No. 11478 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Friday 1st September. 1950. Page 1.

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

03Z G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	03Z	03Z	03Z	03Z	03Z	03Z	03Z	03Z	03Z
Pressure: M.S.L.	1017·2 mb	1015·3 mb	1017·6 mb	1017·6 mb	1015·8 mb	1014·6 mb	1014·4 mb	1017·2 mb	1017·4 mb
Pressure: Surf	1007·1 mb	1013·4 mb	1016·8 mb	1009·0 mb	1013·8 mb	1010·1 mb	998·5 mb	1006·7 mb	1018 mb
Pressure: Freezing	750 mb	750 mb	689 mb	695 mb	680 mb	722 mb	725 mb	683 mb	660 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LERWICK					
Surf	2·7	44	44	Calm	
1000	4·6	45	44		
950		42	37	203	04
900	32·9	36	32	204	06
850		37	28	220	08
800	64·1	35	17	272	09
750		32	07	302	10
700	39·2	28	02	308	10
650		23	-04	310	10
600	139	15	-06	263	10
550		11	-14	237	12
500	185	06	-26	256	18
450		-05	-37	254	22
400	239	-17	-45	249	27
350		-29	-56	252	30
300	304	-44		243	25
250		-60		237	24
200	391	-74		276	20
170		-66		293	23
150		-65		302	21
130		-64		291	19
110		-63		277	16
100	537	-62			
90					
80					
70					
60					
Tropopause	I 202mb -75° 39·000				
STORNOWAY					
Surf	0·5	55	55	195	08
1000	4·2	56	55	199	15
950		53	49	201	16
900	33·1	49	43	205	17
850		42	38	205	18
800	64·7	37	30	205	17
750		32	26	206	12
700	99·8	28	12	212	16
650		25	04	217	19
600	140	19	-04	224	25
550		11	-06	235	24
500	186	06	-05	245	30
450		-03	-09	248	24
400	240	-13	-19	254	22
350		-26	-34	260	18
300	306	-41		258	30
250		-58		253	29
200	393	-60		272	37
170		-61		277	29
150		-63		273	27
130		-65		273	24
110		-61		271	17
100	540	-58		267	21
90		-58		265	16
80		-58			
70					
60					
Tropopause	I 218 mb -68° 37·500				
LEUCHARS					
Surf	0·2	44	44		
1000	4·7	48	46		
950		49	43		
900	33·4	45	36		
850		41	35		
800	65·0	36	32		
750		33	21		
700	100	32	00		
650		28	-34		
600	140	22	-39		
550		16	-43		
500	186	09	-49		
450		-01	-56		
400	241	-12	-50		
350		-25	-53		
300	308	-41			
250		-57			
200	395	-67			
170		-70			
150		-66			
130		-66			
110		-63			
100	540	-63			
90		-61			
80		-59			
70		-57			
60					
Tropopause	I 173 mb -71° 30·900				
ALDERGROVE					
Surf	2·3	50	48	Calm	
1000	4·8	52	49		
950		54	46	180	09
900	33·7	47	43	188	07
850		44	37	218	06
800	65·4	38	27	218	06
750		35	16	215	09
700	101	33	-06	224	11
650		27	-16	231	02
600	141	22	-26	242	11
550		14	-33	255	11
500	187	08	-38	254	14
450		-03	-46	248	15
400	241	-15	-45	270	15
350		-27	-46	296	24
300	307	-41		324	29
250		-59		310	70
200	394	-73		318	57
170		-73		305	33
150		-73		312	33
130		-69		306	20
110		-66		290	11
100	538	-66		290	15
90		-63		298	14
80		-61		282	05
70		-62			
60					
Tropopause	I 190mb -75° 40·500				
LIVERPOOL					
Surf	0·6	57	55	Calm	
1000	1·4	58	55		
950		56	52		
900	33·5	51	46		
850		46	40		
800	65·4	39	32		
750		34	25		
700	101	33	08		
650		30	-17		
600	141	24	-37		
550		15	-44		
500	187	04	-51		
450		-04	-58		
400	241	-16	-57		
350		-30	-57		
300	307	-42			
250		-52			
200	394	-65			
170		-65			
150		-66			
130		-66			
110		-63			
100	540	-62			
90		-62			
80		-61			
70		-60			
60		-59			
		-57			
Tropopause	I 212 mb -64° 38·200				
DOWNHAM MARKET					
Surf	1·2	55	55	345	05
1000	4·0	56	56	040	17
950		54	51	047	15
900	33·0	49	45	053	13
850		44	40	049	14
800	64·7	38	34	030	14
750		32	28	024	12
700	100	30	22	020	10
650		24	08	013	10
600	140	17	-01	013	16
550		10	-15	010	19
500	185	01	-23	006	15
450		-09	-32	011	14
400	239	-22	-44	012	11
350		-37	-58	014	06
300	304	-55		036	05
250		-67		022	21
200	389	-64		358	34
170		-63		349	28
150		-62		343	25
130		-62		351	15
110		-63		331	05
100					
90					
80					
70					
60					
Tropopause	I 250 mb -67° 34·200				
LARKHILL					
Surf	4·4	56	56	035	10
1000	3·9				
950		57	54	013	16
900	35·0	52	43	026	16
850		47	39	052	15
800	64·9	41	34	062	12
750		35	32	049	11
700	100	29	24	029	13
650		26	16	027	18
600	140	21	06	022	15
550		13	-02	027	18
500	186	04	-11	027	18
450		-07	-22	024	19
400	240	-20	-37	020	19
350		-35	-52	027	18
300	305	-48		003	37
250		-49		358	65
200	393	-60		006	57
170		-61		346	46
150		-60		346	43
130		-58		343	23
110		-56		354	09
100	541	-60		353	11
90		-63			
(94 mb)					
80					
70					
60					
Tropopause	I 295 mb -49° 30·900				
CAMBORNE					
Surf	2·9	57	56	340	10
1000	4·7	57	56		
950		53	43	343	15
900	33·6	49	38	007	15
850		47	34	016	09
800	65·5	41	32	022	08
750		38	27	359	10
700	101	34	12	352	16
650		26	10	354	20
600	141	23	02	006	22
550		17	-09	006	22
500	187	07	-26	359	31
450		01	-33	003	45
400	242	-09	-42	357	51
350		-21	-52	351	63
300	309	-29	-51	348	76
250		-43		350	84
200	399	-59		350	66
170		-64		354	54
150		-66		342	57
130		-63		338	42
110		-60		345	29
100	546	-61		336	26
90		-61		336	20
80		-60		351	17
70		-59		302	20
60	(63 mb)	-58			
Tropopause	II 180mb -63° 42·100				
VALENTIA					
Surf	0·3	54	54	190	09
1000	4·7	55	53	167	09
950		51	48	212	11
900	33·6	47	43	234	14
850		45	38	237	15
800	65·4	44	22	229	12
750		42	19	227	12
700	101	37	08		
650		30	22		
600	141	24	09		
550		16	-01		
500	188	10	-06		
450		-01	-13		
400	242	-11	-18		
350		-23	-36		
300	309	-39	-50		
250		-57			
200	396	-75			
170		-71			
150		-72			
130	(16 mb)				
110					
100					
90					
80					
70					
60					
Tropopause	I 200mb -75° 39·600				

Inversion. 1007 mb 44°-974 mb 46° 882 " 34°-850 " 37° 580 " 12°-512 " 13°
Inversion. 1013 mb 55°-992 mb 57° 660 " 24°-642 " 26°
Isothermal. 735-712 mb 29° 530-510 " 08°
Inversion. 1017 mb 44°-989 mb 52° 763 " 32°-747 " 33°
Isothermal. 733-689 mb 32°
1009 mb 50°-980 mb 57°
Isothermal. 685-665 mb 30°
Inversion. 1014 mb 57°-988 mb 60°
Isothermal. 752-703 mb 31°
Inversion. 1010 mb 55°-988 mb 57°
Isothermal. 750-722 mb 32°
Inversion. 973 mb 55°-950 mb 57° 700 " 29°-685 " 30°
Isothermal. 1007-987 mb 57° 900-865 " 49° 780-750 " 38° 650-623 " 26°
Inversion. 1016 mb 54°-1000 mb 56° 822 " 43°-800 " 44°
Isothermal. 900-890 mb 47° 516-500 " 10°

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE
Pressure: Time	09Z	09Z		09Z	09Z	09Z	09Z	09Z
Pressure: M.S.L.	1014·9 mb	1011·7 mb		1015·3 mb	1016·1 mb	1016·3 mb	1016·1 mb	1018·0 mb
Pressure: Surf	1004·9 mb	1009·8 mb		1006·8 mb	1014·1 mb	1011·9 mb	1000·3 mb	1007·5 mb
Pressure: Freezing	723 mb	780 mb		680 mb	668 mb	652 mb	685 mb	650 mb

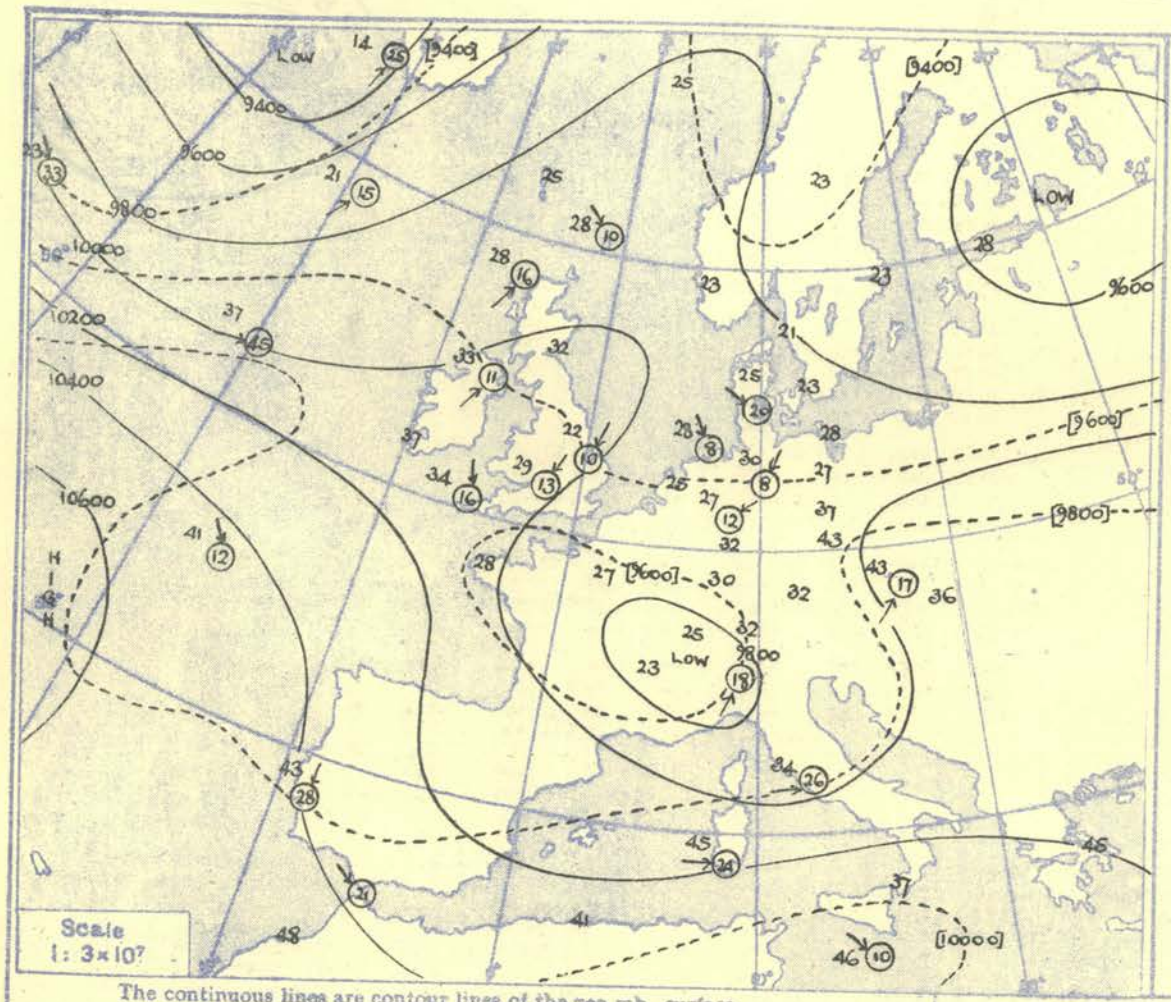
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LERWICK					
Surf	2·7	52	46	165	04
1000	4·0	51	45		
950		44	40	180	11
900	32·4	40	33	183	08
850		40	23	242	06
800	63·9	39	18	258	08
750		35	10	256	07
700	99·1	28	03	242	10
650		21	01	235	12
600	139	17	-03	232	17
550		11	-11	230	19
500	184	01	-23	235	23
450		-06	-15	239	23
400	238	-14	-26	236	18
350		-28	-44	240	18
300	304	-45		250	24
250		-62		242	33
200	391	-61		251	26
170		-59		270	24
150		-59		272	18
130		-61		270	15
110		-55		266	10
100	539	-55		263	10
90		-54		262	08
80		-53			
70	(78 mb)	-53			
60					
Tropopause	I 225mb -71° 36·600				
STORNOWAY					
Surf	0·5	57	55		
1000	3·3	55	52		
950		52	48		
900	32·2	48	42		
850		42	36		
800	63·8	35	31		
750		29	24		
700	98·7	23	18		
650		22	15		
600	138	21	16		
550		14	08		
500	185	07	-01		
450		-03	-13		
400	239	-15	-25		
350		-29	-40		
300	305	-48			
250		-64			
200	391	-57			
170		-59			
150		-58			
130		-56			
110					
100					
90					
80					
70					
60					
Tropopause	I 236mb -68° 36·500				
LEUCHARS					
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					
ALDERGROVE					
Surf	2·3	57	53	Calm	
1000	4·2	56	52	180	09
950		52	47	180	10
900	33·1	47	43	179	11
850		41	37	182	12
800	64·7	36	23	192	15
750		39	06	198	18
700	100	34	04	224	21
650		29	17	238	25
600	140	24	16	254	33
550		17	09	258	33
500	186	08	-01	262	33
450		00	-05	263	28
400	241	-10	-19	260	28
350		-24	-35	280	27
300	308	-39	-52	286	40
250		-58		283	72
200	395	-66		284	39
170		-64		283	36
150		-66		282	30
130		-68		283	33
110		-64		280	15
100	541	-63		280	14
90		-60		274	12
80		-58		273	12
70		-59		268	12
60		-58		285	12
		-56			
Tropopause	I 206mb -68° 38·800				
LIVERPOOL					
Surf	0·6	59	55		
1000	4·5	58	54		
950		55	50		
900	33·4	47	44		
850		43	39		
800	65·0	39	33		
750		36	25		
700	100	35	20		
650		30	09		
600	141	25	-04		
550		18	-18		
500	187	10	-25		
450		01	-33		
400	242	-10	-40		
350		-23	-48		
300	309	-35	-56		
250		-49			
200	397	-67			
170		-79			
150		-68			
130		-66			
110		-65			
100	542	-62			
90		-62			
80		-60			
70		-57			
60		-54			
	(44 mb)	-50			
Tropopause	I 170mb -79° 43·000				
DOWNHAM MARKET					
Surf	1·2	59	57	010	06
1000	4·5	58	56	016	09
950		55	50	020	10
900	33·5	49	45	024	10
850		43	40	021	09
800	65·2	37	33	005	03
750		35	28	357	02
700	101	35	18	324	02
650		32	08	300	03
600	141	25	-07	326	08
550		18	-30	329	14
500	187	09	-41	346	15
450		-02	-55	010	15
400	242	-13	-54	017	15
350		-27	-59	023	29
300	309	-41		018	31
250		-57		019	38
200	395	-64		356	48
170		-66		351	39
150		-62		349	31
130		-64		342	22
110		-64		331	21
100	542	-60		330	19
90		-55		348	11
80		-57		349	06
70		-55			
60					
Tropopause	I 212 mb -66° 38·300				
LARKHILL					
Surf	4·4	57	54	060	08
1000	4·5				
950		54	51	029	11
900	33·5	51	43	003	10
850		47	39	342	09
800	65·4	42	35	341	08
750		36	30	306	07
700	101	34	17	340	07
650		30	10	040	09
600	141	23	-01	051	10
550		16	-07	009	11
500	187	07	-16	004	10
450		-05	-29	010	14
400	241	-16	-40	022	26
350		-24	-49	017	41
300	308	-38	-60	353	62
250		-53		353	70
200	396	-59		350	65
170		-63		339	46
150		-60		340	37
130		-64		349	30
110		-60		335	16
100	545	-61		342	22
90		-59		316	15
80		-55		067	03
70		-55		003	06
60		-54		349	05
	(57 mb)	-55			
Tropopause	I 213mb -63° 38·300				
CAMBORNE					
Surf	2·9	58	57	315	03
1000	5·0	57	55		
950		55	47	308	09
900	34·0	51	36	283	06
850		47	31	250	08
800	65·9	44	27	300	05
750		42	09	314	08
700	102	37	02	308	10
650		32	-08	320	14
600	142	26	-18	330	13
550		18	-36	332	18
500	189	13	-36	342	24
450		04	-41	343	25
400	244	-06	-32	345	37
350		-17	-32	346	43
300	311	-32	-48	343	61
250		-46		332	68
200	400	-65		331	59
170		-69		334	60
150		-69		334	42
130		-71		326	36
110		-72		320	39
100	544	-71		335	37
90		-67			
80		-66			
70		-66			
60		-61			
		-58			
	(35 mb)	-56			
Tropopause	II 188 mb -68°				

Inversion. 908 mb 39°-874 mb 43° Isothermal. 838-800 mb 39° 775-745 " 35°
Inversion. 628 mb 21°-612 mb 23° Isothermal. 1010-985 mb 57°
Inversion. 963 mb 51°-950 mb 51° 784 " 34°-757 " 40° Isothermal. 460-453 mb 01°
Inversion. 774 mb 34°-722 mb 36° 688 " 34°-675 " 35°
Inversion. 963 mb 52°-942 mb 55° 722 " 33°-711 " 35° Isothermal. 670-645 mb 30°
Isothermal. 827-775 mb 44° Max Wind. 37,400 ft. 227 mbs 331° 72 kts.

METEOROLOGICAL LIBRARY 9-SEP 1950 OFFICE

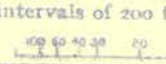
Friday 1st September, 1950.

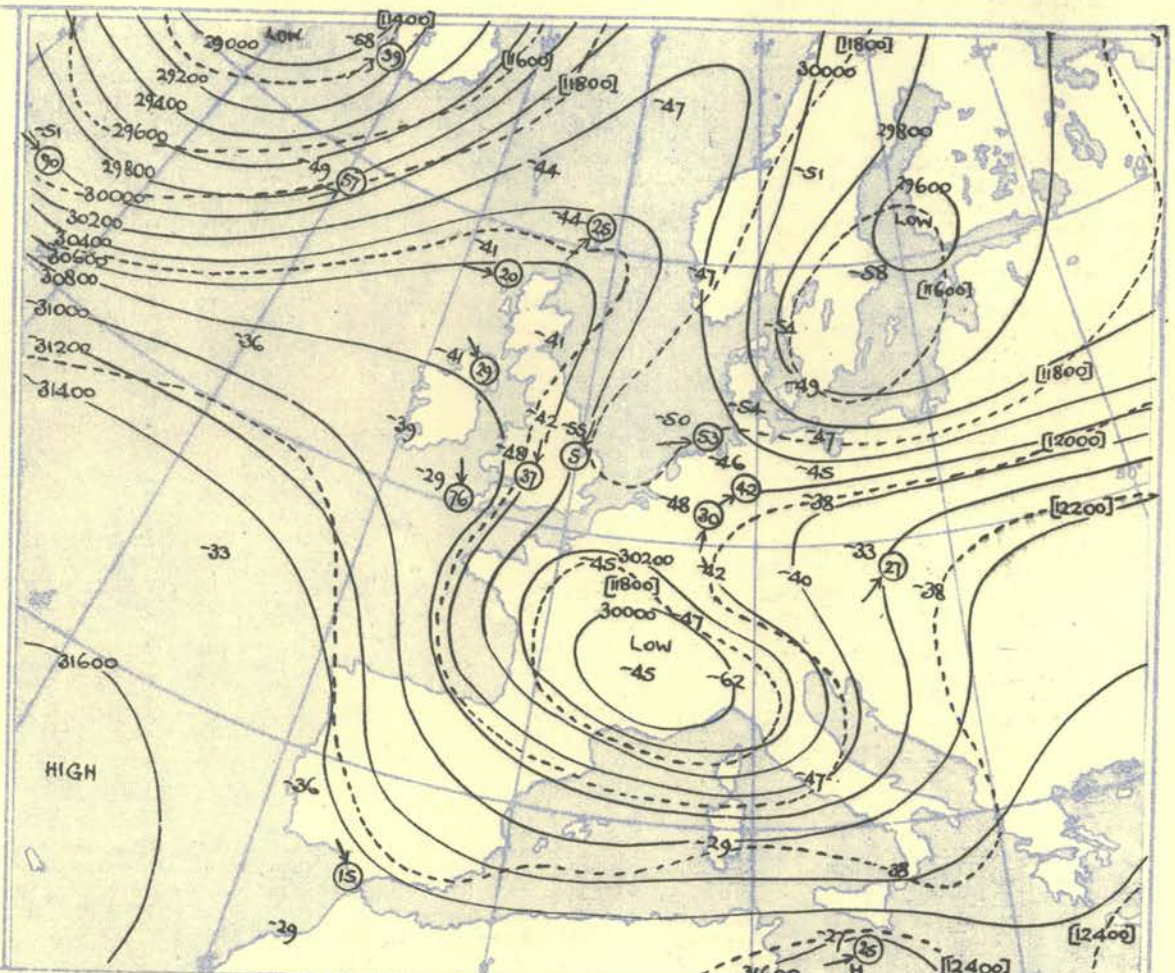
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. GMT.



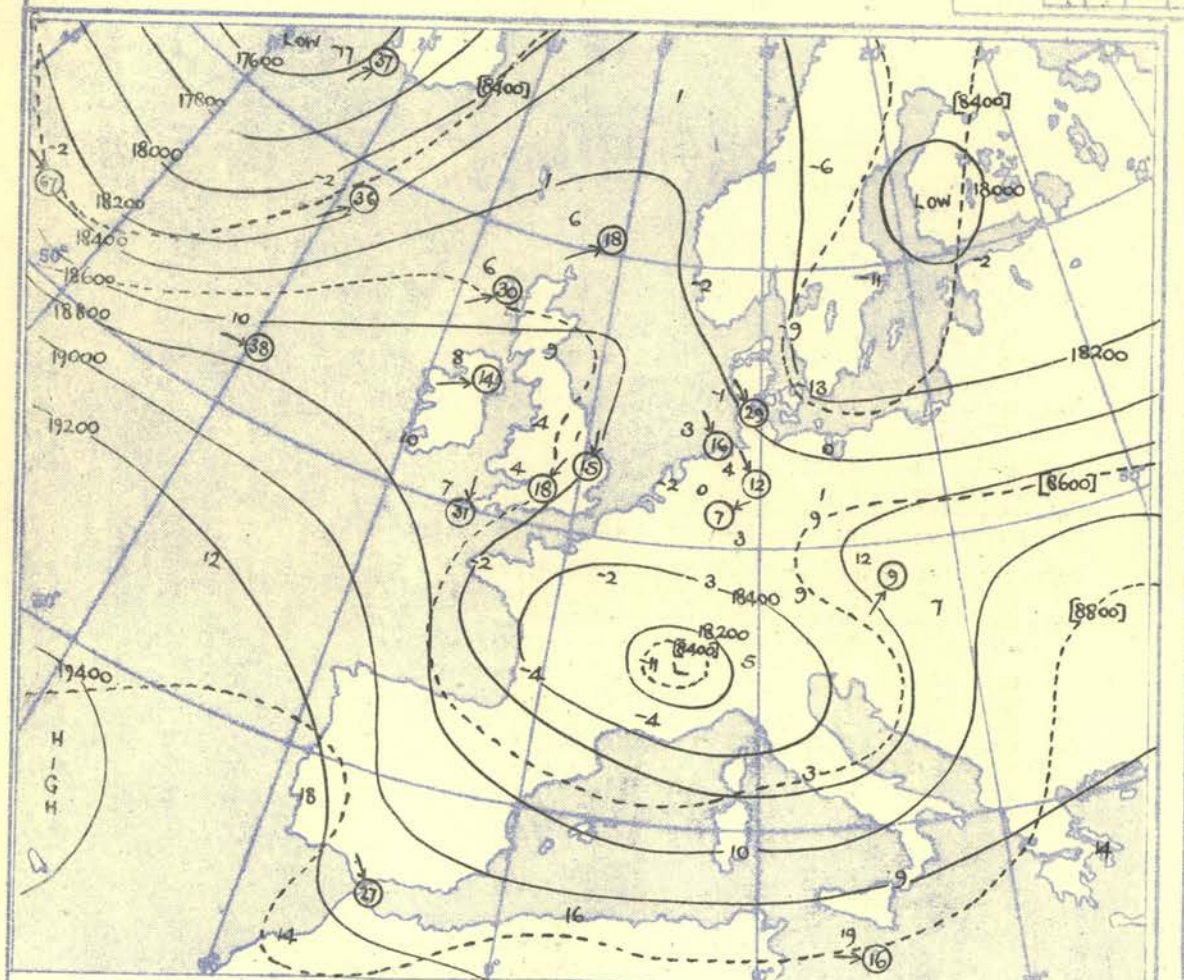
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

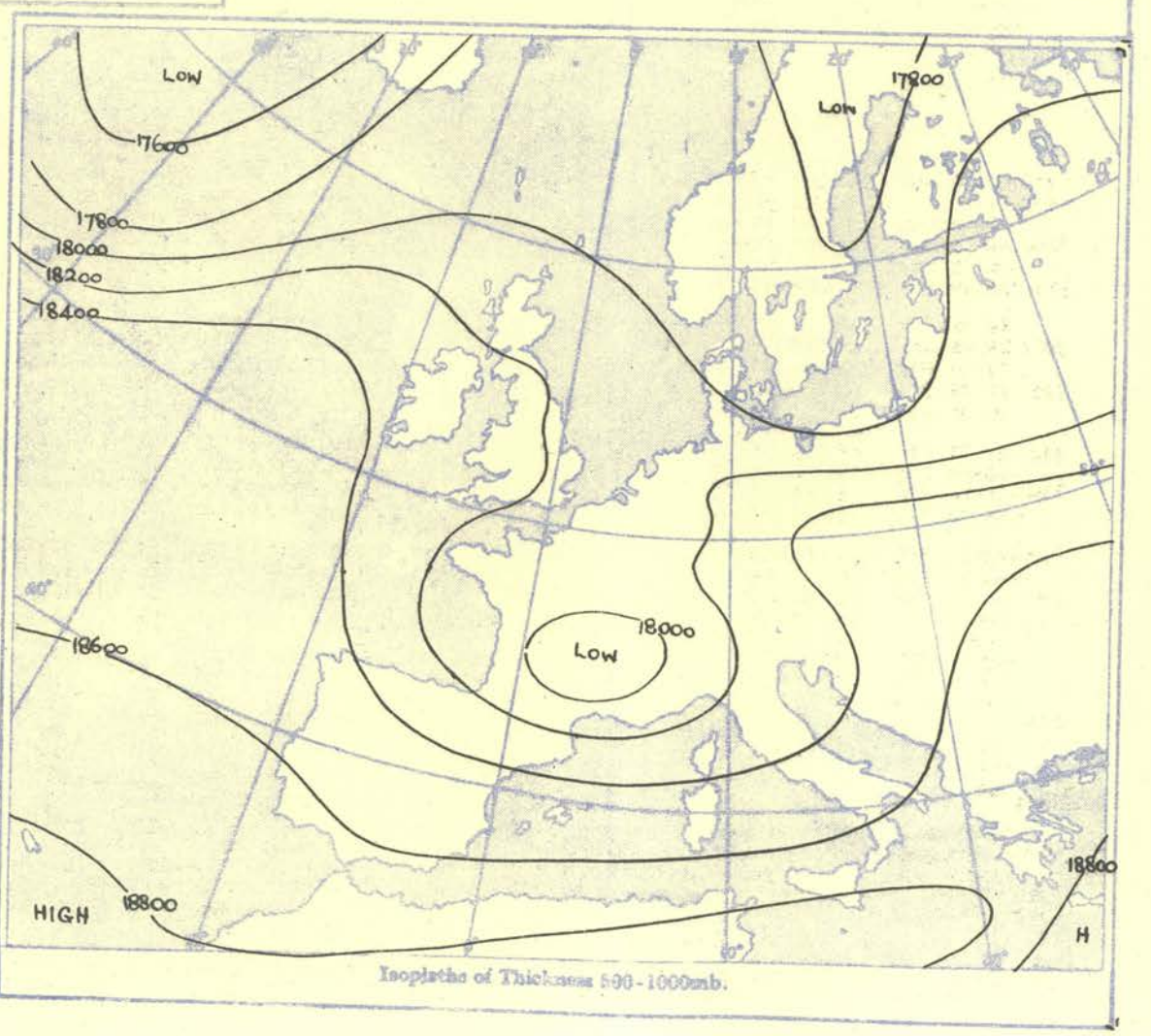




The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500 — 300 mb



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

51·3N 00·4E

Pressure	Time	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb
	1445										
M.S.L.	1015·9										
Surf	1004·6										
Freezing	700										

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	03·1	65	57																			Surf
1000	04·4																					1000
950																						950
900	33·5	50	43																			900
850		45	39																			850
800	65·4	40	33																			800
750		37	24																			750
700	10·1	33	14																			700
650		29	16																			650
600	141	25	+05																			600
550		16	0																			550
500	187	09	-06																			500
450		-03	+04																			450
400	242	-15																				400
350		-28																				350
300																						300
250																						250
200																						200
170																						170

Cloud
3 Sc
8 930 -880 mb.

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

Place	Cirrus 52·5N 20·5		Cirrus 52·5N 20·5W		Cirrus 52·5N 20·0W		Shoeburyness		Standalone		Valentia		Leuchars		Downham						
Time	03h		09h		15h		15h		15h		15h		21h		21h Radar						
Type																					
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	
Surf.			340	24	320	18	080	04	090	08	220	13	180	08	135	05					Surf.
1,000			320	19	330	18	090	09	080	05	240	24	230	22	193	15					1,000
2,000	250	36	320	19	330	18	060	07	070	06	260	28	230	23	199	21					2,000
3,000			320	21	320	21	360	06	070	03	260	30	230	23	214	22					3,000
4,000			300	30	320	20	300	05	220	01	260	31	230	22	217	16					4,000
5,000			290	41	300	23	300	07			260	33	240	20	218	18					5,000
6,000			280	38			300	09	290	06	260	37	240	19	228	18					6,000
8,000			260	41			310	13	300	13	260	44	240	21	259	17					8,000
10,000	250	45	260	45	280	34	300	13	270	24	260	46	240	26	263	18					10,000
14,000			260	56	290	42	300	16			260	47	220	26	258	21					14,000
18,000	250	38	260	44	270	60	340	12			260	44	220	27	248	22					18,000
24,000			(17,000')		270	62	350	21			260	45	200	39	247	23					24,000
30,000					(20,000')		360	25			260	60	240	62	285	30					30,000
40,000							340	39			260	84	210	54	296	35					40,000
50,000							330	16			260	82	(36,000')		290	16					50,000
							330	11			(41,000')				270	06					
							(60,000')								(58,000')						

NEPHOSCOPE OBSERVATIONS

Place												
Time Type			NONE REPORTED.									
Dir. Vel.												

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

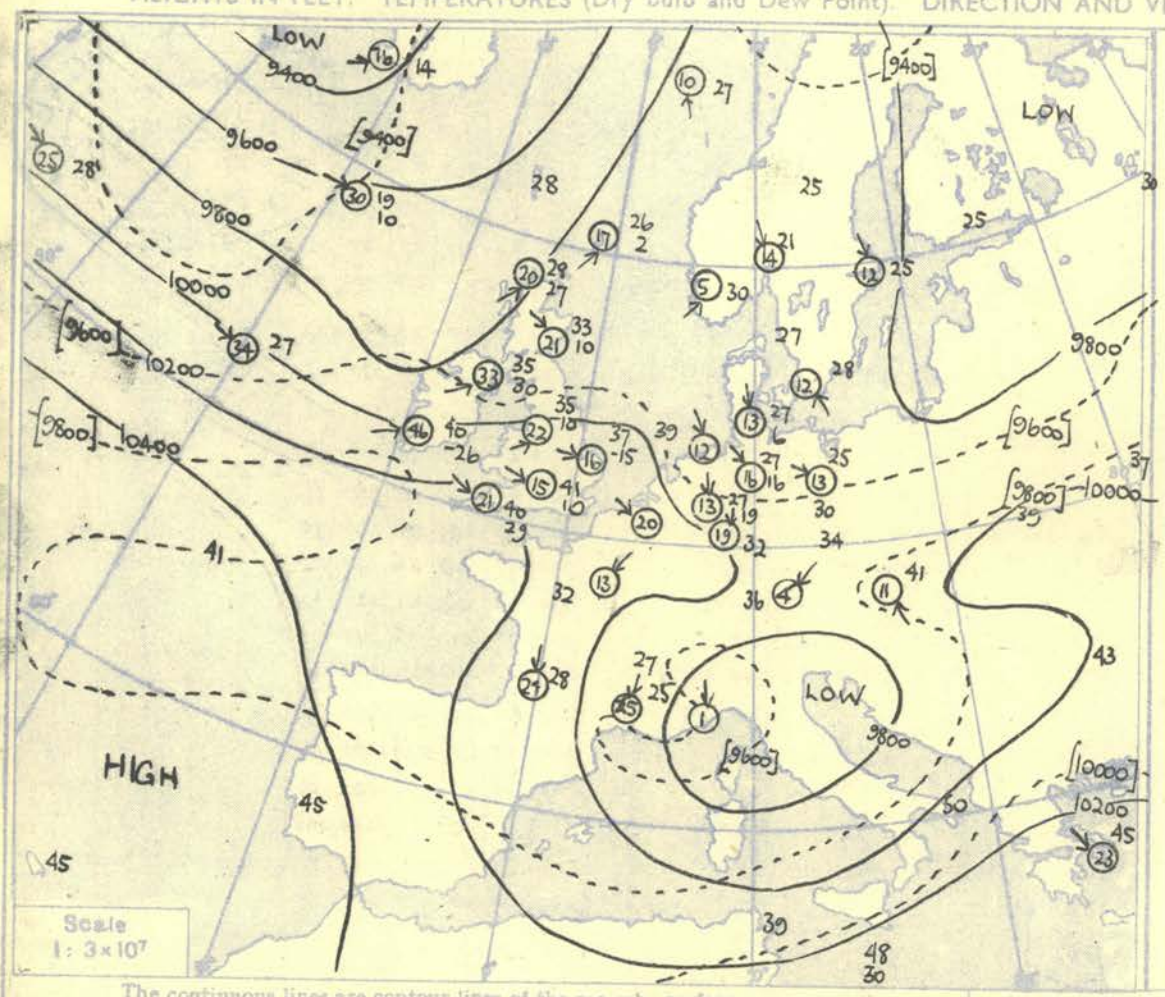
Ship	Cirrus				Cirrus				Cirrus				Cirrus				Weather Explorer				Weather Explorer				Weather Explorer				Weather Explorer			
Lat/Long	52·5N 20·0W				52·5N 20·0W				52·5N 20·0W				52·5N 20·0W				58·8N 18·7W				59·0N 18·6W				59·6N 18·9W				58·9N 19·2W			
Pressure Time	03h G.M.T.				09h G.M.T.				15h G.M.T.				21h G.M.T.				03h G.M.T.				09h G.M.T.				15h G.M.T.				21h G.M.T.			
Pressure M.S.L.	1009 mb				1011 mb				1018 mb				1021 mb				1009 mb				1006 mb				1008 mb				1009 mb			
Pressure Surf	1009 mb				1011 mb				1018 mb				1021 mb				1009 mb				1006 mb				1008 mb				1009 mb			
Pressure Freezing	650 mb				700 mb				740 mb				780 mb				800 mb				810 mb				830 mb				830 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	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf		57	57				54	50				55	45				55	46				54	48	230	10		53	46	255	14		53	39	270	20		52	44	270	27					Surf
1000	2·4	57	55			3·0	52	50			4·9	52	41			5·7	52	43			2·3	53	48			1·7	53	45	260	15	2·2	52	40			2·3	51	42						1000
950																											48	40	272	16		46	39	272	22		47	39	270	36					950
900																					30·9	43	37	250	15	30·3	41	34	272	17	30·7	40	34	272	23	30·8	40	33	277	34				900
850		52	52				46	31				36	23				32	21				38	30	250	13		35	29	276	19		34	29	276	24		34	26	278	30				850
800																					62·3	31	26	247	13	61·5	31	25	279	22	61·8	30	23	280	25	61·9	29	19	279	30				800
750				For Winds					For Winds					For Winds								26	20	235	14		24	17	283	19		25	15	279	29		23	10	280	30				750
700	6·0	37	37			99·0	32	-06			10·0	27	0			10·0	25	0			96·9	21	14	217	15	95·9	18	10	288	17	96·3	19	10	273	30	96·3	17	02	280	30				700
650				See					See					See								15	10	212	18		12	02	286	22		12	-13	267	28		10	-03	275	31				650
600																					136	09	05	212	23	135	03	-11	244	27	135	7	-20	260	25	135	02	-09	275	33				600
580																						06	-01	217	29		-03	-16	233	22		01	-10	245	25		-03	-18	275	35				580
500	187	10	-31	Top of	185	05	-11	Top of	185	01	-27	Top of	186	03	-11						181	-02	-23	216	36	179	-12	-27	231	27	180	-07	-17	257	22	179	-11	-30	275	37				500
450																						-12	-25	221	39		-23	-43	231	24		-19	-29	249	24		-20	-38	275	34				450
400				Page				Page.				Page.									234	-24	-31	225	48	231	-30	-57	231	45	232	-33	-42	243	22	231	-31	-48	275	34				400
350																						-36	-44	225	52		-41		227	50		-44		244	21		-43		275	29				350
300	308	-36			305	-45			304	-49			304	-51							299	-49		225	57	295	-50		223	59	296	-47		244	21	295	-57		277	29				300
250					(259 mb)	-60															(283 mb)	-53					-48		222	61		-41		245	32		-47		281	48				250
200	396	-74							391	-54			390	-63												384	-45		236	46	387	-39		241	43	384	-46		282	38				200
170																											-48		238	44		-41		248	40		-47		280	36				170
150																											-49		238	46		-42		258	34		-46		280	27				150
130																											-50		237	45		-42		252	27		-49		278	25				130
110																											-49		237	31		-42		245	27		-49		278	24				110
100		-69								-62				-62												536	-49		239	26	541	-44		245	29	537	-49		278	27				100
90													(675 mb)	-58													-52		240	31		-44		240	21		-49		278	26				90
80																											-53		242	34		-44		246	22		-51		278	21				80
70	(072 mb)	-65																									-53		241	22		-43		254	17	(076 mb)	-52							70
60																											-52		238	19		-44		254	15									60
																											-51		238	21	(050mb)	-44		254	09									
																											-49		238	15	(040mb)	-43		256	10									
	Isothermal 1009-100 mb 57° 941-927 mb 55°				Inversion 925mb 43°-888mb 46° 860 " 43°-833 " 46°				Inversion 802mb 32°-818mb 37°				Inversion. 850mb 32°-832mb 37° 700 " 25°-637 " 27° Isothermal 709-700mb 25°				Inversion 572 mb 04°-557mb 06° Isothermal 557-550mb 06°				(633 mb) Inversion 595 mb 02°-586mb 03° Isothermal 1006-994mb 53°				(036mb) Isothermal 819-795mb 30°								
Tropopause	II 202mb -74° 39,400'				N.R.				II 268mb -62° 32,900'				I 230mb -78° 36,000'				N.R.				II 300mb -50° 29,500'				I 329mb -51° 27,600'				I 300mb -57° 29,500'				Tropopause

METEOROLOGICAL OFFICE LIBRARY 9-SEP 1950

Friday 15th September 1950.

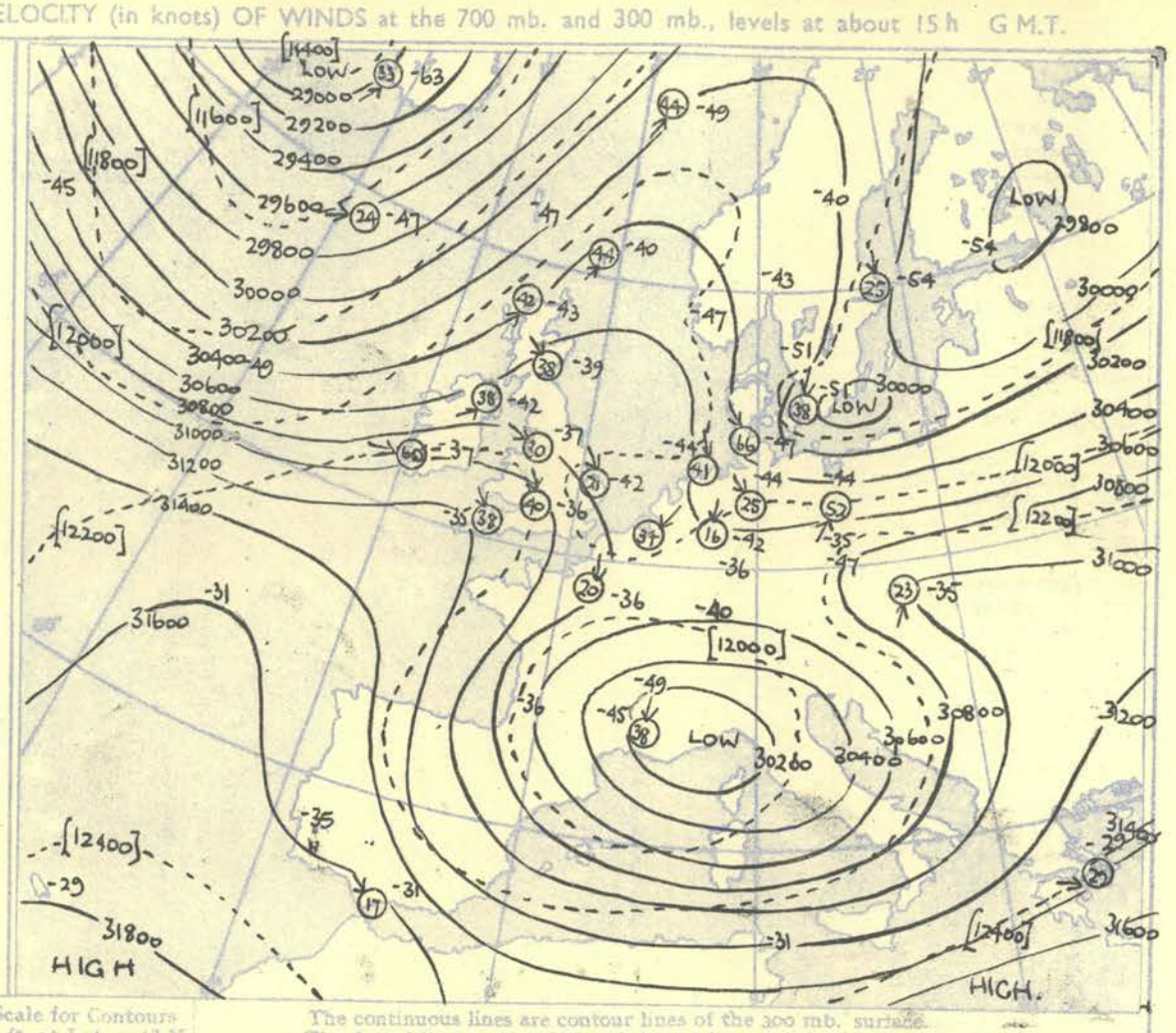
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h G.M.T.



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

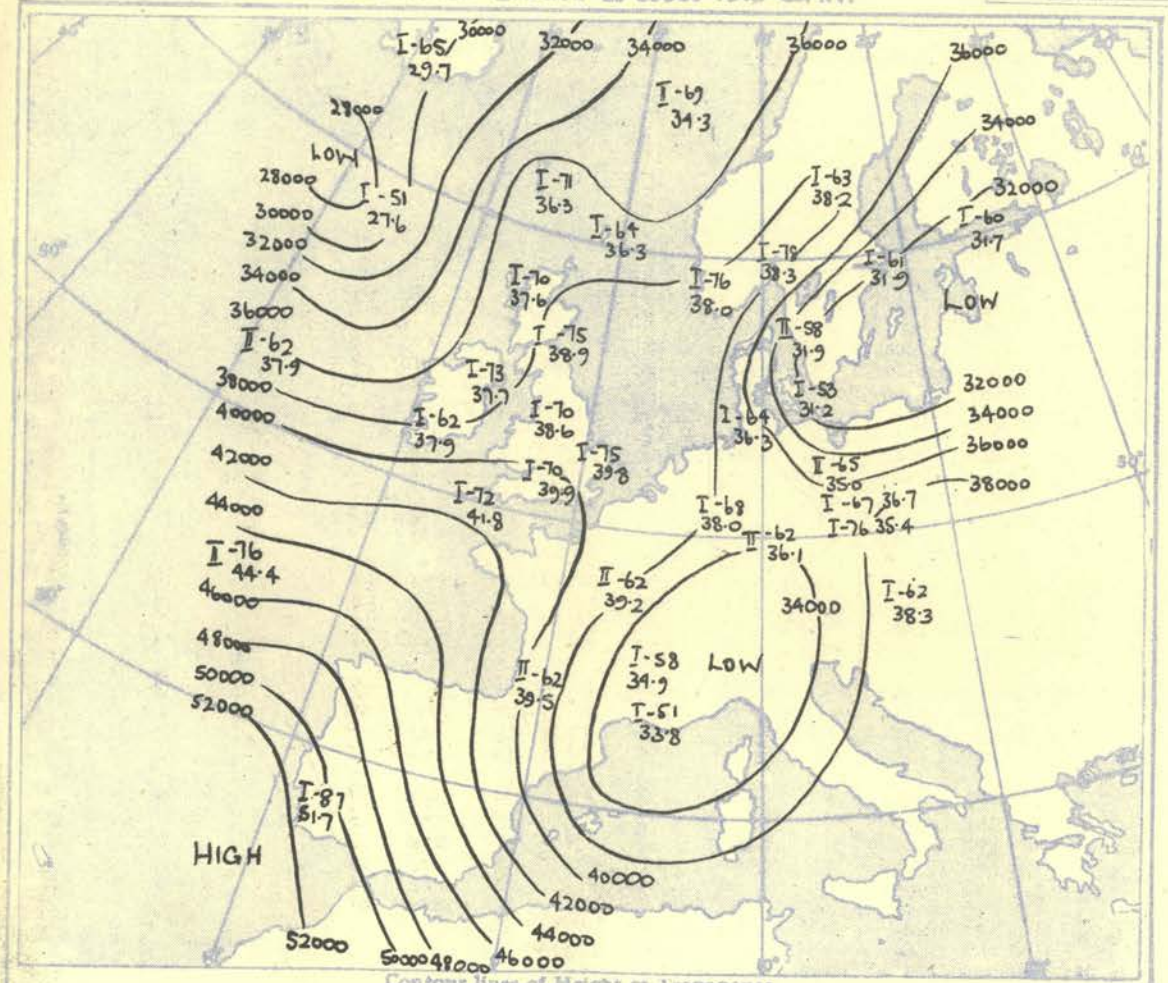
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

100 to 40 50 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 15 h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

By a process of advection and dynamic cooling the cold pool was rapidly transferred to the Riviera. The warm ridge was followed by a cold trough which travelled at over 30 Kts during the period, and eventually weakened the former.

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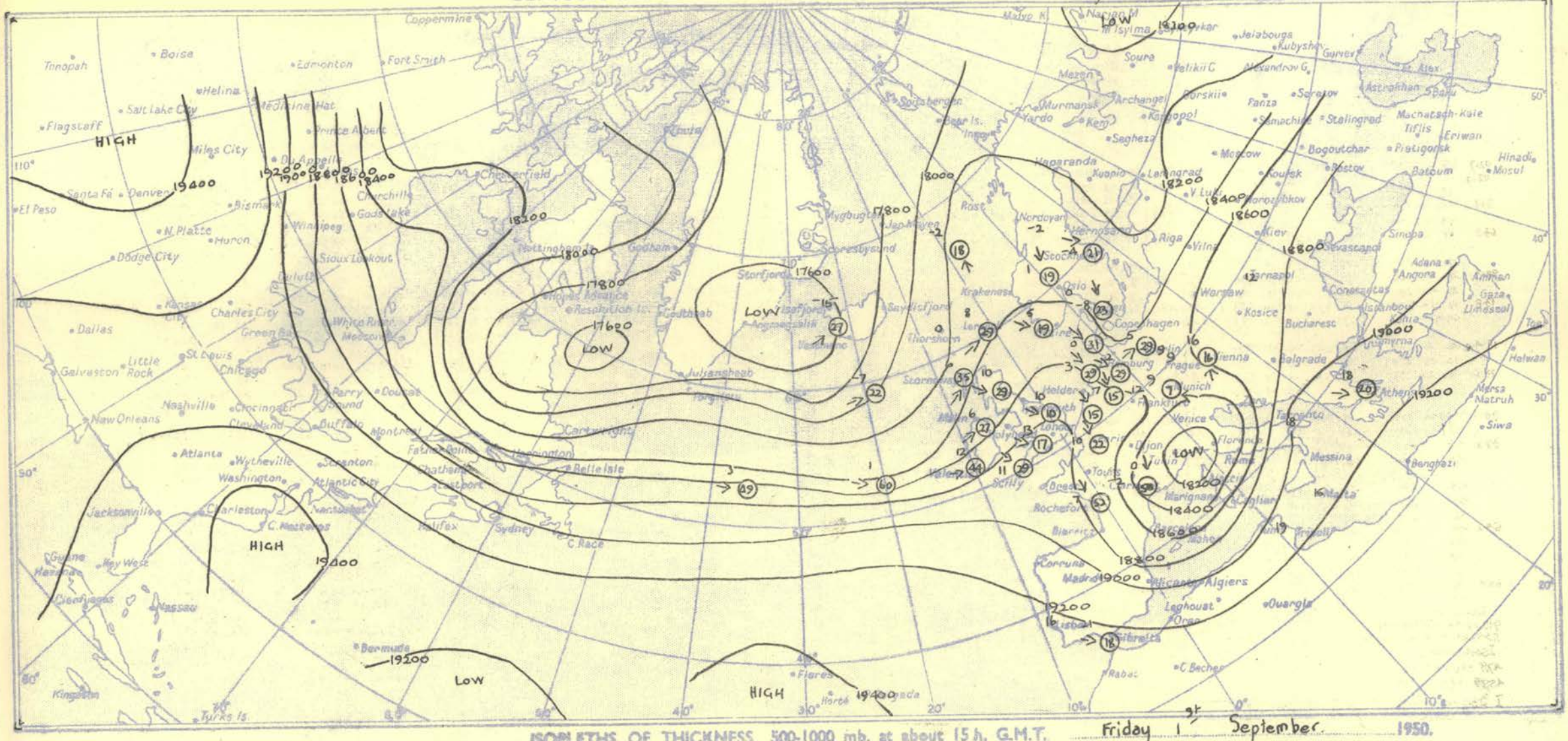
NELSON K. JOHNSON, K.C.B.; D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Friday 1st September 1950.


HIGH
19400
19200
19000
18800
18600
18400
18200
18000
17800
17600
LOW
HIGH
19400
LOW
19200
HIGH
19400
LOW
18200
18400
18600
16800
19000
19200
LOW
18100
Tunapah
Boise
Edmonton
Fort Smith
Coppermine
Helina
Salt Lake City
Medicine Hat
Flagstaff
Miles City
Prince Albert
Du Appelle
Chesterfield
Churchill
Gods Lake
Santa Fé
Denver
El Paso
Bismark
N. Platte
Huron
Winnipeg
Dodge City
Sioux Lookout
Kansas City
Charles City
Dallas
White River
Green Bay
Galveston
Little Rock
St. Louis
Chicago
Nashville
Cincinnati
Cleveland
Buffalo
New Orleans
Parry Sound
Montreal
Atlanta
Wytheville
Washington
Scranton
Atlantic City
Jacksonville
Charleston
C. Hatteras
Guane
Key West
Havana
Cienfuegos
Nassau
Bermuda
Kingston
Turks Is.
Belle Isle
Cartwright
Harrington
Father Point
Chatham
Eastport
Halifax
Sydney
C. Race
Thule
Spitsbergen
Bear Is.
Ingo
Mygbugten
Jan Mayen
Nottingham Is.
Godthaab
Resolution Is.
Julianshaab
Storfjord
Isafjord
Angmagssalik
Vestmanno
Saydisfjord
Thorshavn
Stornoway
Lerwick
Ursine
Krakenes
Nordoyan
Scoatness
Oslo
Stavanger
Copenhagen
Skagen
Tynemouth
Helder
Malin
Holyhead
London
Paris
Brest
Scilly
Rochefort
Biarritz
Corruna
Madrid
Lisbon
Gibraltar
Valentia
Toulouse
Dijon
Clermont
Marignane
Barcelona
Mahon
Alicante
Algiers
Leghouat
Oran
Rabat
C. Bacher
Tripoli
Tunis
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Sinope
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Corruna
Biarritz
Rochefort
Brest
Scilly
Valentia
Toulouse
Dijon
Clermont
Marignane
Barcelona
Mahon

METEOROLOGICAL OFFICE, LONDON. Friday 1st. September 1950.

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

LERWICK

Pressure — Time 15h G.M.T.; M.S.L. 1010.9 mb; Surf 1001.0 mb; Freezing 750 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.7	55	51	150	16
1000	02.9				
950		48	45	177	20
900	31.6	46	39	189	16
850		44	35	216	14
800	63.3	38	25	226	15
750		32	07	219	15
700	98.3	26	02	206	17
650		21	-11	201	19
600	13.8	17	-36	205	24
550		09	-02	221	27
500	18.4	08	00	249	29
450		00	-05	242	31
400	23.8	-13	-26	235	36
350		-26	-37	222	38
300	30.5	-40	-48	224	44
250		-57		234	48
200	39.2	-63		237	30
170		-53		240	30
150		-53		239	21
130		-52		241	22
110		-52		243	16
100	54.2	-51		244	16
90		-50		241	14
80		-49		237	14
70		-48		233	15
60	65.4	-46		252	12
		-48			

Inversion 915 mb 44° - 888 mb 48°; 534 mb 07° - 526 " 09°
Isothermal 428 - 462 mb 03°; 458 - 445 " 00°

Tropopause: I 230 mb -64° 36,300'

STORNOWAY

Pressure — Time 15h. G.M.T.; M.S.L. 1007.7 mb; Surf 1005.8 mb; Freezing 750 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.5	55	55	180	15
1000	00.9	54	54		
950		49	49	191	32
900	29.7	44	44	192	37
850		40	40	193	38
800	61.2	35	35	205	29
750		30	31	219	18
700	96.2	27	27	249	24
650		21	21	235	22
600	13.6	16	16	224	33
550		08	07	218	36
500	18.1	-01	-03	219	39
450		-11	-14	217	31
400	23.5	-23	-27	203	40
350		-36	-40	201	54
300	30.0	-51		198	64
250		-67		202	56
200	38.6	-57		224	49
170		-57		229	30
150	44.8	-57		237	32
130		-59		234	27
110		-60		231	24
100	53.4	-60			

Tropopause: I 214 mb -70° 37,600'

LEUCHARS

Pressure — Time G.M.T.; M.S.L. mb; Surf mb; Freezing 700 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.2	60	54	210	06
1000	03.2	59	53	204	12
950		53	48	204	16
900	32.1	47	43	206	17
850		42	38	206	19
800	63.7	37	33	209	24
750		34	26	220	24
700	100	32	10	223	24
650		25	12	223	23
600	14.0	21	14	247	31
550		17	12	261	30
500	18.6	10	04	257	24
450		00	-6	267	28
400	24.1	-11	-19	265	30
350		-23	-31	249	34
300	30.8	-39	-48	243	40
250		-59		253	40
200	39.5	-71		267	34
170		-65		268	30
150	45.5	-63		273	29
130		-63		254	26
110		-60		260	20
100	54.2	-58		267	17
90		-55		248	16
80		-53		251	11
70		-52		260	11
60	65.2	-50		250	12

Inversion 761 mb 33° - 735 mb 35°; 613 " 19° - 598 " 22°

Tropopause: I 205 mb -75° 38,900'

ALDERGROVE

Pressure — Time 15h. G.M.T.; M.S.L. 1011.4 mb; Surf 1003.0 mb; Freezing 675 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.3	58	54	184	12
1000	03.2				
950		51	47	190	18
900	32.0	46	41	198	28
850		41	34	201	28
800	63.5	39	36	222	28
750		39	35	244	34
700	99.1	35	30	247	33
650		29	22	245	30
600	13.9	23	15	245	27
550		14	-3	250	29
500	18.5	6	-30	255	27
450		-2	-35	256	26
400	24.0	-14	-44	257	35
350		-27	-53	250	37
300	30.6	-42		248	38
250		-61		256	48
200	39.2	-69		260	51
170		-62		264	37
150	45.3	-66		258	35
130		-64		262	23
110		-62		259	21
100	53.9	-60			

Inversion 814 mb 38° - 770 mb 42°
Isothermal 545 - 530 mb 13°

Tropopause: I 215 mb -73° 37,700'

LIVERPOOL

Pressure — Time 15h G.M.T.; M.S.L. 1013.5 mb; Surf 1011.5 mb; Freezing 678 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.6	65	56	190	09
1000	03.7	63	55		
950		56	50	208	14
900	32.8	51	44	213	18
850		45	38	223	17
800	64.6	39	32	232	21
750		41	19	230	23
700	102	35	10	240	22
650		30	04	242	21
600	14.0	26	-3	251	21
550		18	08	263	18
500	18.7	10	01	269	18
450		0	-12	276	23
400	24.1	-10	-19	286	31
350		-23	-32	274	36
300	30.8	-37	-46	281	30
250		-58		287	48
200	39.5	-65		294	52
170		-65		288	27
150		-65		288	29
130		-64		280	22
110		-61		285	18
100		-58		287	17
90		-57		271	12
80		-54		270	12
70		-54		254	09
60		-49			
(58 mb)		-48			

Inversion 775 mb 36° - 760 mb 42°
Max. Wind. 294° 76 kts 38,300'. 213 mb.

Tropopause: I 210 mb -70° 38,600'

DOWNHAM MARKET

Pressure — Time 15h. G.M.T.; M.S.L. 1015.1 mb; Surf 1010.7 mb; Freezing 650 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01.2	65	54	CALM	
1000	04.2	64	53		
950		57	46	330	02
900	33.3	50	41	278	05
850		43	33	273	05
800	65.1	38	27	285	07
750		38	20	281	12
700	101	37	-15	279	16
650		32	-32	293	22
600	14.1	25	-37	287	16
550		21	-40	312	07
500	18.8	10	-48	313	10
450		-01	-56	314	14
400	24.1	-12	-53	322	19
350		-26	-58	325	20
300	30.7	-42		326	21
250		-55		326	30
200	39.4	-74		328	37
170		-66		319	33
150	45.5	-67		325	27
130		-65		324	25
110		-63		315	13
100	54.0	-63		300	09
90		-63		277	12
80		-63		281	16
70		-63		299	15
60	64.8	-62		307	11

Inversion 713 mb 36° - 689 mb 37°
Isothermal 807 - 740 mb 38°

Tropopause: I 196 mb -75° 39,800'

LARKHILL

Pressure — Time 15h. G.M.T.; M.S.L. 1015.6 mb; Surf 1000.0 mb; Freezing 650 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4.4	67	55	CALM	
1000	4.4				
950		58	49	224	04
900	33.6	52	46	235	04
850		49	40	266	07
800	65.6	45	31	267	10
750		43	22	276	11
700	10.1	41	10	285	15
650		32	04	271	19
600	14.2	27	01	262	16
550		19	-10	273	17
500	18.9	13	-20	299	17
450		02	-30	311	13
400	24.1	-11	-42	315	15
350		-22	-50	337	29
300	31.4	-36	-61	339	40
250		-52		326	62
200	39.8	-70		323	55
170		-63		322	53
150	45.9	-63		328	30
130		-60		316	23
110		-58		301	13
100	54.5	-59		288	11
90		-58		290	10
80		-57			

Inversion 788 mb 43° - 775 mb 44°; 762 " 43° - 734 " 44°

Tropopause: I 200 mb -70° 39,900'

CAMBORNE

Pressure — Time 15h. G.M.T.; M.S.L. 1017.3 mb; Surf 1007.0 mb; Freezing 645 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.9	63	56	225	10
1000	03.2	62	56		
950		55	51	230	16
900	33.9	52	46	234	18
850		50	27	252	18
800	66.0	48	22	264	15
750		45	19	287	13
700	10.2	40	29	301	21
650		33	29	310	21
600	14.3	27	21	310	23
550		20	15	308	25
500	18.9	11	06	308	29
450		2	-4	311	28
400	24.4	-8	-14	308	28
350		-20	-25	314	32
300	31.2	-35	-40	317	38
250		-54		306	51
200	39.9	-70		308	72
170		-69		304	57
150		-67		305	25
130		-68		305	30
110		-70		300	21
100	54.4	-67		285	15
90		-64		303	14
80		-62			

Inversion 867 mb 48° - 850 mb 50°
Isothermal 943 - 910 mb 54°

Tropopause: I 183 mb -72° 41,800'

VALENTIA

Pressure — Time 15h. G.M.T.; M.S.L. 1011.8 mb; Surf 1010 mb; Freezing 640 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.3	61	60		
1000	3.2	60	60		
950		56	56		
900	32.3	53	53		
850		50	50		
800	64.5	46	33		
750		44	-4		
700	100	40	-26		
650		33	1		
600	14.1	27	23		
550		20	-8		
500	18.8	12	2		
450		4	-5		
400	24.3	-8	-19		
350		-21	-41		
300	31.0	-37	-51		
250		-54			
200	39.8	-61			
170		-59			
150		-60			
130		-59			
110		-57			
100	54.6	-56			
90		-54			
80		-51			
70		-49			
60		-47			
(50 mb)		-45			
(41 mb)		-42			

Inversion 475 mb 5° - 460 mb 6°

Tropopause: I 219 mb - 62° 37,900'

LERWICK

Pressure — Time 21h. G.M.T.; M.S.L. 1006.8 mb; Surf 996.9 mb; Freezing 778 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.7	55	52	160	15
1000	01.8				
950		49	48	179	24
900	30.6	46	40	179	24
850		42	35	181	23
800	62.1	35	31	184	20
750		29	25	189	19
700	97.1	27	20	193	25
650		20	15	187	27
600	13.7	14	11	187	24
550		13	08	203	21
500	18.3	06	-1	213	23
450		-6	-11	214	26
400	23.7	-16	-21	214	33
350		-29	-36	215	32
300	29.2	-45		216	33
250		-62		220	39
200	38.8	-69		219	37
170		-59		229	27
150		-59		228	24
130		-61		227	20
110		-61			
100	(105 mb)	-61			

Inversion 594 mb 13° - 574 mb 17°
Isothermal 922 - 883 mb 46°; 760 - 716 " 29°

Tropopause: I 213 mb -75° 37,600'

STORNOWAY

Pressure — Time 21h. G.M.T.; M.S.L. 1005.5 mb; Surf 1001.6 mb; Freezing 778 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.5	54	54	200	05
1000	00.9	54	54		
950		49	49	236	18
900	29.7	44	44	237	18
850		40	40	233	21
800	61.2	35	35	229	21
750		30	30	240	21
700	96.2	27	27	249	24
650		21	21	235	22
600	13.6	16	16	224	33
550		08	07	218	36
500	18.1	-01	-03	219	39
450		-11	-14	217	31
400	23.5	-23	-27	203	40
350		-36	-40	201	54
300	30.0	-51		198	64
250		-67		202	56
200	38.6	-57		224	49
170		-57		229	30
150	44.8	-57		237	32
130		-59		234	27
110		-60		231	24
100	53.4	-60			

Tropopause: I 238 mb - 70° 34,700'

LEUCHARS

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

Tropopause:

ALDERGROVE

Pressure — Time 21h. G.M.T.; M.S.L. 1006.8 mb; Surf 998.4 mb; Freezing 724 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.3	57	56	222	12
1000	01.9				
950		56	51	238	22
900	31.0	51	51	257	27
850		46	46	263	24
800	62.9	41	41	272	22
750		35	35	273	29
700	98.2	31	30	264	29
650		28	09	250	33
600	13.8	19	11	250	36
550		09	09	246	37
500	18.4	02	02	243	38
450		-10	-10	237	40
400	23.7	-22	-22	230	37
350		-36	-36	218	55
300	30.2	-50		217	58
250		-60		222	55
200	38.9	-57		245	47
170		-61		250	34
150	45.0	-63		252	32
130		-65		260	19
110		-61			
100	53.6	-63			

Isothermal 998 - 965 mb 57°; 713 - 668 " 31°

Tropopause: I 246 mb -67° 34,500'

LIVERPOOL

Pressure — Time 21h. G.M.T.; M.S.L. 1010.8 mb; Surf 1008.8 mb; Freezing 690 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.6	58	53	190	20
1000	03.0	57	53		
950		52	48	201	20
900	31.9	47	47	217	23
850		42	42	222	22
800	63.5	41	41	246	22
750		40	40	265	30
700	99.1	33	33	264	23
650		27	26	256	24
600	13.9	20	18	256	22
550		14	07	264	23
500	18.5	05	-1	257	27
450		-5	-14	261	31
400	23.9	-17	-34	254	39
350		-28	-39	250	45
300	30.6	-44		251	49
250		-62		251	51
200	39.1	-80		257	51
170		-67		268	32
150		-71		259	30
130		-71		277	33
110		-70		284	23
100	53.5	-68		274	22

Inversion 838 mb 40° - 771 mb 41°

Tropopause: I 203 mb -82° 38200'

DOWNHAM MARKET

Pressure — Time 21h. G.M.T.; M.S.L. 1013.2 mb; Surf 1008.8 mb; Freezing 684 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01.2	60	57		
1000	03.7	59	55		
950		56	52		
900	32.9	51	47		
850		45	39		
800	64.7	39	33		
750		38	12	See Page	
700	10.0	34	07	3	
650		27	-07	for Winds	
600	14.0	24	-11		
550		15	-05		
500	18.6	07	-01		
450		-03	-10		
400	24.1	-13	-20		
350		-27	-35		
300	30.7	-43			
250		-63			
200	39.3	-76			
170		-70			
150	45.2	-68			
130		-69			
110		-68			
100	53.7	-66			
90		-64			
80		-63			

Inversion 785 mb 37° - 765 mb 40°
Isothermal 1009 - 976 mb 60°

Tropopause: I 203 mb -78° 37,800'

LARKHILL

Pressure — Time 21h. G.M.T.; M.S.L. 1014.3 mb; Surf 998.5 mb; Freezing 670 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4.4	59	57	210	05
1000	3.9				
950		56	48	220	15
900	33.0	52	46	223	15
850		47	39	233	17
800	64.9	43	27	243	22
750		40	34	270	21
700	10.1	36	34	274	27
650		29	27	279	26
600	14.1	24	22	284	25
550		17	15	286	27
500	18.7	09	06	285	31
450		-01	-06	282	28
400	24.2	-13	-18	282	29
350		-28	-30	278	35
300	30.8	-42		277	33
250		-61		285	37
200	39.3	-73		288	63
170		-66		287	34
150	45.3	-68		284	30
130		-68		287	24
110		-67		298	15
100	53.8	-65		293	10
90		-63			

Inversion 775 mb 39° - 740 mb 40°

Tropopause: I 205 mb -75° 38700'

CAMBORNE

Pressure — Time 21h. G.M.T.; M.S.L. 1014.3 mb; Surf 1003.9 mb; Freezing 658 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.9	58	58	203	10
1000	03.9	58	57		
950		56	55	237	24
900	33.1	53	52	250	31
850		54	53	265	33
800	65.5	49	48	270	37
750		44	43	271	39
700	10.2	38	37	275	36
650		31	28	274	39
600	14.2	24	18	276	39
550		17	07	278	36
500	18.8	09	04	278	40
450		-2	-8	281	34
400	24.3	-15	-22	275	33
350		-30	-25	268	34
300	30.9	-47		276	45
250		-60		272	60
200	39.5	-68		274	60
170		-64		280	47
150		-66			
130		-66			
110					
100	(146 mb)	-66			

Inversion 900 mb 53° - 863 mb 55°
Isothermal 1004 - 989 mb 58°

Tropopause: I 203 mb -69° 39200'

VALENTIA

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

Tropopause:

No. 11479. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Saturday 2nd September 1950. Page 1.

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

METEOROLOGICAL OFFICE LIBRARY 11 SEP 1950 EXETER

03Z

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
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.	1002·7 mb	1006·7 mb	1004·0 mb	1011·4 mb	1007·0 mb	1010·1 mb	1011·3 mb	1013·5 mb	1018·9 mb
Surf	992·8 mb	1004·8 mb	1003·2 mb	1002·8 mb	1005·0 mb	1005·7 mb	995·5 mb	1003·1 mb	1017 mb
Freezing	768 mb	814 mb	738 mb	790 mb	690 mb	698 mb	669 mb	640 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	2·7	54	54	170	14	0·5	51	49	300	10	0·2	54	54			2·3	53	47			0·6	58	57	270	10	1·2	56	55	180	03	4·4	56	56	220	05	2·9	57	57	270	14	0·3	56	48	320	13	Surf
1000	0·7					1·8	52	49			(0·1					3·1					1·9	58	57			2·8	55	54	225	16	3·1					3·7	57	57			5·1	54	45	325	16	1000
950		50	49	194	25		49	45	309	26		51	51				48	40				54	52				52	50	216	20		53	52	253	20		52	50	307	27		47	41	336	25	950
900	29·4	46	45	191	22	305	43	40	308	26	29·9	47	47			31·7	43	34			30·9	51	49			31·6	45	42	207	28	32·1	50	48	275	22	32·6	48	47	310	26	33·8	51	34	331	29	900
850		40	39	183	26		37	36	307	25		44	43				37	31				47	44				42	38	216	26		45	43	277	24		47	38	303	27		35	30	327	29	850
800	60·9	35	34	180	26	61·8	31	30	307	22	61·6	40	39			63·0	33	22			62·8	40	37			63·2	40	34	248	21	63·9	42	34	272	26	64·5	48	09	291	31	64·9	33	22			800
750		31	30	179	30		27	23	304	22		34	32				29	08	For			35	32				36	30	268	22		41	22	275	26		44	-01	287	36		30	24			750
700	96·0	25	24	178	34	96·6	22	15	294	18	97·0	29	27			97·8	25	-04	winds		98·2	31	21			98·6	32	26	274	23	99·5	36	09	280	29	100	36	01	286	37	99·9	29	-10			700
650		20	19	184	31		15	09	286	19		21	19				20	-12	see			27	-03				30	24	262	23		30	-27	277	32		33	-18	288	39		28	-18			650
600	135	16	15	195	17	136	07	03	268	17	137	14	11			137	15	-15	page		138	18	-05			139	21	15	260	24	140	21	-25	275	34	141	26	-24	287	38	140	22	-01			600
550		10	06	204	28		00	-04	264	19		06	01				07	-21	3.			11	-18				14	07	249	21		12	-25	276	39		18	-37	291	40		13	-06			550
500	181	01	-03	192	30	180	-03	-06	241	24	182	-03	-11			183	-03	-19			184	03	-33			185	07	-01	241	27	186	05	-38	288	45	187	08	-38	290	42	186	02	-16			500
450		-10	-16	197	36		-11	-29	226	29		-12	-27				-13	-24				-07	-38				-03	-12	253	32		-07	-48	287	47		-03	-42	287	46		-09	-27			450
400	235	-19	-23	182	41	234	-22	-40	206	29	235	-22	-34			235	-25	-44			238	-17	-44			239	-14	-23	245	32	239	-20	-59	284	46	242	-15	-51	288	46	239	-21	-38			400
350		-32	-37	183	52		-34	-50	196	34		-35	-44				-38	-54				-30					-26	-36	238	41		-34	-59	269	42		-30	-57	290	45		-37	-53			350
300	300	-48		185	54	299	-47		187	39	300	-50				230	-54				303	-46				306	-43		225	39	305	-49		250	46	30)	-46		282	49	304	-52				300
250		-62		192	56		-54		196	37		-60					-51					-61					-63		231	48		-68		234	50		-64		297	35		-68				250
200	386	-56		199	38	387	-49				387	-55				388	-52				390	-60				391	-69		248	32	389	-68		264	44	393	-68		293	51	389	-68				200
170		-54		207	29							-55					-56					-59					-65		260	27		-65		270	33		-64		292	36		-64				170
150		-56		211	25							-57					-55					-61					-67		271	33		-68		273	26		-67		281	36		-65				150
130		-58		217	21							-58					-55					-62					-68		268	20		-72		277	26		-68		289	48		-65				130
110												-60										-64					-68		251	20		-71		273	20		-68		286	29		-65				110
100											536	-59									53)	-65								534	-71		274	17	538	-68		278	19	535	-64				100
90												-58										-66									-69		280	13		-68		291	15		-63				90
80												-57										-65														-67			(81mb)					80
70																						-62																					70
60																					(53mb)	-62																					60
						Inversion 1005 mb 51° - 989 mb 53° 566 - 00° - 554 - 01° Isothermal. 520 - 500 mb - 03°						Inversion 722 mb 30° - 715 mb 31°					Isothermal. 1003 - 998 mb 53°					Inversion 700 mb 31° - 690 mb 32°					Inversion 718 mb 31° - 700 mb 32°					Isothermal. 839 - 811 mb 13° 791 - 735 - 41°					Inversion 865 mb 44° - 836 mb 50° Isothermal. 700 - 670 mb 36°					Inversion 818 mb 31° - 800 mb 33° 700 - 29° - 674 - 31°					
Tropopause	I 222 mb -72° 36 500					II 258 mb -54° 33 200					I 255 mb -61° 35 500					I 268 mb -50° 32 500					I 213 mb -66° 37 700					I 212 mb - 80° 38 000					I 215 mb - 80° 37 600					I 218 mb - 74° 37 600					I 225 mb -77° 36 500					Tropopause

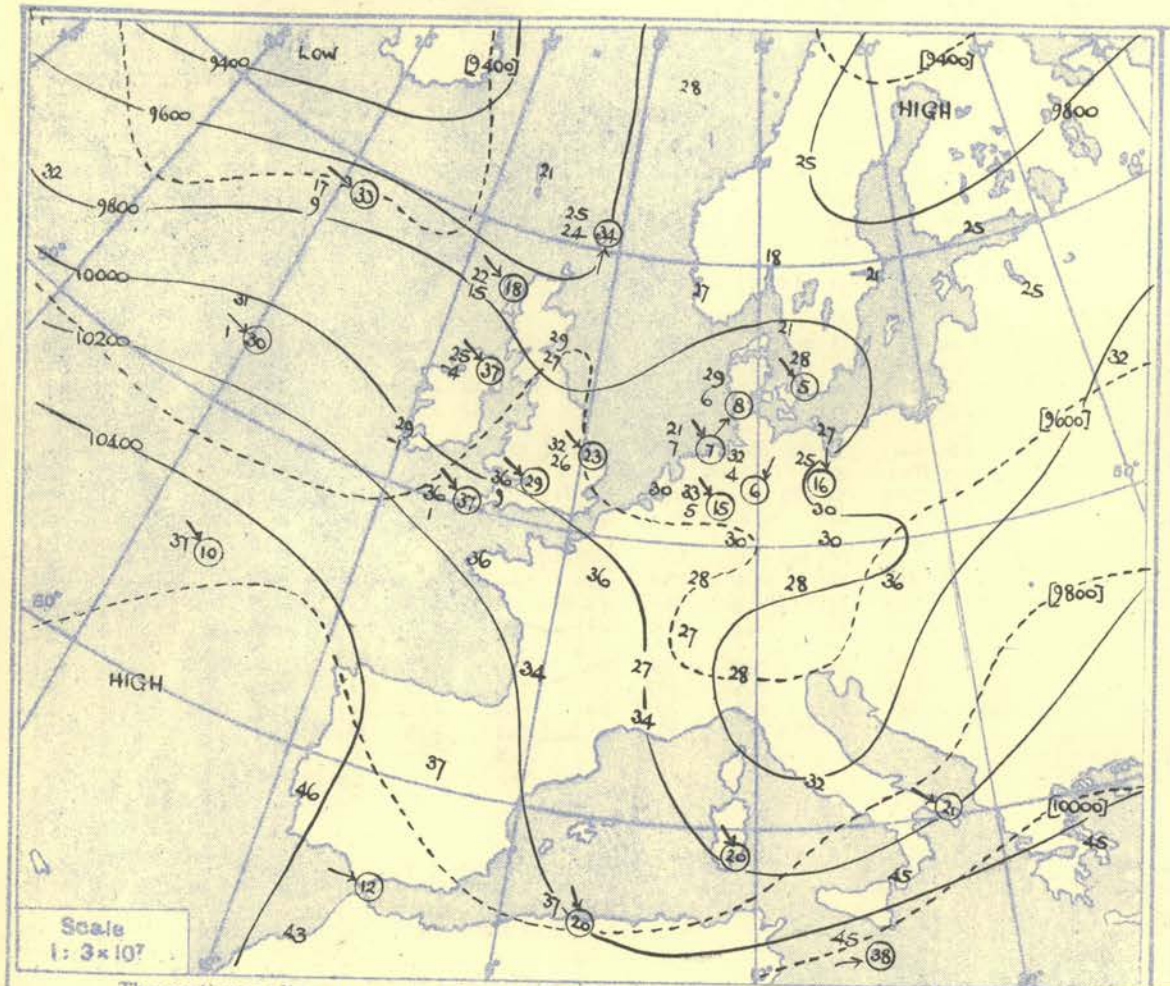
09Z

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne		
Time	09Z G.M.T.	09Z G.M.T.	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.	1002·9 mb	1010·1 mb	mb	1014·7 mb	1012·1 mb	1008·9 mb	1012·3 mb	1017·8 mb	mb	M.S.L.
Surf	993·1 mb	1008·2 mb	mb	1006·1 mb	1010·1 mb	1004·6 mb	996·5 mb	1007·3 mb	mb	Surf
Freezing	750 mb	831 mb	mb	858 mb	810 mb	686 mb	650 mb	635 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	Pressure mb
Surf	2·7	51	48	300	17	0·5	54	48								2·3	55	47			0·6	57	47	330	18	1·2	58	53	280	12	4·4	55	52			2·9	57	49	360	15						Surf
1000	0·8					2·8	53	48								4·0					3·3	56	45			2·5	57	52			3·4					4·9	56	48								1000
950		48	45	313	29		47	38									45	39				49	13				51	46	302	29		49	45				50	44	340	16						950
900	29·4	41	38	309	23	31·4	40	34								32·5	38	34			32·0	42	38			31·3	46	43	304	27	32·1	46	43			33·6	43	37	350	26						900
850		39	30	305	18		34	30									31	27				37	33				44	38	296	23		41	38				40	27	354	30						850
800	60·8	34	27	288	15	62·5	29	28								63·4	26	18			63·3	31	27	For		63·0	40	33	283	20	63·8	42	25			65·2	42	08	332	31						800
750		32	23	273	15		23	22									22	06	For			26	20				32	26	273	22		41	-10				38	02	310	34						750
700	05·7	25	11	275	15	97·0	18	15								97·8	18	-02	winds		98·0	20	11	winds		98·2	33	17	270	25	99·4	37	-15			101	37	-12	302	37						700
650		16	07	261	14		10	-02									14	-09	see			17	-02	see			28	-16	265	29		32	-18				33	-04	294	39						650
600	135	12	07	200	13	136	04	-12								137	08	-17	page		137	11	-08	page		138	20	-25	262	30	140	25	-06			141	26	00	294	36						600
550		06	01	183	15		-03	-20									01	-27	3.			02	-16	3.			11	-20	266	34		17	-08				18	-06	293	34						550
500	180	-01	-06	172	25	180	-11	-30								181	-07	-38			182	-07	-29			184	04	-21	265	43	186	06	-17			187	07	-15	293	13						500
450		-10	-16	172	32		-20	-41									-18	-47				-16	-40				-07	-30	260	50		-07	-34				-02	-23	292	42						450
400	234	-22	-29	168	37	232	-31	-49								234	-28	-56			235	-26	-49			238	-21	-43	252	48	240	-19	-48			242	-14	-34	294	40						400
350		-33	-40	165	31		-43										-40					-38	-58				-37	-56	245	45		-35	-58				-28	-46	291	43						350
300	299	-48		164	60	296	-54									298	-54				303	-45				303	-51		244	44	305	-51				308	-46		300	48						300
250		-64		184	60		-54										-53				(30)mb						-61		250	44		-64					-61		296	54						250
200	386	-51		191	30	384	-51									386	-50									390	-50		255	34	391	-56				394	-62		303	55						200
170		-50					-54																				-52		251	30		-56					-58		292	49						170
	(187mb)																																												
150							-53																				-56		260	28		-59					-60		290	42						150
130							-54																									-58					-62		300	37						130
110							-53																									-59					-62		285	27						110
100						534	-52																									-56				541	-62		284	26						100
90							-52																									-54					-60		293	16						90
80							-52																									-53					-59		298	15						80
70							-53																									-53				(73mb)	-58									70
60							-54																									-54														60
							-54																																						
							-53																																						
	Inversion 780 mb 31° - 763 mb 33° 643 - 15° - 632 - 16° Isothermal. 882 - 838 mb 39°																				Max Wind. 29,400 ft. 309 mb 274° 78 kts.					Inversion 900 mb 46° - 882 mb 47° 725 - 37° - 700 - 33°										Inversion 838 mb 40° - 813 mb 44° 750 - 38° - 737 - 39° Isothermal. 850 - 838 mb 40°										
Tropopause	I 250 mb -64° 33 800					I 285 mb - 57° 30 500										J 286 mb - 56° 30 800					NR.					I 245 mb -62° 34 600					I 245 mb -65° 34 700					I 210 mb - 74° 38 300										Tropopause

Saturday 2nd September, 1950.

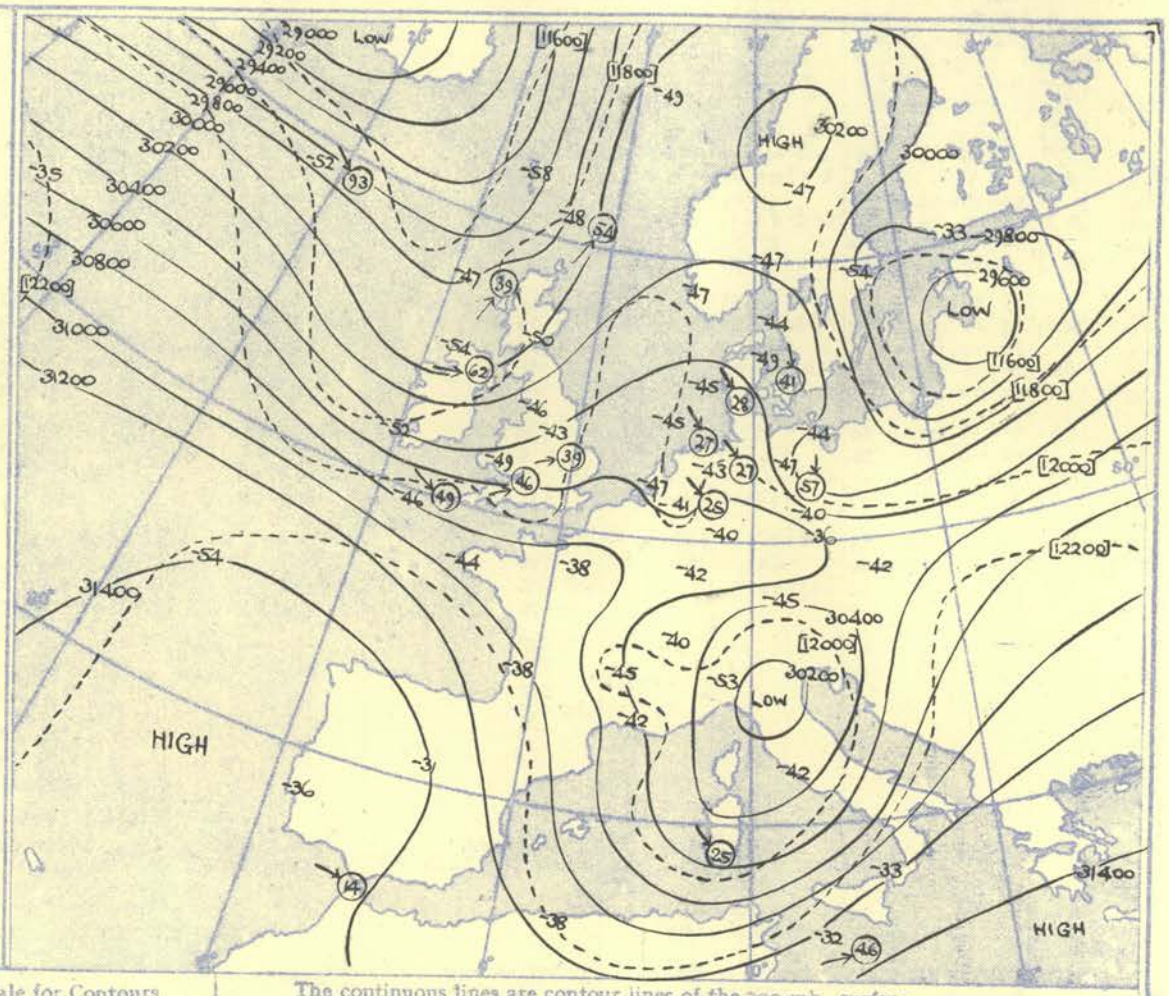
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. GMT



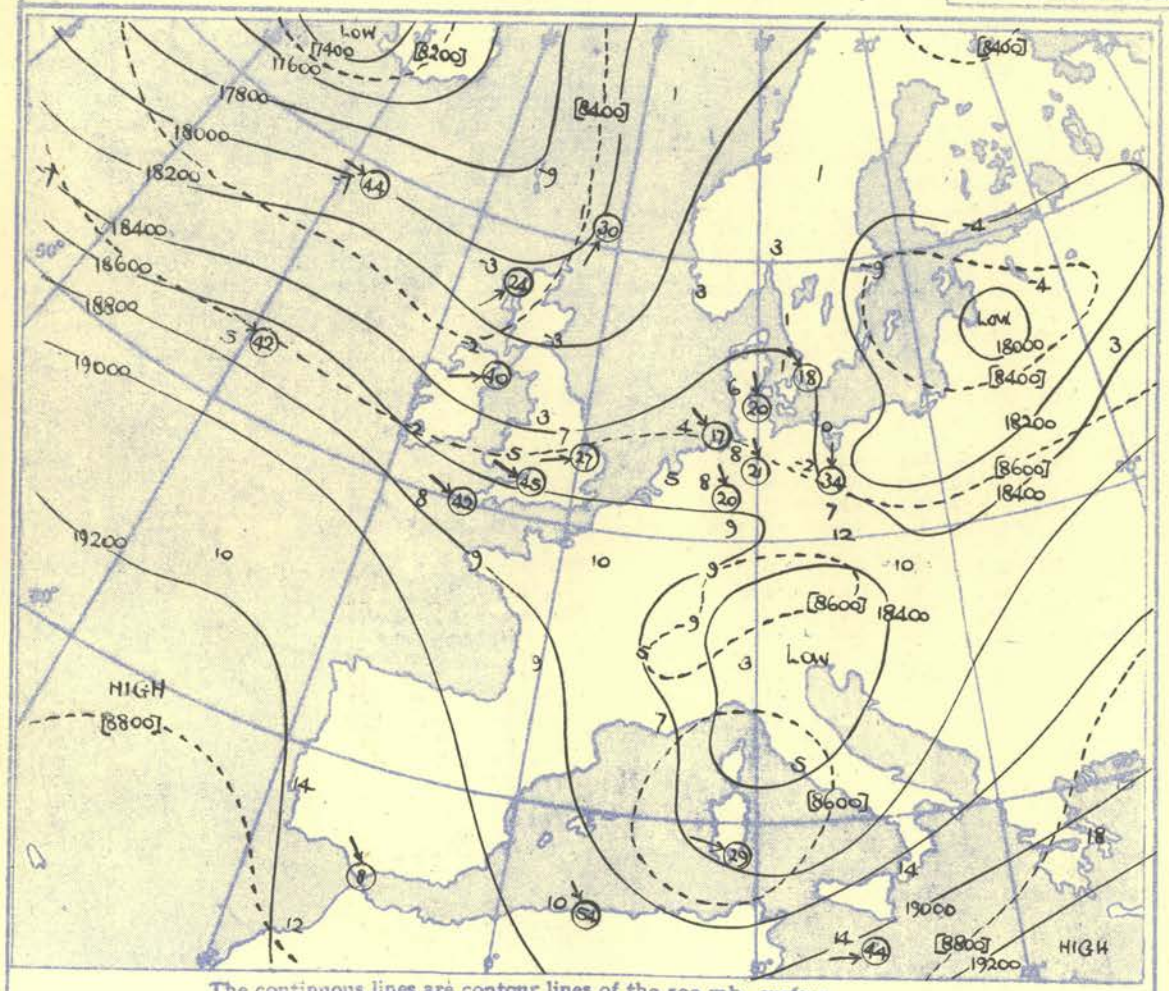
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

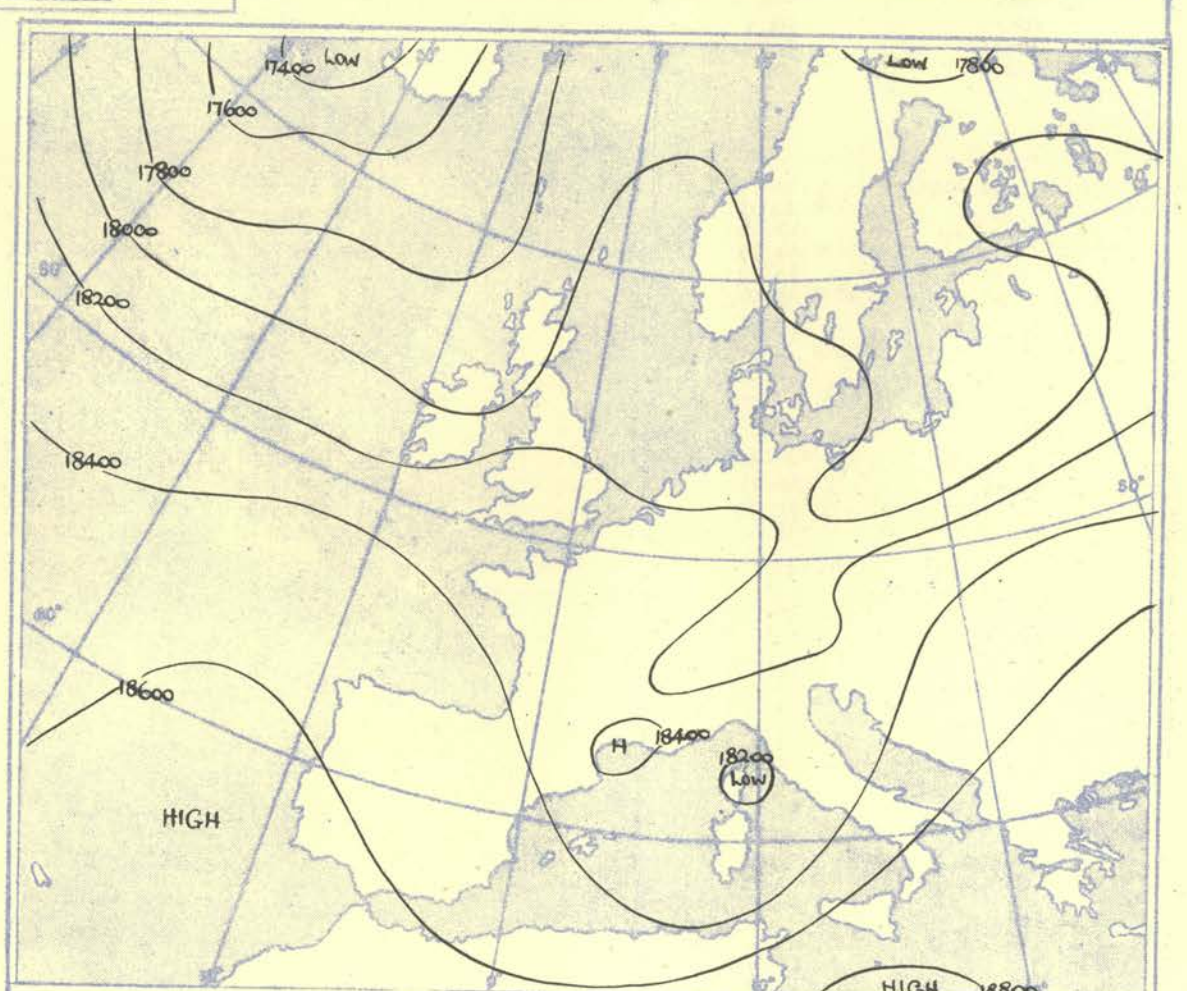
100 60 40 30 20 15 10 knots



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.

Saturday 2nd September. 1950. Page 3

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	43·2N 17·0W	39·5N 12·2W	48·2N 20·5W	49·5N 14·7W	51·3N 00·4E															
Pressure Time	13L	15L	1245L	1415L	1355L	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	Time
Pressure M.S.L.	1026 mb	1021 mb	1023 mb	1024 mb	1013·4mb															M.S.L.
Pressure Surf	1023 mb	1017 mb	1019 mb	1020 mb	1002·4mb															Surf
Pressure Freezing	630 mb	625 mb	645 mb	650 mb	710* mb															Freezing
Pressure mb	Height ft./100 / °F. / °F.	Height ft./100 / °F. / °F.	Height ft./100 / °F. / °F.	Height ft./100 / °F. / °F.	Height ft./100 / °F. / °F.	Height ft./100 / °F. / °F.	Height ft./100 / °F. / °F.	Height ft./100 / °F. / °F.	Height ft./100 / °F. / °F.	Height ft./100 / °F. / °F.	Height ft./100 / °F. / °F.	Height ft./100 / °F. / °F.	Height ft./100 / °F. / °F.	Height ft./100 / °F. / °F.	Height ft./100 / °F. / °F.	Height ft./100 / °F. / °F.	Height ft./100 / °F. / °F.	Height ft./100 / °F. / °F.	Height ft./100 / °F. / °F.	Pressure mb
Surf	64 64	66 60	1·0 57 57	1·0 58 47	3·1 65 47															Surf
1000	5·1 63 58	5·8 64	6·2	6·5																1000
950	55 55	58 54	59 58	48 44	55 36															950
900	56 51	54 52	35·5 57 55	35·2 42 40	32·7 47 34															900
850	54 29	58 46	53 51	51 19	39 31															850
800	49 31	54 49	67·9 47 47	67·2 47 17	64·1 33 30															800
750	48 14	49 34	44 37	43 18	35 30															750
700	105 42 15	104 42 27	104 37 35	103 38 22	99·3 29 08															700
650	34 18	36 30	31 25	31	23 04															650
600	27	28	144 26	143 23	139 17 08															600
550	17	18	22	16	09 04															550
500	192 09	192 13	191 10	190 07	185 03 08															500
450					+09															450
400					239 +21															400
350					+35															350
300					304 -51															300
250																				250
200																				200
170																				170
	Cloud. 5/8 Sc 940-920mb 2/8 Ci NR. Surf wind. N. 7-10kts. Inversion 950 mb 55° - 900 - 56°	Cloud. 8/8 Sc 950-890mb Surf wind N. 7-10kts. Inversion 900mb 54° - 850 - 58°	Cloud. 8/8 Sc 1010-870mb 2/8 Ci NR. Inversion 1019 mb 57° - 950 " 59°	Cloud. 8/8 As NR. 7/8 Sc 910-890mb. Inversion 900mb 12° - 850 " 51°	Cloud. 3/8 Cu 857-782mb. Sheet of Cs + Ds W. Inversion 775 mb 31° - 730 " 31°. Actual temps doubtful * Shallow layer 795 - 770mb.															

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

Place	Aldergrove	52·5N 20ow Cirrus	Liverpool	Aldergrove	Lerwick	52·5N 20ow Cirrus	Durham	Lerwick	52·5N 20ow Cirrus	Hedchars	Place
Time	03L.	09L.	09L.	09L.	15L	15L	21L.	21L.	21L	0000h.	Time
Type	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.	280 12	230 02	330 18	300 12		180 43	260 06	280 06	240 36	180 08	Surf.
1,000	299 27	220 06	319 33	310 11		180 48	310 22	290 15	260 41	228 22	1,000
2,000	308 30	230 06	324 35	318 16		190 54	320 22	290 14	260 42	231 23	2,000
3,000	318 33	230 08	324 35	323 21		200 50	320 21	290 13	270 44	234 23	3,000
4,000	320 30	230 09	324 36	326 25		210 48	320 19	290 12	270 48	235 22	4,000
5,000	317 33	230 09	326 36	326 26		210 46	320 18	290 15	270 53	239 20	5,000
6,000	313 36		323 36	323 30			310 17	290 15		240 19	6,000
8,000	305 34		314 35	319 31			310 21	280 13	270 60	244 21	8,000
10,000	292 37	260 29	306 34	318 34		220 47	320 21	280 12	270 59	244 26	10,000
14,000	268 33	250 31	276 44	308 39			310 32	270 15	290 60	224 26	14,000
18,000	264 40	260 40	266 49	310 48			310 36	300 21	270 63	222 27	18,000
24,000	266 54	260 40	265 58	315 75			320 53	310 32	270 68	203 39	24,000
30,000	263 62		266 59	317 90			320 72	310 57	(19,000)	205 62	30,000
40,000	262 39		262 45	298 43			320 58	280 21		215 54	40,000
50,000			250 24	280 26	232 15		300 24	270 15		(36,000)	50,000
			327 10	285 16	219 09		320 12	240 11			60·000
			(57,000)	(55·000)	218 11		170 02	280 06			70·000
					(65·000)		Calm	230 06			80 000
							140 05	330 07			90·000
							270 06				98·000

NEPHOSCOPE OBSERVATIONS

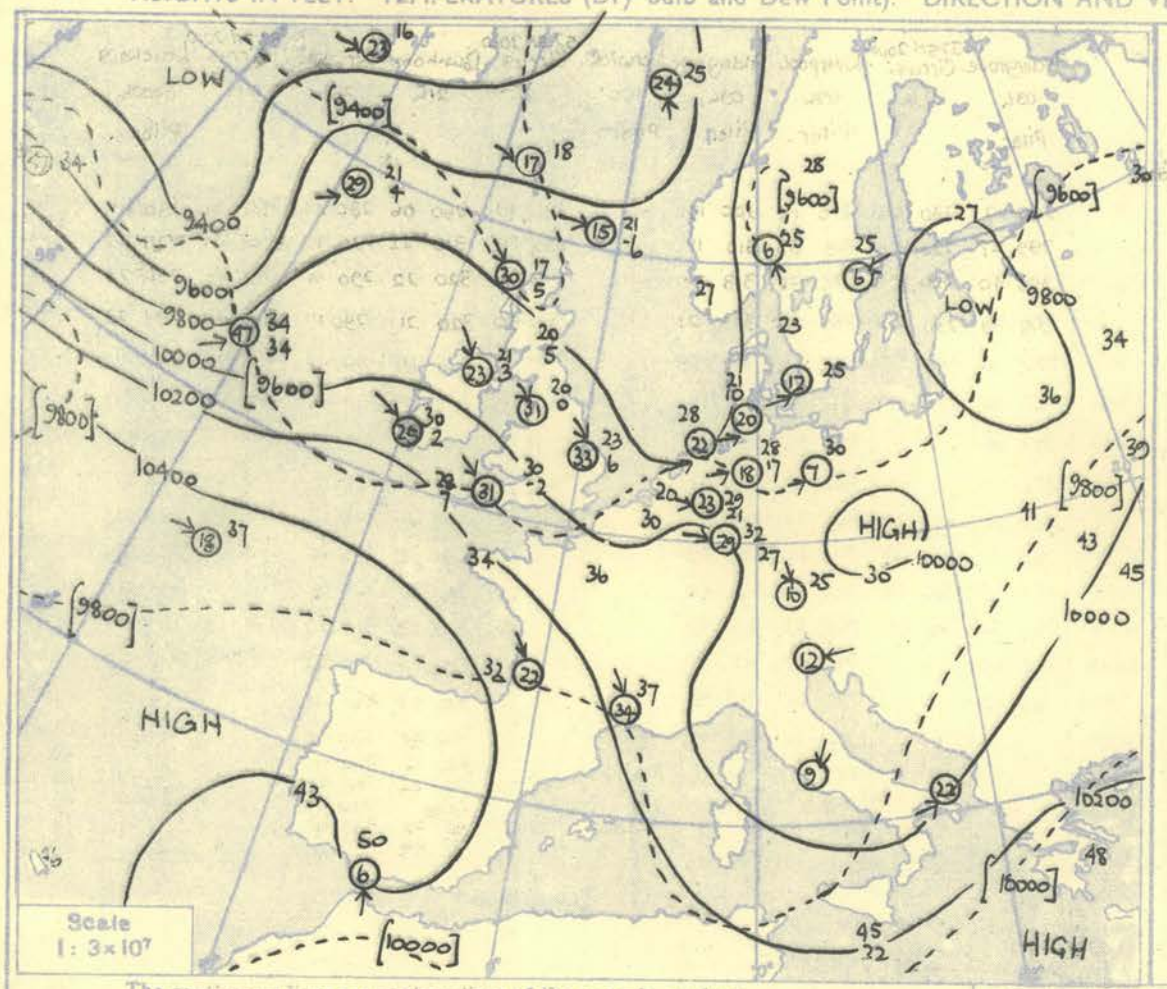
Place			NON REPORTED.								Place
Time Type											Time Type
Dir. Vel.											Dir. Vel.

