	45		253	31	295·1	46		231	81	301·6	46		225	120	302·6	44		225	114	300·7	51		237	82	298·7	56		247	42	300
250		49		185	29		38		201	09		38		222	34		41		240	31		47		235	63		62		221	113		68		224	113		59		293	80		54		243	39	250
200	383·5	42		197	24	384·6	39		185	15	384·3	41		211	33	385·5	40		228	53	384·5	48		226	53	388·9	55		228	82	389·7	59		224	78	388·1	53				387·1	44		244	31	200
170		42		203	17		40		207	15		42		213	30		41		228	30		50		222	39		62		231	42		63		235	51		52					47		240	27	170
150		42		205	19		39		206	17		42		217	27		42		228	27		51		229	39		54					50		231	47		51					49		242	27	150
130		43		217	16		38		204	13		45		216	29		44		217	24		54		238	31		55					51					51					47		231	22	130
110		42		206	13		39		195	15		44		217	19		44		222	28		53					55					54					51					46		230	18	110
100	507·7	41		202	07	540·0	39				538·5	42		187	11	539·7	42		235	20	535·3	52					53					52					51					46		225	14	100
90		93		198	06							43		199	11		40		216	09	(94 mb)	52					59					52					53					46		221	12	90
80		91		183	06							45		216	05		41		176	16							65					62					52					46		186	11	80
70		95		178	06							47		218	09		82		186	09							56					62					55					47		134	09	70
60												44					84		165	14												52					54					48		166	16	60
											(055 mb)	42					04		177	09						(052 mb)	51																		

Isothermal 790 - 711 mb 28°

Inversion 375 mb -46° - 330 mb -3°

Inversion 744 mb 25° - 728 mb 31°; 356 .. -38° - 350 .. -34°

Isothermal 660 - 647 mb 19°

Tropopause	I 289 mb -58° 30,200'	I 354 mb -59° 25,800'	I 369 mb -45° 29,700'	I 340 mb -53° 26,700'	I 375 mb -46° 29,600'; I 285 .. -48° 30,700'	I 250 mb -62° 34,100'	I 229 mb -65° 36,100'	I 250 mb -59° 34,000'	I 282 mb -68° 31,200'	Tropopause

21h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	G.M.T.
M.S.L.	1004·4 mb	1005·2 mb	1005·8 mb	1011·7 mb	1012·5 mb	1014·2 mb	1017·1 mb	1018·3 mb	mb
Surf	994·4 mb	1003·6 mb	1005·0 mb	1004·8 mb	1010·5 mb	1009·8 mb	1000·0 mb	1007·6 mb	mb
Freezing	837 mb	828 mb	892 mb	860 mb	839 mb	767 mb	767 mb	800 mb	mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	49	47	190	06	00·9	51	45	290	05	00·2	52	48	250	10	02·6	51	41	270	10	00·6	56	48	270	18	01·2	58	42	220	10	04·4	54	48	270	06	02·9	53	49	270	05						Surf
1000	01·2					01·9	50	43			01·6	51	47			03·0					03·4	59	46	272	24	03·9	51	41									05·0	52	48								1000
950		44	44	193	09		45	38	271	11		45	39	259	28		46	38				48	39	278	35		55	42	247	25		49	41	267	14		47	41	258	09							950
900	29·6	39	36	183	11	29·9	40	33	266	12	30·1	39	36	270	26	31·5	38	33			32·0	42	35	283	27	32·8	47	38	249	24	33·1	43	38	256	18	33·5	40	35	277	15						900
850		33	32	180	12		35	28	276	15		33	32	272	23		31	27				35	30	278	27		40	31	253	20		37	30	257	20		36	30	278	13							850
800	60·7	29	28	177	13	61·0	30	23	294	16	61·1	27	26	268	24	62·5	26	19			63·1	29	23	272	26	64·3	34	21	253	23	64·4	34	18	264	20	64·7	32	23	280	13						800
750		22	21	174	13		24	16	290	15		23	15	264	26		25	-04	For Winds			24	16	269	28		30	10	298	26		30	07	260	19		26	14	263	14							750
700	95·0	16	07	173	12	96·5	18	08	293	10	95·5	16	09	263	24	96·9	19	-17			97·6	20	09	262	33	99·1	20	-05	245	27	99·2	24	-07	243	22	99·4	20	-02	236	20						700
650		07	02	177	11		12	04	321	11		09	01	254	22		12	-20	See			12	-08	259	34		18	-16	239	32		21	-13	236	29		15	-09	249	20							650
600	133·4	-02	-07	163	10	134·0	06	-02	332	18	134·0	02	-06	260	29	135·7	06	-26			136·3	05	-17	250	32	138·5	16	-20	234	35	138·6	14	-20	234	35	138·4	09	-15	237	27						600
550		-07	-17	157	18		-03	-10	335	20		-06	-20	259	25		-02	-33	Page 3.			-04	-33	247	37		15	-18	232	40		06	-26	234	38		01	-23	233	33							550
500	177·9	-16	-29	141	25	178·9	-12	-19	332	21	178·1	-15	-27	260	32	180·1	-13	-39			180·7	-11	-34	246	50	183·7	-04	-32	233	51	183·8	-05	-39	235	42	183·2	-08	-29	230	37						500
450		-29	-40	127	20		-23	-32	335	29		-26	-36	259	40		-25	-45				-22	-41	242	64		-15	-43	227	60		-14	-46	232	52		-20	-42	229	93							450
400	228·6	-41		115	21	230·8	-35	-45	337	25	229·6	-40	-48	252	41	231·7	-38	-58			232·7	-35	-54	237	72	236·7	-22	-49	227	73	236·8	-24	-55	229	63	235·5	-31	-52	221	51						400
350		-53		123	21		-49		342	24		-57		251	43		-50					-46		234	77		-34	-54	229	85		-35	-52	229	78		-33		224	75							350
300	291·8	-49		154	16	294·5	-46		322	11	292·4	-46		235	37	294·9	-52				296·3	-54		232	94	301·9	-08		227	102	301·8	-98		223	90	299·3	-56		220	92							300
250		-45		185	18		-38		256	08		-41		226	33		-48					-53		229	65		-60		224	99		-63		226	91		-62		220	74							250
200	381·5	-43		206	21	385·4	-38		229	15	382·9	-45		215	27	383·9	-45				389·3	-51		232	95	388·7	-58		230	70	388·0	-63		221	72	385·9	-57		225	45							200
170		-43		205	18		-37		220	12		-46					-48					-54		220	42		-56		225	55		-57		228	53		-55		225	44							170
150		-45		202	17		-38		220	07		-47					-99					-55		225	40		-56		224	51		-56		226	48		-56		227	31							150
130		-47		196	14		-40					-48					-99					-51		227	30		-55		223	43		-57		222	93		-55		224	33							130
110		-48		193	07							-49					-99					-55		232	19		-56		227	27		-56		230	80		-56		220	21							110
100	534·8	-48		193	07						534·8	-48														539·5	-59				538·0	-58		210	22	535·2	-57									100
90	(94 mb)	-48										-51															-68		227	30	536·8	-54		205	23											90
80																											-56		185	13		-58		217	25											80
70																																-59		222	17											70
60																																-59														60
																																-59														

Isothermal 935 - 913 mb 41°; 785 - 716 .. 19°

Inversion 333 mb -53° - 323 mb -51°

Isothermal 555 - 533 mb -9°

Isothermal 794 - 775 mb 33°; 650 - 625 - 18°

(58 mb) Inversion 672 mb 20° - 660 mb 22°; Isothermal 815 - 800 mb 34°

Max Wind 32,500' 266 mb 218° 105 Kts.

Tropopause	I 350 mb -53° 25,800'	I 332 mb -51° 27,300'	I 350 mb -57° 25,800'	I 333 mb -53° 27,200'; I 306 .. -53° 29,100'	I 275 mb -56° 31,500'	II 230 mb -64° 35,900'	II 225 mb -68° 36,300'			Tropopause

HMSO Print. MO. Dunstable

No. 1768. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Monday 18th June, 1951. Page 1.

METEOROLOGICAL OFFICE LIBRARY 9 JUL 1951

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

03h. G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Pressure: Time	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.
Pressure: M.S.L.	1003·2 mb	1008·2 mb	1007·9 mb	1013·7 mb	1014·7 mb	1016·0 mb	1017·4 mb	1018·9 mb	1018·2 mb
Pressure: Surf	993·1 mb	1006·6 mb	1007·1 mb	1004·2 mb	1012·7 mb	1011·4 mb	1001·1 mb	1008·2 mb	1017 mb
Pressure: Freezing	840 mb	835 mb	850 mb	860 mb	840 mb	800 mb	807 mb	834 mb	850 mb

Pressure mb	Lerwick Height ft./100	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Stornoway Height ft./100	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Leuchars Height ft./100	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Aldergrove Height ft./100	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Liverpool Height ft./100	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Downham Market Height ft./100	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Larkhill Height ft./100	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Camborne Height ft./100	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Valentia Height ft./100	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	46	46	Calm		00·4	46	42			00·2	48	47	260	10	02·6	46	42	270	07	00·6	49	45	Calm		01·2	46	44	245	02	04·4	44	44	Calm		02·9	49	47	Calm		00·3	52	45	300	07	Surf
1000	00·8					02·2	45	41			02·2	47	46			03·7	46	42			04·0	52	44			04·3	49	45			04·7					05·1	50	48	268	15	04·9	51	45	302	09	1000
950		46	45	221	05		41	37				43	42	273	20		44	38	295	19		48	39	272	15		48	42	290	17		47	40	285	10		46	45	278	15		46	40	308	14	950
900	29·3	40	36	216	05	30·4	37	33			30·5	38	31	287	16	32·1	37	32	312	20	32·6	41	32	274	17	32·9	43	37	266	15	33·2	42	35	268	11	33·6	39	36	280	15	33·5	40	33	307	17	900
850		33	29	222	07		33	31				32	30	282	18		31	27	312	22		33	29	267	22		38	31	245	16		37	29	258	12		34	28	273	15		33	27	302	21	850
800	60·3	28	28	223	09	61·5	29	28			61·5	29	25	290	18	63·0	26	22	293	20	63·7	27	21	286	24	64·3	32	26	242	20	64·5	31	19	250	14	64·7	28	20	262	15	64·5	29	22	299	22	800
750		22	22	223	09		25	20				23	18	286	17		21	11	278	18		25	04	257	25		29	16	234	22		27	07	244	16		23	11	250	15		22	17				750
700	94·6	15	04	226	10	96·1	19	14			95·9	17	06	283	22	97·2	16	−11	277	15	98·1	18	01	251	25	99·0	24	06	231	25	99·1	23	−08	235	21	99·1	19	00	247	17	98·8	18	07			700
650		09	−03	227	10		13	07				11	−06	273	25		09	−16	265	09		13	−04	238	26		21	−01	221	30		18	−17	231	28		13	−03	240	22		12	04				650
600	133·1	02	−10	227	09	134·9	06	00			134·6	04	−10	266	27	135·6	−01	−19	258	07	136·9	06	−11	229	32	138·5	14	−11	222	35	138·5	15	−27	226	36	138·0	07	−10	236	27	137·6	05	−07			600
550		−07	−23	217	06		−02	−08				−05	−16	267	29		−07	−25	256	07		−01	−17	225	38		05	−19	224	37		05	−27	226	42		−01	−19	231	31		−03	−16				550
500	177·2	−16	−31	L & V		179·3	−11	−17			178·8	−15	−25	257	30	179·6	−15	−30	258	10	181·4	−11	−29	222	43	183·7	−04	−24	223	45	183·6	−05	−35	227	44	182·6	−11	−25	227	37	182·1	−11	−23			500
450		−27	−41	< 05 kts.			−21	−29				−28	−36	261	29		−27	−42	243	16		−22	−35	222	47		−14	−35	222	60		−14	−44	219	49		−22	−38	222	47		−21	−31				450
400	228·6	−40	−55			231·5	−32	−42			230·1	−41		263	33	231·0	−39	−54	236	27	233·4	−38	−53	218	51	236·8	−21	−37	223	75	236·7	−22	−53	217	64	234·6	−33	−49	219	49	234·3	−32	−41			400
350		−52		297	05		−44					−54		248	42		−51		226	38		−47		221	63		−32	−47	220	87		−32	−58	217	85		−49		215	61		−45					350
300	291·8	−45		283	05	295·2	−36				292·6	−55		235	51	293·7	−52		243	33	296·9	−54		216	87	302·1	−47		219	87	302·1	−46		215	90	298·2	−51		210	89	297·6	−60				300
250		−44		208	12		−45					−51		235	40		−48		234	18		−53		225	58		−63		219	91		−59		219	100		−56		219	68		−59					250
200	381·8	−43		219	18	384·6	−43				381·0	−49		232	31	382·6	−47		242	30	384·9	−49		224	45	388·5	−59		222	65	389·3	−55		214	64	386·0	−52		218	40	384·6	−51				200
170		−43		206	18		−43					−50		220	31		−49		239	23		−51		227	34		−53		222	53		−54		221	56		−52		225	08		−49					170
150		−46		203	18		−44					−53		217	29		−51		230	19		−51		221	36		−51		218	43		−55		219	46		−54		227	30		−52					150
130		−44		206	19							−51		208	23		−47		223	18		−51		218	21		−53		218	86		−53		223	39		−55		224	29		−52					130
110		−46		213	15							−54		220	23		−48		222	09		−52		222	24		−57		224	34		−53		221	36		−53		205	27		−54					110
100	535·1	−47		210	11						531·8	−54		222	24	534·4	−49		212	15	536·0	−54		217	14	538·3	−58		220	31	539·5	−55		212	35	535·9	−56		216	26	535·6	−54				100
90		−49		196	08							−51		210	17		−51					−55		199	11							−56		211	31		−58		224	16		−54					90
80		−48		191	06							−52		185	12							−56										−55		220	24		−59		224	11		−55					80
70		−51		184	09							−55		194	15						(075 mb)	−56										−56		227	18	(075 mb)	−60					−52					70
60		−51		192	08							−55																				−58		225	07						(068 mb)	−52					60
	(050 mb)	−52		111	03																																								
	(045 mb)	−52																																												

Inversion 993 mb. 46° – 969 mb. 47°

Isothermal 1004 – 973 mb. 46° ; 750 – 732 mb. 21°

Inversion 1013 mb. 49° – 994 mb. 53° ; Isothermal 783 – 758 mb. 26° ; 329 – 313 mb. −52°

Inversion 1011 mb. 46° – 982 mb. 53°

Inversion 1001 mb. 44° – 970 mb. 49° ; Isothermal 650 – 634 mb. 18°

Inversion 1008 mb. 49° – 992 mb. 52° ; 338 mb. −30° – 317 mb. 29°

Inversion 812 mb. 28° – 800 mb. 29°

Tropopause	Lerwick I 350 mb. −52° 29,800′	Stornoway I 300 mb. −56° 29,600′	Leuchars II 337 mb. −58° 26,800′	Aldergrove I 322 mb. −58° 27,800′	Liverpool I 280 mb. −57° 31,200′	Downham Market I 235 mb. −67° 35,400′	Larkhill I 230 mb. −62° 35,900′	Camborne II 278 mb. −55° 31,500′	Valentia II 300 mb. −60° 29,800′	Tropopause

09h. G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne		Station
Pressure: Time	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	G.M.T.	Time
Pressure: M.S.L.	1003·3 mb	1011·3 mb	1011·1 mb	1015·2 mb	1015·9 mb	1016·5 mb	1017·0 mb	1019·1 mb	mb	M.S.L.
Pressure: Surf	993·4 mb	1009·7 mb	1010·3 mb	1005·5 mb	1013·9 mb	1012·1 mb	1001·3 mb	1008·5 mb	mb	Surf
Pressure: Freezing	838 mb	897 mb	818 mb	850 mb	841 mb	812 mb	836 mb	819 mb	mb	Freezing

Pressure mb	Lerwick Height ft./100	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Stornoway Height ft./100	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Leuchars Height ft./100	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Aldergrove Height ft./100	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Liverpool Height ft./100	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Downham Market Height ft./100	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Larkhill Height ft./100	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Camborne Height ft./100	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	49	47	290	18	00·4	49	37			00·2	54	45	270	08	02·6	52	41	250	05	00·6	54	45	260	03	01·2	58	49	235	05	04·4	57	48	290	05	02·9	55	50	293	06						Surf
1000	00·9					03·0	48	37			03·0	53	45			04·1					04·3	52	43	268	12	04·4	56	46			04·8	55	47			05·2	54	49	270	15						1000
950		43	40	262	19		40	33				46	40	275	19		44	40	268	11		46	40	261	09		49	40	248	09		47	42	278	08		46	36	270	16						950
900	29·2	37	34	269	18	31·2	33	29			31·5	40	36	292	19	32·5	38	34	262	09	32·8	39	38	257	10	33·2	44	34	249	09	33·3	40	37	269	08	33·8	41	37	274	16						900
850		34	30	276	15		28	24				35	31	302	13		32	29	262	10		38	29	262	17		37	30	246	09		34	33	252	09		35	32	271	17						850
800	60·3	28	25	283	14	62·0	24	20			62·7	30	25	293	10	63·5	27	22	274	15	63·9	27	19	257	18	64·5	30	24	241	13	64·4	28	28	237	10	65·0	30	28	269	19						800
750		23	19	286	14		23	03				26	20	296	14		22	12	286	13		21	13	243	19		27	15	235	18		22	17	232	14		26	10	268	19						750
700	94·6	17	08	283	13	96·3	18	−08			97·3	17	12	294	15	97·9	15	09	282	12	98·1	16	09	240	19	99·1	22	04	229	24	98·7	17	−15	235	20	99·7	21	06	278	18						700
650		10	01	286	13		11	−14				10	06	269	14		09	01	264	12		10	04	242	24		16	−05	225	30		13	−13	233	22		16	−05	274	15						650
600	133·2	01	−07	290	14	135·0	04	−23			136·0	08	03	285	14	136·4	03	−05	284	15	136·7	04	−02	240	27	138·3	12	−14	220	35	137·6	07	−29	232	29	138·7	08	−17	262	15						600
550		−07	−14	284	16		−04	−28				−01	−08	252	15		−05	−14	306	16		−04	−11	233	30		04	−18	220	41		00	−24	222	33		00	−20	289	18						550
500	177·2	−16	−26	276	14	179·3	−13	−33			180·6	−11	−20	241	17	180·6	−15	−25	306	17	181·0	−12	−30	233	36	183·2	−07	−21	220	46	182·2	−10	−34	222	41	183·3	−11	−32	264	18						500
450		−26	−36	298	14		−22	−44				−24	−34	245	14		−27	−38	324	15		−23	−31	229	39		−17	−36	218	56		−20	−50	222	45		−22	−43	258	20						450
400	228·8	−39	−48	325	14	231·2	−35	−57			232·4	−36	−48	249	10	232·1	−40	−50	330	30	232·9	−36	−43	224	42	235·3	−25	−45	219	76	234·5	−32	−60	221	63	235·3	−34	−54	250	27						400
350		−54		352	17		−48					−48		246	19		−52		336	34		−47		220	50		−33	−51	218	99		−36	−66	212	93		−48		−39	28						350
300	291·5	−49		262	15						295·6	−57		237	25	294·8	−55		296	21	296·7	−47		216	57	301·1	−47		218	108	299·2	−48		206	108	298·8	−53		216	39						300
250		−43		229	18							−48		223	28		−49		236	17		−48		219	53		−61		216	106		−61		207	99		−51		221	39						250
200	381·4	−43		226	21						384·1	−47		223	28	383·4	−47		228	20	385·9	−45		224	39	387·9	−57		216	59	386·4	−55		210	52	387·3	−50		219	35						200
170		−41		215	15							−46		222	31		−47		238	18		−46		217	33		−53		218	47		−52		213	39		−51		230	32						170
150		−41		202	14							−45		221	25		−49		218	17		−47		215	30		−53		219	43		−51		220	37		−52		223	30						150
130		−44		214	14							−44		213	19		−50		216	18		−47		208	28		−52		212	41		−52		219	39		−49		204	19						130
110		−44		178	13							−49		210	12		−46		219	16		−50		219	23		−53		208	04		−54					−52		196	24						110
100	535·6	−44		186	15						537·0	−48		206	15	538·7	−46		204	12	538·2	−48		206	15	538·2	−54		205	20	536·9	−54				538·2	−52		214	21						100
90		−44		200	10							−47		203	12		−45		204	17		−48		193	19		−56					−54					−53		230	18						90
80		−43		168	03							−47		198	10							−49										−54					−58								80
70		−41										−46									(074 mb)	−51										−54													70
60																																														60

Inversion 788 mb. 23° – 770 mb. 25°

Inversion 641 mb. 09° – 620 mb. 11° ; Isothermal 800 – 784 mb. 30°

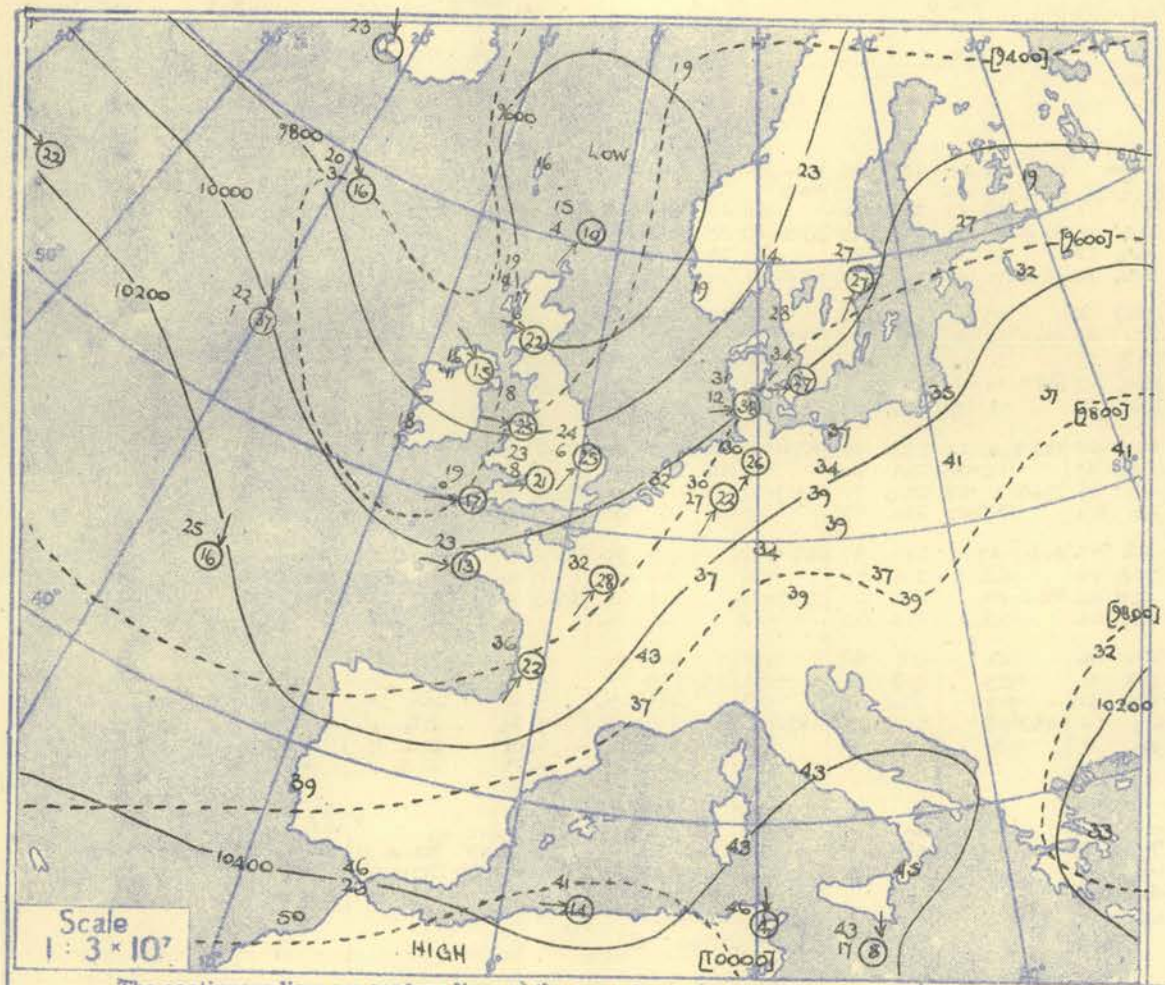
Inversion 845 mb. −48° – 825 mb. −5° ; 405 – 392 mb. −28°

Isothermal 702 – 682 mb. 17° ; 400 – 368 mb. −32° ; Max wind:- 268 mb. 205° 115 kts. 32,300′

Tropopause	Lerwick I 335 mb. −58° 26,700′	Stornoway N.R.	Leuchars I 285 mb. −62° 30,600′ ; II 344 mb. −53° 26,500′	Liverpool I 345 mb. −48° 26,500′ ; I 287 mb. −49° 33,100′	Downham Market I 240 mb. −64° 35,000′	Larkhill I 246 mb. −63° 34,100′	Camborne II 338 mb. −51° 27,200′	Tropopause

Monday 18th June, 1951.

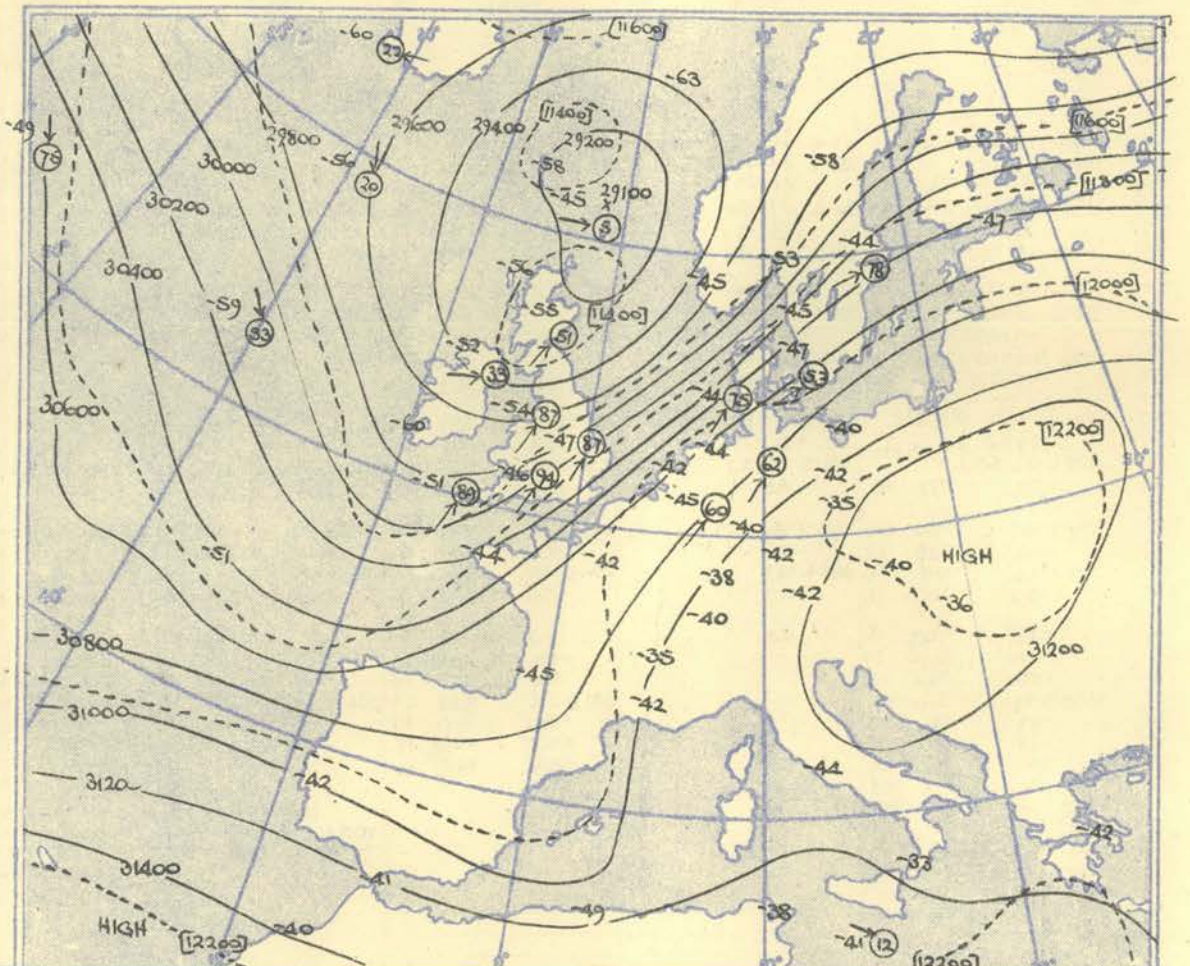
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.



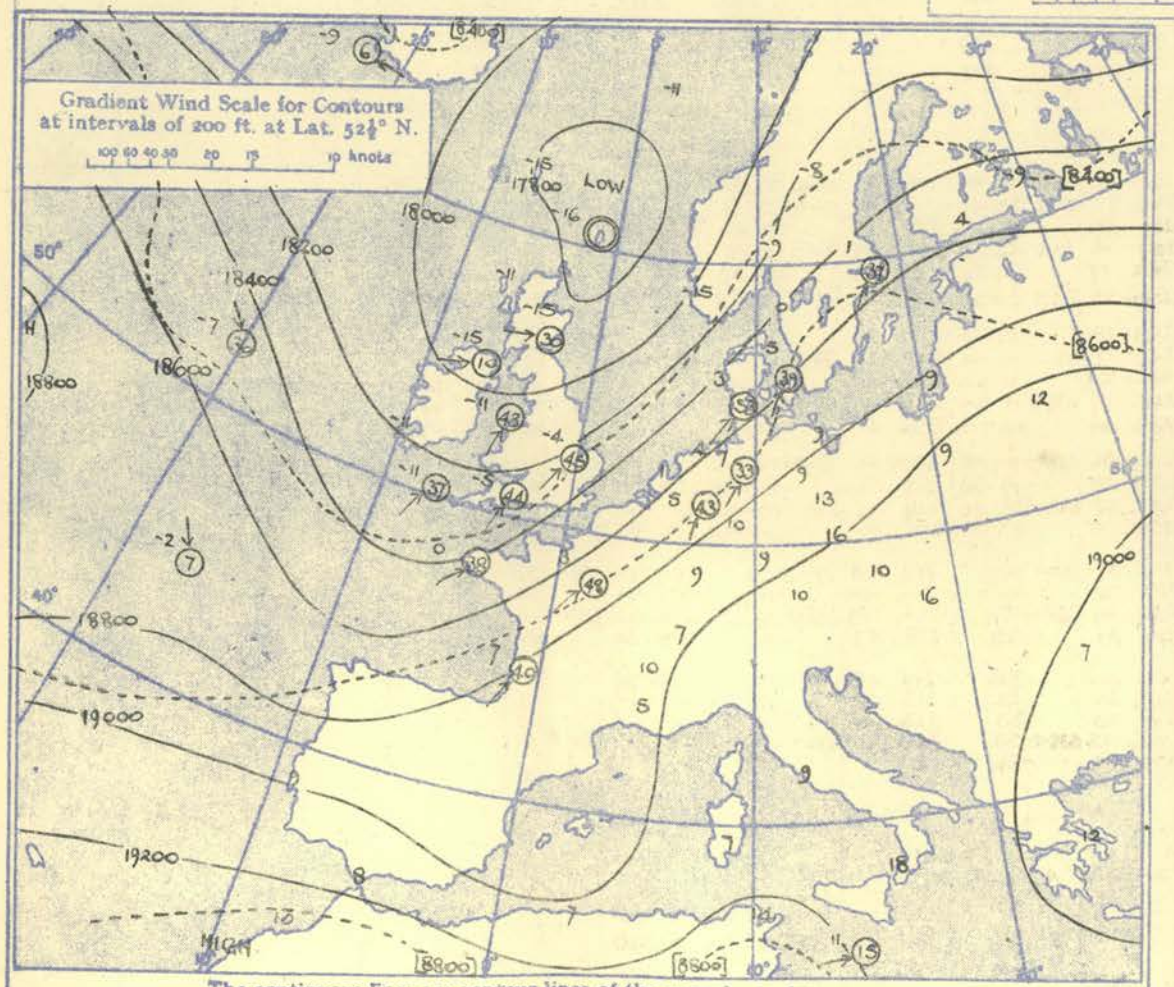
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

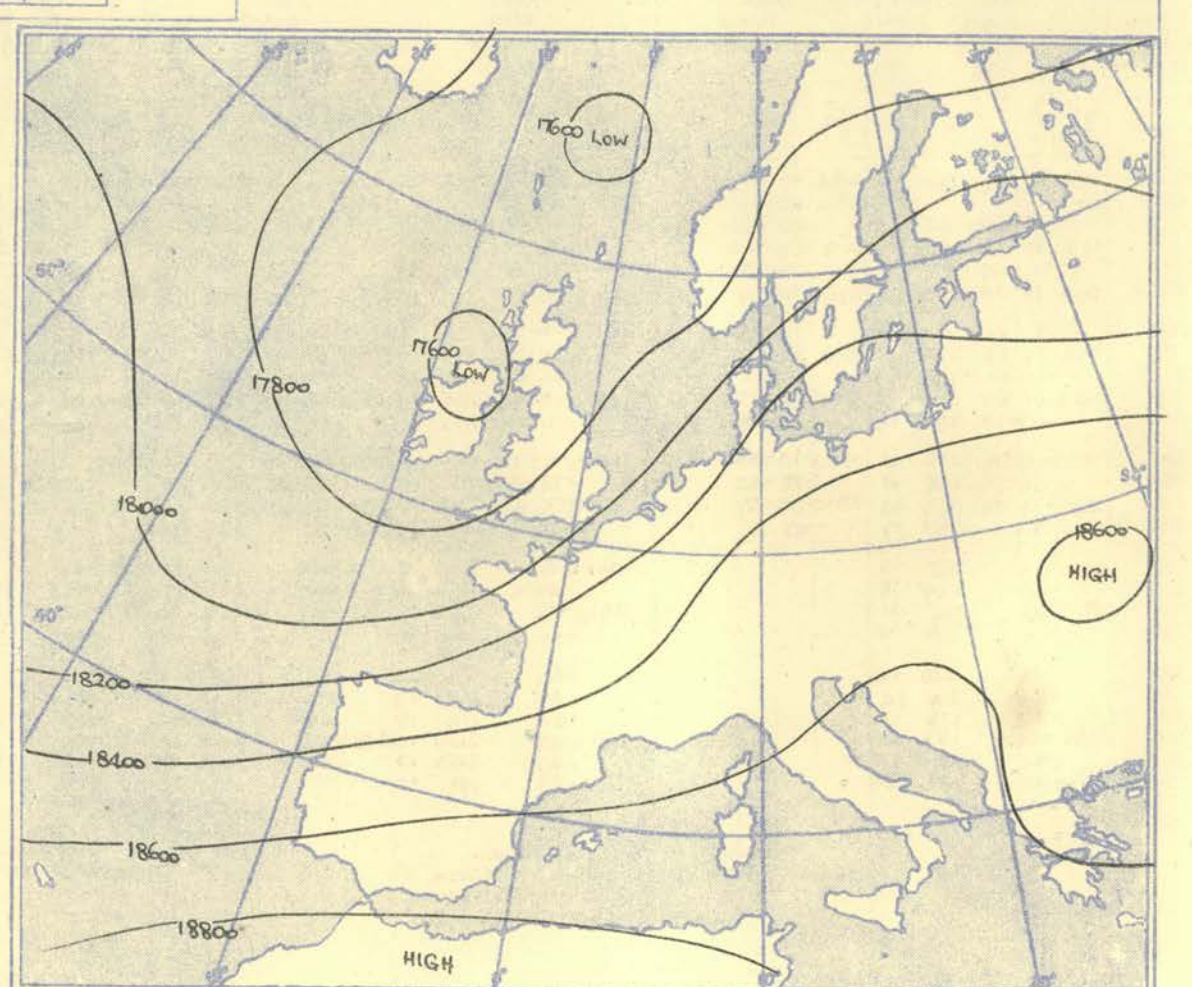
100 60 40 30 20 15 10 knots



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500-1000mb.

METEOROLOGICAL OFFICE 25 JUN 1951 LIBRARY

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

Pressure		48·1°N 17·0°W			47·7°N 12·3°W			52°N 02°12'W																						Pressure
	Time	13h			15h			1405h																						Time
	M.S.L.	1029 mb			1025 mb			1016·5mb			mb			mb			mb			mb			mb			mb			M.S.L.
	Surf	1017 mb			1021 mb			1015·0mb			mb			mb			mb			mb			mb			mb			Surf
	Freezing	770 mb			840 mb			812 mb			mb			mb			mb			mb			mb			mb			Freezing
Pressure mb		Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Pressure mb
Surf			53	46		57	55	00·9																					Surf
1000		06·0	51	46	06·6	53	50	09·5																					1000
950			45	42		45	45																						950
900			39	37		39	33	33·3	42	42																			900
850			36	27		33	33		36																				850
800			35	29		29	29	64·5	31	29																			800
750			29	21		27	26																						750
700		10·0	22		10·8	22		99·1	18																				700
650			14			19																							650
600			08			07		137·9	06																				600
550			-01			01																							550
500		18·4·7	-07		18·9·6	-07		182·9	-13																				500
450																													450
400								239·3	-35																				400
350																													350
300								298·0	-59																				300
250																													250
200																													200
170																													170
		Cloud. 7/8 Sc. 900-750mb 1/8 Ci. 8/8 N.R. Surf Wind N'w'ly 11-16 kts.			Cloud 6/8 Cu. 1000-850mb 5/8 As. 800-750. 1/8 Ci 8/8 N.R. Surf Wind N'w'ly 17-21 kts			Cloud 3-4/8 Cu. 885-700mb 3-4 As. 720-700																					

DIRECTION (degrees from N) and VELOCITY (knots) of UPPER WINDS at heights above M.S.L.

Place	Lerkhill		Lerkhill		Ronaldsway		Weather Explorer 59·1N 19W		Lerkhill		Lympne		Lerkhill		Downham		Lerwick		Leuchars		Place
Time	03h		09h		15h		15h		15h		21h		21h		21h		21h		21h		Time
Type																					Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Surf.	Calm		190	03	240	14	230	07	250	10	260	03	280	05	250	06	220	12			Surf.
1,000	200	11	230	06	230	12	220	09	250	12	126	13	300	15	260	09	260	25			1,000
2,000	190	13	230	07	250	16	220	10	270	14	280	15	300	14	260	10	260	24			2,000
3,000	170	13	240	08	260	16	210	11	280	17	270	15	290	14	250	11	260	21			3,000
4,000	170	14	260	10	250	16	210	11	280	18	270	12	290	14	250	13	270	19			4,000
5,000	160	13	260	11	260	16	210	10	280	18	270	12	290	12	250	15	260	21			5,000
6,000	160	12	250	11	250	15	220	09	270	15	260	12	280	12	250	15	260	20			6,000
8,000	150	19	240	10	250	09	280	12	260	14	230	10	270	14	240	16	260	18			8,000
10,000	150	21	250	16	250	11	300	12	260	13	230	11	270	16	240	18	250	16			10,000
14,000	140	34	320	29	270	15	280	12	270	21	260	15			230	19	260	15			14,000
18,000	140	38			250	25									260	18	260	17			18,000
24,000	(16,000')														260	19	290	16			24,000
30,000															290	30	270	18			30,000
40,000															220	36	220	18			40,000
50,000															210	30	200	13	215	21	50,000
															120 (12,000')	25	100 (38,000')	13	208 (53,000')	14	

NEPHOSCOPE OBSERVATIONS

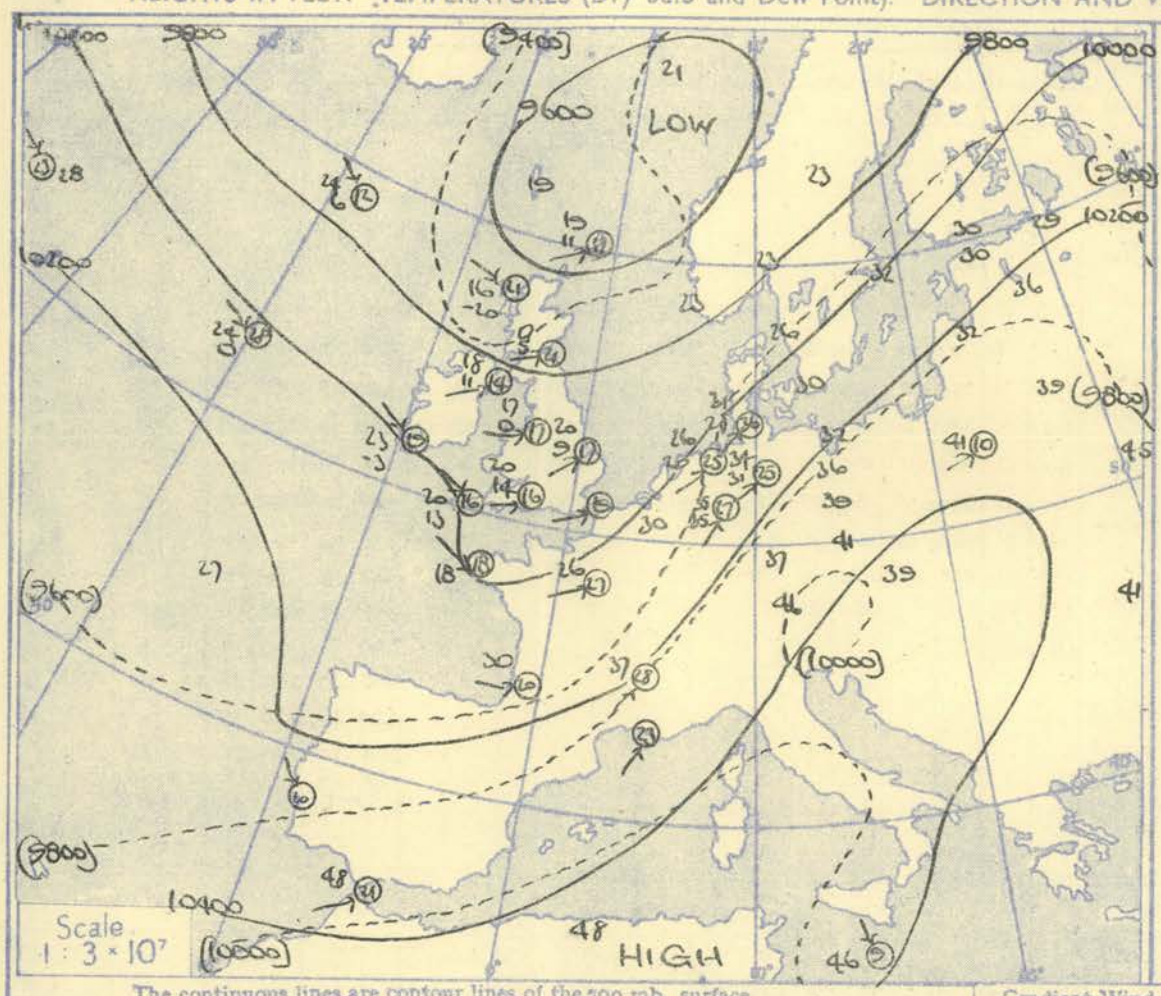
Place	Defford	Valentia									Place
Time Type	09h Ac	15h Ci									Time Type
Dir. Vel.	240 36	240 30									Dir. Vel.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

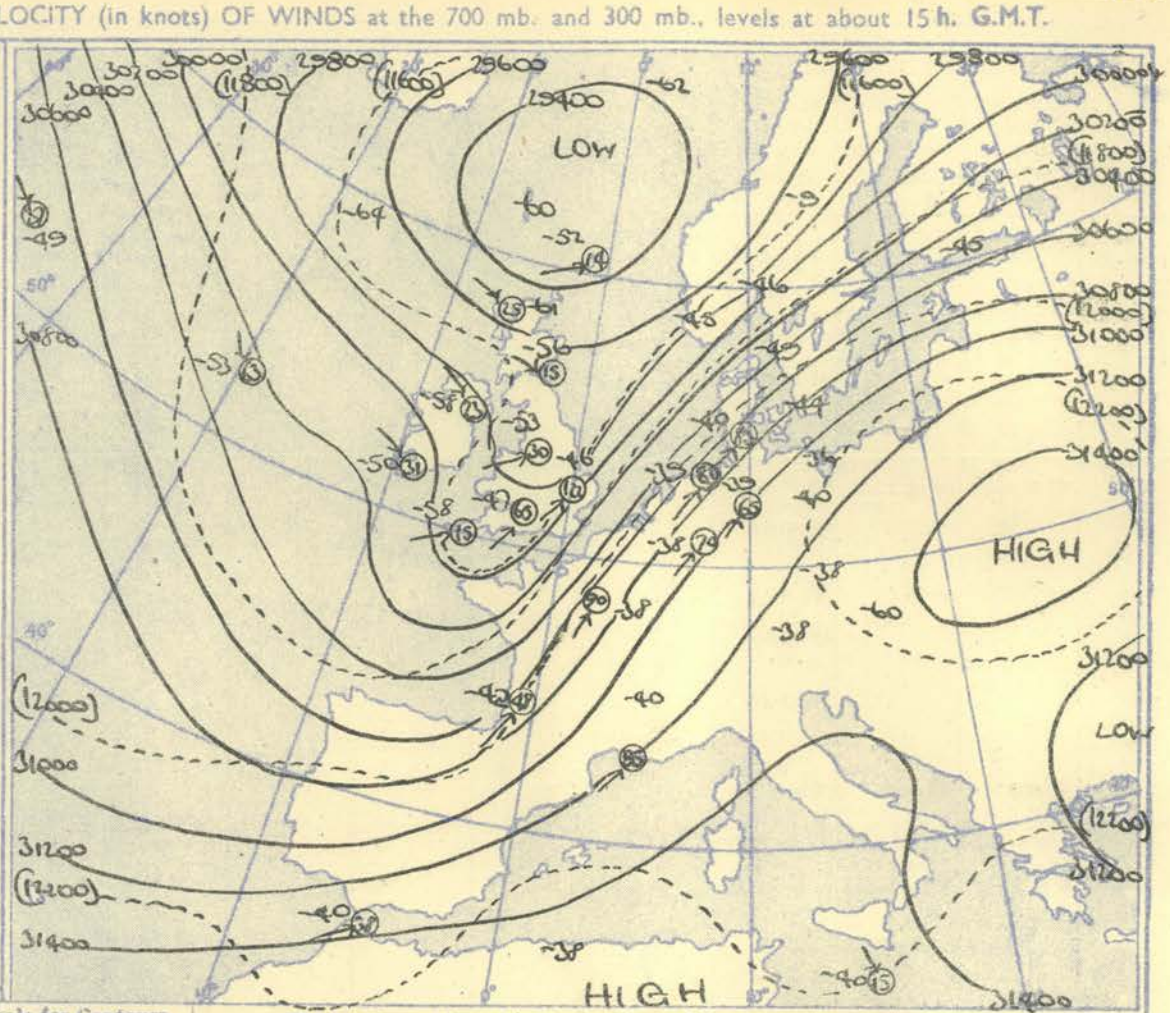
Ship	Weather Explorer				Weather Explorer				Weather Explorer				Weather Explorer				Weather Recorder				Weather Recorder				Weather Recorder				Weather Recorder				Ship
Lat/Long	59·1°N 19·2°W				59·1°N 19·1°W				59·1°N 19·1°W				59·1°N 19·1°W				52·3°N 20°W				52·3°N 20°W				52·4°N 19·9°				52·4°N 19·8°				Lat/Long
Time	03hrs G.M.T.				09hrs G.M.T.				15hrs G.M.T.				21hrs G.M.T.				03hrs G.M.T.				09hrs G.M.T.				15 hrs G.M.T.				21hrs G.M.T.				Time
Pressure M.S.L.	1015 mb				1013 mb				1012 mb				1010 mb				1023 mb				1022 mb				1021 mb				1020 mb				Pressure M.S.L.
Surf	1015 mb				1013 mb				1012 mb				1010 mb				1023 mb				1022 mb				1021 mb				1020 mb				Surf
Freezing	830 mb				830 mb				770 mb				815 mb				795 mb				775 mb				780 mb				810 mb				Freezing
Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. Vel. ° knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. Vel. ° knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. Vel. ° knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. Vel. ° knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. Vel. ° knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. Vel. ° knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. Vel. ° knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. Vel. ° knots	Pressure mb
Surf	—	49	40	290 20	—	49	45	210 10	—	51	44	calm	—	50	47	190 07	—	53	43	300 18	—	52	50	290 20	—	55	46	270 19	—	54	49	300 20	Surf
1000	39	47	38	301 23	37	48	45	240 03	33·1	50	42	"	2·7	49	47	202 09	36·2	50	41	304 16	35·8	50	48	292 16	35·6	52	45	275 19	35·5	51	46	304 15	1000
950		40	32	297 20		43	40	248 05		45	34	"		45	44	201 09		44	37	302 15		46	44	285 15		45	40	278 18		45	40	302 17	950
900	32·2	35	14	285 16	32·1	38	35	256 07	31·5	39	29	"	31·2	40	39	202 10	34·6	38	32	303 19	34·1	38	35	282 19	33·9	41	38	272 18	33·9	41	34	301 20	900
850		34	06	292 13		34	30	287 11		34	33	"		35	34	217 12		38	31	318 28		38	33	283 23		40	21	290 20		35	29	298 20	850
800	63·2	26	04	295 14	62·2	29	25	286 12	62·7	32	18	"	62·4	31	30	237 13	65·9	33	28	339 36	65·7	35	26	286 27	65·4	34	10	290 24	65·2	31	24	278 17	800
750		22	01	296 14		26	15	295 13		30	00	"		28	24	244 13		27	22	333 36		29	22	286 28		29	04	283 27		30	16	270 17	750
700	91·9	20	-3	299 16	91·8	21	11	299 15	91·5	24	06	"	91·1	22	20	222 12	100·6	22	17	326 37	100·6	22	18	290 32	100·2	24	00	280 28	100·0	24	00	271 18	700
650		12	-4	309 20		16	-3	300 14		15	01	302 16		14	12	214 14		16	08	320 38		15	10	302 34		18	06	280 28		17	-1	278 21	650
600	136·4	05	-12	326 20	136·9	08	-9	319 13	136·6	09	-10	300 14	136·3	09	07	230 12	139·7	08	-1	319 38	139·6	06	00	302 29	139·4	10	-2	280 30	139·2	10	-2	281 27	600
550		-3	-28	338 18		01	-23	318 12		01	-25	285 16		00	-3	249 10		-1	-10	321 41		00	-12	257 34		01	-11	281 36		05	-3	287 35	550
500	180·8	-11	-40	333 19	177·6	-8	-32	306 14	181·4	-8	-37	267 10	181·0	-8	-11	282 16	184·4	-7	-15	317 36	184·3	-7	-15	292 40	184·2	-6	-12	288 38	184·3	-4	-12	290 37	500
450		-22	-50	339 19		-19	-42	326 19		-21	-44	273 14		-20	-29	301 18		-18	-25	310 43		-16	-22	292 42		-15	-21	288 40		-13	-23	290 39	450
400	234·8	-33	-58	336 16	234·0	-33	-55	332 23	233·6	-34	-51	291 16	233·3	-32	-38	291 14	231·0	-29	-37	312 53	231·1	-25	-34	294 45	231·1	-25	-31	283 42	231·3	-24	-40	296 37	400
350		-46		331 12		-46		327 26		-47		304 19		-46		301 15		-44		311 54		-37	-45	308 44		-29	-45	286 55		-24	-48	304 66	350
300	296·4	-56		334 20	297·5	-57		325 30	296·9	-60		315 23	296·7	-59		277 10	300·6	-59		317 53	301·9	-50		310 58	301·5	-53		292 63	302·5	-46		308 79	300
250		-56		336 23		-55		332 23		-59		324 24		-58		040 04		-67		310 55		-65		312 85		-60		287 60		-63		301 85	250
200	338·3	-49		336 18	338·2	-47		315 10	338·2	-46		290 11		(-55)			386·2	-59		306 38	387·3	-61		301 36	388·7	-60		294 36	389·2	-55		297 45	200
170		-47		333 13		-44		315 07		-45		290 10						-57		311 23		-54		300 28		-49		306 27		(-52)			170
150		-47		329 10		-45		315 07		-45		290 07						-57		315 20		-51		311 23		-49		305 20					150
130		-48		326 09		-44		315 10		-44		290 06						-57		313 22		-50		314 18		-47		305 12					130
110		-48		325 09		-45		315 05		-46								-57		315 21		-49		304 12		-55		288 06					110
100	536·1	-48		323 02	536·7	-46		315 03	537·4	-46		calm 03									538·7	-48		294 12	539·1	-43							100
90		-48				-43				-44		110										(-48)				-42							90
80		(-51)				(-52)																				-41							80
70																										-40							70
60																										-39							60
	Inversion 925mb 36°-915mb 40° 754mb 21°-745mb 23°				Isothermal 775-755 mb 26° 306-300 mb -57°				Inversion 800mb 32°-780mb 33° Isothermal 827-800 mb 32° 770-750 mb 28° 520-510 mb -6°				Isothermal 880mb 36°-844mb 39°				Isothermal 870-832 mb 38° 431-415 mb -21°				Inversion 881mb 36°-858mb 41°				Inversion 850mb 35°-838 mb 36° 765mb 27°-750mb 30° 570mb 3°-560mb 5°				
Tropopause	I285 mb -60° 30100'				I272 mb -62° 31900'				I264 mb -66° 33400'				I272 mb -54° 31800'				I268 mb -69° 32500'				I233 mb -67° 35600'				I262 mb -62° 33100'				I239 mb -67° 36000'				Tropopause

June 18TH 1951.

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.

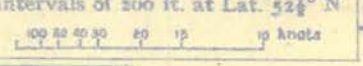


The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

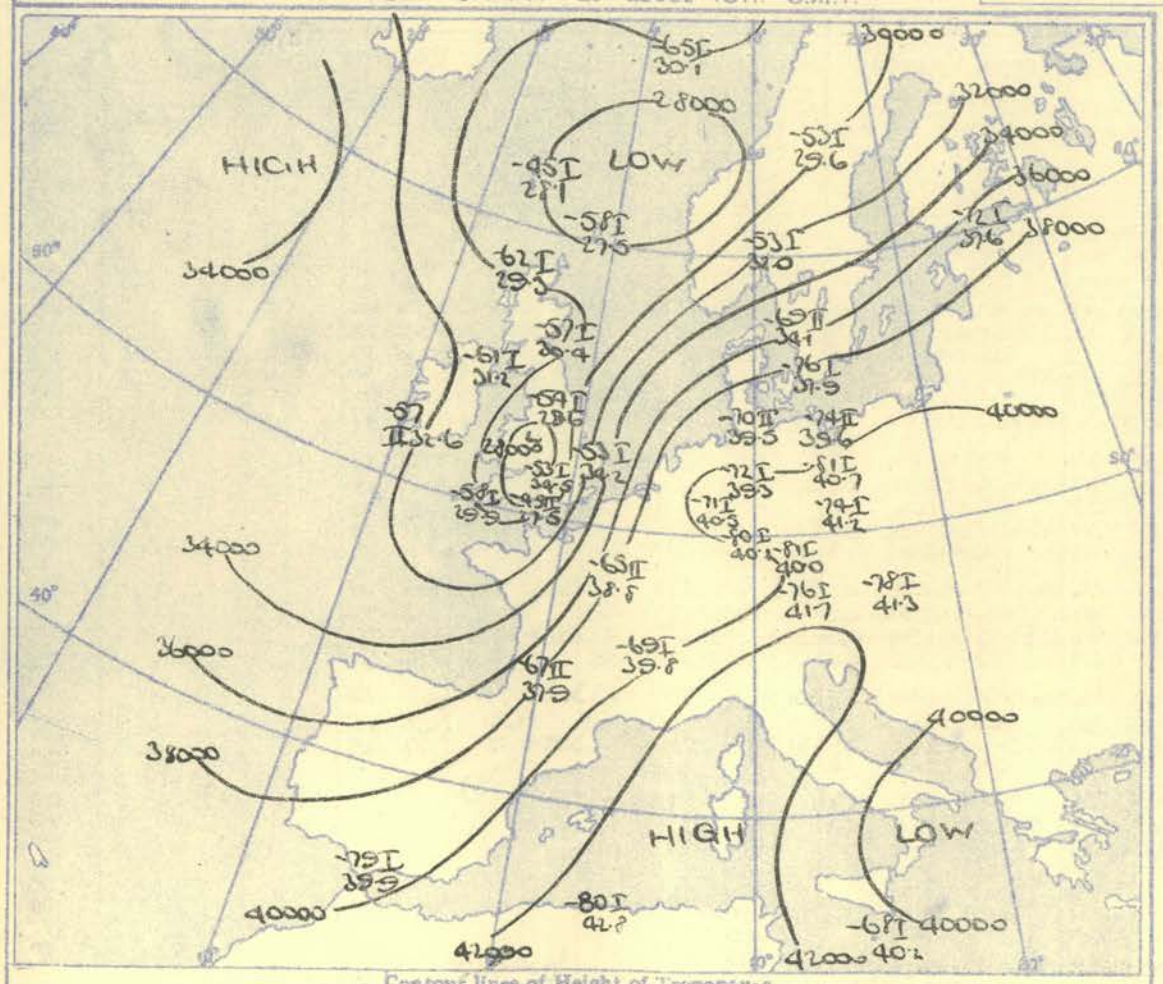


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N



TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Little change in the situation aloft.

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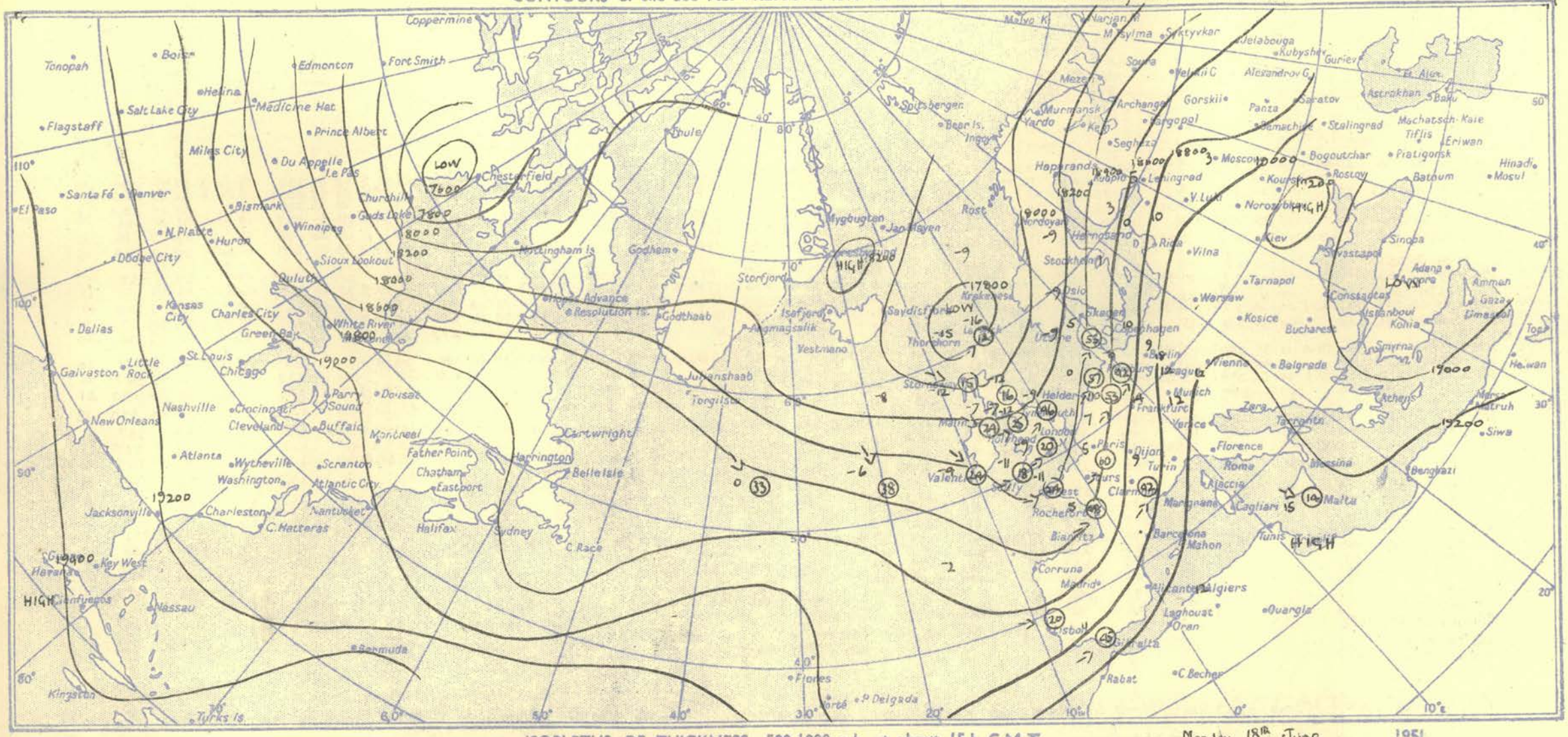
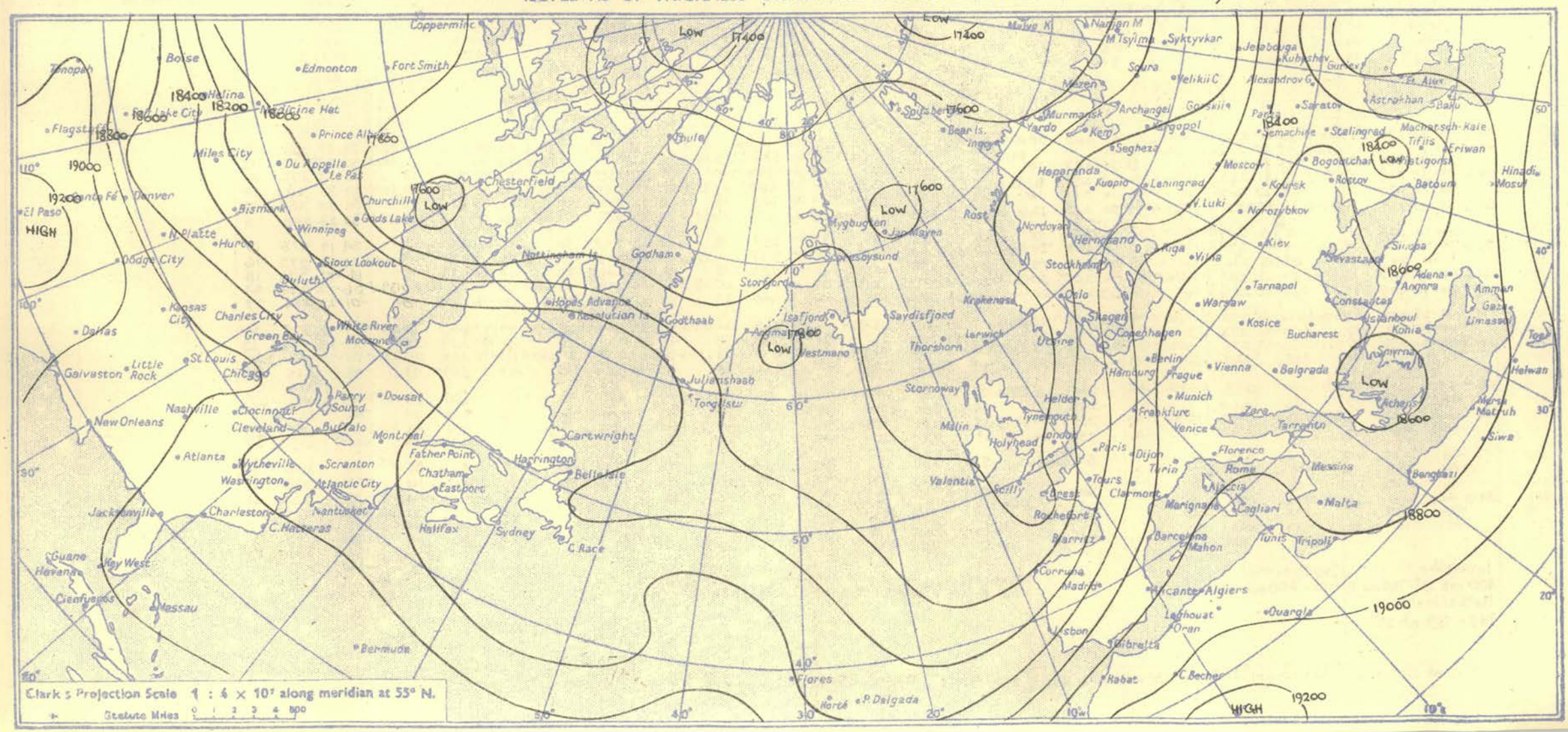
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Monday 18th June 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Monday 18th June 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON Monday 18th June. 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15h G.M.T.

Station	Time	M.S.L.	Surface	Freezing	Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LERWICK	15h	1007·5 mb	997·5 mb	842 mb	Surf	02·7	50	42	310	20
					1000	02·0				
					950		41	35	275	24
					900	30·3	35	31	274	19
					850		29	25	267	16
					800	61·2	30	18	260	19
					750		24	16	255	18
					700	95·6	19	11	253	17
					650		12	01	248	16
					600	134·4	04	-06	248	19
					550		-04	-13	241	18
					500	178·6	-16	-26	231	12
					450		-26	-39	225	14
					400	230·2	-38	-50	210	16
					350		-50		209	14
					300	293·1	-52		239	14
					250		-42		222	22
					200	383·1	-41		222	21
					170		-41		218	20
					150		-41		214	19
					130		-41		207	17
					110		-41		206	11
					100	538·1	-42		205	11
					90		-43		202	08
					80		-46		165	09
					70		-49		175	11
					60		-42			
						Inversion 850 mb 29°-842 mb 32° Isothermal 728-707 mb 20°				
					Tropopause	I 325 mb -58° 27,500'				
STORNOWAY	15h	1012·0 mb	1010·4 mb		Surf	00·4	54	37	260	08
					1000	03·3	52	35		
					950		47	32	270	13
					900	31·7	36	24	259	13
					850		29	19	254	10
					800	62·4	24	05	270	12
					750		19	-13	277	17
					700	96·5	16	-20	273	21
					650		10	-11	271	21
					600	135·1	04	-24	276	16
					550		-04	-34	278	13
					500	179·4	-12	-39	280	15
					450		-22	-48	290	15
					400	231·4	-34	-56	294	13
					350		-47		289	20
					300	294·6	-61		282	25
					250		-50		263	13
					200	383·9	-47		226	15
					170		-42		235	11
					150		-42		215	14
					130		-40		228	10
					110		-38		213	15
					100	538·5	-38		190	15
					90		-39		173	13
					Tropopause	I 303 mb -62° 29,300'				
LEUCHARS	15h	1011·9 mb	1011·1 mb	820 mb	Surf	00·2	64	42	280	12
					1000	03·2	61	40	265	12
					950		51	35	269	21
					900	32·1	45	33	279	18
					850		37	28	272	20
					800	63·4	29	23	270	19
					750		22	13	267	22
					700	97·7	17	05	25	21
					650		12	-01	251	17
					600	136·5	05	-09	261	15
					550		-02	-11	252	18
					500	180·9	-12	-29	259	16
					450		-22	-37	260	15
					400	232·9	-33	-48	264	14
					350		-44		303	15
					300	296·5	-56		273	15
					250		-50		227	25
					200	385·3	-46		228	27
					170		-45		226	29
					150		-46		221	27
					130		-45		214	18
					110		-47		203	17
					100	538·6	-42		215	29
					90		-43		215	15
					80		-44		221	15
					70		-45		218	15
					60		-47		150	12
							-45		150	06
							-46			
					Tropopause	I 290 mb -57° 30,400'				
ALDERGROVE	15h	1015·2 mb	1005·9 mb	825 mb	Surf	02·6	51	48	300	07
					1000	04·2	50	46		
					950		46	40	290	16
					900	32·7	39	33	278	21
					850		34	28	270	18
					800	63·8	29	24	265	12
					750		25	19	253	13
					700	58·4	18	11	252	14
					650		12	-05	270	15
					600	137·1	04	-15	274	16
					550		-01	-22	276	19
					500	181·6	-09	-32	280	24
					450		-20	-42	282	21
					400	234·0	-30	-49	287	24
					350		-45		284	19
					300	297·7	-58		287	23
					250		-54		254	20
					200	386·6	-47		242	20
					170		-47		217	22
					150		-47		220	21
					130		-47		228	18
					110		-46		227	13
					100	538·4	-45		218	14
					90		-44		198	16
					80		-48		173	09
					70		-48		168	08
					60					
						Isothermal 515-506 mb -08°				
					Tropopause	I 280 mb -61° 31,200'				
LIVERPOOL	15h	1016·1 mb	1014·1 mb	820 mb	Surf	00·6	59	40	290	10
					1000	04·5	55	36	297	13
					950		47	30	286	11
					900	33·4	41	27	259	11
					850		35	21	268	12
					800	64·6	29	16	252	13
					750		23	10	250	14
					700	99·0	17	00	255	17
					650		11	-06	253	16
					600	137·7	06	-19	269	18
					550		-02	-29	271	20
					500	182·1	-12	-40	265	25
					450		25	-53	259	25
					400	233·8	-38	-58	283	25
					350		-49		289	21
					300	296·8	-53		249	30
					250		-50		228	39
					200	385·3	-50		222	36
					170		-49		216	31
					150		-49		219	33
					130		-49		217	33
					110		-50		222	23
					100	537·2	-51		203	20
					90		-50		203	23
					80		-51		223	15
					70		-54		194	08
					60		-54		180	10
							-53			
						Inversion 613 mb 05°-600 mb 06°				
					Tropopause	I 315 mb -59° 28,600'				
DOWNHAM MARKET	15h	1015·7 mb	1011·3 mb	796 mb	Surf	01·2	63	43	230	06
					1000	04·4	61	41		
					950		54	35	251	08
					900	33·4	47	33	250	08
					850		40	23	247	11
					800	64·9	33	21	250	16
					750		26	16	246	16
					700	99·5	20	09	236	17
					650		13	-05	233	23
					600	138·9	10	-21	232	28
					550		01	-18	227	36
					500	183·2	-09	-26	217	96
					450		-19	-42	212	50
					400	235·6	-28	-52	205	70
					350		-37	-60	203	86
					300	300·4	-46		200	122
					250		-57		205	81
					200	385·6	-48		211	53
					170		-49		217	93
					150		-49		217	92
					130		-49		217	83
					110		-51		210	35
					100	540·3	-53		210	21
					90		-53		209	18
					80		-54		212	12
					70		-55		227	08
					60					
						Inversion 695 mb 12°-627 mb 13° Isothermal 358-396 mb -37° Max Wind 30,200' 298 mb 200° 138 kts.				
					Tropopause	I 246 mb -58° 34,930' II 334 mb -45° 27,600'				
LARKHILL	15h	1016·4 mb	1000·7 mb	790 mb	Surf	04·4	61	46	280	08
					1000	04·5				
					950		52	41	277	18
					900	33·4	93	36	275	14
					850		37	30	272	09
					800	64·8	33	28	266	09
					750		26	20	261	12
					700	99·4	20	14	257	16
					650		15	05	251	17
					600	138·4	10	-12	246	21
					550		01	-26	243	22
					500	183·1	-09	-32	244	20
					450		-20	-40	236	24
					400	235·5	-31	-50	221	27
					350		-43		215	42
					300	299·7	-47		206	65
					250		-52		210	60
					200	386·3	-48		216	46
					170		-48		208	93
					150		-49		210	41
					130		-49		218	34
					110		-47		213	26
					100	598·0	-53		213	25
					90		-51		200	25
					80	072 mb	-54		206	18
					70		-49			
					60					
						Inversion 710-695 mb 20°				
					Tropopause	I 300 mb -58° 27,880'				
CAMBORNE	15h	1020·3 mb	1009·8 mb	821 mb	Surf	02·9	58	48	293	13
					1000	05·6	56	47	289	15
					950		48	43	290	15
					900	34·2	41	35	289	14
					850		35	26	292	15
					800	65·4	30	21	291	15
					750		24	15	288	13
					700	99·9	20	03	278	16
					650		15	-08	262	13
					600	138·9	07	-17	251	14
					550		-02	-24	254	15
					500	183·4	-11	-31	245	18
					450		-22	-41	238	16
					400	235·5	-36	-52	238	15
					350		-48		237	12
					300	298·8	-58		248	16
					250		-51		243	27
					200	387·0	-50		234	27
					170		-51		227	27
					150		-52		224	27
					130		-51		229	30
					110		-51		212	19
					100	538·3	-52		198	22
					90		-52		211	19
					80	082 mb	-51			
					70					
					60					
						Isothermal 710-695 mb 20°				
					Tropopause	I 293 mb -62° 30,500'				
VALENTIA	15h	1020·4 mb	1018 mb	820 mb	Surf	00·3	57	47	280	06
					1000	06·5	55	45	280	07
					950		48	35	282	12
					900	34·1	41	34	284	14
					850		36	27	286	16
					800	66·3	30	23	283	15
					750		27	15	283	17
					700	100·0	23	-03	285	19
					650		16	-05	286	19
					600	139·1	08	-08	297	19
					550		02	-19	301	20
					500	184·1	-04	-18	291	24
					450		-14	-18	287	23
					400	236·2	-25	-33	280	21
					350		-37	-44	280	28
					300	300·8	-50		287	31
					250		-57		287	29
					200	390·5	-49		274	25
					170		-46		268	18
					150		-48		256	17
					130		-49		258	19
					110		-48		242	12
					100	541·9	-48		255	10
					90		-46		209	10
					80		-44		212	10
					70		-46		212	11
					60					
						Isothermal 750-728 mb 27°				
					Tropopause	II 269 mb -57° 32,600'				

21h G.M.T.

Station	Time	M.S.L.	Surface	Freezing	Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LERWICK	21h	1009·3 mb	999·2 mb	887 mb	Surf	02·7	46	40	285	17
					1000	02·5				
					950		39	35	269	21
					900	30·6	33	30	269	22
					850		28	24	270	21
					800	61·2	22	20	266	20
					750		22	10	252	19
					700	95·6	18	03	247	18
					650		11	01	247	17
					600	134·2	04	-09	247	16
					550		-04	-14	249	16
					500	178·4	-16	-29	252	13
					450		-24	-35	251	10
					400	230·2	-36	-46	296	10
					350		-48		309	14
					300	293·4	-57		280	12
					250		-49		233	19
					200	382·1	-46		221	19
					170		-45		214	18
					150		-45		214	14
					130		-46		208	16
					110		-46		195	14
					100	539·2	-44		180	14
					90		-46		182	07
					80		-50		167	06
						Inversion 800 mb 22°-785 mb 23° Isothermal 785-759 mb 23°				
					Tropopause	I 315 mb -57° 28,200'				
STORNOWAY	21h	1012·1 mb	1010·5 mb	850 mb	Surf	00·4	50	44	230	05
					1000	03·3	49	43		
					950		43	37	265	16
					900	31·7	37	31	268	16
					850		32	27	262	16
					800	62·6	24	19	257	17
					750		19	05	259	18
					700	96·7	14	-15	271	19
					650		09	-18	276	16
					600	135·2	04	-22	281	16
					550		-04	-32	286	16
					500	179·5	-14	-44	290	17
					450		-29	-52	292	13
					400	231·2	-36	-59	290	19
					350		-48		287	15
					300	299·2	-60		278	16
					250		-52		260	17
					200	382·3	-45		242	12
					170		-46		236	13
					150		-44		232	10
					130		-44		219	09
					110		-42		176	08
					100	535·9	-42		184	09
					90		-42		164	06
					80		-44		154	06
					70		-49		202	03
					60		-45			
						Isothermal 610-600 mb 04°				
					Tropopause	I 293 mb -61° 29,900'				
LEUCHARS	21h	1013·7 mb	1012·9 mb	840 mb	Surf	00·2	54	41	260	08
					1000	03·7	53	41		
					950		48	38	282	18
					900	32·3	41	34	292	20
					850		34	28	280	16
					800	63·4	28	20	269	12
					750		23	05	276	15
					700	97·7	17	02	268	17
					650		09	-06	268	18
					600	136·3	03	-16	267	20
					550		-03	-22	269	20
					500	180·7	-11	-26	275	18
					450		-21	-36	275	22
					400	232·9	-31	-45	276	25
					350		-43		273	29
					300	296·7	-58		264	28
					250		-52		243	29
					200	384·9	-45		234	26
					170		-46		230	24
					150				For Winds	
					130					
					110				See	
					100					
					90				Page 3.	
					80					
					70					
					60					
						Inversion 726 mb 15°-706 mb 16°				
					Tropopause	I 280 mb -62° 31,200'				
ALDERGROVE	21h	1016·4 mb	1006·9 mb	850 mb	Surf	02·6	53	41	Calm	
					1000	04·5				
					950		46	36	301	12
					900	33·0	39	32	294	13
					850		32	25	289	13
					800	64·0	27	19	286	11
					750		19	13	283	14
					700	98·1	15	05	280	16
					650		07	-06	274	14
					600	136·5	00	-12	270	22
					550		-07	-22	266	20
					500	180·5	-15	-30	259	25
					450		-26	-40	253	25
					400	232·1	-36	-48	214	31
					350		-47		234	32
					300	295·4	-56		239	34
					250		-65		256	29
					200	381·8	-55		250	19
					170		-59		249	20
					150		-53		237	18
					130		-54		223	13
					110		-56		218	14
					100	531·8	-53		216	18
					90		-54		214	13
					80		-54		210	19
					70		-53		169	12
					60		-56			
						Inversion 726 mb 15°-706 mb 16°				
					Tropopause	I 263 mb -67° 32,200'				
LIVERPOOL	21h	1017·2 mb	1015·2 mb	833 mb	Surf	00·6	55	44	Calm	
					1000	04·7	53	42	286	12
					950		48	39	263	10
					900	33·3	40	33	280	17
					850		34	28	284	18
					800	64·4	28	23	277	16
					750		21	17	259	18
					700	98·7	17	09	257	14
					650		12	-01	252	15
					600	137·5	07	-10	255	20
					550		-01	-17	260	21
					500	182·1	-11	-31	268	21
					450		-21	-39	262	23
					400	234·2	-32	-47	258	18
					350		-47		260	24
					300	297·5	-59		256	25
					250		-59		232	27
					200	385·5	-48		229	27
					170		-49		233	26
					150		-50		229	26
					130		-49		209	23
					110		-49		215	23
					100	537·4	-49		227	13
					90		-52			
					80					
					70					
					60					
						Inversion 750 mb 21°-735 mb 22°				
					Tropopause	II 300 mb -47° 30,000'				
DOWNHAM MARKET	21h	1016·4 mb	1012·0 mb	800 mb	Surf	01·2	56	46	Calm	
					1000	04·5	55	42		
					950		51	40	250	11
					900	33·2	45	36	248	10
					850		38	32	248	10
					800	64·6	32	27	251	12
					750		26	21	249	16
					700	99·2	20	15	248	19
					650		15	09	248	22
					600	138·3	09	-06	248	22
					550		02	-13	249	20
					500	183·1	-07	-23	241	22
					450		-19	-31	237	27
					400	235·6	-30	-44	237	29
					350		-40	-54	234	29
					300	299·9	-47		219	40
					250		-46		210	46
					200	389·3	-45		216	44
					170		-46		216	32
					150		-46		217	30
					130		-46		203	28
					110		-50			
					100					
					90					
					80	536·9	-53		207	31
					70		-59		215	30
					60		-59		200	18
						Isothermal 337-318 mb -93°				
					Tropopause	II 300 mb -47° 30,000'				
LARKHILL	21h	1019·2 mb	1003·1 mb	809 mb	Surf	04·4	52	44	270	07
					1000	05·2	52	44		
					950		47	37	294	18
					900	33·8	41	33	295	15
					850		36	25	279	12
					800	64·6	31	17	264	13
					750		26	05	262	13
					700	99·6	19	03	259	15
					650		14	-01	268	19
					600	138·5	08	-08	266	20
					550		00	-16	256	20
					500	183·1	-10	-27	250	20
					450		-21	-37	259	20
					400	235·4	-33	-48	264	20
					350		-43		269	19
					300	299·1	-56		250	25
					250		-56		235	35
					200	386·5	-51		231	33
					170		-53		224	36
					150		-54		226	36
					130		-53		231	30
					110		-54		204	29
					100					
					90					
					80					
					70					
					60					
					Tropopause	II 288 mb -60° 30,500'				
CAMBORNE	21h	1021·9 mb	1011·2 mb	834 mb	Surf	02·9	53	47	280	03
					1000	06·1	52	47	268	18
					950		47	43	276	16
					900	34·7	40	38	282	14
					850		34	30	283	14
					800	65·8	30	23	280	15
					750		24	14	278	14
					700	100·2	20	02	277	16
					650		14	-01	276	18
					600	139·1	06	-12	270	22
					550		-01	-22	274	29
					500	183·7	-09	-32	275	33
					450		-20	-35	269	23
					400	236·0	-31	-42	265	26
					350		-44		265	25
					300	299·7	-58		272	27
					250		-60		257	31
					200	386·5	-53		245	28
					170		-55		233	27
					150		-55		238	28
					130		-54		227	21
					110		-55		224	24
					100	536·3	-56		234	23
					90		-56		226	17
					80		-56		190	11
					70		-58		146	10
					60	(67 mb	-60			
						Isothermal 815-800 mb 30°				
					Tropopause	I 300 mb -58° 27,880'				
VALENTIA					Surf					
					1000					
					950					
					900					
					850					
					800					
					750					
					700					
					650					
					600					
					550					
					500					
					450					
					400					
					350					
					300					
					250					
					200					
					170					
					150					
					130					
					110					
					100					
					90					
					80					
					70					
					60					
					Tropopause	II 269 mb -57° 32,600'				

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No. 11769

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Tuesday 19th June 1951 Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	Valentia	Station
Pressure: Time	03hrs G.M.T.	03hrs G.M.T.	03hrs G.M.T.	03hrs G.M.T.	03hrs G.M.T.	03hrs G.M.T.	03hrs G.M.T.	03hrs G.M.T.	03hrs G.M.T.	Pressure: Time
M.S.L.	1009.9 mb	1013.2 mb	1015.0 mb	1017.7 mb	1017.7 mb	1018.0 mb	1020.3 mb	1022.0 mb	1018.3 mb	M.S.L.
Surf	999.8 mb	1011.6 mb	1014.1 mb	1008.2 mb	1015.7 mb	1013.3 mb	1003.9 mb	1011.2 mb	1017 mb	Surf
Freezing	886 mb	850 mb	860 mb	850 mb	841 mb	820 mb	829 mb	838 mb	830 mb	Freezing

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	43	40	290	16	0·4	46	43	calm		0·2	43	39	calm		02·6	44	42	210	04	0·6	47	43	calm		01·2	50	46	258	46	04·4	41	41	280	03	02·3	46	43	200	03	0·3	52	51			Surf
1000	02·7					03·5	46	43			04·0	45	40	271	10	02·8	46	43			04·8	51	47	267	09	04·8					05·4	42	42			05·3	50	46	246	15	5·1	51	50			1000
950		40	37	265	24		42	38	277	15		42	37	280	15		43	36	271	07		46	38	285	09		48	41	308	13		45	42	295	15		46	43	265	14		46	44			950
900	30·8	34	31	263	25	31·8	37	33	273	17	32·3	37	32	275	16	32·2	38	30	273	10	33·3	40	34	273	12	33·4	42	38	288	10	33·8	41	39	291	14	34·4	43	36	273	14	33·5	39	37			900
850		28	28	260	29		32	28	271	16		31	28	273	13		32	22	268	14		33	26	268	13		36	34	270	09		35	25	281	12		34	31	261	14		34	32			850
800	61·4	22	18	263	28	62·7	27	23	267	16	63·2	26	22	264	12	64·2	29	12	264	15	64·3	27	21	268	21	64·7	29	27	263	08	65·0	28	17	268	14	65·5	28	23	279	14	64·6	25	26			800
750		20	06	271	22		21	14	270	15		21	07	267	17		21	13	263	17		20	06	268	20		23	20	250	13		25	06	264	15		24	08	278	13		23	21			750
700	95·6	16	-3	278	21	97·1	19	03	280	14	97·5	17	-2	260	18	98·8	17	06	275	19	98·6	19	-4	261	19	99·1	19	-7	252	13	99·4	18	-3	260	16	00·0	20	-4	275	12	99·1	17	03			700
650		10	-6	286	18		13	-4	281	14		10	-4	260	21		12	-3	276	18		12	-4	251	16		16	-14	257	22		11	-14	245	17		12	-10	272	13		11	07			650
600	134·1	02	-15	280	12	136·0	06	-13	291	14	136·1	04	-11	263	15	137·3	05	-10	278	18	137·4	03	-14	264	18	138·3	10	-11	258	26	138·1	05	-10	240	17	138·8	04	-9	270	17	137·7	03	00			600
550		-6	-25	277	16		-2	-20	285	12		-4	-23	260	17		-2	-23	271	17		-2	-20	252	19		01	-18	246	23		-4	-18	244	35		-3	-9	270	18		-4	-7			550
500	178·2	-16	-34	277	21	180·4	-12	-27	283	13	180·4	-11	-26	281	15	181·8	-8	-26	279	20	181·8	-11	-34	268	21	183·0	-9	-29	246	24	182·5	-10	-60	250	30	183·2	-11	-18	268	26	182·1	-12	-19			500
450		-26	-42	273	22		-23	-38	267	13		-22	-34	284	22		-19	-34	284	22		-21	-31	248	24		-21	-26	246	24		-21	-60	249	32		-22	-29	270	29		-23	-27			450
400	229·7	-38	-51	268	22	232·3	-36	-50	286	12	232·3	-35	-44	276	19	234·2	-30	-44	284	24	234·0	-33	-42	245	28	235·2	-32	-49	244	27	234·6	-31	-60	248	31	235·2	-04	-10	271	31	234·1	-35	-39			400
350		-43		280	22		-50		317	09		-44		271	25		-43		283	25		-45		240	30		-44		236	24		-47		239	31		-44		269	33		-45				350
300	292·5	-64		273	22	294·5	-64		294	10	296·2	-55		273	26	298·0	-56		284	22	297·5	-58		255	34	298·7	-61		235	33	298·1	-56		231	37	298·8	-59		262	35	297·5	-59				300
250		-50		257	16		-49		267	14		-56		236	23		-59		264	26		-58		250	28		-58		233	40		-59		235	36		-63		263	41		-63				250
200	360·8	-47		274	18	383·5	-47		246	09	369·2	-45		257	13	366·1	-46		256	18	384·9	-51		275	30	385·8	-54		223	33	385·6	-51		235	33	385·1	-53		246	28	384·0	-56				200
170		-46		218	16		-46		221	09		-47		228	20		-46		257	17		-49		259	30		-54		220	04		-52		233	33		-55		246	28		-55				170
150		-47		218	15		-48		198	07		-47		248	23		-47		235	16		-51		222	21		-55		216	30							-57		247	26		-55				150
130		-48		204	15		-46					-43		222	21		-47		234	12		-49		224	20		-54		213	31							-57		238	22		-55				130
110		-46		178	10						536·9	-50		227	18		-47		220	14		-51		223	20		-56		202	17							-56		229	19		-56				110
100	533·5	-49		217	06							-47		213	14	535·5	-46				536·1	-50		201	21	536·4	-57		206	14						534·4	-58		216	09	533·5	-57				100
90		-50		221	09							-44		193	15		-46					-51		188	15											-58		203	18		-54				90
80		-52		174	08							-46		207	10		-47					-52														-57		213	12		-55				80
70												-52					-48					(82)														-58		218	15		-55				70
60																																				(68)				(65)	-54				60

Inversion 800 mb 22° - 750 mb 23°

Inversion 728 mb 20° - 715 mb 21° / 702 mb 45° - 690 mb 47°

Inversion 704 mb 43° - 683 mb 46°

Isothermal 784 - 770 mb 26°

Inversion 1016 mb 47° - 1003 mb 52° / 750 mb 26° - 733 mb 22°

Inversion 1003 mb 50° - 977 mb 51° / 710 mb 18° - 700 mb 19°

Inversion 1004 mb 41° - 963 mb 47°

Inversion 1011 mb 46° - 995 mb 51°

Isothermal 764 - 750 mb 24°

Tropopause	I 297 mb -65° 29500'			I 305 mb -66° 29000'			I 275 mb -59° 31500'			II 283 mb -64° 30900'			II 281 mb -61° 31100'			I 277 mb -63° 31500'			I 273 mb -62° 31800'			I 275 mb -66° 31800'			II 287 mb -62° 30700'			Tropopause
Station	LERWICK			STORNOWAY			LEUCHARS			ALDERGROVE			LIVERPOOL			DOWNHAM MARKET			LARKHILL			CAMBORNE						Station
Pressure: Time	09hrs G.M.T.			09hrs G.M.T.			09hrs G.M.T.			09hrs G.M.T.			09hrs G.M.T.			09hrs G.M.T.			09hrs G.M.T.			09hrs G.M.T.						Pressure: Time
M.S.L.	1010·4 mb			1013·5 mb			1015·7 mb			1017·9 mb			1018·7 mb			1013·2 mb			1020·7 mb			1022·2 mb						M.S.L.
Surf	1000·4 mb			1011·9 mb			1014·9 mb			1008·2 mb			1016·7 mb			1014·8 mb			1004·9 mb			1011·5 mb						Surf
Freezing	853 mb			850 mb			841 mb			832 mb			840 mb			824 mb			834 mb			830, 784 mb						Freezing

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	45	37	305	12	0·4	54	51	240	07	02·2	55	46	270	10	02·6	52	44	210	04	0·6	57	45	250	05	01·2	58	44	200		02·4	55	50	250	03	02·3	54	48	270	06						Surf
1000	02·8	45	37			03·7	52	42			04·3	52	41	260		04·8	51	44			05·1	52	43	257	09	05·3	54	48			05·7	54	48			06·0	52	47	248	09						1000
950		41	35	276	18		45	37	264	18		45	36	271	19		44	38	230	09		46	35	268	08		48	39	262	10		46	40	259	07		46	46	254	11						950
900	31·0	33	27	274	20	32·1	37	31	255	17	32·7	39	32	279	18	33·2	38	31	237	12	33·6	40	29	278	14	33·9	42	33	270	09	34·2	39	35	271	07	34·5	40	36	261	13						900
850		27	21	273	18		32	27	266	16		33	22	278	19		33	26	250	13		33	24	273	16		36	27	275	11		35	29	269	05		34	28	268	15						850
800	61·6	26	14	278	18	63·1	31	11	280	19	63·8	27	16	273	18	64·3	28	22	257	14	64·7	27	19	271	14	65·1	29	20	276	14	66·3	29	24	267	10	65·7	32	29	282	15						800
750		21	00	275	13		25	09	288	20		24	11	272	15		23	18	267	14		20	11	262	14		22	13	269	15		24	12	274	10		28	20	295	16						750
700	95·8	16	-10	276	20	97·6	19	05	287	18	98·0	13	02	274	16	98·7	18	06	263	19	99·0	18	-7	253	16	99·5	20	06	260	18	99·9	20	04	272	14	00·4	24	13	300	18						700
650		10	-5	276	22		15	-2	273	21		11	-3	272	15		12	-3	261	19		14	03	244	19		13	-6	270	17		14	05	302	24											650
600	134·3	00	-13	275	24	136·6	08	-16	273	11	136·6	05	-14	274	22	137·4	03	-13	272	16	137·7	04	-5	262	20	138·4	06	-6	244	16	138·8	07	-11	272	18	139·0	-3	305	24						600
550		-9	-18	274	27		-1	-29	274	12		-1	-24	282	18		-4	-21	287	14		-4	-14	264	22		-2	-22	283	17		-2	-13	263	21		-2	-11	294	25						550
500	178·1	-18	-27	275	26	181·2	-10	-18	279	13	181·0	-14	-28	283	17	181·7	-13	-28	283	15	182·0	-13	-25	261	20	182·9	-7	-33	266	22	183·3	-10	-19	260	25	184·1	-11	-18	278	26						500
450		-27	-36	272	27		-20	-36	283	17		-22	-37	282	16		-23	-37	258	20		-23	-37	255	17		-18	-33	258	22		-20	-30	260	24		-19	-26	282	27						450
400	229·5	-37	-48	272	29	233·5	-31	-45	284	15	233·2	-35	-45	272	16	233·7	-34	-46	258	23	234·0	-33	-50	253	18	235·4	-30	-47	245	25	235·6	-31	-42	252	28	236·4	-31	-42	280	28						400
350		-49		274	31		-42		277	16		-46		272	17		-48		250	28		-46		261	26		-41		253	28		-42		242	28		-45		283	30						350
300	292·3	-63		275	34	297·5	-55		277	13	296·2	-55		270	15	296·8	-61		281	29	297·3	-59		263	25	299·3	-53		250	31	299·5	-57		244	29	299·9	-59		285	33						300
250		-50		241	16		-50		269	13		-53		252	19		-61		270	26		-58		247	25		-57		235	38		-56		231	31		-61		287	34						250
200	360·5	-45		244	16	364·8	-43		258	14	364·1	-46		237	17	365·4	-50		256	19	366·4	-48		245	22	387·3	-45		226	31	386·7	-50		242	31	386·5	-53		270	27						200
170		-44		218	14		-44		250	13		-46		284	16		-48					-49		237	26		-47		248	30		-48		238	27		-55		257	27						170
150		-45		206	13		-43		245	08		-46		236	16		-48					-49		237	20		-46		223	30		-51		235	23		-55		251	22						150
130		-44		182	12		-42		229	08		-48		202	14		-50					-50		222	20		-45		218	27		-51		221	25		-56		247	19						130
110		-44		190	10		-40		149	06		-45		201	14		-49					-48		209	16		-48		203	23		-49		225	21		-58		240	16						110
100	534·1	-44		178	09	538·2	-40		158	07	536·9	-45		204	13	535·9	-46				536·3	-48		202	16	536·9	-50				536·9	-47		222	18	535·8	-56		231	17						100
90		-44		140	05		-41		165	06		-46		181	12		-46					-49		209	13							-47		210	13		-55		217	16						90
80		-44					-42		164	07		-47		184	12		-47					-51		179	10							-53					-54		215	15						80
70							-42		167	09							-48				(75)	-52														-56		220	14						70
60							-40																													(66)	-57										60

Inversion 814 mb 28° - 800 mb 31°

Isothermal 693 - 669 mb 18°

Isothermal 680 - 655 mb 12°

Isothermal 784 - 770 mb 26°

Inversion 745 mb 19° - 730 mb 24°

Inversion 750 mb 22° - 736 mb 26°

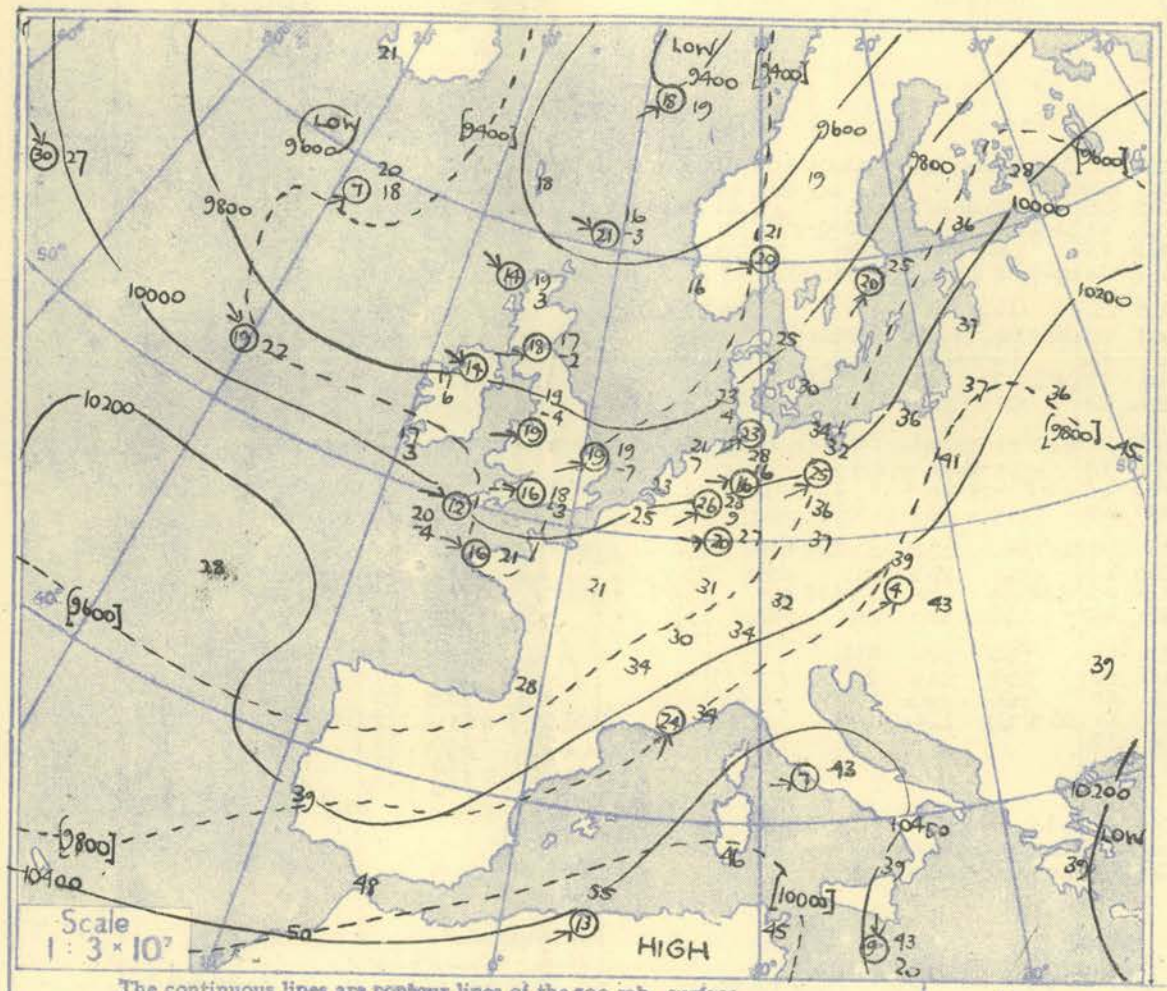
Isothermal 756 - 741 mb 24°

Isothermal 830 - 784 mb 32°

Tropopause	I 190 mb -66° 29800'			I 263 mb -67° 32500'			I 295 mb -60° 30300'			II 283 mb -64° 30900'			I 273 mb -66° 31800'			I 269 mb -59° 32400'			I 280 mb -62° 31400'			II 300 mb -59° 29592'													Tropopause

Tuesday 19th June. 1951.

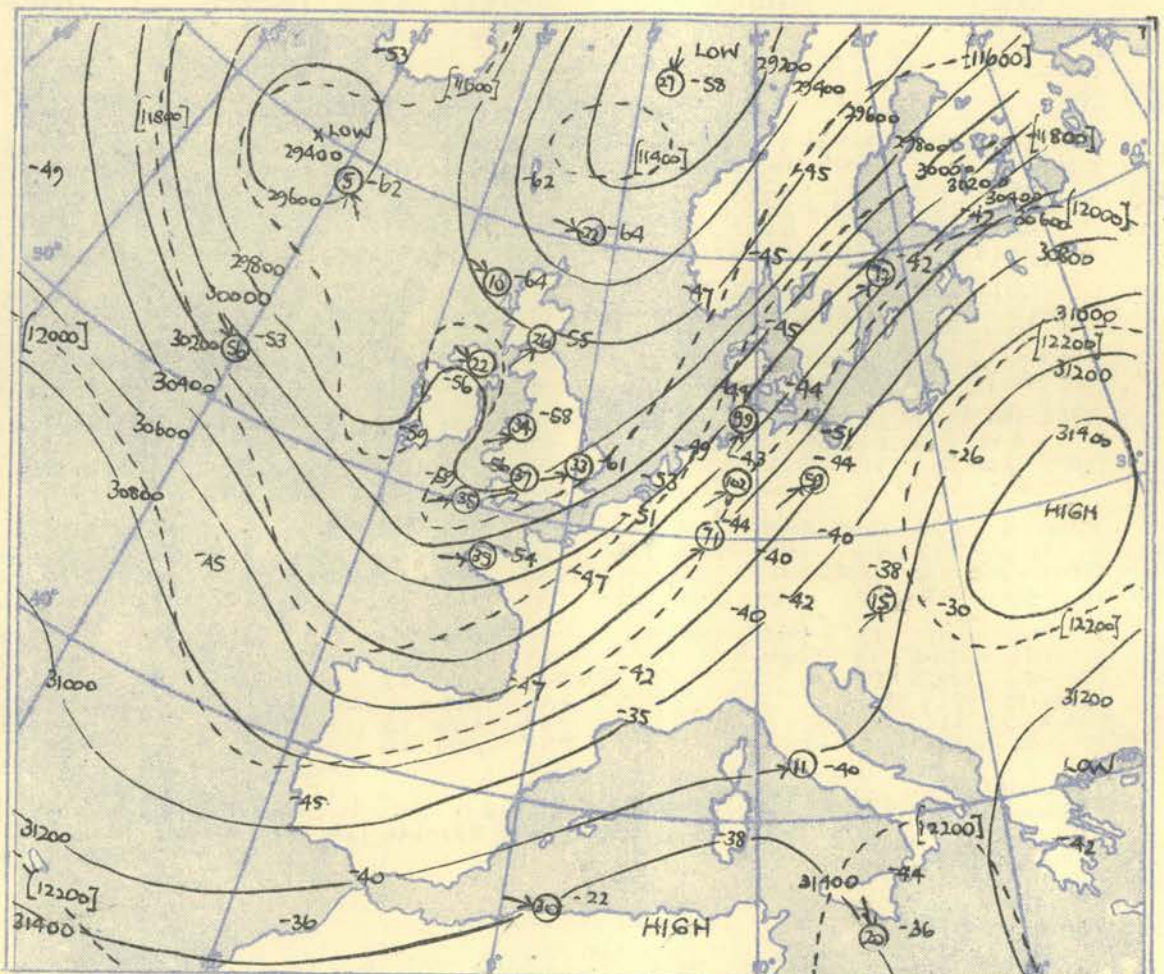
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.



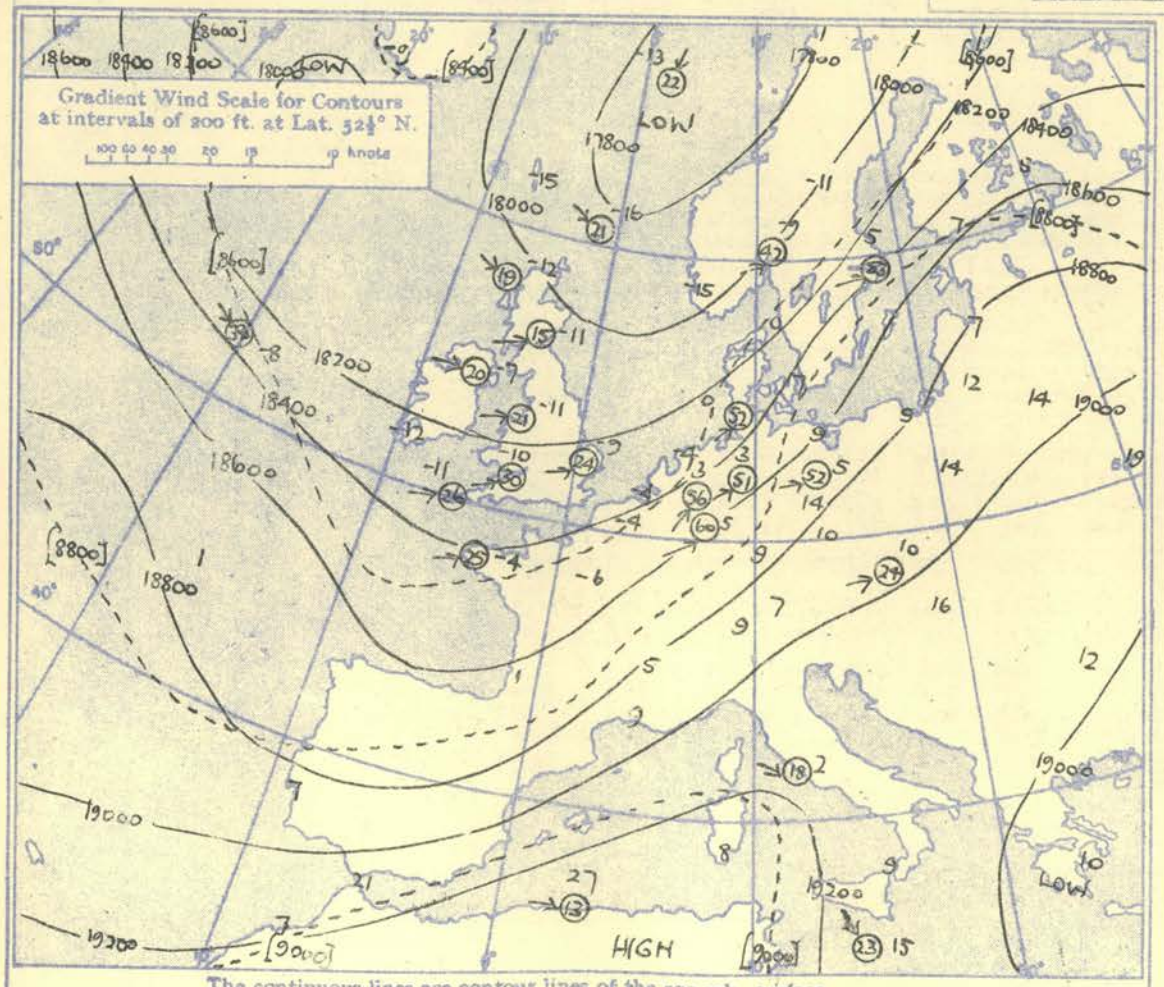
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

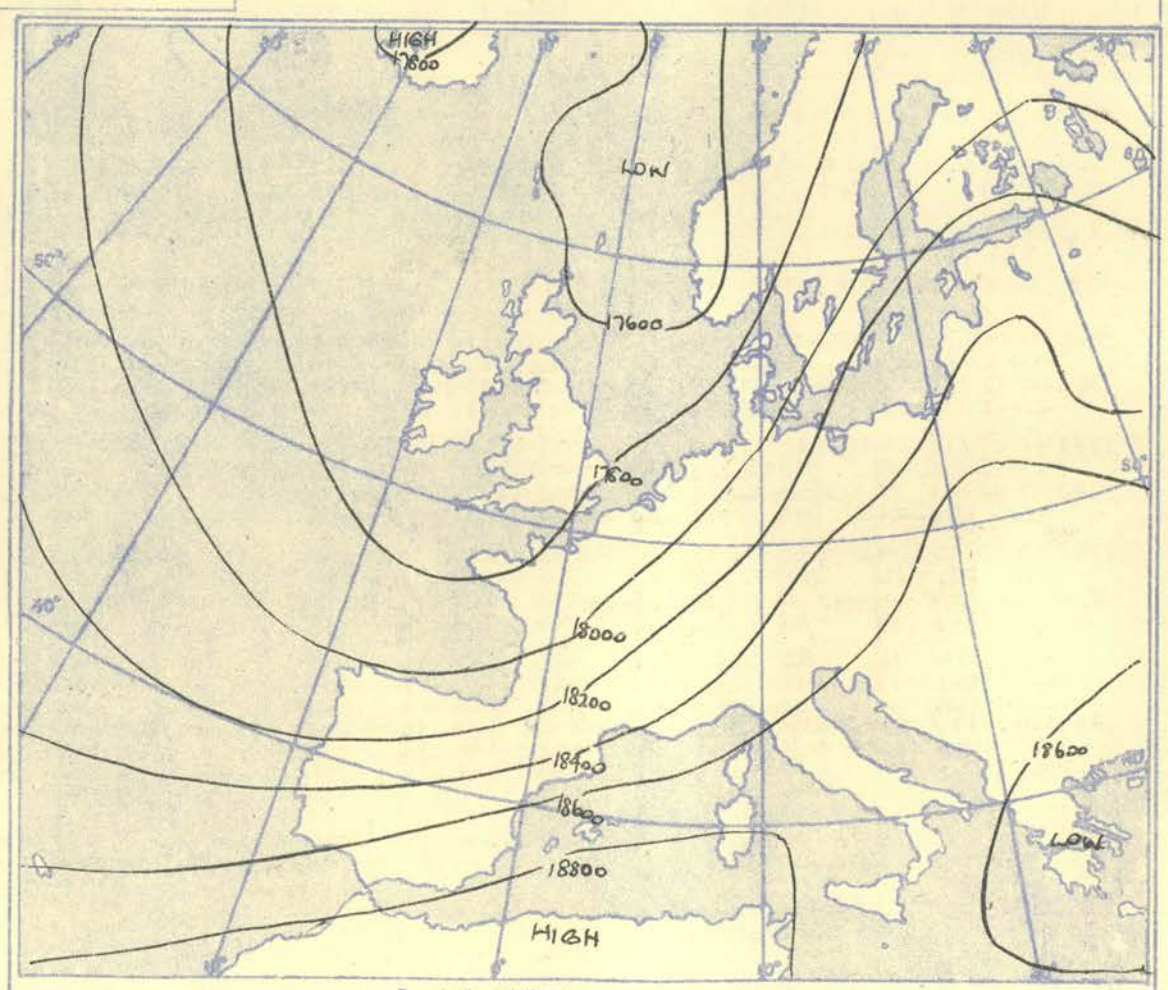
100 60 40 30 20 15 10 knots



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500 - 1000mb.