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

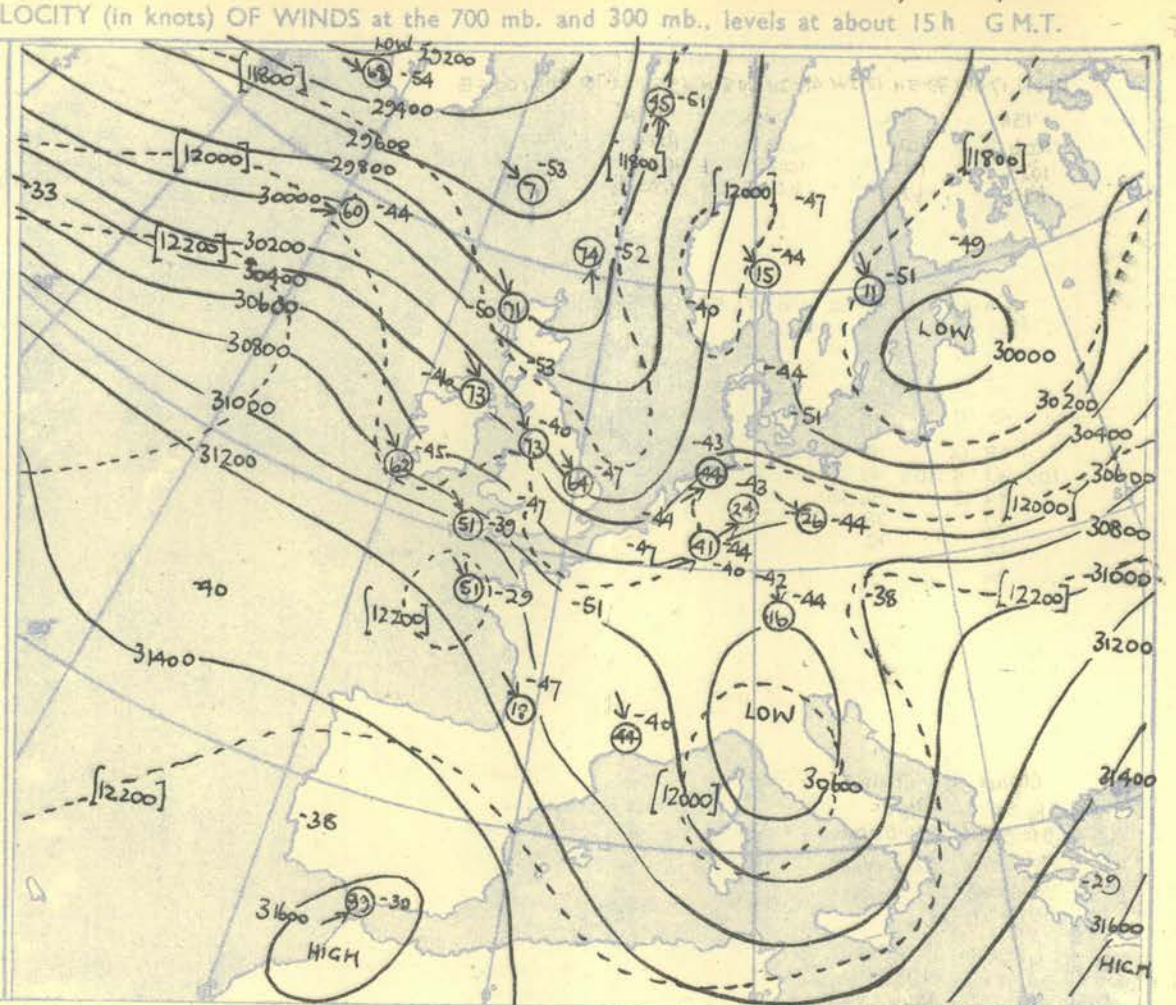
Ship	WEATHER EXPLORER	WEATHER EXPLORER	WEATHER EXPLORER	WEATHER EXPLORER	CIRRUS	CIRRUS	CIRRUS	CIRRUS		Ship
Lat/Long	58·9N 19·1W	58·9N 18·9W	58·9N 18·6W	58·9N 19·0W	52·5N 20·0W	52·5N 20·0W	52·5N 20·0W	52·5N 20·0W		Lat/Long
Pressure Time	08L G.M.T.	09L G.M.T.	15L G.M.T.	21L G.M.T.	03L G.M.T.	09L G.M.T.	15L G.M.T.	21L G.M.T.	G.M.T.	Time
Pressure M.S.L.	1009 mb	1009 mb	1008 mb	1004 mb	1022 mb	1021 mb	1012 mb	1004 mb	mb	M.S.L.
Pressure Surf	1009 mb	1009 mb	1008 mb	1004 mb	1022 mb	1021 mb	1012 mb	1004 mb	mb	Surf
Pressure Freezing	820 mb	815 - 790 mb	805 mb	795 mb	725 mb	670 860 mb	670 mb	650 mb	mb	Freezing
Pressure mb	Height ft./100 / °F. / °F. / Wind Dir. ° Vel. knots	Height ft./100 / °F. / °F. / Wind Dir. ° Vel. knots	Height ft./100 / °F. / °F. / Wind Dir. ° Vel. knots	Height ft./100 / °F. / °F. / Wind Dir. ° Vel. knots	Height ft./100 / °F. / °F. / Wind Dir. ° Vel. knots	Height ft./100 / °F. / °F. / Wind Dir. ° Vel. knots	Height ft./100 / °F. / °F. / Wind Dir. ° Vel. knots	Height ft./100 / °F. / °F. / Wind Dir. ° Vel. knots	Height ft./100 / °F. / °F. / Wind Dir. ° Vel. knots	Pressure mb
Surf	53 47 240 22	54 46 260 18	55 47 240 14	54 47 210 12	55 45	64 41	54 48	59 57		Surf
1000	2·5 52 47 238 24	2·4 53 45	2·1 54 45 223 07	1·0 54 46 205 15	6·2 52 43	5·5 52 39	3·3 52 48	1·3 59 57		1000
950	46 44 245 25	48 44 270 19	47 36 224 15	48 38 199 20						950
900	31·0 40 40 254 26	31·0 42 39 270 20	30·7 41 31 227 21	29·6 42 32 193 20						900
850	34 34 261 29	36 33 266 22	36 25 235 22	37 29 191 15	32 30	32 19				850
800	62·1 30 27 259 31	62·3 33 23 262 24	62·0 31 21 242 27	60·9 33 22 190 15						800
750	24 21 263 31	28 15 259 27	24 15 237 29	27 07 192 16						750
700	96·5 17 09 270 33	97·1 23 17 254 25	96·4 21 04 235 29	95·5 21 -01 195 16	10·1 32 08	100 34 -13	99·3 34 34	98·7 39 19		700
650	10 03 276 38	17 13 258 29	14 -04 246 32	13 01 195 15						650
600	185 06 -03 278 38	136 10 05 256 35	135 09 -05 254 42	134 10 01 197 21						600
550	-01 -13 278 38	03 -02 251 36	03 -08 258 45	09 01 207 28						550
500	180 -07 -13 273 44	181 -02 -08 265 37	181 -03 -13 258 44	180 03 -05 227 31	187 05 -11	187 03 -26	186 14 12	186 14 14		500
450	-15 -28 280 55	-08 -15 275 53	-08 -21 251 48	-04 -12 244 42						450
400	233 -24 -34 295 66	235 -17 -24 278 65	234 -18 -29 251 56	234 -16 -25 251 47						400
350	-37 -45 292 74	-30 -38 273 72	-28 -39 252 59	-29 -38 254 51						350
300	397 -52 288 93	301 -43 283 75	300 -44 261 60	300 -45 243 57		307 -36		309 -33		300
250	-67 289 98	-59 283 87	-61 265 78	-58 230 52						250
200	383 -54 287 67	387 -62 283 72	387 -57 261 63	388 -47 233 45		(296) -38 mb				200
170	-54 280 45	-56 281 57	-54 255 46	-47 246 45						170
150	-53 274 33	-54 278 51	-52 255 42	-49 246 43						150
130	-53 273 31	-52 275 39	-53 256 26	-50 248 34						130
110	-53 273 31	-51 275 29	-53 256 31	-49 259 25						110
100	534 -53 273 31	538 -50 275 26	537 -50 256 20	540 -49 256 27						100
90	-54 275 22	-51 275 23	-49 257 18	-47 249 28						90
80	-56 275 12	-54 275 15	-50 257 18	-46 241 19						80
70	-56 275 12	-53 275 15	-50 257 15	-51 240 17						70
60	(58 mb) -56 276 09 -57	-50 275 10 -52 275 10 -50 275 06	(33 mb) -49 -60					Inversion 913 mb 50° - 891 mb 55°		60
	Inversion 613 mb 41° - 599 mb 43°	Inversion 810 mb 31° - 800 mb 33°	Inversion 732 mb 22° - 715 mb 23°	Inversion 613 mb 09° - 586 mb 11°	Inversion 825 mb 30° - 810 mb 36° Isothermal 824 - 680 mb 32°	Inversion 825 mb 28° - 781 mb 37° 408 " -15° - 398 " -11° Isothermal 744 - 700 mb 34°	Inversion 890 mb 39° - 850 mb 45° Isothermal 850 - 837 mb 45°	Isothermal 1004 - 1000 mb 59° 777 - 762 " 46° 610 - 590 " 28° 529 - 507 " 16°		
Tropopause	II 250 mb - 61° 33,600'	I 213 mb - 73° 37,400'	I 219 mb - 70° 36,700'	I 253 mb - 59° 33,600'	NR	NR	NR.	I 159 mb - 89° 44,300'		Tropopause

Saturday 2nd September 1950.

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

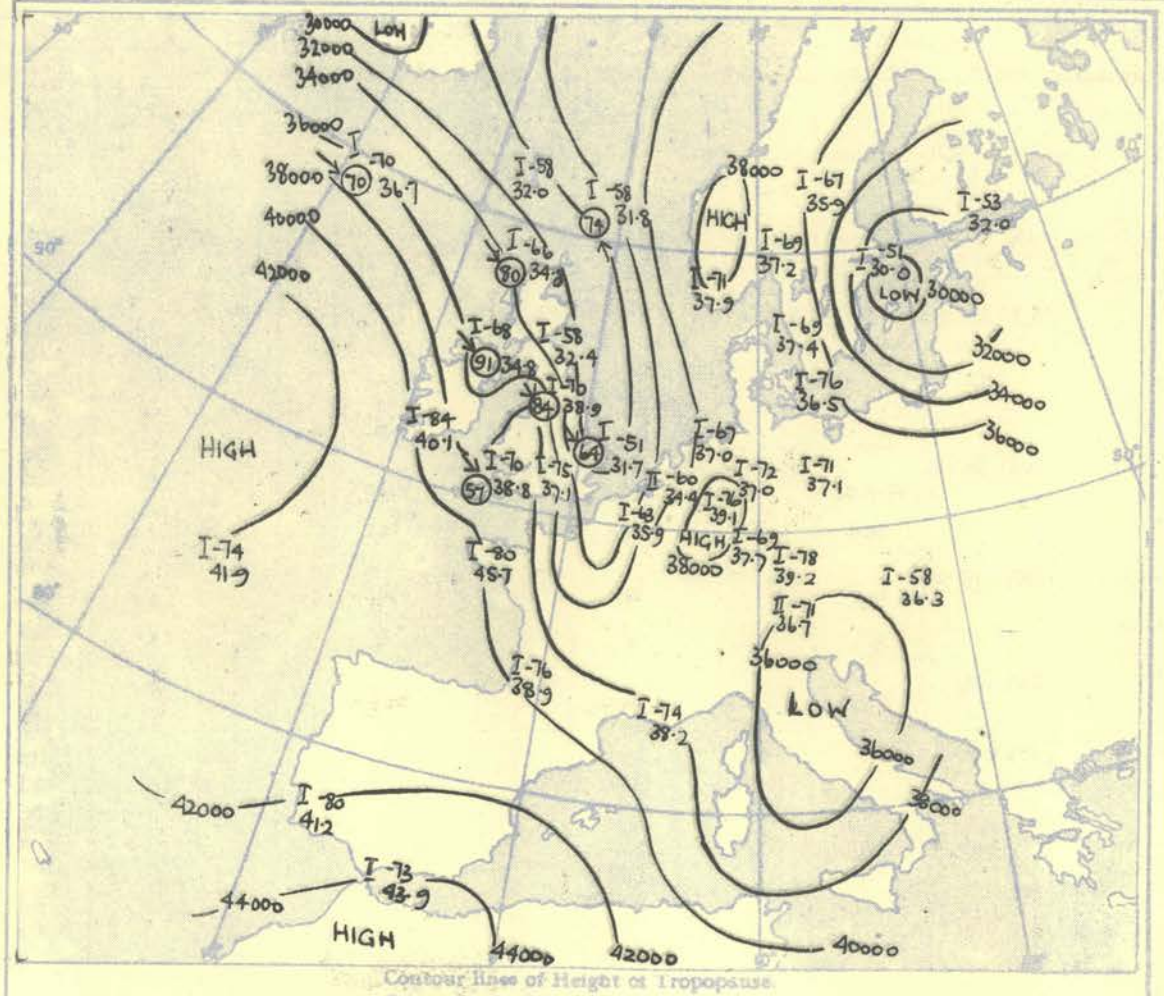


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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.

The cold trough continued its rapid motion and almost completely obliterated the warm ridge over North west Europe. It is interesting to note that cooling at high levels was occurring ahead of the occlusion and warm front.

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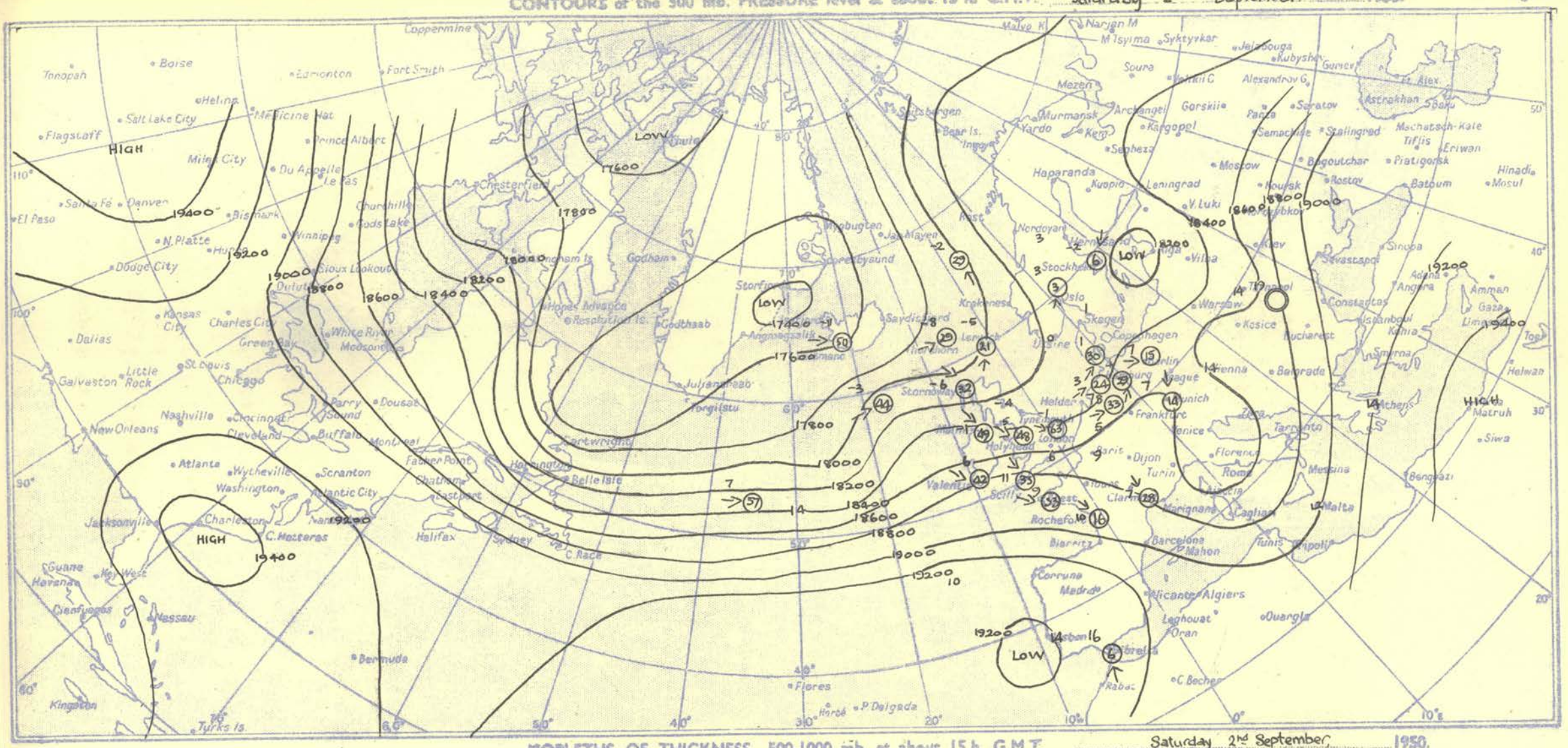
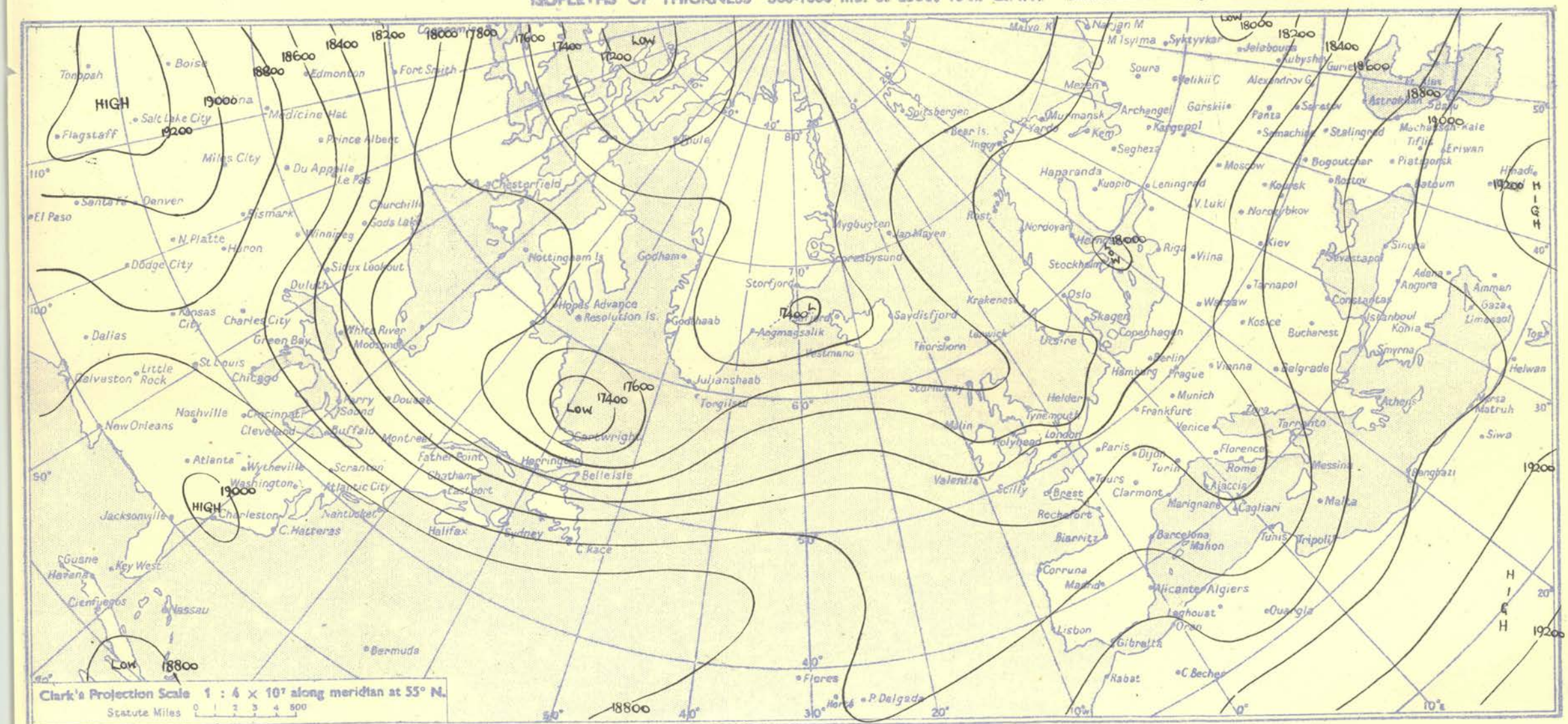
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Saturday 2nd September 1950.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Saturday 2nd September 1950.



THE METEOROLOGICAL OFFICE, LONDON. Saturday 2nd September 1950.

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

15h. G.M.T.

Station	Pressure	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LERWICK	Time 15h. G.M.T.					
	M.S.L. 1006.9 mb					
	Surf 997.0 mb					
	Freezing 830 mb					
	Surf	02.7	55	45	280	21
	1000	01.8				
	950		48	40	310	21
	900	30.5	41	35	308	20
	850		35	29	303	18
	800	61.6	31	23	288	17
	750		28	09	280	17
	700	96.4	21	-06	268	15
	650		15	-05	267	16
	600	13.5	08	-15	254	15
	550		04	-24	225	17
	500	18.0	-5	-33	204	24
	450		-16	-38	193	28
	400	23.3	-29	-45	189	29
	350		-40	-56	178	34
	300	29.7	-52		175	47
	250		-54		196	31
	200	38.5	-51		216	9
	170		-52		Continued on page 3.	
	150	(160mb)	-53			
	130					
	110		Inversion			
	100		816 mb 30° - 774 mb 31°			
	90		569 " 030° - 537 " 04°			
	80					
	70					
	60					
	Tropopause	I 272 mb -58° 31,800'				
STORNOWAY	Time 15h. G.M.T.					
	M.S.L. 1012.2 mb					
	Surf 1010.3 mb					
	Freezing 844 mb					
	Surf	00.5	58	53	280	15
	1000	03.4	55	48		
	950		46	37	283	20
	900	31.9	39	32	287	21
	850		33	25	292	23
	800	63.0	27	18	288	26
	750		22	12	292	29
	700	97.3	17	05	300	30
	650		09	-03	297	25
	600	13.6	05	-10	294	26
	550		00	-20	302	31
	500	18.1	-06	-25	308	32
	450		-15	-32	306	47
	400	23.4	-25	-41	308	53
	350		-36	-50	305	59
	300	29.8	-50		316	71
	250		-63		318	80
	200	38.5	-57		298	42
	170		-53		290	34
	150	44.7	-55		285	24
	130		-56		282	33
	110		-57		282	29
	100	53.4	-55		260	15
	90		-55		242	14
	80		-55		213	11
	70		-55			
	60					
	Tropopause	I 232 mb -66° 34,800'				
LEUCHARS	Time G.M.T.					
	M.S.L.					
	Surf					
	Freezing					
	Surf	00.2	65	44		
	1000	03.1	63	44		
	950		55	39		
	900	32.2	47	35		
	850		39	29		
	800	63.6	32	23		
	750		25	14		
	700	09.8	20	05		
	650		13	-05		
	600	13.7	11	-13		
	550		05	-24		
	500	18.2	-04	-33		
	450		-16	-44		
	400	23.5	-25	-50		
	350		-37	-60		
	300	30.0	-53			
	250		-57			
	200	38.7	-53			
	170		-52			
	150	45.0	-54			
	130		-54			
	110		-55			
	100	53.7	-56			
	90		-57			
	80		-56			
	70		-55			
	60					
	Tropopause	I 267 mb -58° 32,400'				
ALDERGROVE	Time 15h G.M.T.					
	M.S.L. 1017.0 mb					
	Surf 1008.6 mb					
	Freezing 811 mb					
	Surf	02.3	60	45	290	14
	1000	04.7				
	950		50	39	308	13
	900	33.4	44	32	306	18
	850		37	26	304	21
	800	64.7	30	22	303	22
	750		26	12	302	24
	700	09.9	21	03	300	23
	650		19	-08	297	24
	600	13.9	13	-20	298	29
	550		07	-15	306	40
	500	18.4	-01	-15	307	49
	450		-09	-24	307	54
	400	23.8	-18	-33	308	57
	350		-30	-46	315	62
	300	30.3	-46		314	73
	250		-65		317	91
	200	39.0	-58		312	58
	170		-55		304	33
	150	45.2	-57		300	42
	130		-56		292	23
	110		-52		297	14
	100	54.0	-52		278	7
	90		-53		272	16
	80		-53			
	70					
	60					
	Tropopause	I 243 mb -68° 34,800'				
LIVERPOOL	Time 15h. G.M.T.					
	M.S.L. 1015.1 mb					
	Surf 1013.1 mb					
	Freezing 780 mb					
	Surf	0.6	61	46	310	25
	1000	04.2	58	46	309	29
	950		50	38	309	27
	900	32.9	42	31	310	30
	850		36	22	320	27
	800	64.2	34	15	329	27
	750		28	06	321	28
	700	98.9	22	00	312	31
	650		21	-4	313	35
	600	13.8	18	-12	319	39
	550		12	-21	312	42
	500	18.4	05	-27	312	48
	450		-4	-30	313	56
	400	23.8	-15	-36	309	60
	350		-27	-47	312	67
	300	30.4	-40	-58	314	73
	250		-57		312	79
	200	39.1	-69		314	84
	170		-59		310	49
	150	45.3	-55		300	43
	130		-57		320	32
	110		-59		294	39
	100	54.0	-59			
	90		-54			
	80		-60			
	70		-60			
	60		-59			
	50		-58			
	Tropopause	I 203 mb -70° 38,900'				
DOWNHAM MARKET	Time 15h. G.M.T.					
	M.S.L. 1012.0 mb					
	Surf 1007.6 mb					
	Freezing 789 mb					
	Surf	01.2	61	48	330	18
	1000	03.3	60	49		
	950		52	42	325	25
	900	32.2	45	36	319	28
	850		40	30	316	31
	800	63.7	34	25	313	33
	750		27	19	312	34
	700	98.5	23	06	310	33
	650		19	-07	300	27
	600	13.8	13	-14	296	45
	550		05	-20	297	54
	500	18.3	-01	-36	295	63
	450		-13	-45	297	66
	400	23.6	-22	-53	300	71
	350		-35	-58	302	78
	300	30.2	-47		303	64
	250		-50		297	57
	200	39.0	-50		283	42
	170		-49		277	33
	150	45.3	-49		271	27
	130		-57		280	16
	110		-55			
	Tropopause	I 278 mb -51° 31,700'				
LARKHILL	Time 15h G.M.T.					
	M.S.L. 1015.1 mb					
	Surf 999.5 mb					
	Freezing 728 mb					
	Surf	04.4	64	46		
	1000	04.2				
	950		56	40		
	900	33.3	48	35		
	850		40	28		
	800	64.8	34	22		
	750		33	11		
	700	10.0	30	-02		
	650		25	-11		
	600	14.0	21	-22		
	550		14	-23		
	500	18.6	06	-19		
	450		-06	-27		
	400	24.0	-19	-37		
	350		-32	-49		
	300	30.5	-47			
	250		-64			
	200	39.1	-60			
	170		-54			
	150	45.3	-58			
	130		-62			
	110		-58			
	100	54.0	-56			
	90		-54			
	80		-54			
	(754mb)		-55			
	Tropopause	I 221 mb -75° 37,100'				
CAMBORNE	Time 15h. G.M.T.					
	M.S.L. 1020.5 mb					
	Surf 1010.0 mb					
	Freezing 618 mb					
	Surf	02.9	60	50	350	12
	1000	05.6	59	49	318	18
	950		52	44	327	19
	900	34.5	46	38	328	19
	850		40	30	327	18
	800	66.1	39	24	321	23
	750		39	16	315	27
	700	10.2	38	07	304	30
	650		37	05	301	35
	600	14.2	29	03	305	40
	550		20	00	295	39
	500	18.9	11	-9	299	33
	450		1	-18	302	36
	400	24.4	-9	-27	299	44
	350		-24	-42	297	50
	300	31.1	-39	-55	309	51
	250		-55		317	62
	200	39.8	-63		313	57
	170		-58		304	45
	150		-57		301	37
	130		-56		300	34
	110		-54		307	20
	100	54.7	-56			
	90		-56			
	80					
	70					
	60					
	Tropopause	I 210 mb -70° 38,800'				
VALENTIA	Time 15h. G.M.T.					
	M.S.L. 1022.3 mb					
	Surf 1020 mb					
	Freezing 825 - 735 mb					
	Surf	00.3	60	51	275	07
	1000	6.0	56	48	264	07
	950		48	43	259	08
	900	34.6	40	36	259	09
	850		34	30	259	11
	800	65.8	30	20	264	18
	750		33	12	278	21
	700	101	30	02	288	25
	650		27	09	291	33
	600	141	20	04	285	31
	550		13	-6	286	37
	500	187	06	-12	290	43
	450		-5	-18	292	43
	400	241	-18	-31	294	50
	350		-31	-47	299	53
	300	306	-45		308	62
	250		-61		312	77
	200	392	-80			
	170		-71			
	150		-69			
	130		-69			
	110		-64			
	100	537	-61			
	90		-60			
	80					
	70					
	60					
	Tropopause	I 192 mb -84° 40,100'				

Inversion
672 mb 19° - 632 mb 21°
Max Wind 38,200'
210 mb 315° 96 kts.

Inversion
742 mb 26° - 734 mb 27°
Isothermal
550 - 534 mb 05°

Inversion
794 mb 33° - 754 mb 34°
Isothermal
613 - 595 mb 21°

Inversion
750 mb 39° - 724 mb 40°
Isothermal
800 - 750 mb 39°
680 - 650 " 37°

Inversion
800 mb 30° - 766 mb 33°
Isothermal
766 - 750 mb 33°

21h. G.M.T.

Station	Pressure	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LERWICK	Time 21h. G.M.T.					
	M.S.L. 1009.3 mb					
	Surf 999.3 mb					
	Freezing 820 mb					
	Surf	02.7	48	44	280	21
	1000	02.5				
	950		46	40	294	15
	900		39	32	293	17
	850	46.1	35	28	292	21
	800		30	20	290	20
	750		26	11	283	15
	700	96.7	21	00	268	12
	650		15	-08	262	12
	600	13.6	10	-19	271	15
	550		03	-21	271	15
	500	18.1	-5	-33	289	19
	450		-14	-42	304	22
	400	23.4	-25	-49	313	33
	350		-38	-58	317	45
	300	29.8	-52		310	48
	250		-55		287	24
	200	38.6	-52		271	19
	170		-52		261	18
	150		-52		259	15
	130		-53		263	17
	110		-54		269	12
	100	53.6	-55		273	09
	90	(724mb)	-56			
	80					
	70		Inversion			
	60		999 mb 48° - 982 mb 50°			
	Tropopause	II 285 mb -54° 30,900'				
STORNOWAY	Time 21h. G.M.T.					
	M.S.L. 1012.2 mb					
	Surf 1010.3 mb					
	Freezing 805 mb					
	Surf	00.5	52	51	250	10
	1000	03.3	51	50	250	17
	950		47	46	252	18
	900	31.9	42	41	253	20
	850		36	35	254	21
	800	63.1	31	30	250	21
	750		26	23	255	20
	700	97.7	21	19	268	18
	650		17	09	270	17
	600	13.7	12	04	266	19
	550		04	-04	266	25
	500	18.2	01	-05	273	28
	450		-06	-11	287	33
	400	23.6	-16	-22	292	39
	350		-28	-33	285	46
	300	30.2	-42		289	45
	250		-58		291	59
	200	38.9	-63		297	59
	170		-60		310	46
	150		Inversion			
	130		552 mb 04° - 542 mb 05°			
	110					
	100					
	90					
	80					
	70					
	60					
	Tropopause	I 214 mb -63° 37,500'				
LEUCHARS	Time G.M.T.					
	M.S.L.					
	Surf					
	Freezing					
	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					
ALDERGROVE	Time 21h. G.M.T.					
	M.S.L. 1017.1 mb					
	Surf 1008.5 mb					
	Freezing 771 mb					
	Surf	02.3	51	45	CALM	
	1000	04.6	52	45	252	06
	950		50	42	274	06
	900	32.3	43	38	276	08
	850		37	30	270	10
	800	64.6	32	32	266	13
	750		30	07	266	12
	700	10.0	29	-02	276	19
	650		24	10	282	25
	600	13.9	18	08	286	35
	550		12	-03	284	39
	500	18.5	04	-13	282	34
	450		-04	-17	282	30
	400	23.9	-14	-22	283	36
	350		-26	-34	290	46
	300	30.6	-40	-47	298	63
	250		-57		296	75
	200	39.2	-54		300	74
	170		-64		298	48
	150	45.3	-63		307	33
	130		-61		302	27
	110		-62		288	22
	100	53.9	-64			
	90		-61			
	80					
	70					
	60					
	Tropopause	II 221 mb -71° 37,200'				
LIVERPOOL	Time 21h. G.M.T.					
	M.S.L. 1017.2 mb					
	Surf 1015.2 mb					
	Freezing 780 mb					
	Surf	0.6	55	47	280	10
	1000	05.6	54	47	287	18
	950		49	45	301	19
	900	33.5	44	40	311	20
	850		38	33	319	19
	800	64.8	33	23	321	17
	750		28	16	313	18
	700	99.7	23	11	313	19
	650		21	03	315	24
	600	13.9	18	03	317	31
	550		13	02	314	37
	500	18.5	04	-05	307	39
	450		-06	-13	309	39
	400	23.9	-15	-23	310	44
	350		-27	-36	312	51
	300	30.5	-41		312	61
	250		-57		314	75
	200	39.2	-73		323	81
	170		-66		314	51
	150		-65		312	46
	130		-63		306	30
	110		-61		306	29
	100	53.8	-64		305	25
	90		-61			
	80					
	70					
	60					
	50					
	Tropopause	I 203 mb -70° 38,900'				
DOWNHAM MARKET	Time 21h. G.M.T.					
	M.S.L. 1015.5 mb					
	Surf 1011.1 mb					
	Freezing 802 mb					
	Surf	01.2	53	50	260	03
	1000	04.3	56	52	327	15
	950		53	47	326	16
	900	33.2	47	42	323	20
	850		39	35	323	21
	800	64.6	31	27	320	21
	750		25	20	320	21
	700	99.3	21	09	318	23
	650		21	03	309	32
	600	13.9	16	-07	306	36
	550		09	-15	316	39
	500	18.4	00	-20	317	44
	450		-10	-26	320	48
	400	23.8	-20	-32	320	53
	350		-31	-43	317	66
	300	30.3	-46		318	81
	250		-63		325	97
	200	39.0	-62		319	58
	170		-59		311	42
	150	45.1	-60		309	29
	130		-61		307	21
	110		-61		293	18
	100	53.7	-61		279	10
	90		-61		270	06
	80					
	70					
	60					
	Tropopause	I 278 mb -51° 31,700'				
LARKHILL	Time 21h. G.M.T.					
	M.S.L. 1018.0 mb					
	Surf 1002.1 mb					
	Freezing 717 mb					
	Surf	4.4	53	45	310	10
	1000	4.9	53	45		
	950		52	42		
	900	33.7	45	37		
	850		39	31		
	800	65.2	35	20		
	750		33	10		
	700	10.0	31	03		
	650		29	00		
	600	14.1	24	09		
	550		15	01		
	500	18.7	07	-07		
	450		-04	-14		
	400	24.1	-12	-23		
	350		-23	-38		
	300	30.8	-39	-51		
	250		-53			
	200	39.5	-72			
	170		-63			
	150	45.5	-64			
	130		-63			
	110		-64			
	100	54.1	-58			
	90		-60			
	80		-62			
	Tropopause	I 221 mb -75° 37,100'				
CAMBORNE	Time 21h. G.M.T.					
	M.S.L. 1021.5 mb					
	Surf 1010.8 mb					
	Freezing 665 mb					
	Surf	02.9	52	49	270	08
	1000	05.8	54	50	275	09
	950		50	46	295	12
	900	34.5	43	37	315	12
	850		38	33	315	15
	800	66.0	39	18	300	20
	750		39	08	292	20
	700	10.1	35	07	292	22
	650		31	12	297	25
	600	14.2	24	08	300	28
	550		16	-4	300	32
	500	18.8	09	-10	298	38
	450		-1	-13	295	37
	400	24.2	-11	-21	301	43
	350		-21	-28	302	54
	300	31.0	-34	-39	320	60
	250		-50		329	69
	200	39.8	-71		326	84
	170		-80		330	78
	150		-79		327	69
	130		-71		333	44
	110		-70		309	33
	100	54.0	-72		302	24
	90		-70		330	30
	80		-68		335	30
	70		-65		339	07
	60		-66			
	Tropopause	I 185 mb -76° 41,100'				
VALENTIA	Time G.M.T.					
	M.S.L.					
	Surf					
	Freezing					
	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	I 192 mb -84° 40,100'				

Inversion
1009 mb 51° - 979 mb 54°
805 " 31° - 785 " 33°
717 " 27° - 700 " 29°

Isothermal
682 - 641 mb 21°
Max Wind
324° 99 kts
38,000ft. 212 mb.

Inversion
1011 mb 53° - 995 mb 57°
690 " 20° - 655 " 22°

Inversion
1002 mb 58° - 983 mb 55°
Isothermal
797 - 761 mb 34°
737 - 717 " 32°
690 - 676 " 30°

Inversion
1011 mb 52° - 990 mb 55°
840 " 37° - 818 " 39°
Isothermal
900 - 887 mb 43°
818 - 737 " 39°

No. 11480

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.

Sunday 3rd September. 1950.

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

LERWICK

03Z — G.M.T.

Pressure	
Time	1009·7 mb
M.S.L.	999·6 mb
Surface	818 mb
Freezing	

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	2·7	46	44	Calm	
1000	2·6				
950		46	42	267	12
900	31·1	39	37	277	11
850		34	30	282	12
800	62·2	30	18	287	13
		25	11	286	15
750	96·8	22	05	285	13
700		18	-07	293	12
650	136	13	-07	301	13
600		06	-11	280	15
550					
	181	-01	-18	260	14
500		-11	-25	263	19
450	235	-20	-30	276	21
400		-31	-38	292	29
350					
	300	-42		292	34
300		-60		296	48
250	387	-60		286	27
200		-56		273	20
170					
		-54		263	16
150		-52		260	17
130		-55		265	17
110	537	-55		267	14
100		-55		263	12
90		-55		259	11
80					
70					
60					

Inversion 1000mb 46°- 979 mb 49°

Isothermal. 858 - 835 mb 34°

Tropopause: I 228mb -68° 35·800

STORNOWAY

03Z — G.M.T.

Pressure	
Time	1009·6 mb
M.S.L.	1007·7 mb
Surface	827 mb
Freezing	

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	0·5	51	49	210	05
1000	2·6	52	50		
950		47	43	216	17
900	31·2	41	36	221	16
850		35	31	219	16
800	62·4	30	25	222	22
		25	16	224	22
750	96·9	19	04	223	18
700		15	01	219	16
650	136	11	01	223	16
600		05	-02	234	21
550					
	181	-03	-09	228	22
500		-10	-16	246	25
450	235	-17	-21	254	28
400		-29	-34	256	30
350					
	301	-45		255	39
300		-62		263	30
250	387	-71		266	29
200		-57		272	30
170					
		-58		271	31
150		-60		273	30
130		-60		272	24
110	557	-58		273	23
100		-56		273	17
90		-58		273	13
80		-60		273	13
70		-62			
60					

Inversion 1007 mb 51°- 990 mb 53° 458 - 440 -09°

Tropopause: I 200mb -71° 38.700

LEUCHARS

03Z — G.M.T.

Pressure	
Time	1012·8 mb
M.S.L.	1011·9 mb
Surface	814 mb
Freezing	

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	0·2	46	44		
1000	3·4	47	44		
950		48	44		
900	31·9	42	38		
850		36	31		
800	63·2	30	24		
		25	18		
750	97·8	21	09		
700		17	00		
650	137	11	01		
600		05	-06		
550					
	182	-01	-10		
500		-07	-11		
450	236	-16	-20		
400		-27	-31		
350					
	302	-40	-44		
300		-58			
250	389	-72			
200		-61			
170					
		-61			
150		-63			
130		-61			
110	536	-60			
100		-58			
90		-61			
80		-61			
70		-59			
60					

Inversion 1012 mb 46°- 950 mb 48°

Tropopause: I 200mb -72° 38.900

ALDERGROVE

03Z — G.M.T.

Pressure	
Time	1012·8 mb
M.S.L.	1004·2 mb
Surface	818 mb
Freezing	

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	2·3	51	46	185	07
1000	3·5				
950		48	40	192	14
900	32·1	42	34	198	17
850		36	30	206	22
800	63·8	30	27	212	26
		25	25	207	25
750	98·0	26	23	226	30
700		23	23	252	34
650	138	19	19	264	37
600		15	14	274	41
550					
	184	06	05	277	40
500		-05	-10	274	39
450	238	-18	-26	269	44
400		-30	-38	270	44
350					
	304	-45		273	45
300		-65		266	52
250	390	-63		284	55
200		-65		290	48
170					
		-67		293	45
150		-65		287	35
130		-62		286	23
110	536	-61		298	27
100		-63			
90					
80					
70					
60					

Inversion 730 mb 25°-718 mb 27°

Isothermal. 1004 - 970 mb 51° 754 - 730 - 25°

Tropopause: II 243 mb - 68° 34.800

LIVERPOOL

03Z — G.M.T.

Pressure	
Time	1015·7 mb
M.S.L.	1013·7 mb
Surface	822 mb
Freezing	

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	0·6	49	45	Calm	
1000	4·1	52	46		
950		50	42		
900	32·9	43	34		
850		35	28		
800	64·1	30	23		
		29	10		
750	98·9	27	04		
700		23	11		
650	138	16	08		
600		07	01		
550					
	184	01	-07		
500		-04	-10		
450	238	-13	-20		
400		-27	-35		
350					
	304	-43			
300		-61			
250	391	-71			
200		-66			
170					
		-65			
150		-65			
130		-64			
110	536	-63			
100		-62			
90		-62			
80		-62			
70		-61			
60		-62			

Inversion. 1016 mb 49°- 989 mb 53° 780 - 27°- 766 - 29°

Isothermal 766 - 720 mb 29° 660 - 646 - 23°

Tropopause: I 191 mb - 74° 40.000

DOWNHAM MARKET

03Z — G.M.T.

Pressure	
Time	1016·0 mb
M.S.L.	1011·5 mb
Surface	787 mb
Freezing	

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	1·2	47	45	Calm	
1000	4·3	48	45	312	19
950		49	44	311	17
900	32·9	43	37	301	14
850		37	32	277	14
800	64·2	31	23	289	16
		29	16	299	19
750	99·0	24	04	298	23
700		23	+01	295	27
650	139	20	+02	303	32
600		12	-07	308	34
550					
	185	03	-08	308	31
500		-07	-17	301	35
450	239	-16	-25	302	41
400		-28	-35	305	48
350					
	305	-40	-46	308	64
300		-59		308	61
250	391	-71		312	67
200		-66		314	48
170					
		-66		313	37
150		-65		312	28
130		-66		309	35
110	537	-65		307	29
100		-59		311	15
90		-61		295	12
80		-62		305	16
70					
60					

Inversion. 1011 mb 47°- 979 mb 50° 800 - 31°- 787 - 32° 608 - 23°- 677 - 24°

Max Wind. 32·500ft 272 mbs 308°78kts

Isothermal. 780 - 723 mb 34°

Tropopause: I 214 mb - 72° 37.700 I 172 mb - 75° 42.900

LARKHILL

03Z — G.M.T.

Pressure	
Time	1017·9 mb
M.S.L.	1001·6 mb
Surface	700 mb
Freezing	

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	4·4	46	44		
1000	4·9	47	44		
950		50	42		
900	33·5	44	39		
850		39	31		
800	64·9	35	19		
		34	07		
750	100	32	08		
700		27	11		
650	140	20	11		
600		11	03		
550					
	186	07	02		
500		-01	-05		
450	241	-10	-16		
400		-22	-29		
350					
	308	-37	-44		
300		-51			
250	396	-67			
200		-74			
170					
		-69			
150		-67			
130		-64			
110	541	-63			
100		-61			
90		-61			
80		-60			
70		-60			
60	(42mb)	-59			

Inversion 1002mb 46°- 984 mb 53° 540 - 10°- 525 - 11°

Isothermal. 780 - 723 mb 34°

Tropopause: I 172 mb - 75° 42.900

CAMBORNE

03Z — G.M.T.

Pressure	
Time	1019·0 mb
M.S.L.	1008·4 mb
Surface	700 mb
Freezing	

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	2·9	54	50	247	08
1000	5·2	55	51		
950		50	45	237	20
900	33·9	44	37	248	17
850		39	32	248	13
800	65·4	38	28	251	18
		36	30	264	28
750	101	32	28	277	36
700		30	26	280	44
650	141	24	20	289	41
600		18	14	305	42
550					
	187	10	06	308	42
500		02	-03	302	51
450	242	-09	-15	302	54
400		-21	-28	288	56
350					
	309	-37	-43	308	75
300		-56		310	84
250	396	-77			
200		-80			
170					
		-75			
150		-73			
130		-70			
110					
100	545	-74			
90					
80					
70					
60					

Inversion. 1008 mb 54°- 1000 mb 55° 850 - 39°- 826 - 41° 774 - 35°- 750 - 36°

Tropopause: II 193 mb - 81° 41.700

VALENTIA

09Z — G.M.T.

Pressure	
Time	1009 mb
M.S.L.	1008 mb
Surface	678 mb
Freezing	

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	0·3	55	54		
1000	2·5	55	54		
950		54	53		
900	31·5	51	50		
850		47	46		
800	63·6	47	46		
		41	38		
750	99·3	32	27		
700		30	17		
650		23	16		
600		16	11		
550					
	186	14	08		
500		04	01		
450	241	-07	-10		
400		-20	-24		
350					
	309	-35	-42		
300		-49			
250	397	-67			
200		-79			
170					
		-76			
150		-74			
130		-72			
110					
100	539	-71			
90		-70			
80		-69			
70		-68			
60					

Inversion 965 mb 53°- 950 mb 54° 830 - 46°- 800 - 53°

Tropopause: I 180mb -29° 41.900

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LERWICK

09Z — G.M.T.

Pressure	
Time	1008·9 mb
M.S.L.	998·9 mb
Surface	804 mb
Freezing	

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	2·7	53	48	Calm	
1000	2·4				
950		46	42	176	12
900	30·9	41	38	187	11
850		36	33	204	09
800	62·2	31	20	220	07
		27	19	250	06
750	96·9	23	07	250	07
700		19	07	249	11
650	136	12	03	204	14
600		05	00	223	14
550					
	181	-01	+07	241	14
500		-09	-15	222	16
450	235	-16	-22	224	16
400		-28	-33	255	14
350					
	301	-43		276	20
300		-61		256	26
250	388	-55		272	21
200		-53		277	16
170					
		-54		277	20
150		-54		272	16
130		-53		268	14
110	538	-54		262	10
100		-53		269	15
90		-52		277	12
80		-53			
70					
60	(66mb)	-54			

Isothermal. 430 - 416 mb -130°

Tropopause: I 223 mb -71° 36.500

STORNOWAY

09Z — G.M.T.

Pressure	
Time	1005·7 mb
M.S.L.	1003·8 mb
Surface	814 mb
Freezing	

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	0·5	54	47		
1000	1·6	53	45		
950		50	43		
900	30·3	43	36		
850		37	30		
800	61·6	30	25		
		27	22		
750	96·3	23	17		
700		18	11		
650	136	14	07		
600		11	04		
550					
	181	04	-03		
500		-05	-14		
450	235	-16	-26		
400		-28	-42		
350					
	301	-42			
300		-54			
250	390	-48			
200		-46			
170					
		-50			
150		-50			
130		-50			
110	542	-49			
100		-49			
90		-48			
80		-49			
70		-49			
60					

Isothermal. 790 - 764 mb 29°

Tropopause: I 245 mb -65° 34.500

LEUCHARS

09Z — G.M.T.

Pressure	
Time	mb
M.S.L.	mb
Surface	mb
Freezing	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface					
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					

ALDERGROVE

09Z — G.M.T.

Pressure	
Time	1005·8 mb
M.S.L.	997·2 mb
Surface	698 mb
Freezing	

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	2·3	52	51	160	18
1000	1·5				
950		49	49	178	22
900	30·2	46	45	217	25
850		44	44	234	24
800	61·9	41	39	247	25
		39	34	256	25
750	97·4	33	26	262	24
700		24	16	267	25
650	138	25	-05	278	38
600		17	-42	284	40
550					
	184	07	-50	285	42
500		-07	-57	282	45
450	238	-15	-57	286	48
400		-30	-57	294	61
350					
	304	-45		296	74
300		-54		297	75
250	392	-53		300	64
200		-54		300	50
170					
		-53		296	45
150		-55		294	35
130		-57		298	28
110	542	-54			
100					
90					
80					
70					
60					

Inversion 869 mb 44°- 854 mb 45° 650 - 24°- 600 - 25°

Isothermal. 85 - 78 mb 41°

Tropopause: II 260 mb -54° 33 500

LIVERPOOL

09Z — G.M.T.

Pressure	
Time	1012·0 mb
M.S.L.	1010·0 mb
Surface	800 mb
Freezing	

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	0·6	52	49	180	10
1000	3·3	52	49	177	17
950		49	43	188	20
900	31·9	43	49	198	18
850		38	35	208	19
800	63·2	32	28	224	23
		29	25	245	22
750	98·1	25	21	281	25
700		25	21	294	30
650	138	20	15	291	46
600		13	08	292	49
550					
	184	05	-04	291	41
500		-06	-20	292	38
450	238	-17	-25	286	35
400		-31	-39	282	31
350					
	304	-46		288	30
300		-61		289	38
250	391	-59		295	51
200		-59		300	48
170					
		-60		305	46
150		-62		284	30
130		-62		305	28
110	538	-62		314	25
100		-61		308	25
90		-60		302	16
80		-59		276	13
70		-57		302	09
60					

Isothermal. 700 - 635 mb 25°

Tropopause: II 245 mb - 63° 34 700

DOWNHAM MARKET

09Z — G.M.T.

Pressure	
Time	1015·5 mb
M.S.L.	1011·0 mb
Surface	814 mb
Freezing	

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	1·2	50	47	190	02
1000	4·2	51	47	224	09
950		49	39	251	12
900	32·9	43	34	263	15
850		39	31	270	17
800	64·2	30	25	278	20
		26	21	283	16
750	98·9	25	12	270	15
700		22	18	256	22
650	139	16	12	251	22
600		09	04	288	21
550					
	184	06	00	302	27
500		-03	-10	298	29
450	238	-15	+23	297	33
400		-28	-37	288	38
350					
	305	-43		281	51
300		-60		282	48
250	392	-59		302	55
200					
170					
150					
130					
110					
100					
90					
80					
70					
60					

Inversion 1016mb 50°- 980mb 53° 758 - 25°- 738 - 28°

Isothermal. 681 - 658 mb 23° 555 - 525 - 09°

Tropopause: I 230 mb -65° 36.400

LARKHILL

09Z — G.M.T.

Pressure	
Time	1017·2 mb
M.S.L.	1001·1 mb
Surface	800 mb
Freezing	

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	4·4	50	50		
1000	4·7				
950		45	42		
900	33·1	40	36		
850		35	32		
800	64·3	32	31		
		29	28		
750	99·4	27	25		
700		25	23		
650	139	22	20		
600		15	12		
550					
	185	07	02		
500		-03	-09		
450	240	-12	-19		
400		-25	-33		
350					
	306	-39	-48		
300		-49			
250	395	-54			
200		-55			
170					
		-60			
150		-60			
130		-57			
110	544	-54			
100		-55			
90		-51			
80					
70	(75mb)	-50			
60					

Isothermal. 831 - 800 mb 32° 664 - 650 - 25°

Tropopause: I 222 mb - 58° 37.400

CAMBORNE

09Z — G.M.T.

Pressure	
Time	1013·7 mb
M.S.L.	1003·2 mb
Surface	665 mb
Freezing	

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surface	2·9	56	55	200	18
1000	3·8				
950		53	52	228	39
900	32·7	51	50	247	39
850		48	47	272	38
800	61·8	44	43	280	32
		41	39	287	22
750	101	37	35	306	23
700		31	26	305	31
650	141	26	22	303	41
600		21	17	303	52
550					
	188	14	06	296	58
500		06	-14	307	56
450	243	-04	-41	310	75
400		-17	-55	302	66
350					
	311	-29	-56	311	90
300		-47		304	96
250	400	-66		308	98
200		-78			
170					
		-79			
150		-75			
130		-72			
110	543	-72			
100		-70			
90		-68			
80		-67			
70	(78mb)				
60					

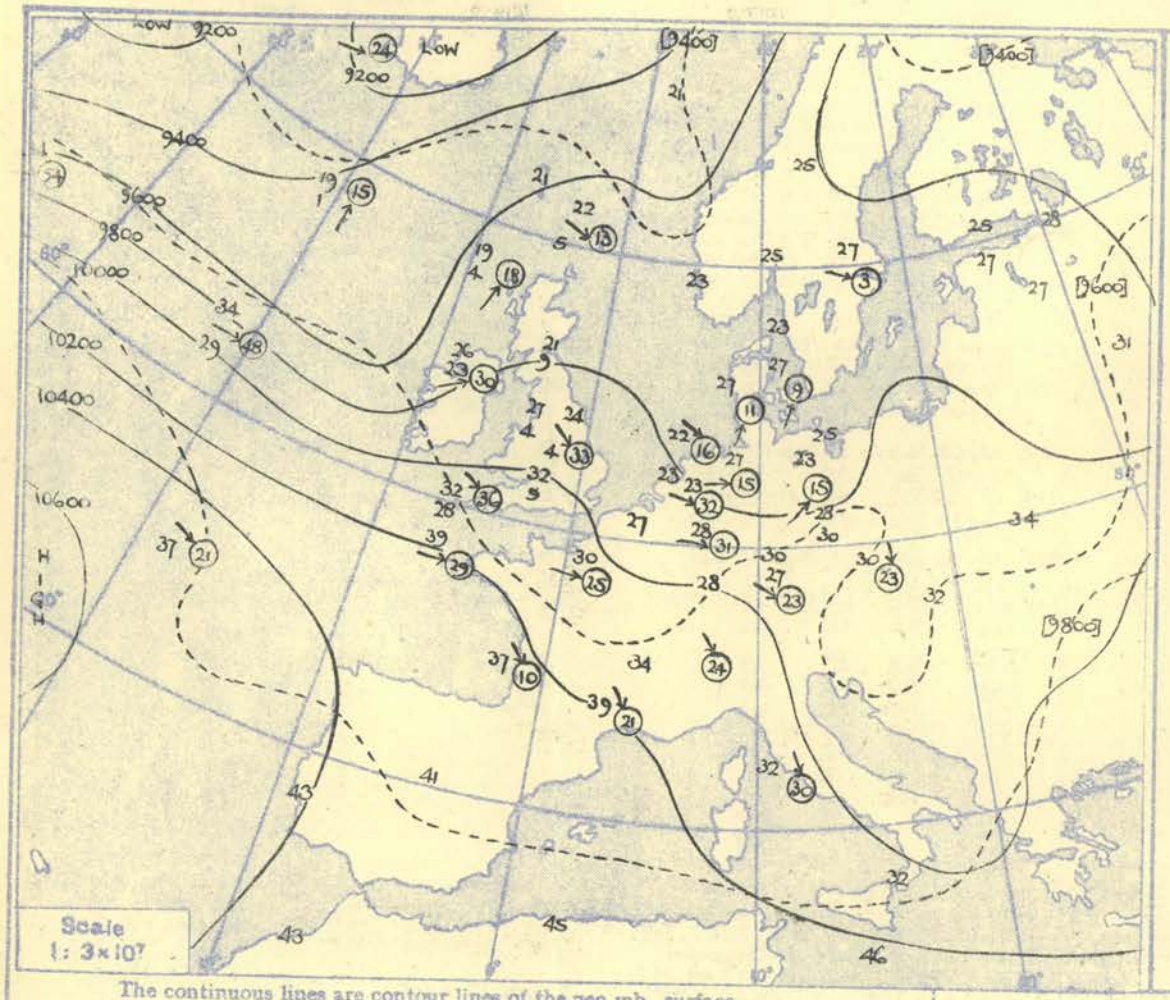
Inversion 576mb 23°- 568 mb 24° 164 - -78°- 155 - -77°

Isothermal. 170 - 164 mb -78°

Tropopause: I 144 mb -82° 46 800

Sunday 3rd September, 1950.

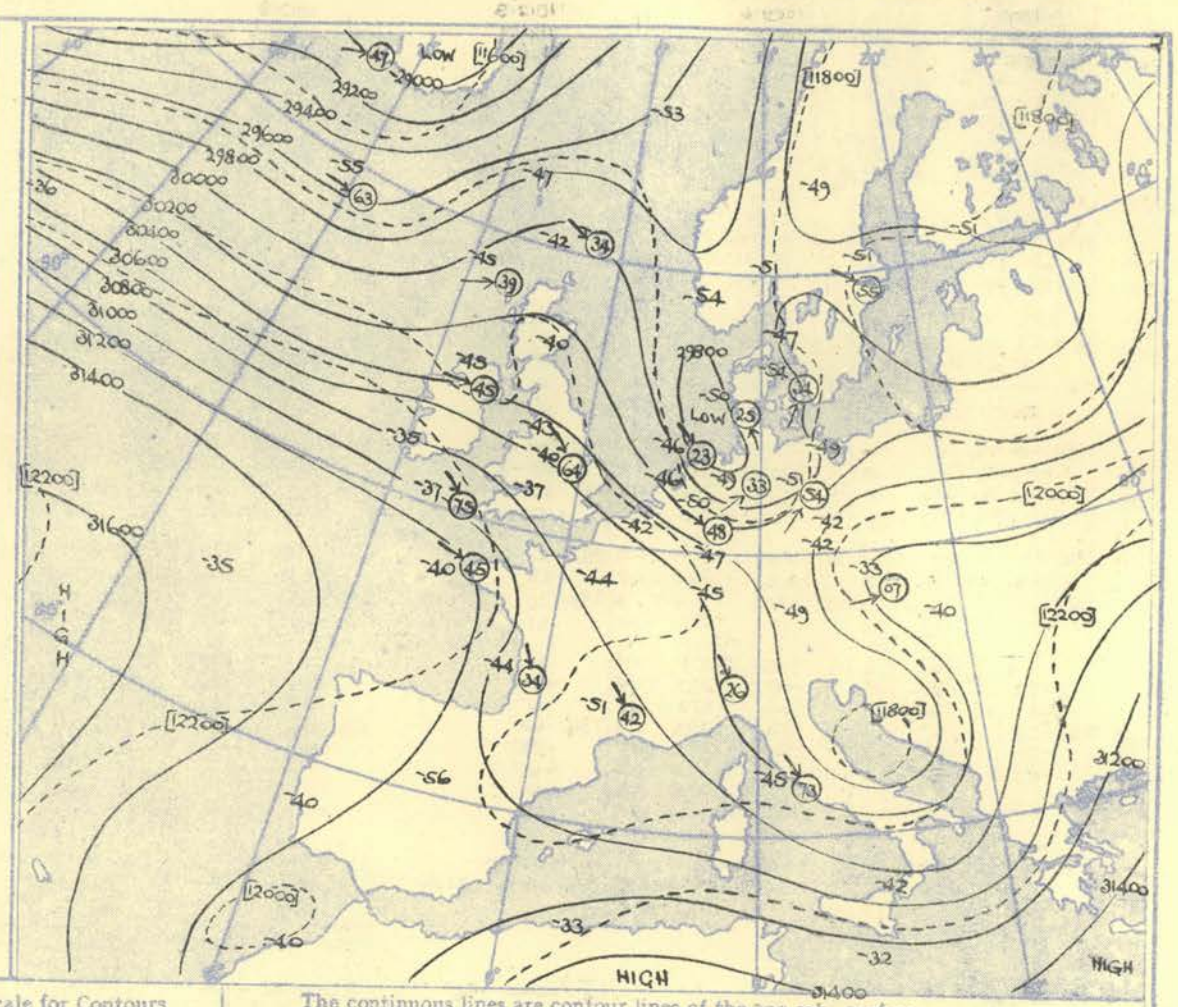
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. G.M.T.



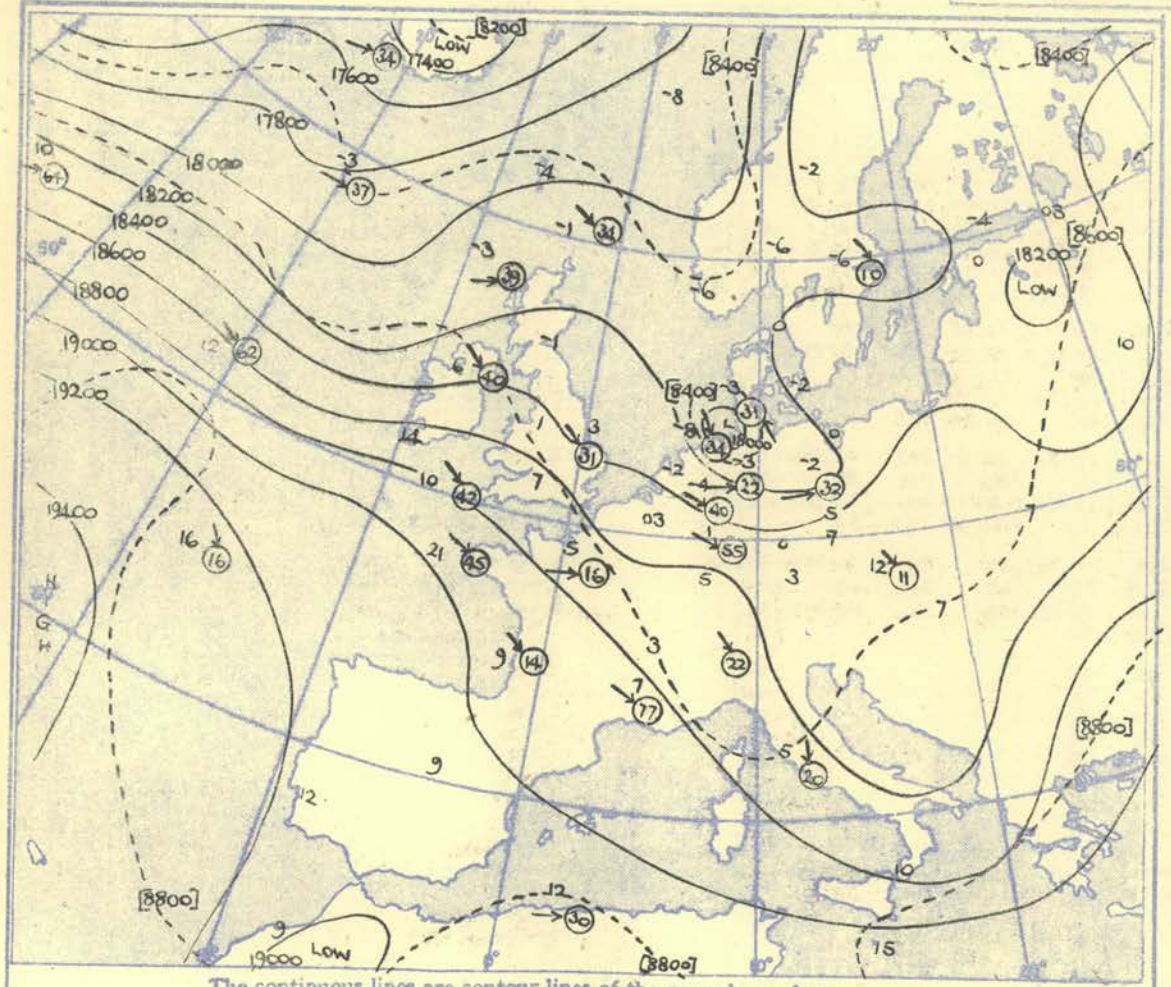
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

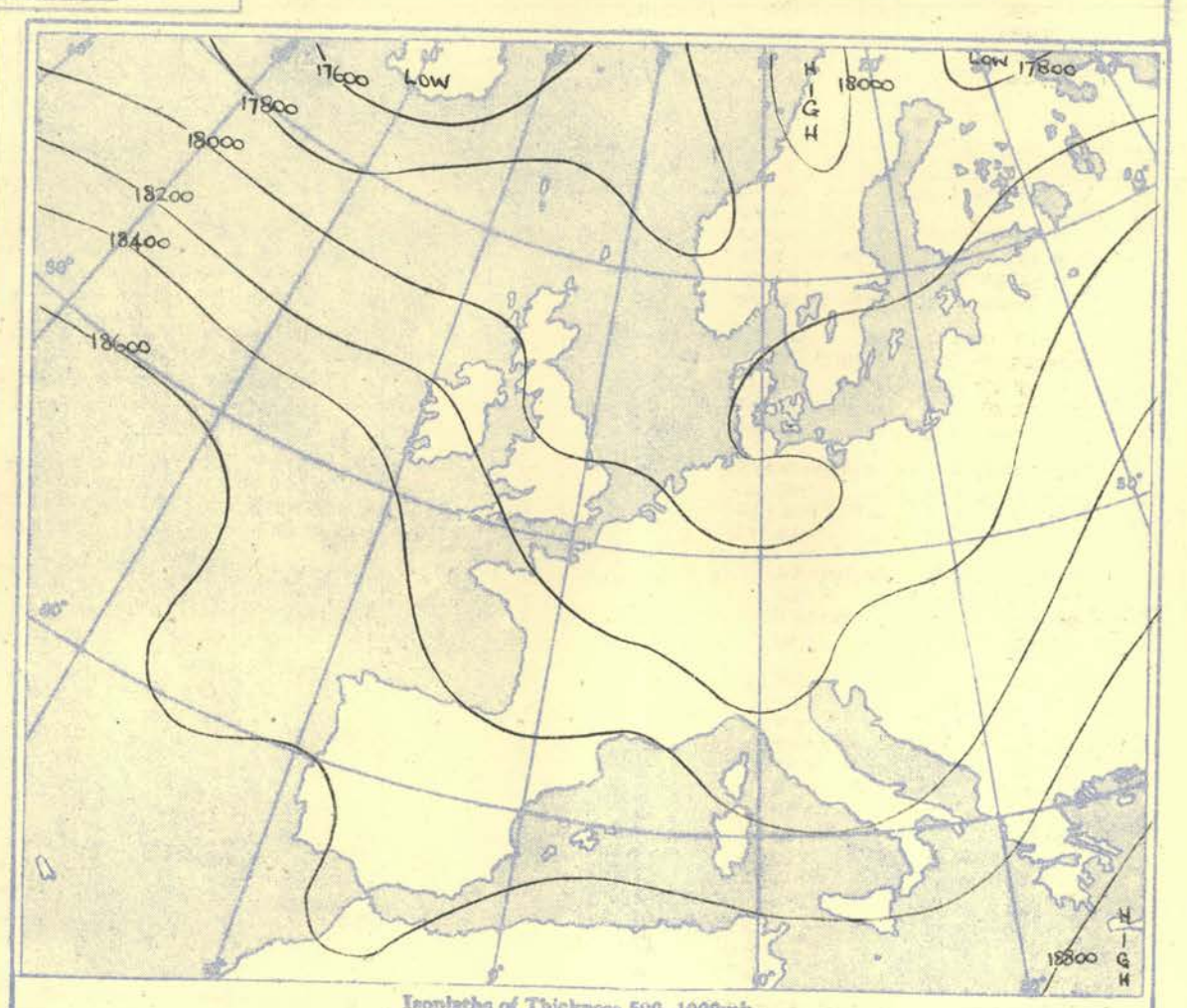
100 60 40 30 20 15 10 knots



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

	48·2N 20·5W	49·5N 14·7W	48·2N 17·0W	39·5N 12·2W									
Time	15h	1615h	1230h	1430h									Time
Pressure M.S.L.	1021·2 mb	1018·7 mb	1029 mb	1025 mb	mb	mb	mb	mb	mb	mb	mb	mb	Pressure M.S.L.
Pressure Surf	1017·2 mb	1015·1 mb	1025 mb	1021 mb	mb	mb	mb	mb	mb	mb	mb	mb	Pressure Surf
Pressure Freezing	610 mb	620 mb	610 mb	595 mb	mb	mb	mb	mb	mb	mb	mb	mb	Pressure 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	1·0	59	59	1·0	59	59		67	60		68	62													Surf
1000	5·9	56	56	5·1			7·9	63	60	7·1	63	61													1000
950		60	55		62	62		58	55		58	56													950
900	35·1	61	44	34·1	60	57		59	43		62	46													900
850		57	34		56	53		56	33		60	48													850
800	67·7	52	25	67·0	53	47		52	29		55	41													800
750		49	20		48	37		49	16		52	24													750
700	104	43	25	103	43	31	106	47		106	49	16													700
650		35	25		35	33		23			41	12													650
600	145	30	24	144	30			31	14		33														600
550		21	20		21			26			25														550
500	192	17		191	13		194	18		194	13														500
450																									450
400																									400
350																									350
300																									300
250																									250
200																									200
170																									170
	Cloud. 8/8 St 1000-990mb 4/8 Ci NR.			Cloud. 8/8 Sc 1000-890mb 5/8 Ci NR.			Cloud. 6/8 Sc 950mb.			Cloud. 7/8 Sc 970-930mb														
	Inversion 1000mb 56° 900 " 61°			Inversion 1019 mb 59° 950 " 62°			Inversion 950mb 58° 900 " 59°			Inversion 950mb 58° 900 " 62°														

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

Place	52·5N 20W Cirrus.		52·5N 20W Cirrus.		52·5N 20W Cirrus.		52·5N 20W Cirrus		Newhaven.										Place
Time	03h.		09h		15h.		21h		21h										Time
Type									Pilot.										Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Surf.	260	35	270	20	210	27	220	26	170	02									Surf.
1,000	270	36	270	20	240	42	240	36	221	15									1,000
2,000	270	40	270	23	240	47	240	40	227	15									2,000
3,000	270	46	270	24	240	49	240	51	234	13									3,000
4,000	270	47	270	28	250	46	240	57	240	14									4,000
5,000	270	47	270	40	260	55	240	60	242	15									5,000
6,000					250	52			242	15									6,000
8,000									252	13									8,000
10,000	270	48	270	51	250	58	240	62	282	18									10,000
14,000	270	58	280	58	250	52	240	67	293	40									14,000
18,000	290	62	270	46			(16,000')		299	54									18,000
24,000	280	76	270	54					309	75									24,000
30,000									306	96									30,000
40,000									311	84									40,000
50,000									367	33									50,000
									(48,000')										

NEPHOSCOPE OBSERVATIONS

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

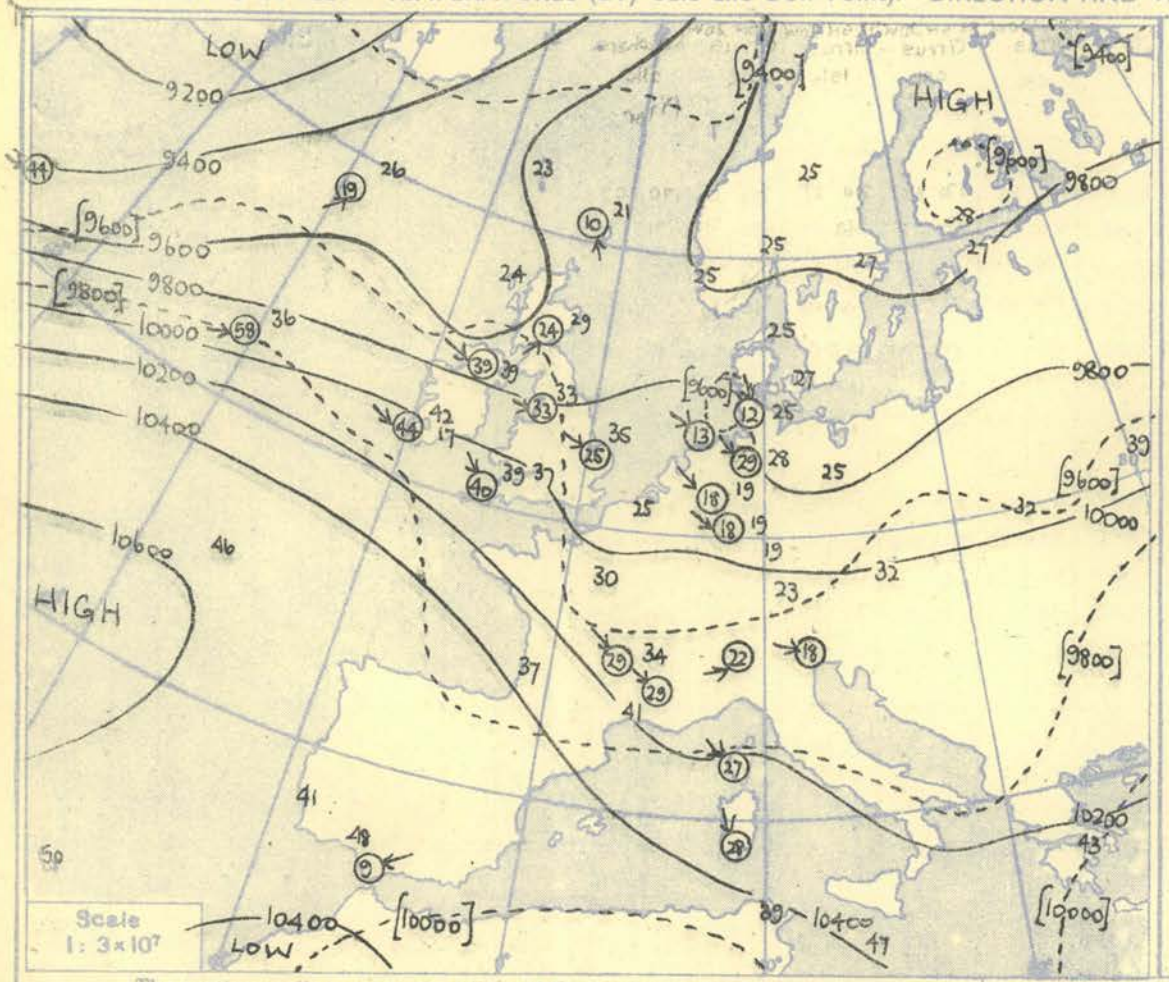
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	WEATHER EXPLORER	WEATHER EXPLORER	WEATHER EXPLORER	WEATHER EXPLORER	CIRRUS	CIRRUS	CIRRUS	CIRRUS		Ship
Lat/Long	58·9N 19·2W	58·9N 19·2W	58·1N 18·8W	69·2N 18·7W	52·5N 20·0W	52·5N 20·0W	52·5N 20·0W	62·5N 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.	1000 mb	1000 mb	999 mb	995 mb	1005 mb	1008 mb	1006 mb	1003 mb	mb	Pressure M.S.L.
Pressure Surf	1000 mb	1000 mb	999 mb	995 mb	1005 mb	1008 mb	1006 mb	1003 mb	mb	Pressure Surf
Pressure Freezing	820 mb	800 mb	745 mb	750 mb	690 mb	630 mb	662 mb	600 mb	mb	Pressure Freezing

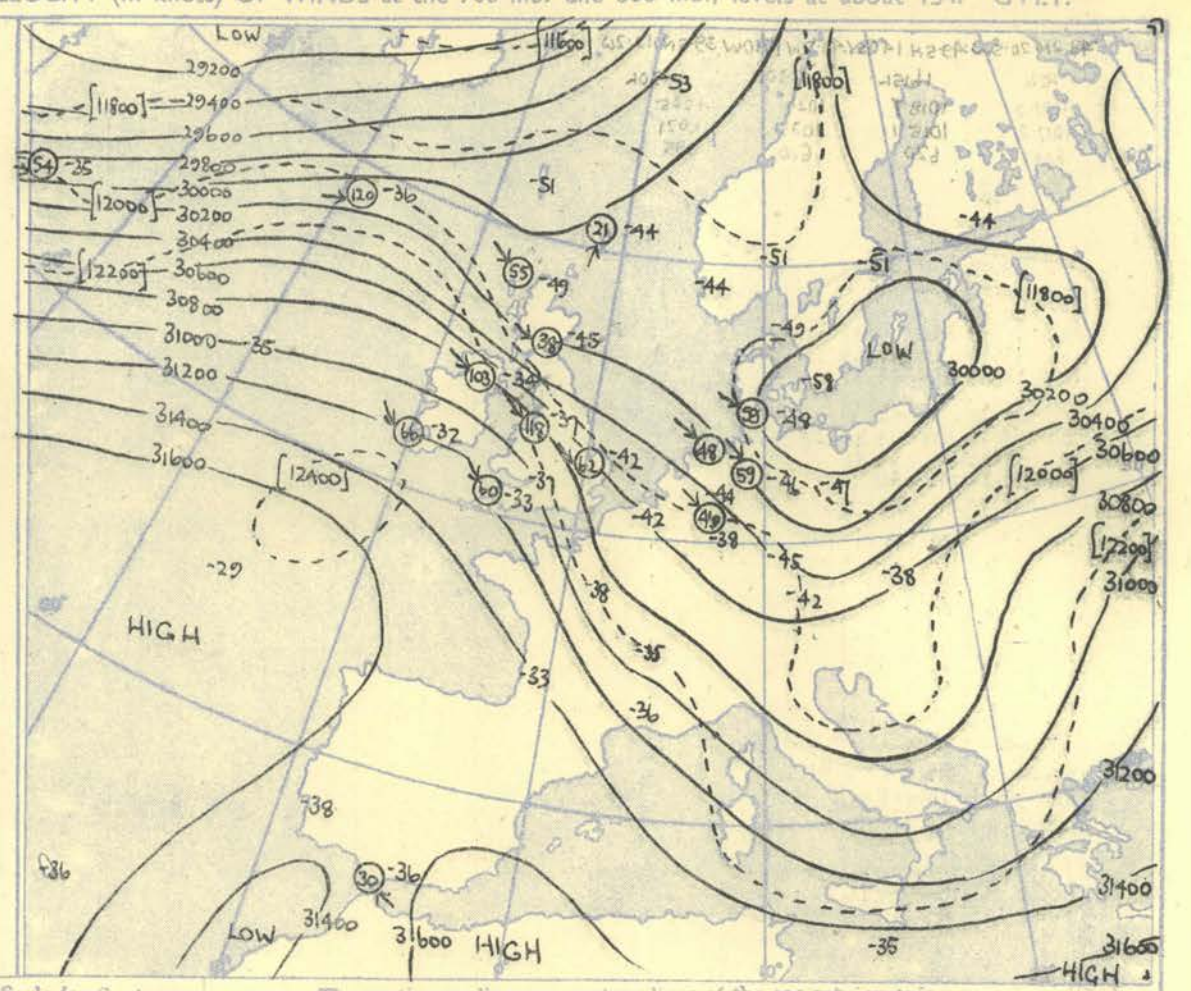
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Pressure mb
Surf		52	46	120	05		50	48	180	05		54	50	150	12		54	52	160	20		57	55				57	57				59	57				Surf
1000	0	52	46	120	05	0	50	48	190	05	-2					+1·5	50	50	158	25	1·4	57	54			1·6	57	57			1·0	59	57			1000
950		46	42	154	07		48	44	186	05		50	46	177	12		50	50	158	25															950
900	28·5	40	37	160	08	28·5	42	39	183	07	28·5	44	41	183	19	27·2	46	46	173	30		52	45				52	52				55	55			900
850		35	33	162	08		37	34	182	10		40	36	206	18		42	42	190	26															850
800	59·6	30	28	165	16	59·8	32	28	187	08	60·0	37	33	224	19	58·8	38	38	191	22															800
750		25	22	178	18		29	23	239	06		33	29	233	20		32	32	192	24				for	for			for	for			for	for		750
700	94·1	19	17	195	15	94·5	23	17	253	12	95·1	26	24	237	19	93·9	29	29	200	19	98·7	34	30			99·5	36	36			99·5	36	34			700
650		12	10	248	12		19	13	257	22		22	02	241	26		25	22	235	28				winds	winds				winds	winds			winds	winds		650
600	133	12	05	275	15	134	13	08	275	27	135	17	-02	243	32	134	20	19	235	39															600
580		04	-02	258	28		08	01	277	25		10	05	231	32		14	03	243	48				see	see				see	see			see	see		580
500	178	-03	-14	260	37	179	-02	-15	262	30	181	01	-16	253	33	180	05	-05	238	45	184	12	-15			187	12	12			186	10	03			189	16	16			500
450		-12	-40	267	40		-10	-29	262	53		-04	-11	253	64		-01	-22	243	64				top	top				top	top			top	top		450
400	231	-25	-53	275	44	232	-23	-39	280	43	235	-13	-22	269	100	234	-11	-39	238	73																	400
350		-40	-60	270	60		-32	-48	276	63		-26	-32	255	109		-21	-48	250	89				of	of				of	of			of	of		350
300	296	-55		267	63	298	-40	-57	281	126	301	-36	-47	258	120	301	-31	-46	249	114						310	-31				309	-35				311	-33				300
250		-59		266	54		-51		278	135		-54		264	143		-44		237	130				page	page				page	page			page	page.		250
200	383	-52		261	38	387	-52		277	69	389	-60		254	88	391	-65		253	133						399	-67				396	-76				399	-74				200
170		-55		259	39		-52		275	54		-56		261	52		-63		265	162																		170
150		-58		259	40		-56		275	51		-58		261	39																						150
130		-60		259	40		-56		275	41		-56		256	41																						130
110		-60		259	33		-56		275	38		-54		245	31																						110
100	532	-60		259	25	536	-57		275	35	539	-55		231	32													-71									100
90		-59		252	20		-58		275	26		-51		253	31																	-69					90
80		-60					-57		275	21		-51		235	15																						80
70							-55		275	19		-51		253	21																						70
60							-55		275	17		-50		253	13																						60
												-48		253	15																						
												-40																									
	Inversion 640 mb 11° - 625 mb 15° Isothermal 510 - 500 mb - 03°					Isothermal 815 - 800 mb 32° 685 - 675 " 22° 535 - 515 " 01°					Inversion 680 mb 22° - 667 mb 23° Isothermal 813 - 785 mb 37° 610 - 590 " 17°					Isothermal 735 - 722 mb 30°					Inversion 965 mb 52° - 955 mb 55° 890 " 52° - 865 " 66° 475 " 07° - 470 " 09° Isothermal 608 - 575 mb 21°					Inversion 915 mb 52° - 900 mb 54° 850 " 50° - 815 " 52° Isothermal 705 - 685 mb 38° 500 - 480 " 12°					Inversion 966 mb 55° - 950 mb 59° Isothermal 950 - 914 mb 59°					Inversion 954 mb 59° - 910 mb 63°				
Tropopause	I 262 mb - 62° 32,500'					I 235 mb - 54° 35,200'					I 216 mb - 64° 37,300'					II 197 mb - 67° 39,400'					NR.					I 172 mb - 78° 43,000'					I 195 mb - 78° 41,200'					I 176 mb - 80° 42,500'					Tropopause

Sunday 3rd September 1950.

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

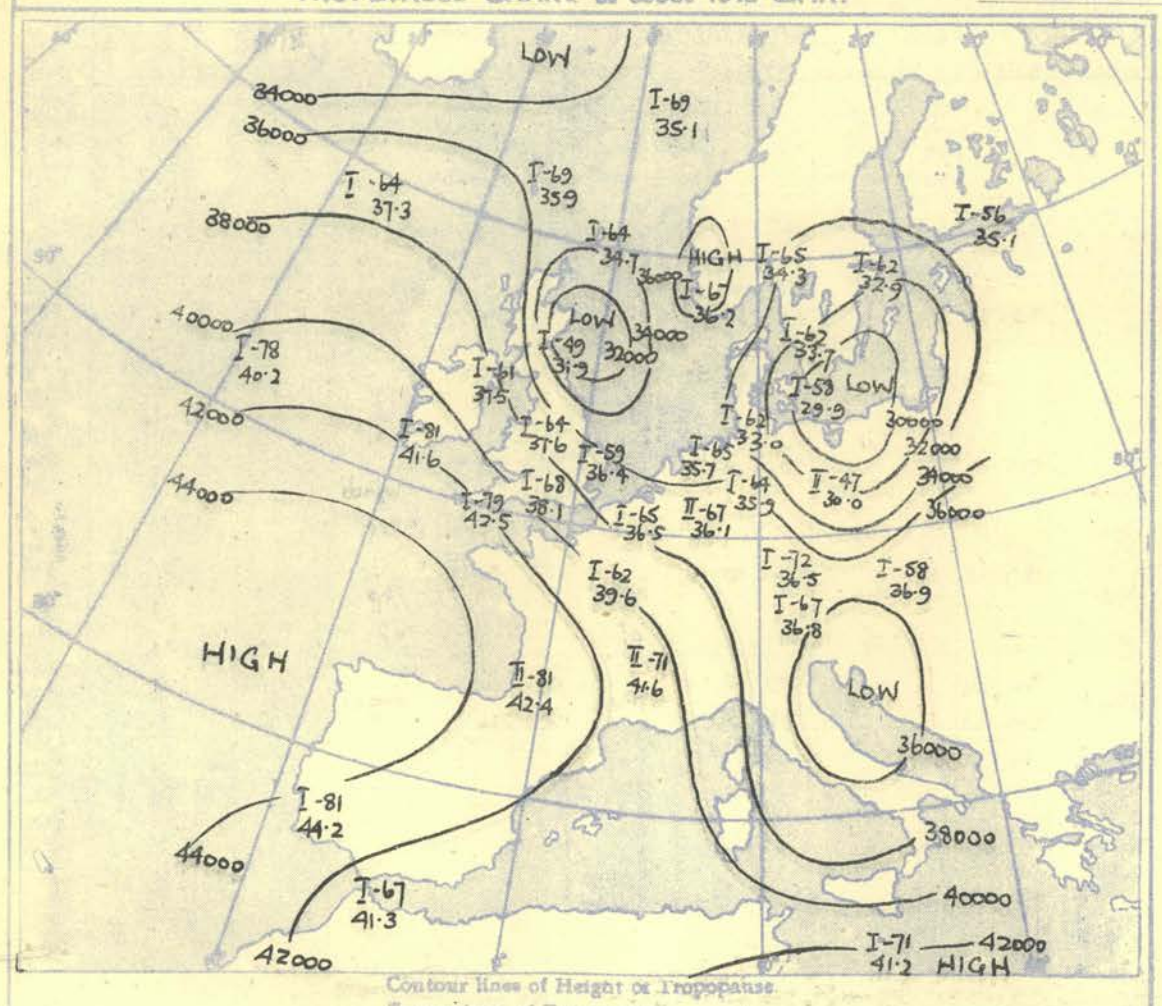


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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

100 80 60 40 20 15° 10 knots

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



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

The warm ridge moving across the British Isles was intensified by subsidence in the warm sector and behind the cold front of the depression crossing the British Isles.

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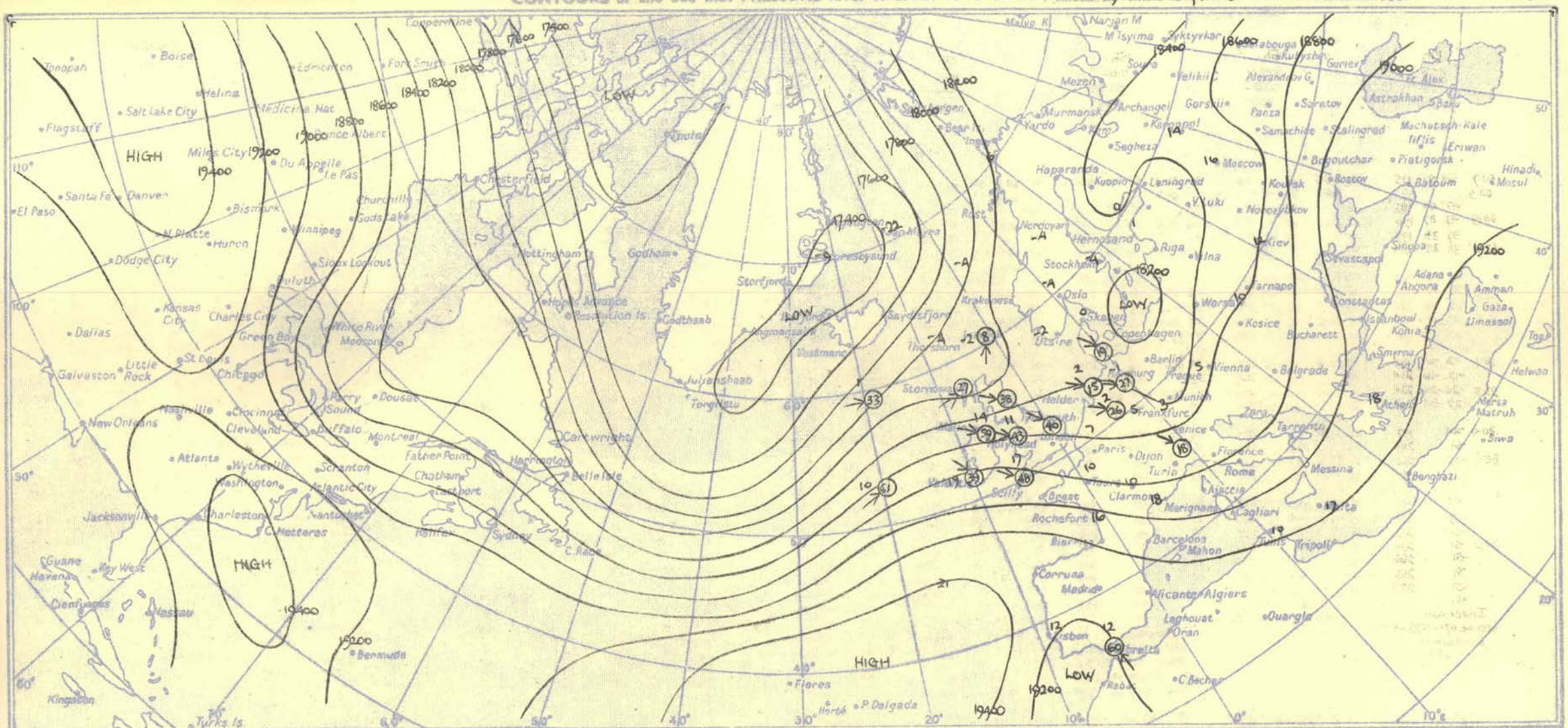
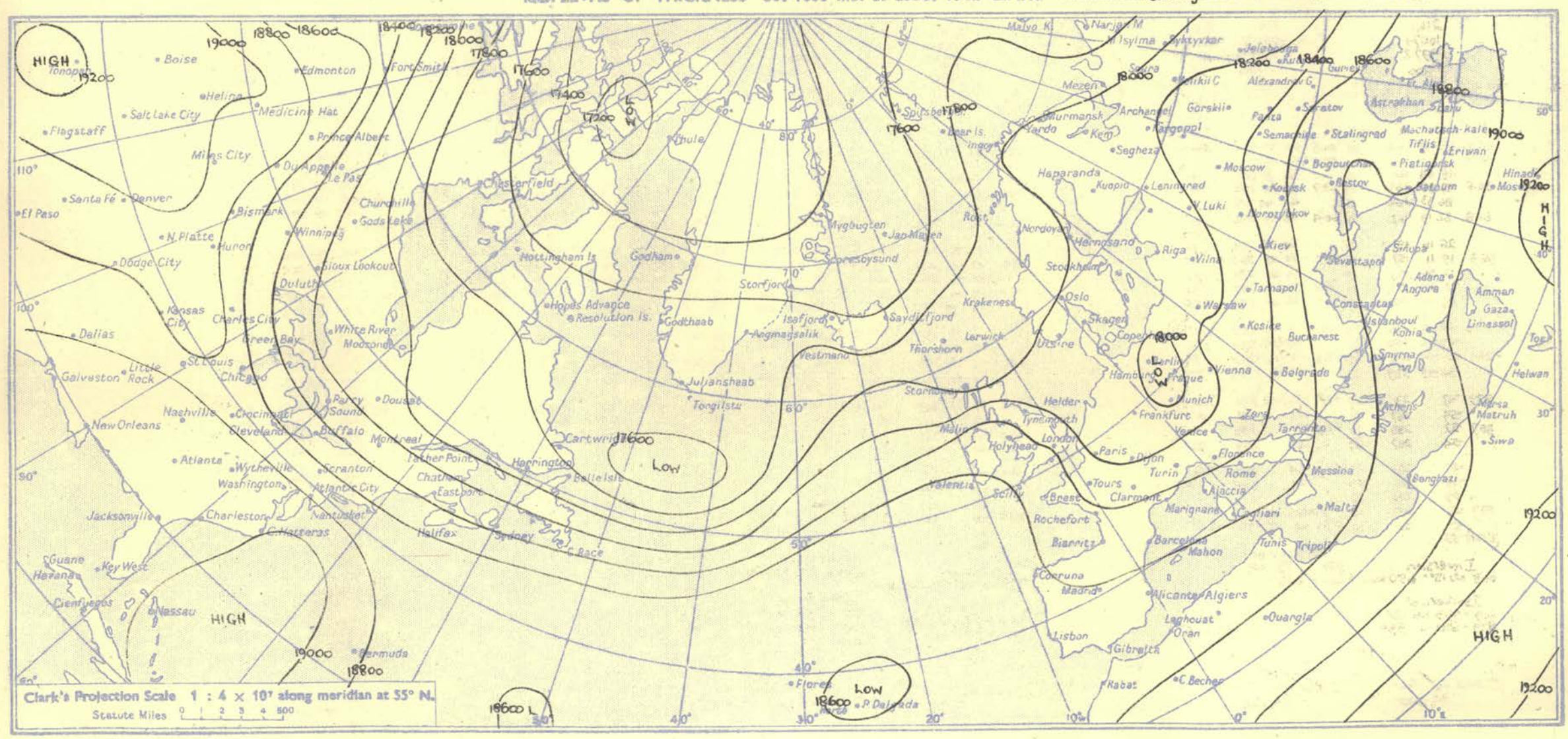
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Sunday 3rd. September 1950.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Sunday 3rd September 1950.