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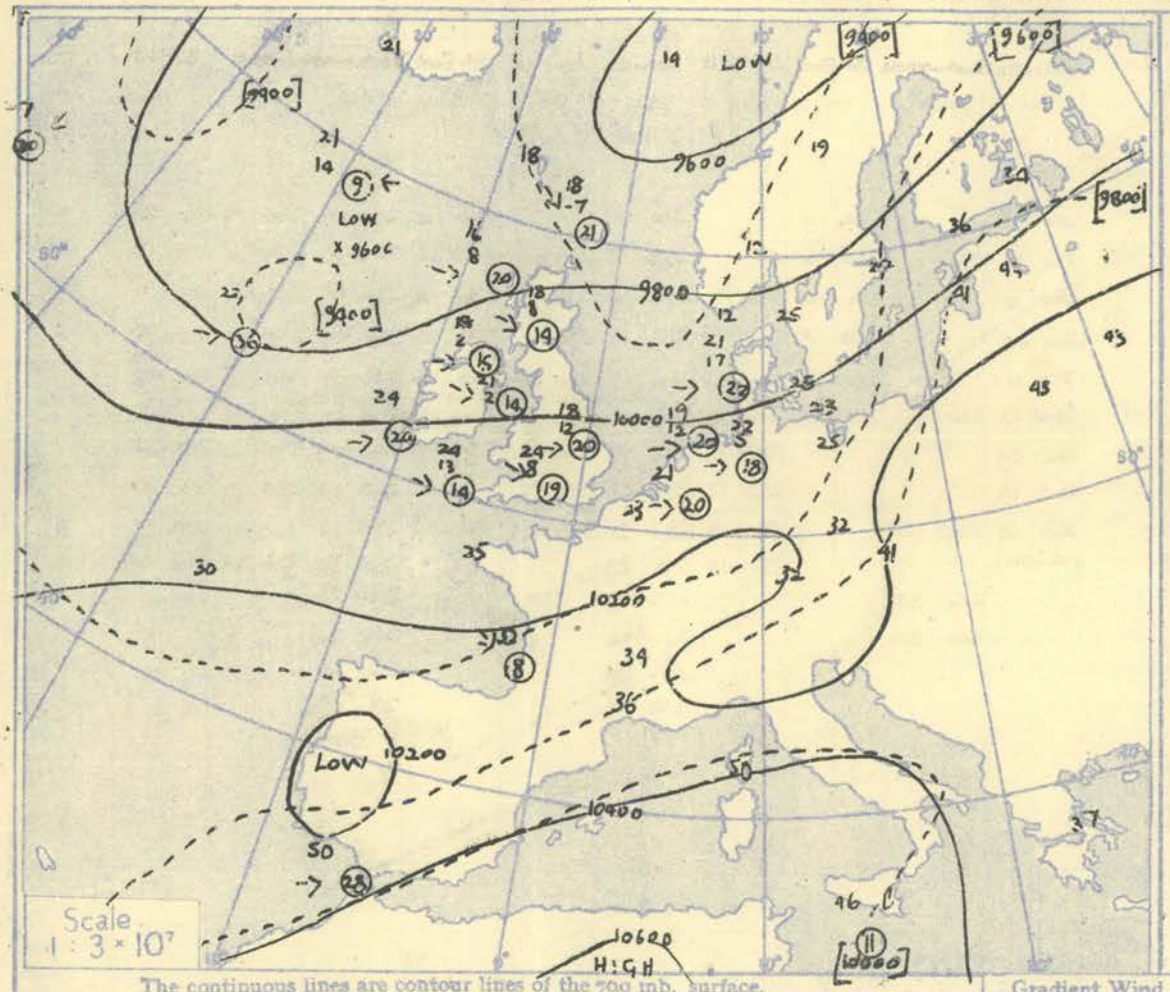
AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

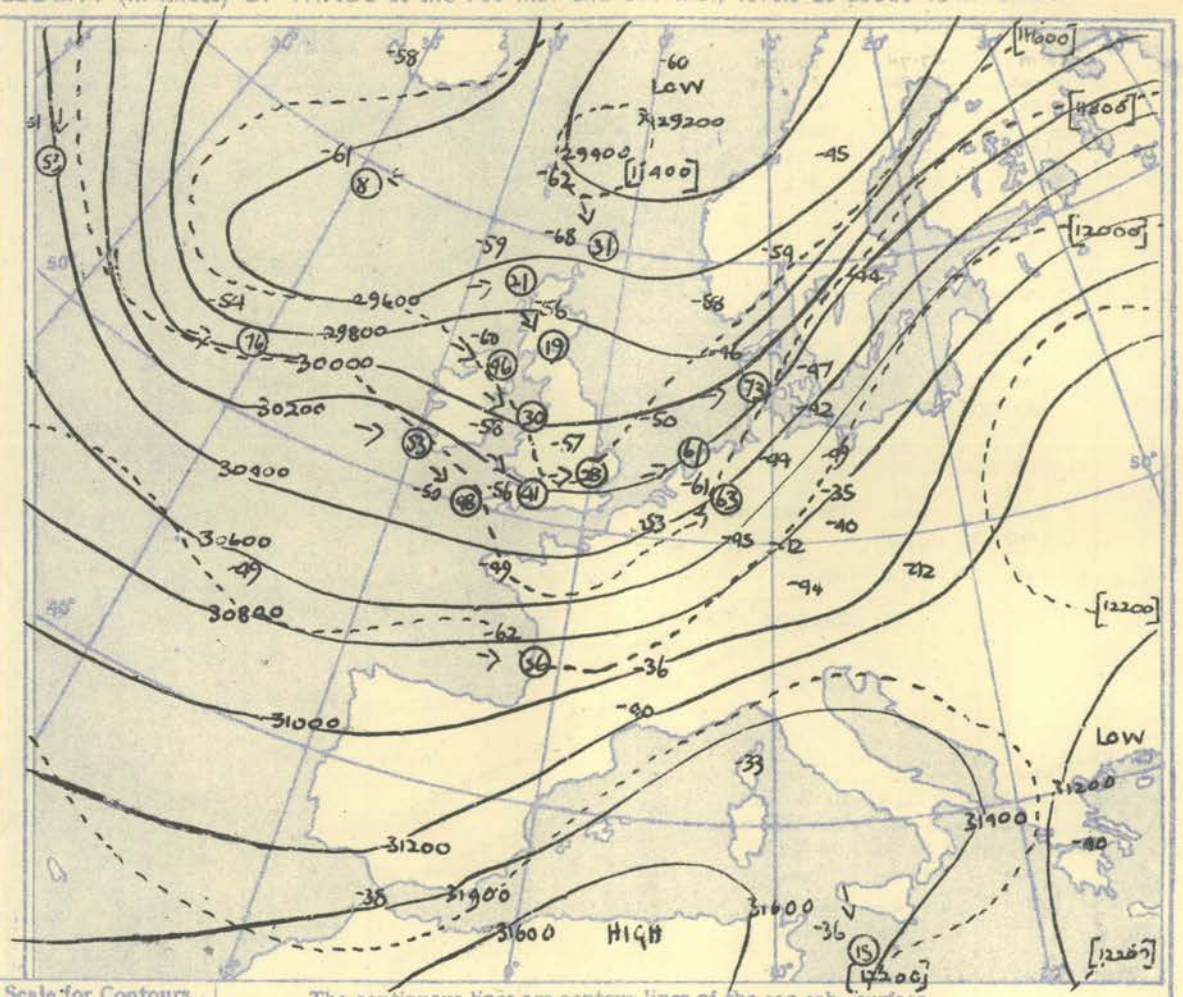
| | | |

Tuesday 19th June 1951.

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

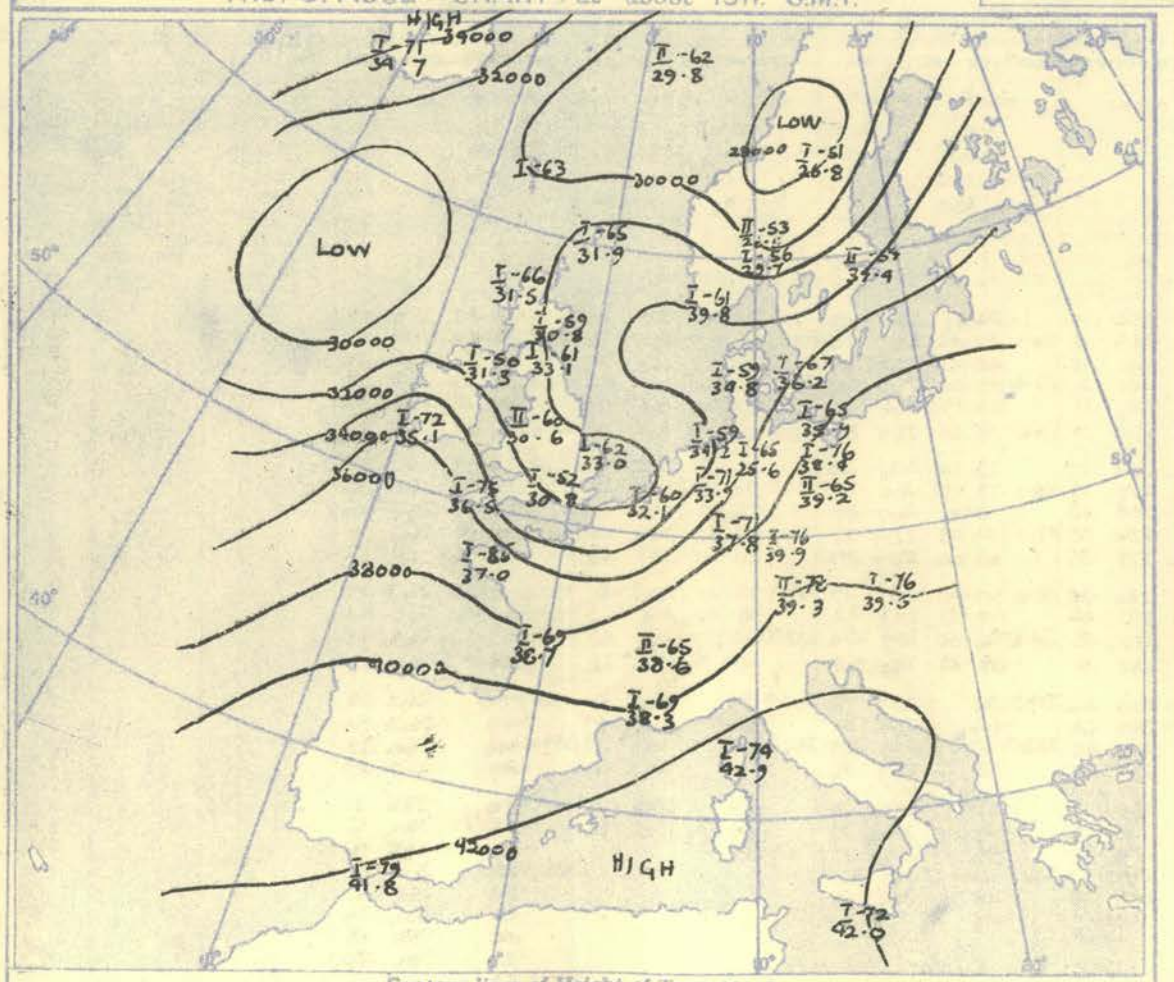


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N

100 50 40 30 20 15 10 knots

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Note persistence of upper cold trough in vicinity of the British Isles.

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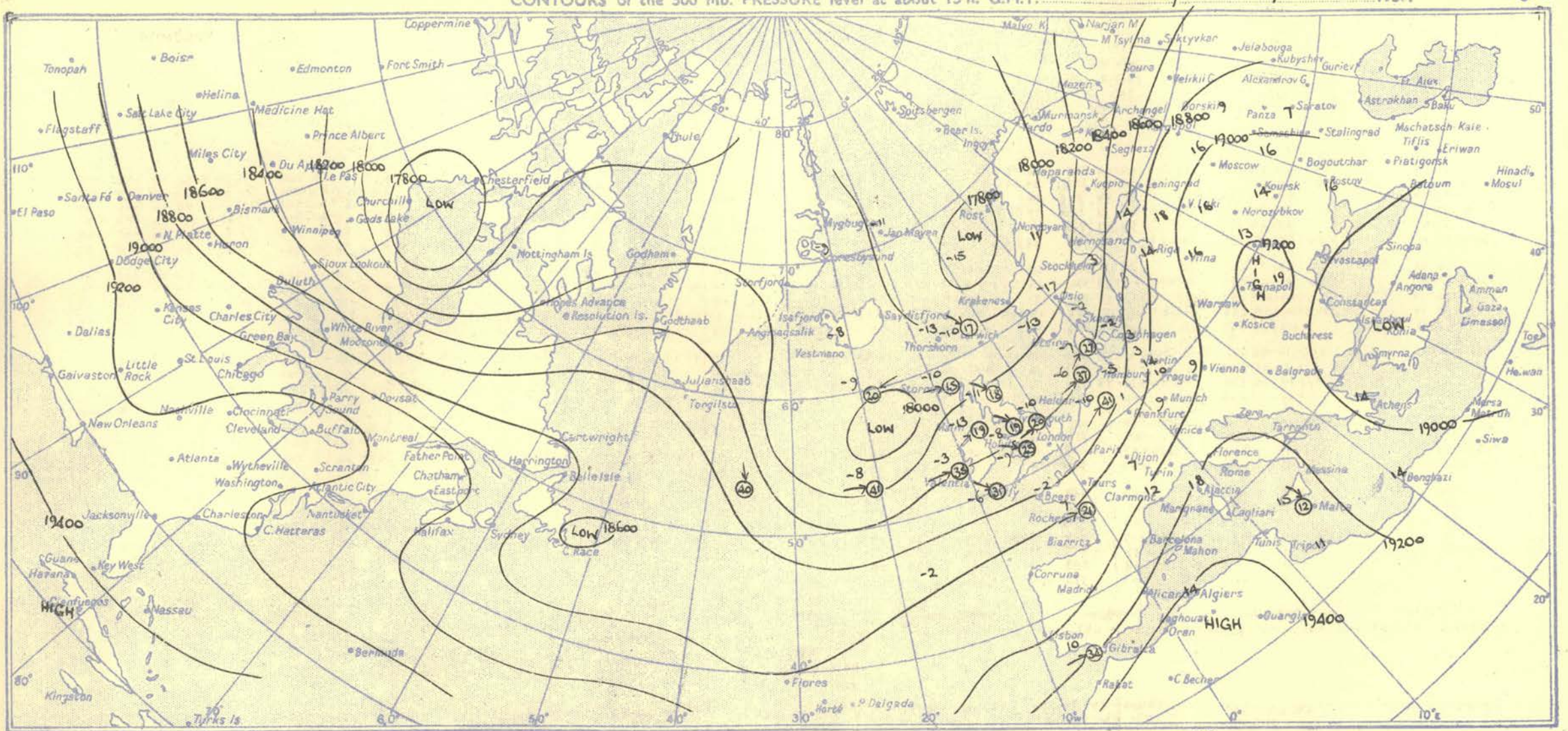
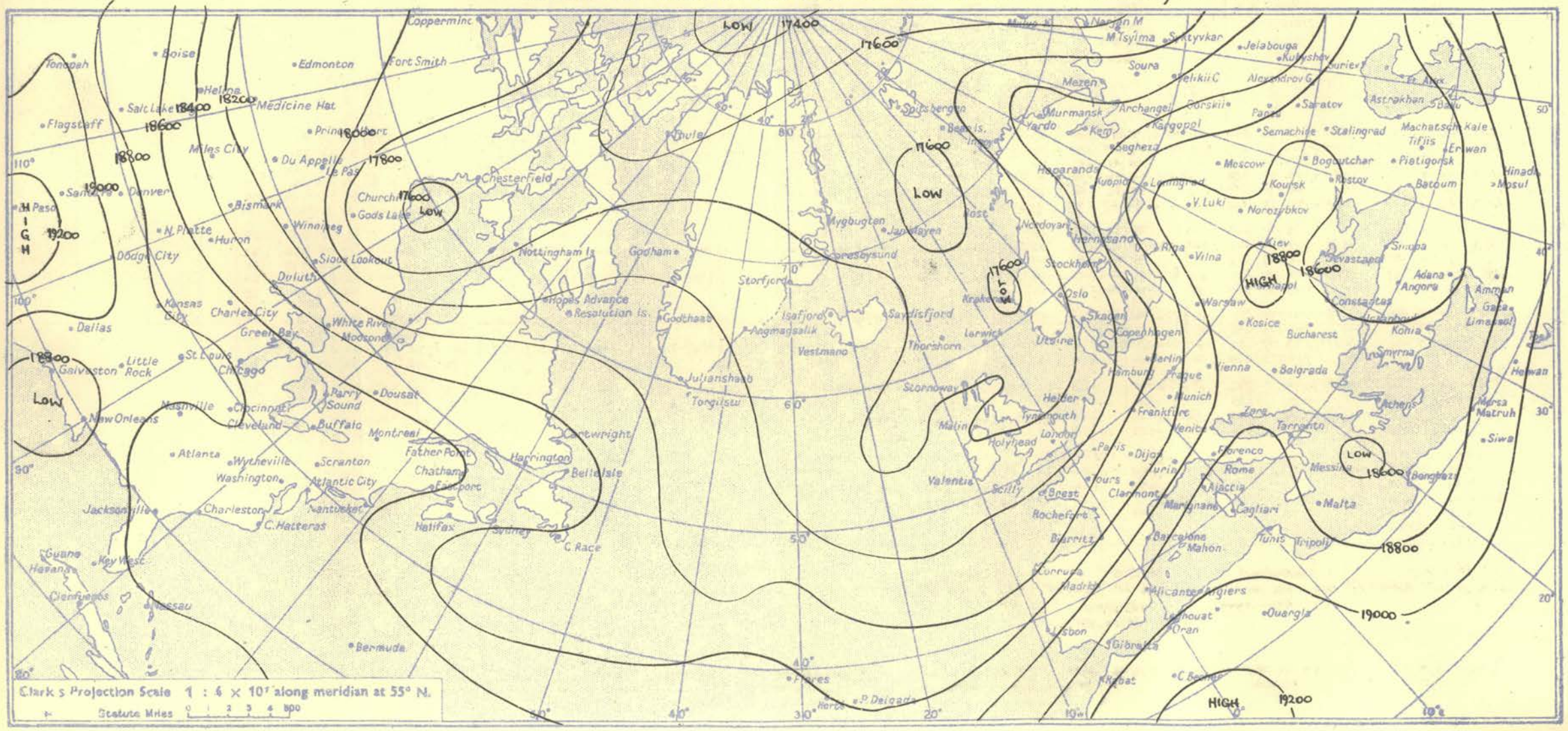
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Tuesday 19th June, 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Tuesday 19th June, 1951.



Clark's Projection Scale 1 : 4 × 10⁷ along meridian at 55° N.

Statute Miles 0 1 2 3 4 500

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. ...day ... June 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.
Pressure: M.S.L.	1012·3 mb	1013·9 mb	1016·0 mb	1017·0 mb	1019·0 mb	1019·1 mb	1020·9 mb	1022·5 mb	1019·3 mb
Pressure: Surf	1002·3 mb	1012·3 mb	1015·2 mb	1009·5 mb	1017·0 mb	1014·7 mb	1005·2 mb	1012·0 mb	1017 mb
Pressure: Freezing	864 mb	812 mb	807 mb	805 mb	807 mb	809 mb	800 mb	782 mb	810 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LERWICK					
Surf	02·7	52	39		
1000	03·3				
950		43	34		
900	31·6	36	28		
850		30	25		
800	62·6	30	14		
750		25	03		
700	97·0	18	-07		
650		12	-13		
600	135·8	05	-13		
550		+03	-12		
500	180·2	-10	-22		
450		-21	-37		
400	232·4	-33	-47		
350		-46			
300	295·9	-58			
250		-57			
200	383·4	-43			
170		-46			
150		+48			
130		-42			
110		-35			
100		+34			
90	(105 mb)				
80					
70					
60					
Tropopause	I 271 mb -65° 31·900				
STORNOWAY					
Surf	00·4	56	46	210	12
1000	03·8	55	42		
950		+58	40	213	18
900	32·4	41	34	222	18
850		35	28	234	18
800	63·6	30	15	235	18
750		24	17	245	20
700	98·0	16	08	245	20
650		14	00	257	16
600	136·9	07	-20	255	14
550		-01	-26	247	15
500	181·5	-10	-38	251	15
450		-21	-37	265	16
400	233·7	-34	-46	274	20
350		-47		268	18
300	297·0	-59		251	21
250		-58		253	16
200	384·3	-47		250	14
170		-45		234	11
150		-43		229	11
130		-42		231	10
110		-42		228	06
100	538·2	-41		158	05
90		-42		156	07
80		-44		121	03
70		-42		120	09
60					
Tropopause	I 275 mb -56° 31·500				
LEUCHARS					
Surf	00·2	62	43	260	14
1000	04·4	60	44	248	24
950		51	38	245	20
900	33·2	44	33	244	17
850		39	29	250	18
800	64·6	21	24	263	15
750		23	18	269	14
700	99·1	18	08	272	14
650		13	-02	280	21
600	138·0	07	-10	282	19
550		00	-24	282	19
500	182·6	-11	-29	286	18
450		-23	-40	277	16
400	234·6	-34	-48	290	16
350		-46		309	24
300	298·1	-56		305	19
250		-62		279	42
200	385·6	-47		256	24
170		-47		250	17
150		-51		246	18
130		-51		231	21
110		-49		233	12
100	538·2	-47		235	08
90		-47		232	07
80		-48		239	10
70		-47			
60					
Tropopause	I 286 mb -59° 30·800 II 257 -61° 33·100				
ALDERGROVE					
Surf	02·6	56	50	180	08
1000	04·6	55	47		
950		49	43	200	14
900	33·3	42	37	237	18
850		38	32	237	20
800	64·6	31	26	244	18
750		25	19	248	16
700	99·2	19	03	254	15
650		13	00	266	19
600	138·1	06	-12	258	15
550		-02	-25	253	12
500	182·6	-11	-33	244	19
450		-21	-41	264	24
400	234·6	-35	-49	275	36
350		-46		275	35
300	298·1	-58		278	46
250		-62		279	42
200	384·7	-50		256	24
170		-51		250	19
150		-51		246	18
130		-51		231	21
110		-49		233	12
100	536·1	-49		235	08
90		-48		232	07
80		-46		239	10
70		-48			
60					
Tropopause	I 274 mb -65° 31·700				
LIVERPOOL					
Surf	00·6	62	42	300	02
1000	05·3	58	39	310	06
950		51	40	283	07
900	34·1	43	35	250	10
850		36	35	234	14
800	65·3	31	27	241	14
750		27	11	258	14
700	99·9	21	02	272	14
650		15	03	277	18
600	138·9	07	-04	272	20
550		00	-17	275	19
500	183·5	-08	-27	287	19
450		-18	-38	286	21
400	235·9	-32	-49	277	26
350		-45		273	28
300	299·4	-38		275	30
250		-60		277	33
200	386·4	-50		261	26
170		-50		251	22
150		-49		244	21
130		-48		232	21
110		-48		230	16
100	539·9	-50		214	14
90		-47		208	12
80		-51		185	12
70		-50		183	11
60		-48		123	04
		-48			
Tropopause	(153 mb)				
	Isothermal. 856-840 mb 36° 690-674 20°				
	II 290 mb -61° 30·600				
DOWNHAM MARKET					
Surf	01·2	65	44	205	13
1000	05·3	63	43	248	12
950		55	41	252	12
900	34·3	46	36	260	12
850		38	31	270	12
800	65·7	31	21	263	14
750		24	17	258	18
700	100·1	18	12	258	20
650		12	-04	259	22
600	138·9	06	-18	261	22
550		-01	-11	259	21
500	184·4	-09	-21	280	25
450		-20	-32	277	28
400	236·7	-32	-44	278	29
350		-45		281	31
300	300·0	-57		296	28
250		-57		235	29
200	388·5	-49		244	33
170		-47		235	30
150		-43		225	24
130		-48		219	25
110		-48		216	21
100	540·0	-46		220	20
90		-50		215	18
80		-48		203	15
70		-50		191	09
60		-48			
Tropopause	I 262 mb -62° 33·000				
	Isothermal. 707-688 mb 18°				
LARKHILL					
Surf	04·4	61	46	240	10
1000	05·8	59	44		
950		+51	36	245	12
900	34·6	44	33	241	09
850		37	22	262	10
800	65·9	32	23	265	11
750		27	19	275	16
700	100·6	24	08	276	19
650		14	02	263	19
600	139·7	07	-06	265	19
550		01	-12	276	23
500	184·4	-09	-21	280	25
450		-20	-32	277	28
400	236·7	-32	-44	278	29
350		-45		281	31
300	300·3	-56		294	41
250		-56		281	33
200	388·9	-51		256	31
170		-50		252	26
150		-51		234	25
130		-51		233	23
110		-48		216	19
100	539·4	-49		210	22
90		-51		211	14
80		-50		201	12
70		-46		237	10
60		-48			
	(63 mb)				
	Inversion 745-626-735 mb 28°				
CAMBORNE					
Surf	02·9	61	49	200	15
1000	06·2	59	48	231	21
950		51	42	241	15
900	35·0	47	40	255	13
850		39	32	263	15
800	66·4	35	26	261	17
750		28	21	264	19
700	101·2	24	13	270	19
650		18	05	275	21
600	140·4	11	-06	272	15
550		03	-05	275	26
500	185·3	-06	-17	277	31
450		-11	-24	282	39
400	238·5	-22	-33	282	48
350		-35	-44	284	48
300	303·6	-50		288	48
250		-68		298	48
200	389·1	-62		269	36
170		-56		261	76
150		-55		256	21
130		-55		240	20
110		-55		235	20
100	538·4	-53		234	19
90		-51		228	12
80		-52			
70		-53			
60					
	(76 mb)				
	Isothermal. 703-692 mb 24°				
VALENTIA					
Surf	00·3	56	50	230	08
1000	05·2	54	48	233	12
950		48	40	246	20
900	33·9	42	36	252	21
850		36	32	247	24
800	65·1	31	27	241	22
750		26	22	248	21
700	99·8	24	06	255	24
650		18	-01	256	27
600	139·0	11	-01	259	32
550		05	-01	263	34
500	184·2	-03	-10	266	35
450		-12	-21	268	40
400	233·4	-22	-31	268	43
350		-36	-45	268	44
300	302·2	-50		264	53
250		-65		270	47
200	388·1	-59		266	57
170		-58		264	26
150		-59		261	23
130		-58		258	20
110		-59		256	16
100	536·7	-59		258	15
90		-55			
80		-55			
70		-54			
60		-53			
		-50			
		-48			
	(43 mb)				
Tropopause	I 271 mb -65° 31·900	I 275 mb -56° 31·500	I 286 mb -59° 30·800 I 257 -61° 33·100	I 274 mb -65° 31·700	II 290 mb -61° 30·600	I 262 mb -62° 33·000	I 288 mb -58° 30·800	I 225 mb -75° 36·500	I 231 mb -72° 35·900

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Pressure: Time	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	G.M.T.
Pressure: M.S.L.	1014·1 mb	1014·2 mb	1016·3 mb	1016·0 mb	1019·4 mb	1020·2 mb	1021·7 mb	1022·7 mb	mb
Pressure: Surf	1004·1 mb	1012·6 mb	1015·5 mb	1006·5 mb	1017·4 mb	1015·8 mb	1005·9 mb	1012·1 mb	mb
Pressure: Freezing	876 mb	825 mb	820 mb	812 mb	823 mb	791 mb	812 mb	810, 769 mb	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LERWICK					
Surf	02·7	48	39	300	12
1000	03·8	47	38		
950		40	32	287	12
900	31·9	34	27	287	12
850		30	23	288	13
800	62·8	27	12	287	15
750		23	02	286	17
700	97·2	18	01	284	19
650		10	-04	284	20
600	135·8	03	-12	287	21
550		-08	-18	292	20
500	180·0	-14	-28	290	18
450		-24	-38	281	16
400	231·7	-36	-49	278	18
350		-49		267	18
300	294·7	-62		264	19
250		-70		264	17
200	380·3	-51		255	19
170		-44		240	10
150		-45		230	09
130		-45		208	01
110		-44		208	10
100	533·5	-41		200	08
90		-46		166	08
80		-48		185	08
70		-47			
60					
Tropopause	I 282 mb -74° 32 400				
STORNOWAY					
Surf	00·4	53	48	210	06
1000	03·9	52	48	217	15
950		47	41	216	17
900	32·4	42	37	210	16
850		36	31	206	17
800	63·6	30	25	201	16
750		25	18	205	16
700	98·1	19	12	213	19
650		12	03	218	19
600	136·9	06	00	231	20
550		-03	-08	229	19
500	181·3	-10	-18	232	16
450		-19	-29	238	17
400	233·7	-28	-37	252	18
350		-40	-49	274	16
300	297·7	-60		282	23
250		-59		259	21
200	386·2	-49		250	16
170		-47		256	10
150		-43		229	11
130		-42		231	10
110		-42		228	06
100	538·2	-41		158	05
90		-42		156	07
80		-44		121	03
70		-42		120	09
60					
Tropopause	I 283 mb -67° 31·000				
LEUCHARS					
Surf	00·2	55	47	260	03
1000	04·5	55	47	246	09
950		49	41	241	16
900	33·2	42	36	238	19
850		35	31	236	21
800	64·4	30	27	237	21
750		25	22	238	15
700	98·9	20	15	250	13
650		14	03	258	17
600	137·8	07	00	267	18
550		-01	-08	275	21
500	182·3	-11	-17	272	17
450		-22	-26	272	19
400	234·4	-33	-38	273	20
350		-46		274	19
300	297·8	-59		272	22
250		-66		267	31
200	383·6	-57		265	24
170		-53		252	20
150		-54		255	20
130		-55		256	20
110		-56		232	12
100	534·2	-51		221	15
90		-53			
80					
70					
60					
Tropopause	II 278 mb -65° 31·300				
ALDERGROVE					
Surf	02·6	53	49	180	08
1000	04·4				
950		49	41	200	10
900	33·1	43	39	214	12
850		36	33	221	16
800	64·4	31	29	226	13
750		26	23	228	16
700	99·1	20	17	229	18
650		15	08	220	18
600	138·1	06	00	219	19
550		-02	-10	223	21
500	182·5	-11	-20	236	21
450		-21	-27	256	25
400	234·7	-31	-37	260	33
350		-43		270	48
300	298·5	-58		275	57
250		-71		265	61
200	383·7	-60		258	22
170		-58		247	25
150		-56		264	20
130		-55		274	15
110		-55		240	10
100	532·8	-55		240	09
90					
80					
70					
60					
Tropopause	I 247 mb -72° 33·900				
LIVERPOOL					
Surf	00·6	55	49	210	05
1000	05·3	54	46	214	12
950		48	38	226	16
900	33·9	43	32	227	20
850		36	25	223	17
800	65·1	30	22	220	17
750		25	15	215	17
700	99·6	18	06	223	15
650		12	-06	245	15
600	138·4	05	-12	258	15
550		-03	-21	271	19
500	183·5	-13	-28	266	21
450		-22	-42	266	27
400	234·9	-31	-50	279	39
350		-46		282	43
300	298·3	-60		282	57
250		-77		278	57
200	383·0	-62		270	29
170		-57		253	21
150		-58		247	21
130		-55		230	20
110		-58			
100	(149 mb)				
90					
80					
70					
60					
Tropopause	I 250 mb -77° 33 600				
DOWNHAM MARKET					
Surf	01·2	56	46	220	03
1000	05·5	57	43		
950		53	45	244	13
900	34·5	45	37	232	12
850		39	29	261	12
800	65·9	33	24	266	12
750		26	18	262	15
700	100·6	21	13	264	17
650		14	02	271	18
600	139·5	07	-05	272	18
550		01	-15	274	17
500	184·1	-09	-27	277	20
450		-18	-34	275	26
400	236·7	-29	-44	280	35
350		-41		287	48
300	300·7	-55		296	65
250		-64		287	50
200	388·3	-55		252	30
170		-52		248	28
150		-52		240	20
130		-57		257	26
110		-58		245	21
100		-59		217	19
90	537·7	-54		207	15
80					
70					
60					
Tropopause	I 259 mb -66° 33·200				
LARKHILL					
Surf	04·4	53	50	230	04
1000	06·0	53	49		
950		49	44	258	09
900	34·7	43	38	263	10
850		37	34	271	13
800	66·2	31	27	263	17
750		27	21	259	16
700	100·5	20	15	258	16
650		13	02	255	19
600	139·4	07	-09	262	22
550		00	-09	272	21
500	184·0	-09	-20	265	27
450		-16	-24	280	57
400	236·7	-26	-33	291	41
350		-41		278	44
300	301·2	-54		275	49
250		-70		277	50
200	386·0	-63		270	40
170		-58		263	27
150		-57		257	26
130		-58		245	21
110		-59		217	19
100	534·5	-58		232	18
90		-56			
80					
70					
60					
Tropopause	I 218 mb -77° 36 200				
CAMBORNE					
Surf	02·9	54	53	240	10
1000	06·2	53	52	231	18
950		49	49	242	18
900	34·9	43	39	251	19
850		37	35	248	19
800	66·2	31	31	253	20
750		30	19	265	23
700	101·1	25	09	274	22
650		18	06	279	21
600	140·4	11	-01	278	22
550		06	-08	266	25
500	185·5	-03	-10	263	32
450		-12	-23	268	33
400	238·7	-24	-36	267	33
350		-36	-45	261	35
300	303·6	-51		258	39
250		-66		268	44
200	389·2	-65		264	40
170		-59		255	29
150		-56		254	24
130		-55		253	19
110		-54		217	16
100	538·2	-56			
90					
80					
70					
60					
Tropopause	I 230 mb -72° 36 000				

Inversion 821 mb 26° - 800 mb 27°

Isothermal. 805 - 795 mb 30° 553 - 540 - 03°

Inversion 725 mb 21° - 715 mb 22°
Isothermal. 1016 - 987 mb 55°

Isothermal. 1001 - 980 mb 53° 700 - 690 - 20°

Inversion 1016 mb 56° - 987 mb 58°

Inversion 1005 mb 53° - 994 mb 54° 765 - 26° - 753 - 28°

Inversion 800 mb 31° - 780 mb 33°
Isothermal. 750 - 740 mb 30°

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METEOROLOGICAL OFFICE LIBRARY 2 JUL 1951 VALENTIA

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

03h. G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	Station
Pressure: Time	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	Time
Pressure: M.S.L.	1015·5 mb	1014·0 mb	1016·6 mb	1016·1 mb	1019·1 mb	1021·1 mb	1022·4 mb	1022·7 mb	1017·8 mb
Pressure: Surf	1005·4 mb	1012·4 mb	1015·8 mb	1006·4 mb	1017·1 mb	1016·5 mb	1006·2 mb	1012·0 mb	1016 mb
Pressure: Freezing	845 mb	810 mb	823 mb	826 mb	800 mb	800 mb	803 mb	771 mb	810 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	45	43	260	01	00·4	50	48	190	05	00·2	46	44	CALM		02·6	52	50	210	05	00·6	52	48	CALM		01·2	47	45	200	08	04·4	48	47	CALM		02·9	50	49	200	02	00·3	55	53			Surf
1000	04·1	45	42			03·8	50	47			04·4	47	45	239	18	04·3					05·2	52	48	176	18	05·6	52	48			06·0	49	48			06·1	51	50	213	15	04·8	53	50			1000
950		41	34	243	14		47	43	198	16		46	43	227	16		46	43	228	21		48	44	226	17		52	39	244	13		50	41	240	12		48	44	233	15		48	45			950
900	32·4	37	34	260	14	32·3	42	36	209	15	32·9	41	37	214	14	32·8	40	37	220	22	33·8	43	40	247	20	34·4	46	36	232	10	34·7	45	37	237	15	34·7	42	34	239	15	33·4	42	40			900
850		33	31	272	18		37	32	207	15		35	33	198	18		35	32	216	22		38	36	241	15		39	30	230	14		39	32	233	18		36	31	239	19		38	33			850
800	63·4	28	26	271	20	63·6	31	26	200	12	64·1	29	28	202	17	64·0	29	26	212	22	65·2	32	29	233	12	65·8	32	22	232	16	66·1	31	25	236	18	66·1	35	24	243	21	64·8	31	28			800
750		23	19	273	19		24	20	206	12		23	22	214	17		23	21	206	25		25	22	225	16		25	17	237	16		29	19	253	19		29	17	245	19		28	19			750
700	97·8	17	07	275	15	98·1	21	07	213	12	98·5	18	16	214	19	98·5	15	11	216	30	99·9	22	08	235	21	100·5	19	09	242	18	100·9	24	-13	270	22	101·0	21	08	243	20	99·5	22	12			700
650		09	00	273	15		14	04	209	13		13	08	211	19		13	10	232	28		15	02	249	21		14	00	248	19		17	-11	267	21		17	-07	241	21		15	05			650
600	136·9	04	-13	269	15	137·0	06	00	212	13	137·3	05	00	219	17	137·3	05	02	237	28	139·0	10	04	254	23	139·4	09	-05	256	20	140·1	10	-12	266	22	140·1	11	-17	245	24	138·5	07	-08			600
550		-05	-22	261	15		-02	-09	218	16		-04	-07	232	16		-02	-05	228	30		02	-06	247	24		01	-12	259	22		-02	-27	257	24		04	-25	248	24		01	-07			550
500	180·6	-14	-25	261	16	181·5	-11	-20	218	19	181·6	-13	-16	238	18	181·7	-10	-12	230	30	183·8	-06	-10	246	28	184·1	-09	-20	264	29	185·0	-05	-26	259	30	185·2	-05	-31	248	29	183·4	-05	-12			500
450		-24	-34	261	17		-19	-27	208	18		-25	-29	241	17		-20	-22	231	36		-15	-19	259	33		-16	-29	268	33		-15	-42	263	33		-14	-37	249	34		-11	-18			450
400	232·3	-37	-44	263	22	233·8	-31	-44	202	22	233·3	-37	-42	259	23	234·1	-31	-34	230	39	236·7	-26	-30	257	35	236·8	-28	-41	271	36	237·8	-27	-42	264	36	238·2	-24	-40	266	30	236·5	-24	-33			400
350		-52		263	22		-45		206	24		-47		265	38		-44		237	46		-39	-44	259	42		-42		271	41		-41		262	40		-38	-52	263	37		-37	-44			350
300	294·7	-66		264	22	297·3	-60		232	25	296·5	-59		266	53	297·8	-58		240	56	301·1	-53		257	48	300·8	-57		267	48	302·0	-55		264	38	302·8	-53		256	40	301·0	-53				300
250		-60		265	17		-68		248	22		-71		266	47		-73		246	54		-69		257	56		-70		267	48		-72		259	47		-68		258	40		-69				250
200	381·3	-50		256	14	383·6	-52		238	24	381·4	-62		259	27	383·4	-56		240	28	386·7	-56		254	36	386·2	-59		257	32	386·5	-66		253	40	387·7	-68		255	40	386·4	-61				200
170		-49		256	12		-50		242	15							-55		253	22		-54		257	23		-58		243	26		-61		252	30		-60		252	21						170
150		-49		243	12	446·4	-49		239	12				Inversion			-56		242	17		-55		243	22	447·9	-54		243	22	447·4	-64		241	27		-60		254	24		Inversion				150
130		-49		247	10		-49		234	13	1016 mb	46°-	970 mb	48°			-57		242	15		-55		240	26		-55		235	18		-60		248	21		-62		242	21	783 mb	29°-	773 mb	30°	130
110		-47		249	08		-50		230	09							-54		240	14		-52		235	17		-55		216	14		-57		230	15		-60		248	18						110
100	533·3	-46		166	03	535·1	-50		232	09						532·8	-55		234	10	536·6	-51		221	08	535·4	-57		208	13	533·9	-57		218	13	535·0	-60		241	13		Isothermal				100
90		-47		162	09		-48		L + V								-53		160	09		-53					-56		191	09		-59		217	14		-58		234	12	883	-866 mb		90°	90
80		-50		198	07		-49		L + V								-54		180	12	(88mb)	-54										-63					-57		216	13						80
70		-49		150	06		-50		L + V								-56																				(73mb)	-59								70
60		-51		178	06	646·8	-51		L + V																																				60
	(55mb)	-50					Inversion																			Inversion					Inversion					Inversion									
		Isothermal					725 mb 21°- 709 mb 22°																			1017 mb 47°- 992 mb 54°					1006 mb 48°- 979 mb 53°					1012 mb 50°- 998 mb 52°									
		1005 - 988 mb 45°					Isothermal																							775 mb 27°- 758 mb 30°					Isothermal									
							1012 - 987 mb 50°																													859 - 809 mb 36°									
Tropopause	I 298 mb -68° 30,000'					I 255 mb -70° 33,300'					I 260 mb -72° 32,600'					I 252 mb -74° 33,500'					I 238 mb -73° 35,000'					I 245 mb -71° 34,400'					II 243 mb -75° 34,700'					II 230 mb -75° 35,900'					II 260 mb -68° 32,200'					Tropopause

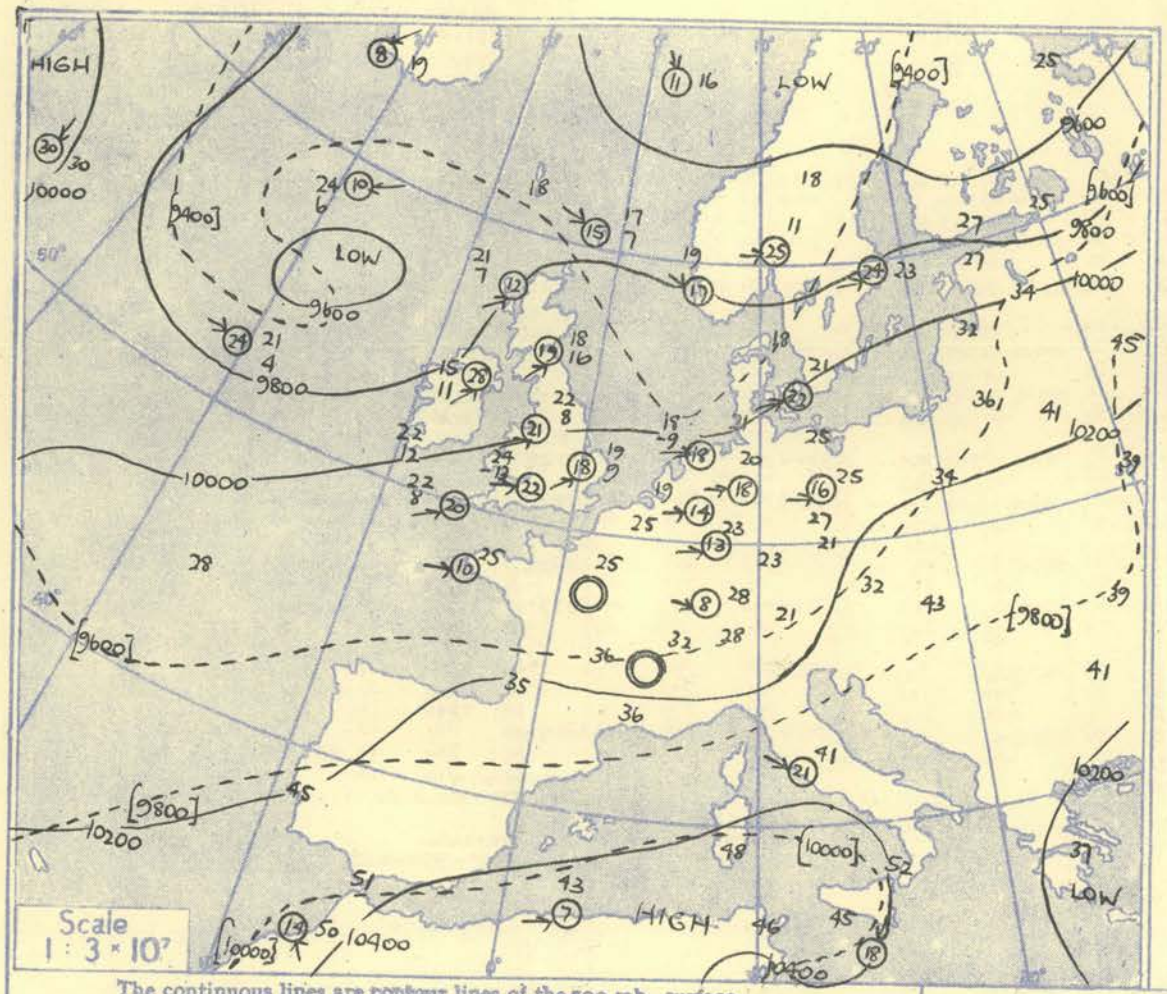
09h. G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	Station
Pressure: Time	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	Time
Pressure: M.S.L.	1016·7 mb	1014·1 mb	1016·8 mb	1016·5 mb	1020·2 mb	1022·5 mb	1023·7 mb	1022·5 mb	mb
Pressure: Surf	1006·7 mb	1002·5 mb	1016·0 mb	1006·8 mb	1018·2 mb	1018·0 mb	1007·7 mb	1012·0 mb	mb
Pressure: Freezing	838 mb	818 mb	820 mb	792 mb	795 mb	762 mb	770 mb	773 mb	mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	51	47	180	07	00·4	52	48	180	03	00·2	55	52	210	07	02·6	54	50	210	10	00·6	59	48			01·2	60	48	220	10	04·4	56	52	230	05	02·9	58	52	165	10						Surf
1000	04·5	50	46			03·9	51	47			04·6	53	49	222	15	04·4	53	49			05·6	56	44			06·2	56	46	235	15	06·5	54	50			06·2	53	48	195	12						1000
950		48	36	178	10		45	41	170	15		46	43	222	16		47	44	222	25		48	40				48	42	230	15		47	41	232	09		48	45	203	13						950
900	32·9	40	34	199	12	32·3	40	36	178	11	33·1	40	37	223	20	33·0	42	39	225	25	34·2	41	35			34·9	43	39	233	17	35·1	43	38	233	11	34·9	42	37	222	09						900
850		34	30	218	13		35	31	154	19		36	33	224	18		38	35	228	30		36	30				39	32	234	19		36	32	239	17		37	32	214	15						850
800	64·0	27	23	220	14	63·5	30	26	156	17	64·4	29	26	224	19	64·3	33	30	232	31	65·5	32	23			66·3	33	28	233	20	66·4	34	29	245	17	66·3	35	28	218	20						800
750		23	18	221	14		25	20	168	18		24	21	223	26		26	24	231	34		29	17				31	19	246	18		30	15	247	17		29	20	241	19						750
700	98·3	17	11	239	12	98·2	20	15	176	14	98·9	18	16	220	29	99·1	22	19	230	31	100·4	23	05			101·3	27	10	255	18	101·2	24	05	238	20	101·1	24	15	240	19						700
650		12	02	232	12		13	04	187	18		12	09	217	27		15	11	227	30		17	03				21	05	257	21		19	-05	237	21		20	04	244	21						650
600	136·9	02	-06	239	12	137·0	06	-09	187	13	137·6	05	-02	223	25	138·1	09	04	225	26	139·6	10	-07			140·8	12	00	264	27	140·5	13	-16	244	23	140·5	14	03	242	24						600
550		-04	-13	242	15		-02	-12	198	12		-01	-05	226	24		00	-07	223	22		02	-15				04	-07	263	28		06	-24	254	26		05	-07	240	32						550
500	181·1	-13	-21	247	18	181·5	-16	-19	189	16	182·2	-09	-14	229	24	182·7	-11	-18	228	25	184·4	-06	-19			185·9	-02	-09	253	28	186·8	-04	-26	251	28	185·7	-03	-16	243	36						500
450		-23	-33	259	19		-20	-29	188	20		-18	-24	224	29		-22	-29	234	35		-12	-21	255	31		-13	-22	256	32		-10	-20	252	36						450
400	233·0	-25	-44	273	24	233·7	-33	-45	186	17	234·6	-31	-37	231	30	234·8	-34	-45	236	40	237·4	-25	-36			239·1	-20	-30	259	32	238·9	-22	-30	253	35	239·1	-20	-27	258	38						400
350		-38		274	25		-47		184	21		-42		229	39		-45		236	43		-37	-48				-36	-46	262	35		-36	-44	251	34		-35	-42	254	43						350
300	295·9	-64		275	27	296·9	-52		190	21	298·6	-52		238	53	298·3	-59		234	57	302·0	-53				304·1	-51		257	40	303·8	-51		251	32	304·3	-48		253	49						300
250		-59		266	21		-54		229	16		-65		240	48		-62		240	50		-67					-68		253	43		-67		258	51		-63		267	44						250
200	382·9	-47		247	13	384·5	-45		230	13	385·1	-54		242	24	387·0	-54		236	35	387·7	-57				389·9	-59		253	45	389·3	-66		253	45	390·1	-69		254	48						200
170		-48		227	10		-45		224	09		-49		244	22		-51		242	21		-54					-53		249	27		-60		258	32		-65		258	43						170
150		-48		234	09	471·0	-44		220	09	448·1	-50		241	18		-53		230	18		-53				452·1	-51		250	22	450·5	-57		260	26	450·6	-59		253	30						150
130		-47		219	06		-44		200	07		-50		258	13		-51		227	19		-52					-51		239	17		-55		248	20		-57		246	23						130
110		-45		205	07		-42		178	10		-50		219	10		-52		252	09		-51										-55		228	21		-57		254	21						110
100	535·5	-44		198	08	373·0	-40		196	07	536·7	-50		198	12	535·6	-51		248	07	538·2	-52					Inversion				538·0	-54		231	17	537·6	-57		246	18						100
90		-46		196	04							-49		204	13		-50		240	07		-51					777 mb 30°- 762 mb 32°					-52		232	18		-57		229	15						90
80		-47		158	04							-49		207	10		-51		236	07		-51										-50		205	15		-57		233	12						80
70		-46		133	06							-49										-50										-52					-55		200	11						70
60	(63mb)	43																																		(63mb)	-54								60
		Inversion																													Inversion														
		771 mb 23°- 760 mb 24°																													822 mb 32°- 792 mb 35°														
																																				Isothermal									
																																				678 - 682 mb 20°									
Tropopause	II 291 mb -67° 30,200'					I 275 mb -65° 31,500'					I 251 mb -65° 33,750'					I 282 mb -64° 31,200'					II 260 mb -67° 33,200'					I 240 mb -70° 35,200'					I 224 mb -73° 36,500'					I 220 mb -71° 37,200'										Tropopause

Wednesday 20th June. 1951.

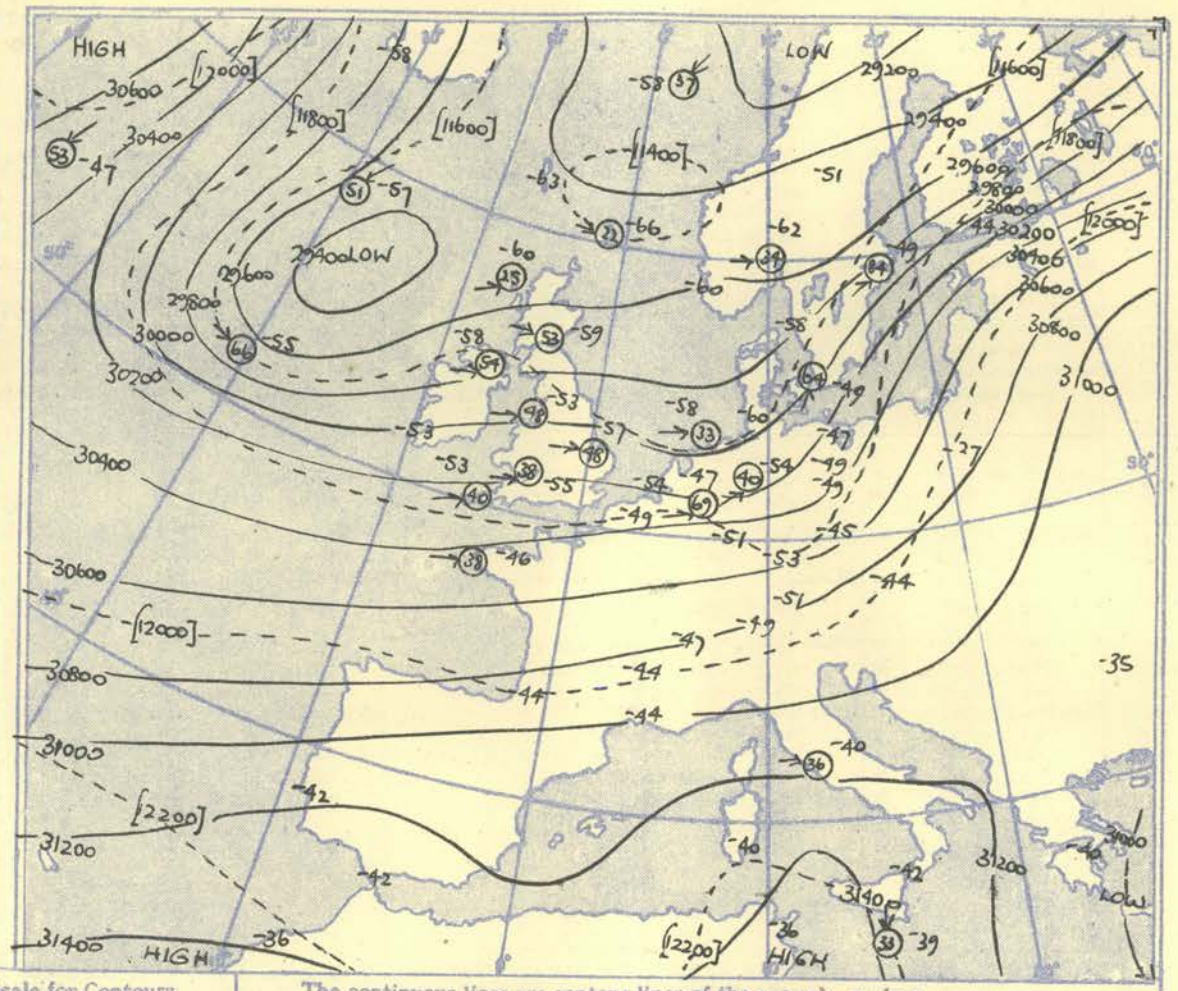
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.



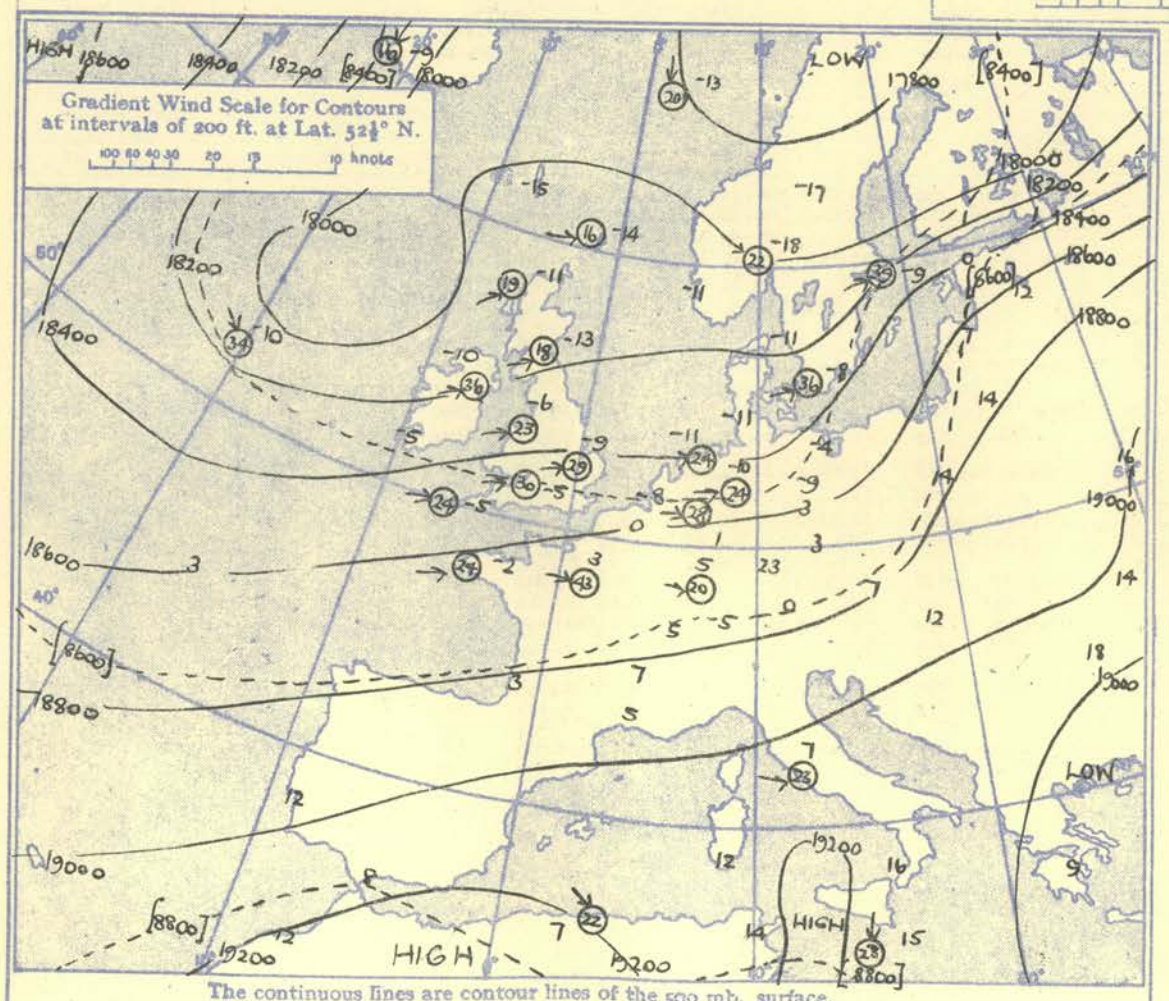
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

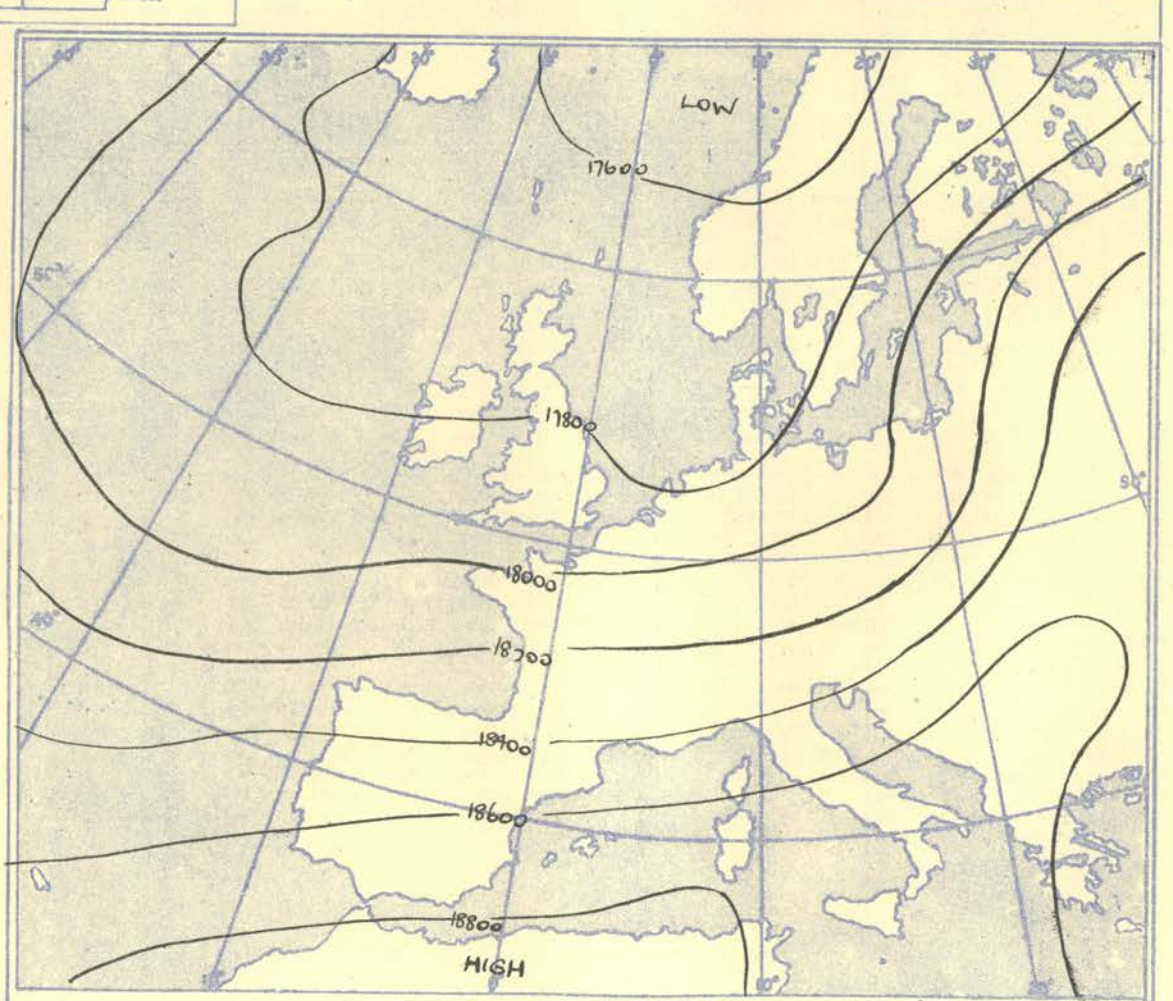
100 60 40 30 20 15 10 knots



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500-1000mb.

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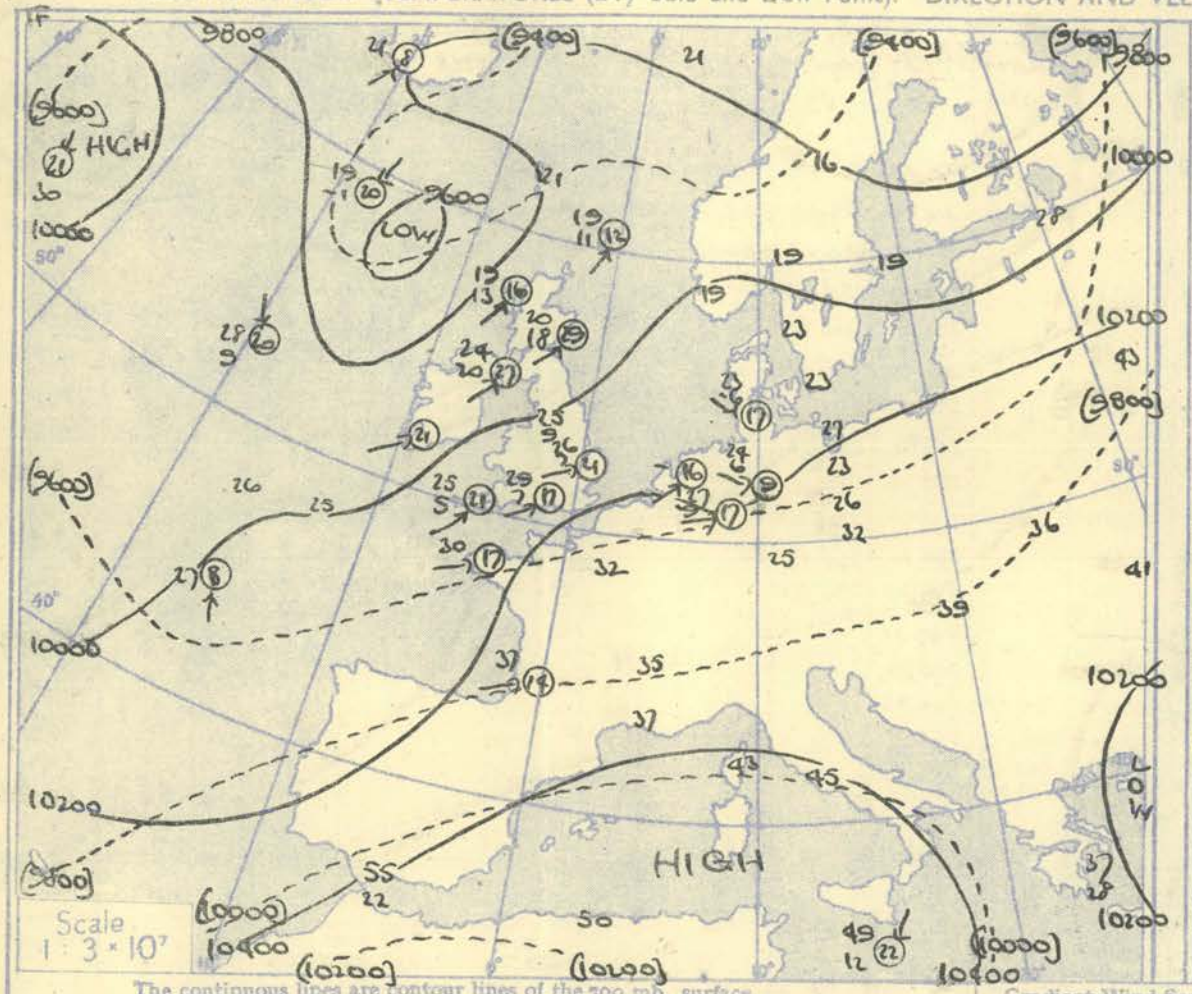
AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

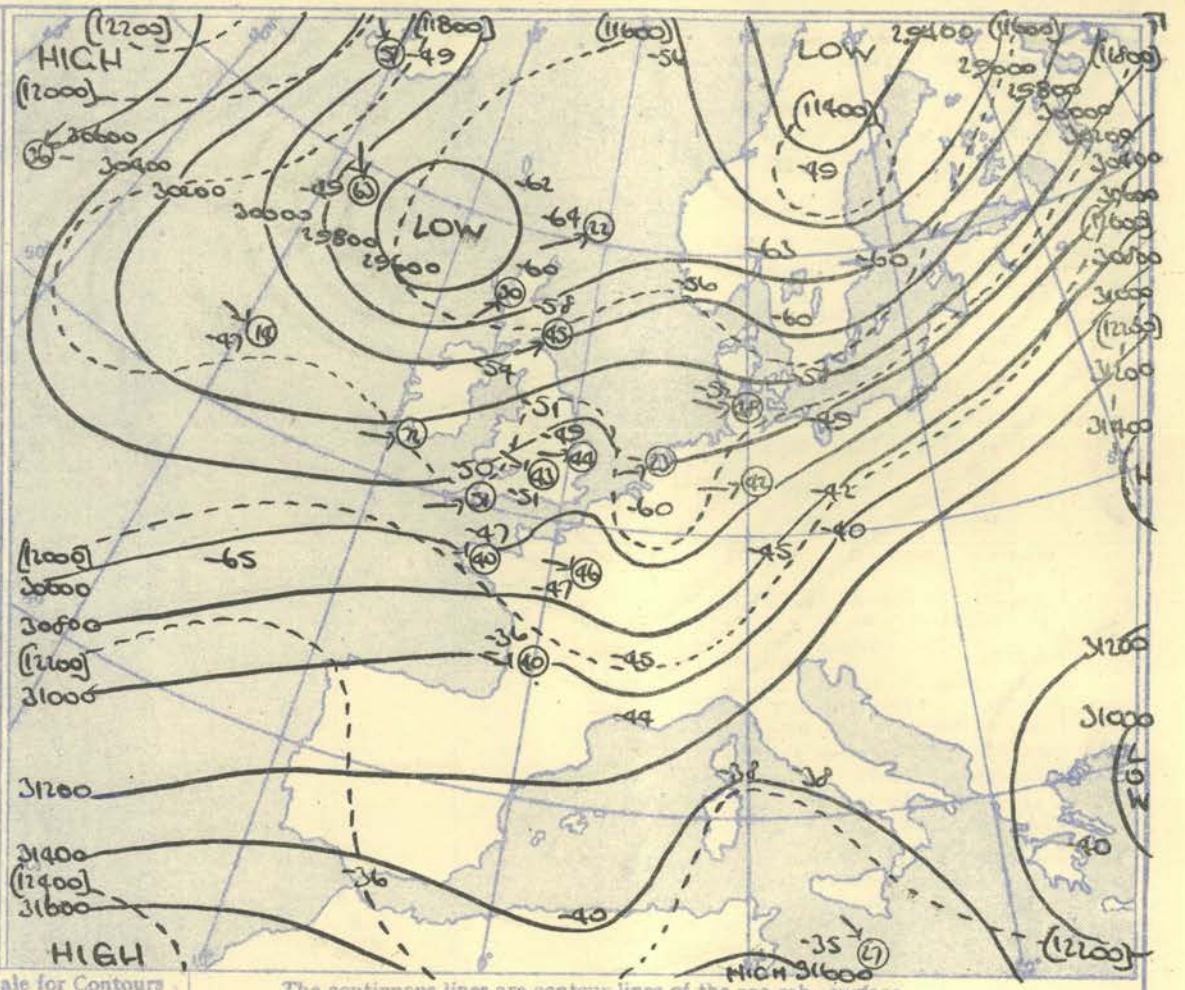
| | | |

June 20th 1951.

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

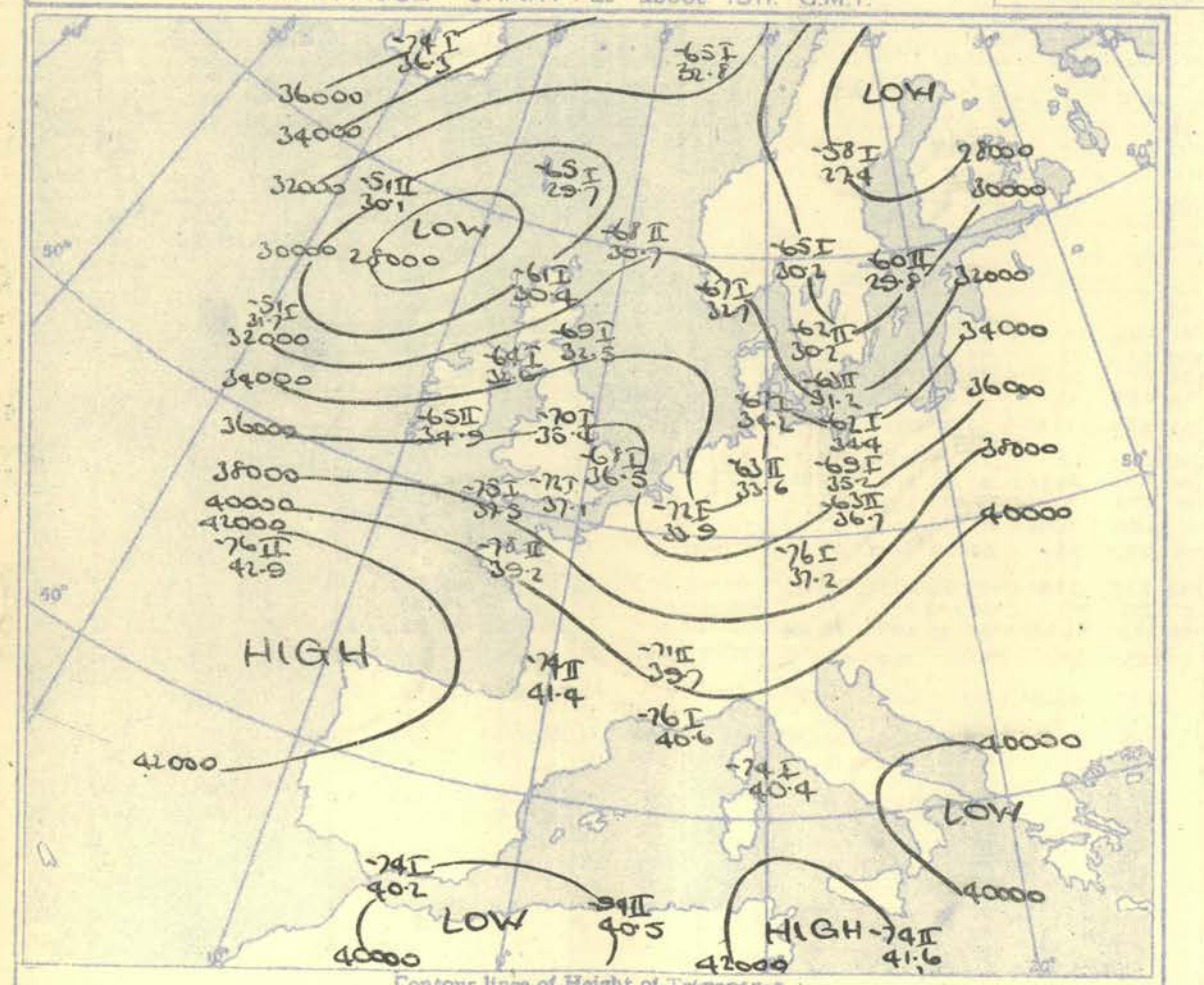


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N

100 80 60 50 40 30 20 15 10 knots

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Main upper air trough still in vicinity of the British Isles.

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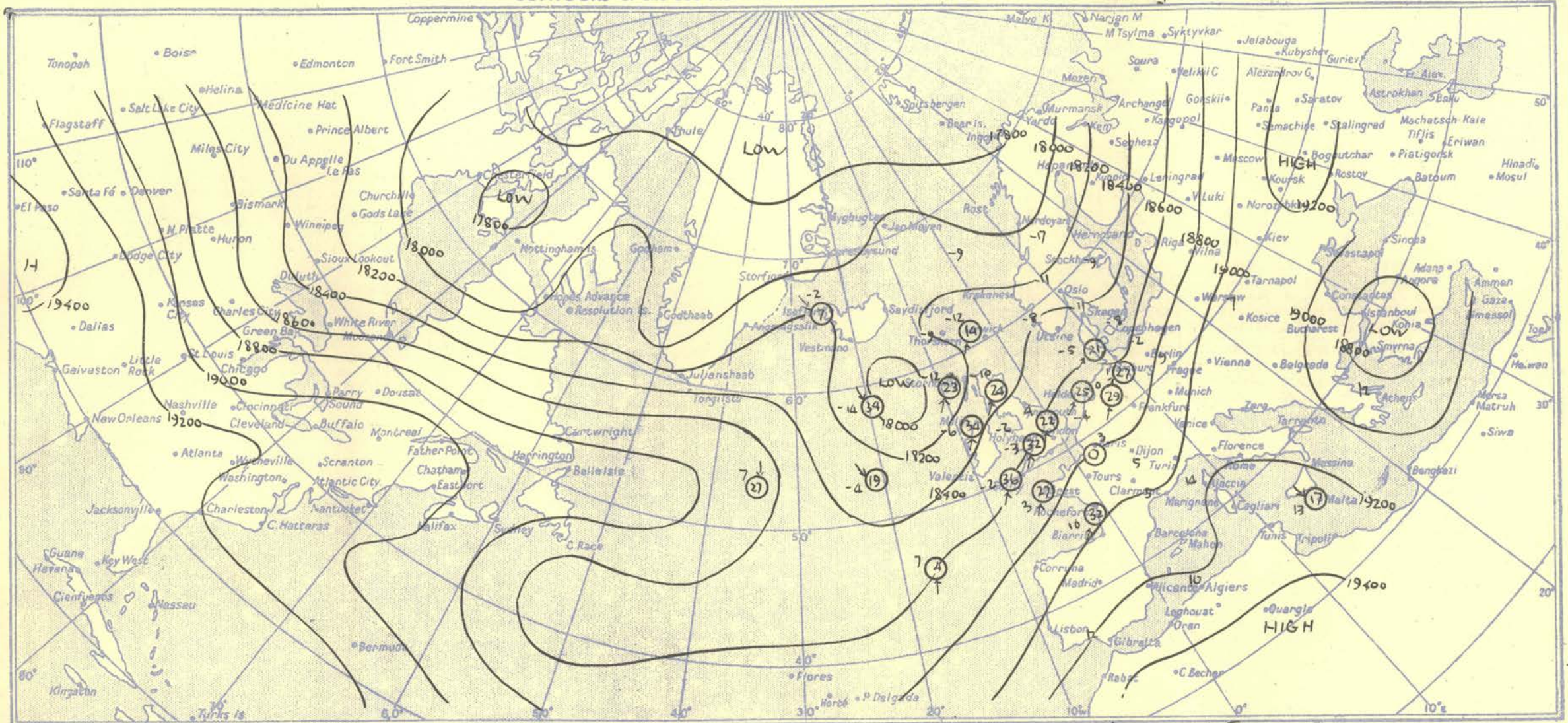
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Wednesday 20th June. 1951.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Tonopah
Boise
Edmonton
Fort Smith
Helena
Salt Lake City
Medicine Hat
Flagstaff
Prince Albert
Miles City
Du Appelle
Le Pas
Santa Fé
Denver
El Paso
Bismark
Churchill
Gods Lake
N. Platte
Winnipeg
Huron
Dodge City
Sioux Lookout
Duluth
Kansas City
Charles City
Dallas
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Havana
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Kinzalon
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Thule
Chesterfield
Nottingham Is
Godthaab
Hopes Advance
Resolution Is.
Juliannshaab
Spitsbergen
Bear Is.
Ingo
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DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Wednesday 20th June. 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.
Pressure: M.S.L.	1016·5 mb	1014·0 mb	1016·8 mb	1015·4 mb	1020·3 mb	1021·7 mb	1022·2 mb	1022·4 mb	1017·4 mb
Pressure: Surf	1006·6 mb	1012·4 mb	1016·0 mb	1005·9 mb	1018·3 mb	1017·3 mb	1006·8 mb	1011·9 mb	1016 mb
Pressure: Freezing	800 mb	802 mb	800 mb	779 mb	785 mb	757 mb	778 mb	765 mb	785 mb

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	027	55	50	180	09	004	55	49	190	08	002	62	53	230	09	026	57	51	190	10	006	61	44			012	66	47	240	10	014	65	50	200	09	029	63	50	180	18	003	59	53	215	16	Surf
1000	045	53	49			038	53	48			047	59	51	223	12	042	56	50			056	60	41			060	63	47	242	17	062	63	49			062	60	49	186	13	047	56	51	214	19	1000
950		48	44	181	19		47	41	190	15		48	43	226	17		51	41	212	28		55	39				55	45	235	14		54	44	213	09		49	42	188	14		50	45	212	25	950
900	331	44	38	181	18	324	42	36	190	19	334	42	39	237	28	330	47	38	218	28	345	46	35			380	47	40	233	12	352	47	41	232	10	349	45	33	191	16	334	44	36	216	26	900
850		38	32	182	18		37	32	190	18		37	31	237	29		41	34	226	29		39	32				41	36	225	10		40	35	242	11		43	28	196	16		39	38	218	28	850
800	645	32	28	183	18	637	32	27	190	15	647	32	28	240	27	646	34	28	233	27	659	33	26			666	36	31	237	12	667	33	28	239	14	666	36	28	206	16	649	34	29	220	28	800
750		24	21	183	14		26	20	193	15		26	23	238	29		29	24	222	33		29	22				31	19	247	15		30	20	243	16		30	20	216	16		28	23	221	28	750
700	989	19	11	188	12	984	19	13	196	16	994	20	18	232	29	995	24	20	224	27	1008	25	09			1016	26	07	244	21	1017	29	07	244	17	1015	25	05	213	21	997	24	17	225	29	700
650		12	05	199	13		14	08	198	17		14	08	228	24		18	11	225	27		18	01				21	07	239	22		23	01	231	18		20	00	218	26		18	08	228	30	650
600	1317	05	01	209	14	1313	05	04	205	19	1383	08	04	230	19	1389	11	02	226	30	1401	11	11			1412	16	13	249	19	1414	17	02	239	22	1409	13	07	225	27	1390	12	04	236	30	600
550		03	08	223	15		02	13	212	20		00	13	235	18		03	12	226	31		02	12				08	09	253	28		07	14	244	27		06	21	230	31		06	02	239	32	550
500	1821	12	18	217	14	1818	12	22	211	23	1830	10	20	236	24	1839	06	27	223	31	1851	02	16			1866	01	11	254	35	1868	03	23	247	32	1862	02	17	233	36	1843	02	08	233	45	500
450		23	31	207	18		24	36	216	30		21	31	246	24		18	39	224	34		10	24				09	17	253	34		10	20	249	35		12	20	242	38		10	16	237	54	450
400	2341	35	44	221	21	2336	37	50	217	34	2352	32	48	239	33	2365	29	43	224	38	2386	21	35			2402	19	32	250	34	2402	21	33	249	35	2393	24	33	247	40	2379	20	27	243	62	400
350		48		224	19		50		213	38		44		244	47		37	49				36	50				33	47	260	41		34	49	258	39		36	46	247	44		32	40	246	62	350
300	2969	64		235	22	2964	60		205	30	2990	58		244	45	3009	54				3036	51				3085	49		266	44	3053	51		247	43	3041	50		257	51	3033	48		264	72	300
250		58		235	24		57		213	20		64		244	53		60					67					65		266	48		68		260	50		63		261	67		63		247	77	250
200	3839	47		248	15	3842	48		228	16	3854	52		238	28	3880	49				3895	57				3916	60		264	41	3906	65		261	48	3896	74		262	54	3894	62		249	60	200
170		48		248	11		48		225	12		50		239	24		49					52					53		250	34		61		250	36		64		258	39		51		243	42	170
150		46		248	11		48		222	11		49		240	25		48					52					54		246	28		58		251	30		62		248	35		50		242	29	150
130		46		231	08		47		221	08		52		250	20							52					53		251	29		55		249	28		61		245	27		52				130
110		45		208	05		49		227	08		49		249	11							50					51		230	19		56		238	19		62					55				110
100	5369	44		209	03	5366	46		L.V.		5366	51		247	06							52				5422	47		226	15	5390	56		242	16	(1113mb)					5401	51				100
90		47		170	07		46					48		198	04							48					47		216	12												54				90
80		47		166	07		47		160	07		48		164	08							49					48		216	12												50				80
70		47		168	05		48		167	07		52		172	07							49					50														(84mb)					70
60		42		182	09		47		155	06		52		192	07							49																								60
		45										50		191	07							49																								

Inversion 601mb 05°-596mb 06°
Isothermal 693-675mb 18°

Inversion 733mb 27°-720mb 28°
Isothermal 1018-1004mb 61°
925-508mb -10

Isothermal 783-757mb 32°

Isothermal 786-700mb 29°

	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Tropopause	II 286mb -68° 30·700	I 290mb -61° 30·400	I 266mb -69° 32·450	I 267mb -64° 32·600	II 236mb -70° 35·400	I 227mb -68° 36·500	II 220mb -72° 37·100	II 214mb -75° 37·900	II 243mb -65° 34·900

21h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE		VALENTIA
Pressure: Time	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	G.M.T.	
Pressure: M.S.L.	1016·3 mb	1013·2 mb	1016·8 mb	1015·6 mb	1020·4 mb	1021·4 mb	1022·3 mb	1021·2 mb	mb	
Pressure: Surf	1006·3 mb	1011·6 mb	1016·1 mb	1006·0 mb	1018·4 mb	1017·0 mb	1006·1 mb	1010·5 mb	mb	
Pressure: Freezing	809 mb	822 mb	800 mb	815 mb	747 mb	760 mb	750 mb	750 mb	mb	

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	027	50	49	180	02	004	52	50	170	05	002	54	51	270	04	026	55	50	210	08	006	58	45	190	07	012	60	48	240	02	044	55	46	190	03	029	55	50	130	10						Surf
1000	045	49	48			036	52	48			046	53	50	227	15	042	54	49			057	57	45	204	17	059					061	56	41			058	54	48	143	09						1000
950		45	44	162	16		48	44	187	22		49	46	226	19		48	43	230	23		51	40	219	20			56	43	217	10		54	36	177	09		53	43	191	08						950
900	329	41	37	157	16	322	43	39	190	21	333	44	41	229	28	329	42	37	240	24	349	46	38	222	25	350	49	39	232	12	351	49	33	182	08	347	47	40	212	12						900
850		37	33	162	12		36	32	191	23		38	35	231	26		35	32	233	21		40	33	247	24			42	31	244	13		43	29	195	07		42	37	204	16						850
800	641	31	28	176	10	634	29	25	189	23	647	32	30	236	23	641	30	29	232	32	659	36	27	218	22	666	36	26	247	14	668	37	25	208	06	663	38	25	191	16						800
750		25	22	168	10		23	15	186	22		27	24	223	23		25	24	231	31		32	10	236	28		31	21	244	14		32	18	208	08		32	19	195	16						750
700	987	20	18	187	10	979	18	10	180	24	994	21	17	212	20	987	20	18	225	34	1009	26	06	233	27	1016	27	13	242	13	1019	27	08	205	14	1014	28	06	206	16						700
650		14	09	209	10		12	16	180	24		14	12	214	21		12	09	218	36		18	01	226	27			22	00	230	19		22	01	215	17		24	00	222	18						650
600	136	07	00	212	12	1367	04	26	185	25	1385	07	04	222	23	1375	05	02	214	32	1402	11	03	217	34	1411	15	02	228	22	1415	15	02	222	24	1411	17	03	225	23						600
550		02	09	218	14		05	33	190	25		01	04	233	24		03	08	208	30		07	02	233	39			09	10	236	33		08	08	231	29		10	10	236	28						550
500	1820	12	20	223	19	1809	16	38	194	28	1830	10	14	231	28	1819	12	17	218	36	1856	00	07	242	44	1865	01	17	242	34	1869	01	19	241	33	1867	04	04	240	36						500
450		21	32	236	22		28	45	196	31		20	24	224	34		23	27	227	45		09	16	245	45			08	18	246	36		10	17	243	36		07	12	245	36						450
400	2341	33	45	235	21	2321	43		196	32	2353	31	36	240	38	2338	34	38	240	57	2392	19	27	238	54	2402	18	27	245	37	2403	21	27	252	40	2406	15	22	253	40						400
350		48		213	18		55		197	33		46		247	60		45		240	70		34	42	248	52			31	45	246	40		35	41	256	45		30	39	247	45						350
300	2973	60		208	15	2945	56		205	30	2991	55		246	65	2973	58		239	87	3046	48		255	58	3059	44		261	48	3054	49		260	54	3064	46		247	52						300
250		59		229	16		50		215	23		61		248	46		64		247	66		63		261	77			60		275	55		67		261	63		62		248	62						250
200	3842	51		238	14	3824	48		237	17	3860	52		247	36	3838	52		237	30	3905	61		246	56	3924	66		267	61	3906	72		259	50	3923	75		249	42						200
170		50		245	13		48		246	11		49		247	22		55		238	28		58		257	37			59		259	41		62		254	37		71		249	42						170
150		49		251	11		48		234	11		52		247	17		56		234	27		56		262	27			58		254	33		62		252	28		64		249	35						150
130		49		249	10		49		248	11		52		249	18		55		220	12		53		235	22			55		254	22		61		248	22		62		253	24						130
110		49		238	06		49		286	14		51		230	07		55		218	05		51		272	16			55		248	18		59		237	15		61		245	17						110
100	5358	48		214	06	5350	49		255	11	5370	50		209	11	5336	53					53		249	12	5413	53		233	15	5374	57		221	15	5381	62		236	18						100
90		49					49		258	10		51		225	10							56		216	11							58		225	15		62		234	18						90
80							50					52																				58		223	10		60		232	18						80
70							51																									(75mb)				59									70
60																																58				(75mb)									60

Inversion 805mb 35°-800mb 36°
560" 06°-548" 08°

Inversion 492mb -03°-483mb -02°
1017" 60°-990" 62°

Inversion 1006mb 85°-996mb 87°

Inversion 1001mb 54°-985mb 56°

	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Tropopause	I 280mb -66° 31·200	III 560mb -55° 26·100	I 261mb -63° 32·900	I 272mb -65° 31·700	II 230mb -71° 36·100	I 214mb -70° 37·800	II 235mb -73° 35·700	I 200mb -75° 39·100	Tropopause

(HMSO) Press MO, Dunstable

No. 1171 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Thursday 21st June 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

LERWICK

Time 03h. G.M.T. | M.S.L. 1015·6 mb | Surf 1005·6 mb | Freezing 810 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	027	49	49	170	06
1000	04·2	49	49		
950		47	46	176	14
900	32·7	44	29	186	14
850		38	26	194	14
800	64·1	31	28	197	15
750		24	21	199	16
700	98·5	19	14	200	17
650		12	10	208	16
600	137·3	04	-04	214	18
550		-03	-13	214	20
500	181·7	-14	-25	218	21
450		-24	-36	220	22
400	233·4	-38	-49	227	25
350		-50		220	24
300	296·0	-64		221	21
250		-59		226	18
200	382·9	-52		240	18
170		-51		243	14
150		-50		244	14
130		-50		250	12
110		-50		241	09
100	534·2	-50		228	06
90		-49		221	08
80		-51		207	03
70		-51		208	06
60		-51		184	04
		-51			

Inversion 963 mb 46° - 943 mb 48°

Tropopause: II 300 mb -64° 29,600'

STORNOWAY

Time 03h. G.M.T. | M.S.L. 1014·0 mb | Surf 1012·4 mb | Freezing 830 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	50	48	180	03
1000	03·8	49	46		
950		45	41	222	12
900	32·2	40	36	221	13
850		34	28	212	14
800	63·3	29	22	215	16
750		24	12	211	17
700	97·7	19	01	203	18
650		13	-07	199	22
600	136·6	05	-17	202	22
550		-03	-18	211	26
500	180·9	-15	-25	205	28
450		-25	-32	198	24
400	232·8	-34	-45	196	31
350		-46		205	45
300	296·4	-51		212	38
250		-47		220	24
200	385·4	-46		231	20
170		-47		236	17
150	448·8	-48		234	15

Tropopause: I 288 mb -52° 30,500'

LEUCHARS

Time 03h. G.M.T. | M.S.L. 1016·4 mb | Surf 1015·6 mb | Freezing 988 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	52	30	CALM	
1000	04·4	54	51	232	24
950		49	46	231	25
900	33·1	44	40	229	27
850		39	36	227	26
800	64·5	33	32	224	24
750		28	27	224	25
700	99·4	22	21	222	26
650		16	15	212	28
600	138·5	09	08	211	20
550		01	-01	213	30
500	183·3	-08	-10	222	32
450		-18	-21	231	37
400	235·7	-31	-34	239	46
350		-43		241	66
300	299·5	-57		241	76

Inversion 1016 mb 52° - 1000 mb 54°

Tropopause: N.R.

ALDERGROVE

Time 03h. G.M.T. | M.S.L. 1016·1 mb | Surf 1006·6 mb | Freezing 790 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	53	51	210	12
1000	04·4	53	51		
950		48	45	225	27
900	33·0	42	39	233	30
850		37	34	236	33
800	64·3	33	31	238	33
750		28	26	238	33
700	99·1	22	19	232	32
650		16	12	216	32
600	138·2	09	04	220	32
550		02	-03	226	37
500	183·0	-08	-14	230	42
450		-18	-25	226	44
400	235·6	-28	-36	237	60
350		-38	-47	234	74
300	300·2	-50		242	90
250		-64		252	90
200	386·6	-58			
170		-55			
150		-54			
130		-56			
110		-58			

Isothermal 335 - 325 mb -43°

Max. Wind 254° 108 kts. at 271 mb 32,100 ft.

Tropopause: I 245 mb - 66° 34,300'

LIVERPOOL

Time 03h. G.M.T. | M.S.L. 1020·1 mb | Surf 1018·1 mb | Freezing 774 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	54	48	170	03
1000	05·5	56	50	178	10
950		51	43	204	15
900	34·3	46	36	218	21
850		42	25	225	23
800	65·9	35	24	226	26
750		29	19	226	29
700	100·8	22	14	226	31
650		15	04	228	32
600	139·8	11	06	232	36
550		05	00	228	38
500	185·0	-04	-10	237	46
450		-13	-20	243	51
400	238·0	-25	-32	249	64
350		-35	-47	246	66
300	302·6	-54		260	66
250		-71		250	64
200	387·6	-64		249	48
170		-60		247	34
150		-58		250	27
130		-60		248	16
110		-58		240	13
100	535·6	-56		204	09
90		-57		203	05
80		-59		182	06
70	(726 mb)	-61			

Inversion 1018 mb 54° - 1000 mb 56°

Isothermal 884 - 869 mb 44°

Tropopause: I 236 mb - 75° 35,300'

DOWNHAM MARKET

Time 03h. G.M.T. | M.S.L. 1021·8 mb | Surf 1017·2 mb | Freezing 740 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	50	47	130	02
1000	05·9	58	51		
950		56	49	170	11
900	34·9	49	44	193	12
850		41	37	203	12
800	66·5	36	31	210	12
750		32	24	215	12
700	101·6	28	13	221	14
650		23	02	225	21
600	141·2	17	-02	232	24
550		09	-05	239	28
500	186·7	01	-04	243	36
450		-07	-11	245	42
400	240·5	-18	-22	254	45
350		-31	-36	259	43
300	306·2	-46		255	47
250		-67		258	54
200	392·0	-70		255	50
170		-66		247	41
150	452·4	-61		247	30
130		-60		247	29
110		-61		247	26
100	538·8	-60		247	21
90		-58		250	20
80		-55		242	11
70		-55		235	08
60	648·5	-58		223	06

Inversion 1017 mb 50° - 1005 mb 58°

Isothermal 1005 - 965 mb 58°

764 - 740 mb 32°

Tropopause: I 209 mb -73° 38,300'

LARKHILL

Time 03h. G.M.T. | M.S.L. 1021·3 mb | Surf 1005·0 mb | Freezing 762 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	43	41		
1000	05·7	45	40		
950		52	33		
900	34·6	49	28		
850		42	20		
800	66·2	36	12		
750		31	05		
700	101·2	28	03		
650		23	-04		
600	140·8	18	-11		
550		12	-17		
500	186·6	03	-12		
450		-08	-19		
400	240·3	-21	-28		
350		-39	-42		
300	305·5	-49			
250		-67			
200	390·6	-77			
170		-68			
150	450·4	-64			
130		-64			

Inversion 1005 mb 43° - 988 mb 53°

Isothermal 750 -725 mb 31°

Tropopause: I 223 mb -76° 36,900'

See Page 3 for Winds

CAMBORNE

Time 03h. G.M.T. | M.S.L. 1019·0 mb | Surf 1008·5 mb | Freezing 740 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	53	51	125	14
1000	05·2	55	51	137	24
950		55	41	147	16
900	34·2	49	41	166	16
850		42	39	186	16
800	65·8	36	31	195	14
750		34	16	202	14
700	101·0	28	09	209	16
650		23	02	212	15
600	140·7	20	-05	214	19
550		13	-03	221	27
500	186·6	04	-03	226	32
450		-09	-17	226	35
400	240·4	-18	-28	233	35
350		-31	-42	241	38
300	306·0	-47		245	39
250		-65		243	53
200	391·1	-81		240	60
170		-68		245	41
150		-63		243	26
130		-63		243	30
110		-63		253	22
100	536·7	-63		258	21
90		-63		210	16
80		-60		230	11
70		-58		222	08
60	645·6	-58		172	06
		-59			

Inversion 1009 mb 53° - 982 mb 58°
800 mb 36° - 765 mb 37°
Max. Wind. 244° 81 kts
217 mb. 81°

Tropopause: I 198 mb - 82° 39,300'

VALENTIA

Time 03h. G.M.T. | M.S.L. 1017·4 mb | Surf 1016 mb | Freezing 780 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	56	53	212	06
1000	04·7	54	51	216	07
950		48	45	219	08
900	33·4	43	37		
850		39	32		
800	64·8	34	27		
750		29	17		
700	99·6	23	03		
650		17	-01		
600	138·7	09	-02		
550		03	-05		
500	183·8	-04	-11		
450		-12	-20		
400	237·0	-28	-31		
350		-36	-45		
300	301·8	-52			
250	(292 mb)	-55			

Isothermal 550 -542 mb 03°

Tropopause: N.R.

LERWICK

Time 09h. G.M.T. | M.S.L. 1015·3 mb | Surf 1005·3 mb | Freezing 787 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	51	49		
1000	04·1	50	49		
950		47	46		
900	32·7	44	40		
850		40	34		
800	64·2	34	27		
750		27	22		
700	98·9	21	15		
650		15	05		
600	137·9	07	-01		
550		-01	-07		
500	182·5	-10	-15		
450		-21	-26		
400	234·6	-34	-40		
350		-48			
300	297·7	-60			
250		-60			
200	384·9	-49			
170		-49			
150		-30			
130		-51			
110		-50			
100	526·4	-52			
90		-52			
80		-50			
70		-48			
60		-50			
		-52			
		-51			
	(33 mb)	-49			

Tropopause: I 305 mb -61° 29,400'

STORNOWAY

Time 09h. G.M.T. | M.S.L. 1015·0 mb | Surf 1013·4 mb | Freezing 827 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	004	55	49	180	05
1000	04·1	53	47		
950		48	41	205	13
900	32·7	41	35	196	11
850		35	28	198	11
800	63·9	29	24	210	11
750		24	19	211	12
700	98·9	20	08	214	12
650		12	03	217	12
600	137·2	06	-10	218	16
550		00	-19	225	19
500	181·8	-10	-26	228	21
450		-23	-37	232	24
400	233·9	-32	-44	234	40
350		-43		232	42
300	298·0	-48		235	40
250		-43		234	26
200	387·8	-44		231	16
170		-42		240	14
150	451·7	-44		244	17
130		-45		240	12
110		-49		254	09
100	541·6	-43		248	03
90		-43		211	03
80		-42			

Isothermal 750 -730 mb 24°

Tropopause: II 327 mb -48° 27,850'

LEUCHARS

Time 09h. G.M.T. | M.S.L. 1017·0 mb | Surf 1016·2 mb | Freezing 782 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	57	54	230	08
1000	04·7	55	52	228	18
950		49	46	232	20
900	33·4	44	40	234	23
850		39	35	227	24
800	64·8	33	30	222	23
750		29	24	221	24
700	99·7	23	19	223	25
650		17	12	223	26
600	138·8	10	09	233	29
550		02	-04	235	32
500	183·7	-07	-13	229	34
450		-17	-24	233	43
400	236·4	-24	-34	239	60
350		-34	-43	209	78
300	301·5	-48		240	87
250		-62		247	89
200	388·4	-54		239	42
170		-50		236	25
150		-50		240	18
130	451·1	-50		257	23
110		-50		248	13
100	539·6	-50		235	09
90		-49			

Max. Wind 271 mb. 32500 ft. 244° 101 kts.

Tropopause: I 240 mb -65° 35,000'

ALDERGROVE

Time 09h. G.M.T. | M.S.L. 1017·0 mb | Surf 1007·5 mb | Freezing 785 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	54	53	200	08
1000	04·6	53	52		
950		47	46	214	20
900	33·2	44	39	221	24
850		39	34	223	25
800	64·7	34	31	224	27
750		28	26	220	29
700	99·5	23	20	221	28
650		18	14	213	25
600	138·8	12	08	208	23
550		04	-01	215	26
500	183·9	-05	-10	232	23
450		-13	-19	227	48
400	237·1	-20	-28	227	66
350		-31	-41	227	72
300	302·7	-45		231	86
250		-61			
200	389·6	-57			
170		-53			

Tropopause: I 225 mb -68° 36,500'

LIVERPOOL

Time 09h. G.M.T. | M.S.L. 1019·8 mb | Surf 1017·8 mb | Freezing 757 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	60	49	CALM	
1000	05·5	58	48	164	06
950		51	45	210	08
900	34·3	47	36	211	16
850		43	27	210	20
800	66·0	38	24	210	18
750		31	21	206	18
700	101·0	24	13	197	21
650		20	03	199	34
600	140·4	15	-06	210	28
550		06	-06	220	35
500	185·8	02	-09	229	45
450		-08	-18	234	45
400	239·5	-20	-29	241	47
350		-30	-40	238	59
300	305·2	-45		235	62
250		-62		239	63
200	391·0	-73		238	69
170		-60		244	36
150		-58		235	32
130		-55		247	21
110		-55			
100	(108 mb)	-56			

Inversion 534 mb 3° - 520 mb 5°

Tropopause: I 207 mb -77° 38,400'

DOWNHAM MARKET

Time 09h. G.M.T. | M.S.L. 1020·8 mb | Surf 1016·4 mb | Freezing 744 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	63	48	140	08
1000	05·8	61	47	148	15
950		54	40	158	12
900	34·8	48	37	169	11
850		44	29	164	12
800	66·5	38	22	175	11
750		33	15	198	12
700	101·7	28	06	197	15
650		22	00	199	19
600	141·3	17	-06	213	25
550		13	-09	219	30
500	187·2	04	-07	228	30
450		-05	-14	239	24
400	241·2	-17	-25	229	36
350		-30	-40	238	39
300	307·0	-46		245	38
250		-63		253	48
200	392·5	-60		248	50
170		-64		247	39
150	452·3	-60		247	33
130		-59		252	19
110		-58		237	18
100	539·1	-57		226	12
90		-56		224	12

Isothermal 592 - 573 mb 16°

Tropopause: I 184 mb - 86° 41,000'

LARKHILL

Time 09h. G.M.T. | M.S.L. 1019·3 mb | Surf 1003·5 mb | Freezing 711 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	59	50	130	05
1000	05·3	58	49		
950		56	45	126	10
900	34·3	49	40	126	08
850		42	35	129	07
800	65·9	36	26	148	06
750		35	11	165	12
700	101·1	31	02	176	14
650		26	-05	203	20
600	141·1	21	-12	207	22
550		13	-19	205	25
500	187·1	05	-27	208	31
450		+06	-31	218	31
400	241·1	-17	-30	222	31
350		-29	-40	219	31
300	307·0	-43		226	36
250		+60		228	47
200	393·1	-76		235	48
170		-61		236	35
150	453·7	-58		242	29
130		-57		244	25
110		-58		248	18
100	540·7	-57		249	19
90		-55		219	15
80		-54		220	10
70		-54		216	10
60	651·2	-53			

Inversion 983 mb 56° - 960 mb 58°
800 mb 36° - 780 mb 37°

Isothermal 660 - 646 mb 26°

Tropopause: II 206 mb - 75° 38,800'

CAMBORNE

Time 09h. G.M.T. | M.S.L. 1017·1 mb | Surf 1006·6 mb | Freezing 738 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	60	52	120	15
1000	04·7	61	52		
950		59	46	139	14
900	33·9	52	43	147	10
850		48	36	166	05
800	65·6	37	26	179	07
750		34	17	184	13
700	100·8	26	08	190	16
650		24	03	199	20
600	140·5	19	-04	216	24
550		-11	-14	219	27
500	186·3	03	-14	198	26
450		-07	-16	199	24
400	240·1	-18	-24	210	24
350		-30	-36	214	33
300	306·0	-44		217	32
250		-63		210	33
200	391·6	-74		218	41
170		-62		228	32
150		+60		228	29
130		-60		234	25
110		-62		226	21
100	538·4	-63			
90	(96 mb)	-64			

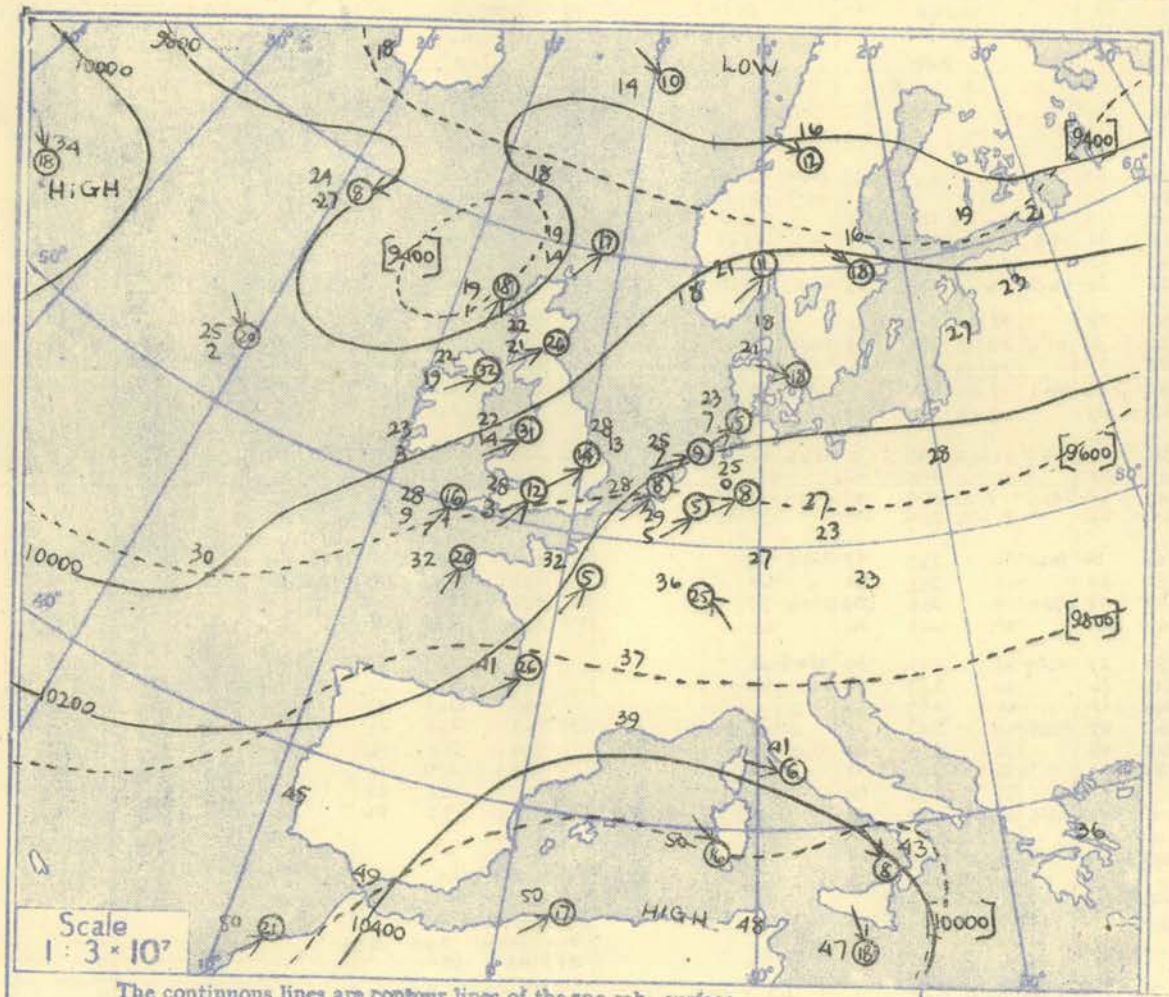
Inversion 1007 mb 60° - 972 mb 62°
806 mb 36° - 777 mb 39°

Tropopause: II 220 mb - 74° 37,100'

METEOROLOGICAL OFFICE LIBRARY 6 JUL 1951

Thursday 21st June 1951.