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	1008·3 mb	998·4 mb	792 mb
STORNOWAY	15h.	1002.5 mb	1000·6 mb	800 mb
LEUCHARS	15h.	1006·3 mb	1005·5 mb	744 mb
ALDERGROVE	15h.	1003·3 mb	994·9 mb	628 mb
LIVERPOOL	15h.	1007·3 mb	1005·3 mb	695 mb
DOWNHAM MARKET	15h.	1012·7 mb	1006·3 mb	683 mb
LARKHILL	15h.	1013·4 mb	997·5 mb	661 mb
CAMBORNE	15h.	1012·0 mb	1002·7 mb	605 mb
VALENTIA	15h.	1012·2 mb	1010 mb	580 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	51	125	08	00·5	54	49	120	16	00·2	57	50	160	10	02·3	64	62	230	12	00·6	57	52	160	18	01·2	58	49	180	10	4·4	55	55	195	12	02·9	62	60	270	12	00·3	61	58	257	08	Surf
1000	02·3					00·7	54	49			01·7										02·0	57	52	166	21	03·5	57	48			3·7					03·6	62	60			3·3	60	57	261	12	1000
950		47	44	182	10		47	43	120	19		49	46	172	20		58	58	241	22			52	48	209	22			49	41	211	23		51	49				57	54	272	24		54	53	276	24	950
900	30·9	42	37	190	10	29·3	40	39	136	20	30·4	44	41	178	22	30·1	53	51	251	29	30·9	50	47	247	25	32·2	42	32	232	22	32·6	50	47			32·8	56	51	275	26	32·5	49	49	289	32	900
850		37	33	197	09		36	36	170	16		39	35	209	21		47	47	260	29		46	42	257	27		42	32	255	21		48	45				53	45	276	27		54	43	290	37	850
800	62·2	33	29	184	08	60·6	32	32	174	14	61·9	39	35	232	22	62·1	47	38	272	31	62·8	42	34	261	29	63·8	38	28	266	21	64·6	45	41			65·1	49	42	281	30	64·8	51	24	290	41	800
750		26	22	168	08		28	28	167	10		33	29	223	21		45	32	279	35		40	30	264	30		34	24	268	24		44	27				46	39	289	37		47	23	288	45	750
700	96·9	21	19	172	10	95·4	24	24	188	15	97·1	29	25	237	23	98·0	39	18	282	39	98·4	33	26	269	33	99·1	35	24	282	25	10·1	37	26			10·1	39	32	294	40	10·1	42	17	287	44	700
650		17	08	186	16		22	22	243	23		25	20	255	25		35	05	286	44		30	09	285	33		28	18	296	24		30	17				33	24	293	38		41	-25	290	43	650
600	13·6	07	01	193	19	13·5	16	16	248	25	36·9	16	10	266	27	13·9	29	-02	288	50	13·9	26	-7	288	33	13·9	20	02	291	30	14·1	26	08			14·2	31	12	305	36	142	34		288	45	600
550		05	00	198	19		07	07	246	27		13	-17	266	37		22	-06	286	57		18	-18	288	35		18	-42	304	37		20	-08				24	-7	303	44		27		286	41	550
500	18·1	-2	-6	199	18	18·0	-02	-16	257	27	82·7	05	-32	276	38	18·6	14	-13	296	59	18·5	11	-28	293	43	18·6	08	-49	306	40	18·7	11	-28			18·9	17	-17	302	48	189	19		287	39	500
450		-12	-16	214	24		-11	-32	269	27		-06	-40	275	36		04	-21	308	75		-1	-35	299	54		-03	-57	305	42		02	-35				08	-26	309	39		09		292	44	450
400	23·5	-20	-25	224	16	23·4	-25	-41	270	30	36·7	-19	-50	278	35	24·1	-06	-21	305	92	23·9	-12	-42	308	65	24·0	-13	-54	302	46	24·2	-09	-40			24·5	-5	-39	307	63	24·5	-1		293	55	400
350		-29	-34	207	23		-40	-55	269	27		-32	-59	280	25		-19	-25	300	95		-23	-50	317	92		-28	-56	302	50		-22	-45				-18	-48	310	69		-15		299	62	350
300	30·0	744		197	21	29·8	-49		289	95	02·3	-45		281	38	30·8	-34	-42	306	103	30·6	-37	-60	315	118	30·6	-42		313	62	30·9	-37	-35			31·2	-33	-60	324	63	31·3	-32		304	66	300
250		-61		203	21		-55		299	76		-49		302	62		-50		313	105		53		311	108		-54					-56				-50		320	80		-50		307	72	250
200	28·8	-49		266	22	28·6	-57		291	63	91·1	-51		303	53	29·7	-60		307	89	29·4	-64		313	102	29·4	-57				29·7	-65			40·0	-69		309	79	401	-74		298	82	200
170		-50		272	22		-59		285	44		-51		306	44		-63		305	72		-62					-55					-61				-77		311	72		-79				170
150		-53		282	22	44·7	-61		295	38		-52		295	33	45·8	-59		301	68	45·6	-56				45·6	-54		316	41	45·8	-58					-73		318	69		-75				150
130		-53		277	21		-64		280	33		-51		296	32		-58		287	48		-57					-57		306	34		-61					-72		320	56		-69				130
110		-52		273	20		-63		278	27		-56		313	24		-56		322	31		-57					-58		308	30		-59					-72					-67				110
100	53·9	-51		270	19	53·3	-62		272	27	41·8	-51		309	21	54·5	-58		305	26	54·3	-56				54·4	-58		312	24	54·4	-58				54·3	-72				54·4	-64				100
90		-51		266	16		-61		275	23		-51		248	16		-52		289	21		-53					-58		316	21		-55					-69					-60				90
80		-51		255	12		-60		281	14		-52		247	19		-52		266	24		-54					-55		300	15							-66					Inversion				80
70		-51		253	12							-52		286	12		-52		270	20	Inversion						-52		279	10	Isothermal					-66					900 mb 49°-869 mb 55°				70
60		-51					Isothermal					-52		292	09		-51				682 mb 29°-667 mb 31°					654	-50		278	07	940-880 mb 50°					(67 mb)	-62				700-685 " 43°				60
		Inversion					850-837 mb 36°					-51					Inversion					Isothermal					+49										-61					Isothermal				
		600 mb 07°-575 mb 09°										Inversion					821 mb 43°-786 mb 50°					800-760 mb 42°					Inversion										Inversion					423-416 mb 3°				
		Isothermal										838 mb 38°-808 mb 39°					711 " 38°-690 " 40°										875 mb 41°-850 mb 42°										920 mb 54°-893 mb 57°									
		706-683 mb 21°										534 " 15°-575 " 17°					Isothermal										730 " 32°-700 " 35°										654 " 33°-625 " 36°									
												Isothermal					930-916 mb 55°										593 " 19°-571 " 22°																			
												718-677 mb 29°															Inversion																			
																											940-880 mb 50°																			
Tropopause	I 243 mb -64° 34,700'					II 325 mb -47° 28,000'					I 279 mb -49° 31,900'					I 222 mb -61° 37,500'					I 217 mb -64° 37,600'					I 230 mb -69° 36,400'					I 215 mb -68° 38100'					I 177 mb -79° 42,500'					I 187 mb -81° 41,600'					Tropopause

21h G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	21h.	1007·1 mb	997·2 mb	800 mb
STORNOWAY	21h.	1000·9 mb	999·6 mb	730 mb
LEUCHARS				
ALDERGROVE	21h.	1006·0 mb	997·5 mb	616 mb
LIVERPOOL	21h.	1007·4 mb	1005·4 mb	616 mb
DOWNHAM MARKET	21h.	1010·1 mb	1005·9 mb	719 mb
LARKHILL	21h.	1011·1 mb	995·4 mb	618 mb
CAMBORNE	21h.	1014·5 mb	1004·0 mb	607 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	53	49	140	09	00·5	53	53	170	06						02·3	57	53	270	15	00·6	61	56	280	14	01·2	55	55	160	05	04·9	60	56			02·9	58	58	270	12						Surf
1000	01·9					00·0	53	53								01·6					02·1	60	55			02·8	55	55			03·1					04·0	58	58								1000
950		48	44	161	17		50	50	201	07							53	49	275	25		56	51	284	26		53	52	245	18		56	51				55	54	284	29						950
900	30·5	42	38	163	17	28·7	46	46	208	10						30·5	48	45	280	29	31·1	50	44	290	26	31·8	51	49	274	21	32·2	50	47			33·1	55	54	292	30						900
850		36	33	164	18		44	44	218	10							52	38	284	34		43	37	291	26		46	43	265	21		51	38				53	45	296	33						850
800	61·8	32	19	162	16	60·4	40	39	236	11						62·6	47	32	287	37	62·9	45	33	290	35	63·8	40	37	267	21	64·2	45	37			65·4	52	22	301	38						800
750		25	16	151	15		34	33	239	15							47	21	289	39		43	14	295	35		36	30	269	25		43	20				46	28	302	40						750
700	96·3	19	11	157	15	95·7	29	22	263	21						98·7	42	04	294	42	98·8	40	-3	300	37	99·2	30	27	273	27	10·0	40	-12			10·2	43	20	303	41						700
650		17	06	170	15		24	00	278	23							38	05	296	44		35	-16	294	46		29	-07	291	33		34	-19				40	02	307	42						650
600	135	12	08	221	14	13·6	20	-15	284	40						14·0	29	10	287	46	13·9	29	-18	300	50	13·9	25	-32	300	35	14·1	29	-23			14·3	30	00	307	39						600
550		05	-01	235	17		13	00	277	45							23	19	287	51		23	-12	300	53		17	-30	305	45		22	-17				25	-8	304	39						550
500	18·1	-01	-10	245	19	182	8	-8	287	43						18·7	17	13	294	53	18·6	13	-13	305	55	18·5	08	-37	309	63	18·7	13	-26			19·0	17	-23	299	39						500
450		-09	-30	250	23		00	-20	294	72							08	04	297	60		04	-17	308	54		00	-33	314	68		02	-29				8	-21	305	41						450
400	23·4	-21	-40	248	25	23·6	-12	-26	292	73						24·2	-02	-06	298	63	24·1	-6	-16	312	63	24·0	-12	-29	323	77	24·2	-11	-36			24·5	-1	-27	325	43						400
350		-36	-53	289	23		-23	-36	289	90							-14	-21	294	69		-19	-29	306	77		-24	-34	322	81		-23	-34				-14	-39	319	51						350
300	29·9	-47		271	29	30·3	-36	-48	291	101						31·1	-28	-37	303	84	30·9	-34	-43	313	79	30·7	-39	-48	325	104	30·9	-37	-48			31·3	-29	-52	321	52						300
250		-54		287	42		-55		291	105							-46		297	92		-52		321	99		-56		327	104		-56					-48		324	61						250
200	38·7	-52		288	37	39·0	-71		298	100						40·0	-65		305	96	39·7	-70		321	87		-73		330	105	39·6	-74				40·2	-70		328	67						200
170		-54		287	30		-89		298	93							-68		297	84		-70					-71		323	85		-77					-84		320	67						170
150		-57		278	25	45·1	-64		299	51						46·0	-70		298	55		-67				45·4	-67		323	52	45·5	-73					-86		320	64						150
130		-53		278	23		-63		304	32							-68		293	41		-66					-67		324	43		-73					-82		331	58						130
110		-59		282	18	Inversion											-64		295	40		-63					-67		318	31		-70					-78		323	41						110
100	537	-56		273	16	535 mb 10°-528 mb 12°										54·5	-63		304	33	54·2	-62				53·9	-66		313	22	53·9	-67				54·2	-75		330	24						100
90		-57		271	18												-62					-62					-65		319	17	(95 mb)	-65					-75		331	24						90
80	(88 mb)	-58				Isothermal											-61										-67					Inversion					-73		333	20						80
70						900-879 mb 46°															Inversion					Isothermal					880 mb 48°-					-70		338	20						70
60		Inversion				650-630 " 24°											Inversion				820 mb 40°-808 mb 45°					800-782 mb 40°					839 " 52°					(67)	-67								60
		668 mb 15°-650 mb 17°															778 mb 45°-761 mb 47°										700-660 " 30°										Inversion									
		Isothermal															Isothermal				Isothermal					Max Wind at 186 mb										930 mb 54°-892 mb 56°									
		619-593 mb 12°															998-985 mb 57°				808-770 mb 45°					319° 117 kts. 40,800'										782 " 44°-720 " 45°									
		829-810 " 33°															761-745 " 47°				600-584 " 29°															Isothermal									
																					206-195 " -70°															845-800 mb 52°									
																																						667-645 " 40°									
Tropopause	I 242 mb -56° 34,500'					I 204 mb -73° 38,500'										I 186 mb -71° 41,500'					I 182 mb -74° 41,600'					II 202 mb -73° 39,300'					I 174 mb -82° 42,500'					I 160 mb -88° 44,600'										Tropopause

No. 1148 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Monday 4th September **1950.** Page 1.

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

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE
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.
Pressure: M.S.L.	1005·4 mb	1000·5 mb	1003·8 mb	1007·5 mb	1009·3 mb	1009·5 mb	1011·7 mb	1015·6 mb
Pressure: Surf	995·5 mb	998·6 mb	1003·0 mb	999·0 mb	1007·3 mb	1005·2 mb	996·0 mb	1005·2 mb
Pressure: Freezing	790 mb	710 mb	676 mb	646 mb	605 mb	620 mb	612 mb	620 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
Surf	2·7	52	48	120	12	0·5	56	56	180	08	0·2	54	54		
1000	1·4					0·1					1·0				
950		48	43	150	22		51	51	209	16		52	50		
900	30·0	41	32	153	24	28·9	46	46	215	16	29·9	47	45		
850		36	31	169	19		43	41	225	15		42	39		
800	61·3	33	28	198	17	60·6	40	27	228	14	61·6	42	34		
750		28	23	200	17		37	19	241	17		41	23		
700	96·2	24	19	205	16	95·9	31	18	255	24	97·0	36	03		
650		20	15	221	17		28	20	267	26		27	15		
600	136	13	06	227	17	136	25	16	268	35	137	24	18		
550		08	-07	256	18		17	09	275	38		21	11		
500	181	00	-30	272	27	183	11	-02	280	48	184	13	01		
450		-04	-42	285	45		01	-09	280	48		03	-16		
400	235	-16	-57	289	53	237	-10	-17	280	64	239	-10	-16		
350		-27	-59	300	70		-22	-30	280	72		-22	-30		
300	301	-39	-58	304	83	304	-36	-45	286	90	306	-34	-44		
250		-54		302	117		-53		288	94		-52			
200	389	-62		295	40	392	-73		289	90	394	-73			
170		-58		297	39		-70		292	71		-78			
150		-58		305	42		-67		285	48		-71			
130		-58		290	27		-68		275	43		-69			
110		-59		285	24							-67			
100	537	-58		282	24						537	-66			
90		-57		297	23							-65			
80		-57		288	23							-63			
70		-57		295	20										
60		-57		290	24										
		-60													
	(47mb) -61														
	Inversion 855mb 35°-840mb 38° 565 - 06°- 540 - 09° Isothermal. 739 - 733mb 26° 483 - 450 - 04°			Inversion 865mb 42°-850mb 43° 688 - 29°- 675 - 30° 650 - 28°- 638 - 30° 553 - 15°- 528 - 16° Isothermal. 795 - 781mb 40°		Inversion 829mb 40°-778mb 44° Isothermal. 715 - 697mb 36° 640 - 610 - 25° 583 - 553 - 22°		Inversion 874mb 45°-845mb 50° Isothermal. 845 - 812mb 50°		Inversion 882mb 47°-858mb 49° Isothermal. 858 - 822mb 49°		Inversion 810mb 43°-784mb 45°		Inversion 908mb 51°-888mb 56° 640 - 35°- 630 - 34° Isothermal 996 - 981mb 58° 850 - 835 - 54° 771 - 745 - 49°		Inversion 938mb 51°-893mb 57°	
Tropopause	I 206mb -65° 38·300		I 197mb -74° 39·600	I·172mb -79° 42·500	I 157mb - 82° 41·800	I 164mb - 82° 44·200	I 174mb - 86° 42·900	I 176mb - 83° 42·500	I 180mb - 87° 42·000	

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE
Pressure: Time	09h G.M.T.	09h G.M.T.	G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.
Pressure: M.S.L.	1001·9 mb	995·2 mb	mb	1004·4 mb	1008·6 mb	1010·9 mb	1013·1 mb	1015·3 mb
Pressure: Surf	992·1 mb	994·3 mb	mb	996·0 mb	1006·6 mb	1006·5 mb	997·4 mb	1004·9 mb
Pressure: Freezing	746 mb	665 mb	mb	600 mb	620 mb	633 mb	588 mb	593 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
Surf	2·7	53	53	120	16	0·5	56	56			2·3	61	58	220	12
1000	0·5					-106					1·2				
950		49	49	154	35		53	53				56	54	236	27
900	29·2	45	45	160	35	27·9	51	51			30·4	54	53	246	40
850		42	41	169	31		52	52				54	53	251	44
800	60·8	39	38	177	25	60·2	48	48			62·8	49	47	255	42
750		33	32	183	21		42	42				46	44	253	39
700	96·0	29	22	200	22	96·2	36	33			98·9	41	20	247	36
650		28	05	227	22		30	27				37	08	244	42
600	136	21	-05	234	21	137	24	21			139	32	00	246	46
550		16	-04	261	25		19	03				25	-23	253	48
500	182	14	-01	268	40	183	10	-12			187	15	-25	254	59
450		03	-11	276	39		00	-14				03	-30	252	50
400	237	-06	-19	275	43	238	-10	-22			242	-10	-51	253	57
350		-21	-32	280	52		-22	-41				-24	-52	250	64
300	305	-38	-50	281	76	305	-38	-57							
250		-59		288	79		-54								
200	392	-67		290	60	392	-68								
170		-66		293	50		-63								
150		-66		284	37		-64								
130		-59		273	20		-63								
110		-59		276	20		-60								
100	538	-59		272	18	539	-58								
90		-58		244	15		-55								
80		-56					-55								
70															
60															
	Inversion 822mb 42°-512mb 17° Isothermal. 690 - 650mb 28°			Inversion 905mb 50°-861mb 53° 593 - 23°- 583 - 24°							Inversion 922mb 53°-875mb 56° 660 - 35°- 640 - 38°				
Tropopause	I 219 mb -69° 37·300			I 205 mb -70° 35·800		NR					I 170mb - 82° 43·200				

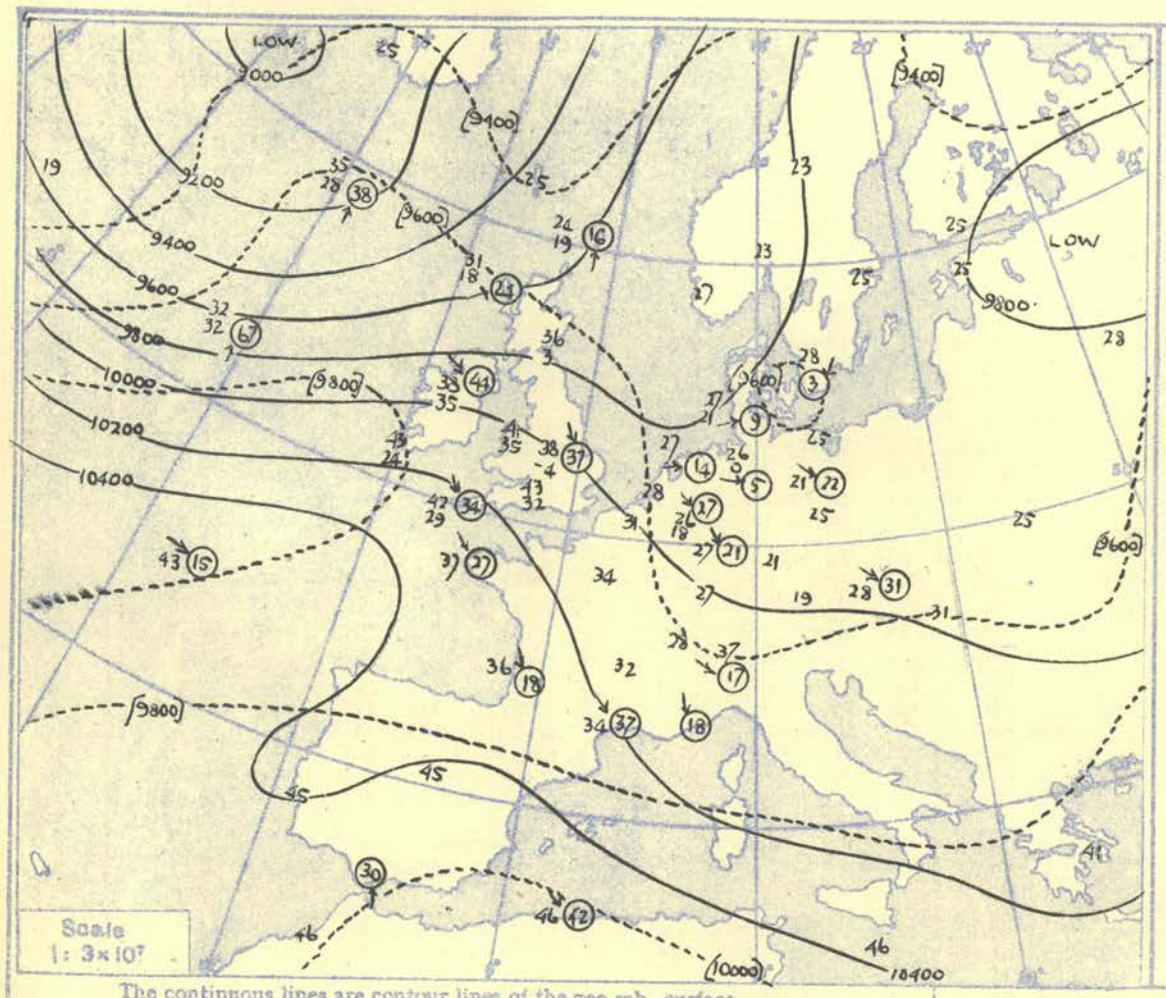
Station	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE
Pressure: Time	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.
Pressure: M.S.L.	1008·6 mb	1010·9 mb	1013·1 mb	1015·3 mb
Pressure: Surf	1006·6 mb	1006·5 mb	997·4 mb	1004·9 mb
Pressure: Freezing	620 mb	633 mb	588 mb	593 mb

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
Surf	0·6	61	55	180	10	1·2	58	55	220	08	4·4	60	57	260	08
1000	2·3	60	54			3·0	57	54			3·7				
950		57	54	224	15		55	48				55	53	286	19
900	31·6	56	52	262	25	32·1	55	38			32·9	56	55	294	22
850		53	47	270	23		55	45				55	52	295	24
800	64·1	49	41	272	30	64·3	46	45			65·4	53	48	295	25
750		46	40	279	37		44	41				48	42	297	28
700	100	42	38	283	38	100	39	34	For		102	45	36	295	33
650		37	31	286	36		34	27	winds			40	31	297	34
600	141	30	22	286	39	141	28	20	see		143	34	24	299	35
550		23	13	282	42		22	12	page			27	13	302	36
500	188	16	05	288	41	188	16	08	3.		190	20	10	305	38
450		04	-09	288	41		06	-05				10	02	304	37
400	243	-06	-20	293	36	243	-05	-16			246	-01	-14	306	37
350		-19	-34	293	48		-18	-29				-14	-33	301	40
300	311	-34	-50	288	52	311	-33	-45			314	-28	-49	301	45
250		-52		282	58		-52					-47		301	47
200	398	-74		282	58	399	-71				403	-65		299	46
170		-82		286	51		-78					-74		315	37
150		-78		303	33		-72					-77		322	28
130		-74		310	30		-66					-69		303	26
110		-76		294	16		-64					-66		296	18
100	540	-74		285	32						547	-66		298	14
90		-67		284	18							-64		316	09
80		-64		284	08							-63		341	07
70		-64													
60															
	Isothermal. 970 - 906mb 57° Max Wind. 37.500ft 212 mb·s. 281° 71 kts.	Inversion 958mb 54°-930mb 56°	Inversion 956mb 55°-920mb 57° 728 - 45°- 720 - 46° Isothermal. 900 - 868 mb 56°	Inversion 960mb 58°-925mb 60° 520 - 20°- 512 - 21° Isothermal. 820 - 770mb 54°
Tropopause	I 170mb - 82° 43·200	I 174mb -79° 42·700	I 150mb -77° 46·200	I 150mb - 81° 46·400

VALENTIA OBSERVATORY 18 SEP 1950

Monday 4th September. 1950.

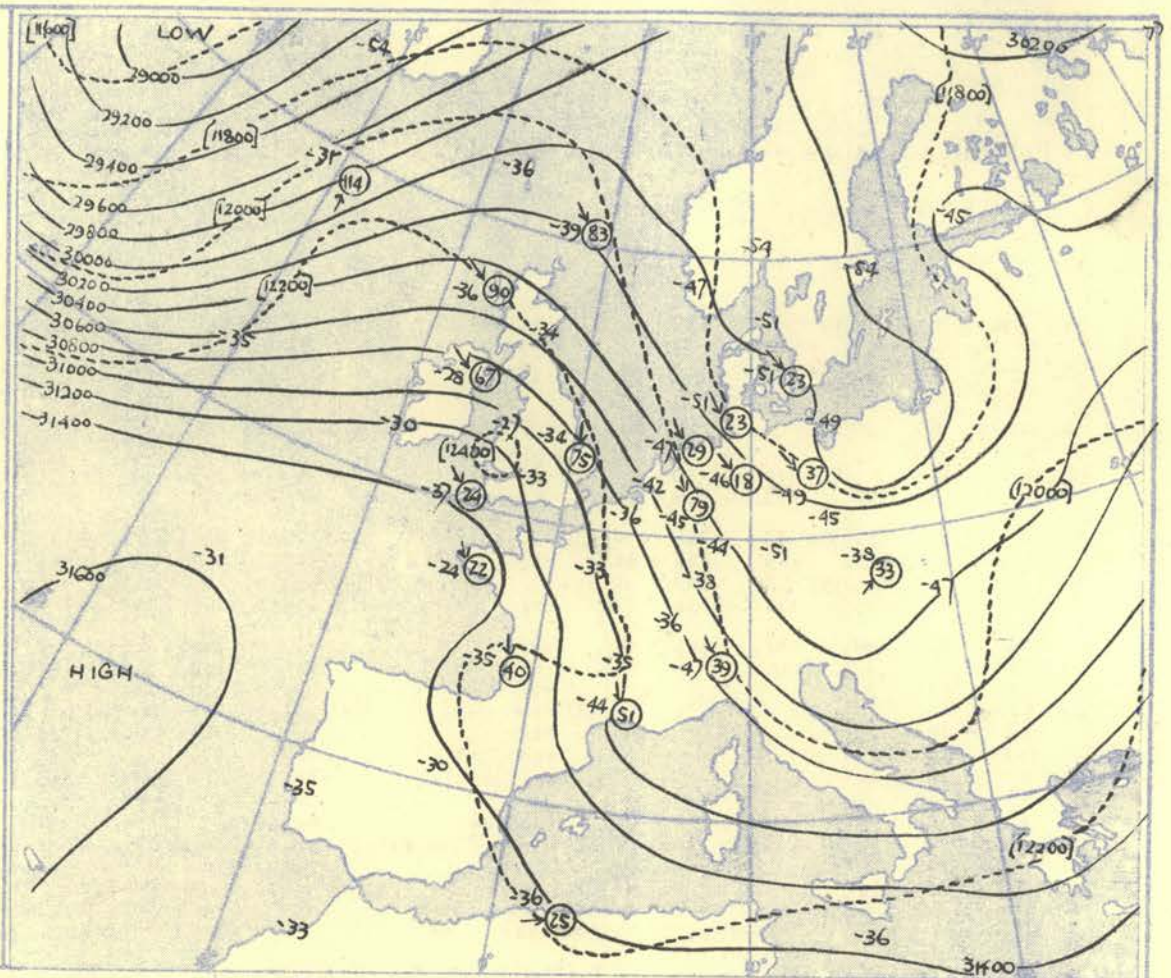
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. GMT



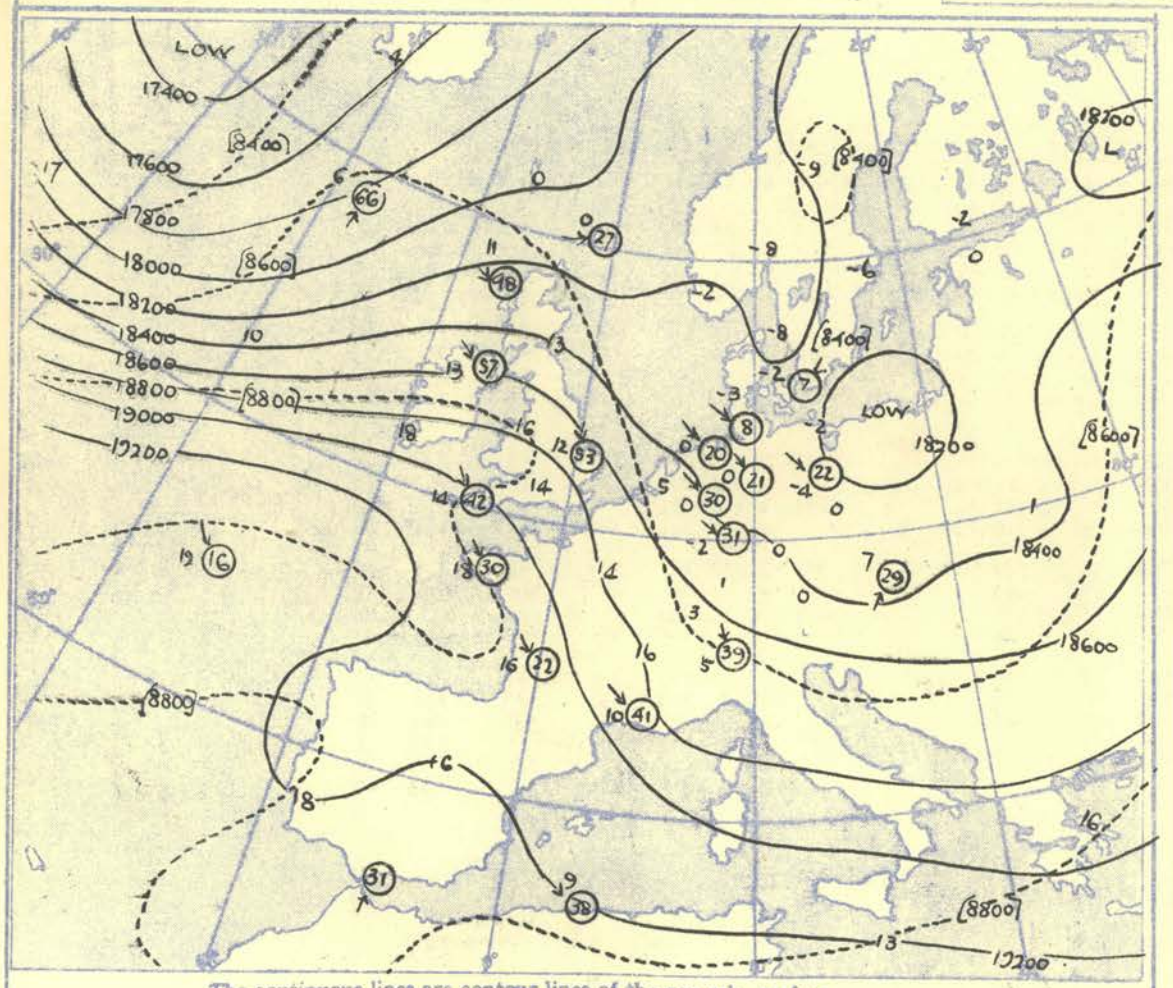
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

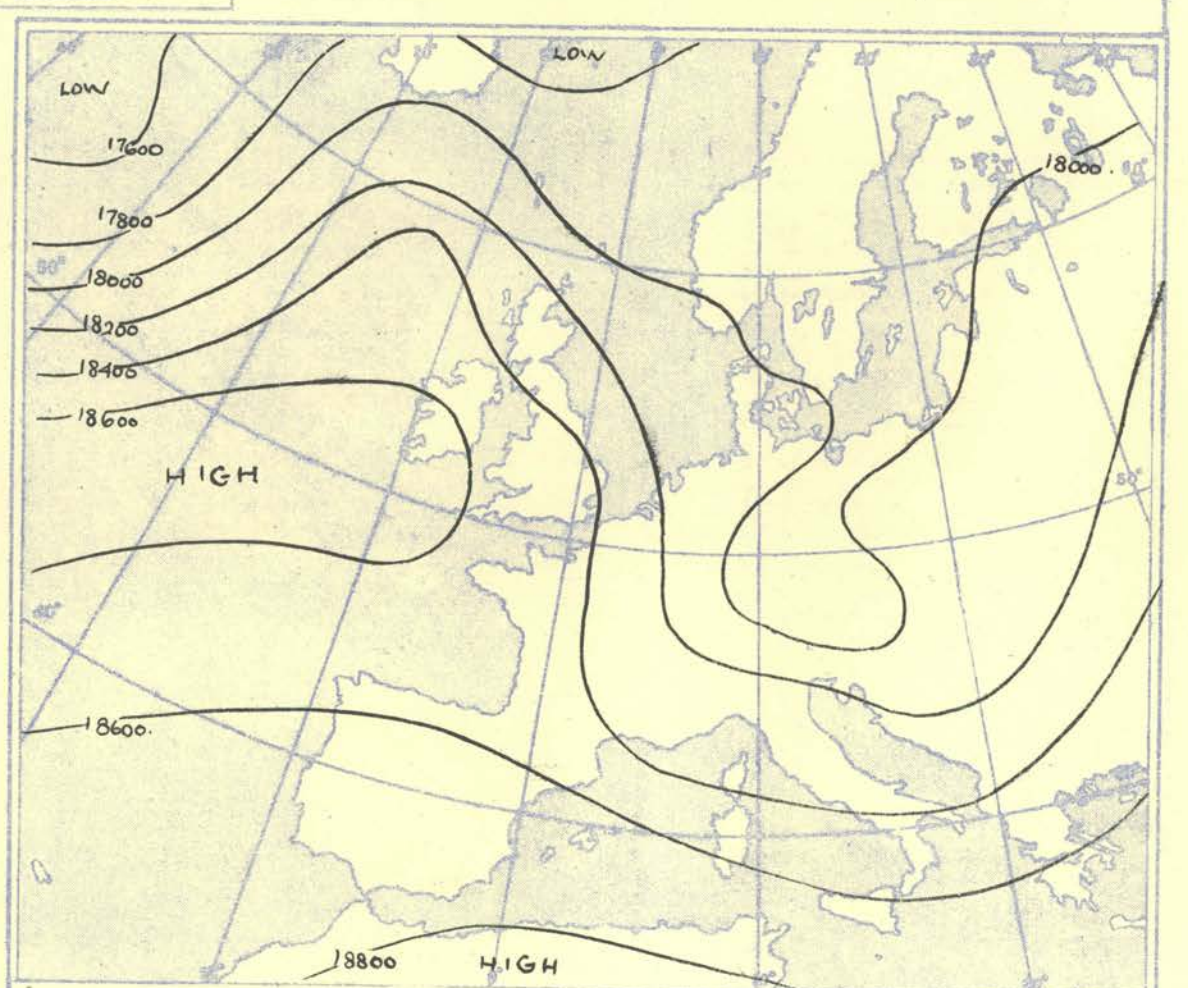
100 60 40 30 20 15 10 knots



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 12 SEP 1950

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

Pressure mb	51·3N 00·4E 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	Pressure mb
Time	15h.																								
Pressure M.S.L.	1013·5			mb				mb				mb				mb				mb				mb	Time M.S.L.
Pressure Surf	1002·4			mb				mb				mb				mb				mb				mb	Surf
Pressure Freezing	610			mb				mb				mb				mb				mb				mb	Freezing
Surf	03·1	71	63																						Surf
1000	38·8																								1000
950																									950
900	33·4	59	56																						900
850		57	51																						850
800	66·0	54	45																						800
750		49	42																						750
700	10·3	44	41																						700
650		39	36																						650
600	14·9	28	28																						600
550		22																							550
500	19·1	15																							500
450		5																							450
400	24·6	5																							400
350		17																							350
300	31·4	34																							300
250																									250
200	Cloud																								200
170	7/8 Sc																								170
	930-890mb.																								

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

Feet	Place	Time	Type	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Surf.	CIRRUS 52·5N 20W	03h.		220	36					250	12													Surf.
1,000				230	52					260	18													1,000
2,000				240	59					260	18													2,000
3,000				240	57					300	17													3,000
4,000				240	57					310	20													4,000
5,000				230	62					310	25													5,000
6,000				230	70					310	30													6,000
8,000										310	32													8,000
10,000				220	67					300	35													10,000
14,000				210	74					310	38													14,000
18,000										310	37													18,000
24,000										320	41													24,000
30,000										320	47													30,000
40,000										320	50													40,000
50,000										336	26													50,000
										320 (51,000')	05													
	CIRRUS 52·5N 20W	09h.				260	36	272	15															
						260	43	275	15															
						270	48	290	18															
						270	48	292	21															
						280	46	307	27															
								307	27															
								311	30															
						260	50	310	43															
						250	68	315	51															
						220	60	317	44															
								312	48															
								314	52															
								317	57															
								317 (46,000')	47															
	Downham Market	09h.																						
	Shoebury-ness	09h.																						
	CIRRUS 52·5N 20W	15h.																						
	Lerwick	15h.																						
	Lerwick	21h.																						
	Leuchars	21h.																						
	Cirrus 52·5N 20W	21h.																						

NEPHOSCOPE OBSERVATIONS

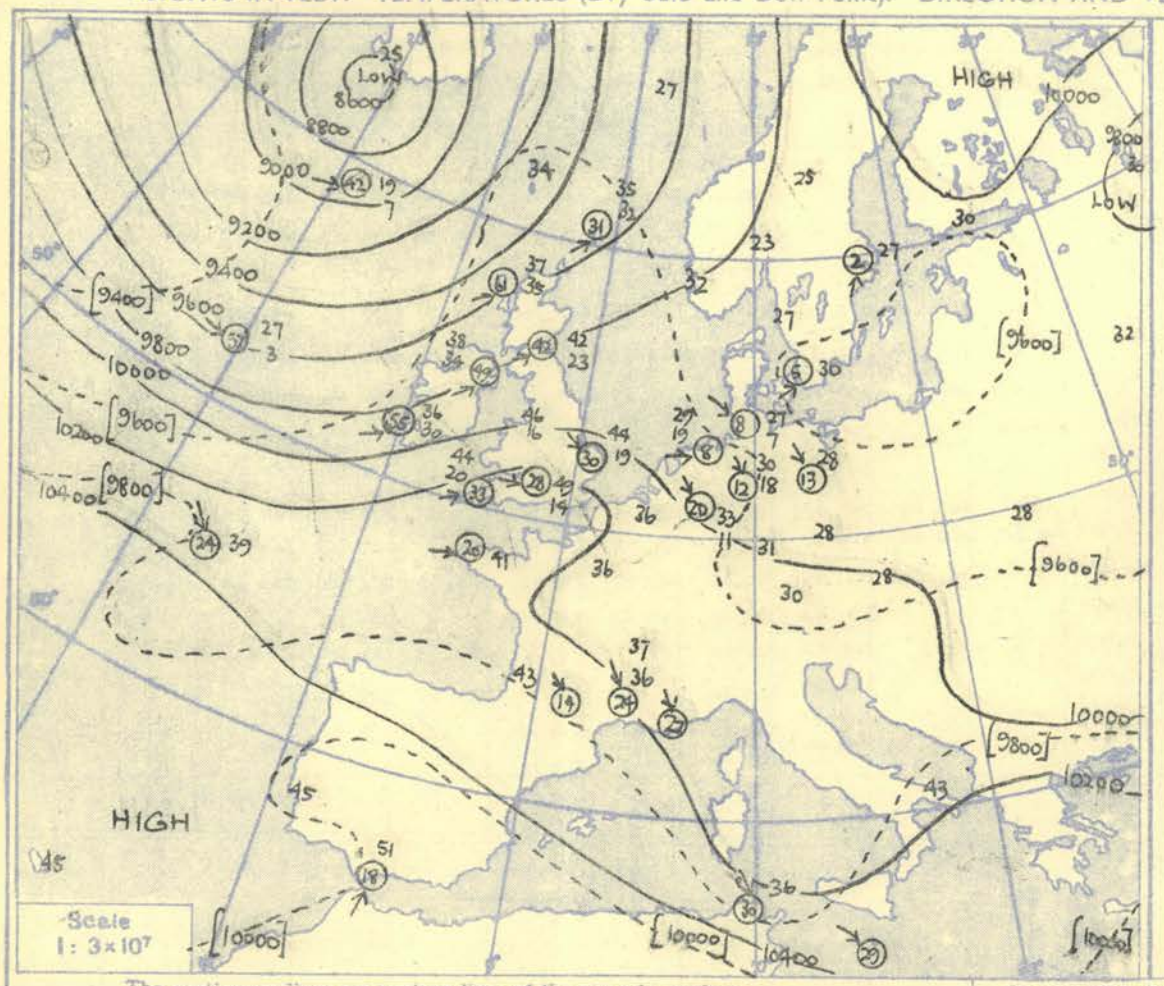
	Place	Time Type	Dir. Vel.

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

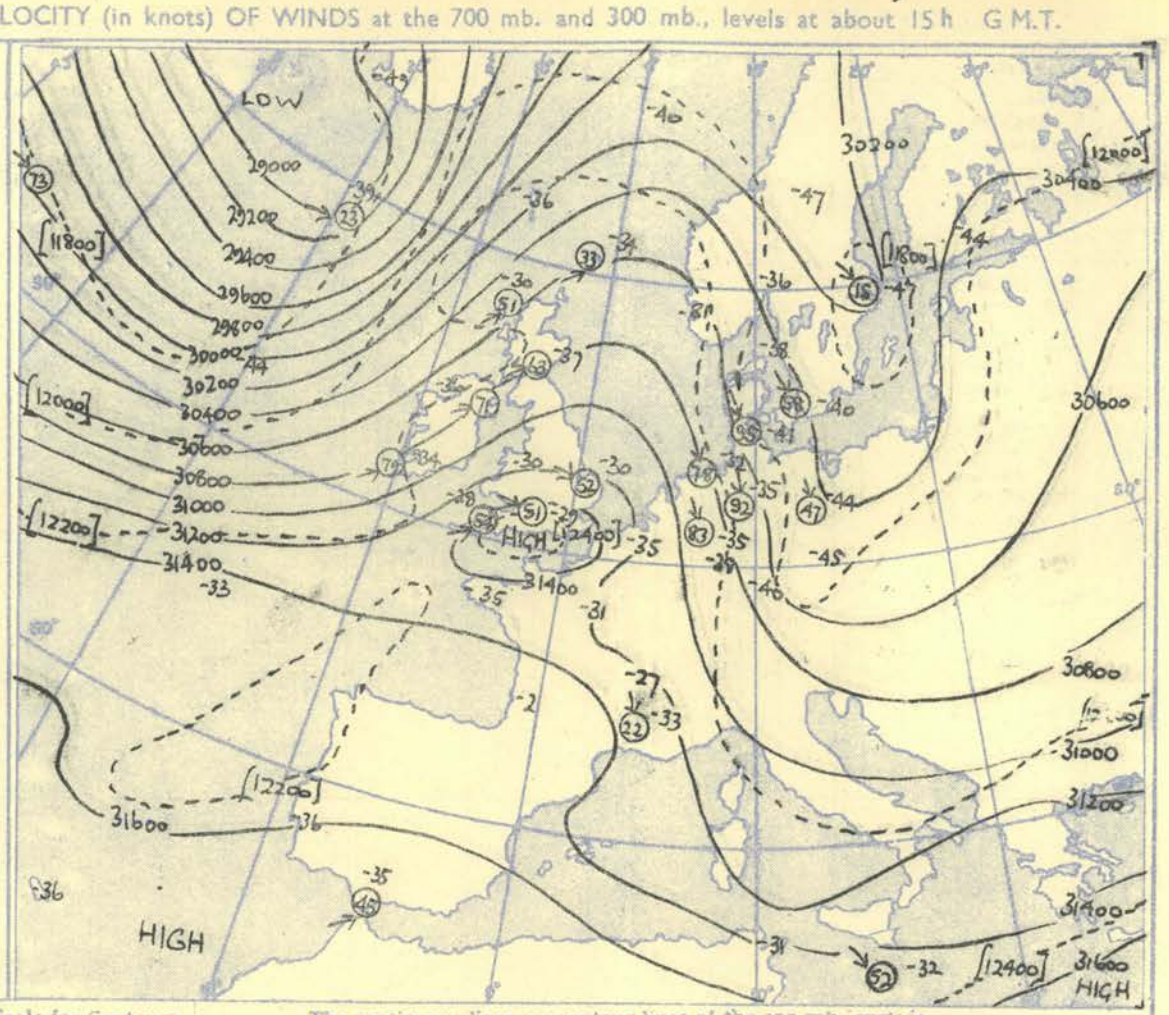
	Ship	Lat/Long	Time	Pressure M.S.L.	Pressure Surf	Pressure Freezing	Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots
	WEATHER EXPLORER	59·1N 18·6W	03h. G.M.T.	982 mb	982 mb	665 mb	Surf		55	55	135	32
							1000	-5·1				
							950		53	47	130	40
							900	23·9	50	43	139	39
							850		48	40	162	37
							800	55·9	46	38	177	37
							750		40	32	190	39
							700	91·6	35	28	187	38
							650		31	23	185	40
							600	132	24	15	208	57
							580		15	00	207	58
							500	178	06	-37	208	66
							450		-01	-58	226	81
							400	238	-11	-53	231	90
							350		-20	-43	216	87
							300	300	-31	-50	204	114
							250		-47		206	133
							200	389	-72		206	114
							170		-64		209	129
							150		-60		210	60
							130		-58		210	42
							110		-58		210	47
							100	536	-58		210	31
							90		-58		210	30
							80		-59		210	34
							70		-57		210	23
							60		-56		210	25
									-58		210	10
								(53 mb)	-59			
									Inversion 650 mb 31°-642 mb 32° Isothermal 819-803 mb 47° 652-650 mb 31°			
							Tropopause		I 193 mb -77° 39,600'			
	WEATHER EXPLORER	59·0N 18·9W	09h. G.M.T.	974 mb	974 mb	790 mb	Surf		53	45	225	40
							1000	-7·3				
							950		50	46	226	42
							900	21·8	44	40	228	48
							850		38	33	231	47
							800	52·8	38	28	232	48
							750		28	21	234	52
							700	87·6	22	12	233	51
							650		15	05	230	50
							600	127	08	-02	226	48
							580		-01	-10	210	46
							500	171	-06	-18	197	50
							450		-13	-29	193	57
							400	225	-17	-39	200	67
							350		-23	-55	203	79
							300	292	-29		200	81
							250		-31		195	83
							200	384	-42		204	63
							170		-42		218	60
							150		-47		218	51
							130		-48		208	37
							110		-48		208	27
							100	537	-48		208	28
							90		-47		208	26
							80		-50		208	20
							70		-50		208	14
							60		-48		208	17
									-48			
								(59 mb)				
									Isothermal 550 - 538 mb -01			
							Tropopause		I 195 mb -43° 38,300'			
	WEATHER EXPLORER	58·9N 18·9W	15h. G.M.T.	981 mb	981 mb	810 mb	Surf		53	40	240	35
							1000	-5·2				
							950		50	38	246	34
							900	23·5	43	32	248	37
							850		37	23	248	56
							800	54·8	31	19	248	54
							750		25	14	248	49
							700	89·3	19	07	248	42
							650		13	-04	248	46
							600	129	07	-09	248	46
							580		01	-11	245	40
							500	173	-07	-20	244	32
							450		-18	-32	245	28
							400	225	-31	-43	247	26
							350		-42		281	23
							300	290	-39		252	23
							250		-31		251	28
							200	382	-31		245	32
							170		-34		230	38
							150		-33		222	40
							130		-35		220	33
							110		-40		220	28
							100	539	-43		219	29
							90		-44		221	33
							80		-43		220	29
							70		-43		219	22
							60		-45		220	14
									Isothermal 819 - 790 mb 31° 715 - 700 " 21°			
							Tropopause		I 333 mb -46° 26,600'			
	WEATHER EXPLORER	58·9N 19·1W	21h. G.M.T.	981 mb	981 mb	820 mb	Surf		53	44	255	38
							1000	-5·4				
							950		49	42	259	52
							900	23·3	41	38	264	48
							850		35	34	262	52
							800	54·4	31	27	266	56
							750		26	19	262	52
							700	88·9	21	18	265	52
							650		13	11	266	49
							600	128	05	02	266	44
							580		00	-09	264	45
							500	173	-11	-28	264	45
							450		-21	-35	264	47
							400	225	-32	-41	267	46
							350		-44		278	42
							300	288	-58		294	41
							250		-43		301	34
							200	378	-41		278	27
							170		-44		272	23
							150		-46		270	22
							130		-47		270	19
							110		-49		270	19
							100	531	-50		270	19
							90		-52		270	18
							80		-53		270	14
							70		-54			
									Inversion 900 mb 41°-872 mb 42° Isothermal 819 - 790 mb 31° 715 - 700 " 21°			
							Tropopause		I 300 mb -58° 23,500'			
	CIRRUS 52·5N 20·0W	03h. G.M.T.	998 mb	998 mb	700 mb	Surf		-7	59	59	For winds see top of page	
							1000					
							950					
							900					
							850		52	52		
							800					
							750					
							700	96·8	32	32		
							650					
							600					
							580					
							500	184	10	10		
							450					
							400					
							350					
							300	306	-35			
							250	(290 mb)	-38			
							200					
							170					
									Inversion 887 mb 52°-864 mb 54° Isothermal 998-950 mb 59°			
							Tropopause		NR.			
	CIRRUS 52·5N 20·0W	09h. G.M.T.	1004 mb	1004 mb	720 mb	Surf		1·0	55	43	For winds see top of page	
							1000		55	43		
							950					
							900					
							850		36	28		
							800					
							750					
							700	96·6	30	00		
							650					
							600					
							580					
							500	182	09	-24		
							450					
							400					
							350					
							300	305	-38			
							250					
							200		-51			
							170					
							150					
							130					
							110					
							100		-58			
							90					
							80					
							70					
							60					
									Inversion 825 mb 34°-796 mb 36° Isothermal 1004 - 1008 mb 55° 641 - 620 " 25°			
							Tropopause		I 235 mb -53° 35,700'			
	CIRRUS 52·5N 20·0W	15h. G.M.T.	1008 mb	1008 mb	825 mb	Surf		2·3	55	46	For winds see top of page	
							1000		55	48		
							950					
							900					
							850		34	30		
							800					
							750					
							700	96·8	27	03		
							650					
							600					
							580					
							500	182	00	-31		
							450					
							400					
							350					
							300	300	-44			
							250					
							200	389	-47			
							170					
							150					
							130					
							110					
							100					
							90					
							80					
							70					
							60					
									Inversion 800 mb 30°-781 mb 34°			
							Tropopause		I 248 mb -51° 34,400'			
	CIRRUS 52·5N 20·0W	21h. G.M.T.	1011 mb	1011 mb	850 - 765 mb	Surf		3·0	55	41	For winds see top of page	
							1000		52	37		
							950					
							900					
							850		32	21		
							800					
							750					
							700	97·4	27	-06		
							650					
							600					
							580					
							500	182	-01	-27		
							450					
							400					
							350					
							300	302	-44			
							250					
							200	390	-47			
							170					
							150					
							130					
							110					
							100					
							90					
							80					
							70					
							60					
									Inversion 807 mb 27°-790 mb 34°			
							Tropopause		I 221 mb -58° 36,700'			

Monday 4th September 1950.

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.

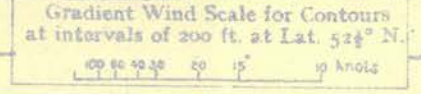


The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

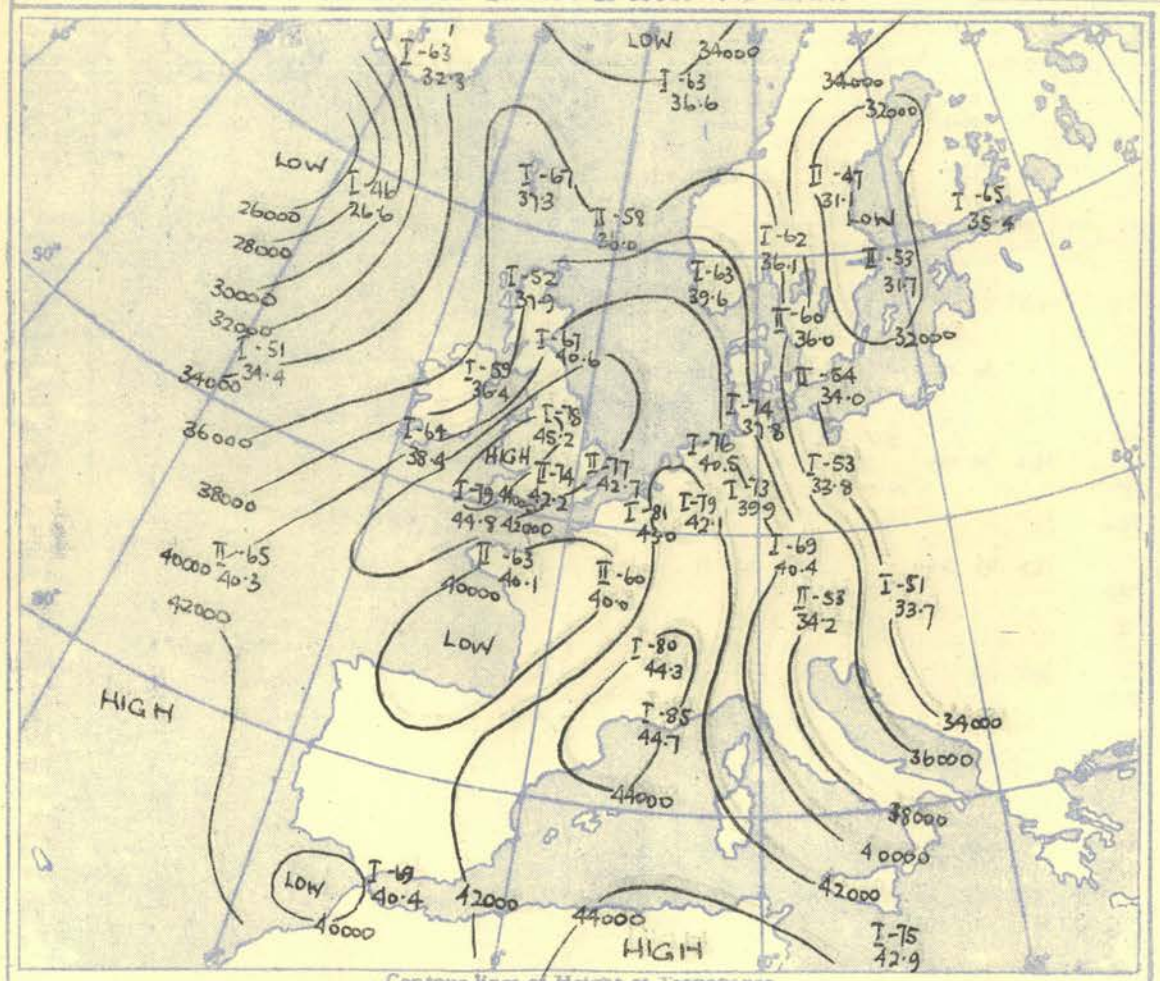


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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.

A warm ridge moved across the British Isles and into the North Sea. The very strong advection set up by the intense depression near Iceland brought in much cooler air behind this warm ridge and a strong thermal gradient persisted across the Atlantic at around latitude 48° N.

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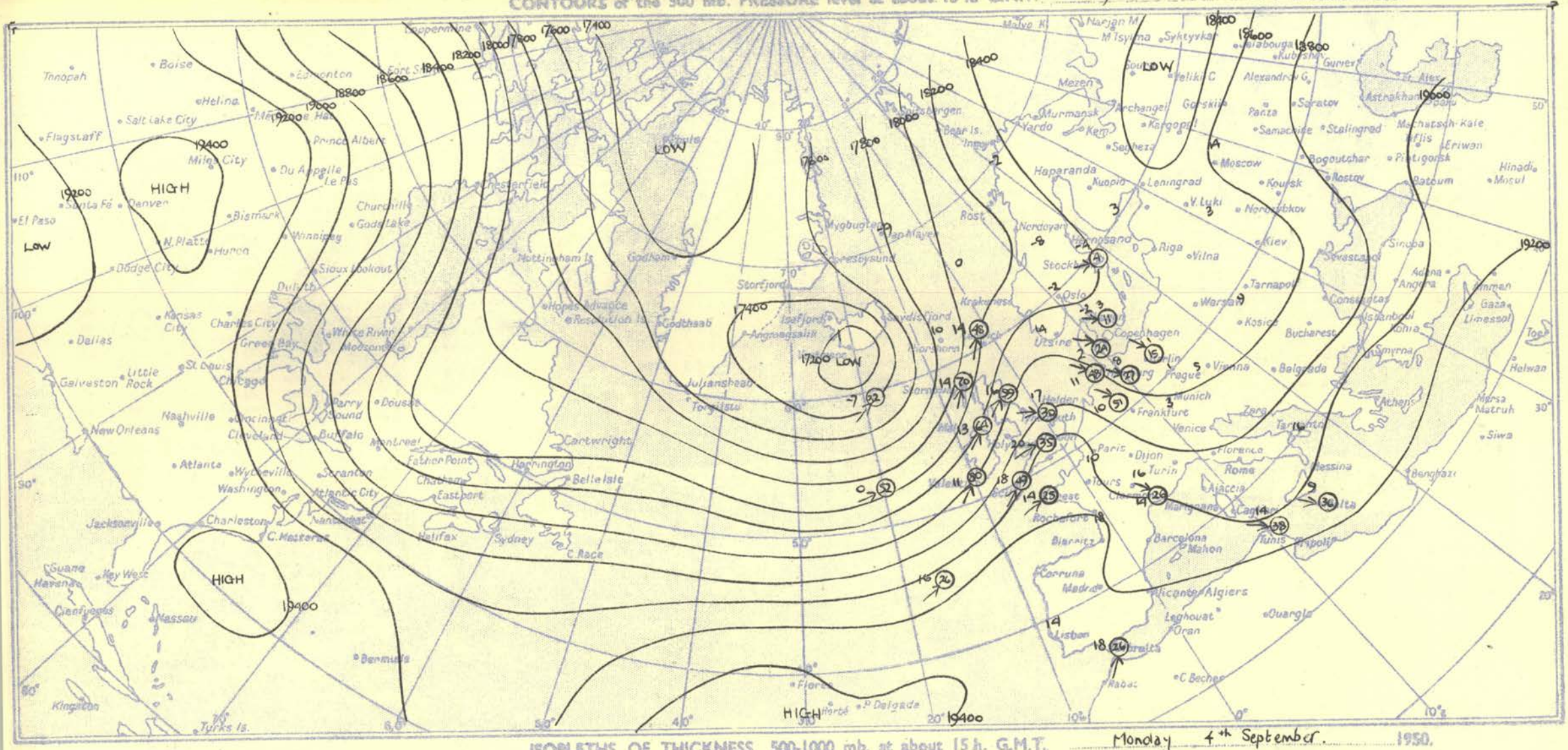
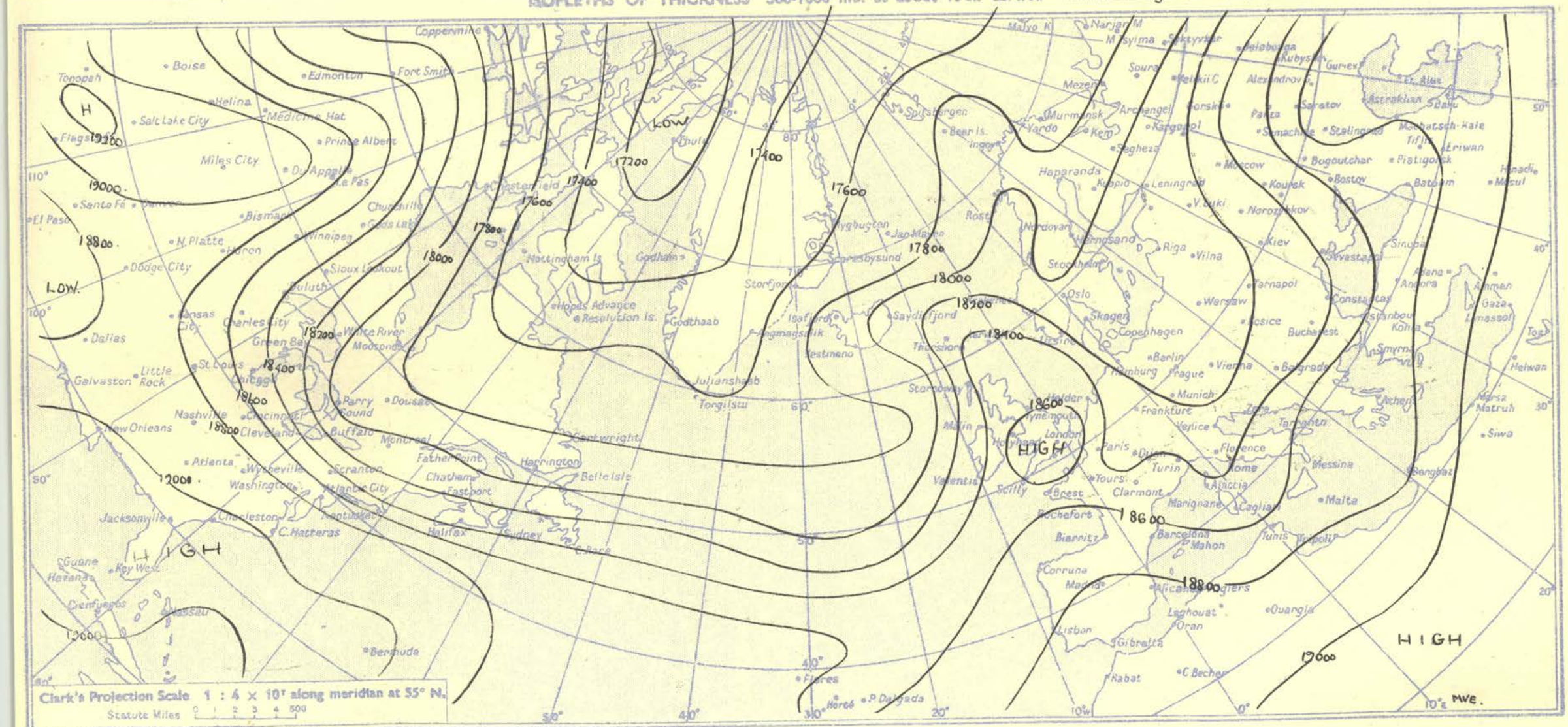
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Monday 4th. September 1950.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Monday 4th September. 1950.



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

1950.

LERWICK

Pressures — Time: 15h. G.M.T. | M.S.L.: 997·4 mb | Surf: 987·7 mb | Freezing: 686 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·7	55	55		
1000	-0·8				
950		51	51		
900	28·0	48	47		
850		49	48		
800	60·1	45	43		
750		41	39	See Page 3 for Winds	
700	95·9	35	32		
650		33	29		
600	13·6	29	25		
550		21	17		
500	18·3	14	09		
450		05	-1		
400	23·9	-5	-12		
350		-20	-28		
300	30·6	-34	-43		
250		-53			
200	39·4	-57			
170		-64			
150		-67			
130		-63			
110		-59			
100	54·2	-55			
90	(95·6)	-53			
80					
70					
60					

Inversion 900 mb 48° - 870 mb 51°

Isothermal 930 - 900 mb 48°; 670 - 635 " 33°

Tropopause: II 235 mb -58° 36,000'

STORNOWAY

Pressures — Time: 15h. G.M.T. | M.S.L.: 994·2 mb | Surf: 992·3 mb | Freezing: 635 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
00·5	62	59	290	20
1·0				
	57	55	233	30
2·6	52	50	236	33
	47	46	238	40
5·6	43	42	236	45
	40	34	225	53
9·5	37	35	218	61
	35	29	218	61
13·6	27	14	218	60
	19	12	217	63
18·3	14	09	216	70
	09	01	218	67
23·8	-02	-09	219	60
	-15	-23	212	53
30·6	-30	-39	210	51
	-44		216	51
39·6	-50		224	57
	-52		221	51
45·9	-56		216	51
	-51		220	41
	-50			
54·7	-51			

Inversion 765 mb 39° - 750 mb 40°

Tropopause: I 217 mb -52° 37,900'

LEUCHARS

Pressures — Time: 15h. G.M.T. | M.S.L.: 1001·7 mb | Surf: 1000·9 mb | Freezing: 610 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
00·2	65	62	250	12
00·4	65	62		
	59	56	234	29
29·6	54	50	244	33
	53	49	254	36
61·9	50	45	243	40
	47	35	238	44
09·8	42	23	234	42
	36	03	234	44
13·9	31	-03	239	41
	24	-13	238	48
18·6	16	-26	241	59
	04	-31	244	57
24·1	-08	-33	243	58
	-20	-44	239	60
30·8	-37	-60	235	63
	-50		243	73
39·6	-61		246	63
	-66			
45·7	-65			
	-65			
	-72			
54·2	-63			

Tropopause: I 191 mb -67° 40,600'

ALDERGROVE

Pressures — Time: 15h. G.M.T. | M.S.L.: 1003·3 mb | Surf: 994·9 mb | Freezing: 645 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
02·3	64	61	220	20
00·9				
	59	57	225	27
30·3	54	53	230	32
	50	48	232	36
62·5	48	45	234	40
	43	40	237	46
98·5	38	34	240	49
	33	28	237	53
13·9	28	20	234	51
	21	03	231	60
18·6	13	-15	227	64
	04	-28	227	65
24·1	-09	-39	228	66
	-21	-54	232	76
30·8	-36	-59	235	71
	-52		237	68
39·6	-56		232	87
	-58			

Tropopause: I 234 mb -59° 36,400'

LIVERPOOL

Pressures — Time: 15h. G.M.T. | M.S.L.: 1007·8 mb | Surf: 1005·8 mb | Freezing: 618 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
00·6	70	59		
02·2	69	57		
	62	52		
31·6	55	46		
	57	42		
64·1	53	32		
	49	35		
10·0	46	16		
	37	13		
14·1	29	03		
	24	-07		
18·8	17	-14		
	5	-22		
24·4	-7	-30		
	-17	-39		
31·1	-30	-52		
	-47			
39·9	-65			
	-76			
	-77			
	-80			
	-67			
54·3	-66			
	-63			
	-60			
	-57			
	-58			
	-53			
(45 mb)	-52			

Inversion 900 mb 55° - 845 mb 57°

Isothermal 825 - 778 mb 53°

Tropopause: I 155 mb -78° 45,200'

DOWNHAM MARKET

Pressures — Time: 15h. G.M.T. | M.S.L.: 1010·9 mb | Surf: 1006·6 mb | Freezing: 615 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
01·2	70	61	220	10
03·1	69	60		
	62	55	247	19
32·5	56	51	253	19
	56	46	269	23
65·0	54	37	273	24
	51	13	278	25
10·1	44	19	280	20
	37	19	280	34
14·2	30	16	281	37
	23	-06	285	34
18·9	17	-32	294	30
	04	-43	286	33
24·5	-05	-49	278	41
	-15	-56	281	47
31·3	-30	-57	282	52
	-48		277	51
40·1	-67		281	61
	-77		277	43
46·1	-72		283	35
	-74		303	26
	-70		298	14
54·5	-69		278	12
	-64		244	11
	-60		246	09
	-57		268	05
65·3	-54		254	06
	-56		240	06

Inversion 895 mb 55° - 881 mb 59°; 811 " 52° - 796 " 55°

Isothermal 657 - 642 mb 37°

Tropopause: II 176 mb -77° 42,700'

LARKHILL

Pressures — Time: 15h. G.M.T. | M.S.L.: 1012·9 mb | Surf: 997·5 mb | Freezing: 596 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
4·4	70	61	250	12
3·7				
	64	58	259	19
33·3	56	51	270	28
	60	48	275	30
66·0	56	41	275	29
	51	13	278	25
10·3	49	14	271	28
	42	16	273	33
14·4	33	21	267	37
	27	10	260	36
19·1	20	-04	258	35
	10	-5	260	33
24·7	-01	-26	265	42
	-14	-38	265	44
31·5	-29	-51	265	51
	-47		265	48
40·4	-69		268	53
	-73		263	38
46·3	-74		265	25
	-72		273	23
	-68		272	12
54·8	-67		270	10
	-61		265	09
	-57		228	09

Tropopause: II 183 mb -74° 42,200'

CAMBORNE

Pressures — Time: 15h. G.M.T. | M.S.L.: 1015·3 mb | Surf: 1004·9 mb | Freezing: 619 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
02·9	64	61	210	10
04·3	63	61		
	57	56	246	23
33·6	57	54	251	23
	57	44	249	24
66·1	53	42	254	26
	51	28	259	32
10·2	44	20	252	33
	37	16	245	34
14·3	29	19	239	37
	26	05	247	43
19·1	15	-3	240	49
	08	-14	233	42
24·6	00	-23	243	45
	-13	-34	243	53
31·5	-28	-38	229	54
	-45		243	59
40·4	-65		242	59
	-75		242	57
	-77		239	45
	-75		232	41
	-76		242	26
54·6	-79		246	24
	-70		259	24
	-69		265	19
	-66		262	16
65·4	-65		260	14
	-60		177	16
	-56		183	16
(38 mb)	-56			

Inversion 577 mb 25° - 564 mb 27°

Isothermal 958 - 850 mb 57°; 782 - 755 mb 52°; 434 - 423 mb 05°

Tropopause: I 161 mb -79° 44,800'

VALENTIA

Pressures — Time: 15h. G.M.T. | M.S.L.: 1008 mb | Surf: 670 mb | Freezing:

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
00·3	60	57	250	12
2·5	59	56	252	13
	53	50	272	26
31·6	49	46	263	31
	47	44	254	39
63·5	42	38	247	48
	41	35	240	56
99·2	36	30	235	65
	30	23	235	54
139	23	15	233	58
	17	07	262	63
186	11	-4	230	80
	01	-19	228	71
241	-9	-24	233	68
	-19	-31	237	78
288	-34	-45	228	79
	-51		225	70
396	-61			
	-64			
	-65			
	-63			
	-66			
543	-67			
	-64			
	-61			
	-57			
	-54			
(50 mb)	-54			
(40 mb)	-55			

Isothermal 914 - 872 mb 49°

Tropopause: I 212 mb -64° 38,400'

LERWICK

Pressures — Time: 21h. G.M.T. | M.S.L.: 995·7 mb | Surf: 986·0 mb | Freezing: 672 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	56	56	200	20
1000	01·2				
950		53	52	241	27
900	27·8	51	49	231	28
850		46	43	226	30
800	59·8	41	38	225	30
750		37	34	219	34
700	95·3	35	32	213	37
650		28	24	205	44
600	13·5	20	16	207	51
550		15	10	199	59
500	18·2	07	02	200	61
450		-01	-08	202	59
400	23·6	-09	-20	198	48
350		-22	-35	197	48
300	30·3	-37	-47	213	46
250		-54		216	45
200	39·1	-65		214	46
170		-61		208	45
150		-61		208	37
130		-61		208	34
110	(26 mb)	-61			
100					
90					
80					
70					
60					

Isothermal 925 - 900 mb 51°; 570 - 545 " 15°

Tropopause: I 205 mb -67° 38,600'

STORNOWAY

Pressures — Time: 21h. G.M.T. | M.S.L.: 996·4 mb | Surf: 994·4 mb | Freezing: 792 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
00·5	55	49	210	20
09·8				
	51	47	216	23
27·8	44	41	223	38
	38	32	231	46
59·2	33	26	232	45
	30	20	230	49
94·0	26	07	222	48
	20	-10	217	59
13·3	12	-17	213	66
	04	-28	202	51
17·9	-03	-32	200	66
	-11	-39	195	83
23·2	-20	-47	193	90
	-32	-58	197	99
29·7	-44		197	112
	-56		208	95
38·6	-51			
	-53			
44·8	-58			
	-59			
	-55			
53·5	-57			

Isothermal 775 - 745 mb 30°

Tropopause: I 250 mb -56° 33,800'

LEUCHARS

Pressures — Time: 21h. G.M.T. | M.S.L.: | Surf: | Freezing:

Tropopause:

ALDERGROVE

Pressures — Time: 21h. G.M.T. | M.S.L.: 1006·3 mb | Surf: 997·7 mb | Freezing: 740 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
02·3	55	48	200	08
01·8				
	50	44	260	24
30·6	45	39	249	33
	38	25	268	32
62·1	29	14	262	36
	24	09	259	38
97·2	27	03	254	43
	21	-06	247	48
13·7	16	-10	231	60
	12	-21	224	69
18·3	05	-33	219	72
	-04	-40	216	81
23·7	-16	-50	218	78
	-28	-56	217	90
30·3	-45		216	105
	-59		214	105
39·0	-59		220	77
	-56		224	63
	-60		224	52
	-63			
	-66			
53·7	-62			
	-63			
	-63			

Inversion 848 mb 37° - 793 mb 39°

Tropopause: I 255 mb -60° 33,700'

LIVERPOOL

Pressures — Time: 21h. G.M.T. | M.S.L.: 1007·0 mb | Surf: 1005·0 mb | Freezing: 665 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
00·6	63	59		
02·0	63	59		
	59	55		
31·2	55	52		
	54	51		
63·6	50	45		
	44	36		
99·5	37	32		
	30	22		
14·0	24	14		
	17	-1		
18·6	09	-12		
	-1	-15		
24·1	-12	-21		
	-22	-31		
30·8	-37	-46		
	-53			
39·5	-64			
	-66			
	-69			
	-74			
	-68			
54·0	-65			
	-68			
	-66			
	-61			
	-64			
	-69			
(45 mb)	-64			

Inversion 900 mb 55° - 867 mb 56°

Tropopause: I 178 mb -68° 42,000'

DOWNHAM MARKET

Pressures — Time: 21h. G.M.T. | M.S.L.: 1010·8 mb | Surf: 1006·4 mb | Freezing: 630 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
01·2	62	57	205	08
03·0	61	56		
	59	54	246	30
32·2	56	52	258	27
	55	45	261	26
64·7	53	35	257	26
	49	23	255	27
10·1	43	14	252	31
	36	14	249	33
14·2	25	15	248	36
	24	03	246	35
18·9	15	-08	248	42
	05	-17	249	43
24·4	-08	-28	248	44
	-20	-37	247	55
31·1	-35	-49	251	66
	-51		247	78
39·9	-72		250	84
	-75		257	55
45·8	-77		255	39
	-80		242	29
	-79		229	21
54·0	-75		242	19
	-74		243	16
	-68			

Inversion 891 mb 55° - 878 mb 57°; 824 - 538 - 808 " 54°

Tropopause: I 173 mb -77° 42,800'

LARKHILL

Pressures — Time: 21h. G.M.T. | M.S.L.: 1013·2 mb | Surf: 997·5 mb | Freezing: 641 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
4·4	61	59	230	13
3·7				
	58	55	246	23
33·0	55	52	252	27
	54	46	254	30
65·4	50	42	253	36
	45	31	250	36
10·1	41	20	242	36
	34	17	241	37
14·2	24	13	241	37
	19	-05	241	38
18·9	12	-12	240	41
	05	-19	247	51
24·4	-06	-25	241	57
	-22	-34	235	64
31·1	-35	-48	238	81
	-50		241	75
39·9	-69		242	85
	-76		244	72
45·8	-74		246	42
	-77		247	36
	-78		240	30
54·1	-74		235	25
	-70		234	20
	-67		242	17
	-63		239	20

Inversion 885 mb 54° - 865 mb 56°; 765 " 44° - 742 " 46°

Tropopause: I 172 mb -77° 43,000'

CAMBORNE

Pressures — Time: 21h. G.M.T. | M.S.L.: 1015·0 mb | Surf: 1004·6 mb | Freezing: 646 mb

Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
02·9	60	60	280	10
04·1	59	59		
	57	57	251	26
33·3	56	56	261	28
	53	52	259	30
65·6	48	47	251	37
	41	38	250	39
10·1	38	26	251	41
	33	24	251	42
14·2	26	03	248	42
	19	-5	248	45
18·8	11	-22	248	50
	03	-30	245	57
24·3	-7	-17	241	54
	-20	-27	241	68
31·1	-35	-42	235	69
	-55		230	78
39·8	-68		235	87
	-72		244	56
	-74			
	-74			
	-74			
54·2	-73			

Isothermal 929 - 869 mb 56°; 714 - 691 " 38°

Tropopause: I 182 mb -74° 41,700'

VALENTIA

Pressures — Time: | M.S.L.: | Surf: | Freezing:

Tropopause:

No. 11482. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Tuesday 5th September 1950. 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.	996·0 mb	996·5 mb	1003·6 mb	1008·7 mb	1010·7 mb	1006·3 mb	1012·9 mb	1016·4 mb	1014·4 mb
Pressure: Surf	986·3 mb	994·6 mb	1002·8 mb	1000·1 mb	1008·7 mb	1010·6 mb	997·2 mb	1005·9 mb	1013 mb
Pressure: Freezing	782 mb	795 mb	733 mb	818 mb	711 mb	696 mb	672 mb	675 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	02·7	53	49	200	12	00·5	54	49	250	25	00·2	52	48		
1000	-1·1					-1·0					0·9	52	48		
950		51	46	235	31		50	45	237	40		49	45		
900	29·6	44	41	240	36	27·7	43	38	242	42	29·6	43	39		
850		39	33	240	35		37	36	245	47		37	34		
800	59·0	34	30	232	33	59·0	33	27	244	49	61·0	35	30		
750		30	16	223	35		28	19	241	48		34	07		
700	94·0	28	-03	210	41	93·9	23	11	239	49	96·0	29	05		
650		21	-14	207	42		16	08	237	46		20	-03		
600	133	13	-23	204	47	133	09	-01	235	42	136	10	-10		
550		07	-31	200	52		00	-11	230	44		03	-19		
500	175	00	-40	196	61	178	-09	-21	238	45	181	-05	-26		
450		-09	-35	191	77		-18	-32	229	44		-17	-36		
400	232	-18	-30	179	91	230	-29	-41	215	42	233	-27	-45		
350		-30	-39	176	98		-41		209	48		-38	-51		
300	298	-45		175	100	294	-51		205	50	298	-46			
250		-64		186	91		-45		207	53		-52			
200				188	65	384	-45		216	48	386	-52			
170							-47		215	47		-53			
150							-49		218	42		-53			
130							-50		214	42		-58			
110							-50		221	27		-62			
100						536	-49		222	26	535	-63			
90							-53					-63			
80												-60			
70												-63			
60												-61			
											(40)	-61			

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	02·3	52	48	270	12	00·6	36	30			01·2	62	60	210	07
1000	2·4					3·0	55	48			3·0	61	58		
950		47	43	264	31		52	47				57	54	260	29
900	30·9	42	37	266	38	31·8	45	39			32·1	53	49	267	31
850		37	30	255	42		38	21				48	44	262	31
800	62·2	31	22	260	42	63·4	41	17			64·2	48	38	262	33
750		28	09	265	43		37	04				41	32	261	38
700	96·9	22	-01	265	45	98·7	30	-09			100	33	28	257	42
650		15	-09	260	44		23	-18				26	22	248	41
600	136	08	-19	253	48	138	17	-23			140	19	15	237	41
550		01	-30	252	48		10	-33				10	-04	229	48
500	181	-07	-42	250	48	184	02	-39			186	04	-02	238	55
450		-16	-51	252	73		-07	-50				-06	-12	242	50
400	234	-26	-58	256	76	238	-18	-58			240	-15	-21	237	51
350		-39	-59	254	91		-31	-58				-28	-36	240	66
300	298	-54		250	92	304	-43				306	-44		235	75
250		-62		252	81		-56					-61		234	84
200	385	-50		244	62	391	-57				392	-74		241	76
170		-51		238	48		-59					-78		233	61
150		-54		237	37		-60					-79		233	56
130		-60		232	39		-64					-85		236	49
110		-66		216	31							-80		231	38
100	534	-70		230	41						532	-77		230	24
90		-60		226	33							-77		233	24
80		-61		219	24							-77		231	22
70		-61										-72		248	15
60															

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	60			02·9	54	49	320	08	00·3	55	48		
1000	3·6					4·5	54	49			39	56	49		
950		55	54				48	44	313	24		51	46		
900	32·7	53	52			33·2	46	35	294	22	32·8	45	42		
850		50	49				48	20	272	24		38	37		
800	64·9	47	46			65·2	46	12	270	29	64·1	35	18		
750		40	37				40	03	262	34		35	00		
700	101	36	31			101	35	-02	262	36	99·3	32	-10		
650		29	19				29	-08	261	36		27	-27		
600	141	23	01			141	20	-18	259	45	139	20	-30		
550		16	-07				14	-24	259	44		12	-34		
500	187	08	-18			187	05	-32	257	44	185	02	-41		
450		-02	-30				-06	-42	258	54		-07	-47		
400	242	-12	-34			241	-17	-52	253	59	239	-20	-54		
350		-24	-38				-29	-56	240	71		-33			
300	308	-40	-52			307	-43		243	77	304	-48			
250		-55					-57		245	94		-63			
200	396	-65				(213 mb)	-69				391	-58			
170		-70										-57			
150		-67										-57			
130		-69										-60			
110		-68										-60			
100											539	-60			

	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Tropopause	NR	I 291 mb - 53° 30,100'	I 245 mb - 53° 34,300'	II 261 mb - 65° 32,800'	I 220 mb - 60° 37,100'	I 180 mb - 80° 41,300'	I 176 mb - 72° 42,200'	NR	I 234 mb - 69° 35,800'

Inversions / Isothermals:

- LERWICK: Isothermal 765 - 750 mb 30° ; 720 - 700 mb .. 28° ; 431 - 418 mb .. -19°
- STORNOWAY: Isothermal 995 - 979 mb 54°
- LEUCHARS: Inversion (40) mb 808 mb 34° - 788 mb 37° ; 282 .. -49° - 266 .. -47° ; Isothermal 1003 - 972 mb 53°
- ALDERGROVE: Isothermal 800 - 785 mb 31°
- LIVERPOOL: Inversion 850 mb 38° - 830 mb 43°
- DOWNHAM MARKET: Inversion 840 mb 48° - 828 mb 50° ; Isothermal 910 - 890 mb 53°
- CAMBORNE: Inversion 1006 mb 54° - 994 mb 55° ; 911 .. 43° - 885 .. 50°
- VALENTIA: Inversion 1013 mb 55° 995 mb 57° ; 814 .. 33° - 787 .. 38°

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.	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.	996·9 mb	998·4 mb	mb	1009·7 mb	1012·9 mb	1013·7 mb	1015·9 mb	1017·6 mb	mb
Pressure: Surf	987·2 mb	996·5 mb	mb	1001·2 mb	1010·9 mb	1009·3 mb	1000·0 mb	1009·2 mb	mb
Pressure: Freezing	768 mb	812 mb	mb	809 mb	729 mb	674 mb	680 mb	670 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	55	49	190	28	00·5	51	48							
1000	-0·9					-0·4									
950		51	45	221	36		49	42							
900	27·9	44	40	231	35	28·3	42	38							
850		39	35	233	34		35	34							
800	59·3	32	30	233	33	59·5	31	27							
750		30	20	229	31		25	18							
700	94·3	24	14	218	30	94·1	19	08							
650		17	07	214	32		12	07							
600	133	09	00	212	35	133	05	03							
550		00	-09	211	38		-02	-08							
500	178	-10	-22	212	38	177	+11	-20							
450		-18	-28	210	40		-22	-34							
400	231	-29	-42	203	40	229	-32	-45							
350		-42		191	38		-42								
300	295	-48		184	42	294	-48								
250		-48		185	45		-47								
200	384	-44		200	43	383	-42								
170		-47		195	40		-46								
150		-47		196	35		-47								
130		-47		194	31		-48								
110		-50		188	21		-49								
100	567	-50		201	14	536	-48								
90		-50		203	12		-46								
80		-50		187	12		-44								
70	(74 mb)	-50													
60															

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	02·3	55	46			00·6	57	52	245	15	01·2	67	50	280	08
1000	2·7					3·5	56	52	254	18	3·8	56	52	299	15
950		49	44				48	43	262	20		51	44	300	15
900	31·4	43	37			32·3	44	34	270	25	32·6	47	37	294	15
850		37	27				37	28	264	26		47	19	279	21
800	62·7	31	26			63·8	40	01	261	28	64·5	45	06	274	23
750		27	08				34	-05	264	32		39	01	267	27
700	97·5	24	-13			99·0	29	-12	267	35	100	36	-09	263	31
650		20	-20				23	-12	273	42		29	-21	265	36
600	137	15	-27			139	16	-22	273	44	140	21	-27	263	37
550		07	-31				09	-31	267	45		15	-32	260	41
500	182	-03	-36			184	01	-36	270	48	186	07	-38	253	48
450		-13	-41				-09	-43	265	59		-03	-46	248	47
400	235	-24	-48			238	-21	-54	258	58	241	-17	-57	246	52
350		-37	-57				-34	-65	255	60		-34	-57	251	59
300	300	-51				303	49		254	71	306	-50		251	73
250		-67					-64		253	74		-64		240	90
200	387	-51				389	-58		245	62	392	-61		240	64
170		-50					-55		251	46		-63		241	52
150		-53					-58		249	53		-63		233	42
130		-54					-60					-64		229	35
110		-53					-54					-64		225	36
100						537	-52				539	-62		247	24
90							-53					-61		251	15
80							-58								
70							-57								
60							-55								
							-52								

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	55	51	300	05	02·9	58	50	315	01					
1000	4·4	55	51			4·8	57	50	281	10					
950		51	44	309	14		49	45	292	12					
900	33·2	48	34	303	12	33·5	43	41	295	14					
850		47	19	276	15		46	10	283	14					
800	65·1	45	13	272	19	65·3	43	08	264	16					
750		39	03	265	24		41	-07	262	22					
700	101	35	-02	266	27	101	36	-29	261	23					
650		27	-12	270	31		30	-33	265	27					
600	141	21	-16	272	33	141	22	-39	272	31					
550		15	-23	264	35		13	-46	270	35					
500	188	05	-33	254	36	187	05	-49	268	30					
450		-06	-42	250	38		-05	-57	259	37					
400	241	-19	-53	254	44	241	-19	-44	252	42					
350		-31	-58	252	53		-31	-42	250	48					
300	306	-45		249	72	307	-45		251	57					
250		-62		240	98		-58		257	80					
200	393	-65		244	71	393	-68		253	76					
170							-62		258	58					
150							-63		252	45					
130							-63		253	33					
110							-65		269	30					
100															
90															
80															
70															
60															

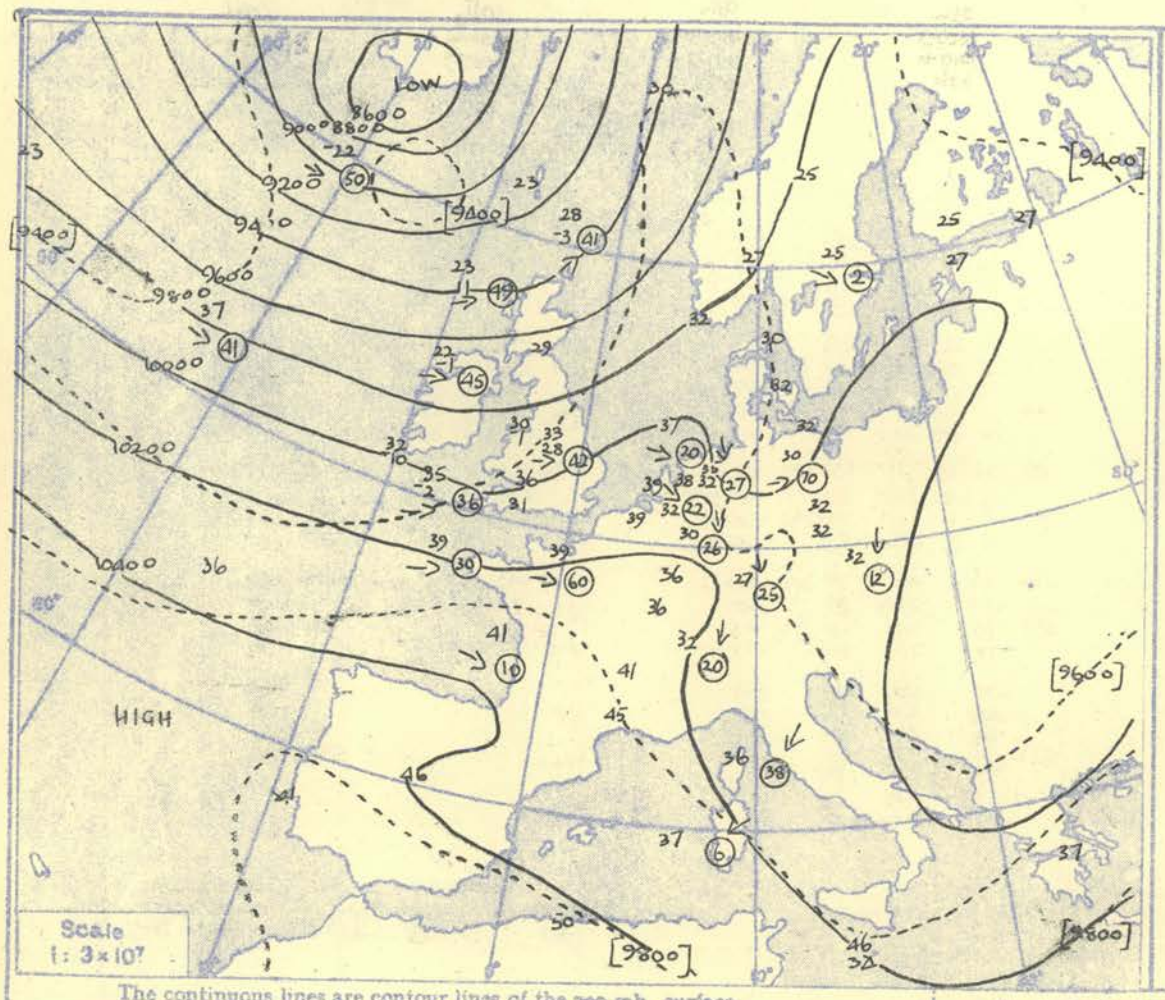
	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Tropopause	I 318 mb - 50° 28,100'	II 320 mb - 48° 27,900'		I 247 mb - 69° 34,200'	I 228 mb - 70° 36,200'	II 264 mb - 63° 33,300'	I 214 mb - 68° 37,700'	II 217 mb - 68° 37,700'	

Inversions / Isothermals:

- LERWICK: Inversion 800 mb 32° - 778 mb 33°
- STORNOWAY: Inversion 997 mb 51° - 974 mb 52°
- ALDERGROVE: Isothermal 715 - 760 mb 27°
- LIVERPOOL: Inversion 887 mb 35° - 812 mb 41° ; Isothermal 932 - 919 mb 46°
- DOWNHAM MARKET: Inversion 907 mb 46° - 886 mb 48° ; 735 .. 28° - 725 .. 39°
- LARKHILL: Inversion 913 mb 47° - 880 mb 49° ; Isothermal 766 - 741 mb 39°
- CAMBORNE: Inversion 870 mb 33° - 845 mb 47° ; Max wind.- 256° 92 kts 34,700'

Tuesday 5th September 1950.

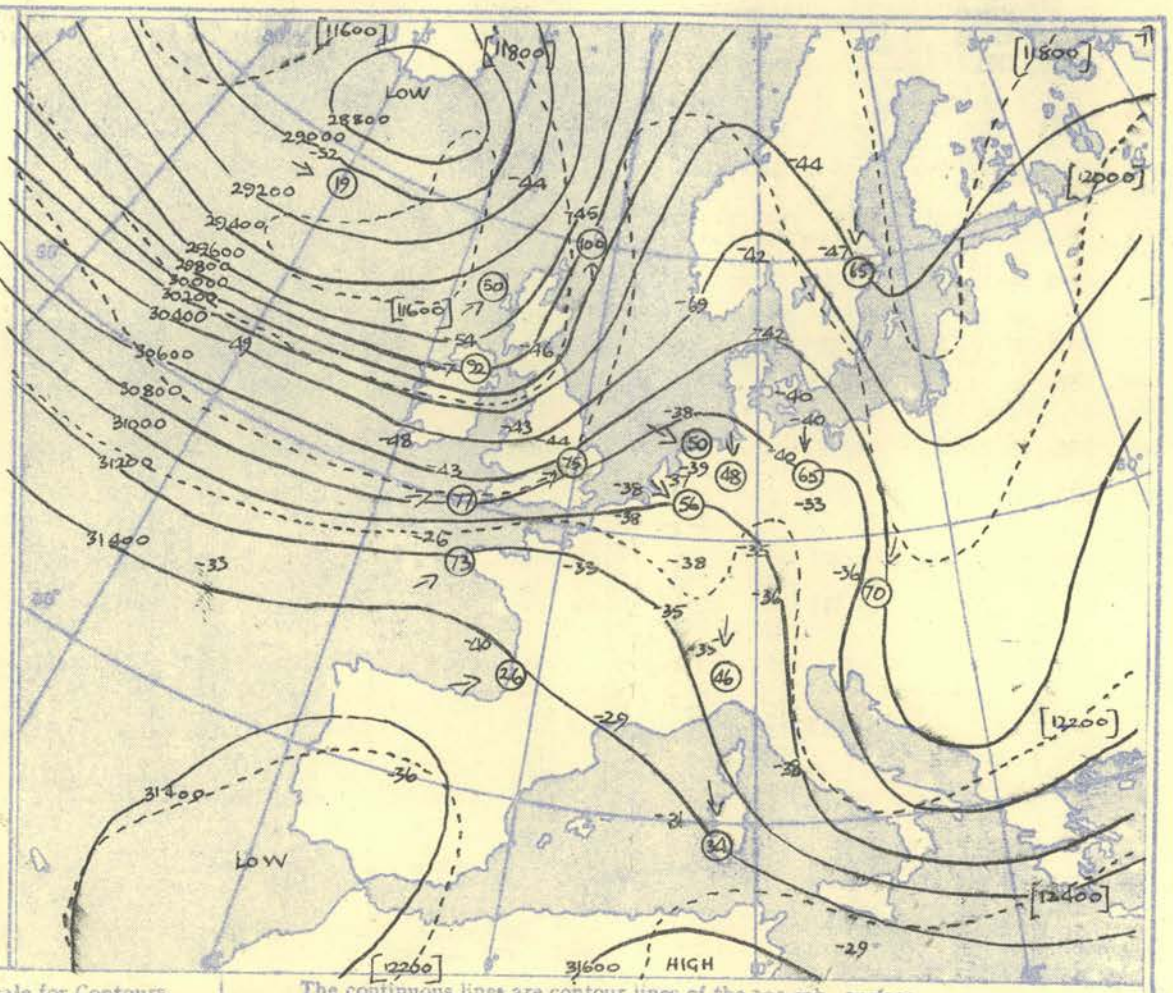
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. GMT.



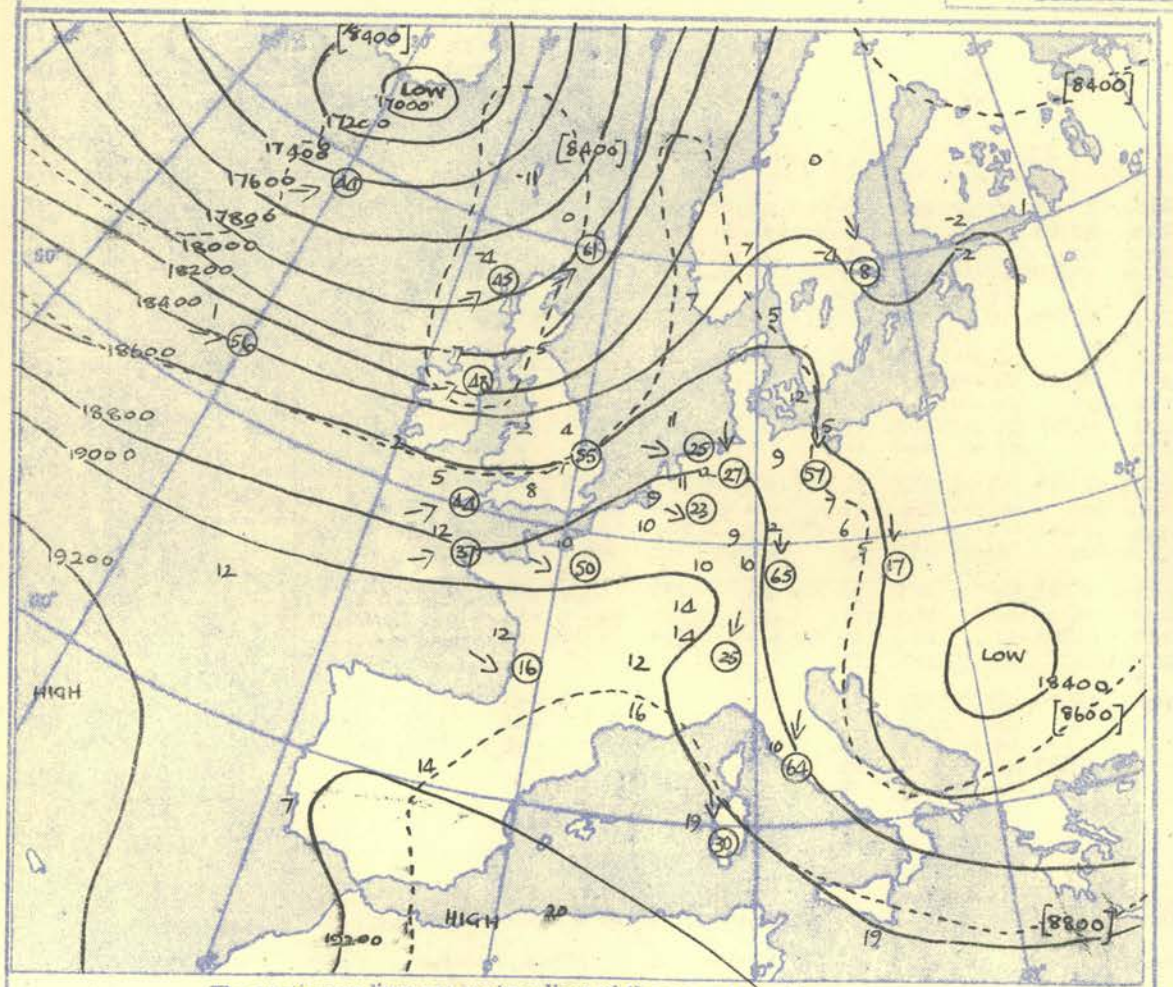
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

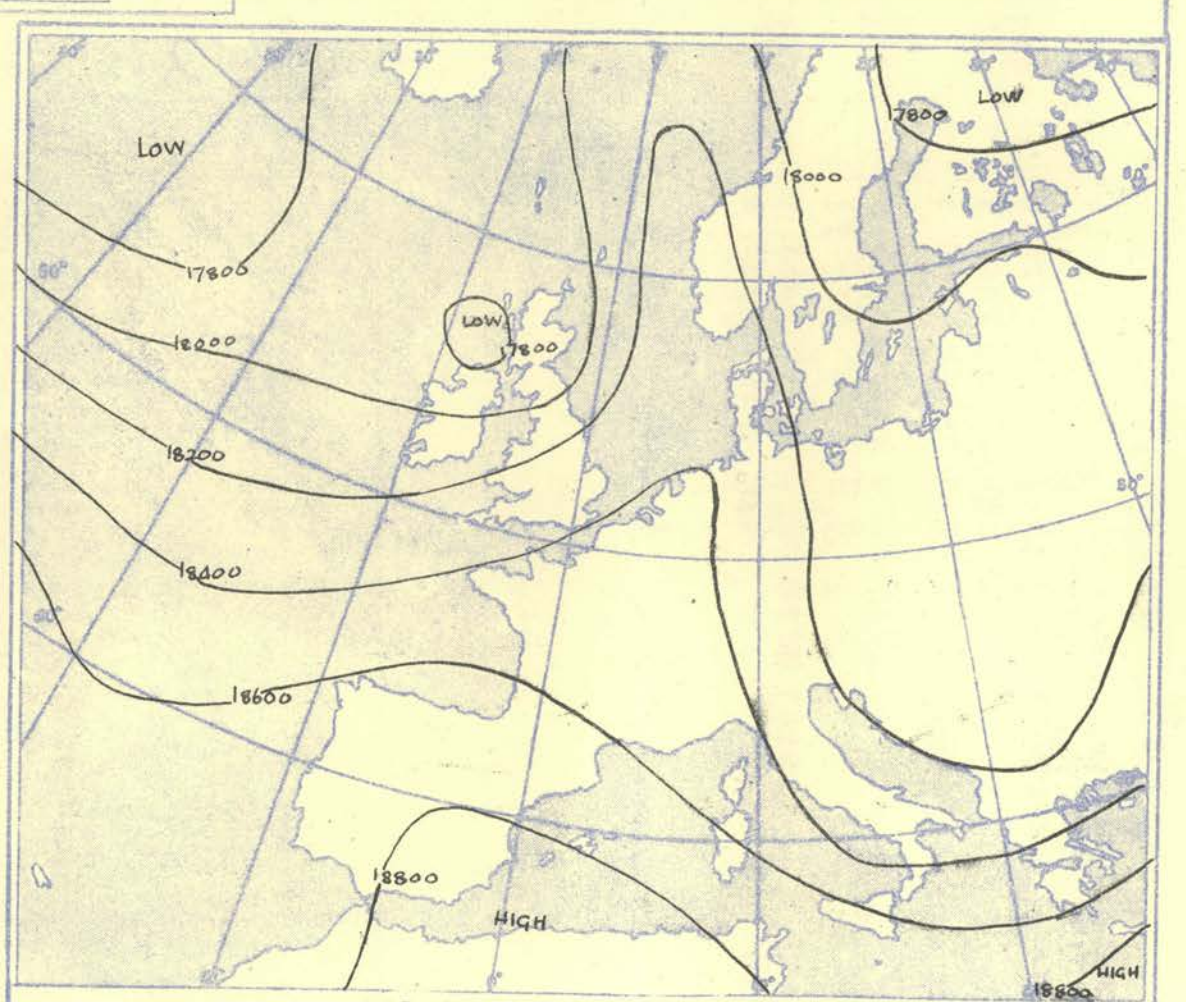
100 60 40 30 20 15 10 knots



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.

Tuesday 5 September. 1950. Page 3

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	48·2N 20·5W	49·5N 14·7W	43·9N 17·0W	39·5N 12·4W	51·3N 00·4E																	
Pressure Time	12h	14h	13h	15h	14/15h																	Time
Pressure M.S.L.	1021 mb	1020 mb	1023 mb	1022 mb	1015·9 mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	M.S.L.
Pressure Surf	1018 mb	1017 mb	1019 mb	1018 mb	1004·9 mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	Surf
Pressure Freezing	650 mb	680	615	608	673	mb	mb	mb	mb	mb	mb	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.	Height ft./100	°Temp. °F.	Dew °F.	Pressure mb
Surf		58	47		57	48		60			69		03·1	68	47										Surf
1000	5·9			5·6			6·2			6·0	66		4·8											1000
950		49	39		48	44					57	57													950
900	34·5	41	34	34·2	39	39		54	54		62	43	32·7	49	46										900
850		40	27		35	33		55	23		57	50		46	36										850
800		45	43	65·4	33	33		49	40		52	27	65·7	45	34										800
750		39	34		38	29		43	38		49	20		42	42										750
700	102	38	09	101	33	29	104	43	29	104	43	16	101	36	29										700
650		31	19		28			37	25		38	05		29	26										650
600	142	25		141	22			29			31		142	21											600
550		17			11			19			21			13											550
500	188	07		187	-02		191	11		192	14		188	03											500
450														-08											450
400													242	-19											400
350														-30											350
300													308	-45											300
250																									250
200																									200
170																									170

cloud:- 1/8 Cu 940-910 mb; 2/8 Sc 870-860 mb. Inversion 850 mb 40° - 800 .. 45°

cloud:- 3/8 Cu 950-750 mb; 5/8 Sc 880-800 mb. Inversion 800 mb 33° - 750 .. 38°

Cloud:- 7/8 Sc 990-920 mb; 6/8 Cs NR. Inversion 1018 mb 60° - 950 .. 61°; 900 mb 54° - 850 .. 55°; Isothermal 750-700 mb 45°

cloud:- 7/8 Sc 950-920 mb; 6/8 Cs NR. Inversion 950 mb 57° - 900 .. 62°; Surface wind N 11-16 kts

cloud:- 2/8 Cu 846-836 mb; 3/8 Ci 333-314 mb

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

Place	Lerwick		Cirrus 52·5N 20·0W		Cirrus 52·5N 20·0W		Weather Explorer 58·9N 19·3W		Culdrose		Downham Market		Cirrus 52·5N 20·0W		Cirrus 52·5N 20·0W		Leuchars				Place
Time	03h		03h		09h		09h		10h		10h		15h		21h		21h				Time
Type																	P14AR				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	30	270	27	250	40	340	09	280	07	260	18	230	13	240	11			Surf.
1,000			"		"		250	45			280	12	260	24	220	17	245	27			1,000
2,000			270	38	270	29	260	52			290	12	"		220	20	254	28			2,000
3,000			280	35	270	30	260	57			290	13	260	32	240	30	258	33			3,000
4,000			280	34	270	27	270	54			290	15	"		250	31	260	35			4,000
5,000			280	36	270	30	270	54			280	19	"		230	26	261	37			5,000
6,000			270	38	270	37	270	47	270	12	270	21			250	31	258	36			6,000
8,000			(7,000')				270	54	260	21	260	24			260	38	259	35			8,000
10,000			270	41	270	37	270	48	260	40	260	28	260	40	260	38	263	37			10,000
14,000			270	46	280	38	270	49	250	30	260	36	260	47	250	36	262	46			14,000
18,000			260	56	270	41	270	44			260	36	260	58	250	54	259	54			18,000
24,000			260	60	280	42	270	37			250	50	270	52			264	66			24,000
30,000					280	54	280	39	260	22	250	58					260	66			30,000
40,000	210	56			(28,000')		270	39	260	66	240	61					256	43			40,000
50,000	80	55							(38,000')		240	33					263	21			50,000
	190	15									250	19									60,000
	(55,000')										230	05									70,000
											CALM										80,000
											330	07									90,000
											210	12									
											(55,000')										

NEPHOSCOPE OBSERVATIONS

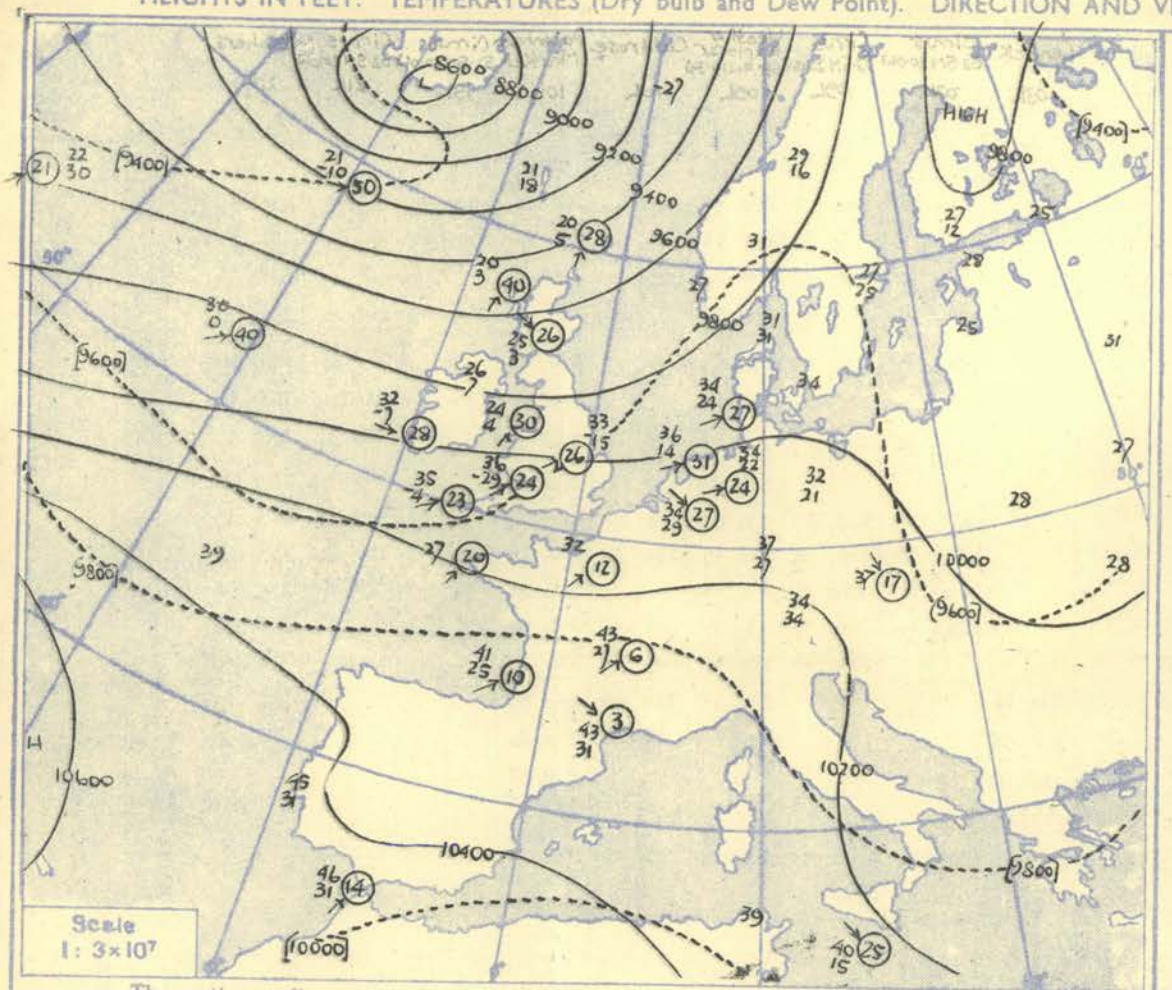
Place	West Raynham										Place
Time Type	12h Ci										Time Type
Dir. Vel.	220 50										Dir. Vel.

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

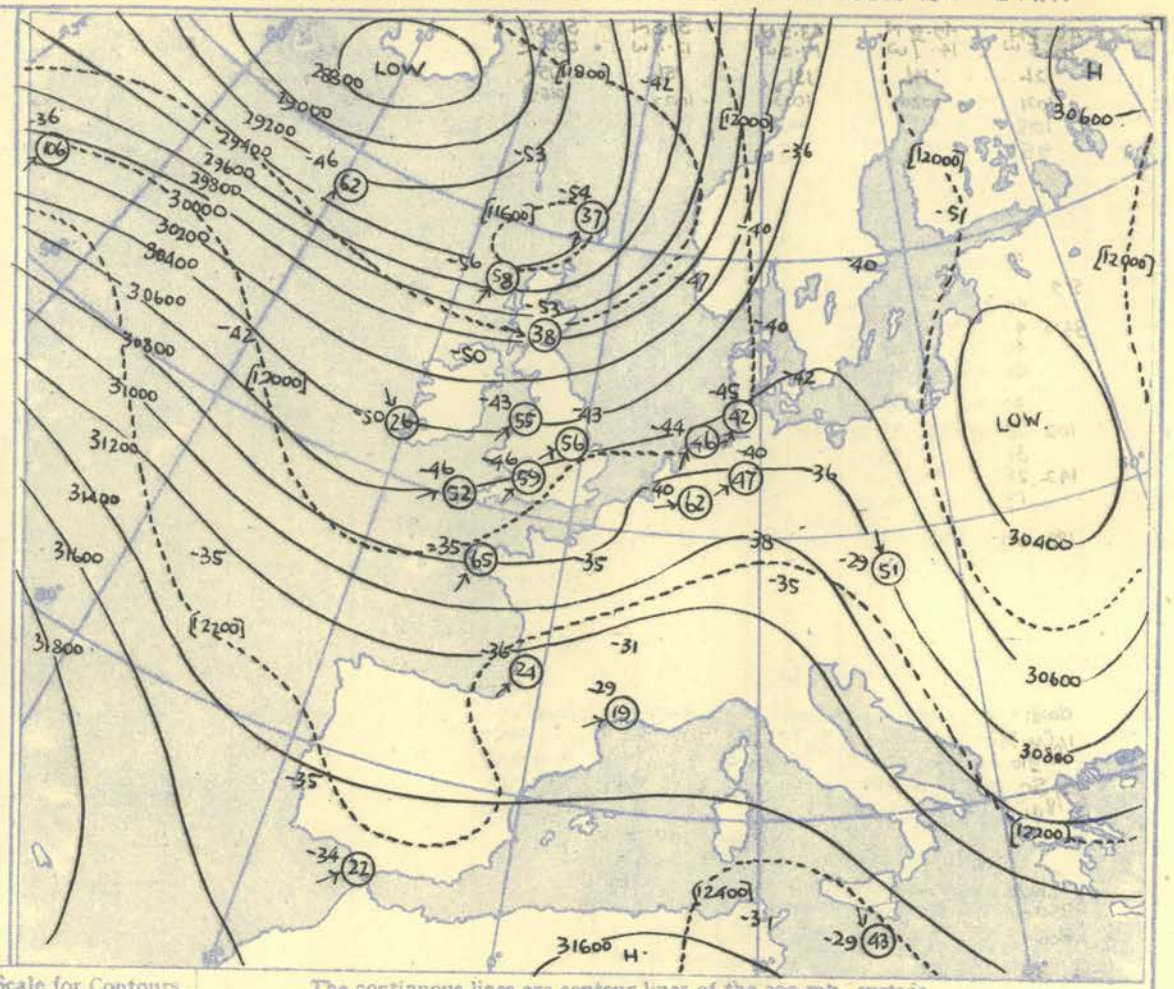
Ship	WEATHER EXPLORER.			WEATHER EXPLORER.			WEATHER EXPLORER.			WEATHER EXPLORER.			CIRRUS.			CIRRUS.			CIRRUS			CIRRUS.						Ship
Lat/Long	58·9N 19·1W.						58·9N 18·9W			58·9N 19·1W.			52·5N 20·0W.			52·5N 20·0W.			52·5N 20·0W			52·5N 20·0W.						Lat/Long
Pressure Time	03h. G.M.T.			09h. G.M.T.			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.	985 mb			mb			992 mb			992 mb			1013 mb			1013 mb			1013 mb			1013 mb			mb			M.S.L.
Pressure Surf	985 mb			mb			992 mb			992 mb			1013 mb			1013 mb			1013 mb			1013 mb			mb			Surf
Pressure Freezing	800 mb			mb			830 mb			830 mb			865 · 700 mb			850 · 750 mb			710 mb			770 · 850 mb			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	Pressure mb
Surf		53	49	250	42			51	42	260	33		50	44	260	30		52	45				54	43				55	45								Surf
1000	-42						-23					-23					3·4	50	43		3·6	52	43			3·6	52	41			2·1	52	46			1000
950		49	46	260	52			46	39	265	34		46	42	267	44																			950
900	24·5	43	41	269	59		26·2	40	33	265	44	26·2	39	38	266	42																			900
850		37	36	267	62			34	27	264	36		34	32	263	43		30	27			32	23				32	21				32	30			850
800	35·8	32	32	266	52		57·3	29	22	258	45	57·3	29	27	263	44																			800
750		28	27	270	50	No Radio Sonde		25	10	256	48		23	18	266	50																			750
700	90·5	22	20	278	50		91·9	21	-10	260	50	91·7	19	08	272	53	98·1	32	-15	For	98·2	28	-06	For		98·5	30	00	For		96·6	30	28	For		700
650		16	14	291	51	ascent available.		15	-17	257	46		14	02	251	53																			650
600	130	10	07	292	49		131	08	-23	257	48	131	07	-11	250	48				winds				winds				winds				winds			600
590		02	-06	281	45			01	-31	261	55		00	-19	258	49				See				See				See				See			550
500	175	-06	-22	257	44	For winds see	176	-08	-38	260	54	175	-06	-26	260	51	184	01	-33	top	183	00	-36	top		184	03	-18	top		182	05	01	top		500
450		-15	-31	251	47	top of page.		-18	-51	260	55		-13	-33	254	59				of				of				of				of			450
400	228	-26	-43	267	38		228	-29	-56	260	58	228	-25	-46	255	65				page				page				page				page			400
350		-38	-56	268	26			-39	-59	260	78		-35	-57	258	72																			350
300	292	-52		268	19		293	-46		260	62	293	-45		260	68	302	-49			302	-53				304	-42				304	-42				300
250		-55		269	33			-48		274	55		-44		259	65																			250
200	380	-47		258	42		382	-44		269	65	383	-42		261	61	388	-58				-38				392	-62				393	-44				200
170		-46		252	36			-45		277	38		-33		269	48																			170
150		-46		245	33			-46		294	42																-62				-36				150
130		-48		249	33			-49		298	45		-46		270	48										(116mb)				(160mb)				130
110		-49		251	29			-45		283	32		-50		268	43																			110
100	533	-50		255	21		535	-46		275	31	537	-49		263	35		-60				-58													100
90		-51		263	18			-48		267	30		-50		260	32																			90
80		-52						-45					-50		260	24	(95mb)	-62				-54													80
70	(83mb)																																		70
60																																			60
							Isothermal 762 - 734 mb 25°					Isothermal 666 - 643 mb 19°					Inversion 846 mb 30° - 816 mb 36°; Isothermal 850 - 846 mb 30°				Inversion 818 mb 28° - 803 mb 34°; Isothermal 803 - 774 mb 34°.					Inversion 833 mb 30° - 810 mb 36°; Isothermal 810 - 760 mb 36°.					Isothermal 845 - 774 mb 32°; 723 - 700 .. 30°				
Tropopause	I 265 mb -59° 31·900.						I 283 mb -49° 30600.					I 283 mb -48° 30·600.					I 241 mb -72° 34·900.				II 270 mb -63° 32·500.					I 200 mb -62° 39·200.					I 252 mb -51° 34·100.					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

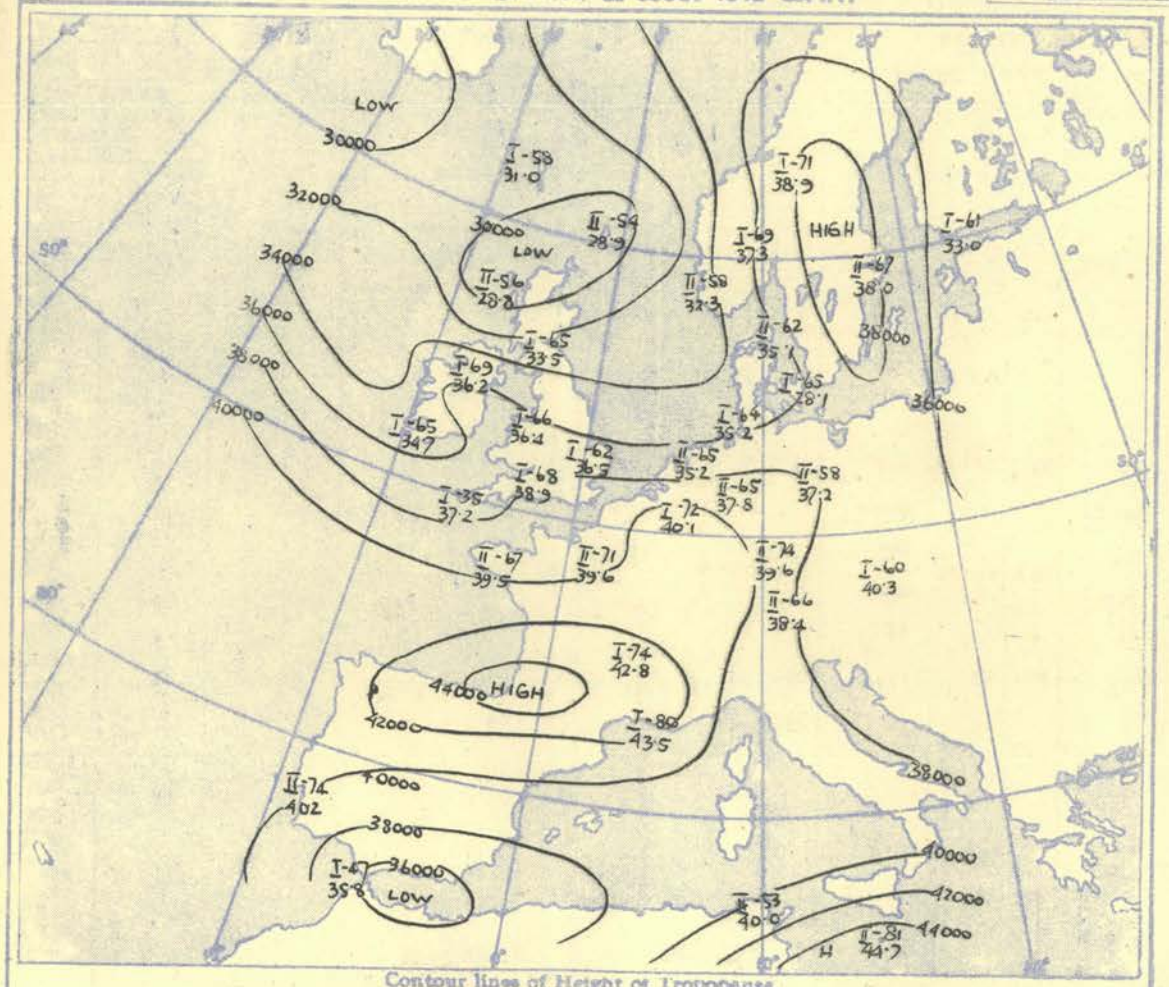


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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.

The warm ridge across the North Sea moved away eastwards. The cold air over the Northern Atlantic spread into northern districts of the British Isles and a small cold pool moved across Northwest Scotland. In southern districts of the country there was little change throughout the day. The strong westerly thermal gradient persisted at around latitude 50°N in the Atlantic.

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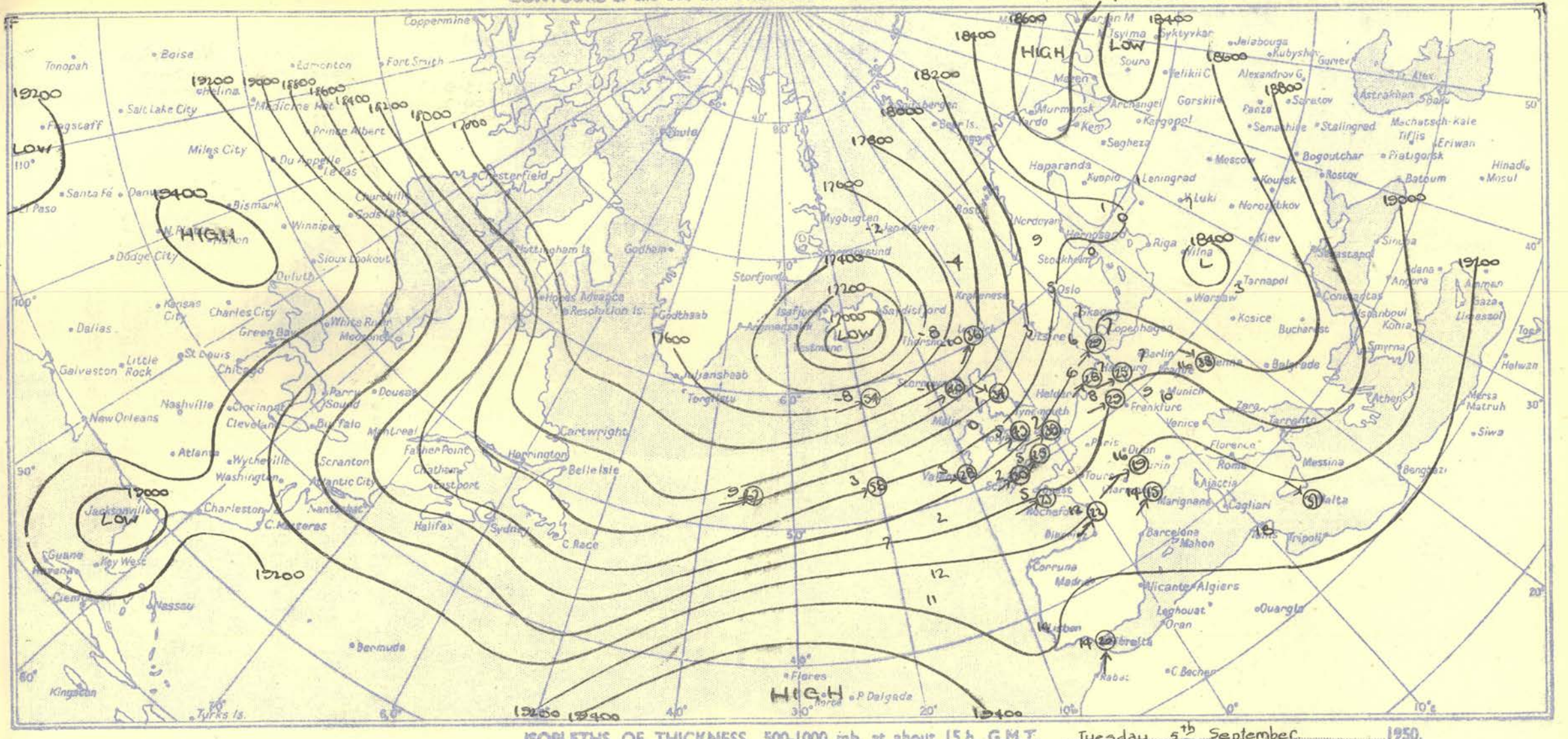
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. September 5th 1950.


HIGH
LOW
HIGH
LOW
HIGH
LOW
HIGH
18600
18400
18200
18000
17800
17600
17400
17200
19200
19000
19400
Coppermine
Boise
Edmonton
Fort Smith
Tonopah
Helina
Salt Lake City
Medicine Hat
Flagstaff
Prince Albert
Miles City
Du Appelle
Le Pas
Chesterfield
Churchill
Santa Fé
Denver
Bismark
Winnipeg
El Paso
Dodge City
Sioux Lookout
Duluth
Kansas City
Charles City
White River
Dallas
Green Bay
Galveston
Little Rock
St Louis
Chicago
Nashville
Cincinnati
Cleveland
Buffalo
New Orleans
Atlanta
Wytheville
Washington
Scranton
Atlantic City
Jacksonville
Charleston
C. Hatteras
Nantucket
Halifax
Sydney
C. Race
Cartwright
Father Point
Chatham
Eastport
Harrington
Belle Isle
Montreal
Parry Sound
Douse
Moosonee
Resolution Is.
Hopes Advance
Nottingham Is.
Godhavn
Godthaab
Julianshaab
Torgilstu
Storfjord
Isafjord
Angmagssalik
Mygbugten
Jan Mayen
Thule
Bear Is.
Spitsbergen
Murmansk
Archangel
Vardo
Kem
Soura
Mezen
Gorskii
Segheza
Haparanda
Kuopio
Leningrad
Moscow
Kotlas
Kirov
Molotov
Sverdlovsk
Perm
Kazan
Gorkii
Saratov
Stalingrad
Astrakhan
Baku
Tiflis
Batoum
Rostov
Kharkov
Kursk
Orel
Tula
Smolensk
Minsk
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Riga
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Oslo
Skagen
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Kiev
Tarnapol
Lwow
Luki
Norozitkov
Nordoyan
Herngsand
Lerwick
Thorshavn
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Scilly
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Gibraltar
Barcelona
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Bangui
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Abidjan
Freetown
Bathurst
Dakar
Port Etienne
Agadir
Casablanca
Tangier
Gibraltar
Malta
Tripoli
Benghazi
Mersa Matruh
Siwa
Helwan
Amman
Gaza
Limassol
Adana
Angora
Kahia
Ispanboul
Smyrna
Constantza
Sevastapol
Kiev
Tarnapol
Lwow
Luki
Norozitkov
Nordoyan
Herngsand
Lerwick
Thorshavn
Valentia
Scilly
Brest
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Biarritz
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Alicante
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Leghouat
Ouargla
Tripoli
Malta
Cagliari
Ajaccio
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Prague
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Venice
Tarranto

METEOROLOGICAL OFFICE, LONDON. September 3 1950.

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.	999.2 mb	1000.1 mb	1006.8 mb	1010.6 mb	1013.9 mb	1014.7 mb	1015.9 mb	1018.2 mb	1016.3 mb
Pressure: Surf	989.5 mb	998.2 mb	1005.7 mb	1002.2 mb	1011.9 mb	1010.3 mb	1000.2 mb	1007.8 mb	1014 mb
Pressure: Freezing	818 mb	817 mb	775 mb	805 mb	685 mb	672 mb	670 mb	672 mb	700 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LERWICK					
Surf	02-7	51	49	190	27
1000	-03				
950		51	46	213	31
900	287	44	40	216	30
850		36	32	219	33
800	558	30	27	222	33
750		25	18	227	31
700	94-4	20	05	220	28
650		13	00	219	29
600	133	06	-10	218	32
550		-2	-17	219	36
500	178	-10	-28	220	36
450		-21	-38	226	33
400	230	-28	-44	232	37
350		-43		236	40
300	294	-59		240	37
250		-45		209	41
200	383	-44		207	30
170		-47		204	36
150		-48		211	35
130		-48		208	23
110		-48			
100		(116)			
90					
80					
70					
60					
Tropopause	I 307 mb -54° 28900'				
STORNOWAY					
Surf	0·5	55	49	210	15
1000	0·0				
950		50	43	227	27
900	287	43	38	238	32
850		37	33	244	32
800	60·0	30	26	247	35
750		27	18	241	42
700	94·6	20	03	240	40
650		13	-5	245	42
600	134	07	-6	246	46
550		-3	-18	246	43
500	178	-11	-19	236	40
450		-20	-26	239	55
400	230	-31	-37	238	57
350		-45		238	55
300	294	-56		240	58
250		-47		247	46
200	383	-43		231	32
170		-45		247	35
150		-45		246	27
130		-46		219	20
110		-46		229	28
100	536	-45		228	27
90		-48		221	18
80		-47		230	16
70		-45			
60					
	Isothermal 778-746 mb 27°				
Tropopause	I 307 mb -56° 28800'				
LEUCHARS					
Surf	00·2	63	49	260	22
1000	01·8				
950		54	43	293	30
900	30·8	46	36	289	26
850		40	30	281	30
800	62·3	35	23	279	27
750		30	14	279	27
700	97·0	23	03	285	26
650		21	-8	287	36
600	137	15	-13	294	33
550		11	-16	290	32
500	182	01	-29	293	34
450		-10	-31	288	35
400	236	-21	-40	288	32
350		-35	-51	282	42
300	30·1	-53		268	38
250		-64		276	43
200	388	-47		293	35
170		-46		238	27
150		-43		232	26
130		-51		248	20
110		-53		252	18
100	540	-43		242	14
90		-44		225	08
80		-47			
70		-52			
60					
Tropopause	I 253 mb -65° 33500'				
ALDERGROVE					
Surf	02·3	58	49		
1000	03·0				
950		48	44		
900	31·6	43	35		
850		37	29		
800	62·5	31	25		
750		27	19		
700	97·8	26	07		
650		21	03		
600	137	16	-6		
550		09	-15		
500	183	00	-23		
450		-10	-32		
400	236	-22	-42		
350		-34	-52		
300	30·1	-50			
250		-66			
200	387	-54			
170		-54			
150		-52			
130		-54			
110		-51			
100	538	-52			
90		-53			
80		-54			
70		-52			
60					
	Inversion 783 mb 26°-735 mb 29°				
Tropopause	I 226 mb -69° 36200'				
LIVERPOOL					
Surf	0·6	62	44	270	18
1000	03·9	61	44	271	20
950		53	38	267	24
900	32·6	45	32	263	25
850		39	28	258	26
800	64·1	38	19	255	28
750		41	03	254	30
700	99·7	34	04	254	30
650		27	-11	256	37
600	140	18	-16	255	37
550		13	-20	253	44
500	186	05	-25	255	43
450		-7	-34	255	54
400	239	-19	-38	254	57
350		-30	-44	253	55
300	303	-43		252	55
250		-58		250	55
200	392	-55		252	42
170		-52		252	47
150		-51		250	43
130		-53		252	43
110		-49		260	36
100	543	-48		249	23
90		-50		225	24
80		-51		231	25
70		-49			
60		-44			
		-48			
	Inversion 808 mb 24°-793 mb 43° Isothermal 793-763 mb 43°				
Tropopause	I 224 mb -66° 36400'				
DOWNHAM MARKET					
Surf	01·2	67	47	240	08
1000	04·1	65	46		
950		59	41	265	13
900	33·3	49	36	267	13
850		42	22	261	16
800	65·1	45	06	256	22
750		39	-7	254	24
700	101	33	-15	257	26
650		25	-22	260	30
600	141	22	-23	260	32
550		13	-29	260	33
500	187	07	-34	260	38
450		-3	-43	260	39
400	241	-16	-52	259	44
350		-25	-56	254	49
300	307	-43		245	56
250		-59		248	67
200	394	-60		249	73
150		-57		247	48
130		-55		245	43
110		-58		247	46
100	543	-55			
90		-53			
80		-52			
70		-54			
60		-54			
		-51			
	Inversion 853 mb 42°-830 mb 46° Isothermal 686-672 mb 32°				
Tropopause	I 230 mb -62° 36500'				
LARKHILL					
Surf	4·4	61	50	310	07
1000	4·4	61	50		
950		54	43	292	14
900	33·4	47	38	276	13
850		41	33	269	16
800	65·1	44	02	263	21
750		41	-4	257	24
700	101	36	-29	251	24
650		29	-34	256	23
600	141	23	-38	263	24
550		15	-44	260	24
500	187	05	-51	252	25
450		-6	-60	244	30
400	241	-17	-60	248	38
350		-30	-60	248	46
300	307	-46		244	55
250		-57		243	50
200	393	-61		244	28
150		-61		243	55
130		-60		252	46
110		-61		257	42
100	542	-58		252	32
90		-57		254	25
80		-58		250	17
70		-57		250	25
60		-55		251	12
	Inversion 845 mb 41°-816 mb 47° Isothermal 726-715 mb 36°				
Tropopause	I 204 mb -68° 38200'				
CAMBORNE					
Surf	02·9	62	51	270	08
1000	05·0	58	48	275	12
950		51	43	286	10
900	33·8	45	37	292	12
850		40	31	289	18
800	65·4	43	15	268	23
750		40	07	263	24
700	101	35	-4	264	23
650		29	-16	263	24
600	141	21	-24	258	25
550		12	-34	258	28
500	187	02	-36	261	30
450		-10	-43	249	42
400	240	-22	-40	253	42
350		-33	-48	249	36
300	305	-46		257	52
250		-61		260	66
200	391	-60			
150		-58			
130		-60			
110		-62			
100	540	-61			
90		-59			
80		-58			
70		-61			
60		(72)-56			
	Inversion 848 mb 39°-832 mb 44° Isothermal 726-715 mb 36°				
Tropopause	I 222 mb -35° 37200'				
Valentia					
Surf	03	60	52	240	12
1000	4·4	57	48	247	13
950		49	40	262	17
900	33·1	43	37	262	21
850		37	31	264	29
800	64·5	34	24	265	28
750		30	01	269	28
700	99·8	32	-7	267	28
650		26	-13	266	33
600	140	20	-19	269	31
550		14	-25	268	30
500	186	08	-35	270	28
450		-8	-44	281	29
400	239	-20	-54	288	29
350		-34		302	26
300	305	-50		306	26
250		-64		301	34
200	391	-55		275	48
170		-58		278	46
150		-56		279	41
130		-55		274	39
110		-53		276	34
100	541	-56		271	36
90		-57		270	36
80		-55			
70		-54			
60		(66)-55			
	Inversion 870 mb 32°-786 mb 37°				
Tropopause	I 247 mb -65° 34700'				

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.	G.M.T.	00hrs. (winds 21hrs) G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.
Pressure: M.S.L.	1000·6 mb	1001 mb	mb	1011·7 mb	1014·0 mb	1015·4 mb	1017·0 mb	1018·6 mb
Pressure: Surf	990·7 mb	999·4 mb	mb	1003·1 mb	1012·0 mb	1010·5 mb	1000·9 mb	1008·0 mb
Pressure: Freezing	831 mb	818 mb	mb	725 mb	700 mb	697 mb	670 mb	688 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LERWICK					
Surf	02·7	51	46	200	19
1000	00·1				
950		47	38	232	32
900	287	42	34	230	28
850		35	30	226	28
800	59·8	28	25	223	29
750		23	17	227	31
700	94·2	18	09	231	33
650		10	-3	229	33
600	133	02	-9	228	33
550		-7	-13	220	36
500	177	-15	-21	224	36
450		-24	-29	224	36
400	229	-35	-41	224	33
350		-49		213	27
300	292	-55		220	34
250		-48		228	37
200	381	-43		229	30
170		-49		226	22
150		-52		214	20
130	(134)	-55			
110					
100					
90					
80					
70					
60					
Tropopause	I 313 mb -56° 28300'				
STORNOWAY					
Surf	0·3	55	52	260	15
1000	0·4				
950		49	46	257	18
900	29·1	42	39	253	20
850		38	34	239	23
800	60·4	30	26	237	27
750		22	13	244	39
700	94·8	19	04	251	38
650		13	-2	250	39
600	134	05	-10	252	36
550		-1	-16	255	44
500	178	-11	-29	255	48
450		-19	-41	264	58
400	231	-27	-53	270	81
350		-38	-58	270	85
300	295	-51		267	87
250		-58		265	64
200	383	-48		263	38
150		-53			
130		-50			
110		-52			
100	534	-53			
90					
80					
70					
60					
	Inversion 929 mb 55°-890 mb 56° Isothermal 850-728 mb 22°				
Tropopause	I 258 mb -62° 32700'				
LEUCHARS					
Tropopause					
ALDERGROVE					
Surf	02·3	51	48	240	100
1000	03·2				
950		48	44	258	13
900	31·8	43	37	258	27
850		39	35	254	31
800	61·2	33	32	258	27
750		33	23	261	30
700	98·2	29	01	256	37
650		24	-2	254	37
600	138	17	-10	255	42
550		09	-17	258	37
500	183	-2	-36	249	34
450		-14	-27	255	48
400	236	-23	-29	246	56
350		-37	-42	243	53
300	30·1	-52		238	58
250		-64		247	42
200	388	-57		256	32
170		-56		265	38
150		-58		258	28
130		-61			
110		-62			
100	536	-58			
90		-56			
80		-56			
70					
60					
	Inversion 783 mb 32°-771 mb 34°				
Tropopause	I 295 mb -64° 30100'				
LIVERPOOL					
Surf	0·6	57	46	255	15
1000	03·9	55	44	262	18
950		49	40	265	18
900	32·6	43	32	263	25
850		39	28	258	26
800	63·9	30	23	271	15
750		22	11	258	28
700	99·0	32	11	258	28
650		26	-12	257	32
600	138	19	-21	258	30
550		12	-30	262	32
500	185	03	-39	259	31
450		-7	-49	257	29
400	239	-20	-60	268	23
350		-34	-57	256	21
300	304	-49		260	16
250		-67		273	22
200	390	-61		261	46
150		-57		264	37
130		-58		269	40
110		-58		270	53
100	538	-56		275	36
90		-58		263	21
80		-60		263	24
70		-56		264	28
60		(66)-55		274	13
	Inversion 778 mb 27°-736 mb 36°				
Tropopause	I 244 mb -69° 34800'				
DOWNHAM MARKET					
Surf	01·2	57	50	205	05
1000	04·2	55	53		
950		54	47	284	19
900	33·3	49	44	254	14
850		41	36	268	12
800	64·8	33	29	269	14
750		37	-2	251	18
700	100	32	-15	240	22
650		26	-33	243	26
600	140	19	-36	252	31
550		10	-45	252	30
500	186	00	-50	233	29
450		-11	-53	250	33
400	239	-23	-54	254	34
350		-38	-39	252	36
300	306	-46		247	39
250		-56		236	59
200	393	-59		248	54
150		-54		261	40
130		-66		258	40
110		-63		262	28
100	542	-66		270	25
90		-68		260	25
80		-66			
70					
60					
	Inversion 811 mb 57°-788 mb 62° 287 mb 38°-257 mb 38°				
Tropopause	I 216 mb -74° 32300'				
LARKHILL					
Surf	4·4	53	45	calm	
1000	4·6				
950		54	47	284	19
900	33·4	47	41	274	18
850		39	33	254	12
800	64·9	41	21	266	12
750		39	10	261	18
700	100	35	01	250	20
650		29	-7	258	22
600	141	23	-11	246	28
550		15	-18	249	27
500	187	04	-26	251	26
450		-7	-32	259	26
400	240	-19	-35	251	31
350		-31	-44	247	32
300	306	-46		247	39
250		-56		236	59
200	393	-59		248	54
150		-54		261	40
130		-57		263	37
110		-57		263	37
100	542	-57		271	29
90		-58		265	24
80		-57		275	15
70		-57		275	19
60		-55			
	Inversion 1001 mb 53°-994 mb 56° 830 mb 36°-810 mb 42°				
Tropopause	I 235 mb -60° 35800'				
CAMBORNE					
Surf	02·9	54	50	270	03
1000	05·0	54	50		
950		52	49	266	15
900	33·8	44	41	277	14
850		38	32	286	15
800	65·1	37	28	265	17
750		38	-6	252	20
700	101	34	-17	257	20
650		28	-32	260	22
600	141	20	-31	260	22
550		12	-34	255	23
500	186	02	-37	260	22
450		-8	-38	265	29
400	240	-20	-38	261	32
350		-34	-47	257	32
300	305	-49		248	39
250		-60		279	37
200	392	-60		283	41
150		-61		284	40
130		-61		283	37
110		-62		279	37
100	539	-67		288	38
90		-66		300	31
80		-64		280	23
70		-64		284	18
60		-65		285	14
	Inversion 1008 mb 54°-975 mb 55° 818 mb 34°-785 mb 40°				
Tropopause	I 240 mb -62° 33300'				

No. 11483. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Wednesday 6th September. 1950. Page 1.

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

03h G.M.T.

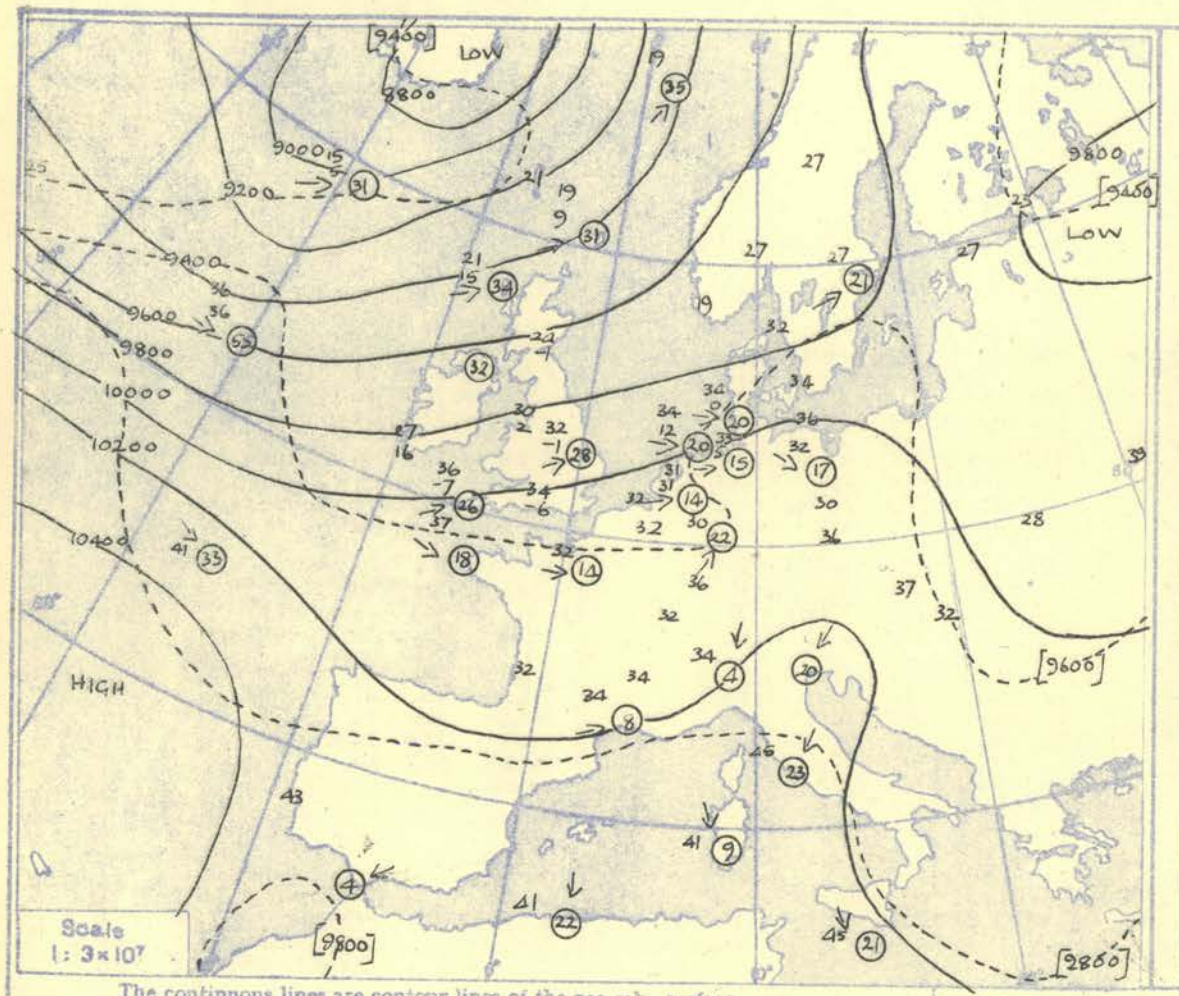
Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	03h	03h	03h	03h	03h	03h	03h	03h	03h
Pressure: M.S.L. (mb)	1001·2	1001·6	1008·0	1010·0	1012·7	1015·0	1016·4	1016·5	1011·1
Pressure: Surf (mb)	991·3	999·7	1007·2	1001·4	1010·7	1010·4	1000·1	1005·9	1009
Pressure: Freezing (mb)	824	815	818	750	715	700	682	670	785
Surf	2·7 51 47 195 17	0·5 52 47 235 15	0·2 51 48	2·3 51 48 210 12	0·6 54 48	1·2 53 49 Calm.	4·4 46 45 Calm.	2·9 52 51 Calm.	0·3 55 51 190 09
1000	0·3	0·4 52 47	2·2 51 47	2·6	3·5 56 50	4·1 54 49	4·4 46 45	4·5 53 50	3·0 55 50 196 13
950	47 42 220 33	48 41 234 27	47 44	46 45 233 23	50 44	51 44 256 09	50 46	51 43 240 14	50 49 213 22
900	28·9 42 35 222 30	29·0 42 36 234 30	30·8 42 39	31·1 41 37 238 27	32·4 44 36	32·9 44 39 251 09	33·1 45 38	33·3 45 34 250 14	31·8 43 36 220 24
850	36 27 229 29	36 31 234 31	36 32	36 33 236 24	38 32	37 33 243 14	38 34	39 32 260 15	36 33 225 26
800	60·1 29 24 232 31	60·3 30 25 234 30	62·0 30 26	62·3 30 29 239 26	63·7 30 27	64·2 32 28 235 22	64·4 38 28	64·7 38 27 250 19	63·2 37 26
750	25 18 232 32	27 21 235 31	25 18	32 22 240 31	37 11	36 10 239 23	39 12	40 07 244 22	31 60
700	94·6 19 09 231 31	95·0 21 15 241 34	96·6 24 -01	87·9 26 -05 243 32	98·9 30 02	100 32 -01 245 28	100 34 -06	100 36 -07 248 26	98·4 27 16
650	12 00 232 33	18 07 241 39	21 -18	20 -10 240 30	24 -05	25 -07 247 26	28 -11	29 -15 249 27	29 28
600	133 05 -10 234 31	134 07 01 238 42	136 14 -21	137 13 -16 240 37	139 19 -11	139 18 -13 252 27	140 21 -14	141 24 -20 260 26	139 22 21
550	-03 -19 238 30	-02 -20 243 48	04 -17	05 -17 244 44	11 -18	09 -21 245 30	13 -15	17 -26 273 28	16 13
500	178 -12 -31 242 37	178 -08 -25 241 50	181 -05 -12	182 -03 -08 248 45	184 00 -26	185 -01 -25 242 32	186 02 -28	187 08 -33 282 30	185 09 04
450	-19 -42 251 48	-15 -25 240 50	-15 -20	-12 -15 256 45	-12 -33	-13 -30 244 29	-07 -31	-01 -41 296 31	00 -06
400	230 -28 -44 263 49	231 -24 -33 247 51	234 -25 -31	235 -24 -18 278 66	238 -25 -42	238 -25 -38 245 28	240 -19 -43	241 -13 -41 304 46	239 -13 -16
350	-40 -50 256 71	-37 -46 244 52	-41	-36 -05 284 84	-38 -50	-38 -49 248 35	-32 -56	-26 -45 315 54	-25 -32
300	294 -53 259 75	296 -52 244 51	298 -57	300 -52 288 92	302 -50	301 -54 246 31	305 -45	308 -40 -56 315 73	306 -42
250	-60 256 49	-66 243 45	-66	-66 292 98	-64	-66 263 40	-59	-57 322 84	-55
200	382 -49 229 27	383 -51 252 45	384 -53	387 -59 292 66	389 -58	388 -59 270 37	393 -57	395 -61 322 78	393 -63
170	-51 222 27		-53	-63 291 46	-58	-63 273 38	-59	-66 314 70	-66
150	-51 233 26			-65 280 45	-57	-62 273 32	-59	-64 304 55	-70
130	-51 234 21			-64 271 41	-60	-62 271 30	-63	-66 306 41	-69
110	-51 215 21			-63 276 28	-61	-64 265 34		-66 303 32	-67
100	533 -51 214 20			533 -64	537 -60	535 -64 267 32		541 -64 304 29	(121mb)
90	-52 227 14				-60	-61 269 25		-65 303 30	
80	-52 242 12				-56	-62 271 19		(86mb) -65	
70	-53 180 17				-54	-62 272 20			
60	(66mb) -53				-56	-60 264 18			
		Isothermal. 1000 - 981 mb 52° 800 - 766 " 30°	Isothermal 1007 - 986mb 51° 760 - 709 " 25°	Inversion 790mb 28° - 760 mb 33°	(38mb) Inversion 1010·7 mb 54° - 995 mb 56° 800 " 30° - 781 " 37° Isothermal. 781 - 750 mb 37°	Inversion 1010mb 53° - 987 mb 56° 805 " 31° - 780 " 37°	Inversion. 1000 mb 46° - 983 mb 54° 818 " 33° - 775 " 40°	Inversion. 1006 mb 52° - 989 mb 55° 814 " 34° - 781 " 42°	Inversion 812 mb 34° - 791 mb 39° 681 " 24° - 650 " 29° Isothermal. 1009 - 1000 mb 55°
Tropopause	I 258 mb -65° 32·600	I 255 mb -68° 33·200	I 258 mb -70° 32·800	I 248 mb -66° 34·000	I 250 mb -64° 34·200	I 240 mb -69° 35·000	I 235 mb -63° 35·700	I 180 mb -67° 41·800	I 150 mb -70° 45·100

09h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	09h	09h		09h	09h	09h	09h	09h	
Pressure: M.S.L. (mb)	1000·4	996·6		1004·4	1009·5	1013·4	1015·2	1013·9	
Pressure: Surf (mb)	990·5	995·5		995·8	100[illegible]·5	1009·0	999·1	1003·3	
Pressure: Freezing (mb)	800	815		806	690	666	675	655	
Surf	2·7 53 49 190 16	0·5 53 49		2·3 51 47 200 15	0·6 56 48 190 10	1·2 55 51 190 05	4·4 220 05	2·9 55 50 203 10	
1000	0·1	-07		1·1	2·6 55 47	3·7 54 49	4·1	3·8 55 48	
950	49 45 208 27	47 45		47 41 205 28	51 44 206 14	50 43 224 16	52 47 228 20	51 43 219 27	
900	28·8 43 37 213 24	29·8 40 40		29·7 42 38 206 29	31·4 45 38 228 18	32·4 45 36 217 15	32·9 45 36 230 22	32·5 44 38 224 24	
850	37 30 215 23	36 35		37 36 208 31	40 34 230 21	39 32 229 18	38 30 240 20	39 36 226 24	
800	60·1 32 27 215 24	59·0 31 31		61·0 31 30 210 36	62·9 35 31 235 31	63·8 32 28 236 24	64·2 31 22 243 24	63·8 36 31 244 24	
750	26 21 215 27	25 24		28 27 215 39	35 26 245 30	40 09 236 27	39 -05 235 30	41 10 258 27	
700	94·7 19 09 216 29	93·6 20 18		95·8 24 23 226 39	98·2 33 -05 243 29	99·2 36 -01 238 28	99·5 35 -29 234 29	99·5 37 00 253 32	
650	12 01 218 31	14 11		22 21 238 38	29 -12 236 39	30 -06 244 28	29 -28 250 30	31 27 258 34	
600	134 06 -07 216 33	133 07 03		136 27 20 239 45	138 20 04 234 49	139 24 -13 246 30	140 23 -47 252 31	140 26 23 265 37	
550	-02 -18 223 31	03 -01		17 13 253 47	18 14 246 45	15 -20 256 31	15 -18 258 31	20 16 273 34	
500	178 -08 -14 228 32	177 -04 -09		182 09 05 260 50	185 11 06 251 47	185 05 -14 264 32	186 06 -06 257 37	187 13 08 282 37	
450	-15 -31 231 39	-15 -18		00 -12 263 58	02 -04 253 47	-03 -12 268 34	-03 -13 266 38	04 -02 286 41	
400	231 -25 -30 228 42	230 -25 -29		237 -11 -29 277 65	240 -08 -16 268 87	240 -16 -23 271 42	240 -14 -24 266 38	242 -05 -11 287 42	
350	-37 -42 230 41	-38 -44		-21 -10 277 97	-23 -32 281 50	-27 -34 289 47	-23 -32 291 50	-18 -26 296 45	
300	296 -51 232 49	295 -54		304 -36 -51 274 126	307 -38 -49 291 78	306 -42 296 54	307 -37 -47 305 76	310 -33 -42 298 57	
250	-61 237 41	-55		-52 280 113	-52 292 96	-55 301 88	-54	-49 308 85	
200	383 -51 234 30	383 -48		392 -54 250 80	395 -61 296 90	393 -61 311 73	395 -64	399 -57 326 78	
170	-49 236 31	-49		-58 283 62	-62 308 63	-63 312 57	-67	-64 311 65	
150	-49	-51		-63 288 51	-65 304 65	-61 313 46	(156mb)	-68 300 60	
130	(152mb)	-52		-59	-62 279 46	-63 283 38		-72 319 66	
110					-61	-64 285 38		-75 304 44	
100					542 -61	540 -63 286 33		543 -69 295 45	
90					-60	-62 296 30		-68 306 37	
80					-56	-61 284 18		-68 320 25	
70					-53	-59		-65 318 21	
60					-52			(65mb) -64	
	Isothermal. 515 - 485 mb -08°	Isothermal. 580 - 565 mb 04°		Isothermal. 668 - 625 mb 22° 310 - 300 " -36°	(55mb) -52 Inversion. 770 mb 31° - 729 mb 37° 588 " 18° - 568 " 19°	Inversion. 785 mb 30° - 768 mb 41° Isothermal. 470 - 460 mb -01°	Inversion. 798 mb 31° - 761 mb 40° Isothermal. 991 - 956 mb 52°	Inversion. 805 mb 35° - 779 mb 43°	
Tropopause	I 260 mb -65°	I 280 mb -60° 30·100		II 242 mb -55° 35·000	II 200 mb -61° 39·500	II 233 mb -58° 35·900	I 215 mb -66° 38·000	I 230 mb -56° 36·800	

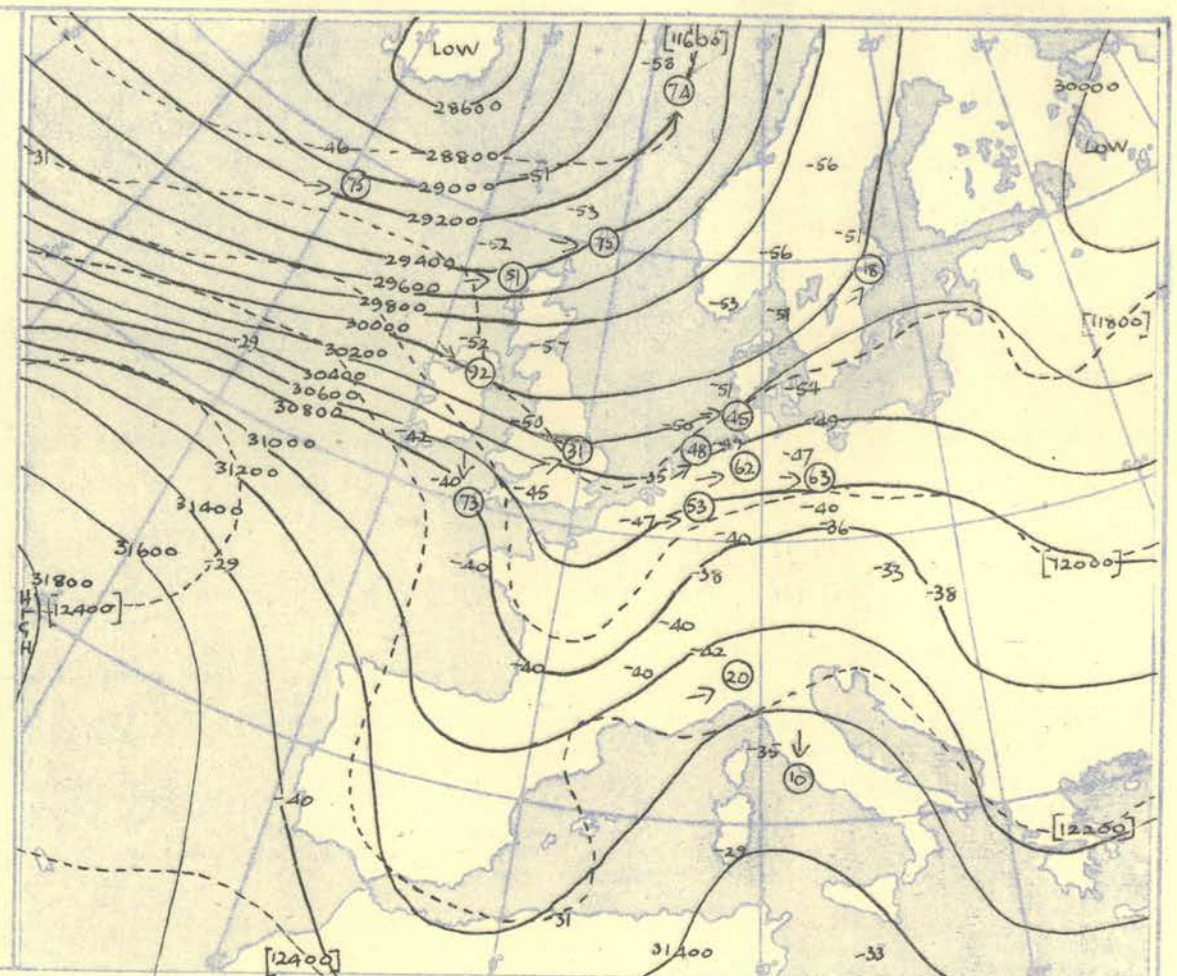
Wednesday 6th September 1950.

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. GMT.

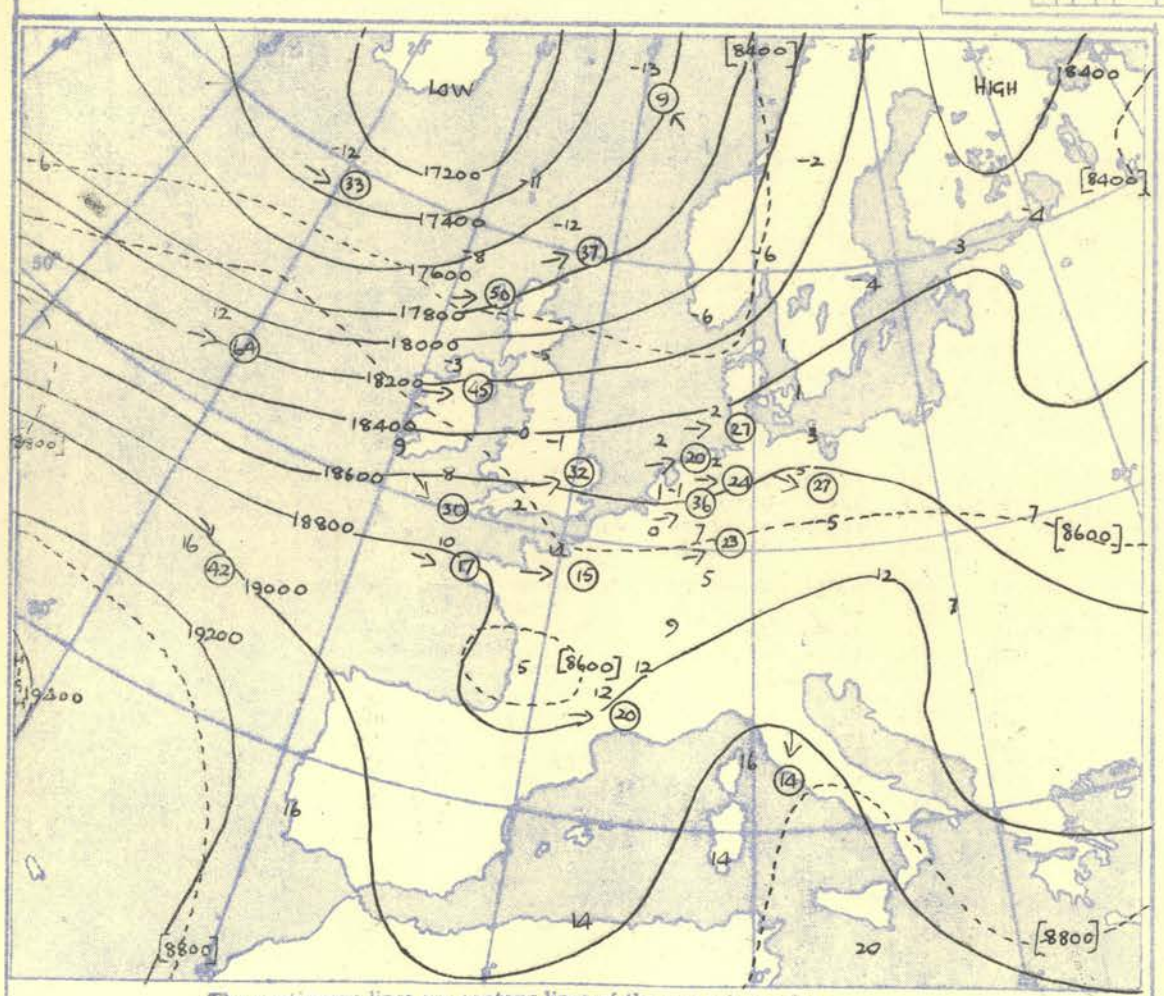


The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

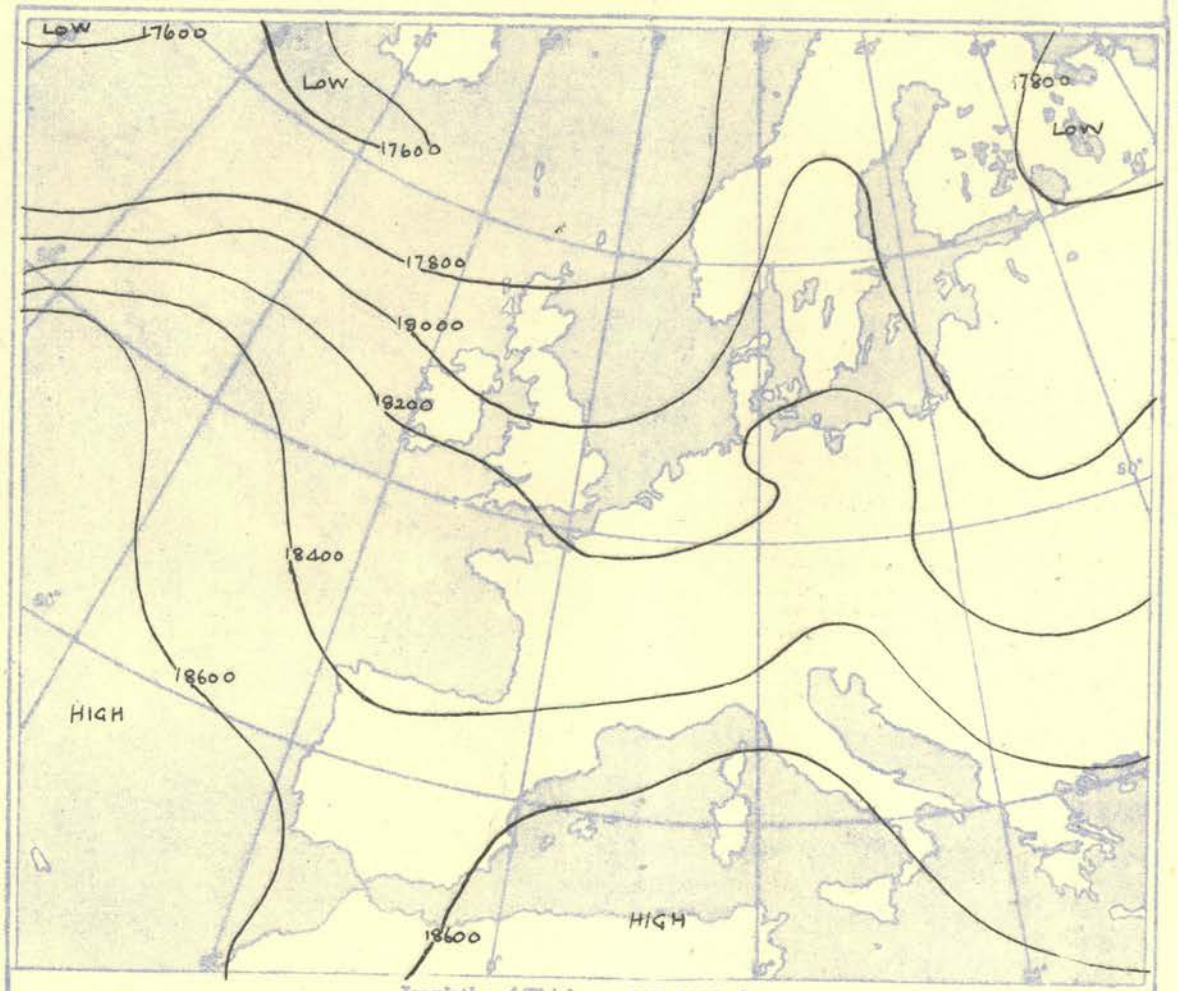
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.



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

Pressure mb	43·2N 17·0W Height ft./100	°F. Temp.	°F. Dew	39·5N 17·2W Height ft./100	°F. Temp.	°F. Dew	51·3N 00·4E 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	0h			1430h			1415h.															Time
M.S.L.	1021 mb			1023 mb			1010·8 mb			mb			mb			mb			mb			M.S.L.
Surf	1018 mb			1000 mb			1000·0 mb			mb			mb			mb			mb			Surf
Freezing	mb			mb			673 mb			mb			mb			mb			mb			Freezing
Surf		69	66		65	60	3·1	60	51													Surf
1000	6·0	68	64	6·2	65	60	3·1	60	51													1000
950		62	60		60	53		52														950
900		61	58		63	35	31·9	45														900
850		59	45		59	18		39														850
800		53	40		55	44	63·5	44														800
750		49	40		49	34		43														750
700	10·5	43	27	10·5	45	31	99·3	36														700
650		37	16		39			29														650
600		32	17		33		140	27														600
550		26			28			18														550
500	19·3	19		19·3	19		186	09														500
450								-02														450
400							241	-05														400
350								-19														350
300							309	-33														300
250																						250
200																						200
170																						170
	Cloud. 8/8 Sc 940·930mb 2/8 CiHR.			Inversion 950 mb 60° – 900 mb 63° Cloud. 2/8 Sc 940 930mb 3/8 As·HR			Cloud. 4/8 Cu 900·860mb 8/8 As 600·530mb 8/8 Cs NR.															

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

Place	52·5N 20W Cirrus.		52·5N 20W Cirrus		Leeming		Tangmere.		St Eval.		Shoebury		52·5N 20W Cirrus		Valentia.		52·5N 20W Cirrus		Heathers		Place
Time	03h.		09h		09h		09h.		09h		09h		15h		15h		21h.		21h.		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.	140	26	350	19	190	08	250	06	180	12	270	07	310	32	200	29	300	33	160	11	Surf.
1,000	200	30	360	23	220	23	240	11	210	27	240	14	310	28	220	50	290	36	210	33	1,000
2,000	240	40	360	25	230	24	240	12	240	30	230	15	300	29	240	60	280	35	200	36	2,000
3,000	250	46	340	27	220	24	250	12	220	27	230	13	310	29	240	71	280	36	200	36	3,000
4,000	260	48	310	28	210	24	260	12	220	27	240	10	310	40	240	70	280	33	200	37	4,000
5,000	260	55	260	45	210	28	260	12	230	25	240	13	310	36	230	71	290	36	200	38	5,000
6,000	260	64	260	47			250	13	250	17	250	21			240	67			200	41	6,000
8,000							250	12	250	26	230	26			240	84			210	38	8,000
10,000	270	55	270	52			250	08			230	25	290	50	240	81	280	40	210	35	10,000
14,000	250	59	260	71							250	26	300	47	250	85	280	47	210	38	14,000
18,000	250	64	260	89							270	30	(12.000)		260	87	280	51	200	50	18,000
24,000			260	80													(16.000)		210	57	24,000
30,000			(20.000)								310	68							210	69	30,000
40,000											320	68							210	78	40,000
50,000											290	39									50,000

NEPHOSCOPE OBSERVATIONS

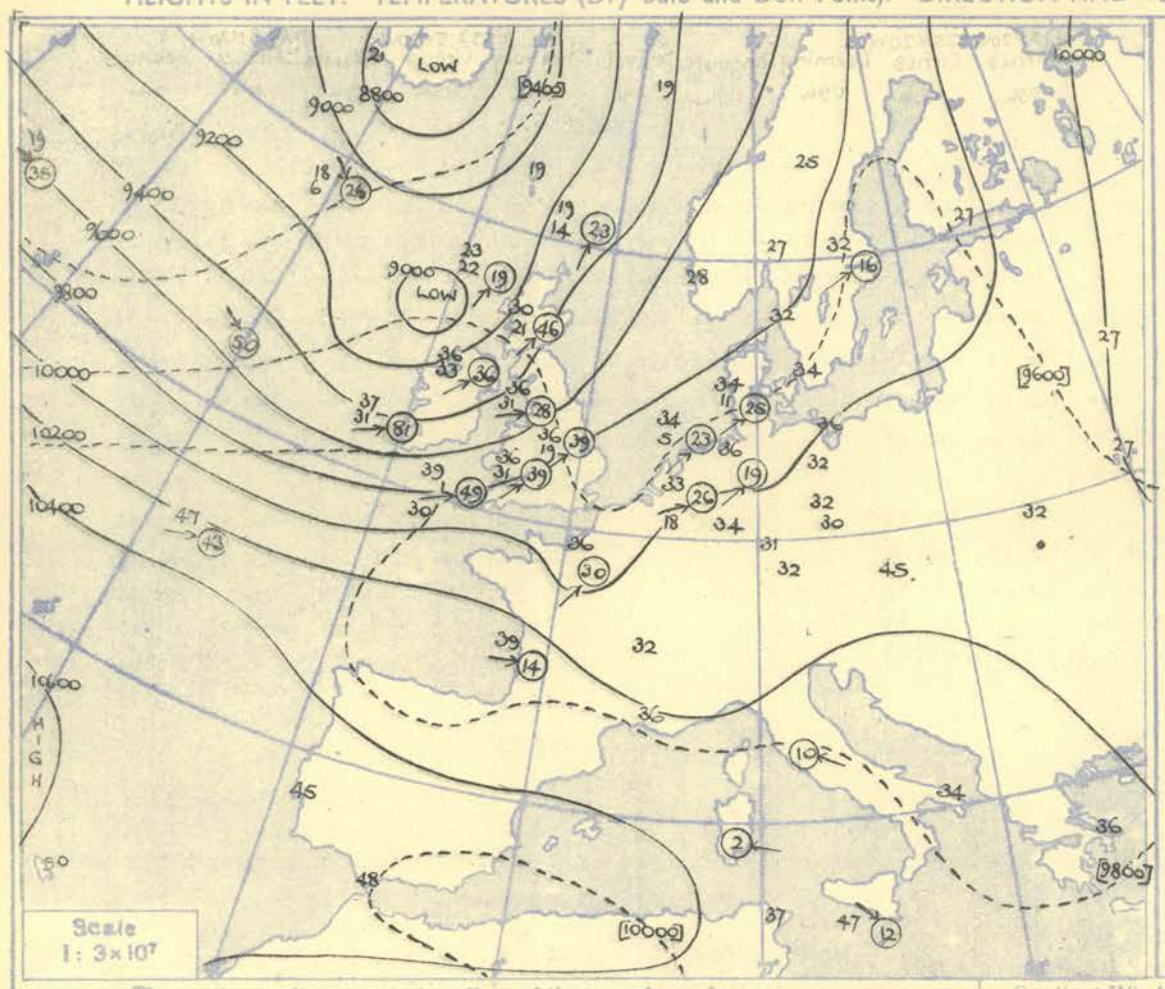
Place			NON	REPORTED.						Place
Time Type										Time Type
Dir. Vel.										Dir. Vel.

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

Ship	WEATHER EXPLORER	WEATHER EXPLORER	WEATHER EXPLORER	WEATHER EXPLORER	CIRRUS	CIRRUS	CIRRUS	CIRRUS		Ship
Lat/Long	58·9N. 19·3W.	58·9N. 19·4W.	58·9N. 19·2W.	58·9N. 18·9W.	52·5N. 20·0W.	52·5N. 20·0W.	52·5N. 20·0W.	52·5N. 20·0W.		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.	G.M.T.	Time
M.S.L.	990 mb	988 mb	988 mb	992 mb	994 mb	989 mb	mb	1005 mb	mb	M.S.L.
Surf	990 mb	988 mb	988 mb	992 mb	994 mb	989 mb	mb	1005 mb	mb	Surf
Freezing	850 mb	830 mb	835 mb	855 mb	665 mb	700 mb	mb	835 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		51	47	240	32		51	42	240	20		49	44	290	18		51	42	295	29		56	54				55	52				Surf
1000	-2·8					-3·4					-3·5					-2·3					-1·6					-3·0					1000
950		46	35	250	30		46	39	258	28		45	33	288	26		45	39	319	30											950
900	25·7	39	28	261	29	25·1	39	36	258	24	25·0	38	28	292	28	26·2	38	34	321	32											900
850		32	19	262	33		34	28	255	23		33	26	296	26		31	29	321	33		48	48				43	43				850
800	56·6	27	16	257	34	56·2	29	24	254	24	56·1	28	20	295	24	57·1	30	23	320	33											800
750		22	11	260	33		24	20	263	27		22	14	294	25		23	18	323	37				For		For		For		For		750
700	90·8	15	05	259	31	90·6	17	12	266	28	90·4	18	06	283	26	91·4	15	11	318	41	95·3	36	36	winds		winds	93·4	32	32	winds		700
650		10	02	263	30		10	04	265	26		13	-13	274	25		08	03	312	36							see top					650
600	129	04	-15	266	30	129	06	-02	266	25	129	05	-23	276	30	130	01	-05	309	33				see		see	of page.			see		600
550		-13	-26	266	33		-02	-12	262	28		-03	-32	291	29		-05	-13	305	33												550
500	17·4	-12	-37	268	33	17·4	-11	-23	262	29	17·4	-11	-42	302	24	17·4	-13	-24	294	39	18·3	12	-06				18·0	12	10			18·1	01	-17			500
450		-20	-47	262	47		-19	-34	261	38		-22	-53	305	27		-24	-34	281	34				top		top					top		450
400	22·6	-32	-58	270	49	22·6	-30	-46	258	47	22·6	-34	-60	306	34	22·6	-37	-46	286	51													400
350		-42		264	65		-43		257	53		-46		310	35		-49		291	52				of		of					of		350
300	29·0	-46		260	75	29·0	-55		256	48	28·9	-53		285	46	28·9	-59		290	54	30·5	-29					30·3	-29				30·3	-31		page		300
250		-41		257	62		-45		240	57		-40		244	46		-51		278	53				page		page							250
200	38·0	-44		262	58	37·9	-43		242	62	37·9	-39		268	44	37·7	-46		260	41	39·5	-58					39·3	-58				39·2	-60				200
170		-46		262	54		-43		254	51		-38		260	41		-47		257	48														170
150		-47		262	54		-43		254	45		-37		254	37		-48		263	41														150
130		-49		262	56		-48		254	40		-38		255	38		-48		263	36														130
110		-52		261	36		-46		254	41		-43		252	30		-49		246	36														110
100	53·2	-53				53·3	-49		254	30	53·5	-46		269	26	52·9	-56		257	29		-69						-63							100
90		-54					-49		254	27		-43		236	35	(09·4 mb)	-50				(09·4 mb)	-69													90
80		-54					-50		254	27		-40		238	17																			80
70		-53					-47		254	18		-40		255	20																			70
60		-54					-47		254	18		-39																						60
	(050 mb) -54 (047 mb) -53 Inversion 677mb. 11° – 660mb. 12°					(050 mb) -49										Isothermal 850 – 813mb. 31°					Isothermal 962 – 918 mb. 54°					(057 mb) -54 Isothermal 927 – 906mb. 46° 862 – 788 mb. 43°					Inversion 734 mb. 27° – 735 mb. 32° 374 mb. -20° – 344 mb. -17°					
Tropopause	I 306mb. -47° 28,600'			I 300mb. -55° 29,000'			I 302 mb. -54° 28,800'			I 275 mb. -63° 30,700'			I 134 mb. -74° 48,700'			I 135 mb. -70° 47,500'					I 200mb. -60° 39,200'										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 15 h G.M.T.



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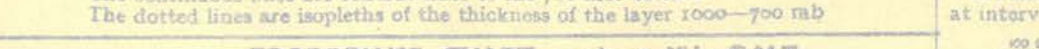
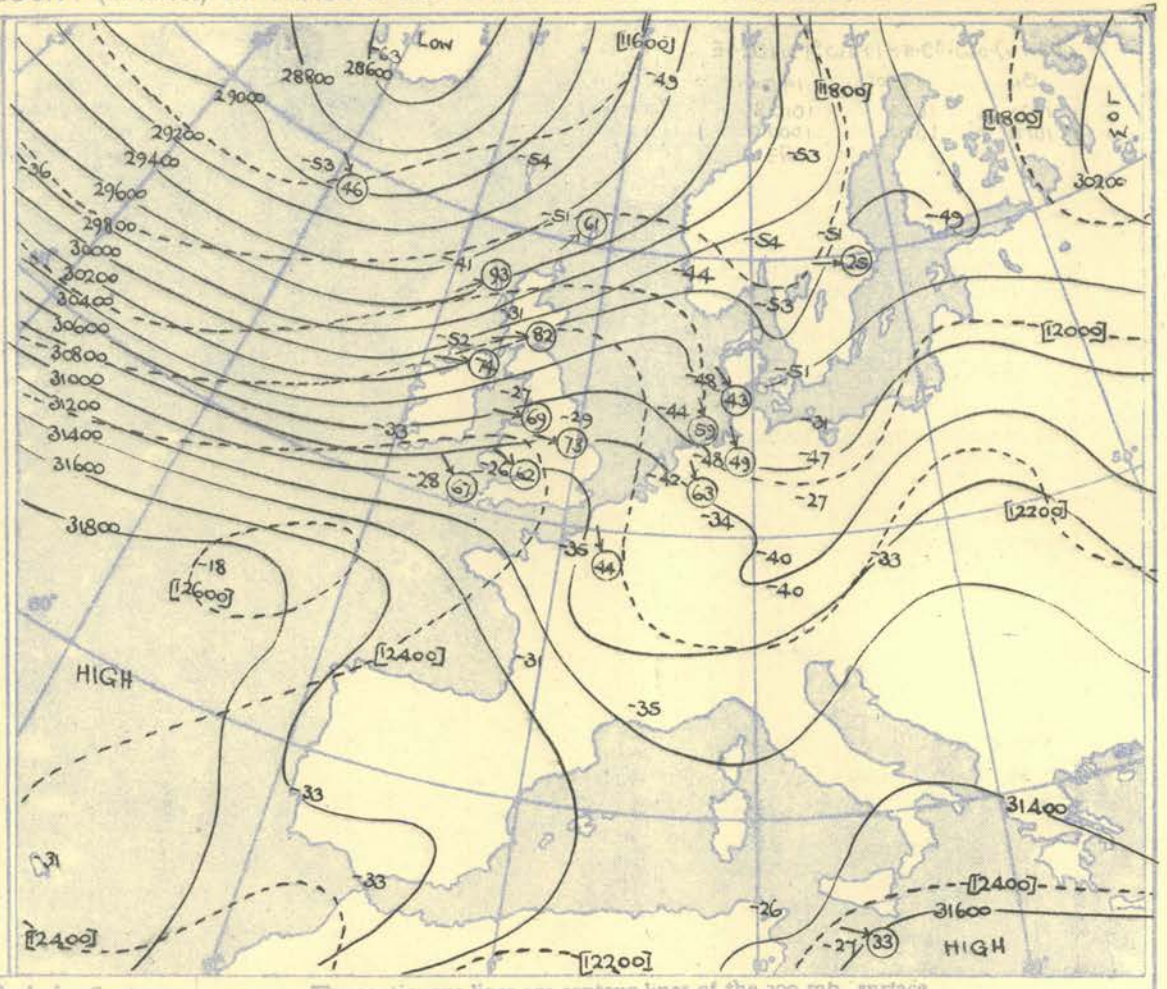
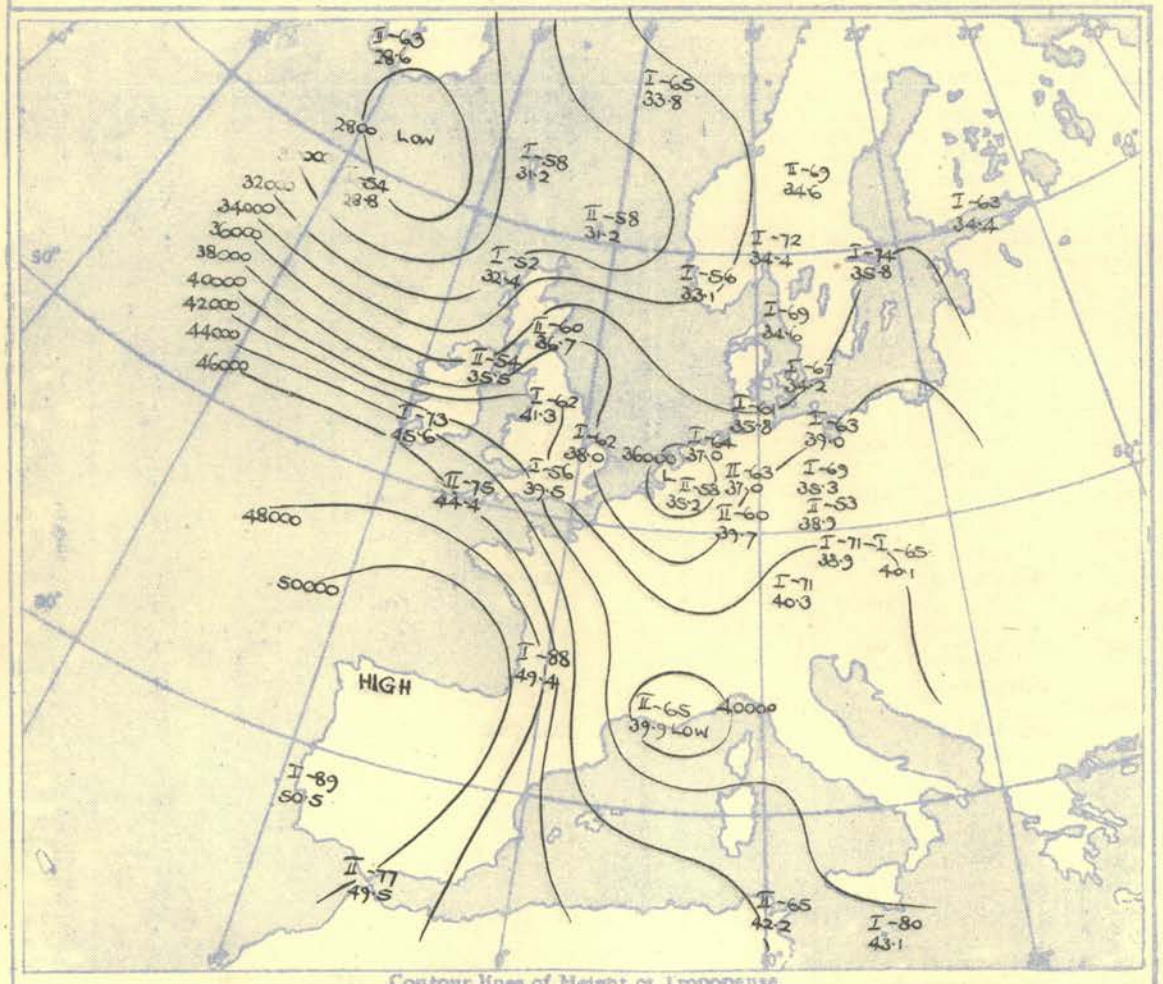
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.





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 15 h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

The strong westerly thermal gradient around 50°N. across the Atlantic was the predominating feature. Distortion produced by strong advection around a deep surface depression produced a cold trough and a warm ridge in this stream with both trough and ridge moving steadily eastwards and crossing the British Isles.

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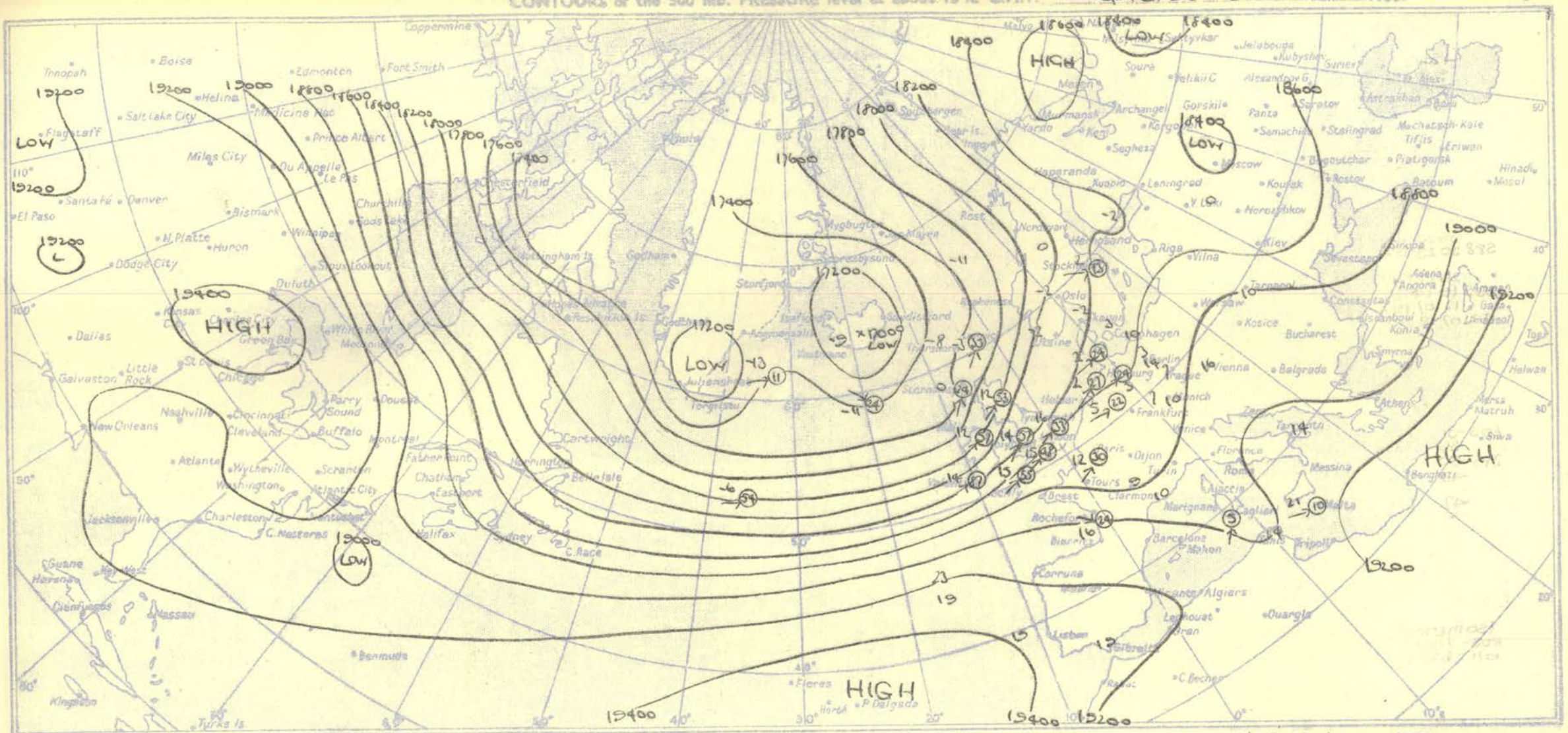
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. September 6th 1950.


LOW
HIGH
LOW
HIGH
LOW
HIGH

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

LERWICK

Pressure — Time: 15hrs G.M.T. | M.S.L.: 996·5 mb | Surf: 986·7 mb | Freezing: 825 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	027	54	49	170	16
1000	+01·1				
950		48	43	189	27
900	27·6	42	38	189	28
850		36	30	186	30
800	58·8	30	25	181	31
750		26	17	175	25
700	93·5	19	14	188	23
650		13	07	192	28
600	132	07	02	206	35
550		03	-3	200	31
500	177	-3	-9	198	35
450		+1	-7	8	201
400	231	-2	-25	205	42
350		-36	-43	206	53
300	295	-51		216	61
250		-56		233	58
200	383	-50		241	52
170		-43		241	40
150		-47		251	33
130		-47		238	29
110		-43		214	19
100	535	-47		203	23
90		-47		222	24
80		-47		267	24
70		-46		237	24
60	(24)	-42			

Isothermal 805–776 mb 30°
671–655 mb 14°

Tropopause: II 276 mb −58° 31200′

STORNOWAY

Pressure — Time: 15hrs G.M.T. | M.S.L.: 990·0 mb | Surf: 988·2 mb | Freezing: 788 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	0·5	53	51	180	20
	-2·8				
		49	46	172	29
25·9		43	41	184	32
		37	35	187	33
57·2		33	32	191	34
		26	17	175	25
92·0		23	22	201	19
		17	13	198	18
131		12	07	206	20
		09	03	209	21
176		00	-7	229	24
		-10	-19	234	33
230		-19	-29	224	43
		-29	-40	223	66
296		-41		226	93
		-51		230	90
385		-49		248	71
		-48		246	66
		-47		240	60
		-49		245	47
537		-48		252	36
		-49		249	34
		-51			
		-52			

Isothermal 587–561 mb 11°

Tropopause: I 265 mb −52° 32400′

LEUCHARS

Pressure — Time: 15hrs G.M.T. | M.S.L.: 996·0 mb | Surf: 995·2 mb | Freezing: 758 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	002	52	51	170	12
	+0·9				
		49	46	178	31
27·9		45	41	182	31
		39	33	190	29
59·4		33	29	206	35
		22	15	217	47
134		20	11	215	49
		18	09	245	53
181		12	04	245	53
		03	01	229	54
236		-7	-17	230	66
		-18	-28	237	78
303		-31	-41	246	82
		-49			
		-60			
		-54			
		-56			
		-57			
		-58			
		-55			
541		-53			
		-49			
		-52			
		-49			

Isothermal 558–541 mb 11°

Tropopause: II 223 mb −60° 36700′

ALDERGROVE

Pressure — Time: 15hrs G.M.T. | M.S.L.: 989·5 mb | Surf: 981·0 mb | Freezing: 690 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	023	54	51	180	25
	-2·9				
		51	50	182	45
25·9		47	47	198	51
		46	46	226	58
57·8		45	43	242	56
		40	40	235	39
93·6		33	33	230	36
		25	25	254	36
134		24	24	252	39
		18	18	232	43
180		12	11	229	57
		03	01	229	66
235		-7	-10	231	77
		-19	-23	246	74
303		-32	-38		
		-45			
392		-57			
		-60			
		-58			
		-62			
		-63			
540		-52			
		-54			
		-51			
		-49			

Inversion 668 mb 29° – 655 mb 30°

Isothermal 590–567 mb 46°

Tropopause: II 237 mb −54° 35500′

LIVERPOOL

Pressure — Time: 15hrs G.M.T. | M.S.L.: 1000·4 mb | Surf: 958·4 mb | Freezing: 650 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	0·6	55	51	185	20
	0·1				
		51	47	188	36
28·9		45	41	194	44
		41	37	204	50
60·5		43	39	228	51
		40	36	240	45
96·2		36	31	239	48
		32	27	239	46
137		27	22	242	52
		20	15	242	54
183		14	08	248	57
		07	-1	254	60
239		-3	-13	265	66
		-13	-22		
307		-27	-38		
		-42			
397		-58			
		-59			
		-55			
		-62			
		-63			
544		-65			
		-61			
		-53			
		-52			
		-54			
		-52			
		-51			

Inversion 998 mb 55° – 996 mb 56°
834 mb 29° – 804 mb 43°
218 mb −56 – 212 mb −55°

Tropopause: I 186 mb −62° 41300′

DOWNHAM MARKET

Pressure — Time: 15hrs G.M.T. | M.S.L.: 1008·2 mb | Surf: 1004·3 mb | Freezing: 647 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	021	60	45	200	13
	024	60	45	210	30
		54	39	207	25
31·4		47	35	208	29
		40	29	213	33
62·6		35	14	222	33
		41	-5	232	33
98·0		36	-9	234	39
		33	+21	244	39
139		27	+5	252	42
		21	+09	255	40
186		16	-4	250	33
		05	-11	246	38
241		-4	-18	255	52
		-15	-28	270	65
309		-29	-43	281	73
		-49		292	81
398		-57		305	80
		-60		285	51
		-66		287	52
		-73		285	47
		-62		298	35
544		-64		298	34
		-62		284	31
		-58		246	21
		-54		276	27
		-52		238	16
(40)		-48		242	10

Inversion 800 mb 35° – 768 mb 42°
520 mb 16° – 510 mb 18°

Tropopause: I 217 mb −62° 38000′

LARKHILL

Pressure — Time: 15hrs G.M.T. | M.S.L.: 1003·9 mb | Surf: 994·1 mb | Freezing: 640 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	4·4	57	48	220	21
	2·7				
		51	44	205	30
31·5		46	41	211	35
		39	34	216	37
63·1		33	29	236	35
		41	36	248	34
98·9		36	31	248	39
		33	28	253	38
139		28	22	253	40
		22	16	257	39
187		15	08	261	48
		07	00	271	51
242		-1	-8	273	51
		-12	-20	280	62
311		-26	-35	288	62
		-39	-45	302	69
410		-55		301	81
		-56		298	72
		-61		301	57
		-67		298	46
		-64		290	38
548		-61		283	34
		-57		278	21
		-54			

Inversion 830 mb 39° – 811 mb 45°

Isothermal 811 – 775 mb 45°
754 – 720 mb 39°

Tropopause: I 206 mb −56° 29500′

CAMBORNE

Pressure — Time: 15hrs G.M.T. | M.S.L.: 1006·3 mb | Surf: 996·6 mb | Freezing: 625 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	029	58	53	180	30
	01·9				
		54	50	211	47
30·8		48	43	224	48
		43	37	240	49
63·0		38	34	244	46
		43	31	246	46
98·9		39	30	254	43
		34	31	254	43
140		29	26	259	47
		22	19	263	54
187		13	12	262	55
		07	03	267	54
244		-1	-20	280	56
		-12	-25	285	56
311		-28	-40	295	67
		-48		299	95
399		-65		304	83
		-73		300	65
		-75		300	63
		-73			
		-74			
542		-71			
		-67			
(84)		-65			

Inversion 900 mb 48° – 880 mb 53°

Isothermal 880 – 850 mb 58°

Tropopause: II 160 mb −75° 44400′

Valentia

Pressure — Time: 15hrs G.M.T. | M.S.L.: 987·2 mb | Surf: 986 mb | Freezing: 625 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	0·3	62	61		
	-3·5				
		60	60		
25·8		56	55		
		51	50		
58·1		46	47		
		43	39		
94·1		37	31		
		31	26		
135		28	25		
		22	-11		
182		14	03		
		08	-45		
257		-4	-54		
		-18			
305		-33			
		-45			
394		-55			
		-66			
		-73			
		-71			
		-66			
539		-63			
		-60			
		-64			
		-58			
		-57			

Inversion 866 mb 33° – 850 mb 36°
256 mb −46° – 250 mb −45°

Isothermal 800–788 mb 48°
711 – 700 mb 37°

Tropopause: 577 – 562 mb 24°
500 – 475 mb 14°
230 – 214 mb −54°
Trop I 150 mb −55° 45600′

LERWICK

Pressure — Time: 21hrs G.M.T. | M.S.L.: 988·5 mb | Surf: 978·7 mb | Freezing: 810 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	027	50	48	130	17
1000	+3·2				
950		47	44	157	30
900	25·3	41	37	156	33
850		36	31	158	36
800	56·8	31	28	165	36
750		27	23	168	32
700	91·2	22	18	166	30
650		15	11	164	30
600	130	11	06	167	30
550		06	00	174	25
500	176	01	-7	187	32
450		-5	-12	198	42
400	230	-15	-23	205	46
350		-27	-36	217	57
300	296	-42		205	80
250		-61		221	100
200	383	-53			
170		-53			
150		-52			
130	(140)	-51			
110					
100					
90					
80					
70					
60					

Tropopause: I 234 mb −67° 35000′

STORNOWAY

Pressure — Time: 21hrs G.M.T. | M.S.L.: 980·4 mb | Surf: 978·6 mb | Freezing: 840 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	0·5	50	48	038	12
	-5·4				
		48	43	038	22
23·2		41	37	024	15
		33	31	013	13
54·3		29	29	005	16
		27	27	357	15
85·0		21	20	354	13
		15	11	343	10
128		11	07	336	12
		06	01	305	13
174		00	-7	262	08
		-12	-22	215	30
227		-23	-32	185	36
		-38	-48	180	45
292		-48		188	63
		-54		215	51
380		-46		240	42
		-43			

Isothermal 782–757 mb 28°

Tropopause: I 260 mb −58° 32200′

LEUCHARS

Pressure — Time: G.M.T. | M.S.L.: mb | Surf: mb | Freezing: mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots

ALDERGROVE

Pressure — Time: 21hrs G.M.T. | M.S.L.: 985·7 mb | Surf: 974·7 mb | Freezing: 753 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	023	55	50	255	20
	-4·8				
		52	48	303	42
24·1		45	42	302	45
		40	39	304	43
55·6		35	31	302	53
		32	29	296	52
90·7		30	22	287	55
		23	09	278	51
131		18	02	277	48
		10	-3	280	39
176		00	-14	278	39
		-13	-26	270	51
229		-23	-29	260	46
		-30	-60	260	49
296		-36	-57	256	65
		-32		256	76
388		-37		248	87
		-47		251	101
		-50		264	77
		-54		258	47
		-60		256	43
535		-57		253	31

Inversion 344 mb −31 – 330 mb −28°

Isothermal 884 – 865 mb 43°
732 – 700 mb 28°

Tropopause: I 300 mb −36° 29600′

LIVERPOOL

Pressure — Time: 21hrs G.M.T. | M.S.L.: 984·2 mb | Surf: 982·2 mb | Freezing: 677 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	0·6	62	61	230	30
	-4·5				
		60	59	245	48
24·9		55	54	251	37
		51	49	257	56
57·1		45	42	260	-66
		39	35	257	62
92·8		35	29	258	63
		29	24	252	74
133		19	09	242	65
		14	-4	238	82
179		04	-26	234	87
		-5	-46	234	91
233		-17	-57	234	102
		-28	-56		
300		-28	-56		
		-36	-55		
391		-46			
		-54			
		-58			
		-69			
		-72			
		(120)			

Inversion 346 mb −28 – 343 mb −27°
326 mb −30 – 300 mb −28°

Isothermal 600 – 576 mb 19°

Tropopause: II 255 mb −37° 33700′

DOWNHAM MARKET

Pressure — Time: 21hrs G.M.T. | M.S.L.: 996·8 mb | Surf: 992·4 mb | Freezing: 630 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	012	54	51	170	20
	-0·9				
		51	47	197	51
27·5		46	44	211	66
		53	52	228	72
66·2		51	50	237	67
		46	44	240	66
96·4		40	37	241	65
		34	27	241	66
137		28	24	240	65
		20	16	245	60
184		12	-1	252	63
		05	-11	252	60
239		-5	-23	250	60
		-19	-41	257	71
307		-32	-56	259	87
		-51		265	95
398		-68		273	83
		-72		269	70
		-71		267	60
		-73		267	46
		-73		266	34

Inversion 900 mb 46° – 870 mb 55°

Isothermal 592 – 580 mb 54°
570 – 529 mb 53°

Tropopause: I 194 mb −70° 40000′

LARKHILL

Pressure — Time: 21hrs G.M.T. | M.S.L.: 999·7 mb | Surf: 984·0 mb | Freezing: 610 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	4·4	57	56	230	300
	-0·1				
		55	54	208	45
29·0		51	50	228	65
		52	50	235	71
61·1		50	46	246	71
		48	40	241	72
97·4		43	37	240	72
		37	31	240	70
138		31	25	242	66
		24	21	246	75
185		17	04	252	76
		12	-12	258	78
241		00	-24	264	85
		-14	-36	266	93
310		-28	-49	261	90
		-44		268	115
399		-63		287	97
		-71		273	73
		-77			

Inversion 871 mb 50° – 850 mb 52°

Tropopause: II 200 mb −63° 39900′

CAMBORNE

Pressure — Time: 21hrs G.M.T. | M.S.L.: 999·0 mb | Surf: 988·7 mb | Freezing: 610 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	029	61	61	230	30
	-0·3				
		60	59	210	52
29·0		58	56	225	65
		54	51	237	69
64·5		51	48	232	63
		47	44	227	66
97·8		42	35	227	63
		37	34	236	65
139		31	26	238	72
		26	-10	240	78
186		13	-18	244	86
		09	-22	249	82
242		-2	-31	250	89
		-14	-43		
309		-33	-60		
		-47			
399		-63			
		-71			
		-77			
		-81			
		-78			
540		-76			
		-77			

Inversion 900 mb 48° – 880 mb 53°

Isothermal 880 – 850 mb 58°

Tropopause: II 160 mb −75° 44400′

No. 11484. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Thursday 7th September 1950. Page 1.

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

METEOROLOGICAL OFFICE LIBRARY 15 SEP 1950

03h G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne
Pressure: Time	03h	03h	03h	03h	03h	03h	03h	03h
Pressure: M.S.L. (mb)	973.4	982.7	977.4	993.1	993.9	994.5	998.6	1003.5
Pressure: Surface (mb)	963.8	980.9	977	984.7	991.9	990.1	982.9	993.2
Pressure: Freezing (mb)	752	822	790 \ 725	817	805	681	654	600

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Lerwick					
Surf	02·7	51	51		
1000	-7·4				
950		50	50		
900	21·3	46	46		
850		42	41		
800	52·8	36	35		
750		32	31		
700	87·9	28	27		
650		22	20		
600	128	15	13		
550		11	07		
500	174	06	01		
450		-02	-07		
400	228	-11	-17		
350		-23	-29		
300	294	-37	-43		
250		-55			
200	383	-60			
170	(180) mb	-50			
150					
130					
110					
100					
90					
80					
70					
60					

For winds see page 3.