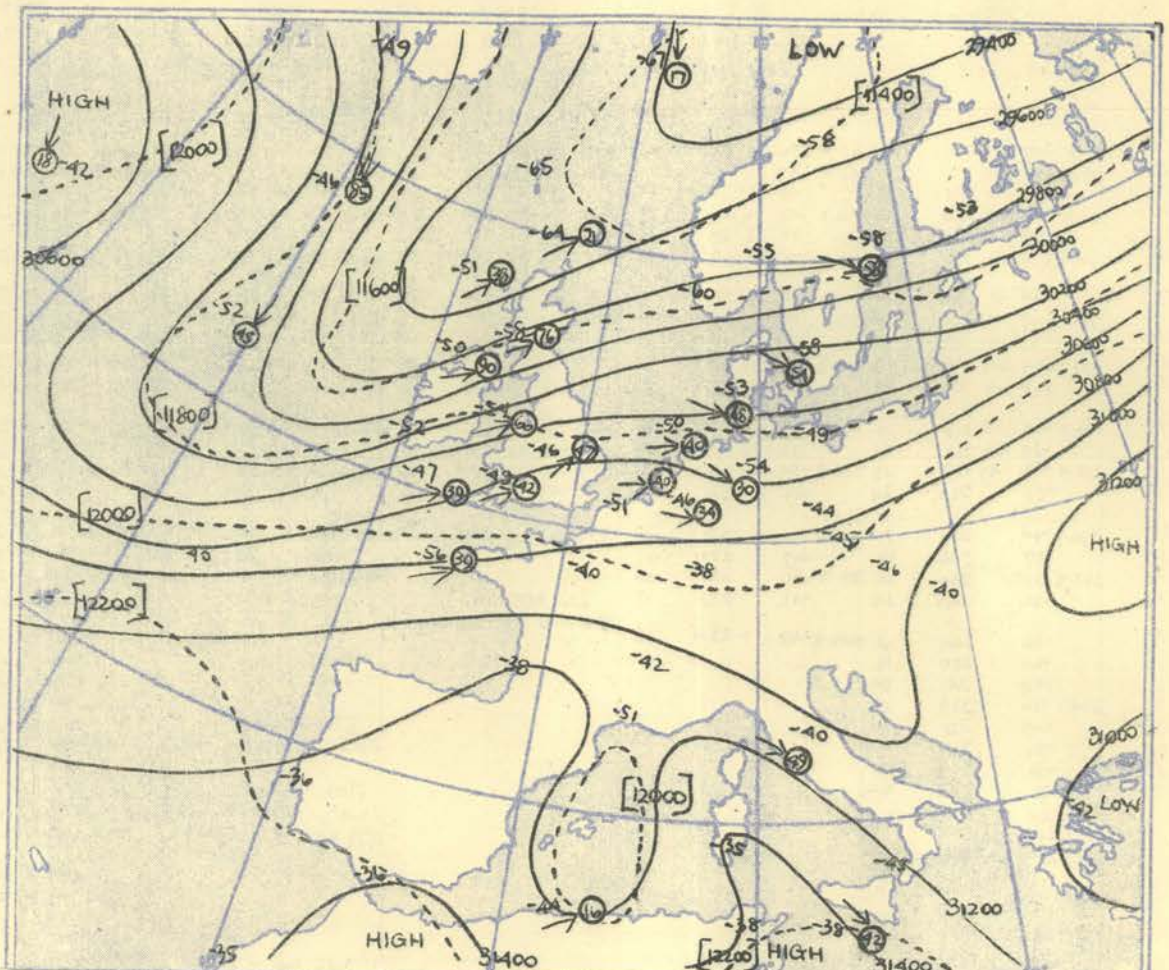
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.



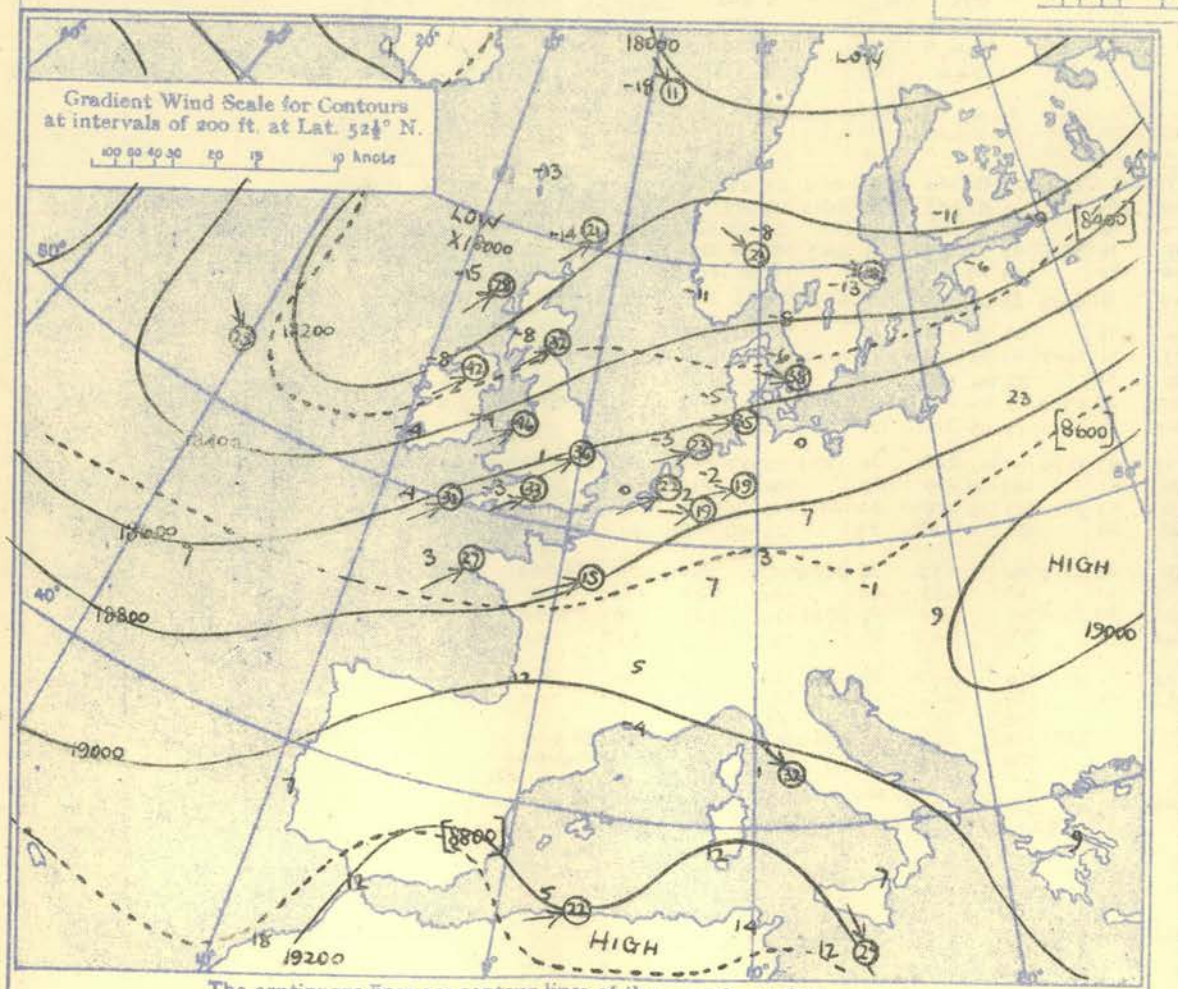
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

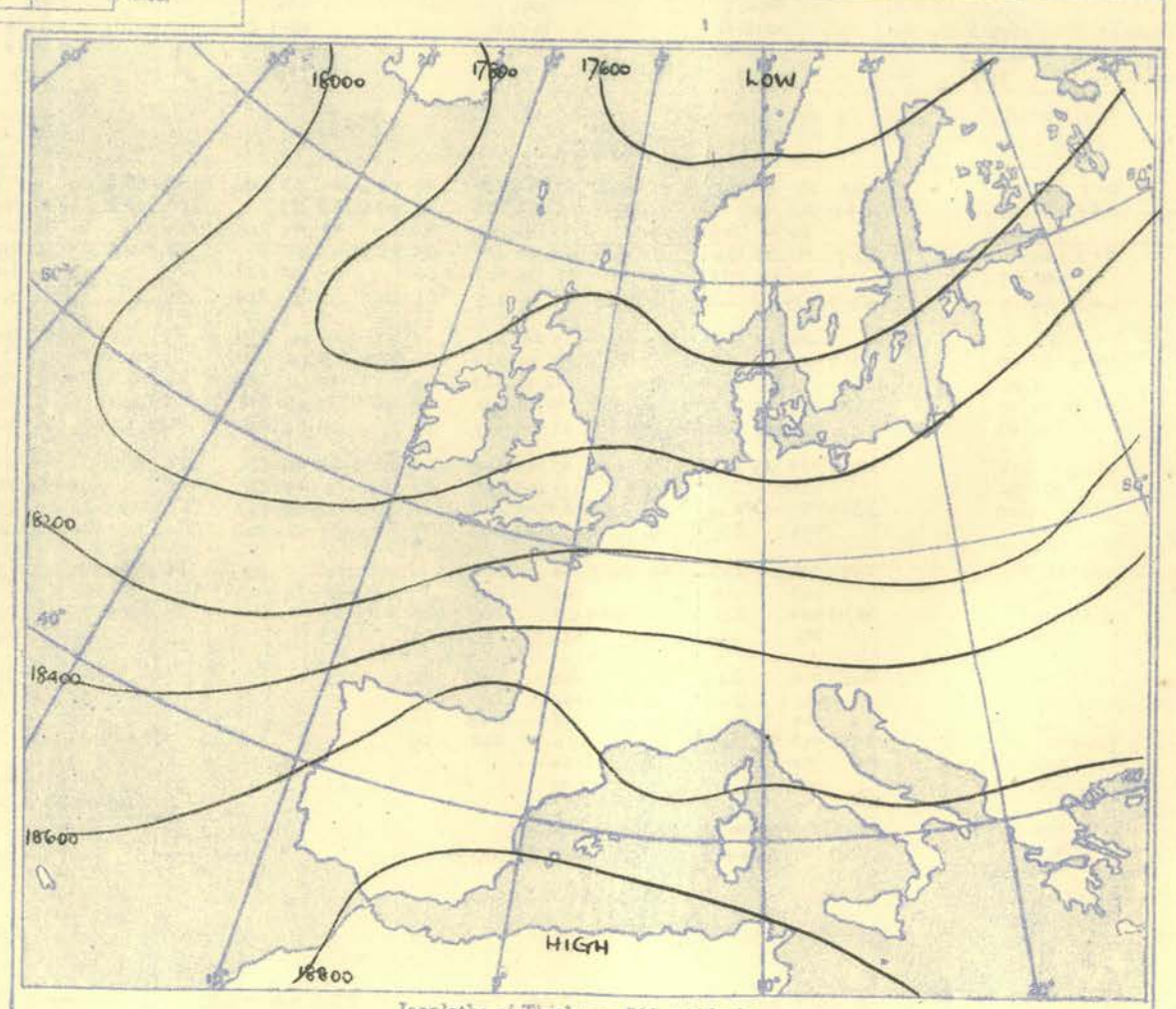
100 80 60 50 40 30 20 15 10 knots



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer : 700—500 mb.



Isopleths of Thickness 500 - 1000mb.

METEOROLOGICAL 2 JUL 1951 OFFICE LIBRARY

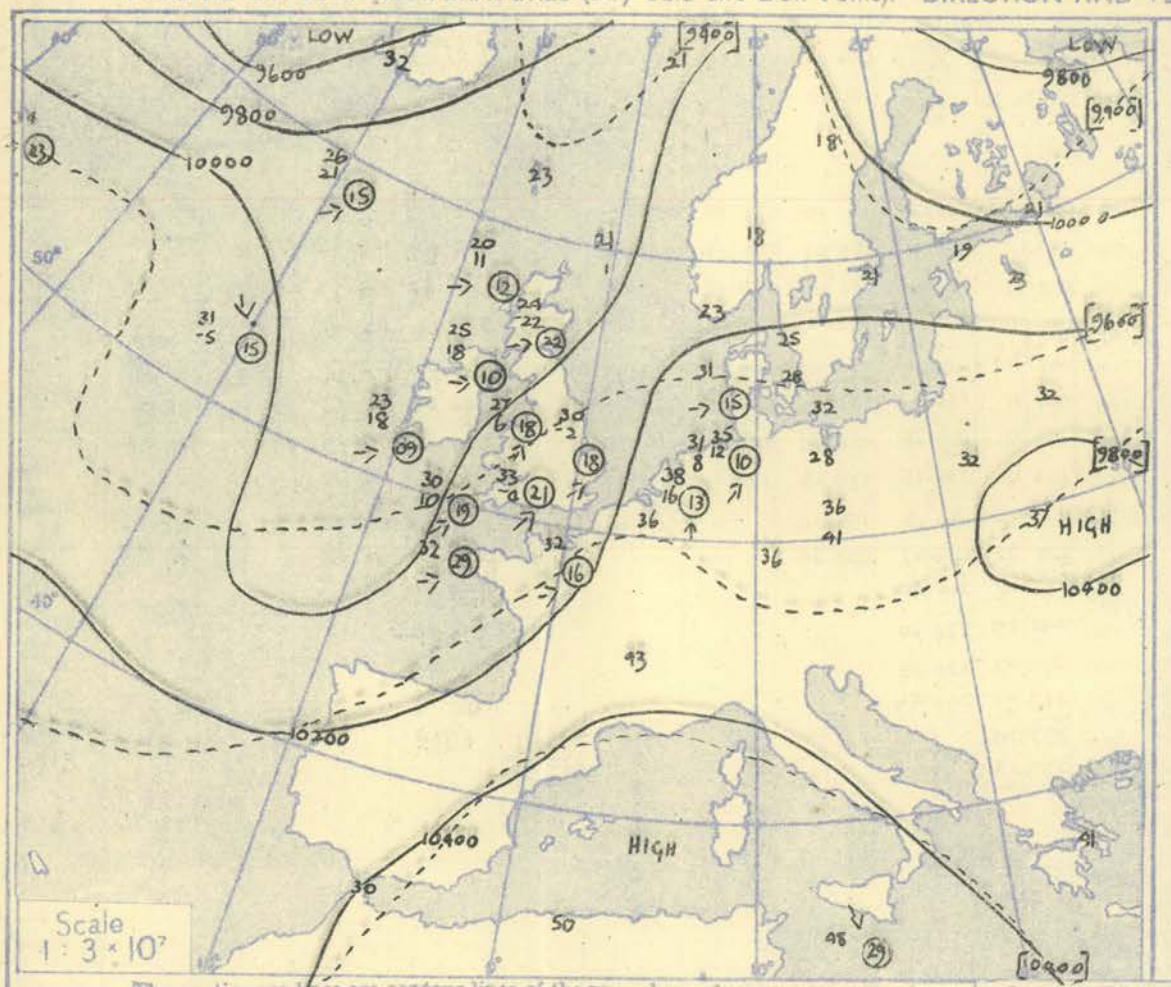
AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

52° 12'N 02° 12'W.

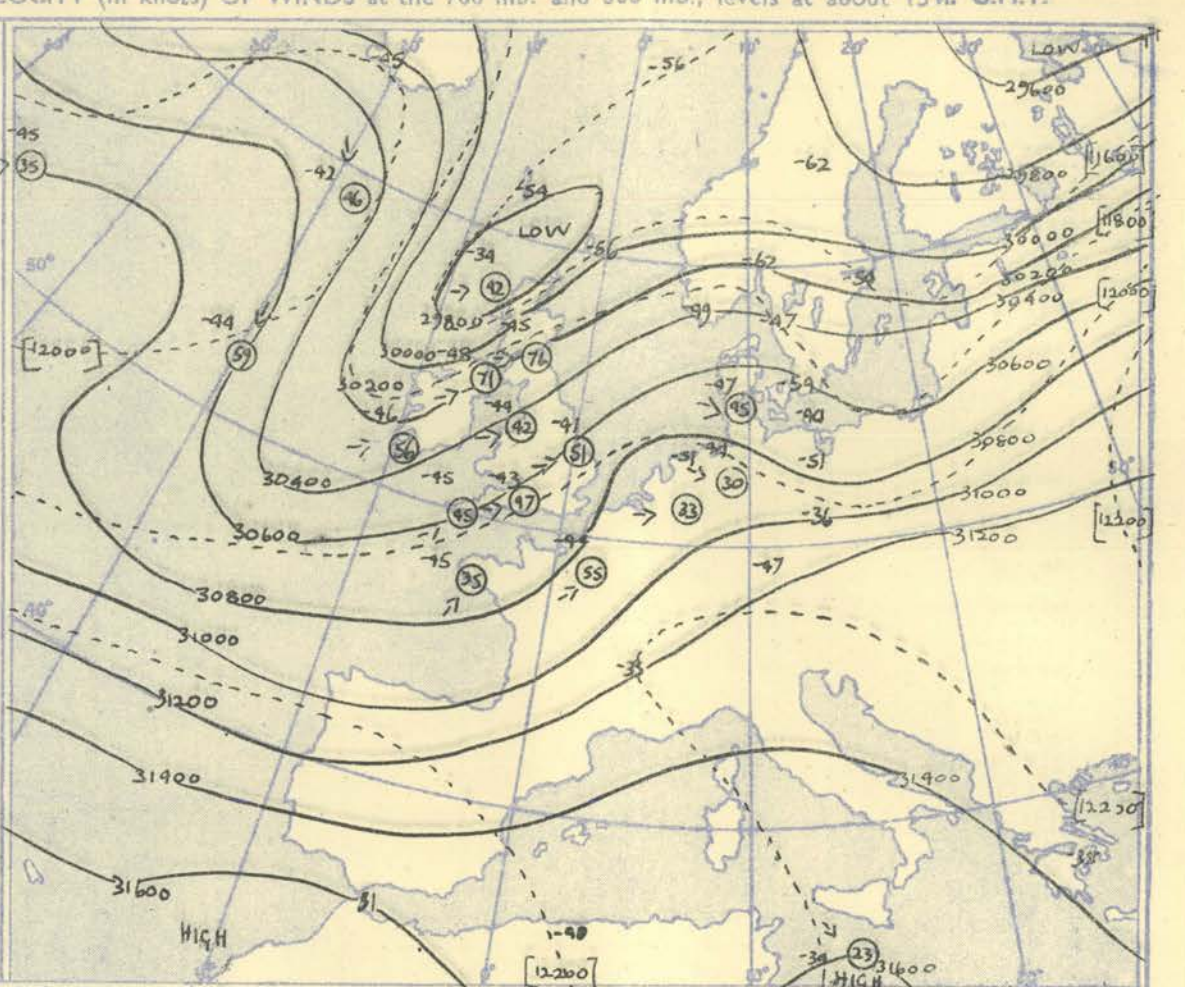
| Pressure | | |

Thursday 21st June 1951.

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

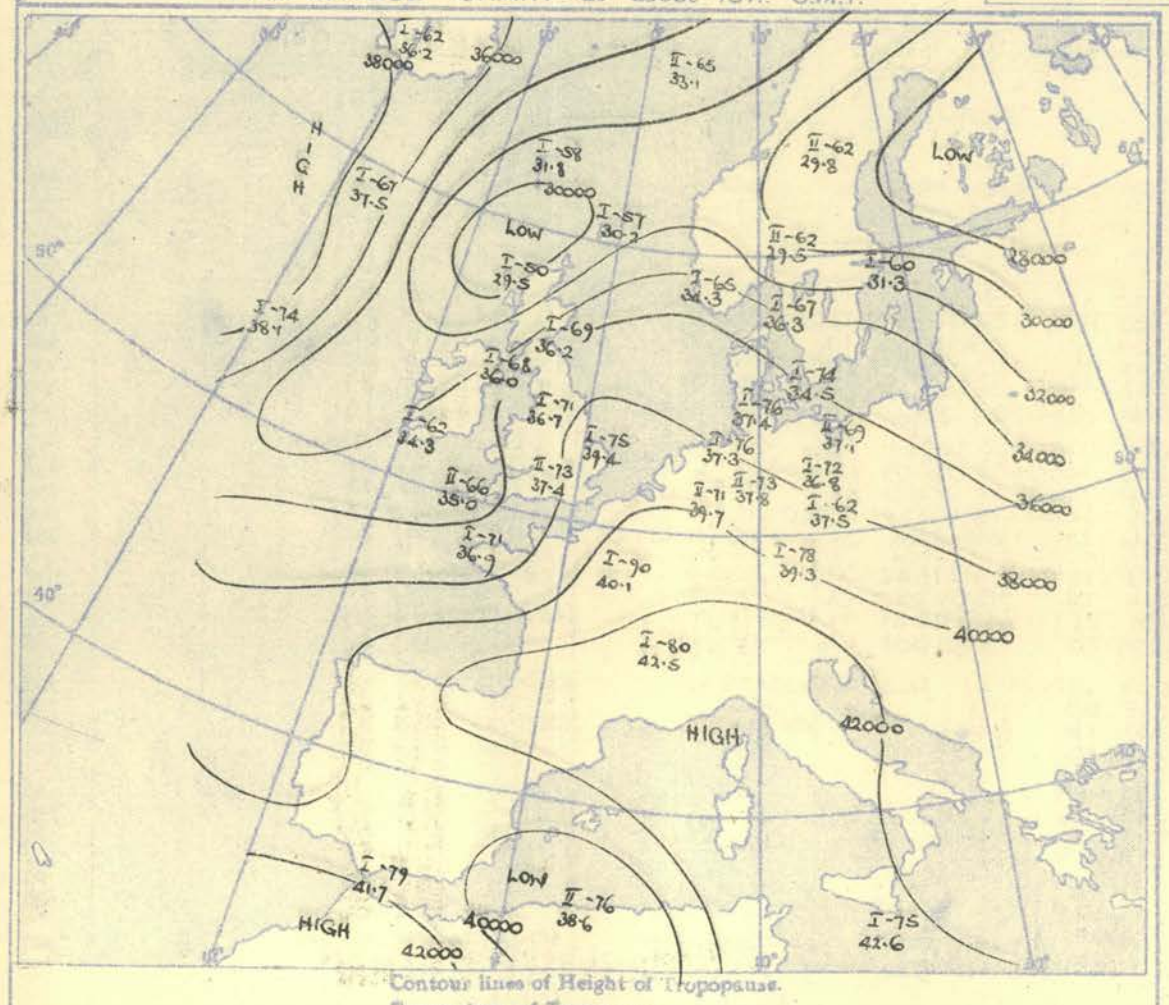


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N

100 50 40 30 20 15 10 knots

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Little change occurred in the broad thermal pattern. However, warming over Europe and the eastward progression of a warm ridge south of Iceland, led to an increase of the thermal winds over England, and the sharpening of the cold trough to the west of the British Isles.

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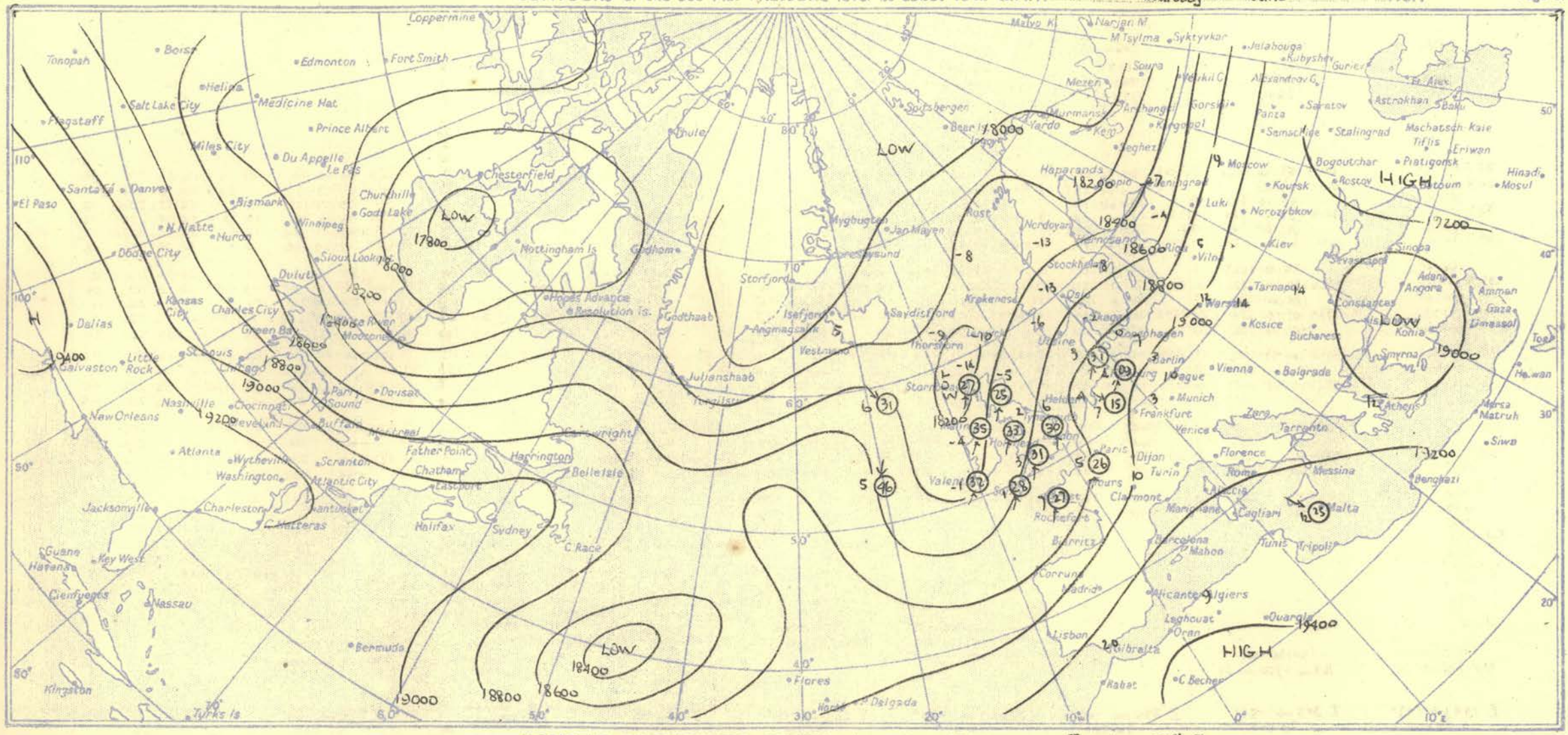
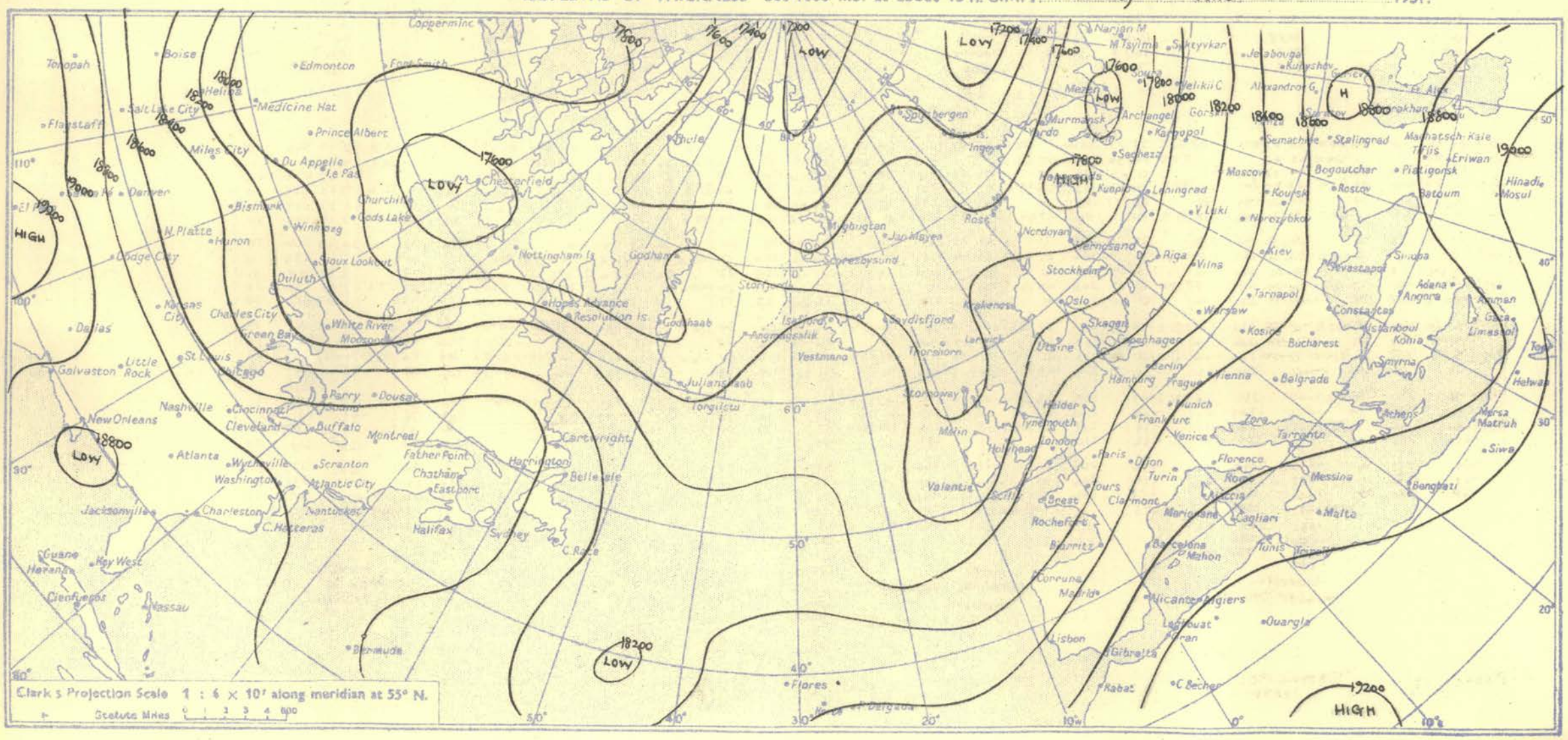
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Thursday 21st June 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Thursday 21st. June 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Thursday ... June ... 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.
Pressure: M.S.L.	1015·9 mb	1015·3 mb	1017·5 mb	1016·3 mb	1016·4 mb	1016·9 mb	1015·4 mb	1014·9 mb	1015·9 mb
Pressure: Surf	1005·9 mb	1013·7 mb	1016·7 mb	1006·8 mb	1014·4 mb	1012·6 mb	1000·0 mb	1004·6 mb	1014 mb
Pressure: Freezing	800 mb	820 mb	780 mb	797 mb	762 mb	722 mb	695 mb	715 mb	780 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	52	49			00·4	57	48	180	08	00·2	59	54	240	02
1000	04·3	51	48			04·2	55	44			04·8	56	52	223	15
950		46	44				49	40	222	15		49	46	228	17
900	32·8	41	39			32·9	42	34	229	12	33·5	44	41	229	18
850		36	35				36	29	229	09		38	36	229	19
800	64·1	32	29			64·1	30	22	215	11	65·0	34	33	231	19
750		28	21				25	14	223	11		29	29	227	19
700	98·8	21	01			98·6	20	11	226	12	99·9	24	22	225	22
650		15	-10				13	01	228	17		18	14	215	22
600	137·8	07	-23			137·4	05	-10	224	20	139·2	11	06	209	24
550		-01	-35				-04	-22	228	24		05	-01	214	25
500	182·4	-10	-42			181·6	-14	-31	230	27	184·4	-05	-12	225	25
450		-22	-50				-24	-42	225	30		-12	-19	231	40
400	234·6	-33	-58			233·4	-35	-52	227	40	237·6	-19	-29	235	01
350		-46					-47		225	51		-30	-39	236	72
300	298·2	-56				296·9	-54		228	42	303·5	-45		235	75
250		-54					-51		236	27		-60		236	79
200	386·1	-47				385·3	-48		252	21	390·2	-57		238	41
170		-49					-50		244	18		-51		235	26
150		-49					-49		241	11		-50		250	18
130		-50					-51					-49			
110		-49													
100	538·0	-50													
90		-49													
80		-48													
70		-47													
60		-46													
		-45													
	(55 mb)														
	Isothermal. 794-778 mb 31°					Isothermal 763 mb -750 mb 25°									
Tropopause	I 294 mb -57° 30·200					I 303 mb -55° 29·500					I 255 mb -69° 36·500				

Pressure mb	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	57	53	190	10	00·6	69	48	Calm		01·2	72	46	120	06
1000	04·5	56	52			04·7	67	46	"		04·7				
950		51	42	202	13		60	46	164	10		61	41	116	12
900	33·3	45	39	201	17	34·0	52	33	165	10	34·1	53	36	127	12
850		39	30	199	24		44	29	167	17		46	33	137	12
800	64·8	33	24	203	22	65·7	38	23	169	15	66·0	37	25	162	12
750		28	21	209	16		31	11	170	15		33	19	180	14
700	99·5	25	18	211	10	100·7	27	06	181	18	101·1	30	02	195	18
650		18	11	213	10		19	00	196	21		26	12	206	23
600	138·8	11	05	223	10	140·1	13	07	209	28	141·1	21	14	213	25
550		03	04	220	24		11	14	217	29		15	26	215	27
500	183·8	04	11	223	35	185·7	02	14	216	33	187·2	06	25	209	30
450		10	30	221	48		06	13	218	32		05	21	208	37
400	237·3	19	33	220	55	239·6	16	28	220	32	241·3	14	27	212	40
350		32	43	223	61		29	41	225	31		26	39	219	43
300	302·7	48		218	71	305·6	44		215	42	307·7	41		222	51
250		63		219	72		61		215	47		60		225	56
200	389·3	54		228	37	392·2	61		232	36	394·0	75		229	47
170		51		235	20		55		234	28		61		235	36
150		49		229	19		52		233	20		58		239	22
130							52		236	18		58		237	21
110							50		232	18		57		235	23
100						542·6	52		234	16	541·8	54		248	22
90							47		243	13		53		243	17
80							47		244	08		52		240	09
70							46		155	03		51		190	08
60							48		159	07		51		180	08
							52					49		183	08
	Isothermal. 960-947 mb 51° 500-480 -04°					Isothermal. 588-557 mb 12°					Inversion 750 mb 33°-739 mb 34°				
Tropopause	I 229 mb -65° 36.000					I 225 mb -71° 36.700					I 200 mb -75° 39.400				

Pressure mb	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	70	49	130	10	02·9	68	52	110	07	00·3	56	54	210	06
1000	04·4					04·2	67	53			04·3	54	52	208	09
950		60	40	115	11		59	53	106	12		48	45	204	12
900	33·7	53	36	125	09	33·5	52	48	115	10	33·0	43	40	200	12
850		46	33	125	12		45	41	144	10		39	35	207	12
800	65·6	38	31	137	14	65·3	42	29	160	10	64·4	34	30	217	13
750		35	07	171	17		35	18	180	13		29	24	216	12
700	100·8	33	04	194	21	100·6	30	10	197	13	99·2	23	18	207	09
650		25	11	207	23		24	00	207	22		17	11	231	11
600	140·7	19	20	214	27	140·4	18	06	208	25	138·4	11	05	238	11
550		11	09	212	31		10	13	206	30		05	03	222	20
500	186·5	03	09	217	31	186·0	01	20	214	28	183·6	01	12	218	32
450		08	14	223	37		07	16	210	30		07	22	217	40
400	240·3	18	24	224	40	239·9	15	22	210	38	234	18	32	212	45
350		27	35	222	42		30	36	211	42		30	42	210	48
300	306·4	48		221	47	305·8	45		214	45	303·0	46		205	56
250		62		222	53		64		210	45		63		214	58
200	392·3	71		224	48	392·1	60		231	27	390·2	50		214	46
170		63		227	36		54		222	28		50		229	18
150		60		232	27		56		235	22		50		232	16
130		58		236	24		57					52		232	10
110		60		233	21	(147 mb)			For rest			50		224	15
100	539·8	60		246	21				of winds		541·6	51		219	12
90		58		226	15				See page			50		225	09
80		55		223	14				3.			50		232	09
70		53		223	03										
60		54		217	04										
		54		156	14										
	(78 mb)														
	Inversion 777 mb 34°-760 mb 36° Isothermal. 724-697 mb 33°					Inversion 820 mb 39°-800 mb 42°									
Tropopause	II 218 mb -73° 37.500					II 246 mb -66° 35.000					I 250 mb -62° 34.300				

21h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Pressure: Time	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	G.M.T.
Pressure: M.S.L.	1017·4 mb	1016·5 mb	1018·1 mb	1016·3 mb	1015·3 mb	1015·3 mb	1012·9 mb	1012·7 mb	mb
Pressure: Surf	1007·4 mb	1014·9 mb	1017·3 mb	1006·9 mb	1013·3 mb	1010·9 mb	997·4 mb	1002·3 mb	mb
Pressure: Freezing	823 mb	805 mb	782 mb	800 mb	722 mb	750 mb	710 mb	735 mb	mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	52	48	280	06	00·4	53	47	070	05	00·2	55	53	Calm	
1000	04·7	51	47			04·5	52	45			05·0	54	50	288	05
950		48	40	223	06		49	43	198	07		51	48	214	05
900	33·2	41	35	215	07	33·1	43	35	193	06	33·8	46	43	183	06
850		36	32	216	12		38	31	199	07		40	37	178	10
800	64·5	31	26	218	12	64·5	31	21	196	10	63·3	34	27	196	17
750		24	14	220	13		28	12	195	10		28	20	205	21
700	98·9	19	11	221	16	99·2	22	10	208	09	100·1	21	17	206	25
650		12	00	222	21		14	02	216	13		13	09	196	12
600	137·7	05	-09	221	24	138·1	06	03	217	15	139·0	07	05	208	09
550		-04	-16	220	25		-03	-19	221	18		01	00	206	11
500	182·0	-14	-28	221	27	182·5	-12	-28	226	24	183·8	-05	-07	213	20
450		-24	-41	222	33		-21	-39	228	34		-12	-14	230	38
400	233·8	-36	-51	225	36	234·6	-32	-50	224	46	238·0	-20	-23	232	42
350		-48		230	46		-42		226	48		-34	-37	224	49
300	291·0	-56		231	53	298·8	-48		238	33	302·2	-49		223	55
250		-54		233	39		-52		244	24		-65		230	46
200	384·8	-50		244	18	387·3	-61		256	15		-55		237	28
170		-51		253	14		-51		240	15		-53		230	19
150		-51		247	11		-52		242	12		-54		229	20
130		-51		256	11		-52		253	12		-54		246	12
110		-50		212	09		-52		272	07		-54		246	10
100						538·2	-51		205	04		-53		205	05
90							-52		191	06				216	05
80							-50		188	07					
70							-50		220	03					
60							-52								
						Inversion 790 mb 30°-776 mb 31°									
Tropopause	II 305 mb -56° 29.400					II 274 mb -52° 31.800					MIR				

Pressure mb	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	55	52	180	04	00·6	59	48	Calm		01·2	63	48	060	06
1000	04·5					04·2	61	48	032	12	04·2	62	42	087	18
950		52	40	195	09		60	46	065	08		61	45	103	17
900	33·4	47	36	207	14	33·4	54	41	111	08	33·5	55	41	135	10
850		41	32	230	14		47	36	120	09		49	40	155	11
800	64·9	32	28	230	11	66·3	40	32	133	09	65·6	42	37	170	15
750		28	25	205	08		35	19	179	10		32	28	179	16
700	99·7	23	19	193	10	100·6	29	16	202	17	100·8	30	06	194	16
650		16	12	206	10		22	14	228	23		24	25	216	17
600	138·8	09	04	191	06	140·2	17	12	234	20	140·6	18	16	215	20
550		02	06	213	14		13	08	223	21		09	13	205	26
500	185·7	04	13	217	26	186·1	06	01	229	24	186·2	02	09	211	33
450		10	19	214	33		03	09	212	25		06	13	220	39
400	237·1	21	30	215	41	240·4	14	20	198	30	240·0	18	26	222	41
350		34	43	216	42		26	33	215	39		32	41	220	46
300	302·4	48		213	46	306·6	43		210	37	305·5	47		224	53
250		64		213	34		63		214	38		62		227	69
200	388·3	53		226	25	393·3	57		222	30	390·2	73		232	61
170		53		237	15		55		231	28		63		232	31
150		53		214	14		55		235	23		62		234	23
130		54		231	19		53		235	14		60		237	20
110		54		240	10		53		234	13		61		240	16
100	538·6	54		205	05	543·1	54		233	11					
90		53		216	05		53								
80							52								
70						(84 mb)									
60															
	Inversion 1007 mb 55°-992 mb 56° Isothermal. 776-763 mb 30° 498-481 -5°					Inversion. 1013 mb 59°-1000 mb 61° Isothermal. 1000-960 mb 61° 760-750 35° 662-647 22°					Inversion 1000 mb 62°-968 mb 63 Isothermal. 742-706 mb 30°				
Tropopause	I 240 mb -67° 34.800					I 240 mb -67° 35.400					I 208 mb -76° 38.200				

Pressure mb	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots					
Surf	04·4	65	53	Calm		02·9	59	53	340	05					
1000	03·7					03·5	59	52							
950		63	45	118	10		57	47	029	06					
900	33·1	56	40	111	11	32·6	50	42	067	10					
850		48	32	118	10		43	37	077	15					
800	65·1	41	25	144	16	64·3	39	19	079	10					
750		36	13	154	19		34	23	256	05					
700	100·5	31	10	193	14	99·6	27	19	233	12					
650		25	01	201	18		22	03	189	21					
600	140·4	18	16	203	21	139·2	17	09	202	25					
550		11	00	204	22		11	05	217	28					
500	186·2	04	01	212	29	184·9	03	04	212	29					
450		06	13	222	27		07	15	191	24					
400	240·1	18	23	218	34	238·7	19	27	195	28					
350		31	39	214	37		32	41	197	33					
300	305·7	46		206	51	304·2	48		193	34					
250		63		207	78		63		196	36					
200	391·4	76		216	63	390·6	59		209	34					
170		63		219	33		56		219	29					
150		61		225	30		56		229	26					
130		61		239	22		58		233	23					
110		63		228	20		58		242	23					
100	537·8	65		238	18	539·3	59		236	21					
90		64		238	17		59								
80		63		230	15										
70		62													
60															
	Inversion 997 mb 65°-985 mb 67° Isothermal. 567-542 mb 11°					Inversion 990 mb 58°-980 mb 60° Isothermal. 615-590 mb 1)°									
Tropopause	II 215 mb -75° 37.700					II 240 mb -65° 35.100									

H.M.S.O. Press, M.O. Dunstable

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. FRIDAY, 22nd JUNE 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

03h G.M.T.

Station	Time	M.S.L.	Surf	Freezing	Tropopause
LERWICK	03h	1018·6 mb	1008·4 mb	820	I 290 mb - 59° 30,900
STORNOWAY	03h	1018·3 mb	1016·7 mb	810	II 262 mb - 50° 33,000
LEUCHARS	03h	1017·7 mb	1016·9 mb	776	II 257 mb - 69° 33,500
ALDERGROVE	03h	1016·8 mb	1007·2 mb	793	I 250 mb - 64° 34,100
LIVERPOOL	03h	1013·5 mb	1011·5 mb	753	I 231 mb - 73° 35,800
DOWNHAM MARKET	03h	1011·5 mb	1007·2 mb	707	I 229 mb - 76° 36,200
LARKHILL	03h	1010·8 mb	995·0 mb	728	I 229 mb - 73° 36,000
CAMBORNE	03h	1011·1 mb	1000·6 mb	729	I 260 mb - 65° 33,300
VALENTIA	03h	1016·8 mb	1015 mb	800	II 279 mb - 59° 31,800

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	45	45			00·4	44	42	290	02	00·2	50	49	Calm	
1000	04·9	47	46			04·9	50	46			04·8	51	50	185	03
950		47	34				47	38	220	05		52	48	179	06
900	33·9	42	25			33·4	42	33	215	06	33·6	48	42	174	08
850		36	20				36	28	209	07		42	35	172	10
800	64·7	30	17			64·7	31	17	208	07	65·2	35	30	173	10
750		24	10				27	05	215	07		29	15	189	08
700	99·1	19	03			99·3	21	00	219	06	99·9	20	12	214	11
650		11	-10				14	-07	225	10		13	08	207	17
600	137·8	02	-07			138·3	07	-18	232	13	138·8	09	04	195	23
550		-06	-29				-02	-23	242	10		03	-02	210	18
500	181·8	-16	-40			182·7	-12	-35	242	13	183·7	-05	-11	215	23
450		-26	-52				-20	-45	260	16		-13	-18	222	36
400	233·3	-36	-59			235·1	-26	-56	295	18	236·7	-24	-31	219	92
350		-46					-35	-58	350	30		-37	-49	224	36
300	296·7	-57				300·2	-46		345	30	301·4	-53		226	95
250		-56					-50		306	19		-69		220	40
200	384·2	-53				388·9	-50		284	15	387·2	-59		244	15
170		-54					-51		275	15		-57		265	14
150		-54					-52		256	09		-53		236	09
130		-54					-53		258	09		-59		205	13
110		-52					-54		246	07		-59		213	07
100	(104 mb)	-52				539·4	-62		225	06	535·9	-59		241	06
90							-52		192	05		-55		255	05
80							-53		230	05					
70							-53		234	04					
60															

Inversion 1008 mb 48° - 967 mb 49°

Inversion 1017 mb 49° - 1000 mb 50°

Inversion 1017 mb 50° - 970 mb 53°

Pressure mb	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	50	49	040	04	00·6	56	51	050	05	01·2	58	53	050	06
1000	04·5	51	48			03·7	58	50	054	12	03·2	60	54		
950		52	42	066	05		57	45	085	10		66	49	100	13
900	33·3	47	39	120	05	32·8	52	43	107	09	32·7	59	46	110	12
850		41	34	170	06		45	39	119	07		51	43	120	12
800	64·8	33	29	206	08	64·6	38	33	124	09	64·9	43	37	130	10
750		27	23	192	09		31	26	133	11		35	28	137	10
700	99·6	22	20	198	07	99·7	25	18	158	08	100·3	31	15	147	12
650		16	12	160	09		19	12	179	10		22	-06	162	16
600	138·8	10	05	191	08	139·1	14	-13	192	18	139·9	14	-03	175	20
550		05	-01	220	09		06	-12	200	21		10	04	188	21
500	183·9	-02	-07	220	17	184·5	00	-08	212	23	186·5	02	-04	204	29
450		-11	-15	225	23		-09	-17	211	21		-08	-16	203	23
400	237·3	-20	-27	220	28	238·0	-20	-31	212	22	239·2	-20	-29	197	26
350		-33	-93	219	30		-35	-47	209	26		-34	-93	195	32
300	302·5	-99		210	36	303·2	-50		208	35	300·4	-50		196	52
250		-64		212	30		-67		203	68		-67		197	67
200	389·2	-59		236	10	388·7	-61		216	18	389·7	-66		212	30
170		-54		257	11		-58		215	21		-61		220	22
150		-52		250	10		-59		218	18		-61		229	19
130		-53		198	08		-60		229	16		-59		231	16
110		-55		189	08		-60		235	11		-61		224	15
100						526·6	-60		230	11	537·0	-62		226	15
90							-60		225	09		-59			
80							-59		225	10					
70							-59		243	05					
60							-60		253	03					

Inversion 1007 mb 50° - 990 mb 53°

156 mb

Inversion 1011 mb 56° - 990 mb 60°

Isothermal 970 - 955 mb -8°

Inversion 1007 mb 58° - 975 mb 68°

726 .. 31° - 707 .. 32°

Isothermal 594 - 574 mb 13°

Pressure mb	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	58	53	050	06	04·4	58	55	090	07	02·9	55	54	350	10
1000	03·2	60	54			02·9					03·1				
950		66	49	100	13		58	52	101	14		58	49	366	08
900	32·7	59	46	110	12	32·1	52	47	135	09	32·2	64	43	027	05
850		51	43	120	12		47	41	097	03		47	40	080	08
800	69·9	43	37	130	10	69·1	40	36	072	03	64·1	39	33	114	05
750		35	28	137	10		39	33	099	05		35	19	133	07
700	100·3	31	15	147	12	99·3	30	30	125	09	99·3	28	18	116	07
650		22	-06	162	16		23	22	175	13		22	17	130	09
600	139·9	14	-03	175	20	139·1	17	16	175	17	134·0	17	11	208	06
550		10	04	188	21		11	08	168	20		12	06	214	12
500	184·5	03	-01	184	12	184·9	02	-07	172	12	180·7	02	-07	172	12
450		-08	-13	177	17		-09	-18	202	15		-11	-33		
400	238·7	-20	-25	175	18	238·3	-22	-32	192	16	237·1	-22	-38		
350		-34	-90	179	23		-36	-96	178	19		-34	-49		
300	303·9	-99		174	39	303·2	-51		166	22	302·1	-51			
250		-67		176	54		-64		169	21		-58			
200	389·6	-60		210	24	389·9	-56		211	21	389·5	-50			
170		-60		221	29		-56		231	18		-54			
150		-59		224	21		-56		236	15		-60			
130		-61		227	20		-56		225	15		-54			
120		-62		224	18		-59		215	15		-54			
100	537·1	-63		232	17	538·8	-60		223	12	539·6	-59			
90		-62					-62		237	08		-54			
80		-69					-61		232	07					
70							-59		212	10					
60						(063 mb)	-58								

(193 mb)

Inversion 995 mb 58° - 961 mb (59°)

Inversion 974 mb 59° - 950 mb 58°

Isothermal 950 - 933 mb 58°

782 - 757 .. 36°

Isothermal 793 - 767 mb 31°

691 - 670 - 21°

917 - 890 - 44°

09h G.M.T.

Station	Time	M.S.L.	Surf	Freezing	Tropopause
LERWICK	09h	1019·3 mb	1009·1 mb	813	I 291 mb - 50° 30,700
STORNOWAY	09h	1013·9 mb	1017·3 mb	798	I 235 mb - 66° 35,300
LEUCHARS	09h	1017·2 mb	1016·4 mb	802	I 228 mb - 67° 36,100
ALDERGROVE	09h	1017·2 mb	1007·7 mb	778	I 260 mb - 62° 33,900
LIVERPOOL	09h	1013·2 mb	1011·2 mb	742	I 294 mb - 68° 39,800
DOWNHAM MARKET	09h	1010·1 mb	1005·7 mb	720	I 239 mb - 69° 35,900
LARKHILL	09h	1010·7 mb	995·0 mb	711	I 258 mb - 63° 33,700
CAMBORNE	09h	1011·7 mb	1000·7 mb	737	I 241 mb - 63° 35,100
VALENTIA					

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	47	47			00·4	58	49	Calm		00·2	57	53	110	04
1000	05·2	45	45			05·2	53	47	"		04·7	54	50	Land V	
950		47	47				49	40	"			51	44	"	
900	33·7	43	27			33·8	43	36	"		33·3	46	38	"	
850		36	24				38	31	"			40	33	"	
800	65·0	30	22			65·1	32	23	214	03	69·5	34	28	"	
750		26	14				26	14	222	02		28	19	"	
700	99·5	20	07			99·7	20	05	276	05	99·6	19	15	220	06
650		14	-04				16	-03	296	07		14	12	240	05
600	138·9	06	-21			138·7	08	-17	328	10	138·6	10	08	275	05
550		-02	-21				-01	-27	393	16		03	00	242	13
500	182·8	-10	-22			183·4	-07	-34	356	24	183·7	-03	-07	220	29
450		-20	-30				-14	-41	356	33		-10	-16	218	28
400	235·1	-31	-43			236·4	-22	-49	351	33	237·2	-19	-25	225	33
350		-39	-56				-36	-61	346	38		-31	-39	221	35
300	299·6	-48				301·3	-51		346	44	301·8	-46		224	41
250		-49					-64		345	42		-63		229	34
200	388·5	-47				387·5	-59		298	12	388·4	-57		229	18
170		-48					-56		283	11		-54		232	13
150		-49					-55		263	06		-52		251	10
130		-52					-55		229	07		-55		235	10
110		-50					-55		274	06		-55		192	07
100	540·3	-51				536·8	-55				539·2	-55			
90		-52													
80		-48													
70	Inversion														
60	1000 mb 45° - 985 mb 47°														

973 .. 46° - 958 .. 48°

781 .. 27° - 769 .. 28°

Isothermal 670 - 655 mb 16°

Isothermal 989 - 936 mb 51°

Pressure mb	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	58	51	Calm		00·6	59	49	030	10	01·2	58	57	290	10
1000	04·7	57	51			03·6	58	46	035	20	02·8			For Wind	
950		50	47	028	07		57	40	060	21		61	55		
900	33·5	47	40	037	06	32·7	53	41	070	20	32·2	58	48	See	
850		41	35	038	05		45	37	060	16		51	44		
800	65·0	34	31	034	05	69·5	37	32	041	09	69·3	42	38		
750		29	25	278	05		33	21	067	08		37	36	Page 3.	
700	100·0	24	19	250	06	99·6	26	12	086	06	99·8	30	29		
650		19	14	301	04		21	03	142	04		25	24		
600	139·3	12	07	280	04	139·1	17	06	164	13	139·7	20	18	149	10
550		09	-02	298	09		10	03	173	24		13	09	197	07
500	189·5	-01	-07	250	10	189·7	02	-07	183	21	185·9	07	02	251	06
450		-08	-18	197	19		-08	-17	194	19		-02	-08	193	08
400	238·1	-20	-30	199	15	238·9	-19	-29	195	15	240·1	-15	-21	163	11
350		-33	-92	200	21		-33	-93	185	19		-28	-33	169	14
300	303·3	-50		210	18	303·7	-46		183	29	306·3	-93		155	18
250		-61		228	07		-66		196	24		-61		151	30
200	389·1	-56		230	07	390·9	-54		205	15	393·3	-58		194	29
170		-56		260	09		-51		213	13		-51		212	23
150		-56		242	06		-51		207	11		-51		213	18
130		-54		258	06		-53		216	14		-53		212	13
110		-52		208	03		-53		235	12		-57		218	19
100						541·0	-52		237	12	543·3	-54		217	12
90							-50		231	08		-53		214	08
80							-99								
70															
60															

Inversion 626 mb 17° - 610 mb 18°

Isothermal 981 - 929 mb 57°

Inversion 1006 mb 58° - 956 mb 61°

Isothermal 956 - 926 mb 61°

Pressure mb	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	60	58	060	09	02·9	57	54	350	02					
1000	03·0					03·1	57	54							
950		55	53	058	03		52	48	340	12					
900	32·1	51	47	037	03	32·1	53	43	354	12					
850		47	40	006	03		47	36	002	08					
800	69·0	42	36	229	04	69·0	41	33	012	07					
750		37	31	217	10		34	30	L and V						
700	99·9	31	26	215	13	99·3	29	28	"						
650		24	20	213	12		23	22	"						
600	139·3	18	14	210	12	139·1	18	14	"						
550		11	05	238	12		11	07	"						
500	185·2	03	-04	224	15	189·9	04	-04	"						
450		-07	-15	216	16		-05	-17	208	07					
400	228·9	-19	-28	207	16	239·0	-16	-31	176	07					
350		-39	-44	199	19		-31	-42	152	07					
300	309·1	-98		208	17	309·6	-96		183	14					
250		-62		213	17		-62		183	14					
200	391·6	-51		206	16	391·7	-53		206	09					
170		-51		212	22		-51		229	08					
150		-51		212	23		-52		217	06					
130		-50		213	15		-53		203	07					
120		-52		215	17		-55		210	14					
100	542·9	-54		210	12	542·3	-55		231	16					
90		-52		209	11		-54		241	15					
80		-50		212	12		-53								
70	(072 mb)	-98													
60	Inversion														

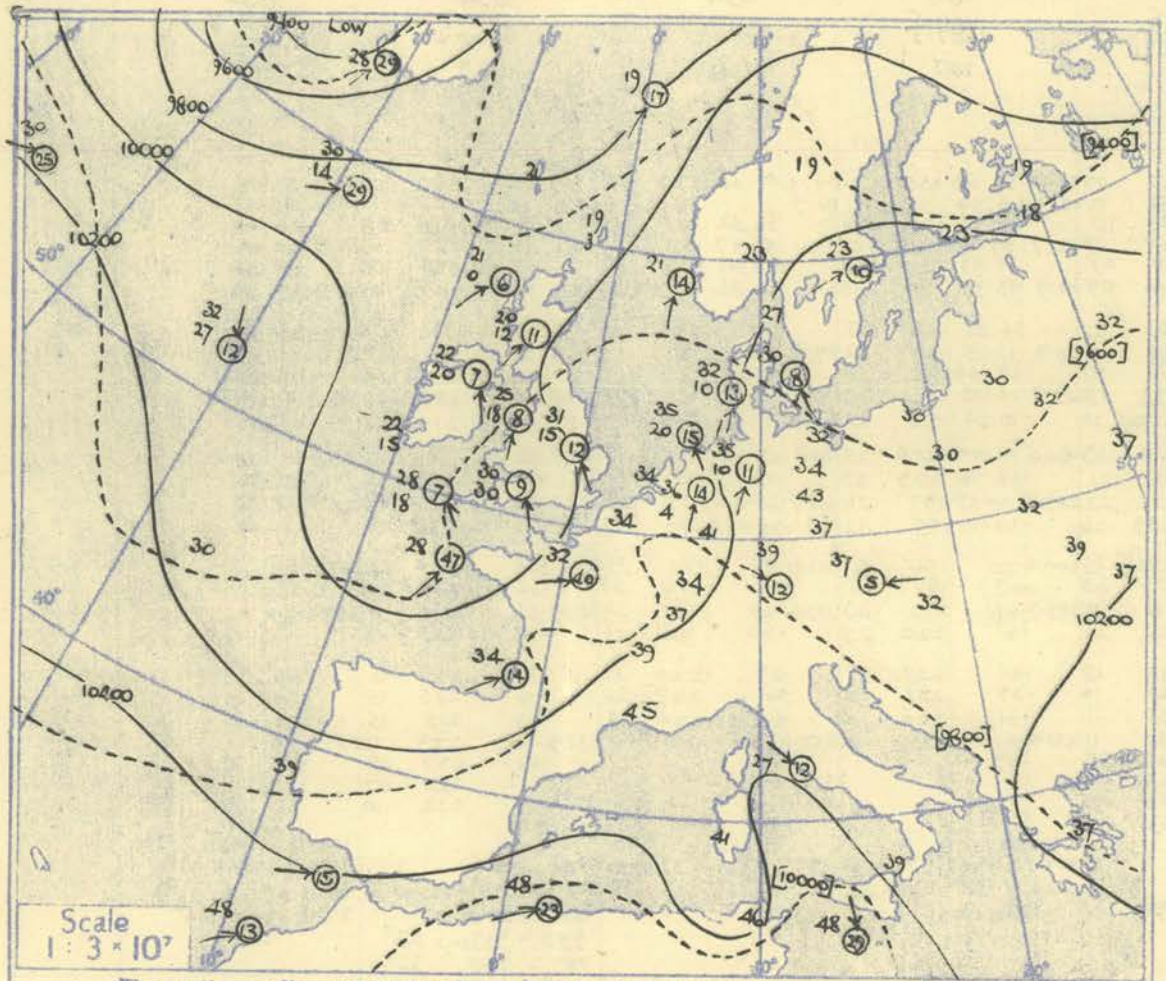
607 mb 17° - 592 mb 19°

Inversion 950 mb 52° - 931 mb 55°

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Tropopause	I 290 mb - 59° 30,900	II 262 mb - 50° 33,000	II 257 mb - 69° 33,500	I 250 mb - 64° 34,100	I 231 mb - 73° 35,800	I 229 mb - 76° 36,200	I 229 mb - 73° 36,000	I 260 mb - 65° 33,300	II 279 mb - 59° 31,800
Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Tropopause	I 291 mb - 50° 30,700	I 235 mb - 66° 35,300	I 228 mb - 67° 36,100	I 260 mb - 62° 33,900	I 294 mb - 68° 39,800	I 239 mb - 69° 35,900	I 258 mb - 63° 33,700	I 241 mb - 63° 35,100	

Friday 22nd June, 1951.

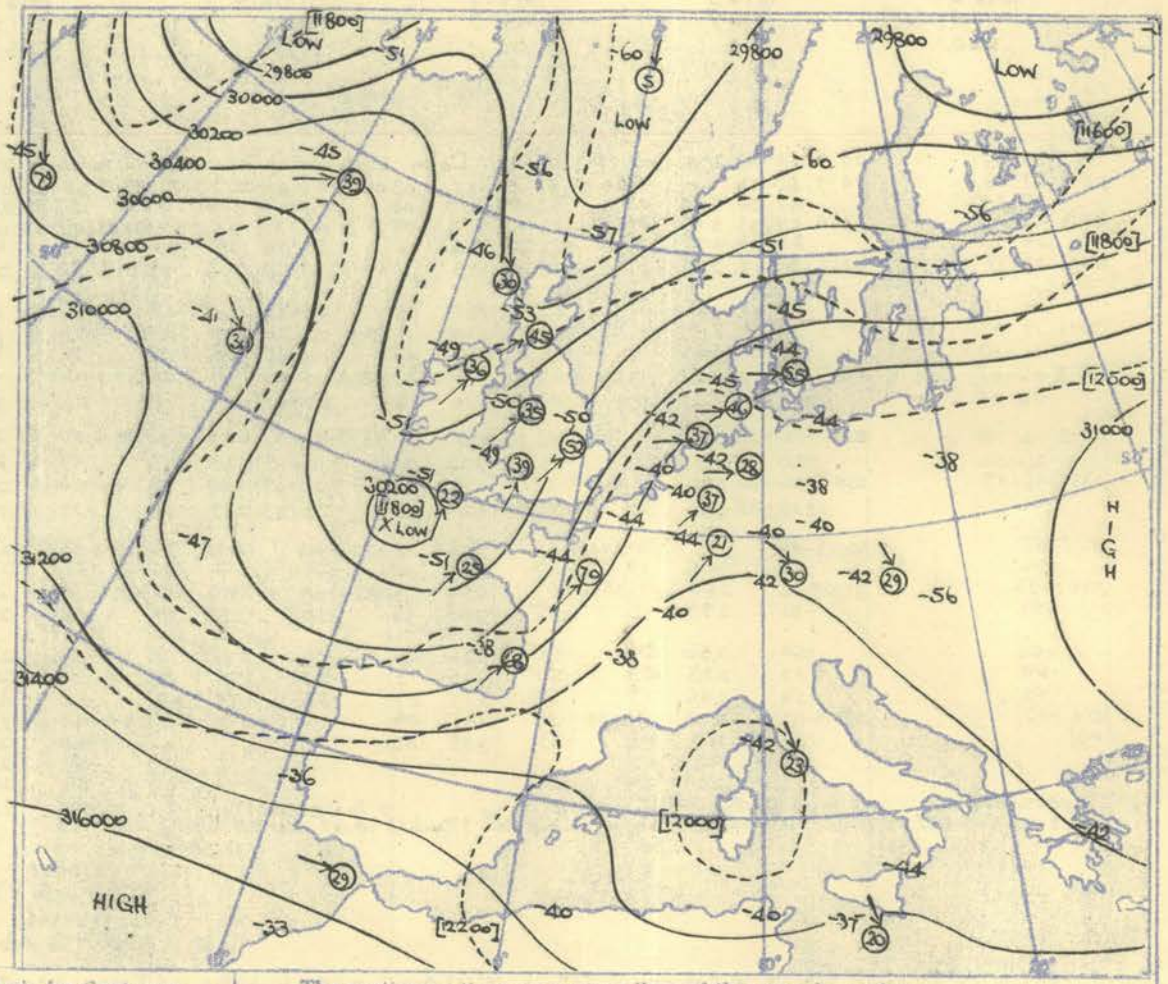
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.



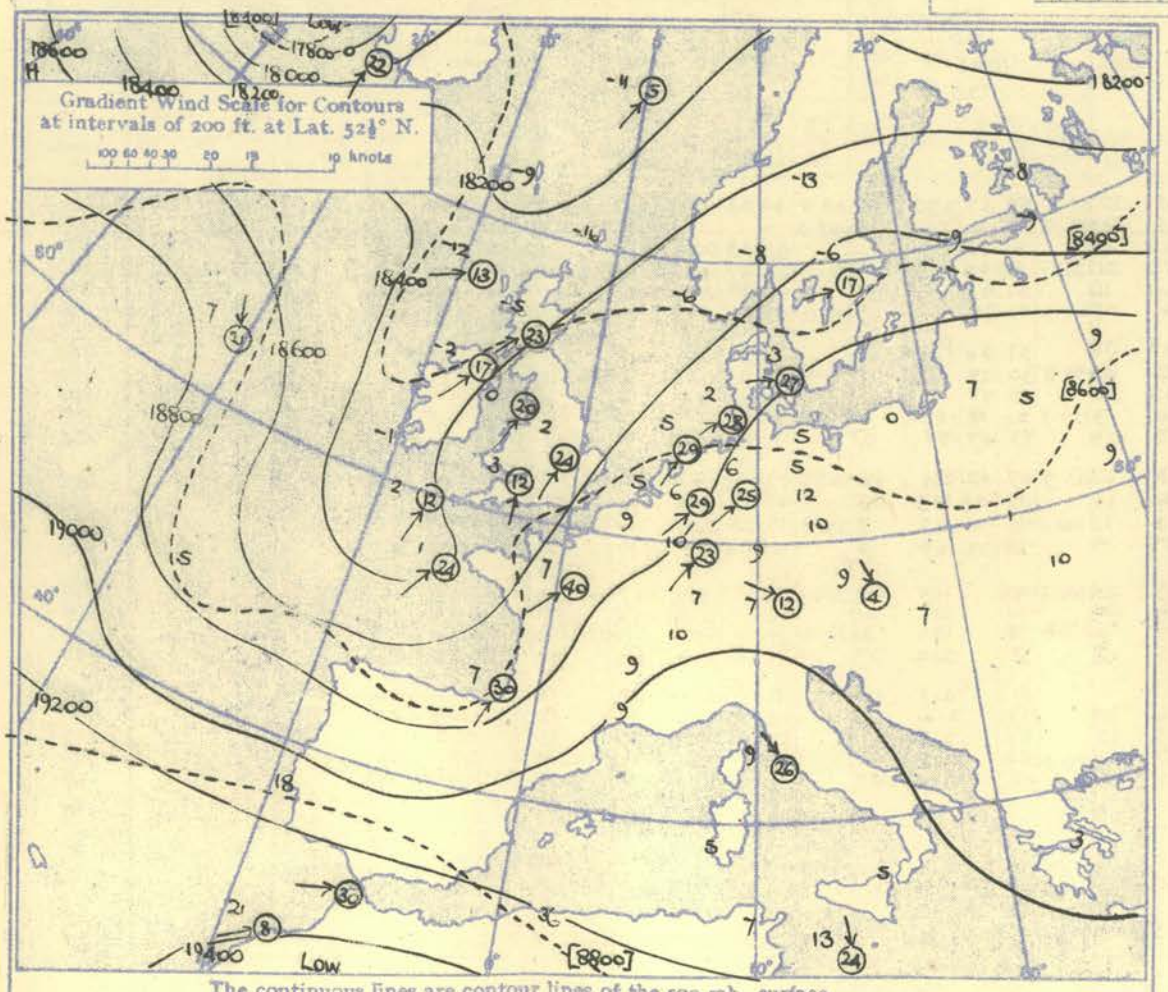
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

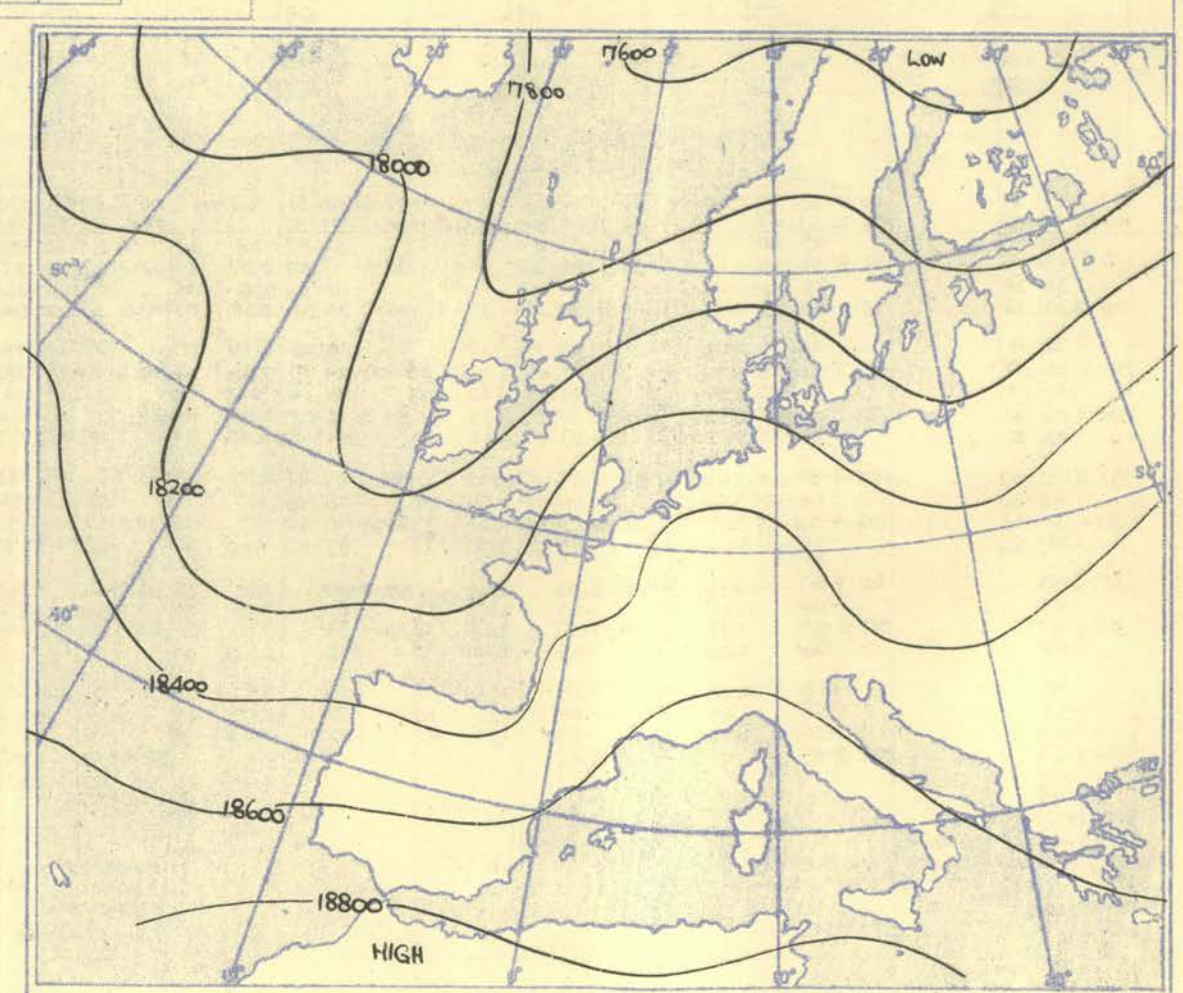
100 60 40 30 20 15 10 knots



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



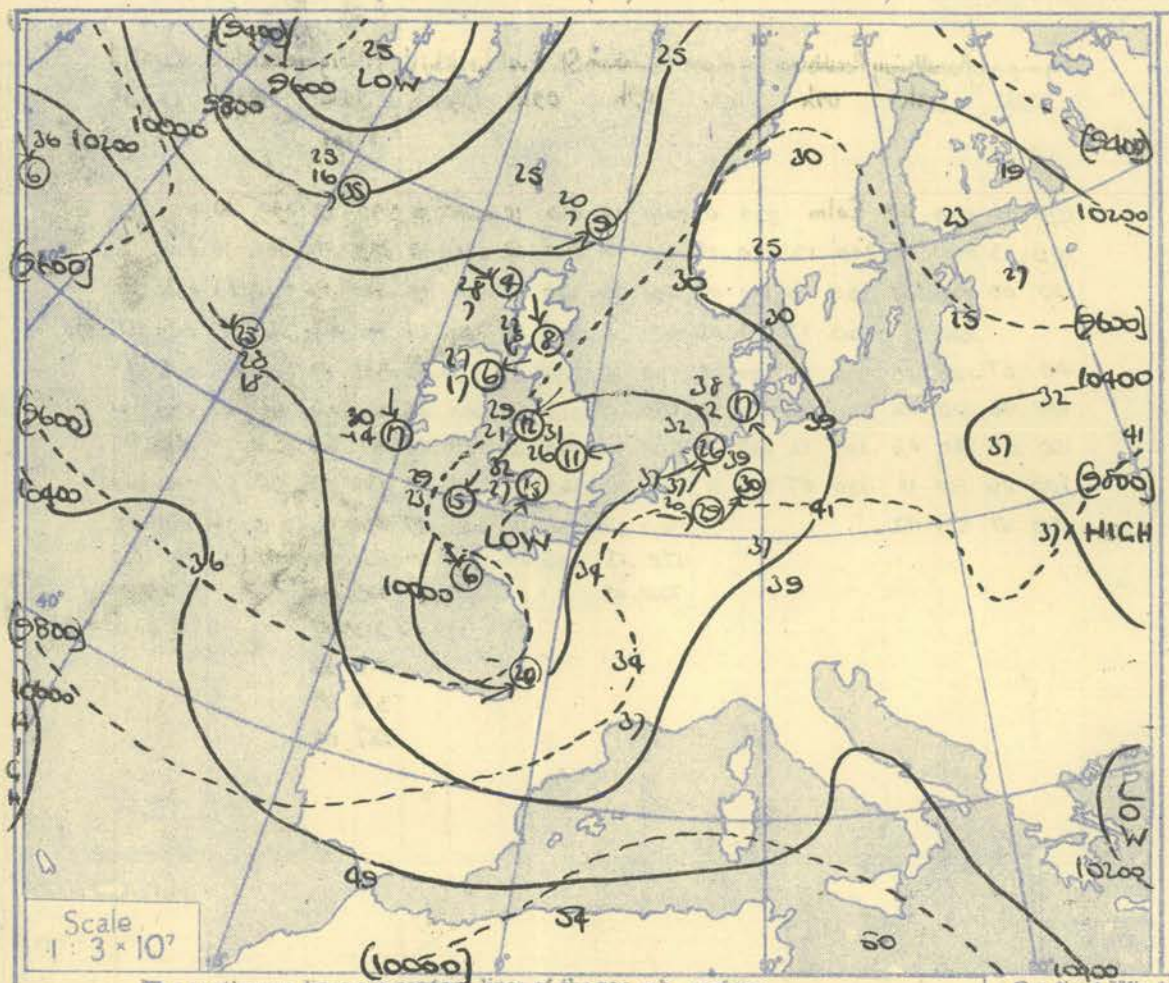
Isopleths of Thickness 500-1000mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

| | | |

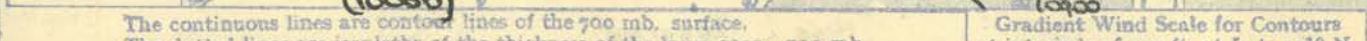
June 22nd 1951.

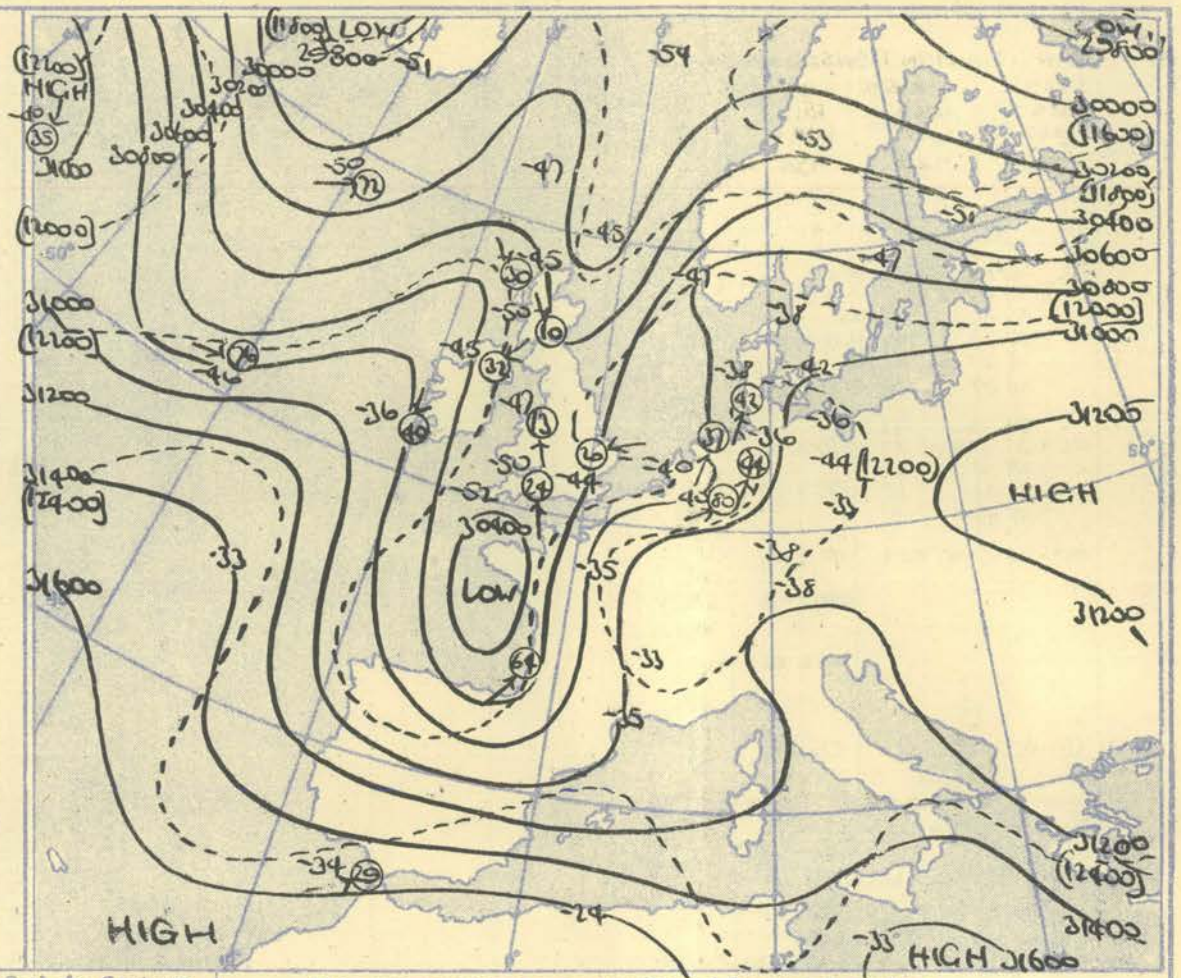
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

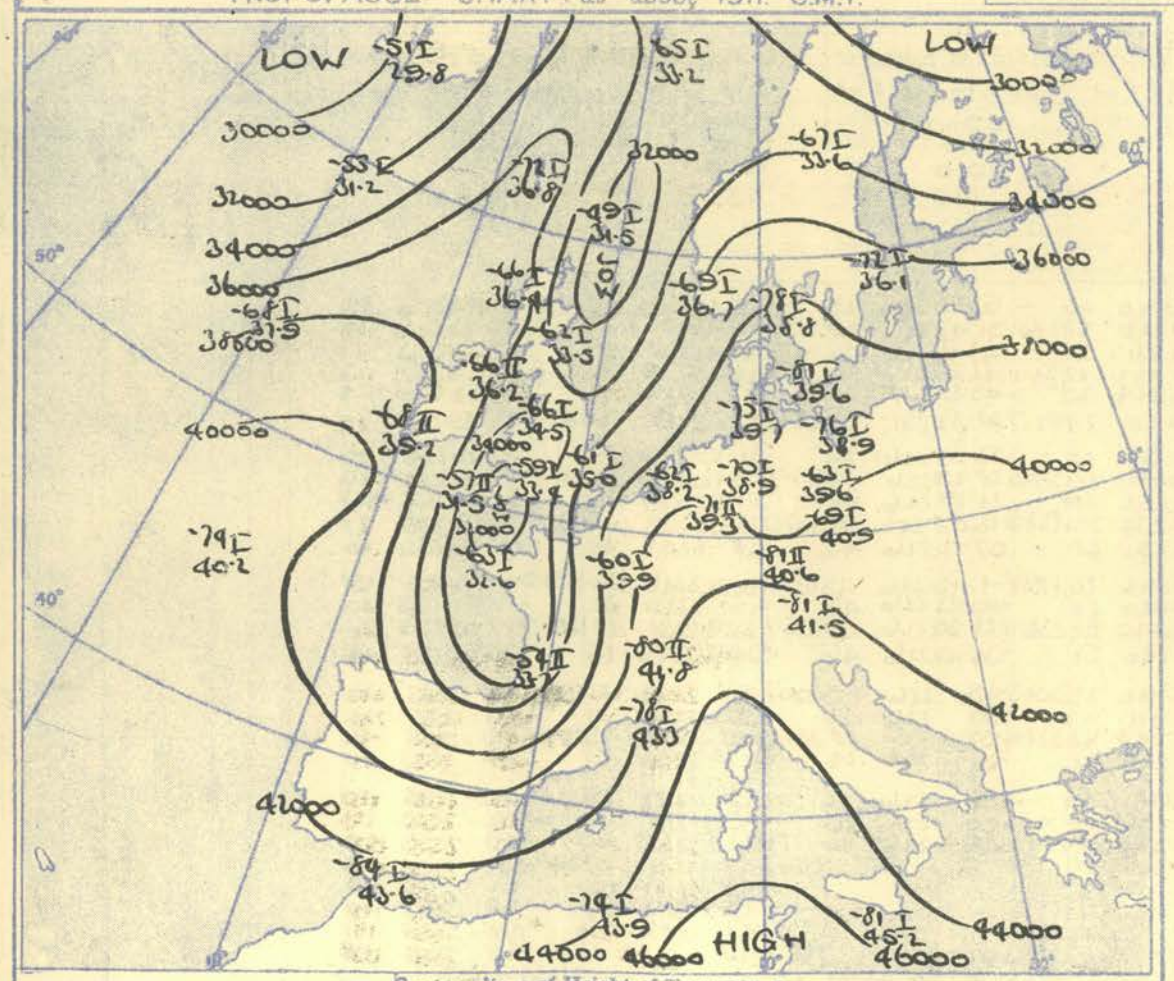
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N





The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

A warm ridge South of Iceland continued to move slowly East and the warm ridge over Europe moved only a little East. The cold trough to the West of Brittain, squeezed between the two warm ridges, degenerated and a further cold trough formed South of Iceland

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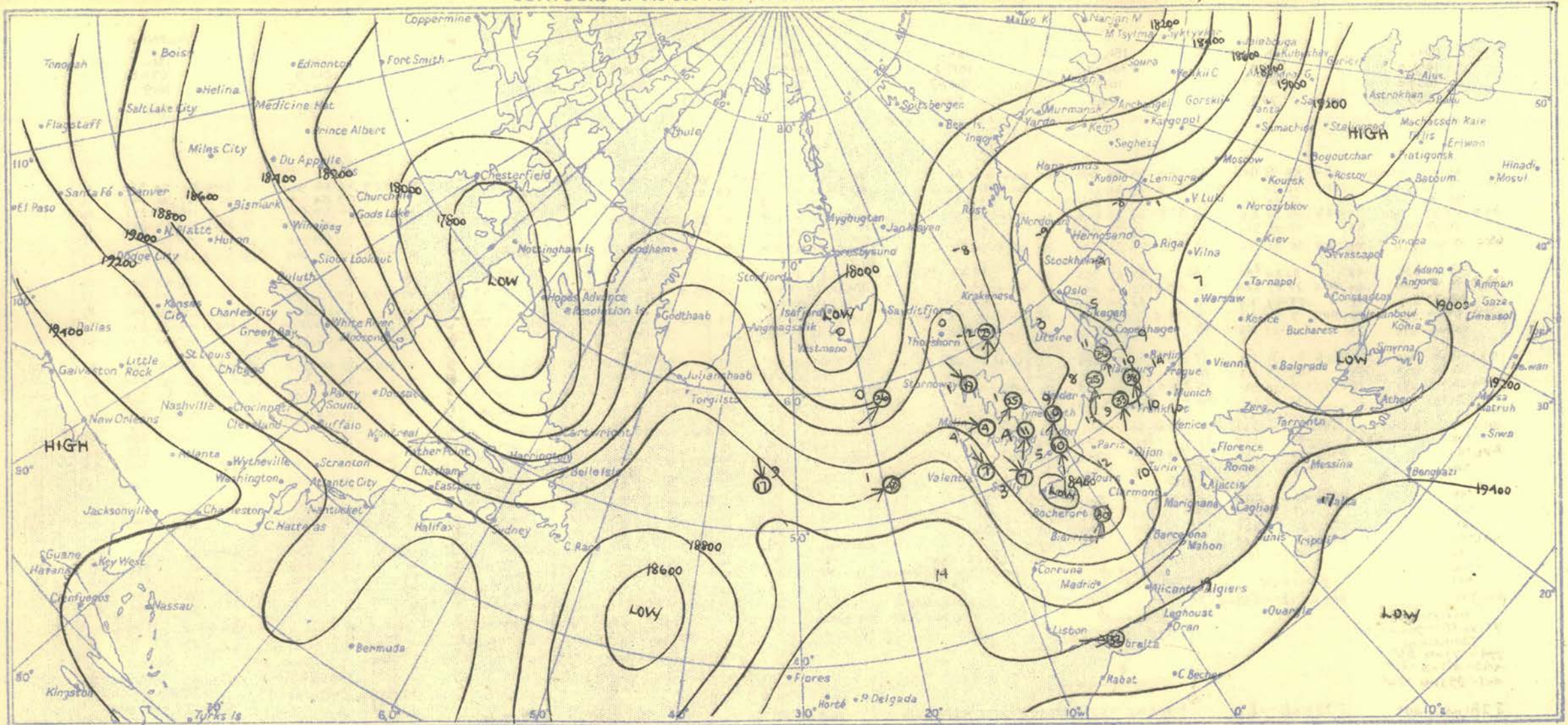
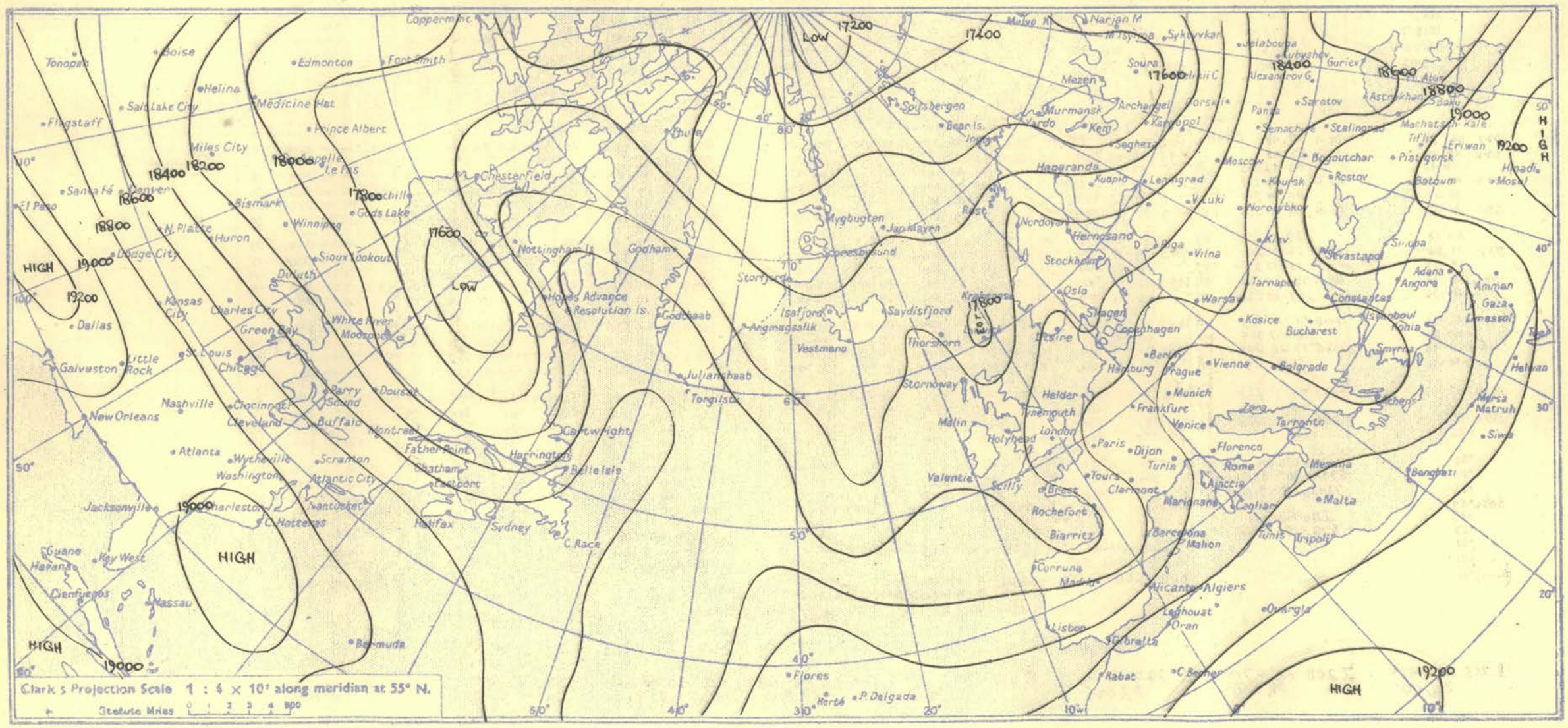
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Friday 22nd. June 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Friday 22nd June, 1951.



RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15h. G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Pressure: Time	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.
Pressure: M.S.L.	1019·0 mb	1018·4 mb	1016·6 mb	1017·2 mb	1013·2 mb	1010·2 mb	1010·3 mb	1012·9 mb	1020·8 mb
Pressure: Surf	1009·0 mb	1016·8 mb	1015·8 mb	1007·7 mb	1011·2 mb	1005·9 mb	994·7 mb	1002·5 mb	1019 mb
Pressure: Freezing	809 mb	750 mb	763 mb	740 mb	717 mb	705 mb	700 mb	730 mb	710 mb

Pressure mb	Lerwick Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Stornoway Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Leuchars Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Aldergrove Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	027	55	52	CALM		004	58	52	040	07	002	63	54	090	05	026	62	51		
1000	051	52	49	"		031	56	50	CALM		046	59	50			047	61	50		
950		50	42	"			51	45	242	03		54	38	060	07		53	43		
900	338	44	33	"		339	45	38	216	04	335	49	38	040	06	337	48	38		
850		38	25	235	03		40	35	204	05		42	33	017	06		42	33		
800	652	31	21	226	06	654	35	29	204	04	651	36	24	359	06	653	36	27		
750		25	12	236	08		32	20	204	04		30	23	356	07		33	23	See Page 3 for Winds.	
700	998	20	07	240	09	1004	28	07	284	04	1000	22	18	346	08	1004	27	17		
650		14	-03	237	12		23	-07	319	10		20	08	324	10		22	12		
600	1387	06	-12	227	18	1400	17	-13	316	09	1394	12	02	286	10	1400	15	04		
550		-02	-16	215	23		10	-21	315	15		07	-10	264	18		11	00		
500	1831	-12	-36	200	23	1856	01	-31	315	19	1847	01	-29	256	25	1856	04	-08		
450		-22	-40	213	25		-08	-24	317	18		-08	-38	261	20		-05	-17		
400	2354	-26	-45	297	16	2393	-18	-31	321	19	2384	-20	-51	285	31	2396	-16	-29		
350		-34	-53	310	24		-31	-44	320	24		-34	-57	314	11		-21	-45		
300	3006	-45		(Winds by Theodolite)		3051	-44		324	30	3036	-50		301	10	3054	-45			
250		-48					-61		325	31		-61		280	12		-60			
200	3696	-48				3920	-60		300	13	3900	-58		266	12	3921	-66			
170		-48					-53		259	12		-56		240	11		-59			
150		-48				4540	-52		242	10	4521	-55		241	12		-56			
130		-48					-53		249	08		-55		243	14		-56			
110		-52					-52		224	08		-54		210	08		-56			
100	5416	-46				5424	-50		244	04	5397	-53		189	07					
90		-46					-48		198	01		-53								
80		-46					-46													
70		-47																		
60																				
	(65mb) -48																			

Lerwick: Inversion 977 mb 50° – 966 mb 51°; Isothermal 994 – 977 mb 50°; 443 – 417 mb -23°; 407 – 392 mb -26°

Stornoway: Inversion 605 mb 16° – 600 mb 17°

Leuchars: Inversion 700 mb 22° – 670 mb 24°; Isothermal 577 – 536 mb 07°

Aldergrove: Inversion 560 mb 10° – 550 mb 11°; Isothermal 800 – 776 mb 36°

Pressure mb	Liverpool Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Downham Market Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Larkhill Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Camborne Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Valentia Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	006	66	49	CALM		012	62	58	345	08	044	63	57	020	05	029	60	55	360	12	003	60	54	350	15
1000	037	64	47	240	03	028					028					035	59	54			006	57	51	349	16
950		58	44	047	09		59	50	045	09		57	52	038	10		56	50	015	14		50	43	351	16
900	328	52	41	040	07	320	53	44	071	05	320	51	47	013	05	326	52	46	023	12	343	53	38	353	17
850		46	38	041	10		47	39	076	06		45	41	341	03		48	39	012	16		40	33	352	17
800	647	39	33	034	15	639	43	36	077	10	638	39	34	205	03	648	41	37	009	18	658	39	17	346	19
750		34	25	037	15		37	26	077	13		35	29	218	08		35	29	009	18		36	-03	347	19
700	1000	29	21	046	12	994	31	26	078	11	992	32	27	201	15	992	29	23	359	15	1011	30	-14	340	17
650		23	16	078	12		27	23	201	07		27	18	211	15		24	19	338	07		25	-16	341	22
600	1399	19	14	108	14	1396	23	16	235	13	1393	23	10	223	12	1397	17	15	336	06	1409	20	-22	336	30
550		12	07	130	11		17	08	233	14		15	01	222	09		10	05	341	06		15	-27	336	34
500	1867	04	-02	145	11	1860	09	-02	230	10	1854	05	-12	190	10	1858	03	-08	338	07	1871	08	-14	345	40
450		-05	-12	120	04		-04	-13	241	13		-06	-26	166	13		-06	-20	343	06		-01	-22	344	38
400	2407	-17	-24	130	04	2402	-16	-28	233	18	2393	-20	-33	173	17	2394	-19	-32	348	06	2417	-11	-32	353	39
350		-30	-37	183	07		-28	-43	192	18		-34	-46	174	19		-34	-44	312	06		-23	-43	342	39
300	3065	-47		166	18	3062	-44		218	20	3044	-50		175	24	3045	-52		L+V		3085	-36	-55	350	45
250		-66		168	15		-60		223	31		-57		207	45		-57		L+V			-56		335	48
200	3936	-51		236	10	3939	-53		211	25	3919	-53		206	20	3919	-52		240	10	3858	-68		344	40
170		-52		243	07		-52		229	25		-51		226	20		-49		257	10		-59		334	23
150		-52		218	14	4565	-52		219	18	4545	-51		220	12		-52		251	06		-55		310	11
130		-51		225	12		-50		214	20		-51		213	15		-53		219	05		-54		286	15
110		-52		223	12		-54		224	13		-55		211	17		-54		232	10		-53		288	10
100	5446	-52		216	07	5448	-55		215	13	5425	-54		208	18	5430	-55		230	10	5449	-52		284	03
90		-49		203	12		-54		211	15		-52		204	10		-55		230	09		-51		275	03
80		-47		196	07		-50		206	10		-51		198	05		-52		190	07		-52		265	02
70		-46		231	05		-49		189	07		-51		260	01		-50		177	06		-52		203	03
60		-47		207	07	5363	-47		175	04	6537	-50		CALM			-50					-50		142	05
	(56mb) -47						-48		169	05		-47				($7mb) -50					(50mb) -48		250	10

Liverpool: Inversion 1000 mb 60° – 971 mb 63°; 797 mb 31° – 783 mb 38°

Downham Market: Inversion 974 mb 58° – 958 mb 59°

Larkhill: Isothermal 750 – 736 mb 35°

Camborne: Inversion 989 mb 35° – 964 mb 58°; Isothermal 558 – 540 mb 10°

Valentia: Inversion 950 mb 50° – 900 mb 53°; Isothermal 800 – 773 mb 39°

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Tropopause	I 281 mb -49° 31,500'	I 228 mb -66° 36,400'	I 258 mb -62° 33500'; I 210 mb -66° 38,000'	II 230 mb -66° 36,200'	I 250 mb -66° 34570'	I 245 mb -61° 35,000'	I 262 mb -59° 33,400'	II 286 mb -57° 31,500'	II 203 mb -68° 39,200'

21h. G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	
Pressure: Time	21h. G.M.T.	21h. G.M.T.	21h G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	G.M.T.
Pressure: M.S.L.	1018·7 mb	1018·4 mb	1016·6 mb	1018·4 mb	1013·4 mb	1011·2 mb	1011·0 mb	1014·8 mb	mb
Pressure: Surf	1008·6 mb	1016·8 mb	1015·8 mb	1008·6 mb	1011·4 mb	1006·8 mb	995·3 mb	1004·2 mb	mb
Pressure: Freezing	802 mb	780 mb	758 mb	724 mb	733 mb	700 mb	715 mb	743 mb	mb

Pressure mb	Lerwick Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Stornoway Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Leuchars Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Aldergrove Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	027	50	50			004	55	48	CALM		002	55	51	CALM		026	54	48	350	12
1000	050	49	49			050	53	45			042	55	49	064	17	050	53	47		
950		48	46				48	42	315	02		55	47	047	14		48	41	345	21
900	336	45	35			336	42	36	237	04	332	49	43	026	13	332	48	34	339	17
850		39	27				40	29	221	03		43	38	020	12		42	36	343	11
800	651	31	22			650	34	17	214	06	649	37	33	005	09	623	58	29	357	05
750		26	18				29	07	225	09		31	26	341	09		35	23	057	03
700	997	21	00			998	26	-05	240	08	999	24	17	308	09	1005	29	15	340	05
650		13	-04				21	-12	253	07		18	02	294	11		23	11	305	09
600	1386	07	-18			1393	15	-24	267	09	1392	12	02	332	10	1402	17	-03	236	10
550		01	-26				09	-08	283	08		10	-11	357	10		13	-15	301	08
500	1834	-05	-35			1848	01	-10	289	11	1848	02	-26	342	11	1862	05	-23	354	09
450		-09	-39				-08	-17	309	13		-08	-35	313	11		-05	-21	003	09
400	2369	-20	-48			2385	-18	-28	295	15	2385	-21	-38	319	14	2402	-16	-38	358	10
350		-34	-56				-30	-41	290	15		-34	-50	336	18		-29	-50	357	13
300	3022	-47				3043	-44		283	15	3038	-50		010	27	3063	-42		001	20
250		-59					-59		272	21		-64		006	21		-58		359	22
200	3895	-57				3908	-70		265	13	3902	-57		270	07	3931	-68		347	15
170		-56					-64					-52		255	09		-58		239	05
150		-55									4525	-51		236	08		-55		255	07
130		-50										-54		223	11		-55		251	07
110		-53										-53		231	10		-56		257	09
100	5896	-54									5405	-52		236	08	5418	-56			
90		-53										-52								
80		-52										-51								
70		-52																		
60		-51																		
	(55mb) -51																			

Stornoway: Inversion 870 mb 38° – 850 mb 40°; 724 mb 26° – 710 mb 27°; Isothermal 575 – 562 mb 11°

Leuchars: Isothermal 1016 – 950 mb 55°; 600 – 568 mb 12°

Aldergrove: Inversion 950 mb 48° – 929 mb 50°; Isothermal 929 – 914 mb 50°; 784 – 750 mb 35°; 584 – 568 mb 15°

Pressure mb	Liverpool Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Downham Market Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Larkhill Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Camborne Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	006	61	54			012	57	54	010	12	044	60	56	010	10	029	56	54	350	10
1000	038	60	51			031	56	53			031					040	55	53		
950		60	47				35	32	018	12		56	52	022	18		54	48	348	19
900	330	52	39			321	55	41	025	10	322	51	47	033	13	330	51	44	355	21
850		45	38				48	38	031	12		47	43	037	08		45	41	355	24
800	648	38	29			641	41	34	036	15	641	43	37	092	05	648	38	35	349	25
750		33	24				37	27	032	12		37	31	125	05		33	26	350	23
700	1000	28	21			996	32	23	011	06	996	30	25	146	03	999	27	19	350	18
650		22	16				27	16	008	02		24	19	260	03		20	11	339	14
600	1396	16	10			1397	22	07	245	02	1395	19	12	225	06	1393	13	07	333	14
550		10	02				13	-02	242	05		11	-01	190	07		09	02	287	15
500	1852	01	-08			1857	04	+13	223	07	1852	03	-13	171	11	1848	00	-06	243	14
450		-05	-18				-05	-30	218	09		-08	-30	183	12		-10	-17	241	14
400	2388	-21	-31			2396	-20	-47	228	11	2389	-20	-40	209	17	2383	-21	-32	245	13
350		-35	-49				-34	-53	220	28		-34	-53	198	21		-36	-46	251	12
300	2032	-51				3048	-48		207	56	3040	-50		186	37	3033	-49		290	21
250		-65					-63		210	62		-61		195	24		-55		316	20
200	3900	-58				3914	-55		210	25	3911	-55		212	15	3909	-56		328	14
170		-57					-60		205	19		-56		200	14		-58		309	13
150		-56				4531	-55		212	17	4530	-57		217	15		-58		276	06
130		-56					-55		218	13		-55		227	14		-58		252	09
110		-59					-59		224	13		-56		236	10		-60		250	08
100	5389	-59				5403	-59		228	09	5403	-56		225	07	5391	-60		272	08
90		-56					-59					-56				(93mb)	-60			
80		-56																		
70		-58																		
60		-58																		

Liverpool: Inversion 1000 mb 60° – 971 mb 63°; 797 mb 31° – 783 mb 38°

Downham Market: Inversion 968 mb 52° – 931 mb 59°; 757 mb 36° – 740 mb 38°

Camborne: Inversion 977 mb 52° – 943 mb 54°; 570 mb 09° – 563 mb 11°

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	
Tropopause	II 255 mb -58° 33700'	I 208 mb -71° 38,200'	I 220 mb -67° 37,000'	II 216 mb -67° 37,700'	I 255 mb -66° 33,800'	II 222 mb -64° 37,200'	I 242 mb -62° 35,000'	II 280 mb -55° 31,800'	Tropopause

(HMSO Press, MO, Dunstable

No. 11773. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Saturday 23rd June. 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

03h G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	03h G.M.T.	1017·1 mb	1006·9 mb	783 mb
STORNOWAY	03h G.M.T.	1016·9 mb	1015·3 mb	760 mb
LEUCHARS	03h G.M.T.	1016·0 mb	1015·2 mb	763 mb
ALDERGROVE	03h G.M.T.	1017·0 mb	1008·0 mb	750 mb
LIVERPOOL	03h G.M.T.	1013·6 mb	1011·6 mb	740 mb
DOWNHAM MARKET	03h G.M.T.	1010·8 mb	1006·4 mb	719 mb
LARKHILL	03h G.M.T.	1010·9 mb	995·1 mb	724 mb
CAMBORNE	03h G.M.T.	1015·5 mb	1004·9 mb	750, 714 mb
VALENTIA	03h G.M.T.	1020·4 mb	1019 mb	720 mb

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	027	47	47			000	46	43	Calm		002	48	48	Calm		026	47	46	Calm		006	54	53			012	55	54	360	12	044	57	55	360	10	029	56	53	350	18	003	50	48	Calm		Surf
1000	045	46	46			043	51	48			043	49	46	360	05	047	47	46			037	53	52			029					030					012	55				055	51	46	524	04	1000
950		45	45				47	43	223	05		53	42	360	01		47	40	325	05			57	59				50	48	005	15		52	49	011	20		51		357	27			48	44	325	11	950
900	329	42	28			331	43	38	205	06	331	47	38	360	09	333	46	37	338	08	328	52	31			319	55	42	013	17	320	50	44	030	17	331	49		354	30	340	41	31	324	13	900
850		37	24				39	26	204	08		42	35	360	09		41	31	354	07			46	23				51	39	018	20		49	33	031	19		41		347	30		41	09	323	14	850
800	643	34	15			644	35	16	225	06	647	37	31	353	09	648	37	26	314	03	647	40	27			641	44	36	028	19	640	42	29	031	20	648	47		348	30	655	40	27	324	15	800
750		28	01				31	-05	242	10		30	26	341	09		32	19	248	05			33	21				36	24	035	16		35	25	024	17		32		356	25		35	14	316	13	750
700	990	28	-10			994	27	-11	236	07	998	25	22	342	10	999	26	12	248	05	999	28	22			995	29	22	039	14	993	29	24	015	11	1000	30		017	15	1007	30	-02	302	12	700
650		19	-21				22	-17	231	06		20	10	359	10		20	-03	280	03			23	18				29	17	044	13		22	17	007	06		31		036	10		28	11	295	16	650
600	1383	13	-29			1389	14	06	234	08	1394	15	-19	007	10	1394	16	-27	002	05	1396	18	11			1396	20	09	050	12	1391	17	09	040	03	1395	17		040	10	1404	17	12	292	17	600
550		06	-39				07	01	234	13		12	-27	357	07		12	-46	353	03			09	01				11	-06	068	07		11	-06	194	02		10		027	10		11	-02			550
500	1835	-02	-23			1843	-01	-08	234	14	1851	05	-28	338	05	1852	03	-29	327	03	1852	00	-08			1855	04	-12	110	02	1848	03	-27	197	07	1851	03		027	10	1862	03	-06			500
450		-10	-30				-11	-18	228	14		-05	-28	309	05		-08	-28	315	03			-08	-18				-06	-25	125	02		-08	-31	153	09		-08		027	13		-05	-15			450
400	2371	-20	-39			2376	-23	-30	223	18	2391	-17	-32	302	05	2389	-04	-37	269	04	2388	-20	-33			2394	-19	-31	168	11	2386	-20	-46	160	10	2389	-20		020	16	2402	-16	-23			400
350		-34	-52				-36	-43	222	18		-29	-45	300	06		-33	-48	245	04			-35	-51				-31	-39	183	26		-34	-52	169	18		-36		022	24		-29	-36			350
300	3023	-49				3024	-51		213	21	3049	-45		002	08	3041	-48		174	03	3038	-52				3050	-47		196	4	3037	-51		171	34	3039	-50		360	34	3060	-46				300
250		-62					-68		209	30		-61		031	09		-64		165	03			-65				-62		186	63		-63		177	33		-58		346	36		-62				250
200	3885	-61				3882	-61		217	15	3915	-62		220	07	3900	-66		229	07	3902	-59				3914	-60		192	14	3903	-57		206	12	3911	-61		310	16		-59				200
170		-56					-51		219	11		-55		229	07		-56		236	10		-58					-58		197	17		-55		219	12		-59		306	10		-55				170
150		-58					-51		221	07		-53		213	07		-56		244	10		-58					-58		205	17		-56		207	07		-55		306	06		-57				150
130		-54					-51		221	05		-53		230	10		-57		250	06		-57					-57		210	15		-58		197	10		-57		245	05						130
110		-54					-51					-54		220	07		-56		220	02		-58					-58		204	13		-58		205	11		-57		233	06						110
100	5381	-51									5413	-54		351	08	5387	-55		177	03	5389	-59				5398	-59		195	12	5391	-59		204	10	5398	-57		228	08		-57				100
90		-52										-53		011	07		-54					-61					-61		204	09							-58		228	12						90
80		-54										-53		263	05							-61					-60		213	07							-60		274	06						80
70		-54										-54										-60							217	04							-57									70
60		-54																																													60
		-53																																												
	Inversion 975 mb 44°-956 mb 46° 815- 33°- 800 " 34°					Inversion 1015 mb 46°-1000 mb 51°					Inversion 1015 mb 48°-965 mb 53° Isothermal. 657-630 mb 20° 597-566- 14°					Inversion 1040 mb 19°-624 mb 20° Isothermal. 1008-950 mb 47°					Inversion 1012 mb 54°-982 mb 60° Isothermal. 615-600 mb 18°					Inversion 945 mb 50°-908 mb 54° 679- 26°- 645- 30° Isothermal. 550-535 mb 11°					Inversion 900 mb 50°-883 mb 54° Isothermal. 645-625 mb 21°					Inversion 969 mb 51°-935 mb 57° 732- 30°- 714- 32° 579- 10°- 562 " 12°					Inversion 1019 mb 50°-983 mb 52° 814- 38°-834- 43°					
Tropopause	II 226 mb -66° 36·300					I 246 mb -69° 34·500					I 217 mb -69° 37·300					II 228 mb -70° 36·200					I 248 mb -66° 34·500					I 222 mb -70° 37·000					II 266 mb -62° 32·800					II 255 mb -58° 33·900					I 227 mb -71° 36·600					Tropopause

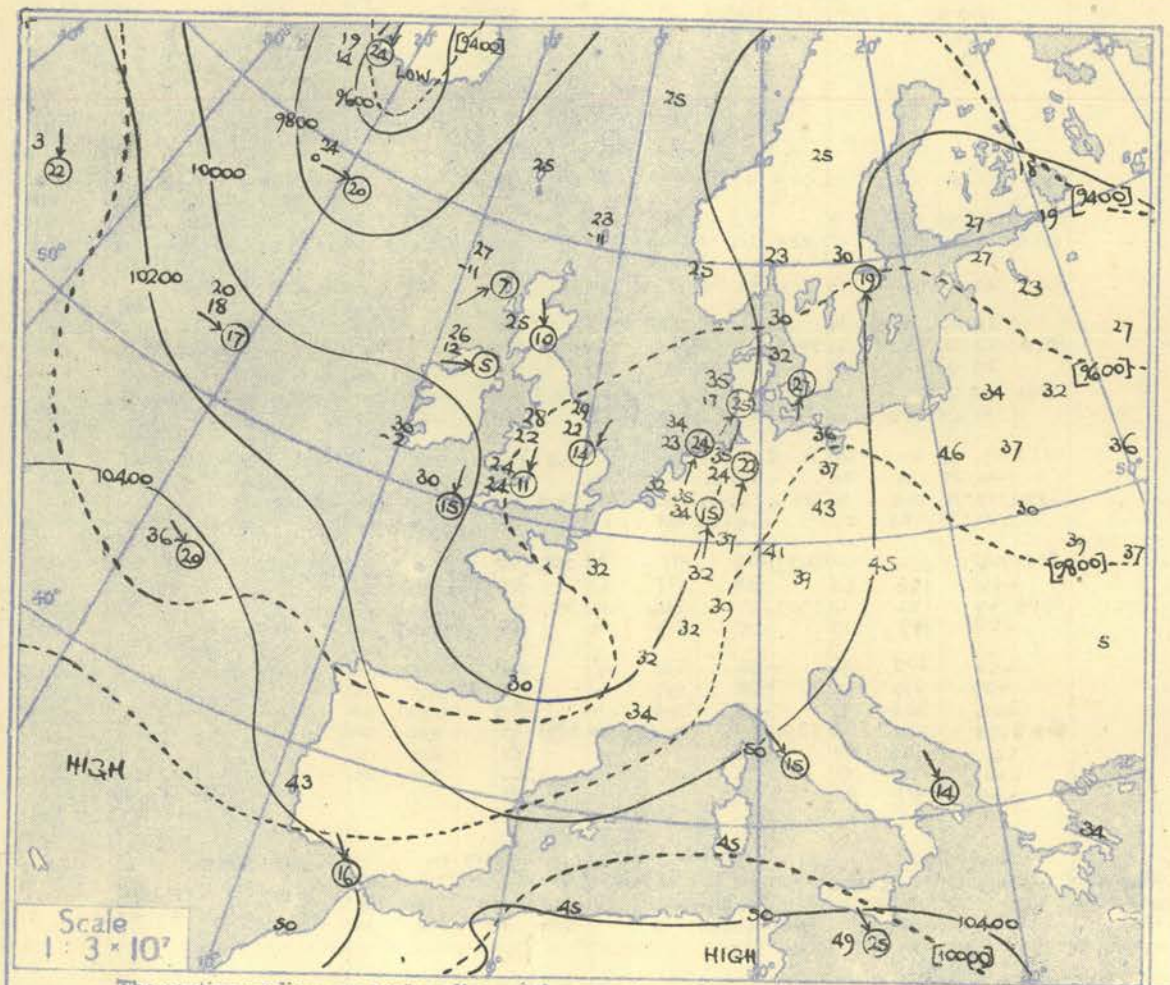
09h G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	09h G.M.T.	1016·6 mb	1006·6 mb	773 mb
STORNOWAY	09h G.M.T.	1015·8 mb	1014·2 mb	742 mb
LEUCHARS	09h G.M.T.	1015·0 mb	1014·4 mb	760 mb
ALDERGROVE	09h G.M.T.	1016·3 mb	1006·5 mb	750 mb
LIVERPOOL	09h G.M.T.	1012·9 mb	1010·9 mb	716 mb
DOWNHAM MARKET	09h G.M.T.	1010·1 mb	1005·8 mb	709 mb
LARKHILL	09h G.M.T.	1010·7 mb	994·9 mb	715 mb
CAMBORNE	09h G.M.T.	1015·9 mb	1005·4 mb	765 (740 mb
				G.M.T. mb

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	027	52	49			004	57	48			002	51	49	140	07	026	53	48	Calm		009	59	51	Calm		012	55	54	350	15	044	55	52	360	12	029	56	54	350	10						Surf
1000	045	50	47			043	54	46			041	49	46	022	06	044					036	57	50			029										042	55	51	347	24						1000
950		45	41				49	41				49	42	007	07		46	42	020	09			51	47	348	12		51	50	015	17		50	45	006	20		49	47	343	24						950
900	331	45	33			331	46	39			327	47	36	001	09	330	45	34	L.V.		324	49	40	354	14	316	50	47	024	17	317	53	41	011	22	331	47	40	347	24						900
850		38	28				42	33				42	30	006	10		41	32	"				47	30	013	12		47	36	027	18		49	40	021	21		42	39	345	24						850
800	644	38	19			645	38	21			643	35	24	017	12	645	35	30	"		643	40	26	015	18	635	44	33	023	26	638	43	36	024	18	647	36	32	344	21						800
750		29	08				33	05				31	15	028	12		32	23	"				35	23	353	09		38	28	019	21		36	28	015	17		32	28	341	16						750
700	993	24	06			997	28	01			994	27	05	046	10	995	26	10	"		997	30	17	321	07	990	31	20	020	21	992	30	22	009	16	998	27	22	343	11						700
650		19	-03				22	-08				23	-23	064	12		20	-06	"				24	12	311	10		25	16	015	21		25	19	023	14		21	18	346	05						650
600	1387	14	-11			1393	17	02			1390	17	-28	067	12	1390	17	-05	"		1400	17	10	280	07	1390	20	09	012	18	1392	21	15	034	12	1394	14	10	305	08						600
550		06	-04				11	02				11	-23	052	09		12	-28					12	06	182	04		13	03	028	19		15	05	026	08		05	00	217	11						550
500	1840	-02	-15			1849	-04	-07			1848	03	-19	051	05	1848	03	-31	"		1853	02	-06	133	03	1849	05	-05	046	11	1833	08	-10	026	06	1848	00	-10	317	09						500
450		-11	-20				-08	-15				-08	-27	249	06		-07	-27	"				-06	-20	151	09		-04	-17	063	11		-01	-17	064	02		-10	-23	314	08						450
400	2374	-20	-30			2387	-20	-28			2385	-19	-35	163	07	2387	-18	-33	"		2392	-16	-33	163	13	2391	-15	-22	095	08	2399	-12	-28	133	02	2388	-22	-33	303	08						400
350		-34	-43				-31	-40				-32	-47	132	07		-29	-43	154	15			-31	-47	175	17		-27	-34	130	17		-25	-39	199	06		-36	-47	329	04						350
300	3024	-51				3043	-43				3040	-47		126	17	3046	-44		142	11	3049	-46		187	30	3051	-44		160	22	3065	-41		166	20	3032	-49		337	14						300
250		-63					-58					-62		127	12		-60		135	14		-63		171	30		-64		156	36		-56		150	27		-61		329	14						250
200	3887	-58				3913	-6				3905	-59		172	15	3911	-62		178	08	3920	-52		176	15	3920	-62		169	26	3947	-49		166	12	3902	-55		305	15						200
170		-54					-50					-54		196	12		-56		218	08		-51		192	11		-54		180	19		-47		166	10		-56		295	12						170
150		-53					-49					-53		201	09		-51		247	07		-52		202	09		-52		206	10		-45		202	09		-56		260	06						150
130		-54					-48					-53		196	09		-52		200	05		-51		206	08							-47					-55		270	09						130
110		-53					-46					-51		210	06		-50		210	04		-49		206	08							-48					-58		268	08						110
100	5387	-52				5429	-46				5408	-51		210	04	5417	-49		303	03	5431	-53		195	06							(12 mb)					5395	-57		272	07						100
90		-52					-44					-51					-48					-61		163	06												-56		244	05						90
80		-51					-46															-47														-53		306	06						80
70		-50					-46															-45														-53		360	04						70
60	(72 mb)																					(76 mb)														-55		350	03						60
																																				-56									
	Inversion 962 mb 44°-929 mb 47° Isothermal. 815-783 mb 33°										Inversion 984 mb 48°-950 mb 49°					Inversion 937 mb 45°-922 mb 46° Isothermal 792-767 mb 34° 640-606 " 18°					Isothermal 932-918 mb 49° 780-736 " 35° 489-476 " -01°					Isothermal 950-920 mb 51° 519-510 " 01°					Inversion 925 mb 48°-911 mb 54° 650- 25°- 641- 26° Isothermal. 528-518 mb 11°					Inversion 932 mb 47°-913 mb 48° Isothermal. 765-740 mb 32° 542-515 " 03° 298-288 " -50°									
Tropopause	II 235 mb -66° 35·300					II 227 mb -66° 36·400					I 226 mb -68° 36·600					I 218 mb -68° 32·300					I 242 mb -66° 35·100					I 260 mb -64° 34·500					II 245 mb -58° 35·100					I 240 mb -65° 35·200										Tropopause

Saturday 23rd June, 1951.

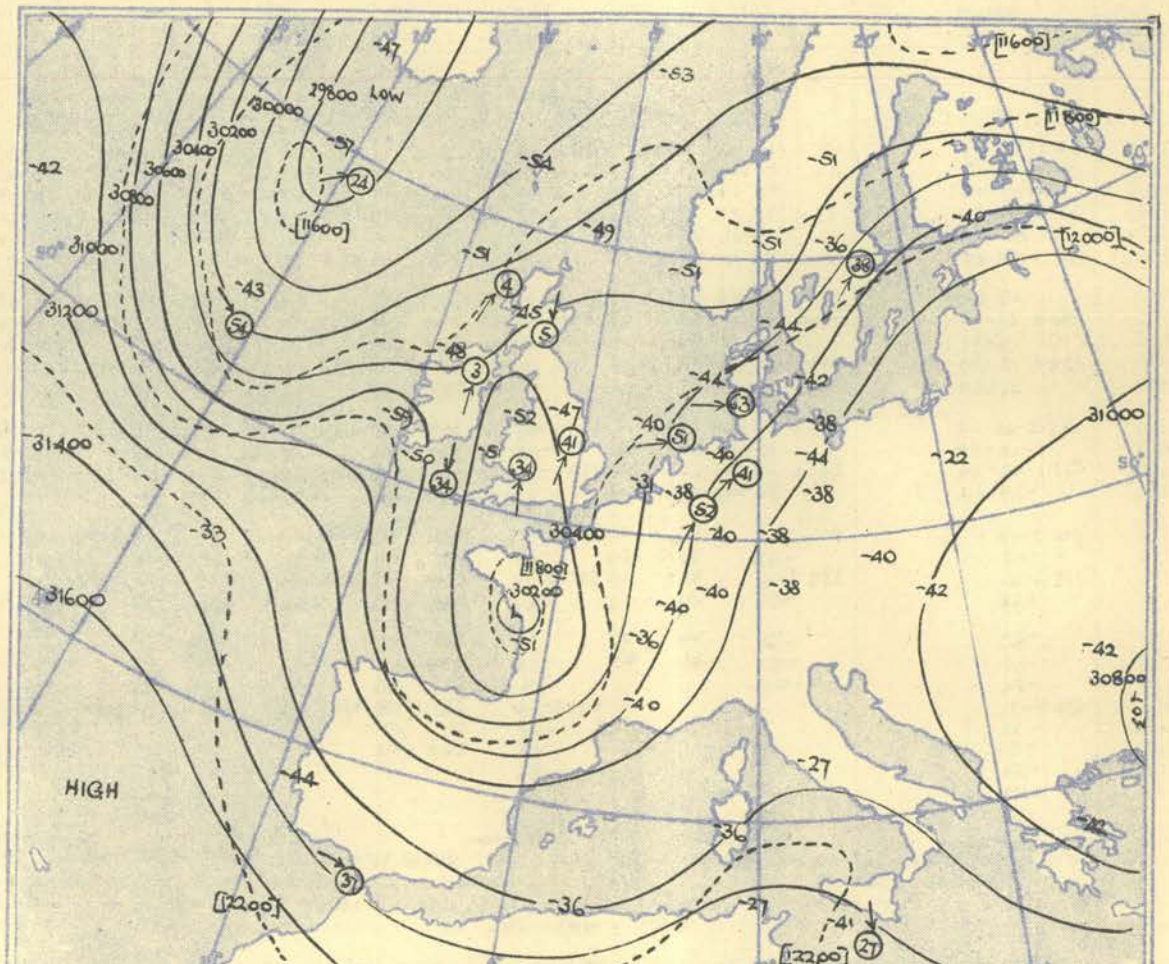
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.



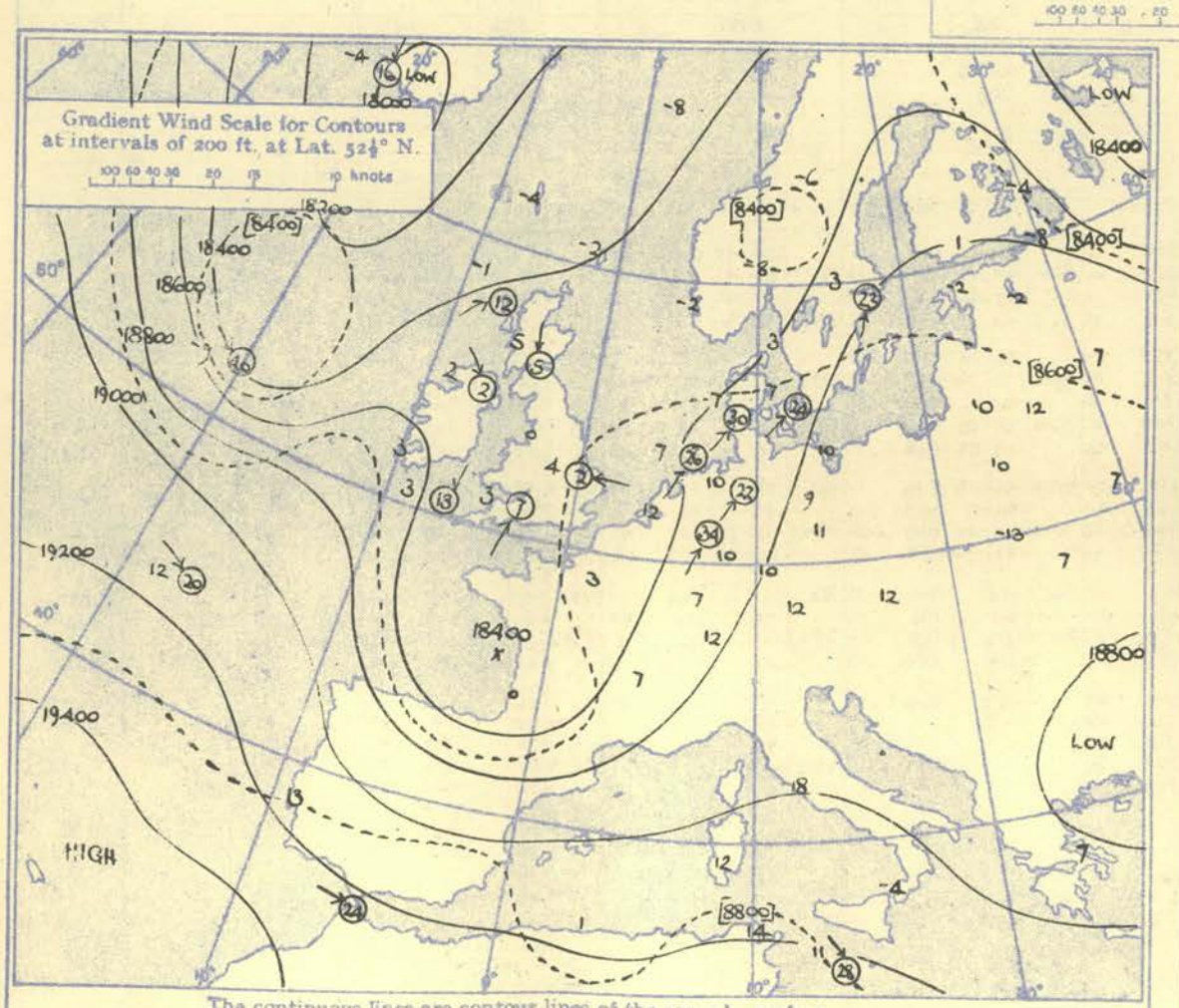
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

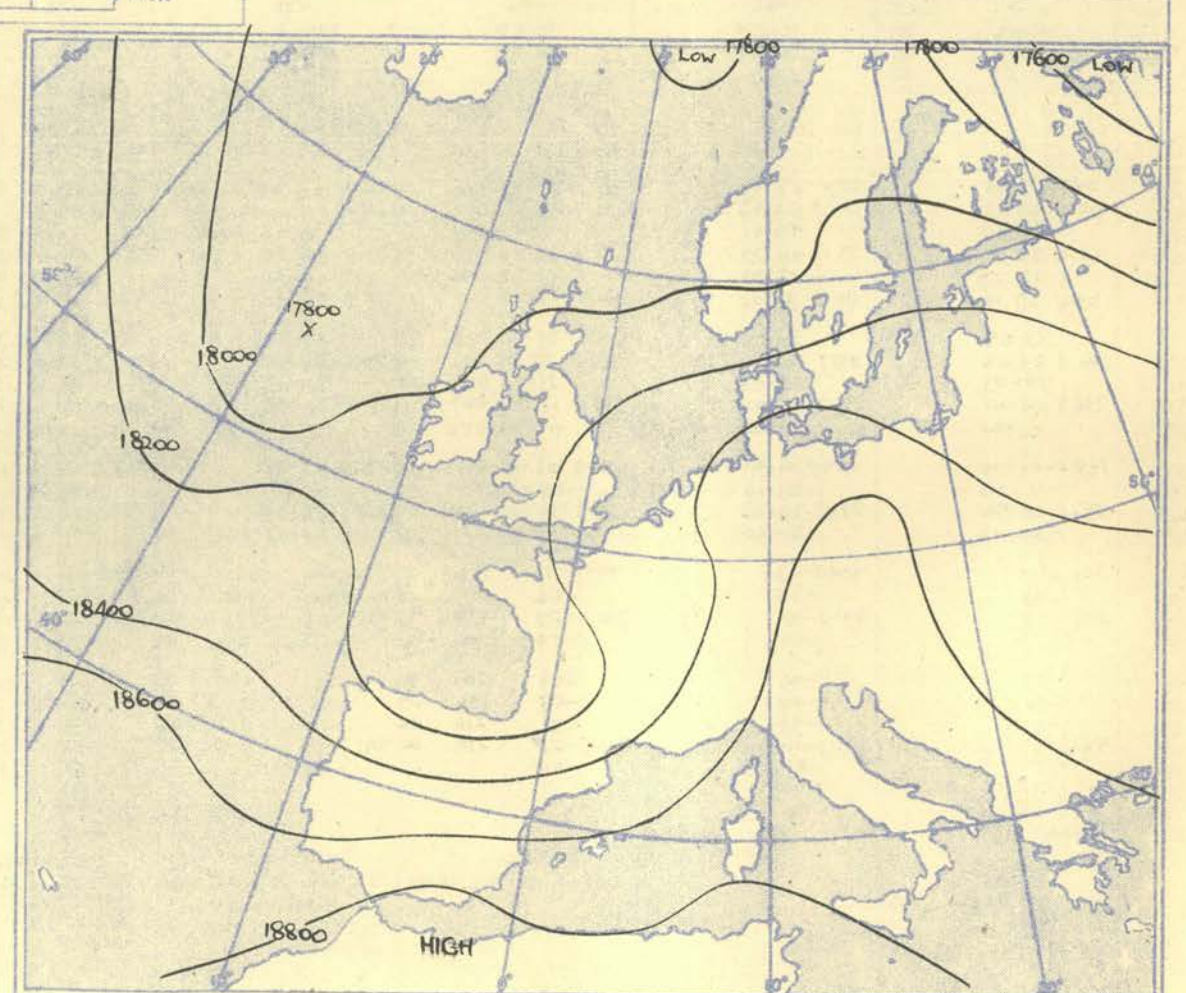
100 60 40 30 20 15 10 knots



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500-1000mb.

METEOROLOGICAL OFFICE 2 - JUL 1951

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

Pressure mb	52°12'N 02°12'W Height ft./100	°F. Temp.	°F. Dew	mb Height ft./100	°F. Temp.	°F. Dew	mb Height ft./100	°F. Temp.	°F. Dew	mb Height ft./100	°F. Temp.	°F. Dew	mb Height ft./100	°F. Temp.	°F. Dew	mb Height ft./100	°F. Temp.	°F. Dew	mb Height ft./100	°F. Temp.	°F. Dew	mb Height ft./100	°F. Temp.	°F. Dew	Pressure mb
Time	1405 h																								
M.S.L.	1010 mb			mb			mb			mb			mb			mb			mb			mb			
Surf	1008·5 mb			mb			mb			mb			mb			mb			mb			mb			
Freezing	740			mb			mb			mb			mb			mb			mb			mb			
Surf	0·4																								Surf
1000	02·8																								1000
950																									950
900	31·9	48	48																						900
850		46	39																						850
800	63·7	37	33																						800
750																									750
700	98·9	27																							700
650																									650
600	138·5	15																							600
550																									550
500	183·9	-01																							500
450																									450
400	237·5	-20																							400
350																									350
300	302·7	-49																							300
250																									250
200																									200
170																									170

Cloud
Cu 880-820 mb
Sc. 880-860 mb

DIRECTION (degrees from N) and VELOCITY (knots) of UPPER WINDS at heights above M.S.L.

Place	St. Eval		Larkhill		Ronaldsway		Larkhill														Place
Time	09h		12h		15h		23h														Time
Type																					Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Surf.	350	15	010	10	360	11	300	08													Surf.
1,000	350	17	000	20	340	08	310	15													1,000
2,000	350	34	000	20	330	07	390	13													2,000
3,000	350	32	000	22	320	06	360	14													3,000
4,000	350	29	010	24	360	10	350	13													4,000
5,000	350	25	010	22	040	08	350	12													5,000
6,000	350	21	020	19	030	07	340	10													6,000
8,000			010	19	050	06	320	07													8,000
10,000			010	16			280	08													10,000
14,000			040	09			280	03													14,000
18,000							(15,000')														18,000
24,000																					24,000
30,000																					30,000
40,000																					40,000
50,000																					50,000

NEPHOSCOPE OBSERVATIONS

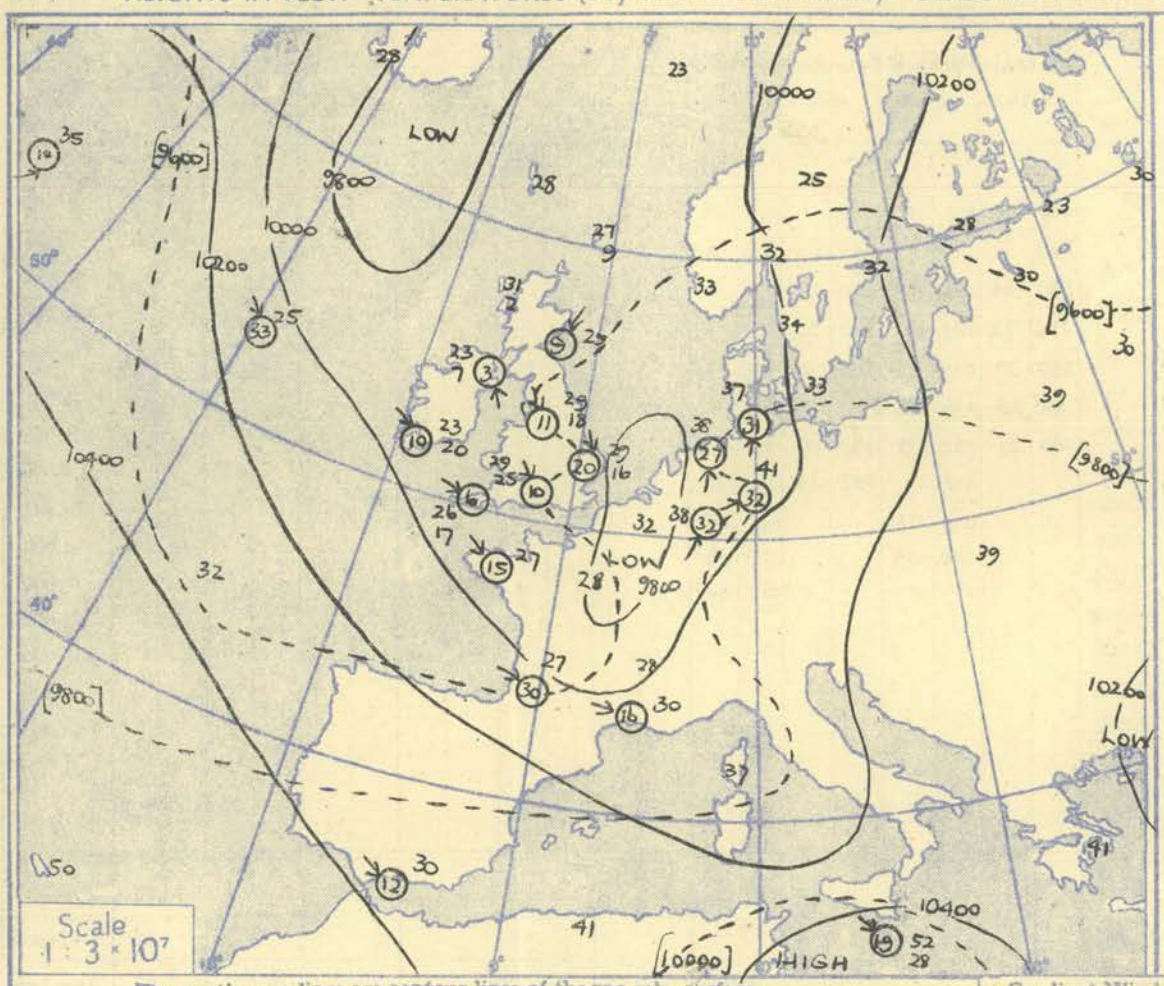
Place																					Place
Time Type					None Reported.																Time Type
Dir. Vel.																					Dir. Vel.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	WEATHER EXPLORER				WEATHER EXPLORER				WEATHER EXPLORER				WEATHER EXPLORER				WEATHER RECORDER				WEATHER RECORDER				WEATHER RECORDER								Ship
Lat/Long	59·1N			18·5W	59·2N			18·4W	59·0N			19·1W	59·0N			18·9W	52·5N			19·7W	52·6N			19·7W	52·5N			19·8W	52·4N			19·8W					Lat/Long
Time	03h G.M.T.				09h G.M.T.				15h G.M.T.				03h G.M.T.				03h G.M.T.				09h G.M.T.				15h G.M.T.				21h G.M.T.				. G.M.T.				Time
M.S.L.	1010 mb				1010 mb				1011 mb				1012 mb				1021 mb				1018 mb				1020 mb				1020 mb				mb				M.S.L.
Surf	1010 mb				1010 mb				1011 mb				1012 mb				1021 mb				1018 mb				1020 mb				1020 mb				mb				Surf
Freezing	850 mb				830 ? 780 mb				810 mb				800 mb				775 mb				710 mb				675 mb				710 mb				mb				Freezing
Surf																																					Surf
1000	2·8	49	45	270 16	2·8	52	45	250 15	3·1	50	46	290 16	3·3	51	47	330 08	5·7	55	51	269 24	5·0	53	46	300 22	5·5	53		320 22	5·6	55	47	300 21					1000
950		42	41	264 21		44	39	262 13		45	44	289 17		50	47			53	50	263 27		51	43	315 18		52		325 12		52	45	327 20					950
900	31·1	38	38	279 22	31·3	40	35	268 16	31·6	41	40	295 16	31·8	40	36	007 10	34·3	48	46	268 26	33·5	47	40	305 21	34·1	47		322 17	34·0	44	39	327 21					900
850		32	32	280 23		34	29	277 19		37	36	299 16		38	37	277 25		43	41	274 25		41	35	288 21		42		314 18		39	35	326 20					850
800	62·2	31	28	271 20	62·4	30	26	283 16	62·9	31	31	296 13	63·1	32	27	011 12	65·7	35	34	270 29	64·8	35	27	285 23	65·5	37		310 21	65·9	41	25	323 22					800
750		29	17	270 18		30	22	285 22		26	25	292 09		26	19	022 10		28	23	283 22		38	07	303 37		40		325 26		36	02	322 27					750
700	97·1	24	06	268 20	97·3	24	15	277 20	97·6	22	21	287 19	97·8	23	19	046 13	100·4	20	18	268 17	100·1	30	11	307 36	101·0	35		330 30	100·7	31	-05	323 30					700
650		17	-08	258 20		18	10	268 21		16	15	277 16		16	07	059 12		14	12	256 33		21	05	309 33		29		322 33		24	-09	324 37					650
600	136·3	11	-11	243 24	136·6	13	05	258 27	136·9	12	08	280 19	136·9	08	01	050 22	139·3	07	06	259 31	139·8	16	-01	304 36	141·2	22		308 34	140·5	21	-16	325 43					600
550		02	-22	249 25		04	-05	252 24		04	-17	294 28		04	-20	032 22		00	-02	279 33		10	-11	309 45		19		309 44		13	-25	326 51					550
500	181·2	-07	-28	261 23	181·7	-05	-14	259 23	181·9	-03	-26	297 22	182·0	-04	-33	025 21	184·0	-09	-12	289 40	185·5	04	-24	319 47	187·3	08		310 48	186·6	11	-19	326 72					500
450		-17	-37	254 24		-14	-29	257 27		-13	-37	303 32		-12	-40	023 39		-20	-25	273 34		-08	-43	320 44		03		318 78		02	-40	328 86					450
400	233·8	-30	-48	240 24	234·6	-27	-46	260 18	235·0	-25	-47	294 30	235·2	-21	-51	012 49	236·3	-30	-37	275 38	239·2	-20	-53	313 55	242·3	-05		317 90	241·6	-09	-23	329 80					400
350		-44		231 24		-37	-56	278 19		-32	-56	301 35		-31	-58	005 60		-39	-49	291 56		-30	-57	306 90		-18				-22	-39	323 85					350
300	297·6	-57		228 24	299·4	-45		286 19	300·6	-36	-59	324 36	301·1	-35	-58	358 68	301·0	-43		294 84	305·1	-40	-60	306 106	(347 mb)	-19			308·6	-38	-52	322 91					300
250		-54		235 20		-40		291 15		-37	-60	350 42		-42		014 54		-47		298 66		-50		306 107					(268 mb)	-50							250
200	385·5	-49		290 15	390·0	-41		317 17	391·7	-46	-60	340 31	391·1	-49		014 48	390·2	-52		295 49	393·6	-56		306 70													200
170		-50		313 15	(175 mb)	-43				-44		319 15		-50		014 36		-56		303 41	(173 mb)	-52															170
150		-53		333 13						-44		347 19		-51		014 29		-57		309 34																	150
130		-54		325 15						-45		013 21		-54		014 24		-60		312 28																	130
110		-53		325 16						-47		346 12		-57		014 14		-60		308 28																	110
100	536·3	-54		331 16					536·3	-48		342 19	541·5	-56		014 11	(538·7)	-60		302 18																	100
90		-54		350 16						-45		005 11		-56		014 11		-60																			90
80		-53		352 15						-45		344 07		-55		044 12	(855 mb)	-60							845 mb 37° - 825 mb 40°													80
70		-55		008 08						-43		320 05		-51		014 09									800 " 40° - 780 " 41°													70
60		-55												-53																							60
	(59 mb)	-59							(63 mb)	44																											
	Inversion 775 mb 28° - 750 mb 39°				Inversion 802 mb 29° - 780 mb 32°				Inversion 1011 mb 50° - 1000 mb 51°				Inversion 592 mb 01° - 582 mb 08°				Inversion 831 mb 36° - 815 mb 37°				Inversion 895 mb 34° - 750 mb 38°				Isothermal 860 - 845 mb 37°											
	Isothermal 1010 - 1000 mb 48°								Isothermal 900 - 892 mb 41°				+Isothermal 724 - 713 mb 24°												825 - 800 " 40°											
	834 - 795 " 31°												482 - 477 " -08°												780 - 765 " 41°											
													379 - 372 " -27°												640 - 630 " 27°											
																									465 - 435 " 03°											
Tropopause	I 282 mb - 61° 31,100'				I 305 mb -46° 29,500'				II 380 mb - 30° 24,700'				III 325 mb - 36° 28,400'				II 350 mb -39° 26,600'				I 211 mb - 61° 38,200'				NR.				NR.								Tropopause

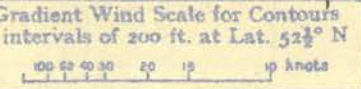
Saturday 23rd June 1951.

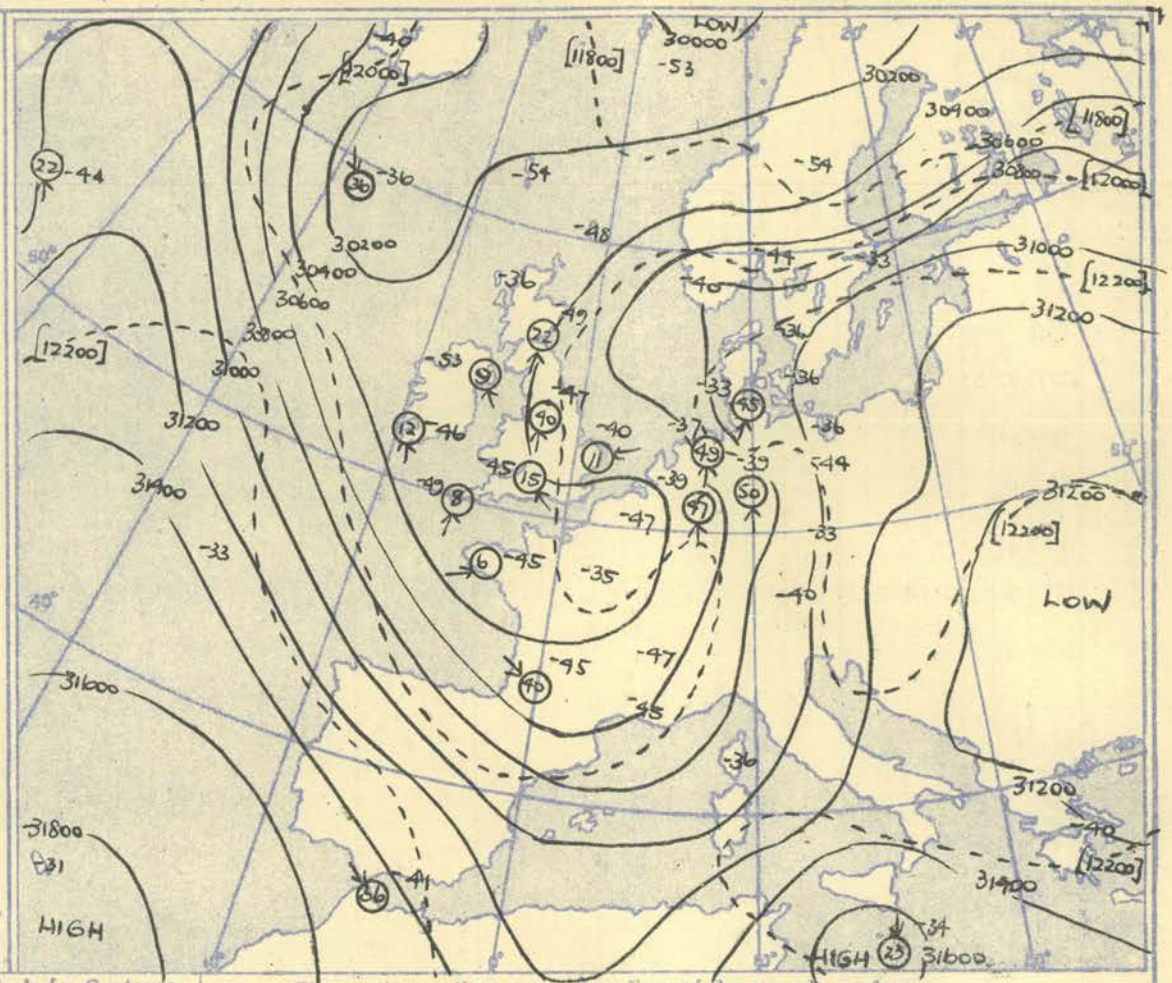
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

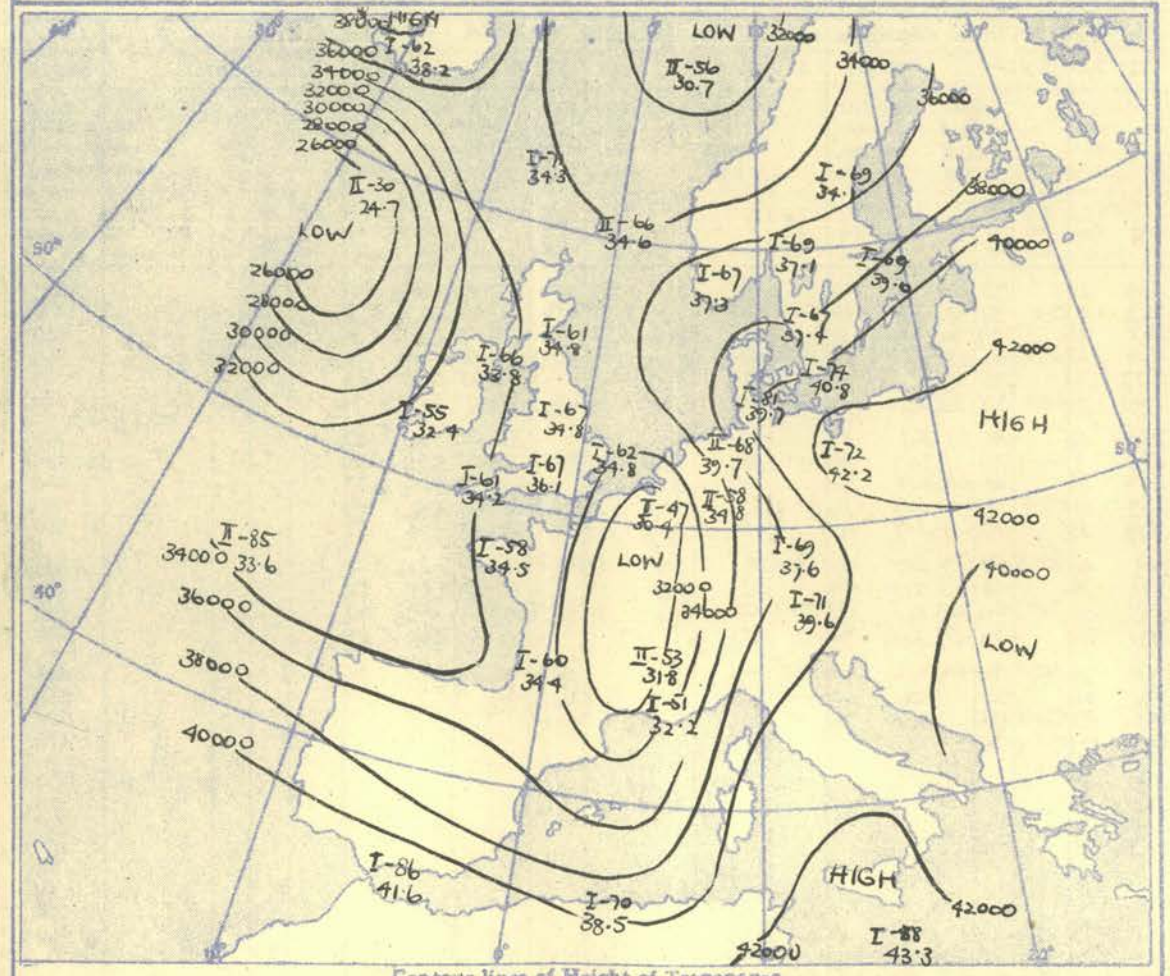
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N





The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

A weak cold-pool appeared off Southwest England slightly in advance of the eastward moving cold trough just west of the British Isles. It's formation seems to be due to dynamical causes. The warm ridge over Greenland has moved steadily east.

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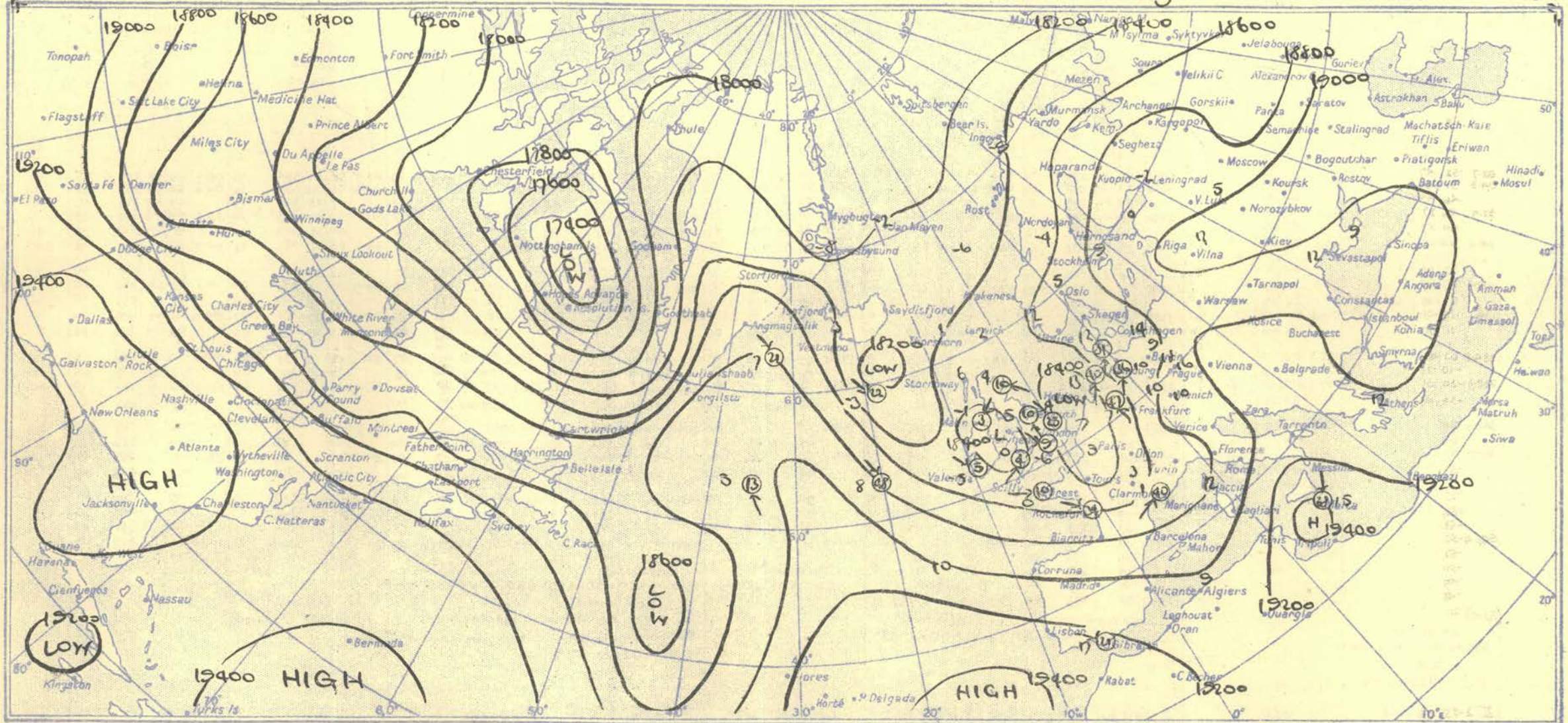
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Saturday 23rd June 1951.


19000
18800
18600
18400
18200
18000
17800
17600
17400
19200
19400
LOW
HIGH
18200
18600
19200
19400
Tonopah
Boise
Edmonton
Fort Smith
Coppermine
Helena
Salt Lake City
Medicine Hat
Flagstaff
Prince Albert
Miles City
Du Appelle
Le Pas
Chesterfield
Churchill
Gods Lake
Winnipeg
Bismarck
Santa Fé
Denver
El Paso
Dodge City
Sioux Lookout
Duluth
Kansas City
Charles City
Green Bay
White River
Dallas
Galveston
Little Rock
St. Louis
Chicago
Parry Sound
Dorsal
Nashville
Cincinnati
Cleveland
Buffalo
New Orleans
Atlanta
Montreal
Father Point
Harrington
Belleisle
Wytheville
Washington
Scranton
Atlantic City
Nantucket
Charleston
C. Hatteras
Jacksonville
Halifax
Sydney
C. Race
Bermuda
Nassau
Havana
Cienfuegos
Key West
Kingston
Turks Is
Cartwright
Julianehaab
Godthaab
Holsteinsborg
Angmagssalik
Resolution Is.
Hopes Advance
Storfjord
Fyfjord
Vestmanna
Saydisfjord
Longilsu
Thule
Chesterfield
Nottingham Is.
Coppermine
Mygbugten
Jan Mayen
Bear Is.
Spitsbergen
Malye K.
Narjan M.
M Tsyima
Syktyvkar
Soura
Mezen
Murmansk
Yardo
Archangel
Gorskii
Velikii C.
Jelabouga
Kuibyshev
Saratov
Astrakhan
Baku
Kargopol
Kem
Seghezo
Semachine
Stalingrad
Machatsch-Kale
Tiflis
Eriwan
Batoum
Hinadi
Mosul
Haparanda
Kuopio
Leningrad
Moscow
Bogoutchar
Piatigorsk
Rostov
Kouisk
Norozybkov
V. Luki
Riga
Vilna
Kiev
Sevastapol
Sinopa
Tarnapol
Warsaw
Kosice
Bucharest
Constantza
Istanboul
Konia
Adana
Angora
Amman
Gaza
Limassol
Smyrna
Vienna
Belgrade
Prague
Berlin
Hamburg
Munich
Frankfurt
Venice
Zara
Tarranto
Athens
Messina
Florence
Rome
Malta
Siwa
Matruh
Benghazi
Tripoli
Tunis
Algiers
Bougie
Biskra
Laghouat
Oran
Quargla
Rabat
Gibraltar
Lisbon
Madrid
Corruna
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Mahon
Marignane
Ajaccio
Cagliari
Biarritz
Rochefort
Brest
Tours
Clermont
Dijon
Paris
London
Plymouth
Holyhead
Valentia
Scilly
Malin
Thorshavn
Lerwick
Stornoway
Skagen
Copenhagen
Oslo
Skegen
Ukraine
Krakenes
Hernosand
Stockholm
Haparanda
Kuopio
Leningrad
Moscow
Riga
Vilna
Kiev
Warsaw
Tarnapol
Sevastapol
Constantza
Kosice
Bucharest
Istanboul
Konia
Smyrna
Belgrade
Vienna

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Saturday 23rd June 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15h. G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Pressure: Time	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h G.M.T.	15h. G.M.T.
Pressure: M.S.L.	1016·0 mb	1014·6 mb	1013·8 mb	1013·9 mb	1011·2 mb	1009·0 mb	1010·3 mb	1015·4 mb	1017 mb
Pressure: Surf	1006·0 mb	1013·0 mb	1013·0 mb	1004·4 mb	1009·2 mb	1004·7 mb	994·6 mb	1005·0 mb	1015 mb
Pressure: Freezing	750 mb	712 mb	755 mb	757 mb	739 mb	725 mb	724 mb	750 mb	760 mb

Pressure mb	Lerwick Height ft./100	Lerwick °F.	Lerwick Dew °F.	Lerwick Wind Dir. °	Lerwick Wind Vel. knots	Stornoway Height ft./100	Stornoway °F.	Stornoway Dew °F.	Stornoway Wind Dir. °	Stornoway Wind Vel. knots	Leuchars Height ft./100	Leuchars °F.	Leuchars Dew °F.	Leuchars Wind Dir. °	Leuchars Wind Vel. knots	Aldergrove Height ft./100	Aldergrove °F.	Aldergrove Dew °F.	Aldergrove Wind Dir. °	Aldergrove Wind Vel. knots	Liverpool Height ft./100	Liverpool °F.	Liverpool Dew °F.	Liverpool Wind Dir. °	Liverpool Wind Vel. knots	Downham Market Height ft./100	Downham Market °F.	Downham Market Dew °F.	Downham Market Wind Dir. °	Downham Market Wind Vel. knots	Larkhill Height ft./100	Larkhill °F.	Larkhill Dew °F.	Larkhill Wind Dir. °	Larkhill Wind Vel. knots	Camborne Height ft./100	Camborne °F.	Camborne Dew °F.	Camborne Wind Dir. °	Camborne Wind Vel. knots	Valentia Height ft./100	Valentia °F.	Valentia Dew °F.	Valentia Wind Dir. °	Valentia Wind Vel. knots	Pressure mb
Surf	02·7	52	47			00·4	62	53			00·2	56	51	080	08	02·6	63	48	CALM		00·6	63	52	270	15	01·2	55	53	340	15	04·4	61	54	360	10	02·9	58	54	330	15	00·3	56	55	295	07	Surf
1000	04·3	51	47			04·0	58	48			03·8	53	49	048	09	03·8	62	48			03·1	61	51	289	18	02·5	55	53			02·8					04·3	56	53	320	16	04·6	54	53	296	08	1000
950		46	45				54	45				53	50	046	12		52	41	002	06		54	47	313	13		50	46	348	22		55	50	359	18		47	45	311	19		49	48	301	10	950
900	32·9	46	37			32·9	49	40			32·6	50	40	039	12	32·7	44	35	344	04	32·1	51	46	008	12	31·3	48	42	356	18	31·8	48	45	353	17	32·8	43	36	303	20	33·2	44	43	305	13	900
850		40	27				43	36				44	29	041	15		39	29	LAV			46	39	028	14		46	39	011	19		49	43	356	16		40	35	286	16		41	39	313	11	850
800	64·4	36	18			64·5	39	28			64·2	37	10	036	12	64·1	35	28	176	06	64·0	41	32	016	14	63·1	41	27	013	20	63·7	42	31	351	13	64·3	35	32	276	12	64·8	35	32	314	10	800
750		32	14				35	18				31	-08	027	10		31	21	188	03		34	23	011	10		35	24	006	20		36	30	345	12		32	22	277	07		31	27	319	10	750
700	99·4	27	09			99·8	31	07			99·2	25	-20	030	09	99·1	23	07	157	03	99·3	29	18	341	11	98·5	29	16	360	20	99·1	29	25	349	10	99·4	26	19	276	06	99·7	23	20	331	10	700
650		23	-08				26	-05				23	-38	042	12		18	-10	LAV			25	11	323	12		23	06	004	21		21	15	351	10		19	14	248	08		17	13	335	10	650
600	139·1	18	-01			139·3	22	-08			138·8	18	-42	056	11	138·3	15	-21	340	07	139·2	19	11	277	12	138·2	16	00	015	22	138·7	18	13	336	06	138·9	13	09	231	07	139·0	12	04	339	09	600
550		11	00				14	06				13	-46	095	10		08	-32	036	05		12	07	231	06		10	02	008	21		09	06	343	08		05	01	232	05		04	-08	351	08	550
500	184·8	02	-08			185·3	06	-03			184·7	04	-41	122	10	183·7	-01	-44	065	03	185·1	05	-05	179	10	183·9	04	-05	359	20	184·3	02	-03	343	09	184·2	00	-08	232	04	184·1	-05	-13	303	05	500
450		-10	-21				-03	-10				-07	-40	146	09		-11	-53	118	07		-06	-18	168	16		-03	-11	057	15		-06	-13	324	05		-10	-22	205	06		-12	-23	178	08	450
400	238·3	-20	-31			239·7	-12	-21			238·5	-19	-46	167	11	237·0	-24	-57	116	10	239·0	-18	-32	157	26	238·1	-12	-21	082	10	238·2	-17	-27	271	10	237·6	-22	-35	199	09	237·3	-22	-41	163	19	400
350		-33	-47				-23	-32				-33	-58	174	12		-28	-58	122	11		-21	-43	177	29		-26	-35	065	11		-29	-40	211	10		-35	-50	203	11		-32	-50	147	20	350
300	303·6	-48				306·5	-36	-45			303·6	-49		194	22	301·6	-53		105	09	304·6	-47		170	40	304·5	-40	-51	063	11	304·0	-45		155	15	302·7	-49		193	08	302·7	-46		169	12	300
250		-64					-46					-60		187	28		-64		105	06		-65		165	39		-60		092	18		-62		139	20		-60		186	07		-49		256	12	250
200	3899	-57									391·0	-53		177	20	388·0	-56		215	06	391·7	-52		179	14	392·2	-51		165	15	390·8	-55		179	09	390·5	-49		277	11	391·3	-47		800	19	200
170		-53										-52		180	12		-51		218	05		-49		207	07		-47		165	14		-51		214	14		-50		290	14		-48		298	22	170
150		-53									453·6	-49		193	11		-51		220	05		-51		193	08	455·4	-46		166	14	453·4	-50		206	08		-52		287	10		-49		311	19	150
130		-52										-49		176	09		-53		232	03		-52		198	12		-43		183	18		-51		189	10		-51		305	05		-50		323	12	130
110		-52										-52		178	10		-52		116	05		-52		178	07		-47		188	13		-53		195	08		-53		194	06		-52		351	09	110
100	5404	-52									542·1	-51		183	06	538·8	-50		LAV							545·1	-45		187	09	541·7	-52		238	07	541·5	-53		202	06	543·0	-51		313	06	100
90		-51										-50		173	05		-50		250	04							-46		187	12		-55					-51			LAV	(97mb)	-51					90
80		-50										-49		203	06		-50		.211	05																	-51			LAV							80
70		-49										-50		153	04																					-52										70
60		-48										-53		076	07																															60
	(53mb)	-48									653·7	-51				783	mb 33°	-771	mb 35°		962	-941	mb 54°			480	mb -01°	-470	mb 00°		618	-600	mb 18°		793	mb 34°	-771	mb 35°							
	Inversion 950 mb 46° - 944 mb 47°					Inversion 975 mb 48° - 942 mb 54°					Isothermal 863 - 830 mb 39°					Isothermal					Isothermal 941 - 918 mb 49°					Inversion 880 mb 45° - 850 mb 49°																						
	Isothermal 975 - 950 mb 46°					Isothermal 820 - 807 mb 40°																				900 - 874 mb 48																						
																										527 - 512 mb 07																						
Tropopause	I 245 mb - 66° 34,600'		N.R.			I 244 mb - 61° 34,800'					I 253 mb - 66° 33,800'					I 245 mb - 67° 34,800'					I 245 mb - 62° 34,800'					I 231 mb - 67° 36,100'					I 252 mb - 61° 34,200'					I 272 mb - 55° 32,400'					Tropopause

21h. G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne		Valentia
Pressure: Time	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.		G.M.T.
Pressure: M.S.L.	1014·8 mb	1014·0 mb	1012·7 mb	1012·7 mb	1010·1 mb	1008·0 mb	1009·8 mb	1014·1 mb		mb
Pressure: Surf	1004·8 mb	1012·4 mb	1011·9 mb	1003·2 mb	1008·1 mb	1003·7 mb	994·0 mb	1003·6 mb		mb
Pressure: Freezing	736 mb	745 mb	760 mb	787 mb	750 mb	759 mb	759 mb	780 mb		mb

Pressure mb	Lerwick Height ft./100	Lerwick °F.	Lerwick Dew °F.	Lerwick Wind Dir. °	Lerwick Wind Vel. knots	Stornoway Height ft./100	Stornoway °F.	Stornoway Dew °F.	Stornoway Wind Dir. °	Stornoway Wind Vel. knots	Leuchars Height ft./100	Leuchars °F.	Leuchars Dew °F.	Leuchars Wind Dir. °	Leuchars Wind Vel. knots	Aldergrove Height ft./100	Aldergrove °F.	Aldergrove Dew °F.	Aldergrove Wind Dir. °	Aldergrove Wind Vel. knots	Liverpool Height ft./100	Liverpool °F.	Liverpool Dew °F.	Liverpool Wind Dir. °	Liverpool Wind Vel. knots	Downham Market Height ft./100	Downham Market °F.	Downham Market Dew °F.	Downham Market Wind Dir. °	Downham Market Wind Vel. knots	Larkhill Height ft./100	Larkhill °F.	Larkhill Dew °F.	Larkhill Wind Dir. °	Larkhill Wind Vel. knots	Camborne Height ft./100	Camborne °F.	Camborne Dew °F.	Camborne Wind Dir. °	Camborne Wind Vel. knots	Valentia Height ft./100	Valentia °F.	Valentia Dew °F.	Valentia Wind Dir. °	Valentia Wind Vel. knots	Pressure mb
Surf	02·7	50	47	050	09	00·4	59	50	CALM		00·2	53	50	090	06	02·6	55	45	350	05	00·6	59	52	340	10	01·2	55	53	330	08	04·4	55	53	280	09	02·9	54	51	300	10						Surf
1000	04·0					03·8	52	47			03·5	52	50			34·5		49			02·8	58	49			02·2					02·7					03·8	53	50								1000
950		45	40	041	09		51	41	046	08		51	51	044	10		50	39	328	06		55	47	350	15		49	46	347	19		56	50	314	18		47	40	303	15							950
900	32·6	45	33	030	15	32·6	46	39	088	06	32·2	46	45	035	12	32·2	47	31	325	06	31·8	51	42	359	15	31·0	48	45	355	20	31·7	49	44	342	14	32·4	43	34	340	18						900
850		40	29	025	12		40	35	136	05		42	36	032	17		41	25	331	05		45	38	344	16		45	37	348	22		44	37	352	13		38	28	321	21							850
800	64·1	37	40	020	13	64·1	39	28	187	07	63·8	38	28	019	24	63·8	34	27	347	05	63·6	39	33	337	14	62·8	39	31	345	22	63·4	39	31	341	10	63·8	35	33	321	14						800
750		33	11	023	12		33	09	186	08		31	17	015	18		26	21	357	05		32	27	337	11		30	24	340	22		30	24	318	09		28	14	317	09							750
700	99·2	29	05	043	07	99·2	26	02	162	08	98·9	26	02	016	11	98·6	22	-06	354	05	98·7	24	20	336	10	97·8	24	19	337	22	98·5	25	22	304	08	98·5	23	-12	327	06						700
650		25	-03	069	06		21	-09	155	08		19	-05	034	10		17	-28	357	05		22	06	333	10		20	09	334	19		19	15	302	07		16	01	LAV							650
600	139·0	18	06	100	05	138·7	15	-42	161	07	138·4	16	-18	049	16	137·7	12	-26	354	06	128·2	16	06	309	09	137·2	13	-06	335	21	137·9	13	09	305	07	137·6	12	07	"						600
550		10	01	105	04		08	-21	174	08		11	-21	067	14		03	-29	356	06		10	02	298	06		07	-10	332	25		04	02	307	05		06	02	"							550
500	184·6	01	-07	126	07	189·2	00	-28	170	10	184·2	05	-27	090	12	182·7	-04	-45	093	04	183·8	02	-08	290	05	182·6	00	-10	338	25	183·1	-04	-08	262	02	182·8	-03	-09	272	04						500
450		-08	-17	147	09		-10	-24	175	14		-06	-37	107	13		-15	-49	125	04		-05	-23	221	04		-10	-18	345	15		-12	-22	161	03		-12	-17	177	04							450
400	238·3	-19	-29	166	12	237·7	-20	-30	170	17	238·1	-18	-45	161	15	235·6	-28	-47	139	07	237·8	-16	-41	177	09	236·1	-20	-30	313	14	236·2	-22	-35	199	10	23·6	-23	-29	160	09						400
350		-33	-43	169	16		-32	-41	165	18		-31	-55	155	24		-42		L+V			-29	-54	173	13		-31	-41	348	13		-34	-46	190	13		-36	-42	144	16							350
300	303·7	-47				303·2	-46		142	29	303·8	-46		161	33	299·6	-56		218	02	303·8	-42		151	20	301·8	-45		025	10	301·3	-49		167	20	300·9	-49		147	18							300
250		-63					-61		137	27		-62		160	33		-61		162	12		-61		138	24		-63		053	08		-67		145	26		-62		157	10							250
200	390·3	-56				390·3	-52		179	12	390·1	-55		165	16	386·5	-55		CALM		390·9	-52		131	13	388·8	-53		152	17	(211mb)	-67				388·3	-51		309	12							200
170		-55					-49					-52		173	12		-54		CALM			-50		173	09		-54		171	20							-52		312	10							170
150		-54									452·6	-52		175	09		-55		"			-50		178	07	452·2	-52		189	15						450·8	-53		281	05							150
130		-54										-54		175	07		-56		"			-50		178	07		-54		182	11							-54		277	09							130
110		-52										-54		179	06		-58		CALM			-49		178	07		-56		187	09							-57		286	12							110
100	5403	-52									540·5	-53		189	09	536·0	-53		080	03	542·4	-49		170	07	538·9	-58		155	09						(108mb)	-58										100
90		-52										-53		097	03		-55		085	01	(96mb)	-49																							90
80		Inversion										-53		104	09	Isothermal																															80
70		945 mb 44° - 922 mb 47°										Isothermal				750 - 735 mb 26°																															70
60												866 - 830 mb 42°																																			60
																					955 mb 54° - 944 mb 56°					932 mb 47° - 917 mb 49°																						
																					687 mb 22° - 662 mb 24°					890 mb 47° - 872 mb 48°																						
																					Isothermal 810 - 797 mb 39°					Isothermal 666 - 650 mb 20°																						
Tropopause	I 238 mb - 67° 35,200'		I 240 mb - 64° 35,100'			I 220 mb - 71° 37,000'					II 277 mb - 60° 31,700'					I 235 mb - 68° 35,700'					I 246 mb - 65° 34,500'					I 228 mb - 75° 36,000'					I 253 mb - 63° 33,800'											Tropopause

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No. 11774 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON** Sunday 24th June 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

03h G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	03h	1013·9 mb	1003·9 mb	733 mb
STORNOWAY	03h	1013·1 mb	1011·4 mb	785 mb
LEUCHARS	03h	1011·1 mb	1010·3 mb	781 mb
ALDERGROVE	03h	1012·3 mb	1002·6 mb	769 mb
LIVERPOOL	03h	1009·1 mb	1007·1 mb	764 mb
DOWNHAM MARKET	03h	1007·5 mb	1003·0 mb	740 mb
LARKHILL	03h	1009·3 mb	993·3 mb	750 mb
CAMBORNE	03h	1012·3 mb	1001·7 mb	753 mb
VALENTIA	03h	1014 mb	1012 mb	770 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	48	44			00·4	52	50	Calm		00·2	51	50	Calm		02·6	47	45	Calm		00·6	50	50	Calm		01·2	52	51	270	04	04·9	52	49	290	04	02·9	53	52	283	03	300·3	52	51	070	02	Surf
1000	03·7	47	43			03·6	52	49			03·0	50	49			32·5					02·6	52	52			02·0					02·5					03·4	53	52			03·8	53	52	050	02	1000
950		42	41				54	56	128	04		46	45	024	14		51	90	356	19		53	52	330	09		49	47	335	17		52	46	340	15		49	48				49	47	350	07	950
900	32·2	44	25			32·4	47	39	134	07	31·5	43	42	026	14	32·0	47	24	347	09	31·5	47	45	340	11	30·7	+7	39	349	22	31·3	49	45	337	10	32·0	45	39			32·6	46	43	346	09	900
850		40	19				90	37	139	06		46	35	029	13		44	32	024	02		43	40	347	13		43	38	346	23		45	37	320	07		39	35				40	37	334	11	850
800	63·7	38	03			63·9	34	30	Land	Var	63·0	35	24	020	14	63·6	37	31	129	03	63·1	37	31	347	15	62·4	39	30	329	19	63·1	38	31	331	09	63·5	36	30			64·1	35	31	318	08	800
750		33	02				31	01	013	05		30	16	358	17		29	24	133	03							33	29	316	24		32	28	327	07		31	15	For Winds			30	27	310	05	750
700	98·8	29	21			98·9	26	16	034	04	97·9	25	17	029	11	98·5	23	10	042	01	98·1	25	18	334	13	97·6	27	20	308	27	98·1	26	25	293	07	98·5	26	07			99·0	25	21			700
650		23	24				21	03	075	05		19	14	053	11		19	16	340	01		19	15	314	12		21	12	304	24		20	16	287	06		20	13	See			21	13			650
600	138·4	16	09			138·3	15	39	088	07	37·2	11	06	087	11	37·8	13	22	346	08	37·6	15	11	283	13	37·2	16	01	310	22	37·6	12	11	280	07	37·9	12	09			38·4	15	02			600
550		09	09				08	49	100	10		09	09	104	18		08	35	350	07		09	04	277	10		13	16	308	20		06	09	288	08		07	05				07	12			550
500	189·0	03	27			183·7	01	11	104	09	82·6	01	02	123	20	83·2	00	48	350	02	83·1	00	05	259	04	83·1	04	11	308	20	82·8	04	09	209	06	83·3	00	03	Page 3.		83·9	02	26			500
450		10	34				13	20	130	09		08	09	098	17		08	30	140	05		07	17	140	05		04	14	300	16		11	22	166	07		10	14				13	34			450
400	237·5	22	44			236·9	23	32	147	14	236·4	17	19	126	17	236·9	19	34	144	05	236·9	18	28	152	10	237·3	13	25	312	10	236·2	20	34	179	07	236·7	22	26			237·3	19	36			400
350		32	52				36	47	159	22		30	33	119	17		30	45	149	05		30	40	160	10		27	35	234	05		34	48	170	10		36	40				31	45			350
300	302·7	49				301·9	50		173	34	302·2	95		114	11	302·7	43		155	11	302·5	47		152	12	303·6	40	53	240	04	301·4	50		160	18	301·6	49				302·9	44				300
250		66					65		169	35		62		104	14		55		154	13		64		145	16		58		160	06		69		153	18		60					50				250
200	388·7	60				388·7	54		168	10	389·1	56		143	10	390·3	53		162	06	389·8	51		141	12	390·9	56		170	19	387·6	57		177	10	389·1	50				391·7	47				200
170		58					53		162	03		54		156	10		48		292	03		50		151	09		55		167	18		54		196	03		51					98				170
150		56					52					53		159	08		49		332	02		50		160	10		53		176	16		56		184	04		54					50				150
130		56										52		167	09		48		084	07		53		168	08		52		187	13		57		181	06		59					53				130
110		55										54		183	08		49		086	05		53		181	06		52		141	13		57		160	07		56					55				110
100	537·8	54									537·2	56		154	09	542·6	50		087	03	540·8	53		194	05	541·3	53		144	10	536·8	57		170	10	538·4	58				542·6	55				100
90		55										55		158	07		51		086	03		52					55		145	10		57		191	07		58					65				90
80		55										55		141	07		52		083	04							58		176	10		59		165	06		57					55				80
70		53										54					52		072	06							59		180	12		62		042	05	(075 mb)	57								70
60																											99		160	06		62		089	09	Inversion									60
	Inversion 990 mb 40-914 mb 45° Isothermal 828-800 mb 38° 540-530 .. 07°					Inversion 992 mb 51°-957 mb 55° 768 .. 30°-750 .. 31° Isothermal 668 - 650 mb 21° 543 - 533 .. 06°					Inversion 906 mb 42°-895 mb 43° 595 .. 10°-564 .. 11° Isothermal 771 - 750 mb 39°					Inversion 1003 mb 47°-960 mb 51°					Inversion 1007 mb 50°-987 mb 55° Isothermal 662 - 596 mb 15° 490 - 475 .. -02°					Inversion 960 mb 49°-941 mb 50° Isothermal 600 - 578 mb 16°					(55 mb) Inversion 993 mb 52°-962 mb 54° Isothermal 700 - 677 mb 26° 607 - 584 .. 12°					Inversion 890 mb 35°-800 mb 36° 670 .. 21°-658 .. 22°					Isothermal 1000 - 985 mb 53°					
Tropopause	I 230 mb -72° 36,000'					I 240 mb -68° 35,000'					I 292 mb -66° 34,800'					I 220 mb -66° 37,000'					I 245 mb -66° 34,600'					I 214 mb -67° 37,600'					I 247 mb -71° 39,900'					II 261 mb -60° 33,200'					II 280 mb -50° 31,800'					Tropopause

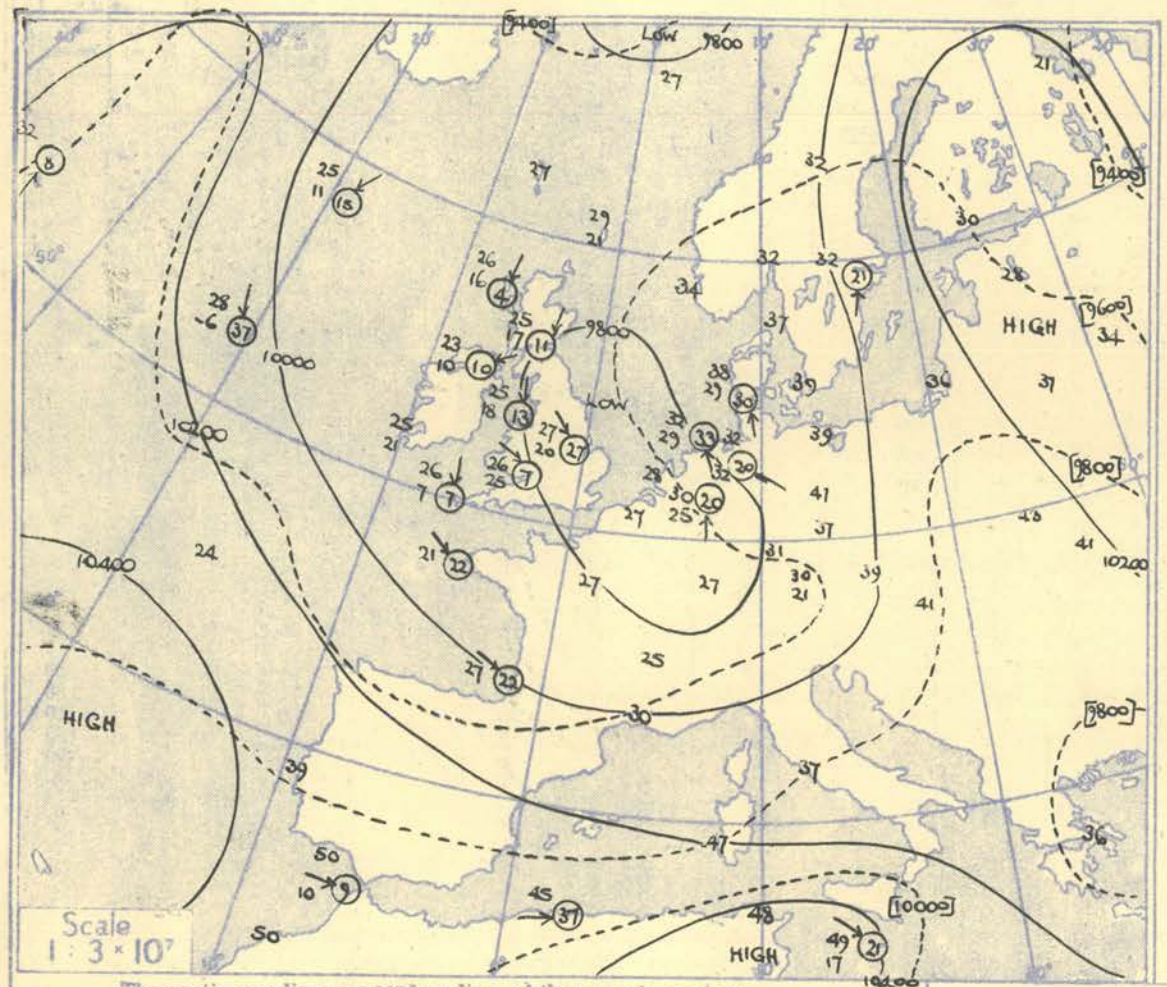
09h G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	09h	1012·2 mb	1002·2 mb	700 mb
STORNOWAY	09h	1013·8 mb	1012·2 mb	750 mb
LEUCHARS	09h	1010·0 mb	1009·2 mb	760 mb
ALDERGROVE	09h	1011·8 mb	1002·1 mb	762 mb
LIVERPOOL	09h	1008·6 mb	1006·6 mb	764 mb
DOWNHAM MARKET	09h	1007·1 mb	1002·8 mb	771 mb
LARKHILL	09h	1009·1 mb	993·3 mb	755 mb
CAMBORNE	09h	1011·5 mb	1001·0 mb	769 mb
VALENTIA	G.M.T.	mb	mb	mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	49	45			00·9	54	48	050	12	00·2	54	45			02·6	53	47	340	12	00·6	59	52			01·2	56	51	280	07	09·4	55	50	330	03	02·9	56	54	315	06						Surf
1000	03·3	49	45			03·8	51	46			02·7	52	44			03·2					02·4					02·0					02·5					03·1	56	54								1000
950		44	43				46	41	039	15		47	40				47	42	345	11		50	44				49	46	308	17		50	46	333	07		49	44	335	11						950
900	31·8	49	35			32·4	46	38	027	14	31·3	41	37			31·8	45	36	333	08	31·2	46	38			30·7	44	41	306	18	31·3	98	42	336	07	31·8	45	38	328	16						900
850		44	07				41	39	016	14		37	30				44	30	353	03		41	32				40	37	303	22		44	35	333	09		40	33	321	14						850
800	63·5	41	-17			63·9	36	25	011		1062·5	35	23			63·3	37	30	Calm		62·8	36	23			62·2	35	31	300	24	63·1	38	28	332	10	63·3	36	22	325	13						800
750		36	-29				32	10	026	10		31	18	For Winds			30	23	..			31	17				30	23	296	25		31	24	328	11		30	19	332	08						750
700	98·8	32	-32			99·0	28	-07	032	12	97·5	25	14			98·5	24	17	068	03	97·8	26	-02			97·0	25	14	295	27	98·1	25	22	304	10	98·3	24	-03	330	05						700
650		26	-36				23	-16	035	12		23	18	See			18	10	030	07		20	-19				21	05	295	28		20	16	276	08		16	05	341	04						650
600	138·7	18	-92			136·6	16	-30	050	12	137·2	18	16			137·7	13	-04	003	08	137·3	19	-19			136·6	19	05	296	25	137·6	13	08	270	10	137·5	10	05	342	04						600
550		09	-16				09	-39	056	17		11	07	Page 3.			07	-13	004	05		12	-04				11	-06	308	26		10	-02	268	09		02	00	337	06						550
500	189·9	05	-04			184·2	02	-20	059	16	182·9	02	-02			183·1	02	-18	041	03	183·1	03	-15			182·4	03	-10	320	14	183·2	-01	-13	275	07	182·5	-03	-18	344	05						500
450		-04	-12				-07	-23	068	12		-07	-11				-08	-23	091	04		-06	-33				-07	-16	323	14		-08	-36	281	06		-14	-22	053	03						450
400	238·9	-18	-25			238·0	-18	-31	080	12	236·7	-19	-24			236·7	-20	-35	128	07	237·1	-16	-44			236·2	-17	-27	009	10	236·9	-19	-39	125	06	235·5	-26	-35	126	07						400
350		-30	-38				-30	-92	120	20		-32	-37				-34	-49	129	16		-29	-55				-29	-38	038	10		-32	-58	124	09		-37	-47	145	12						350
300	304·2	-47				303·8	-99		134	19	302·3	-47				302·2	-44		132	30	303·0	-44				302·1	-46		066	13	302·4	-46		108	16	300·0	-54		128	19						300
250		-69					-60		139	18		-55					-60		129	24		-63					-63			117	17		-64		123	14		-61		026	07						250
200	390·9	-59				390·9	-52		116	10	390·4	-49				390·1	-49		111	06	390·4	-50				389·3	-54		136	17	389·8	-50		140	06	387·0	-52		327	15						200
170		-52					-49		105	06		-98					-47		085	06		-97					-51		126	17		-98		090	06		51		337	12						170
150		-52					-48		112	06		-98					-50		090	04		-97					-50		154	18		-48		119	07		-53		340	09						150
130		-51					-49		115	08		-99					-50		062	04		-98					-99		171	16		-49		184	10		-55		317	07						130
110		-50					-51		060	09		-98					-49		087	08		-99					-49		138	13		-51		181	08		-57		322	03						110
100	541·8	-49				542·6	-50		075	09	542·5	-99				541·9	-50		109	08	542·7	-98				540·7	-51		143	15	541·8	-50		156	08	537·0	-57		027	06						100
90		-48					-99		094	09		-98					-49		107	06		-98					-60					-48		107	07		-57		043	08						90
80		-47					-97		130	09							-48		099	03												-49		106	10		-55		082	07						80
70		-46					-96		039	05							-48		097	06												-51		117	15	(071 mb)	-54								70
60		-44																														-49													60
	(52 mb) Inversion 935 mb 92°-900 mb 99° Isothermal 900 - 850 mb 99°					Inversion 958 mb 45°-931 mb 50°					Inversion 872 mb 36°-837 mb 37° 792 .. 30°-729 .. 31° 700 .. 25°-668 - 26° Isothermal 810 - 791 mb 35°					Inversion 830 mb 14°-817 mb 16°					Inversion 818 mb 16°-800 mb 19°										Inversion 600 mb 13°-585 mb 15° Isothermal 663 - 645 mb 20°					Inversion 559 mb 01°-540 mb 03°										
Tropopause	I 250 mb -69° 39,300'					I 230 mb -68° 36,100'					II 256 mb -55° 33,600'					I 240 mb -62° 35,000'					I 293 mb -66° 34,900'					I 250 mb -63° 39,100'					I 247 mb -65° 34,400'					I 260 mb -63° 33,000'										Tropopause

Sunday 24th June, 1951.

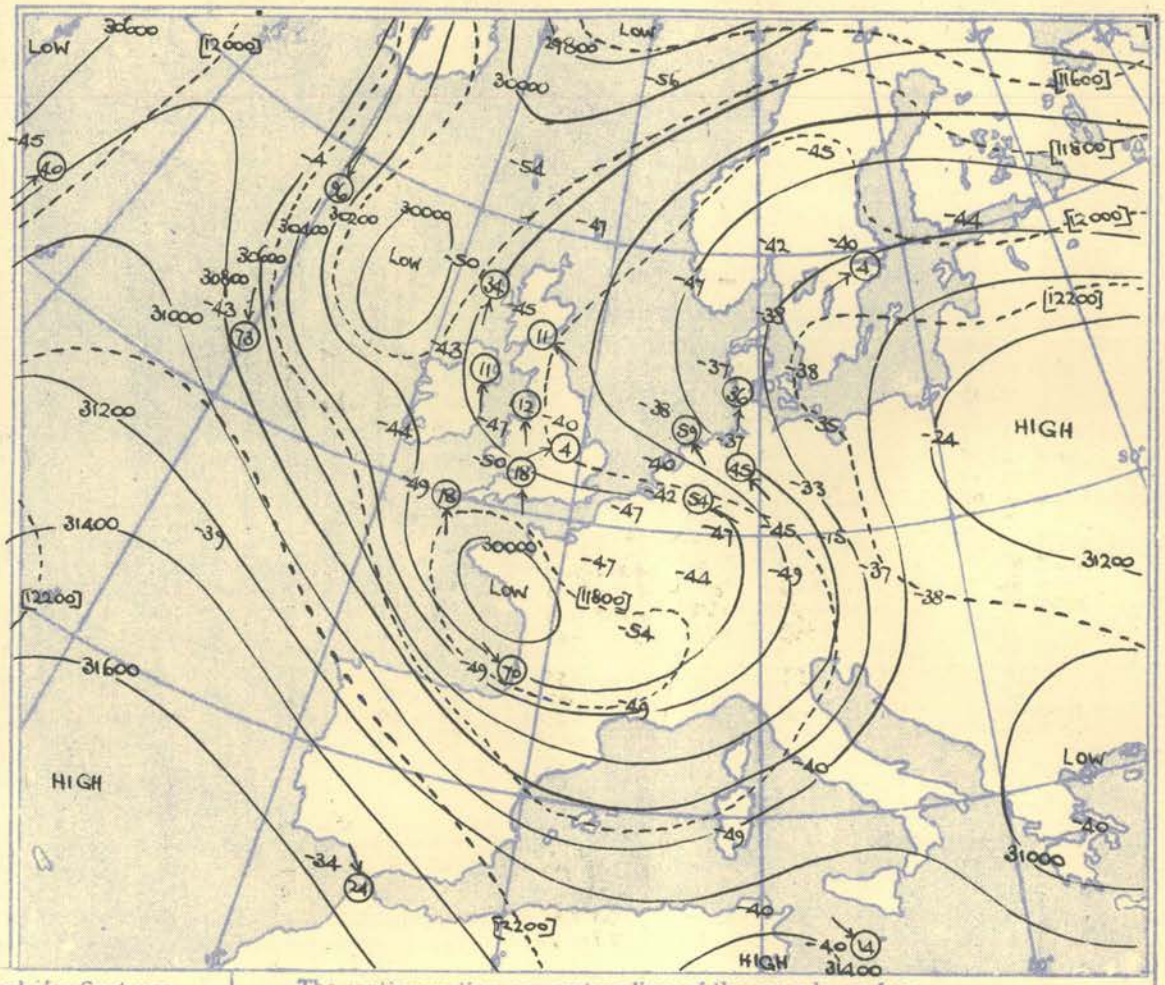
. HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.



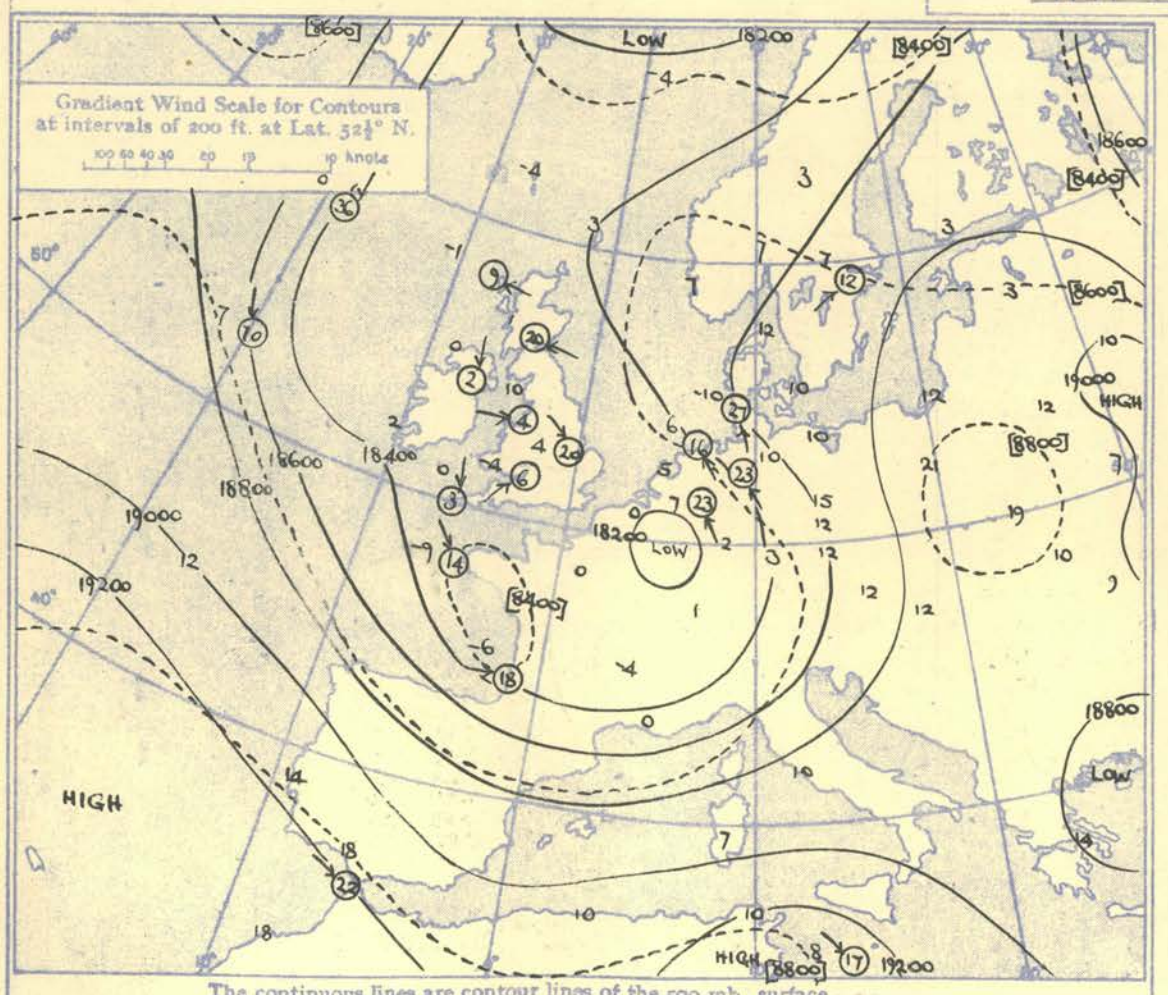
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

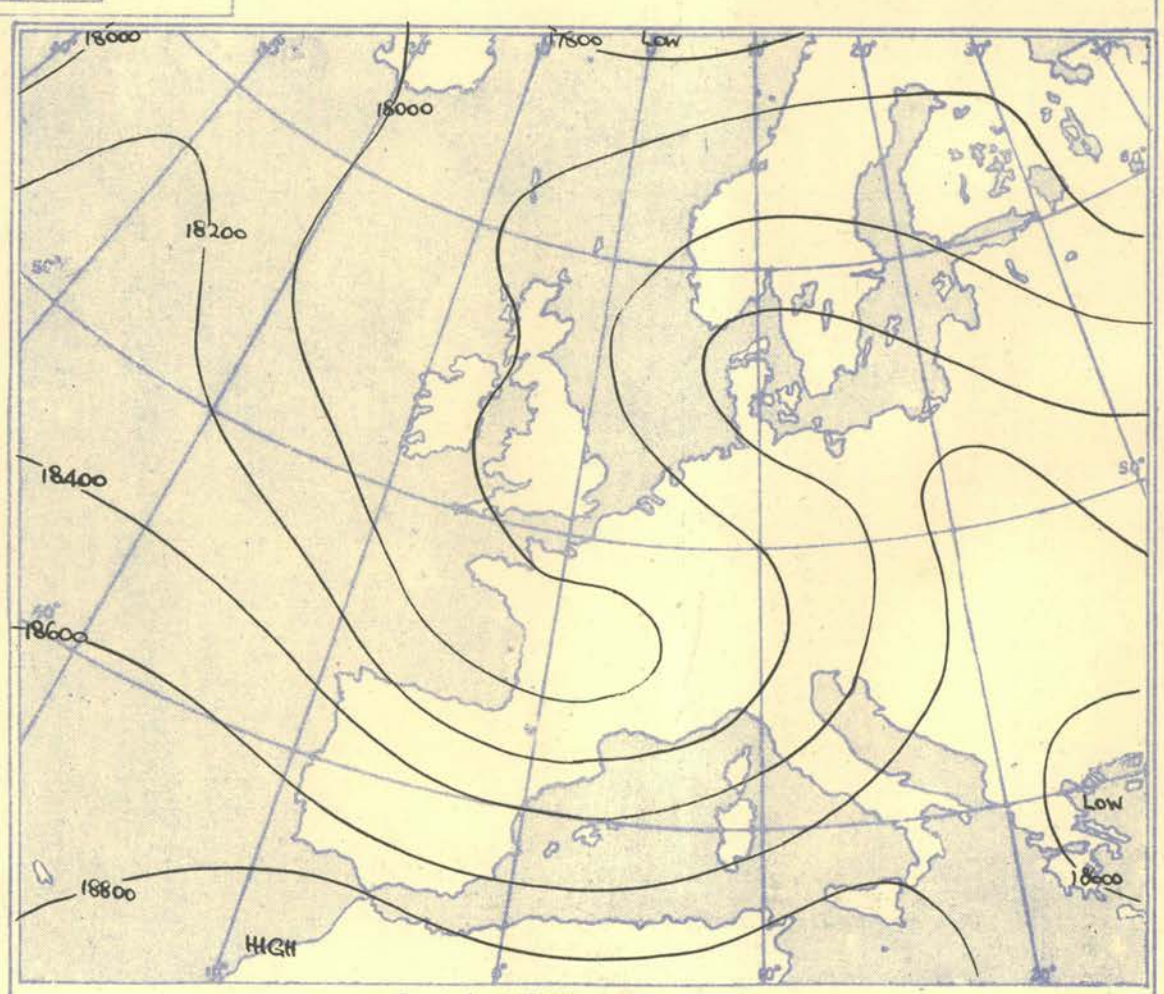
100 60 40 30 20 15 10 knots



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500-1000mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	52·12°N 02·12°O																																	
Pressure Time	1350h																																	
Pressure M.S.L.	1008 mb			mb			mb			mb			mb			mb			mb			mb			mb			Time M.S.L.		
Pressure Surf	1006·5 mb			mb			mb			mb			mb			mb			mb			mb			mb			Surf		
Pressure Freezing	770 mb			mb			mb			mb			mb			mb			mb			mb			mb			Freezing		
Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Pressure mb		
Surf	00·4																											Surf		
1000	2·2																											1000		
950																												950		
900	31·4	49	45																									900		
850		42	40																									850		
800	63·0	35	35																									800		
750																												750		
700	97·9	23																										700		
650																												650		
600	137·5	14																										600		
550																												550		
500	182·9	00																										500		
450																												450		
400	236·7	-21																										400		
350																												350		
300	302(-49																											300		
250																												250		
200																												200		
170	Cloud. 3/8 Cu 870-830 mb 5/8 Ci 320 TNR Inversion 700 mb 22° 650 .. 24°																											170		

DIRECTION (degrees from N) and VELOCITY (knots) of UPPER WINDS at heights above M.S.L.

Place	Collinstown		Ronaldsway		Camborne		Leuchars		Larkhill		Lympne		Larkhill		Ronaldsway		Downham		Leuchars		Place
Time	03h		03h		03h		09h		11h		13h		16h		21h		21h		21h		Time
Type					Pilot		Pilot												Pilot		Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Surf.	280	03	350	06	283	03	030	08	290	04	230	18	330	13	330	13	350	06			Surf.
1,000	350	09	030	07	294	09	017	12	290	08	230	25	310	15	350	24	336	21			1,000
2,000	350	10	010	09	316	11	012	13	300	07	240	10	300	14	330	24	323	23			2,000
3,000	330	05	350	10	326	12	018	19	310	11	280	13	300	14	330	23	310	25			3,000
4,000	330	08	360	10	334	12	020	24	320	11	280	17	290	14	330	23	301	28			4,000
5,000	310	86	360	13	336	14	022	26	320	13	280	17	290	11	330	24	297	27			5,000
6,000	010	04	010	13	334	13	018	26	320	16	280	16	300	09	330	32	292	30			6,000
8,000	190	06	360	09	335	09	012	21	320	17	280	19	290	11	330	25	278	30			8,000
10,000	350	09			353	07	042	18	290	11	280	19	270	13	320	25	288	26			10,000
14,000					L-V		059	11	290	11			270	11	290	22	307	17			14,000
18,000					360	03	015	07					261	111			310	12			18,000
24,000					118	11	066	10					(15·000')				345	10			24,000
30,000					125	18	035	07									030	17			30,000
40,000					309	12	137	16									104	08	139	12	40,000
50,000							145	10											128	06	50,000
							111	10											128	08	
							108	09											(57,000)		
							(63·000)														

NEPHOSCOPE OBSERVATIONS

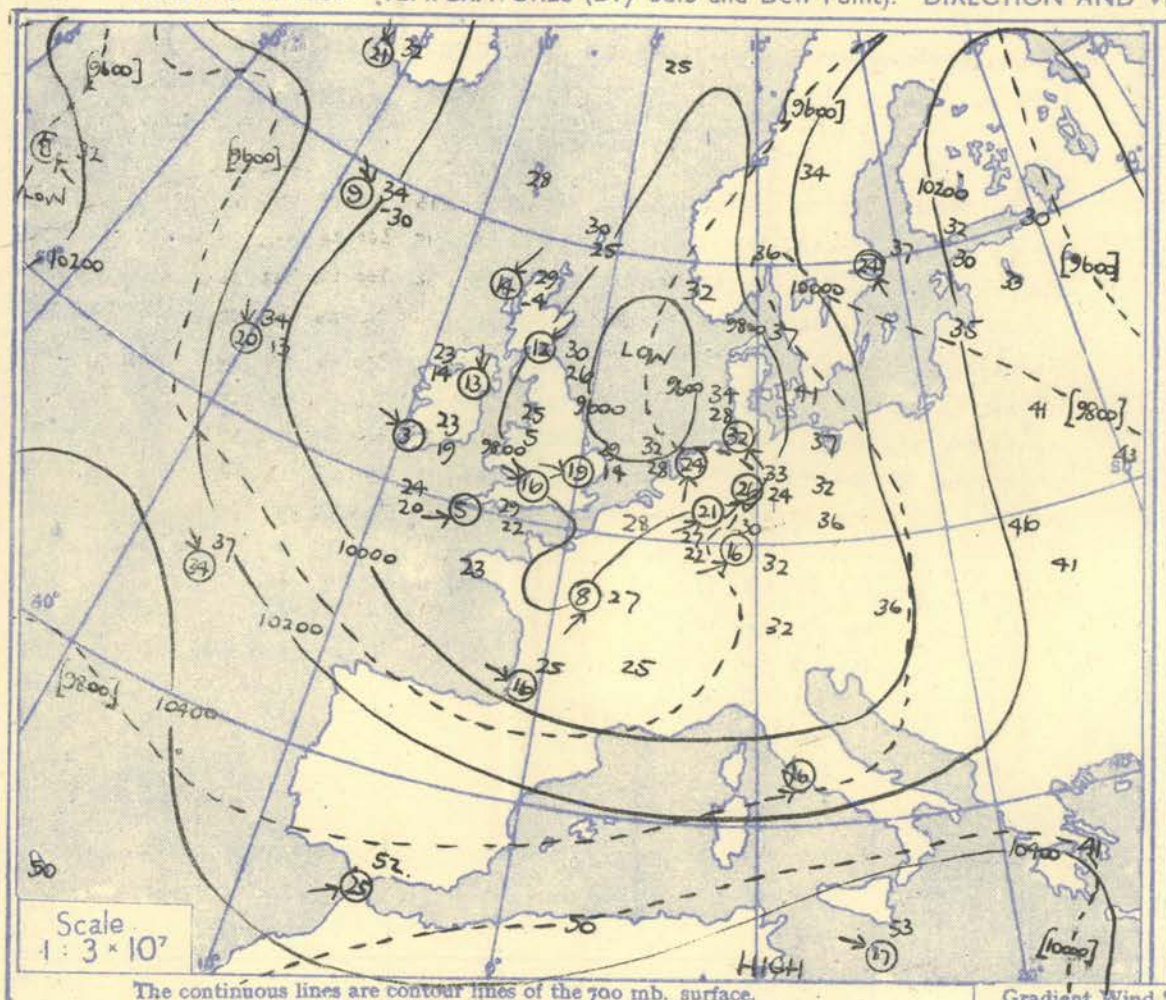
Place												Place
Time Type												Time Type
Dir. Vel.												Dir. Vel.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	WEATHER EXPLORER				WEATHER EXPLORER				WEATHER EXPLORER				WEATHER EXPLORER				WEATHER RECORDER				WEATHER RECORDER				WEATHER RECORDER				Ship
Lat/Long	59·1N			18·9W	59·1N			18·9W	59·1N			18·6W	59·1N			18·6W	52·6N			20·0W	52·7N			20·1W	52·8N			20·1W	52·7N			20·2W		Lat/Long
Pressure Time	03L G.M.T.				09L G.M.T.				15L G.M.T.				21L G.M.T.				03L G.M.T.				09L G.M.T.				15L G.M.T.				21L G.M.T.				G.M.T.	Time
Pressure M.S.L.	1016 mb				1018 mb				1020 mb				1020 mb				1020 mb				1020 mb				1020 mb				1022 mb				mb	M.S.L.
Pressure Surf	1016 mb				1018 mb				1020 mb				1020 mb				1020 mb				1020 mb				1020 mb				1022 mb				mb	Surf
Pressure Freezing	780 mb				740 mb				680 mb				700 mb				740 mb				730 mb				680 mb				650 mb				mb	Freezing
Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. ° Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. ° Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. ° Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. ° Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. ° Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. ° Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. ° Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. ° Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. ° Vel. knots	Pressure mb
Surf		52	48	010 12		52	47	010 13		52	48	353 15		52	44	330 10		54	46	320 20		53	48	320 25		55	49	330 15		56	48	360 08					Surf
1000	4·3	50	44	020 10	4·9	50	45	018 10	5·5	50	41	005 09	5·5	50	43	329 08	5·6	51	43	318 18	5·3	50	44	319 17	5·6	53	48	319 12	5·9	53	45	360 06					1000
950		45	36	015 11		44	39	015 09		45	38	005 08		44	40	325 07		44	39	320 19		43	35	326 19		46	42	339 10		47	40	002 06					950
900	32·7	38	30	012 11	33·3	39	32	013 10	33·9	40	34	005 08	33·9	40	36	326 07	33·9	36	32	321 26	33·7	40	33	316 20	34·1	41	39	352 12	34·9	40	35	002 08					900
850		37	28	014 12		35	29	013 12		35	30	005 07		36	32	351 09		37	31	326 33		33	28	341 23		37	32	360 13		46	32	002 08					850
800	64·0	33	22	019 13	64·6	36	20	004 10	65·2	37	21	005 07	65·3	37	25	012 14	65·1	35	23	327 30	64·7	34	20	341 21	65·6	42	31	002 13	66·1	42	18	357 09					800
750		30	17	022 13		33	12	003 01		36	04	360 08		36	19	008 04		33	12	332 19		33	12	337 32		36	20	352 16		37	10	346 10					750
700	98·9	25	11	020 15	99·7	29	18	010 07	100·6	34	30	339 09	100·6	32	03	353 16	100·3	28	06	324 37	100·1	30	06	335 37	101·1	34	13	340 20	101·5	35	03	338 12					700
650		22	06	021 19		25	37	013 05		29	34	312 10		29	02	351 23		23	12	324 49		25	02	335 41		27	04	344 21		33	18	321 15					650
600	138·4	16	04	026 24	139·5	19	41	030 10	140·7	24	37	307 10	140·9	27	08	350 21	140·0	19	06	323 58	140·0	21	32	335 51	141·4	24	07	354 31	141·9	25	38	334 16					600
550		10	19	029 29		11	45	020 15		18	42	332 16		21	05	359 27		14	03	324 54		17	06	332 57		20	18	352 42		20	10	340 19					550
500	184·0	00	32	031 36	185·3	02	46	015 19	187·2	12	46	008 30	187·6	12	12	358 21	186·1	07	03	330 70	186·3	11	11	329 55	188·0	14	25	342 46	188·4	12	46	346 21					500
450		12	47	022 37		03	41	015 39		02	47	031 51		00	23	359 82		03	13	330 66		01	20	320 63		04	32	339 48		03	50	350 33					450
400	237·3	21	54	009 58	239·5	16	44	015 52	242·0	10	52	017 37	242·3	13	35	358 33	241·4	16	25	325 72	241·1	10	26	321 64	243·2	07	41	340 42	243·4	10	52	350 36					400
350		32	59	011 75		30	54	015 70		22	56	007 37		23	45	356 38		28	38	325 61		21	38	325 62		21	51	327 54		23	56	343 37					350
300	302·8	42		008 96	305·5	42		015 69	308·9	35	58	018 44	308·9	39	59	355 33	306·6	43		310 73	308·0	39	52	321 69	310·4	38	58	318 57	310·2	38	58	333 52					300
250		53		012 77		56		015 72		50		022 54		57		339 27		65		323 63		52		320 64		52		312 63		55		312 44					250
200	301·2	55		003 47	302·8	61		015 51	307·2	67		013 39	307·9	72		350 32	291·1	84		328 63	295 (mb)	53			308·5	65		313 45	309·6	70		306 30					200
170		59		006 34		58		015 35		67		013 34		63		350 21		71		323 39						65		312 27		70		321 30					170
150		56		340 25		56		015 19		62		012 36		62		340 18		65		323 28					(141 mb)	56			(145 mb)	62							150
130		57		353 20		57		015 12		58		013 16		60		336 11		60		323 21																	130
110		57		005 09		58		015 14		57		013 06		59		351 08		60		323 13																	110
100						58		015 16	544·0	56		013 06	542·8	58		351 05	537·4	62		323 09																	100
90						57		015 10		53		013 06		57		352 03	(71 mb)	62																			90
80						53		015 01		52		013 06		57		L-V																					80
70						53		015 01		52		013 06	(72 mb)	56																							70
60						54		015 08		51		019 06																									60
	Isothermal 894 - 839 mb 37°				(57 mb) +52 Inversion 850 mb 35° - 832 mb 37° Isothermal 865 - 850 mb 35° 582 - 815 .. 37° 485 - 476 .. 01°				(51 mb) +46 Inversion 829 mb 34° - 765 mb 39° Isothermal 738 - 84° - 720 .. 36°				Inversion 857 mb 35° - 837 mb 41° 787 .. 36° - 766 .. 37° 642 .. 29° - 628 .. 31° Isothermal 663 - 642 mb 29° 606 - 581 .. 27°				Inversion 887 mb 34° - 872 mb 37° 814 .. 34° - 785 .. 36°				Inversion 846 mb 33° - 830 mb 35° Isothermal 956 - 945 mb 43° 850 - 846 .. 33° 800 - 765 .. 34°				Inversion 860 mb 37° - 819 mb 45° 650 .. 37° - 637 .. 29° Isothermal 572 - 583 mb 20°				Inversion 870 mb 36° - 850 mb 46° 770 .. 33° - 750 - 37° Isothermal 750 - 732 mb 37° 576 - 555 .. 21°								
Tropopause	I 207 mb - 56° 38,400'				II 222 mb - 63° 37,200'				I 178 mb - 72° 42,100'				I 196 mb - 73° 40,000'				I 200 mb - 84° 39,200'				NR.				I 180 mb - 71° 42,100'				I 182 mb - 76° 41,700'								Tropopause

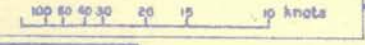
Sunday 24th June. 1951.