Tropopause: I 237 mb - 58° 34,600'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Stornoway					
Surf	00·5	51	46	310	26
1000	-4·8				
950		48	43	310	39
900	23·8	43	38	306	39
850		36	30	307	39
800	55·1	31	21	309	38
750		26	07	301	38
700	89·7	21	-02	296	35
650		16	-04	290	28
600	129	09	01	280	18
550		00	-07	291	19
500	173	-09	-29	294	27
450		-19	-36	288	29
400	226	-28	-45	269	23
350		-39	-56	245	19
300	290	-50		212	15
250		-49		233	25
200	379	-41		251	36
170		-45		254	30
150		-46		241	32
130		-46		242	38
110		-50		247	40
100	532	-50		248	35
90		-50		244	31
80		-52			
70					
60					

Tropopause: I 273 mb - 56° 31,000'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Leuchars					
Surf	00·2	51	44		
1000	-6·2				
950		50	42		
900	22·5	46	39		
850		38	32		
800	53·9	33	27		
750		32	24		
700	89·0	29	19		
650		22	10		
600	129	15	-02		
550		08	-16		
500	174	00	-32		
450		-09	-37		
400	227	-22	-47		
350		-39	-59		
300	292	-48			
250		-40			
200	383	-38			
170		-43			
150		-49			
130		-54			
110		-54			
100	535	-56			
90		-56			
80		-56			
70		-57			
60		-58			

Inversion 762 mb 31 - 738 mb 33°

Tropopause: I 300 mb - 48° 29,200'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Aldergrove					
Surf	02·3	50	43	250	23
1000	-1·9				
950		47		288	37
900	26·7	42		288	42
850		36		289	52
800	58·0	30		288	53
750		26		292	52
700	92·7	22		291	50
650		22		284	44
600	132	14		280	42
550		05		276	49
500	177	-06		272	54
450		-18		271	61
400	230	-30		266	56
350		-42		266	62
300	294	-50		268	88
250		-53		267	90
200	383	-49		266	79
170		-51		247	72
150		-53		262	60
130		-53			
110		-59			
100	533	-61			
90		-65			
80		-64			
70					
60					

Isothermal 700 - 650 mb 22°

Max wind:- 366° 107 kts 259 mb 32,600'

Tropopause: I 315 mb - 51° 28,300'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Liverpool					
Surf	00·6	55	47		
1000	-1·7				
950		50	44		
900	27·1	43	39		
850		37	32		
800	58·4	31	27		
750		27	22		
700	93·3	27	17		
650		27	05		
600	133	16	-12		
550		09	-27		
500	178	-01	-36		
450		-13	-45		
400	232	-21	-48		
350		-31	-52		
300	298	-35	-55		
250		-39	-59		
200	388	-51			
170		-57			
150		-61			
130		-66			
110		-70			
100	535	-63			
90		-59			
80		-57			
70		-62			
60		-69			
	(53) mb	-69			

Inversion 736 mb 26° - 725 mb 32° 355 " -32° - 322 " -38°

Tropopause: I 273 mb - 42° 32,000'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Downham Market					
Surf	01·2	56	50	240	06
1000	-1·4				
950		53	47	267	32
900	27·4	47	41	269	37
850		45	33	269	40
800	59·1	40	30	264	45
750		40	20	264	52
700	94·5	35	06	261	59
650		27	03	260	63
600	134	17	-04	265	64
550		10	-12	264	73
500	180	06	-23	260	94
450		00	-24	257	97
400	235	-13	-36	258	103
350		-20	-39	270	134
300	302	-32	-48	268	152
250		-50		263	140
200	391	-60			
170		-64			
150		-66			
130		-69			
110		-66			
100	536	-66			

Inversion 865 mb 43° - 858 mb 46° 768 " -36° - 750 " -40°

Isothermal 545 - 520 mb 09° 500 - 480 " 06°

Tropopause: II 218 mb - 60° 37,100'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Larkhill					
Surf	04·4	56	53		
1000	-0·4				
950		54	51		
900	28·7	49	47		
850		47	37		
800	60·5	44	35		
750		44	16		
700	96·4	38	11		
650		31	02		
600	137	25	-10		
550		24	-03		
500	184	16	00		
450		03	-09		
400	239	-05	-15		
350		-15	-23		
300	307	-29	-37		
250		-45			
200	396	-66			
170		-63			
150		-69			
130		-72			
110		-70			
100	541	-71			
	(92) mb	-66			

Inversion 865 mb 46° - 847 mb 48° 788 " -43° - 756 " -45° 605 " -24° - 590 " -27°

Isothermal 983 - 970 mb 56° 590 - 570 " 27°

Tropopause: I 200 mb - 66° 39,600'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Camborne					
Surf	02·9	57	54	270	15
1000	1·0				
950		53	49	273	30
900	29·9	47	43	272	42
850		46	36	272	44
800	61·7	45	22	271	44
750		43	-10	272	48
700	97·5	38	-14	272	50
650		33	-25	273	50
600	138	32	-10	274	53
550		24	02	270	69
500	185	14	03	266	81
450		07	-02	265	93
400	241	-03	-14	268	95
350		-14	-24	276	97
300	309	-27	-41	271	111
250		-46		274	111
200	398	-70			
170		-74			
150		-74			
130		-79			
110		-77			
100	540	-75			
90		-76			
80		-70			
70					
60					

Inversion 889 mb 46° - 872 mb 47° 850 " 33° - 825 " 36°

Isothermal 832 - 782 mb 45°

Tropopause: I 175 mb - 76° 42,500'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Valentia					
Surf	00·3	56	44	280	14
1000	1·2	56	44	282	17
950		51	40	299	27
900	30·0	43	33	299	28
850		36	25	299	27
800	61·2	30	17	298	28
750		33	03	290	37
700	96·2	29	-16	283	52
650		23	-25	279	53
600	136	13	-15	278	56
550		09	-07		
500	181	03	-04		
450		-04	-10		
400	235	-10	-16		
350		-21	-25		
300	303	-29	-40		
250		-48			
200	392	-59			
170		-64			
150		-65			
130		-63			
110		-62			
100	538	-63			
90		-62			
80		-62			
70		-61			
	(77) mb				

Inversion 781 mb 29° - 750 mb 33° 426 " -10° - 412 " -07°

Isothermal 1003 - 1000 mb 56°

Tropopause: I 208 mb - 63° 38,300'

09h G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Pressure: Time	09h	09h		09h	09h	09h	09h	09h	
Pressure: M.S.L. (mb)	968·9	988·0		998·7	999·3	1001·8	1005·3	1009·6	
Pressure: Surface (mb)	960·3	986·2		990·1	997·9	997·0	989·3	999·1	
Pressure: Freezing (mb)	772	815		800	812	797	730	790 \ 682	

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Lerwick					
Surf	02·7	49	49		
1000	-8·3				
950		49	49		
900	20·3	44	41		
850		40	37		
800	51·7	35	34		
750		30	29		
700	86·7	26	25		
650		20	18		
600	126	15	13		
550		09	06		
500	172	02	-02		
450		-09	-14		
400	225	-18	-23		
350		-32	-39		
300	291	-47			
250		-48			
200	380	-42			
170		-44			
150		-43			
130		-42			
110		-44			
100	534	-46			
90		-47			
80		-46			
70		-46			
60		-46			
	(56) mb	-45			

For winds see page 3.

Isothermal 960 - 940 mb 49°

Tropopause: I 266 mb - 53° 31,700'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Stornoway					
Surf	00·5	50	46		
1000	-3·3				
950		46	42		
900	25·2	41	37		
850		36	32		
800	56·5	30	26		
750		23	17		
700	90·9	16	09		
650		10	02		
600	130	03	-06		
550		-05	-15		
500	174	-12	-24		
450		-19	-33		
400	226	-30	-44		
350		-40	-55		

NR.

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Leuchars					

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Aldergrove					
Surf	02·3	53	45	270	25
1000	-0·4				
950		48	44	282	30
900	28·2	41	38	300	36
850		35	29	304	41
800	59·5	32	22	306	42
750		26	18	302	44
700	94·0	20	03	294	42
650		13	-04	284	39
600	133	07	-12	287	43
550		00	-24	284	46
500	178	-07	-30	286	42
450		-19	-35	282	46
400	230	-32	-43	276	40
350		-42		278	61
300	294	-45		300	51
250		-42		298	61
200	385	-41		292	61
170		-45		298	67
150		-49		290	55
130		-50		284	47
110		-51		272	36
100	537	-50		288	31
90		-52		265	50
80		-53		273	35

Max wind:- 302° 90 kts 267 mb 32,300'

Tropopause: I 322 mb - 46° 27,800'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Liverpool					
Surf	00·6	55	45	270	30
1000	-0·4				
950		50	43	271	41
900	28·7	42	38	276	43
850		36	31	283	44
800	59·9	31	26	284	42
750		26	17	284	42
700	94·5	20	06	283	43
650		15	-03	281	48
600	133	09	-19	279	49
550		02	-35	278	50
500	178	-06	-22	278	51
450		-17	-30	274	57
400	231	-24	-43	273	69
350		-29	-56	269	76
300	297	-38	-58	271	91
250		-41		263	92
200	387	-53			
170		-55			
150		-54			
130		-49			
110		-46			
100	539	-52			
90		-63			
80		-64			
70		-61			
	(68) mb				

Tropopause: I 272 mb - 42° 31,800'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Downham Market					
Surf	01·2	53	47	240	10
1000	0·4				
950		49	42	270	34
900	29·0	42	36	287	36
850		38	27	291	35
800	60·3	33	24	288	34
750		28	01	280	38
700	95·1	27	-11	271	39
650		23	-23	269	45
600	135	25	-10	264	49
550		07	-08	259	58
500	180	02	-03	258	75
450		-07	-12	252	88
400	234	-14	-26	254	90
350		-22	-46	258	117
300	301	-36	-58	257	124
250		-44		255	141
200	391	-53		258	107
170		-52		256	93
150		-55		259	92
130		-58			
110		-57			
100	540	-58			
		-59			

Inversion 810 mb 000 - 500 mb 02° 413 " -15° - 400 " -14°

Isothermal 750 - 720 mb 28°

Tropopause: I 269 mb - 45° 32,500'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Larkhill					
Surf	04·4	53	47	290	10
1000	1·4				
950		48	40	286	32
900	30·0	40	34	284	42
850		35	27	282	42
800	61·3	35	13	280	43
750		35	08	273	45
700	96·4	28	-02	270	52
650		21	-09	265	58
600	136	14	-05	262	66
550		10	02	260	82
500	182	05	00	259	95
450		-01	-10	263	105
400	236	-10	-17	262	113
350		-22	-36	259	121
300	303	-36	-41	261	143
250		-51		260	140
200	392	-61		263	123
170		-62			
150		-62			
130		-64			
110		-61			
100	539	-57			
90		-56			
80		-55			

Inversion 835 mb 33° - 770 mb 37°

Isothermal 585 - 574 mb 12°

Tropopause: II 181 mb - 62° 41,800'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Camborne					
Surf	02·9	56	46	293	12
1000	2·6				
950		52	44	290	28
900	31·5	46	40	296	30
850		39	32	293	34
800	62·9	33	28	288	37
750		39	04	286	36
700	98·3	34	-09	283	42
650		27	-15	279	48
600	138	21	05	272	62
550		16	05	266	79
500	185	13	-07	268	85
450		06	-04	268	93
400	240	-03	-09	270	113
350		-13	-20	263	138
300	308	-26	-35	274	125
250		-43		275	138
200	398	-62		267	129
170		-67			
150		-67			
130		-70			
110		-65			
100	543	-67			
90		-69			
80		-69			
70		-66			
60		-65			
	(67) mb				

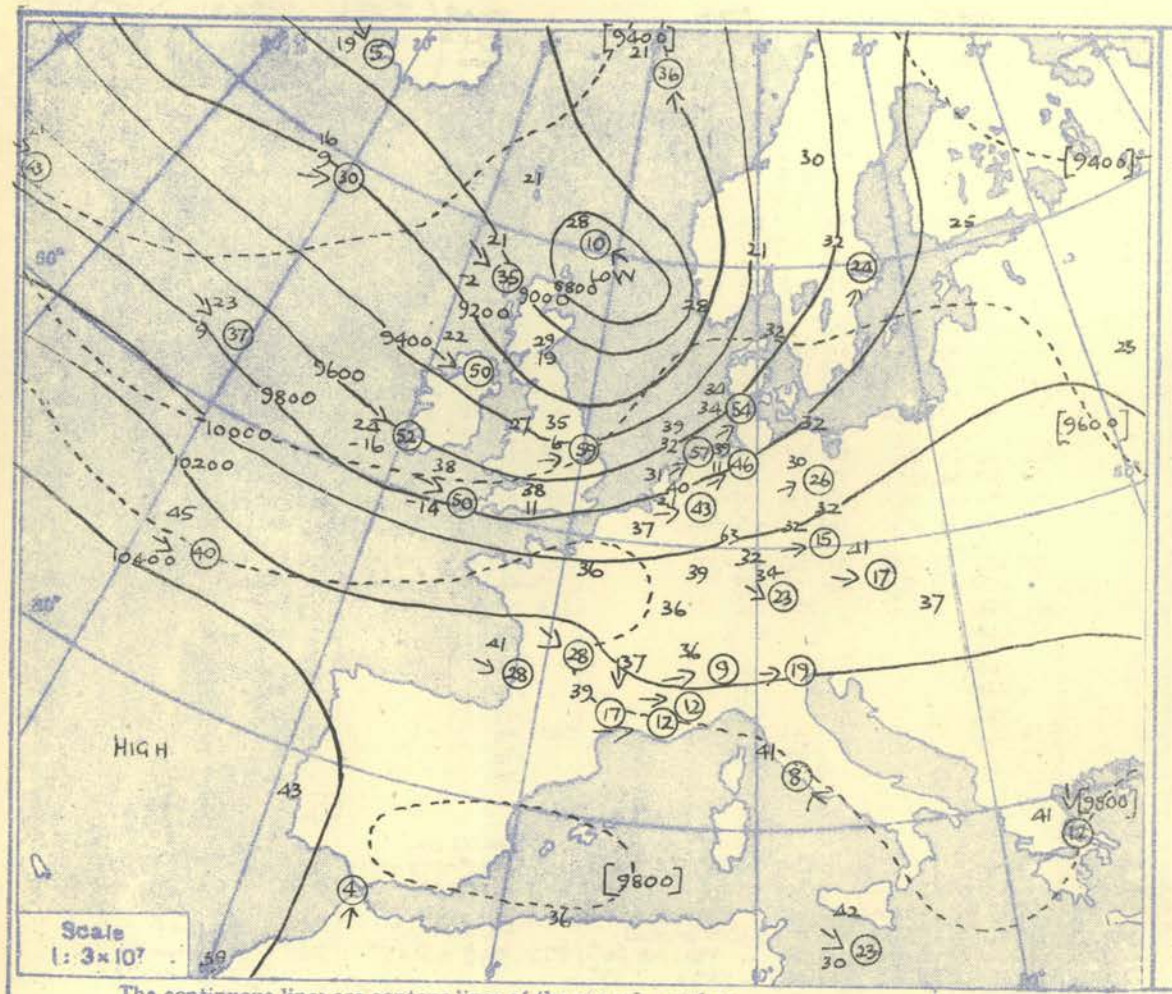
Inversion 790 mb 32° - 766 mb 40° 532 " 13° - 570 " 14°

Isothermal 999 - 983 mb 56° 610 - 576 " 21°

Tropopause: II 187 mb - 66° 41,200'

Thursday 7th September 1950.

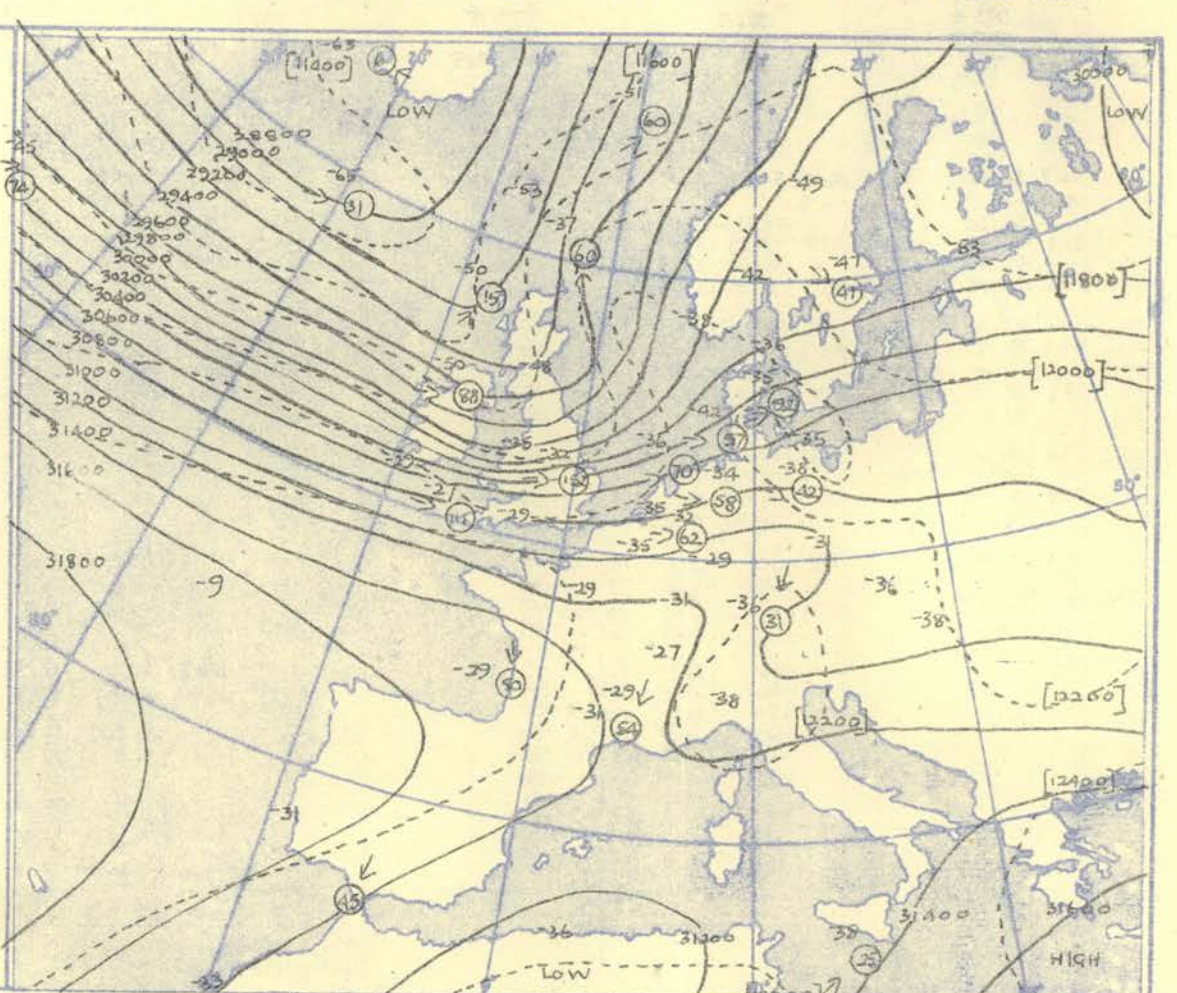
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. GMT.



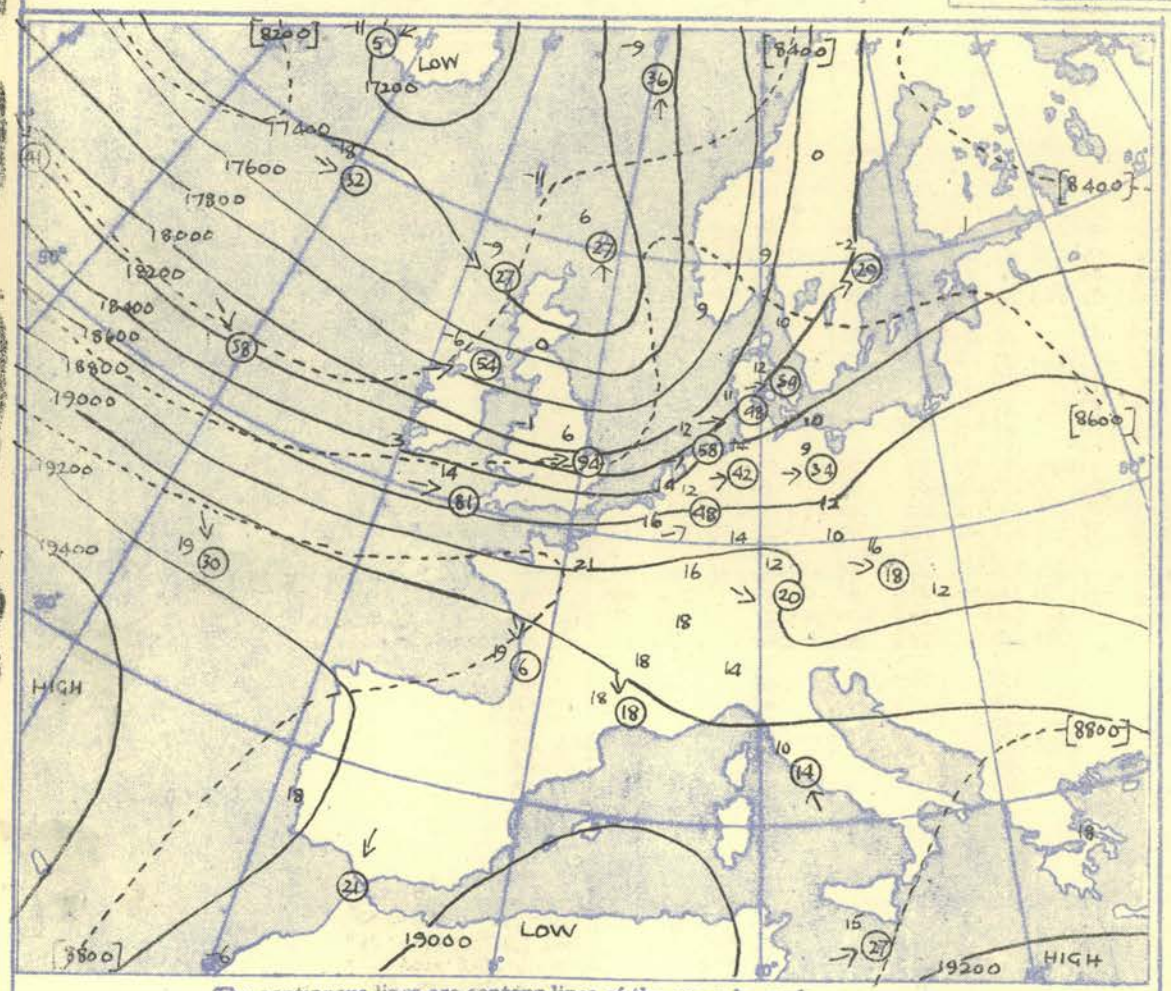
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

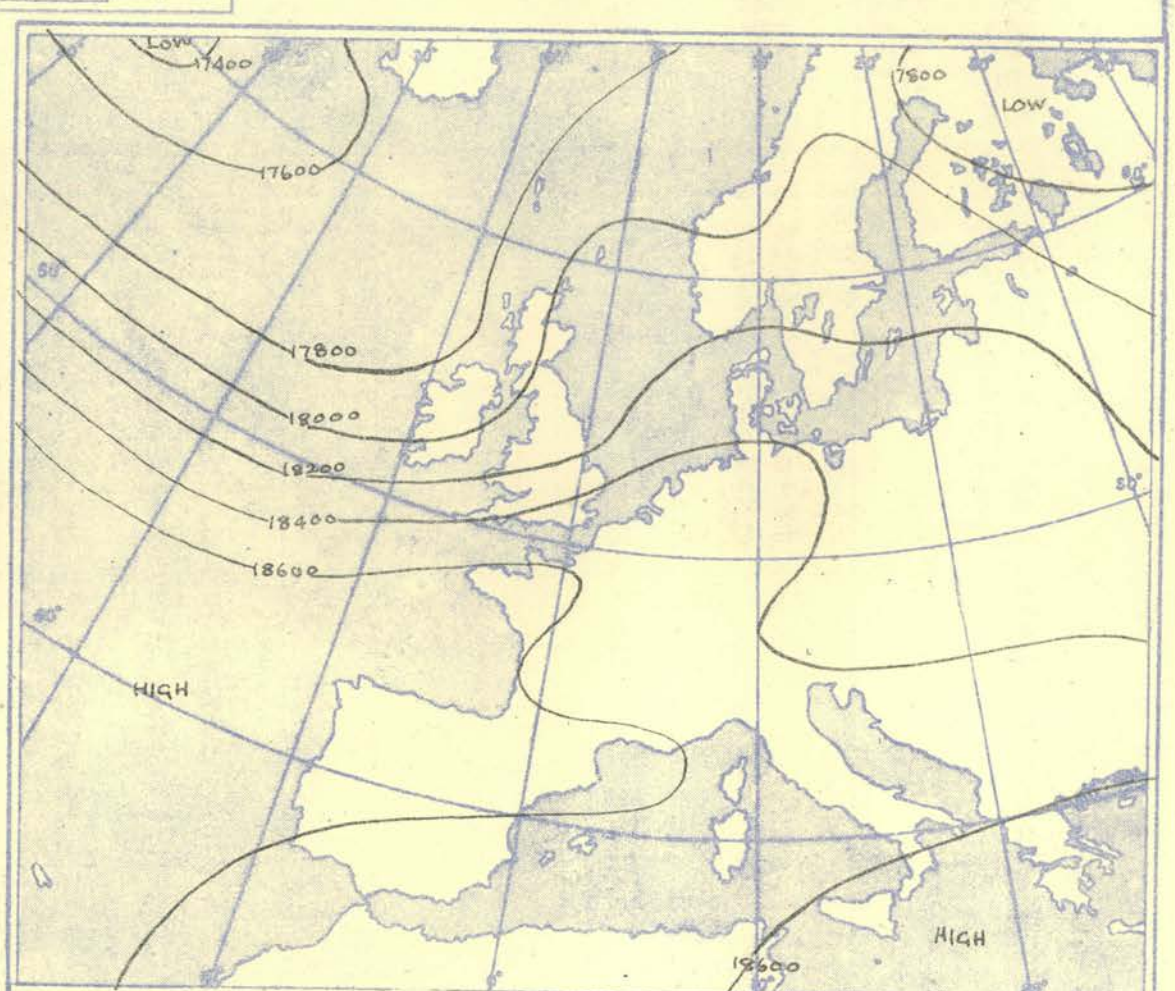
100 50 40 30 20 15 10 knots



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.

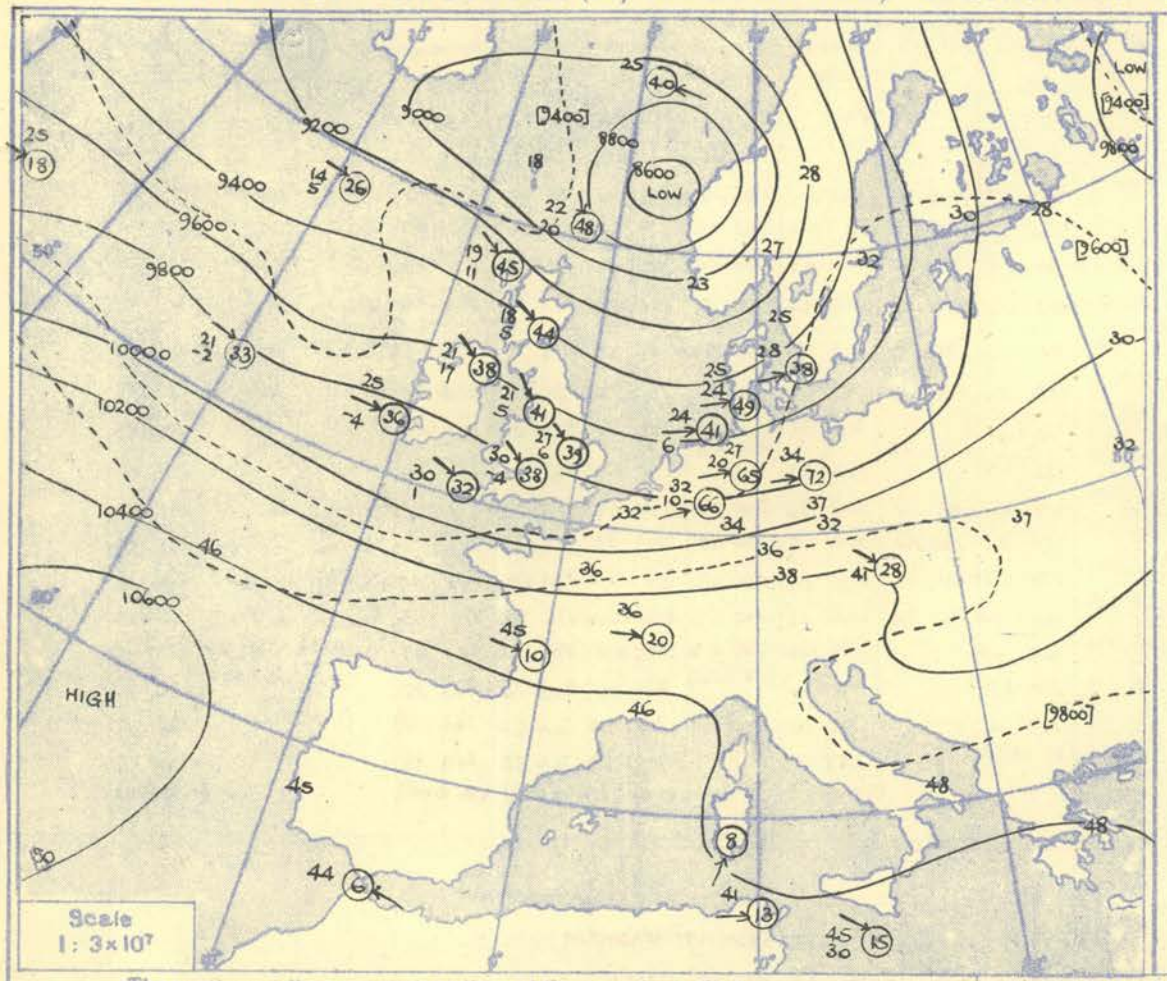
Thursday 7th September 1950 — Page 3

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

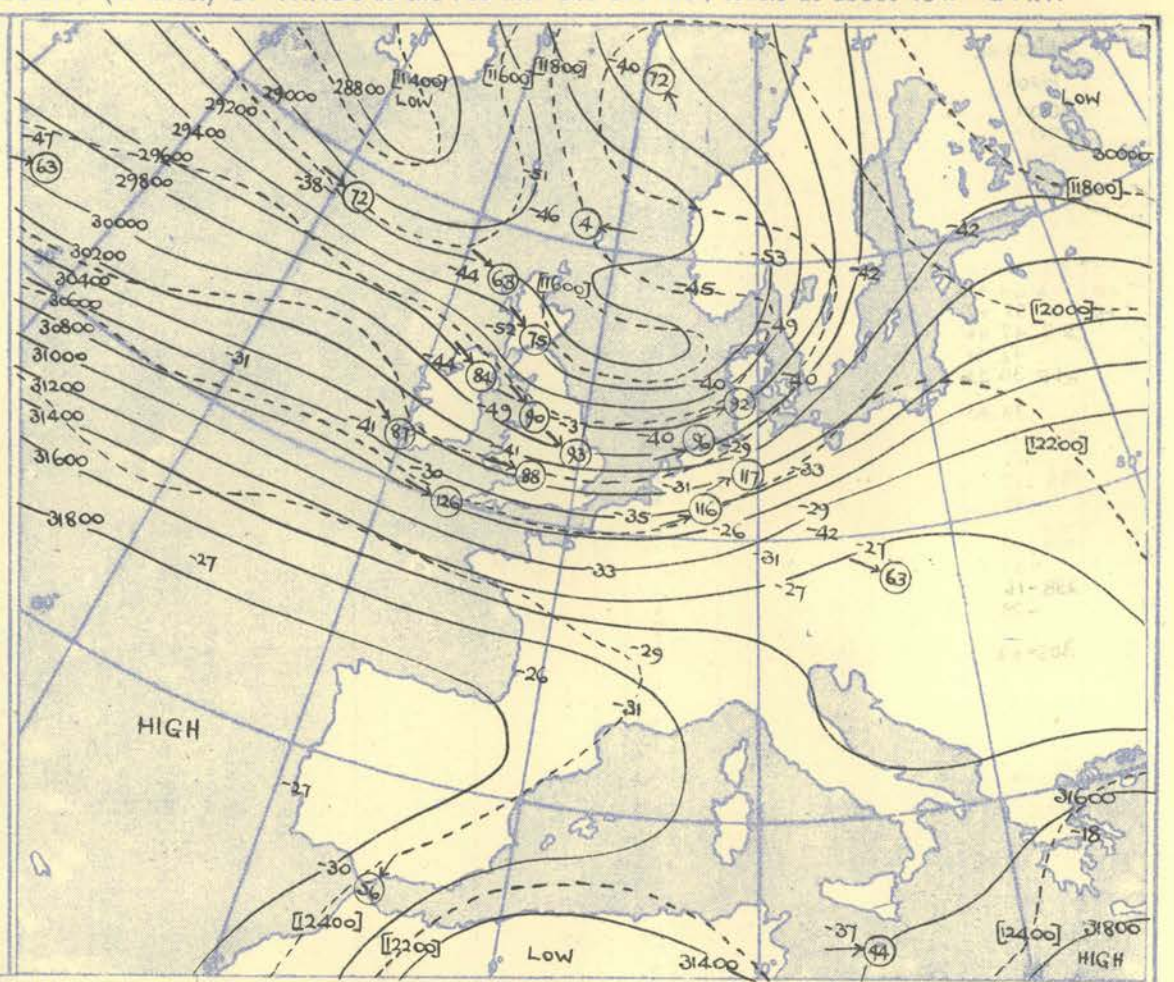
| | | |

Thursday 7th September, 1950.

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

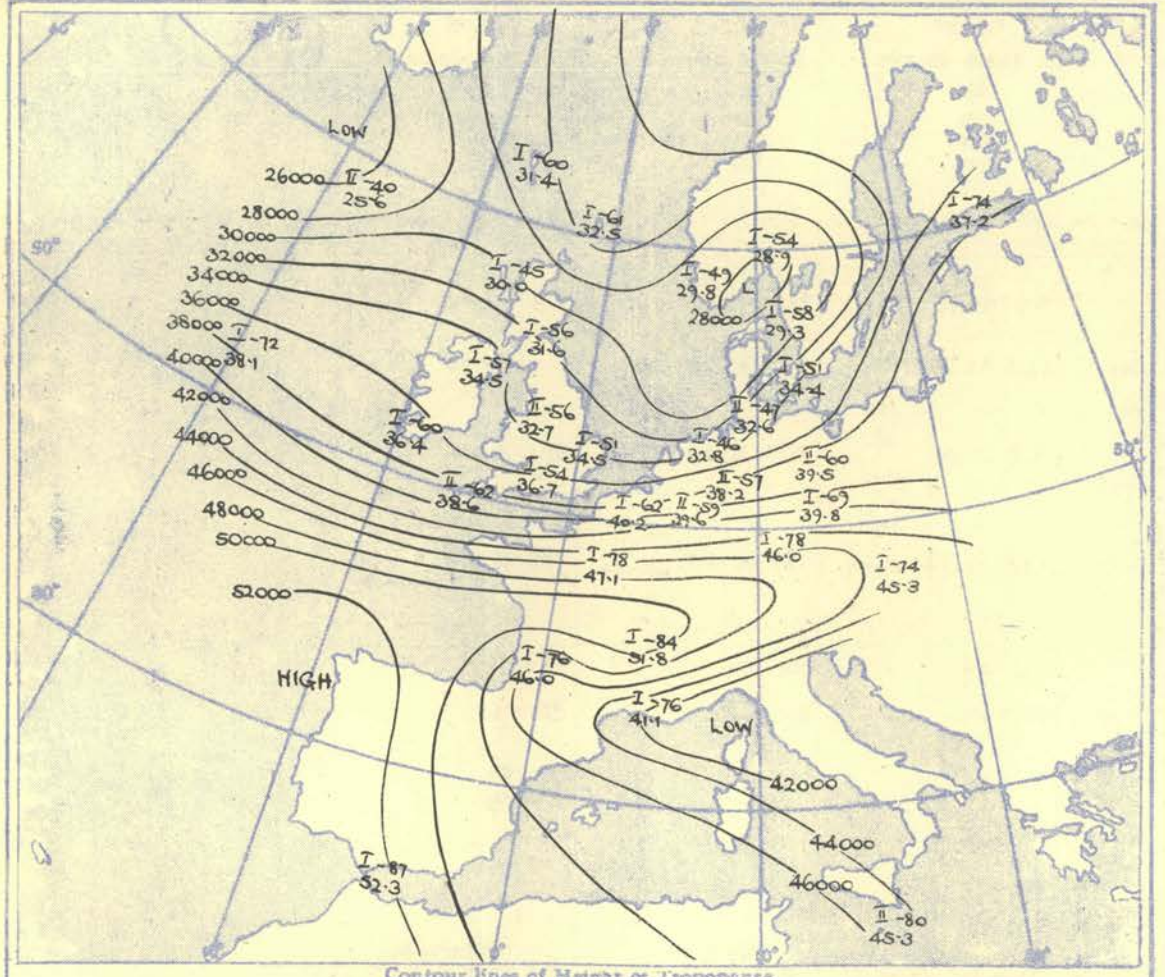


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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.

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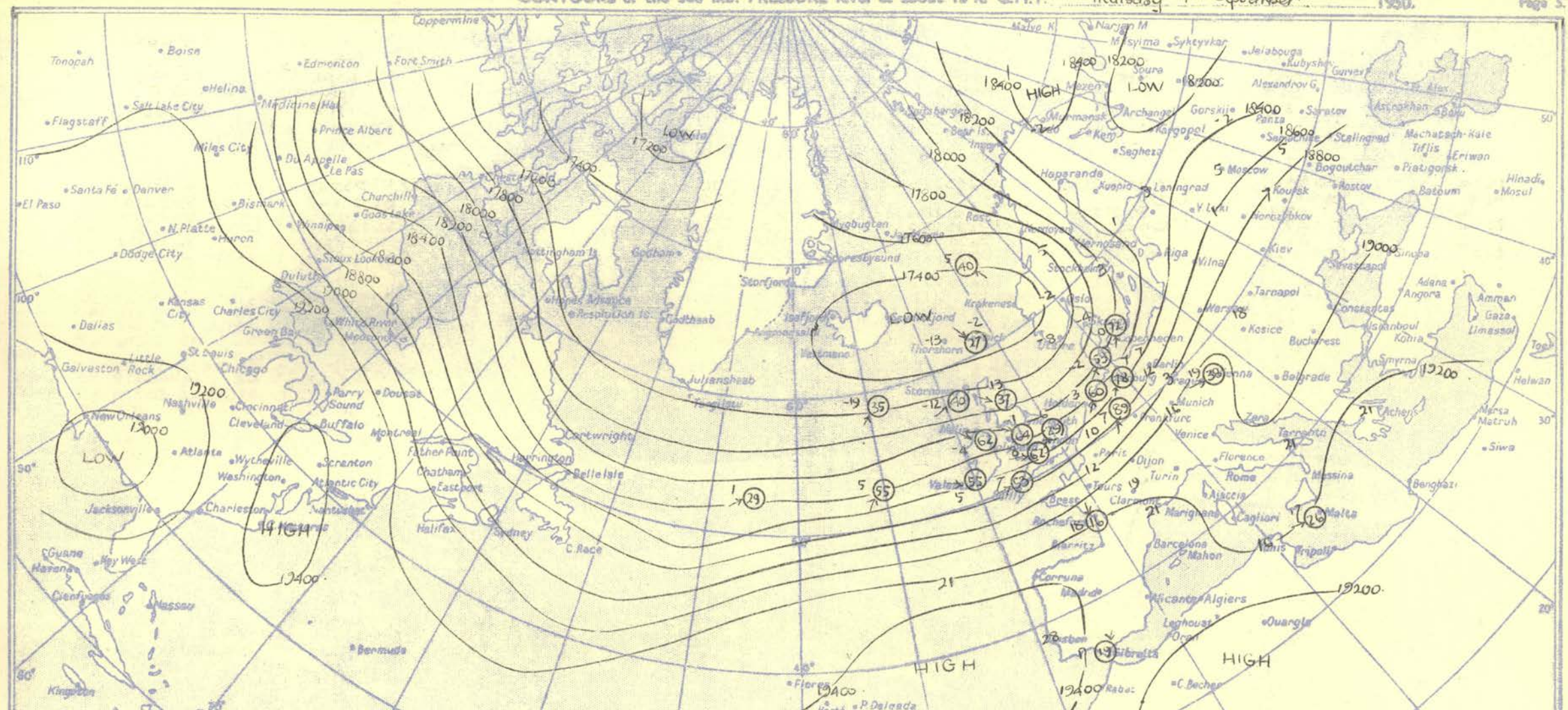
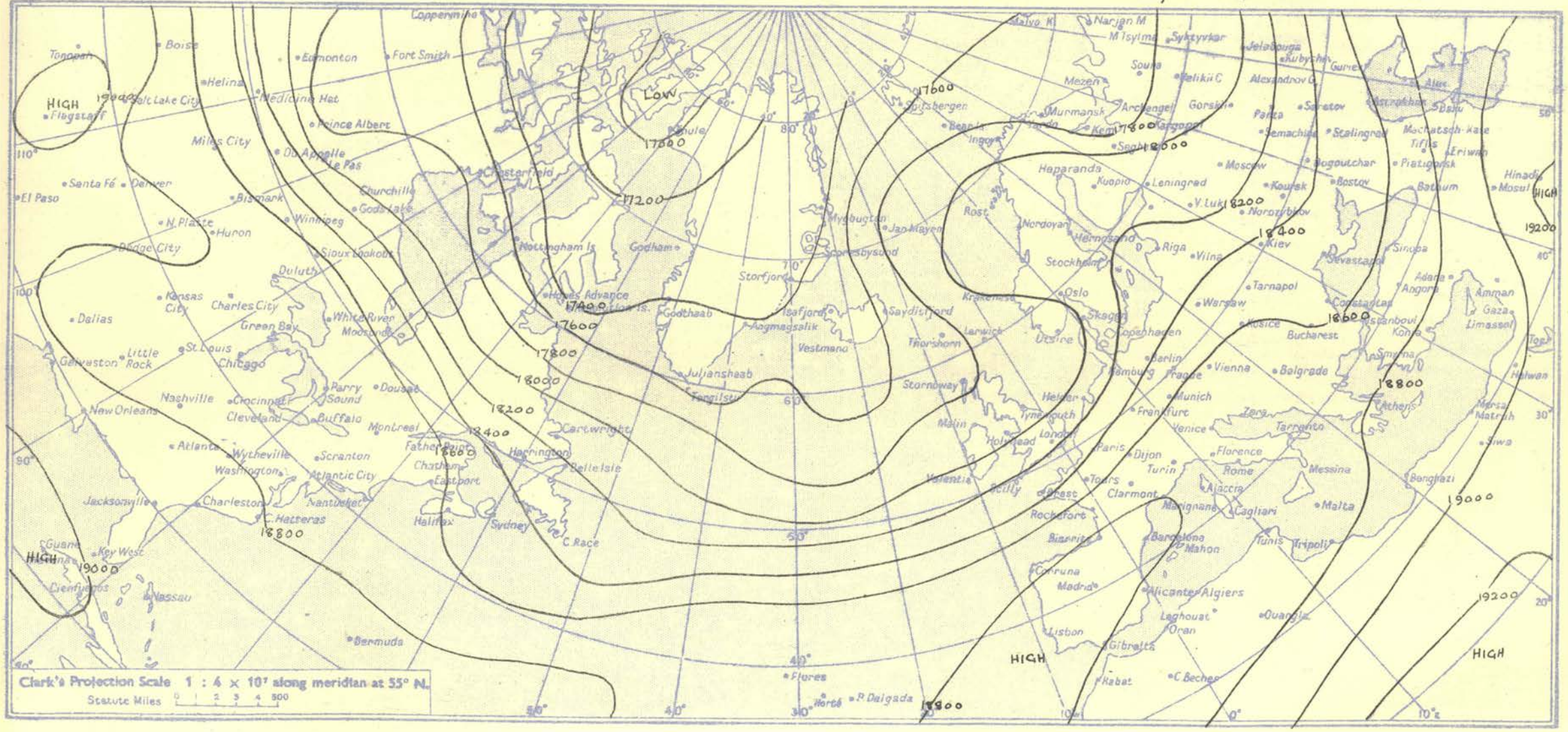
CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Thursday 7th September 1950.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Thursday 7th September 1950.



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

15hrs 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.	976.7 mb	993.6 mb	997.3 mb	1005.3 mb	1006.8 mb	1007.5 mb	1009.3 mb	1014.4 mb	1014.0 mb
Pressure: Surf	967.2 mb	982.5 mb	mb	996.8 mb	1004.8 mb	1002.7 mb	994.6 mb	1004.0 mb	1012 mb
Pressure: Freezing	800 mb	807 mb	mb	815 mb	298 mb	770 mb	721 mb	715 mb	810, 750 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	43	47		
1000		+0·4			
950			48	46	
900	22·2	43	41		
850		39	35		
800	53·3	32	30		
750		28	26	Seeps for winds	
700	88·3	22	20		
650		15	17		
600	128	13	10		
550		06	02		
500	173	+2	+6		
450		+12	+16		
400	226	+21	+26		
350		+30	+36		
300	282	+46			
250		+48			
200	381	+42			
170		+44			
150		+46			
130		+42			
110		+42			
100	534	+40			
90		+46			
80		+40			
70		+43			
60	(69)	+45			

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·3	54	47	277	33
1000	+0·6				
950		49	42		
900	27·1	42	36		
850		36	31		
800	58·4	31	25		
750		25	20	Seeps for winds	
700	94·0	19	11		
650		12	04		
600	132	04	-2		
550		-3	-9		
500	176	-12	-18		
450		-21	-28		
400	228	-28	-36		
350		-36	-45		
300	293	-44			
250		-39			
200	384	-37			
170		-37			
150		-37			
130		-40			

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·0	59	41	290	25
1000	-0·9				
950		50	31	279	42
900	28·0	46	26	282	45
850		38	21	285	43
800	59·4	32	15	285	46
750		23	08	285	47
700	94·0	18	05	286	44
650		13	00	282	47
600	133	07	-8	286	42
550		-3	-11	286	36
500	177	-13	-28	282	37
450		-24	-38	275	42
400	229	-35	-49	282	57
350		-41		291	81
300	293	-52		298	75
250		-47		279	71
200	382	-43		280	52
170		-44		272	45
150		-50		275	43
130		-50		274	39
110		-49			
100	535	-43			
90		-49			
80		-52			
70		-51			
60		-49			

Isothermal 960 - 930 mb 56°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·3	56	43	285	25
1000	01·5				
950		50	41	286	28
900	30·2	42	33	270	32
850		36	31	266	30
800	61·5	30	26	270	30
750		26	22	273	32
700	96·2	21	17	275	38
650		14	09	277	41
600	138	08	-4	284	46
550		+01	-14	285	52
500	179	-4	-22	281	62
450		-12	-27	284	69
400	235	-22	-37	285	78
350		-35	-49	284	84
300	298	-44		282	86
250		-56		280	80
200	386	-51		275	70
170		-48		272	51
150		-50		273	40
130		-52		274	44
110		-50		268	43
100	538	-51		250	30
90		-52		284	22
80		-51		280	20
70		-49			
60		-48			

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·6	60	48	270	30
1000	01·8	59	46	273	33
950		51	40	281	32
900	30·6	45	36	297	34
850		33	30	301	34
800	62·0	32	23	303	26
750		27	15	283	35
700	96·7	21	03	291	41
650		15	-3	288	47
600	136	10	-11	285	54
550		04	-26	286	60
500	181	-1	-25	287	64
450		-11	-29	280	67
400	234	-23	-38	282	72
350		-36	-48	280	90
300	299	-49		280	90
250		-56		284	89
200	388	-51			
170		-58			
150		-59			
130		-51			
110		-49			
100	537	-46			
90		-54			
80		-63			
70		-67			
60					

Isothermal 554 - 542 mb 4°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	63	46	260	15
1000					
950	02·0	62	46		
900		55	41		
850	31·0	48	35		
800	62·6	35	23		
750		29	19	Seeps for winds	
700	97·6	27	06		
650		23	-4		
600	137	17	-11		
550		09	-21		
500	183	06	-30		
450		-3	-33		
400	237	-12	-32		
350		-23	-40		
300	304	-37	-53		
250		-50			

Inversion 930 mb 27° - 905 mb 28°
909 mb 5° - 892 mb 7°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	09·4	61	48	290	18
1000	02·8				
950		53	43	282	24
900	31·7	43	38	283	24
850		38	26	288	27
800	63·2	39	17	295	25
750		33	08	295	32
700	98·4	30	-4	286	38
650		22	-8	286	40
600	138	(16	-1)	287	49
550		17	-22	277	54
500	184	08	-30	272	62
450		+3	-37	271	63
400	238	+5	-46	272	65
350		+2	-36	269	66
300	304	+1		273	88
250		+51		267	111
200	393	+53		271	111
170		+58		278	90
150		+60		271	80
130		+60		265	66
110		+59		274	59
100	541	+58		270	53
90		+57		266	45
80		+57		262	36

Inversion 831 mb 32° - 816 mb 40°
575 mb 13° - 555 mb 18°
750 - 736 mb 33°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	52	49	293	100
1000	04·0	58	48		
950		52	44	286	20
900	32·8	44	37	287	20
850		38	27	287	19
800	64·2	38	21	283	21
750		37	03	275	25
700	99·5	30	01	274	32
650		24	00	276	36
600	139	21	-4	275	45
550		17	-9	270	52
500	186	07	-21	269	53
450		-3	-21	271	68
400	240	-10	-28	272	81
350		-20	-35	277	100
300	307	-30	-44	280	126
250		-47		278	147
200	397	-62			
170		-62			
150		-64			
130		-64			
110		-64			
100	543	-63			
90	(95)	-62			

Inversion 810 mb 36 - 785 mb 39°
Isothermal 785 - 761 mb 39°
639 - 618 mb 23°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	61	50	260	13
1000	38				
950		55	50	264	15
900		50	45	273	20
850	32·6	43	41	271	23
800		36	28	270	25
750		32	00	265	31
700	98·7	25	-4	265	36
650		22	-11	272	40
600	138	17	-23	278	42
550		13	-33	276	48
500	184	05	-39	278	55
450		-4	-40	278	58
400	238	-16	-50	279	68
350		-29		285	85
300	304	-41		288	87
250		-54		283	83
200	392	-55			
170		-60			
150		-61			
130		-65			
110		-62			
100	539	-61			
90	(93)	-62			

Inversion 800 mb 31 - 768 mb 35°
577 mb 13° - 557 mb 14°
700 mb 25° - 690 mb 26°
Isothermal 650 - 625 mb 22°

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Tropopause	I 259 mb -61° 32500'	I 290 mb -45° 30000'	I 270 mb -56° 31600'	I 243 mb -57° 34500'	II 263 mb -56° 32600'	I 248 mb -51° 34500'	I 225 mb -54° 36700'	II 203 mb -62° 38600'	I 225 mb -60° 36400'

21hrs G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Pressure: Time	21hrs G.M.T.	21hrs G.M.T.	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.
Pressure: M.S.L.	984.6 mb	996.5 mb	mb	1005.0 mb	1009.2 mb	1011.6 mb	1014.5 mb	1017.1 mb	mb
Pressure: Surf	974.9 mb	994.6 mb	mb	999.4 mb	1001.2 mb	1001.0 mb	998.4 mb	1006.6 mb	mb
Pressure: Freezing	832 mb	840 mb	mb	830 mb	815 mb	758 mb	742 mb	809 mb	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	50	46		
1000	-4·2				
950		48	43		
900	24·4	42	38		
850		34	30		
800	55·6	30	23		
750		26	14	Seeps for winds	
700	90·2	20	11		
650		14	04		
600	129	06	-6		
550		-2	-20		
500	174	-12	-23		
450		-19	-26		
400	226	-30	-38		
350		-40	-47		
300	290	-53			
250		-43			
200	379	-43			
170		-44			
150		-45			
130		-47			
110		-48			
100	532	-50			
90		-49			
80		-50			
70		-49			
60					

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·5	50	45	220	15
1000	-0·9				
950		45	40	267	31
900	27·5	39	36	265	37
850		33	31	272	40
800	58·6	27	24	272	40
750		21	18	269	36
700	92·8	15	12	266	37
650		09	00	265	37
600	131	01	-3	267	35
550		-8	-14	262	29
500	175	-18	-26	267	33
450		-31	-38	266	43
400	226	-38	-46	274	62
350		-43		278	91
300	290	-46		280	79
250		-43		274	65
200	380	-41		274	46
170		-47		274	45
150		-51		274	45
130		-55		280	32

Isothermal 417 - 400 mb -38°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·3	52	46	240	15
1000	02·2				
950		47	43	257	27
900	30·8	41	37	270	30
850		35	30	273	38
800	62·0	30	23	274	38
750		25	17	276	35
700	96·6	18	05	275	38
650		15	02	275	42
600	136	10	-2	278	44
550		05	-10	276	52
500	181	-5	-17	275	59
450		-13	-27	276	74
400	234	-21	-42	280	86
350		-32	-53	276	98
300	299	-48		281	111
250		-59		289	126
200	387	-51		292	76
170		-54			
150		-57			

Isothermal 999 - 985 mb 52°
815 - 788 mb 30°
707 - 668 mb 18°
476 - 460 mb -10°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	57	46	270	20
1000	02·6	56	46	271	25
950		50	45	274	27
900	31·3	44	41	274	25
850		37	33	271	33
800	62·6	30	28	265	36
750		23	16	264	36
700	97·1	23	03	281	33
650		16	-4	281	37
600	137	12	-7	274	46
550		06	-9	276	46
500	182	-1	-10	277	61
450		-10	-25	276	64
400	235	-18	-40	279	71
350		-31	-52	279	80
300	301	-44			
250		-55			
200	388	-63			
170		-62			
150		-62			
130		-66			
110		-65			
100	534	-63			
90		-60			
80		-60			
70		-62			
60		-65			

Inversion 744 mb 23° - 715 mb 26°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	51	45	194	05
1000	03·1	52	45		
950		52	42	273	25
900	31·5	46	39	278	24
850		38	31	282	20
800	63·3	32	25	279	21
750		31	10	277	28
700	98·1	23	00	281	33
650		16	-4	281	37
600	137	13	-13	280	40
550		07	-15	282	52
500	183	00	-7	284	65
450		-9	-20	283	65
400	236	-19	-40	287	69
350		-31	-51	286	79
300	302	-45		287	81
250		-59		284	82
200	389	-57		288	82
170		-54		281	69
150		-58		273	63
130		-60		275	52
110		-60		284	40
100	538	-60		274	39
90		-60			

Inversion 1001 mb 51 - 987 mb 56°
Isothermal 500 - 758 mb 32°
650 - 625 mb 16°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	45	46	270	07
1000	03·9				
950		50	45	272	23
900	32·6	45	39	277	23
850		39	26	277	28
800	63·9	34	04	265	20
750		33	00	265	23
700	98·9	27	-7	272	25
650		23	-7	271	29
600	139	19	-15	274	37
550		14	-15	278	46
500	185	06	-19	281	53
450		-6	-28	283	59
400	239	-14	-35	285	65
350		-29	-53	288	76
300	305	-42		293	84
250		-57		308	115
200	382	-60		288	97
170		-63		289	63
150		-65		282	68
130		-64		275	45
110		-63		284	38
100	539	-61		277	27
90		-61		276	28

Inversion 998 mb 49° - 978 mb 52°
817 mb 34° - 769 mb 35°
660 mb 22° - 646 mb 24°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	54	48	180	06
1000	04·7	54	48		
950		51	47	268	21
900	33·4	44	41	273	23
850		37	34	277	24
800	64·7	31	28	280	27
750		31	17	275	28
700	99·7	27	05	277	32
650		26	-5	276	33
600	140	21	-15	274	34
550		16	-28	272	41
500	186	14	-29	277	48
450		05	-39	284	54
400	241	-4	-47	292	83
350		-15	-54	295	93
300	305	-32	-59	294	111
250		-51		290	108
200	397	-74		288	114
170		-76			
150		-71			
130		-74			
110		-74			
100	(123)	-74			

Inversion 1001 mb 54 - 983 mb 58°
783 mb 30 - 750 mb 31°
700 mb 27 - 688 mb 28°
Isothermal 535 - 505 mb 15°

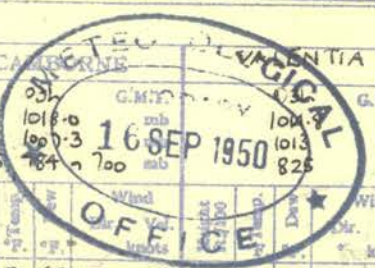
Station	LERWICK	STORNOWAY		ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Tropopause	I 259 mb -57° 29600'	I 311 mb -48° 25100'		I 243 mb -60° 34500'	I 220 mb -66° 36800'	I 242 mb -60° 34800'	II 236 mb -62° 35700'	II 196 mb -76° 39700'	

No. 11485

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.

Friday 8th September 1950. 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	988·8 mb	979·0 mb	821 mb
STORNOWAY	03h	996·9 mb	995·0 mb	838 mb
LEUCHARS	03h	1001·7 mb	1000·9 mb	818 mb
ALDERGROVE	03h	1008·5 mb	1000·0 mb	820 mb
LIVERPOOL	03h	1010·2 mb	1008·2 mb	838 mb
DOWNHAM MARKET	03h	1013·0 mb	1008·4 mb	811 mb
LARKHILL	03h	1015·2 mb	999·0 mb	733 mb
CAMBORNE	03h	1018·0 mb	1000·3 mb	805 [illegible] 700 mb
VALENTIA	03h	[illegible] mb	1001·8 mb	1013 mb 825 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	027	19	44	260	27	005	47	43	250	10	002	49	46		
1000	3·1					-0·9					0·2				
950		48	40	270	39		46	39	272	27		45	41		
900	25·4	42	35	274	36	27·6	40	32	273	30	28·7	41	37		
850		36	30	274	37		34	27	271	29		36	29		
800	56·6	29	24	274	40	58·7	26	21	270	42	59·9	30	20		
750		25	17	277	37		19	11	271	39		22	09		
700	91·1	19	05	274	34	92·9	14	-01	262	36	94·0	19	08		
650		12	-03	271	33		07	-09	266	39		12	01		
600	130	04	-10	266	29	131	-01	-16	265	47	133	05	-06		
550		-05	-19	263	25		-10	-25	264	51		-06	-15		
500	174	-14	-27	263	20	175	-20	-29	252	50	177	-17	-26		
450		-24	-35	237	08		-30	-41	262	47		-21	-38		
400	226	-35	-45	214	03	226	-38	-52	264	50	229	-29	-47		
350		-44		126	27		-42		272	00		-41			
300	289	-55		186	11	290	-42		277	68	294	-50			
250		-40		266	22		-39		279	58		-54			
200	380	-41		266	30	381	-40		274	53	382	-46			
170		-43		264	23		-46		279	46		-49			
150		-45		259	19		-45		275	42		-51			
130		-45					-48								
110	(127 mb)	-45													
100															
90															
80															
70															
60															
	Isothermal 979 - 956 mb 49°					Inversion 995 mb 47° - 978 mb 49°					Isothermal 728 - 700 mb 19°				
Tropopause	I 306 mb - 56° 28,400'					I 323 mb - 44° 27,300'					II 250 mb - 54° 33,300'				

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	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	023	51	46	230	20	006	54	45			012	48	47	200	05	044	47	45	CALM		029	52	48	180	03	003	54	48		
1000	2·3					2·8					3·5					4·1					4·9									
950		46	42	251	26		49	41				48	46	272	28		48	44				53	49	262	21	4·0	53	46	240	10
900	30·8	41	37	267	40	31·4	42	36			32·1	43	40	273	30	32·7	43	36				49	45	266	22		46	42	248	14
850		35	32	274	43		34	28				37	34	201	30		37	33			33·6	42	38	270	24	32·6	38	37	271	22
800	62·0	30	27	271	42	62·5	28	21			63·4	30	26	259	29	64·0	36	27				39	32	267	25		34	33	278	24
750		27	11	272	44		24	08				26	19	263	32		33	19			65·0	31	27	267	30	636	30	24		
700	96·6	22	-01	272	45	97·0	23	-07			98·4	25	-01	255	35	99·1	29	05				35	05	272	35		28	03		
650		14	03	272	45		20	-07				17	-10	261	39		27	-05			100	32	-05	273	41	98·3	25	-06		
600	136	11	02	273	48	136	15	-04			138	14	-15	270	47	139	20	-13				30	01	276	50		22	09		
550		-05	-20	274	54		07	-06				07	-11	273	53		15	-19			140	26	18	280	60	138	17	16		
500	181	-01	-38	274	68	182	01	-19			183	03	-18	274	64	185	10	-25				21	13	280	66		14	09		
450		-13	-37	274	69		-09	-27				-07	-19	273	72		03	-10			187	17	07	281	75	184	10	02		
400	234	-23	-35	276	75	235	-19	-29			237	-18	-30	270	81	240	-06	-13				06	-01	279	76		02	-01		
350		-34	-43	278	93		-28	-37				-26	-32	278	93		-19	-28			243	-05	-11	277	76	289	-07	-16		
300	299	-42		279	144	302	-40	-49			303	-40	-46	289	117	307	-34	-41				-18	-25	278	89		-18	-22		
250		-55		282	153		-56					-57		294	138		-53				310	-36	-42	281	95	307	-31	-37		
200	387	-61		294	106	388	-68				390	-67		292	99	395	-72					-58		282	96		-50			
170							-66					-63		282	90		-69				397	-73								
150							-68															-73								
130							-71					-66		286	60		-72					-72								
110							-64					-69		297	53		-71					-70								
100						534	-61					-67		309	12		-68					-68								
90							-61				536	-68		264	42	539	-65				(105 mb)									
80							-61					-65					-63													
70							-61										-63													
60						(78 mb)	-66										-67													
	Isothermal 650 - 613 mb 14°					Isothermal 764 - 735 mb 24° 700 - 684 " 23°					Inversion 1008 mb 48° - 975 mb 58° 750 " 26° - 722 " 28° Isothermal 542 - 513 mb 06° 385 - 366 " -22°					Inversion 999 mb 47° - 980 mb 52° 814 " 32° - 800 " 36° Isothermal 713 - 679 mb 29°					Inversion 1007 mb 52° - 990 mb 54° 800 " 31° - 765 " 35° 525 " 19° - 520 " 21°					Inversion 721 mb 24° - 700 mb 25° Isothermal 800 - 770 mb 30° 700 - 688 " 25°				
Tropopause	II 228 mb - 62° 35,700'					I 204 mb - 71° 38,000'					I 228 mb - 68° 36,200'					II 211 mb - 72° 38,900'					II 223 mb - 73° 37,300'					NR				

09h G.M.T.

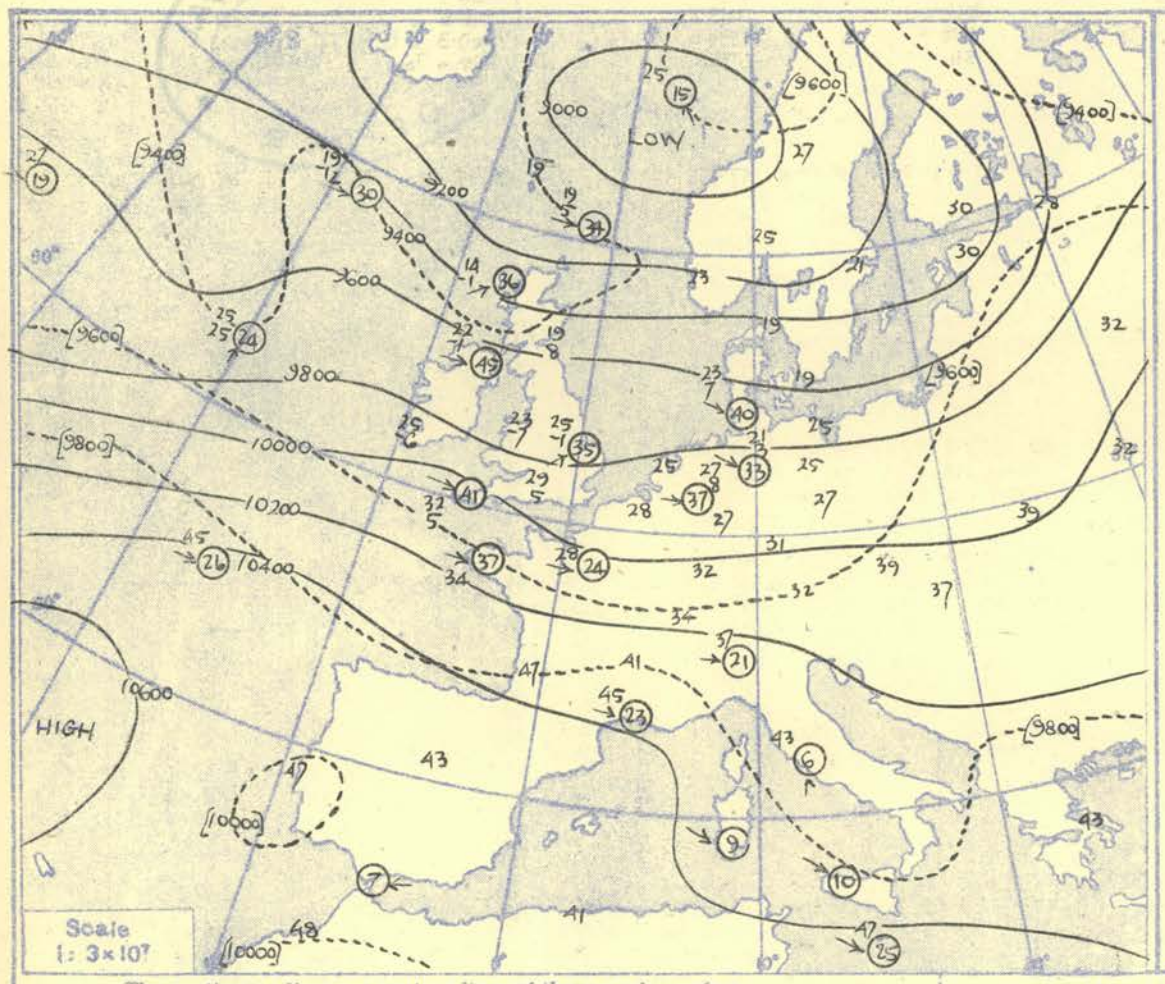
Station	Time	M.S.L.	Surf	Freezing
LERWICK	09h	991·7 mb	981·9 mb	818 mb
STORNOWAY	09h	1000·5 mb	998·6 mb	842 mb
LEUCHARS	09h	mb	mb	mb
ALDERGROVE	09h	1009·4 mb	1000·8 mb	837 mb
LIVERPOOL	09h	1010·6 mb	1008·6 mb	770 mb
DOWNHAM MARKET	09h	1013·2 mb	1009·1 mb	770 mb
LARKHILL	09h	1015·6 mb	999·7 mb	830 mb
CAMBORNE	09h	1017·5 mb	1007·0 mb	760, 710, 642 mb
VALENTIA	09h	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	027	51	45	270	24	005	52	46							
1000	2·3					0·1									
950		48	42	274	34		47	41							
900	26·2	41	35	281	32	28·7	41	35							
850		36	31	285	31		33	29							
800	57·5	30	25	284	33	59·8	27	23							
750		24	17	280	33		25	19							
700	92·0	18	10	285	31	94·2	17	05							
650		11	03	291	27		09	-10							
600	131	03	-03	292	24	133	02	-19							
550		-07	-14	294	18		-06	-25							
500	175	-16	-24	303	17	177	-13	-33							
450		-25	-33	319	18		-22	-42							
400	226	-37	-46	049	11	229	-32	-53							
350		-49		065	11		-43								
300	290	-48		350	06	293	-57								
250		-40		279	24		-50								
200	380	-41		274	29	381	-45								
170		-41		269	31		-48								
150		-42		268	30		-51								
130		-45		276	29		-55								
110		-45		268	23		-57								
100	534	-45		263	23	532	-56								
90		-43		239	26		-55								
80		-45		247	24		-53								
70		-45		260	15										
60	(65 mb)	-45													
						Isothermal 783 - 750 mb 25°									
Tropopause	II 350 mb - 49° 25,500'					I 300 mb - 57° 29,300'									

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	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	023	51	47	255	20	006	57	47			012	58	48			044	52	48	260	08	029	57	52	203	08					
1000	2·6					2·9	56	46			3·8	56	46			4·4					4·8	56	51							
950		45	38	274	26		50	42				49	42				46	41	271	23		50	46	257	20					
900	31·0	40	31	283	28	31·6	45	38			32·8	43	37			32·9	40	35	277	25	33·6	44	37	266	22					
850		34	25	283	33		39	30				40	24				34	31	283	24		39	34	273	23					
800	62·2	30	18	286	33	63·1	35	24			64·0	35	22			64·1	30	27	279	27	65·0	33	28	273	24					
750		23	13	278	36		30	20	For			31	11	For			28	23	277	30		31	24	276	35					
700	96·6	20	09	277	39	98·1	28	02	winds		98·9	29	-04	winds		98·9	29	09	278	38	100	34	30	278	49					
650		15	-03	278	42		22	06	see			24	-04	see			21	12	281	42		33	27	279	61					
600	136	11	-06	278	45	138	15	03	page		139	19	-04	page		139	20	17	280	57	141	27	22	279	64					
550		05	-17	278	44		11	-03	3			13	-19	3			15	13	278	64		17	16	276	63					
500	181	-01	-28	275	54	184	10	01			185	13	03			185	11	07	279	74	187	15	01	275	71					
450		-11	-34	276	60		02	-08				04	-08				04	00	278	84		09	-05	273	77					
400	234	-19	-32	276	76	238	-08	-18			240	-03	-14			240	-04	-09	277	87	243	-01	-09	277	73					
350		-31	-45	275	93		-18	-28				-11	-25				-17	-21	279	95		-13	-21	279	84					
300	300	-39	-52	269	130	306	-31	-42			309	-24	-38			308	-29	-36	281	107	311	-26	-40	275	87					
250		-53		271	153		-47					-45					-48		281	110		-46		277	89					
200	388	-55				395	-55				399	-56				397	-69		284	68		-67								
170		-58					-59					-61					-70		283	96		-76								
150		-58					-59					-63					-74		277	80		-75								
130		-62					-59					-61					-74		279	74		-81								
110		-62					-58					-64					-73		280	63		-80								
100						543	-55				546	-63				540	-69				542	-75								
90							-55					-62					-68					-73								
80							-57					-59					-61					-70								
70							-56										-64					-68								
60						(52 mb)	-48										-60				(53 mb)	-65								
	Inversion 720 mb 18° - 700 mb 20°					Inversion 734 mb 28° - 715 mb 29° Isothermal 524 - 500 mb 10°					Inversion 894 mb 42° - 879 mb 43° 528 " 12° - 508 " 14° Isothermal 742 - 720 mb 30°					Inversion 763 mb 26° - 736 mb 30° 629 " 20° - 620 " 22° 568 " 13° - 560 " 15°					Inversion 723 mb 29° - 688 mb 36° Isothermal 800 - 765 mb 33° 738 - 723 " 29° 688 - 670 " 36°									
Tropopause	II 260 mb - 53° 33,900'					I 215 mb - 57° 38,800'					II 222 mb - 55° 37,700'					III 197 mb - 70° 39,800'					I 175 mb - 78° 42,600'									

Friday 8 September 1950.

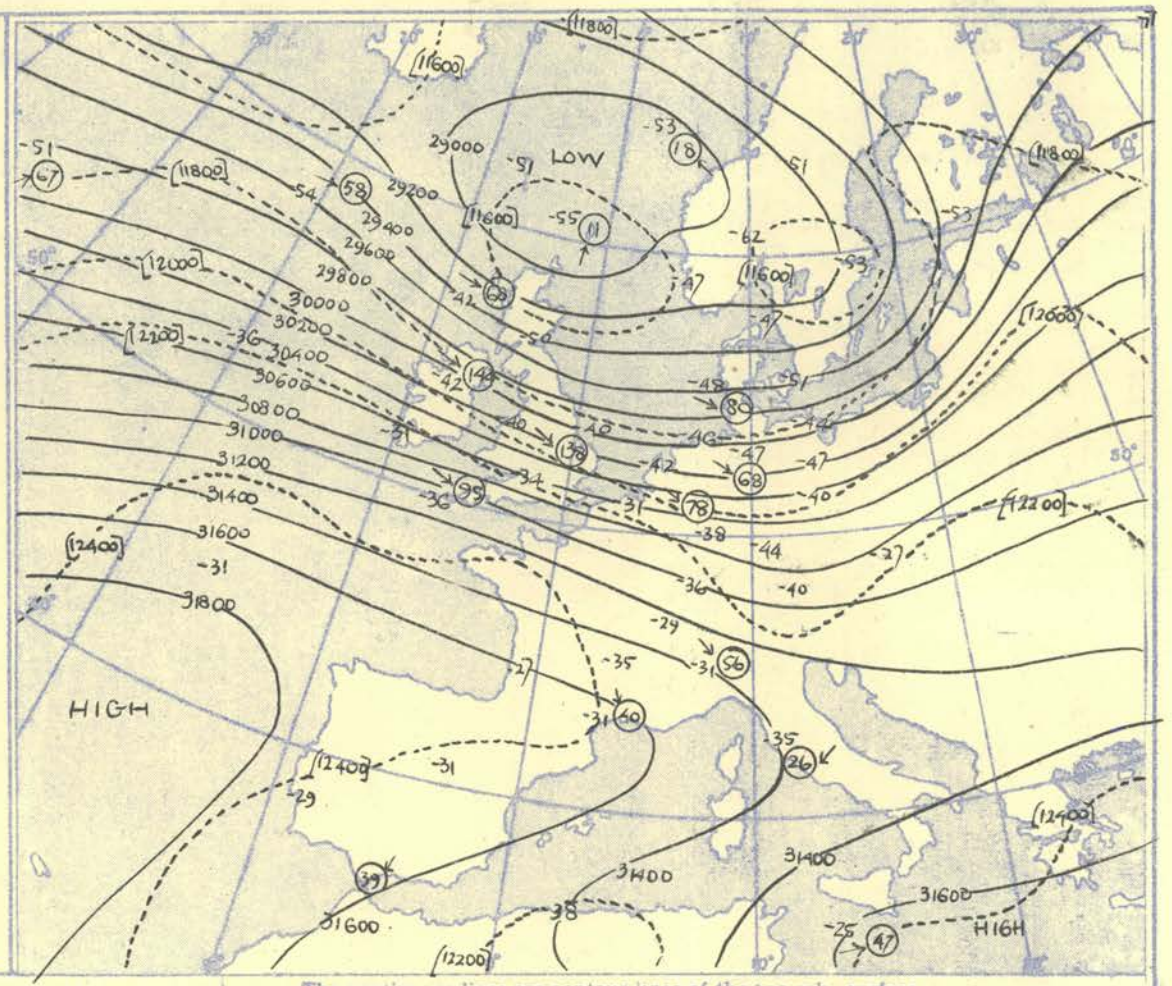
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. G.M.T.



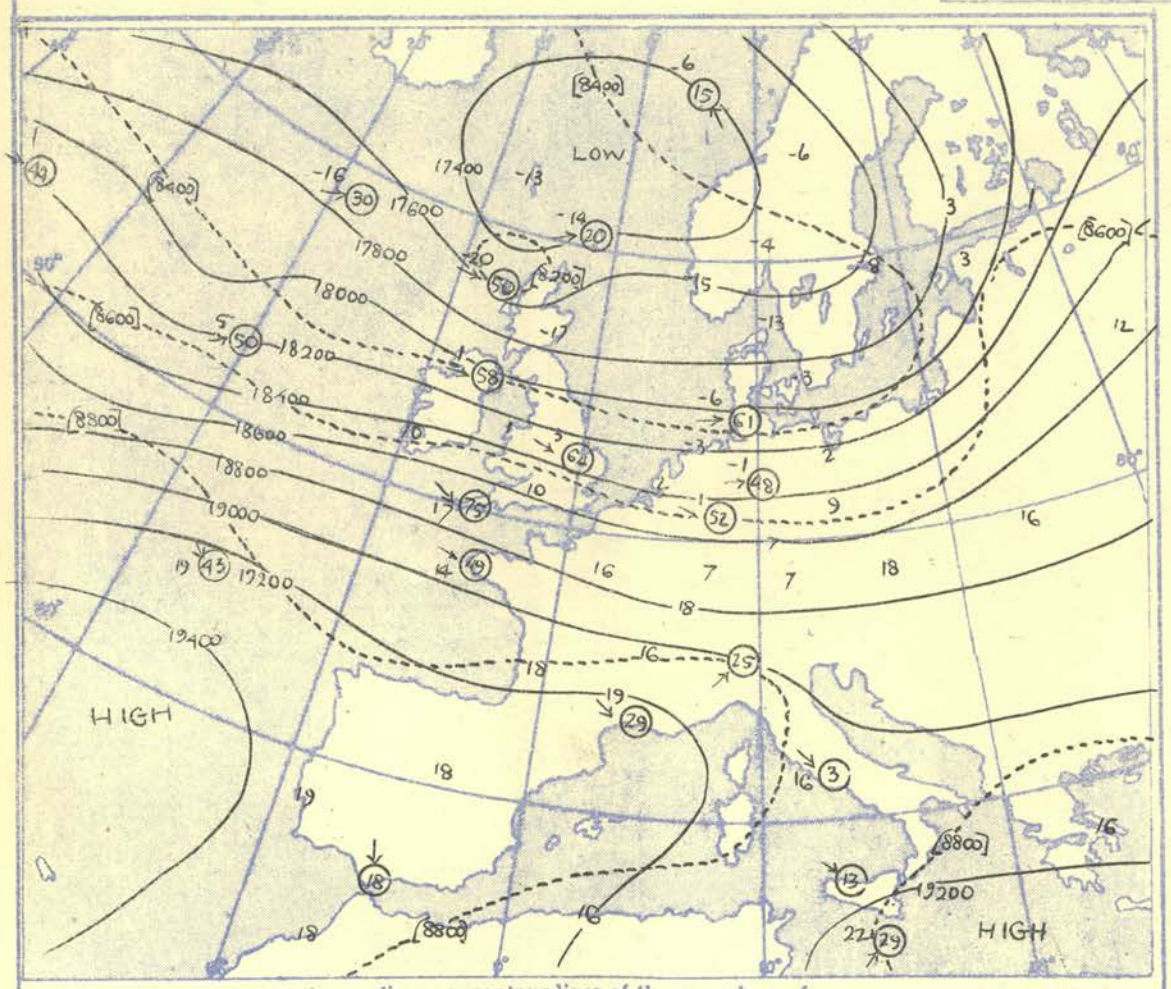
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

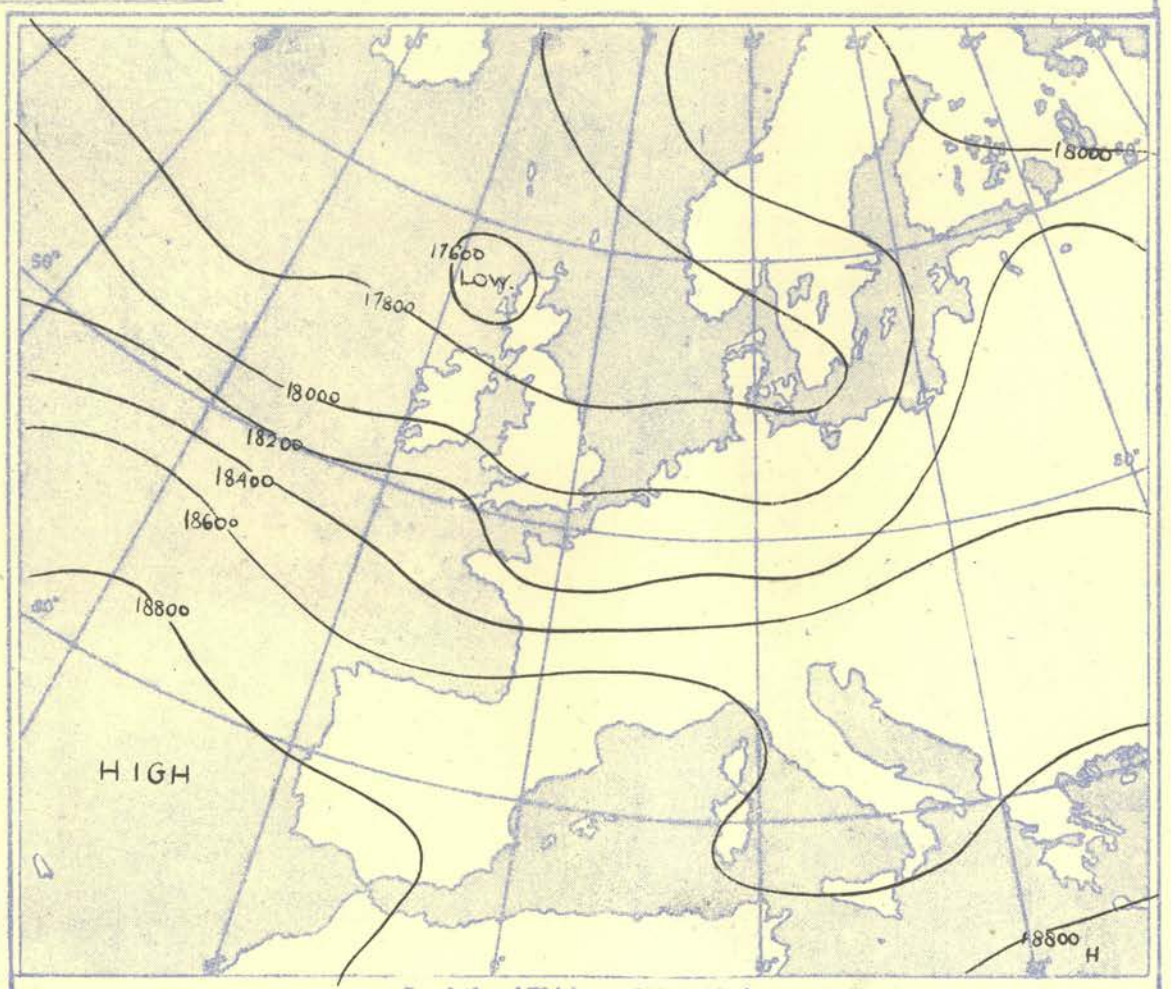
100 60 40 30 20 15 10 knots



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.

Friday 8th September. 1950. Page 3

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	48·2N 20·5W	49·5N 19·7W	43·2N 17·0W	39·5N 12·2W	51·3N 00·4E								
Pressure: Time	13h	1430L	1215h	14L	1415L								Time
Pressure: M.S.L.	1006·4 mb	1001·4 mb	1021 mb	1021 mb	1015·8 mb	mb	mb	mb	mb	mb	mb	mb	M.S.L.
Pressure: Surf	1002·8 mb	997·8 mb	1018 mb	1018 mb	1004·7 mb	mb	mb	mb	mb	mb	mb	mb	Surf
Pressure: Freezing	618 mb	605 mb	620 mb	585 mb	761 mb	mb	mb	mb	mb	mb	mb	mb	Freezing

Pressure mb	Height ft./100	°C Temp.	°C Dew	Height ft./100	°C Temp.	°C Dew	Height ft./100	°C Temp.	°C Dew	Height ft./100	°C Temp.	°C Dew	Height ft./100	°C Temp.	°C Dew	Height ft./100	°C Temp.	°C Dew	Height ft./100	°C Temp.	°C Dew	Pressure mb
Surf	01·0	63	61	01·0	57	57		65	65		60	60	03·1	61	49							Surf
1000	1·9			0·5			6·0	65		6·0	60		4·4									1000
950		60	59		54	54		63	63		60	60										950
900	31·2	60	53	29·6	54	52		62	54		65	31		45	45							900
850		55	52		54	49		62	37		63	43		41	38							850
800	63·7	57	49	62·0	52	40		57	30		60	44	64·8	37	37							800
750		51	43		48	28		52	23		55	33		31	31							750
700	99·8	45	43	98·2	42	33	105	46	13	105	48	14	100	33	31							700
650		40	33		38	21		36	27		42	19		33	31							650
600	141	33	33	139	30	26		30			34	28	141	27	24							600
550		27			21			22			28			23								550
500	187	19		186	11		193	17		194	21		187	17								500
450		11												06								450
400													243	-05								400
350														-10								350
300																						300
250																						250
200																						200
170																						170
	cloud:- 8/8 St 990-950 mb; 4/8 As 650-620 mb; 3/8 Ac 590-580 mb; Inversion 900 mb 55°, 850 .. 57°	cloud:- 7/8 St 990-900 mb; 2/8 AC NR; Isothermal 950-850 mb 54°	cloud:- 7/8 Sc 1018-970 mb; Isothermal 900-850 mb 62°	cloud:- 7/8 Sc 990-920 mb; Isothermal 1018-950 mb 60°; Inversion 950 mb 60°-900 .. 65°	cloud:- 8/8 As 820-680 mb; 8/8 As 570-420 mb																

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

Place	Cirrus 52·5N 20·0W	Liverpool	Lympne	Cirrus 52·5N 20·0W	Downham Market	Cirrus 52·6N 2·0W	Stornoway	Aldergrove	Aldergrove	Valley		Place
Time	03L	09h	09h	09L	09L	15h	15h	15h	21h	21h		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.	230 21	270 25	240 08	050 10	250 15	030 08		290 06	CALM	200 06		Surf.
1,000	230 18	274 28	270 18	020 11	261 27	"		270 21	240 14	252 22		1,000
2,000	230 19	274 30	280 30	030 12	264 27	"		260 16	250 12	267 22		2,000
3,000	250 17	280 30	280 27	040 13	274 28	030 12		250 19	260 10	277 23		3,000
4,000	270 16	283 29	270 31	060 18	277 29	020 15		260 21	260 15	284 25		4,000
5,000	240 15	283 30	260 30	050 14	281 29	010 18		260 18	260 13	287 27		5,000
6,000		282 33	"	340 15	280 27	350 21		260 17	270 15	285 30		6,000
8,000		285 39	280 30	320 14	274 28	320 19		260 22	280 19	287 34		8,000
10,000	230 24	284 37	270 35	270 27	262 34	280 28		270 25	290 17	294 35		10,000
14,000	250 36	278 45	280 60	260 30	269 44	270 33		270 36	290 42	288 42		14,000
18,000	260 50	276 58		230 40	279 62	250 46		270 47	290 67	279 54		18,000
24,000	260 48	279 90		260 41	277 86	270 49		270 78	280 74	282 63		24,000
30,000	(19,000')	277 123			282 125	260 43	270 67	260 104	280 92	279 77		30,000
40,000		292 135			276 103	(27,000')	270 49	270 108	288 88			40,000
50,000		(34,000')			271 71		270 46	(34,000')	270 48			50,000
					(44,000')		260 20					
							(55,000')					

NEPHOSCOPE OBSERVATIONS

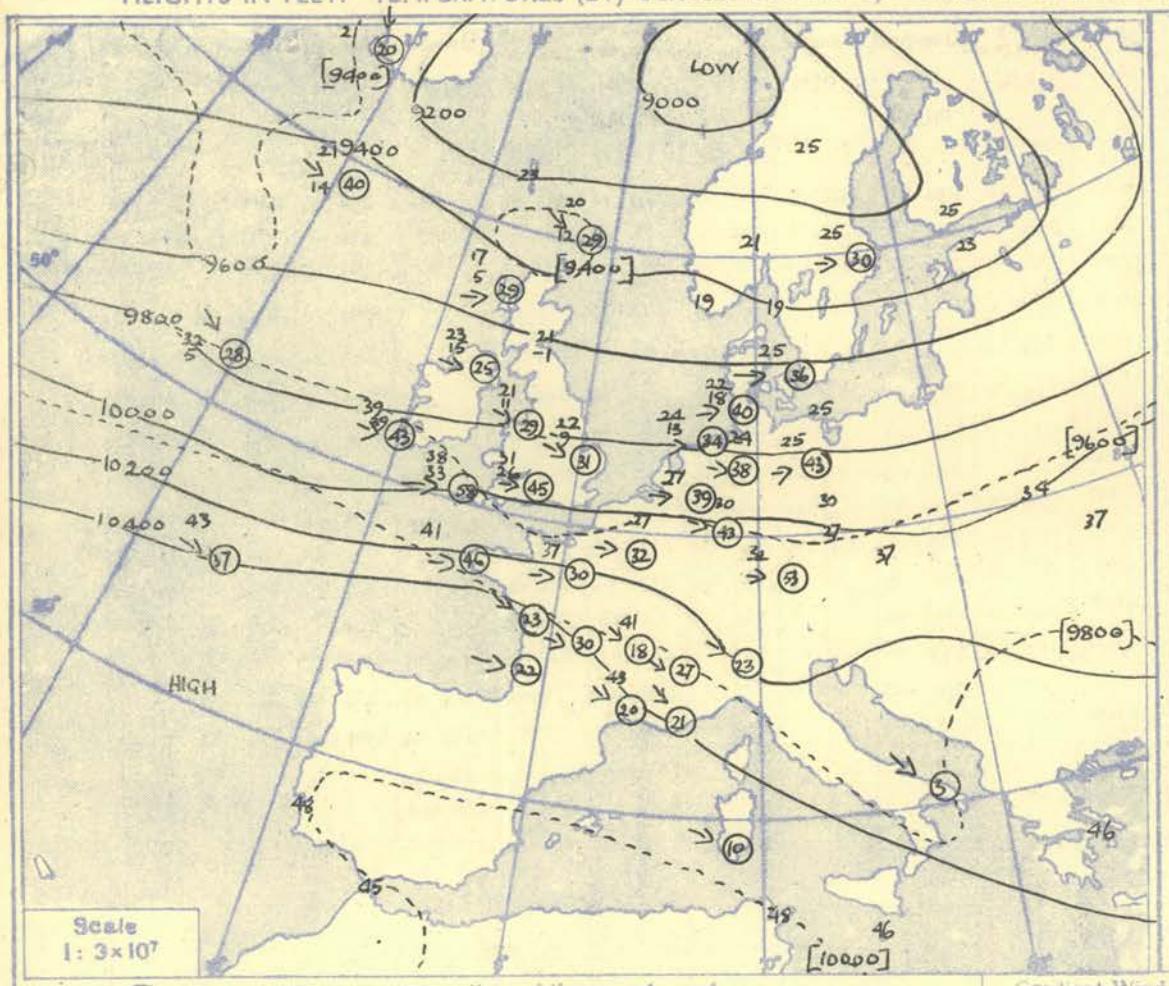
Place											Place
Time Type	NONE REPORTED.										Time Type
Dir. Vel.											Dir. Vel.

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

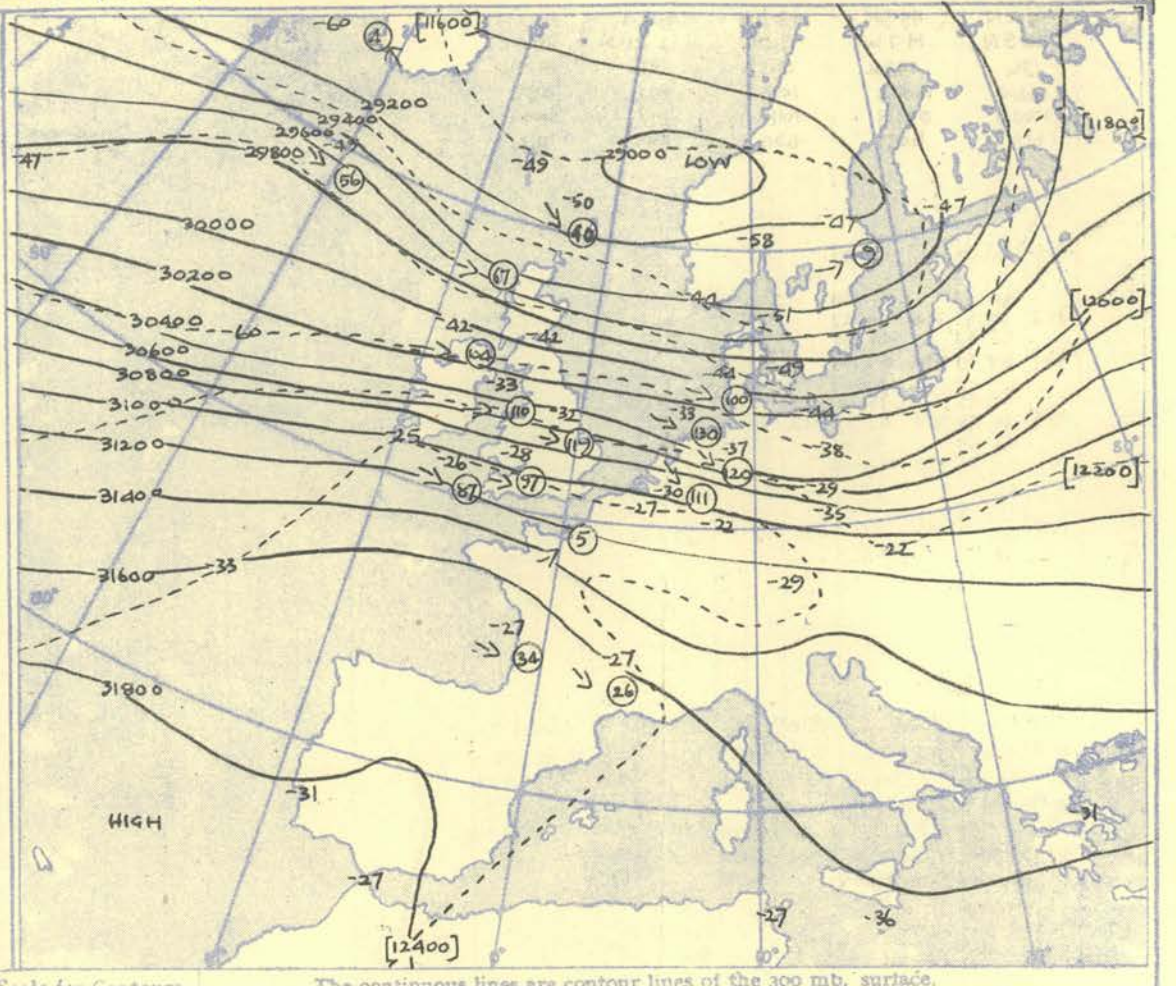
Ship	Cirrus	Cirrus	Cirrus	Cirrus	Weather Explorer	Weather Explorer	Weather Explorer	Weather Explorer		Ship
Lat/Long	52·5 N 20·0 W	52·5N 20·0 W	52·5 N 20·0 W	52·5 N 20·0 W	58·9 N 19·3 W	58·9N 19·1 W	58·9 N 19·0 W	58·9 N 18·8 W		Lat/Long
Pressure: Time	03h G.M.T.	09h G.M.T.	15h G.M.T.	21h G.M.T.	03h G.M.T.	09h G.M.T.	15h G.M.T.	21h G.M.T.	G.M.T.	Time
Pressure: M.S.L.	1010 mb	1006 mb	1008 mb	1010 mb	1001 mb	1001 mb	1001 mb	1003 mb	mb	M.S.L.
Pressure: Surf	1010 mb	1006 mb	1008 mb	1010 mb	1001 mb	1001 mb	1001 mb	1003 mb	mb	Surf
Pressure: Freezing	830 mb	850 mb	700 mb	665 mb	850 mb	835 mb	795 mb	780 mb	mb	Freezing

Pressure mb	Height ft./100	°C Temp.	°C 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	°C Temp.	°C Dew	°F. Dew	Wind Dir.	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir.	Wind Vel. knots	Height ft./100	°C Temp.	°C Dew	°F. Dew	Wind Dir.	Wind Vel. knots	Pressure mb
Surf		52	48				54	46				54	46				51	40	295	20		51	44	240	18		52	51	250	17		53	49	250	13	Surf
1000	3·0	50	46			1·7	52	48			2·3	54	46			2·7	52	43			01	51	40	260	23	02	51	43			04	52	51	252	19	07	53	49	250	13	1000
950																						45	33	264	26		44	38	254	18		48	44	263	25		48	38	265	19	950
900																					28·6	38	26	269	28	28·6	39	33	241	24	29·0	43	38	264	25	29·4	43	35	265	21	900
850		34	32	For Winds			32	32	For Winds			36	25	For Winds			39	18				32	30	272	27		33	28	246	26		38	34	263	27		37	30	267	25	850
800																					59·6	29	12	271	24	59·7	28	23	252	29	60·1	33	27	265	27	60·7	33	27	267	19	800
750				See					See					See								27	02	268	25		22	16	263	34		27	22	269	31		29	18	269	29	750
700	97·2	25	25	Top of		96·5	30	28	Top of		97·4	32	05	Top of		98·1	36	03			94·2	19	-12	267	30	94·1	17		273	34	95·0	21	14	274	40	95·5	21	08	272	29	700
650				Page					Page					Page.								11	-20	267	30		11		275	39		16	08	278	42		20	-09	275	36	650
600																					133	06	-27	268	30	133	05		278	50	134	11	-09	274	37	135	15	-10	270	34	600
550																						-02	-32	268	31		-02		274	48		04	-12	271	41		04	-18	270	36	550
500	183	05	05			183	07	-09			183	00	-27			186	09	-26			178	-10	-36	270	30	177	-10		268	50	179	-03	-23	271	43	180	-06	-26	270	37	500
450																						-19	-41	274	35		-24		272	54		-13	-33	273	46		-15	-33	270	46	450
400																					230	-28	-47	274	52	229	-34		277	57	232	-25	-42	278	48	233	-26	-42	270	51	400
350																						-40	-56	273	60		-45		285	54		-37	-51	285	52		-39	-54	270	66	350
300	304	-36				303	-36				300	-60				305	-42				294	-54		271	58	293	-53		273	53	297	-49		280	56	297	-54		270	68	300
250																						-53		278	63		-48		279	51		-56		276	41		-62		270	72	250
200	391	-71				391	-60				384	-81				392	-67				382	-46		271	59	382	-44		272	48	385	-43		275	51	384	-55		270	58	200
170																						-48		266	56		-45		272	43		-43		275	47		-53		270	48	170
150																						-50		269	51		-47		261	40		-42		275	39		-52		269	45	150
130																						-51		265	34		-48		259	36		-45		275	36		-55		268	37	130
110																						-53		244	42		-47		270	33		-48		275	31		-55		269	39	110
100		-72					-62					-89					-72				534	-54		250	45	534	-46				539	-48		275	30	534	-56		268	38	100
90																						-54		269	29							-48		275	23		-57		268	35	90
80																						-54		269	28							-47		275	20		-58		268	28	80
70																						-53		269	29							-46		275	24		-56		268	24	70
60																						-53		251	19							-44		275	22		-55		268	16	60
																					(055 mb)	-53		Isothermal 1001 - 1000 mb 51°				Isothermal 1001 - 1000 mb 51°			-40 (042 mb)	-41		Isothermal 1001 - 1000 mb 52°			-55 (045 mb)	-56		Inversion 697 mb 20° - 670 mb 24° Isothermal 1003 - 1000 mb 53° 639 - 615 .. 18°		
							Isothermal 850 - 842 mb 32° 600 - 563 .. 19°				Inversion 765 mb 32° - 727 mb 36° Isothermal 1008 - 1000 mb 54°					Inversion 794 mb 36° - 771 mb 39° Isothermal 874 - 828 mb 39°																					
Tropopause	II 202 mb - 71° 39,000'	II 225 mb - 60° 36,700'	II 189 mb - 85° 39,600'	II 217 mb - 65° 37,500'	I 275 mb - 62° 31,300'	I 290 mb - 54° 30,000'	II 280 mb - 54° 31,100'	I 241 mb - 63° 34,500'		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 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

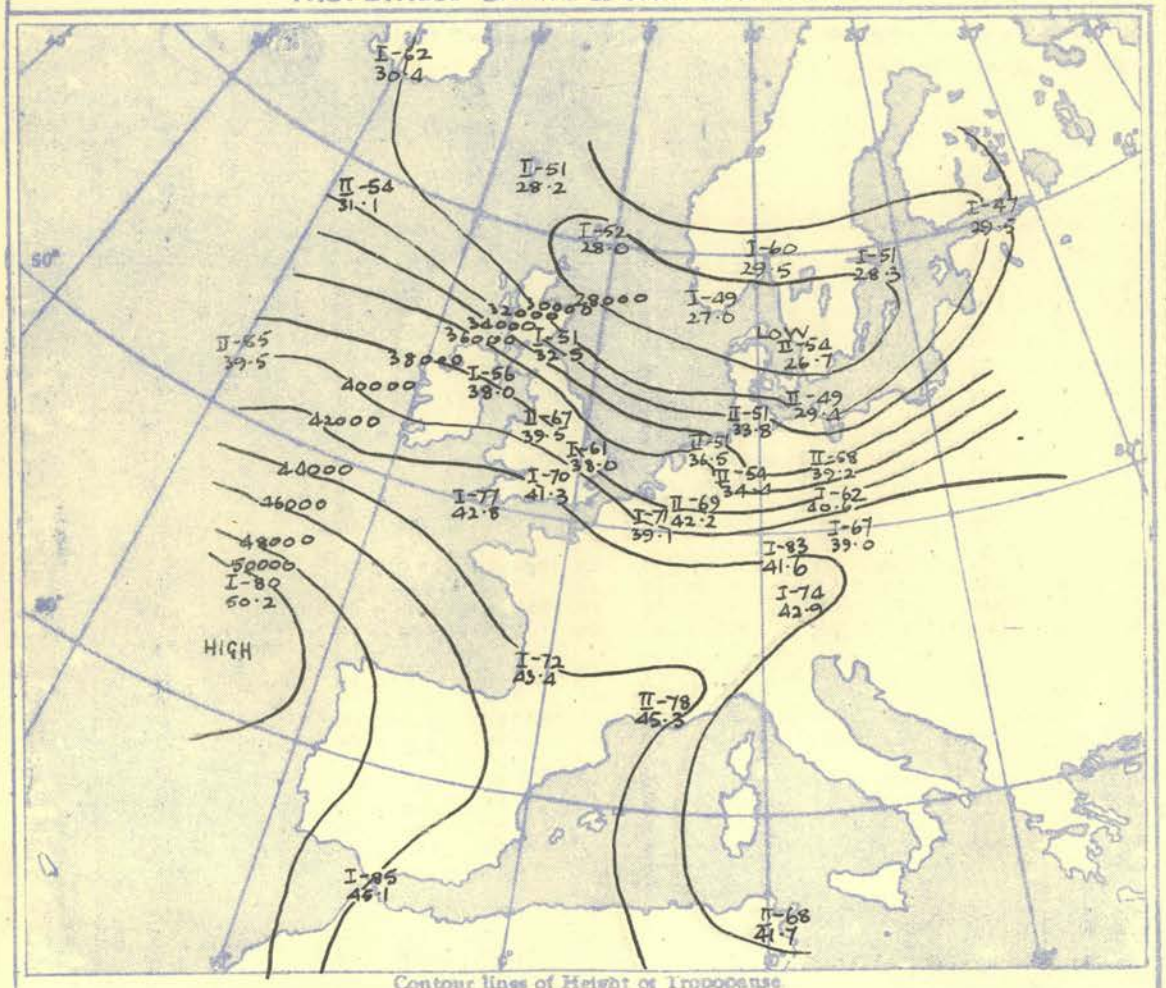


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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 15 h. G.M.T.