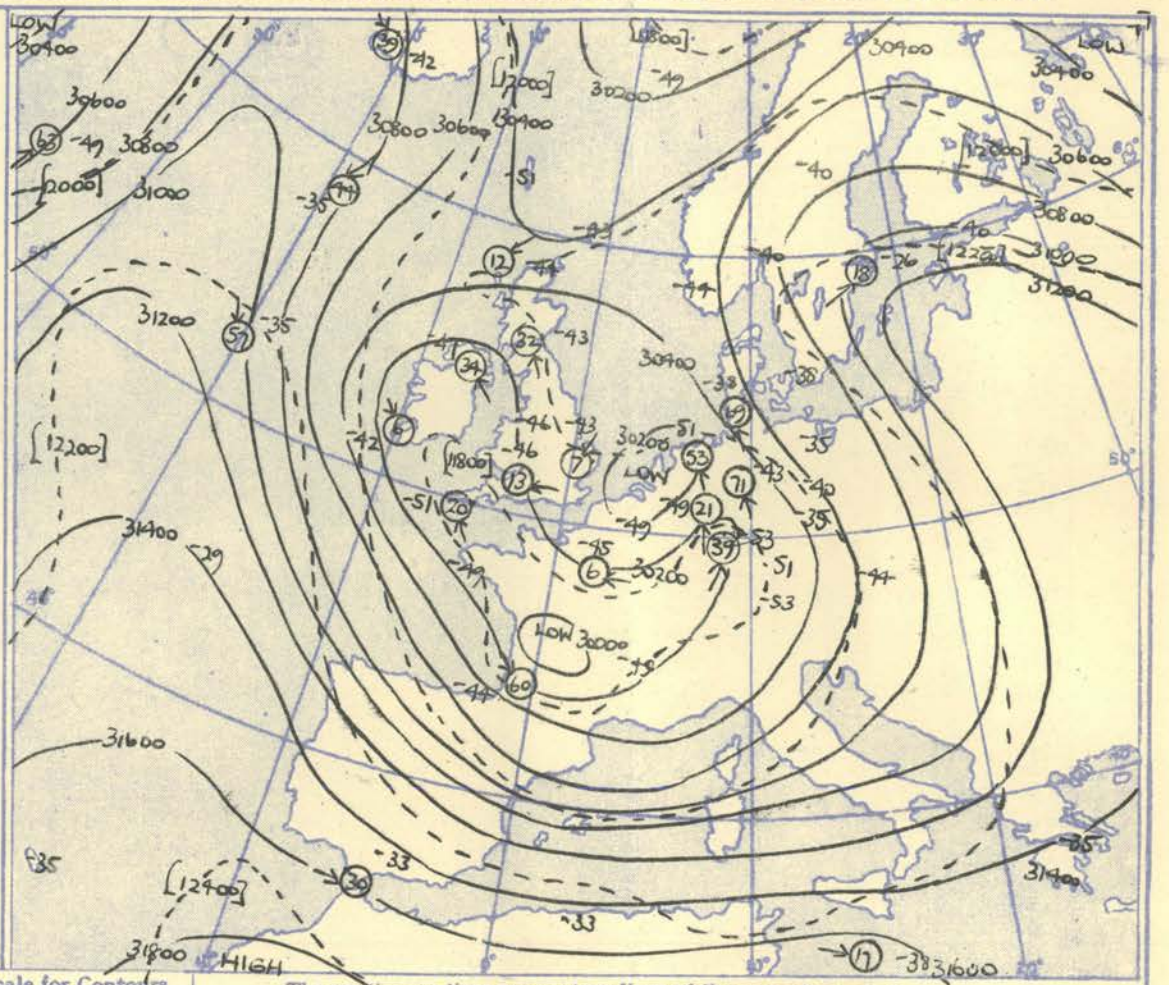
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

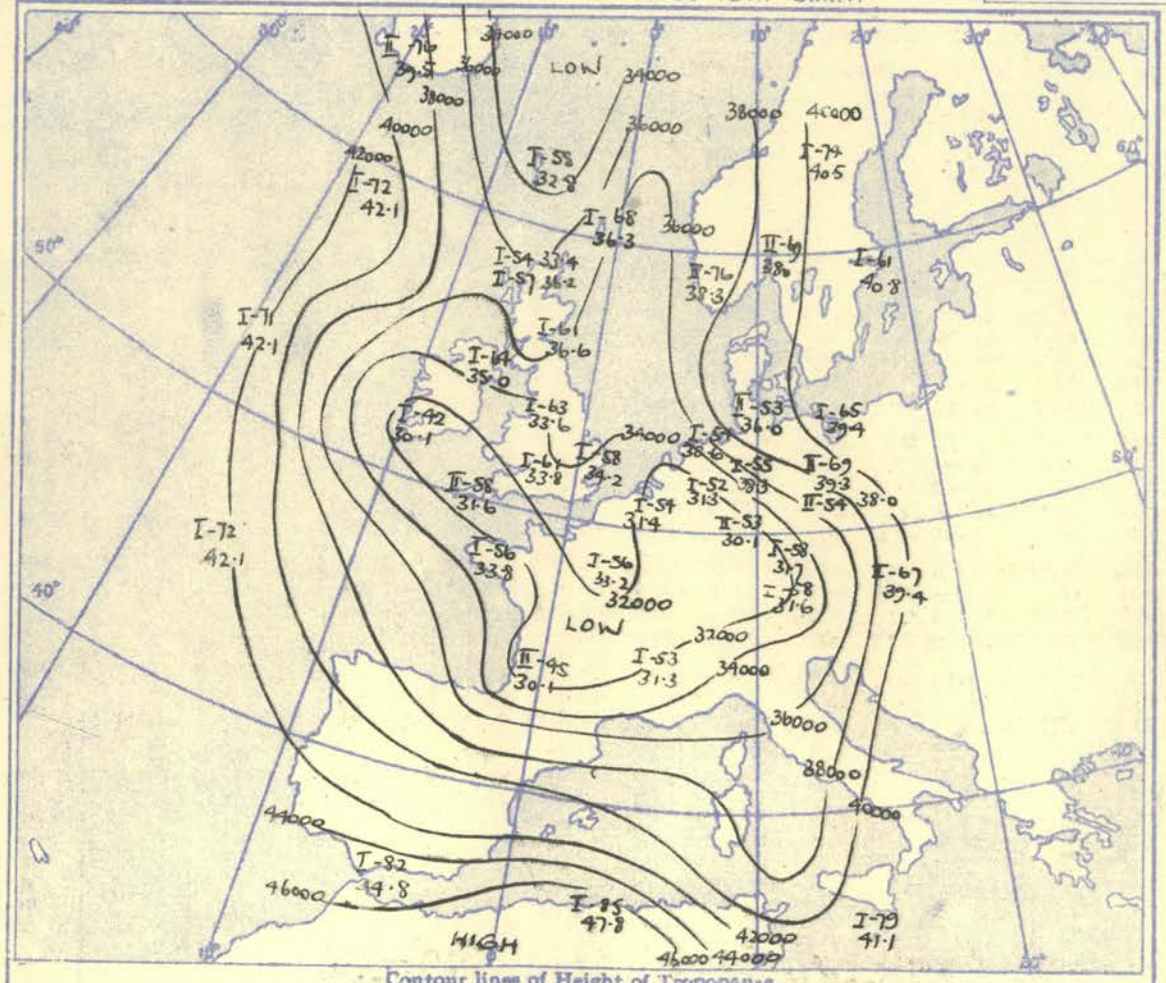
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N





The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

The cold pool to southwest of British Isles increased in area without moving appreciably. The warm ridge in mid-Atlantic continued to move eastwards.

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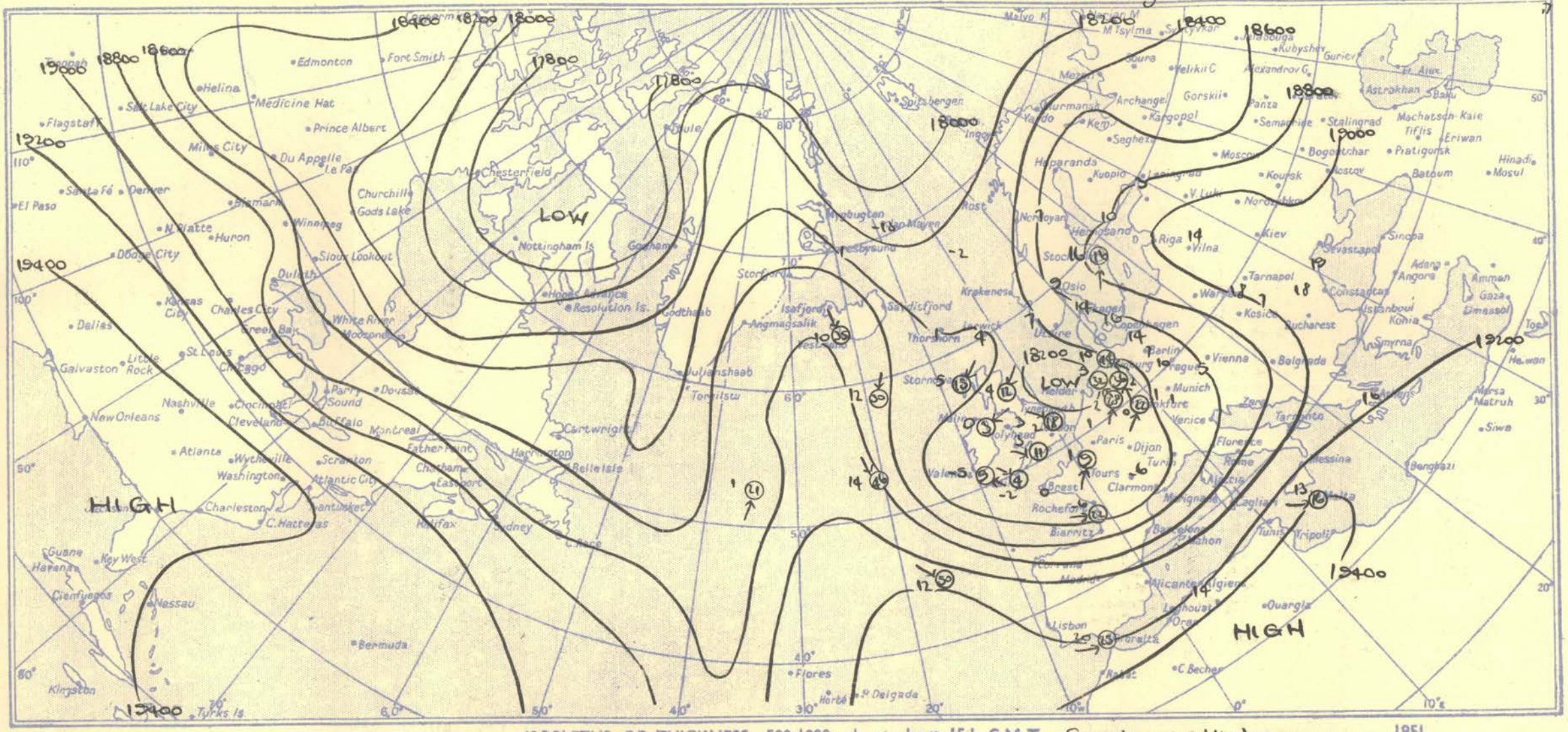
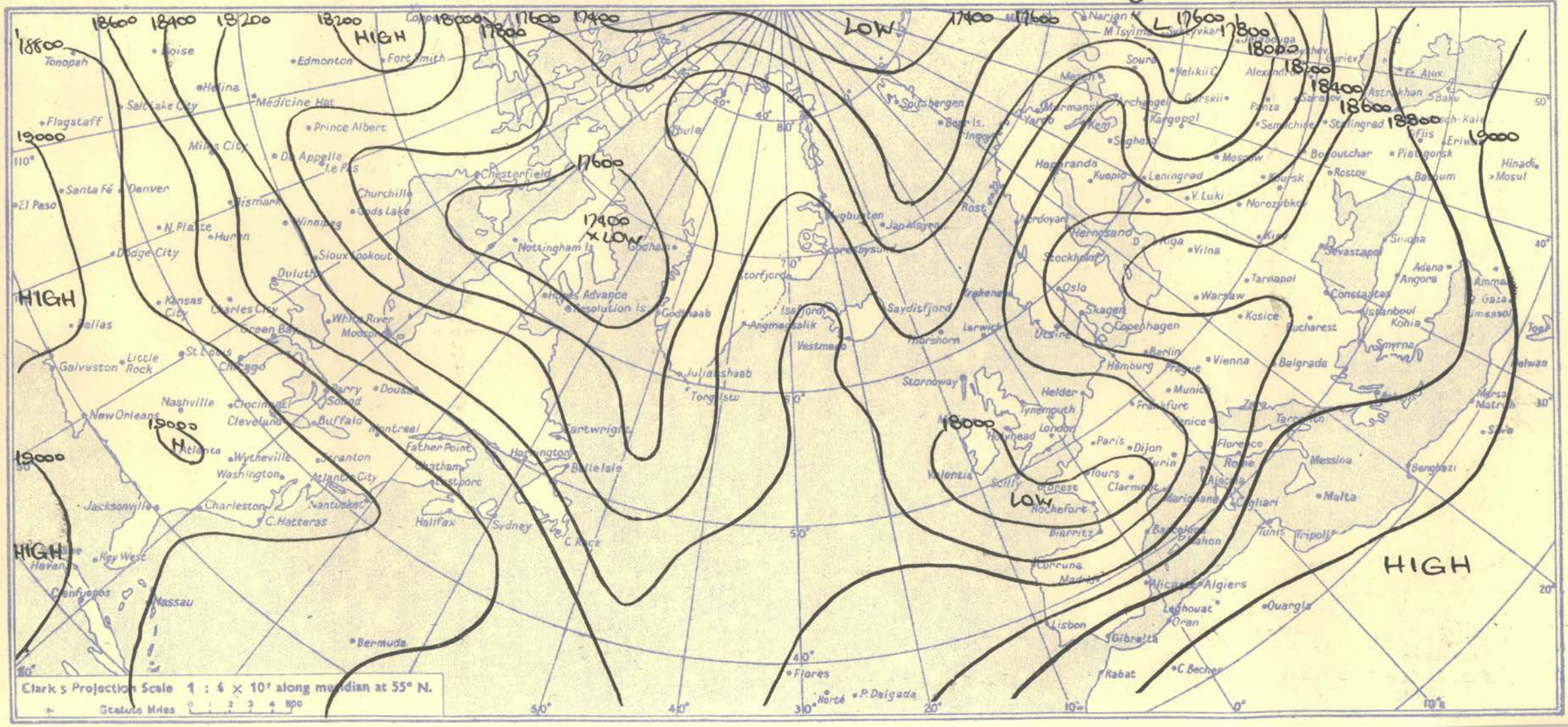
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Sunday 24TH June 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Sunday 24TH June 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Sunday 24th. June 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15h. G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Pressure: Time	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.
Pressure: M.S.L.	1010.2 mb	1012.4 mb	1008.6 mb	1010.4 mb	1008.3 mb	1006.3 mb	1008.0 mb	1011.6 mb	1014 mb
Pressure: Surf	1000.2 mb	1011.8 mb	1007.8 mb	1001.0 mb	1006.3 mb	1002.0 mb	992.5 mb	1001.2 mb	1012 mb
Pressure: Freezing	721 mb	724 mb	715 mb	770 mb	768 mb	772 mb	740 mb	778 mb	775 mb

Pressure mb	Lerwick Height ft./100	Lerwick Temp. °F.	Lerwick Dew °F.	Lerwick Wind Dir. °	Lerwick Wind Vel. knots	Stornoway Height ft./100	Stornoway Temp. °F.	Stornoway Dew °F.	Stornoway Wind Dir. °	Stornoway Wind Vel. knots	Leuchars Height ft./100	Leuchars Temp. °F.	Leuchars Dew °F.	Leuchars Wind Dir. °	Leuchars Wind Vel. knots	Aldergrove Height ft./100	Aldergrove Temp. °F.	Aldergrove Dew °F.	Aldergrove Wind Dir. °	Aldergrove Wind Vel. knots	Liverpool Height ft./100	Liverpool Temp. °F.	Liverpool Dew °F.	Liverpool Wind Dir. °	Liverpool Wind Vel. knots	Downham Market Height ft./100	Downham Market Temp. °F.	Downham Market Dew °F.	Downham Market Wind Dir. °	Downham Market Wind Vel. knots	Larkhill Height ft./100	Larkhill Temp. °F.	Larkhill Dew °F.	Larkhill Wind Dir. °	Larkhill Wind Vel. knots	Camborne Height ft./100	Camborne Temp. °F.	Camborne Dew °F.	Camborne Wind Dir. °	Camborne Wind Vel. knots	Valentia Height ft./100	Valentia Temp. °F.	Valentia Dew °F.	Valentia Wind Dir. °	Valentia Wind Vel. knots	Pressure mb
Surf	02.7	51	46			00.4	56	45	030	12	00.2	58	46	060	08	02.6	63	52	340	10	00.6	61	50			01.2	63	48	360	10	04.4	65	52	290	05	02.9	59	55	330	10	00.3	59	51	340	12	Surf
1000	02.7	51	46			03.7	53	42			02.3	56	44			02.9					02.3					01.8					02.2					03.2	52	55			03.8	57	50	339	12	1000
950		49	41				45	38	019	15		48	39	351	10		53	45	038	15		50	43				55	41	317	16		58	45	298	07		51	48	326	08		51	47	340	11	950
900	31.3	47	35			32.2	45	34	018	16	31.0	43	36	353	15	31.8	45	41	350	14	31.1	45	38			30.8	48	07	289	19	31.4	50	44	303	07	32.1	46	40	329	07	32.7	44	42	350	07	900
850		45	31				42	18	020	15		38	27	009	21		42	35	014	07		40	27				41	33	283	22		44	39	326	11		41	35	329	06		38	36	339	04	850
800	63.1	42	27				37	10	020	13	62.3	33	24	002	17	63.4	36	29	359	09	62.6	35	23			62.3	35	27	279	25	63.2	39	28	322	13	63.6	35	28	301	04	64.1	34	30	331	04	800
750		36	26				35	03	021	13		32	29	017	10		30	21	344	12		30	19				29	21	283	26		33	29	299	11		29	25	268	04		29	26	340	05	750
700	98.3	30	25			98.9	29	-04	020	14	97.4	30	26	034	12	98.2	23	14	354	13	97.6	25	05			97.3	29	14	292	19	98.4	29	22	292	16	98.5	24	20	246	05	99.0	23	19	299	03	700
650		28	09				24	-11	033	14		24	16	043	08		17	05	016	09		20	03				23	12	306	15		21	16	285	16		19	14	246	03		17	13	184	03	650
600		20	13			138.6	18	-16	055	16	137.2	18	11	065	10	137.4	10	-03	018	07	137.0	17	-13			137.1	19	-09	303	20	137.9	15	11	263	13	138.0	14	10	293	04	138.2	10	-04	143	05	600
550		12	06				12	-19	038	15		11	00	038	13		07	-13	007	06		09	-08				11	-10	299	18		10	02	251	13		07	-07	306	06		02	-10	106	05	550
500	184.2	04	-09			184.5	05	-15	050	15	183.0	04	-12	033	12	182.8	00	-21	051	08	182.7	03	-16			182.9	02	-17	319	18	183.6	03	-08	275	11	183.2	03	-05	281	04	183.2	-05	-16	117	09	500
450		-04	-14				-05	-19	071	10		-04	-22	014	11		-10	-29	113	08		-06	-28				-07	-17	335	15		-07	-21	297	06		-13	-20	186	04		-34	-29	170	14	450
400	238.2	-16	-28			238.6	-16	-29	076	08	237.0	-18	-35	012	09	236.3	-22	-40	122	14	236.6	-16	-44			236.7	-15	-23	350	13	287.5	-17	-31	291	05	236.4	-25	-33	169	10	236.0	-26	-42	119	20	400
350		-29	-40				-29	-45	067	08		-31	-47	L&V			-35	-52	122	18		-32	-56				-28	-37	028	06		-33	-45	126	03		-37	-43	165	20		-35	-55	120	14	350
300	304.2	-43				304.5	-44		037	12	302.8	-43		152	32	301.5	-47		127	34	302.2	-46				302.8	-43		056	07	303.0	-46		078	13	301.1	-51		154	20	301.2	-42		330	06	300
250		-61					-53		046	07		-55		149	30		-02		131	27		-61					-58		083	17		-60		117	07		-52		271	16		-38		317	19	250
200	391.2	-56				392.5	-51		095	04	390.6	-53		146	19	388.7	-55		102	11	389.7	-51				390.7	-49		129	14	390.8	-47		093	04	389.2	-49		303	17	(218mb)	-41				200
170		-52					-48		099	03		-48		125	08		-52		090	07		-50					-46		153	10		-46		173	02		-50		317	14						170
150		-50				455.6	-49		101	03	453.6	-49		120	10		CALM					-50				454.0	-48		136	10	454.2	-46		310	02		-52		315	11		Isothermal				150
130		-53					-46		103	04		-50		171	13		"					-51					-48		128	15		-47		077	06		-54		207	08		338 - 320 mb - 38°				130
110		-52					-45		108	04		-49		172	09		-52		090	08		-53					-48		136	16		-45		120	10		-54		242	07						110
100	541.8	-52				545.2	-43		102	03	542.4	-49		159	07	539.1	-54		112	12	540.7	-52				543.0	-50		140	12	543.5	-48		150	10	539.9	-53		116	05						100
90		-51					-43		108	05		-50		139	07		-55		123	07		-50					-52		140	07		-48		150	11		-55		110	04						90
80		-51					-43		110	07		-50		129	06		-54		127	05		-50					-52					-48		203	14		-53		111	05						80
70		-51					Inversion					-49					-53		124	07		-50					-52					-48		108	05		-54										70
60	(60mb)	-49					932mb 43° - 910mb 46°					Isothermal					-53		120	07	(73mb)	-50				654.2	-52				656.6	-50					Isothermal												60
		Inversion										795 - 715 mb 32°										Isothermal				Inversion					Inversion					738 - 719 mb 27°										
		950 mb 44° - 895 mb 48°																				630 - 592 mb 17°				743 mb 28° - 710 mb 30°					600 mb 15° - 589 mb 16°					676 - 655 mb 20°									
		700 mb 30° - 689 mb 31°																								Isothermal																		
		455 mb - 05° - 450 mb - 01°																								636 - 619 mb 21°																		
Tropopause	I 228 mb - 68° 36,300'					I 262 mb - 54° 33,400' I 230 mb - 57° 36,200'					I 225 mb - 61° 36,600'					I 239 mb - 64° 35,000'					I 257 mb - 63° 33,600'					I 250 mb - 58° 34,200'					I 255 mb - 61° 33,800'					II 278 mb - 58° 31,600'					I 300 mb - 42° 30,100'					Tropopause

21h. G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne		Station
Pressure: Time	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	G.M.T.	Time
Pressure: M.S.L.	1006.6 mb	1013.0 mb	1007.3 mb	1010.1 mb	1007.8 mb	1007.5 mb	1008.6 mb	1011.5 mb	mb	M.S.L.
Pressure: Surf	996.6 mb	1011.4 mb	1006.5 mb	1000.6 mb	1005.8 mb	1003.0 mb	992.8 mb	1000.9 mb	mb	Surf
Pressure: Freezing	710 mb	725 mb	784 mb	779 mb	760 mb	790 mb	771 mb	790 mb	mb	Freezing

Pressure mb	Lerwick Height ft./100	Lerwick Temp. °F.	Lerwick Dew °F.	Lerwick Wind Dir. °	Lerwick Wind Vel. knots	Stornoway Height ft./100	Stornoway Temp. °F.	Stornoway Dew °F.	Stornoway Wind Dir. °	Stornoway Wind Vel. knots	Leuchars Height ft./100	Leuchars Temp. °F.	Leuchars Dew °F.	Leuchars Wind Dir. °	Leuchars Wind Vel. knots	Aldergrove Height ft./100	Aldergrove Temp. °F.	Aldergrove Dew °F.	Aldergrove Wind Dir. °	Aldergrove Wind Vel. knots	Liverpool Height ft./100	Liverpool Temp. °F.	Liverpool Dew °F.	Liverpool Wind Dir. °	Liverpool Wind Vel. knots	Downham Market Height ft./100	Downham Market Temp. °F.	Downham Market Dew °F.	Downham Market Wind Dir. °	Downham Market Wind Vel. knots	Larkhill Height ft./100	Larkhill Temp. °F.	Larkhill Dew °F.	Larkhill Wind Dir. °	Larkhill Wind Vel. knots	Camborne Height ft./100	Camborne Temp. °F.	Camborne Dew °F.	Camborne Wind Dir. °	Camborne Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02.7	48	45			00.4	52	45			00.2	55	40	040	04	02.6	56	49	330	15	00.6	56	51	320	08	01.2	51	48			04.4	67	51	CALM		02.9	55	53	320	08						Surf
1000	01.7					03.5	51	45			02.0	54	45			02.8					02.1					02.0					02.4					03.1	54	52								1000
950		43	39				45	40				49	40	341	13		49	42	340	27		53	47	302	18			47	39				56	47	313	10		48	47	322	13						950
900	30.1	44	36			32.0	39	35			30.6	44	36	350	15	31.6	45	38	344	26	31.0	47	39	315	19	30.6	44	39			31.4	49	44	327	10	31.8	45	41	333	12						900
850		43	23				36	26				40	30	356	17		40	34	336	22		41	37	315	18			40	33				43	36	335	11		40	32	343	08						850
800	61.8	41	10			63.2	38	13			62.2	35	26	354	21	63.0	34	28	331	21	62.5	35	31	316	22	62.1	33	32			63.1	36	31	338	13	63.3	34	28	349	06						800
750		36	08				34	21				30	24	358	19		30	14	334	18		31	03	314	24			29	28	For Winds			29	23	312	13		28	15	328	09						750
700	97.1	31	18			98.4	30	09			97.2	28	23	008	17	97.9	25	07	340	19	97.4	26	-10	317	23	97.0	25	22	See		98.0	21	17	282	14	97.9	20	10	353	07						700
650		24	18				25	-04				29	19	017	17		20	02	351	13		23	15	327	11			22	20	Page			16	11	272	13		14	09	029	10						650
600	136.9	18	10			138.3	20	-10			136.9	17	12	008	16	137.3	13	07	035	08	137.2	14	11	328	09	136.6	16	13	3		137.1	11	05	279	14	136.9	08	00	041	07						600
550		12	-04				13	-13				07	02	358	19		10	-08	004	01		10	03	323	10			08	03				05	-04	264	11		02	-08	L&V						550
500	182.7	04	-08			184.3	07	-22			182.7	04	-06	359	13	182.9	02	-12	018	06	183.0	04	-06	333	15	182.1	00	-04			182.2	-04	-14	271	05	181.7	-08	-11	168	05						500
450		-05	-14				-05	-23				-05	-23	004	12		-10	-20	029	09		-05	-14	001	10			-10	-17				-13	-24	307	03		-18	-23	141	11						450
400	236.8	-16	-26			238.5	-14	-28			236.8	-16	-43	047	07	236.4	-20	-34	040	07	237.0	-17	-26	011	12	235.5	-21	-28			235.3	-23	-34	005	08	234.3	-28	-34	126	20						400
350		-28					-27	-43				-28	-51	121	11		-32	-47	107	08		-31	-42	017	15			-32	40				-37	-46	027	07		-42		182	29						350
300	302.8	-44				304.7	-41				303.6	-44		131	13	301.7	-50		091	13	302.7	-45		071	12	300.9	-47				299.9	-53		055	10	298.5	-54		135	84						300
250		-60					-55				For continuation of						-69		092	19		-64		105	19			-65					-64		044	07		-55		292	09						250
200	389.5	-61				391.5	-64				Winds See Page 3					388.4	-52		096	13	390.0	-50		078	10	387.7	-55				386.9	-50		341	06	386.3	-50		315	17						200
170		-59					-52										-51		067	08		-48		078	10		-53					-51		086	02		-53		325	15						170
150	451.1	-56				453.4	-54				Inversion						-52		063	06		-52		117	09	450.1	-52				449.6	-53		143	03		-52		332	11						150
130		-55					-56				545 mb 6° - 515 mb 7°						-52		097	05		-48		139	07		-53					-53		174	05		-58		349	08						130
110		-57					-56										-55		095	05		-48		118	06							-55		096	08		-59		266	04						110
100	538.5	-56				541.8	-54				Isothermal					539.0	-50		098	08	542.0	-48							Inversion		587.4	-56		153	05	536.0	-57		263	03						100
90		-56					-54				772 - 740 mb 30°						-55					Inversion							700 mb 25° - 693 mb 26°		(92mb)	-56				-59									90
80		-64					-53									Isothermal					976 mb 53° - 962 mb 54°									Inversion					Isothermal									80
70		-52					-53									594 - 566 mb 12°					784 mb 33° - 773 mb 34°									993 mb 57° - 970 mb 58°					923 - 900 mb 45°									70
60	(63mb)	-51				657.8	-53														700 mb 26° - 682 mb 28°									Isothermal					779 - 755 mb 29°									60
		Inversion					Inversion																								628 - 613 mb 13°														
		942 mb 42° - 918 mb 44°					880 mb 37° - 863 mb 38°																																						
		Isothermal					843 mb 36° - 807 mb 38°																																						
		918 - 900 mb 44°					Isothermal																																					
		890 - 835 mb 43°					532 - 521 mb 10°																																					
		583 - 565 mb 15°																																										
Tropopause	II 236 mb - 65° 35,400'					II 225 mb - 58° 34,000' I 197 mb - 69° 38,400'					N.R.					I 245 mb - 71° 34,500'					I 243 mb - 66° 34,700'					I 245 mb - 66° 34,500'					II 264 mb - 64° 32,600'					II 283 mb - 59° 31,100'									Tropopause

HMSO Press, MO. Dunstable.

No. 11775 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Monday 25th June 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

03h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.
Pressure: M.S.L.	1002·7 mb	1010·0 mb	1005·4 mb	1010·6 mb	1007·2 mb	1007·5 mb	1009·0 mb	1011·4 mb	1015·5 mb
Pressure: Surf	992·7 mb	1008·4 mb	1004·6 mb	1000·8 mb	1005·2 mb	1002·9 mb	993·0 mb	1000·9 mb	1014 mb
Pressure: Freezing	742 mb	799 mb	751 mb	732 mb	782 mb	790 mb	776 mb	790 mb	740 mb

Pressure mb	LERWICK Height ft./100	LERWICK °F. Temp.	LERWICK °F. Dew	LERWICK Wind Dir. °	LERWICK Wind Vel. knots	STORNOWAY Height ft./100	STORNOWAY °F. Temp.	STORNOWAY °F. Dew	STORNOWAY Wind Dir. °	STORNOWAY Wind Vel. knots	LEUCHARS Height ft./100	LEUCHARS °F. Temp.	LEUCHARS °F. Dew	LEUCHARS Wind Dir. °	LEUCHARS Wind Vel. knots	ALDERGROVE Height ft./100	ALDERGROVE °F. Temp.	ALDERGROVE °F. Dew	ALDERGROVE Wind Dir. °	ALDERGROVE Wind Vel. knots	LIVERPOOL Height ft./100	LIVERPOOL °F. Temp.	LIVERPOOL °F. Dew	LIVERPOOL Wind Dir. °	LIVERPOOL Wind Vel. knots	DOWNHAM MARKET Height ft./100	DOWNHAM MARKET °F. Temp.	DOWNHAM MARKET °F. Dew	DOWNHAM MARKET Wind Dir. °	DOWNHAM MARKET Wind Vel. knots	LARKHILL Height ft./100	LARKHILL °F. Temp.	LARKHILL °F. Dew	LARKHILL Wind Dir. °	LARKHILL Wind Vel. knots	CAMBORNE Height ft./100	CAMBORNE °F. Temp.	CAMBORNE °F. Dew	CAMBORNE Wind Dir. °	CAMBORNE Wind Vel. knots	VALENTIA Height ft./100	VALENTIA °F. Temp.	VALENTIA °F. Dew	VALENTIA Wind Dir. °	VALENTIA Wind Vel. knots	Pressure mb
Surf	02·7	47	47			00·4	51	49	390	08	00·2	51	41	330	06	02·6	52	46	320	17	00·6	53	49	300	10	01·2	49	47	210	08	04·4	49	47	330	03	02·9	63	52	390	03	00·3	55	52	010	09	Surf
1000	00·7					02·9	51	50			01·4	50	41			02·8					02·0					02·0					02·4					03·1	53	52			02·2	54	50	007	11	1000
950		46	46				46	45	343	23		45	38	319	20		45	42	323	24		49	48	306	18		50	45	260	22		50	47	322	09		51	48	320	12		50	44	352	16	950
900	29·2	93	38			51·2	42	41	350	22	29·8	38	32	336	20	31·2	42	38	328	26	30·7	46	43	314	17	30·7	45	43	283	21	31·1	47	43	288	09	31·8	46	43	338	14	33·0	44	38	349	16	900
850		41	37				37	36	351	22		39	32	360	22		42	13	335	29		40	36	316	20		40	34	288	22		42	35	278	12		40	39	346	16		37	33	339	15	850
800	60·7	34	32			62·2	32	31	347	16	61·2	35	19	355	22	62·7	38	00	338	21	62·2	34	28	319	20	62·2	33	28	287	24	62·7	36	31	279	13	63·3	33	39	357	15	64·4	37	23	328	13	800
750		32	32				27	24	343	16		32	04	346	21		34	-07	337	21		28	25	319	22		30	-02	289	25		28	22	277	14		28	25	001	13		33	19	329	15	750
700	95·8	30	30			97·1	25	21	326	20	96·1	25	01	338	27	97·8	28	-16	335	20	97·2	29	17	320	22	97·1	26	19	285	20	97·6	26	09	275	14	98·2	23	18	006	10	99·6	27	12	345	18	700
650		25	25				20	13	305	18		26	18	336	24		21	-19	330	20		22	20	326	21		22	18	284	15		16	04	285	14		16	09	017	11		20	00			650
600	135·6	19	18			136·5	14	-14	395	15	135·8	17	11	328	18	137·4	18	-05	329	18	136·9	17	11	326	19	136·7	16	11	286	13	136·8	13	04	290	14	137·3	09	03	033	12	139·0	16	-10			600
550		12	11				08	-36	274	13		08	03	343	13		12	-04	326	13		10	00	329	18		07	01	278	10		07	-05	290	07		-02	-07	037	12		12	-24			550
500	181·5	04	02			182·0	00	-44	255	17	181·3	01	-04	355	15	183·2	03	-11	344	22	182·5	04	-10	342	21	182·1	-02	-08	125	03	182·1	-02	-14	309	06	182·0	-05	-14	059	12	184·9	05	-32			500
450		-04	-07				-16	-58	246	25		-07	-16	333	10		-06	-20	315	16		-05	-17	349	22		-11	-21	343	06		-14	-27	336	09		-19	-24	073	17		-06	-40			450
400	235·6	-14	-18			235·8	-27	-39	228	30	235·0	-19	-29	030	08	237·2	-18	-33	344	22	236·5	-18	-28	349	22	235·4	-21	-32	318	08	235·2	-23	-38	346	12	235·0	-25	-35	080	26	238·8	-18	-60			400
350		-25	-29				-39	-59	207	25		-29	-34	014	06		-31	-47	332	21		-31	-41	353	22		-34	-43	359	15		-35	-45	022	15		-38	-47	094	29		-31				350
300	302·3	-37	-42			302·1	-47		200	30	300·8	-45		325	11	302·8	-48		343	30	302·1	-46		004	15	300·6	-49		358	18	300·2	-51		041	16	299·6	-52		084	35	304·4	-44				300
250		-42					-48		239	17		-61		317	14		-59		350	35		-64		349	14		-66		003	16		-68		055	16		-65		072	16		-59				250
200	392·6	-43				391·3	-51		271	13						389·5	-65		004	24	388·9	-55		045	10	387·4	-62		062	05	386·7	-54		009	07	386·8	-50		345	15	391·8	-57				200
170		-43					-50		300	10							-56		346	11		-53		070	05		-52		037	03		-51		333	07		-53		319	15		-54				170
150		-42					-50		340	10							-53		005	13		-53		033	06		-52		027	06		-52		343	07		-56		326	15		-56				150
130							-55		014	06							-55		040	09		-53		070	09							-54		041	05		-55		341	13		-57				130
110							-55		050	05							-57		090	05		-55		120	10							-56		100	06		-57		355	07		-57				110
100						542·1	-55		116	03						538·6	-58		094	05	538·9	-57		121	08							-55		104	06	536·5	-56		L and V		541·2	-57				100
90																	-58		095	05		-58		122	07							-58		110	06		-58		"			-57				90
80																	-58		098	05		-59		110	07							-59		097	06		-60								80
70																	-58		100	10		-59		063	07							-60				(78 mb)	-60								70
60																						-59																							60
	Inversion 961 mb 45° - 936 mb 46° Isothermal 785 - 792 mb 32° 730 - 710 " 31°					Inversion 730 mb 24° - 712 mb 26°					Inversion 900 mb 38° - 865 mb 40° 705 " 25° - 690 " 27° 661 " 23° - 650 " 25°					Inversion 922 mb 91° - 871 mb 44°					Inversion 953 mb 48° - 940 mb 50° 745 " 27° - 720 " 30° Isothermal 565 - 550 mb 10°					Inversion 1003 mb 49° - 978 mb 53° 768 " 29° - 741 " 31° Isothermal 940 - 924 mb 49° 875 - 865 " 42°					Inversion 993 mb 49° - 972 mb 52° 641 " 15° - 630 " 16° Isothermal 950 - 926 mb 50° 700 - 675 " 20°					Inversion 538 mb -05° - 521 mb 01°					Isothermal 850 - 779 mb 37° 550 - 531 " 12°				
Tropopause	I 276 mb -43° 32,100'	II 304 mb -39° 29,800' I 224 " -52° 36,600'	II 245 mb -63° 31,500'	I 255 mb -60° 33,700' I 234 " -62° 35,600' I 200 " -65° 38,950'	I 238 mb -69° 35,100'	I 245 mb -68° 34,900'	I 250 mb -68° 33,900'	I 242 mb -66° 34,500'	I 243 mb -61° 35,200'	Tropopause

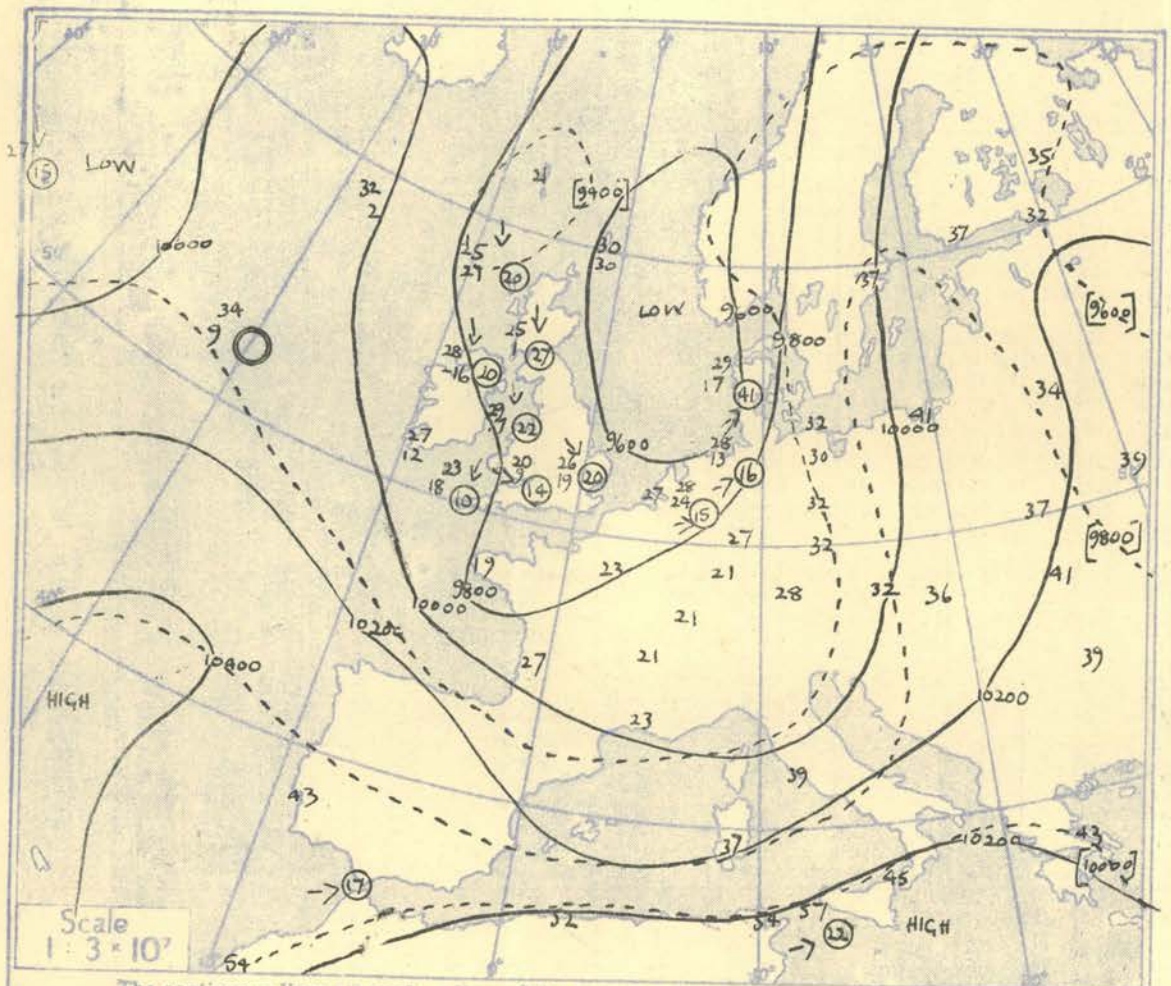
09h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	G.M.T.
Pressure: M.S.L.	1000·1 mb	1003·7 mb	1004·0 mb	1009·7 mb	1008·1 mb	1007·4 mb	1010·0 mb	1013·4 mb	mb
Pressure: Surf	990·1 mb	1007·1 mb	1003·2 mb	1000·2 mb	1006·1 mb	1003·1 mb	994·9 mb	1002·9 mb	mb
Pressure: Freezing	700 mb	832 mb	806 mb	818 mb	724 mb	780 mb	780 mb	789 mb	mb

Pressure mb	LERWICK Height ft./100	LERWICK °F. Temp.	LERWICK °F. Dew	LERWICK Wind Dir. °	LERWICK Wind Vel. knots	STORNOWAY Height ft./100	STORNOWAY °F. Temp.	STORNOWAY °F. Dew	STORNOWAY Wind Dir. °	STORNOWAY Wind Vel. knots	LEUCHARS Height ft./100	LEUCHARS °F. Temp.	LEUCHARS °F. Dew	LEUCHARS Wind Dir. °	LEUCHARS Wind Vel. knots	ALDERGROVE Height ft./100	ALDERGROVE °F. Temp.	ALDERGROVE °F. Dew	ALDERGROVE Wind Dir. °	ALDERGROVE Wind Vel. knots	LIVERPOOL Height ft./100	LIVERPOOL °F. Temp.	LIVERPOOL °F. Dew	LIVERPOOL Wind Dir. °	LIVERPOOL Wind Vel. knots	DOWNHAM MARKET Height ft./100	DOWNHAM MARKET °F. Temp.	DOWNHAM MARKET °F. Dew	DOWNHAM MARKET Wind Dir. °	DOWNHAM MARKET Wind Vel. knots	LARKHILL Height ft./100	LARKHILL °F. Temp.	LARKHILL °F. Dew	LARKHILL Wind Dir. °	LARKHILL Wind Vel. knots	CAMBORNE Height ft./100	CAMBORNE °F. Temp.	CAMBORNE °F. Dew	CAMBORNE Wind Dir. °	CAMBORNE Wind Vel. knots	VALENTIA Height ft./100	VALENTIA °F. Temp.	VALENTIA °F. Dew	VALENTIA Wind Dir. °	VALENTIA Wind Vel. knots	Pressure mb
Surf	02·7	49	49			00·4	49	45	350	15	00·2	59	44	280	08	02·6	55	47	335	15	00·6	53	45	285	15	01·2	56	49	240	10	04·4	59	49	310	07	02·9	57	54	343	10						Surf
1000	00·0					02·3	48	44			01·1	57	53			02·6					02·2	52	44			02·1	55	48			02·8					03·7	56	53								1000
950		45	45				42	38	351	25		49	37	318	16		47	40	329	21		45	39	294	21		49	45	275	16		52	43	320	12		49	48	341	15						950
900	28·5	41	41			30·6	37	33	357	18	29·8	42	35	335	19	31·2	41	36	326	25	30·7	38	34	295	24	30·7	47	43	273	16	31·7	47	33	312	14	32·4	45	42	327	19						900
850		37	36				33	29	007	14		35	31	350	24		36	28	322	27		38	21	299	25		41	35	279	18		43	33	307	13		39	35	324	21						850
800	59·8	35	33			61·7	30	17	010	11	61·1	31	28	346	22	62·4	29	24	314	27	62·0	38	14	310	27	62·3	35	29	284	19	63·3	35	25	299	12	63·9	34	28	321	22						800
750		34	34				23	12	336	10		27	17	313	18		28	14	308	28		35	05	318	25		28	25	283	20		29	17	293	14		29	22	318	18						750
700	95·0	32	28			96·0	16	10	342	10	95·7	21	14	306	19	97·2	25	02	306	28	97·2	24	-01	319	24	97·3	29	19	288	20	98·1	23	12	287	15	98·8	27	10	301	15						700
650		25	20				12	-25	031	12		17	00	305	24		17	-04	300	30		25	-07	305	23		23	20	281	17		18	05	296	13		21	00	305	12						650
600	135·1	21	11			134·8	05	-28	057	10	134·9	13	02	297	22	136·4	10	-14	290	33	137·0	19	05	288	24	137·1	16	11	267	14	137·4	17	-09	311	12	138·3	14	-06	326	15						600
550		12	01				-02	-26	082	11		07	-08	272	17		02	-19	292	37		11	03	297	20		08	03	263	13		09	-12	327	14		11	-10	342	21						550
500	180·9	03	-11			179·3	-10	-38	103	13	180·2	00	-15	236	22	181·5	02	-31	296	44	182·7	01	-06	302	21	182·6	01	-07	263	10	182·9	00	-20	312	14	184·0	04	-23	351	24						500
450		-05	-25				-16	-57	109	21		-09	-27	232	19		-07	-36	306	52		-06	-16	301	27		-06	-13	291	15		-09	-20	338	19		-06	-35	363	30						450
400	234·9	-18	-33			232·1	-23	-56	115	40	233·8	-19	-38	218	15	235·5	-18	-45	305	59	236·6	-17	-30	307	33	236·4	-18	-25	297	17	236·6	-19	-34	348	23	238·0	-18	-49	358	29						400
350		-29	-41				-31	-58	120	48		-32	-52	202	16		-32	-56	310	63		-30	-42	316	29		-30	-38	319	13		-32	-95	357	23		-32	-56	011	30						350
300	300·7	-44				297·7	-40	-60	116	30	299·5	-92		218	17	300·9	-95		310	63	302·4	-95		333	27	302·2	-96		341	19	302·0	-97		360	21	303·5	-96		010	33						300
250		-52					-39	-59	045	13		-53		246	15		-68		315	51		-67		327	21		-60		345	21		-65		003	18		-63		014	32						250
200	389·3	-46				388·4	-43		013	15	388·3	-47		323	06	388·4	-54		313	26	390·4	-50		327	12	389·5	-50		017	06	388·7	-53		354	15	390·7	-53		348	28						200
170		-48					-47		351	06		-46		152	06							-47		075	06		-48		095	08		-51		351	11		-51		343	18						170
150	(160 mb)	-46					-48		063	06		-45		213	06							-43		131	07		-47		143	09		+99		048	07		-51		361	13						150
130							-47		090	05		-46		124	04							-44		142	10		-46		099	04		+52		129	06		-53		007	09						130
110							-50		058	04		-48		147	07							-47		047	12		-48		145	05		-52		085	05		-5[illegible]		352	05						110
100						540·8	-50		116	06	538·0	-50		135	06						543·4	-50		062	09	541·9	-49		103	05	539·9	-51		105	03	541·5	-51		350	05						100
90							-49		141	09		-52		150	06							-49		038	03		-51					-51		106	03	(793 mb)	-52									90
80							-47		073	07		-51		165	06							(84 mb) -48									-53		027	09											80
70												-50																			(72 mb) -54														70
60											(65 mb) -50																																			60
	Inversion 771 mb 31° - 737 mb 35° 635 " 23° - 625 " 29°					Isothermal 700 - 677 mb 16°					Isothermal 788 - 764 mb 29°					Inversion 760 mb 25° - 750 mb 28° 551 " 02° - 521 " 04°					Inversion 884 mb 36° - 865 mb 39° 812 " 37° - 800 " 38°					Inversion 733 mb 26° - 700 mb 29° 525 " 09° - 516 " 05° Isothermal 945 - 910 mb 48°					Inversion 623 mb 16° - 600 mb 17°					Inversion 761 mb 28° - 741 mb 30° Isothermal 840 - 830 mb 38°									
Tropopause	I 269 mb -56° 32,900'	I 291 mb -42° 30,900'	III 262 mb -52° 32,900'	I 253 mb -58° 33,700'	I 250 mb -57° 34,200'	I 255 mb -69° 33,700'	I 239 mb -69° 35,100'	I 240 mb -66° 35,200'		Tropopause

Monday 25th June 1951.

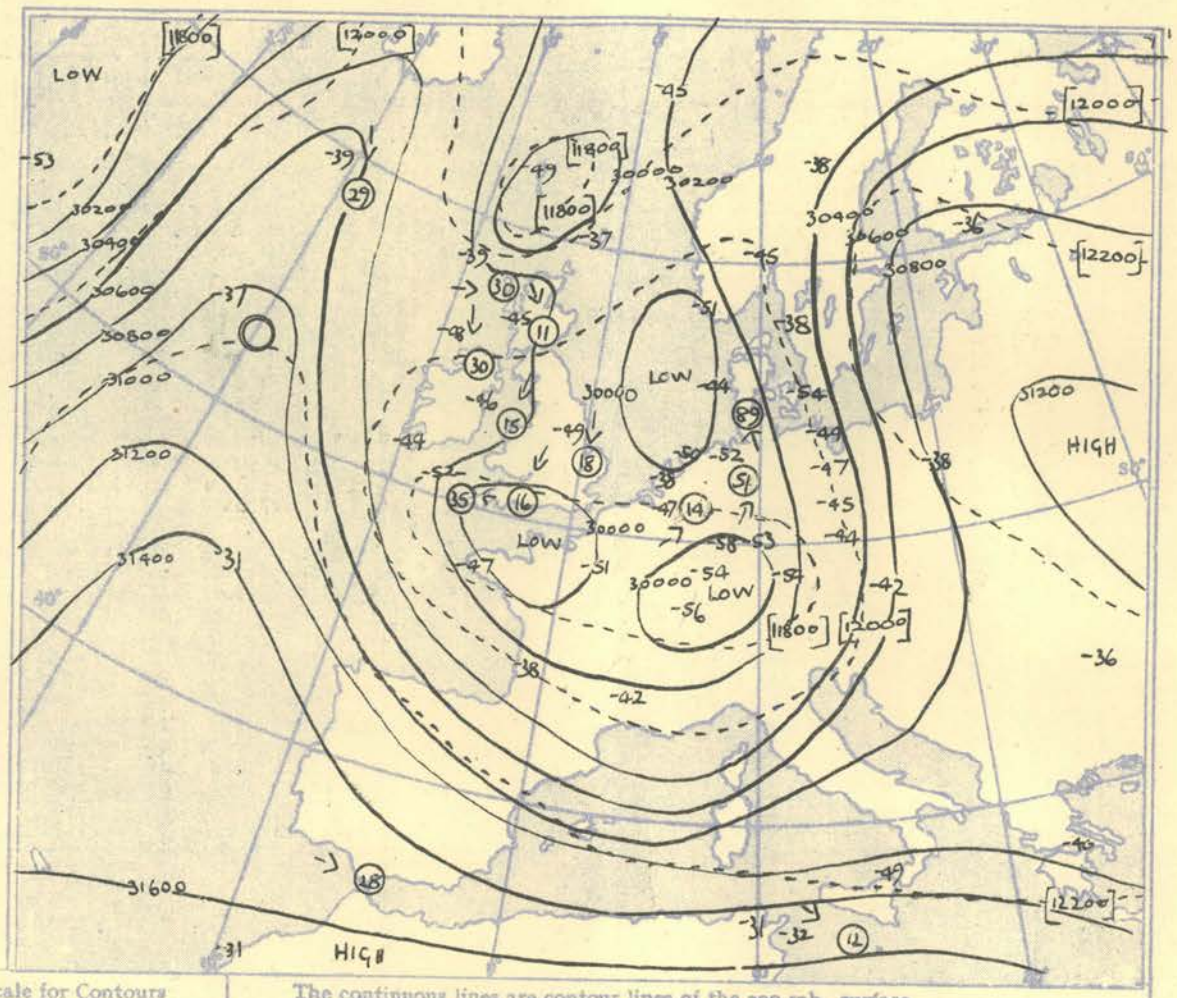
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.



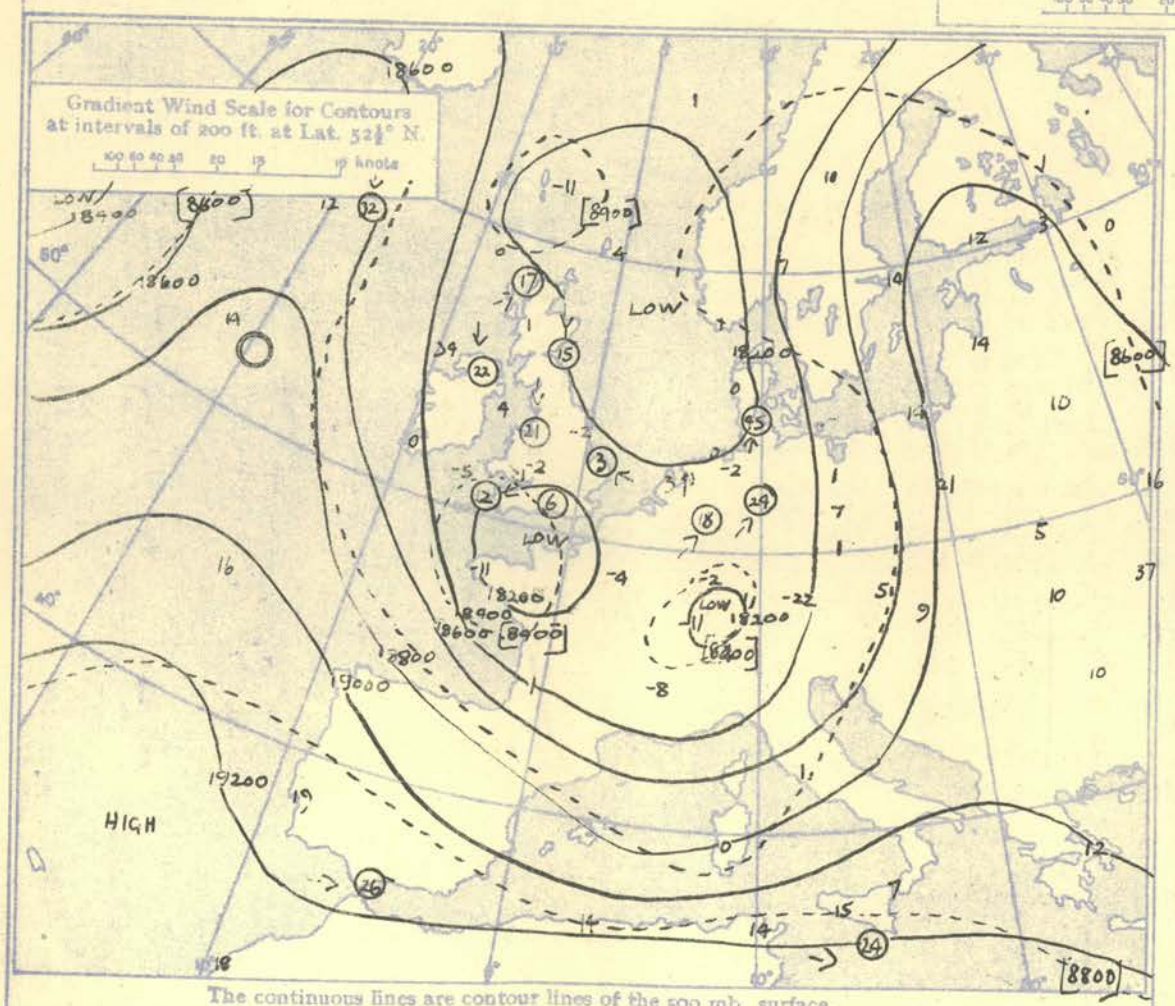
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

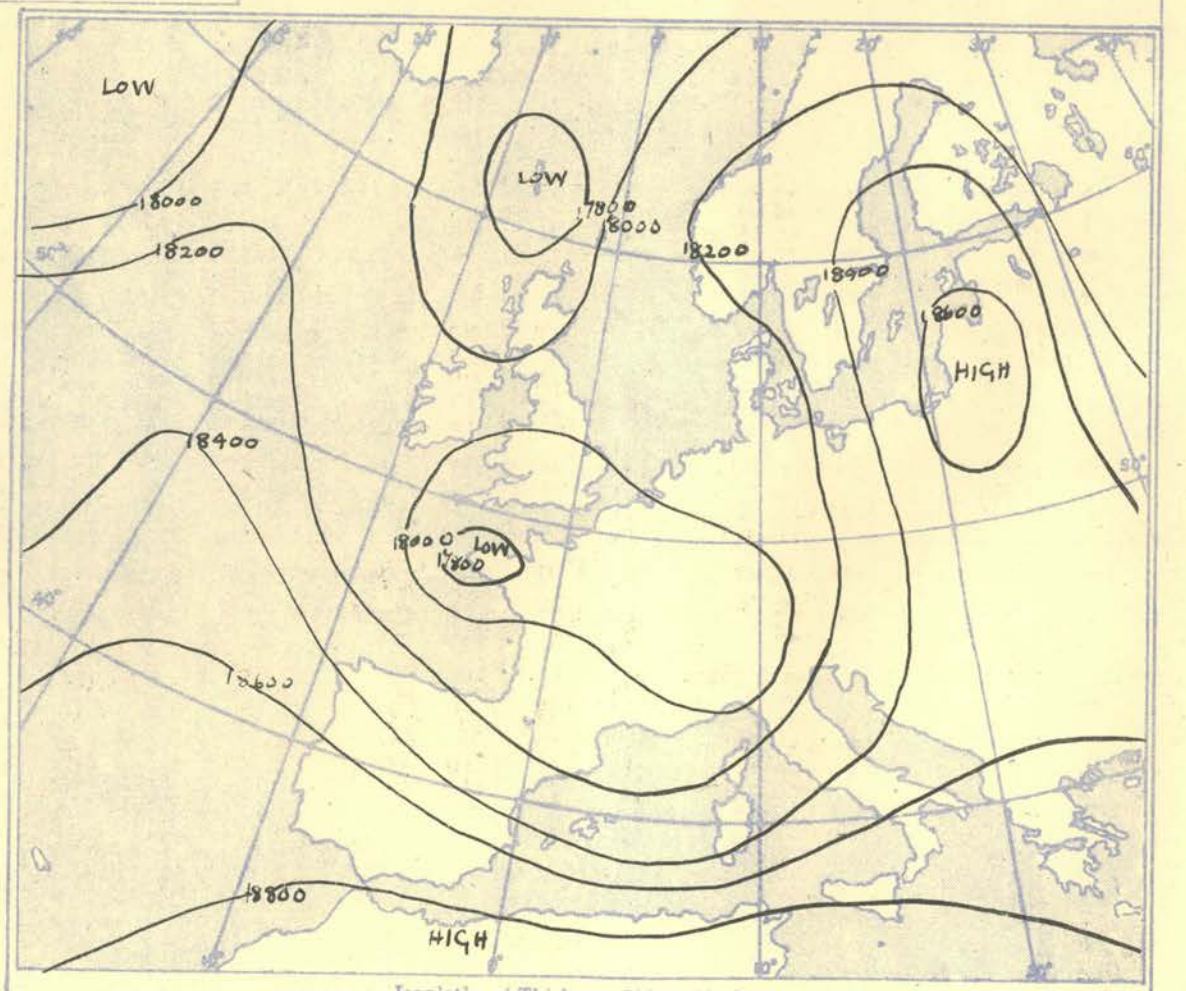
100 60 40 30 20 15 10 knots



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500-1000mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	48·1 N 17·0W.	47·7 N 12·3W.	52° 12'N 02° 12'W.																			
Pressure Time	12h.	13h.	1440h.																		Time M.S.L.	Pressure
Pressure M.S.L.	1022 mb	1022 mb	1009 mb	mb			mb			mb			mb			mb			mb			Surf
Pressure Surf	1010 mb	1018 mb	1007·5 mb	mb			mb			mb			mb			mb			mb			Freezing
Pressure Freezing	675 mb	675 mb	N/R.																			
Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Pressure mb
Surf		57	50		57	50	00·4																		Surf
1000	06·1	54		6·0	55	50	02·5																		1000
950		48	47		49	44																			950
900		46	46		43	38																			900
850		46	44		44	34	Flight																		850
800		44	37		42	06	abandoned																		800
750		40	24		39	08	through.																		750
700	102·4	36	12	102·0	35	01	Psychrometer																		700
650		28	20		29	23	failure																		650
600		23			22																				600
550		16			13																				550
500	188·8	06		188·2	03		Cloud.																		500
450	Cloud			Cloud			6/8 Sc																		450
400	5/8 Sc			3/8 Cu			890 - 770 mb																		400
350	940 - 910 mb			960 - 870 mb																					350
300	6/8 Cs above 900 mb			2/8 Sc 930 - 870 mb																					300
250	Isothermal			1/8 Cs 0604																					250
200	900 - 850 mb			300 mb.																					200
170	46°			Surface																					170
	Surface Wind Calm			Wind 7-10 kts N'ly Inversion 900 mb 43° 850 mb 44°																					

DIRECTION (degrees from N) and VELOCITY (knots) of UPPER WINDS at heights above M.S.L.

Place	Shoebury-ness		Lorkhill		W. Recorder 52·4N 19·9W		Comborne		Leuchars		Ronaldsway		Lorkhill		Cirrus 60·5N 20W		Lorkhill		Downham		Place
Time	09h.		11h.		15h.		15h.		15h.		1945h.		21h.		21h.		24h.		22½.		Time
Type																					Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Surf.	240	08	260	07					350	17	330	13	280	17	350	21	280	12	260	08	Surf.
1,000	270	13	270	13					310	26	320	40	276	24	340	19	290	19	290	15	1,000
2,000	270	13	280	12					311	16	310	37	280	27	340	20	300	22	290	17	2,000
3,000	270	19	280	12					310	22	310	33	286	29	350	19	300	25	290	17	3,000
4,000	280	21	280	13					313	23	310	30	290	25	350	27	310	27	280	17	4,000
5,000	280	22	270	14					317	22	324	29	287	26	350	23	310	29	280	18	5,000
6,000	270	24	260	17					318	20	310	32	287	26			310	32	270	18	6,000
8,000	270	23	270	19					308	20	330	33	287	25			300	29	270	20	8,000
10,000	270	23	290	19					305	21	(7,000')		285	28	010	23	270	27	250	25	10,000
14,000	270	15	310	09					135	08			271	45	010	23	290	41	240	33	14,000
18,000	270	13	300	09					150	03			264	52	030	27			240	33	18,000
24,000	330	13	(15,000')						267	27			268	77	010	24			230	40	24,000
30,000	350	21			230	30			289	29			275	93	020	32			250	29	30,000
40,000	360	05			230	25	337	40	275	15			303	29	(28,000')				280	12	40,000
50,000	140	10			260	12	326	11					320	16					360	04	50,000
	060	02			(42,000')		(49,000')						(43,000)						110	07	60,000
	(53,000')																		100	12	70,000
																			070	12	80,000
																			090	20	90,000

NEPHOSCOPE OBSERVATIONS

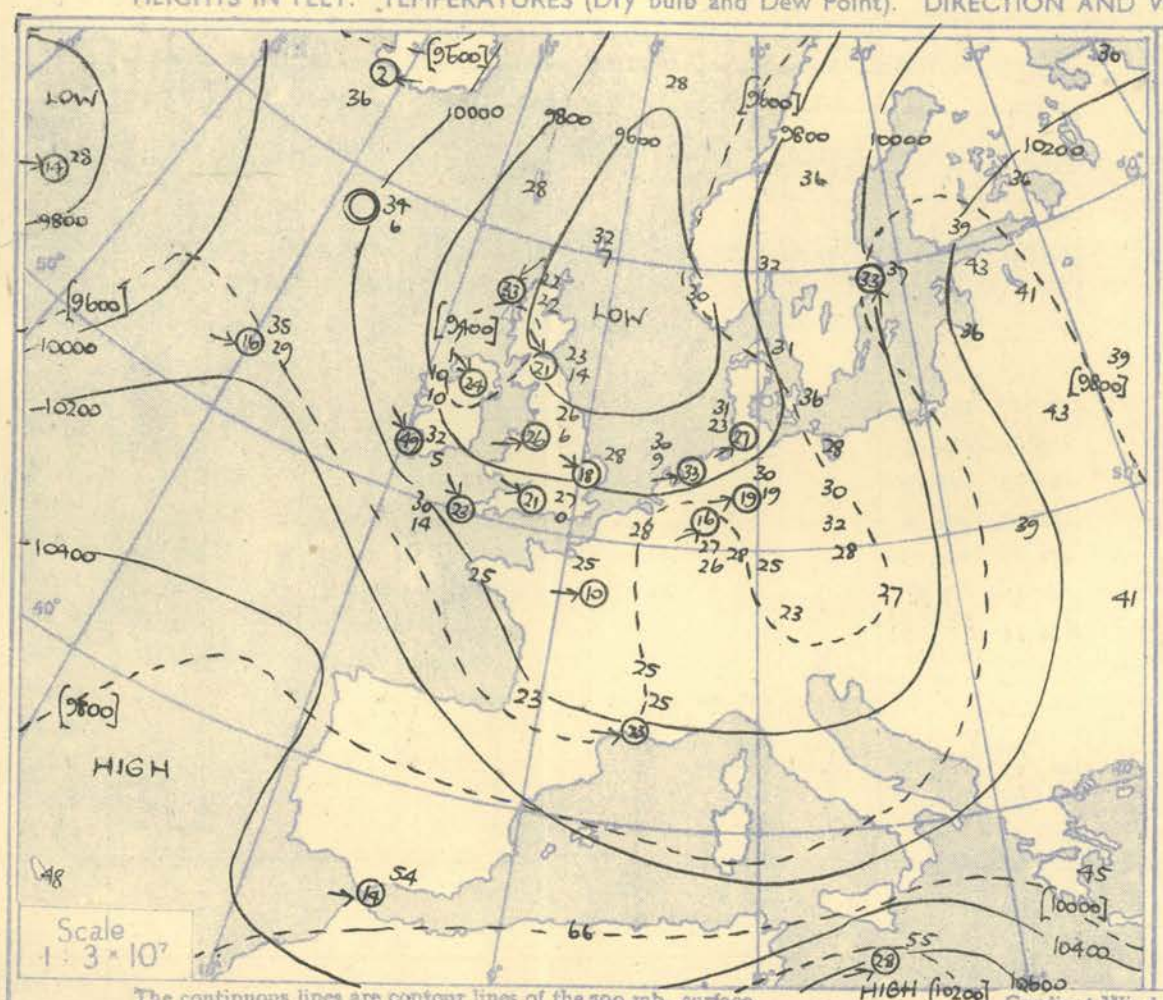
Place													Place
Time Type													Time Type
Dir. Vel.													Dir. Vel.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

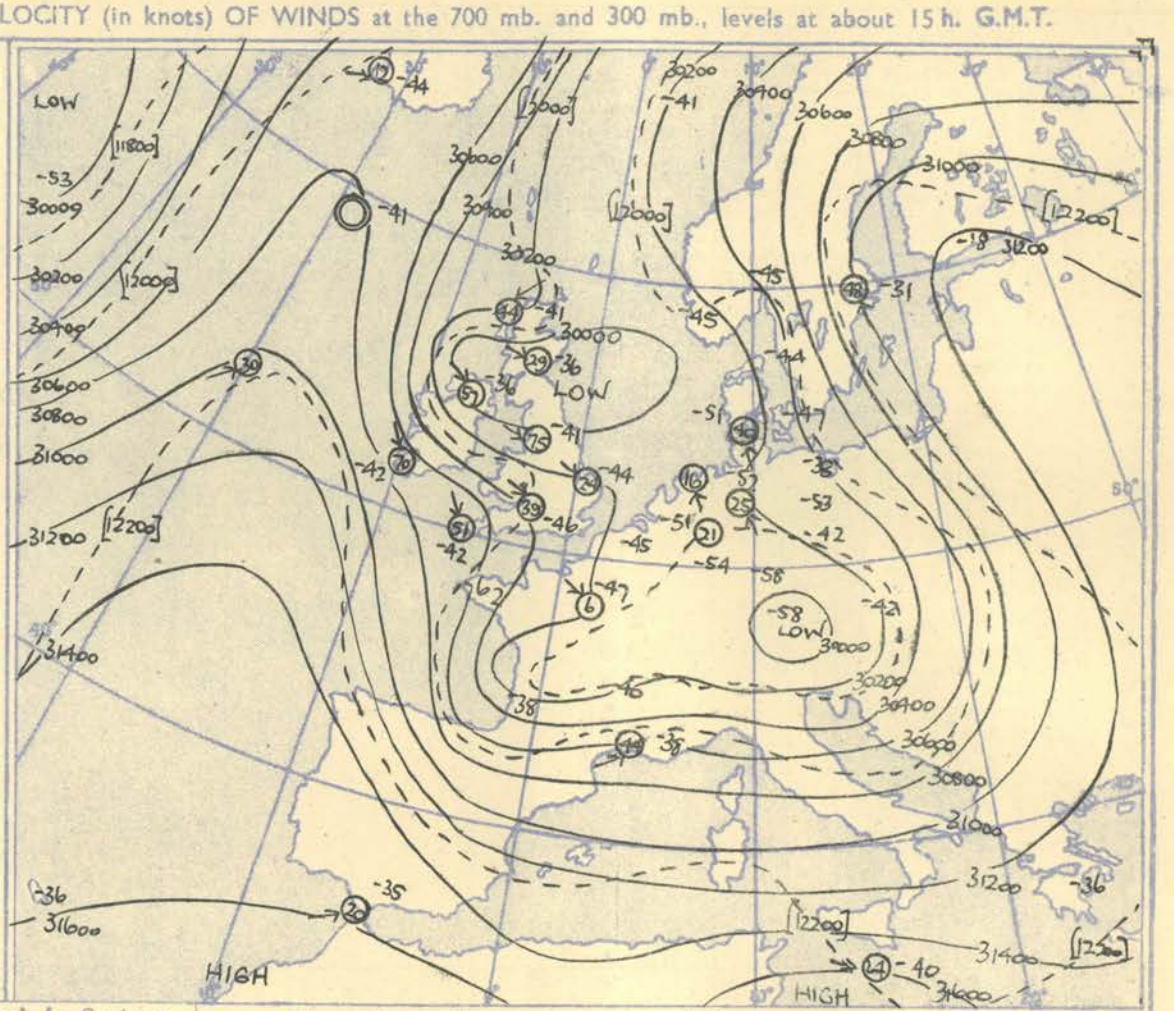
Ship	Weather Explorer			Weather Explorer			Weather Explorer			Weather Explorer			Weather Recorder			Weather Recorder			Weather Recorder			Weather Recorder						Ship
Lat/Long	59·1°N 18·6°W			59·1°N 19·4°W			59°N 19·5°W			59°N 19·5°W			52·8°N 20·3°W			52·5°N 20°W			52·4°N 19·9°W			52·5°N 19·8°W						Lat/Long
Pressure Time	03hrs G.M.T.			09hrs G.M.T.			15hrs G.M.T.			21hrs G.M.T.			03hrs G.M.T.			09hrs G.M.T.			15hrs G.M.T.			21hrs G.M.T.			G.M.T.			Time
Pressure M.S.L.	1020 mb			1020 mb			1021 mb			1021 mb			1021 mb			1020 mb			1020 mb			1018 mb			mb			M.S.L.
Pressure Surf	1020 mb			1020 mb			1021 mb			1021 mb			1021 mb			1020 mb			1020 mb			1018 mb			mb			Surf
Pressure Freezing	795, 710 mb			665 mb			680 mb			670 mb			650 mb			640 mb			675 mb			630 mb			mb			Freezing
Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	—	52	45	007	04	—	51	43	310	02	—	54	45	080	02	—	54	43	080	04	—	54	43	Calm		—	54	43	180	08		Surf
1000	5·3	49	42	015	05	5·6	50	42	—		5·8	50	44			5·6	52	44			5·7	52	48	"		5·5	54	43	180	06	1000
950		42	38	025	04		43	35	—			45	46				43	39	Balloon			47	43	"			48	43	187	08	950
900	33·7	40	32	018	06	33·9	37	29	—		34·1	37	33			34·1	39	36	above		34·8	46	36	"		34·1	42	38	200	07	900
850		39	31	017	05		38	26	—			37	32				37	30	maximum			44	29	"			47	27	245	12	850
800	65·2	33	24	—		65·2	35	23	—		65·4	35	28			65·5	39	01	Radar		65·9	42	19	"		65·9	44	11	254	18	800
750		32	12	—			37	-6	—			35	02				38	-12	Electron			37	15	"			42	27	265	15	750
700	100·4	32	02	—		100·6	36	-15	—		100·6	34	-6			100·9	35	-29	121	04	101·3	34	09	"		101·7	39	31	280	13	700
650		28	-8	—			30	-33	—			31	-10				30	-33	098	03		32	-5	"			33	23	278	13	650
600	140·5	27	-10	358	25	141·0	28	-23	—		140·9	26	-9			141·2	26	-19	057	09	141·7	27	-27	"		142·3	26	13	262	13	600
550		13	-11	358	28		22	-25	023	29		19	-11				18	-12	080	07		22	-20	"			21	01	245	13	550
500	187·1	12	-20	349	32	187·7	12	-34	003	27	187·4	11	-22			187·7	11	-22	083	06	188·5	14	-24	"		189·0	13	-17	240	12	500
450		01	-27	340	32		00	-40	358	29		-2	-31				-1	-28				01	-34	"			01	-25	232	12	450
400	241·3	12	-36	320	32	242·4	13	-49	330	18	242·0	13	-35			243·9	14	-37			243·5	11	-43	"		242·8	12	-29	231	16	400
350		-25	-47	346	30		-26	-58	330	16		-28	-54				-26	-51				-21	-50	"			-26	-33	224	15	350
300	308·5	35	-61	298	29	308·9	38	-58	327	17	308·2	41				308·7	41				310·5	27	-60	"		310·2	41		248	25	300
250		-53		334	33		-55		325	29		-57					-52					-52		"			-58		224	16	250
200						336·1	-74		320	26	335·0	-74				335·9	-72				338·1	-74		"		336·5	-79		208	13	200
170							-71		328	17		-69					-78					-73	301	13			-70		239	18	170
150							-62		343	10		-62					-61					-71	284	12			-65		238	12	150
130							-60		347	06	(143)	-60					-61					-65	268	03			-69				130
110							-58		345	05							-57					-66	312	06			(140)				110
100						342·9	-58		340	02						341·9	-58				340·9	-67	315	03							100
90							-55		calm													-64	050	01							90
80							-55															-60	107	02	Inversion						80
70							(65)															-62	105	03	900 mb 42° - 860 mb 48°						70
60																						-63	055	02							60
	Inversion 915 mb 39° - 878 mb 41° 780 mb 30° - 722 mb 33°					Inversion 900 mb 37° - 864 mb 39° 770 mb 35° - 740 mb 38° 644 mb 29° - 628 mb 31°					Inversion 888 mb 36° - 872 mb 41° 821 mb 33° - 775 mb 37° 750 mb 35° - 735 mb 36°					Inversion 870 mb 40° - 850 mb 38° 845 mb 36° - 807 mb 40° 800 mb 39° - 784 mb 40°					Inversion 875 mb 40° - 840 mb 46° 703 mb 33° - 690 mb 35°					Inversion 930 mb 45° - 920 mb 48° 900 mb 48° - 868 mb 49° 617 mb 24° - 600 mb 25°					Inversion 990 mb 50° - 962 mb 54°				
	Isothermal 705 - 695 mb 32 641 - 600 mb 27					Isothermal 665 - 638 mb 31					Isothermal 770 - 738 mb 38° 631 - 612 mb 28°					Isothermal 900 - 875 mb 40°					Isothermal 920 - 900 mb 48°					Isothermal 962 - 950 mb 54° 600 - 590 mb 21°				
				Inversion 815 - 770 mb 35° 740 - 715 mb 38° Isothermal 715 mb -79° 41100'					Inversion 665 - 638 mb 31° I 184 mb -77° 41200'					Inversion 845 mb 39° - 807 mb 40° Isothermal 770 - 738 mb 38° 631 - 612 mb 28° I 171 mb -81° 42800'					Inversion 875 mb 40° - 840 mb 46° 703 mb 33° - 690 mb 35° Isothermal 900 - 875 mb 40° I 180 mb - 84° 42000'					Inversion 900 mb 42° - 860 mb 48° II 200 mb -79° 39600'					Inversion 617 mb 24° - 600 mb 25° Isothermal 920 - 900 mb 48°					Isothermal 962 - 950 mb 54° 600 - 590 mb 21° I 215 mb -70° 38000'				
Tropopause	NR																														Tropopause

Monday 25th June 1951.

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 2000—700 mb.

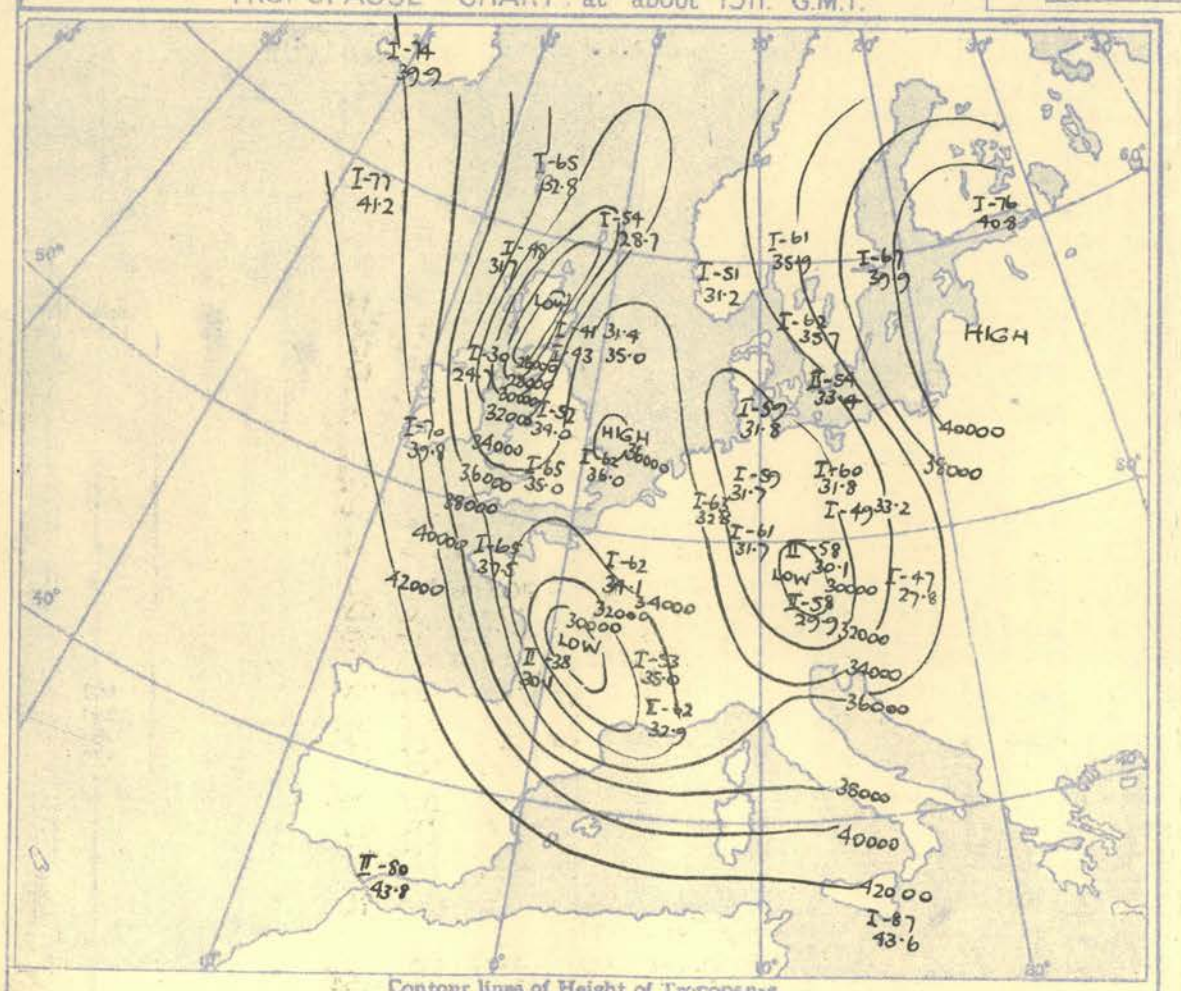


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N

100 80 40 30 20 15 10 knots

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

A further cold pool moved quickly southwards from near the Faroes to the Midlands whilst the original cold pool over France moved east and decreased in area. The Atlantic warm ridge intensified slightly and moved slowly eastwards.

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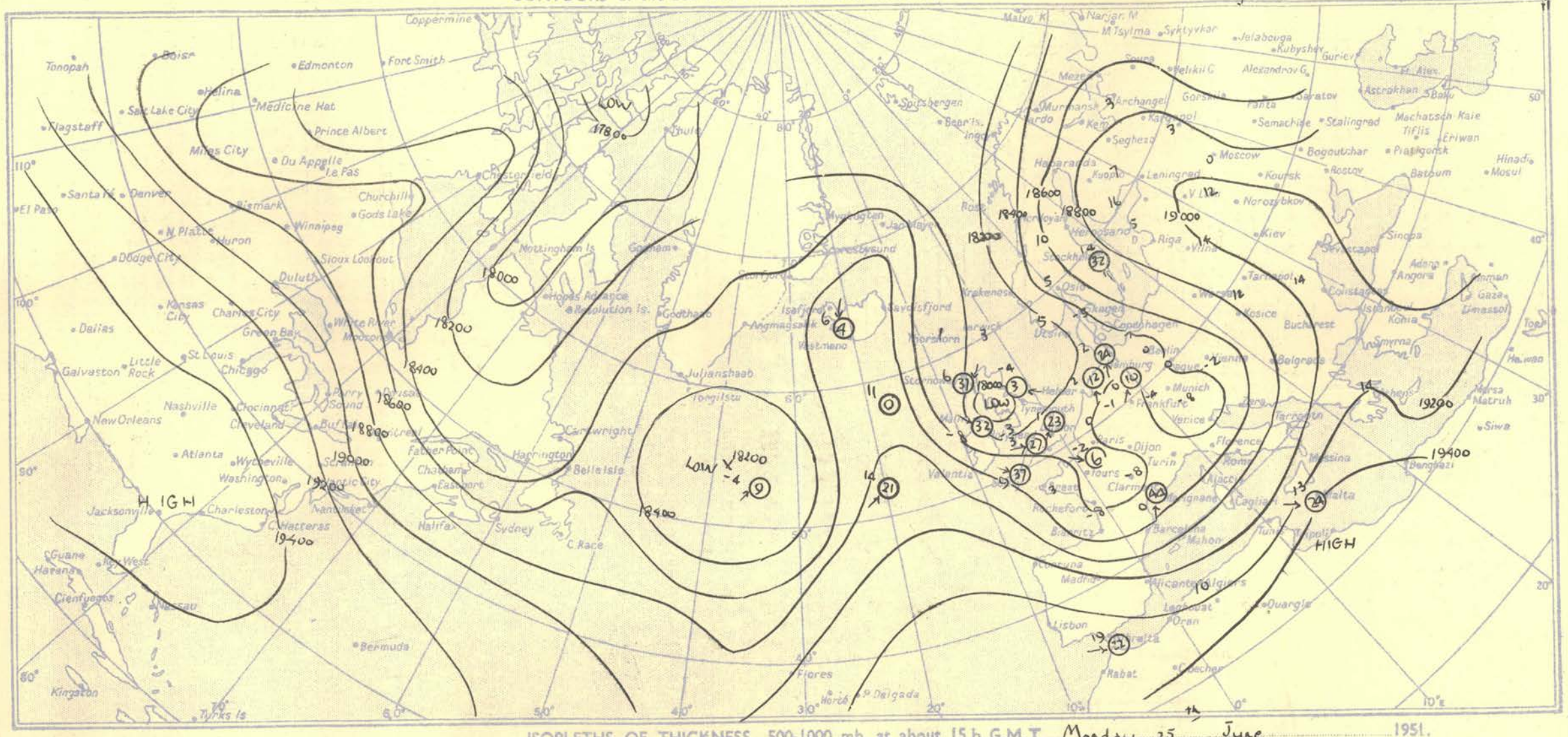
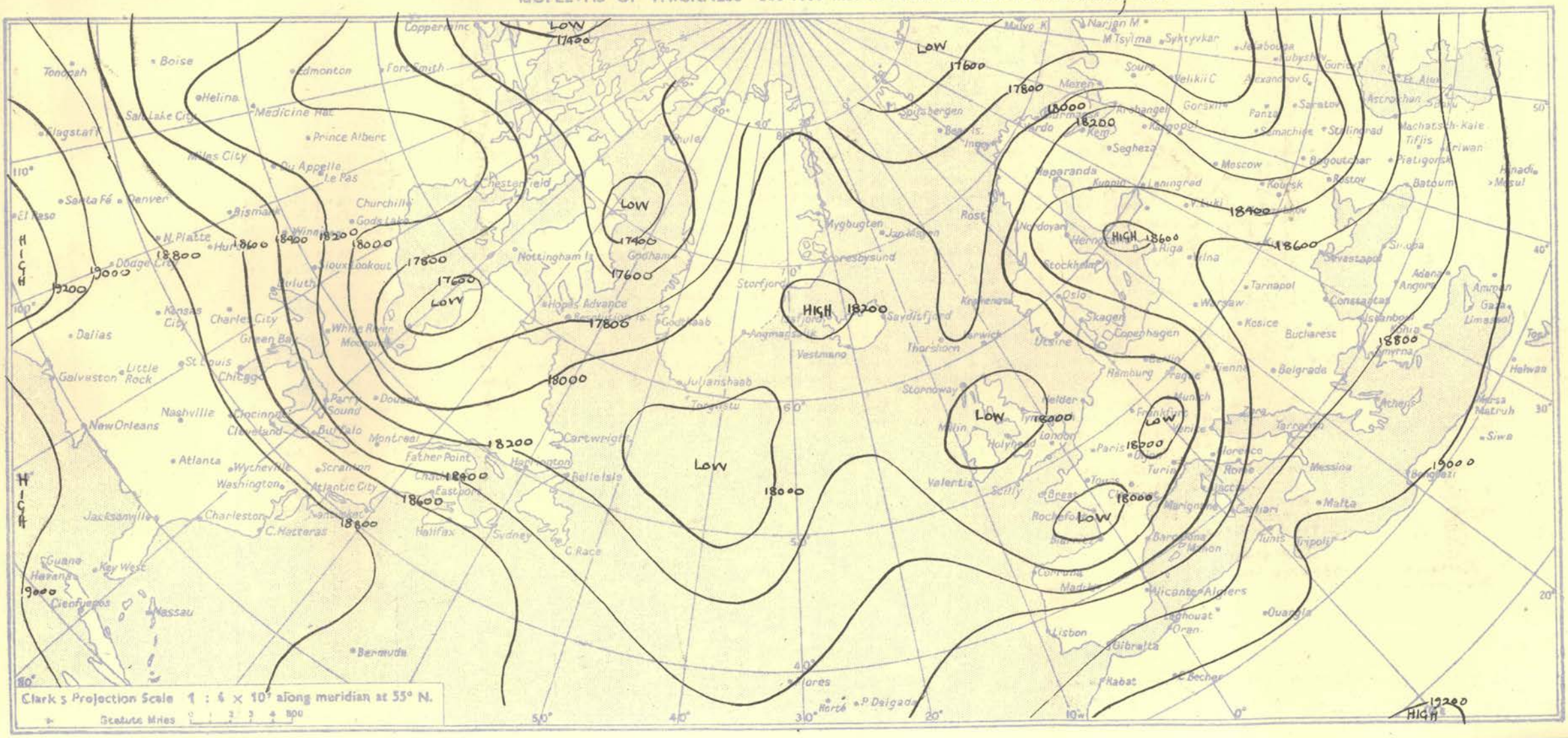
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Monday 25th June. 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Monday 25 June 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Monday 25th. June 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

LERWICK

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	999.6 mb	989.7 mb	693 mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	027	50	50		
1000	-01·6				
950		50	50		
900	28·5	44	44		
850		41	41		
800	60·0	36	36		
750		35	23		
700	95·4	32	07		
650		29	11		
600	135·3	18	01		
550		13	-33		
500	181·2	03	-37		
450		-08	-47		
400	234·9	-21	-52		
350		-36	-59		
300	299·8	-51			
250		-45			
200	389·0	-46			
170		-46			
150		-48			
130					
110		Inversion			
100	990 mb 50°	-963 mb 51°			
90					
80		Isothermal			
70	794 - 735 mb 35°				
60	715 - 693 mb 32°				
	612 - 585 mb 18°				
Tropopause	I 287 mb - 54° 30,900'				

STORNOWAY

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1008·7 mb	1007·1 mb	823 mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	004	50	46	330	15
1000	02·3	49	46		
950		44	44	335	30
900	30·7	38	38	345	28
850		35	35	357	29
800	61·9	30	30	001	27
750		27	27	007	28
700	96·6	22	22	011	33
650		17	16	013	34
600	135·4	13	10	020	28
550		12	07	035	36
500	181·8	06	-01	038	37
450		-03	-09	038	38
400	236·3	-13	-23	036	38
350		-26	-36	042	35
300	302·7	-41		049	44
250		-45		035	29
200	343·1	-46		027	14
170		-46		000	12
150	392·3	-46		017	09
130		-47		052	04
110		-50		126	06
100	544·9	-48		140	07
90		-48		141	06
80		-46		157	05
70		-45			
60					
Tropopause	I 279 mb - 48° 31,700'				

LEUCHARS

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1004·2 mb	1003·4 mb	mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	002	61	49	350	13
1000	01·1	60	44		
950		53	40		
900	30·0	45	33		
850		38	28		
800	61·4	33	23		
750		28	20		
700	96·1	23	14		
650		16	04		
600	135·2	10	01		
550		04	-06		
500	180·3	-04	-21		
450		-13	-41		
400	233·5	-21	-50		
350		-29	-56		
300	299·5	-36	-59		
250		-41			
200	390·3	-39			
170		-42			
150	454·4	-41			
130		-44			
110		-49			
100	549	-49			
90		-47			
80		-48			
70		-49			
60	656·3	-48			
		-46			
	745·6	-46			
	(306 mb)	-49			
	Inversion				
	576 mb 6° - 570 mb 7°				
	500 mb -4° - 494 mb -3°				
	437 mb -16° - 426 mb -15°				
Tropopause	I 278 mb - 41° 24,100' I 238 mb -48° 35,000'				

ALDERGROVE

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1010·8 mb	1001·3 mb	839 mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	026	53	44	320	15
1000	03·0				
950		45	37	328	22
900	31·5	40	33	330	24
850		33	29	320	20
800	62·5	28	25	304	25
750		24	18	301	26
700	96·9	18	10	293	24
650		10	01	295	29
600	135·8	02	-04	298	32
550		-06	-11	308	28
500	179·7	-08	-28	303	22
450		-17	-49	303	49
400	232·4	-25	-58	306	60
350		-31	-58	309	04
300	298·2	-34	-57	312	57
250		-39	-59	320	40
200	389·1	-44		320	23
170		-47		328	17
150		-50		322	10
130		-51		065	05
110		-51			
100	540·8	-52			
90		-53			
80					
70		Inversion			
60	525 mb -10°	-514 mb -6°			
Tropopause	II 375 mb - 30° 24,700'				

LIVERPOOL

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1008·9 mb	1006·9 mb	790 mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	006	60	47	280	15
1000	02·4	58	45		
950		49	39	293	25
900	31·2	43	33	301	28
850		37	26	300	19
800	62·5	30	23	295	23
750		27	15	280	25
700	97·4	26	06	264	26
650		20	-03	258	29
600	136·7	11	-13	262	32
550		03	-20	265	37
500	181·8	-03	-30	268	52
450		-09	-37	262	59
400	235·4	-18	-42	270	69
350		-30	-52	279	73
300	301·3	-41		282	75
250		-51		275	48
200	390·6	-44		265	18
170		-44		287	17
150		-45		090	01
130		-46		102	03
110		-45		093	04
100	544·1	-45			
90	(98 mb)	-45			
80					
70		Inversion			
60	740 mb 26°	-722 mb 28°			
		Isothermal			
	842 - 829 mb 36°				
	490 - 480 mb -04°				
Tropopause	I 252 mb - 52° 34,000'				

DOWNHAM MARKET

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1008·1 mb	1003·8 mb	760 mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F	Wind Dir. °	Wind Vel. knots
Surf	012	65	45	270	12
1000	02·3				
950		55	39	275	22
900	31·3	47	35	269	22
850		39	27	257	26
800	62·8	35		255	27
750		31		247	24
700	97·8	28		282	18
650		22		264	18
600	137·5	18		247	23
550		09		259	23
500	183·1	01		258	23
450		-05		271	25
400	237·1	-16		281	24
350		-32		291	27
300	302·8	-44		292	24
250		-58		297	24
200	390·3	-54		297	13
170		-49	CALM		
150	453·1	-45	"		
130		-47	"		
110		-50	"		
100	542·5	-52	"		
90		-50	099	06	
80		-51	137	06	
70		-52	118	03	
60					
		Isothermal			
	891 - 823 mb 38°				
	792 - 775 mb 34°				
	750 - 720 mb 31°				
	654 - 641 mb 22°				
Tropopause	I 232 mb -62° 36,000'				

LARKHILL

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1010·2 mb	994·8 mb	750 mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	014	63	49	280	17
1000	02·9				
950		55	45	287	23
900	31·9	47	41	277	23
850		41	33	278	17
800	63·5	35	22	273	16
750		32	07	271	20
700	98·5	27	00	278	21
650		22	01	268	14
600	138·1	15	06	263	14
550		13	-08	278	25
500	183·8	03	-19	282	27
450		-06	-24	304	27
400	237·7	-18	-36	317	32
350		-31	-49	318	35
300	303·3	-46		323	39
250		-62		319	40
200	390·0	-60		326	23
170		-53		307	13
150	452·0	-52		321	10
130		-52		337	07
110		-52		053	03
100	540·2	-53		124	04
90		-52		180	03
80		-55		110	05
70		-53		089	06
60	661·8	-52		077	05
		-51		102	10
	(458 mb)	-50			
	Isothermal				
	585 - 550 mb 13°				
Tropopause	I 242 mb -65° 35,000'				

CAMBORNE

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1015·6 mb	1005·2 mb	730 mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	029	60	54	290	15
1000	04·3	59	53		
950		50	45	297	21
900	33·1	45	38	308	20
850		39	33	306	23
800	64·6	40	26	293	26
750		34	22	297	23
700	99·9	30	14	303	23
650		25	09	312	25
600	139·7	19	-01	314	29
550		12	-12	314	37
500	185·8	09	-16	320	37
450		-01	-25	332	41
400	240·3	-13	-34	332	41
350		-28	-46	336	42
300	306·4	-42		340	51
250		-59			
200		For remainder of Winds See Page 3.			
170					
150		Inversion			
130	843 mb 38°	-815 mb 41°			
110					
100	539·4	-60			
90		-58			
80		-57			
70		-58			
60		-58			
		(56 mb) -54			
		Inversion			
	750 mb 37°	-803 mb 30°			
		Isothermal			
	611 - 600 mb 21°				
	553 - 550 mb 19°				
Tropopause	N.R.				

VALENTIA

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1018·2 mb	1016 mb	825 & 700 mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	003	58	50	340	10
1000	04·9	56	48	331	13
950		47	42	319	19
900	33·6	40	37	319	21
850		34	33	309	25
800	64·6	31	23	306	29
750		37	10	309	35
700	99·8	32	-15	305	49
650		26	-22	305	43
600	139·7	21	-26	308	43
550		19	-22	308	46
500	186·1	11	-26	307	45
450		-01	-36	312	48
400	240·6	-14	-46	314	51
350		-28		313	58
300	306·6	-42		315	70
250		-58		321	63
200	393·0	-67		323	53
170		-66		318	33
150		-61		314	27
130		-59		314	20
110		-62		315	12
100	539·4	-60		315	10
90		-58		315	07
80		-57			
70		-58			
60		-58			
		(56 mb) -54			
		Inversion			
	750 mb 37°	-803 mb 30°			
		Isothermal			
	611 - 600 mb 21°				
	553 - 550 mb 19°				
Tropopause	I 196 mb -70° 39,800'				

LERWICK

Pressure	Time	M.S.L.	Surf	Freezing
	21h. G.M.T.	1002·2 mb	992·2 mb	760 mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	027	50	50		
1000	00·5				
950		48	48		
900	29·2	45	45		
850		41	40		
800	60·7	36	34		
750		31	28		
700	95·7	26	23		
650		21	19		
600	135·3	16	13		
550		09	-04		
500	181·0	01	-12		
450		-09	-22		
400	234·5	-21	-34		
350		-35	-50		
300	299·5	-51			
250		-45			
200	389·1	-44			
170		-46			
150		-49			
130		-49			
110		-49			
100	543·3	-53			
90		-53			
80		-53			
70		-53			
60		Isothermal			
	956 - 943 mb 48°				
Tropopause	I 292 mb - 53° 30,500'				

STORNOWAY

Pressure	Time	M.S.L.	Surf	Freezing
	21h. G.M.T.	1003·6 mb	1001·0 mb	790 mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F	Wind Dir. °	Wind Vel. knots
Surf	009	60	48	360	16
1000	02·3	60	47		
950		44	43	358	37
900	31·8	42	39	358	37
850		37	34	009	37
800	63·1	33	30	012	36
750		29	26	007	36
700	98·0	28	25	003	36
650		23	21	006	33
600	137·6	18	16	009	31
550		10	06	009	37
500	183·4	03	-05	003	34
450		-06	-18	006	33
400	237·4	-16	-33	004	41
350		-29		021	57
300	303·9	-43		014	60
250		-54		013	44
200	391·8	-51		009	40
170		-51		012	14
150	454·6	-51		011	12
130		-52		023	08
110		-54			
		Inversion			
	934 mb 43°	-928 mb 44°			
		Isothermal			
	732 - 700 mb 28°				
Tropopause	II 265 mb -54° 33,000'				

LEUCHARS

Pressure	Time	M.S.L.	Surf	Freezing
	21h. G.M.T.	1005·2 mb	1004·4 mb	820 mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	002	51	48	290	07
1000	01·4	50	47		
950		45	41	298	27
900	29·9	40	37	315	26
850		34	32	335	24
800	61·0	30	29	322	20
750		25	24	320	20
700	95·6	20	20	316	21
650		14	13	321	27
600	134·6	12	11	020	35
550		03	01	029	36
500	179·6	-06	-09	033	39
450		-15	-18	029	38
400	232·4	-27	-31	027	37
350		-41		029	37
300	296·8	-50		027	20
250		-50		013	21
200	385·4	-48		014	11
170		-51		034	03
150		-52		342	27
130		-55		305	15
110		-55		344	07
100	537·4	-57		010	05
90		-57		084	10
80					
70		Isothermal			
60	833 - 820 mb 32°				
	625 - 610 mb 10°				
	524 - 514 mb -3°				
Tropopause	I 283 mb -52° 31,600' I 227 mb -52° 35,800'				

ALDERGROVE

Pressure	Time	M.S.L.	Surf	Freezing
	21h. G.M.T.	1011·5 mb	1002·0 mb	840 mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	026	50	46	320	12
1000	03·1				
950		45	43	324	27
900	31·6	39	37	329	31
850		32	32	332	28
800	62·7	29	29	342	29
750		25	25	348	32
700	97·3	20	19	352	36
650		15	11	348	39
600	136·3	09	04	348	40
550		06	02	354	48
500	181·5	01	-05	354	43
450		-09	-19	345	49
400	234·2	-20	-31	354	52
350		-33	-41	347	60
300	299·6	-47		347	52
250		-58		346	49
200	387·1	-50		346	34
170		-53		342	26
150		-52		342	27
130		-55		305	15
110		-55		344	07
100	537·4	-57		010	05
90		-57		084	10
80					
70		Isothermal			
60	585 - 526 mb 7°				
Tropopause	I 256 mb -59° 33,400'				

LIVERPOOL

Pressure	Time	M.S.L.	Surf	Freezing
	21h. G.M.T.	1009·4 mb	1007·4 mb	831 mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	006	53	46	310	10
1000	02·6	52	46		
950		46	42	306	21
900	31·1	40	33	302	21
850		34	25	301	24
800	62·2	28	21	303	28
750		22	14	305	26
700	96·5	16	08	306	23
650		11	02	301	21
600	135·4	02	-10	298	16
550		-08	-18	303	15
500	179·0	-19	-26	281	16
450		-26	-35	310	16
400	230·6	-29	-36	325	23
350		-34	-37	324	24
300	296·0	-37	-60	329	31
250		-40	-60	316	33
200	386·5	-47		359	10
170		-52		213	10
150		-52		024	04
130		-56		003	03
110	(21 mb)	-53			
100					
90		Inversion			
80	460 mb -29°	-447 mb -25°			
70					
60		Isothermal			
	585 - 526 mb 7°				
Tropopause	I 460 mb. -29° 19,900' II 350 mb. -34° 26,100'				

DOWNHAM MARKET

Pressure	Time	M.S.L.	Surf	Freezing
	21h. G.M.T.	1008·5 mb	1004·1 mb	793 mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	012	57	46	230	12
1000	02·3	56	44		
950		53	42	258	20
900	31·2	46	37	271	17
850		39	31	279	18
800	62·7	33	26	274	19
750		26	20	263	22
700	97·4	21	15	238	21
650		16	05	235	27
600	136·4	09	-10	251	35
550		00	-21	238	42
500	181·2	-05	-30	226	38
450		-14	-44	235	46
400	234·9	-21	-48	229	61
350		-33	-55	236	63
300	299·8	-46		245	63
250	(345 mb)	-35			
200		-45		250	46
170	389·1	-45		252	18
150		-45		263	11
130	452·8	-47		307	09
110		-48		053	09
100		-50		305	03
90	541·7	-53		270	02
80		-54			
70		Isothermal			
60	520 - 490 mb -05°				
Tropopause	I 282 mb -48° 31,400'				

LARKHILL

Pressure	Time	M.S.L.	Surf	Freezing
	21h. G.M.T.	1011·6 mb	996·7 mb	810 mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	014	54	49		
1000	03·1				
950		49	44		
900	31·8	43	37		
850		38	33		
800	63·1	31	26		
750		27	22	For Winds	
700	97·8	20	15	See	
650		19	07	Page	
600	137·0	12	-12	3.	
550		07	-20		
500	182·2	-03	-33		
450		-09	-35		
400	235·7	-21	-41		
350		-34	-51		
300	(345 mb)	35			
250		-45		312	80
200		-60		306	84
170		-69		303	62
150		-60		312	34
130		-60		335	30
110		-60		304	19
100		-59		304	08
90	537·8	-59		304	07
80		-59			
70					
60					
Tropopause	N.R.				

CAMBORNE

Pressure	Time	M.S.L.	Surf	Freezing
	21h. G.M.T.	1016·3 mb	1005·8 mb	812, 750 & 729 mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	029	55	51	280	15
1000	04·4	54	51		
950		50	49	290	28
900	33·1	44	42	302	26
850		37	33	300	26
800	64·4	30	29	298	29
750		32	20	288	37
700	99·3	28	04	288	93
650		23	-04	296	48
600	141·0	17	-14	299	50
550		13	-24	301	56
500	189·9	04	-26	301	56
450		-07	-28	300	62
400	238·7	-18	-37	301	69
350		-31	-48	303	73
300	304·5	-45		312	80
250		-60		306	84
200	390·7	-69		303	62
170		-60		312	34
150		-60		335	30
130		-60		304	19
110		-59		304	08
100	537·8	-59		304	07
90		-59			
80					
70					
60					
Tropopause	N.R.				

HMSO Press, MO. Dunstable

No. 1176. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Tuesday 26th June 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

03L G.M.T.

Station	Pressure	Time	M.S.L.	Surface	Freezing
LERWICK	mb	03L	1004·4	994·5	760
STORNOWAY	mb	03L	1009·8	1008·2	779
LEUCHARS	mb	03L	1004·5	1003·7	750
ALDERGROVE	mb	03L	1012·3	1002·5	800
LIVERPOOL	mb	03L	1009·4	1007·4	821
DOWNHAM MARKET	mb	03L	1009·3	1004·9	830
LARKHILL	mb	03L	1012·5	996·3	832
CAMBORNE	mb	03L	1017·2	1006·7	835
VALENTIA	mb	03L	1019·6	1018	730

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	50	50			00·4	49	47	350	16	00·2	51	48	280	08
1000	1·2					2·6	49	47			1·2	51	48		
950		49	49				44	42	347	33		46	44	311	25
900	29·9	45	44			31·1	39	37	358	36	29·7	42	41	336	25
850		41	40				37	35	004	39		40	39	356	25
800	61·3	36	35			62·4	34	32	006	38	61·2	35	32	001	24
750		31	30				31	29	359	37		32	32	001	22
700	96·4	26	25			97·3	28	26	358	37	96·2	26	25	351	18
650		20	19				24	23	004	35		19	18	352	19
600	138·9	14	12			137·0	18	16	007	30	135·6	13	11	008	22
550		07	03				10	05	017	40		06	02	014	32
500	181·3	00	-07			182·6	02	-03	014	41	180·9	-03	-12	013	30
450		-11	-18				-06	-26	011	42		-11	-22	009	34
400	234·6	-23	-31			236·4	-17	-37	017	43	234·1	-23	-32	011	35
350		-37	-45				-30	-48	018	53		-36	-46	017	29
300	299·3	-54				302·2	-44		018	60	299·1	-48		357	15
250		-53					-59		014	46		-46		004	19
200	387·4	-49				390·5	-50		007	27	388·2	-45		006	15
170		-48					-52		014	15		-49		353	08
150		-57					-51		014	06					
130		-54					-52		LVV						
110		-55					-54		LVV						
100	537·6	-55				541·0	-56		LVV						
90	(93 mb)	-55													
80															
70															
60															
	Inversion ° 975 mb 49°- 964 mb 50 560 " 06°- 550 " 09					Isothermal ° 898 - 863 mb 38 760 - 740 " 31					Inversion ° 872 mb 40°- 855 mb 41				
Tropopause	I 282 mb -59° 31,300'					I 253 mb -60° 34,000'					I 292 mb -50° 30,500'				

Pressure mb	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	51	47	300	17	00·6	50	49	300	18	01·2	47	45	260	09
1000	3·3					2·6					2·5				
950		45	42	314	28		45	44	305	32		45	39	296	25
900	31·8	39	37	324	34	31·0	40	39	310	28	30·9	40	34	303	24
850		35	33	332	30		35	34	311	28		34	28	287	21
800	63·6	32	31	338	30	62·1	31	30	309	28	62·0	28	24	270	19
750		27	25	334	36		27	26	312	29		24	16	275	18
700	97·8	24	22	340	29	96·8	22	21	320	26	96·4	17	12	290	17
650		20	18	340	24		16	15	323	31		11	00	302	15
600	137·4	17	12	336	26	136·0	13	11	340	35	135·1	02	-08	291	16
550		08	01	350	33		06	04	343	45		-07	-18	272	16
500	182·9	01	-04	348	39	181·3	-02	-04	336	48	179·1	-18	-29	266	14
450		-08	-21	340	43		-11	-18	331	48		-22	-37	311	20
400	236·5	-20	-42	336	58	234·6	-20	-28	329	52	231·1	-29	-51	315	25
350		-32	-50	336	60		-35	-43	325	54		-36	-60	296	33
300	301·9	-48		337	58	299·6	-44		325	54	296·3	-38	-62	323	37
250		-52		330	57		-42		325	35		-40		309	26
200	390·2	-48		328	38	389·8	-43		326	21	386·8	-44		316	15
170		-47		334	19		-47		329	09		-47		341	09
150		-51					-46		339	09		-48		343	12
130		-52					-51		006	08		-54		259	06
110		-52					-51		LVV			-55		348	10
100	541·5	-54				542·1	-51		"		538·3	-56		028	07
90		-55					-52		"						
80		-56					-52		017	06					
70		-56				(76 mb)	-53								
60		-55													
	Inversion ° 850 mb 20°- 630 mb 21					Isothermal ° 630 - 609 mb 19					Isothermal ° 782 - 770 mb 26° 500 - 486 " -18° 339 - 312 " -37°				
Tropopause	I 263 mb -57° 33,300'					I 318 mb -46° 28,600'					II 290 mb -40° 30,500'				

Pressure mb	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	47	45	280	06	02·9	54	48	315	15	00·3	51	48	360	04
1000	3·3					4·7	53	47	297	27	5·3	50	47	348	08
950		46	39	300	22		47	43	305	22		45	41	326	14
900	31·8	41	27	312	24	33·3	40	37	309	22	33·7	40	37	314	19
850		34	24	309	21		34	31	309	22		34	30	308	20
800	62·9	27	20	294	30	64·4	27	23	311	24	64·9	36	29	310	19
750		23	09	294	30		31	12	314	29		33	14	309	25
700	97·3	22	-06	302	32	97·3	28	-06	316	33	100·1	30	-12	314	32
650		17	-11	302	31		24	-27	315	36		26	-16	317	38
600	136·5	09	-18	304	34	139·0	18	-37	307	37	1400	22			
550		01	-19	309	36		11	-47	310	47		16	-31		
500	181·5	00	-14	318	51	184·8	05	-51	314	52	186·3	09	-26		
450		-14	-26	316	54		-05	-59	311	54		00	-28		
400	234·6	-25	-34	315	63	238·8	-18	-58	313	69	241·0	-08	-31		
350		-37	-51	311	80		-31	-58	312	78		-21	-40		
300	297·4	-49		310	81	304·6	-44		310	77	308·0	-39	-54		
250		-52		315	62		-59		306	90		-57			
200	387·7	-51		312	39	391·1	-68		318	54	394·9	-74			
170		-54		296	23		-63		312	45		-63			
150		-53		318	20		-61		311	33		-63			
130		-54		344	13		-60		313	20		-63			
110		-57		307	07		-61		305	15		-60			
100	537·7	-57		306	02	538·2	-60		315	13	541·4	-61			
90		-59		CALM			-62		315	08		-61			
80		-60		339	03		-61					-60			
70		-60				(77 mb)	-60								
60															
	Inversion ° 996 mb 41°- 980 mb 48 700 " 22°- 690 " 23 Isothermal 790 - 772 mb 25° 745 - 700 " 22° 540 - 500 " 00°					Inversion ° 785 mb 25°- 750 mb 31					Inversion ° 827 mb 32°- 800 mb 36				
Tropopause	I 288 mb -52° 30,800'					I 211 mb -70° 38,000'					II 200 mb -74° 39,500'				

09L G.M.T.

Station	Pressure	Time	M.S.L.	Surface	Freezing
LERWICK	mb	09L	1006·0	996·0	780
STORNOWAY	mb	09L	1011·3	1009·6	715
LEUCHARS	mb	09L	1005·7	1004·9	750
ALDERGROVE	mb	09L	1012·4	1002·7	800
LIVERPOOL	mb	09L	1009·5	1007·5	793
DOWNHAM MARKET	mb	09L	1009·8	1005·4	813
LARKHILL	mb	09L	1013·6	997·7	828
CAMBORNE	mb	09L	1018·7	1008·3	838, 783, -750
VALENTIA	mb				

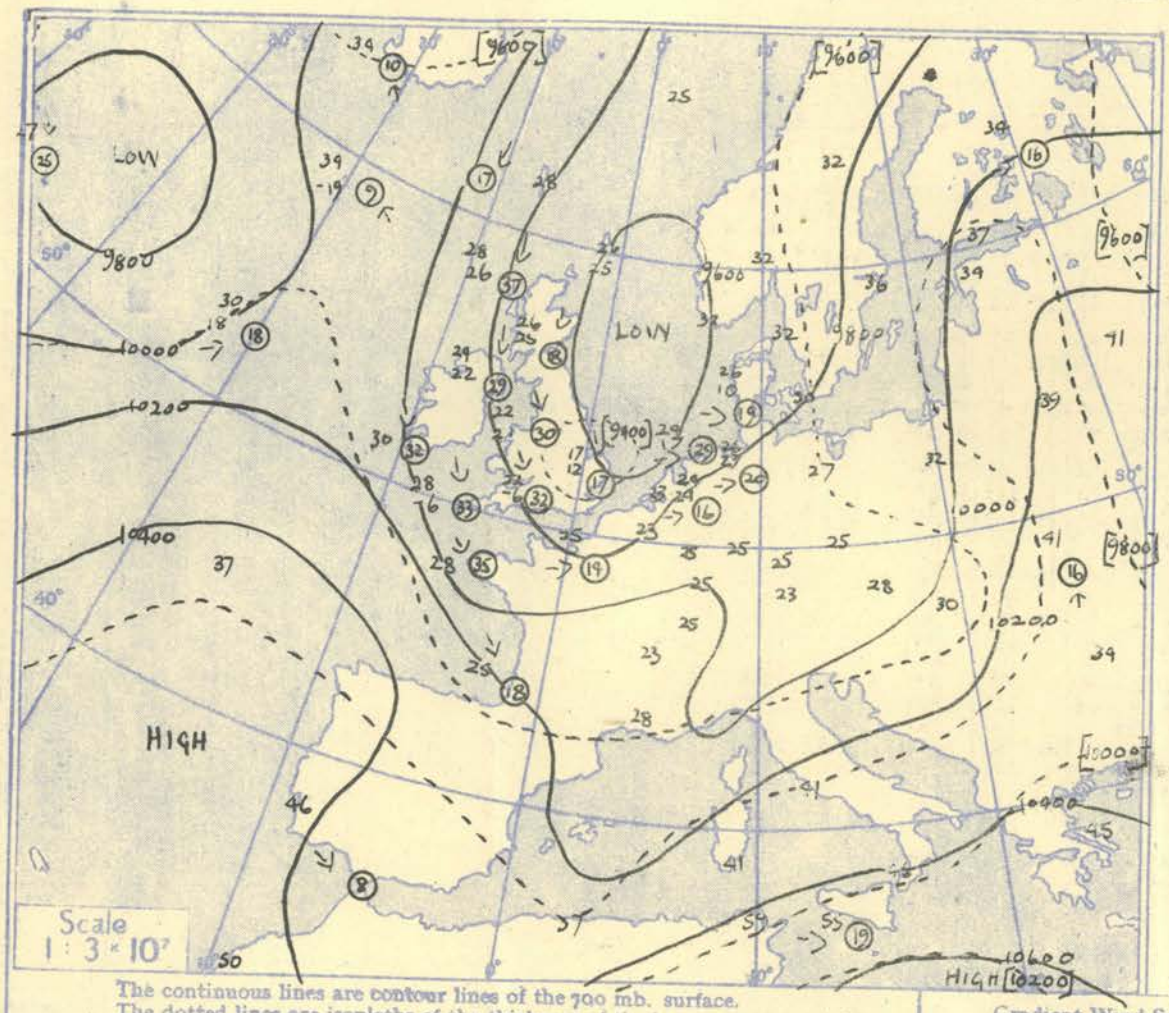
Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	53	51	010	15	00·4	50	48	350	17	00·2	53	49	280	08
1000	1·6					3·0	49	46			1·5	53	50		
950		53	47	030	14		45	42	002	26		48	42	327	24
900	30·4	47	44	024	16	31·5	41	38	005	26	30·2	44	40	355	30
850		41	39				40	37	003	25		39	36	008	36
800	62·0	36	34			63·0	39	35	360	21	62·0	37	34	014	30
750		32	31				35	30	360	19		32	28	018	23
700	97·0	26	23			98·3	30	25	007	20	96·8	28	23	019	23
650		22	17				25	20	011	27		21	16	013	25
600	136·6	16	10			138·3	19	15	017	30	136·4	15	09	355	25
550		06	01				13	-02	019	29		10	02	339	21
500	182·0	-01	-07			184·2	05	-16	019	31	182·0	02	-10	014	18
450		-09	-18				-05	-15	019	36		-06	-18	045	14
400	235·6	-19	-31			238·3	-17	-24	018	40	235·8	-18	-38	069	15
350		-34	-48				-25	-37	016	37		-32	-52	082	14
300	300·7	-50				304·3	-44		010	44	301·2	-46		070	13
250		-50					-55		010	43		-50		026	18
200	389·5	-46				397·4	-51		028	27	390·2	-45		004	21
170		-46					-48		033	18		-44		026	11
150		-45					-48		037	10		-46		026	06
130		-50					-47		062	05		-47		046	04
110		-50					-44		062	06		-40		095	04
100	541·7	-50				544·8	-46				542·9	-51			
90		-50					-48								
80		-49													
70		-50													
60		-44													
	Inversion ° 996 mb 53°- 963 mb 54					Isothermal ° 890 - 850 mb 40 840 - 800 " 39° 750 - 736 " 35°									
Tropopause	I 270 mb -54° 31,500'					I 263 mb -56° 33,300'					I 260 mb -52° 33,200'				

Pressure mb	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	51	48	320	20	00·6	51	49	300	18	01·2	50	49	230	11
1000	3·3					2·6	50	48			2·7	49	48		
950		44	42	320	32		44	42	302	36		44	42	265	24
900	31·8	40	39	325	33	31·1	40	38	302	38	31·1	41	38	284	20
850		37	36	328	34		37	35	303	34		35	32	292	27
800	63·0	32	32	322	36	62·3	32	30	313	36	62·3	31	28	291	19
750		29	28	340	33		30	28	318	36		26	23	292	22
700	97·9	26	23	332	29	97·3	28	26	322	34	97·0	22	18	303	22
650		20	17	325	30		20	16	328	34		15	10	309	27
600	131·5	15	09	340	32	136·9	14	08	330	42	136·2	10	05	308	28
550		06	-02	345	33		09	02	334	35		04	-04	313	33
500	182·8	00	-17	336	36	182·4	01	-11	336	37	181·3	-04	-12	318	41
450		-10	-28	334	40		-08	-19	332	43		-16	-23	320	45
400	236·2	-23	-39	337	51	236·2	-18	-30	328	48	234·1	-24	-34	315	56
350		-33	-48	330	47		-30	-45	324	55		-35	-48	316	64
300	301·3	-50		332	49	301·8	-46		327	55	299·4	-41		316	53
250		-66		334	42		-46		322	40		-43		312	36
200	387·8	-53		355	18	391·2	-46		324	28	389·9	-42		327	27
170		-55		330	14		-45		353	18		-44		326	11
150		-52		320	12		-46		356	15		-45		336	08
130		-55		340	05		-46		343	08		-49		345	06
110		-56		090	05		-52		018	05		-50		338	01
100	537·4	-56		090	05	543·6	-53		CALM		542·7	-49		292	09
90		-57		090	05		-52		"						
80							-54		"						
70							-51		"						
60							-50		121	06					
							-51		090	06					
						(47 mb)	-52								
	Isothermal ° 772 - 720 mb 30 565 - 555 " 10°														
Tropopause	II 262 mb -66° 33,200'					I 297 mb -47° 30,400'					I 312 mb -41° 29,000'				

Pressure mb	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	53	47	280	10	02·9	56	50	300	15					
1000	2·7	47	47			4·7	55	49	298	18					
950		47	42	294	24		47	43	303	23					
900	31·1	41	38	284	29	33·3	40	34	302	26					
850		34	29	301	31		34	29	300	26					
800	62·3	30	27	306	30	64·3	27	26	308	27					
750		27	25	316	28		32	15	317	28					
700	98·2	23	19	312	29	99·3	29	03	312	28					
650		17	14	297	31		24	-04	310	33					
600	137·4	12	09	300	33	139·0	20	-10	311	47					
550		07	03	307	35		14	-14	311	58					
500	182·7	02	-06	313	45	185·1	08	-16	308	64					
450		-09	-19	310	57		-02	-22	307	64					
400	236·2	-19	-33	312	64	239·6	-11	-31	308	60					
350		-32	-46	314	74		-27	-45	311	60					
300	301·6	-47		313	81	308·8	-42		305	67					
250		-50		309	62		-59		302	69					
200	389·9	-53		311	45	394·2	-66		299	48					
170		-49		319	17		-55		312	25					
150		-50		314	09		-56		314	24					
130		-52		347	08		-57		311	21					
110		-51		336	08		-53		307	09					
100	541·0	-53		334	09	541·5	-53		310	07					
90		-53					-56								
80		-53													
70		-53													
60															
	Isothermal 657 - 624 mb 17°					Max wind:- 285 mb 34,100' 300° 98 Kts Inversion 80 mb 27°- 775 mb 34° Isothermal 735 - 716 mb 30° 560 - 540 " 14°										
Tropopause	I 277 mb -55° 31,200'					I 220 mb -70° 37,700'									

Tuesday 26th June 1951.

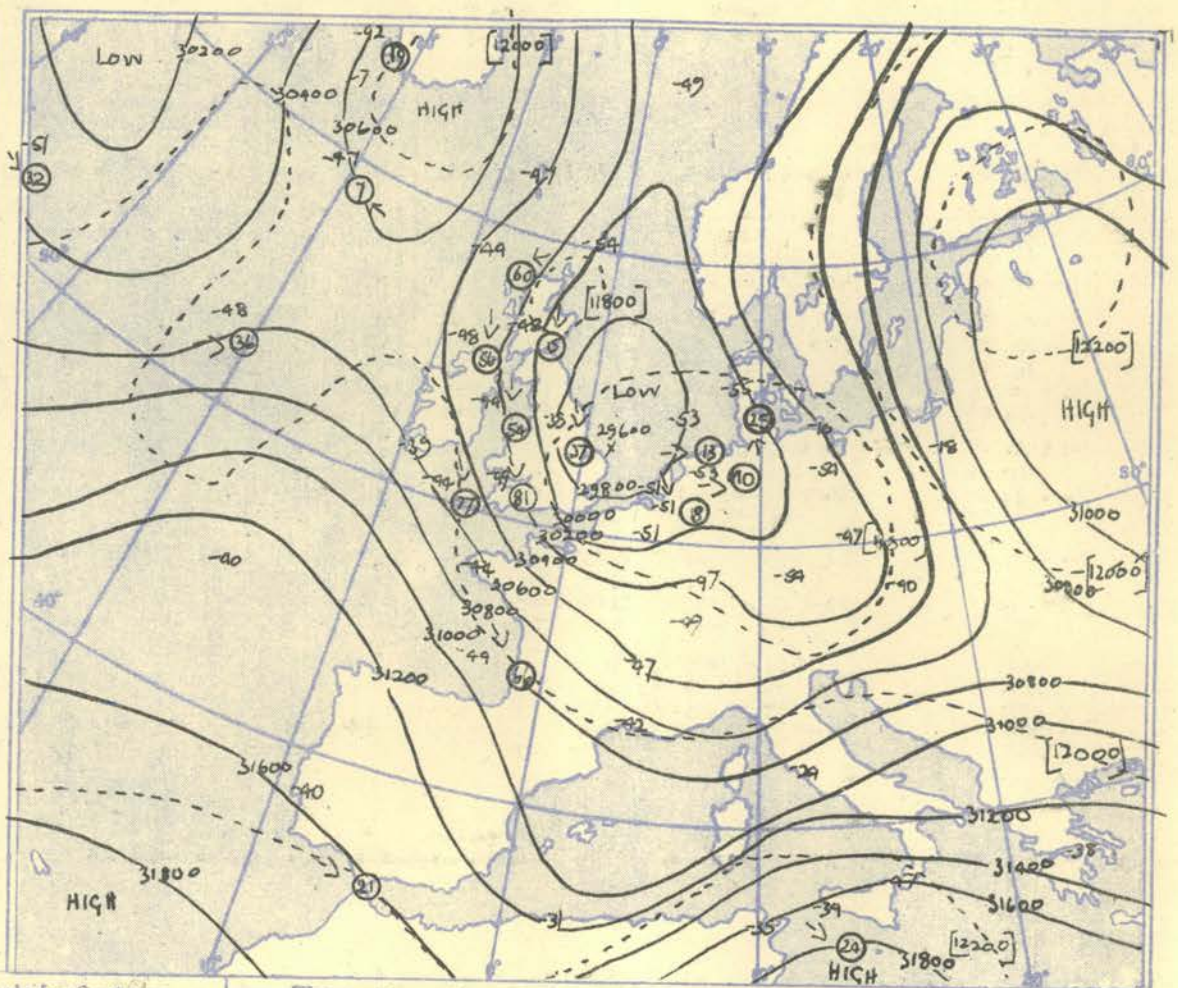
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.



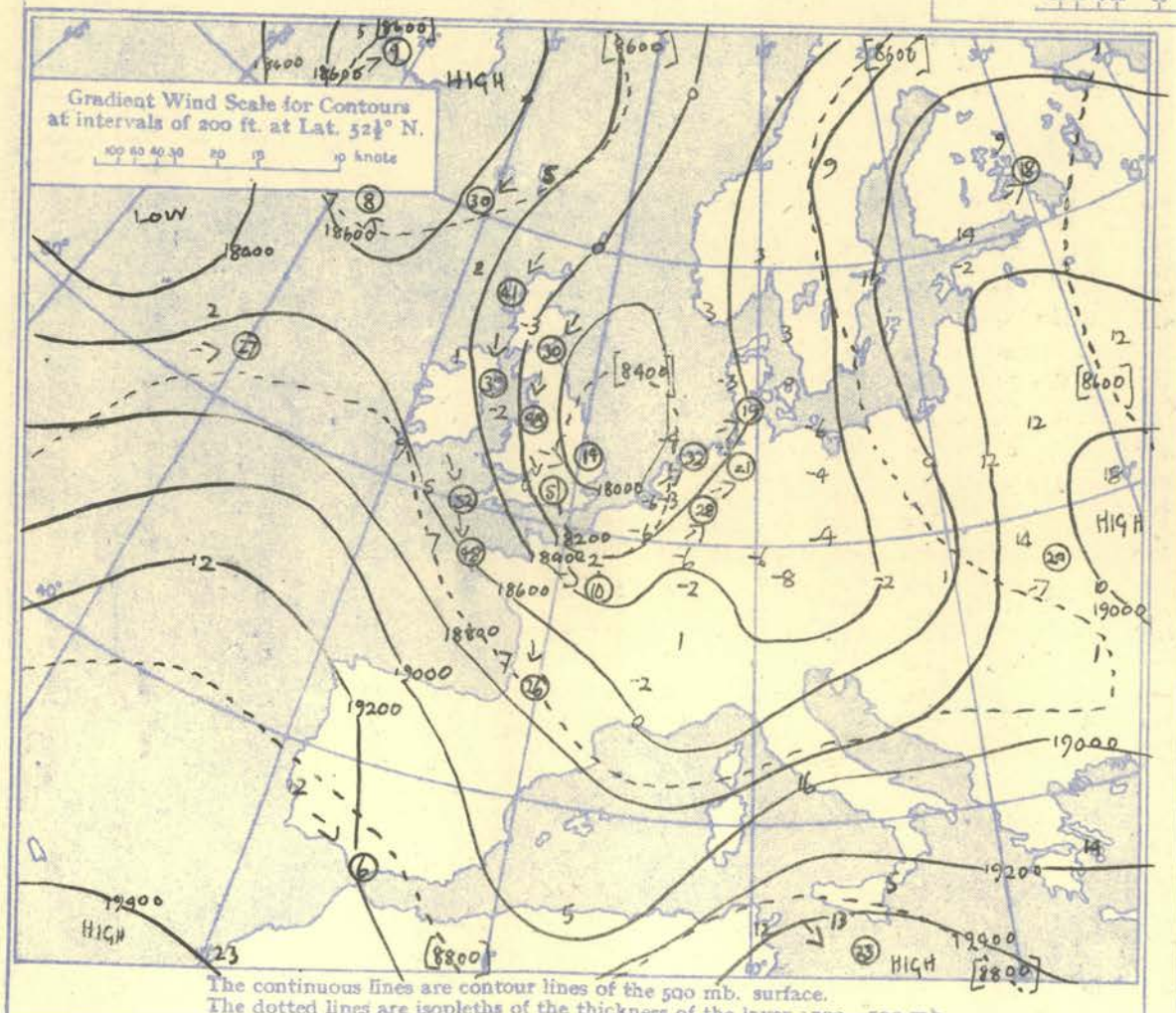
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

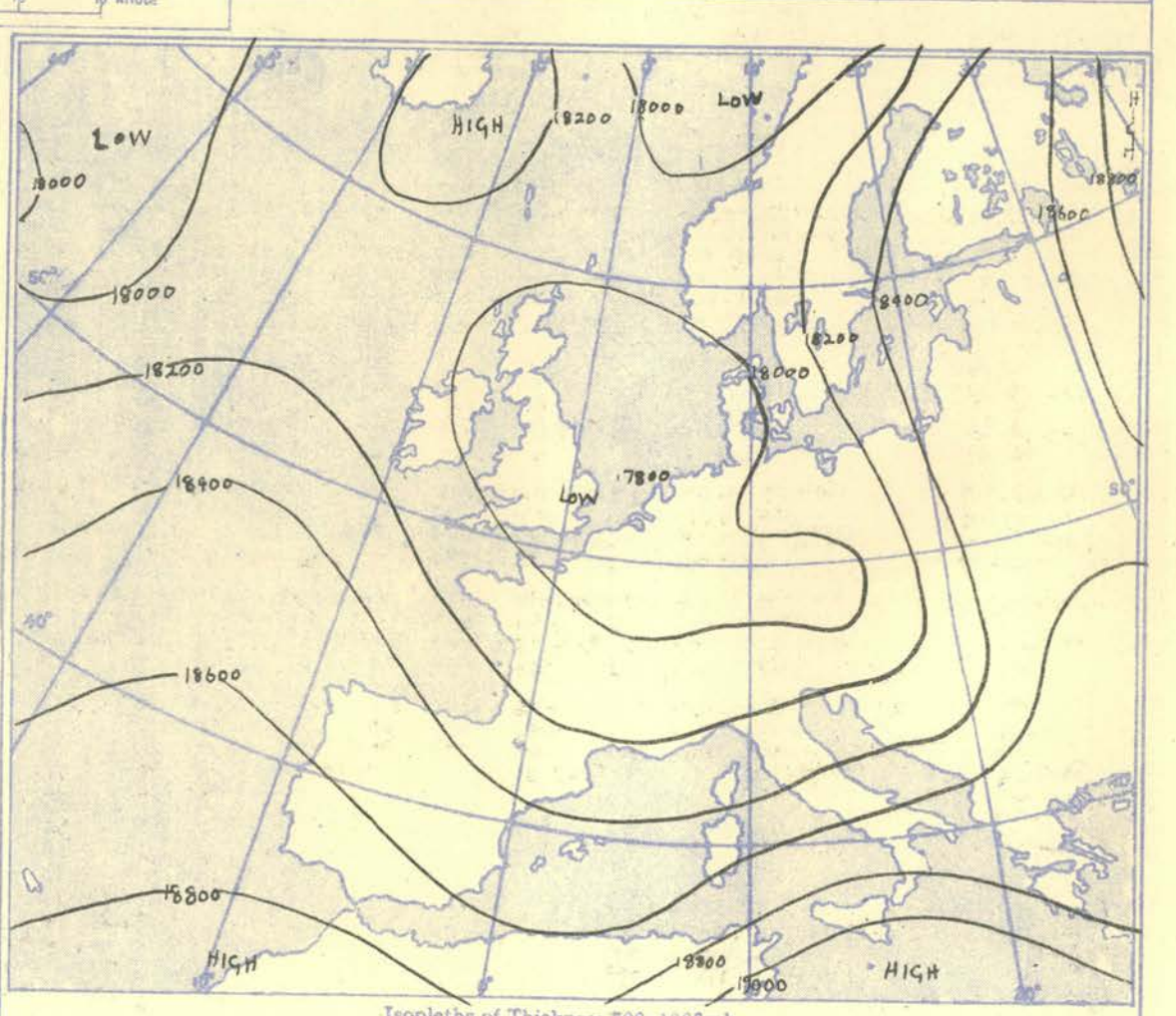
100 60 40 30 20 15 10 knots



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—590 mb.



Isopleths of Thickness 500-1000mb.

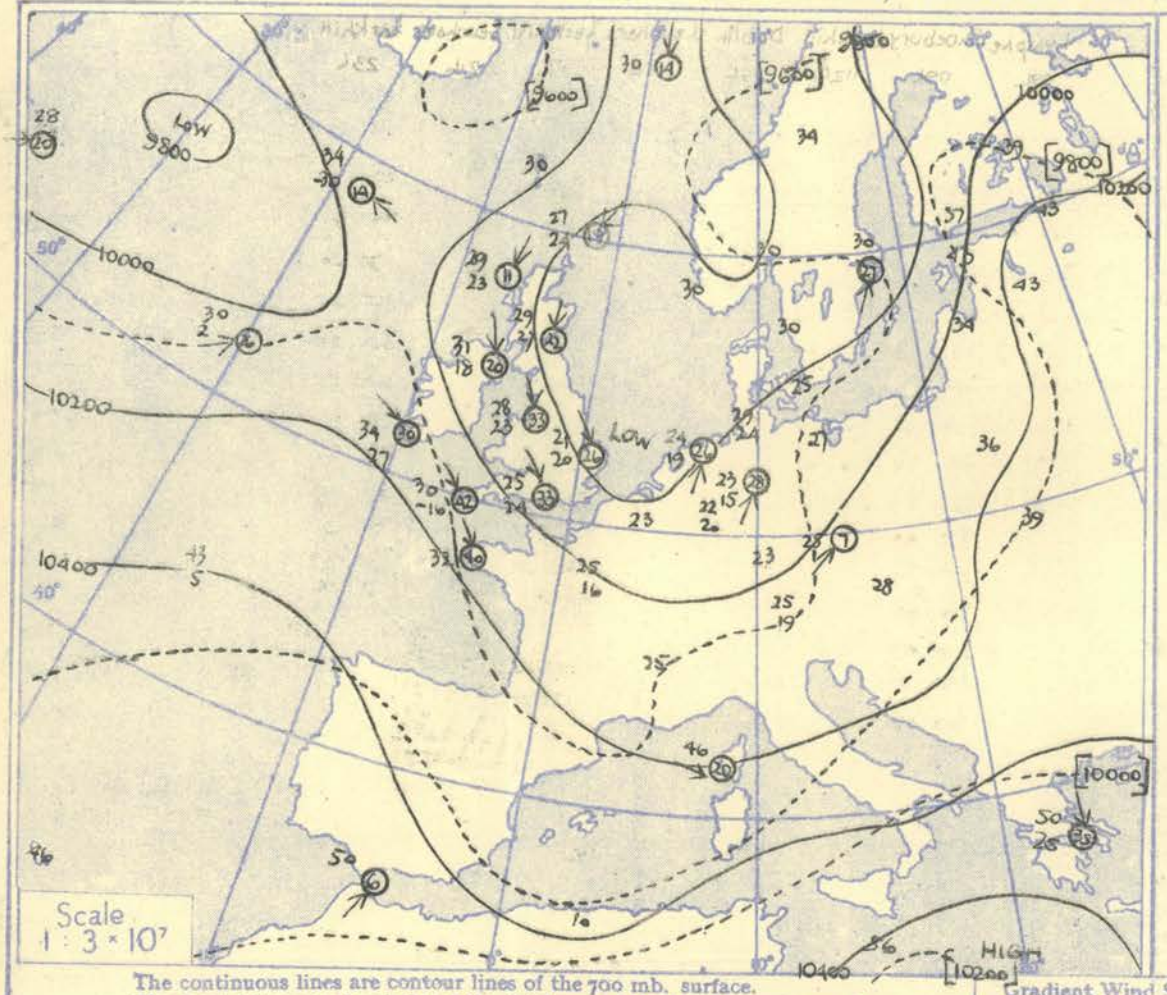
Tuesday 26th June. 1951. Page 3

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

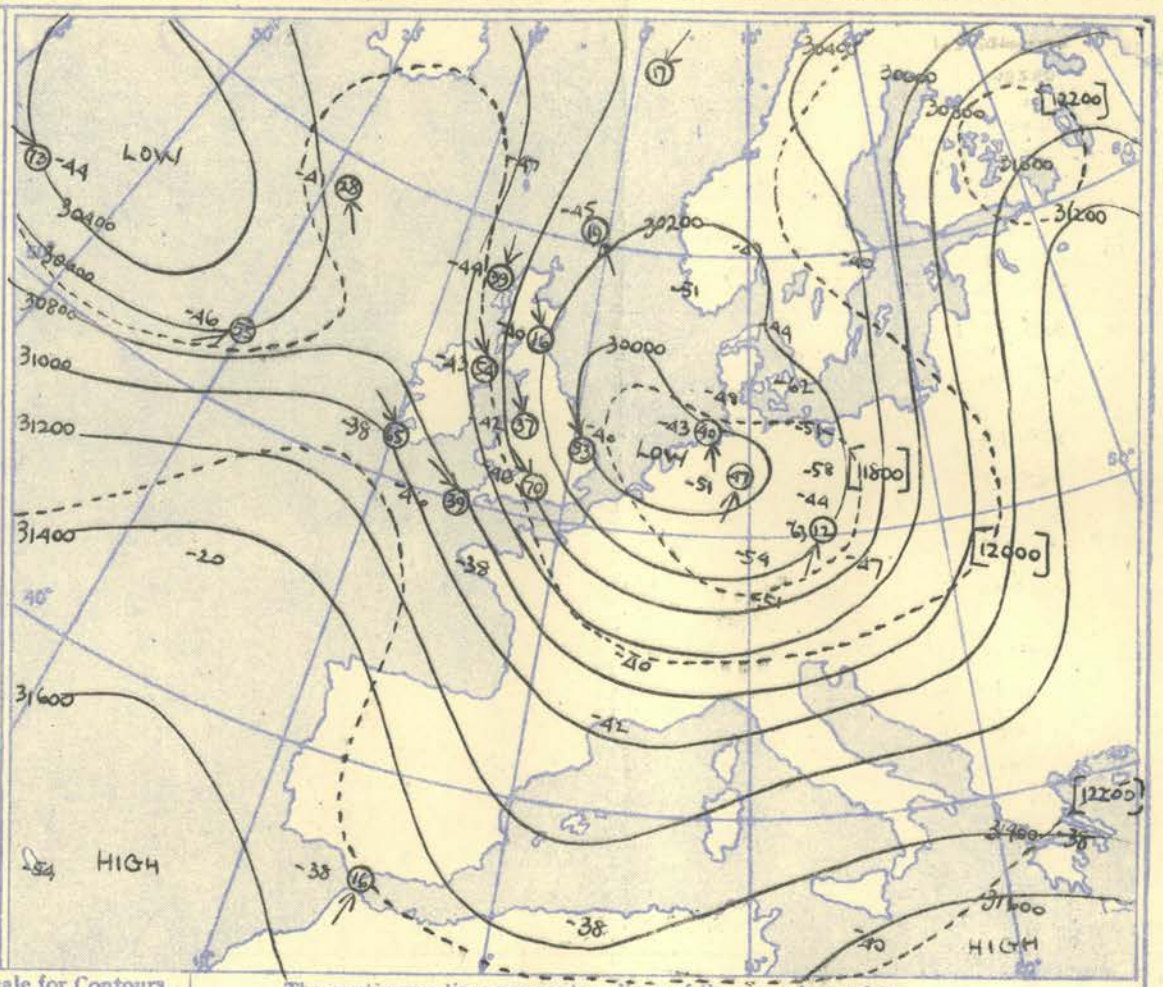
| Pressure | | |

Tuesday 26th June 1951

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



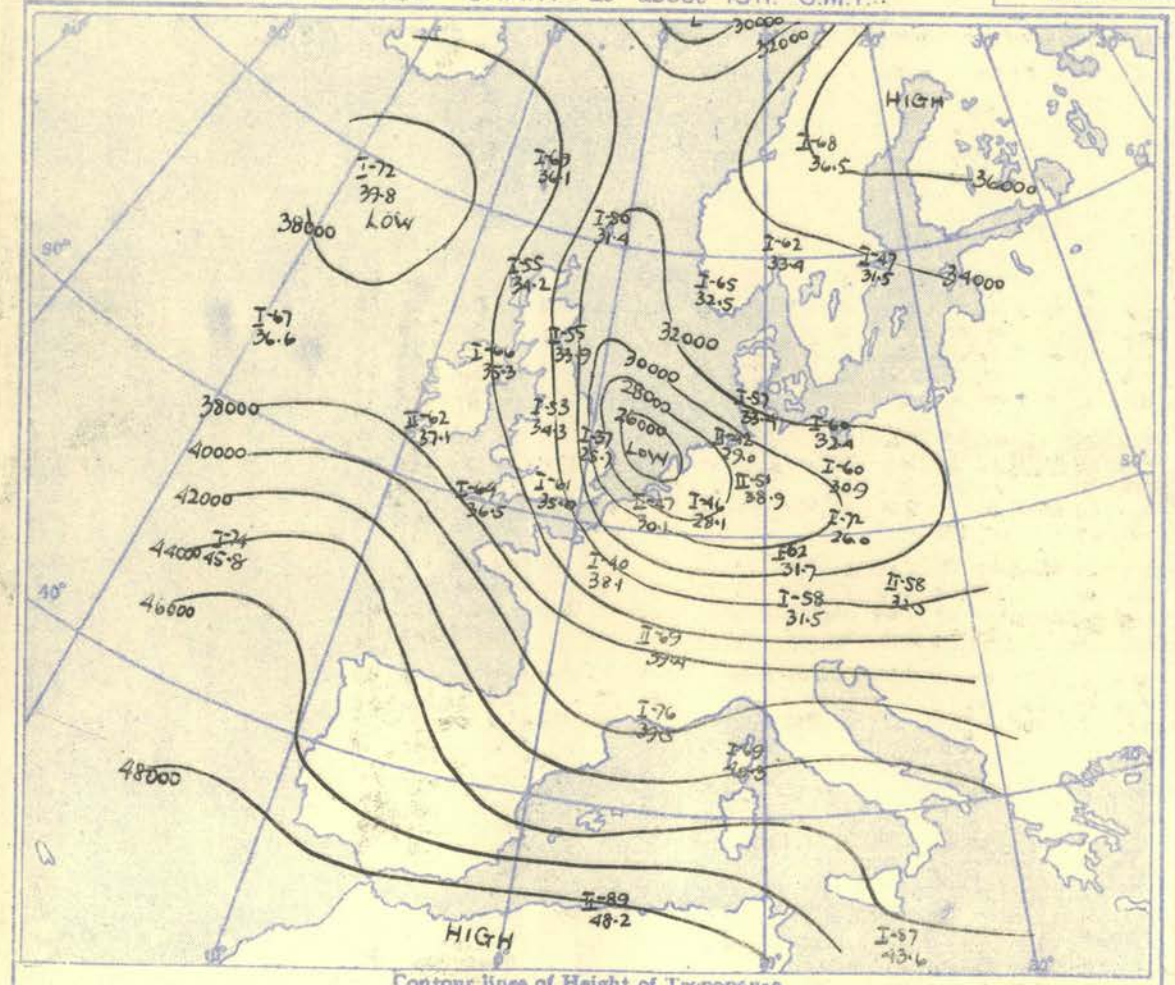
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N

TROPOPAUSE CHART at about 15h. G.M.T..



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

The cold pool over South England continued to move steadily reaching Northwest Germany by the end of the day. The Atlantic warm ridge continued a slow eastward movement but weakened somewhat in its central regions and having a detached warm pool southeast of Iceland.

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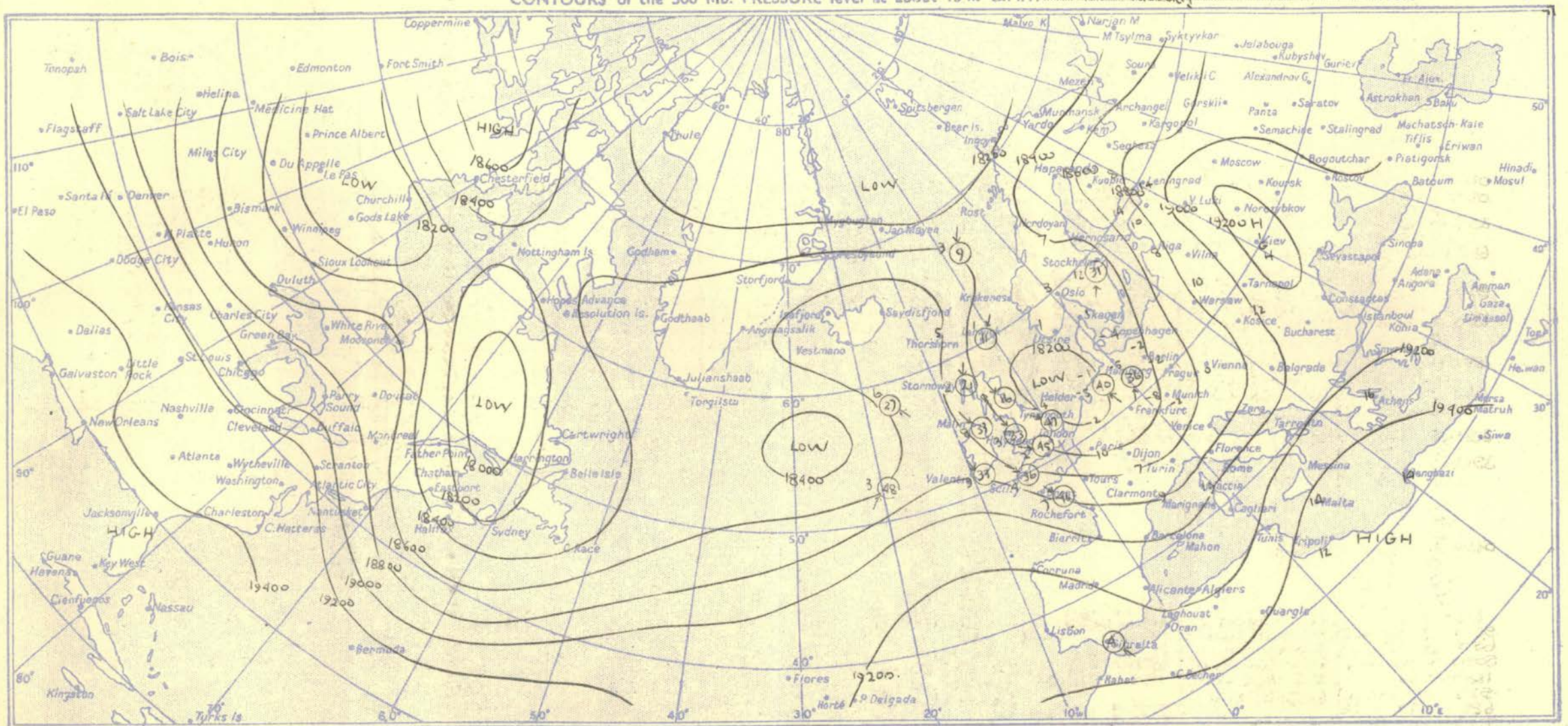
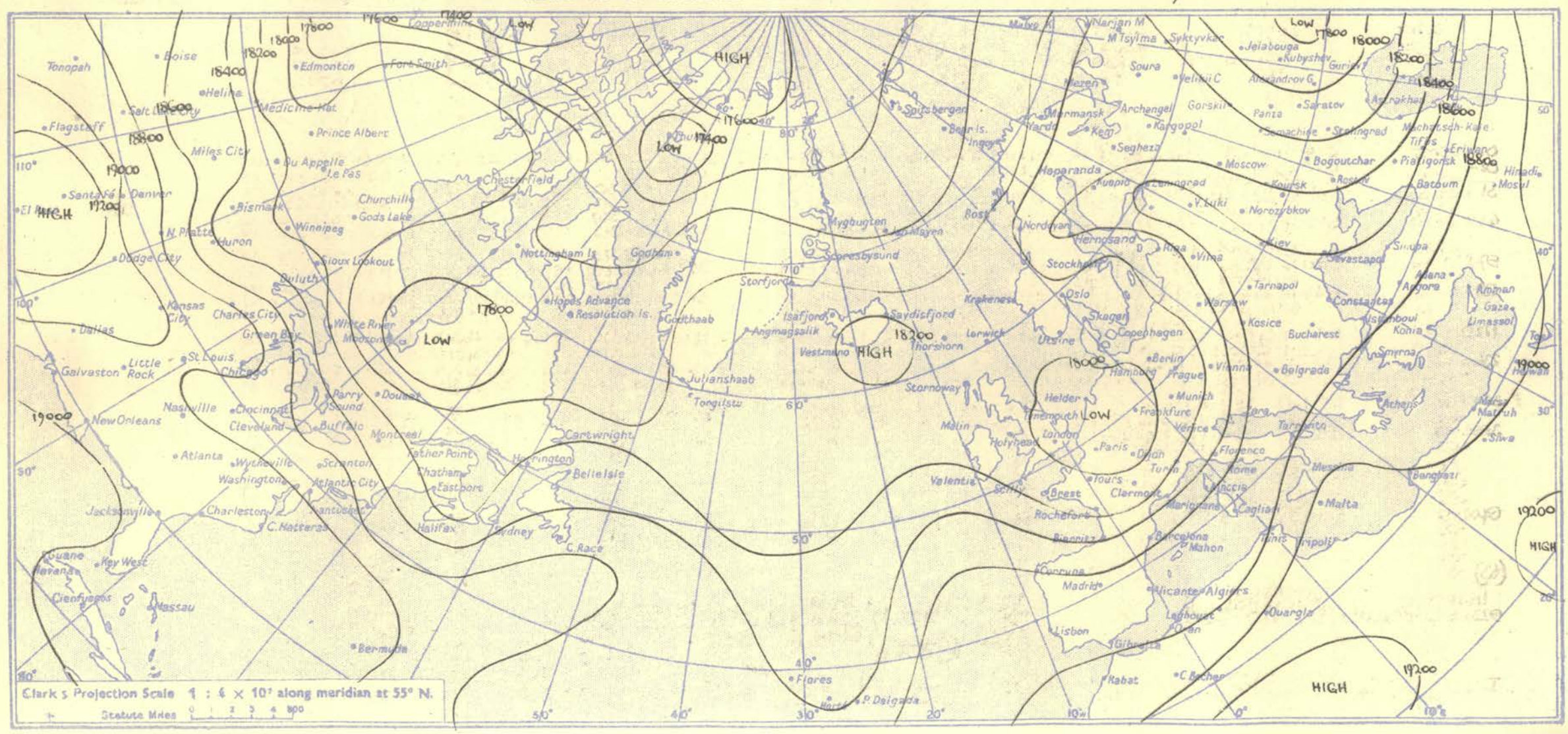
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Tuesday 26th June 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Tuesday 26th June, 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Tuesday 26th June 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15 hrs G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	15 hrs G.M.T.	1001·7 mb	997·7 mb	742 mb
STORNOWAY	15 hrs G.M.T.	1012·8 mb	1011·2 mb	722 mb
LEUCHARS	15 hrs G.M.T.	1007·9 mb	1007·1 mb	735 mb
ALDERGROVE	15 hrs G.M.T.	1013·8 mb	1004·1 mb	775 mb
LIVERPOOL	15 hrs G.M.T.	1011·4 mb	1009·4 mb	750 mb
DOWNHAM MARKET	15 hrs G.M.T.	1009·5 mb	1005·0 mb	827 mb
LARKHILL	15 hrs G.M.T.	1014·4 mb	998·5 mb	768 mb
CAMBORNE	15 hrs G.M.T.	1019·7 mb	1009·5 mb	718 mb
Valentia	15 hrs G.M.T.	1020·6 mb	1018 mb	685 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots
Surf	02·7	51	51	080	20	0·4	53	49	360	12	0·2	60	50	360	07
1000	02·0					03·4	52	46			02·1	55	49		
950		49	45	031	21		47	44	008	19		52	45	353	19
900	30·7	50	44	031	18	320	45	40	012	17	31·1	47	42	004	20
850		45	39	035	16		42	38	014	15		42	38	007	20
800	62·5	39	35	036	14	63·7	40	37	018	15	61·7	37	35	020	19
750		33	29	037	18		36	30	024	14		33	31	009	24
700	37·7	27	24	041	19	39·1	29	23	033	11	39	29	27	003	27
650		22	14	037	20		24	19	027	09		24	16	003	22
600	137·5	18	0	037	18	135	18	09	011	13	137	18	-1	004	16
550		08	-1	030	17		11	-1	011	19		17	-9	356	16
500	183	-1	-9	041	11	184·7	02	-13	007	21	183·7	08	-17	346	16
450		-7	-23	078	12		-6	-18	003	23		-1	-27	358	16
400	236·8	-13	-33	077	15	235·5	-18	-35	003	22	235·2	-12	-35	344	16
350		-32	-47	100	13		-30	-44	006	31		-25	-48	354	13
300	302·3	-45		120	19	304·3	-44		015	35	304·8	-40	-60	347	16
250		-50		063	24		-54		017	32		-53		335	24
200	191·3	-47		044	11	192·3	-52		017	30	192·8	-43		345	29
170		-46		058	12		-51		355	10		-55		313	17
150		-46		071	09		-48		341	07		-49		330	08
130		-49		L-V			-47		303	04		-49		010	05
110		-52		L-V			-49		237	04		-48		262	03
100	54·3	-52		L-V		54·5	-45		165	03	54·3	-50		272	03
90		-50		L-V			-46					-50		319	05
80		-50		L-V								-49		330	04
70		-50		L-V								-49		086	04
60		-46		L-V								-50		111	04
												-46		040	04
												-40			
Tropopause	I 285 mb -50° 31400'					I 253 mb -55° 34200'					I 234 mb -55° 35900'				

Pressure mb	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots
Surf	02·6	52	45	310	18	0·6	54	45	330	20	01·2	52	52	260	13
1000	03·7					03·2	53	47	300	21	02·5				
950		46	44	315	25		48	44	307	35		46	45	280	31
900	32·2	41	38	320	28	31·8	42	39	309	35	31·1	40	35	292	31
850		38	35	332	24		42	36	313	26		35	34	299	29
800	63·3	38	31	343	27	63·3	37	32	324	25	62·2	30	29	299	27
750		33	27	355	15		32	28	324	27		26	25	303	27
700	98·4	28	23	321	33	96·3	21	20	308	26	98·3	26	24	305	33
650		25	18	321	32		16	15	308	29		23	15	309	37
600	136·8	19	12	319	30	136·1	17	10	329	35	136	10	08	307	35
550		15	-12	335	29		10	01	330	35		03	00	308	40
500	183·8	08	-16	339	33	183·8	03	-5	328	33	181·1	-4	-9	303	47
450		-3	-16	330	24		-8	-25	320	37		-14	-18	301	50
400	231·5	-13	-26	328	24	231·5	-20	-38	319	36	234·1	-26	-33	304	58
350		-29	-41	328	35		-34	-53	316	37		-37	-46	302	57
300	300·4	-43		310	34	303·0	-42		314	37	299·1	-40	-55	308	53
250		-62		314	34		-53		321	35		-43		324	36
200	192·8	-53		328	25	192·1	-45		331	31	198·4	-43		307	24
170		-55		313	17		-47		329	15		-44		296	18
150		-49		330	08		-45		307	15		-47		299	16
130		-49		010	05		-49		315	10		-51		306	15
110		-48		262	03		-51		350	08		-52		357	08
100	544·3	-50		272	03	544·4	-50		343	04	541·4	-52		043	11
90		-50		319	05		-49		324	04		-53		076	08
80		-49		330	04		-45		L-V			-53		156	06
70		-49		086	04		-50		L-V			-54		177	05
60		-50		111	04		-46		L-V						
		-46		040	04										
		-40													
Tropopause	I 241 mb -66° 35300'					II 308 mb -42° 29600' I 250 mb -53° 34300'					II 359 mb -37° 25700'				

Pressure mb	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Valentia Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots
Surf	04·4	55	47	280	15	02·9	59	49	300	16	0·3	58	48	290	03
1000	04·0					05·5	57	48	281	24	5·5	56	47	286	04
950		47	41	292	32		48	40	287	23		49	43	283	07
900	34·6	43	38	291	34	34·1	41	32	296	23		46	37	292	14
850		37	34	301	32		39	26	298	23		46	40	294	21
800	64·0	33	31	304	30	65·5	33	18	299	28	66·0	42	36	292	25
750		30	27	300	27		36	-3	303	32		38	32	286	27
700	100	26	24	305	33	100	20	-16	307	42	101·5	34	27	291	30
650		23	15	309	37		26	07	308	46		28	21	292	31
600	140	17	12	307	41	140	21	12	310	45	141·7	23	09	292	30
550		06	03	313	41		13	06	308	48		17	-1	298	35
500	183	02	-15	311	45	186	04	00	299	36	188	09	-2	302	33
450		-6	-21	308	55		-4	-9	297	51		-3	-25	305	34
400	240	-18	-26	306	60	240	-16	-21	296	46	242	-14	-29	299	30
350		-31	-39	302	62		-29	-34	291	41		-26	-50	301	45
300	303	-46		299	70	306·8	-46		294	39	306·8	-38		303	65
250		-60		303	70		-59		292	46		-53		306	58
200	199	-54		312	33	199	-63		294	43	196·7	-62		308	40
170		-54		302	27		-56		298	32		-57		301	26
150		-49		293	18		-55		303	30		-55		299	21
130		-50		317	10		-58		317	15		-55		302	19
110		-51		334	09		-56		301	09		-55		307	11
100	54·2	-52		325	06	54·2	-54		299	06	54·5	-55		306	11
90		-48		305	03		-53		300	04		-55			
80		-49		314	04		-56		298	06		-55			
70		-51					-58					-55			
60		(72)					(66)					(64)			
Tropopause	I 242 mb -61° 35000'					I 227 mb -64° 36500'					II 226 mb -62° 37100'				

21 hrs G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	21 hrs G.M.T.	1009·6 mb	998·6 mb	740 mb
STORNOWAY	21 hrs G.M.T.	1014·1 mb	1012·5 mb	736 mb
LEUCHARS	21 hrs G.M.T.	1010·2 mb	1009·4 mb	766 mb
ALDERGROVE	21 hrs G.M.T.	1014·8 mb	1005·1 mb	715 mb
LIVERPOOL	21 hrs G.M.T.	1013·4 mb	1011·4 mb	750 mb
DOWNHAM MARKET	21 hrs G.M.T.	1011·8 mb	1009·4 mb	776 mb
LARKHILL	21 hrs G.M.T.	1015·6 mb	999·7 mb	750 mb
CAMBORNE	21 hrs G.M.T.	1019·4 mb	1008·7 mb	692 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots
Surf	02·7	49	49			0·4	51	48	020	12	0·2	55	54	320	03
1000	02·6					03·8	50	47			02·8	54	53		
950		45	42				43	40	010	20		48	47	326	18
900	31·1	44	34			32·3	44	38	040	19	31·5	44	43	335	18
850		43	27				41	34	012	21		40	40	354	19
800	62·7	36	30			63·9	36	31	012	22	62·9	36	36	005	17
750		33	25				34	27	020	18		31	31	001	16
700	97·8	27	16			99·0	28	22	013	15	97·9	26	26	001	21
650		21	09				22	14	009	10		19	19	352	24
600	131·3	16	03			133·6	16	10	015	22	132·8	12	10	345	24
550		11	-23				05	01	016	24		02	-3	348	25
500	182·9	01	-27			164·1	-1	-13	013	22	182·3	-3	-12	352	24
450		-10	-29				-11	-23	007	25		-8	-13	350	26
400	236·5	-26	-35			237·3	-21	-40	006	33	236·0	-23	-36	344	22
350		-33	-47				-32	-54	003	42		-38	-52	327	29
300	301·8	-50				301·1	-44		358	47					
250		-60					-52		341	43					
200	198·3	-63				191·3	-56		334	29					
170		-49					-52		316	18					
150		-52					-52		305	14					
130		-52					-52		271	07					
110		-52					-52		264	05					
100	94·2	-52				94·5	-52		270	03					
90		-52					-52								
80		-52													
70		-52													
60		(63)	60												
Tropopause	I 256 mb -62° 33600'					II 220 mb -56° 37100'					NR.				

Pressure mb	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots
Surf	02·6	53	48	300	15	0·6	52	45	300	15	01·2	52	50	260	12
1000	04·0					03·7	52	48			03·2	52	49		
950		46	43	309	25		45	42				47	44	301	26
900	32·6	41	40	312	27	32·2	41	40			31·8	42	41	313	22
850		40	36	319	26		41	37				38	38	307	21
800	64·1	36	29	326	21	63·6	37	33			63·2	34	34	313	21
750		35	24	320	20		32	29				29	29	325	21
700	99·4	31	21	317	19	98·7	28	24			98·1	24	24	325	25
650		25	19	321	20		22	16				17	17	322	29
600	139·3	19	14	321	20	138·4	13	07			137·4	10	10	321	28
550		10	06	326	21		05	00				07	-10	331	28
500	185·0	02	-4	324	22	183·9	02	-16			182·5	01	-13	330	34
450		-8	-23	325	24		-9	-31				-9	-20	328	35
400	237·5	-19	-37	322	27	238·6	-26	-38			236·1	-21	-31	320	36
350		-32	-51	332	43		-30	-44				-35	-44	314	37
300	304·2	-46		326	46	303·2	-47				301·3	-49		317	39
250		-60		326	43		-59					-63		315	37
200	191·1	-55		340	20	190·7	-51				188·4	-51		313	27
170		-55		317	21		-49					-52		316	21
150		-54		303	06		-52					-54		339	16
130		-56		268	06		-52					-54		327	09
110		-56					-50					-54		288	08
100	54·0	-56		L-V		(114)					53·8	-56		293	08
90		-57										-61		316	06
80		-57										-60		338	04
70		-58													
60		-60													
Tropopause											I 254 mb -60° 30900'				

Pressure mb	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots
Surf	04·4	54	48	280	16	02·9	55	52	280	08					
1000	04·3					05·2	54	51	280	23					
950		47	44	301	26		48	45	288	22					
900	32·9	43	36	300	23	33·9	45	39	294	22					
850		38	33	311	23		45	39	301	25					
800	64·3	34	29	314	26	66·7	42	37	300	34					
750		32	21	305	24		37	35	302	38					
700	103	26	19	305	27	104·2	33	30	301	39					
650		23	14	302	21		27	24	302	41					
600	141·9	17	07	305	33	141·1	21	05	300	38					
550		09	-1	306	36		13	03	303	41					
500	187·0	05	-5	304	39										
450		-8	-31	315	42		-4	-10	306	38					
400	241·2	-14	-26	308	41										
350		-31	-47	313	50		-26	-55	311	54					
300	303·6	-45		313	53	303·6	-41		313	56					
250		-58		311	52		-58		311	58					
200	199·6	-60		299	55	199·6	-55		311	43					
170		-55		308	24		-55		301	30					
150		-55		310	20		-55		305	24					
130		-55		311	10		-54		308	21					
110		-55		301	10		-54		306	13					
100	94·0	-56		303	08	94·5	-54		322	05					
90		-59		305	07		-55		322	06					
80		-59		324	04		-56								
70		-59		282	03		-56								
60		(63)	60			(71)	56								
Tropopause	I 263 mb -59° 33200'					I 215 mb -65° 37800'									

Inversion 958 mb 48 - 925 mb 50°; 650 mb 24 - 633 mb 28°; 505 mb 0 - 500 mb 1°; Isothermal 925 - 900 mb 50°; 689 - 672 mb 26°

Inversion 883 mb 41 - 846 mb 42°; Isothermal 866 - 838 mb 42°; 815 - 800 mb 40°; 605 - 592 mb 17°

Inversion 609 mb 16 - 583 mb 22°; Isothermal 750 - 737 mb 33°

Inversion 821 mb 37 - 808 mb 38°; Isothermal 868 - 840 mb 38°

Inversion 880 mb 40 - 850 mb 42°; Isothermal 731 - 720 mb 30°; 308 - 290 mb - 42°

Inversion 857 mb 36 - 837 mb 39°; 510 mb 1 - 500 mb 2°; Max wind 265 mb 301° 82 kts 33200'

Inversion 883 mb 38 - 838 mb 40°; Isothermal 821 - 800 mb 46°

Inversion 923 mb 43 - 885 mb 45°

Inversion 929 mb 43 - 903 mb 45°

Inversion 800 mb 36 - 786 mb 37°; Isothermal 900 - 870 mb 41°

Inversion 874 mb 39 - 850 mb 41°; 580 mb 10 - 569 mb 11°

Inversion 582 mb 6 - 550 mb 7°

Inversion 825 mb 34 - 813 mb 35°; Isothermal 800 - 768 mb 34°; 503 - 490 mb 2°

Inversion 850 mb 45 - 839 mb 46°; Isothermal 905 - 850 mb 45°; 620 - 600 mb 24°

HMSO Press, MO, Dunstable

No. 11777 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Wednesday 27th June. 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

03h G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	03h G.M.T.	1011·5 mb	1001·5 mb	766 mb
STORNOWAY	03h G.M.T.	1013·1 mb	1014·7 mb	730 mb
LEUCHARS	03h G.M.T.	1011·0 mb	1000·2 mb	770 mb
ALDERGROVE	03h G.M.T.	1014·9 mb	1005·3 mb	750 mb
LIVERPOOL	03h G.M.T.	1013·9 mb	1011·9 mb	750 mb
DOWNHAM MARKET	03h G.M.T.	1012·5 mb	1008·2 mb	767 mb
LARKHILL	03h G.M.T.	1016·1 mb	1000·0 mb	735 mb
CAMBORNE	03h G.M.T.	1018·6 mb	1007·9 mb	719 mb
VALENTIA	03h G.M.T.	1018·9 mb	1017 mb	710 mb

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	VALENTIA Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Pressure mb
Surf	02·7	49	49			00·4	50	48	360	10	00·2	53	52	Calm		02·6	51	50	355	12	00·6	53	50			01·2	51	50	250	10	04·1	51	48	280	06	02·9	54	53	Calm		00·3	55	52	Calm		Surf
1000	03·1	49	49			04·0	49	47	006	26	03·0	53	52			04·1					03·8	51	48			03·5					04·4					05·0	54	53	269	08	05·1	53	50	331	01	1000
950		45	45				43	39	011	18		50	47	322	09		46	44	331	21		46	45				48	47	294	22		49	43	294	21		51	50	274	14		49	46	331	03	950
900	31·6	43	43			32·6	43	36	017	15	31·7	45	43	335	07	32·6	42	41	316	24	32·3	41	41			32·1	45	44	307	18	33·0	43	39	302	23	33·8	48	47	282	18	33·8	47	44	305	04	900
850		41	40				42	34	022	19		40	39	329	09		37	37	324	23		38	38				40	38	306	17		36	34	306	22		44	43	293	24		44	41			850
800	63·8	37	34			64·2	37	31	020	18	63·2	35	34	317	15	64·0	36	36	349	26	63·7	36	36			63·6	35	32	309	18	64·3	32	32	307	21	65·8	39	35	293	25	65·5	40	37			800
750		29	26				34	27	018	17		30	30	316	14		32	28	353	18		32	28				31	28	306	20		33	26	303	24		35	31	292	20		35	30			750
700	98·3	25	21			99·4	28	23	023	15	98·2	25	25	309	11	99·1	27	24	333	14	98·8	27	22			98·5	25	20	308	21	99·4	28	19	302	25	100·8	30	17	290	29	100·7	31	21			700
650		18	13				22	18	028	16		19	19	319	13		20	18	317	14		20	15				18	13	313	26		21	00	300	29		25	07	294	29		24	13			650
600	137·7	15	02			139·1	15	10	035	19	137·5	12	10	332	17	138·1	17	08	316	15	138·3	13	11			137·7	11	06	314	29	139·0	15	03	296	34	140·8	18	02	299	37	140·5	20	02			600
550		09	-16				08	01	040	23		04	02	336	20		08	-22	303	18		05	-04				67	-03	310	24		09	01	298	36		12	-09	293	40		17	-15			550
500	183·2	-02	-22			184·6	02	-10	038	24	182·6	-04	-08	344	18	184·3	03	-29	318	32	183·5	-03	-09			183·1	01	-12	307	27	184·5	00	-09	298	36	186·7	08	-21	302	48	186·8	06	-23			500
450		-11	-32				-08	-27	035	25		-12	-21	001	09		-08	-35	309	36		-12	-19				-10	-27	309	36		-12	-24	304	44		-03	-16	304	47		-05	-12			450
400	234·4	-23	-45			238·2	-19	-35	024	23	235·8	-23	-34	012	05	238·1	-18	-42	309	44	236·8	-23	-39			236·6	-21	-40	311	40	239·1	-21	-40	309	46	241·0	-16	-23	306	47	240·9	-15	-37			400
350		-36	-56				-33	-49	012	24		-37	-47	057	07		-31	-53	308	45		-36	-52				-35	-46	312	38		-34	-55	309	52		-29	-35	301	53		-28	-46			350
300	301·2	-52				303·3	-50		007	27	300·6	-49		065	16	303·1	-45		309	52	301·8	-51				301·6	-51		308	43	303·0	-49		308	51	307·0	-44		303	59	307·0	-43			300
250		-68					-62		011	30		-58		003	13		-61		317	47		-60					-60		310	42		-60		310	49		-61		303	54		-60				250
200	387·5	-56				390·2	-55				387·9	-55		340	14	390·7	-57		310	22	388·8	-54				388·9	-52		310	32	389·8	-59		309	34	393·2	-74		301	50	393·1	-74			200
170		-53										-52		333	15		-58		317	15		-54					-51		313	20		-59		303	25		-62		305	32		-62				170
150		-55										-56		346	07		-55		312	10		-54					-53		308	17		-54		289	13		-59		308	25		-59				150
130		-57										-53		002	03		-54		278	05		-56					-56		311	11		-57		310	06		-61		300	23		-61				130
110		-58										-57		L-V			-56		262	04		-58					-56		318	08		-59		313	10		-61		300	17						110
100	536·8	-59									537·6	-59		"		539·9	-57				538·1	-59				538·9	-57		305	06	538·4	-61		307	07	540·3	-59		313	13						100
90		-58										-61		"								-60					-59		304	08		-59					-61		316	07						90
80		-58										-62		"								-61					-61		319	05		-61					-61		317	06						80
70		-57										-61		310	10							-62					-59		325	05		-61					-61									70
60	(72mb)											-61										-58										(73mb)					-60									60
	Inversion 900mb 43°-888mb 44° 60)- 12°-595 " 17°					Inversion 932mb 42°-885mb 44° Isothermal. 770-750mb 34° 555-536 " 08°					Isothermal. 1010-978mb 53°					Inversion 842mb 36°-811mb 37° Isothermal. 624-600mb 17° 523-512 " 5°					Inversion 810mb 35°-800mb 36°										Inversion 795mb 31°-763mb 34° Isothermal. 568-558mb 10°					Isothermal. 760-750mb 35°					Isothermal. 925-889mb 47°- 773-732 " 35°- 600-588 " 20° Inversion 619mb 19°-600mb 20°					
Tropopause	I 250mb -68° 34.000.					II 270mb -65° 32.100.					II 267mb -59° 32.500.					I 243mb -64° 34.800.					II 258mb -61° 33.300.					I 257mb -62° 33.400.					I 230mb -63° 36.000.					II 205mb -74° 38.800.					I 208mb -71° 32.500.					Tropopause

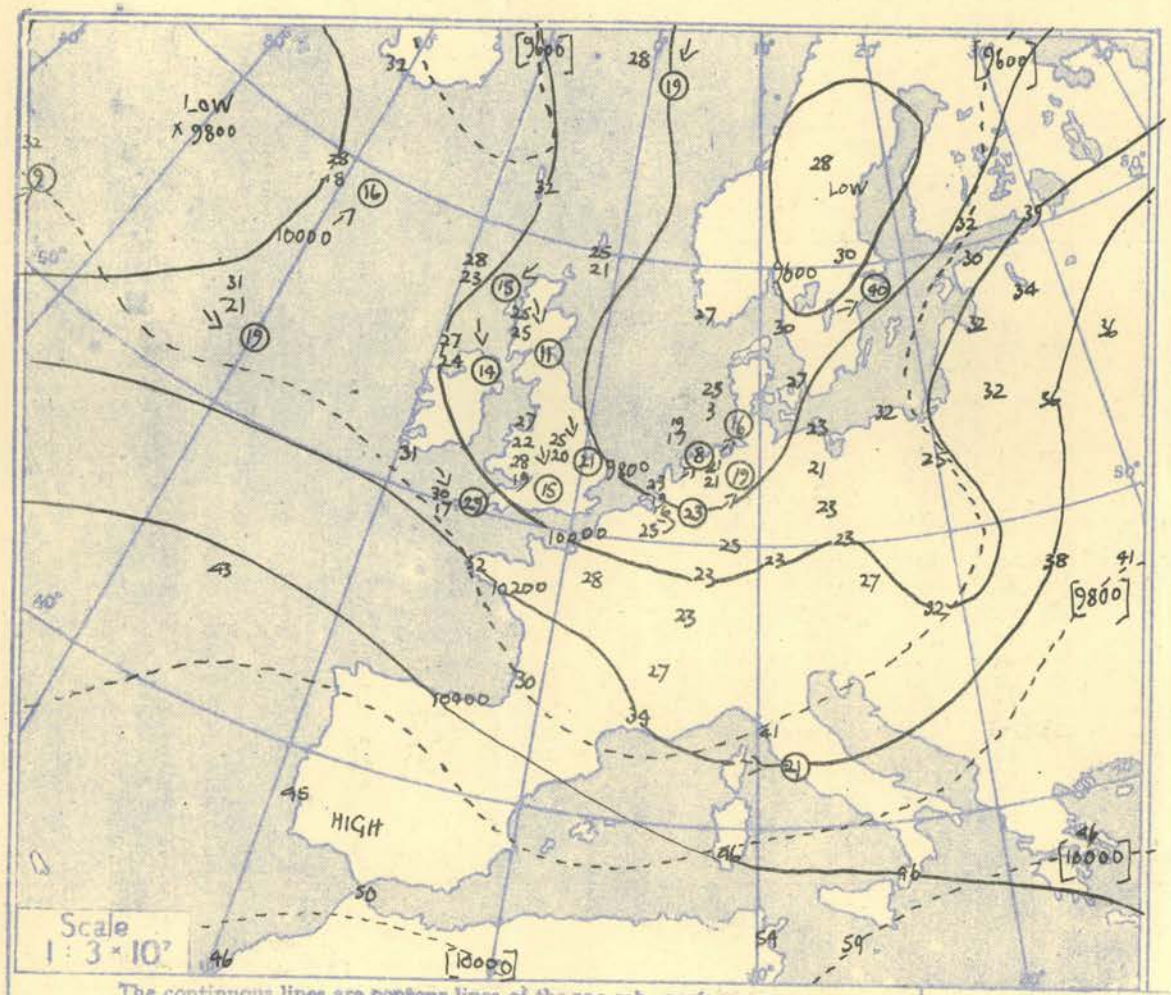
09h G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	09h G.M.T.	1013·7 mb	1003·6 mb	723 mb
STORNOWAY	09h G.M.T.	1014·3 mb	1016·0 mb	754 mb
LEUCHARS	09h G.M.T.	1012·8 mb	1002·0 mb	750 mb
ALDERGROVE	09h G.M.T.	1015·7 mb	1006·2 mb	767 mb
LIVERPOOL	09h G.M.T.	1014·8 mb	1012·8 mb	727 mb
DOWNHAM MARKET	09h G.M.T.	1015·4 mb	1010·0 mb	761 mb
LARKHILL	09h G.M.T.	1016·5 mb	1000·7 mb	743 mb
CAMBORNE	09h G.M.T.	1019·1 mb	1008·4 mb	700 mb
	G.M.T.	mb	mb	mb

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Pressure mb
Surf	02·7	47	44			00·4	52	49	010	10	00·2	55	53	350	02	02·6	53	49	290	12	00·6	54	51	290	10	01·2	56	51	250	09	04·4	57	48	270	07	02·9	56	55	Calm							Surf
1000	03·6	47	44			04·3	50	47			03·5	53	52			04·3	53	49	306	24	04·1	53	49	287	18	03·9	54	50			04·5	57	48			05·2	55	54	295	06						1000
950		40	40				46	43	031	21		46	43	358	05		46	43	314	25		47	44	290	18		47	44	297	19		47	41	285	12		51	50	289	10						950
900	32·0	45	30			32·8	44	41	037	21	32·1	43	42	354	09	32·8	40	39	318	25	32·7	41	39	287	19	32·5	44	40	301	17	33·1	40	36	284	12	34·0	49	48	295	16						900
850		41	24				41	37	039	23		39	38	349	12		39	36	322	21		38	35	278	18		41	37	290	13		35	31	285	15		45	45	297	16						850
800	63·6	39	13			64·3	37	33	038	21	63·5	35	34	342	12	64·3	37	33	324	16	64·0	37	37	292	08	64·1	37	29	289	18	64·4	38	05	290	20	65·8	41	40	310	18						800
750		35	05				31	27	044	19		32	32	385	17		30	27	318	14		35	31	335	05		31	25	303	15		33	12	291	21		34	32	296	19						750
700	98·8	29	01			99·3	25	21	049	18	98·6	27	23	343	16	99·3	25	22	316	16	99·3	29	25	335	09	99·2	29	19	307	17	99·5	28	18	292	23	101·2	32	17	286	23						700
650		24	14				19	15	041	16		19	12	012	15		22	15	330	16		21	17	316	13		22	12	313	15		24	23	296	24		25	08	289	21						650
600	138·6	20	00			138·7	13	07	035	18	138·1	18	08	039	18	139·0	17	05	355	09	139·0	16	07	307	18	138·8	13	06	305	23	139·2	16	05	297	27	141·1	22	23	292	27						600
550		12	-03				09	-02	044	18		13	-26	035	17		07	-06	343	10		10	-11	302	22		07	-07	308	31		07	-19	296	28		18	-30	289	33						550
500	184·4	02	-11			184·1	00	-14	054	14	183·9	04	-33	032	15	184·5	02	-22	318	16	184·6	02	-20	305	28	184·1	00	-09	299	27	184·7	03	-34	292	36	187·4	06	-20	291	28						500
450		-04	-28				-11	-24	010	14		-07	-38	024	17		-08	-35	316	18		-09	-25	296	34		-06	-29	310	36		-07	-45	293	40		-04	-13	293	32						450
400	238·4	-16	-28			237·5	-22	-42	104	12	237·8	-18	-47	010	19	238·2	-21	-47	313	27	238·5	-16	-49	313	44	237·6	-20	-35	296	47	238·5	-19	-53	298	45	241·6	-13	-21	284	34						400
350		-27	-36				-36	-53	108	11		-34	-51	002	21		-35	-53	308	35		-28	-53	307	52		-32	-43	295	60		-33	-60	298	50		-26	-34	286	34						350
300	304·6	-41				302·4	-51		105	27	303·2	-47		017	21	303·2	-51		300	44	304·6	-43				302·9	-49		295	69	303·8	-49		295	48	308·0	-41		283	36						300
250		-60					-60		071	41		-54		016	18		-64		308	37		-53					-57		300	57		-66		295	52		-57		284	45						250
200	391·2	-56				389·3	-56		045	11	391·6	-46		007	12	389·6	-56		318	19	393·0	-50				391·0	-48		315	21	389·2	-67		300	35	394·9	-63		287	47						200
170		-51					-55		046	07		-46		340	06							-47					-48		327	15		-59		307	29		-55		300	27						170
150		-51					-55		223	05		-47		293	05							-46					-48		309	12		-57		303	12		-54		300	25						150
130		-51					-54		246	05		-48		316	02							-47					-47		305	05		-56		313	08		-56		307	21						130
110		-51					-54		223	03		-49										-46					-51		333	03		-56		287	04		-56		318	11						110
100	542·1	-51				539·0	-52		Calm			(115mb)										-46				542·8	-50		335	03	537·8	-57		276	07	544·1	-57		318	09						100
90		-51					-49															-46					-53		314	03		-59		285	07		-57		317	08						90
80		-49					-48															-46					-54		305	03		-60		359	05		-58		292	06						80
70		-49																														-59		006	02		-59									70
60	(66mb)	-47																														-59				(65mb)									60
	Inversion 950mb 40°-915mb 46° Isothermal. 700-685mb 29°					Inversion 925mb 44°-906mb 45° Isothermal. 581-571mb 11°					Isothermal. 650-619mb 19°					Inversion 900mb 40°-887mb 41° 836 " 38°-824 " 40° 550 " 07°-544 " 08° Isothermal. 796-775mb 38°					Inversion 918mb 34°-796mb 38°					Inversion 909mb 43°-900mb 44° 730-710 " 30° 461 " -09°-455 " -08°					Inversion 845mb 34°-822mb 40°					Isothermal. 750mb-716mb 34°										
Tropopause	I 216mb -70° 37.600.					I 261mb -63° 33.300.					I 262mb -57° 33.300.					I 241mb -65° 35.000.					II 250mb -53° 34.500.					I 250mb -57° 34.200.					I 222mb -73° 36.200.					II 229mb -67° 36.500.										Tropopause

Wednesday 27th June. 1951.

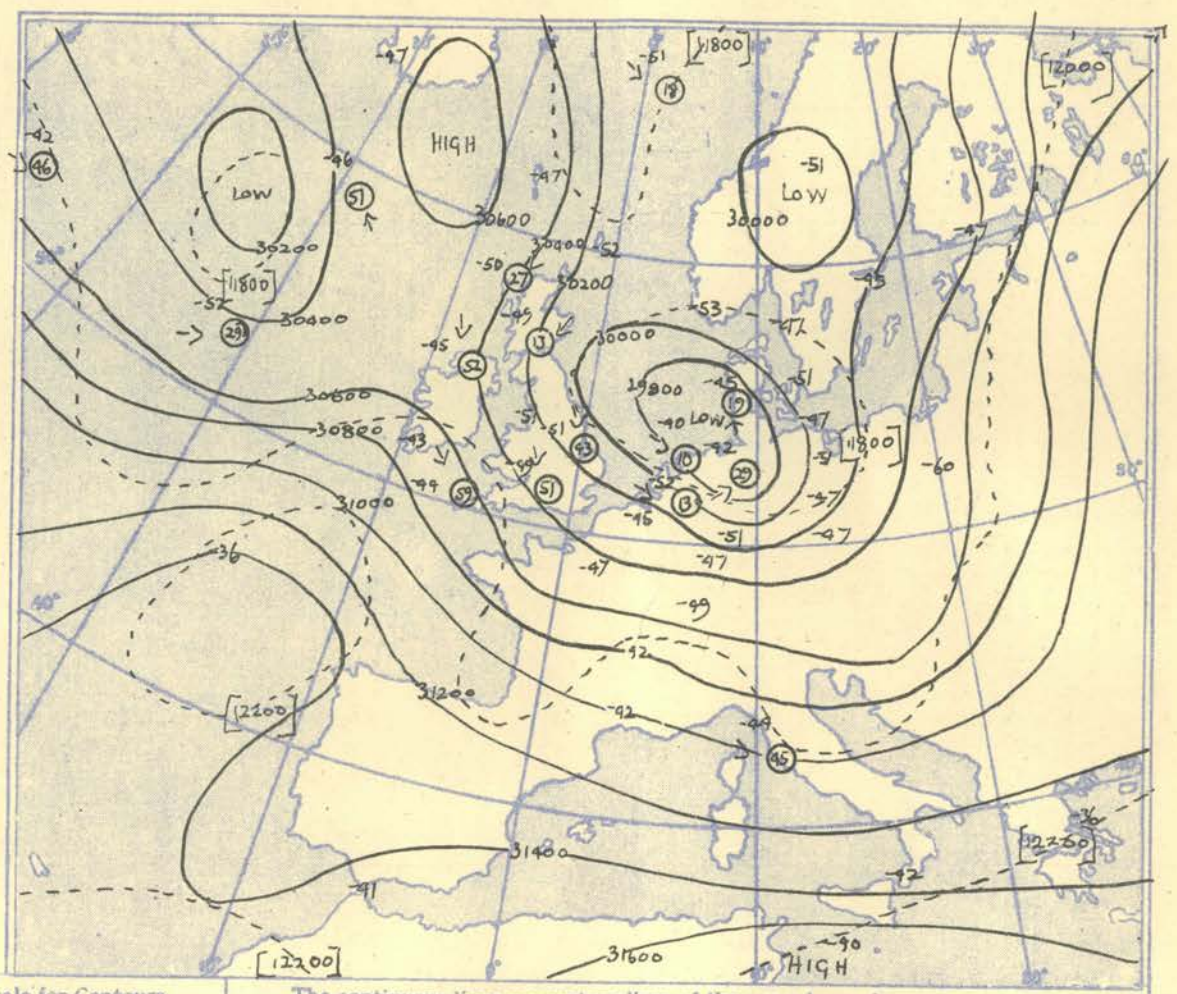
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.



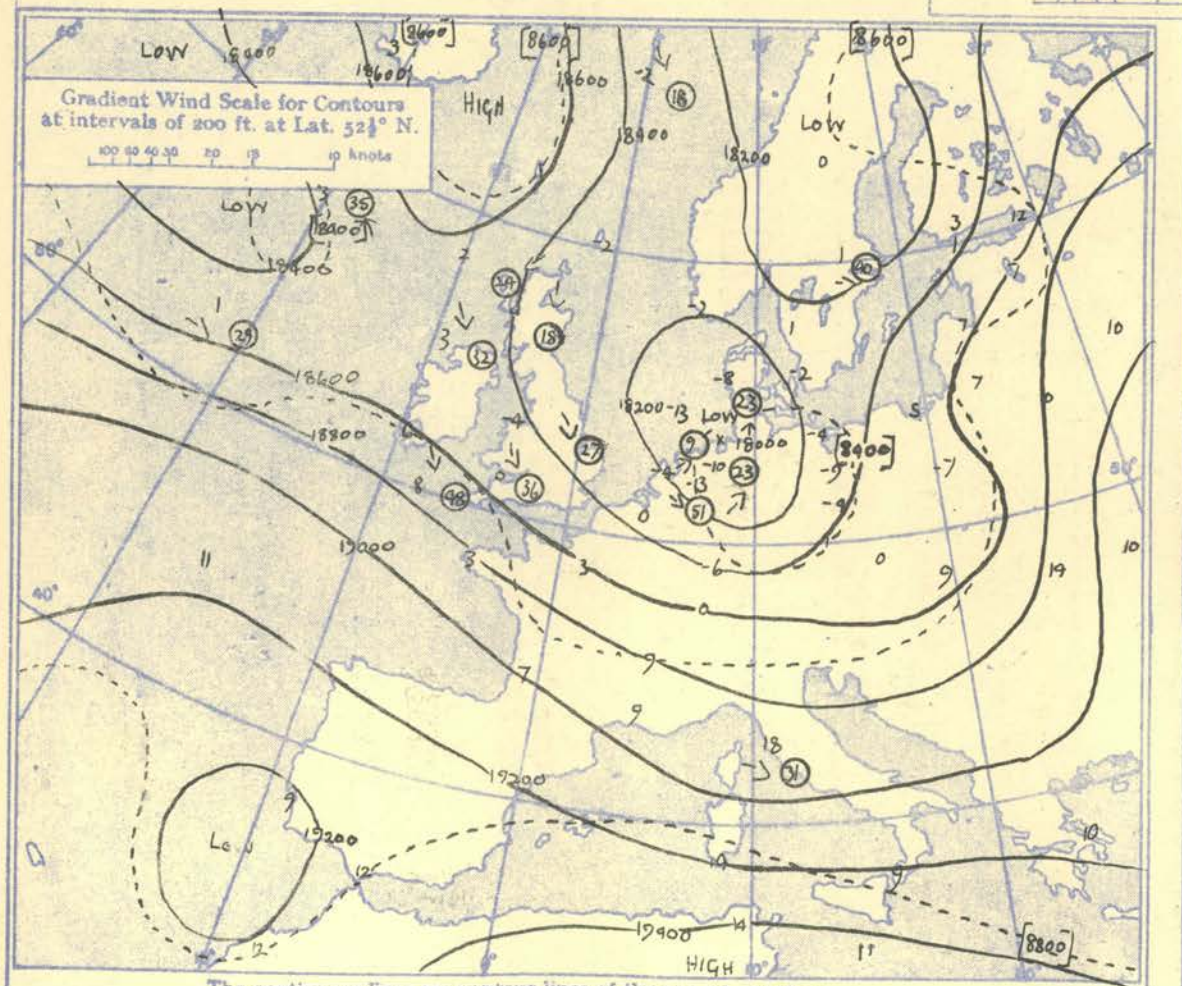
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

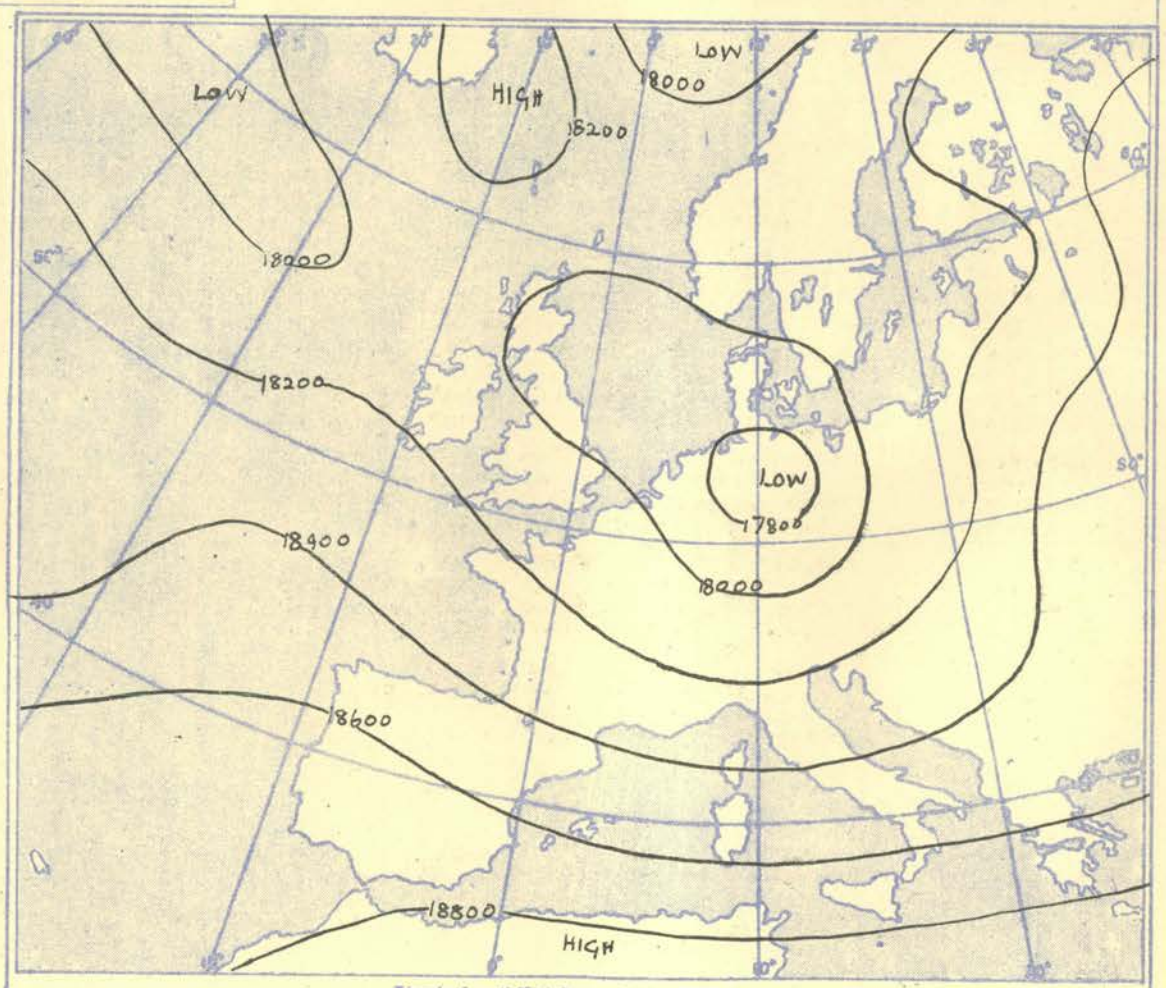
100 50 40 30 20 15 10 knots



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500-1000mb.

METEOROLOGICAL OFFICE LIBRARY 6 - JUL 1951

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

Pressure		52·12r 02·12W	48·1N 0·0W	47·7N 12·3W																			
	Time	1445																					
	M.S.L.	1017 mb	1022 mb	1024 mb	mb	mb	mb	mb	mb	mb	Time M.S.L. Surf Freezing	Pressure
	Surf	1015·5 mb	1018 mb	1021 mb	mb	mb	mb	mb	mb	mb		
	Freezing	745 mb	710 mb	710 mb	mb	mb	mb	mb	mb	mb		

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Pressure mb
Surf	00·4				59	58		60	58													Surf
1000	4·7			6·0			6·8	56	56													1000
950					53	50		52	49													950
900	38·4	43	43		48	46		47	47													900
850		40	40		46	44		47	38													850
800	64·9	35			43	39		41	39													800
750					38	33		37	29													750
700	99·9	28		102·3	30	27	103·1	31	30													700
650					27	24		29														650
600	139·5	14			26	16		20														600
550					13	09		14														550
500	184·9	02		188·3	09		189·2	03														500
450																						450
400	238·7	-29																				400
350																						350
300	304·3	-47																				300
250																						250
200																						200
170																						170

Cloud
4/8 St 930·905mb
8/8 Sc 848·770mb
7/8 As 670·610mb
4/8 Cs 360·295mb

Cloud.
3/8 St 990·980mb
2/8 Sc 880mb
2/8 Ac 670mb
Surf wind S.W 3·6kts.

Cloud
7/8 Sc 910·880mb
2/8 CiMR
Surf Wind S.W 7·10kts

DIRECTION (degrees from N) and VELOCITY (knots) of UPPER WINDS at heights above M.S.L.

Place	Shoeburyness		Larkhill		Leuchars		Larkhill		Pembroke Dock		Larkhill										Place
Time	09h		11h		15h		17h		1930h		23h										Time
Type					Pilot																Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Surf.	270	05			110	02	290	10	270	09	280	09									Surf.
1,000	280	15	300	12	023	12	290	12	290	11	310	12									1,000
2,000	280	15	290	14	016	11	300	10	330	12	310	13									2,000
3,000	280	16	270	16	008	11	290	09	330	14	320	16									3,000
4,000	280	17	270	16	341	11	300	11	320	13	320	17									4,000
5,000	280	19	270	16	345	12	300	13			310	16									5,000
6,000	280	18	280	17	355	13	290	17	330	21	300	18									6,000
8,000	300	12	290	22	029	16	290	23	320	24	290	22									8,000
10,000	290	25	290	30	040	16	290	27			310	27									10,000
14,000	290	27	290	43	047	14	300	35			290	33									14,000
18,000	290	40			047	15	300	31			290	33									18,000
24,000	290	52			061	26	(15,000)				(15,000)										24,000
30,000	290	62			089	42															30,000
40,000	300	21			230	05															40,000
50,000	310	05			(39,000)																50,000
	290	05																			
	(53,000)																				

NEPHOSCOPE OBSERVATIONS

Place													Place
Time Type													Time Type
Dir. Vel.													Dir. Vel.

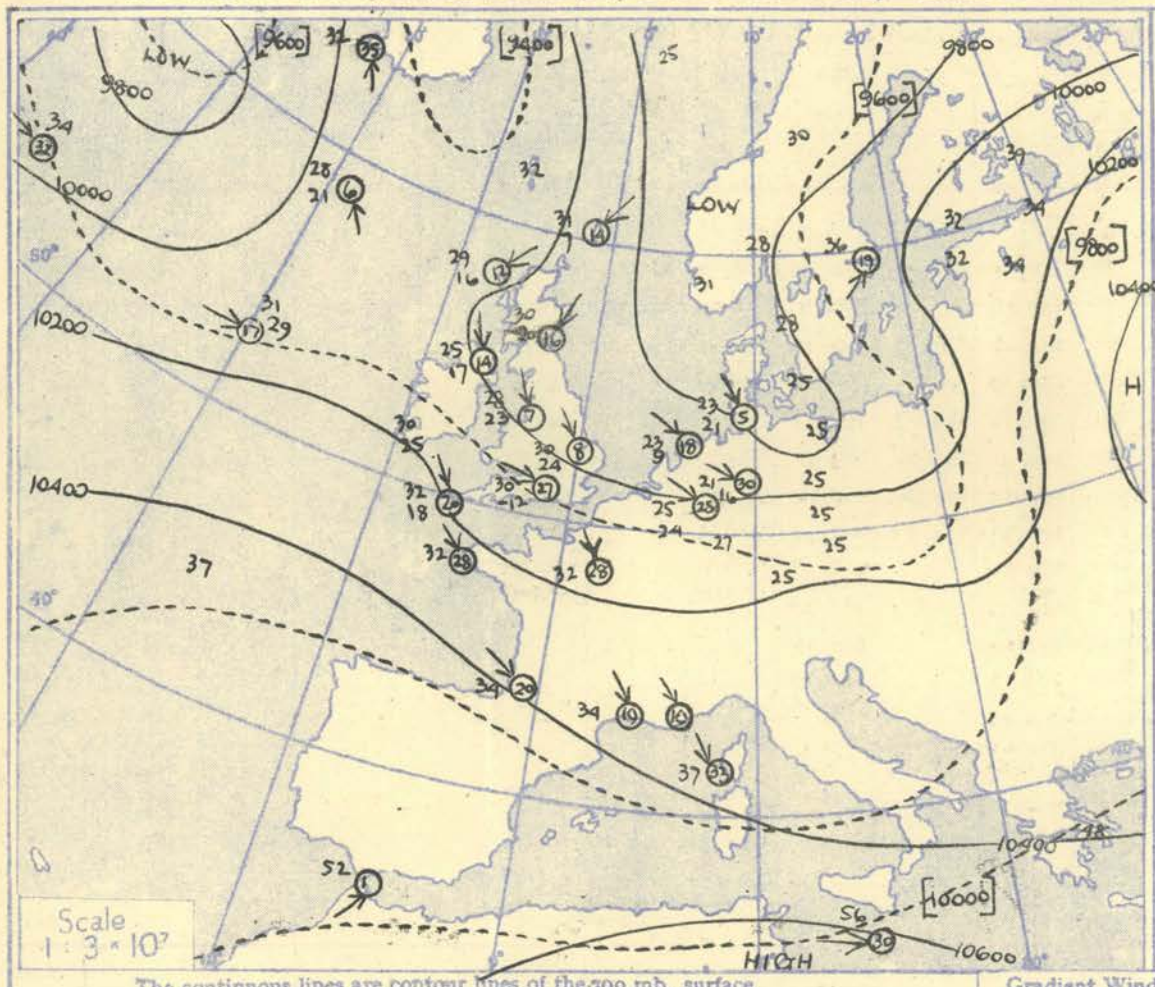
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	WEATHER RECORDER	WEATHER RECORDER	WEATHER RECORDER	WEATHER RECORDER	WEATHER EXPLORER	WEATHER EXPLORER	WEATHER EXPLORER	WEATHER EXPLORER			Ship
Lat/Long	52·6N. 19·6W.	52·5 N 26·0W.	52·5 N 19·9W.	52·5N 20·0W.	59·0N 19·5W	59·0N 19·0W.	59·0N 19·1W	59·0N 19·2W			Lat/Long
Pressure Time	03h. G.M.T.	09h. G.M.T.	15h. G.M.T.	21h. G.M.T.	03h. G.M.T.	09h. G.M.T.	15h. G.M.T.	21h. G.M.T.		G.M.T.	Time
Pressure M.S.L.	1018 mb	1019 mb	1020 mb	1016 mb	1019 mb	1019 mb	1020 mb	1020 mb		mb	M.S.L.
Pressure Surf	1018 mb	1019 mb	1020 mb	1016 mb	1019 mb	1019 mb	1020 mb	1020 mb		mb	Surf
Pressure Freezing	710 mb	680 mb	710 mb	670 mb	750 mb	735 mb	730 mb	750 mb		mb	Freezing

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf		57	54	280	10		54	51	270	10		56	52	200	09		56	56	140	10		53	40	121	12		53	42	130	11		54	43	130	13		53	44	135	10							Surf
1000	05·0	55	53	290	13	05·3	52	48	261	12	05·4	55	51	214	05		55	55	172	15	05·2	52	41	108	20	05·2	51	40	132	07	05·3	54	45	142	14	05·4	51	42	142	09							1000
950		49	49	286	13		47	44	262	14		51	46	230	08		53	53	178	16		46	38	108	21		44	35	132	07		47	41	152	10		45	39	143	07							950
900	33·7	48	48	273	12	34·0	48	40	268	19	34·2	48	39	237	14	33·2	50	50	185	16	33·7	39	33	117	21	33·6	40	25	140	08	33·9	44	30	128	07	33·9	41	31	148	05							900
850		44	41	259	13		44	36	258	20		44	36	243	20		47	46	202	16		40	19	127	20		40	08	147	08		43	14	132	06		41	18	154	03							850
800	65·4	38	31	256	14	65·7	41	24	250	18	65·9	40	36	254	19	65·2	43	42	226	17	65·1	38	09	140	21	65·4	37	28	169	06	65·5	39	21	142	03	63·5	37	20	158	04							800
750		33	14	248	15		37	00	248	18		36	33	266	18		39	37	235	16		31	25	143	17		34	25	193	06		34	28	142	25		32	26	193	06							750
700	100·6	31	-21	259	19	101·1	34	-16	252	20	101·3	31	29	272	17	100·9	36	34	240	25	100·2	28	18	176	16	100·2	27	16	173	07	100·8	28	21	147	06	100·6	26	22	167	08							700
650		25	-26	267	25		28	-21	256	21		26	25	263	21		30	28	260	35		24	-14	123	21		22	07	155	07		24	16	170	08		22	19	172	16							650
600	140·4	17	-05	263	27	141·2	22	-23	260	22	141·3	21	19	256	29	141·2	23	21	265	86	139·9	17	07	123	24	139·9	17	-16	150	12	140·6	17	04	191	14	140·2	17	-02	196	21							600
550		01	-03	259	26		14	-28	271	28		15	10	297	27		17	13	282	35		10	-15	128	31		10	-46	132	22		12	-08	178	21		10	00	195	22							550
500	188·9	01	-13	257	29	187·3	06	-35	270	36	187·4	07	02	267	31	187·6	07	00	268	28	185·6	03	-23	128	35	185·6	03	-41	132	33	186·4	03	-12	157	28	185·9	02	-12	192	22							500
450		-09	-23	259	28		-02	-44	278	45		-01	-07	267	32		-01	-13	275	25		-08	-36	128	35		-09	-44	133	34		-07	-22	145	37		-10	-27	184	21							450
400	237·4	-13	-31	256	35	241·7	-12	-47	279	49	241·9	-11	-15	260	44	242·1	-12	-28	281	24	239·4	-19	-44	135	34	239·2	-19	-55	140	32	240·2	-17	-36	148	35	239·3	-23	-38	171	20							400
350		-38	-55	244	22		-24	-50	293	54		-23	-28	265	36		-25	-39	290	16		-31	-56	120	43		-32	-58	140	31		-29	-38	152	42		-35	-44	170	35							350
300	304·3	-52		237	29	308·4	-38	-58	287	57	308·7	-40	-47	270	54	(330mb)	-32	-47			305·0	-46		136	51	304·7	-47		140	43	306·2	-43		150	46	304·3	-47		148	47							300
250		-53		248	36		-52		285	65		-52		276	55							-60		120	53		-60		140	51		-38		153	45		-56		146	49							250
200	392·1	-52		268	34	396·3	-63		289	49	396·4	-62		276	47						391·8	-56		108	34	391·8	-54		140	20	393·9	-51		153	17	391·8	-50		216	13							200
170		-55		276	31		-55		290	42		-54		291	36							-54		127	12		-51		140	09		-49		153	06	(188mb)	-49												170
150		-56		266	25		-56		287	33		-52		291	37							-55		095	11		-50		CALM			-49		CALM		Inversion											150
130		-57		259	19		-54															-56		098	12		-52		"			-49		153	03	905mb 40°-885mb 43°								130
110							-53															-55		107	07		-52		"			-51		311	05	662mb 21°-650mb 22°								110
100						545·8	-54														541·4	-55		098	07	542·5	-50		"		545·4	-51		256	09											100
90							-64															-54		108	07		-52		"			-51		254	15	Isothermal								90
80							-55															-55		102	10		-52		"			-50		222	12	868 - 836mb 41°								80
70							-55															-55		103	07		-52		CALM			-51		159	04	650 - 643mb 22°								70
60							-55															Isothermal					Isothermal				(65mb)	-50												60
							-54															864 - 850mb 40°					900 - 828mb 40°					Isothermal												
							Inversion															722 - 712mb 29°					Inversion					922 - 904mb 43°												
							950mb 97°-900mb 48°															569 - 560mb 11°					784mb 35°-770mb 36°					413 - 405mb -15°												
							Isothermal															Inversion											Inversion												
							828 - 800mb 41°															895mb 38°-864mb 40°											900mb 44°-885mb 45°												
																																		673mb 23°-662mb 25°												
Tropopause	I 265mb. -55° 33,100'	I 213mb -65° 38,300'	I 212mb -65° 38,400'	N.R.	I 234mb -65° 35,900'	I 256mb -68 33,900'	I 237mb -60° 35,900'	I 263mb - 59° 33,300'			Tropopause

Wednesday 27th. June 1951.

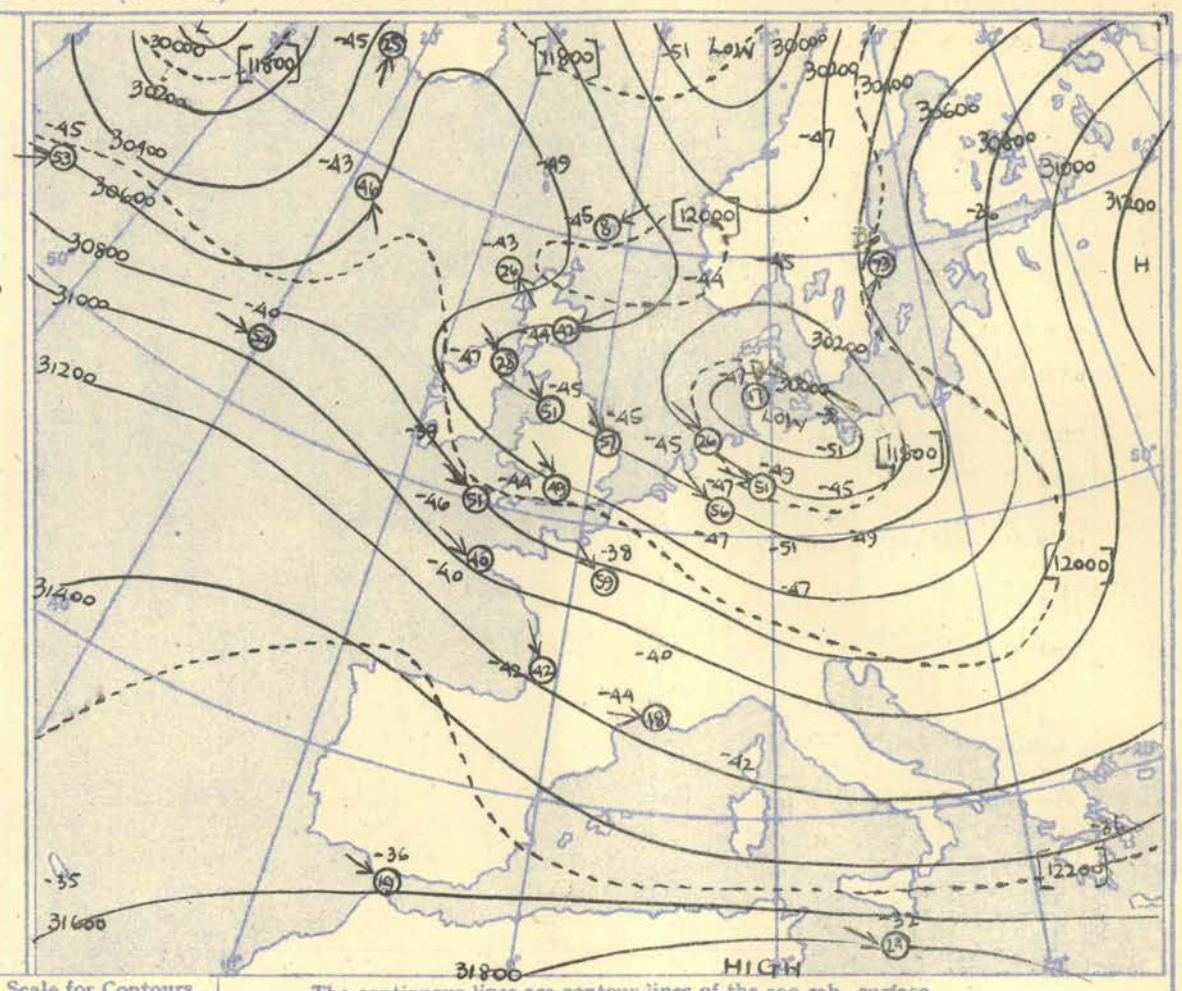
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

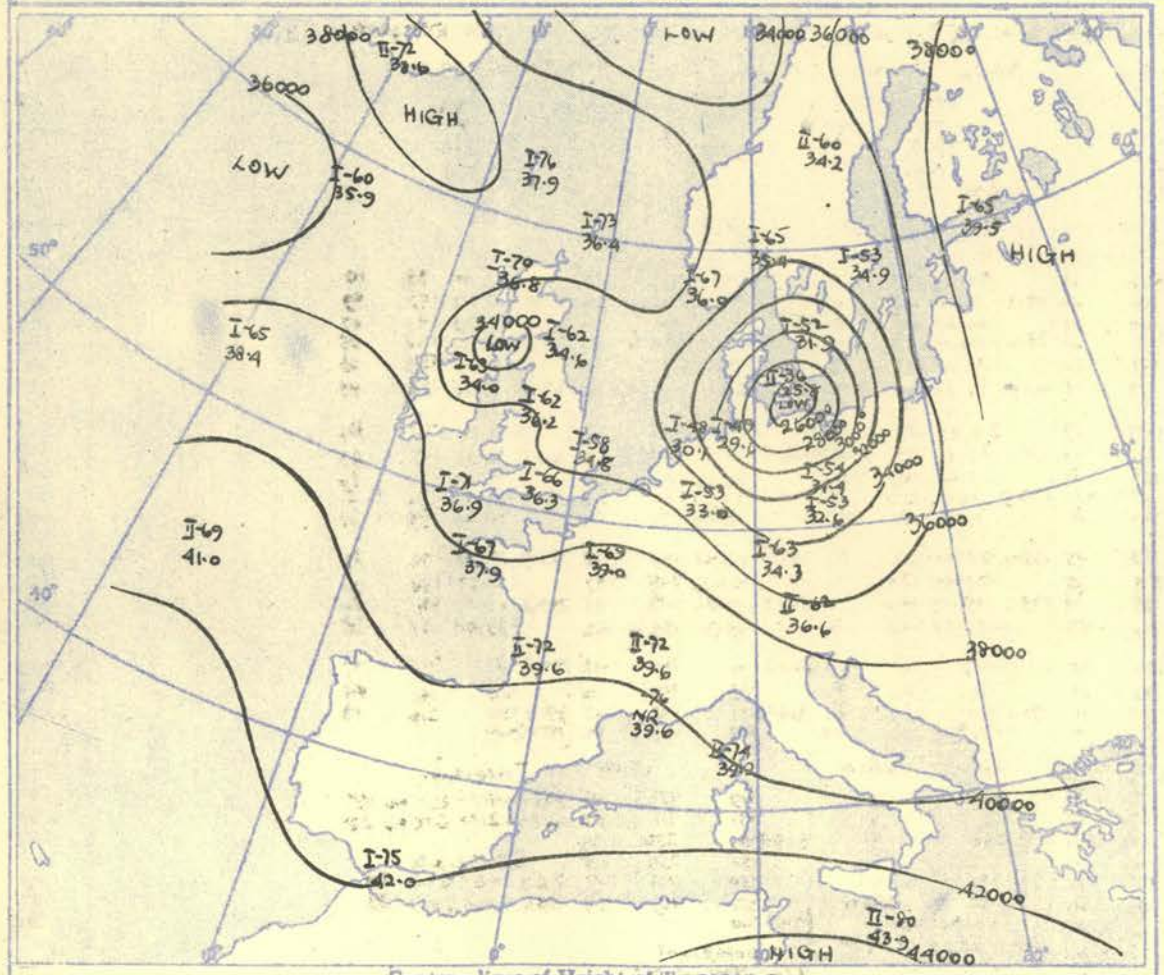
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N

100 60 40 30 20 15 10 knots



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

The movement of the cold pool over Northwest and North Germany has become very slow. Other features show little change from previous charts.