Contour lines of Height of Tropopause
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Warming over Scotland due partly to advection, but mainly to subsidence - compare the 0200 and 1400 Z ascents at Leuchars.

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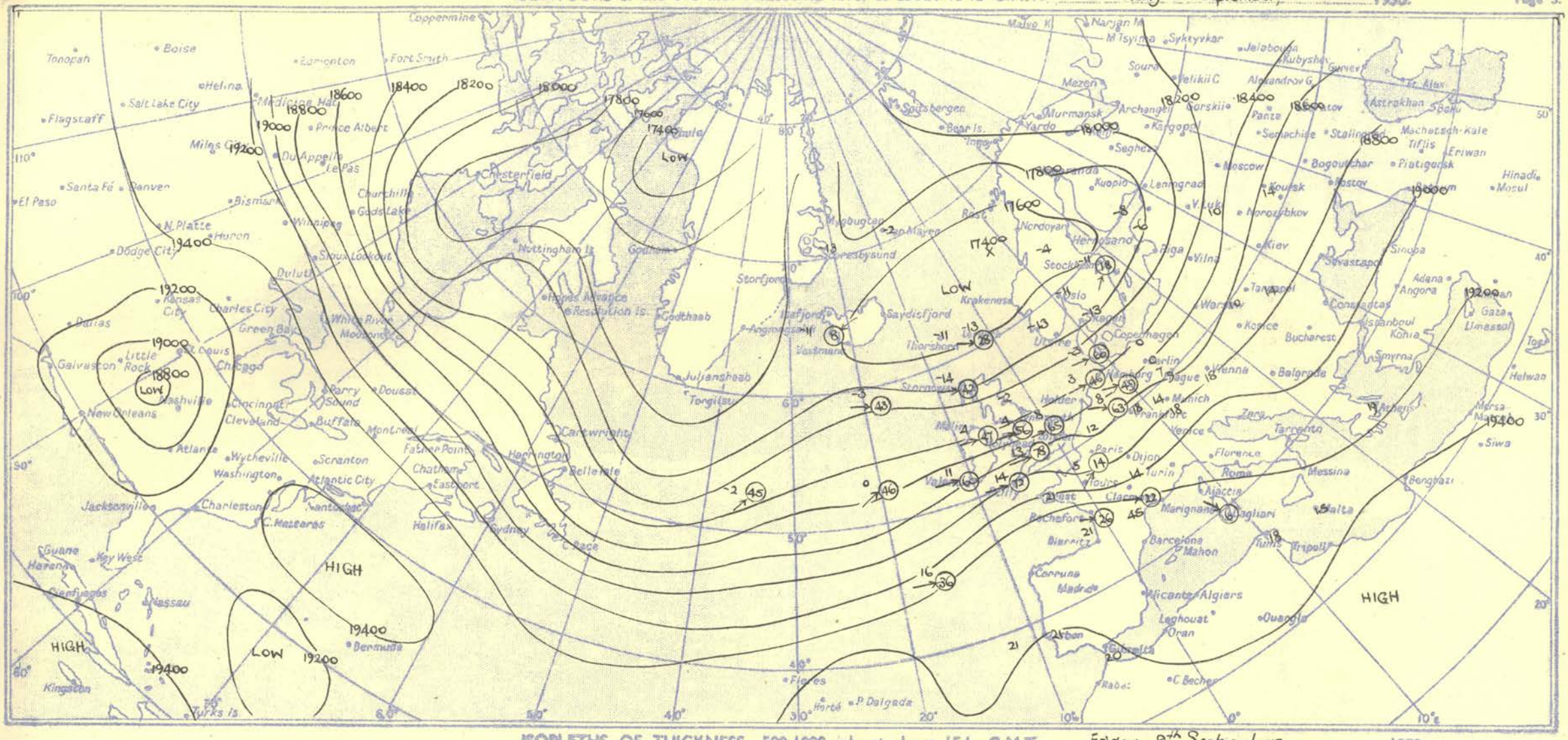
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Friday 8th September 1950.


Coppermine
Tonopah
Boise
Edmonton
Fort Smith
Helena
Salt Lake City
Medicine Hat
Flagstaff
Prince Albert
Miles City
Du Appelle
Le Pas
Chesterfield
Santa Fé
Denver
El Paso
Bismarck
Churchill
Gods Lake
Winnipeg
N. Platte
Huron
Dodge City
Sioux Lookout
Duluth
Kansas City
Charles City
Dallas
Green Bay
White River
Moosonee
Galveston
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Cleveland
New Orleans
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Dousat
Buffalo
Montreal
Atlanta
Wytheville
Scranton
Washington
Atlantic City
Father Point
Chatham
Eastport
Harrington
Belleisle
Cartwright
Jacksonville
Charleston
C. Hatteras
Nantucket
Halifax
Sydney
Cape
Guane
Havana
Key West
Cienfuegos
Nassau
Bermuda
Kingston
Turks Is
HIGH
LOW
Nain
Hopedale
Resolution Is.
Nottingham Is
Godthaab
Storfjord
Isafjord
Angmagssalik
Julianshaab
Torgilsu
Frobisher
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Tananarive
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Gan
Minicoy
Addu Atoll
Male
Kavaratti
Agatti
Minicoy
Amini Divi
Kalpeni
Kadmat
Kiltan
Chetlat
Bitra
Androth
Suheli Par
Hulule
Hanimadu
Kudahuvadhu
Gan
Fuvahmulah
Addu Atoll
Male
Kavaratti
Agatti
Minicoy
Amini Divi
Kalpeni
Kadmat
Kiltan
Chetlat
Bitra
Androth
Suheli Par
Hulule
Hanimadu
Kudahuvadhu

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. [illegible] September, 1950.

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.	996·1 mb	1002·5 mb	1005·1 mb	1009·6 mb	1011·9 mb	1013·1 mb	1015·3 mb	1015·7 mb	1007·0 mb
Pressure: Surf	986·3 mb	1000·6 mb	1004·3 mb	1001·1 mb	1009·9 mb	1008·7 mb	999·4 mb	1003·3 mb	1005 mb
Pressure: Freezing	830 mb	835 mb	820 mb	800 mb	816 mb	800 mb	687 mb	660 mb	630 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	51	47	260	26	00·5	54	46	260	21	00·2	62	44		
1000	1·1					0·7	54	46			0·4	61	44		
960		48	41	276	37		48	40	255	28		52	36		
900	27·5	42	35	275	40	29·3	41	34	259	28	30·3	44	30		
850		35	31	275	37		34	27	257	30		36	24		
800	58·7	29	26	275	33	60·4	28	24	254	29	61·5	30	18		
750		25	18	274	33		23	17	256	28		25	09		
700	93·2	20	12	274	29	94·8	17	05	262	29	96·0	21	−01		
650		13	02	277	26		11	−10	267	31		18	−20		
600	132	08	−11	274	24	133	04	−18	267	35	135	11	−39		
550		−06	−19	271	26		−04	−23	267	37		05	−40		
500	176	−13	−29	274	28	178	−14	−28	270	42	180	−02	−33		
450		−24	−44	266	29		−22	−33	273	48		−12	−33		
400	228	−35	−54	262	30	230	−31	−42	271	57	234	−23	−41		
350		−47		261	42		−42		264	57		−30	−50		
300	291	−50		278	40				267	66	299	−42			
250		−43		272	37	Continued						−48			
200	381	−40		273	35	as Pilar			270	56	388	−47			
170		−42		268	29							−46			
150		−46		266	31				270	51		−47			
130		−46		262	30							−49			
110		−47		252	32							−53			
100	535	−50		271	27				270	31		−55			
90		−45		270	24							−54			
80		−47		278	19							−50			
70		−48		240	17										
60		−48		248	21										
(050 mb)		−48													

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	02·3	54	51			00·6	57	48	250	15	01·2	62	44	250	12
1000	2·7					3·3	55	47	252	24	3·6	61	43		
960		50	46				48	42	259	23		55	39	259	21
900	31·3	44	41			32·0	42	39	261	24	32·6	47	34	260	24
850		37	34				36	28	261	23		39	27	263	25
800	62·6	32	29			63·2	30	25	267	31	64·1	32	22	267	23
750		27	24				26	12	272	31		25	13	274	27
700	97·4	23	15	For		97·9	21	11	277	29	98·7	22	−09	274	31
650		18	06				17	12	278	24		19	03	272	35
600	137	11	00	winds		137	14	09	271	41	138	18	08	275	44
550		09	−07				11	05	274	53		13	02	273	53
500	182	04	−12	see		183	04	−02	275	56	184	08	−04	271	65
450		−06	−26				−03	−10	276	60		02	−10	273	81
400	236	−18	−40	page		237	−13	−21	272	68	239	−09	−20	271	92
350		−29	−47				−23	−32	265	85		−21	−30	271	109
300	302	−42		3.		304	−33	−42	263	110	306	−32	−41	273	119
250		−57					−47		272	136		−48		279	136
200	390	−55				393	−56				395	−59		284	117
170		−55					−62					−63		272	94
150		−58					−63					−68		262	80
130		−60					−65					−66		245	67
110		−60					−61					−65		239	67
100	539	−60				539	−57				541	−64		240	69
90		−59					−54					−59			
80						(82 mb)	−53								

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	55	52	270	08	02·9	57	55	203	08	00·3	54	52	065	14
1000	4·2					4·4	56	55			1·3	54	51	077	16
960		51	46	244	22		51	51	226	31		51	48	139	26
900	33·0	45	40	247	20	33·2	45	42	230	33	30·8	48	47	169	30
850		40	35	247	17		39	37	229	33		47	47	205	27
800	64·5	34	29	255	20	64·7	39	28	240	38	62·7	44	44	245	25
750		31	26	257	25		42	40	254	52		41	38	271	26
700	99·6	31	26	265	45	100	38	33	261	58	98·4	39	39	269	43
650		30	25	274	65		31	27	263	58		34	34	265	61
600	140	25	19	272	67	141	28	24	268	58	139	30	27	262	55
550		19	12	272	70		21	17	266	66		21	11	259	59
500	187	13	05	274	78	188	14	09	268	72	186	11	−16	266	60
450		05	−04	271	84		08	01	269	74		02	−12	263	73
400	242	−04	−14	267	88	243	00	−14	268	76	241	−08	−17	262	85
350		−14	−28	270	93		−12	−27	270	78		−13	−20	255	102
300	310	−28	−45	274	97	312	−26	−39	273	87	309	−25	−32		
250		−45		274	107		−43		269	87		−41			
200	399	−65		270	105	401	−67				339	−60			
170		−66					−73					−62			
150		−71					−71					−61			
130		−73					−73					−63			
110		−68					−73					−61			
100	543	−65				545	−71				546	−60			
90		−62					−68					−58			
80							−64					−54			
70							−62								
60							−62								
(050 mb)						(050 mb)	−62								

Inversion 588mb. 10° – 576mb. 48°

Inversion 764mb. 25° – 750mb. 26°

Inversion 620mb. 16° – 600mb. 18°
Isothermal 730 – 671mb. 22°

Inversion 728mb. 29° – 687mb. 32°
Isothermal 999 – 987mb. 55°

Inversion 800mb. 39° – 760mb. 43°
Isothermal 850 – 800 mb. 39°

Inversion 485mb. 8° – 474mb. 9°
Isothermal 1005 – 1000mb. 54°
617 – 600 mb. 30°

	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Tropopause	I 315mb. −52° 28,000′	N.R.	I 267mb. −51° 32,500′	II 228mb. −62° 38,000′	III 197mb. −67° 39,500′	I 213mb. −61° 38,000′	I 188mb. −70° 41,300′	I 175mb. −77° 42,800′	II 205mb. −60° 39,400′

21h. G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Pressure: Time	21h. G.M.T.	21h. G.M.T.	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.	997·6 mb	1003·0 mb	mb	1010·3 mb	1011·1 mb	1013·7 mb	1014·8 mb	1010·6 mb	mb
Pressure: Surf	987·7 mb	1001·1 mb	mb	1001·7 mb	1009·1 mb	1009·3 mb	998·4 mb	1000·2 mb	mb
Pressure: Freezing	842 mb	831 mb	mb	803 mb	790 mb	791 mb	657 mb	620 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	50	45	240	20	00·5	52	44	245	08					
1000	0·7					0·6	52	44							
960		47	42	257	33		47	39	245	27					
900	27·8	40	36	263	31	29·1	41	34	253	28					
850		33	29	264	32		35	30	265	34					
800	58·9	27	21	263	33	60·2	28	24	272	34					
750		21	14	263	32		23	19	274	37					
700	93·2	17	−02	265	31	94·5	17	13	276	39					
650		09	−05	264	31		11	06	276	42					
600	132	01	−10	265	31	133	04	−02	280	44					
550		−07	−19	269	31		−06	−15	285	47					
500	176	−18	−30	271	31	177	−15	−26	287	52					
450		−27	−41	271	33		−23	−38	285	62					
400	227	−38	−53	263	37	229	−33	−51	286	69					
350		−49		270	39		−46		283	76					
300	290	−54		269	35	293	−60		280	64					
250		−45		274	32		−55		283	69					
200	380	−41		274	33	330	−51		274	45					
170		−46		272	35										
150		−47		280	33										
130		−47													
110															
100															
90															
80															
70															
60															

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	02·3	52	48	Calm		00·6	51	48	200	05	01·2	54	50	210	03
1000	2·8					3·1	50	47	202	03	3·7	53	49		
960		50	42				46	41	250	10		50	45	243	17
900	31·4	43	35			31·6	42	35	265	13	32·4	43	37	250	15
850		37	30				37	33	261	16		37	33	253	21
800	62·7	31	25			62·9	33	29	260	18	63·7	33	30	261	29
750		27	18				29	24	265	23		28	24	273	35
700	97·4	22	09	For		97·8	26	20	274	25	98·4	23	19	280	39
650		18	00				24	10	282	32		22	18	280	37
600	137	14	−10	winds		138	20	02	283	45	138	21	17	280	43
550		06	−25	see			14	−13	284	52		13	08	281	48
500	182	01	−36			184	04	−25	284	65	184	06	−13	284	54
450		−10	−38	page			−06	−34	281	73		−05	−35	287	67
400	235	−24	−49	3.		238	−19	−44	280	78	238	−16	−40	279	89
350		−38	−58				−31	−56	275	82		−25	−34	269	101
300	300	−53				303	−43		272	99	305	−40	−49	263	106
250		−59					−54		270	113		−55		270	135
200						391	−58		270	120	392	−62		274	103
170							−64					−66		279	90
150							−63					−74		276	80
130							−64					−73		272	72
110							−64					−72		266	69
100						537	−61				537	−69			
90							−63								
80							−66								
70															
60															

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		Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	53	53	215	10	02·3	58	58	203	15					
1000	3·9					2·3	58	58							
960		50	49	238	18		57	56	244	43					
900	32·6	46	44	240	24	32·2	57	56	270	43					
850		42	39	242	26		54	53	266	40					
800	64·2	37	33	258	27	64·7	51	50	262	50					
750		32	29	275	29		48	46	271	54					
700	99·4	34	32	280	37	101	43	41	270	55					
650		31	29	282	48		36	33	268	54					
600	140	27	24	283	57	142	30	26	267	57					
550		20	15	284	56		20	14	270	54					
500	187	12	07	275	58	189	14	09	266	52					
450		04	−03	266	70		05	−01	267	77					
400	242	−06	−13	269	78	244	−03	−11	269	84					
350		−17	−26	266	99		−18	−27	269	79					
300	309	−29	−38	269	110	312	−30	−40	273	90					
250		−45		278	129		−50								
200						400	−71								
170							−75								
150							−72								
130							−73								
110							−75								
100						536	−76								
90						(103mb)									
80															
70															
60															

Isothermal 700 – 674mb. 22°

Inversion 684mb. 24° – 660mb. 25°

Isothermal 672 – 610mb. 22°
385 – 370mb. −20°

Inversion 739mb. 30° – 690mb. 35°

Inversion 1000mb. 58° – 995mb. 60°
Isothermal 963 – 900mb. 67°

	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Tropopause	III 330mb. −53° 27,000′	I 276mb. −62° 31,000′		I 218mb. −68° 33,100′	II 233mb. −56° 35,800′	I 227mb. −60° 36,400′	N.R.	I 185mb. −78° 41,700′	

No. 11486 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Saturday 9th September 1950.

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

METEOROLOGICAL OFFICE 18 SEP 1950

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.	997.5 mb	1002.5 mb	1007.0 mb	1010.0 mb	1010.4 mb	1012.7 mb	1010.1 mb	1009.7 mb
Pressure: Surf	987.6 mb	1000.6 mb	1006.2 mb	1001.4 mb	1008.4 mb	1008.1 mb	994.3 mb	999.3 mb
Pressure: Freezing	833 mb	824 mb	750 mb	608 mb	676 mb	741 mb	611 mb	622 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.7	50	46	230	15
1000	-0.7				
950		46	44	249	25
900	27.8	40	38	249	30
850		34	32	257	34
800	58.9	28	25	261	32
750		23	20	266	29
700	98.2	18	14	267	29
650		13	07	264	33
600	138.0	04	-7	262	36
550		-5	-16	254	37
500	176.1	-15	-25	257	47
450		-27	-35	255	43
400	228.3	-38	-43	263	43
350		-49		266	60
300	291.1	-53		274	56
250		-45		274	41
200	380.4	-43		274	42
170		-44		281	31
150		-49		279	34
130	(135)	-49			
110					
100					
90					
80					
70					
60					

Tropopause: II 320 mb -58° 27500'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0.5	55	52	250	13
1000	0.7	52	49		
950		48	45	216	34
900	4.1	38	27	227	27
850		33	31	270	38
800	42.9	25	25	270	36
750		24	18	270	38
700	92.1	05	26	265	38
650		13	-2	265	38
600	134.0	-6	-13	278	43
550		-1	-18	282	54
500	178.5	-24	-28	281	57
450		-20	-32	281	66
400	231.1	-31	-42	282	75

Isothermal 735-707 mb 28°

Tropopause: NR

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	30.2	47	44		
1000	1.9	47	43		
950		48	40		
900	44.2	33			
850		37	29		
800	61.8	34	27		
750		32	24		
700	98.8	24	15		
650		16	08		
600	136.0	06	-4		
550		04	-11		
500	181.1	-2	-17		
450		-10	-25		
400	234.1	-24	-32		
350		-37			
300	299.1	-49			
250		-60			
200	386.1	-54			
170		-53			
150		-56			
130		-57			
110		-60			
100	535.1	-61			
90					
80					
70					
60					

Inversion 1006 mb 47°-950 mb 48°
850 mb 37°-832 mb -39°
791 mb 32°-770 mb 35°
582 mb 2°-550 mb 4°

Tropopause: I 250 mb -60° 33800'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.3	47	47	calm	
1000	02.7				
950		48	42	274	07
900	31.3	40	34	272	08
850		40	36	270	10
800	62.9	42	29	276	14
750		37	20	279	16
700	98.3	36	19	285	21
650		40	20	286	28
600	140.3	00	7	284	40
550		20	-6	280	43
500	184.0	-3	-17	281	51
450		-13	-26	278	61
400	240.1	-30	-45	274	63
350		-26			
300	307.1	-38	-58	276	75
250		-52		276	78
200	394.6	-66		277	79
170		-66		278	92
150		-66		278	96
130		-66		278	81
110		-66		282	63
100	535.1	-66		282	55
90		-66		272	54
80		-66			
70					
60					

Inversion 1001 mb 47°-950 mb 48°
838 mb 39°-800 mb 42°
713 mb 33°-665 mb 42°

Tropopause: II 221 mb -66° 38200'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0.6	43	44	calm	
1000	02.8	47	46		
950		48	44		
900	31.4	44	40		
850		40	34		
800	62.9	33	31		
750		35	20		
700	98.3	32	08		
650		29	-5		
600	140.1	23	-14		
550		14	-22		
500	184.0	05	-24		
450		-8	-26		
400	239.1	-17	-39		
350		-30	-54		
300	304.1	-44			
250		-58			
200	391.1	-64			
170		-65			
150		-67			
130		-68			
110		-72			
100	533.1	-71			
90					
80					
70					
60					

Inversion 1008 mb 45°-983 mb 50°
850 mb 40°-826 mb 41°
687 mb 31°-676 mb 32°

Tropopause: II 240 mb -60° 35200'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01.2	51	50	180	05
1000	03.4	51	50		
950		45	47	244	13
900	32.1	44	40	251	13
850		39	36	255	16
800	63.5	34	30	262	20
750		35	29	271	28
700	98.6	29	23	272	36
650		26	10	280	36
600	139.2	24	-7	288	44
550		16	-21	288	50
500	185.0	05	-30	289	54
450		-5	-34	287	66
400	239.2	-20	-49	282	75
350		-32	-55	284	78
300	304.4	-46		281	86
250		-60		279	92
200	391.1	-67		278	94
170		-74		279	87
150		-78		281	78
130		-75		281	63
110		-75		282	43
100	533.1	-78		283	45
90		-75		280	45
80		-69		279	33
70		-71			
60					

Inversion 960 mb 48°-950 mb 47°
Isothermal 806-765 mb 34°

Tropopause: I 150 mb -78° 45000'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4.4	57	57		
1000	2.8				
950		55	53		
900	32.1	52	49		
850		49	48		
800	63.5	47	46		
750		44	42		
700	98.6	38	32		
650		35	21		
600	139.1	31	03		
550		23	-8		
500	185.1	15	-25		
450		03	-40		
400	239.3	-8	-50		
350		-22	-54		
300	304.3	-34	-49		
250		-47			
200	391.3	-61			
170		-69			
150		-69			
130		-72			
110		-71			
100	533.1	(115)			

Isothermal 660-638 mb 35°

Tropopause: I 170 mb -69° 43200'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.9	61	61	240	15
1000	02.7				
950		59	55	254	33
900	31.9	54	54	263	31
850		49	48	263	32
800	64.1	47	46	261	36
750		45	37	265	35
700	100.1	43	26	274	36
650		36	19	277	34
600	141.1	30	10	271	33
550		23	-4	272	43
500	188.1	12	-10	270	43
450		01	-18	270	49
400	243.1	-5	-11	273	56
350		-18	-24	271	81
300	310.1	-32	-37	274	81
250		-49		267	87
200	399.1	-71		271	98
170		-77			
150		-77			
130		-80			
110		-80			
100	540.1	-79			
90		-79			
80		(92)			
70					
60					

Inversion 442 mb -1°-430 mb 0°
Isothermal 720-692 mb 43°

Tropopause: I 177 mb -78° 42400'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0.3	55	53	050	07
1000	2.1	55	53	057	07
950		51	49	127	03
900	31.0	50	49	242	02
850		48	48	317	03
800	63.1	48	42	341	03
750		43	25		
700	99.1	43	05		
650		35	-10		
600	140	29	-29		
550		22	-34		
500	187	10	-46		
450		-1	-54		
400	243	-16			
350		-26			
300	308	-38			
250		-52			
200	396	-62			
170		-67			
150		-71			
130		-76			
110		-74			
100	540	-72			
90		-71			
80		-70			
70					
60					

Inversion 750 mb 43°-713 mb 45°
Isothermal 1006.-1000 mb 55°

Tropopause: II 150 mb -71° 43300'

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE
Pressure: Time	09hrs G.M.T.	09hrs G.M.T.	G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.
Pressure: M.S.L.	997.4 mb	1004.3 mb	mb	1011.3 mb	1009.7 mb	1010.3 mb	1009.1 mb	1010.0 mb
Pressure: Surf	987.5 mb	1002.4 mb	mb	1002.6 mb	1007.7 mb	1005.9 mb	993.4 mb	999.6 mb
Pressure: Freezing	824 mb	838 mb	mb	652 mb	618 mb	628 mb	600 mb	620 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.7	52	44	225	21
1000	-0.8				
950		45	39	256	30
900	27.8	41	35	264	31
850		34	27	267	32
800	58.9	30	23	265	33
750		26	18	268	36
700	93.6	20	10	267	35
650		12	-01	270	36
600	132.0	06	-6	275	39
550		01	-7	288	33
500	177.1	-8	-18	294	42
450		-19	-31	296	42
400	230.2	-29	-43	291	44
350		-38	-54	294	50
300	294.5	-55		293	54
250		-51		286	42
200	382.4	-45		280	45
170		-46		280	42
150		-44		280	42
130		-49		283	36
110		-52		280	27
100	534.1	-52		279	25
90		-52		280	24
80		-52			
70					
60					

Tropopause: I 275 mb -62° 31200'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0.5	55	50		
1000	0.2	54	50		
950		46	43		
900	29.6	33	28		
850		34	34		
800	60.8	25	26		
750		24	16		
700	95.2	19	04		
650		14	-9		
600	134.0	03	-10		
550		-1	-16		
500	179.2	-9	-27		
450		-13	-34		
400	231.1	-29	-42		
350		-42			
300	295.1	-55			
250		-63			
200	381.1	-57			
170		-56			
150		-63			
130		-63			

Tropopause: I 265 mb -65° 32200'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.3	46	43	calm	
1000	03.0				
950		47	46	292	04
900	31.6	44	41	291	05
850		43	36	287	08
800	63.3	41	26	283	16
750		36	20	278	21
700	98.7	32	10	281	27
650		32	04	283	31
600	139.1	25	-3	284	35
550		18	-8	276	34
500	185.0	09	-12	274	44
450		-01	-20	276	58
400	240.1	-14	-31	278	61
350		-27	-43	279	65
300	306.1	-41		279	74
250		-57		278	77
200	394.1	-59		272	76
170		-60		275	71
150		-62		285	54
130		-58		279	46
110		-62		274	40
100	541.1	-59		274	38
90		-58		277	37
80		-57		258	33
70					
60					

Inversion 700 mb 32°-677 mb 35°

Tropopause: I 226 mb -61° 36700'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0.6	51	49	calm	
1000	02.6	51	50	095	06
950		53	47	082	04
900	31.5	51	43	220	03
850		49	43	267	07
800	63.6	46	39	322	07
750		44	29	287	13
700	99.3	40	14	287	18
650		35	03	287	27
600	140	29	-4	287	33
550		22	-7	282	43
500	187	11	-11	282	50
450		00	-21	283	50
400	242	-14	-34	284	51
350		-29	-45	282	57
300	308.1	-40	-57	280	55
250		-54		281	66
200	396.1	-55		278	29
170		-63		277	34
150		-64		281	69
130		-63		286	58
110		-62		279	41
100	542.1	-61		281	42
90		-59		280	29
80		-57			
70					
60					

Inversion 1008 mb 51°-950 mb 53°
Isothermal 775-730 mb 44°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01.2	55	54	calm	
1000	02.8	55	55		
950		53	52	164	08
900	31.8	50	49	203	09
850		47	43	226	10
800	63.9	45	42	253	12
750		41	38	274	18
700	99.6	36	33	273	23
650		34	-1	272	26
600	140	30	-29	272	35
550		23	-38	276	35
500	188	14	-48	278	43
450		01	-20	278	46
400	242	-11	-53	282	46
350		-26	-60	277	59
300	309	-34	-57	277	61
250		-49		278	65
200	398	-54		280	71
170		-58		280	76
150		-55		281	68
130		-62		282	55
110		-62		281	49
100	546	-58		286	35
90		-55		285	33
80		-51		276	30
70		-52		277	24
60		-51		278	18

Inversion 680 mb 34°-668 mb 35°

Tropopause: II 222 mb -58° 37500'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4.4	61	61	250	05
1000	2.5				
950		57	56	258	17
900	31.8	54	53	268	17
850		51	49	266	18
800	64.1	47	45	259	20
750		43	41	264	23
700	100	41	25	270	32
650		39	09	269	33
600	141	32	05	276	30
550		23	-17	272	30
500	188	13	-27	269	35
450		01	-23	273	42
400	243	-9	-28	277	62
350		-22	-37	272	73
300	310	-34	-51	272	87
250		-47		277	87
200	399	-58		283	81
170		-65		279	72
150		-71		280	63
130		-68		277	57
110		-68		283	44
100	545	-69		288	39
90		-65		285	33
80		-61		272	30
70		(73)	-59		
60					

Inversion 706 mb 4.0°-685 mb 4.3°

Tropopause: I 150 mb -71° 46000'

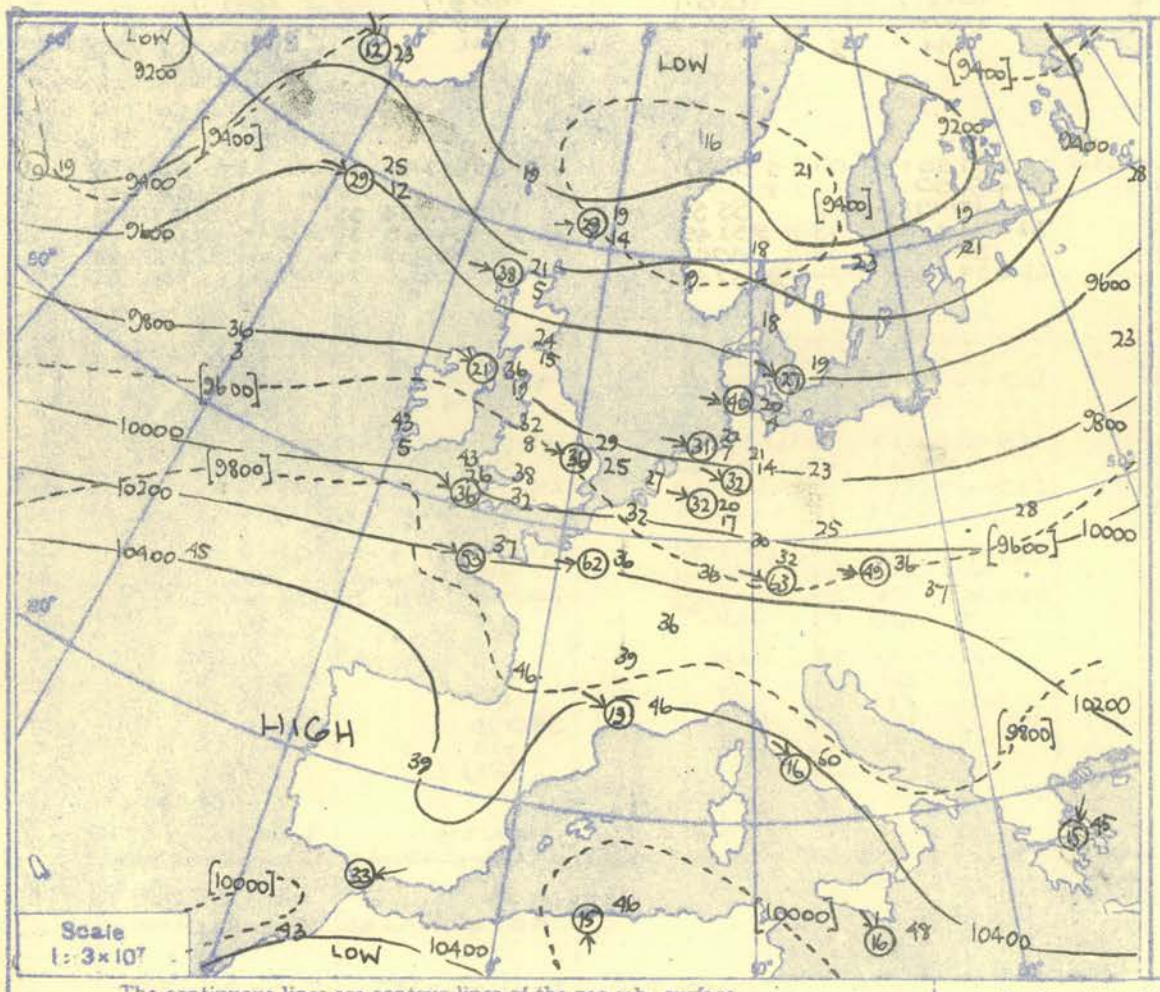
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.9	60	59	270	12
1000	02.8				
950		55	54	258	34
900	32.0	55	51	267	38
850		54	42	273	40
800	64.4	51	35	271	43
750		47	42	268	47
700	101	42	33	268	38
650		36	17	269	33
600	142	29	15	267	32
550		18	13	264	31
500	188	13	02	266	43
450		04	-3	265	52
400	244	-5	-26	266	60
350		-17	-40	276	74
300	311	-29	-50	281	90
250		-48		276	86
200	400	-64		278	84
170		-65		270	74
150		-72		273	59
130		-75			
110		-75			
100	544	-72			
90		-70			
80		(95)			
70					
60					

Inversion 920 mb 34°-875 mb 38°
550 mb 18°-537 mb 19°
Isothermal 705-684 mb 42°

Tropopause: II 194 mb -66° 40600'

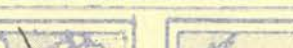
Saturday 9th September. 1950.

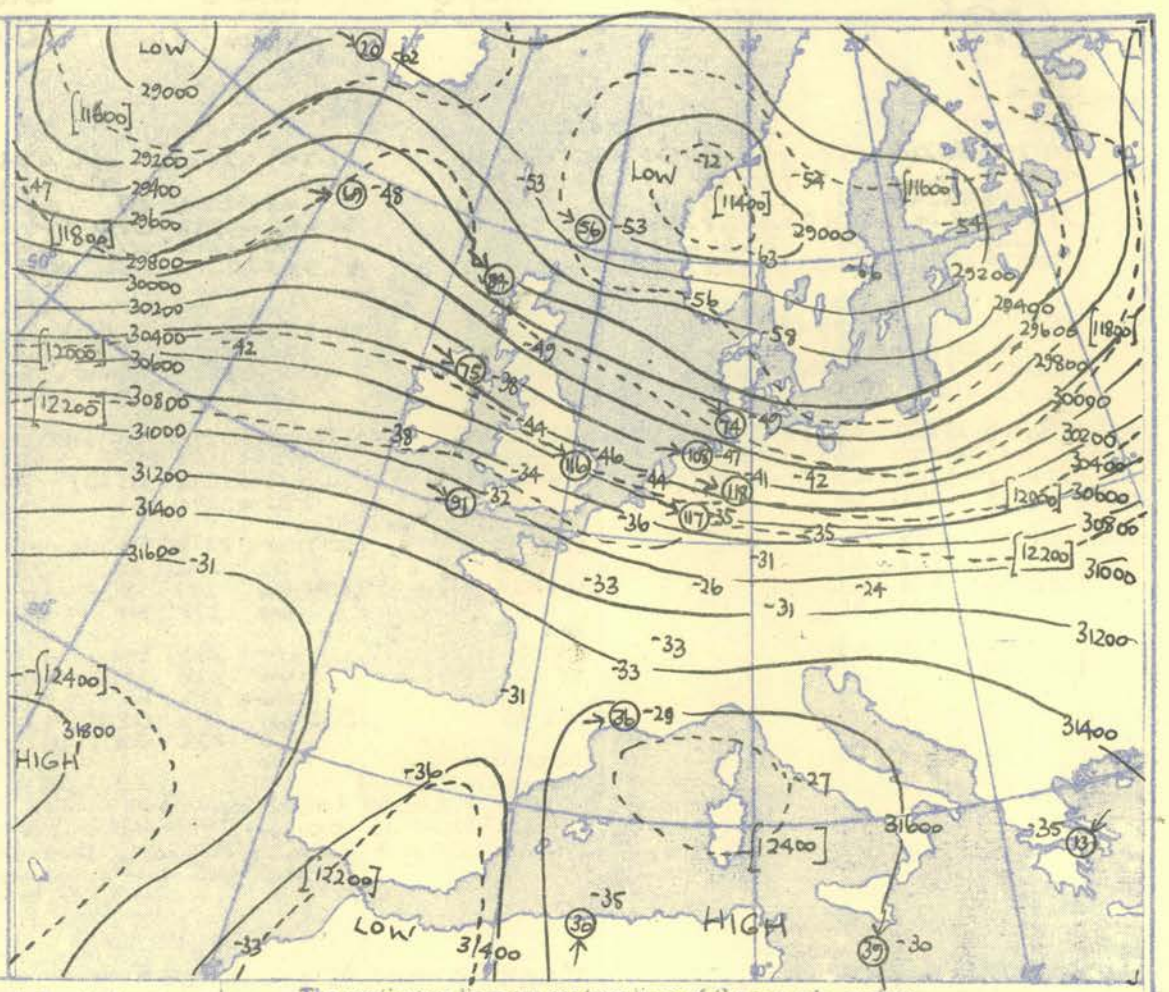
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. G.M.T.



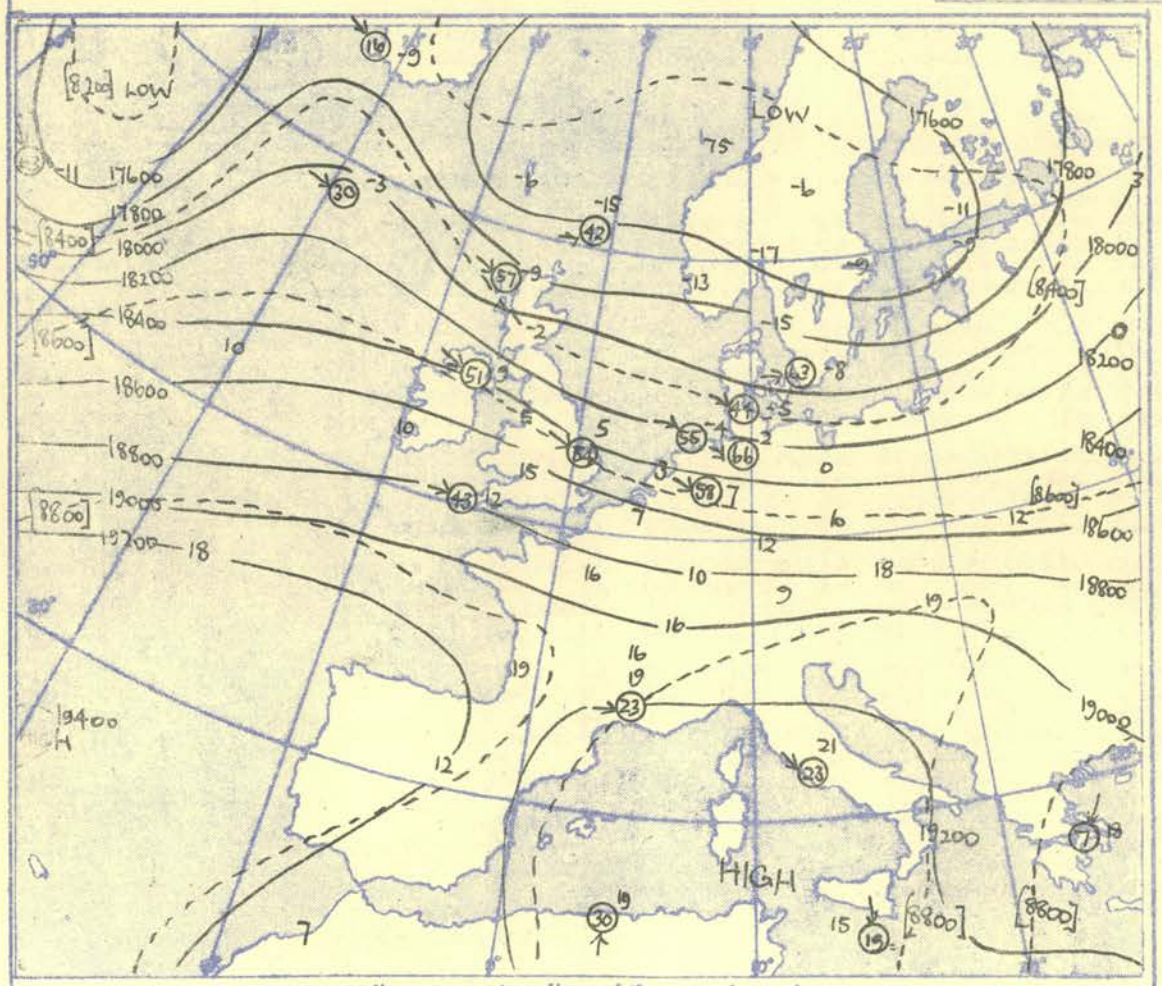
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

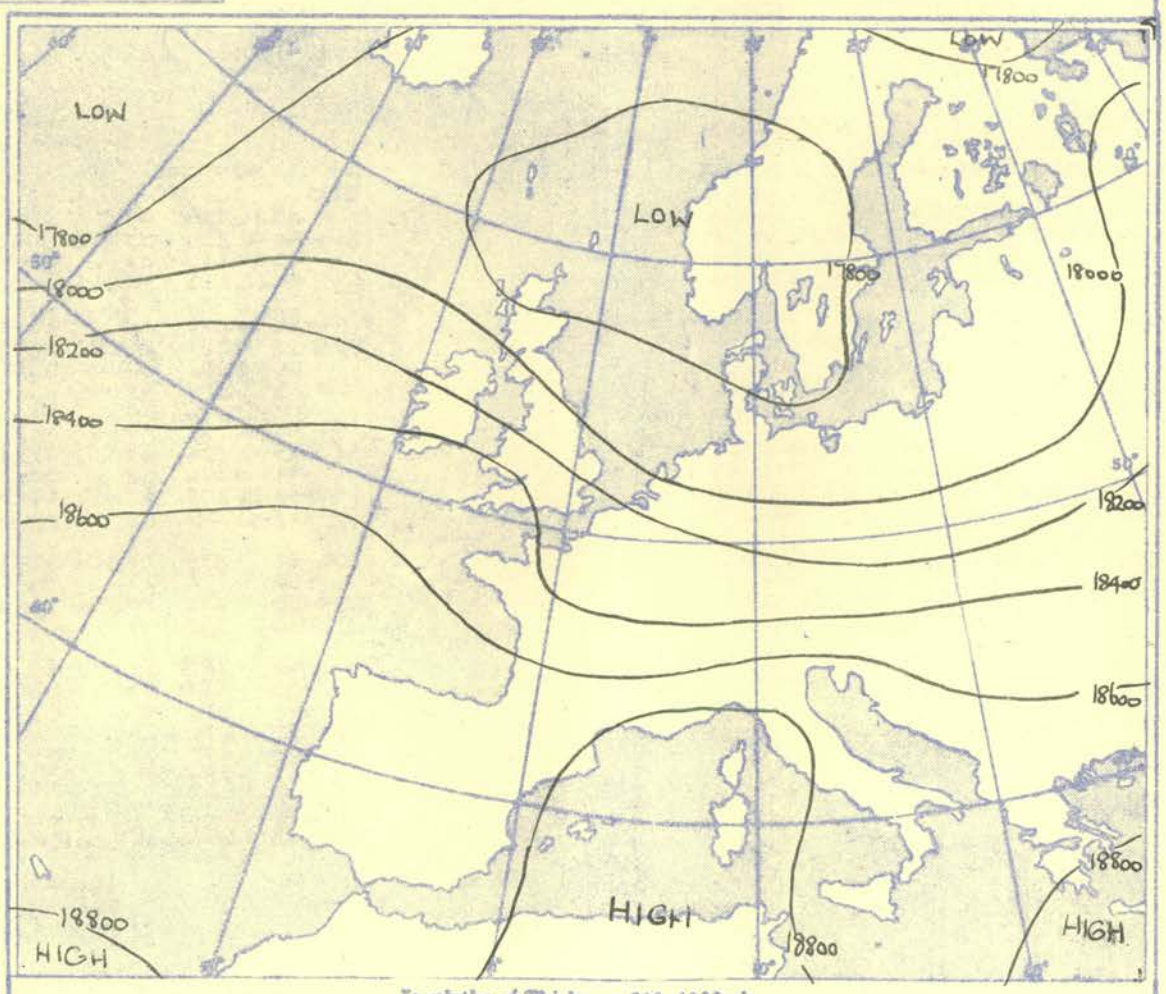




The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500 — 300 mb



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

Pressure	Time M.S.L. Surf Freezing	48·2°N 20·5°W 1215hrs 1014·5 mb 1010·9 mb 625			49·5°N 14·7°W 1345hrs 1010·9 mb 1007·3 mb 625			43·2°N 17°W 14hrs 1022 mb 1018 mb 590			39·5°N 12·2°W 16hrs 1020 mb 1017 mb 600			51·3°N 0·4°E 15hrs 1016·4 mb 999·3 mb 608												Time M.S.L. Surf Freezing	Pressure
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		01·0	56	56	01·0	57	57	—	68	66	—	67	65	03·1	65	62													Surf
1000		04·0			02·9			6·1	66	65	5·7	63	63	02·9															1000
950			52	52		52	52		63	62		66	34																950
900		32·9	53	51	31·8	50	50		62	57		63	02	32·2	55	—													900
850			47	36		52	48		60	47		64	44		51	—													850
800		63·0	49	14	64·0	50	37		55	32		60	27	64·4	45	—													800
750			45	38		49	15		50	24		53	26		46	45													750
700		101	39	34	100	44	17	105	42	14	105	46	21	100	43	—													700
650			33	28		34	23		38	09		38	18		41	27													650
600		142	25	21	141	28			24	24		32		141	31	—													600
550			18			21			24			25			23														550
500		188	11		188	11		193	15		193	16		189	14														500
450															00														450
400														243	-13														400
350															-25														350
300																													300
250														310	-38														250
200																													200
170																													170
		Cloud. 6 Est 1000-960 1 Fsc 240-200 1 8 Ac 460			Cloud. 5 Est 1000-960 5 8 Sc 960-700 1 8 Ac 880-800 4 8 As 450-400 4 8 Ci NR.			Cloud. 8 8 Sc 970-960			Cloud. 2 8 Sc 980-960			Cloud. 8 8 Sc 970-890															
		Inversion 950 mb 52° 900 mb 53° 850 mb 47° 800 mb 49°			Inversion 900 mb 50° 850 mb 52°			Surf wind W 7-10 kts			Surf wind NE 11-16 kts																			

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

Place		Stornoway		Ronaldsway		Ronaldsway		Aldergrove		Lochcarron		Downham Market		Cirrus (52·5°N 20°W)								Place
Time		03hrs		15hrs		21hrs		21hrs		21hrs		22hrs		09hrs		15hrs		21hrs				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.	Feet
Surf.																						Surf.
1,000				310	23	050	05			280	05	Calm		190	08	210	14					1,000
2,000				Calm		070	05			270	18	180	06	210	07	240	14					2,000
3,000				150	02	090	01			280	18	210	06	220	12	240	14	240	18			3,000
4,000				Calm		090	02			287	18	240	11	220	11	250	15					4,000
5,000				"		070	07			284	19	240	15	220	13	250	18					5,000
6,000						060	09			281	20	240	16	220	15	250	20					6,000
8,000										278	21	240	18									8,000
10,000				220	29	050	08			271	21	250	23									10,000
14,000				240	18	070	27			270	22	260	29	220	27	280	36	250	34			14,000
18,000				250	26					272	37	260	38			250	45					18,000
24,000		283	78							272	52	260	44	240	58	250	58	250	50			24,000
30,000		284	84					246	94	271	82	250	78			240	58					30,000
40,000		279	57					252	102	284	91	250	106									40,000
50,000		279	51					(35000')		278	54	280	46									50,000
		(43000')								278	44	280	27									
										(55000')		(60000')										

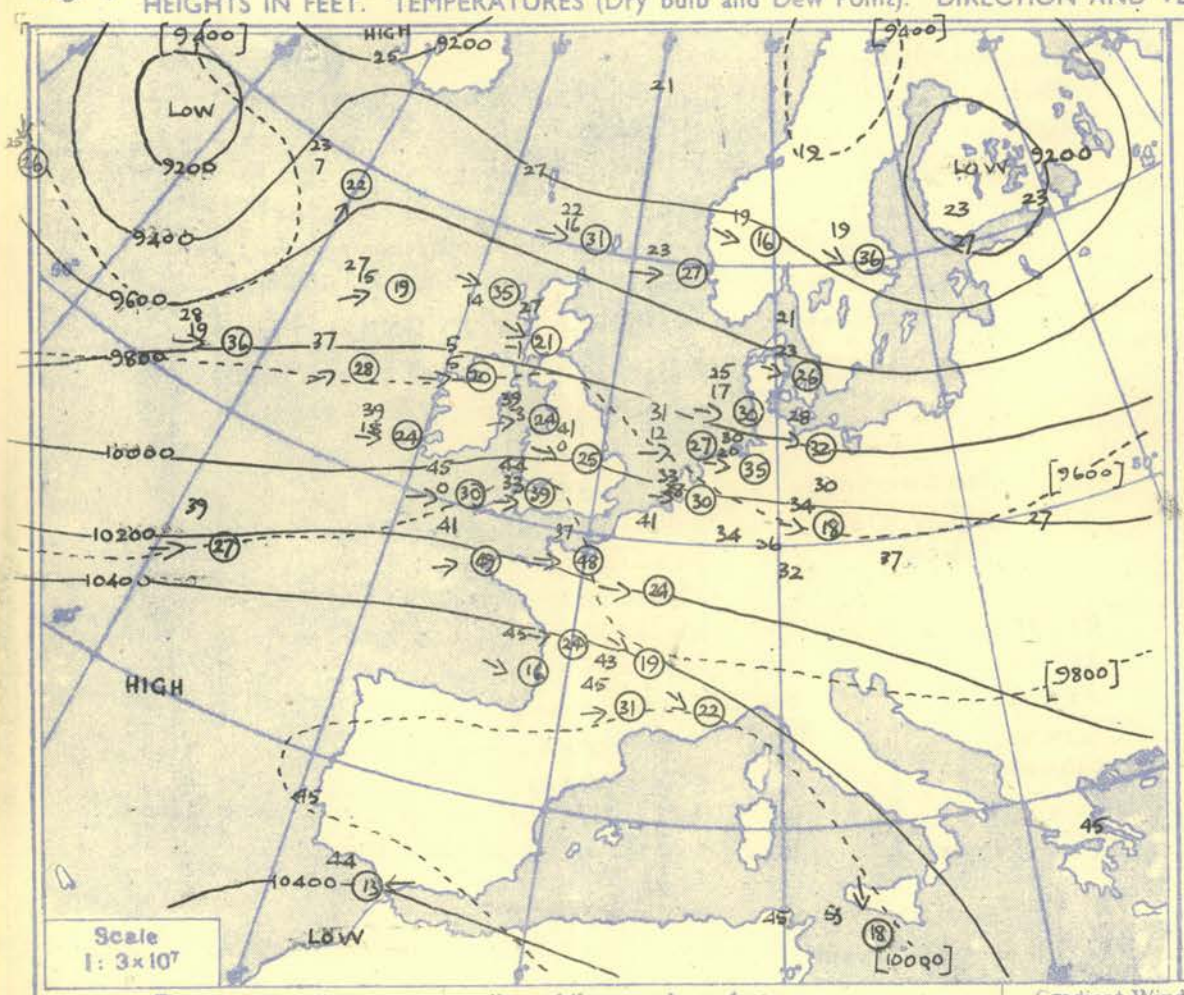
NEPHOSCOPE OBSERVATIONS

Place														Place
Time Type	None Reported.													Time Type
Dir. Vel.														Dir. Vel.

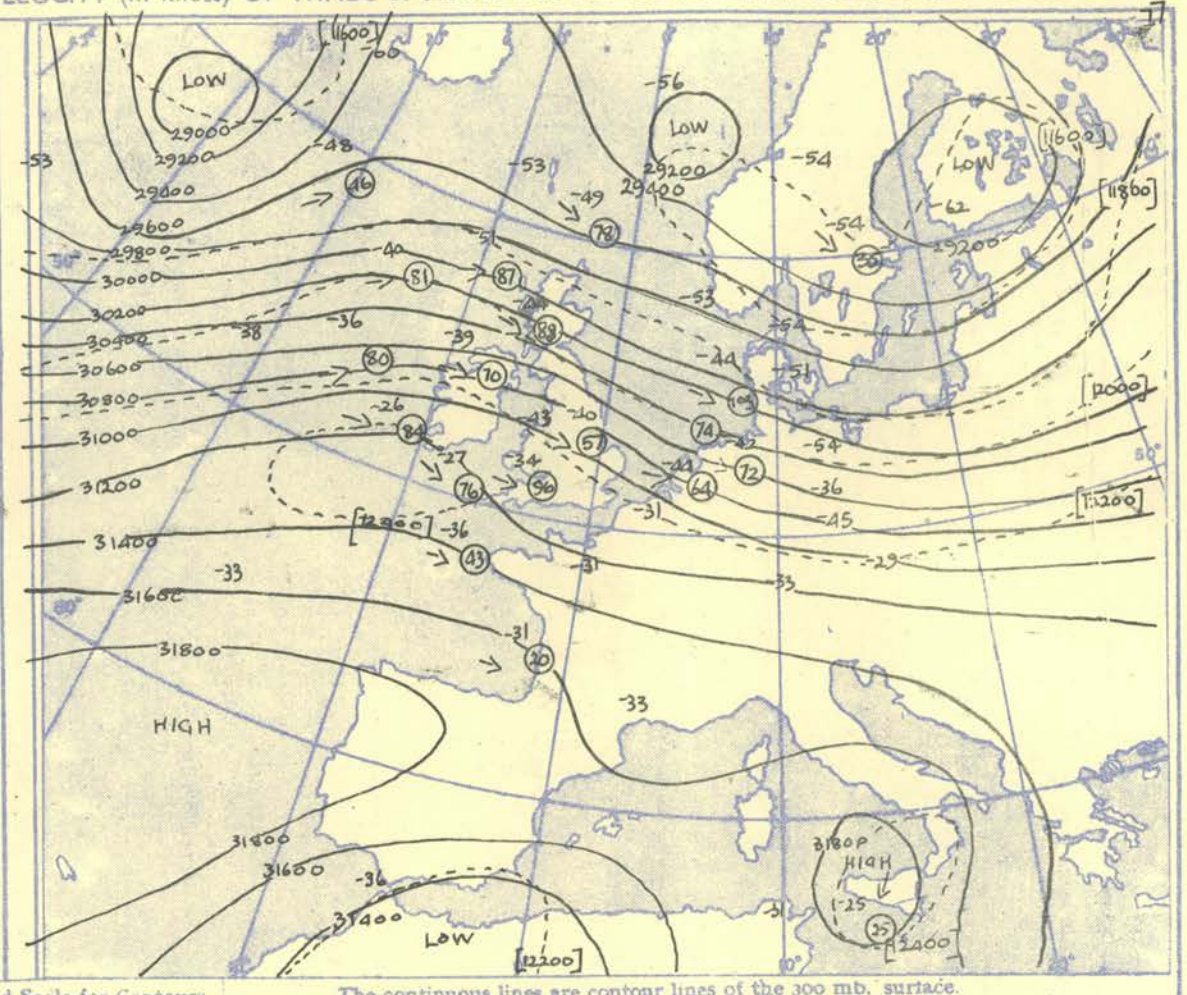
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship		Weather Explorer					Weather Explorer					Weather Explorer					Weather Explorer					Cirrus					Cirrus					Cirrus					Cirrus					Weather Observer					Ship
Lat/Long		58·9°N 18·6°W					59·0°N 18·7°W					59° N 18·2 W					59° N 18·2 W					52·5N 20° W					52·5° N 20° W					52·5 N 20·0 W					52·5 N 20° W					56·8°N 11·3°W					Lat/Long
Pressure Time M.S.L. Surf Freezing		03h 1006 1006 790 G.M.T. mb mb mb					09h 1005 1005 810 G.M.T. mb mb mb					15h 1004 1004 785 G.M.T. mb mb mb					21h 1001 1001 790 G.M.T. mb mb mb					03h 1010 1010 650 G.M.T. mb mb mb					09h 1009 1009 793 and 640 G.M.T. mb mb mb					15h 1009 1009 763 G.M.T. mb mb mb					21h 1008 1008 770 G.M.T. mb mb mb					09h 1005 1005 740 G.M.T. mb mb mb					Time M.S.L. Surf Freezing Pressure
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	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			51	49	280	12		52	52	220	10		53	50	205	12		52	42	140	12		54	46				55	48					57	54					56	51	270	19		Surf
1000		1·5	50	47			1·5	52	49			1·1	53	50			03	52	44			2·7	52	45				54	45			2·5	54	50			2·3	55	52			1·5	55	51			1000
950			45	44	273	13		47	41	245	21		49	48	212	15		46	46	160	16								50	45												49	48	268	19		950
900		30·0	40	38	275	18	30·1	42	36	244	20	29·7	43	39	210	15	288	42	42	168	18								39	25	For Winds			39	32	For Winds			41	32	For Winds		30·2	43	39	281	19	900
850			36	32	277	18		37	31	240	18		37	36	201	14		37	37	180	19																				38	32	290	18		850
800		61·2	33	28	272	21	61·3	31	25	235	18	61·1	33	33	178	16	60·1	33	32	189	21																				61·6	36	26	281	22	800
750			28	17	259	27		28	20	230	20		27	22	176	23		28	26	210	29																					33	21	279	26		750
700		96·1	25	12	267	29	96·1	23	14	233	22	95·9	23	07	185	22	94·9	23	21	223	28	98·1	36	03	See Top of Page.		97·4	32	05	See Top of Page.		97·9	28	19	See Top of Page.		97·8	28	09	See Top of Page.		96·8	27	13	276	33	700
650			19	09	270	29		17	08	238	20		17	07	200	20		15	13	226	21																					19	07	273	28		650
600		135	12	02	269	22	135	09	00	238	21	135	10	02	214	27	134	07	02	222	16																				136	17	03	275	35	600
550			06	12	270	26		03	03	238	21		03	00	222	28		01	10	225	18																					12	12	278	39		550
500		181	03	13	271	30	180	06	11	238	30	180	06	08	220	26	179	11	22	227	20	185	10	18			185	12	18			184	07	11			183	05	13			182	03	21	272	57	500
450			13	21	267	37		14	20	238	36		17	27	214	27		21	32	229	19																					05	15	268	60		450
400		234	23	32	267	47	233	26	36	238	43	235	29	37	219	32	231	29	45	218	24																				226	16	30	262	66	400
350			35	44	267	43		36	58	238	61		39	47	229	39		39	56	237	43																					28	39	263	67		350
300																																														300
250		299	48		263	69	298	48		238	80	297	48		240	46	295	48		248	63	306	42				306	40				305	38				305	36			302	44		263	81	250
200			61		254	99		64		238	81		55		238	55		48		250	68																					61		267	84		200
170		386	59		249	78	385	56		238	49	386	47		241	39	384	48		260	59	393	63				395	63				393	58				393	56			388	56		275	81	170
			53		250	64		53		238	51		45		234	48		48		260	60																					55		273	81		
150			54		255	47		53		238	42		49		248	42		48		266	60																										150
130			54		260	45		52		238	32		45		249	25		49		272	53																					55					130
110			57		260	41		55		238	31		46		259	35		52		272	58																					56					110
100		535	56		260	35	535	56		238	29	438	48		253	29	436	53		272	35																					54					100
90			56		260	25							50																																		90
80			58		260	28							48																																		80
70			58		260	30							49																																		70
60			59		260	30							49																																		60
			59		260	30						(050 mb)	47				(095 mb)	54																												
		Isothermal 338-800 mb 33° 750-722 " 28°					Isothermal 575-559 mb 04°					Inversion 750 mb 27°-740 mb 28° Isothermal 758-750 mb 27°										Inversion 864 mb 37°-850 mb 39° 808 " 34°-726 " 57° Isothermal 850-842 mb 39° 693-669 " 34°					Inversion 737 mb 30°-725 mb 34° 682 " 32°-655 " 34° 531 " 16°-522 " 18° Isothermal 793-772 mb 31° 700-682 " 32°					Inversion 703 mb 28°-686 mb 30° Isothermal 334-312 mb -35° 861-834 " 39°					Inversion 915 mb 43°-892 mb 45° 668 " 28°-635 " 27° Isothermal 744-709 mb 30° 509-500 " 05°					Inversion 623 mb 150-600 mb 17° Isothermal 868-823 mb 38°					
Tropopause		I 250 mb-61° 33,800'					I 258 mb-64° 33,000'					I 245 mb-56° 34,300'					I 284 mb -50° 30,700'					II 218 mb-62° 37,500'					II 202 mb-63° 39,300'					II 174 mb-65° 42,200'					I 170 mb-75° 42,400'					I 232 mb-63° 35,700'					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

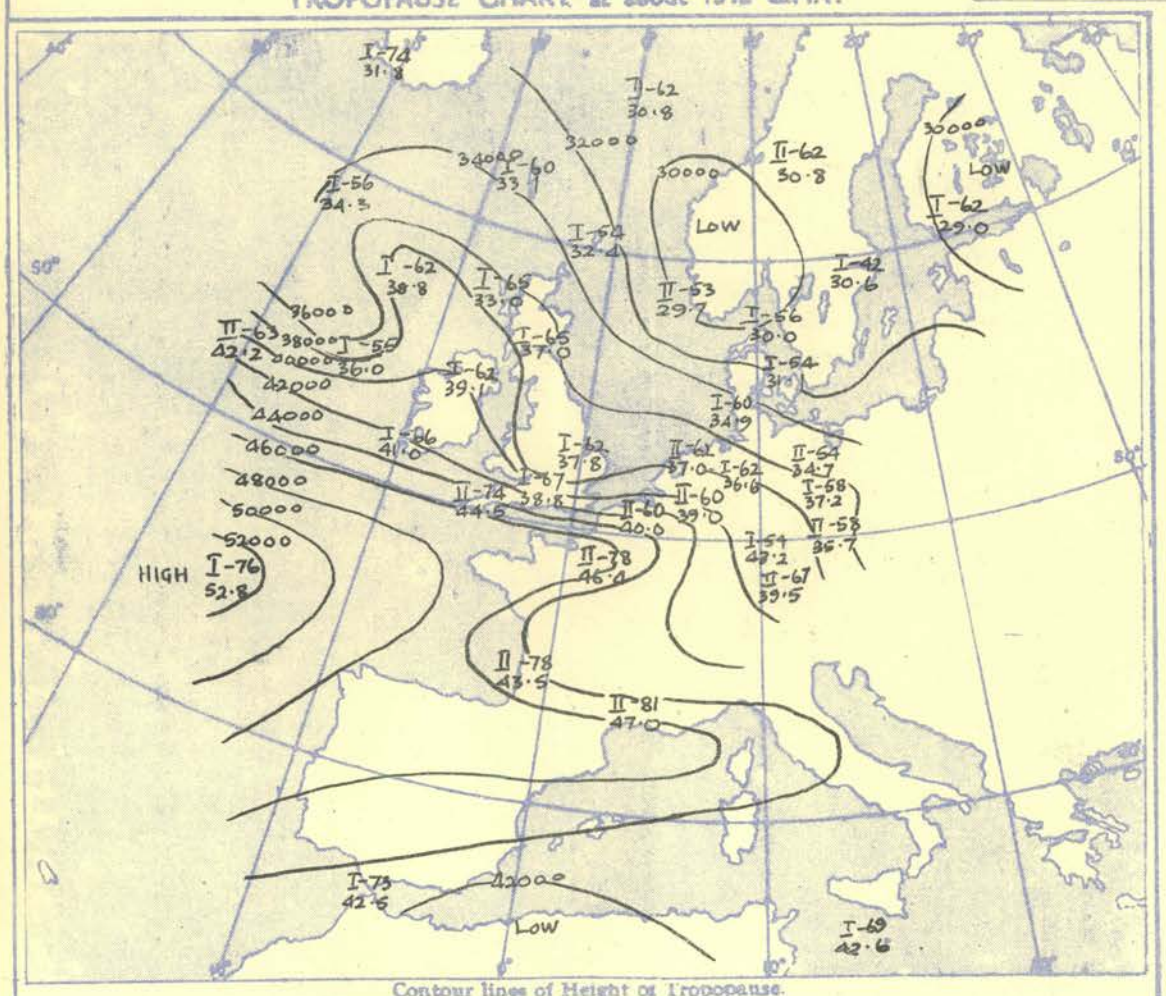


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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

100 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.

Rapid subsidence over the British Isles. The cold trough in mid-Atlantic would appear to have become retrograde during the day.

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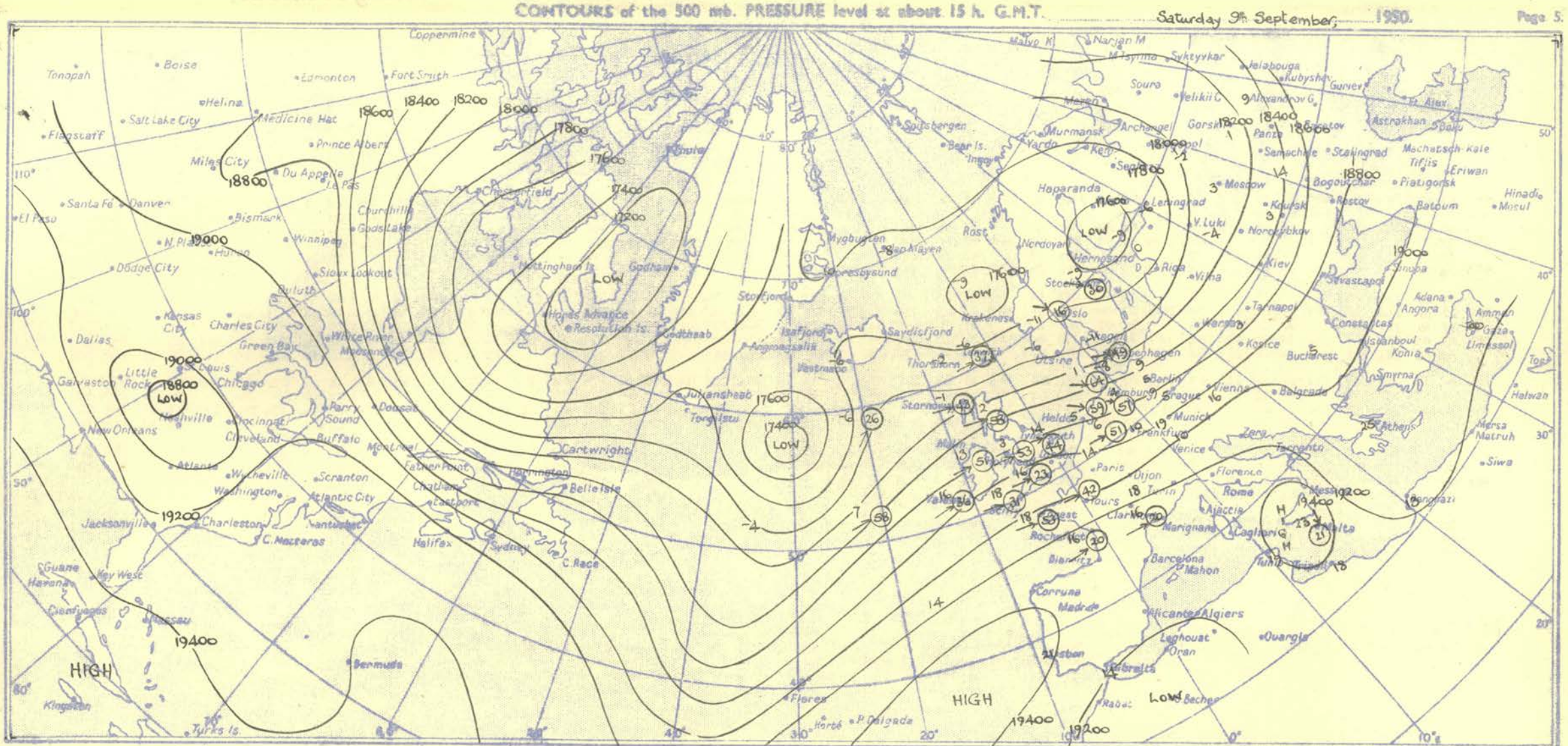
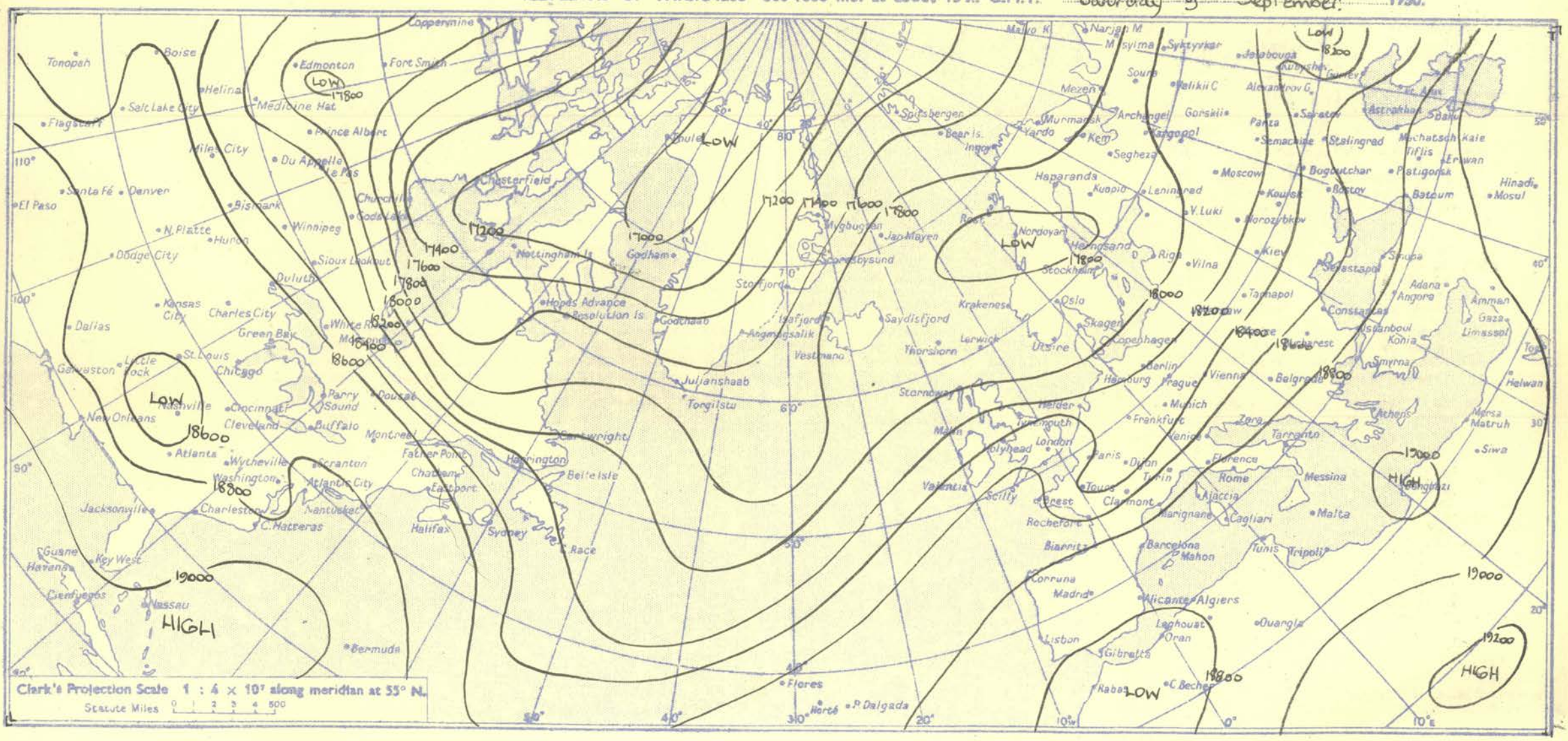
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Saturday 9th September, 1950.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Saturday 9th September. 1950.



DAILY AEROLOGICAL RECORDS OF THE METEOROLOGICAL OFFICE, LONDON.

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

15h. G.M.T.

Station	Time	M.S.L. Pressure	Surf Pressure	Freezing
LERWICK	15h.	998·1 mb	988·2 mb	780 mb
STORNOWAY	15h.	1005·5 mb	1003·6 mb	740 mb
LEUCHARS	15h.	1007·4 mb	1006·6 mb	728 mb
ALDERGROVE	15h.	1010·4 mb	1002·0 mb	660 mb
LIVERPOOL	15h.	1009·1 mb	1007·1 mb	636 mb
DOWNHAM MARKET	15h.	1010·0 mb	1005·6 mb	618 mb
LARKHILL	15h.	1009·2 mb	993·7 mb	590 mb
CAMBORNE	15h.	1010·3 mb	1000·0 mb	581 mb
VALENTIA	15h.	1009·6 mb	1008 mb	580 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	47	240	30	00·5	58	50	270	15	00·2	64	51	270	15
1000	·0·6					1·5	57	48			2·0				
950		48	42	265	45		49	43	273	22		54	43	272	25
900	28·0	42	37	269	42	30·2	43	38	266	24	31·0	47	38	283	29
850		37	31	273	40		38	34	255	27		39	31	289	25
800	59·3	34	28	273	35	61·6	34	27	266	28	62·0	33	26	290	29
750		29	23	274	32		33	18	273	34		35	11	288	24
700	94·2	22	16	274	31	96·7	27	14	270	35	98·0	27	·01	286	21
650		17	10	277	33		21	05	272	29		21	·07	281	33
600	133	13	05	280	34	136	14	·05	274	33	137	21	·01	279	40
550		04	·06	280	38		06	·12	274	34		11	·14	282	51
500	178	·06	·18	281	37	182	·01	·14	273	43	183	02	·22	281	58
450		·18	·29	283	38		·11	·22	274	58		·08	·21	282	69
400	231	·30	·42	284	42	231	·21	·31	272	69	237	·18	·26	279	76
350		·42		286	60		·35	·45	269	80		·29	·36	282	80
300	296	·49		285	78	300	·51		268	87	302	·44		281	83
250		·50		282	69		·60		271	80		·56		281	83
200	384	·47		282	54	387	·54		273	66	389	·60		281	83
170		·48		283	38		·54		272	59		·57			
150		·50		283	39		·55		275	56		·58			
130		·49		274	36		·55					·60			
110		·52		279	32		·55					·61			
100	535	·51		278	31						538	·62			
90		·52		276	31							·58			
80		·52										·52			
70		·51										·51			
60	(65 mb)	·51													
	Isothermal 831–807mb. 35°					Inversion 986mb. 33°–768mb. 34°					Inversion 803mb. 33°–785mb. 37° 621mb. 18°–603mb. 21°				
Tropopause	I 263mb. –54° 32,400′					I 259mb. –65° 33,000′					I 220mb. –65° 37,000′				

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	02·3	62	42	Calm		00·6	65	52	Calm		01·2	65	57	Calm	
1000	2·9					2·5	64	53	L+V.		2·8	64	58	297	02
950		53	35	286	03		56	49	L+V.			57	52	289	03
900	31·8	48	29	284	03	31·6	49	46	L+V.		31·9	52	49	284	04
850		43	26	268	03		48	37	L+V.			50	45	274	09
800	63·6	42	16	260	09	63·6	44	13	277	04	64·0	48	43	275	16
750		38	13	262	15		42	07	272	17		43	37	278	15
700	98·9	33	05	258	20	99·3	39	·03	260	24	100	41	00	273	25
650		31	·11	250	34		33	·10	264	27		39	·09	270	28
600	139	26	·23	250	39	140	28	·14	270	32	141	31	·14	273	33
550		22	·26	256	45		21	·19	277	44		25	·37	274	39
500	186	13	·33	261	51	187	13	·25	276	53	188	14	·33	278	44
450		02	·42	263	58		00	·31	276	54		01	·36	285	46
400	241	·09	·51	268	57	241	·13	·42	276	57	243	·11	·43	291	48
350		·22	·55	270	66		·27	·54	283	58		·25	·53	291	48
300	308	·39	·59	270	70	308	·43				309	·40	·60	293	57
250		·53		268	70	(295 mb)	·45					·53		283	72
200	396	·61		274	93						397	·60		289	79
170		·62		274	95							·62		284	71
150		·65		280	75							·62		278	73
130		·66		274	63							·65		282	61
110		·64		272	52							·62		284	46
100	542	·63		272	46						544	·61		284	42
90		·63		274	42							·60		281	38
80		·61		270	32							·59		276	37
70		·61										·59		284	
60	(050 mb)	·60													
		·57													
	Inversion 692mb. 32°–668mb. 34° Isothermal 857–810mb. 43°					Inversion 885mb. 48°–872mb. 50° Isothermal 784–732mb. 42°					Inversion 694mb. 41°–671mb. 42° Isothermal 879–850mb. 50° 729–694mb. 41° 610–590mb. 31°				
Tropopause	I 203mb. –62° 39,100′					N.R.					I 220mb. –62° 37,800′				

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	00·4	66	61	240	07	02·9	63	62	230	10	00·3	58	56	310	05
1000	2·6					2·9	63	62			2·5	58	57	Calm	
950		60	55	243	12		59	58	251	23		55	55	Calm	
900	31·9	65	61	249	15	32·2	56	55	251	25	31·6	51	51	290	03
850		50	47	259	18		54	52	251	29		47	47	248	09
800	64·4	54	48	268	26	64·7	51	42	251	35	63·7	46	22	271	18
750		49	15	268	33		48	07	251	33		45	20	272	22
700	101	44	33	266	39	101	45	00	251	30	99·7	39	18	257	24
650		39	29	266	34		40	09	253	30		39	01	257	32
600	142	34	04	272	32	142	35	·15	258	32	141	35	31	259	35
550		28	·11	273	26		26	·23	269	29		26	13	255	55
500	189	16	·21	280	23	189	18	·32	270	31	188	16	57	254	36
450		05	·31	282	31		07	·45	275	36		06	50	253	44
400	244	·08	·43	286	52	245	·03	·46	274	54	243	·06	·51	257	53
350		·22	·50	286	58		·13	·43	280	66		·14	·42	267	71
300	311	·34	·56	286	96	313	·27	·57	283	76	311	·26	–	269	84
250		·50		279	89		·44		275	79		·45	·46	265	88
200	400	·63		284	78	403	·63		272	89	401	·63			
170		·66		281	66		·72		274	79		·68			
150		·71		278	59		·74		280	72		·66			
130		·66		278	57		·71		277	56		·69			
110		·69		283	42		·74					·65			
100	545	·66		278	32	546	·75					·64			
90		·62		258	30		·76								
80		·59		275	26		·69				(091 mb)	·66			
70							·70								
60							·71								
							·69								
	Inversion 838mb. 49°–801mb. 56° Isothermal 636–618mb. 37°					(050 mb) ·65 (040 mb) ·59 Isothermal 850–819mb. 54° 773–724mb. 48°					Inversion 850mb. 47°–831mb. 49° 800mb. 46°–773mb. 48° 687mb. 37°–679mb. 39° Isothermal 679–638mb. 39°				
Tropopause	I 212mb. –67° 38,800′					II 163mb. –74° 44,300′					I 190mb. –66° 41,000′				

21h. G.M.T.

Station	Time	M.S.L. Pressure	Surf Pressure	Freezing
LERWICK	21h.	1000·7 mb	990·8 mb	773 mb
STORNOWAY	21h.	1006·3 mb	1004·4 mb	760 mb
LEUCHARS				
ALDERGROVE	21h.	1010·3 mb	1001·7 mb	690 mb
LIVERPOOL	21h.	1008·7 mb	1006·7 mb	638 mb
DOWNHAM MARKET	21h.	1010·2 mb	1005·8 mb	610 mb
LARKHILL	21h.	1009·8 mb	994·1 mb	593 mb
CAMBORNE	21h.	1011·0 mb	1000·6 mb	593 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
Surf	02·7	50	47	260	25	00·5	53	51	230	10					
1000	0·2					1·8	52	50							
950		47	46	268	35		49	45	262	20					
900	28·7	41	39	270	34	30·5	44	41	263	25					
850		36	34	273	30		39	36	260	30					
800	60·0	34	26	279	30	61·8	33	30	259	31					
750		30	19	279	32		31	24	261	30					
700	94·9	26	16	279	34	96·8	28	16	259	26					
650		20	04	280	33		18	08	257	25					
600	135	13	·01	279	36	136	12	02	254	27					
550		05	·08	279	38		04	·06	252	34					
500	180	·02	·15	279	46	181	·04	·14	259	38					
450		·13	·30	281	48		·11	·26	262	48					
400	233	·25	·45	277	56	235	·21	·44	266	57					
350		·37	·49	278	69		·36	·57	263	58					
300	298	·46		277	82	300	·50		259	66					
250		·63		272	76		·59		264	79					
200	387	·52		275	56	387	·53		267	87					
170		·52		284	47		·57		273	60					
150		·52		284	48		·59		269	55					
130		·53		273	43		·57		268	52					
110		·56		254	36		·61								
100	535	·57		272	31	536	·61								
90		·54		294	30		·58								
80	(88 mb)	·53													
70															
60															
	Inversion 830mb. 34°–813mb. 35° Isothermal 991–977mb. 50°					Inversion 780mb. 30°–760mb. 32° 470mb. –11°–460mb. –10°									
Tropopause	I 226mb. –65° 35,000′					I 238mb. –60° 32,300′									

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	02·3	52	47	Calm		00·6	57	52	Calm		01·2	60	59	Calm	
1000	2·8					2·4	57	53	160	03	2·8	60	59		
950		52		187	06		56	53	168	05		56	53	225	05
900	31·6	46		191	08	31·4	49	48	187	07	32·0	52	49	243	10
850		38		193	14		46	45	221	09		49	45	253	16
800	63·1	38		194	18	63·3	43	42	234	11	64·1	44	40	254	16
750		35		199	18		41	13	263	15		40	21	255	18
700	98·3	31		223	24	99·0	38	03	264	21	99·9	41	·15	256	22
650		30		234	30		33	·19	266	27		35	·26	261	25
600	139	28		240	39	140	29	·21	267	31	141	31	·32	265	33
550		17		240	62		23	·30	267	36		21	·40	264	37
500	185	11		242	50	186	12	·40	266	42	187	12	·46	262	43
450		03		240	51		·01	·45	263	47		01	·54	269	46
400	240	·07		238	55	241	·11	·50	266	56	242	·12	·53	273	51
350		·19		238	60		·23	·53	271	68		·25	·58	275	63
300						309	·37	·57	273	78	309	·36	·59	285	82
250							·52		281	88		·54		282	76
200						397	·65		281	111	397	·69		287	108
170							·70		282	61		·69		290	68
150							·68		280	60		·73		284	66
130							·69		279	60		·74		286	57
110							·70					·71		285	52
100						541	·70				540	·71		282	40
90							·71					·69		287	40
80												·67		301	21
70															
60															
	For remainder of winds see page 3.										Max wind:– 209mb 285° 120kts. 38,700′				
	Inversion 1002mb. 52°–971mb. 55° 850mb. 38°–820mb. 39° 700mb. 31°–690mb. 32°					Inversion 1007mb. 57°–989mb. 58° Isothermal 823–807mb. 44°					Inversion 760mb. 39°–714mb. 42° Isothermal 1006–992mb. 60° 900–880mb. 62°				
Tropopause	N.R.					I 170mb. –70° 43,300′					II 200mb. –69° 39,700′				

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	62	60	230	08	02·9	60	59	225	08					
1000	2·7					3·0	60	59							
950		60	59	235	12		56	56	255	24					
900	32·1	56	55	250	16	32·4	55	54	263	24					
850		53	52	257	20		53	52	269	24					
800	64·5	50	49	261	22	64·5	51	48	275	25					
750		46	42	260	21		50	39	269	24					
700	101	41	29	261	25	101	45	29	268	26					
650		40	11	274	30		42	01	269	36					
600	142	33	·13	272	32	142	33	05	266	36					
550		24	·25	264	35		23	·18	265	36					
500	189	16	·40	263	40	189	16	·07	264	44					
450		05	·51	270	47		09	·05	268	51					
400	244	·03	·44	275	57	245	·01	·15	269	53					
350		·15	·40	277	60		·13	·30	286	46					
300	312	·30	·52	284	72	313	·29	·50	280	59					
250		·48		283	91		·49		275	67					
200	401	·68		289	84	402	·70		273	54					
170		·73		287	68		·81		279	58					
150		·76		281	50		·76		277	52					
130		·75		280	48		·78		279	50					
110		·80					·81		281	39					
100	543	·75				543	·80		278	33					
90							·77		277	32					
80						(084 mb)	·76								
70															
60															
	Inversion 672mb. 39°–660mb. 41°					Inversion 918mb. 54°–893mb. 56° 845mb. 52°–822mb. 53° 710mb. 44°–685mb. 48° Isothermal 785–750mb. 50°									
Tropopause	I 195mb. –71° 41,700′					I 172mb. –82° 43,100′									

No. 11481 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Sunday 10th September 1950.

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

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.
Pressure: M.S.L.	1002·1 mb	1006·8 mb	1009·0 mb	1010·9 mb	1009·3 mb	1009·8 mb	1010·5 mb	1013·2 mb	1013·7 mb
Pressure: Surf	992·2 mb	1004·9 mb	1008·2 mb	1002·3 mb	1007·3 mb	1005·5 mb	994·8 mb	1002·8 mb	1012 mb
Pressure: Freezing	800 mb	826 mb	765 mb	752 mb	642 mb	603 mb	594 mb	590 mb	630 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	44	260	17	0·3	51	49	240	08	0·2	47	45		
1000	0·5					01·8	51	50			02·4				
950		46	40	267	28		47	44	247	20		49	46		
900	29·1	40	35	265	27	30·4	42	39	248	21	31·0	44	39		
850		33	29	272	26		35	32	248	22		39	32		
800	60·2	32	10	274	29	61·6	29	26	250	23	62·4	35	26		
750		29	-2	273	33		25	22	251	27		31	20		
700	95·0	23	+5	270	33	96·2	20	10	256	28	97·0	25	13		
650		14	+9	261	35		19	03	262	28		13	08		
600	134	08	+01	258	35	135	12	01	272	30	137	13	05		
550		01	-4	251	35		06	-11	275	39		09	-1		
500	179	-9	-13	256	36	181	-4	-23	269	40	182	03	-8		
450		-20	-28	258	42		-13	-33	265	50		-6	-16		
400	231	-27	-42	262	61	234	-23	-42	255	64	236	-18	-28		
350		-41		253	64		-35	-51	264	80		-31	-40		
300	293	-55		257	75	299	-50		265	86	302	-44			
250		-61		266	71		-59		272	96		-54			
200	382	-51		266	55	386	-53		266	56	389	-66			
170		-53		272	52		-55		265	79		-63			
150		-53		273	47		-58		264	86		-63			
130		-54		273	40		-61					-69			
110		-58		272	34		-61								
100	532	-60		268	30	535	-60								
90		-60		272	25		-60								
80		-58		276	25		-62								
70		-58		268	26		-61								
60		-58													

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	02·3	52	47	calm		0·6	57	56	calm		01·2	59	55	080	02
1000	03·0					02·6	57	55			02·8	59	55		
950		50	46	242	11		55	52				56	56	244	08
900	31·7	46	42	242	12	31·5	50	44			320	52	51	256	12
850		40	34	252	15		46	43				49	48	250	19
800	63·2	34	27	260	18	63·3	40	39			64·1	44	43	249	23
750		33	16	274	24		36	20				39	34	257	26
700	98·3	34	06	268	27	98·9	38	-20			99·7	33	25	262	30
650		30	-22	262	36		33	-31				36	-1	267	33
600	138	24	-7	262	48	139	26	-36			140	32	-13	268	38
550		16	-3	263	53		19	-41				22	-26	268	40
500	185	08	-16	260	57	186	12	-46			187	14	-25	271	47
450		00	-26	258	59		04	-50				04	-28	273	57
400	239	-12	-21	260	752	241	-6	-30			242	-7	-23	277	65
350		-24	-29	264	83		-19	-41				-16	-35	285	79
300	306	-34	-43	272	108		-20	-42			310	-31	-54	289	82
250		-50		263	105		(345)					-50		282	95
250	354	-68		263	104						398	-70		284	99
200		-66		264	85							-72		284	61
150		-71		264	66							-73		282	61
130		-71		263	51							-72		281	54
110		-68		253	54							-72		283	48
100	539	-66		254	43						542	-69		279	39
90		-64		262	30							-67		278	30
80		-64													
70															
60															

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	4·4	60	60	250	05	02·9	58	57	293	08	0·3	56	53		
1000	2·9					036	57	56			3·7	54	51		
950		56	55				53	52	264	20		49	45		
900	32·1	54	52	256	12	32·5	54	45	270	20	32·4	42	40		
850		51	50				51	47	284	21		43	32		
800	64·4	48	46			647	49	43	279	27	64·0	45	06		
750		45	36				50	25	273	34		43	17		
700	99·7	40	25			101	47	-7	261	37	99·8	37	01		
650		40	02				42	-13	270	36		34	-22		
600	140	33	-4			142	34	-30	267	30	140	28	-1		
550		26	-7				25	-24	263	39		19	06		
500	189	17	-8			189	19	-9	279	33	187	11	04		
450		08	-9				07	-9	269	42		03	-9		
400	244	-1	-20			245	-1	-19	262	44	242	-7	-17		
350		-14	-34				-12	-32	258	44		-16	-31		
300	312	-30	-48			313	-28	-46	260	40	310	-31	-42		
250		-48		255	51		-48		255	51		-49			
200	401	-67				402	-68		265	53	398	-68			
170		-79					-81		268	49		-80			
150		-75					-83		264	51		-77			
130		-74					-81		261	48		-78			
110		-73					-82		257	39		-75			
100	544	-72				543	-81		260	29	540	-71			
90		-71					-80		263	33		-70			
80		-69					-78		266	21		-70			
70		-68					-75		266	19		-69			
60	(64)	-67				(64)	-74				(58)	-67			

Lerwick: Inversion 834 mb 31° – 800 mb 32°

Stornoway: Isothermal 694 – 655 mb 20°; 271 – 254 mb –58°

Leuchars: Inversion 1008 mb 47° 950 mb 49°

Aldergrove: Inversion 1002 mb 52° – 990 mb 53°; 769 mb 29° – 732 mb 37°; 665 mb 30° – 660 mb 31°

Liverpool: Inversion 1001 mb 57° – 984 mb 58°; 784 mb 38° – 764 mb 39°; 750 mb 36° – 691 mb 34°

Downham Market: Inversion 737 mb 38° – 743 mb 40°; 700 mb 33° – 686 mb 39°; Isothermal 379 – 366 mb –12°

Larkhill: Inversion 776 mb 46° – 762 mb 47°; 700 mb 40° – 680 mb 42°; Isothermal 473 – 463 mb 11°

Camborne: Inversion 830 mb 52° – 810 mb 53°; 773 mb 48° – 720 mb 51°

Valentia: Inversion 875 mb 38° – 833 mb 46°; Isothermal 388 – 375 mb –9°

Max wind. 217 mb 284° 111 kts 38000'

	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Tropopause	I 260 mb –64° 32500'	I 242 mb –61° 34500'	I 205 mb –67° 36300'	I 208 mb –71° 38500'	NR	I 180 mb –74° 42000'	I 167 mb –81° 43700'	I 154 mb –88° 43500'	I 170 mb –80° 43200'

09hrs G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	
Pressure: Time	09hrs G.M.T.	09hrs G.M.T.	G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	G.M.T.
Pressure: M.S.L.	1003·7 mb	1005·9 mb	mb	1012·4 mb	1011·5 mb	1010·5 mb	1012·7 mb	1016·1 mb	mb
Pressure: Surf	993·8 mb	1004·0 mb	mb	1000·8 mb	1009·5 mb	1006·1 mb	997·0 mb	1005·6 mb	mb
Pressure: Freezing	812 mb	780 mb	mb	700 mb	628 mb	604 mb	613 mb	620 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	01·7	52	48	235	15	0·5	53	49							
1000	01·0					01·6	53	49							
950		46	42	264	24		49	45							
900	29·3	41	37	273	29	30·3	43	36							
850		36	32	262	26		37	32							
800	607	31	27	263	27	61·7	35	32							
750		28	20	263	27		28	25							
700	95·4	20	13	262	27	96·6	23	17							
650		15	01	259	25		16	10							
600	135	11	00	265	31	136	10	01							
550		05	-12	272	36		04	-18							
500	180	-3	-23	275	40	181	-4	-13							
450		-13	-33	273	46		-11	-17							
400	233	-25	-41	272	54	234	-22	-29							
350		-37	-49	271	63		-34	-41							
300	298	-49		272	81	299	-44								
250		-63		271	84		-58								
200	385	-52		274	66	387	-55								
170		-52		268	66		-55								
150		-53		270	65		-56								
130		-51		272	42		-58								
110		-54		262	35		-57								
100	835	-56		256	35	536	-57								
90		-58		265	33										
80		-58		267	36										
70		-59		270	34										
60		-57		267	28										
		-60		264	30										
	(45)	-58													

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	02·3	56	50	270	05	0·6	58	52	280	08	01·2	60	55	240	05
1000	034					03·2	57	51	284	12	02·9				
950		49	45	263	08		51	44	294	15		56	56	285	16
900	32·1	42	38	258	14	32·0	47	34	296	16	32·0	53	50	286	14
850		37	33	256	15		42	33	303	18		47	46	288	12
800	63·4	37	26	259	13	63·5	35	29	297	23	64·1	46	38	269	19
750		34	13	267	18		43	14	280	27		46	18	266	28
700	98·7	32	-6	265	25	99·4	38	25	274	30	100	43	05	269	30
650		27	-22	259	32		34	12	266	35		38	-14	274	30
600	139	22	-5	266	37	140	28	01	267	39	141	32	-18	275	33
550		16	-7	255	42		20	-10	264	40		23	-12	268	42
500	185	06	-8	262	44	187	12	-3	266	48	189	13	04	267	51
450		-3	-12	260	54		02	-6	269	50		07	-6	268	53
400	239	-13	-21	258	65	242	-3	-13	270	65	243	-4	-17	278	55
350		-17	-30	256	83		-13	-25	263	72		-13	-29	277	66
300	307	-33	-42	248	92	310	-28	-36	257	80	311	-31	-44	266	67
250		-50		251	98		-46		261	80		-49		267	70
200	355	-74		251	90	339	-67		255	75	400	-70		268	28
170		-73		259	75		-75		265	77		-74		278	63
150		-75		258	67		-72		270	64		-70		279	51
130		-70		261	45		-69		268	56		-70		278	48
110		-71		269	43		-69					-67		272	36
100	538	-68		267	41	543	-66				543	-65		275	36
90							-65					-63		274	27
80							-63					-59		280	24
70							-61					-57		311	10
60						(64)	-59								

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	60	56	280	09	02·9	57	56	280	06
1000	03·5					044	56	55	277	16
950		54	50	292	18		53	51	279	21
900	32·6	49	44	298	18	33·4	47	43	282	23
850		52	41	293	22		60	35	283	24
800	64·9	49	36	279	29	65·5	50	20	281	32
750		43	29	270	30		47	32	278	35
700	101	45	11	270	30	102	41	27	293	39
650		37	21	264	37		36	20	270	41
600	142	30	19	263	39	142	30	04	265	42
550		23	12	269	42		22	-15	266	47
500	189	17	03	270	46	189	14	-27	261	48
450		08	-6	269	42		05	-43	263	48
400	244	-1	-15	272	39	244	-6	-60	259	44
350		-14	-31	256	46		-20	-60	256	45
300	313	-29	-46	247	48	312	-36	-59	247	39
250		-48		243	51		-54		230	43
200	402	-68		242	37	399	-68		218	38
170		-76		260	51		-74		243	38
150		-74		264	45		-78		254	40
130		-74		273	45		-78		251	39
110		-73		268	35		-77		263	30
100	544	-72		278	33	541	-74		263	30
90		-70		267	21		-74		261	25
80		-68		272	30		-70		253	19
70										
60										

Lerwick: Inversion 650 mb 15° – 623 mb 16°

Stornoway: Inversion 850 mb 37° – 838 mb 39°; Isothermal 740 – 724 mb 26°

Aldergrove: Inversion 870 mb 33° – 791 mb 40°; 750 mb 34° – 739 mb 35°; 395 mb –4° – 380 mb –10°

Liverpool: Inversion 800 mb 35° – 775 mb 46°; 427 mb –3° – 405 mb –2°

Downham Market: Inversion 615 mb 43° – 600 mb 46°

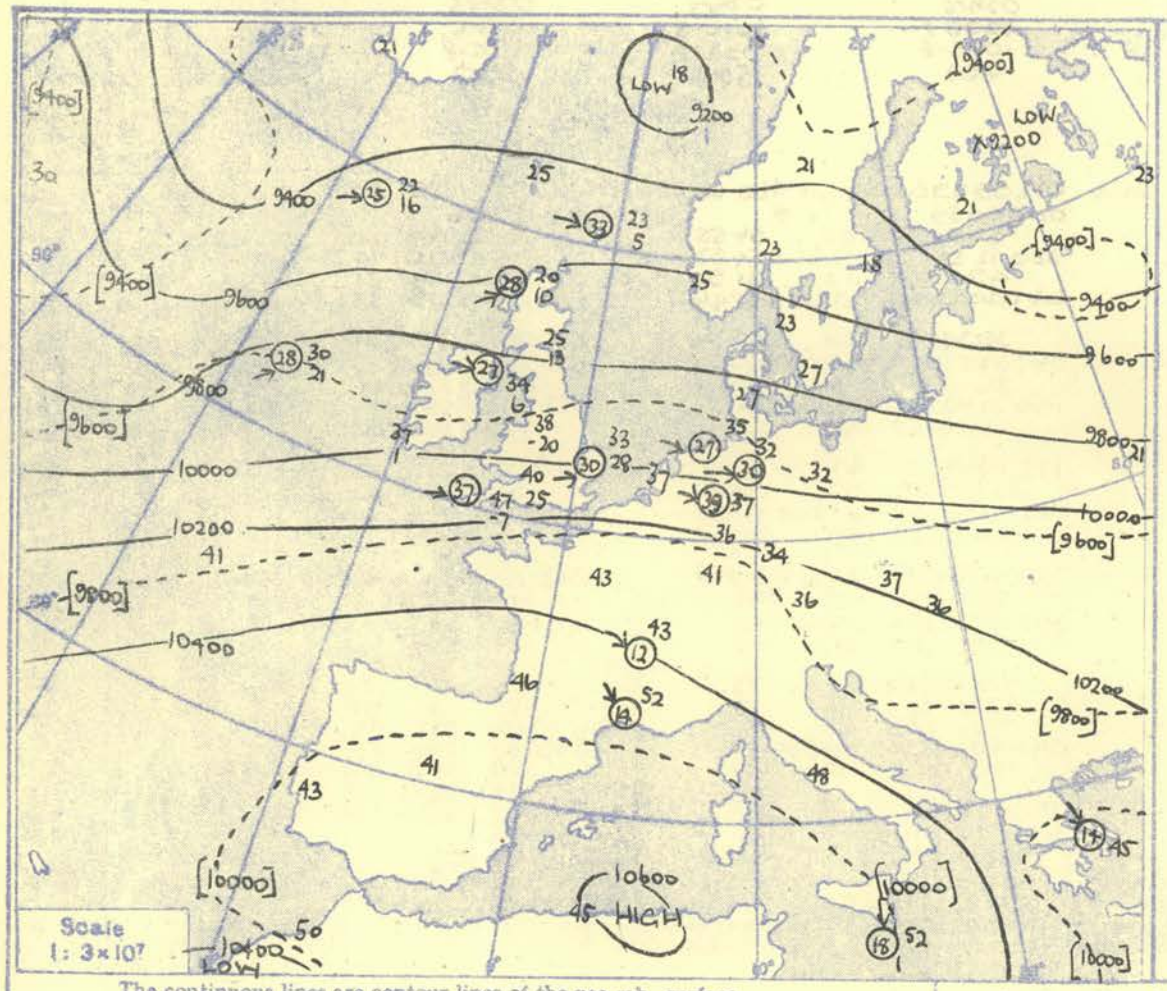
Larkhill: Inversion 882 mb 47° – 871 mb 53°; 756 mb 43° – 702 mb 45°

Camborne: Inversion 900 mb 47° – 864 mb 51°; 777 mb –15° – 770 mb –2°; Isothermal 850 – 800 mb 50°

	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	
Tropopause	I 246 mb –64° 34000'	I 248 mb –59° 34200'		I 196 mb –76° 40000'	I 183 mb –74° 41800'	I 183 mb –78° 41700'	I 166 mb –77° 44300'	I 140 mb –80° 47300'	

Sunday 10th September 1950.

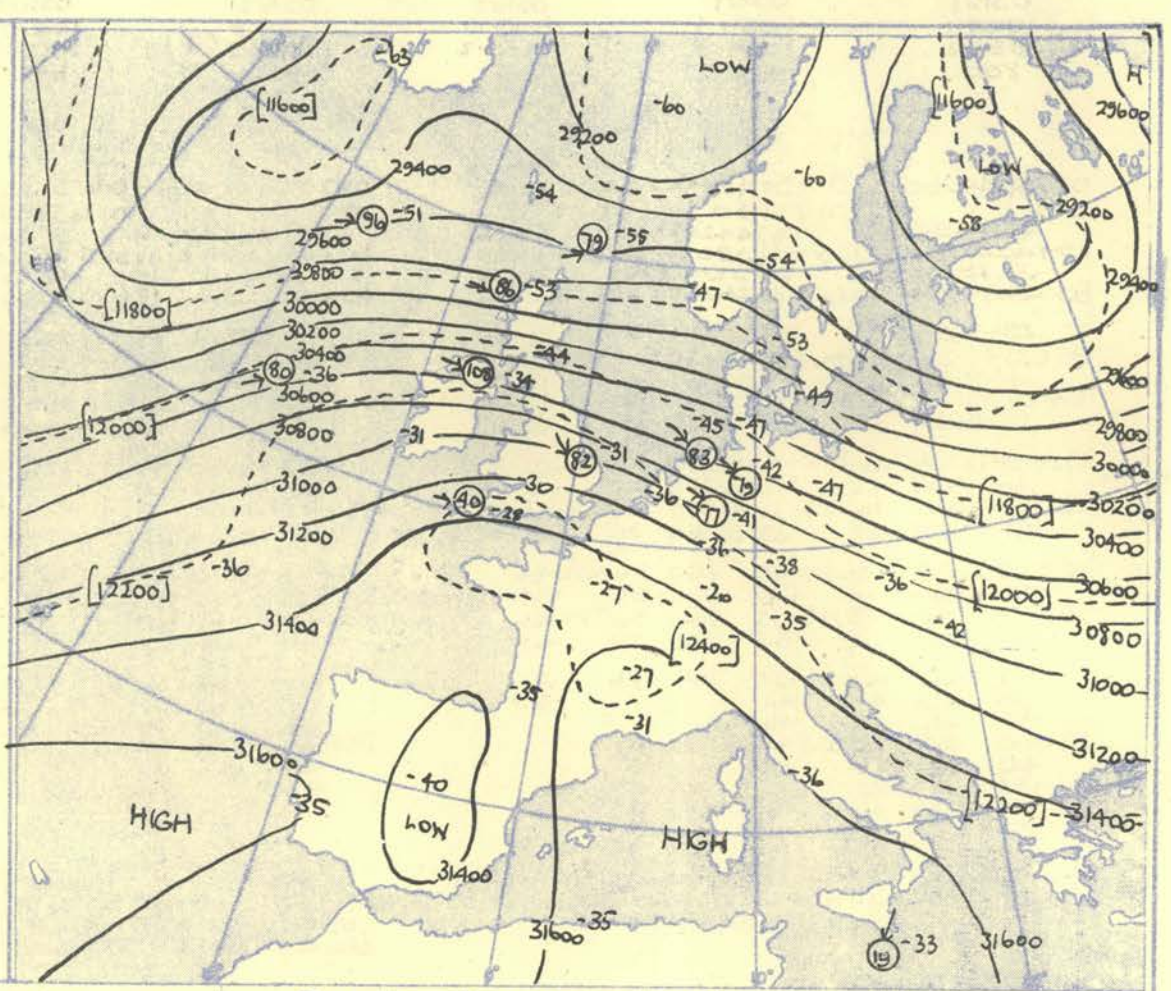
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. GMT.



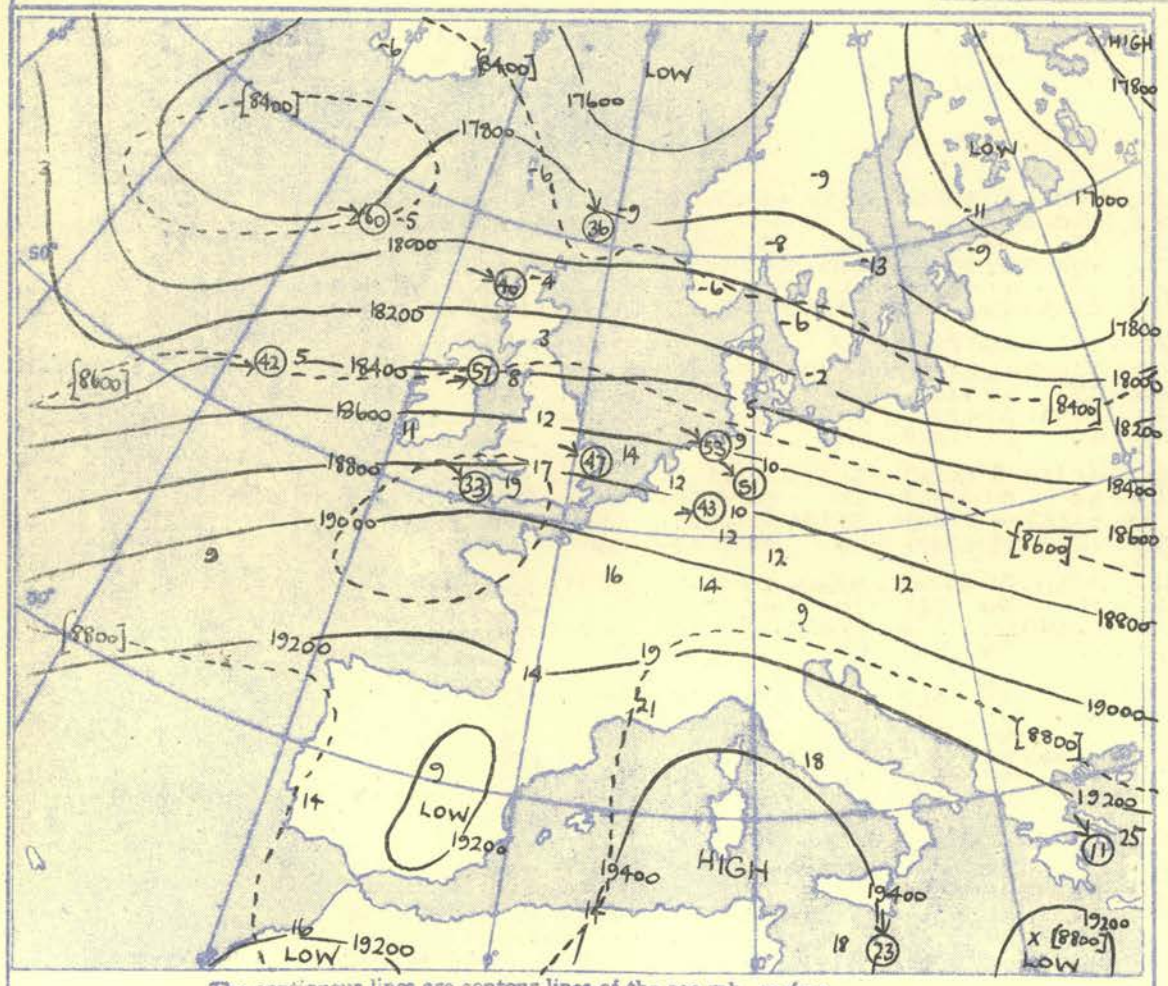
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

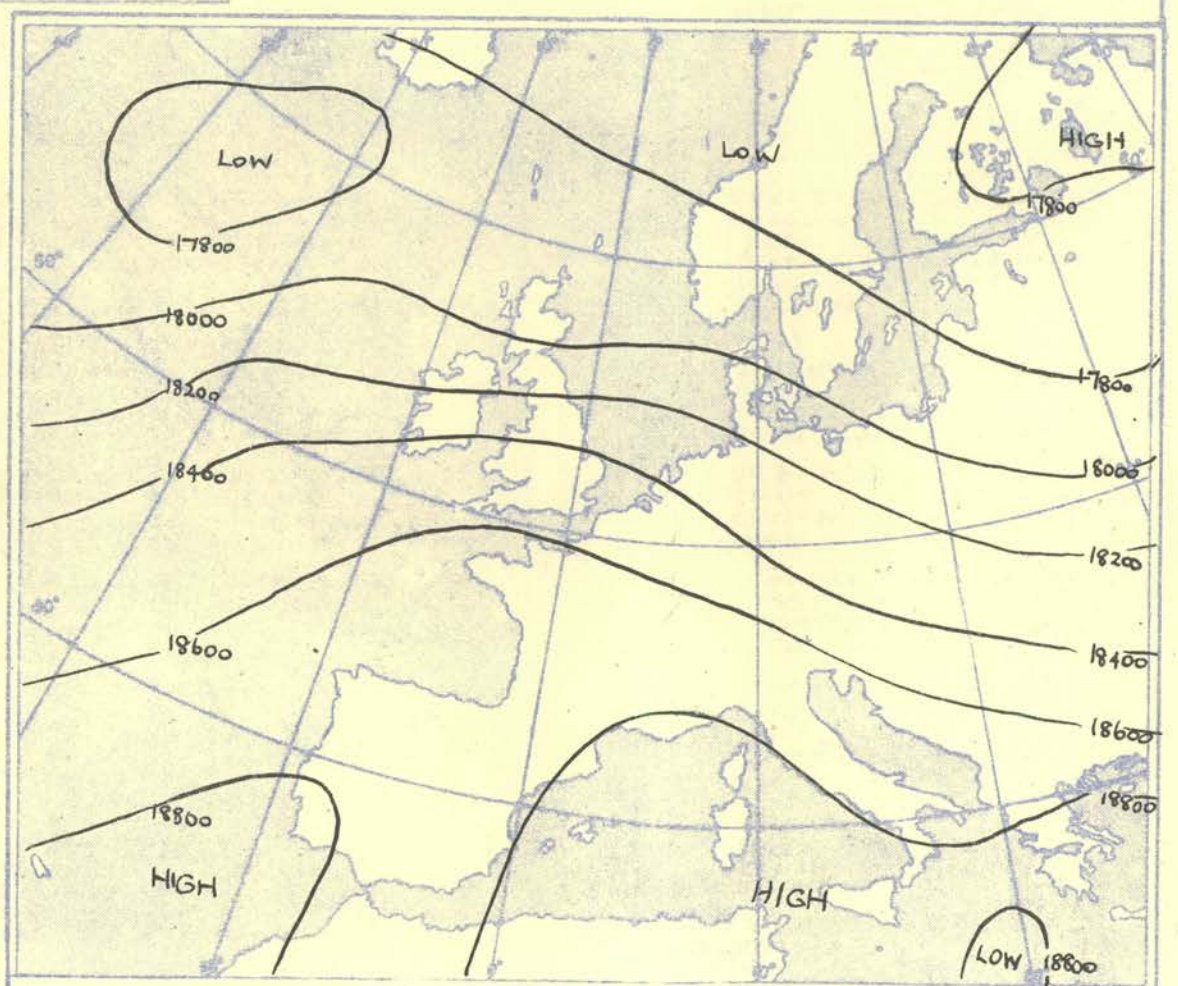
100 60 40 30 20 15 10 knots



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	Time	mb	mb	mb	mb	mb	mb	mb	mb	Time	Pressure
	M.S.L.	mb	mb	mb	mb	mb	mb	mb	mb	M.S.L.	
	Surf	mb	mb	mb	mb	mb	mb	mb	mb	Surf	
	Freezing	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	Pressure mb
Surf																						Surf
1000																						1000
950																						950
900																						900
850																						850
800																						800
750				No Flights Reported.																		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	Time	Type	Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	
	Leuchars	21hrs	Afar	Surf.	240	06																			Surf.
				1,000	238	15																			1,000
				2,000	239	21																			2,000
				3,000	243	24																			3,000
				4,000	246	22																			4,000
				5,000	241	22																			5,000
				6,000	228	24																			6,000
				8,000	236	23																			8,000
				10,000	252	36																			10,000
				14,000	253	45																			14,000
				18,000	255	57																			18,000
				24,000	255	76																			24,000
				30,000	257	96																			30,000
				40,000	256	89																			40,000
				50,000	254	81																			50,000
					(46000')																				

NEPHOSCOPE OBSERVATIONS

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

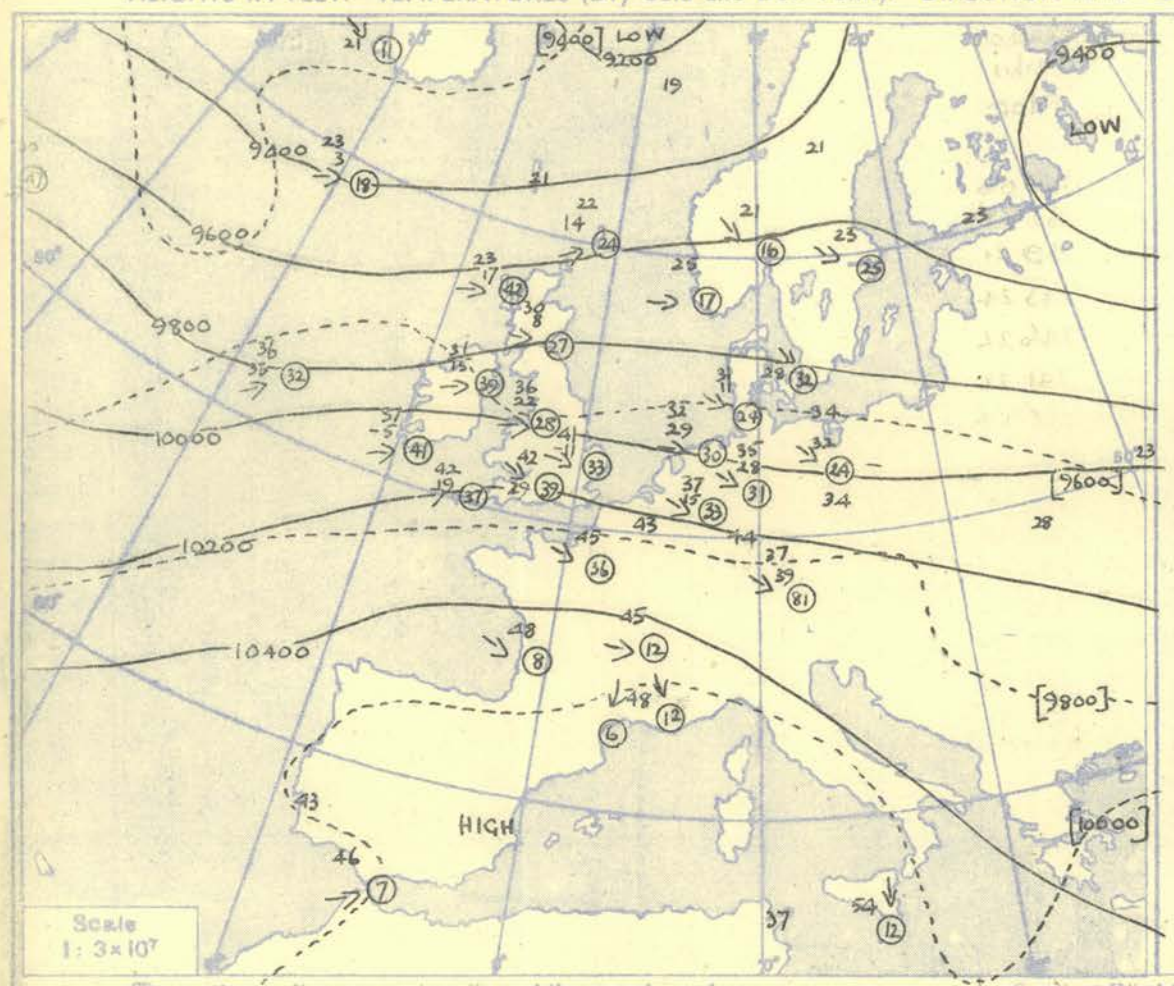
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	Weather Explorer	Weather Observer	Weather Observer	Weather Observer	Cirrus	Weather Watcher	Weather Watcher	Weather Watcher		Ship
Lat/Long	58·5N 16·9W	58·3N 16·0W	58·4N 16·9W	58·6N 17·6W	52·5N 18·2W	52·6N 17·0W	52·5N 18·0W	52·6N 18·9W		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.	G.M.T.	Time
M.S.L.	1001 mb	999 mb	1000 mb	1002 mb	1009 mb	1007 mb	1003 mb	1006 mb	mb	M.S.L.
Surf	1001 mb	999 mb	1000 mb	1002 mb	1009 mb	1007 mb	1003 mb	1006 mb	mb	Surf
Freezing	790 mb	795 mb	800 mb	800 mb	746 mb	715 mb	665 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		54	46	230	18		54	52	220	16		57	53	258	13		54	51	340	08		55	54				58	46	160	10		56	55	025	17		56	54	345	20						Surf
1000	03	54	46	232	18	-02					-02					03	53	49			2·4	55	54			2·0	57	45	180	10	09	56	56	025	17	1·8	55	54	345	20						1000
950		48	42	238	22		48	42	208	21		49	43	247	13		47	39	311	04							54	40	197	16		52	52	018	27		50	44	001	27						950
900	28·9	42	37	247	21	28·4	43	37	226	20	28·5	43	36	235	11	28·9	42	35	292	05						31·0	50	39	211	21	29·9	51	51	038	19	30·5	44	38	351	25						900
850		36	32	254	21		38	32	231	16		37	31	230	10		37	30	279	07	0	45	34	For Winds			47	37	241	32		49	49	069	12		38	26	322	15						850
800	60·2	33	29	251	23	59·8	33	28	228	21	59·8	32	28	237	12	60·2	32	22	280	10						62·9	44	33	242	37	62·1	48	48	153	09	61·9	41	08	323	11						800
750		28	23	243	25		28	23	233	22		28	20	249	15		31	13	283	13				See			36	27	241	37		44	44	220	24		37	-20	341	12						750
700	95·0	22	16	244	25	94·6	23	18	236	25	94·5	22	03	248	18	95·0	27	07	283	17	98·4	30	21	Top of		98·3	31	22	233	32	98·1	36	35	225	32	97·3	32	-32	331	15						700
650		15	07	248	24		16	11	244	30		16	-06	248	17		19	-01	282	24							25	17	230	35		30	30	225	36		26	-36	331	12						650
600	134	08	-03	247	27	134	10	02	251	30	134	09	01	253	16	134	11	-11	279	29						138	19	-01	230	49	138	24	21	227	33	137	20	-08	327	19						600
550		01	-13	241	42		04	-11	251	28		02	-14	266	13		03	-25	278	27							13	-08	234	51		16	07	228	43		12	-03	324	17						550
500	180	-05	-18	237	60	179	-03	-10	249	26	179	-08	-25	272	18	179	-07	-39	280	29	184	05	01			184	05	-09	239	52	185	06	-06	224	48	183	03	-12	326	19						500
450		-16	-33	237	66		-13	-29	249	25		-20	-36	284	14		-17	-47	278	30							-04	-17	241	52		-04	-17	219	51		-08	-22	332	21						450
400	232	-29	-42	236	79	232	-26	-40	255	60	231	-33	-47	287	18	232	-27	-58	279	37						238	-14	-27	234	61	239	-16	-29	219	53	237	-19	-35	337	25						400
350		-38	-53	235	78		-38	-52	251	48		-46		292	20		-39	-59	282	54							-26	-40	235	73	1383	-20	-34				-32	-50	340	24						350
300	296	-51		234	96	297	-41		248	89	294	-54		284	29	296	-55		284	67	305	-36				305	-39	-52	235	94	mb					302	-46		344	31						300
250		-52		238	70		-46		247	90		-47		269	45		-67		288	60							-54		236	93							-56		289	07						250
200	385	-47		246	63	386	-42		246	60	383	-49		263	46	382	-61		283	37	393	-71				392	-64									390	-60		244	28						200
170		-49		262	62		-45		246	52		-50		256	48		-56		285	33							-62										-61		248	43						170
150		-51		269	59		-46		247	57		-51		251	48		-58		285	31							-62										-58		241	49						150
130		-53		265	53		-46		247	56		-49		240	37	(140	-57										-63										-61		229	68						130
110		-53		244	39		-47		246	48		-51		252	39	mb)											-64										-64		225	76						110
100	536	-53		242	36	540	-48		245	37	535	-53		258	37							-69														537	-62		223	67						100
90	(93	-54					-49		244	32		-52		255	31																						-63		215	48						90
80	mb)						-50		242	30		-51		253	27																						-62		210	25						80
70							-47		242	23		-54		258	24																														70
60							-48		242	25		-51		261	25																														60
							-50		243	25		-61		261	23																														
							-48		241	22	(048	-5																																		
						(030	-46				mb)			Inversion			Inversion					Inversion																								
						mb)					800 mb 32°- 782mb 33°					788 mb 31°- 768 mb 32°					935 mb 48°- 915 mb 50°																												
											Isothermal										687 " 28°- 668 " 30°																										
											718-700 mb 22°										Isothermal.																										
																					868-850 mb 45°																										
																					746-725 " 32°																										
																					300 -297 " -36°																										
		Isothermal																																											
		1001- 1000 mb 54°																																											
		814- 799 " 33°																																											
Tropopause		II 300mb-51° 29,600'					I 316mb-44° 28,500'					II 325mb-54° 27,800'					I 258mb-68° 32,900'					I 195mb-72° 39,800'					I 213mb-67° 37,900'					N.R.					II 273mb-65° 32,500'									Tropopause

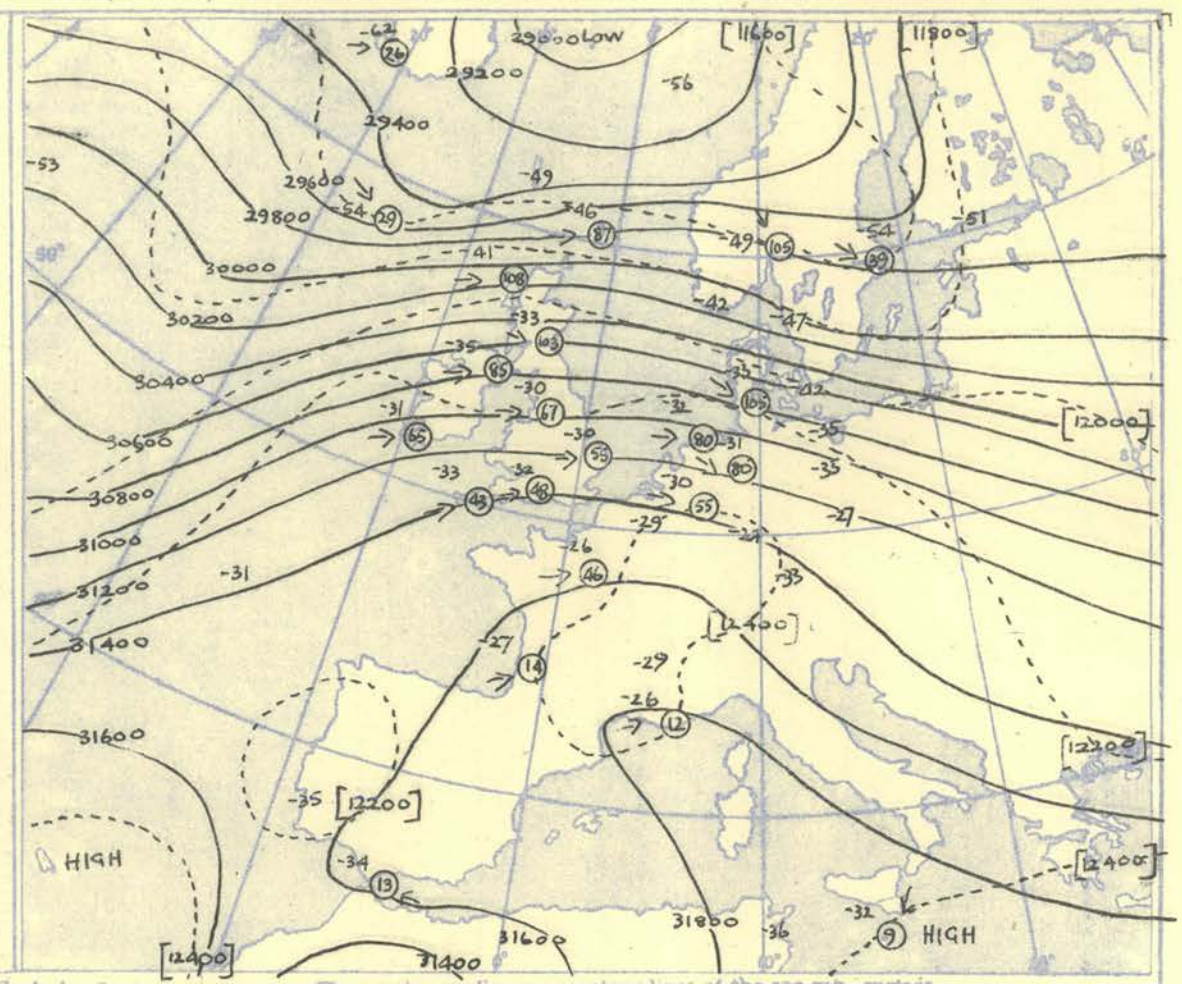
Sunday 10th September 1950.

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.



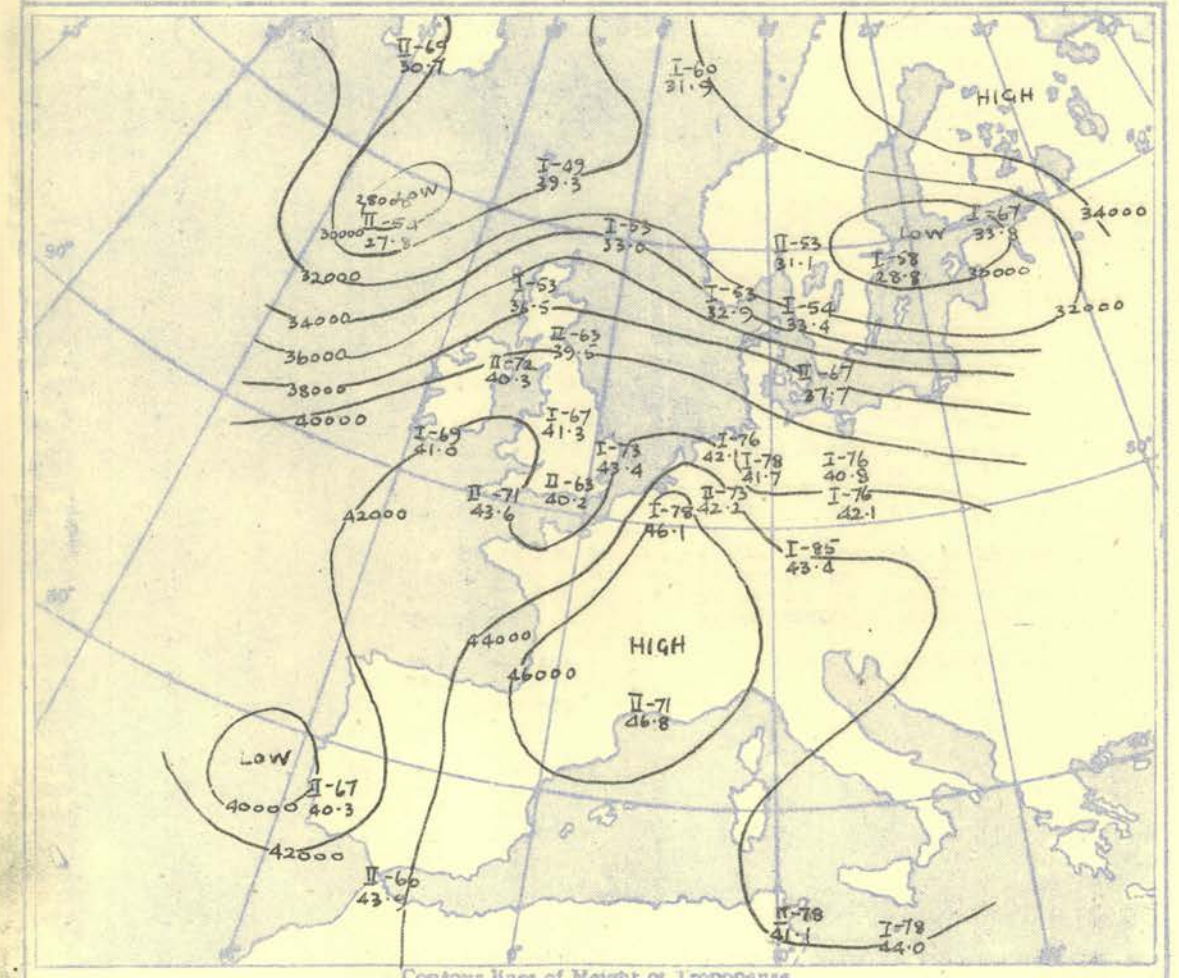
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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 15 h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

A cold trough in the Central Atlantic moved eastward but was rapidly modified by the advance of a warm ridge from the west. The British Isles remained in a thermal ridge with a fairly strong westerly thermal gradient across Scotland. Remarkable changes in the thermal structure west of Ireland may have been associated with the complicated surface developments in that region.

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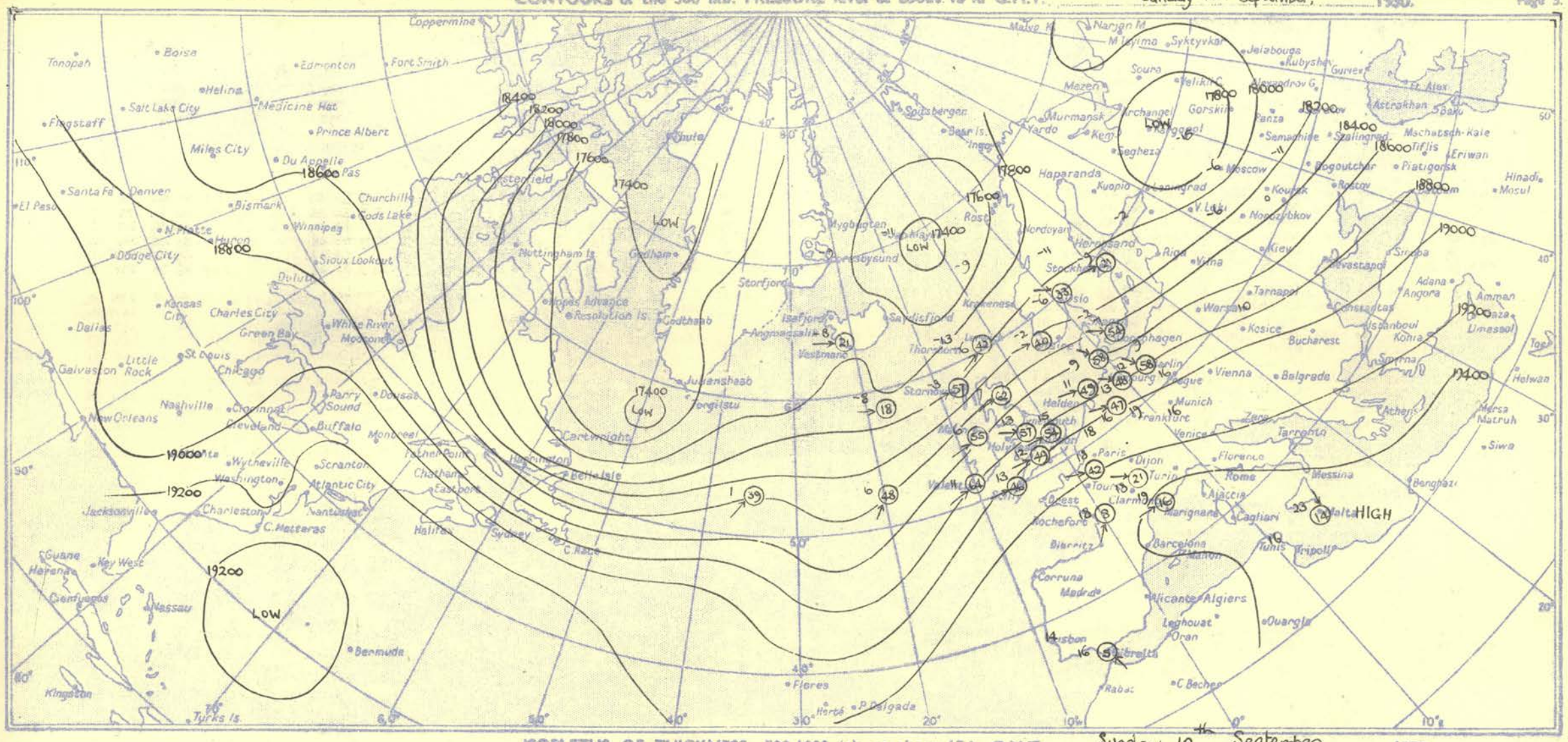
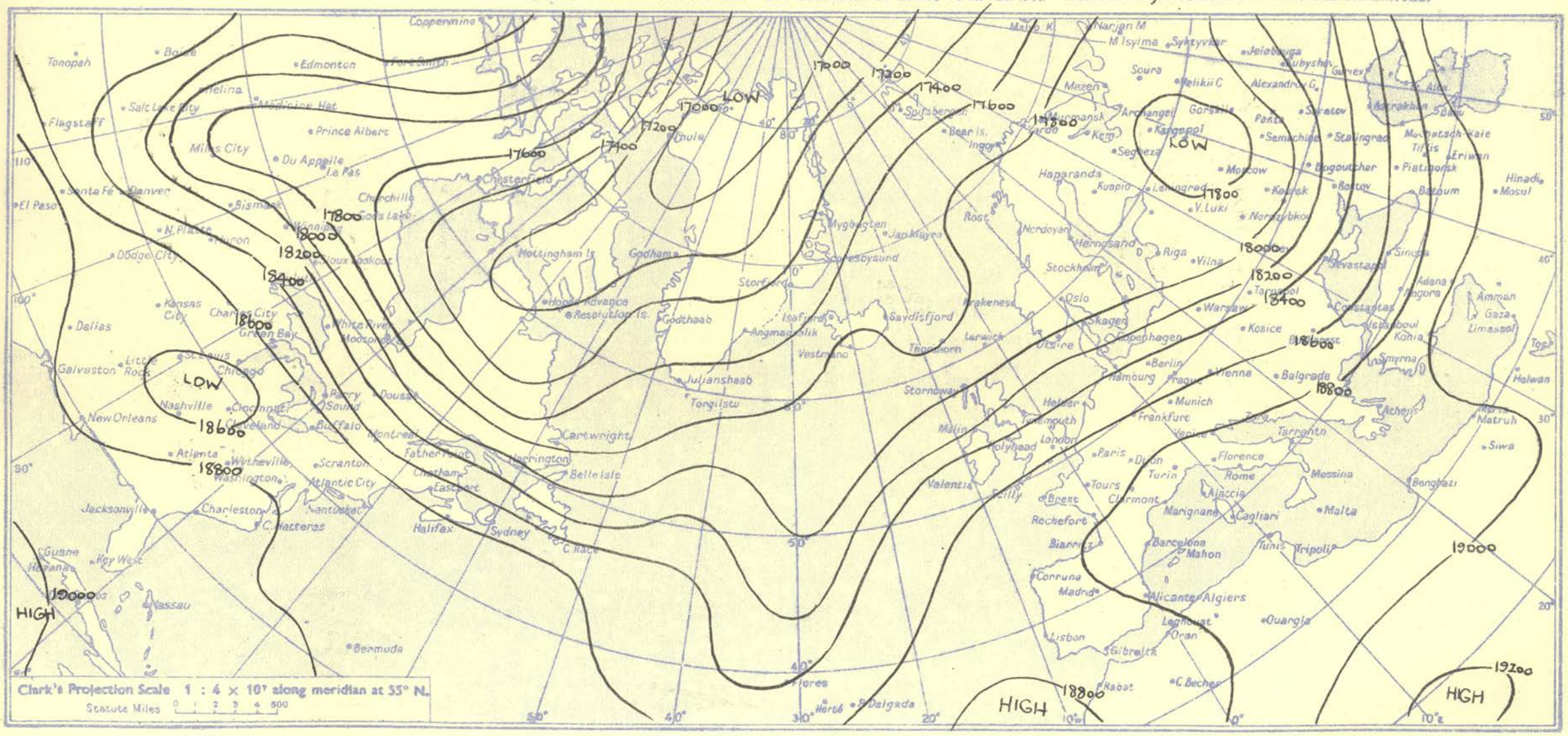
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Sunday 10th September, 1950.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Sunday 10th September 1950.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Sunday 10th September, 1950.

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.	1003·8 mb	1004·7 mb	1008·8 mb	1011·2 mb	1012·9 mb	1012·5 mb	1014·8 mb	1017·6 mb	1011·1 mb
Pressure: Surf	994·0 mb	1002·8 mb	1008·0 mb	1002·8 mb	1010·9 mb	1008·4 mb	999·3 mb	1007·4 mb	1009 mb
Pressure: Freezing	818 mb	770 mb	724 mb	716 mb	687 mb	629 mb	600 mb	593 mb	630 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	55	49	205	17	00·5	58	32	245	20	00·2	62	50	255	12
1000	1·0					1·3	57	50			2·6	61	49		
950		49	43	233	26		51	46	242	28		53	43	248	21
900	29·7	42	36	239	27	30·1	45	41	240	31	31·6	46	37	253	24
850		36	29	239	28		40	35	245	35		41	32	262	23
800	60·9	31	27	239	26	61·6	35	31	254	36	63·1	37	27	265	21
750		27	20	237	25		31	26	260	40		33	23	265	25
700	95·7	22	14	228	24	96·6	23	17	259	42	98·0	30	08	265	27
650		19	12	240	26		19	15	242	41		24	-06	259	31
600	135	11	03	242	32	136	14	11	238	47	138	21	-02	261	44
550		02	+03	243	32		07	03	241	51		16	08	260	53
500	180	-06	-12	245	42	181	-03	-10	250	57	184	07	00	256	62
450		-16	-23	245	46		-13	-26	254	63		-02	-09	256	65
400	232	-23	-37	247	54	235	-19	-29	255	78	239	-13	-21	257	68
350		-37	-45	250	87		-33	-43	254	87		-22	-33	260	84
300	297	-46		260	87	300	-41		254	108	306	-33	-48	268	103
250		-52		258	83		-48		255	119		-48			
200	386	-49		255	77	389	-50		250	82	395	-63			
170		-53		262	64		-53					-65			
150		-53		263	49		-55					-64			
130		-52		262	54		-57					-64			
110		-50		259	37		-53					-62			
100	537	-50		260	27	539	-50				541	-59			
90		-51		262	26							-56			
80		-52		250	26							-57			
70		-53		246	21										
60		-51		305	27										
	Isothermal 803 - 782mb. 31° 741 - 730mb. 26 675 - 650mb. 19°					Isothermal 485 - 425mb. 13°					Isothermal 814 - 704mb. 37° 397 - 385mb. 15° 308 - 298 mb. 33°				
Tropopause	I 258mb. -53° 33,000′					I 225mb. -53° 36,500′					II 198mb. -63° 39,700′				

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	02·3	61	46	200	08	00·6	64	54	270	08	01·2	60	50	270	15
1000						3·6	61	51	274	14	3·6	67	49		
950		53	42	216	11		53	45	287	17		60	46	274	18
900	32·0	46	39	228	12	32·5	48	40	236	21	32·9	52	41	274	17
850		45	28	238	13		43	36	240	18		45	35	270	20
800	63·7	40	25	247	21	64·2	42	22	269	21	64·8	44	29	269	21
750		34	17	248	27		41	07	272	27		45	17	272	28
700	99·0	31	15	250	39	98·8	36	22	269	28	101	41	-11	271	33
650		27	13	256	44		31	21	268	31		35	16	270	38
600	139	22	08	249	41	140	27	19	267	37	141	30	14	268	43
550		14	03	244	45		22	-06	275	48		25	-09	266	47
500	185	06	-03	251	55	187	13	02	277	57	188	15	-17	263	54
450		-04	-13	258	66		06	-05	269	60		07	-30	263	53
400	239	-14	-24	258	75	242	-05	-19	262	64	244	-03	-44	264	54
350		-22	-35	255	79		-16	-38	262	65		-14	-54	260	57
300	306	-35	-49	254	85	310	-30	-55	257	67	312	-30	-56	262	55
250		-51		248	78		-48		261	62		-49		260	57
200	394	-69		239	83	399	-65		248	65	400	-64		252	59
170		-72		244	78		-67		251	63		-73		254	54
150		-73		248	69		-71		257	63		-73		260	57
130		-71		249	57		-70		261	51		-73		264	53
110		-70		256	48		-67					-71		268	47
100	538	-69		256	46	543	-70				544	-71		267	40
90		-69		256	49		-67					-70		270	35
80		-69		259	33		-63					-70		278	32
70		-67					-60					-64		277	23
60		-64					-61					-61		280	21
	Inversion 891mb. 44° - 877mb. 47					(050) (mb) -58 Inversion 823mb. 40° - 812mb. 43° 772mb. 39° - 750mb. 41° Isothermal 467 - 450mb. 06°					(050) -62 (040) (mb) -57 Inversion 827mb. 41° - 776mb. 49° Isothermal 724 - 689mb. 41°				
Tropopause	II 190mb. -72° 40,300′					I 186mb. -67° 41,300′					I 170mb. -73° 43,400′				

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	65	52	280	10	02·9	61	53	270	06	00·3	60	60	180	14
1000	4·2					4·9	60	53	244	16	3·0	60	60	186	17
950		59	49	283	14		53	49	247	15		56	56	212	29
900	33·4	51	43	275	16	33·9	56	48	270	19	32·2	53	53	216	34
850		49	35	279	22		54	44	275	24		48	45	222	34
800	63·5	51	24	281	31	66·3	52	35	272	26	64·3	46	23	231	35
750		47	32	281	34		48	29	266	29		41	14	238	38
700	102	42	29	280	39	103	42	19	265	33	100	37	-05	243	41
650		38	19	276	44		39	13	259	39		34	17	242	49
600	143	32	06	271	45	144	33	07	258	41	141	28	20	243	53
550		23	-04	272	48		24	-01	259	42		20	08	240	57
500	189	12	-08	272	49	191	13	-11	264	46	187	11	03	241	64
450		08	-21	264	51		05	-13	260	45		05	-14	244	56
400	245	-03	-34	256	51	246	-03	-27	254	46	243	-06	-35	246	68
350		-17	-48	258	50		-17	-39	247	48		-18	-38	245	68
300	313	-32	-60	253	48	314	-33	-54	240	43	310	-31	-45	252	65
250		-43		256	45		-50		242	46		-49			
200	402	-63		243	37	402	-64		251	47	399	-66			
170		-67		247	49		-71		251	45		-66			
150		-71		251	47		-73		247	43		-65			
130		-71		253	41		-76		247	40		-68			
110		-70		254	36		-77		248	36		-71			
100	546	-71		262	30	545	-76		254	31	544	-66			
90		-69		257	30		-76		251	34		-68			
80		-65		267	26		-75		244	24		-66			
70		-63		258	18		-70		234	20		-63			
60		-61					-65					-59			
	Inversion 862mb. 46° - 834mb. 53° 495mb. 11° - 479mb. 14° Isothermal 834 - 818 mb. 53° 710 - 685 mb. 42°					(055) (mb) -62 Inversion 920 mb. 50° - 893mb. 58° 457mb. 03° - 445mb. 06° Isothermal 834 - 824mb. 53° 800 - 783 mb. 52°					(050) -57 (040) (mb) Isothermal 1009 - 1000mb. 60° 950 - 922 mb. 56° 831 - 800 mb. 46° 500 - 476 mb. 11°				
Tropopause	II 200mb. -63° 40,200′					II 170mb. -71° 43,600′					I 190mb. -69° 41,000′				

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.	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.	1002·0 mb	1003·0 mb	mb	1008·6 mb	1012·6 mb	1014·0 mb	1016·0 mb	1016·4 mb	mb
Pressure: Surf	992·1 mb	1001·7 mb	mb	1000·1 mb	1010·6 mb	1009·6 mb	1000·2 mb	1005·9 mb	mb
Pressure: Freezing	812 mb	822 mb	mb	693 mb	650 mb	618 mb	602 mb	600 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	50	220	16	00·5	52	52	230	07					
1000	0·5					0·9	52	51							
950		48	45	252	29		49	44	249	16					
900	29·1	42	39	254	30	29·6	43	39	286	14					
850		36	33	253	30		36	33	297	18					
800	60·4	31	26	252	32	60·8	31	30	284	18					
750		26	21	253	31		27	25	241	28					
700	95·1	20	13	254	34	95·5	22	20	235	33					
650		15	08	253	35		16	14	220	36					
600	134	10	-06	253	41	135	10	07	224	41					
550		02	-14	257	43		02	-01	223	42					
500	179	-06	-22	255	57	180	07	-12	230	49					
450		-18	-29	252	66		-19	-24	231	53					
400	232	-28	-36	253	75	232	-31	-37	243	70					
350		-39	-47	256	93		-39	-46							
300	296	-45		256	117										
250		-50		259	91										
200	345	-50		256	63										
170		-50		258	59										
150		-52		258	54										
130		-54		258	52										
110		-54		266	36										
100	535	-54		267	37										
90		-54		266	35										
80		-54		270	21										
70		-54													
60															
	Isothermal 367 - 335mb. 39° 275 - 250mb. 50°					Isothermal 1002 - 992mb. 52°									
Tropopause	I 234mb. -54° 38,000′					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	02·3	55	54	200	11	00·6	58	50	Calm		01·2	58	53	210	03
1000	2·4					3·5	57	45	245	09	3·9	59	53	241	21
950		53	52	222	21		51	44	241	14		57	50	248	21
900	31·3	51	49	234	27	32·3	45	42	245	22	33·0	51	46	256	18
850		48	46	242	35		48	48	253	31		45	38	264	18
800	63·3	43	41	246	71	64·3	44	44	257	31	64·9	46	33	277	22
750		37	34	246	42		39	38	256	33		46	37	279	31
700	98·8	33	30	249	51	99·9	34	24	257	41	101	40	33	276	35
650		28	25	255	54		32	-04	257	45		37	24	278	43
600	139	22	18	256	51	140	25	17	261	51	142	29	08	272	48
550		15	11	254	59		19	11	261	57		22	01	271	51
500	185	07	02	248	52	187	07	03	259	61	189	12	-08	272	55
450		-02	-08	248	56		01	-21	257	62		03	-19	269	50
400	240	-12	-19	248	63	241	-10	-30	256	51	244	-07	-28	277	56
350		-25	-33	252	76		-22	-34	260	61		-20	-39	263	57
300	306	-43		248	80	308	-38	-50	254	68	311	-39	-53	262	53
250		-58		258	95		-57		251	70		-58		268	52
200	393	-69		247	78	395	-71		253	77	398	-69		259	55
170		-65		249	70		-70					-77		260	57
150		-68		247	50		-75					-81		260	49
130		-72		248	49		-71					-79		260	41
110		-71					-69					-78		255	35
100	531	-71					-70				539	-76		250	36
90							-70								
80						(083) (mb)	-67								
70															
60															
	Isothermal 952 - 920mb. 53°					Inversion 885mb. 48° - 865mb. 49° Isothermal 900 - 885mb. 45°					Inversion 1010mb. 58° - 974mb. 60° 850mb. 45° - 824mb. 48° 790mb. 45° - 762mb. 47° Isothermal 695mb. - 670mb. 39°				
Tropopause	I 204mb. -70° 38,900′					I 197mb. -71° 39,800′					II 215mb. -69° 38,300′				

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	58	55	270	05	02·9	58	57	180	10					
1000	4·4					4·5	58	57							
950		53	50	260	15		58	57	233	26					
900	33·4	55	42	263	17	33·7	54	53	245	26					
850		53	43	261	22		49	48	244	27					
800	65·8	51	39	259	35	65·8	49	36	236	28					
750		45	29	260	29		44	29	234	33					
700	102	41	20	258	39	102	43	11	239	32					
650		38	05	256	35		40	00	243	37					
600	143	31	07	256	44	143	32	00	242	43					
550		23	05	260	46		22	00	239	41					
500	190	11	-07	262	46	190	12	-04	247	43					
450		01	-15	258	44		01	-12	248	38					
400	244	-07	-30	256	47	244	-07	-21	241	40					
350		-19	-41	257	42		-20	-35	242	43					
300	312	-35	-55	260	36	312	-39	-49	255	44					
250		-53		269	40		-57		253	49					
200	400	-66		258	48	398	-81		248	44					
170		-73		256	46		-82		248	53					
150		-76		257	48		-85		250	46					
130		-76		255	40		-89		252	38					
110		-73		254	35		-89		248	34					
100	542	-73		256	30	536	-88		247	33					
90		-69		258	35		-87		249	30					
80		-68		260	30		-86		250	23					
70						(077) (mb)	-85								
60															
	Inversion 940mb. 52° - 900mb. 55° Isothermal 435 - 420mb. -03°					Inversion 975mb. 56° - 950mb. 58° 823mb. 46° - 795mb. 50° 415mb. -08° - 400mb. -07° Isothermal 750 - 710mb. 44° 675 - 638 mb. 40°										
Tropopause	II 213mb. -66° 38,500′					II 200mb. -81° 39,800′									

No. 11430

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.

Monday 11th September 1950. Page 1.

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

METEO C... Valentia 21 SEP 1950

03hrs G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	03hrs G.M.T.	1001.8 mb	991.9 mb	786 mb
STORNOWAY	03hrs G.M.T.	1003.8 mb	1001.9 mb	779 mb
LEUCHARS	03hrs G.M.T.	1005.7 mb	1004.7 mb	770 mb
ALDERGROVE	03hrs G.M.T.	1005.0 mb	996.6 mb	682 mb
LIVERPOOL	03hrs G.M.T.	1008.7 mb	1006.7 mb	664 mb
DOWNHAM MARKET	03hrs G.M.T.	1013.8 mb	1003.4 mb	626 mb
LARKHILL	03hrs G.M.T.	1015.8 mb	999.5 mb	601 mb
CAMBORNE	03hrs G.M.T.	1014.4 mb	1004.0 mb	624 mb
Valentia	03hrs G.M.T.	1009 mb	1002 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	50	48	275	10	00·5	47	45	calm		0·2	53	52		
1000	0·4					1·0	48	46			01·5	52	52		
950		46	44	276	23		49	44	254	09		48	48		
900	28·9	42	36	268	25	33·7	44	40	266	10	30·2	44	43		
850		37	34	258	25		39	38	263	12		40	38		
800	60·2	33	28	259	24	61·1	33	29	267	14	61·6	35	33		
750		28	18	261	22		29	20	266	15		30	29		
700	95·0	21	13	262	24	96·0	27	08	268	22	97·0	25	23		
650		14	09	257	24		20	47	270	27		21	19		
600	134	07	-2	255	21	136	15	-24	272	33	136	15	12		
550		00	-16	251	24		07	-27	275	38		05	05		
500	179	-5	-10	256	36	181	-3	-31	270	38	182	00	-9		
450		-20	-27	248	50		-12	-38	272	49		-10	-15		
400	231	-32	-38	236	56	234	-22	-49	267	72	235	-21	-27		
350		-46		238	57		-34	-57				-35	-41		
300	295	-50		251	78						300	-50			
250		-56		251	82							-66			
200	383	-53		259	63						386	-65			
170		-57		258	56							-68			
150		-57		256	51							-65			
130		-57		259	41							-67			
110		-59		256	35							-65			
100	532	-60		255	31						532	-67			
90		-62		267	27							-65			
80	(85)	-62													
70															
60															

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	02·3	60	59	200	15	0·6	58	56			01·2	53	51	200	07	4·4	53	52	200	12	02·9	55	55	190	12	0·3	60	55		
1000	01·4						58	56			01·8	53	51			04·2					04·0	55	53			1·1	60	59		
950		57	56	234	24		56	54				59	53	244	25		55	54	224	20		58	58	219	30		54	54		
900	30·6	53	51	248	26	31·6	54	51			32·9	53	49	249	27	33·4	54	51	243	24	33·3	54	54	228	28	30·2	50	50		
850		50	47	254	28		51	46				49	43	254	29		49	46	243	30		48	48	225	25		47	46		
800	62·8	44	38	254	30	63·7	47	43			68·0	48	33	251	34	65·6	42	37	242	35	65·4	45	39	233	28	62·1	42	42		
750		39	32	255	34		41	38				41	27	250	36		45	27	241	40		41	20	234	33		37	33		
700	98·4	34	31	252	33	99·4	33	30				38	20	251	35	101	40	02	240	36	101	39	16	234	39	91·6	31	25		
650		29	25	248	40		31	21				35	10	252	36		38	-3	241	35		35	07	229	40		25	18		
600	139	23	19	250	43	140	24	00				28	-2	256	46	142	32	-1	243	33	142	29	-6	227	37	137	20	12		
550		18	14	246	53		18	-6				19	-8	259	54		20	-7	236	35		21	-11	226	40		13	-3		
500	185	10	05	240	63	186	09	-5				08	-12	261	55	189	10	-12	238	34	188	16	-12	214	38	183	04	-6		
450		02	-3	244	55		-2	-10				-4	-18	258	52		-2	-17	242	32		00	-14	214	38		-5	-11		
400	240	-10	-16	244	55	241	-14	-21				-14	-25	250	55	244	-10	-24	240	43	243	-10	-26	230	43	237	-16	-23		
350		-22	-29	243	64		-23	-31				-22	-35	252	58		-15	-41	236	66		-19	-34	231	56		-27	-36		
300	307	-36	-46	240	60	307	-36	-46				-33	-52	252	58	311	-33	-51	244	51	311	-34	-54	228	66	304	-43			
250		-51		238	85		-53					-57		251	68		-52		246	54		-52		227	64		-57			
200	395	-63		240	91	396	-69					-70		253	68	359	-72		246	58	359	-73		231	57	351	-61			
170		-60		241	69		-68					-71		251	60		-70		241	53		-70		230	64		-63			
150		-60		240	73		-67					-71		258	49		-72		248	49		-71		236	55		-64			
130		-61		241	49		-71					-73		257	40		-74		254	42		-74		235	38		-68			
110		-62		241	42		-71					-78		253	42		-75		247	40		-77		244	42		-69			
100	542	-63				539	-67					-71		254	37	542	-72		246	35	541	-74		243	32	536	-67			
90							-68					-69					-70		245	35		-69		224	27		-65			
80							-68					(96)					-70		242	22	(84)	-67					-67			
70							-65										-72									(74)	-70			
60							-65																							

Isothermal 340 - 308 mb 49°

Inversion (100 mb 47° - 982 mb 53°; 721 mb 27° - 710 mb 25°)

Inversion 682 mb 31° - 664 mb 32°

Inversion 275 mb 53° - 950 mb 59°; 670 mb 34° - 656 mb 36°; 404 mb 45° - 394 mb 47°

Isothermal 1009 - 975 mb 53°; 865 - 823 mb 49°

Inversion 999 mb 53° - 950 mb 59°; 800 mb 42° - 784 mb 46°; 681 mb 38° - 665 mb 37°; 410 mb 41° - 396 mb 39°

Inversion 780 mb 41° - 736 mb 45°; Isothermal 550 - 537 mb 38°; 825 - 782 mb 45°; 675 - 653 mb 36°

	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	Valentia
Tropopause	II 275 mb -55° 34400'	NR	I 234 mb -69° 35200'	I 214 mb -66° 38500'	I 197 mb -70° 39800'	I 210 mb -71° 38500'	I 200 mb -72° 39900'	II 201 mb -73° 39100'	I 218 mb -68° 37200'

09hrs G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	09hrs G.M.T.	1002.4 mb	993.5 mb	772 mb
STORNOWAY	09hrs G.M.T.	1004.9 mb	1003.0 mb	730 mb
LEUCHARS	G.M.T.	mb	mb	mb
ALDERGROVE	09hrs G.M.T.	1002.4 mb	994.0 mb	697 mb
LIVERPOOL	09hrs G.M.T.	1006.8 mb	1004.8 mb	660 mb
DOWNHAM MARKET	09hrs G.M.T.	1011.9 mb	1007.5 mb	622 mb
LARKHILL	09hrs G.M.T.	1013.1 mb	997.4 mb	631 mb
CAMBORNE	09hrs G.M.T.	1011.1 mb	1000.1 mb	700 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
Surf	02·7	52	47	300	03	0·8	51	50							
1000	0·9					1·3	52	51							
950		47	43	315	12		48	47							
900	29·3	43	36	312	16	29·9	43	37							
850		39	26	301	18		37	32							
800	60·9	35	23	288	19	61·2	36	24							
750		30	17	286	18		32	13							
700	95·8	25	12	283	19	96·2	29	02							
650		21	-2	284	24		23	-08							
600	135	13	-10	290	27	136	16	-16							
550		06	-19	295	30		08	-28							
500	180	-3	-29	292	33	181	-01	-40							
450		-12	-40	289	42		-9	-47							
400	234	-24	-54	282	42	235	-24	-57							
350		-37	-60	274	39		-35	-58							
300	299	-45		264	102	300	-48								
250		-58		264	108		-66								
200	387	-50		259	80	386	-63								
170		-52					-59								
150							-58								
130							-58								
110							-57								
100						534	-57								
90															
80															
70															
60															

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	02·3	60	58	220	15	0·6	63	55	200	05	01·2	59	57	180	07	4·4	59	55	230	18	02·9	55	69	180	13
1000	0·6					0·9	62	58	208	20	03·3	58	57			3·7					03·1	55	55		
950		51	55	229	22		59	55	213	27		54	53	238	23		59	55	216	23		08	58	210	31
900	29·9	54	50	232	28	31·2	56	53	225	37	32·4	51	51	249	25	32·9	55	50	224	26	32·3	53	52	222	34
850		50	46	232	34		51	44	236	37		51	47	255	26		50	43	233	33		48	46	226	30
800	62·0	45	41	234	32	63·3	45	39	238	37	64·6	46	44	249	22	65·4	51	38	241	36	64·3	44	40	228	31
750		37	34	229	34		38	35	233	33		42	40	238	25		45	30	240	38		38	36	228	43
700	91·6	32	30	220	35	99·0	33	29	240	35	100	40	13	242	25	101	38	24	233	43	100	32	30	226	48
650		28	25	214	36		31	13	233	35		36	06	242	38		34	13	223	35		25	24	228	53
600	138	22	18	208	29	139	23	06	228	41	141	30	00	241	40	(142	25	09	220	47	140	19	16	226	58
550		15	11	207	30		15	-5	224	54		23	-4	230	44		26	04	229	49		14	11	216	64
500	184	05	03	208	35	186	09	-8	219	57	188	12	-2	224	39	189	13	-09	224	47	186	08	03	210	70
450		-01	-9	216	48		-2	-11	216	55		01	-13	215	34		02	-14	226	43		-5	-8	200	74
400	239	-10	-20	211	36	240	-11	-15	227	58	243	-7	-27	228	40	244	-9	-20	226	48	240	-17	-25	216	78
350		-23	-32	204	39		-23	-31	225	66		-16	-27	238	52		-16	-27	229	62		-22	-41	214	87
300	305	-38	-47	204	42	307	-35	-43	227	79	311	-26	-36	241	64	311	-28	-42	224	66	307	-35	-47	213	87
250		-53		205	57		-31		224	85		-46		238	71		-49		221	75		-55		216	52
200	393	-62		211	76	395	-61		225	74	400	-67		239	73	400	-66		222	63	396	-58			
170		-59		224	63		60		233	58		-65		240	68		-61		233	62		-62			
150		-59		234	52		-59					-63		248	51		-63		231	54		-60			
130		-58		235	41		-60					-66		251	49		-61		228	35		-63			
110		-58		240	41		-59					-66		246	39		-63		254	33		-67			
100	542	-68		242	38	543	-58				546	-66		247	33	(107)	-64				542	-66			
90		-59		243	29		-56					-64		249	30							-67			
80		-59		248	27		-54					-65		251	28	Inversion						-64			
70							-55					-64		252	24	956 mb 56° - 950 mb 59°						-60			
60							-60					-61		255	15	835 mb 50° - 818 mb 51°									
							-63				Inversion					Isothermal					Inversion				
											935 mb 54° - 915 mb 58°					860 - 835 mb 50°					576 mb 36° - 550 mb 38°				
											604 mb 29° - 595 mb 31°					827 - 550 mb 26°					400 mb -1° - 380 -3 46°				
											404 mb -8° - 390 mb -6°					400 - 388 mb -5°									
											340 mb -18° - 335 mb -17°															
											Isothermal 960 - 935 mb 54°														

Isothermal 705 - 671 mb 25°

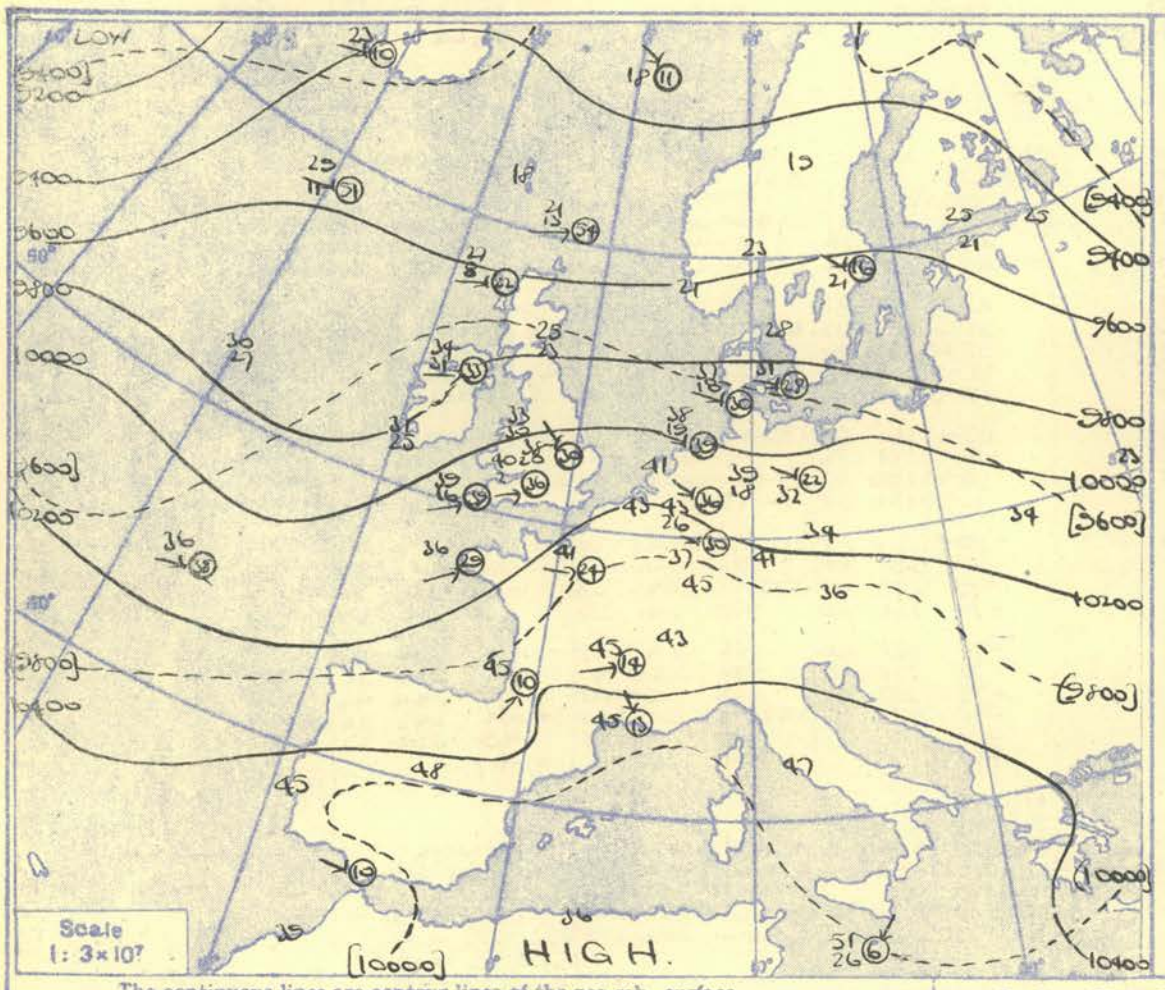
Inversion 840 mb 36° - 825 mb 38°; Isothermal 750 - 730 mb 32°

Isothermal 680 - 660 mb 32°; 558 - 550 mb 15°

	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE
Tropopause	II 294 mb -60° 34300'	II 248 mb -67° 34000'		I 210 mb -63° 38200'	II 226 mb -62° 36800'	I 195 mb -69° 40600'	I 204 mb -66° 39500'	II 245 mb -55° 35200'

September 11TH 1950.

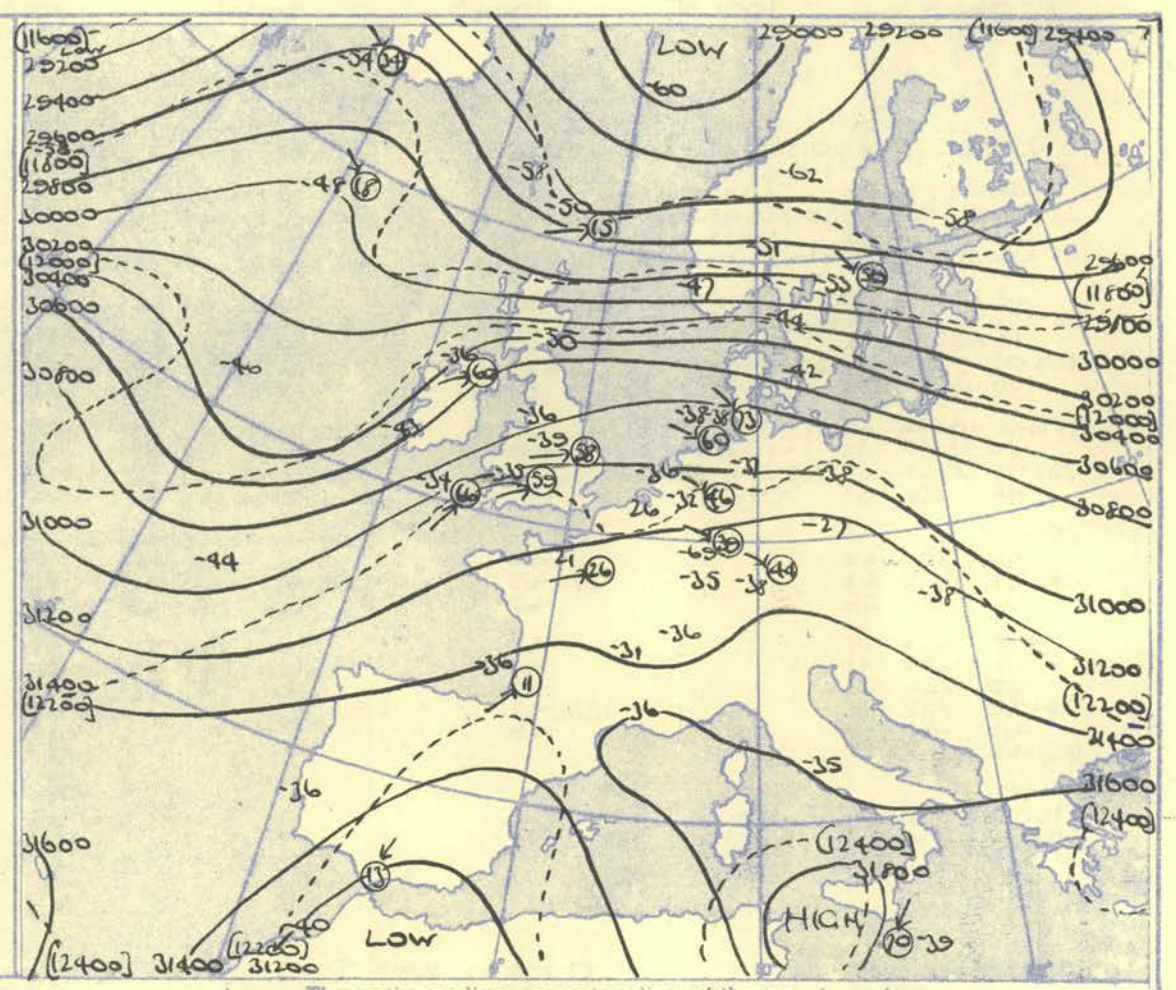
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h, G.M.T.



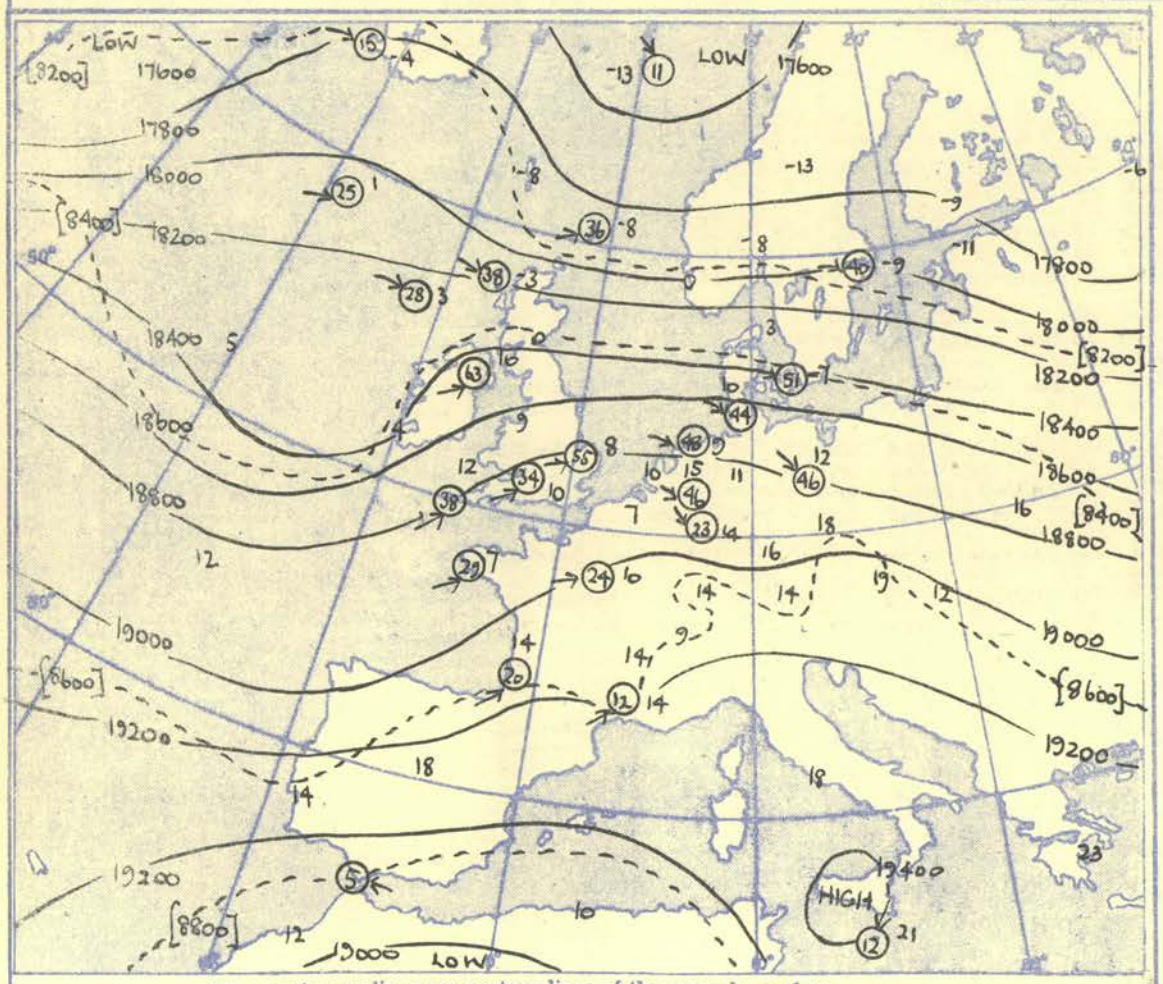
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

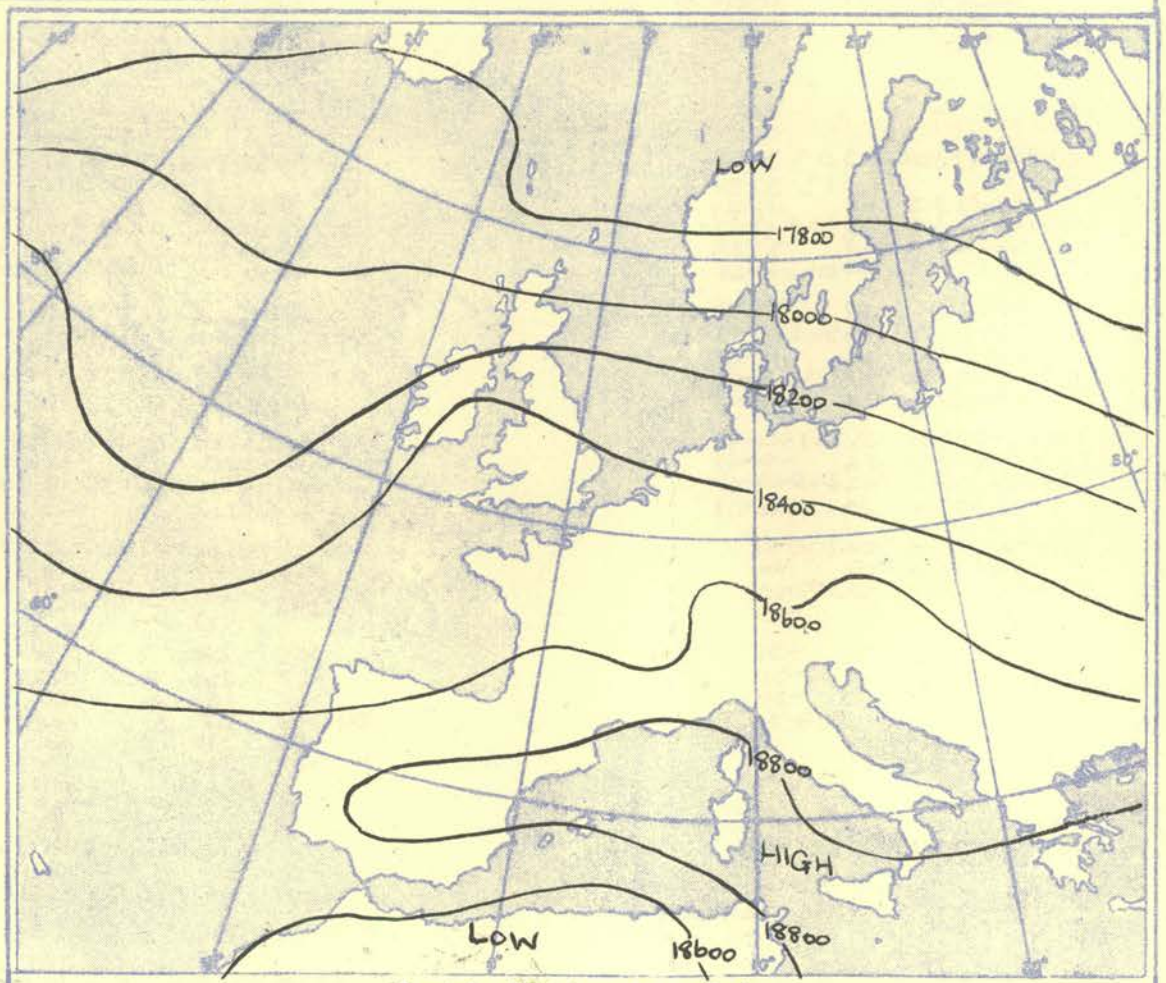
100 60 40 30 20 15 10 knots



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 20 SEP 1950

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

Pressure mb	48·2N. 20·5W. Height ft./100	°F. Temp.	°F. Dew	49·5N. 14·7W. Height ft./100	°F. Temp.	°F. Dew	51·3N. 00·4E. Height ft./100	°F. Temp.	°F. Dew	43·2N. 17·0W. Height ft./100	°F. Temp.	°F. Dew	39·5N. 12·2W. 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	1430h.			16h.			1403h.			1230h.			1415h.												
M.S.L.	1016 mb			1016 mb			1011·8 mb			1024 mb			1024 mb			mb			mb			mb			
Surf	1013 mb			1013 mb			1000·6 mb			1000 mb			1020 mb			mb			mb			mb			
Freezing	665 mb			665 mb			681 mb			620 mb			630 mb			mb			mb			mb			
Surf	010	59	50	010	58	47	31	61	59		66	63		69	65										Surf
1000	405			405						66	63		66												1000
950		50	46		48	44		57	53	66	57	55	66	59	58										950
900	333	44	44	331	41	38	324	53	50		49	49		53	53										900
850		42	34		36	35		50	47		44	44		60	50										850
800	650	43	11	641	47	37	646	45	43		50	34		55	40										800
750		43	09		42	21		41	34		50	47		48	38										750
700	101	37	14	100	35	21	100	33	30	104	43	28	105	43	35										700
650		29	06		29			29	24		37	30		33											650
600	141	24	16	141	23		141	23			28			29											600
550		18			16			15			18			21											550
500	187	07		187	07		187	06 -05		191	09		193	10											500
450																									450
400																									400
350																									350
300																									300
250																									250
200																									200
170																									170

Cloud. 2/8 Sc 900-880mb. 7/8 Cs 3xx-3xxmb. Inversion 850mb. 42° 800mb. 43° Isothermal 800-780mb 43°

Cloud. 2/8 Cu 940-830mb. 8/8 Sc 860-840mb. 5/8 Cs 3xx-3xxmb. Inversion 850mb. 35° 800mb. 47°

Engine failed at 450mb. unable to climb higher on remaining engine. Cloud. 8/8 Sc 760-750mb. 8/8 As 750-450mb.

Inversion 850mb. 44° - 800mb. 50° Isothermal 800-740mb. 50° Cloud. 8/8 Cu 960-870mb. Surf. wind: N. 4-6kts.

Inversion 900mb. 53° - 850mb. 60° Cloud. 6/8 Sc 910-800mb. 2/8 Cs 400mb. upwards T:N·R

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

Place	Leuchars																				Place
Time	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.	030	06																			Surf.
1,000	038	15																			1,000
2,000	057	16																			2,000
3,000	048	15																			3,000
4,000	044	12																			4,000
5,000	320	09																			5,000
6,000	312	10																			6,000
8,000	301	12																			8,000
10,000	308	13																			10,000
14,000	300	13																			14,000
18,000	303	06																			18,000
24,000	171	10																			24,000
30,000	144	11																			30,000
40,000	254	36																			40,000
50,000	251	34																			50,000
	251 (51,000')	34																			

NEPHOSCOPE OBSERVATIONS

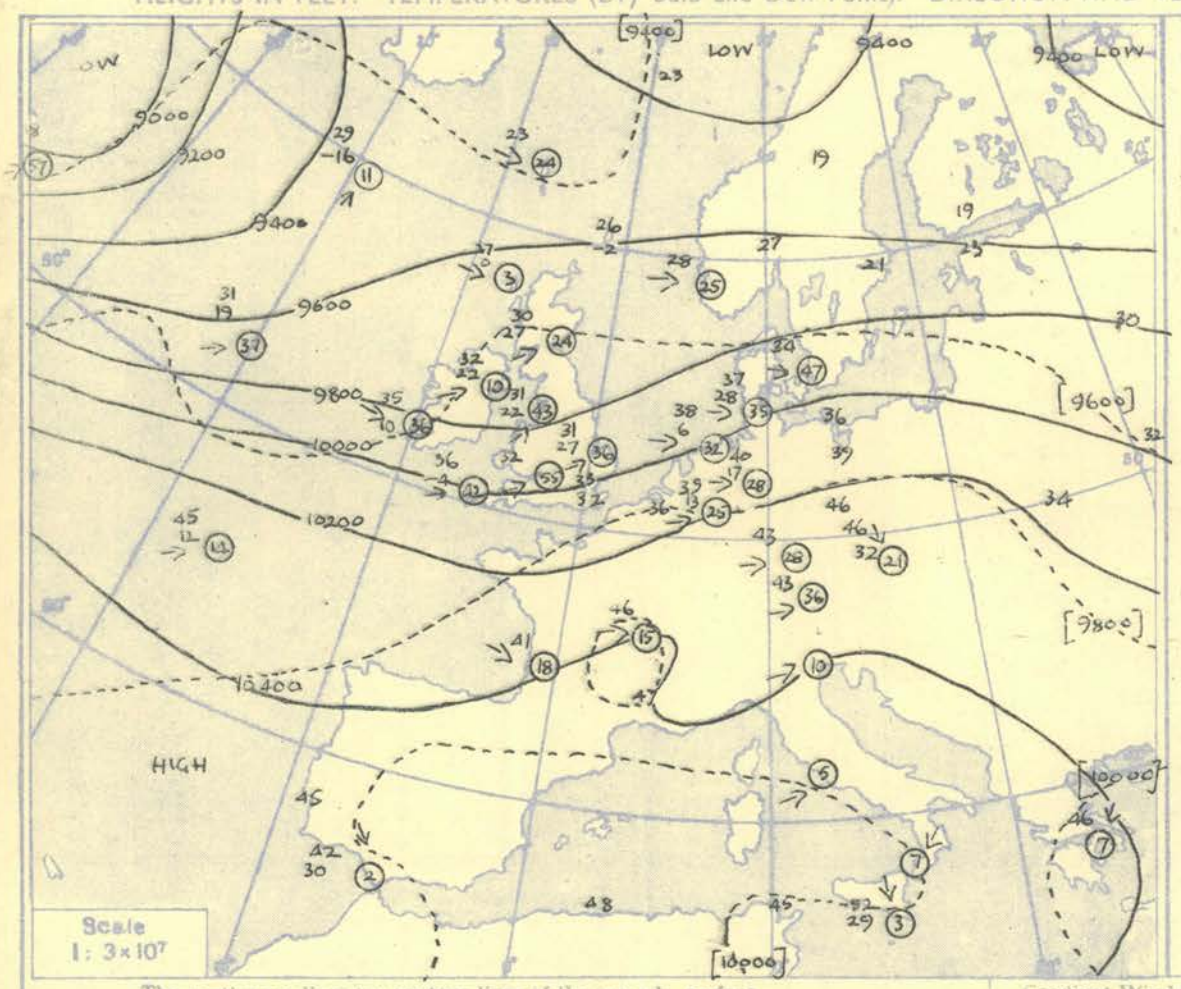
Place	Valentia											Place
Time Type	15h. Ci											Time Type
Dir. Vel.	280 80											Dir. Vel.

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

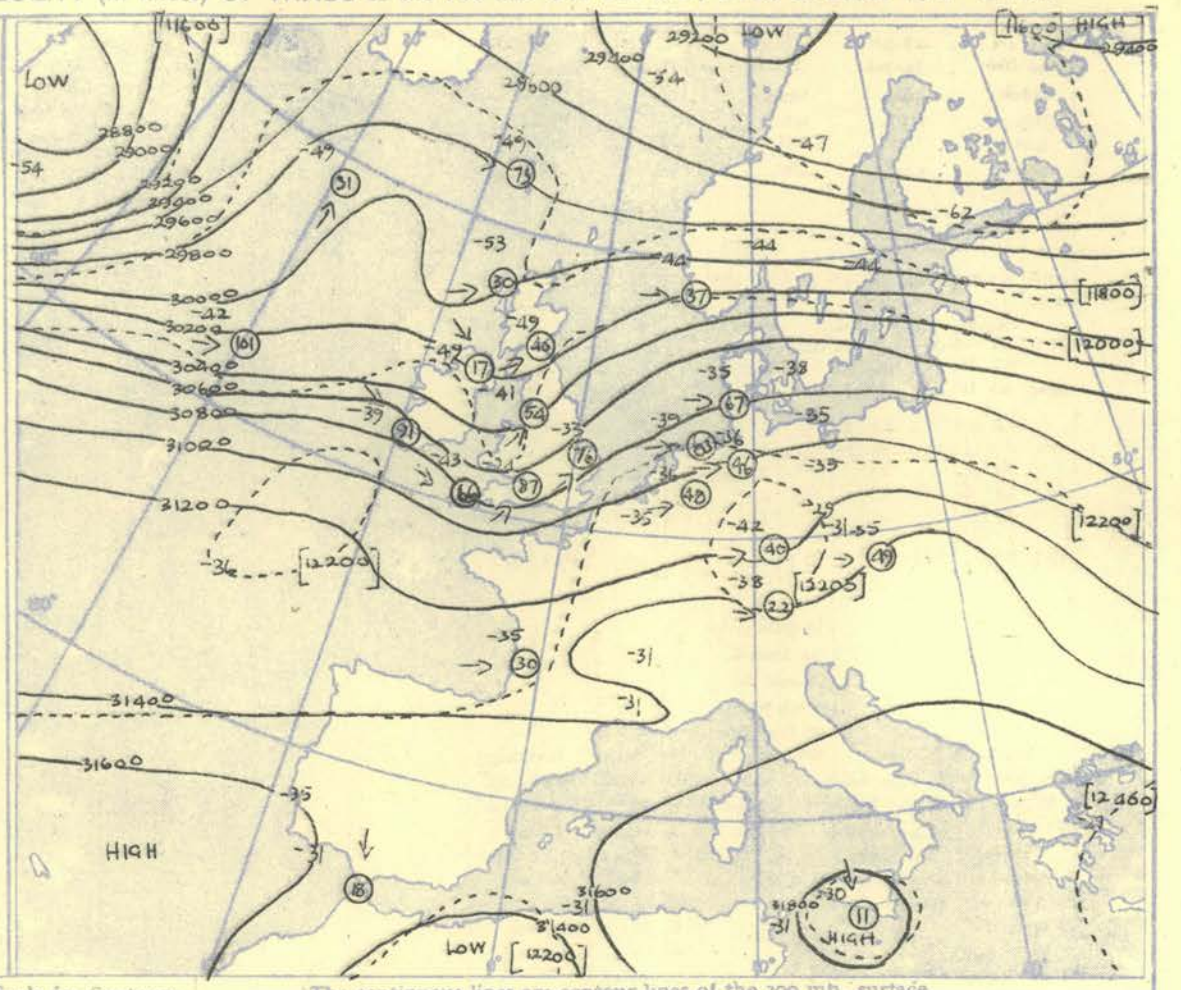
Ship	Weather Observer					Weather Observer					Weather Observer					Weather Observer					Weather Watcher				
Lat/Long	58·8N 18·6W					58·0N 19·0W					58·8N 18·7W					59·0W 18·6W					52·7N 19·5W				
Time	03h G.M.T.					09h G.M.T.					15h G.M.T.					21h G.M.T.					03h G.M.T.				
Pressure M.S.L.	1006 mb					1004 mb					1002 mb					999 mb					1010 mb				
Pressure Surf	1005 mb					1004 mb					1002 mb					999 mb					1010 mb				
Pressure Freezing	760 mb					735 mb					765 mb					830 mb					730 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
Surf		51	45	300	02		52	47	Calm			53	47	150	12		53	48	160	16		55	54	300	20
1000	10	50	43			09	52	47			06	53	47			-06					2·7	54	53		
950		44	38	280	05		46	40	153	03		46	40	163	10		46	40	158	16			46	45		
900	295	40	32	251	03	295	40	33	180	04	291	40	35	166	12	279	39	33	162	20	313	39	39		
850		33	27	254	02		35	31	196	05		36	31	169	15		34	28	164	21		36	32		
800	607	36	11	251	02	608	36	19	197	05	603	33	21	171	12	590	29	23	165	21	625	41	15	227	25
750		31	14	257	04		33	12	197	06		31	09	174	12		29	20	177	24		39	01	232	28
700	957	29	11	260	04	958	30	13	198	07	952	29	-16	188	11	987	23	06	189	30	976	33	19	236	34
650		21	00	264	09		24	03	201	14		24	16	196	14		15	-02	193	33		26	18	237	31
600	135	15	-08	266	16	135	19	-10	205	14	135	18	08	204	18	133	11	01	182	34	137	18	02	238	30
580		08	-19	251	15		12	-03	214	11		10	01	201	18		04	-04	168	34		12	08		
500	181	01	-17	259	25	181	05	-09	222	10	181	01	-07	185	19	178	-04	-12	167	34	183	05	-02		
450		-07	-25	276	24		-06	-21	227	15		-08	-16	181	25		-13	-22	173	35		-06	-13		
400	235	-19	-39	285	33	285	-17	-34	229	23	234	-20	-29	180	29	231	-25	-36	175	39	237	-18	-25		
350		-33	-54	294	30		-32	-49	233	23		-33	-41	182	29		-39	-50	168	43		-31	-37		
300	300	-48		295	25	301	-46		240	16	300	-49		182	31	295	-55		172	40	303	-46			
250		-66		290	36		-65		230	15		-67		178	31		-74		172	40		-62			
200	385	-61		290	26	387	-68		224	23	385	-61		187	25	381	-61		176	31	389	-80			
170		-55		285	27		-54		225	27		-53		210	25		-55		188	22		-72			
150		-54		272	24		-62		223	28		-50		213	23		-55		193	25		-66			
130		-55		269	21		-49		236	23		-49		217	22		-55		202	21		-53			
110		-54		258	21		-52		234	21		-50		218	28		-54		224	21	(120 mb)	-71			
100	535	-54		267	24	537	-51		226	25	536	-47		222	19	530	-54		232	24					
90		-52		251	29		-50		228	24		-46		236	18		-56		235	28	538	-52			
80		-53		239	33		-49		232	21		-47		241	15		-54		238	24		-52			
70		-55		224	32		-51		235	15	(076 mb)	-48					-55		238	14					
60	(067 mb)	-55					-50		228	15							-57		224	15					
							-48		226	13							-57		203	17					
							-47		227	13						(044 mb)	-58								
Tropopause	Isothermal 716-698 mb 29°					(030 mb) Inversion 850mb 35° - 800mb 36° Isothermal 857-850 mb 55°					Inversion 813 mb 32° - 794 mb 34° Isothermal 1002 - 1000 mb 53°					Inversion 777mb 27° - 756mb 29° Isothermal 756 - 750mb 29° 644 - 616 " 13°					Inversion 850 mb 32° - 830 mb 38°				
	II 225 mb - 75° 36,100'					I 218mb - 75° 36,900'					I 219mb - 79° 36,600'					I 248mb - 76° 33,600'					I 200mb - 80° 38,900'				

Ship	Weather Watcher					Weather Watcher					Weather Watcher					Weather Explorer					Ship
Lat/Long	52·4N 20·4W					52·6N 20·1W					52·5N 20·0W					56·8N 11·2W					Lat/Long
Time	09h G.M.T.					15h G.M.T.					21h G.M.T.					03h G.M.T.					
Pressure M.S.L.	1010 mb					1007 mb					1000 mb					1005 mb					Time
Pressure Surf	1010 mb					1007 mb					1000 mb					1005 mb					Pressure M.S.L.
Pressure Freezing	695 mb					710 mb					780 mb					705 mb					Surf / 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	Pressure mb
Surf		54	53	270	12		56	50	200	21		56	55	240	23		55	51	280	14	Surf
1000	28	53	52	261	26	18	55	49	200	21	01	55	55	240	23	14	54	50			1000
950		47	44	251	25		48	44	205	37		52	52	250	34		48	43	007	03	950
900	313	40	36	241	22	304	43	39	212	40	287	48	43	248	37	300	42	36	L and V		900
850		36	30	230	23		36	33	224	39		42	36	245	39		37	31	184	06	850
800	627	41	15	227	25	617	33	28	240	36	603	35	33	243	40	614	41	14	040	02	800
750		39	01	232	28		33	15	242	33		30	20	238	46		36	-11	840	03	750
700	985	33	19	236	34	968	31	19	231	37	952	28	03	233	52	967	31	-15	293	10	700
650		26	18	237	31		24	15	229	37		22	-01	229	53		24	-24	296	13	650
600	138	18	02	238	30	137	18	-05	224	48	135	16	-15	230	60	137	17	-31	294	14	600
580		10	01	235	38		11	06	224	47		10	-28	231	75		12	-46	280	20	550
500	184	00	-05	234	49	182	01	-07	232	51	180	08	-19	233	78	182	03	-52	269	28	500
450		-08	-15	236	39		-10	-20	228	54		-06	-24	238	81		-07	-50	263	36	450
400	238	-18	-25	237	46	236	-21	-28	225	58	234	-18	-31	237	92	236	-20	-60	255	39	400
350		-31	-39	238	52		-31	-40	228	78		-28	-37	236	114		-32	-60	242	47	350
300	303	-46		243	68	301	-42		251	101	300	-44		236	114	301	-46		223	80	300
250		-61		250	80		-58		238	105		-60		236	144		-62		225	91	250
200	389	-71		257	74	388	-67		256	95	387	-73		236	165	388	-60		240	64	200
170		-63		259	56		-61		252	74		-65		236	84		-59		249	56	170
150		-57		253	46		-59		240	48		-61		236	56		-60		256	53	150
130		-53		249	37		-55					-62		236	48		-60		261	45	130
110		-53		245	26		-54					-61		236	44		-56		250	45	110
100	538	-52		244	22	537	-52				533	-59		236	37	536	-57		254	38	100
90		-52		244	20		-52					-59		236	35		-56		249	27	90
80							-52					-59		236	32		-57		263	29	80
70							-51					-59				(72 mb)	-54				70
60							-49														60
Tropopause	Inversion 858 mb 35° - 822 mb 42°					Inversion 790 mb 33° - 780 mb 34° 764 " 32° - 735 " 35° Isothermal 800 - 790 mb 33°					Inversion 762 mb 29° - 741 mb 31°					Inversion 834 mb 35° - 807 mb 42°					Tropopause
	I 210 mb - 74° 37,900'					I 208 mb - 68° 38,000'					I 208 mb - 75° 31,800					I 232 mb - 69° 35,700'					

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

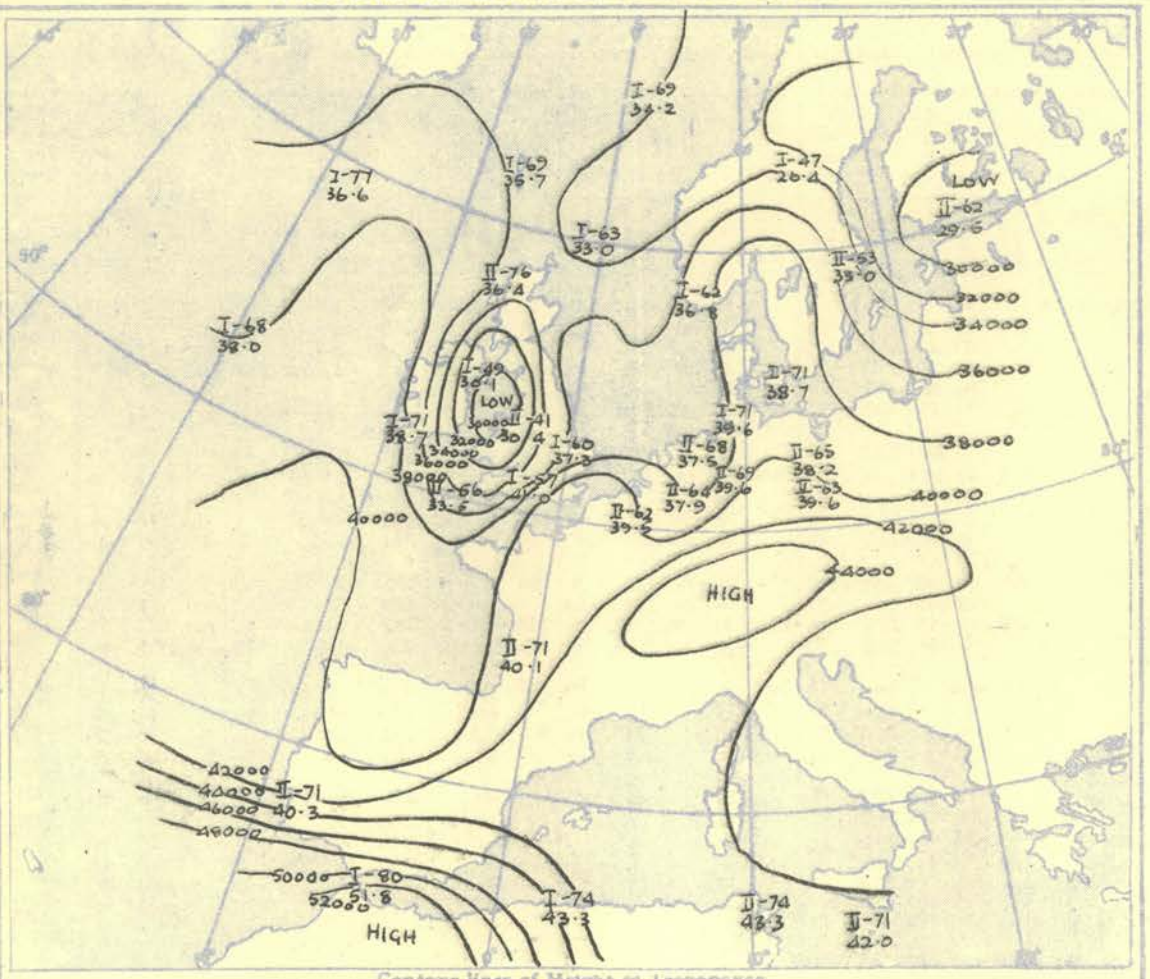


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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 15 h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

The degenerate cold trough in the Western Atlantic moved across the British Isles. A fresh outbreak of cold air rushed into the northeastern Atlantic to develop a tight thermal gradient in about latitude 50° N from America to 20° W.