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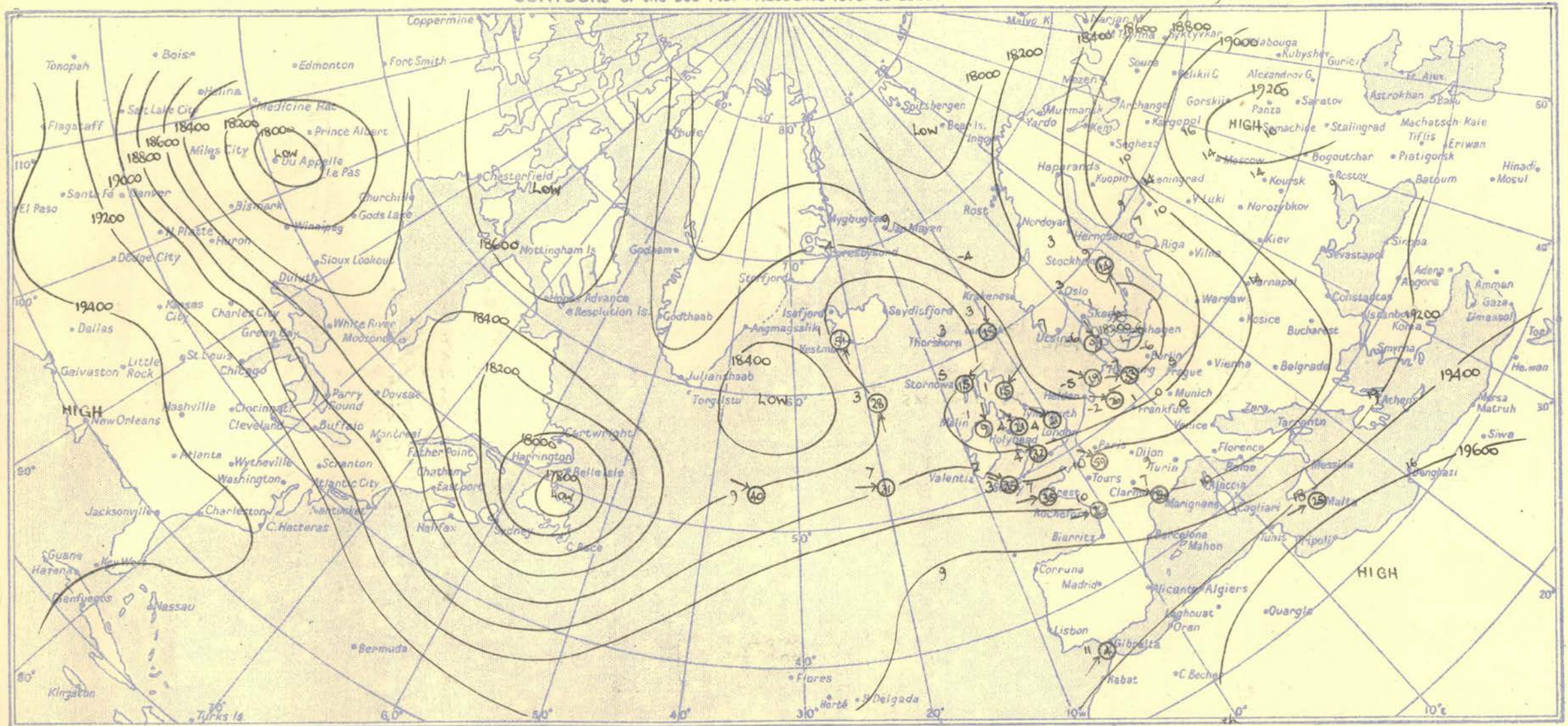
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Wednesday 27th June, 1951.


Coppermine
Tonopah
Boise
Edmonton
Fort Smith
Flagstaff
Salt Lake City
Helena
Medicine Hat
Prince Albert
Miles City
Du Appelle
Le Pas
Chesterfield
Churchill
Gods Lake
Winnipeg
Santa Fé
Denver
El Paso
Bismark
N. Platte
Huron
Dodge City
Sioux Lookout
Duluth
Kansas City
Charles City
Green Bay
White River
Moosonee
Dallas
Galveston
Little Rock
St. Louis
Chicago
Parry Sound
Dousse
Nashville
Cincinnati
Cleveland
Buffalo
Montreal
New Orleans
Atlanta
Wytheville
Scranton
Washington
Atlantic City
Charleston
Nantucket
C. Hatteras
Jacksonville
Guano
Havana
Key West
Cienfuegos
Nassau
Bermuda
Kingston
Turks Is.
Father Point
Chatham
Eastport
Halifax
Sydney
C. Race
Harrington
Cartwright
Belle Isle
Hopes Advance
Resolution Is.
Godthaab
Julianshaab
Torgilstu
Angmagssalik
Isafjord
Stornoway
Thorshorn
Lerwick
Malin
Holyhead
Valentia
Spitsbergen
Bear Is.
Ingo
Mygbugten
Jan Mayen
Rost
Nordoyan
Hernosand
Stockholm
Oslo
Skagen
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Moscow
Bogoutchar
Stalingrad
Saratov
Astrakhan
Baku
Tiflis
Eriwan
Pratigorsk
Machatsch-Kale
Hinadi
Mosul
Semachide
Panta
Gorskiy
Archangel
Murmansk
Yardo
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Gurieff
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Sykyvkar
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M. Tsyjna
Seghezo
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Y. Luki
Jelabouga
Ft. Alex
Astrakhan
Baku
Machatsch-Kale
Tiflis
Eriwan
Pratigorsk
Hinadi
Mosul
Batoum
Rostov
Kursk
Moscow
Bogoutchar
Semachide
Stalingrad
Saratov
Gorskiy
Archangel
Murmansk
Yardo
Kem
Seghezo
Kargopol
Panta
Soura
Mezen
Velikii G.
Alexandrov G.
Jelabouga
Kubyshev
Gurieff
Sykyvkar
Malye K.
Marjan M.
M. Tsyjna
Ft. Alex
Astrakhan
Baku
Machatsch-Kale
Tiflis
Eriwan
Pratigorsk
Hinadi
Mosul
Batoum
Rostov
Kursk
Moscow
Bogoutchar
Stalingrad
Semachide
Panta
Saratov
Gorskiy
Archangel
Murmansk
Yardo
Kem
Seghezo
Kargopol
Yuki
Norozubkov
Haparanda
Kuopio
Leningrad
Y. Luki
Riga
Vilna
Kiev
Sevastapol
Simpa
Tarnapol
Warsaw
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Simpa
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Stalingrad
Saratov
Astrakhan
Baku
Tiflis
Eriwan
Pratigorsk
Hinadi
Mosul
Semachide
Panta

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Wednesday 27th June, 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

LERWICK

15h. G.M.T.
Time
M.S.L. 1015·2 mb
Surf 1005·2 mb
Freezing 706 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	53	45	045	14
1000	04·1	52	45		
950		44	40	010	18
900	32·6	43	30	013	21
850		42	25	014	21
800	64·2	40	19	015	18
750		36	22	015	17
700	99·6	31	17	022	14
650		24	10	024	18
600	133·5	19	01	025	17
550		12	-09	028	17
500	185·3	03	-14	024	15
450		-06	-26	027	15
400	239·3	-18	-35	031	15
350		-30	-45	040	10
300	305·1	-45		060	18
250		-64		038	07
200	391·0	-57		L+V.	
170		-52		L+V.	
150		-52		L.V.	
130		-52			
110		-53			
100	541·5	-53			
90		-51			
80					
70					
60					

Inversion 930mb. 42°–913mb. 44°

Tropopause: I 227mb. -73° 36,400'

STORNOWAY

15h. G.M.T.
Time
M.S.L. 1016·7 mb
Surf 1018·3 mb
Freezing 726 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	54	51	030	08
1000	05·0	51	45		
950		48	38	043	16
900	33·6	47	31	045	20
850		43	27	045	17
800	65·3	39	23	041	13
750		35	16	042	13
700	100·6	29	16	048	12
650		23	17	059	16
600	140·4	17	05	066	20
550		14	00	068	16
500	186·3	08	-08	076	15
450		-04	-17	077	19
400	240·5	-15	-28	084	15
350		-29	-37	100	19
300	306·5	-43		102	26
250		-62		117	28
200	393·0	-58		078	10
170		-55		L+V.	
150		-54		L+V.	
130		-54		227	05
110		-53		251	05
100	542·8	-53		238	06
90		-50		243	07
80		-51		255	05
70		-53		L+V.	
60					

Inversion 963mb. 45°–933mb. 50°
654mb. 22°–640mb. 24°

Tropopause: I 225mb. -70° 36,800'

LEUCHARS

15h. G.M.T.
Time
M.S.L. 1015·6 mb
Surf 1014·8 mb
Freezing 721 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	56	50		
1000	04·2	53	47		
950		47	38		
900	32·8	42	38		
850		38	37		
800	64·1	37	31		
750		32	06		
700	99·2	30	-20		
650		27	-11		
600	139·1	19	-09		
550		10	-15		
500	184·2	01	-22		
450		-08	-25		
400	238·5	-18	-40		
350		-28	-49		
300	304·5	-44			
250		-61			
200	392·0	-49			
170		-49			
150		-49			
130		-49			
110		-49			
100	543·8	-50			
90		-51			
80		-52			
70		-51			
60		-51			
950 mb		-51			

For winds see page 3.

Inversion 812mb. 35°–802mb. 37°
Isothermal 753–721mb. 32°
677–659mb. 27°

Tropopause: I 248mb. -62° 34,600'

ALDERGROVE

15h. G.M.T.
Time
M.S.L. 1016·9 mb
Surf 1007·4 mb
Freezing 750 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	54	52	300	10
1000	04·6	53	51	310	15
950		47	46	315	16
900	33·2	43	41	320	18
850		40	36	315	17
800	64·7	37	33	320	14
750		32	27	333	12
700	99·8	25	17	340	14
650		19	11	342	12
600	139·3	15	02	330	13
550		08	-09	340	15
500	184·8	01	-20	007	09
450		-10	-33	345	07
400	238·3	-21	-49	345	11
350		-35	-57	315	15
300	303·5	-47		300	28
250		-61		307	27
200	390·6	-52		307	14
170		-51		305	10
150		-51		280	13
130		-52		280	09
110		-51		260	07
100	541·5	-53		240	05
90		-48		320	05
80		-51		050	05
70		-50		Calm	
60		-44		Calm	

Isothermal 900–886mb. 42°
830–807mb. 39°
617–600mb. 15°

Tropopause: I 252mb. -63° 34,000'

LIVERPOOL

15h. G.M.T.
Time
M.S.L. 1016·4 mb
Surf 1014·4 mb
Freezing 738 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	55	51	300	10
1000	04·4	53	50	301	18
950		46	43	304	19
900	32·9	42	39	304	18
850		40	37	298	16
800	64·4	38	34	302	14
750		33	29	313	09
700	99·6	28	23	305	07
650		21	16	287	10
600	139·2	15	10	293	17
550		11	-05	302	19
500	184·9	04	-19	317	21
450		-05	-38	307	24
400	238·9	-17	-49	300	26
350		-32	-59	303	30
300	304·6	-45		297	51
250		-59		301	45
200	391·9	-54		298	22
176 mb		-50			

Isothermal
900–886mb. 42°
830–807mb. 39°
617–600mb. 15°

Tropopause: I 232mb. -62° 36,000'

DOWNHAM MARKET

15h. G.M.T.
Time
M.S.L. 1015·7 mb
Surf 1011·3 mb
Freezing 731 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	58	51	250	08
1000	04·2	56	49	276	15
950		50	45	279	15
900	32·9	44	40	279	15
850		39	34	273	18
800	64·4	38	32	278	15
750		33	28	287	09
700	99·6	30	24	288	09
650		24	16	285	09
600	139·5	16	09	280	15
550		09	-12	287	18
500	185·1	04	-13	304	21
450		-06	-29	305	21
400	239·1	-17	-41	309	23
350		-31	-55	305	42
300	304·8	-45		300	57
250		-57		297	56
200	392·6	-51		301	29
170		-48		304	12
150		-49		292	09
130		-49		305	09
110		-51		249	08
100	544·7	-51		299	14
90		-52		300	15
80		-51		333	09
70		-51		135	05
60		-50		334	07
013 mb					

Inversion 815mb. 37°–800mb. 38°

Tropopause: I 246mb. -58° 34,800'

LARKHILL

15h. G.M.T.
Time
M.S.L. 1016·7 mb
Surf 1001·1 mb
Freezing 719 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	64	45	280	14
1000	04·7	63	44		
950		56	40	278	19
900	33·7	48	34	271	18
850		40	28	276	18
800	65·3	40	09	286	24
750		35	-01	291	24
700	100·6	30	-12	292	27
650		23	08	290	32
600	140·3	17	06	291	34
550		12	-08	297	33
500	186·1	04	-22	295	32
450		-06	-25	292	36
400	240·1	-17	-28	287	38
350		-29	-40	290	41
300	306·1	-44		287	49
250		-60		290	50
200	393·1	-55		290	31
170		-50		290	25
150		-53		288	18
130		-51		293	12
110		-52		271	10
100	543·8	-54		295	05
90		-53		324	07
80		-55		323	06
70		-56			
60					

Inversion 837mb. 39°–818mb. 41°

Tropopause: I 230mb. -66° 36,300'

CAMBORNE

15h. G.M.T.
Time
M.S.L. 1020·3 mb
Surf 1009·8 mb
Freezing 700 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	60	52	330	10
1000	05·6	58	50	293	15
950		52	44	303	15
900		49	43	306	18
850	34·5	45	36	297	21
800	66·3	40	31	292	21
750		36	25	298	22
700	101·7	32	18	305	20
650		24	12	300	22
600	141·6	16	00	298	24
550		11	-08	292	27
500	187·5	03	-09	281	35
450		-06	-16	275	36
400	241·4	-18	-35	273	44
350		-29	-45	275	42
300	307·2	-46		282	51
250		-62		273	50
200	393·6	-60		289	36
170		-55		290	26
150		-56		283	24
130		-58		288	21
110		-59		307	14
100	542·2	-59		304	12
90		-59		302	10
80		-59			
70					
60					

Inversion 600mb. 16°–585mb. 18°

Tropopause: I 225mb. -71° 36,900'

VALENTIA

15h. G.M.T.
Time
M.S.L. 1020·8 mb
Surf 1019 mb
Freezing 720 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	59	56		
1000	05·6	58	55		
950		53	50		
900	34·5	48	45		
850		46	43		
800	66·4	42	40		
750		37	35		
700	101·9	30	25		
650		27	06		
600	141·9	19	-01		
550		10	-04		
500	187·7	02	-11		
450		-06	-19		
400	241·7	15	-33		
350		-24			
300	308·3	39			
250		-52			
200	241 mb	-54			
170					
150					
130					
110					
100					
90					
80					
70					
60					

For winds see page 3.

Tropopause: N.R.

LERWICK

21h. G.M.T.
Time
M.S.L. 1015·8 mb
Surf 1005·8 mb
Freezing 721 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	50	41	360	14
1000	04·2	49	40		
950		42	39	343	20
900	32·5	35	25	349	22
850		33	22	001	21
800	63·9	42	33	015	18
750		36	27	024	18
700	99·2	29	23	024	15
650		23	15	020	12
600	139·1	17	03	008	14
550		11	-07	003	17
500	184·8	03	-11	356	20
450		-06	-24	007	17
400	238·8	-16	-34	006	16
350		-31	-45	357	15
300	304·6	-46		354	15
250		-62		006	20
200	390·7	-67		349	13
170		-52		291	09
150		-53		276	07
130		-52		269	12
110		-54		243	06
100	540·7	-52		276	06
90		-51		317	05
80		-52		266	04
70	075 mb	-52			
60					

Inversion 850mb. 32°–835mb. 43°
Isothermal 835–809mb. 48°

Tropopause: I 224mb. -70° 36,600'

STORNOWAY

21h. G.M.T.
Time
M.S.L. 1017·2 mb
Surf 1018·8 mb
Freezing 719 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	50	44	020	10
1000	05·1	48	43	044	21
950		48	37	043	20
900	33·6	45	36	046	18
850		40	32	049	17
800	65·2	39	22	051	15
750		35	24	050	14
700	100·4	30	19	049	11
650		24	12	054	09
600	140·2	19	02	058	10
550		13	-01	063	11
500	186·2	05	-12	066	11
450		-04	-23	070	12
400	240·4	-14	-26	074	11
350		-26	-35	085	13
300	302·7	-42		106	15
250		-60		077	20
200	387·5	-57		021	02
170		-55		314	05
150		-53		319	06
130		-53		313	05
110		-52		202	03
100	537·6	-52		215	04
90		-51		253	06
80					
70					
60					

Inversion 964mb. 44°–950mb. 48°
Isothermals 817–782mb. 39°
600–585mb. 19°

Tropopause: I 227mb. -70° 36,700'

LEUCHARS

21h. G.M.T.
Time
M.S.L. 1017·0 mb
Surf 1016·2 mb
Freezing 760 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	53	49	Calm	
1000	04·6	51	48	028	03
950		46	45	025	07
900	33·1	43	43	004	12
850		40	40	358	15
800	64·5	36	36	011	13
750		31	27	004	12
700	99·4	25	23	023	15
650		20	19	017	18
600	139·0	18	11	009	16
550		10	04	012	13
500	184·6	00	-04	027	15
450		-08	-14	052	15
400	238·3	-18	-22	064	22
350		-30	-38	076	29
300	303·6	-51		076	28
250		-70		082	22
200	389·6	-56		007	09
170		-56		348	05
150		-55		301	06
130		-57		212	04
110		-58		250	08
100	538·8	-58			
90					
80					
70					
60					

Inversion 685mb. 28°–675mb. 26°
Isothermal 867–844mb. 40°

Tropopause: I 237mb. -74° 35,300'

ALDERGROVE

21h. G.M.T.
Time
M.S.L. 1018·1 mb
Surf 1008·5 mb
Freezing 750 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	53	49	300	07
1000	04·9	52	48		
950		47	44	302	11
900	33·5	41	40	325	14
850		40	40	330	14
800	64·9	36	27	332	13
750		32	23	329	11
700	100·1	28	16	331	12
650		20	11	340	14
600	139·6	16	-20	007	12
550		10	-32	024	09
500	185·2	02	-48	003	09
450		-08	-50	360	13
400	238·9	-20	-60	354	19
350		-33	-60	358	16
300	304·1	-50		014	17
250		-60		324	32
200	390·9	-58		314	15
170		-55		317	15
150		-56		347	12
130		-55		286	13
110		-57		297	10
100	540·3	-56		291	06
90		-56		311	05
80		-57		L+V.	
70					
60					

Inversion 900mb. 41°–865mb. 42°
Isotherm 627–592mb. 16°

Tropopause: II 258mb. -60° 33,600'

LIVERPOOL

21h. G.M.T.
Time
M.S.L. 1017·1 mb
Surf 1015·1 mb
Freezing 761 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	54	52	300	10
1000	04·7	52	50	303	15
950		47	44	306	21
900	33·3	43	39	305	22
850		39	35	302	24
800	64·7	35	32	303	21
750		31	27	310	15
700	99·7	24	14	313	12
650		16	10	316	11
600	138·9	11	02	324	11
550		08	-34	339	12
500	184·3	02	-29	336	12
450		-12	-47	331	15
400	237·7	-23	-56	323	20
350		-36	-59	306	27
300	302·6	-50		300	39
250		-56		314	25
200	390·3	-52		321	16
170		-53		318	14
150		-53		296	08
130		-54		270	05
110		-57		322	04
100	540·4	-56		338	03
90		-55			
80	095 mb				
70					
60					

Isothermal
600mb. 11°–587mb. 12°
589–571mb. 12°

Tropopause: II 238mb. -56° 32,200'

DOWNHAM MARKET

21h. G.M.T.
Time
M.S.L. 1016·3 mb
Surf 1011·9 mb
Freezing 737 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	55	51	245	04
1000	04·4	54	49	307	11
950		49	47	307	11
900	33·1	44	42	291	09
850		39	36	271	07
800	64·6	34	31	259	06
750		34	28	315	07
700	99·6	28	24	333	10
650		21	16	309	10
600	139·0	13	09	296	12
550		07	-01	294	15
500	184·2	00	-21	292	16
450		-10	-32	305	16
400	237·7	-21	-39	290	22
350		-34	-50	289	27
300	302·9	-48		282	39
250		-63		289	40
200	389·5	-58		301	19
170		-55		309	14
150		-54		309	12
130		-55		310	07
110		-58		313	06
100	538·7	-62		320	04
90		-62		328	05
80		-62		347	02
70		-63			
60	665 mb	-62			

Inversion 767mb. 31°–750mb. 34°
570mb. 06°–555mb. 08°

Tropopause: I 242mb. -66° 35,000'

LARKHILL

21h. G.M.T.
Time
M.S.L. 1018·0 mb
Surf 1002·1 mb
Freezing 741 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	56	51	280	14
1000	04·9	56	51	310	14
950		51	48	321	13
900	33·7	46	45	313	12
850		40	39	296	18
800	65·2	34	17	296	23
750		33	04	298	27
700	100·2	28	08	294	29
650		19	14	296	31
600	139·7	14	-02	287	36
550		04	-01	282	37
500	184·8	03	-07	286	37
450		-12	-28	283	34
400	238·0	-23	-40	289	22
350		-36	-54	322	12
300	303·1	-51		296	21
250		-59		292	26
200	390·2	-54		299	24
170		-55		303	23
150		-55		305	18
130		-57		294	07
110		-57		295	04
100	539·4	-58		294	05
90		-61		301	09
80		-62			
70		-62			
60	665 mb	-62			

Inversion 810mb. 33°–780mb. 35°

Tropopause: I 235mb. -58° 35,600'

CAMBORNE

21h. G.M.T.
Time
M.S.L. 1020·9 mb
Surf 1010·3 mb
Freezing 723 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	56	50	300	06
1000	05·7	54	50	290	09
950		48	44	317	16
900	34·4	46	43	318	21
850		45	40	307	22
800	66·2	41	35	304	24
750		36	27	303	24
700	101·6	29	23	299	22
650		22	15	298	21
600	141·1	14	04	296	26
550		05	-01	292	33
500	186·3	05	-11	292	35
450		-13	-23	291	45
400	239·3	-24	-36	290	51
350		-36	-46	288	60
300	304·2	-50		281	53
250		-56		291	50
200	391·7	-56		297	38
170		-57		295	20
150		-57		298	26
130		-59			
110		-59			
100	125 mb				
90					
80					
70					
60					

Isothermal 850–837mb. 45°

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No. 11778. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Thursday 28th June. 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

03h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA.
Pressure: Time	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.
Pressure: M.S.L.	1016.7 mb	1019.5 mb	1018.4 mb	1019.0 mb	1017.9 mb	1016.6 mb	1019.0 mb	1021.3 mb	1020.4 mb
Pressure: Surf	1006.6 mb	1017.9 mb	1017.6 mb	1009.3 mb	1015.9 mb	1012.1 mb	1002.9 mb	1010.8 mb	1019 mb
Pressure: Freezing	720 mb	735 mb	740 mb	740 mb	763 mb	763 mb	755 mb	738 mb	720 mb

Pressure mb	LERWICK Height ft./100	°F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA. Height ft./100	°F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	46	44	010	12	00·4	46	44	360	05	00·2	49	45	CALM		02·6	52	51	310	05	00·6	52	49	310	07	01·2	53	52	270	07	04·4	51	49	280	05	02·9	56	56	270	10	00·3	57	54	280	04	Surf
1000	4·5	45	43			5·1	44	43	011	09	4·9	47	44	303	05	5·1	51	50			4·8	51	48	312	12	4·5					5·1	51	50			5·8	55	55	277	17	5·5	55	52	280	04	1000
950		40	40	013	15		48	30	029	11		43	41	303	06		46	46	314	12		46	43	312	12		47	46	301	14		49	45	311	15		52	52	288	17		50	47			950
900	32·7	41	33	016	16	33·6	45	30	039	10	33·3	39	39	315	09	33·6	42	42	312	10	33·3	43	40	318	11	33·1	43	40	296	14	33·8	44	41	318	14	34·8	49	48	294	16	34·4	43	40			900
850		45	23	013	15		41	34	044	10		39	26	326	11		40	40	310	08		39	33	318	10		42	39	289	17		36	30	321	15		44	43	297	15		41	35			850
800	64·4	41	23	005	12	65·1	36	29	050	11	64·5	37	-06	355	13	65·1	37	37	308	06	64·8	36	30	312	11	64·7	37	33	298	15	65·1	32	20	310	20	66·5	39	37	298	15	66·0	42	-02			800
750		35	18	001	13		33	22	038	12		33	-16	015	16		33	25	320	09		30	23	314	15		30	27	306	13		31	22	306	22		34	31	289	18		35	00			750
700	99·6	30		001	15	100·3	29	18	038	10	99·6	28	-22	027	14	100·3	29	08	322	09	99·8	23	17	325	15	99·7	25	21	314	10	100·1	25	-01	305	23	101·7	28	23	284	21	101·2	30	-15			700
650		24		002	20		23	08	037	08		24	-17	031	11		23	-05	360	03		23	-06	002	15		19	14	311	10		18	15	301	29		24	00	295	20		26	-34			650
600	139·3	16		358	26	140·0	17	01	043	07	139·4	19	03	026	10	140·1	19	-01	003	04	139·4	17	-09	019	15	139·0	11	02	289	13	139·4	11	02	299	31	141·4	17	-02	300	22	141·0	19	-15			600
550		09		353	21		09	-03	058	07		11	01	040	11		11	-10	351	05		09	-14	009	16		08	-07	297	14		05	+15	295	29		09	-06	306	27		16	-03			550
500	184·9	02		351	22	185·6	01	-14	070	08	185·1	01	-05	031	11	185·8	02	-18	355	07	185·0	00	-24	009	18	184·3	-01	-22	329	20	184·5	-02	-18	301	38	187·0	03	-14	304	32	186·8	02	-06			500
450		-08		346	23		-09	-33	075	07		-05	-12	044	11		-08	-25	020	08		-10	-34	017	18		-12	-27	326	21		-11	-28	305	27		-04	-28	304	37		-07	-16			450
400	238·1	-17		338	24	239·2	-20	-31	148	06	239·1	-17	-24	048	12	239·5	-19	-36	357	08	238·6	-21	-46	033	20	237·6	-23	-41	326	21	237·9	-22	-39	310	28	241·6	-17	-42	305	36	240·6	-19	-30			400
350		-31		327	28		-34	-44	165	08		-31	-36	061	16		-33	-48	085	05		-32	-53	067	25		-34	-55	341	17		-37	-54	305	39		-31	-57	308	41		-32	-46			350
300						304·3	-52		167	10	304·8	-47		065	15	304·7	-50		105	10	304·0	-46		062	32	302·8	-46		020	17	302·7	-51		302	48	306·7	-45		308	54	306·0	-46				300
250							-71		148	12		-63		069	14		-66		355	10		-64		048	26		-56		008	13		-62		301	42		-61		315	52		-52				250
200						389·7	-60		285	05	390·9	-62		021	07	390·9	-58		312	16	391·1	-55		335	18	390·8	-53		318	12	389·0	-60		308	30	393·4	-59		306	38	392·1	-67				200
170							-59		294	09		-56		318	07		-57		302	15		-55		325	15		-52		311	13		-56		310	23		-59		309	27		-61				170
150	For rest of winds						-58		292	10		-55		286	07		-58		308	15		-56		311	15		-53		307	11		-59		301	16		-58		301	27		-62				150
130	see page 3.						-58		298	08		-55		284	07		-58		307	13		-57		318	14		-53		308	11		-63		301	18		-59		304	21		-60				130
110							-56		287	06		-57		269	07		-58		297	09		-57		306	09		-57		308	11		-61		304	18		-61		306	14		-60				110
100						538·4	-56		300	05	540·1	-57		262	07	539·5	-59		305	08	540·2	-58		290	08	540·8	-59		305	09	536·7	-62		303	09	541·4	-62		311	14						100
90							-56		321	05		-56		316	06		-56		307	07		-58		271	07		-59		304	08		-63		309	08		-63		313	15						90
80							-56					-57		320	05		-57		313	07	(82 mb)	-58					-58		318	07		-64		339	08		-63									80
70																															-60		356	09		-66									70
60																																													60
	Inversion 936 mb 38°-850 mb 45°					Inversion 989 mb 42°-960 mb 49°					Inversion 873 mb 36°-855 mb 40°					Inversion 872 mb 40°-865 mb 41° 643 " 22°-636 " 23°					Inversion 950 mb 46°-937 mb 47° 685 " 21°-661 " 24°					Inversion 882 mb 41°-850 mb 42° 565 " 05°-550 " 08°					Inversion 785 mb 31°-770 mb 33°					Isothermal 963 - 927 mb 52°					Inversion 833 mb 40°-800 mb 42°					
						Isothermal 941 - 922 mb 47°																											Isothermal 1003 - 980 mb 51° 820 - 808 " 33°										Isothermal 900 - 874 mb 43°					
Tropopause	NR.					I 244 mb - 73° 34,700'					I 222 mb - 74° 37,000'					I 242 mb - 68° 35,000'					I 250 mb - 64° 34,300'					I 254 mb - 57° 33,800'					I 230 mb - 65° 35,900'					I 240 mb - 65° 35,500'					I 212 mb - 71° 39,000'					Tropopause
Station	LERWICK					STORNOWAY					LEUCHARS					ALDERGROVE					LIVERPOOL					DOWNHAM MARKET					LARKHILL					CAMBORNE					VALENTIA.					Station

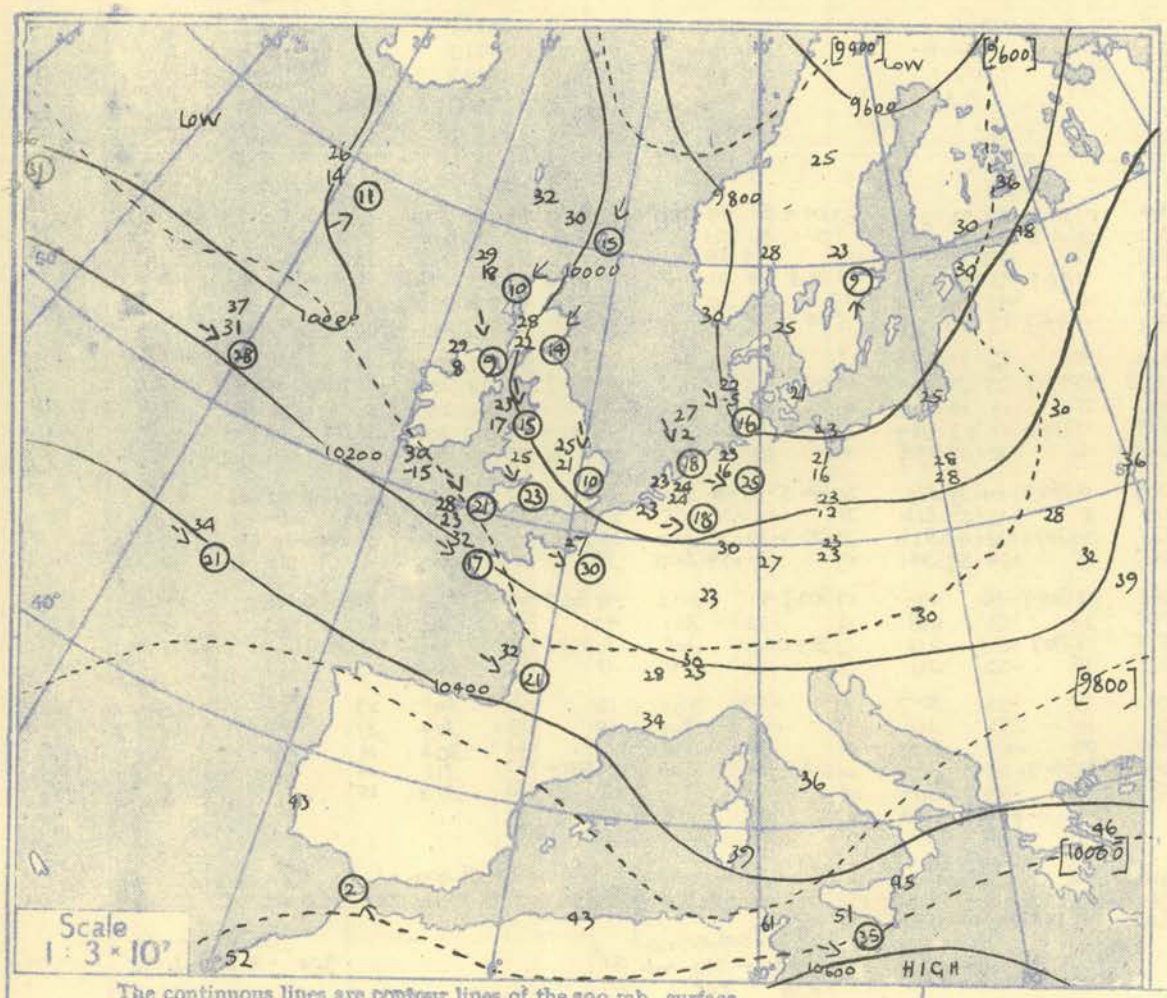
09h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA.
Pressure: Time	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	G.M.T.
Pressure: M.S.L.	1018·0 mb	1021·0 mb	1018·9 mb	1020·2 mb	1019·3 mb	1018·4 mb	1019·9 mb	1022·1 mb	mb
Pressure: Surf	1007·8 mb	1019·4 mb	1018·1 mb	1010·6 mb	1017·3 mb	1014·0 mb	1004·1 mb	1011·5 mb	mb
Pressure: Freezing	700 mb	750 mb	719 mb	708 mb	712 mb	782 mb	731 mb	708 mb	mb

Pressure mb	LERWICK Height ft./100	°F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	47	42	020	15	00·4	49	45	340	07	00·2	58	50	290	03	02·6	53	51	CALM		00·6	56	52	CALM		01·2	56	48	350	10	04·4	57	51	310	04	02·9	58	56	280	11						Surf
1000	4·7	46	41	006	15	5·6	46	43			0·1	53	46	286	05	5·4	52	40			5·3	53	49	311	03	5·0	53	47			5·5	56	50			6·1	56	54							1000
950		38	36	003	15		43	37	345	10		45	43	292	06		47	44	339	04		47	43	301	05		45	39	331	16		52	42	310	11		52	50							950
900	32·9	45	25	358	18	34·0	45	34	347	10	33·6	43	39	336	05	33·9	41	40	328	08	33·9	44	38	290	06	33·5	42	38	311	17	34·3	46	40	316	11	34·9	47	44							900
850		41	19	355	22		43	36	344	10		40	37	019	07		42	36	032	02		41	35	324	09		38	32	298	19		40	35	314	12		41	38							850
800	64·4	40	11	353	22	65·7	37	30	012	09	65·1	38	34	020	11	65·4	38	21	024	03	65·4	35	20	332	09	64·9	34	26	298	19	65·9	36	30	310	17	66·4	40	07							800
750		36	-01	356	18		32	22	013	08		36	29	016	12		36	06	023	03		32	05	342	09		27	23	309	16		33		305	19		38	08							750
700	99·8	32	-07	359	17	100·7	30	20	027	07	100·4	30	23	356	09	100·8	31	-05	003	03	100·4	31	04	348	09	99·7	28	12	334	14	100·9	27		303	21	101·2	31	06							700
650		24	-13	351	15		24	14	045	09		25	15	356	09		26	-10	314	01		26	10	343	11		22	-05	354	17		18		316	21		26	-12							650
600	139·6	16	-24	342	18	140·5	19	09	031	03	140·4	21	08	011	10	140·7	20	-10	CALM		140·4	22	09	343	14	139·3	17	-17	358	18	140·4	19		337	21	141·8	20	-19							600
550		08	-30	340	22		11	00	073	03		13	03	022	09		13	-15	283	02		14	00	353	13		09	-25	360	16		11		341	23		12	-19							550
500	185·0	-01	-22	334	25	186·2	02	-08	121	07	186·3	04	-08	346	06	186·6	04	-26	288	04	186·4	06	-08	010	12	184·8	-01	-30	002	16	186·1	01	-26	337	24	187·7	06	-26							500
450		-09	-31	340	28		-07	-21	145	07		-05	-12	334	10		-06	-37	255	05		-04	-15	002	14		+10	-30	023	20		-10	-37	349	25		-05	-26							450
400	238·6	-18	-40	342	31	240·1	-17	-30	187	08	240·3	-16	-22	322	10	240·6	-16	-44	206	03	240·6	-15	-28	016	12	238·3	-21	-32	036	26	239·6	-22	-50	003	27	241·8	-16	-29							400
350		-30	-50	329	39		-30	-39	195	10		-29	-37	332	10		-31	-55	195	07		-30	-42	027	10		-35	-46	041	29		-34	-59	009	28		-29	-58							350
300	304·4	-44		328	35	305·9	-46		190	12	306·1	-46		342	08	306·3	-45		198	11	306·5	-46		064	15	303·2	-52		053	33	304·7	-49		012	24	307·8	-44								300
250		-59		335	35		-66		180	16		-62		311	06		-60		275	12	255 (mb)	-63					-66		050	27		-55		339	32		-58							250
200	390·9	-71		331	27	391·4	-65		197	08	392·2	-64		323	06	393·1	-60		295	15						389·5	-55		337	15	392·3	-55		321	26	394·8	-66								200
170		-59		311	19		-59		272	11		-57		304	10		-57		316	16							-56		328	14		-53		313	23		-56							170
150		-56		307	15		-55		295	10		-56		294	09		-55		316	16	For rest of						-53		317	10		-55		317	18		-56							150
130		-52		303	14		-53		296	09		-56		310	09		-53		310	14							-54		299	05		-55		316	17		-55							130
110		-51					-52		302	09		-56		311	06		-51		307	09	winds see page 3						-57		315	04		-56		326	07		-55							110
100	540·1	-51				540·8	-51		306	05	541·0	-56		293	06											539·2	-56		315	02	541·9	-56		317	07	544·0	-57								100
90		-51					-51		302	07		-53		310	05																-56					-58									90
80		-51					-49		299	07		-52		276	04															(88 mb)	-56					-57									80
70		-53					-47		321	06		-53																								-55									70
60							-48																													-58									60
	Inversion 930 mb 37°-905 mb 45° 827 " 40°-808 " 41° 380 " -22°-372 " -21°					Inversion 958 mb 41°-930 mb 46°					Isothermal 942 - 921 mb 44° 828 - 812 " 39° 781 - 751 " 37° 657 - 645 " 25°					Inversion 885 mb 40°-850 mb 42° 800 " 38°-770 " 39°					Inversion 880 mb 42°-865 mb 43° 761 " 30°-736 " 34°					Inversion 815 mb 41°-889 mb 42° 739 " 27°-725 " 30°					Inversion 850 mb 18°-816 mb 21°					Inversion 814 mb 36°-790 mb 43°										
	Isothermal 905 - 893 mb 45°					Isothermal 900 - 870 mb 45°															Isothermal 938 - 915 mb 45°					Isothermal 760 - 739 mb 27°					Isothermal 800 - 784 mb 36°																				
Tropopause	I 193 mb - 72° 39,900'					I 217 mb - 75° 37,500'					I 220 mb - 73° 37,250'					I 230 mb - 63° 36,400'					NR.					I 238 mb - 69° 35,100'					I 260 mb - 57° 33,500'					I 200 mb - 66° 39,500'										Tropopause

Thursday 28th June 1951.

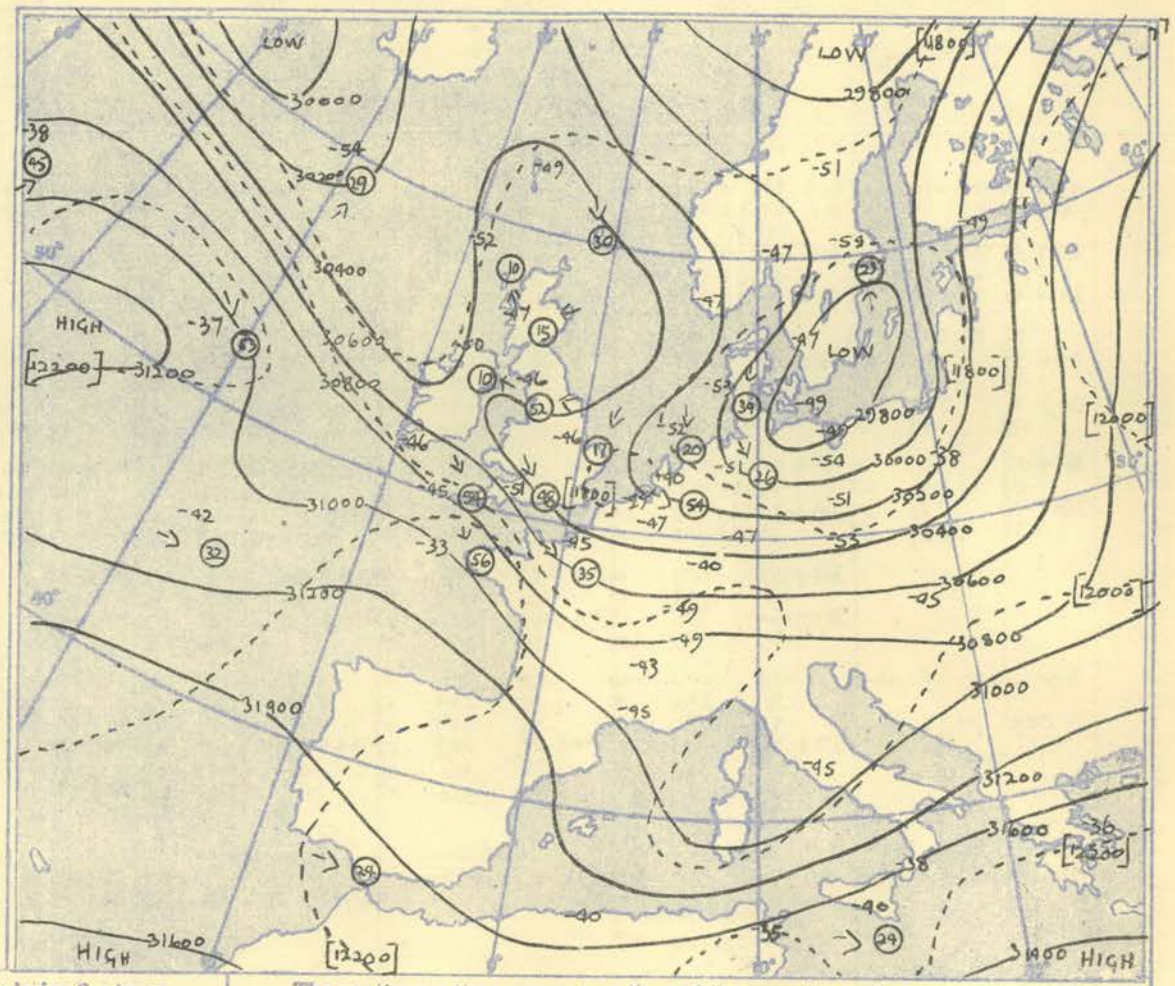
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.



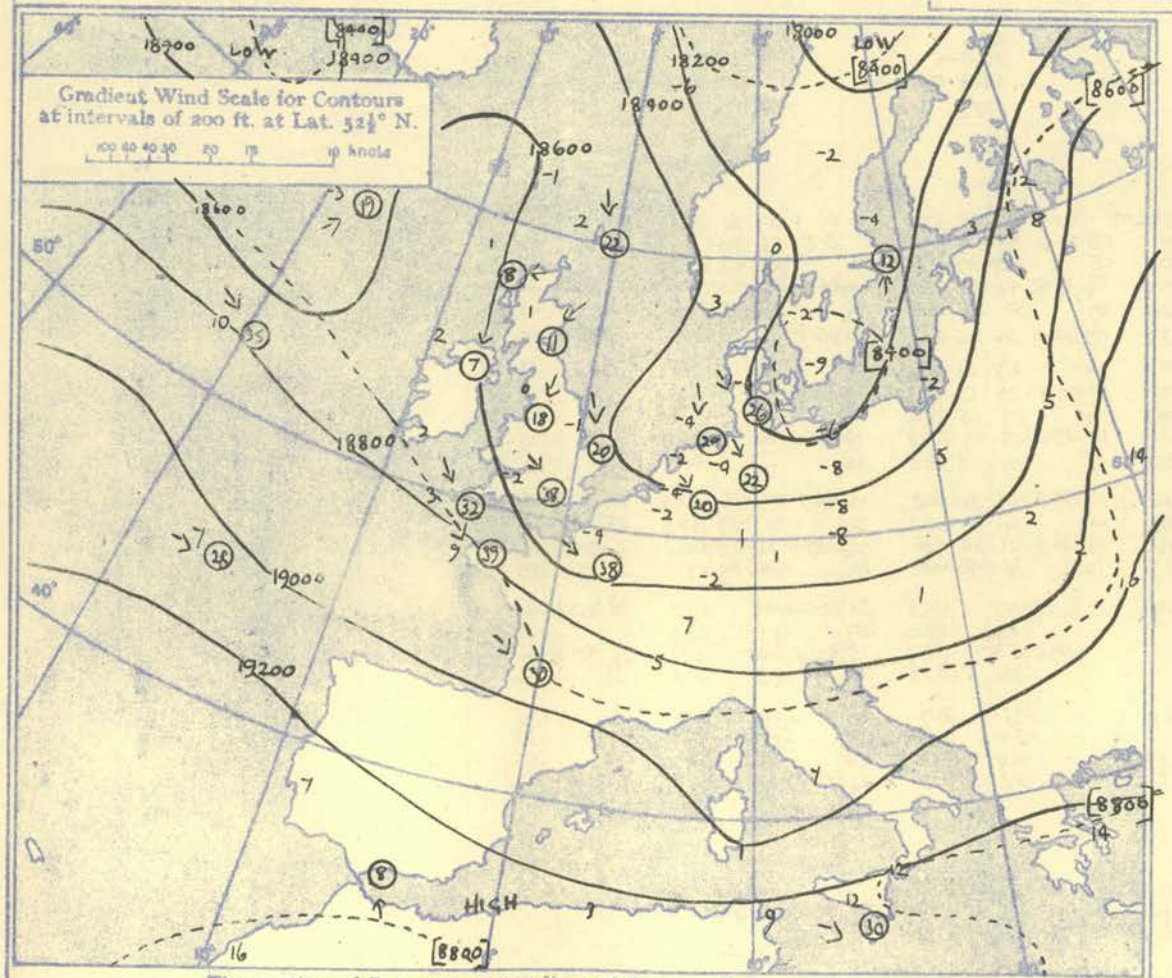
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

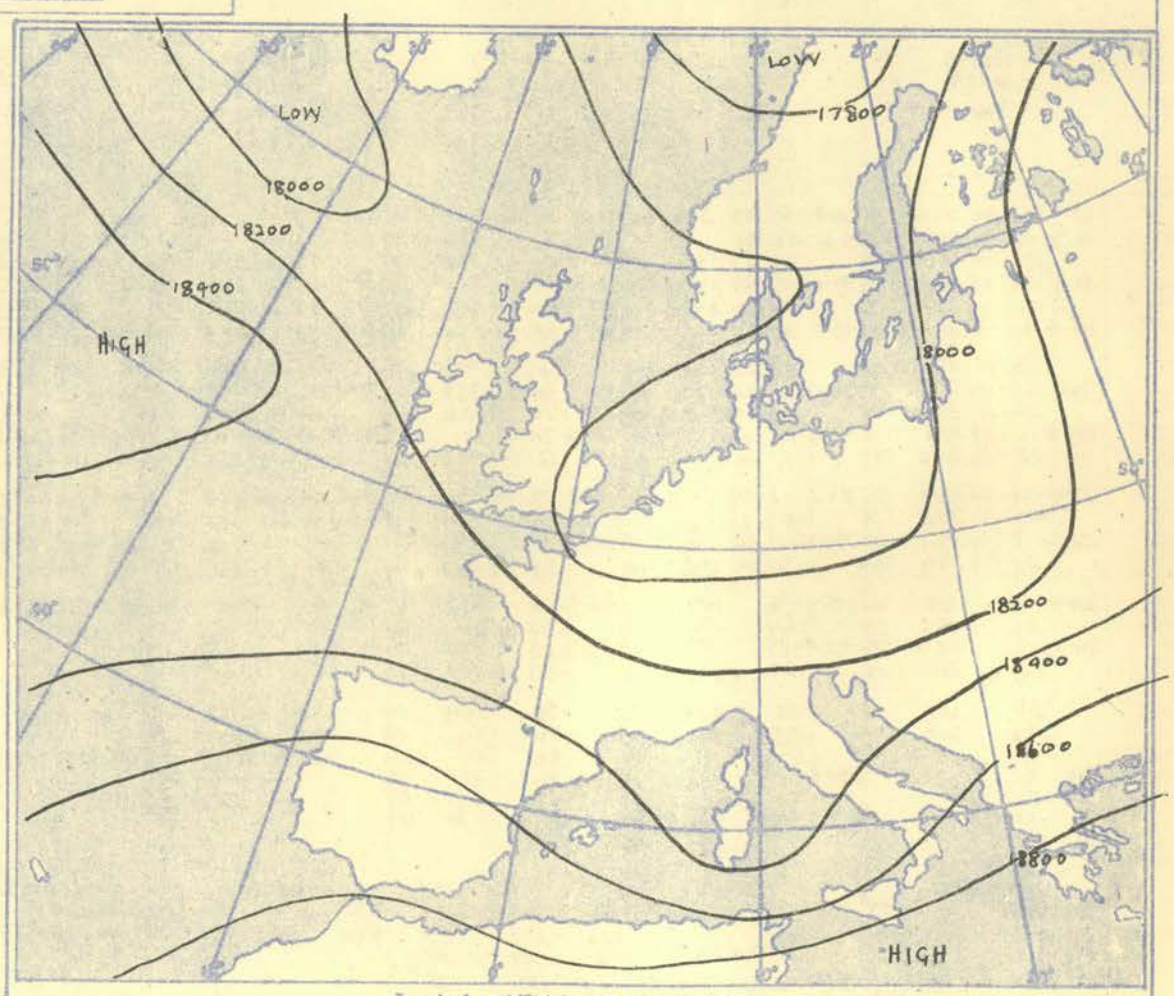
100 60 40 30 20 15 10 knots



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



Isopleths of Thickness 500-1000mb.

Thursday 28th June. 1951 Page 3

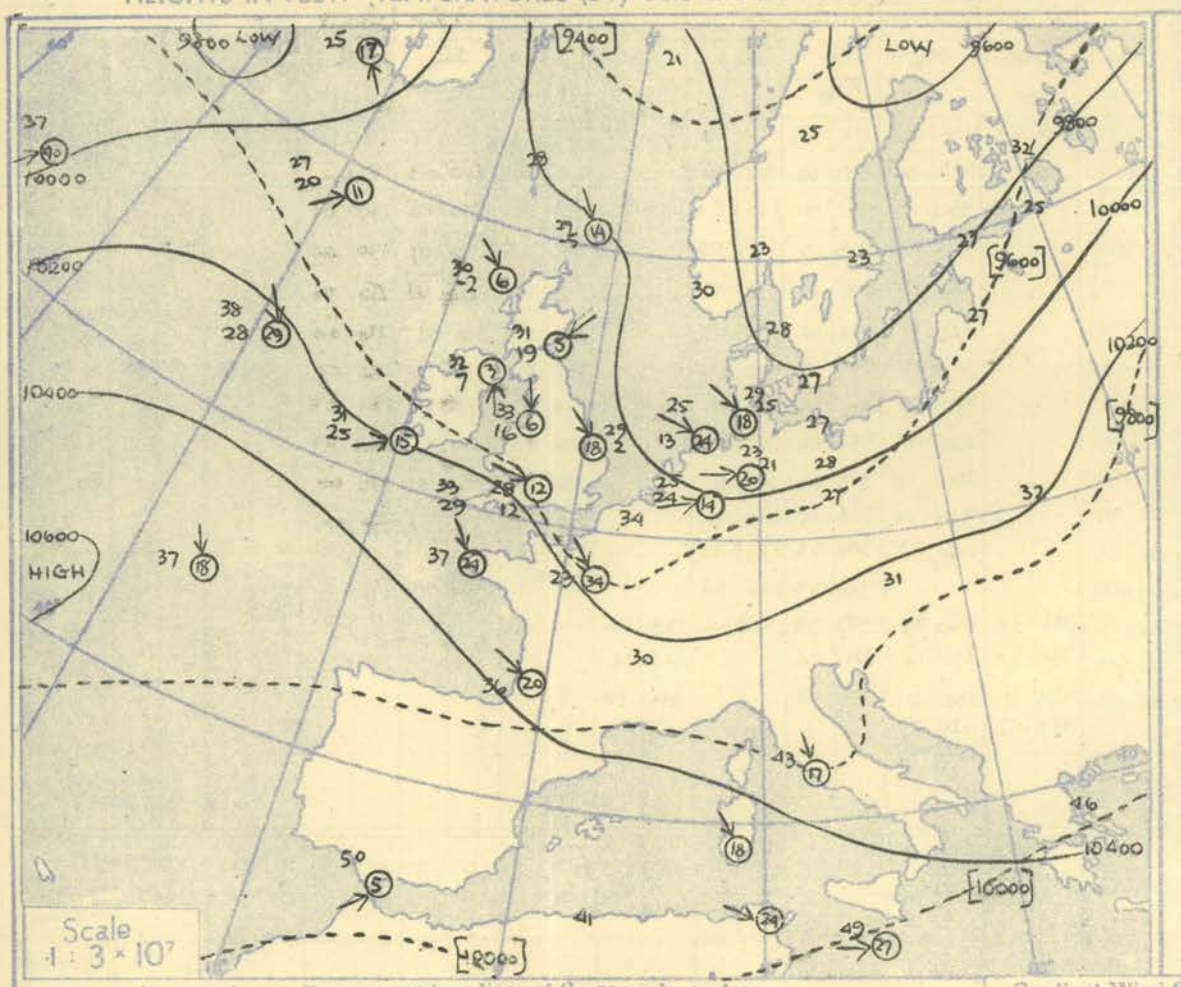
AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

52·12N 02·12W

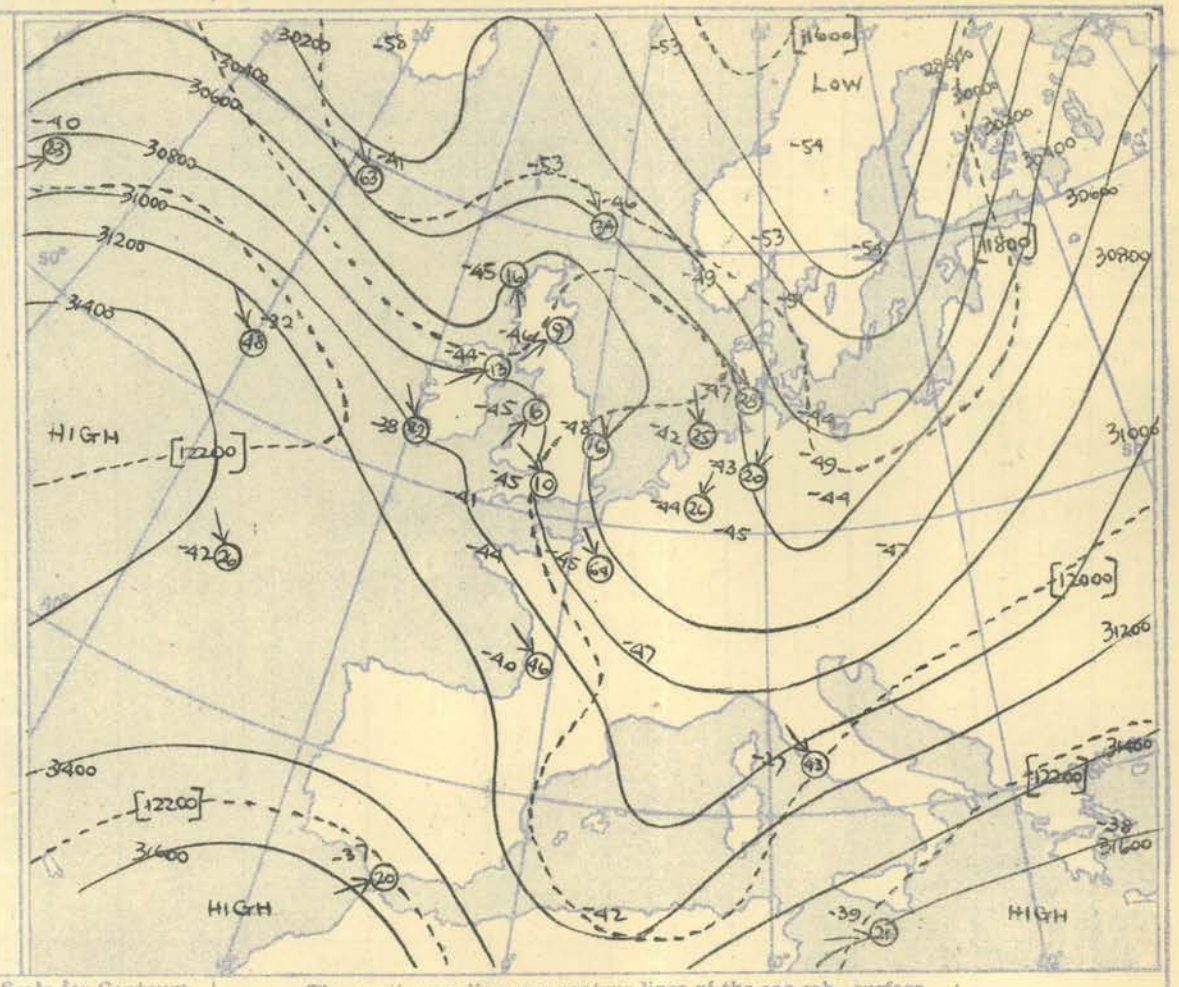
| Pressure | | |

Thursday 28th June 1951.

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



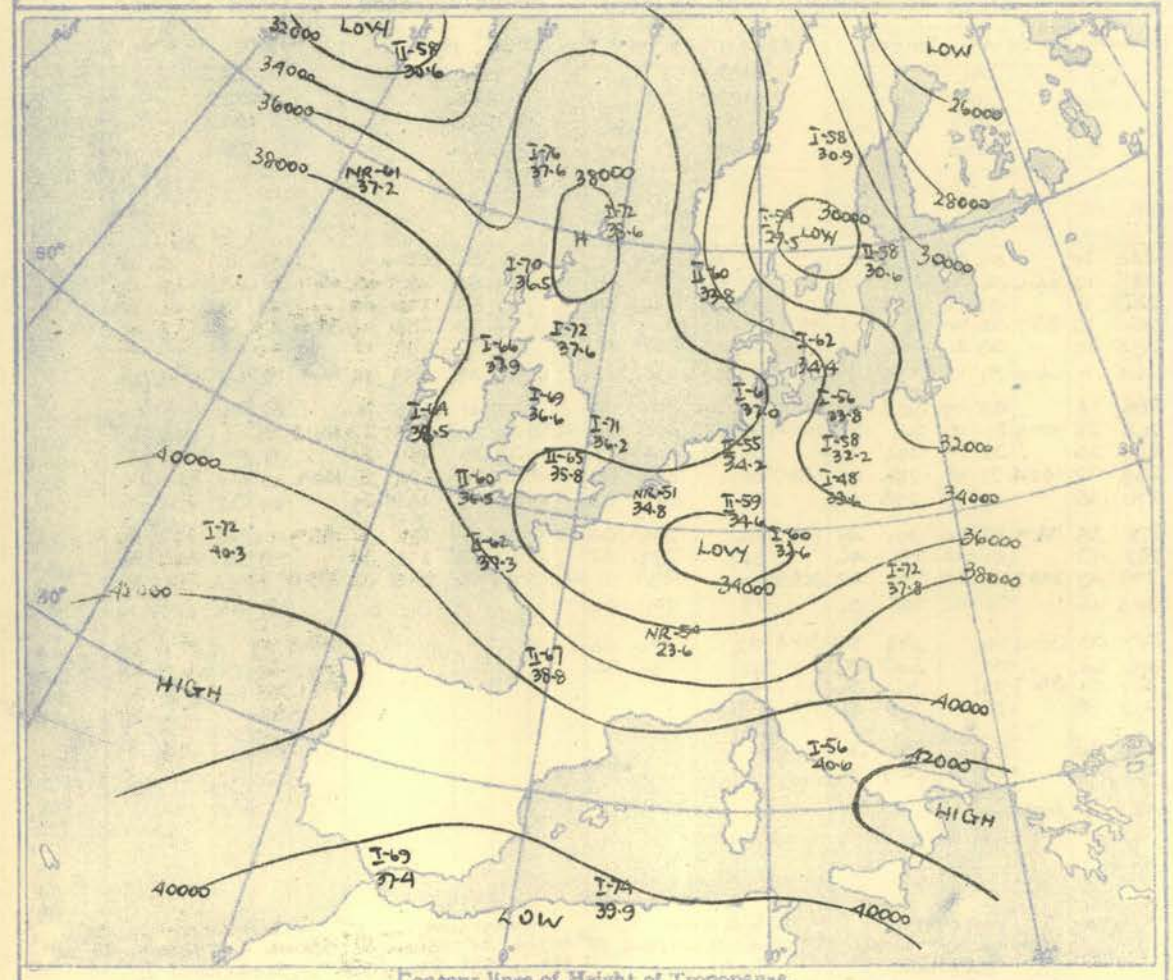
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N

TROPOPAUSE CHART at about 15h G.M.T



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Well marked upper warm tongue of air associated with a fresh disturbance appearing off the East coast of Canada and Newfoundland. Other features as previously noted.

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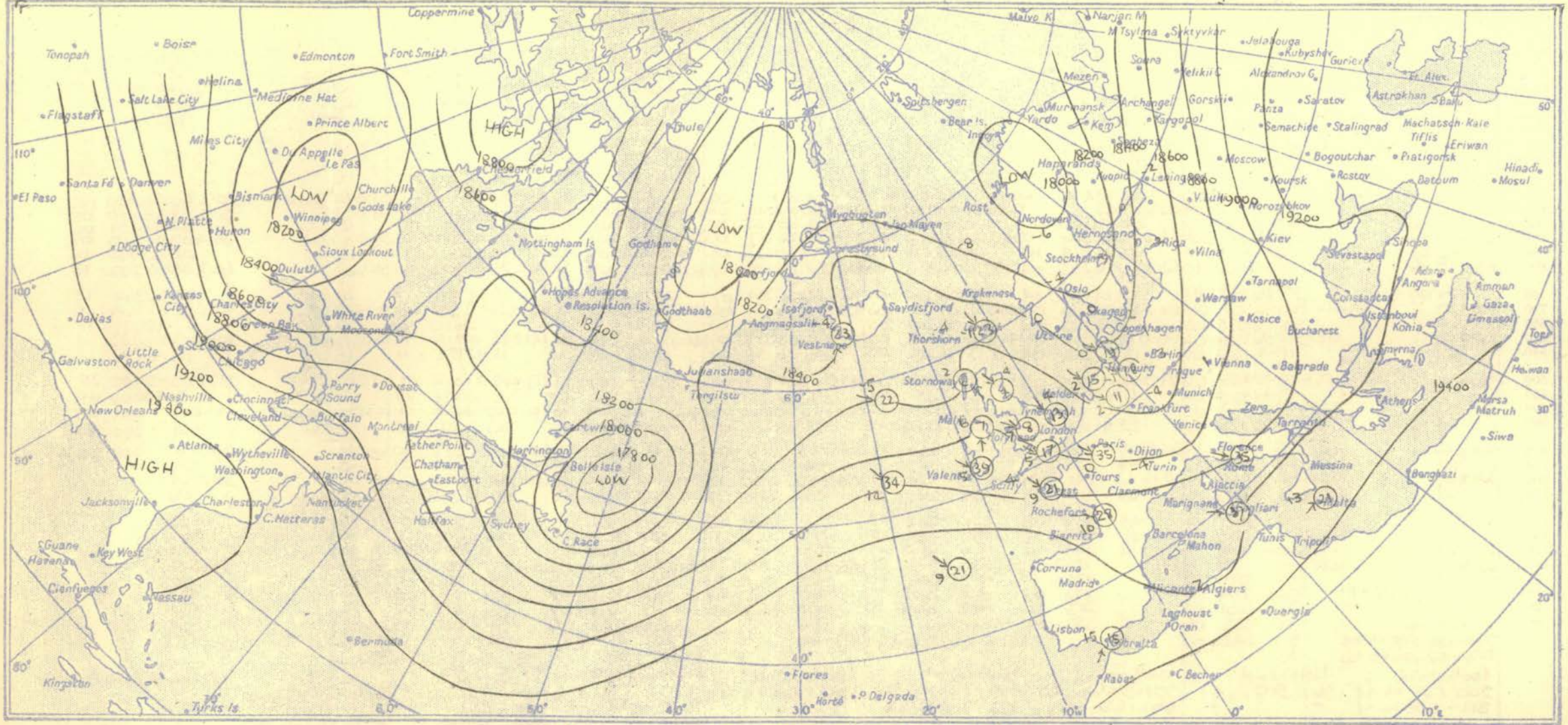
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Thursday 28th June 1951.


HIGH
LOW
18800
18600
18400
18200
18000
17800
19000
19200
19400
Coppermine
Tonopah
Boise
Edmonton
Fort Smith
Helena
Medicine Hat
Salt Lake City
Flagstaff
Prince Albert
Miles City
Du Appelle
Le Pas
Churchill
Gods Lake
Winnipeg
Bismarck
Santa Fé
Denver
El Paso
N. Platte
Huron
Dodge City
Sioux Lookout
Duluth
Kansas City
Charles City
Green Bay
White River
Moosonee
Dallas
Galveston
Little Rock
St. Louis
Chicago
Parry Sound
Nashville
Cincinnati
Cleveland
Buffalo
Montreal
New Orleans
Atlanta
Wytheville
Scranton
Washington
Atlantic City
Father Point
Chatham
Eastport
Harrington
Belle Isle
Jacksonville
Charleston
Nantucket
C. Hatteras
Halifax
Sydney
C. Race
Guane
Havana
Key West
Cienfuegos
Nassau
Bermuda
Kingston
Turks Is.
Chesterfield
Nottingham Is.
Godthaab
Hopes Advance
Resolution Is.
Angmagssalik
Julianshaab
Torgilsu
Carewright
Thule
Godhavn
Jan Mayen
Spitsbergen
Bear Is.
Ingeby
Mygbugten
Scoresbysund
Storfjord
Isafjord
Saydisfjord
Vestmano
Thorshorn
Lerwick
Stornoway
Krakenaes
Oslo
Utsire
Skagen
Copenhagen
Stockholm
Nordoyan
Herngsand
Rost
Happaranda
Kuopio
Leningrad
Moscow
Murmansk
Yardo
Kem
Archangel
Mezen
Soura
Gorskii
Kargopol
Seghaza
Panza
Saratov
Semachiee
Stalingrad
Bogoutchar
Koufsk
Rostov
Astrakhan
Baku
Mechatsch-Kale
Tiflis
Eriwan
Batoum
Pratigorsk
Hinadi
Mosul
V. Luki
Norozubkov
Kiev
Riga
Vilna
Sevastopol
Simpa
Tarnapol
Warsaw
Kosice
Bucharest
Constantza
Istanbul
Konia
Adana
Angora
Amman
Gaza
Limassol
Smyrna
Belgrade
Vienna
Prague
Berlin
Hamburg
Munich
Frankfurt
Venice
Zara
Tarrapin
Athens
Helwan
Marsa Matruh
Siwa
Benghazi
Malta
Messina
Florence
Rome
Ajaccio
Cagliari
Marignane
Paris
Dijon
Turin
Tours
Clermont
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Oran
Lagouat
Ouargla
Madrid
Corruna
Lisbon
Gibraltar
Rabat
C Bechar
Alicante
Valentia
Scilly
Holyhead
London
Tynemouth
Helder
Malin
Flores
Horta
P. Delgada
Azores
Ireland
Iceland
Greenland
Labrador
Hudson Bay
Baffin Land
Davis Strait
Cape Farewell
Ungava Bay
Belle Isle
Carewright
Harrington
Julianshaab
Godthaab
Angmagssalik

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Thursday 28th June 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15 hrs G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	Valentia
Pressure: Time	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.
Pressure: M.S.L.	1019.6 mb	1021.0 mb	1019.6 mb	1020.5 mb	1020.2 mb	1019.5 mb	1019.4 mb	1021.8 mb	1020.4 mb
Pressure: Surf	1009.6 mb	1019.4 mb	1018.8 mb	1010.9 mb	1018.2 mb	1015.1 mb	1004.0 mb	1011.3 mb	1019 mb
Pressure: Freezing	721 mb	730 mb	719 mb	700 mb	688 mb	765 mb	731 mb	696 mb	710 mb

Pressure mb	LERWICK Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	50	41			0·9	54	47	010	06	0·2	58	51	110	12
1000	05·5	43	39			05·7	52	44	010	06	05·3	53	45		
950		40	36				47	38	004	06		52	46	163	08
900	33·6	44	16			34·3	46	35	342	06	34·1	48	42	320	10
850		43	07				44	33	312	08		43	34	334	10
800	65·2	39	06			66·0	39	30	315	10	65·8	39	26	352	09
750		36	00				33	16	337	08		35	24	026	04
700	100·4	29	-5			101·1	30	-2	328	06	101·1	31	19	033	05
650		21	-11				29	06	075	03		27	02	323	02
600	139·9	15	-17			140·9	18	06	193	03	141·0	21	02	332	03
550		06	-26				11	-2	165	03		13	-2	313	04
500	185·3	-1	-16			186·6	02	-9	155	06	186·9	04	-11	305	04
450		-8	-32				-8	-22	155	09		-6	-14	252	08
400	238·9	-11	-41			240·4	-17	-27	163	11	240·9	-15	-25	193	07
350		-34	-52				-29	-35	173	15		-29	-41	263	08
300	304·1	-46				306·3	-45		166	16	306·9	-46		239	09
250		-61					-63		185	18		-64		233	13
200	390·4	-69				392·6	-63		221	11	392·6	-67		241	09
170		-55					-56		280	16		-56		312	11
150		-55					-54		283	16		-54		256	14
130		-53					-54		290	16		-54		300	16
110		-54					-54		294	16		-53		266	11
100	539·6	-53				542·2	-51		293	17	542·1			290	11
90		-53					-51		290	11				296	12
80		-52					-52		294	17				273	07
70		-52					-52		301	08				313	12
60							-52		333	06				353	04
	Inversion 920 mb 36° - 900 mb 44° 227 mb -67° - 220 mb -65°						-53		349	05					
	Isothermal 900 - 855 mb 44° 512 - 500 mb -1°					Isothermal 967 - 910 mb 47°					Isothermal 998 - 946 mb 52° 662 - 630 mb 27°				
Tropopause	I 204 mb -72° 38900'					I 227 mb -70° 36500'					I 214 mb -78° 37100'				

Pressure mb	ALDERGROVE Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	Valentia Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	58	50	calm		0·6	61	60	300	05	01·2	64	51	325	07	04·4	68	52	Calm		029	62	55	287	10	0·3	60	50	180	05
1000	05·6	56	48	144	02	05·6	59	44	302	03	05·4	(57)	45	319	03	05·5	66	50			06	058	52			5·5	58	50	180	05
950		50	44	164	02		51	39	255	08		50	42	311	08		57	42	268	03		53	50				52	44	191	08
900	34·3	45	41	205	02	34·5	46	35	217	09	34·2	44	38	307	12	34·6	50	43	294	05	34·9	47	41			34·4	47	41	213	08
850		42	31	232	04		38	32	306	19		42	39	301	12		43	40				46	40	239	12					
800	66·1	38	26	295	07	66·1	36	27	306	18	66·2	36	33	293	17	66·6	43	15				66·2	39	33	252	13				
750		31	16	315	16		34	18	295	15		38	27				35	30	264	15										
700	100·7	29	02	322	18	101·4	28	12	298	12	102·2	33	29				31	25	264	15										
650		26	12	353	11		27	-3	310	10		27	24				27	13	271	18										
600	140·3	22	10	354	11	141·3	21	-4	316	12	142·3	21	18				141·6	22	06	285	24									
550		20	10	354	11		13	-1	349	11		15	09				16	5	298	28										
500	187·2	05	-2	347	13	187·2	05	-27	312	17	188·5	04	00				187·8	05	-19	299	39									
450		-6	-18	350	19		-5	-30	348	10		-1	-10				-2	-45	300	44										
400	241·2	-15	-38	355	12	243·0	-12	-36									241·2	-13		301	47									
350		-30	-51	332	15		-25	-39				-24		320	67															
300	307·0	-45		323	10	309·5	-41										309·8	-38		319	82									
250		-65		336	07		-55																							
200	397·1	-61		319	23	397·1	-61										396·7	-60												
170		-55		316	20		-55																							
150		-54		305	18		-54																							
130		-54		306	18		-54																							
110		-54		326	10		-54																							
100	546·7	-55		293	07	546·7	-55										546·5	-56												
90		-56		304	07		-56																							
80		-56		298	08		-56																							
70		-56		317	08		-56																							
60		-54		007	09		-54																							
		-57		328	06		-53																							
		-55		338	06		(51)	-52																						
	Inversion 850 mb 40° - 830 mb 41°										Inversion 817 mb 35° - 805 mb 31° 711 mb 28° - 692 mb 30°					Inversion 693 mb 27° - 669 mb 29°					Inversion 496 mb 3° - 482 mb 5°					Inversion 487 mb 2° - 476 mb 3°				
	Isothermal 800 - 765 mb 39° 723 - 710 mb 34°					Isothermal 790 - 764 mb 37°					Isothermal 757 - 725 mb 31° 671 - 661 mb 27°					Isothermal 784 - 745 mb 34° 555 - 542 mb 13° 524 - 512 mb 9°					Isothermal 872 - 787 mb 48°									
Tropopause	I 215 mb -66° 37900'					I 235 mb -69° 36000'					I 230 mb -71° 36200'					II 236 mb -65° 35800'					II 231 mb -60° 36500'					I 211 mb -64° 38500'				

21 hrs G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE
Pressure: Time	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.
Pressure: M.S.L.	1020.4 mb	1021.5 mb	1020.8 mb	1020.3 mb	1020.1 mb	1019.8 mb	1019.4 mb	1020.8 mb
Pressure: Surf	1010.4 mb	1019.9 mb	1020.0 mb	1011.2 mb	1018.1 mb	1015.5 mb	1003.6 mb	1010.2 mb
Pressure: Freezing	718 mb	730 mb	775 mb		737 mb	735 mb	761 mb	700 mb

Pressure mb	LERWICK Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·7	47	39	015	10	00·4	52	42	Calm		0·2	50	46	110	04
1000	05·5	45	38	358	13	05·9	49	40	004	15	05·6	48	46	130	03
950		39	36	360	14		45	32	330	11		50	42	235	06
900	33·6	32	05	004	15	34·5	49	06	318	11	34·3	47	44	284	10
850		42	06	002	16		45	-6	313	07		47	42	320	08
800	65·1	39	05	357	15	66·2	38	28	314	07	65·9	36	36	340	06
750		36	01	355	17		33	15	324	07		31	31	L.V.	
700	100·2	30	-2	002	17	101·3	28	-4	342	04	100·9	28	24	"	
650		23	-10	360	18		22	01	339	02		23	13	"	
600	139·8	15	-19	349	18	140·9	16	-2	352	02	140·3	17	04	"	
550		08	-20	338	19		08	-6	179	03		10	01	"	
500	188·2	-1	-22	344	21	186·3	-1	-16	174	05	186·2	01	-8	"	
450		-8	-29	341	21		-13	-26	192	07		-9	-13	228	07
400	238·8	-11	-35	325	28	239·5	-15	-36	175	12	239·7	-16	-24	214	16
350		-33	-50	314	27		-39	-50	172	15		-34	-38	197	16
300	304·1	-47		319	26	303·9	-55		188	17	304·8	-50		195	15
250		-60		329	18		-67		253	12		-68		209	15
200	389·8	-74		324	18	389·5	-58		300	18	390·3	-60		285	11
170		-61		308	15		-56					-54		303	20
150		-58		315	15							-57		301	17
130		-58		312	15							-57		322	16
110		-58		317	13						(111)	-57			
100	537·6	-56		308	11										
90		-55		306	12										
80	(84)	-54													
70															
60															
	Inversion 838 mb 32° - 803 mb 45°					Inversion 959 mb 44° - 905 mb 49° 765 mb 32° - 743 mb 34°					Inversion 987 mb 47° - 966 mb 51° 936 mb 48° - 920 mb 49°				
						Isothermal 905 - 888 mb 49°					Isothermal 900 - 884 mb 47° 761 - 736 mb 31° 593 - 583 mb 16°				
Tropopause	II 223 mb -72° 36800'					II 253 mb -67° 33000'					I 232 mb -74° 36000'				

Pressure mb	ALDERGROVE Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	57	52	calm		0·6	56	51	Calm		01·2	56	50	090	02	04·4	59	56	calm		02·9	57	55		
1000	05·6	55	50			05·5	53	49	321	08	05·5	55	47			05·3	59	55			05·7	56	54		
950		50	46	334	02		45	41	286	09		49	46	323	04		55	50	288	09		52	50		
900	34·3	43	40	350	04	34·3	43	39	246	11	34·3	49	39	246	11	34·3	47	42	323	04	34·5	49	46	281	05
850		38	39	020	03		44	33	260	07		44	37	323	08		43	41	284	08		46	40		
800	66·0	37	28	080	03	66·0	36	32	284	05	65·9	34	30	322	12	66·1	37	34	292	07	66·4	41	38		
750		33	16	065	01		33	27	287	05		34	02	335	08		31	28	290	05		37	34		
700	100·9	27	08	034	01	101·2	30	17	298	04	100·9	28	12	002	06	101·2	27	16	284	04	101·9	32	29		
650		22	00	350	01		26	06	289	03		26	08	352	09		25	01	278	11		25	22		
600	140·3	16	-5	310	02	141·1	15	01	288	04	140·9	20	04	351	10	140·9	19	-14	256	12	141·9	18	15		
550		09	-14	287	03		12	-5	252	03		15	03	313	07		10	-21	273	11		12	07		
500	186·0	00	-21	262	05	186·9	03	-14	248	05	186·8	04	-7	298	07	186·6	03	-32	288	10	(187·7	03	-2		
450		-10	-27	259	09		-7	-22	216	10		-6	-46	306	05		-6	-37	244	12		-6	+6		
400	239·4	-21	-29	268	12	240·7	-18	-33	200	18	240·8	-15	-27	321	09	240·4	-26	-48	247	13	241·7	-46	-37		
350		-35	-44	222	09		-33	-47	198	18		-30	-49	336	07		-33	-53	207	08		-31	-54		
300	306·1	-50		182	19	306·1	-47		214	12	306·5	-48		306	05	305·8	-47		231	16	307·5	-44			
250		-60		220	10		-64		255	12		-64		289	07		-63		267	16		-56			
200	391·6	-54		313	23	392·6	-55		315	17	392·3	-66		304	12	391·9	-62		307	22	394·6	-66			
170		-55		317	28		-55		317	20		-58		308	16		-57		315	20		-61			
150		-55		313	21		-57		313	18		-57		305	17		-57		315	18		-60			
130		-58		320	21		-57		316	20		-57		311	13		-57		307	18		-61			
110		-57		330	16		-58		314	17		-58		313	08		-56		316	18	(118)	-62			
100	540·9	-55		338	13	541·3	-59				540·7	-59		312	07	540·5	-59		325	13					
90		-56		323	14							-59		308	08		-60		337	08					
80												-60		316	07		-58								
70												-62		322	04	(78)	-57								
60																									
	Inversion 940 mb 48° - 925 mb 50°										Inversion 775 mb 31° - 750 mb 34°					Inversion 672 mb 24° - 650 mb 25°									
	Isothermal 830 - 775 mb 37°					Isothermal 713 - 692 mb 30°										Isothermal 1003 - 1000 mb 59°									
Tropopause	I 253 mb -61° 34000'					II 242 mb -71° 35200'					I 220 mb -78° 37300'					I 232 mb -69° 36000'					I 205 mb -67° 38700'				

HMSO Press, MO, Dunstable

No. 11775 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Friday 29th June 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

METEOROLOGICAL OFFICE LIBRARY Valentia 03hrs 10TH JUL 1951 680

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE
Pressure: Time	03hrs G.M.T.	03hrs G.M.T.	03hrs G.M.T.	03hrs G.M.T.	03hrs G.M.T.	03hrs G.M.T.	03hrs G.M.T.	03hrs G.M.T.
Pressure: M.S.L.	1021.5 mb	1022.6 mb	1022.0 mb	1021.8 mb	1020.7 mb	1020.5 mb	1019.6 mb	1018.9 mb
Pressure: Surf	1011.3 mb	1021.0 mb	1021.2 mb	1012.2 mb	1018.7 mb	1015.8 mb	1003.6 mb	1009.3 mb
Pressure: Freezing	705 mb	730 mb	769 mb	735 mb	762 mb	816 mb	772 mb	720 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	45	38	030	09
1000	05·8	44	38	001	09
950		37	33	010	11
900	11·9	39	32	009	12
850		43	04	349	13
800	65·4	41	01	349	13
750		38	-4	349	13
700	100·7	32	-9	339	13
650		22	-18	332	17
600	140·2	15	-23	334	18
550		09	-16	349	17
500	185·7	01	-28	349	16
450		-10	-34	333	17
400	235	-24	-40	315	19
350		-34	-44	313	16
300	304·7	-50		295	13
250		-63		276	09
200	389·1	-73		300	12
170		-58		312	18
150		-57		315	15
130		-59		322	12
110		-60		301	14
100	536·9	-59		311	12
90		-62		303	09
80		-57		296	10
70	(23)	-57			
60					

Inversion 925 mb 33° – 886 mb 44°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·2	50	46	080	03
1000		47	44	066	03
950		42	39	066	03
900		43	40	007	04
850		40	37	336	04
800		35	33	335	04
750		30	27	330	06
700		24	18	349	04
650		21	10	027	03
600		18	02	076	04
550		09	-7	212	04
500		-1	-17	212	03
450		-12	-16	176	04
400		-23	-27	195	07
350		-35	-43	214	10
300		-49		268	09
250		-66		288	11
200		-63		318	18
170		-55		326	21
150		-53		324	19
130		-60		315	18
110		-60		322	14
100		-59		313	12
90		-59		310	10
80		-60		317	11
70		-59			
60					

Inversion 920 mb 38° – 853 mb 48°

Isothermal 753 – 730 mb 32°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·2	51	47	120	01
1000		47	44	L.Y.	
950		42	38	350	03
900	34·9	39	45	304	06
850		45	25	332	11
800	65·9	42	05	326	07
750		36	-1	316	07
700	101·2	29	-8	315	11
650		4	-13	317	14
600	140·8	16	-10	315	13
550		08	-13	297	14
500	186·2	-3	-21	274	-12
450		-11	-25	260	14
400	235	-24	-35	253	15
350		-35	-49	254	15
300	304·3	-52		236	18
250		-65		244	19
200	390·6	-58		308	21
170		-52		313	19
150		-54		313	16
130		-52		318	15
110		-49		316	20
100	541·3	-45			
90					
80					
70					
60					

Inversion 904 mb 32° – 896 mb 40°; 896 mb 40° – 870 mb 43°; 870 mb 45° – 838 mb 46°

Isothermal 900 – 870 mb 46°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·2	51	47	120	01
1000		48	42	L.Y.	
950		41	37	321	11
900	34·9	46	37	296	11
850		45	25	282	11
800	66·4	41	24	288	08
750		35	21	306	06
700	101·6	30	22	305	01
650		24	05	305	03
600	141·4	18	01	L.Y.	
550		10	01	L.Y.	
500	187·0	00	-12	268	09
450		-9	-34	322	14
400	239·8	-20	-38	327	13
350		-34	-52	302	10
300	305·1	-47		262	07
250		-57		331	26
200	392·4	-55		330	31
170		-58		325	31
150		-59		327	27
130		-59		329	23
110		-60		321	20
100	540·6	-61		325	16
90		-60		315	14
80		-60		333	11
70		-60		331	10
60		-59		336	11

Inversion 968 mb 42° – 885 mb 44°

Inversion 816 mb 34° – 793 mb 39°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	52	47	350	03
1000		52	49	258	04
950	05·9	51	46		
900		49	45	255	05
850	34·1	45	38	229	05
800		38	34	006	08
750	66·6	35	28	246	04
700		31	27	280	04
650	100·6	26	16	259	03
600		21	00	233	01
550	140·3	15	02	301	03
500		08	-4	290	05
450	185·7	01	-14	318	08
400		-8	-23	348	07
350	235·5	-19	-29	200	06
300	305·1	-47		161	11
250		-63		159	15
200	391·3	-61		330	10
170		-58		327	20
150		-58		323	21
130		-60		333	21
110		-62		321	18
100	540·7	-61		319	16
90		-61		312	15
80		-62		310	15
70		-62		331	07
60		-64		319	08
	(47)	-63		358	07

Inversion 1018 mb 46° – 996 mb 51°; 932 mb 44° – 911 mb 46°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	46	45	050	07
1000		46	45	Calm	
950		08	06	258	04
900		46	45	255	05
850	03·4	45	38	229	05
800		40	26	223	04
750	65·5	36	35	245	04
700		30	00	028	02
650	100·6	23	18	133	03
600		20	10	154	02
550	139·4	15	04	258	02
500		05	00	292	03
450	185·6	-5	-10	161	03
400		-11	-20	216	04
350	231·8	-23	-32	240	06
300	302·6	-52		156	04
250		-69		179	06
200	387·7	-65		291	10
170		-62		318	16
150		-60		318	13
130		-61		309	12
110		-62		285	11
100	538·1	-63		290	10
90		-62		303	08
80		-63		321	09
70					
60					

Inversion 1016 mb 46° – 983 mb 50°; 780 mb 28° – 750 mb 30°

Isothermal 619 – 605 mb 16°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	52	51	Calm	
1000		05·3			
950		03	45	255	03
900		52	52		
850	34·3	49	49		
800		45	45		
750	66·1	41	41		
700		35	35		
650	100·0	23	13	137	01
600		22	15	282	05
550	140·0	17	16	252	10
500		10	06	277	08
450	185·6	00	-6	273	10
400		-11	-17	245	03
350	240·4	-21	-25	215	11
300	306·0	-42		181	18
250		-60		190	13
200	394·2	-58		310	13
170		-58		324	21
150		-59		323	18
130		-61		319	15
110		-62		312	11
100	542·0	-62		301	12
90		-62		316	15
80		-63			
70		-64			
60		(62)			

Inversion 580 mb 49° – 536 mb 52°; 675 mb 20° – 650 mb 22°

Isothermal 652 – 623 mb 22°; 545 – 530 mb 7°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·3	55	50	Calm	
1000	5·9	55	51	052	01
950		52	45	038	06
900	34·8	47	42	039	10
850		43	34	029	12
800	66·6	42	18	008	13
750		38	14	344	13
700	101·0	34	03		
650		28	03		
600	142·1	22	-19		
550		16	-31		
500	188·3	08	-38		
450		-2	-31		
400	242·8	-12	-37		
350		-24	-37		
300	309·9	-41			
250		-61			
200					
170					

Inversion 870 mb 41° – 836 mb 44°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·6	55	50	350	04
1000	06·4	52	48	360	03
950		50	47	349	03
900		48	44	337	03
850	34·9	46	42	294	05
800		43	40	314	04
750	66·4	41	39	037	06
700		35	06	008	06
650	101·0	29	10	358	06
600		25	04	330	07
550	141·0	(18)	-7	340	07
500		03	-18	337	08
450	187·0	00	-24	340	14
400		-8	-33	342	15
350	240·9	-21	-41	348	24
300	306·4	-44		348	67
250		-63		352	78
200	393·2	-57		333	25
170		-61		339	43
150		-59		332	16
130		-60		345	16
110		-61		342	15
100	541·0	-60		340	19
90		-58		339	(29)
80		-58		331	13
70		-58		330	05
60					

Inversion 944 mb 39° – 910 mb 45°; 745 mb 30° – 715 mb 32°

Isothermal 910 – 895 mb 45°; 830 – 815 mb 39°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	54	49	030	05
1000		54	49	030	05
950		51	47	025	10
900		49	46	025	02
850	34·7	47	38	015	09
800		42	27	007	08
750	66·3	38	25	014	06
700		32	23	108	02
650	101·7	29	04	044	05
600		23	00	049	05
550	141·3	20	01	075	04
500		12	00	112	04
450	187·1	03	-16	095	04
400		-7	-23	074	03
350	241·1	-18	-28	047	07
300	306·4	-48		164	02
250		-63		200	02
200	393·1	-60		347	24
170		-57		342	21
150		-56		328	20
130		-55		324	11
110		-55		326	12
100	542·8	-55		344	10
90		-55		352	08
80		-54		004	08
70		-54		034	05
60		-51			

Inversion 650 mb 28° – 624 mb 31°; 610 mb 22° – 570 mb 27°

Isothermal 572 – 555 mb 31°; 544 – 525 mb 30°; 868 – 840 mb 42°; 794 – 765 mb 37°; 716 – 700 mb 27°

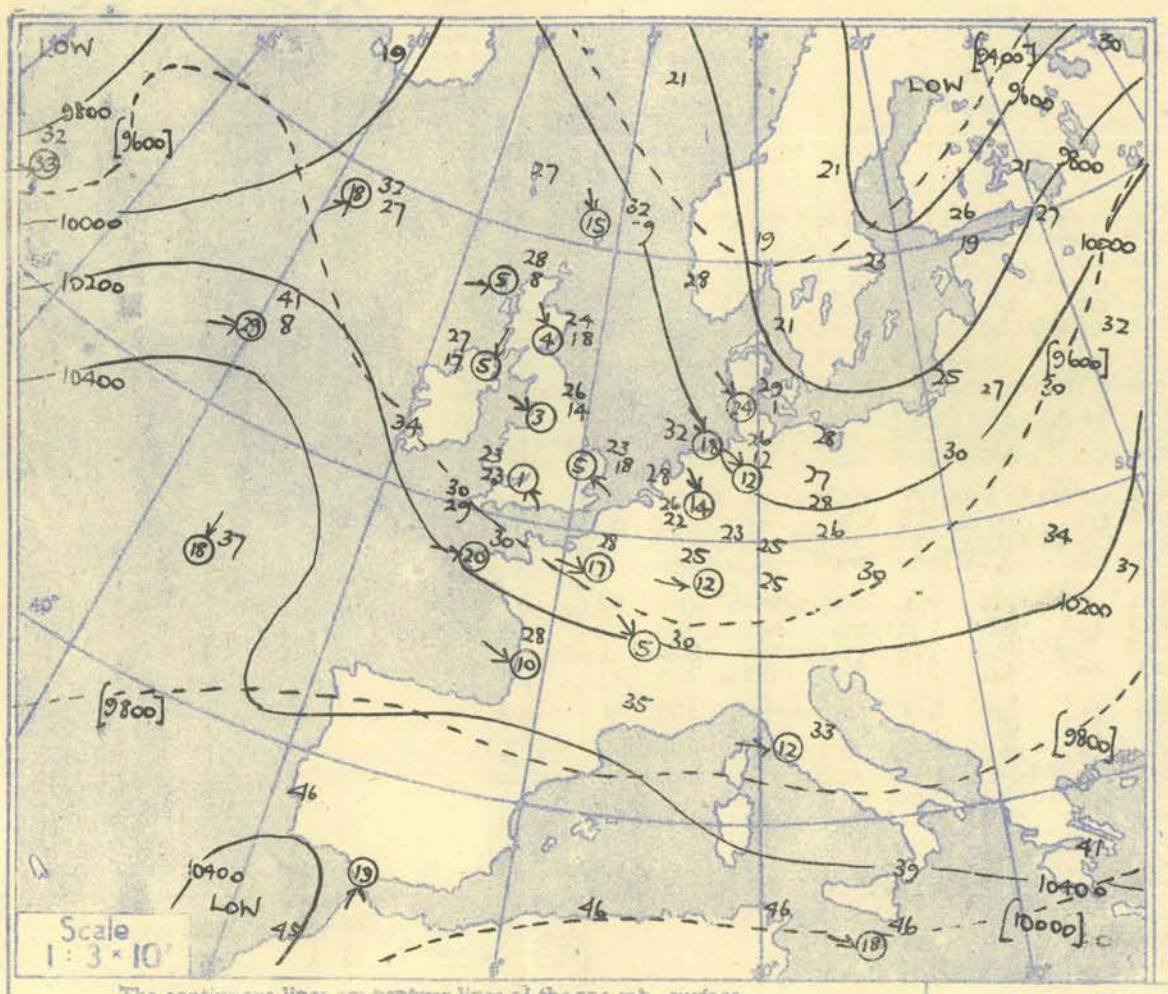
Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	47	39	050	07
1000	06·2	45	38	013	09
950		38	34	013	07
900	34·3	35	23	009	07
850		45	08	003	08
800	65·9	42	05	326	07
750		36	-1	316	07
700	101·2	29	-8	315	11
650		4	-13	317	14
600	140·8	16	-10	315	13
550		08	-13	297	14
500	186·2	-3	-21	274	-12
450		-11	-25	260	14
400	235	-24	-35	253	15
350		-35	-49	254	15
300	304·3	-52		236	18
250		-65		244	19
200	390·6	-58		308	21
170		-52		313	19
150		-54		313	16
130		-52		318	15
110		-49		316	20
100	541·3	-45			
90					
80					
70					
60					

Inversion 904 mb 32° – 896 mb 40°; 896 mb 40° – 870 mb 43°; 870 mb 45° – 838 mb 46°

Isothermal 900 – 870 mb 46

Friday 29th June 1951.

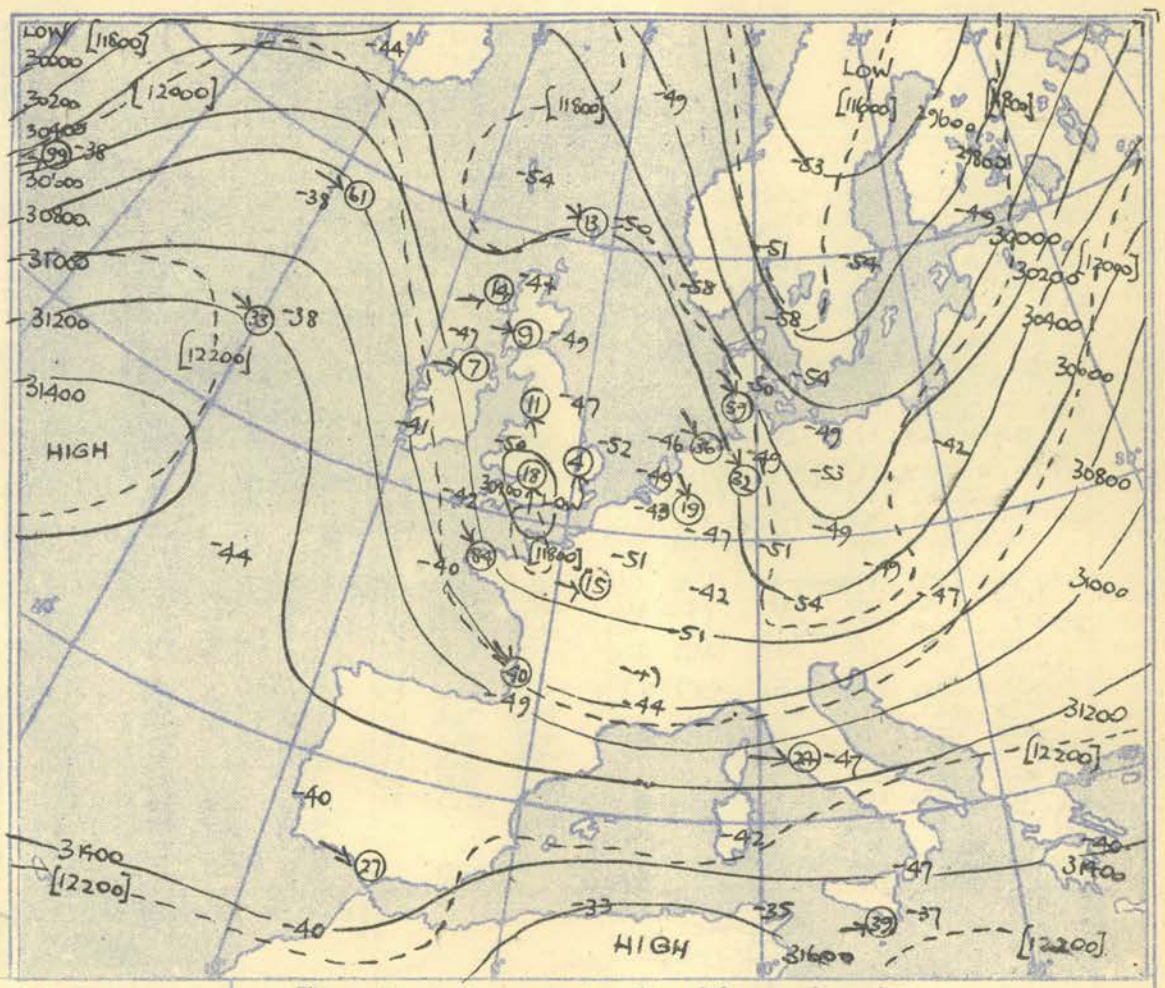
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.



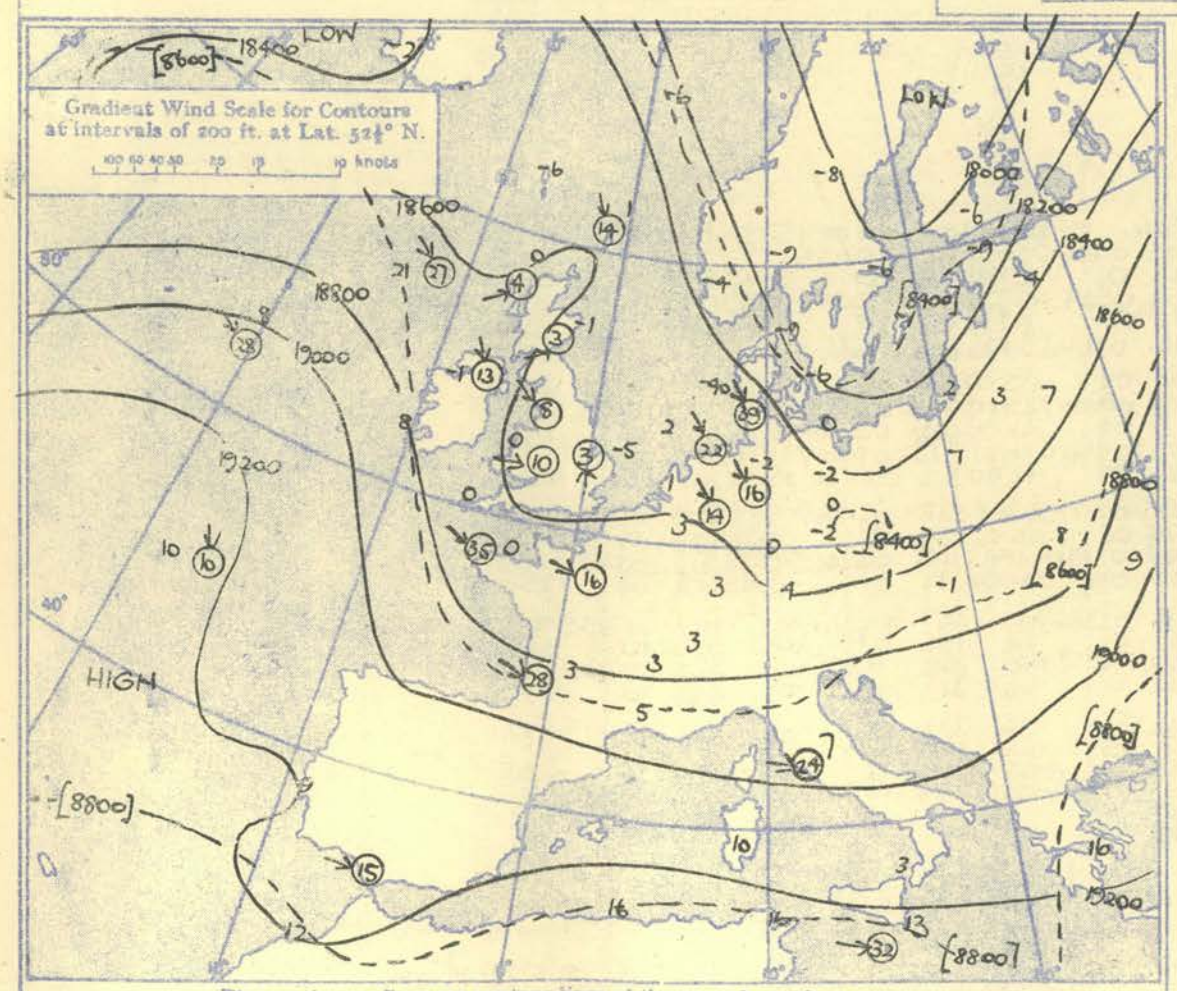
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

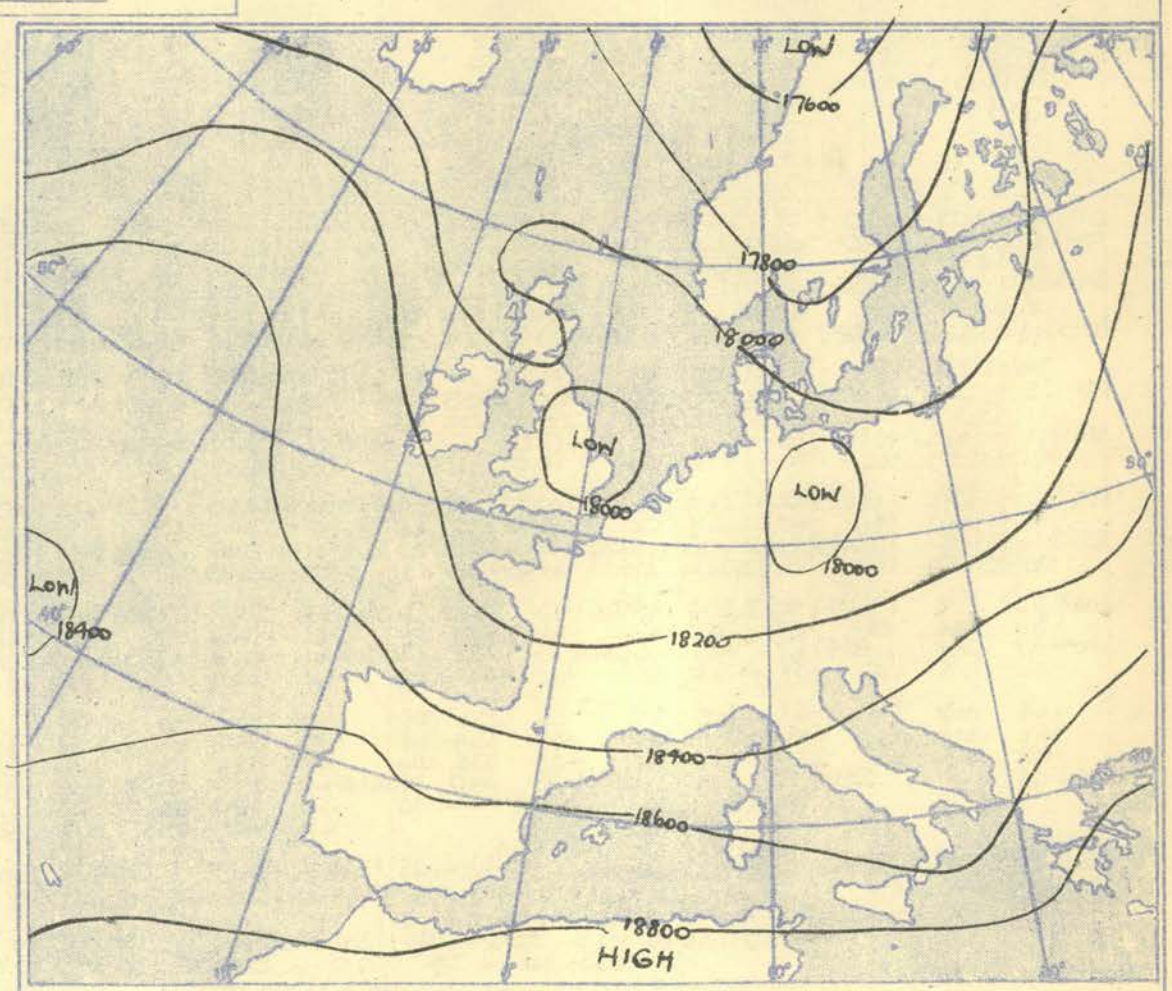
100 60 40 30 20 15 10 knots



The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer : 700—590 mb.



Isopleths of Thickness 500-1000mb.

Friday 29th June 1951. Page 3

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

Pressure	Bismuth Ascent (pos?)	Bismuth Decent (pos?)	52°12'N 2°12'W					
Time	1145hrs	1350hrs	1430hrs					
M.S.L.	1026 mb	1025 mb	1022.5 mb	mb	mb	mb	mb	mb
Surf	1023 mb	1021 mb	1021.0 mb	mb	mb	mb	mb	mb
Freezing	660 mb	650 mb	740 mb	mb	mb	mb	mb	mb

Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew
Surf	~	59 59	~	57 57	0·4				
1000	N·3	59 59	6·8	54 54	6·2				
950		55 51		52 51					
900		47 43		54 47	35·9	51	45		
850		55 35		54 45		43	51		
800		49 43		48 44	67·1	37	86		
750		44 30		43 39					
700	10433	831	10403	831	82·2	27			
850		31 24		32 27					
600		23 19		23 ~	142·0	18			
550		16 ~		15 ~					
500	19·007	~	13·604	~	187·8	03			
450									
400					241·6	18			
350									
300					301·1	48			
250									
200									
170									
	Cloud. 8185 c 910 890 1/8 Ci ~		Cloud. 8185 c 980 960		Cloud. 516 Cu + Sc. 980-820 occasionally Cu tops to 780 Inversion 490 mb 27° 665 mb 26°				

Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Time M.S.L. Surf Freezing Pressure	Pressure mb
Surf																Time	Surf
1000																M.S.L.	1000
950																Surf	950
900																Freezing	900
850																	850
800																	800
750																	750
700																	700
650																	650
600																	600
550																	550
500																	500
450																	450
400																	400
350																	350
300																	300
250																	250
200																	200
170																	170

DIRECTION (degrees from N) and VELOCITY (knots) of UPPER WINDS at heights above M.S.L.

Place	← Lerwick				St Eval				Ringway				Downham Market				Place
Time	09hrs		15hrs		21hrs		15hrs		15hrs		21hrs		23hrs				Time
Type																	Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Surf.	050	05	Calm		Calm		010	12	210	07	Calm		020	05			Surf.
1,000	100	09	030	12	050	03	010	10	250	10	020	06	030	06			1,000
2,000	100	07	020	14	080	04	030	15	320	07	010	05	020	10			2,000
3,000	090	10	080	15	060	05	040	10	350	11	010	04	360	15			3,000
4,000	080	12	070	16	040	07	050	13	060	16	310	04	360	15			4,000
5,000	070	11	070	15	040	15	070	12	060	05	350	02	360	13			5,000
6,000	070	11	060	14	040	15	060	14	150	04	150	02	010	18			6,000
8,000	050	12	040	13	060	15	060	16	360	02							8,000
10,000	050	09	020	06	070	10			330	02			010	06			10,000
14,000	070	07	070	07	050	12							350	04			14,000
18,000			060	05	080	10							300	03			18,000
24,000			(16000')		(16000')								320	10			24,000
30,000													320	17			30,000
40,000													010	32			40,000
50,000													010	20			50,000
													(45000)				

NEPHOSCOPE OBSERVATIONS

Place													Place
Time Type													Time Type
Dir. Vel.													Dir. Vel.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

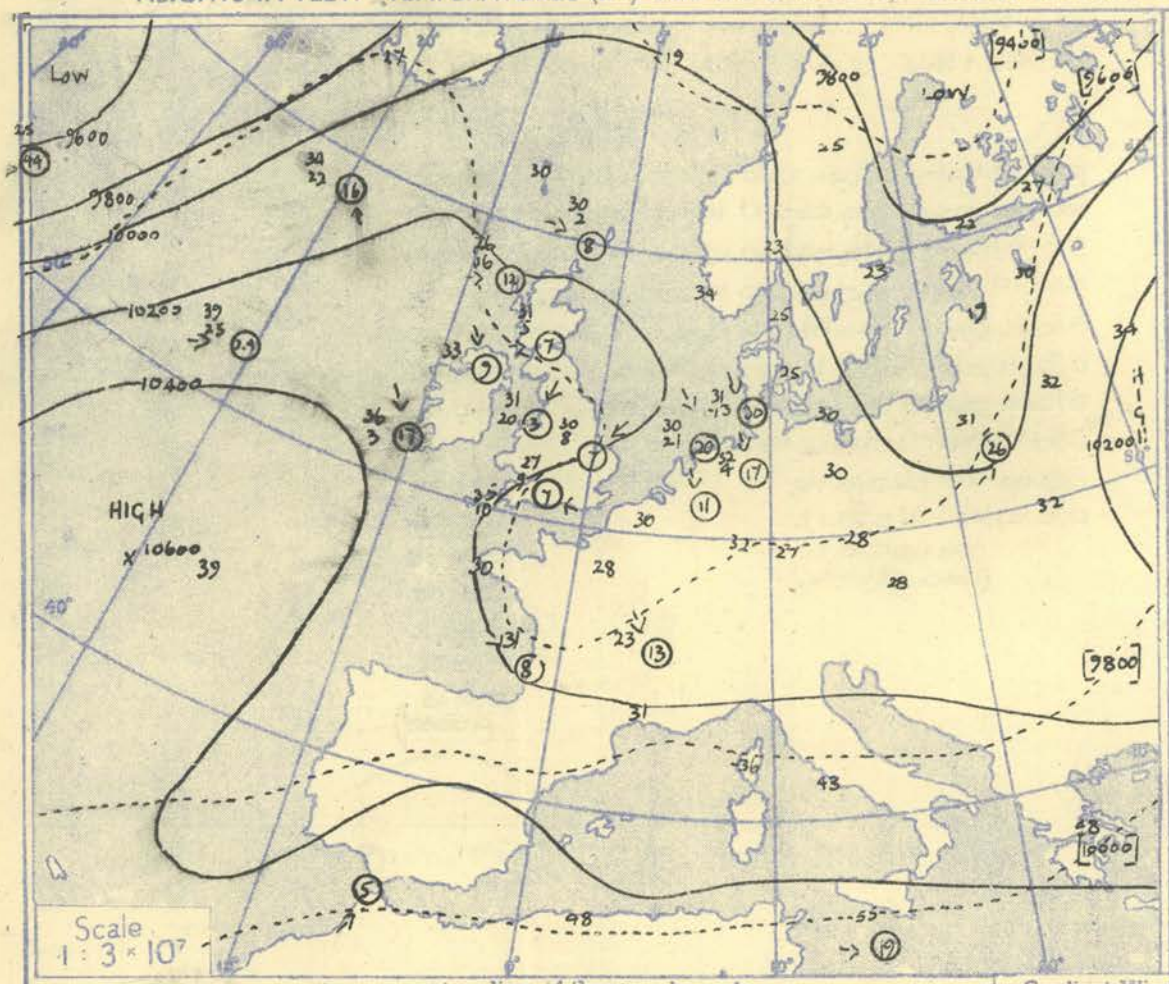
Ship	Weather Explorer	Weather Explorer	Weather Explorer	Weather Explorer	Weather Recorder	Weather Recorder	Weather Recorder	Weather Recorder	Ship
Lat/Long	59°0'N 18°9'W	58°8'N 18°0'W	58°5'N 17°2'W	58°3'N 16°5'W	52°5'N 19°9'W	52°6'N 19°9'W	52°7'N 19°6'W	52°5'N 20°0'W	Lat/Long
Time	03h G.M.T.	09h G.M.T.	15h G.M.T.	21h G.M.T.	03h G.M.T.	09h G.M.T.	15h G.M.T.	21h G.M.T.	Time
M.S.L.	1019 mb	1018 mb	1017 mb	1016 mb	1023 mb	1023 mb	1023 mb	1023 mb	M.S.L.
Surf	1019 mb	1018 mb	1017 mb	1016 mb	1023 mb	1023 mb	1023 mb	1023 mb	Surf
Freezing	710 mb	690 mb	685 mb	660 mb	630 mb	600 mb	650 mb	635 mb	Freezing

Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Wind Dir.	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir.	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir.	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir.	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir.	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir.	Wind Vel. knots	Pressure mb
Surf		56	51	159	17		54	53	150	17		56	55	170	19		55	65	190	20		57	57	230	12		57	57	230	18			Surf
1000	05·1	59	49	181	14	04·8	53	52	155	15	04·5	56	54	197	21	04·3	55	55	176	24	06·3	56	56	261	05	06·3	53	52	229	18	06·4	59	59	200	19		58	58	215	17	1000
950		48	44	190	21		51	51	163	18		64	52	197	21		54	54	205	33		55	55	248	13		55	52	239	18		58	55	218	18	06·4	59	58	231	21	950
900	33·8	46	40	199	19	33·5	50	50	188	20	33·6	50	47	194	26	33·3	53	52	222	38	35·4	53	49	240	15	35·4	53	50	257	20	35·4	54	41	239	22	35·6	57	56	231	24	900
850		45	30	201	15		47	47	226	22		45	45	194	27		51	48	292	35		50	41	236	16		49	44	265	17		51	36	238	21		55	53	238	25	850
800	65·5	40	32	212	18	65·3	43	43	241	20	65·5	41	39	194	25	65·6	48	41	240	32	67·5	48	40	237	18	67·4	44	39	264	20	67·6	27	29	240	21	67·9	52	37	243	23	800
750		33	28	210	16		38	37	246	24		40	32	179	21		43	38	233	30		45	24	247	23		47	29	261	21		42	17	243	23		41	39	230	17	750
700	00·8	32	27	203	18	00·8	34	33	245	24	01·1	34	22	194	16	01·5	38	09	232	28	03·5	41	08	263	29	03·5	44	15	261	22	03·5	39	25	245	24	05·8	39	01	232	21	700
650		27	22	222	22		26	23	258	24		27	20	179	12		30	20	233	32		35	18	270	29		38	05	261	25		32	15	242	23		34	07	230	17	650
600	40·9	21	16	246	17	40·9	20	13	260	24	41·3	24	16	299	30	41·9	24	17	236	40	44·2	28	14	270	30	44·5	32	00	262	23	44·0	25	12	239	27	49·3	28	14	226	25	600
550		14	08	270	39		19	09	262	25		17	09	245	43		18	13	244	52		17	08	269	29		22	06	262	33		17	03	245	33		19	09	228	32	550
500	87·1	08	00	260	30	87·0	10	04	264	38	87·7	10	02	245	52	88·3	11	05	268	60	90·6	08	04	281	28	91·5	14	00	262	25	90·3	08	-07	243	31	90·9	11	-01	228	32	500
450		-01	-10	259	22		00	-06	276	59		01	-09	258	59		01	-07	273	58		-02	-06	283	27		06	-14	263	22		-02	-15	240	28		01	-10	228	35	450
400	41·7	-12	-22	262	36	41·7	-11	-18	259	61	42·6	-08	-18	257	63	43·1	-10	-20	257	99	45·2	-10	-16	279	22	46·8	-06	-20	268	24	99·8	-12	-28	242	27	45·8	-08	-30	230	27	400
350		-22	-33	264	61		-25	-33	267	63		-20	-32	274	58		-23	-34	245	93		-23	-28	283	29		-21	-31	277	25		-25	-40	241	25		-23	-36	233	26	350
300	08·7	-38	-46	269	61	08·3	-42		275	65	09·9	-37	-50	274	66	09·9	-39	-50	245	45	12·1	-38	-44	278	33	14·1	-39	-43	291	24	11·4	-39	-53	228	28	12·7	-38	-58	246	33	300
250		-57		277	60		-39		277	64		-56		284	64		-56		245	50		-55		283	40		-48					-54		236	31		-55		254	54	250
200	35·8	-68		275	51	95·3	-61		277	98	96·9	-76		284	55	97·1	-71		245	44	99·3	-74		293	51	(226	-56				98·9	-69		246	05	99·9	-73		270	43	200
170		-60		260	37		-55		269	36		-66		281	39		-69		245	32		-73		293	51	mb)						-73		295	31		-69		244	28	170
150		-58		258	35		-55		271	33		-63		263	25		-66		295	28		-69		290	32							-72		248	27		-65		292	18	150
130		-59		269	28		-56		272	22		-60		292	32		-61		295	26		-70		287	24							-71					-67		292	16	130
110		-60		265	20		-49		287	12		-60		262	21		-59		295	12		-68		283	16						(137					-64		242	15	110
100	43·3	-60		258	21	95·3	-47		292	11	92·5	-59		280	11	93·7	-58		245	10	92·9	-67		283	09						mb)									100
90		-59		270	10		-47		296	10		-55		280	15		-57		245	12		-65														45·1	-63				90
80		-57		290	08		-42		301	06		-54		279	11		-59		295	09	08b	-65																		80
70		-56		290	07	(077	-43				(073	-54				(074	-55			mb)																				70
60	Inversion 900 mb 96° 890 mb 97° Isothermal 821 - 900 mb - 96° 850 - 836 .. 95° 577 - 586 .. 19°					mb) Inversion 916 mb 99° - 900 mb 50° Isothermal 750 - 735 mb 38° 721 - 713 .. 36°					mb) Inversion 1000 mb 56° - 974 mb 57° 762 .. 39° - 750 .. 40° Isothermal 017 - 1000 mb 56° 950 - 935 .. 54° 750 - 738 .. 90° 650 - 620 .. 27°					mb) Inversion 900 mb 53° - 872 mb 54° 818 .. 48° - 810 .. 49° 617 .. 29° - 610 .. 25° Isothermal 016 - 982 mb 56° 950 - 921 mb 51° 207 - 200 .. 53° 125 - 113 .. 60°					mb) Inversion 974 mb 54° - 960 mb 56° Isothermal 830 - 800 mb 48°					Inversion 982 mb 54° - 915 mb 55° 800 .. 44° - 770 - 48°					Inversion 950 mb 53° - 907 mb 54° Isothermal 1000 - 980 mb 46°					Inversion 1023 mb 58° - 1000 mb 59°					
Tropopause	I 205 mb -70° 39,100'					I 220 mb -68° 37,400'					I 200 mb -76° 39,700'					I 197 mb -73° 40,000'					I 194 mb -76° 40,600'					N.R.					I 185 mb -79° 41,500'					II 200 mb -73° 40,000'					Tropopause

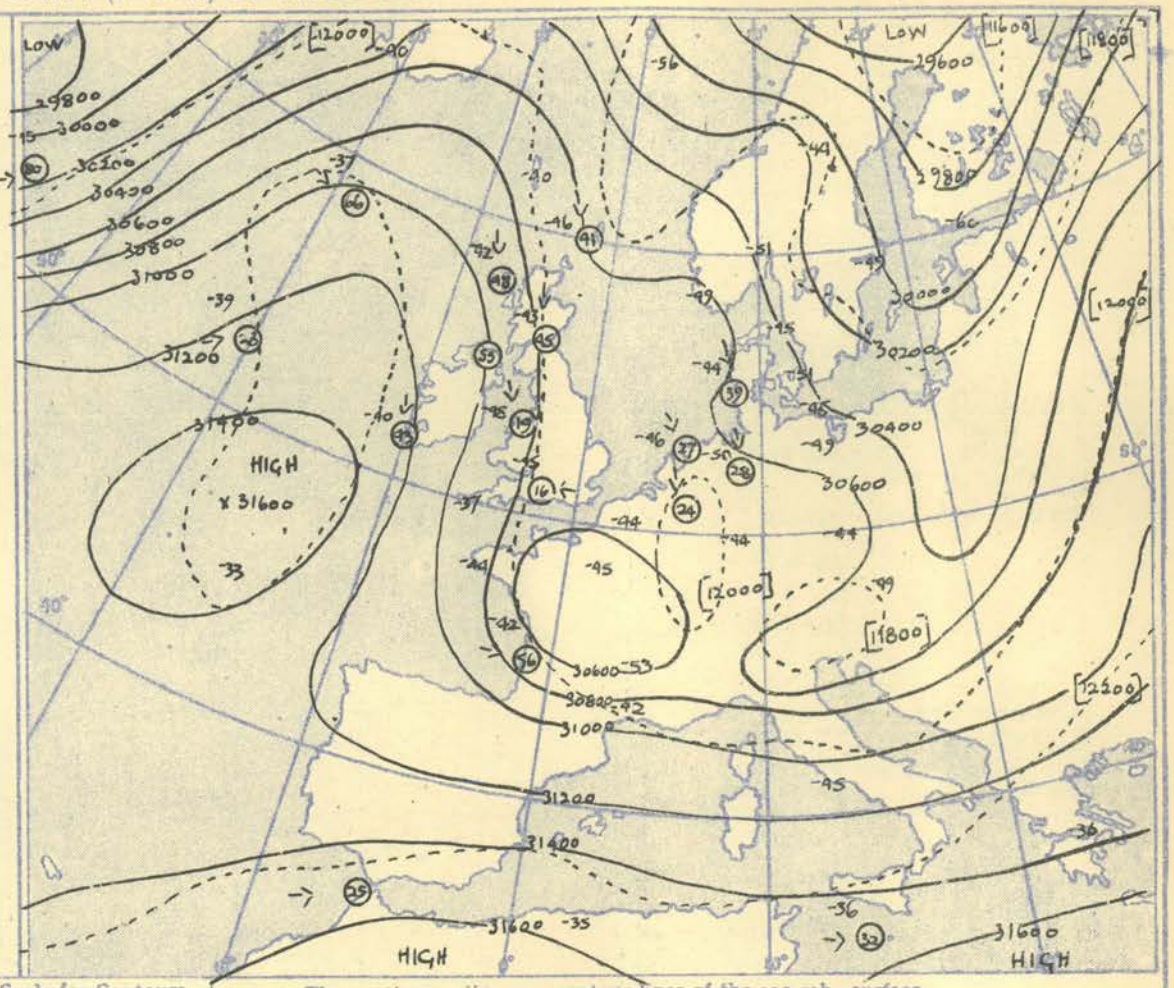
METEOROLOGICAL OFFICE LIBRARY JUL 1951

Friday 29th June 1951.

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

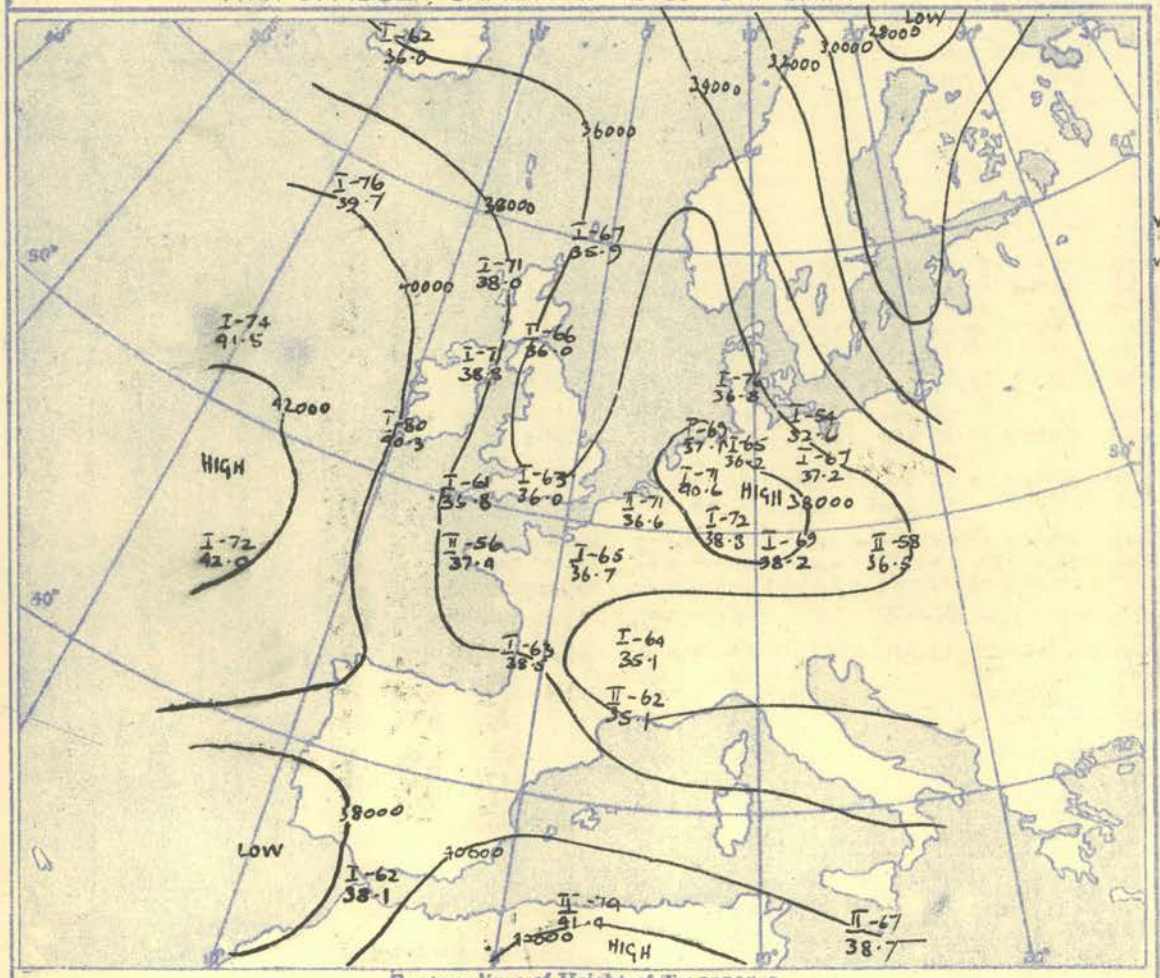


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N

100 50 40 30 20 15 10 knots

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

The thermal ridge on the Central Atlantic advanced northeastward whilst the rather flat and irregular cold trough over Europe persisted, its western side being reinforced by a small cold trough which passed across Britain from the northwest during the day.

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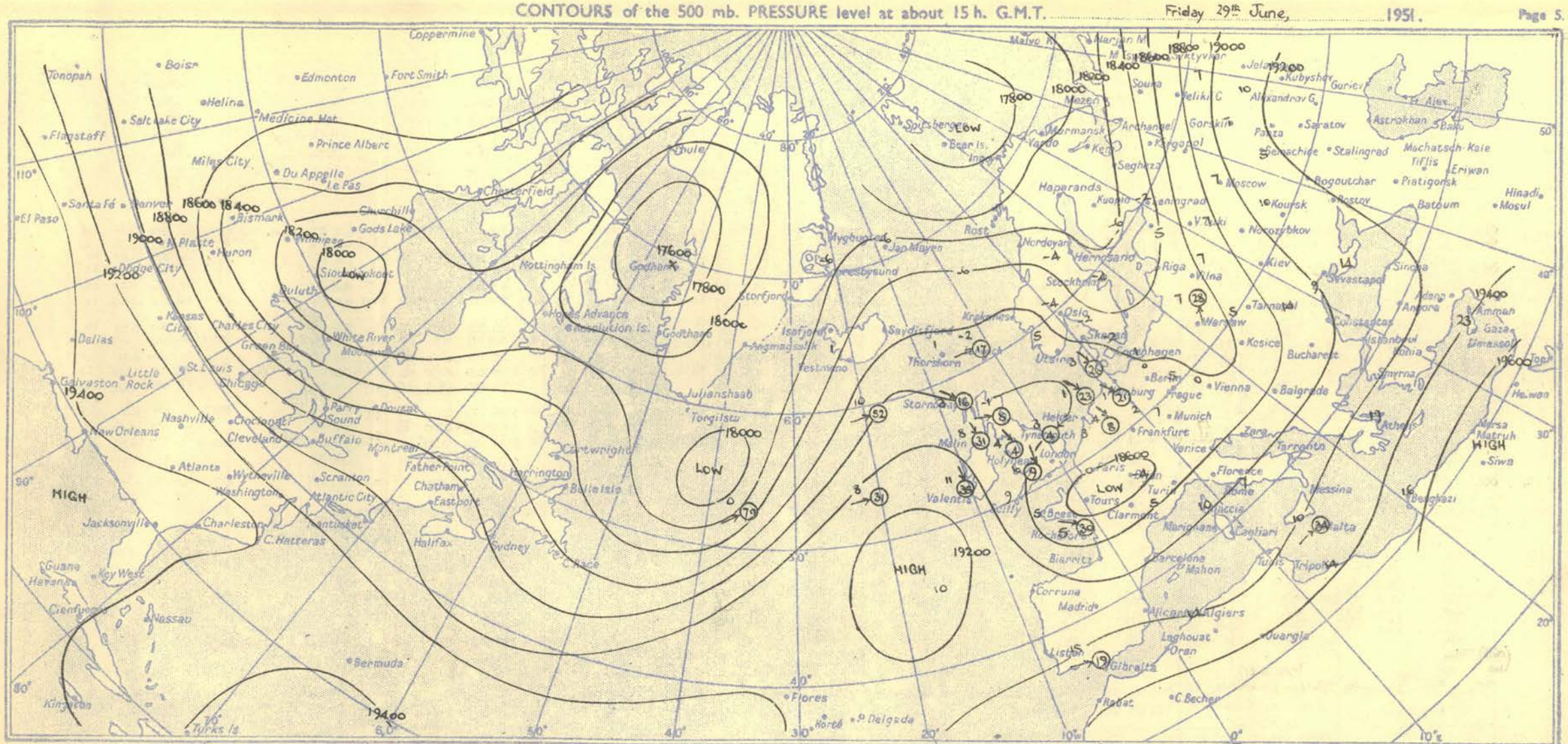
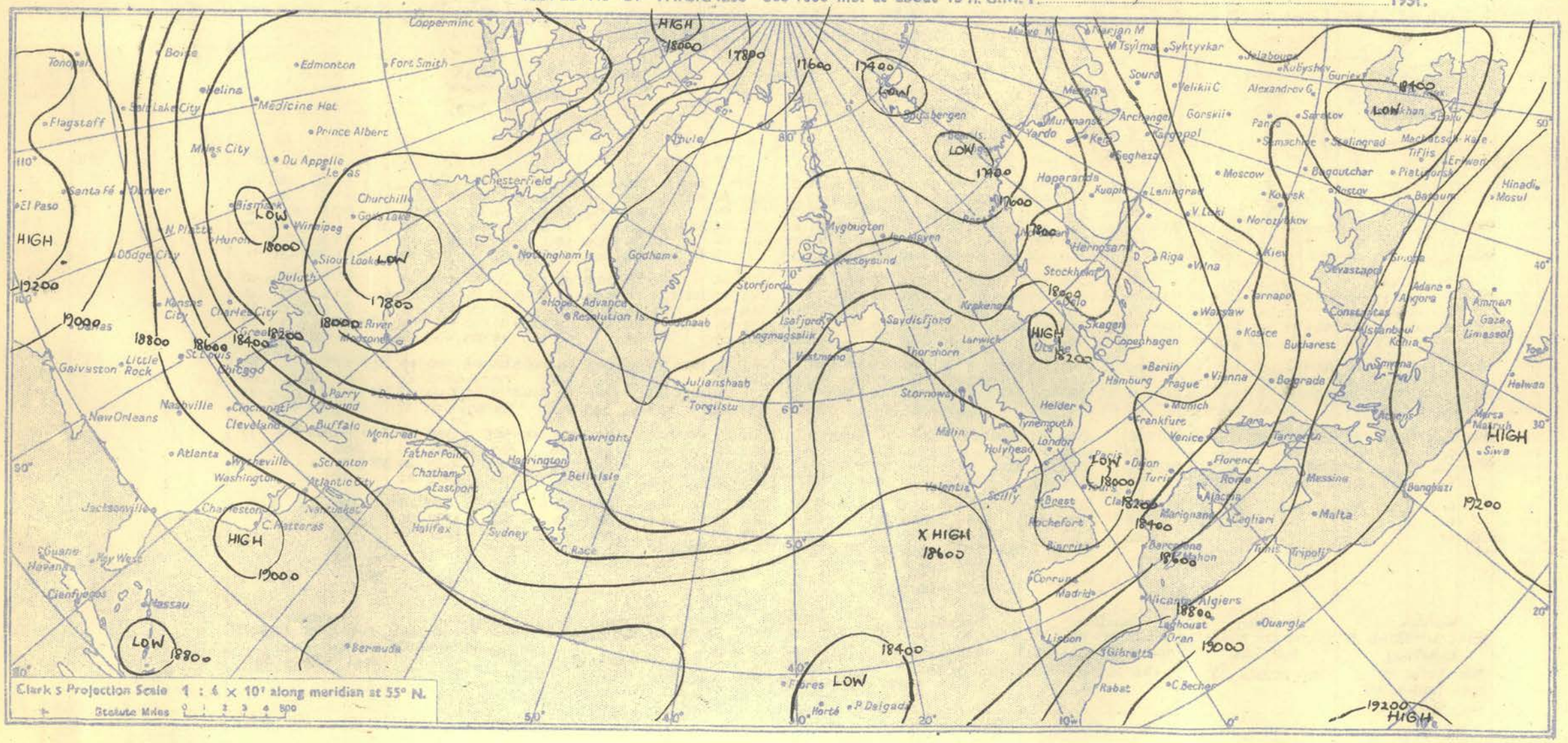
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Friday 29th June, 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Friday 29th June 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Friday 29th June, 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

15h. G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.
Pressure: M.S.L.	1024·3 mb	1025·1 mb	1025·4 mb	1024·6 mb	1023·1 mb	1023·5 mb	1022·0 mb	1022·8 mb	1026·4 mb
Pressure: Surf	1014·2 mb	1023·5 mb	1024·6 mb	1015·0 mb	1021·1 mb	1019·1 mb	1006·2 mb	1012·3 mb	1024 mb
Pressure: Freezing	715 mb	745 mb	760 mb	691 mb	703 mb	716 mb	760 mb	675 mb	660 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	51	41	190	02	00·4	55	48	020	06	00·2	60	53	100	04	02·6	67	51	Calm		00·6	67	55	Calm		01·2	63	52	040	11	04·4	60	55	070	06	02·9	62	55	360	12	00·3	65	54	330	08	Surf
1000	06·5	45	39	L.V.		06·8	50	43	027	10	07·0	53	49	316	04	06·8	64				06·5	63	54	334	08	06·5	57	50	004	08	06·1	59	54			06·3	60	54			07·1	60	52	336	06	1000
950		39	35	"			44	38	301	09		46	43	313	05		54		052	02		56	52	252	01		49	43	001	13		55	47	063	16		56	50				56	44	247	04	950
900	34·7	42	35	"		35·2	43	32	268	14	35·6	49	45	313	05	35·8	48		124	02	35·6	50	46	175	06	35·3	47	40	003	10	35·1	49	43	055	12	35·3	49	48			36·2	51	41	129	02	900
850		45	18	"			44	24	253	12		44	37	309	05		42		204	03		45	42	149	08		42	35	006	14		43	36	045	10		45	44				47	26	357	06	850
800	66·4	41	15	268	08	66·9	39	22	246	10	67·4	38	32	304	06	67·5	44		326	04	67·4	40	37	136	07	67·0	40	20	024	09	66·7	37	31	031	08	67·1	40	37			68·1	46	12	345	12	800
750		36	09	268	09		33	16	240	10		31	27	299	06		39		340	09		37	25	101	02		36	17	064	06		31	24	072	04		40	29				41	07	338	16	750
700	101·6	30	02	267	08	102·0	26	16	236	12	102·5	31	05	261	07	103·0	33		331	09	102·8	31	20	027	03	102·2	30	08	051	07	101·8	27	19	118	07	102·7	35	18			103·8	36	03	338	17	700
650		23	-05	266	10		24	13	249	10		25	-04	323	05		27		327	10		26	13	358	04		24	-07	090	05		22	15	100	05		29	10				31	20	340	22	650
600	141·3	17	-11	265	12	141·7	19	04	261	14	142·3	20	-06	271	10	143·2	23		327	14	142·7	19	08	306	02	142·0	19	-11	081	04	141·5	19	03	080	06	142·8	22	05			144·2	25	15	336	23	600
550		09	-13	264	14		12	-06	274	12		12	-04	285	11		15		332	18		11	-04	349	02		13	-17	073	03		13	-10	065	06		17	02				18	08	333	36	550
500	186·9	-02	-14	266	17	187·5	03	-20	306	10	188·1	01	-12	275	08	189·3	08		343	31	188·5	04	-14	336	04	187·9	03	-14	083	04	187·5	06	-24	024	09	189·1	09	-05			190·8	11	-01	341	35	500
450		-13	-21	276	19		-03	-23	319	27		-10	-26	276	13		00		344	38		-07	-23	351	07		-06	-23	139	03		-05	-33	020	09		-02	-15				01	-12	348	35	450
400	240·1	23	-34	273	23	241·7	-14	-27	320	35	241·8	-19	-36	294	20	243·8	-12		344	45	242·4	-19	-33	300	09	241·8	-18	-40	125	04	241·5	-17	-46	050	16	243·4	-14	-28			246·5	-11	-22	337	31	400
350		-35	-45	285	24		-26	-40	320	45		-32	-50	337	23		-24		344	49		-33	-45	303	09		-32	-56	147	03		-32	-58	060	09		-23	-38				-24	-36	337	38	350
300	305·2	-46		336	41	308·0	-42		328	48	307·4	-43		352	45	310·5	-40		343	55	307·8	-48		329	19						306·9	-45		090	10	310·2	-37	-49			312·1	-40	-50	349	43	300
250		-64		329	48		-58		325	66		-61		349	51		-58		350	68		-61		356	36							-58		030	17		-56					-57		348	54	250
200	311·7	-68		311	30	314·8	-66		328	49	314·0	-66		342	36	317·2	-69		347	57	314·7	-56		352	30						313·9	-60		005	27	317·9	-57				318·8	-78		345	48	200
170		-54		307	30		-59		316	31		-60		332	36		-61		323	3C		-55		340	22							-59		350	23		-56					-78		338	45	170
150		-54		323	22		-58		311	27		-61		334	27		-59		323	29		-55		343	23							-55		346	20		-57					-70		340	29	150
130		-52		312	17		-57		308	21		-60		325	23		-59		350	24		-56		326	19							-57		345	18		-59					-70		340	29	130
110		-52		308	17		-57		321	19		-59		335	21		-58		320	22		-55		337	11							-59		335	15		-58					-71		340	27	110
100	542·0	-49		305	14	543·1	-55		316	16	541·4	-59		331	17	544·9	-58		310	20	544·1	-54		333	09						542·7	-58		335	14	546·5	-59				541·9	-69				100
90		-50		306	08		-53		319	14		-57		316	12		-58					-53		341	06							-60		340	11		-62					-68				90
80		-50		324	08		-52		333	10		-59		308	11							-51		301	05							-57		344	10		-60					-68				80
70		-48					-50		291	03		-59		336	05							-47										-56		337	10		-58				(974) mb	-67				70
60	(663) mb	-44										-58																				-55		035	07		-58									60
Tropopause	I 234 mb. -17° 38,900'	I 213 mb. -71° 38,000'	I 234 mb. -66° 36,800' I 200 mb. -66° 39,400'	I 209 mb. -71° 38,800'	II 246 mb. -62° 35,100'	N.R.	(953) mb -52	(953) mb -59	I 196 mb. -80° 49,300'	Tropopause
Inversion	917 mb. 36° - 892 mb. 46°	918 mb. 40° - 888 mb. 46° 673 mb. 28° - 656 mb. 25°	950 mb. 46° - 895 mb. 50° 732 mb. 28° - 700 mb. 31°	839 mb. 40° - 805 mb. 45°			303 mb. 46° - 300 mb. 45° 284 mb. 52° - 274 mb. 50° 268 mb. 54° - 259 mb. 52° 247 mb. 60° - 243 mb. 59°	785 mb. 39° - 755 mb. 41° 400 mb. -14° - 392 mb. -18°	
Isothermal	892 - 873 mb. 46°	685 - 673 mb. 23° 495 - 480 mb. 02°			T76 - 740 mb. 31°	944 - 907 mb. 48° 825 - 800 mb 40°	691 - 671 mb. 25° 650 - 630 mb. 22° II 235 mb. -63° 36,000'	980 - 960 mb. 58°	975 - 950 mb. 56°

21h. G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Pressure: Time	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	G.M.T.
Pressure: M.S.L.	1024·8 mb	1025·8 mb	1025·6 mb	1025·9 mb	1025·3 mb	1025·8 mb	1023·8 mb	1024·5 mb	mb
Pressure: Surf	1014·7 mb	1024·2 mb	1024·8 mb	1016·2 mb	1023·3 mb	1021·2 mb	1007·9 mb	1014·0 mb	mb
Pressure: Freezing	735 mb	723 mb	770 mb	700 & 733 mb	692 mb	747 mb	742 mb	730 & 657 mb	mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	48	40	360	05	00·4	51	45	Calm		00·2	53	49	120	03	02·6	58	50	220	03	00·6	58	53	Calm		01·2	52	46	030	05	04·4	60	57	Calm		02·9	59	55	030	10						Surf
1000	06·6	45	38	323	06	07·0	49	43			06·9	50	46	172	05	07·0	56	49	L.V.		06·9	57	53	320	06	06·9	50	45	030	12	06·5	61	57			06·7	57	54	033	18						1000
950		38	35	292	03		45	40	259	04		49	46	213	06		53	47	"			54	50	076	06		48	40	020	15		56	49	086	07		57	48	033	21						950
900	34·7	39	33	268	05	35·5	48	35	234	15	35·6	49	45	279	07	35·9	49	43	"		35·9	51	46	133	04	35·6	48	40	010	17	35·6	50	44	017	10	35·8	52	46	038	19						900
850		39	12	262	08		43	24	250	15		42	38	285	09		43	41	298	06		46	42	213	06		44	36	006	14		43	39	956	13		47	43	032	13						850
800	66·1	36	08	253	08	67·2	39	23	254	15	67·3	36	29	280	11	67·7	41	27	345	07	67·8	40	35	255	08	67·3	39	28	004	11	67·3	38	35	028	09	67·7	41	35	031	11						800
750		35	04	245	09		33	18	260	14		29	26	295	09		35	23	320	08		32	29	269	06		33	23	004	08		33	29	031	08		35	30	050	07						750
700	101·2	27	00	249	12	102·4	29	03	268	16	102·3	29	22	291	09	102·9	32	04	330	14	103·0	32	11	324	05	102·4	27	12	004	06	102·5	27	18	060	12	103·0	27	24	021	12						700
650		22	-01	266	15		24	08	269	18		28	07	273	14		27	01	330	17		27	07	344	09		22	-01	007	08		27	15	061	13		31	01	001	24						650
600	140·8	15	-02	272	15	142·1	18	06	290	16	142·1	17	-01	270	12	142·9	19	12	335	27	143·1	20	03	359	09	142·1	17	-06	012	04	142·4	21	-06	065	10	143·2	25	-06	359	25						600
550		08	-09	268	16		12	06	302	18		09	-04	266	12		15	11	337	39		13	-04	340	07		09	-08	011	03		14	-03	033	06		17	-15	005	24						550
500	186·2	-02	-20	281	18	187·9	05	-01	309	25	187·6	00	-18	297	14	189·0	08	03	340	43	189·0	05	-15	324	12	187·6	00	-11	323	04	188·5	05	-08	013	09	189·5	07	-25	001	26						500
450		-13	-29	298	21		-02	-08	316	80		-07	-27	325	24		-03	-06	342	51		-04	-28	337	16		-11	-23	305	03		-05	-21	003	12		00	-26	007	40						450
400	239·6	-21	-33	304	28	242·3	-12	-17	319	42	241·5	-18	-25	331	31	243·3	-14	-20	342	49	243·3	-12	-35	351	32	241·0	-23	-38	312	03	242·5	-19	-34	003	18	244·1	-10	-27	005	46						400
350		-32	-41	304	27		-24	-30	318	53		-31	-49	339	42		-26	-34	345	47		-25	-44	358	36		-37	-52	343	06		-31	-57	001	18		-22	-33	004	54						350
300	305·1	-45		311	37	309·1	-37	-43	321	63	307·1	-47		340	47	309·6	-43		340	52	309·8	-41		360	51	305·7	-53		325	09	308·1	-48		348	21	311·1	-36	-45	006	77						300
250		-60		312	35		-55		325	64		-64		341	42		-62		350	63		-59		360	65		-69		347	06		-62		008	34		-53									250
200	391·6	-66		319	47	396·6	-74		330	60	393·1	-63		339	39	395·4	-79		350	54	396·2	-72		003	57	390·7	-67		353	29	394·2	-65		005	37	398·8	-71									200
170		-61		317	33		-67		325	44		-59		339	23		-70		345	36		-66		353	38		-64		363	25		-61		002	32		-70									170
150		-61		322	35		-63		322	33		-59		333	26		-67		350	33		-64		356	30		-65		350	22		-62		358	25		-64									150
130		-61					-59		319	27		-59		336	16		-68		344	30		-63		351	26		-64		348	20		-63		349	21		-68									130
110		-61										-55					-66		320	20		-65		347	20		-63		350	14		-63		351	16		-68									110
100	(726) mb															540·0	65		340	14	542·0	-65		347	23	536·8	-64		350	11	540·9	-63				543·5	-68									100
90																	-64		332	14		-64					-65		350	10		-63				(697) mb	-68									90
80																	-63		320	15																											80
70																	-64		305	12																											70
60																																																	60
Tropopause	I 218 mb. -69° 37,300'	I 195 mb. -76° 40,200'	I 282 mb. -70° 36,300'	I 190 mb. -80° 40,600'	II 210 mb. -72° 38,600'	I 233 mb. -73° 35,900'	I 225 mb. -69° 36,900'	I 182 mb. -74° 41,800'	Tropopause
Inversion	922 mb. 34° - 885 mb. 43°	922 mb. 42° - 890 mb. 46°	1002 mb. 49° - 989 mb. 51° 969 mb. 48° - 924 mb. 52° 717 mb. 25° - 696 mb. 31°	861 mb. 43° - 833 mb. 44°	1006 mb. 56° - 984 mb. 58° 729 mb. 29° - 697 mb. 38°	966 mb. 46° - 929 mb. 50°	1008 mb. 60° - 1000 mb. 61° 692 mb. 26° - 670 mb. 29°	704 mb. 28° - 657 mb. 32°	
Isothermal	850 - 822 mb. 39° 785 - 750 mb. 35° 700 - 683 mb. 27°	743 - 723 mb. 32°		733 - 700 mb. 32°	942 - 922 mb. 53°			1014 - 973 mb. 59°	

HMSO Press MO. Dunstable

No. 11780 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Saturday 30th June 1951. Page 1.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

METEOROLOGICAL OFFICE LIBRARY 9 - JUL 1951 Valentia

03hrs G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	Valentia
Pressure Time	03hrs G.M.T.	03hrs G.M.T.	03hrs G.M.T.	03hrs G.M.T.	03hrs G.M.T.	03hrs G.M.T.	03hrs G.M.T.	03hrs G.M.T.	03hrs G.M.T.
M.S.L.	1025·4 mb	1025·4 mb	1026·5 mb	1027·1 mb	1026·8 mb	1027·2 mb	1026·9 mb	1026·6 mb	1028·7 mb
Surf	1013·3 mb	1023·8 mb	1025·7 mb	1017·3 mb	1024·8 mb	1022·6 mb	1010·6 mb	1015·9 mb	1027 mb
Freezing	760 mb	705 mb	750 mb	680 mb	707 mb	731 mb	732 mb	762 mb	640 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	45	38	250	02
1000	06·8	43	37	233	09
950		36	34	242	08
900	34·9	35	32	265	01
850		42	24	270	00
800	66·4	38	26	272	13
750		31	23	272	12
700	101·3	25	14	272	13
650		20	09	279	12
600	140·8	15	-1	290	15
550		09	-11	287	15
500	186·3	-1	-11	290	19
450		-10	-19	300	27
400	235·7	-19	-29	306	29
350		-31	-42	314	44
300	305·4	-49		314	60
250		-62		317	76
200	391·2	-73			
170		-83			
150		-83			
130		-82			
110		-81			
100	533·7	-80			
90					
80					
70					
60					

Inversion 928 mb 33 - 910 mb 34°
910 mb 34 - 892 mb 42°
892 mb 42 - 871 mb 43°

Tropopause: I 195 mb -76° 39600'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·6	52	50	220	05
1000	07·3	56	55	169	06
950		52	49	228	06
900	36·2	49	45	264	05
850		43	39	257	06
800	67·9	38	33	263	11
750		34	21	292	10
700	103·1	31	11	309	11
650		26	05	313	12
600	142·2	19	-6	322	17
550		14	-9	339	21
500	189·0	06	00	350	29
450		-2	-8	335	34
400	243·4	-12	-21	354	39
350		-25	-34	360	60
300	311·2	-39	-45	345	34
250		-53		338	41
200	396·1	-73		340	39
170		-78		347	34
150		-68		352	31
130		-67		354	23
110		-66		353	19
100	584·3	-66		352	19
90		-64		351	12
80		-64			
70		(77)			
60					

Inversion 1025 mb 53 - 1000 mb 56°
963 mb 51 - 937 mb 54°
747 mb 32° - 722 mb 34°
Isothermal 810 - 784 mb 36°
1000 mb 55 - 963 mb 56°

Tropopause: I 200 mb -79° 39600'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	44	43	Calm	
1000	07·3	46	43	020	09
950		52	49	228	10
900	36·2	49	45	264	08
850		43	39	257	06
800	67·9	38	33	263	11
750		34	16	354	11
700	103·1	29	10	360	09
650		25	-3	350	06
600	142·5	20	-19	341	06
550		14	-5	339	21
500	188·9	06	-11	306	09
450		-2	-16	315	12
400	242·7	-8	-26	008	11
350		-18	-35	010	24
300	308·3	-31	-51	010	37
250		-47		014	51
200	392·2	-68		011	45
170		-68		360	27
150		-64		358	26
130		-65		357	21
110		-65		354	12
100		-65			
90		(103)			
80					
70					
60					

Inversion 1011 mb 50 - 978 mb 55°
690 mb 26° - 665 mb 29°

Tropopause: I 226 mb -70° 36700'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	50	49	Calm	
1000	07·2	52	51		
950		53	48	053	07
900	36·1	50	43	040	16
850		44	36	051	13
800	67·8	38	27	054	13
750		34	12	055	10
700	103·1	28	18	064	09
650		27	12	064	07
600	142·7	20	11	025	05
550		12	-5	010	12
500	188·9	03	-16	015	08
450		-8	-26	008	11
400	242·7	-18	-35	010	24
350		-31	-51	010	37
300	308·3	-47		014	51
250		-63		014	63
200	394·4	-67		011	45
170		-68		360	27
150		-64		358	26
130		-65		357	21
110		-65		354	12
100		-65			
90		(102)			
80					
70					
60					

Inversion 1012 mb 54 - 983 mb 58°
712 mb 28° - 678 mb 30°

Tropopause: I 174 mb -91° 42000'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	54	52	010	02
1000	07·2	56	52	030	02
950		55	51		
900	36·8	52	43		
850		44	40		
800	68·7	37	34		
750		25	11		
700	104·8	41	08	348	10
650		34	20	333	10
600	145·3	26	18	345	15
550		19	00		
500	189·0	06	-2		
450		-8	-26	008	11
400	242·9	-20	-37		
350		-34	-42		
300	313·5	-49			
250		-63			
200	400·5	-76			
170		-79			
150		-87			
130		-87			
110		-87			
100		-87			
90		829.5	-87		
80			-86		
70			-88		
60		(78)	-88		

Inversion 1000 mb 47 - 978 mb 55°
Isothermal 1000 - 928 mb 55°
787 - 734 mb 44°

Tropopause: I 182 mb -80° 42000'

09hrs G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE
Pressure Time	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.
M.S.L.	1024·6 mb	1024·4 mb	1026·3 mb	1027·8 mb	1027·8 mb	1028·8 mb	1028·6 mb	1028·5 mb
Surf	1014·5 mb	1022·8 mb	1025·3 mb	1018·1 mb	1025·8 mb	1024·2 mb	1012·4 mb	1017·9 mb
Freezing	720 mb	694 mb	700 mb	655 mb	635 mb	714 mb	722 mb	780, 760, 690 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	48	41	260	10
1000	06·6	45	39	252	09
950		38	35	254	12
900	34·7	36	33	257	14
850		33	17	260	13
800	66·3	29	17	264	13
750		24	12	267	12
700	101·5	09	07	274	15
650		23	12	287	18
600	141·2	18	08	295	21
550		11	00	304	26
500	186·9	01	-12	308	24
450		-5	-14	313	33
400	240·8	-17	-25	309	33
350		-30	-40	310	45
300	306·7	-43		316	65
250		-55		313	73
200	393·3	-71		314	64
170		-81			
150		-84			
130		-82			
110		-80			
100		(115)			
90					
80					
70					
60					

Inversion 905 mb 33 - 870 mb 44°
Isothermal 750 - 735 mb 34°

Tropopause: I 202 mb -72° 39200'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·4	52	50	180	10
1000	06·6	50	48	200	18
950		48	47	232	24
900	35·2	48	46	253	23
850		46	43	259	22
800	67·1	42	38	268	18
750		38	36	278	20
700	102·5	33	26	279	23
650		28	09	283	25
600	142·6	22	16	294	35
550		17	09	293	33
500	189·0	10	02	291	34
450		02	-6	287	32
400	243·9	-9	-22	306	30
350		-21	-33	299	37
300	311·1	-36	-48	297	41
250		-55		291	51
200	398·7	-69		293	46
170		-82		293	27
150		-83		298	20
130					
110					
100					
90					
80					
70					
60					

Inversion 910 mb 47 - 918 mb 49°
585 mb 20 - 583 mb 22°
Isothermal 658 - 630 mb 28°

Tropopause: I 199 mb -70° 40000'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·2	57	55	200	05
1000	06·8	54	49	236	18
950		51	41	245	16
900	35·6	51	28	267	17
850		47	28	281	15
800	67·5	42	26	286	13
750		36	25	294	14
700	103·0	32	26	303	16
650		28	24	312	18
600	143·1	24	19	327	21
550		18	13	340	32
500	189·7	10	05	332	33
450		01	-10	328	23
400	244·4	-10	-18	340	37
350		-23	-28	341	36
300	311·2	-39	-45	345	34
250		-55		336	41
200	396·1	-73		340	39
170		-78		347	34
150		-69		343	30
130		-68		335	21
110		-67		337	20
100	584·2	-68		337	18
90		-66		310	12
80		-67		338	16
70		-65			
60					

Inversion 1016 mb 45 - 947 mb 52°
Isothermal 709 - 688 mb 25°
572 - 550 mb 15°

Tropopause: I 182 mb -82° 40600'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	57	52	Calm	
1000	07·5	54	53	228	03
950		53	53	299	06
900	36·4	51	36	280	12
850		47	27	308	12
800	68·3	45	28	314	11
750		40	35	318	14
700	103·0	36	32	330	16
650		31	23	338	18
600	143·8	24	19	336	18
550		17	12	325	24
500	189·7	08	03	322	25
450		00	-4	334	30
400	245·3	-9	-21	318	28
350		-21	-32	314	30
300	311·3	-38	-45	335	39
250		-55		333	42
200	398·4	-73		329	45
170		-76		332	25
150		-70		338	16
130		-68		330	17
110		-64		334	15
100	584·3	-65		338	11
90		-65		336	11
80		-64		332	09
70		-61		342	05
60		-59			

Inversion 964 mb 50 - 910 mb 52°
Isothermal 914 - 967 mb 51°
952 - 930 mb 53°

Tropopause: I 196 mb -75° 40200'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·6	58	52	Calm	
1000	07·6	55	53	228	03
950		53	53	299	06
900	36·6	48	48	268	09
850		43	41	253	10
800	68·3	39	27	257	10
750		34	16	303	10
700	103·7	29	10	318	09
650		27	-3	330	09
600	143·5	21	-6	323	08
550		12	-14	316	09
500	189·3	02	-11	306	09
450		-8	-26	008	11
400	243·8	-14	-28	015	35
350		-27	-43	013	42
300	310·2	-41		015	54
250		-60		020	62
200	396·6	-76		016	43
170		-83		007	31
150		-81		005	27
130		-81		355	23
110		-81		010	16
100	943·2	-68		357	12
90		-67		353	10
80		-67		005	08
70		-65		013	08
60					

Inversion 942 mb 43 - 913 mb 53°
766 mb 37 - 755 mb 38°
700 mb 30 - 686 mb 31°

Tropopause: I 200 mb -76° 39700'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	55	50	120	03
1000	07·8	55	48		
950		53	45	056	10
900	36·6	51	33	057	10
850		47	31	348	15
800	68·3	45	32	058	10
750		40	23	048	12
700	103·5	31	10	008	09
650		26	06	005	05
600	143·5	21	00	356	08
550		13	-8	356	11
500	189·5	06	-21	005	17
450		-3	-20	013	29
400	243·8	-14	-28	015	35
350		-27	-43	013	42
300	310·1	-41		023	54
250		-58		023	63
200	396·5	-76		025	62
170		-83		011	40
150		-84		006	31
130		-86		003	24
110		-86		006	16
100	940·8	-64		358	15
90		-63			
80					
70					
60					

Inversion 982 mb 45 - 980 mb 53°
Isothermal 710 - 690 mb 31°

Tropopause: II 187 mb -78° 40900'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	64	52	Calm	
1000	07·1	55	52	058	02
950		55	47	292	05
900	36·8	52	30	261	04
850		49	19	205	04
800	68·7	45	16	309	05
750		44	25	332	05
700	104·8	41	08	348	10
650		34	20	333	10
600	145·3	26	18	345	15
550		19	00		
500	189·0	06	-2		
450		-8	-26	008	11
400	242·9	-20	-37		
350		-34	-42		
300	313·5	-49			
250		-63			
200	400·5	-76			
170		-79			
150		-87			
130		-87			
110		-87			
100		-87			
90		829.5	-87		
80			-86		
70			-88		
60		(78)	-88		

Inversion 1000 mb 47 - 978 mb 55°
Isothermal 1000 - 928 mb 55°
787 - 734 mb 44°

Tropopause: I 182 mb -80° 42000'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	48	41	260	10
1000	06·6	45	39	252	09
950		38	35	254	12
900	34·7	36	33	257	14
850		33	17	260	13
800	66·3	29	17	264	13
750		24	12	267	12
700	101·5	09	07	274	15
650		23	12	287	18
600	141·2	18	08	295	21
550		11	00	304	26
500	186·9	01	-12	308	24
450		-5	-14	313	33
400	240·8	-17	-25	309	33
350		-30	-40	310	45
300	306·7	-43		316	65
250		-55		313	73
200	393·3	-71		314	64
170		-81			
150		-84			
130		-82			
110		-80			
100		(115)			
90					
80					
70					
60					

Inversion 905 mb 33 - 870 mb 44°
Isothermal 750 - 735 mb 34°

Tropopause: I 202 mb -72° 39200'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·4	52	50	180	10
1000	06·6	50	48	200	18
950		48	47	232	24
900	35·2	48	46	253	23
850		46	43	259	22
800	67·1	42	38	268	18
750		38	36	278	20
700	102·5	33	26	279	23
650		28	09	283	25
600	142·6	22	16	294	35
550		17	09	293	33
500	189·0	10	02	291	34
450		02	-6	287	32
400	243·9	-9	-22	306	30
350		-21	-33	299	37
300	311·1	-36	-48	297	41
250		-55		291	51
200	398·7	-69		293	46
170		-82		293	27
150		-83		298	20
130					
110					
100					
90					
80					
70					
60					

Inversion 910 mb 47 - 918 mb 49°
585 mb 20 - 583 mb 22°
Isothermal 658 - 630 mb 28°

Tropopause: I 199 mb -70° 40000'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·2	57	55	200	05
1000	06·8	54	49	236	18
950		51	41	245	16
900	35·6	51	28	267	17
850		47	28	281	15
800	67·5	42	26	286	13
750		36	25	294	14
700	103·0	32	26	303	16
650		28	24	312	18
600	143·1	24	19	327	21
550		18	13	340	32
500	189·7	10	05	332	33
450		01	-10	328	23
400	244·4	-10	-18	340	37
350		-23	-28	341	36
300	311·2	-39	-45	345	34
250		-55		336	41
200	396·1	-73		340	39
170		-78		347	34
150		-69		343	30
130		-68		335	21
110		-67		337	20
100	584·2	-68		337	18
90		-66		310	12
80		-67		338	16
70		-65			
60					

Inversion 1016 mb 45 - 947 mb 52°
Isothermal 709 - 688 mb 25°
572 - 550 mb 15°

Tropopause: I 182 mb -82° 40600'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·6	52	50	220	05
1000	07·3	56	55	169	06
950		52	49	228	06
900	36·2	49	45	264	05
850		43	39	257	06
800	67·6	38	33	263	11
750		34	21	292	10
700	103·1	31	11	309	11
650		26	05	313	12
600	142·2	19	-6	322	17
550		14	-9	339	21
500	189·7	06	-9	336	23
450		-2	-8	335	32
400	244·4	-10	-18	340	37
350		-23	-28	341	36
300	311·2	-39	-45	345	34
250		-55		338	41
200	396·1	-73		340	39
170		-78		347	34
150		-69		343	30
130		-68		335	21
110		-67		337	20
100	584·3	-66		310	12
90		-64		300	14
80		-63		340	12
70		-62		348	08
60					

Inversion 1017 mb 52 - 1005 mb 55°
850 mb 41° - 800 mb 42°

Tropopause: I 175 mb -81° 42500'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·6	52	51	Calm	
1000	07·3	56	55	169	06
950		52	49	228	06
900	36·2	49	45	264	05
850		43	39	257	06
800	67·9	38	33	263	11
750		34	21	292	10
700	103·1	31	11	309	11
650		25	10	324	21
600	142·2	19	-6	322	17
550		14	-9	340	33
500	189·0	06	00	350	29
450		-2	-8	335	34
400	243·4	-12	-21	354	39
350		-25	-34	360	60
300	311·2	-39	-45	345	34
250		-53		328	41
200	396·1	-73		330	39
170		-78		340	34
150		-68		352	31
130		-67		354	23
110		-66		353	19
100	584·3	-66		352	19
90		-64		351	12
80		-64			
70		(77)			
60					

Inversion 1025 mb 53 - 1000 mb 56°
963 mb 51 - 937 mb 54°
747 mb 32° - 722 mb 34°
Isothermal 810 - 784 mb 36°
1000 mb 55 - 963 mb 56°

Tropopause: I 200 mb -79° 39600'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	44	43	Calm	
1000	07·3	46	43	020	09
950		52	49	228	10
900	36·2	49	45	264	08
850		43	39	257	06
800	67·9	38	33	263	11
750		34	16	354	11
700	103·1	29	10	360	09
650		25	-3	350	06
600	142·5	20	-19	341	06
550		14	-5	339	21
500	188·9	06	-11	306	09
450		-2	-16	315	12
400	242·7	-8	-26	008	11
350		-18	-35	010	24
300	308·3	-31	-51	010	37
250		-47		014	51
200	394·4	-67		011	45
170		-68		360	27
150		-64		358	26
130		-65		357	21
110		-65		354	12
100		-65			
90		(103)			
80					
70					
60					

Inversion 1011 mb 50 - 978 mb 55°
690 mb 26° - 665 mb 29°

Tropopause: I 226 mb -70° 36700'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	50	49	Calm	
1000	07·2	52	51		
950		53	48	053	07
900	36·1	50	43	040	16
850		44	36	051	13
800	67·8	38	27	054	13
750		34	12	055	10
700	103·1	28	18	064	09
650		27	12	064	07
600	142·7	20	11	025	05
550		12	-5	010	12
500	188·9	03	-16	015	08
450		-8	-26	008	11
400	242·7	-18	-35	010	24
350		-31	-51	010	37
300	308·3	-47		014	51
250		-63		014	63
200	394·4	-67		011	45
170		-68		360	27
150		-64		358	26
130		-65		357	21
110		-65		354	12
100		-65			
90		(102)			
80					
70					
60					

Inversion 1012 mb 54 - 983 mb 58°
712 mb 28° - 678 mb 30°

Tropopause: I 174 mb -91° 42000'

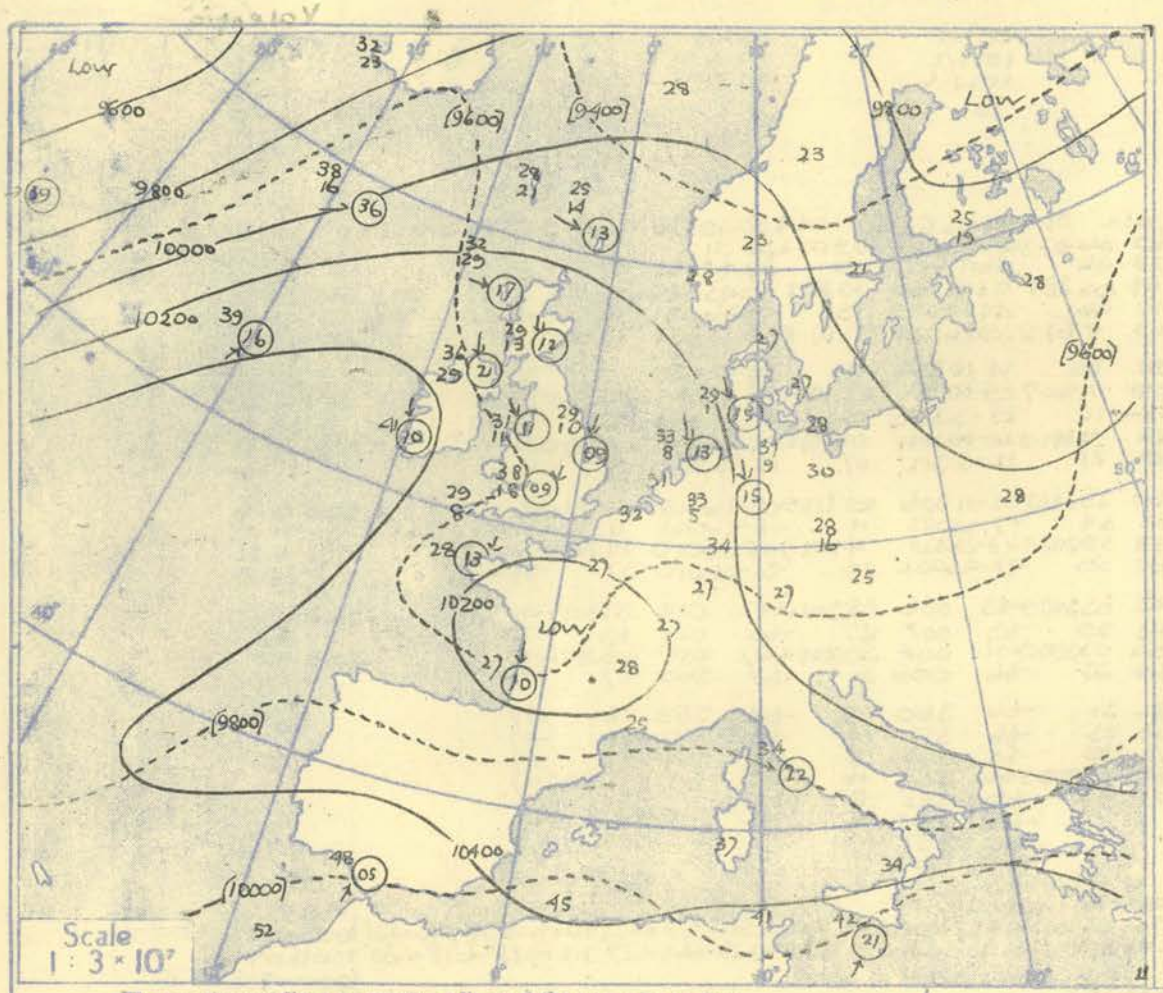
Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	54	52	010	02
1000	07·2	56	52	030	02
950		55	51		
900	36·8	52	43		
850		44	40		
800	68·7	37	34		
750		25	11		
700	104·8	41	08	348	10
650		34	20	333	10
600	145·3	26	18	345	15
550		19	00		
500	189·0	06	-2		
450		-8	-26	008	11
400	242·9	-20	-37		
350		-34	-42		
300	313·5	-49			
250		-63			
200	400·5	-76			
170		-79			
150		-87			
130		-87			
110		-87			
100		-87			
90		829.5	-87		
80			-86		
70			-88		
60		(78)	-88		

Inversion 1000 mb 47 - 978 mb 55°
Isothermal 1000 - 928 mb 55°
787 - 734 mb 44°

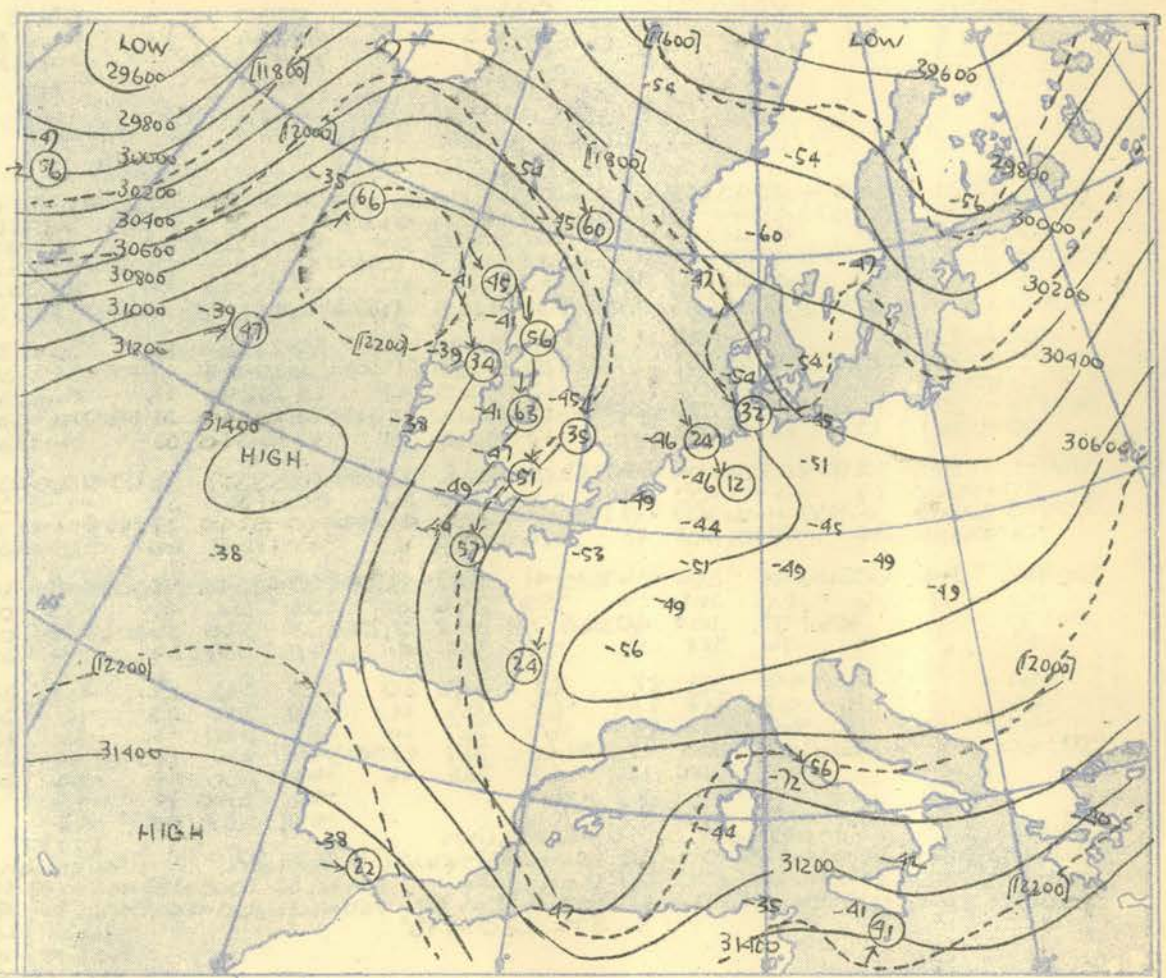
Tropopause: I 182 mb -80° 42000'

Saturday 30th June. 1951.

HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb. and 300 mb., levels at about 03 h. G.M.T.



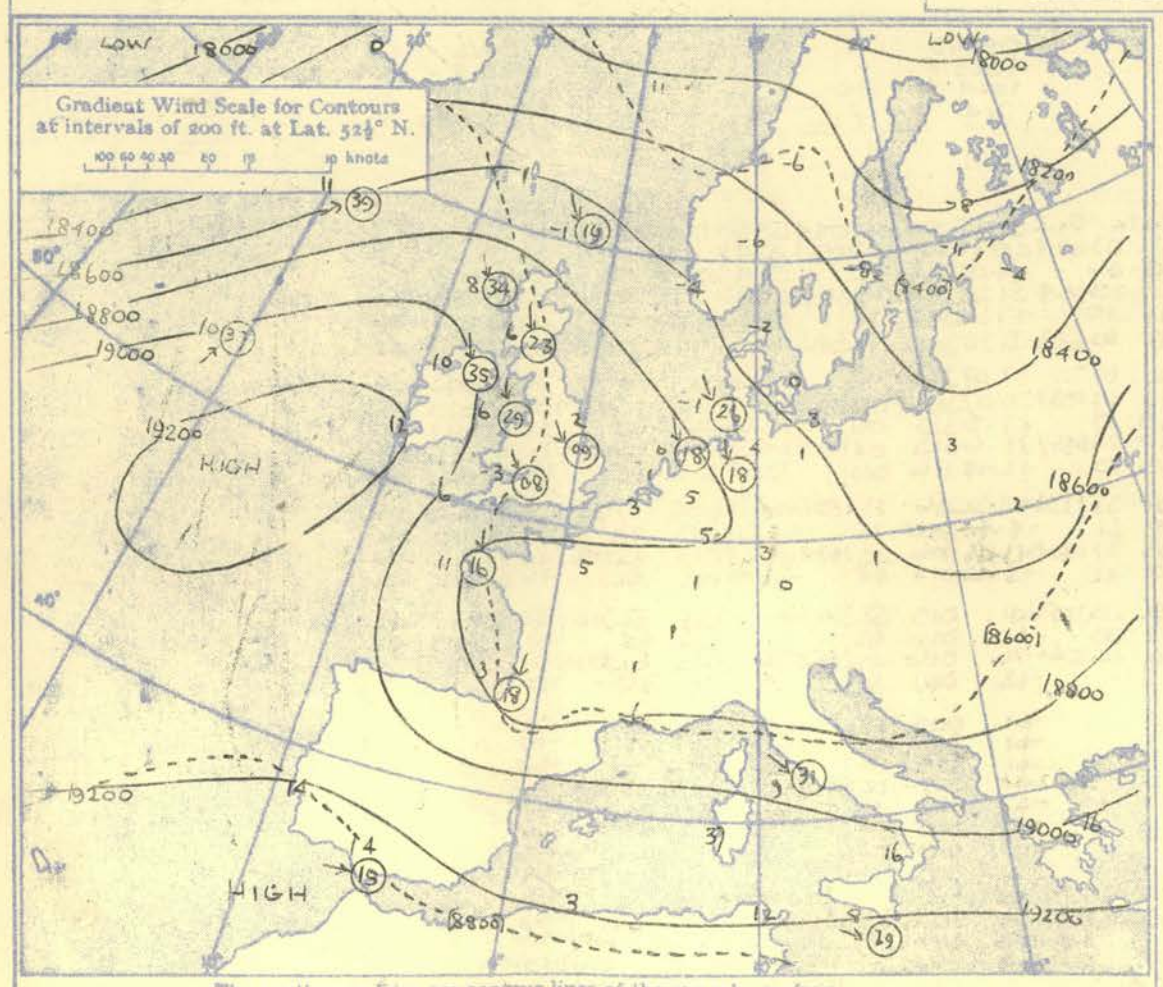
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.



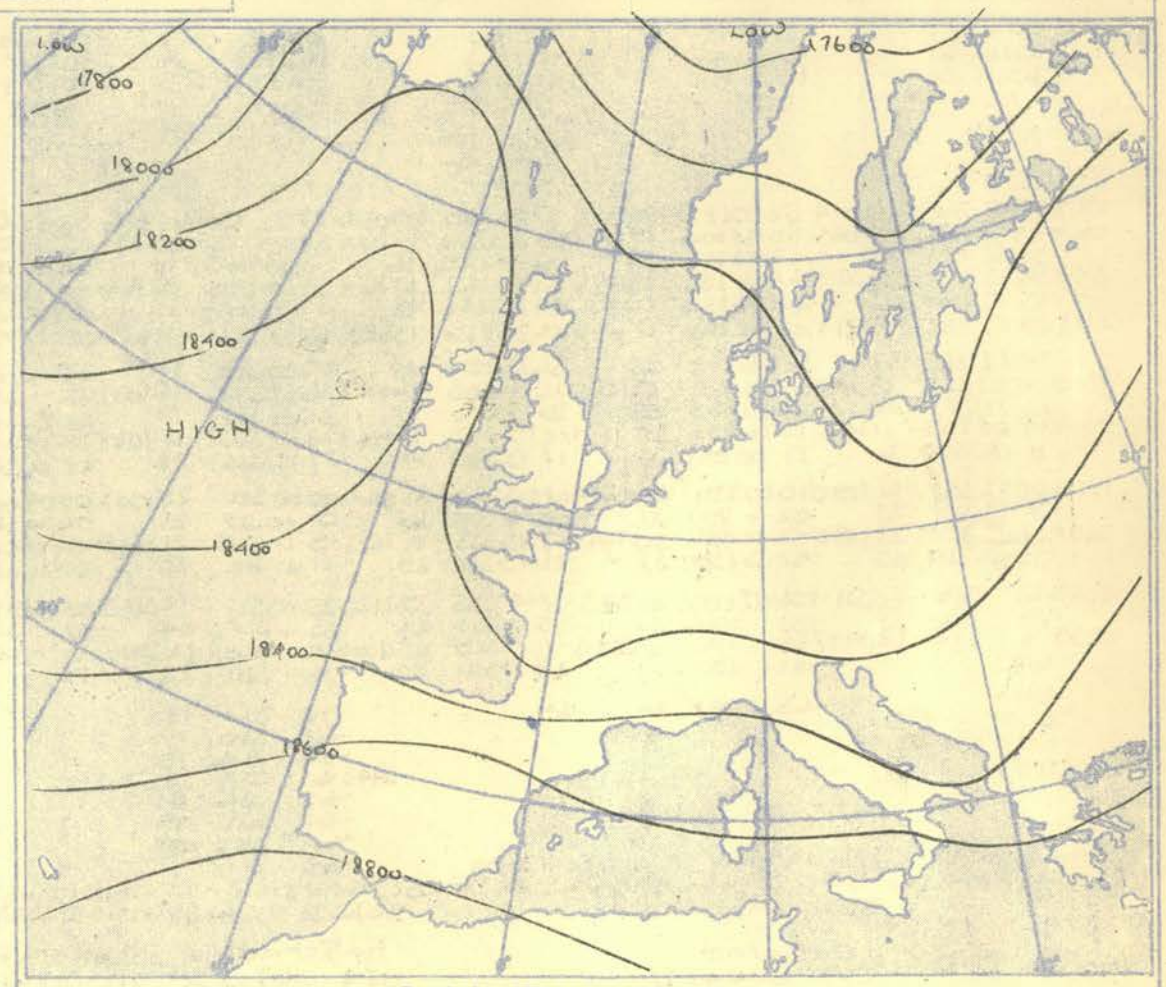
The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

100 60 40 30 20 15 10 knots



The continuous lines are contour lines of the 500 mb. surface.
The dotted lines are isopleths of the thickness of the layer 700—500 mb.



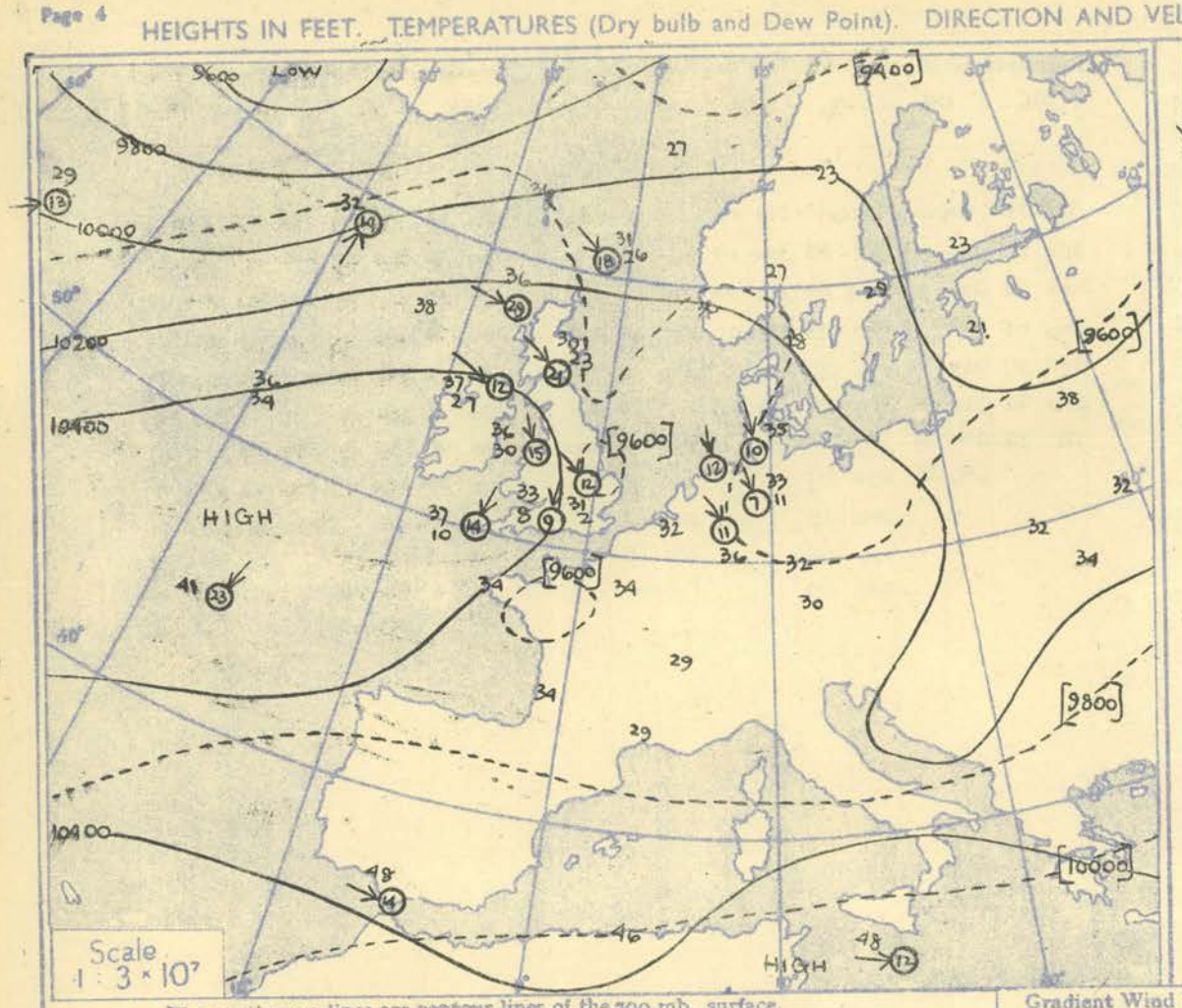
Isopleths of Thickness 500-1000mb.

Saturday 30th June. 1951. Page 3

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

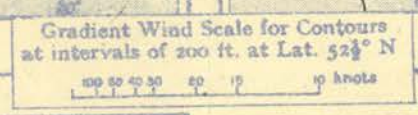
| | | |

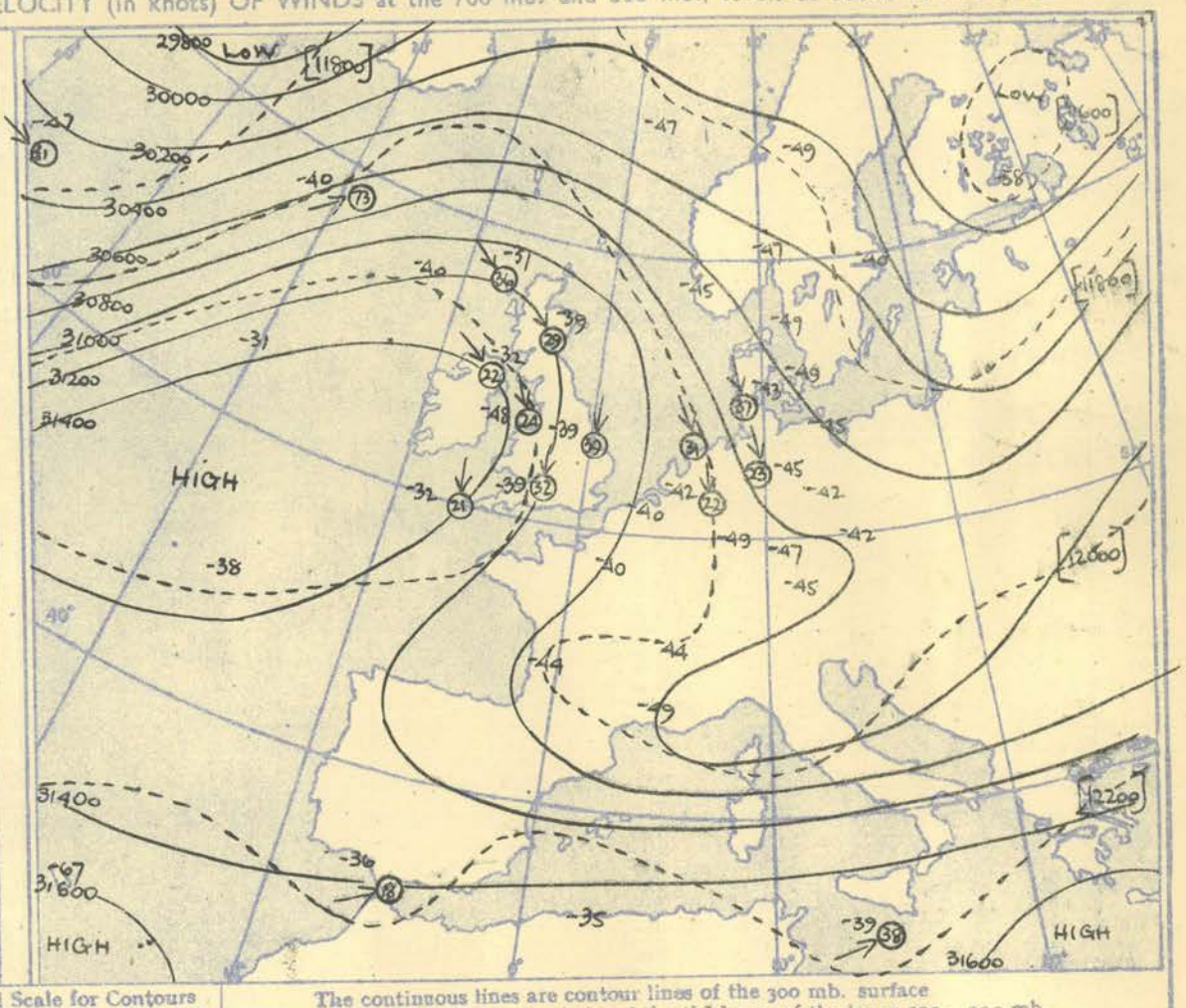
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h. G.M.T.



The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

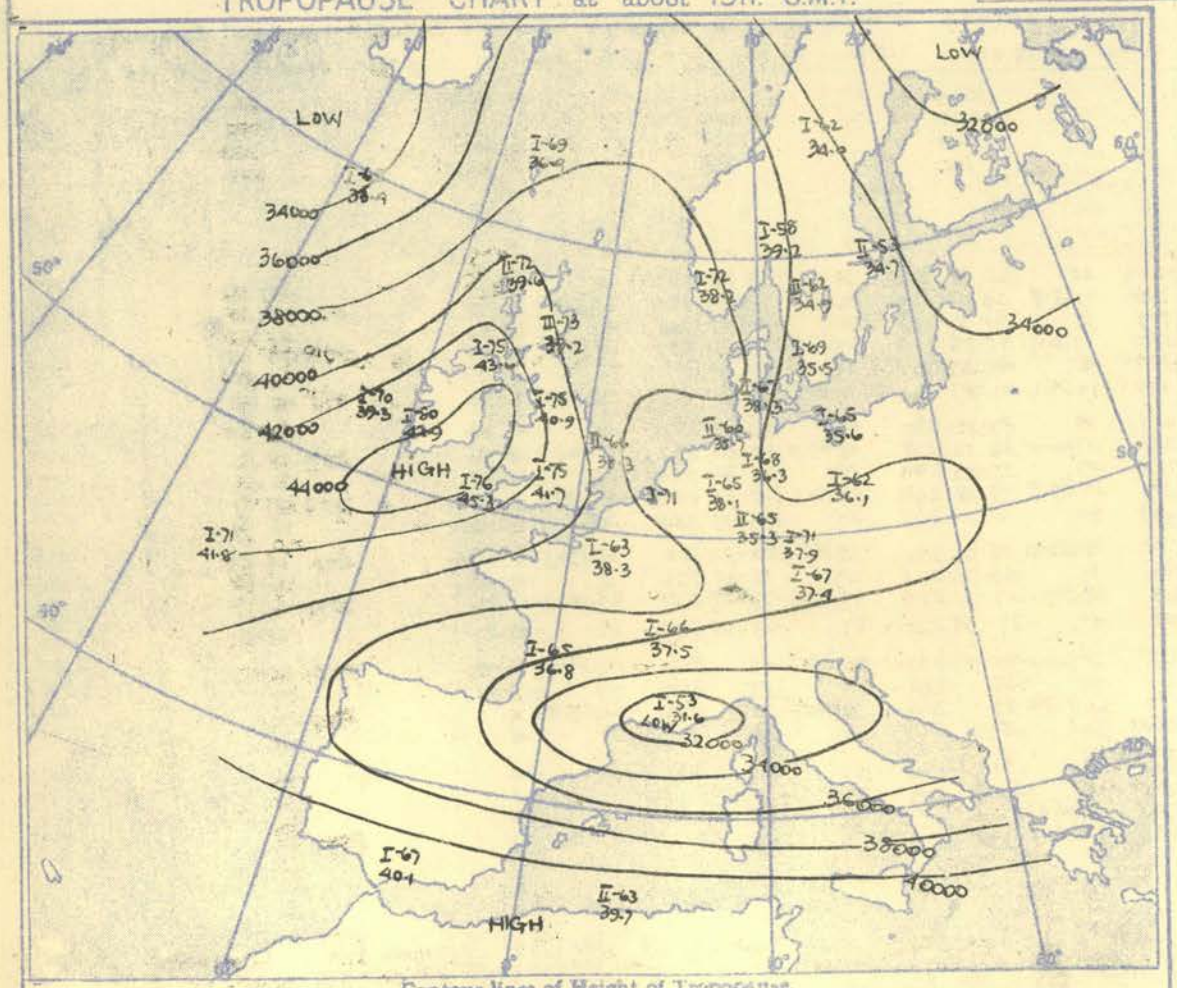
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N





The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

TROPOPAUSE CHART at about 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

The Atlantic warm ridge moved eastward to extend across Britain by the end of the day. There was some decrease in the thermal gradient between the warm ridge and the irregular cold trough over Europe.

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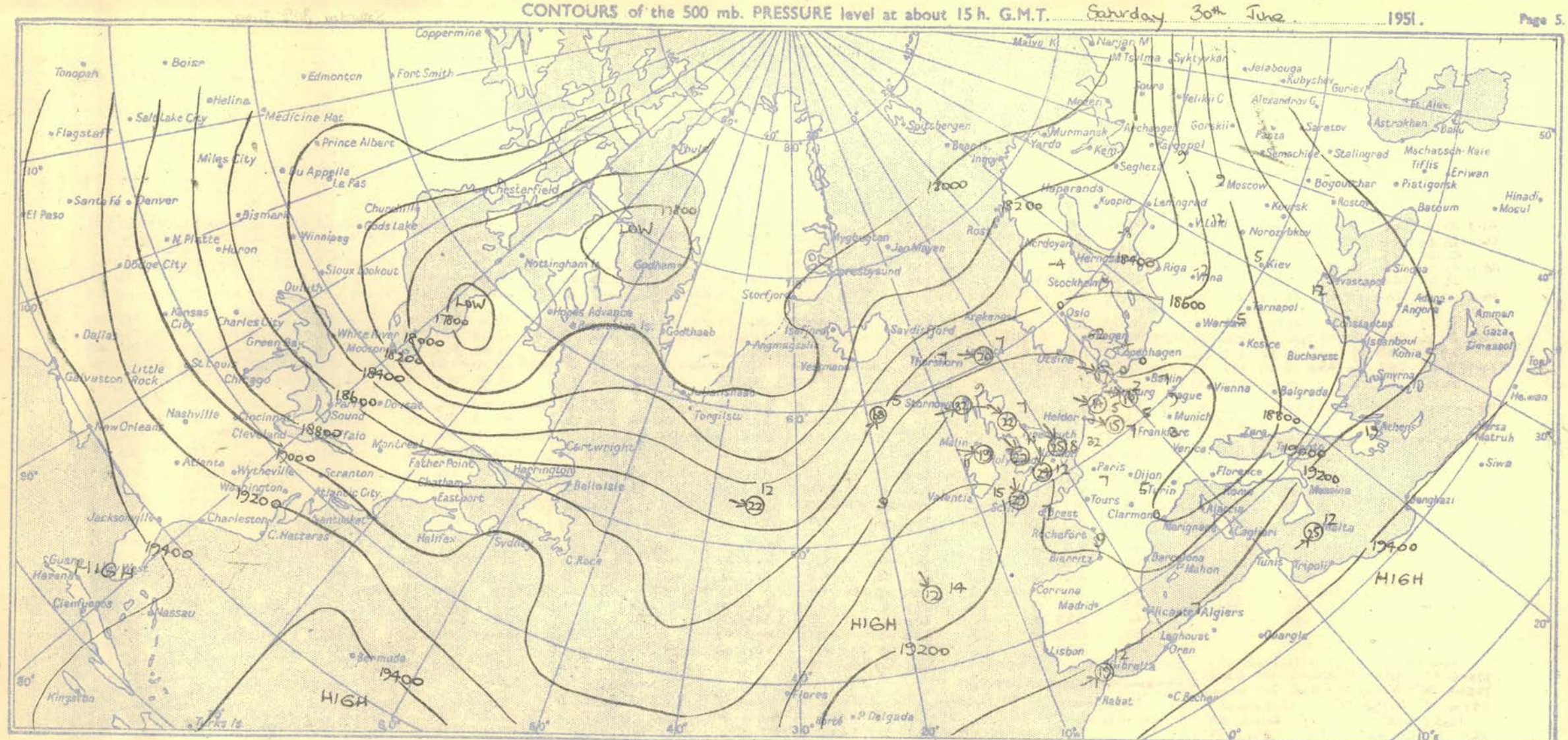
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Saturday 30th June 1951.


LOW
17800
LOW
17800
18000
18200
18400
18600
18800
19000
19200
19400
HIGH
HIGH
HIGH
HIGH
Coppermine
Tonopah
Boise
Edmonton
Fort Smith
Helina
Salt Lake City
Medicine Hat
Flagstaff
Prince Albert
Miles City
De Appelle
Le Pas
Chesterfield
Churchill
Gods Lake
Santa Fé
Denver
El Paso
Bismark
Winnipeg
N. Platte
Huron
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Sioux Lookout
Duluth
Kansas City
Charles City
Green Bay
White River
Dallas
Galveston
Little Rock
St. Louis
Chicago
Nashville
Cincinnati
Cleveland
New Orleans
Atlanta
Wytheville
Washington
Scranton
Atlantic City
Jacksonville
Charleston
C. Hatteras
Guano
Havana
Key West
Cienfuegos
Nassau
Bermuda
Kingston
Turks Is.
Nottingham Is.
Godthaab
Hopes Advance
Resolution Is.
Julianshaab
Torgilsu
Cartwright
Father Point
Herrington
Chatham
Eastport
Bellaisle
Halifax
Sydney
C. Race
Montreal
Buffalo
Sound
Dousat
Thule
Chule
Spitzbergen
Bear Is.
Ingavi
Murmansk
Yardo
Kem
Archangel
Seghezo
Kargopol
Haparanda
Kuopio
Lenigrad
Moscow
Mygbugten
Jan Mayen
Storfjord
Isafjord
Angmagsalik
Vestmanna
Saydisfjord
Thorshorn
Larwick
Stornoway
Valentia
Malin
Holyhead
London
Heldar
Ymuiden
Oslo
Skagen
Copenhagen
Ustire
Berlin
Hamburg
Prague
Vienna
Munich
Frankfurt
Venice
Paris
Dijon
Turin
Tours
Clarmont
Brest
Rochefort
Biarritz
Corruna
Madrid
Lisbon
Gibraltar
Rabat
C. Bechar
Algiers
Alicante
Barcelona
Mahon
Marignane
Ajaccio
Cagliari
Tunis
Tripoli
Malta
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Florence
Zeng
Tarrantin
Athens
Smyrna
Istanbul
Kohia
Belgrade
Bucharest
Kosice
Warsaw
Tarnapol
Lvov
Riga
Vilna
Kiev
Sevastapol
Simpa
Konsk
Rostov
Bogoutchar
Stalingrad
Saratov
Astrakhan
Baku
Batoum
Tiflis
Eriwan
Mschatsch-Kale
Piatigorsk
Hinadi
Mosul
Amman
Gaza
Limassol
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Benghazi
Tripoli
Algiers
Oran
Laghouat
Ouargla
Tobruk
Helwan
Matruh
Mersa
Kanin N
Malye K.
Narjan M
M Tsyima
Syktyvkar
Jelabouga
Kubyshev
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Stalingrad
Mschatsch-Kale
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Batoum
Hinadi
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Lvov
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Bucharest
Istanbul
Kohia
Smyrna
Adana
Angora
Amman
Gaza
Limassol
Helwan
Matruh
Siwa
Benghazi
Tripoli
Malta
Messina
Naples
Rome
Florence
Venice
Frankfurt
Munich
Prague
Vienna
Belgrade
Hamburg
Berlin
Copenhagen
Skagen
Ustire
Thorshorn
Larwick
Stornoway
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Algiers
Alicante
Barcelona
Mahon
Marignane
Ajaccio
Cagliari
Tunis

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Saturday 30th June, 1951.

RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.)

LERWICK

Pressure: 15h. G.M.T. | Time | M.S.L. 1022.9 mb | Surf 1012.8 mb | Freezing 710 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	53	47	200	12
1000	06·2	48	43	200	12
950		43	40	245	12
900	34·7	47	39	248	15
850		44	32	246	14
800	66·4	40	30	256	15
750		37	27	281	15
700	101·8	31	26	288	18
650		27	23	288	19
600	141·7	21	17	288	20
550		12	06	282	20
500	187·6	07	-02	291	20
450		-02	-13	301	24
400	241·9	-14	-26	304	24

Inversion 938 mb. 42° – 915 mb. 48°
785 mb. 38° – 765 mb. 39°
547 mb. 11° – 537 mb. 12°
Isothermal 865 – 838 mb. 44°

Tropopause: N.R.

STORNOWAY

Pressure: 15h. G.M.T. | Time | M.S.L. 1022·8 mb | Surf 1021·2 mb | Freezing 668 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	57	53	200	12
1000	06·3	54	51	219	18
950		53	50	236	23
900	35·2	58	50	245	25
850		49	43	252	25
800	67·3	48	03	261	27
750		42	-02	274	28
700	103·2	36	30	274	29
650		30	24	272	30
600	143·5	26	16	273	32
550		15	05	271	33
500	189·8	09	01	268	32
450		00	-12	258	31
400	244·5	-10	-19	262	31
350		-21	-31	267	32
300	311·5	-37	-47	277	36
250		-56		283	44
200	398·7	-72		275	50
170		-66		277	39
150		-62		280	24
130		-61		278	26
110		-59		282	20
100	545·4	-54		283	15
90		-52		284	14
80		-52			

Inversion 850 mb. 49° – 831 mb. 51°
618 mb. 25° – 604 mb. 27°
Isothermal 989 – 881 mb. 53°
535 – 523 mb. 18°

Tropopause: II 202 mb. -72° 39,600'

LEUCHARS

Pressure: 15h. G.M.T. | Time | M.S.L. 1025·1 mb | Surf 1024·3 mb | Freezing 720 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	64	57	250	05
1000	06·9	60	53	229	12
950		52	46	257	16
900	35·9	47	40	287	14
850		45	44	299	13
800	67·7	39	39	292	15
750		35	35	303	17
700	103·0	30	28	313	21
650		25	18	319	21
600	142·9	23	18	325	19
550		16	10	328	23
500	189·1	07	02	329	22
450		-02	-06	326	25
400	243·4	-15	-22	327	23
350		-26	-34	322	24
300	309·8	-39	-48	321	27
250		-48		308	27
200	396·9	-73		319	44
170		-63		317	30
150		-68		315	24
130		-68		315	21
110		-65		320	15
100	541·8	-64		325	13
90		-63		298	13
80		-61		325	12
70		-59		356	03
60		-57		316	03

Inversion 898 mb. 46° – 885 mb. 48°
Isothermal 650 – 620 mb. 25°

Tropopause: II 203 mb. -73° 39,200'

ALDERGROVE

Pressure: 15h. G.M.T. | Time | M.S.L. 1027·1 mb | Surf 1017·8 mb | Freezing 638 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	67	55	240	05
1000	07·5	64	53	241	06
950		56	46	258	10
900	36·6	51	42	275	07
850		48	38	291	09
800	68·6	45	33	307	09
750		43	36	312	12
700	104·4	37	27	301	14
650		32	20	298	12
600	144·8	25	14	292	14
550		19	05	288	15
500	191·2	11	-16	290	19
450		03	-29	287	19
400	246·2	-07	-38	282	18
350		-18	-47	289	18
300	313·9	-32	-59	304	22
250		-48		308	27
200	402·5	-67		314	24
170		-75		304	30
150		-69		301	18
130		-71		311	16
110		-65		320	15
100	546·9	-62		305	18
90		-64		297	11
80		-65		292	11
70		-63		303	12
60		-60		322	09
(050 mb)		-59		344	07
(040 mb)		-58			

Inversion 657 mb. 31° – 640 mb. 32°
Isothermal 818 – 767 mb. 45°

Tropopause: I 172 mb. -75° 43,300'

LIVERPOOL

Pressure: 15h. G.M.T. | Time | M.S.L. 1027·2 mb | Surf 1025·2 mb | Freezing 657 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	67	53	360	04
1000	07·6	62	50	315	08
950		57	46	302	07
900	36·7	52	39	276	07
850		50	27	291	07
800	68·7	46	29	313	09
750		40	28	313	10
700	104·4	36	30	343	15
650		31	26	359	20
600	144·9	27	21	004	24
550		19	13	003	25
500	191·5	11	03	354	22
450		03	-05	344	25
400	246·5	-09	-18	344	25
350		-22	-31	348	22
300	313·5	38	-47	345	24
250		-54		345	28
200	400·6	-73		348	33
170		-69		358	26
150		-69		357	21
130		-63		349	20
110		-63		348	16
100	546·1	-63		348	15
90		-62		346	09
80		-58		348	16
70		-57		007	07
60		-52		060	05
(050 mb)		-49			

Inversion 968 mb. 55° – 950 mb. 57°
874 mb. 49° – 860 mb. 51°
816 mb. 44° – 806 mb. 47°
Isothermal 716 – 690 mb. 36°
630 – 615 mb. 29°

Tropopause: I 192 mb. -75° 40,900'

DOWNHAM MARKET

Pressure: 15h. G.M.T. | Time | M.S.L. 1026·9 mb | Surf 1022·5 mb | Freezing 710 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	67	51	100	03
1000	07·5	62	50		
950		51	43	006	05
900	36·4	50	39	354	11
850		44	33	330	15
800	68·1	37	20	316	16
750		34	09	315	14
700	103·2	31	02	314	12
650		25	00	313	09
600	143·1	19	-10	334	14
550		15	-18	346	19
500	189·2	08	-15	355	25
450		00	-16	003	31
400	243·9	-09	-26	004	36
350		-23	-40	005	31
300	310·8	-39	-54	007	39
250		-57		358	55
200	398·0	-66		004	42
170		-60		006	29
150		-58		001	22
130		-57		005	20
110		-57		351	15
100	546·1	-53		353	10

Inversion 927 mb. 48° – 915 mb. 51°
Isothermal 772 – 738 mb. 34°
574 – 559 mb. 16°

Tropopause: II 215 mb. -66° 38,300'

LARKHILL

Pressure: 15h. G.M.T. | Time | M.S.L. 1027·0 mb | Surf 1011·4 mb | Freezing 688 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	71	55	Calm	
1000	07·6	68	43		
950		60	48	033	03
900	36·9	52	44	022	05
850		45	37	011	06
800	68·8	40	30	010	10
750		36	21	012	11
700	104·2	33	08	007	09
650		27	02	004	10
600	144·2	23	-10	003	13
550		18	00	012	18
500	190·6	12	-04	016	24
450		02	-12	017	30
400	245·8	09	-25	018	34
350		-23	-28	017	36
300	312·4	-39	-53	016	37
250		-55		006	40
200	399·7	-73		004	42
170		-69		016	35
150		-63		011	27
130		-63		004	23
110		-59		003	18
100	545·8	-58		003	18
90		-59		352	07
80		-55		353	09
70		-55		025	12
60		-54		034	09
(050 mb)		-52		125	06
(040 mb)		-51			

Inversion 744 mb. 35° – 733 mb. 36°
622 mb. 22° – 600 mb. 23°

Tropopause: I 183 mb. -75° 41,700'

CAMBORNE

Pressure: 15h. G.M.T. | Time | M.S.L. 1028·8 mb | Surf 1018·2 mb | Freezing 642 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	63	54	340	06
1000	07·9	60	49	323	06
950		58	47	006	02
900	37·1	51	43	058	04
850		47	37	037	04
800	69·0	43	34	035	07
750		37	25	038	09
700	104·6	37	10	033	14
650		33	22	030	22
600	145·0	25	15	029	27
550		21	12	024	27
500	191·7	15	03	022	29
450		05	-06	011	29
400	246·9	-05	-15	009	28
350		-17	-28	010	25
300	314·7	-32	-43	003	21
250		-47		354	24
200	403·6	-66		359	30
170		-78		001	33
150		-72			
130		-69			
110		-67			
100		-70		304	12
90		-69		300	13
80		-67		298	13
70		-66			
60		-65			
50		-65			
(050 mb)		-63			
(040 mb)		-63			
(030 mb)		-62			

Inversion 993 mb. 58° – 970 mb. 60°
850 mb. 37° – 833 mb. 39°
760 mb. 20° – 550 mb. 21°
Isothermal 738 – 721 mb. 39°
660 – 645 mb. 33°

Tropopause: I 157 mb. -76° 45,300'

VALENTIA

Pressure: 15h. G.M.T. | Time | M.S.L. 1027·7 mb | Surf 1027 mb | Freezing 615 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	62	56	280	08
1000	07·9	58	54	284	06
950		56	42	277	03
900	32·0	53	45	232	02
850		49	43	226	03
800	69·1	51	47	254	04
750		47	21	285	05
700	105·3	44	23	294	08
650		37	21	293	08
600	146·2	30	16	294	08
550		22	06	281	07
500	193·2	13	-05	281	13
450		04	-19	292	13
400	248·4	-05	-27	303	15
350		-16	-37	313	17
300	316·4	-30	-51	297	29
250		-49		298	30
200	404·9	-70		303	27
170		-77		303	29
150		-71		311	24
130		-70		310	19
110		-70		304	12
100		-69		300	13
90		-69		298	13
80		-68		298	13
70					
60					

Inversion 965 mb. 53° – 950 mb. 56°
831 mb. 47° – 810 mb. 51°
Isothermal 810 – 800 mb. 51°

Tropopause: I 178 mb. -80° 42,900'

LERWICK

Pressure: 21h. G.M.T. | Time | M.S.L. 1020·9 mb | Surf 1010·8 mb | Freezing 730 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	50	49	210	15
1000	05·6	49	48	232	23
950		46	46	247	26
900	34·1	45	34	260	25
850		46	32	252	22
800	65·9	41	25	234	19
750		36	24	239	22
700	101·1	29	28	259	29
650		25	24	271	29
600	140·9	20	19	278	32
550		14	10	279	34
500	186·9	06	-14	285	36
450		-03	-26	282	35
400	241·2	-13	-29	289	37
350		-25	-43	293	43
300	307·5	-45		283	52
250		-62		287	51
200	393·3	-67		294	55
170		-65		296	39
150		-65		289	27
130		-65		282	23
(114 mb)		-62			

Inversion 912 mb. 44° – 885 mb. 46°
Isothermal 885 – 840 mb. 46°
660 – 637 mb. 25°

Tropopause: I 222 mb. -74° 37,200'

STORNOWAY

Pressure: 21h. G.M.T. | Time | M.S.L. 1022·5 mb | Surf 1020·9 mb | Freezing 662 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	59	55	220	04
1000	06·2	57	54	225	21
950		53	50	256	25
900	35·1	51	49	273	25
850		48	45	270	29
800	67·2	43	40	259	33
750		38	34	253	35
700	102·6	31	26	254	32
650		31	10	260	32
600	142·8	24	06	259	31
550		16	06	263	33
500	189·0	08	01	261	36
450		-02	-09	262	33
400	243·4	-14	-22	258	35
350		-27	-35	261	40
300	309·6	-43		260	47
250		-62		264	49
200	395·6	-72		270	46
170		-65		272	33
150		-63		269	27
130		-60		300	22
110		-59		282	15
100	542·3	-57		297	12
90		-55			

Inversion 697 mb. 30° – 688 mb. 33°
Isothermal 688 – 670 mb. 33°

Tropopause: I 231 mb. -71° 37,500'
I 190 mb. -74° 40,700'

LEUCHARS

Pressure: 21h. G.M.T. | Time | M.S.L. 1024·9 mb | Surf 1024·1 mb | Freezing 681 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	62	55	270	03
1000	06·8	59	53	270	15
950		54	50	278	18
900	35·8	51	47	304	14
850		48	44	296	16
800	67·8	42	40	292	18
750		39	35	301	20
700	103·3	35	30	302	20
650		27	19	302	18
600	143·5	22	18	292	24
550		15	00	295	21
500	189·5	07	-10	300	21
450		-02	-25	296	19
400	243·9	-15	-25	296	23
350		-27	-39	297	28
300	310·1	-41		305	28
250		-59		300	39
200	396·5	-75		342	06
170		-67		358	06
150		-67		359	05
130		-66		359	05
110		-65		011	04
100	541·5	-64		011	03

Inversion 915 mb. 50° – 889 mb. 52°
646 mb. 26° – 633 mb. 27°
Isothermal 766 – 742 mb. 39°

Tropopause: I 197 mb. -76° 41,700'

ALDERGROVE

Pressure: 21h. G.M.T. | Time | M.S.L. 1026·9 mb | Surf 1017·4 mb | Freezing 656 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	62	54	220	04
1000	07·4	62	54	228	06
950		57	50	228	06
900	36·7	51	45	258	08
850		46	39	266	11
800	68·6	44	34	238	11
750		42	29	244	12
700	104·4	37	26	245	12
650		31	12	279	14
600	144·8	23	01	287	15
550		16	-05	288	22
500	191·0	08	-23	292	23
450		00	-31	288	21
400	245·6	-10	-42	284	23
350		-24	-53	290	28
300	312·4	-40	-60	296	28
250		-56		298	32
200	399·1	-77		296	34
170		-68		300	23
150		-67		298	19
130		-65		314	13
110		-64		325	11
100	544·3	-62			

Inversion 1017 mb. 62° – 990 mb. 63°
814 mb. 43° – 770 mb. 45°

Tropopause: II 200 mb. -77° 39,700'

LIVERPOOL

Pressure: 21h. G.M.T. | Time | M.S.L. 1027·1 mb | Surf 1025·1 mb | Freezing 660 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	61	54		
1000	07·5	60	54		
950		58	46		
900	36·6	53	42		
850		48	33		
800	68·7	46	30		
750		39	35		
700	104·4	36	32		
650		31	26		
600	144·8	24	19		
550		17	11		
500	191·1	10	-02		
450		00	-18		
400	245·7	-12	-25		
350		-24	-35		
300	312·5	38	-49		
250		-56			
200	399·6	-75			
170		-71			
150		-71			
130		-69			
110		-70			
100	543·1	-69			
90		-67			
80		-67			
(088 mb)					

Inversion 736 mb. 37° – 727 mb. 38°
Isothermal 1000 – 972 mb. 60°

Tropopause: I 187 mb. -80° 41,300'

DOWNHAM MARKET

Pressure: 21h. G.M.T. | Time | M.S.L. 1026·5 mb | Surf 1022·1 mb | Freezing 682 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	60	54	075	02
1000	07·3	61	52	210	02
950		56	52	272	03
900	36·4	52	41	337	12
850		46	41	338	16
800	68·3	40	36	338	19
750		38	20	350	17
700	103·8	34	-20	351	15
650		29	-21	002	17
600	143·9	23	-03	006	22
550		16	-01	001	28
500	190·2	07	-11	011	29
450		-01	-38	007	27
400	244·7	-13	-38	357	31
350		-26	-45	358	35
300	311·0	-43		357	34
250		-61		001	42
200	397·0	-75		001	49
170		-71		001	39
150		-73		359	22
130		-69		352	20
110		-66		359	18
100	541·1	-66		356	18

Inversion 1022 mb. 60° – 1000 mb. 64°
776 mb. 37° – 750 mb. 38°
Isothermal 984 – 916 mb. 54°

Tropopause: I 198 mb. -76° 39,800'

LARKHILL

Pressure: 21h. G.M.T. | Time | M.S.L. 1026·6 mb | Surf 1010·8 mb | Freezing 683 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	65	59	270	04
1000	07·4	64	57		
950		59	50	281	06
900	36·6	52	46	303	05
850		45	42	001	06
800	68·4	40	35	009	12
750		36	29	002	12
700	103·8	33	15	003	10
650		29	16	012	16
600	144·1	24	14	011	18
550		18	10	018	27
500	190·5	08	-01	023	30
450		00	-08	012	31
400	245·1	-10	-19	001	25
350		-24	-33	355	24
300	311·7	-41		002	24
250		-57		005	34
200	398·3	-76		005	42
170		-74		012	27
150		-71		012	26
130		-68		007	20
(134 mb)		-66		352	17
100	542·2	-66			

Inversion 762 mb. 35° – 750 mb. 36°

Tropopause: I 196 mb. -78° 40,200'

CAMBORNE

Pressure: 21h. G.M.T. | Time | M.S.L. 1028·8 mb | Surf 1018·1 mb | Freezing 638 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	58	55		
1000	07·9	58	54		
950		56	44		
900	37·0	52	45		
850		47	20		
800	68·9	44	32		
750		42	25		
700	104·6	38	31		
650		33	26		
600	145·1	28	20		
550		20	12		
500	191·7	11	03		
450		02	-09		
400	246·5	-10	-19		
350		-25	-33		
300	313·1	-40	-48		
250		-55			
200	400·4	-73			
170		-77			
150		-74			
(134 mb)		-72			

Inversion 777 mb. 41° – 750 mb. 42°
Isothermal 1018 – 978 mb. 58°
821 – 800 mb. 44°

Tropopause: II 190 mb. -77° 41,100'

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