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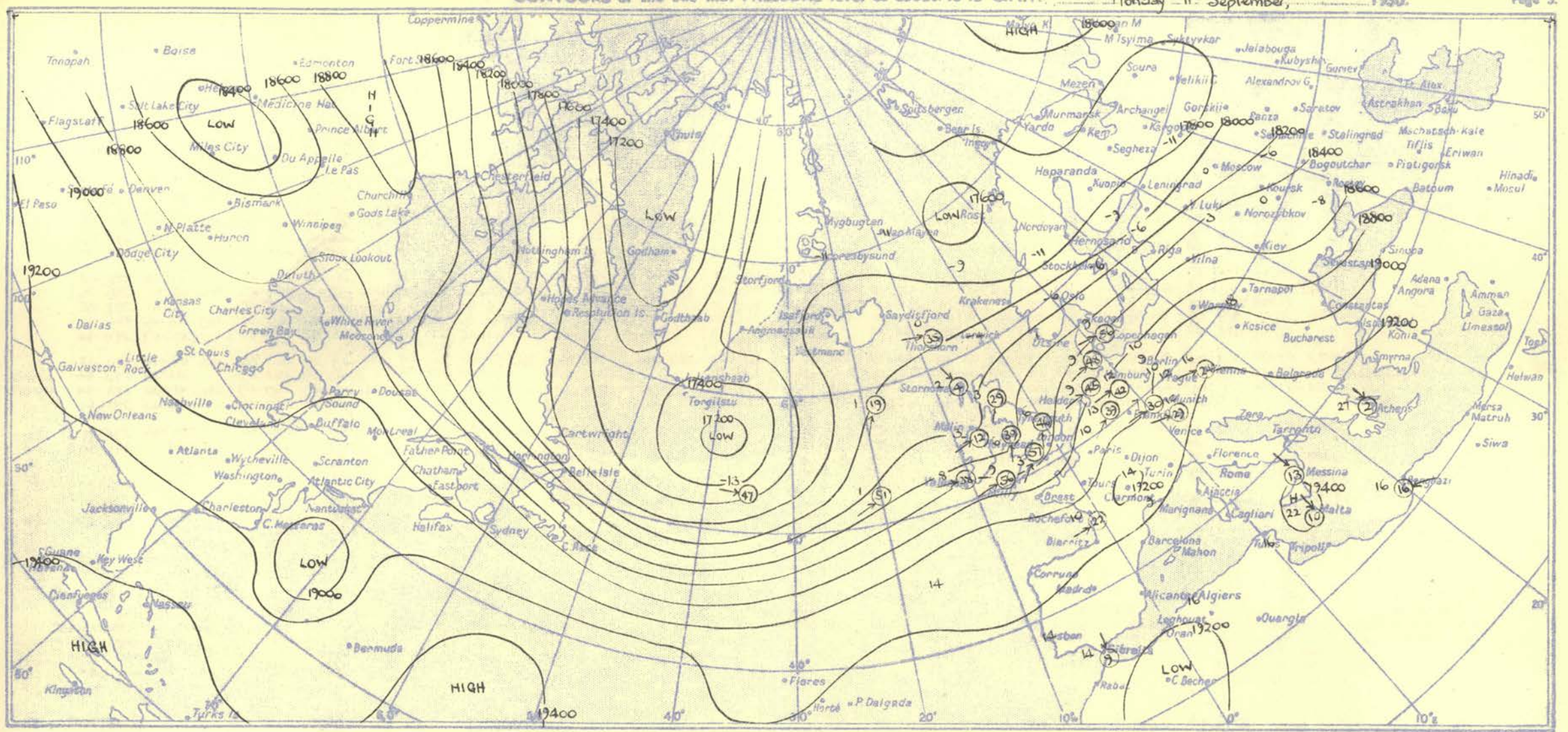
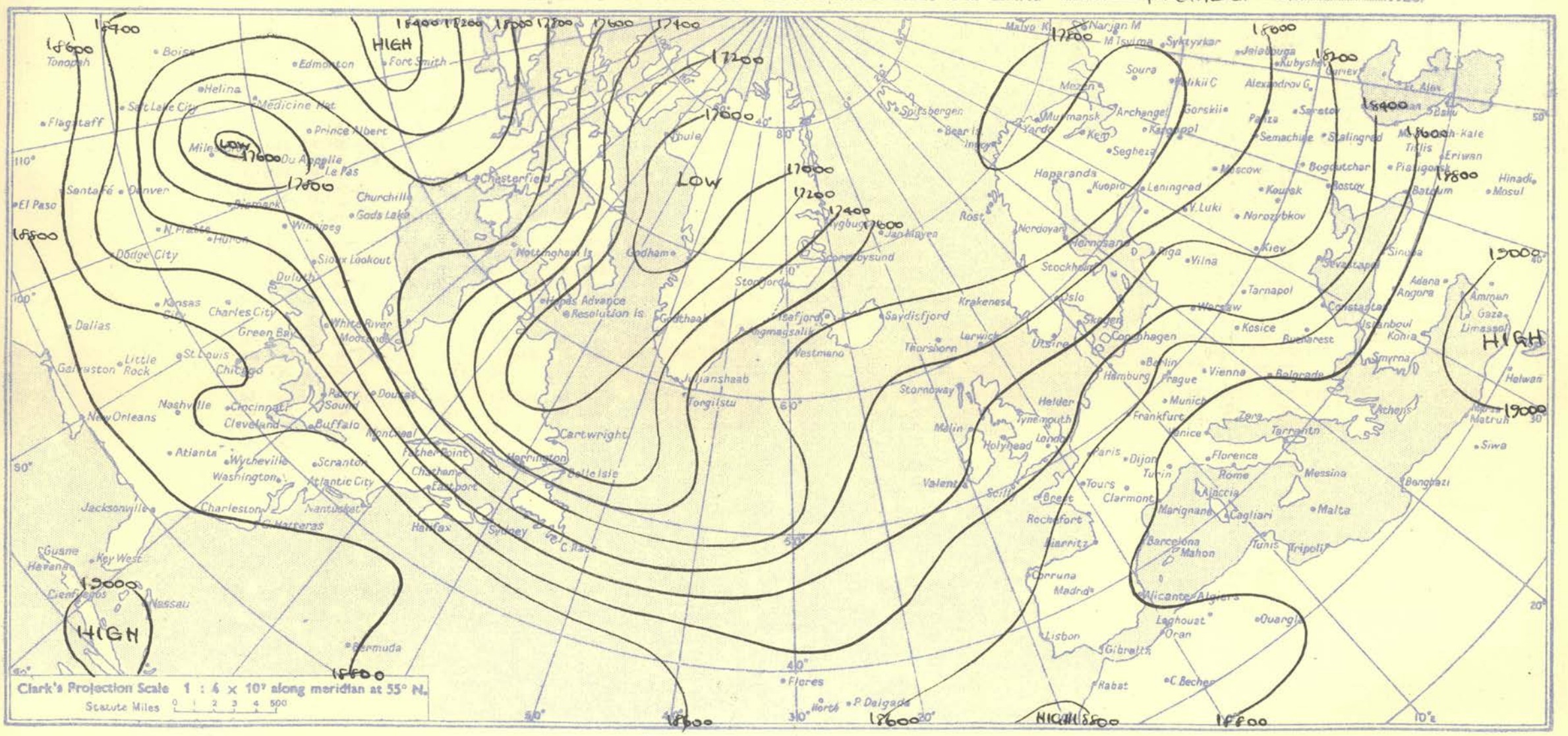
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Monday 11th September, 1950.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. September 11TH 1950.



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.	1004·9 mb	1003·3 mb	1001·7 mb	999·0 mb	1003·0 mb	1008·6 mb	1010·1 mb	1011·6 mb	1011·1 mb
Pressure: Surf	995·0 mb	1001·4 mb	1000·9 mb	990·7 mb	1001·0 mb	1004·3 mb	994·4 mb	1001·2 mb	1009 mb
Pressure: Freezing	748 mb	726 mb	720 mb	700 mb	710 mb	705 mb	700 mb	650 mb	660 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
Surf	02·7	52	48			00·5	57	53	030	10	00·2	54	54	080	16	02·3	63	57	240	05
1000	1·3					0·9	56	52			0·4					0·3				
950		46	43				51	46	057	17		51	51	091	24		58	52	253	11
900	29·8	40	37			29·7	45	38	079	16	29·2	50	50	117	18	28·9	52	46	258	13
850		36	32				40	32	079	10		47	47	190	13		47	41	262	11
800	61·1	32	24			61·2	38	15	081	05	61·1	42	42	224	21	60·8	42	36	258	11
750		32	05	No			35	09	358	03		36	36	235	24		37	30	256	11
700	95·9	26	-02			96·4	29	00	269	03	96·0	30	29	234	25	96·3	32	22	245	10
650		20	-20	winds			21	-08	262	04		25	24	230	25		25	12	236	11
600	135	16	-24			136	13	-21	268	05	136	19	17	221	25	136	18	06	240	11
550		06	-32	reported.			13	-27	274	03		12	08	210	26		11	03	242	12
500	181	-04	-41			182	02	-38	324	04	182	03	-06	205	29	182	03	-10	254	12
450		-14	-50	Radar			-09	-48	332	09		-07	-22	205	25		-06	-18	272	18
400	234	-26	-58			235	-22	-55	230	09	236	-17	-26	208	30	236	-19	-29	263	19
350		-36	-53	u/s.			-36	-89	261	23		-31	-40	218	36		-33	-45	265	16
300	298	-49				300	-53		228	30	302	-49		213	40	301	-49		273	17
250		-03					-71		227	86		-60		211	54		-47		262	27
200	385	-52				385	-60		235	40	388	-56		240	52	390	-50		228	36
170		-58					-58		241	36		-59		240	40		-54		239	44
150		-53					-59		248	38		-58					-57		240	38
130		-52					-59		253	35							-54		241	41
110		-52					-59		243	27							-56		240	34
100	536	-53				533	-59		245	35						540	-56		242	27
90		-54					-58		247	31							-58		239	28
80	(85 mb)	-54					-57		262	22							-56		242	24
70							-56		247	21							-56		237	26
60							-55		252	21							-55		239	23
	Isothermal 800 - 780mb. 32° 364 - 347mb. -36°					Inversion 600mb. 13° - 585mb. 14° Isothermal 850 - 833mb. 40° 585 - 555mb. 14° 250 - 236 mb. -71°					Inversion 955mb. 51° - 940mb. 52° 260 mb. -61° - 252 mb. -60°									
Tropopause	II 260mb. -63° 33,000'					II 221mb. -76° 36,400'					I 228mb. -65° 37,000'					I 300mb. -49° 30,100'				

Pressure mb	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
Surf	00·6	62	57	220	18	01·2	63	60	200	15	04·4	61	59	230	18	02·9	61	52	270	20	02·3	59	52	275	15
1000	0·8	62	57			2·4	62	58			2·8					3·2	61	52			3·0	58	52	278	17
950		58	53	221	31		57	54	218	34		57	51	240	33		53	47	261	34		51	45	291	38
900	30·0	53	48	220	36	31·7	52	49	227	40	32·1	55	46	251	41	32·1	46	39	261	35	31·8	44	39	292	32
850		48	39	220	44		49	43	232	45		51	42	251	44		46	36	259	40		39	36	291	32
800	62·0	45	32	221	43	63·7	43	36	235	51	64·2	43	37	245	45	63·9	44	18	258	42	63·3	37	24	290	30
750		37	24	218	42		36	32	234	45		38	33	236	55		41	08	258	41		39	22	288	35
700	97·6	31	22	213	43	99·1	31	27	221	36	100	32	27	228	55	100	36	-04	257	42	98·4	35	10	286	36
650		27	20	203	38		26	22	209	39		26	19	224	53		32	-05	267	46		30	01	287	36
600	138	19	08	206	32	139	21	16	206	44	140	20	12	223	53	140	25	-06	269	51	139	23	-06	286	40
550		11	05	216	30		14	09	206	42		12	-04	222	57		18	-16	268	55		17	-07	276	40
500	184	06	-01	211	33	185	06	00	214	46	186	03	-16	222	57	181	09	-28	265	56	185	08	-14	273	38
450		-04	-11	202	39		-05	-29	228	57		-05	-29	228	57		-02	-38	263	59		-01	-22	273	46
400	238	-14	-22	199	45	239	-15	-23	219	66	240	-16	-36	220	63	241	-14	-48	269	59	240	-11	-30	273	50
350		-27	-35	201	48		-28	-37	212	84		-21	-44	208	79		-28	-56	275	59		-24	-42	281	61
300	304	-41		196	54	306	-33	-43	212	76	307	-29	-53	211	87	307	-43		280	66	307	-39	-46	290	91
250		-42		200	69		-50		215	99		-43		221	87		-57		277	68		-55		291	90
200	344	-43		230	59	345	-61		211	79	347	-52		219	78	344	-56		260	60	344	-69			
170		-50		228	48		-60		205	59		-53		224	63		-58		246	59		-59			
150		-52		240	46		-61		205	50		-54		222	57		-57		245	50		-55			
130		-55		239	43		-60					-57		238	46		-60		241	45		-56			
110		-51					-61					-62		241	36		-66		240	42		-59			
100	545	-50				542	-62				546	-62		235	33	542	-67		244	38	542	-57			
90		-51					-66					-61		251	29		-66					-58			
80		-49										-60		257	21		-66				(084 mb)	-58			
70		-47										-59		242	17		-65								
60												-57					-63								
	Inversion 1001 mb. 62° - 992 mb. 63° Isothermal 700 - 680mb. 31°					Isothermal 350 - 334 mb. -28°					Inversion 955 mb. 56° - 930 mb. 60°					(050) -61 (040 mb) -59 Inversion 862 mb. 41° - 847 mb. 48° Isothermal 408 - 400mb. -14°					Inversion 810 mb. 34° - 787 mb. 43° Isothermal 870 - 850 mb. 39° 690 - 674 mb. 34°				
Tropopause	II 300mb. -41° 30,400' I 281mb. -44° 36,200'					I 221 mb. -60° 37,300'					I 189 mb. -57° 41,000'					II 262 mb. -56° 33,500'					I 207 mb. -71° 38,700'				

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.	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.	1005·0 mb	1003·8 mb	mb	1003·7 mb	1002·4 mb	1006·8 mb	1010·4 mb	1015·6 mb	mb	
Pressure: Surf	995·1 mb	1001·9 mb	mb	995·3 mb	1000·4 mb	1002·4 mb	994·6 mb	1005·1 mb	mb	
Pressure: Freezing	750 mb	731 mb	mb	700 mb	720 mb	736 mb	633 mb	650 mb	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
Surf	02·7	49	47			00·5	53	52	Calm							02·3	56	54	300	18
1000	1·3					1·0	53	51								0·9				
950		46	42				49	41	073	11							50	44	304	31
900	29·8	41	35			29·7	43	38	067	11						29·7	47	36	302	33
850		35	31				37	33	054	10							44	37	299	35
800	61·0	32	23			61·1	36	25	020	06						61·4	40	31	288	21
750		32	07	No			33	11	317	06							36	27	288	30
700	95·9	25	05			96·2	29	01	276	08						96·8	32	09	293	36
650		17	00	winds			22	-09	266	09							29	-21	293	37
600	135	14	-11			136	15	-19	304	06						137	24	-37	293	36
550		09	-23	reported.			08	-26	298	10							17	-43	294	33
500	181	00	-29			181	00	-33	274	09						183	05	-40	294	33
450		-12	-38	Radar			-12	-45	311	05							-07	-38	287	37
400	234	-24	-48			234	-24	-55	Calm							237	-20	-42	283	48
350		-37	-58	u/s.			-39	-59	208	03							-32	-48	283	50
300	299	-52				299	-55		235	24						303	-48		290	67
250		-65					-72		227	32							-59		294	92
200	384	-65				383	-63		254	35						389	-68		282	67
170		-61					-58		252	41							-58		258	44
150		-58					-58		249	35							-59		254	36
130		-56					-58		249	26							-61		253	38
110		-62					-60		245	27							-61		248	38
100	532	-58				532	-60		253	21						536	-59		249	27
90		-57					-59		238	23							-60		266	24
80		-53					-58													
70		-57																		
60		-58																		
	Inversion 812 mb. 30° - 782 mb. 36°					Inversion 1002 mb. 53° - 970 mb. 54° Isothermal 850 - 815 mb. 37°										Inversion 940 mb. 49° - 934 mb. 50° Isothermal 270 - 262 mb. -56°				
Tropopause	I 222 mb. -76° 36,300'					I 225 mb. -79° 38,800'										I 206 mb. -78° 38,200'				

Pressure mb	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
Surf	00·6	60	57	260	20	01·2	58	51	220	12	04·4	56	50	260	18	02·9	55	51	270	12					
1000	0·7	60	57			1·9	58	50			2·8					4·3	54	50							
950		55	54	260	32		54	48	239	35		51	47	258	25		49	45	283	31					
900	29·7	49	47	276	36	30·8	47	43	258	37	31·6	46	42	273	24	32·9	44	40	290	33					
850		45	42	278	33		47	42	268	37		42	39	280	39		43	32	296	36					
800	61·4	39	36	276	33	62·6	41	35	261	33	63·2	39	33	278	40	64·6	46	18	292	43					
750		35	30	281	34		33	29	258	32		42	08	275	39		43	23	290	45					
700	96·7	30	23	283	36	97·9	28	23	254	41	99·0	39	18	273	43	100	37	19	293	45					
650		25	10	277	39		25	18	255	54		34	-12	267	46		32	07	292	45					
600	137	19	06	282	43	138	19	03	260	57	139	27	-26	267	48	141	24	03	282	48					
550		13	00	285	46		14	-20	265	63		18	-22	272	51		16	-03	278	53					
500	183	05	-01	286	52	184	04	-27	262	65	186	08	-28	271	50	187	09	-08	276	54					
450		-05	-22	290	57		-07	-23	263	64		-02	-29	267	60		00	-15	282	54					
400	287	-19	-36	285	57	238	-19	-32	265	67	240	-13	-37	272	62	242	-11	-26	284	58					
350		-33	-51	287	58		-32	-45	269	73		-27	-49	278	63		-28	-39	288	62					
300	302	-47		290	60	303	-44		275	72	307	-41		282	76	308	-42		285	64					
250		-62		288	75		-53		265	60		-57		296	95		-62		285	65					
200	389	-58		278	52	391	-58		253	63	394	-66		273	76	394	-76		287	69					
170		-55		259	45		-55		247	54		-60		259	66		-71		284	52					
150		-57		252	42		-59		244	46		-60		262	54		-68		288	45					
130		-61		250	41		-64		255	39		-64		248	46		-68		240	52					
110		-63		254	34		-63		244	37		-64		250	39		-69								
100	537	-64		247	32	539	-65		243	33	541	-65		248	34	538	-68								
90		-58					-67		244	28		-67		246	33		-65								
80							-66		247	23		-65		241	30	(85 mb)	-63								
70																Max wind:- 216mb. 281° 81 kts. 37,800'									
60																									
	Inversion 880mb. 44° - 845mb. 48°										Inversion 800mb. 39° - 771mb. 44° Isothermal 995 - 983 mb. 56°					Inversion 863 mb. 40° - 823 mb. 48° Isothermal 700 - 683 mb. 37°									
Tropopause	I 250mb. -62° 34,100'					I 258 mb. -53° 33,600'					I 208 mb. -69° 38,500'					I 210 mb. -77° 38,400'									

No. 11489 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Tuesday 12th September 1950. Page 1.

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

METEOROLOGICAL OFFICE LIBRARY 20 SEP 1950

03h G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	03h	1005·3 mb	995·2 mb	782 mb
STORNOWAY	03h	1005·0 mb	1003·1 mb	750 mb
LEUCHARS	03h	1006·4 mb	1004·6 mb	738 mb
ALDERGROVE	03h	1009·8 mb	1001·2 mb	685 mb
LIVERPOOL	03h	1009·3 mb	1007·3 mb	670 mb
DOWNHAM MARKET	03h	1008·9 mb	1004·5 mb	683 mb
LARKHILL	03h	1014·0 mb	998·1 mb	641 mb
CAMBORNE	03h	1018·2 mb	1007·6 mb	640 mb
VALENTIA	03h	1013·2 mb	1012 mb	665 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	45	45			00·5	46	45	Calm		00·2	53	51		
1000	01·1					01·3	48	47			01·5				
950		44	40				50	49	102	03		50	48		
900	29·5	38	32			30·0	44	41	120	04	31·2	47	45		
850		32	29				36	33	204	07		43	41		
800	60·6	33	14			61·3	35	23	231	12	61·8	39	36		
750		29	07				32	04	236	12		33	29		
700	95·4	24	00			96·3	26	-05	240	13	97·0	29	25		
650		19	-09				22	-19	249	17		25	20		
600	135	16	-20			136	15	-29	241	20	137	19	00		
550		09	-28				07	-38	226	21		12	-17		
500	180	00	-25			181	-04	-39	225	20	183	03	-21		
450		-13	-30				-14	-39	228	25		-06	-31		
400	233	-27	-45			234	-27	-43	227	26	237	-17	-40		
350		-40	-60				-41		233	30		-31	-55		
300	298	-56				298	-57		251	41	302	-45			
250		-74										-59			
200	383	-58									389	-74			
170		-56										-62			
150		-56										-56			
130		-58										-52			
110		-56													
100	582	-56													
90		-56													
80		-56													
70		-56													
60	(66 mb)	-56													

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	02·3	53	49	266	08	00·6	57	52			01·2	57	54	250	20
1000	02·7					02·6	57	52			02·5	57	54		
950		48	42	270	21		51	47				53	50	280	37
900	31·3	43	36	275	22	31·4	44	40			31·4	49	46	288	39
850		36	30	274	22		38	34				47	41	294	39
800	62·7	43	10	273	22	62·8	37	33			63·2	38	33	301	39
750		40	23	266	28		41	09				38	26	301	44
700	98·3	34	15	265	30	98·3	36	-02			98·7	33	09	301	51
650		29	05	264	33		30	-02				31	-19	296	53
600	138	20	09	266	33	138	22	-01			139	26	-16	285	49
550		10	04	260	35		15	-04				17	-20	286	51
500	184	02	-04	260	41	185	07	-12			185	06	-19	285	52
450		-05	-11	264	49		-03	-17				+04	-25	288	63
400	238	-15	-22	266	57	239	-13	-30			239	-15	-33	285	70
350		-27	-34	264	64		-26	-40				-29	-50	288	72
300	304	-41		268	69	305	-43				305	-47		285	82
250		-59		270	78		-61					-64		293	87
200	391	-77		290	73	391	-78				391	-75		286	88
170		-74		287	61		-71					-68		280	56
150		-65		284	61		-67					-66		263	51
130		-63		274	41		-64					-68		256	47
110		-61		263	33		-63					-66		257	50
100	536	-63		260	36	536	-63				536	-65		238	28
90		-63		272	39		-62					-67		248	35
80		-55					-62								
70							-63								
60							-63								

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	4·4	55	50	270	06	02·9	56	46	270	12	00·3	54	51	195	12
1000	3·8					05·0	56	46	267	24	3·6	53	50	208	17
950		50	47	274	24		49	41	268	26		50	48	224	28
900	32·6	44	41	285	31	33·7	41	35	269	24	32·4	43	42	234	31
850		45	34	289	30		35	21	268	24		36	35		
800	60·5	49	03	291	36	65·1	38	15	265	23	63·8	43	36		
750		45	12	296	42		40	16	262	27		39	22		
700	98·7	33	09	301	51	10·1	39	11	264	30	99·4	36	15		
650	10·1	40	13	295	40		33	06	267	30		30	08		
600		34	12	288	42	10·1	39	11	264	30		30	08		
700	141	24	08	288	44	141	26	02	273	35	139	23	06		
650		16	01	286	48		18	-02	270	44		18	03		
600	187	09	-08	278	54	188	09	-04	272	47	186	10	-04		
550		00	+17	275	57		00	-12	270	44		01	-12		
500	242	-12	-28	276	63	242	-13	-26	270	60	241	-10	-24		
450		-26	-41	279	63		-26	-40	270	52		-22	-37		
300	308	-42		276	62	309	-40	-54	270	51	308	-36	-49		
250		-61		282	63		-54		271	50		-57			
200	392	-80		290	66	396	-68		280	55	395	-79			
170		-77		271	60		-81		275	53		-84			
150		-69		263	54		-77		265	49		-79			
130		-70		265	48		-73		266	53		-76			
110		-67		259	35		-71		263	38	(121 mb)				
100	538	-64		254	30	539	-70		264	34					
90		-64		243	24		-68		258	28					
80							-67		260	27					
70							-67		246	20					
60						(67 mb)	-64								

Inversion 995 mb 45° - 983 mb 48° / 833 - 30° - 817 - 33° / isothermal 817 - 796 mb 33°

Inversion 1003 mb 46° - 975 mb 55° / 810 - 34° - 786 - 37°

Inversion 832 mb 34° - 810 mb 44° / Isothermal 505 - 494 mb 02°

Inversion 790 mb 37° - 756 mb 42° / Isothermal 836 - 790 mb 37°

Inversion 875 mb 46° - 850 mb 47° / 800 - 38° - 770 - 40° / Isothermal 672 - 650 mb 31°

Inversion 885 mb 41° - 815 mb 49° / Isothermal 815 - 800 mb 49°

Inversion 895 mb 40° - 872 mb 41° / 835 - 36° - 750 - 40°

Inversion 840 mb 35° - 800 mb 43°

Tropopause: I 239 mb - 78° 34,500' | N.R. | I 193 mb - 76° 39,600' | I 185 mb - 82° 40,700' | I 203 mb - 79° 38,800' | I 212 mb - 77° 37,800' | I 181 mb - 81° 41,400' | I 167 mb - 82° 43,200' | I 185 mb - 87° 41,100'

09h G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	09h	1005·5 mb	995·6 mb	770 mb
STORNOWAY	09h	1003·3 mb	1002·2 mb	806 mb
LEUCHARS				
ALDERGROVE	09h	1010·5 mb	1001·9 mb	723 mb
LIVERPOOL	09h	1014·6 mb	1012·6 mb	650 mb
DOWNHAM MARKET	09h	1015·1 mb	1010·7 mb	653 mb
LARKHILL	09h	1018·5 mb	1002·5 mb	638 mb
CAMBORNE	09h	1019·7 mb	1009·1 mb	619 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
Surf	02·7	51	48			00·5	53	51							
1000	01·4					01·1	53	52							
950		46	39				47	44							
900	29·9	38	33			29·8	42	39							
850		32	30				36	35							
800	61·0	32	18			61·1	32	15							
750		31	09				32	23							
700	95·9	27	06			96·1	27	22							
650		20	-06				19	15							
600	135	16	-18			135	10	09							
550		09	-24				04	-09							
500	181	-01	-28			181	-03	-19							
450		-12	-33				-12	-27							
400	234	-24	-50			234	-22	-30							
350		-38	-55				-33	-41							
300	299	-53				299	-46								
250		-68					-60								
200	384	-70				385	-75								
170		-62					-64								
150		-59					-60								
130		-57					-57								
110		-58													
100	532	-59													
90		-57													
80		-56													
70		-56													
60		-57													
		-58													
(47mb)		-56													

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	02·3	52	47	190	18	00·6	56	48	250	10	01·2	58	51	240	10
1000	02·9	04				04·0	54	47	256	19	04·2	56	50		
950		48	44	217	27		48	43	258	21		50	44	281	25
900	31·5	44	41	238	29	32·6	42	37	263	21	32·9	44	37	291	30
850		45	34	254	27		36	33	262	25		47	32	291	33
800	63·2	41	34	248	26	63·9	35	19	260	30	64·8	49	26	289	33
750		35	31	246	31		44	06	259	35		43	23	282	34
700	98·5	29	25	245	37	99·6	39	08	258	41	10·1	38	09	274	37
650		23	20	236	38		32	08	256	43		31	03	270	42
600	138	15	12	238	39	140	26	08	261	45	141	24	06	277	48
550		12	04	244	59		21	03	263	44		19	03	280	49
500	184	03	-06	246	55	187	13	-03	263	47	188	11	-04	282	46
450		-06	-10	250	57		04	-15	265	54		01	-13	281	48
400	238	-17	-24	252	72	242	-06	-22	265	54	242	-10	-23	281	55
350		-30	-38	248	73		-19	-31	266	60		-23	-36	281	55
300	304	-45		246	78	309	-35	-48	269	60	309	-37	-48	280	56
250		-63		248	85		-53		271	67		-56		281	61
200	389	-77		254	74	397	-76		270	70	396	-73		282	67
170		-68		250	53		-82		267	71		-79		279	61
150		-66		250	48		-75					-75		279	54
130		-64		246	37		-69					-68		273	43
110		-61		235	35		-57					-64		260	40
100	535	-56		243	27	541	-58				540	-62		254	36
90		-57		252	22		-61					-62		258	33
80		-56		248	29		-63					-61		263	28
70		-50					-60					-60		266	18
60						(061 mb)	-57								

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	4·4	54	51	250	08	02·9	57	52	203	07					
1000	5·1	54	51			05·4	56	50	226	21					
950		47	43	276	23		51	44	246	22					
900	33·7	42	39	278	23	34·2	45	40	263	24					
850		48	37	258	26		39	36	261	26					
800	65·5	48	33	254	29	65·9	49	-19	260	28					
750		44	29	261	29		47	+21	254	24					
700	10·1	39	22	266	30	10·2	40	+19	261	29					
650		35	12	262	35		38	+14	261	33					
600	142	28	08	264	36	143	29	01	258	34					
550		20	07	271	36		23	-01	262	42					
500	189	11	03	275	44	190	15	-08	255	43					
450		02	-09	277	48		05	+17	256	47					
400	244	-09	-17	276	50	245	-05	-32	260	51					
350		-21	-30	272	51		+17	-42	264	50					
300	311	-36	-44	271	50	312	-34	-56	266	54					
250		-51		270	55		-51		266	57					
200	399	-70		276	48	401	-70		273	57					
170		-79		274	52		-81		268	54					
150		-79		270	52		-77		265	49					
130		-74		273	47		-72		267	46					
110		-68		263	34		-69		262	40					
100	541	-68		244	39	543	-67		253	40					
90		-68		248	42		-65		256	35					
80		-65		259	38		-63		260	30					
70		-62		260	34		-62		258	29					
60		-59		282	16		-61		257	28					
							-59		255	23					
						(038 mb)	-57								

Inversion 803 mb 32° - 780 mb 34° / Isothermal 570 - 547 mb 04°

Inversion 865 mb 41° - 856 mb 45° / Isothermal 594 - 566 mb 12°

Inversion 810 mb 31° - 780 mb 46°

Inversion 864 mb 40° - 845 mb 50°

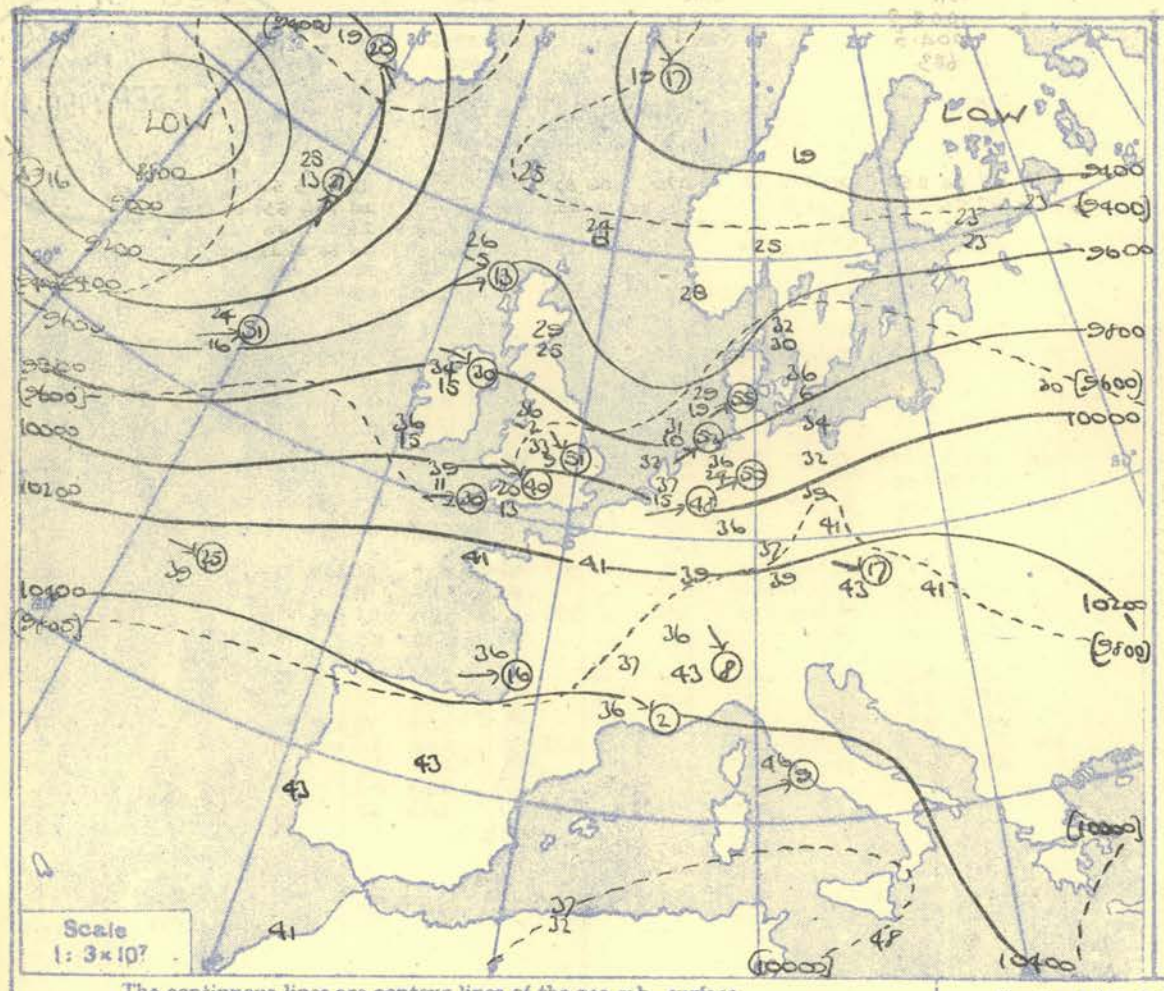
Inversion 878 mb 40° - 845 mb 50°

Inversion 842 mb 38° / 814 mb 51° / Isothermal 785 - 750 mb 47°

Tropopause: I 227 mb - 73° 35,800' | I 197 mb - 76° 38,800' | II 205 mb - 77° 38,400' | I 173 mb - 83° 42,500' | I 174 mb - 80° 42,300' | II 184 mb - 79° 41,700' | I 170 mb - 81° 43,300'

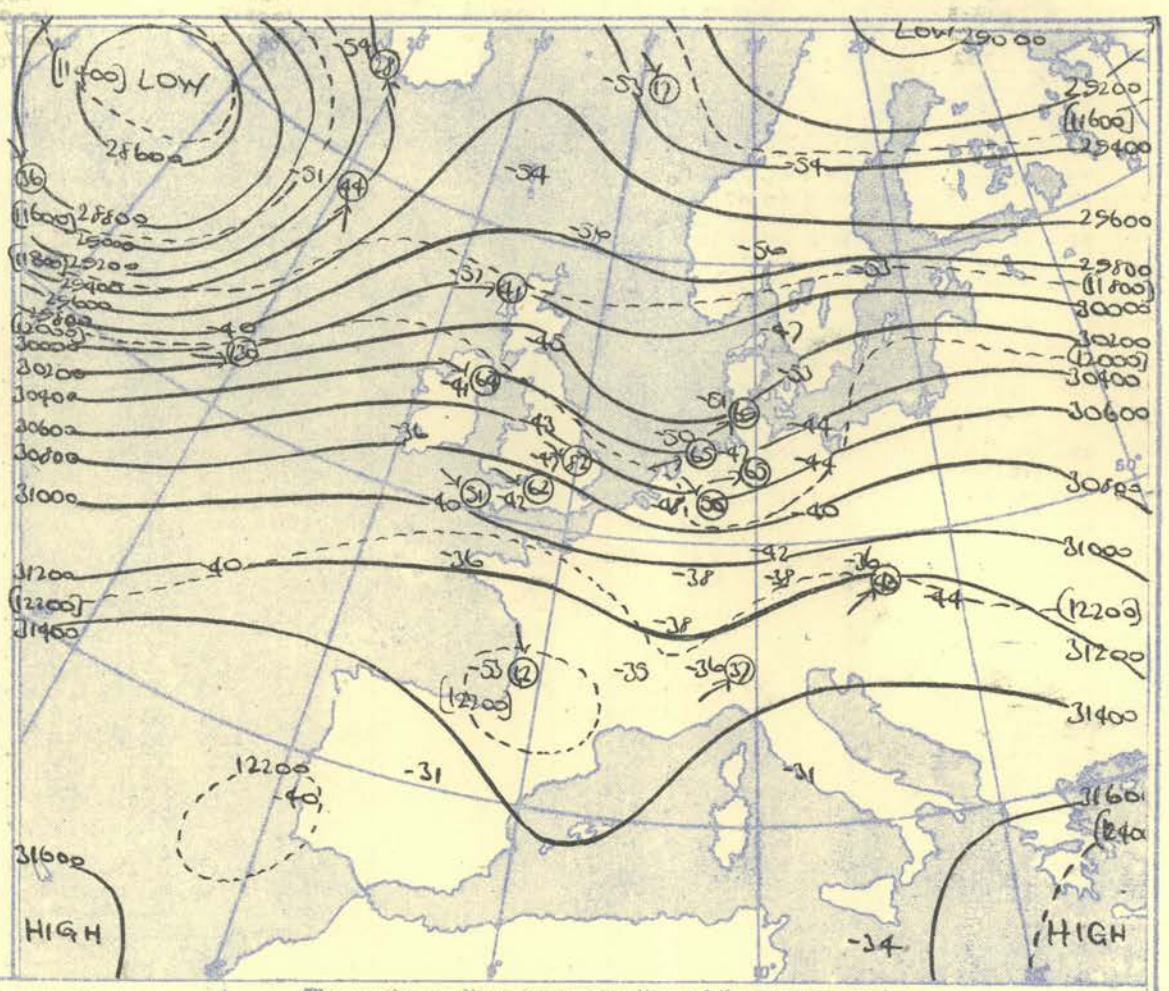
September 12 1950.

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. GMT.

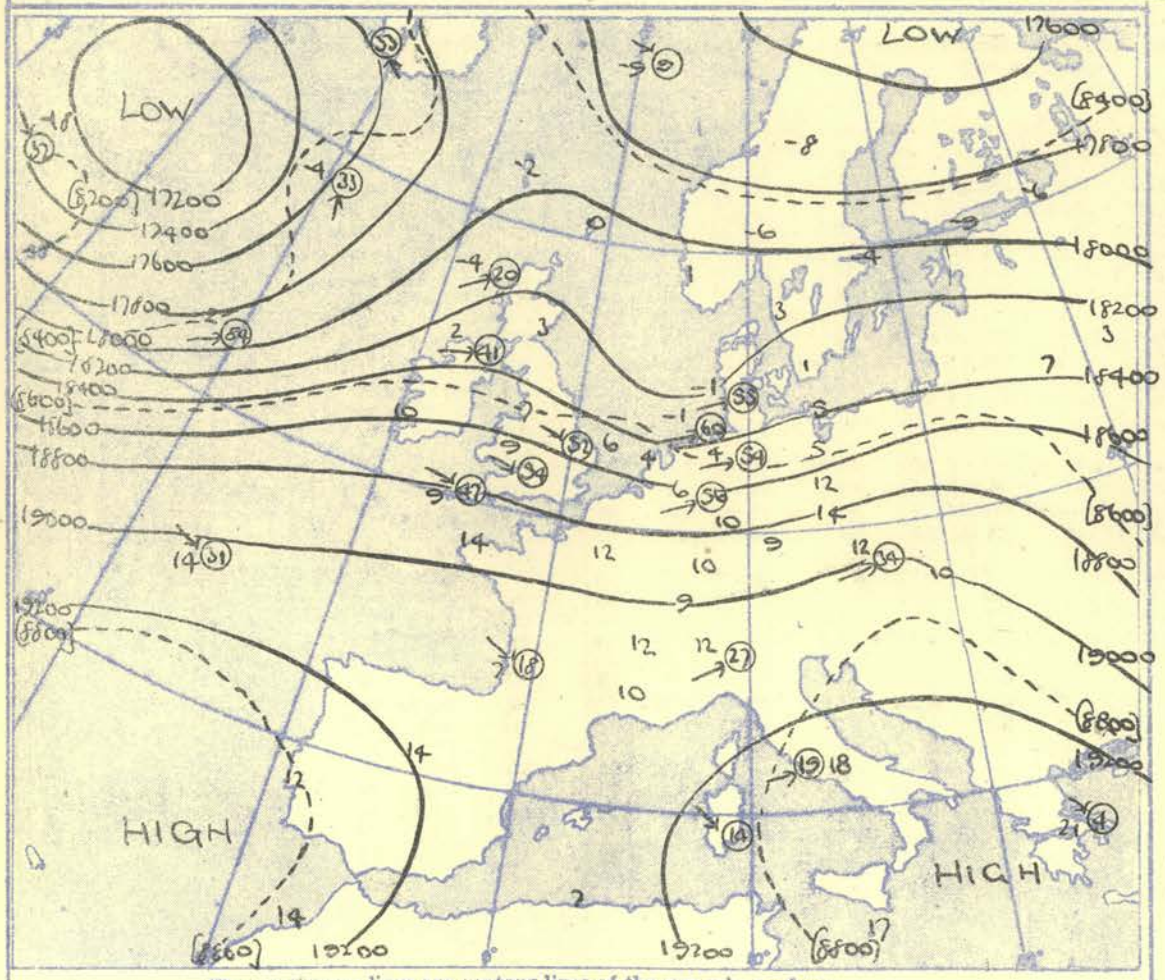


The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

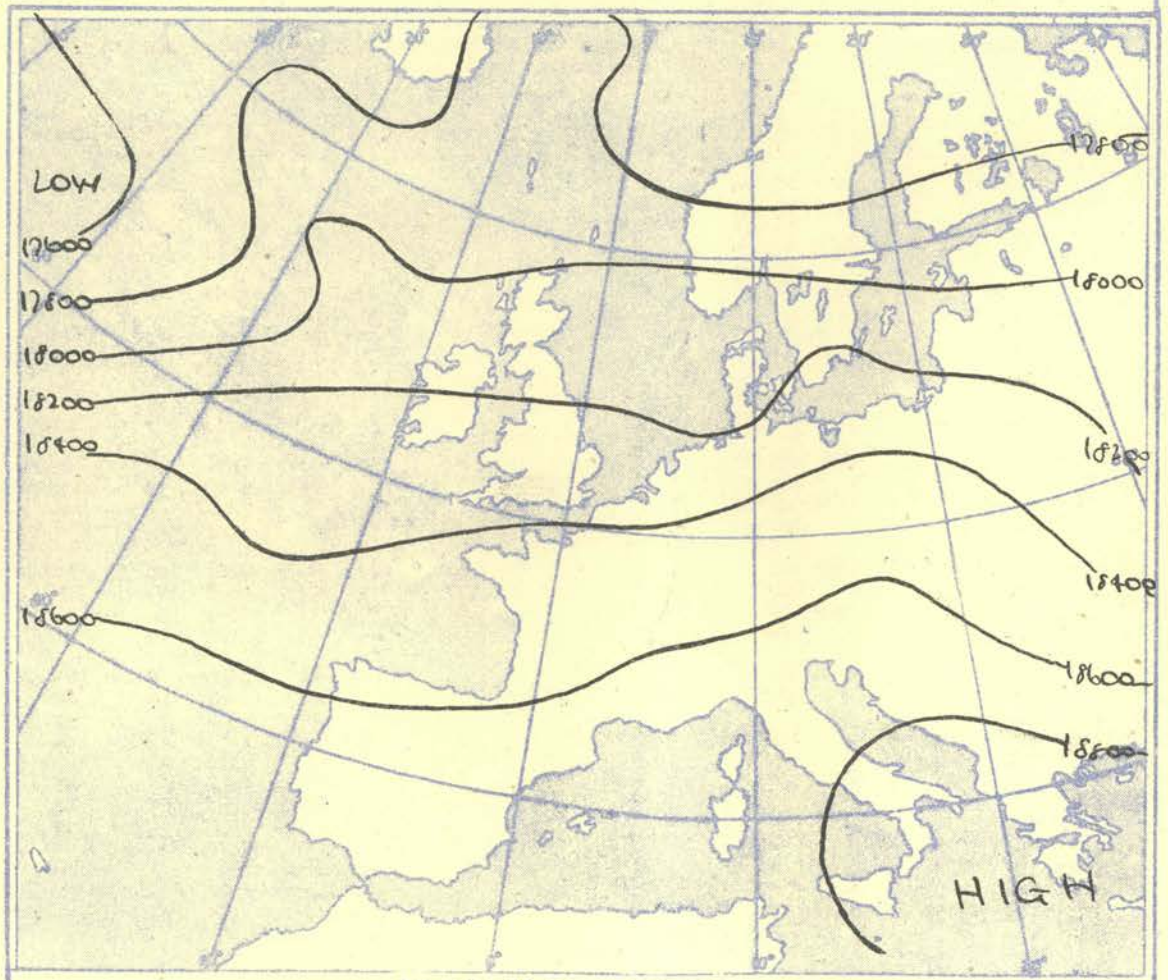
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.



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

	48·2N 20·5W			49·6N 14·7W			43·2N 17·0W			39·5N 12·2W			51·3N 00·4E												
Pressure Time	13h			15h			13h			14h			1410h												Time
Pressure M.S.L.	1013 mb			1011 mb			1020 mb			1020 mb			1019·5 mb			mb			mb			mb			M.S.L.
Pressure Surf	1016 mb			1014 mb			1024 mb			1024 mb			1008·5 mb			mb			mb			mb			Surf
Pressure Freezing	680 mb			670 mb			620 mb			600 mb			630 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		60	54		59	56		67	56		68	60	03·1	62	48										Surf
1000	4·5			4·0			6·6			6·6			05·5												1000
950		51	48		45	29		59	47		60	54		51	48										950
900		45	41		49	37		50	45		55	51	34·4	45	43										900
850		39	37		45	35		42	42		56	48		53	17										850
800		41	12		44	29		55	28		54	32	66·4	49	36										800
750		37	20		40	00		48	10		47	29		45	43										750
700	10·0	35	24	10·1	36		10·4	43	06	10·5	48		10·2	40											700
650		28	18		29			37	16		39			35											650
600		19			19			29			32		14·3	27											600
550		10			10			19			22			17											550
500	186	04		187	04		191	09		193	11		190	11											500
450														01											450
400													24·5	-09											400
350														-25											350
300													31	-40											300
250																									250
200																									200
170																									170
	Cloud 8 Cu. 8 940-810mb 2 Ac 8 550-540 3 Ac 8 N.R. Inversion 850mb 39°- 800 - 41° Surf Wind W'ly 11-16Kts			Cloud 2 Sc. 8 920-820mb 3 Ac. 8 610-380 - As. 8 510-T.N.R. Surf Wind S'wly 11-16 Kts.			Cloud 6 Sc. 8 850-840mb 3 Ci. 8 N.R. Inversion 850mb 42°- 800 " 55° Surf Wind. W'ly 4 6 Kts.			Inversion 900mb 55° 850 " 56° 750 " 47° 700 " 48° Surf Wind. N'wly 4-6 Kts.			Cloud 8 Sc. 8 880-850mb											

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

Place	Leeming		Shoeburyness		Plymouth		Lossiemouth		Leeming		Shoeburyness		Downham		Pembroke Dock		Weather Watchers				Place
Time	08h		09h		09h		09h		09h		09h		09h		13h		21h		21h		Time
Type																			UPPer		Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Surf.	260	11	290	15	200	07	230	09	190	06	230	15	220	12	210	09			250	13	Surf.
1,000	270	21	280	24	190	07	230	12	220	13	230	18	270	19	230	21					1,000
2,000	280	19	280	27	190	07	240	19	210	16	220	21	270	22	230	30			254	39	2,000
3,000	290	19	280	29	190	08	250	21	220	27	200	17	270	22					252	44	3,000
4,000	290	27	280	30	190	08	260	24	240	31	110	15	280	22					251	44	4,000
5,000	290	27	280	31			270	22	240	42	180	13	280	21					249	43	5,000
6,000	290	24	280	32			260	23	240	36	190	10	280	28					248	41	6,000
8,000	280	13	280	33			250	32			230	21	270	37					243	45	8,000
10,000							250	32			240	27	270	35					241	57	10,000
14,000			280	38			240	57			230	30	270	44					241	75	14,000
18,000			280	45							240	38	270	46					243	71	18,000
24,000			280	50							240	32	270	52					244	93	24,000
30,000			270	53							250	39	270	53	240	122			243	80	30,000
40,000			290	48							260	48	280	61	240	70			225	90	40,000
50,000			280	38							250	44	260	42	240	30			(33,000')		50,000
			(49,000')								250	44	270	05	240	28					
											(51,000')		(80,000')		(55,000')						

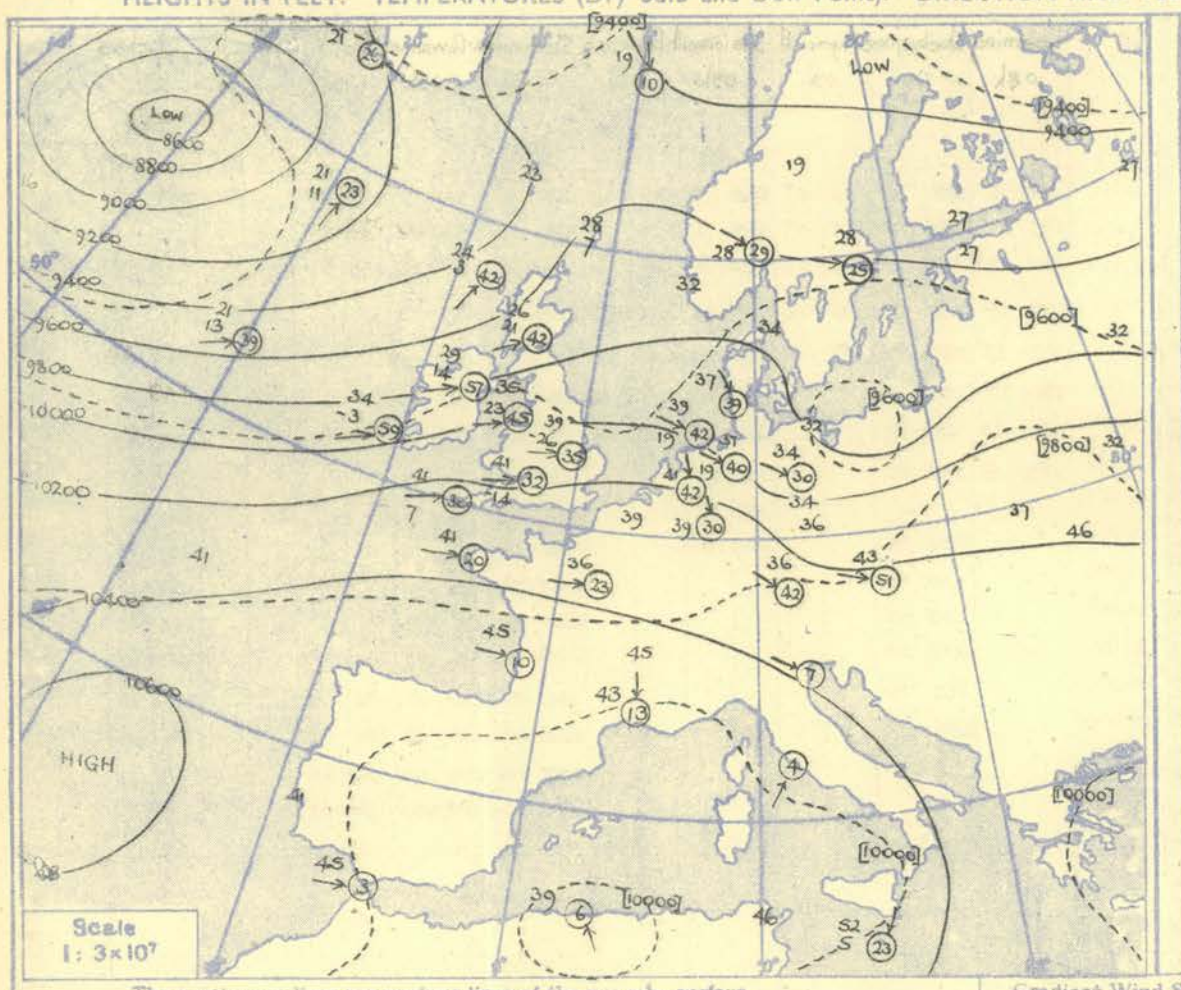
NEPHOSCOPE OBSERVATIONS

Place	West Raynham										Place
Time Type	15h Ci										Time Type
Dir. Vel.	270 60.										Dir. Vel.

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

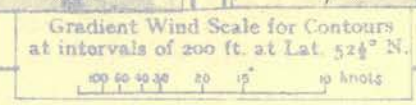
Ship	WEATHER WATCHER	WEATHER WATCHER	WEATHER WATCHER	WEATHER WATCHER	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER		Ship
Lat/Long	52·6N. 20·0W.	52·5N. 19·3W.	52·5N. 20·1W.	52·5N. 20·1W.	59·1N. 18·8W.	59·0N. 18·6W.	59·0N. 18·6W.	58·8N. 18·8W.		Lat/Long
Pressure Time	03h. G.M.T.	09h. 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.	1001 mb	1000 mb	1002 mb	1001 mb	990 mb	989 mb	987 mb	987 mb	mb	M.S.L.
Pressure Surf	1001 mb	1000 mb	1002 mb	1001 mb	990 mb	989 mb	987 mb	987 mb	mb	Surf
Pressure Freezing	785 mb	800 mb	790 mb	810 mb	770 mb	820 mb	810 mb	820 mb	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	Height ft./100 / °Temp. °F. / Dew °F. / Wind Dir. ° Vel. knots	Pressure mb
Surf	57 54 225 20	57 47 250 06	56 48 240 26	55 47 235 21	52 50 155 20	52 48 200 16	55 49 195 20	54 47 225 15		Surf
1000	2 56 54 225 20	1 57 47 250 06	4 56 48 240 26	2 55 47 235 21	-2·9	-3·1	-3·6	-3·6		1000
950	51 50 229 32	50 43 251 21	50 44 235 39	49 44 230 29	49 48 142 36	48 40 203 21	49 41 192 24	49 41 207 21		950
900	29·0 45 40 233 39	28·8 43 39 255 21	29·2 45 40 239 39	28·9 43 37 233 31	26·8 44 43 154 36	25·5 41 34 203 20	25·0 42 35 201 24	25·1 42 33 209 24		900
850	40 37 234 37	37 31 253 20	39 33 240 36	36 32 243 33	39 39 168 33	35 28 203 19	37 30 210 24	35 26 209 24		850
800	60·4 34 33 237 39	60·2 32 24 252 21	60·5 33 26 240 39	60·1 31 27 242 39	57·2 35 34 174 33	56·7 31 23 203 19	56·3 31 25 210 28	56·3 30 22 208 24		800
750	29 23 240 45	28 17 249 21	27 20 241 40	24 17 244 44	30 29 177 32	24 17 204 22	26 17 201 29	23 14 206 28		750
700	98·2 24 16 240 51	94·7 19 12 246 22	95·2 21 18 241 39	94·5 18 07 244 42	92·1 25 13 177 27	91·1 20 12 208 21	90·8 21 11 207 23	90·7 18 05 206 30		700
650	18 01 235 45	12 07 246 25	14 04 242 45	12 06 244 37	17 06 182 27	12 02 201 22	14 04 203 24	11 -02 208 27		650
600	134 12 03 237 54	133 04 -02 249 24	184 07 -01 244 60	133 05 -02 239 52	131 12 07 190 27	130 05 -07 201 21	130 07 01 202 20	129 03 -10 208 29		600
550	06 -11 236 65	-04 -09 245 26	00 -07 245 60	-03 -11 243 51	05 00 182 18	-03 -16 199 18	-02 -08 202 18	-06 -19 208 27		550
500	180 02 -17 235 84	178 -11 -22 242 33	179 -07 -16 242 65	178 -11 -18 240 68	177 -04 -08 172 33	174 -13 -25 200 22	174 -12 -20 202 22	174 -15 -26 207 30		500
450	-06 -21 231 97	-16 -36 245 46	-13 -24 240 84	-15 -24 242 96	-15 -20 152 38	-25 -38 200 23	-24 -32 194 22	-26 -38 206 30		450
400	234 -16 -20 233 108	231 -25 -46 247 52	232 -18 -25 241 114	231 -22 -28 242 106	230 -26 -32 141 48	226 -37 -47 210 19	226 -36 -43 202 21	225 -38 -50 195 28		400
350	-27 -29 235 111	-33 -55 243 60	-28 -33 242 123	-31 -26 242 117	-39 -45 141 52	-47 202 14	-50 202 23	-50 185 27		350
300	300 -40 -52 235 130	296 -47 234 62	298 -37 -43 244 144	(317 mb) -37 -43	294 -51 147 44	289 -55 200 20	289 -61 214 22	288 -63 187 27		300
250	-57 235 150	-54 228 64	-52 242 123		-46 153 33	-47 199 24	-47 209 21	-48 195 33		250
200	387 -69 235 110	384 -54 240 45	387 -49 245 120		383 -42 172 26	378 -46 195 18	378 -43 208 33	376 -46 218 26		200
170	-60 235 75	-53	-48 246 86		-45 164 25	(198 mb) -47	-43 204 27	-48 212 27		170
150	-60 255 63	-55	-47 253 66		-43		-44 214 26	-50 208 23		150
130	-61 235 70	-53	-43 254 57		-44		-46 209 26	-49 214 22		130
110	-62 235 70	-53	-46 247 50		-44		-45 202 24	-48 211 30		110
100	(105 mb) -62	-53	-48 242 44		537 -45		-46 203 27	-49 222 21		100
90		(094 mb) -54	-48 241 39		-46		-46 205 22	-51 226 21		90
80			-48 241 37		-47		-46 205 19	-54 230 24		80
70			-48 241 34		(075 mb) -47		(075 mb) -45	-54 224 20		70
60			-48 241 37					-53		60
	Isothermal 767 - 750mb. 2° 522 - 500mb. 2° 480 - 465mb. -2°		Isothermal 474 mb. -458mb. -12° 430 mb. -406mb. -17°	Isothermal 490 - 480mb. -12°	Isothermal 714 - 700mb. 25° 648 - 630mb. 16°					
Tropopause	I 212mb. -57° 35,400'	I 230mb. -57° 35,400'	I 230mb. -55° 35,800'	N.R.	II 313mb. -57° 29,600'	I 291mb. -57° 29,600'	II 304mb. -61° 28,600'	I 295mb. -65° 29,200'		Tropopause

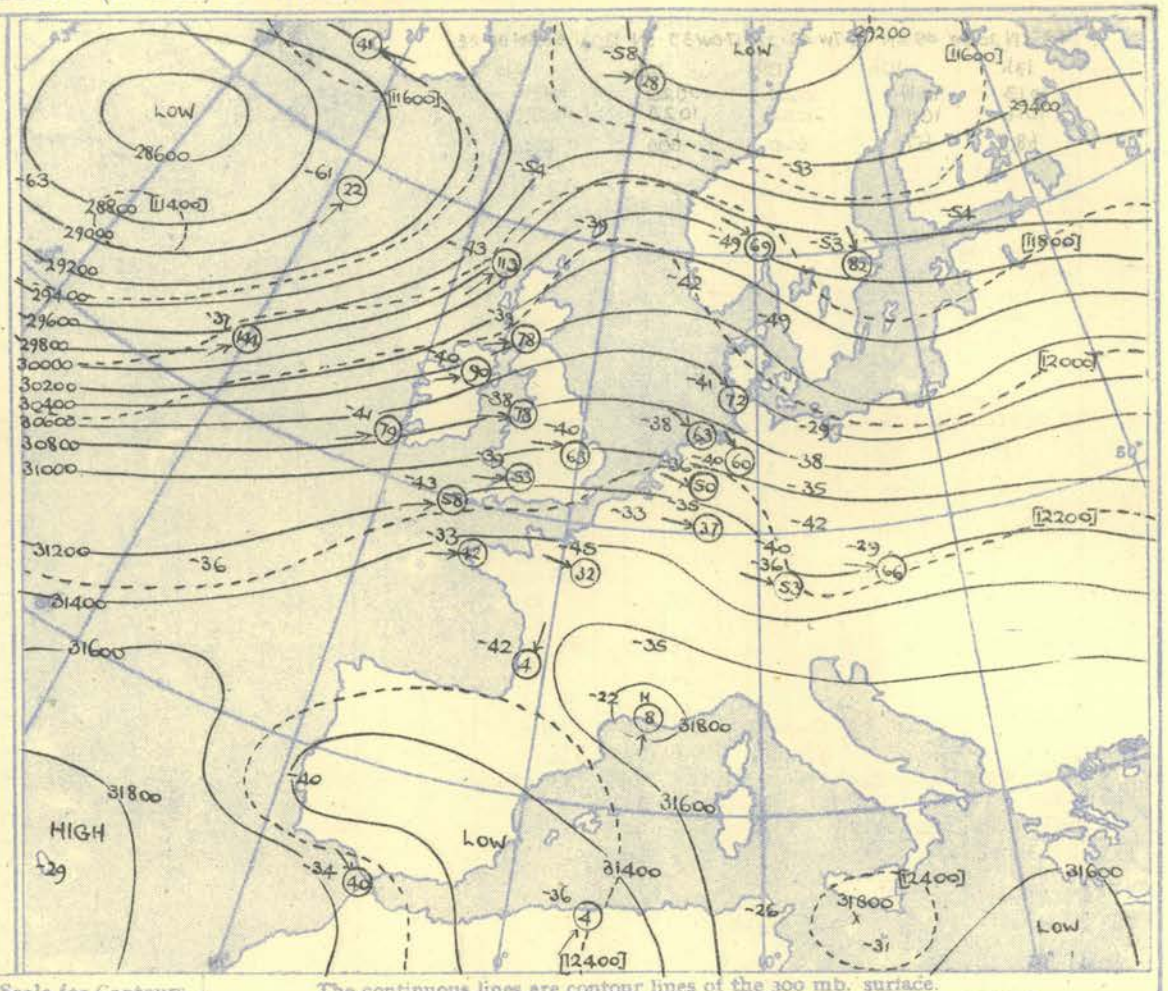
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h G.M.T.



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

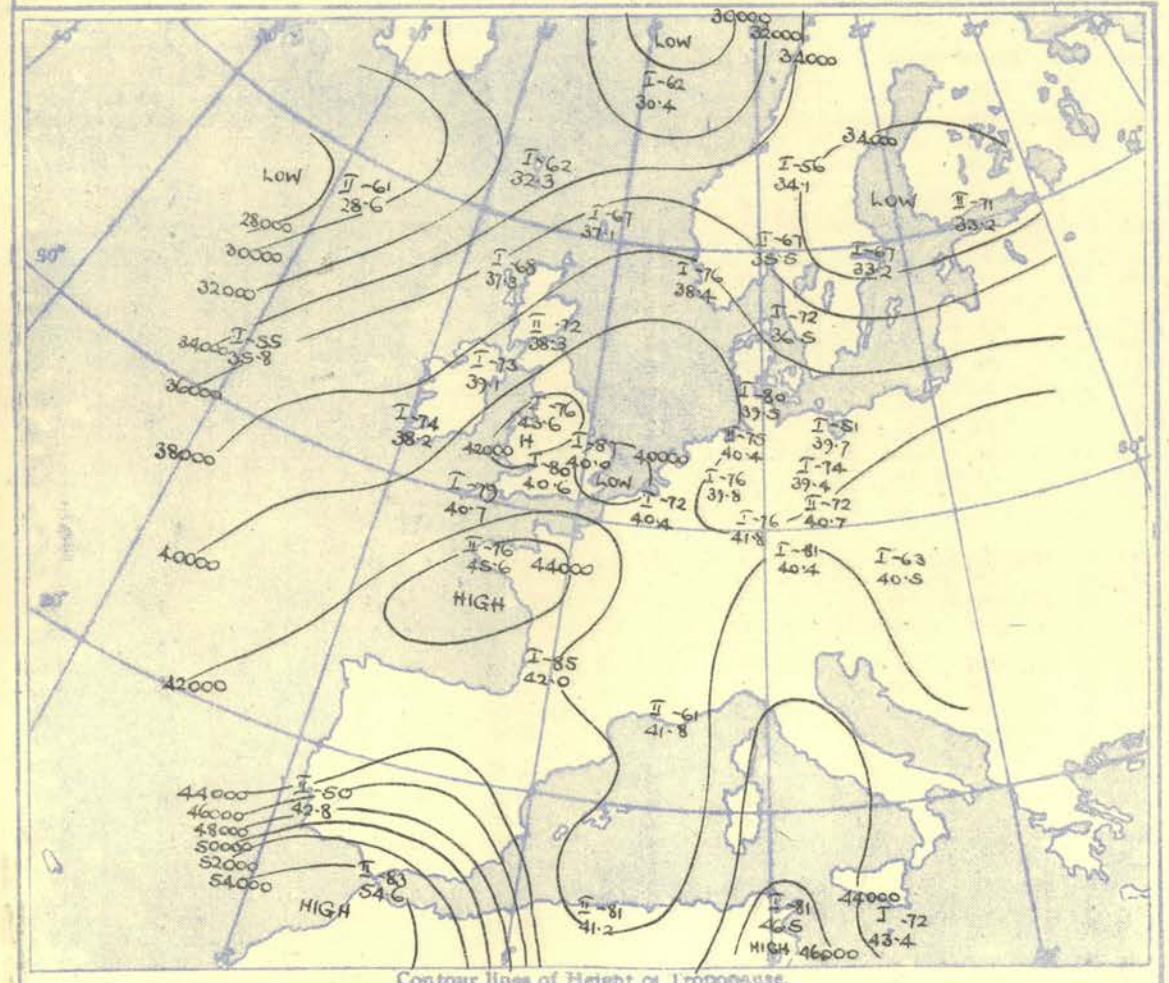
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.





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.

Cold air flooded the Northern Atlantic and the belt of tight thermal gradient advanced right across the Atlantic to reach from Nova Scotia to weather ship station Dog and thence to Northern England.

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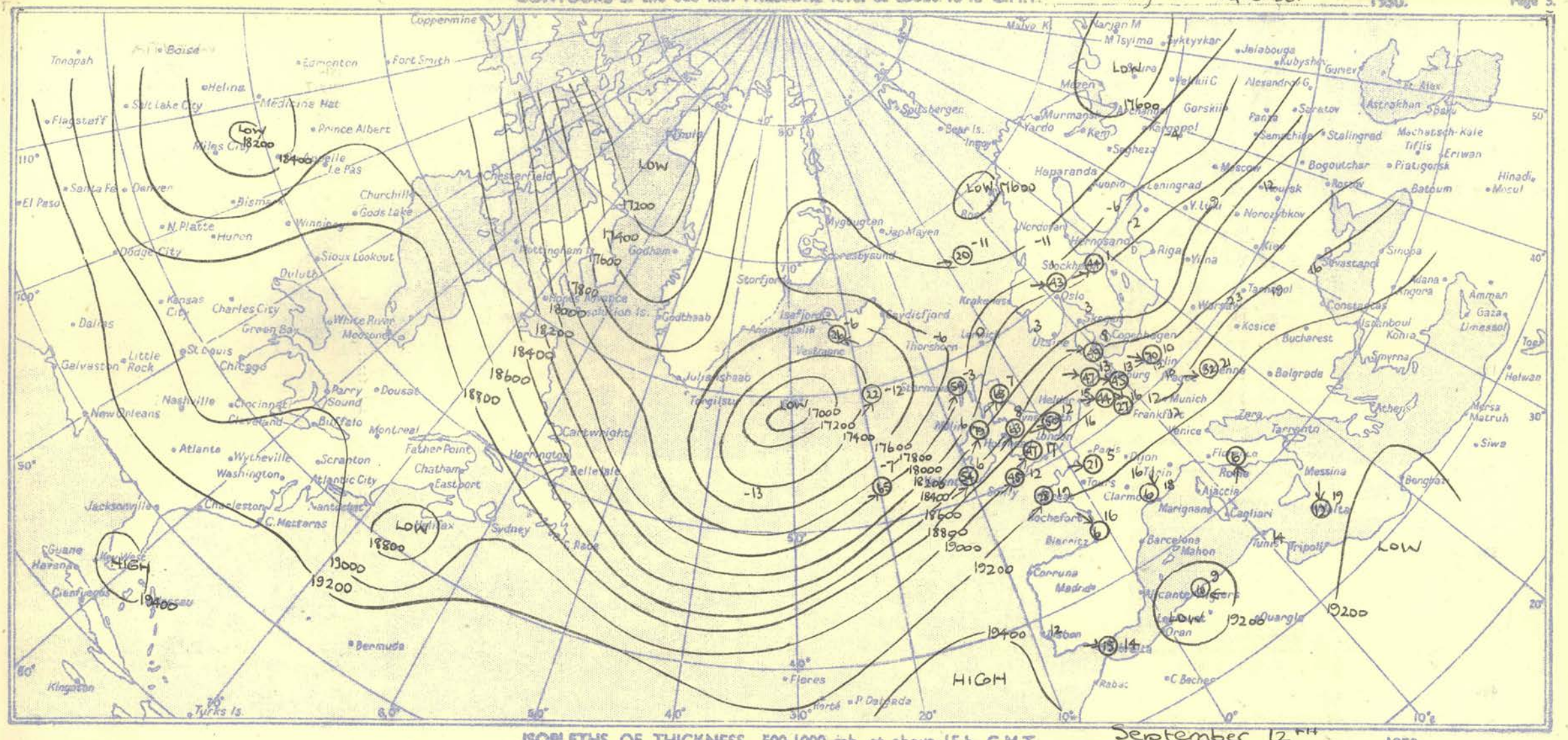
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Tuesday 12th September. 1950.


LOW
HIGH
Coppermine
Tuktoyaktuk
Fort Smith
Edmonton
Boise
Reno
Salt Lake City
Medicine Hat
Prince Albert
Flagstaff
Miles City
La Pas
Churchill
Gods Lake
Winnipeg
Sioux Lookout
Duluth
Dodge City
Kansas City
Charles City
Green Bay
White River
Moosonee
Dallas
Galveston
Little Rock
St. Louis
Chicago
Nashville
Cincinnati
Cleveland
Buffalo
Parry Sound
Dousat
New Orleans
Atlanta
Wytheville
Washington
Scranton
Atlantic City
Montreal
Father Point
Chatham
Eastport
Harrington
Belleisle
Cartwright
Jacksonville
Charleston
C. Hatteras
Nantucket
Halifax
Sydney
C. Race
Havana
Key West
Nassau
Bermuda
Kingston
Turks Is.
Mygdalen Is.
Hopes Advance
Resolution Is.
Godthaab
Julianshaab
Tangilsuk
Godham
Nottingham Is.
Storfjord
Isafjord
Angmagsalik
Vestmanø
Jan Mayen
Scoresbysund
Saydisfjord
Thorshavn
Krakenes
Lerwick
Stornoway
Oslo
Skagen
Copenhagen
Utsire
Helder
Tynemouth
London
Holyhead
Scilly
Brest
Paris
Dijon
Tours
Rochefort
Biarritz
Corruna
Madrid
Lisbon
Gibraltar
Rabat
C. Bacher
Oran
Algiers
Tripoli
Malta
Messina
Rome
Florence
Marignane
Ajaccio
Cagliari
Barcelona
Mahon
Tunis
Zero
Tarranto
Venice
Munich
Frankfurt
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Vienna
Belgrade
Athens
Bucharest
Kosice
Warsaw
Tarnapol
Constantza
Istanboul
Konia
Smyrna
Sevastapol
Simpoa
Batoum
Rostov
Kharkov
Kiev
Riga
Vilna
Leningrad
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Gorkii
Archangel
Murmansk
Yardo
Kem
Segheza
Kandalaksha
Soroka
Haparanda
Kuopio
Nordoyan
Hernosand
Stockholm
Oslo
Skagen
Copenhagen
Utsire
Krakenes
Saydisfjord
Thorshavn
Lerwick
Stornoway
Julianshaab
Godthaab
Hopes Advance
Resolution Is.
Storfjord
Godham
Nottingham Is.
Jan Mayen
Scoresbysund
Mygdalen Is.
Spitsbergen
Bear Is.
Ingo
Soura
Mezen
Malye K.
Narjan M.
Syktyvkar
Jelabouga
Kubyshev
Gurev
Alexandrov G.
Gorskii
Archangel
Murmansk
Yardo
Kem
Kandalaksha
Segheza
Semachida
Stalingrad
Saratov
Panza
Astrakhan
Baku
Machatsch-Kale
Tiflis
Eriwan
Bogoutchar
Piatigorsk
Batoum
Hinadi
Mosul
Amman
Gaza
Limassol
Adana
Angora
Helwan
Siwa
Mersa Matruh
Bengazi
Malta
Tripoli
Tunis
Algiers
Quargla
Ghadames
Oran
Laghouat
Gibraltar
Lisbon
Madrid
Corruna
Biarritz
Rochefort
Brest
Scilly
Holyhead
London
Paris
Dijon
Tours
Clermont
Florence
Rome
Messina
Ajaccio
Cagliari
Marignane
Barcelona
Mahon
Tarranto
Zero
Venice
Munich
Frankfurt
Berlin
Prague
Vienna
Belgrade
Athens
Bucharest
Kosice
Warsaw
Tarnapol
Constantza
Istanboul
Konia
Smyrna
Sevastapol
Simpoa
Batoum
Rostov
Kharkov
Kiev
Riga
Vilna
Leningrad
Moscow
Gork

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Tuesday 12 ... 1950.

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.	1004·4 mb	1000·4 mb	1007·7 mb	1003·5 mb	1013·9 mb	1012·5 mb	1018·7 mb	1019·7 mb	1011·4 mb
Pressure: Surf	994·5 mb	998·5 mb	1006·9 mb	1000·0 mb	1011·9 mb	1011·0 mb	1009·6 mb	1009·2 mb	1010 mb
Pressure: Freezing	750 mb	730	750	719	670	654	622	635	680

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	47			00·5	56	52	210	15	00·2	58	51	230	14
1000	1·1					0·2					2·1	57	50		
950		47	41				52	48	222	26		51	45	222	28
900	29·7	44	38			29·0	46	41	226	38	30·9	44	39	229	30
850		40	34				41	35	223	41		39	34	234	30
800	61·2	34	27			60·5	33	24	223	40	62·3	37	33	241	32
750		32	22				29	06	223	39		32	29	243	27
700	96·1	28	07			95·3	24	03	218	42	97·4	26	21	246	42
650		23	11				16	-09	213	48		21	11	252	52
600	135	14	05			135	12	-15	214	45	137	17	10	246	47
550		06	-03				04	-28	217	50		13	06	245	62
500	181	00	-11			180	-03	-31	219	54	183	07	-01	243	66
450		-07	-19				-12	-37	222	73		-02	-11	245	63
400	235	-16	-26			233	-21	-40	224	84	237	-13	-22	254	70
350		-27	-38				-31	-50	226	89		-25	-35	248	80
300	301	-39	-54			298	-43		226	113	304	-39	-49	244	78
250		-54					-57		229	105		-55			
200	389	-59				385	-66		231	90	391	-73			
170		-53					-59		229	79		-76			
150		-51										-73			
130		-51										-61			
110		-51										-55			
100	539	-49									536	-56			
90		-49										-59			
80		-49										-60			
70		-48										-55			
60	(67 mb)	-46										-50			
												-53			
	Inversion 776 mb 30°-761 mb 33° Isothermal 532 - 513 mb 03° 485 - 464 " -04°					Isothermal 770 mb - 730 mb 29° 650 " - 629 " 16°					Isothermal 865 - 850 mb 39°				
Tropopause	I 217 mb - 67° 37,100'					I 212 mb - 68° 37,300'					II 207 mb -72° 38,300'				

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	02·3	57	53	180	15	00·6	63	50	230	15	01·2	61	46	240	12
1000	2·3	57	53	180	15	3·9	61	49	237	22	4·7				
950		52	49	207	37		54	44	236	22		52	42	247	22
900	31·2	47	44	221	51	32·9	47	39	235	25	33·3	44	36	247	24
850		43	40	233	51		43	34	250	27		40	35	260	26
800	62·9	40	36	236	54	64·7	43	34	262	38	65·1	50	-18	258	31
750		36	19	236	59		41	29	258	45		46	-21	256	33
700	98·2	29	14	236	67	100	35	23	250	45	101	39	-26	258	35
650		22	14	235	57		29	18	247	47		31	-19	262	38
600	138	18	05	237	65	141	22	12	249	53	141	25	-04	259	43
550		14	08	236	74		18	07	248	48		19	-05	262	43
500	184	06	-01	234	79	187	08	-03	247	63	188	12	-12	262	50
450		-03	-10	233	79		-02	-14	250	61		01	-27	260	51
400	238	-14	-21	238	78	241	-12	-28	250	66	243	-09	-44	261	58
350		-26	-33	240	102		-21	-43	251	80		-24	-56	265	63
300	305	-40		240	90	308	-38	-58	251	78	309	-40	-60	266	63
250		-57		236	87		-57		250	88		-59		265	60
200	391	-73		239	78	395	-74		257	80	396	-77		266	68
170		-70		245	96		-75					-78		263	58
150		-66		245	90							-73		263	57
130		-60		234	57							-67		255	42
110		-54		237	45							-64		257	40
100	536	-56		236	41						539	-68		254	33
90		-59		233	29							-62		271	30
80		-59		239	28							-61		273	25
70		-59		239	28							-59		245	18
60		-51										-59		263	15
												-54			
						Inversion 876 mb 44°-832 mb 45° 784 " 41°-767 " 43° Max winds:- 253 mb 34,700' 250° 100kts					Inversion 868 mb 38°-828 mb 51°				
Tropopause						II 200 mb -74° 39,500' I 164 " -75° 43,600'					I 196 mb -78° 40,000'				

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	04·4	61	51	250	10	02·9	62	56	203	15	00·3	62	56	220	16
1000	5·2	60	50			5·4	60	55	215	27	3·1	61	56	221	17
950		53	45	251	19		55	54	227	26		54	51	226	28
900	34·1	46	40	257	23	34·4	47	46	235	30	32·2	50	32	238	33
850		40	35	260	26		41	40	245	29		44	30	242	35
800	65·9	51	-03	257	29	66·2	43	28	287	27	68·9	38	34	243	39
750		47	-37	254	31		46	-08	250	26		38	12	240	50
700	102	41	-14	254	32	102	41	07	249	30	93·3	34	-03	240	59
650		35	-07	252	36		34	06	250	33		28	-08	239	66
600	143	29	-03	250	39	143	27	04	245	36	139	21	05	239	70
550		21	-03	249	42		18	-05	243	40		12	0	241	69
500	189	12	-11	250	47	189	12	-21	244	95	185	06	-05	242	64
450		01	-27	253	51		00	-34	242	98		-03	-13	244	73
400	244	-08	-37	252	57	244	-11	-46	244	58	240	-14	-25	240	75
350		-22	-46	253	55		-25	-53	242	57		-26	-37	243	81
300	311	-39	-60	252	53	311	-43		240	58	306	-41		239	79
250		-58		252	53		-60		239	57		-58		285	85
200	398	-77		254	54	397	-77		246	63	392	-72			
170		-77		258	58		-77		251	58		-69			
150		-77		264	54		-80		264	53		-66			
130		-73		257	46		-76		261	49					
110		-68		256	44		-75		256	49					
100	540	-64		257	37	539	-69		260	42					
90		-61		255	38		-64		276	34					
80		-58		256	22		-64								
70		-57		257	20	(73 mb)	-64								
60		-59													
	Inversion 850 mb 40°-805 mb 52°					Inversion 834 mb 40°-800 mb 49° 800 " 49°-785 " 50°					Inversion 910 mb 49°-900 mb 50° 786 " 36°-750 " 38°				
Tropopause	I 192 mb - 80° 40,000'					I 190 mb -79° 40,700'					I 210 mb -74° 38,200'				

21h G.M.T.

Station	LERWICK	STORNOWAY		ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Pressure: Time	21h G.M.T.	21h G.M.T.	G.M.T.	15h 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.	998·7 mb	998·7 mb	mb	1007·8 mb	1012·4 mb	1016·8 mb	1018·6 mb	1012·1 mb	mb
Pressure: Surf	988·8 mb	996·8 mb	mb	999·4 mb	1010·4 mb	1012·4 mb	1002·7 mb	1008·6 mb	mb
Pressure: Freezing	793 mb	810	mb	780 mb	680	659	628	654	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		Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	52	51			00·5	61	47	235	15					
1000	-0·5					-0·4									
950		50	47				49	45	240	27					
900	28·3	45	41			28·2	43	38	246	35					
850		39	36				36	30	246	24					
800	59·7	33	30			59·5	31	25	242	41					
750		29	26				26	18	238	41					
700	94·5	23	19			95·1	18	12	237	44					
650		16	12				10	01	236	40					
600	134	09	04			136	02	-09	235	42					
550		02	-03				-08	-18	238	44					
500	178	-07	-12			176	-19	-27	233	45					
450		-18	-22				-28	-37	241	46					
400	231	-30	-36			229	-41		242	55					
350		-44													
300	295	-51													
250		-52													
200	383	-50													
170	(195 mb)	-48													
150															
130															
110															
100															
90															
80															
70															
60															
	Isothermal 335 - 312 mb 48°														
Tropopause	I 275 mb - 55° 31,300'					NR									

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	02·3	57	52	220	15	00·6	60	53	210	16	01·2	55	49	210	13
1000	2·0					3·4	59	51	214	24	4·7	56	51	220	28
950		51	47	234	24		53	43	216	26		53	48	240	31
900	30·9	45	41	242	38	32·4	49	37	223	31	33·6	48	43	253	31
850		39	36	246	40		45	32	226	37		43	31	266	22
800	62·4	34	28	248	45	64·2	39	27	242	45	66·8	47	38	266	19
750		29	13	246	48		39	10	253	49		43	32	259	24
700	97·3	23	-01	246	50	99·5	34	-30	255	47	101	34	25	258	26
650		18	00	243	53		28	-22	255	62		31	15	262	42
600	137	17	07	243	70	140	20	01	260	68	142	23	12	256	45
550		14	06	243	75		11	01	257	62		18	05	251	49
500	183	02	-03	241	84	185	05	-05	246	66	188	08	-10	249	53
450		-06	-12	237	90		-05	-15	241	68		-03	-20	248	57
400	237	-16	-23	240	88	240	-16	-26	248	67	242	-12	-33	247	64
350		-29	-39	248	104		-27	-43	254	66		-26	-46	250	73
300	302	-46		243	105	306	-44		249	75	309	-43		247	73
250		-65		243	113		-61		246	83		-61		251	64
200	388	-76		248	93	392	-75		246	75	395	-76		250	75
170		-66		250	89		-72					-76		261	72
150		-65		250	75		-73					-76		273	66
130		-64					-74					-75		264	48
110		-64					-69								
100	533	-63				536	-59								
90		-62													
80															
70															
60															
	Inversion 610 mb 14°-600 mb 17° Isothermal 623 - 602 mb 21° 600 - 570 " 17°					Inversion 775 mb 37°-757 mb 40° 541 " 09°-525 " 10° 220 " -12-215 " -11° Max wind 258 mb 33,900' 249° 73kts					Inversion 1012 mb 55°-988 mb 56° 860 " 43°-835 " 51° Isothermal 687 - 659 mb 32°				
Tropopause	I 209 mb -80° 37,800'					I 197 mb - 76° 39,600'					I 200 mb - 76° 39,500'				

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		Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	55	53	230	09	02·9	58	56	203	15					
1000	5·1	55	53			5·2	57	55	226	27					
950		54	51	233	25		56	49	238	26					
900	34·1	48	45	246	25	34·2	52	44	248	24					
850		42	39	254	22		46	42	254	24					
800	65·9	50	24	264	22	66·1	45	34	260	25					
750		47	29	263	28		43	17	263	27					
700	102	41	24	263	33	102	40	19	264	33					
650		35	18	263	34		31	19	260	32					
600	143	28	15	261	35	143	22	12	256	36					
550		21	03	251	38		15	04	255	39					
500	190	13	-13	248	42	189	08	-08	248	42					
450		04	-23	245	48		-04	-20	248	48					
400	245	-07	-35	236	55	243	-11	-27	244	48					
350		-20	-48	242	62		-26	-42	249	52					
300	312	-35	-55	239	68	309	-44		243	50					
250		-52		242	65		-61		241	51					
200	400	-69		241	65	396	-70		252	60					
170		-71		257	66		-75		253	70					
150		-75		259	65		-78		253	68					
130		-76		259	68		-78		258	58					
110		-76		263	59		-80		249	46					
100	543	-73		267	51	537	-75		261	43					
90		-68		258	37		-73								
80		-66		257	30		-70								
70		-64		235	29										
60	(92 mb)	-61													
	Inversion 835 mb 40°-818 mb 50° Isothermal 1003 - 965 mb 55° 818 - 775 " 56°					Inversion 965 mb 55°-945 mb 55° 812 " 44°-788 " 44° 760 " 42°-745 " 44°									
Tropopause	III 204 mb -68° 39,500'					I 214 mb -72° 38,100'									

No. 11820 . DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Wednesday 13th September 1950. Page 1.

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

METEOROLOGICAL OFFICE LIBRARY 21 SEP 1950

03hrs G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	Valentia
Pressure Time G.M.T.	03hrs	03hrs	03hrs	03hrs	03hrs	03hrs	03hrs	03hrs	03hrs
Pressure M.S.L. mb	996·0	1001·1	1005·0	1009·0	1011·7	1016·2	1017·3	1016·7	1009·6
Pressure Surf mb	986·1	999·2	1004·2	1000·4	1009·7	1011·6	1001·4	1006·3	988
Pressure Freezing mb	812	820	757	757	685	647	648	669	680

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.	Pressure mb
Surf	02·7	50	48			0·5	51	49	240	100	2	53	48			02·3	54	51	220	100	6	59	53	210	100	1·2	53	51	180	08	4·4	64	53	220	11	02·9	58	57	203	20	0·3	58	56	Surf
1000	-01·2					0·3					01·3	53	48			02·4					02·2	59	53			04·4	54	51			4·8	54	53			04·6	57	56			2·6	57	54	1000
950		49	46				48	43	243	27		50	43				49	46	235	27		54	49	245	32		56	49	245	32		54	48	242	23		55	52	218	26		52	49	950
900	27·4	42	39			28·3	42	36	246	32	30·0	44	39			31·1	44	37	244	30	31·2	49	42			33·4	52	48	255	33	33·7	52	46	253	24	33·6	51	38	221	24	31·6	47	42	900
850		36	33				36	29	247	33		40	33				39	32	246	32		45	38				52	46	265	31		50	46	262	22		49	45	224	20		42	35	850
800	58·7	31	27			58·0	30	22	249	34	61·3	36	25			62·8	32	28	246	33	63·0	40	25			65·7	48	41	255	32	65·8	46	41	256	24	65·6	45	39	232	18	63·2	40	34	800
750		26	21				25	14	252	37		31	13				29	20	240	36		38	19				44	33	250	34		43	34	253	26		41	33	230	27		37	33	750
700	93·2	20	11			94·3	17	07	248	39	96·5	25	12			97·4	25	20	242	47	98·5	35	27			102	42	27	259	39	101	40	26	254	28	101	37	21	231	30	98·7	35	31	700
650		13	-1				10	-5	246	41		18	05				19	17	248	51		26	21				33	21	256	41		33	23	253	27		29	18	230	32		28	24	650
600	132	05	-6			133	03	-13	244	51	136	11	03			137	16	12	246	57	139	20	16			142	24	12	258	43	142	22	15	246	26	142	20	12	226	36	139	20	16	600
550		-3	-12				-6	-21	248	57		13	08				11	07	247	66		13	08				16	05	258	50		15	08	246	32		13	-8	232	36		15	11	550
500	176	-13	-23			177	-16	-30	250	57	182	04	-3			183	05	01	246	72	185	08	02			189	09	04	256	52	189	09	01	251	40	188	06	-3	242	48	185	06	03	500
450		-24	-34				-27	-39	252	60		-5	-12				-4	-9	249	87		-2	-9				-2	-17	254	53		-1	-9	253	42		-2	-14	248	45		00	-9	450
400	228	-36	-46			229	-33	-46	258	88	236	-14	-21			237	-15	-19	249	104	239	-15	-22			243	-16	-33	256	54	243	-12	-22	249	46	242	-13	-29	247	45	240	-10	-16	400
350		-46					-38	-49	253	132		-28	-35				-27	-34	246	104		-29	-36				-33	-51	262	45		-25	-37	250	42		-27	-42	243	45		-21	-28	350
300	292	-50				293	-46		250	154	302	-95				303	-41		244	101	306	-45				309	-49		273	54	310	-42		259	42	308	-44		247	45	307	-35	-43	300
250		-46					-54		251	99		-63					-60		246	108		-64					-60		257	62		-61		269	42		-62		261	44		-55		250
200	351	-52				352	-52				357	-71				359	-74		245	89	362	-75				365	-62		257	58	366	-74		261	58	364	-77		253	53		-63		200
170		-54										-68					-65		246	74		-73					-53		259	40		-71		255	70		-78		243	63		(231)		170
150		-54										-67					-63		244	70		-73					-60		258	36		-72		253	57		-77		252	63				150
130		-54										-64					-60					-72										-75		254	49		-79		257	58				130
110		-55										-61					-61					-62										-72		253	50		-76		252	47				110
100	531	-56									533	-64				536	-62				536	-65									539	-69		243	40	536	-74		245	54				100
90		-56										-63					-62					-58										-65					-71		254	35				90
80		-55										-63					-59					-57															-69		263	31				80
70		-56										-61										-63														(25)	-68							70
60		-56																				-64																						60
50		-59																				-64																						50
	Isothermal 986 - 960 mb 50°					Isothermal 999 - 975 mb 51°					Inversion 594 mb 10° - 555 mb 14°					780 mb 36° - 770 mb 37°					715 mb 34° - 700 mb 35° Isothermal 1010 - 1000 mb 57					1012 mb 53° - 969 mb 56° 900 mb 52° - 874 mb 54° 765 mb 41° - 736 mb 44° 735 mb 43° - 714 mb 45° Isothermal 963 - 925 mb 56° 826 - 810 mb 50°					Inversion 960 mb 52° - 943 mb 56°					Isothermal 668 - 830 mb 49°								
Tropopause	II 363 mb -46° 25000'					I 424 mb - 33° 32500'					I 213 mb -78° 37400'					I 208 mb -78° 38400'					I 206 mb - 81° 38600'					II 244 mb -61° 35400'					III 228 mb -71° 36800'					II 210 mb -79° 38400'					NR.			Tropopause
Station	LERWICK					STORNOWAY					LEUCHARS					ALDERGROVE					LIVERPOOL					DOWNHAM MARKET					LARKHILL					CAMBORNE								Station

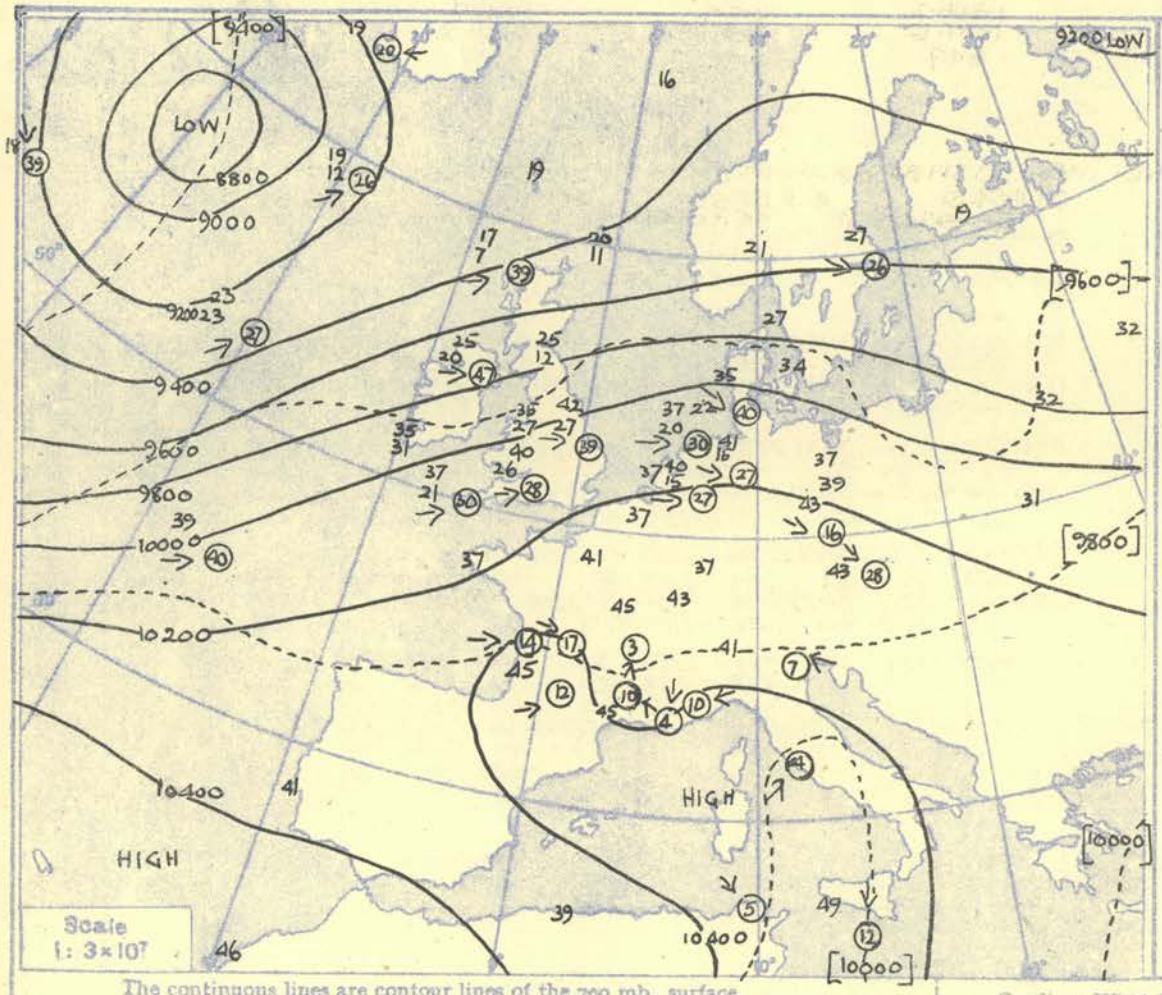
09hrs G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE
Pressure Time G.M.T.	09hrs	09hrs		09hrs	09hrs	09hrs	09hrs	09hrs
Pressure M.S.L. mb	1000·0	1002·2		1007·0	1010·5	1015·2	1015·1	1013·4
Pressure Surf mb	990·2	1000·3		998·4	1008·6	1011·0	999·4	1003·0
Pressure Freezing mb	808	798		725	674	647	647	635

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.	Pressure mb
Surf	02·7	54	48	250	20	0·5	52	48								02·3	54	51	204	12	0·6	55	55	calm		01·2	58	54	180	07	04·4	58	55	230	12	02·9	58	51	190	15				Surf
1000	0·0					0·6	52	48								01·9					02·9	58	55	204	14	04·3					09·2					08·7	55	51						1000
950		48	44	253	27		49	45									50	44	205	21		55	52	205	16		56	49	232	24		52	49	203	24		54	47	205	37				950
900	28·7	43	38	259	33	29·3	44	39								30·7	46	39	214	26	32·0	51	48	219	19	33·3	52	48	238	23	33·1	48	44	201	24	32·7	47	42	206	30				900
850		37	30	263	34		38	33									42	37	220	29		47	43	226	27		50	47	246	23		53	44	(37)	20		47	38	208	27				850
800	60·0	31	23	262	37	60·7	32	29								62·3	37	30	235	33	63·7	42	37	230	38	65·4	47	40	240	25	65·2	48	38	203	22	64·7	55	22	208	33				800
750		25	17	260	38		28	26									34	30	230	42		38	32	231	43		43	35	233	33		48	38	213	31		48	14	210	39				750
700	94·8	13	09	260	40	95·5	22	18								97·8	30	26	232	44	99·4	36	22	233	52	101	42	27	232	37	101	41	29	221	34	101	41	08	213	40				700
650		13	09	261	39		16	11									28	21	238	60		28	01	233	55		33	26	237	39		33	22	224	32		33	-9	223	39				650
600	133	06	-7	259	36	135	10	05								138	20	16	252	57	140	21	11	235	57	142	26	14	236	39	142	27	10	237	37	141	30	-9	230	42				600
550		-4	-20	253	31		04	01									14	03	248	54		13	-7	235	57		16	-2	243	46		20	-1	246	33		21	-17	230	51				550
500	178	-11	-29	262	38	180	-5	-12								184	06	01	250	34	186	05	-8	241	62	188	11	-2	249	47	189	11	-11	245	41	188	12	-26	234	51				500
450		-24	-42	264	57		-12	-18									-2	-8	248	60		-3	-15	240	64		02	-7	247	47		03	-17	241	40		08	-33	235	57				450
400	230	-31	-47	267	65	233	-21	-26								238	-11	-19	249	65	240	-13	-26	241	67	243	-9	-19	249	48	243	-9	-23	241	41	243	-5	-41	235	50				400
350		-38	-55				-30	-36									-22	-32	252	66		-25	-38	244	70		-21	-36	248	57		-22	-36	242	48		-18	-52	236	52				350
300	295	-47														305	-33	-42	250	83	307	-40		247	68	310	-37	-47	252	51	310	-36	-52	244	46	311	-33	-60	238	51				300
250		-54															-50		257	84		-58		250	71		-55		257	54		-55		241	44		-51		240	44				250
200	382	-55														393	-73		255	96	393	-77		248	71	398	-73		260	85	398	-72		253	48	398	-74		251	57				200
170		-56															-80		260	94		-74		251	74		-72		260	69		-71		255	57		-70		243	66				170
150		-58															-75		266	25		-79		258	69		-68		262	62		-71		256	66		-69		242	64				150
130		-56															-70		264	63		-72					-68		255	53		-73		253	54		-70		245	62				130
110		-50															-71		260	60		-65					-66		254	43		-75		244	48		-68							110
100	532	-55														536	-70		260	44		(114)				542	-63		257	38	551	-74		247	47	543	-66							100
90		-57															-68		254	34							-60		263	28		-69		253	42									90
80		-56															-66															-64		251	37									80
70		-54																														-58												70
60		-54																																										60
50		-52																																										50
	(45) -52 Isothermal 385 - 371 mb -32°					Isothermal 667 - 638 mb 16°															Inversion 719 mb 33° - 700 mb 36°					Inversion 973 mb 55° - 941 mb 56° Isothermal 768 - 750 mb 43° 556 - 534 mb 16°					Inversion 903 mb 48° - 848 mb 53° Isothermal 802 - 754 mb 48°					Inversion 1003 mb 58° - 990 mb 60° 858 mb 48° - 825 mb 55° Isothermal 825 - 800 mb 55°								
Tropopause	I 270 mb -57° 31200'					NR										I 177 mb - 81° 41200'					I 188 mb -83° 40500'					I 186 mb -79° 41200'					I 186 mb -78° 41400'					I 200 mb -74° 40200'								Tropopause
Station	LERWICK					STORNOWAY					LEUCHARS					ALDERGROVE					LIVERPOOL					DOWNHAM MARKET					LARKHILL					CAMBORNE								Station

Wednesday 13th September 1950.

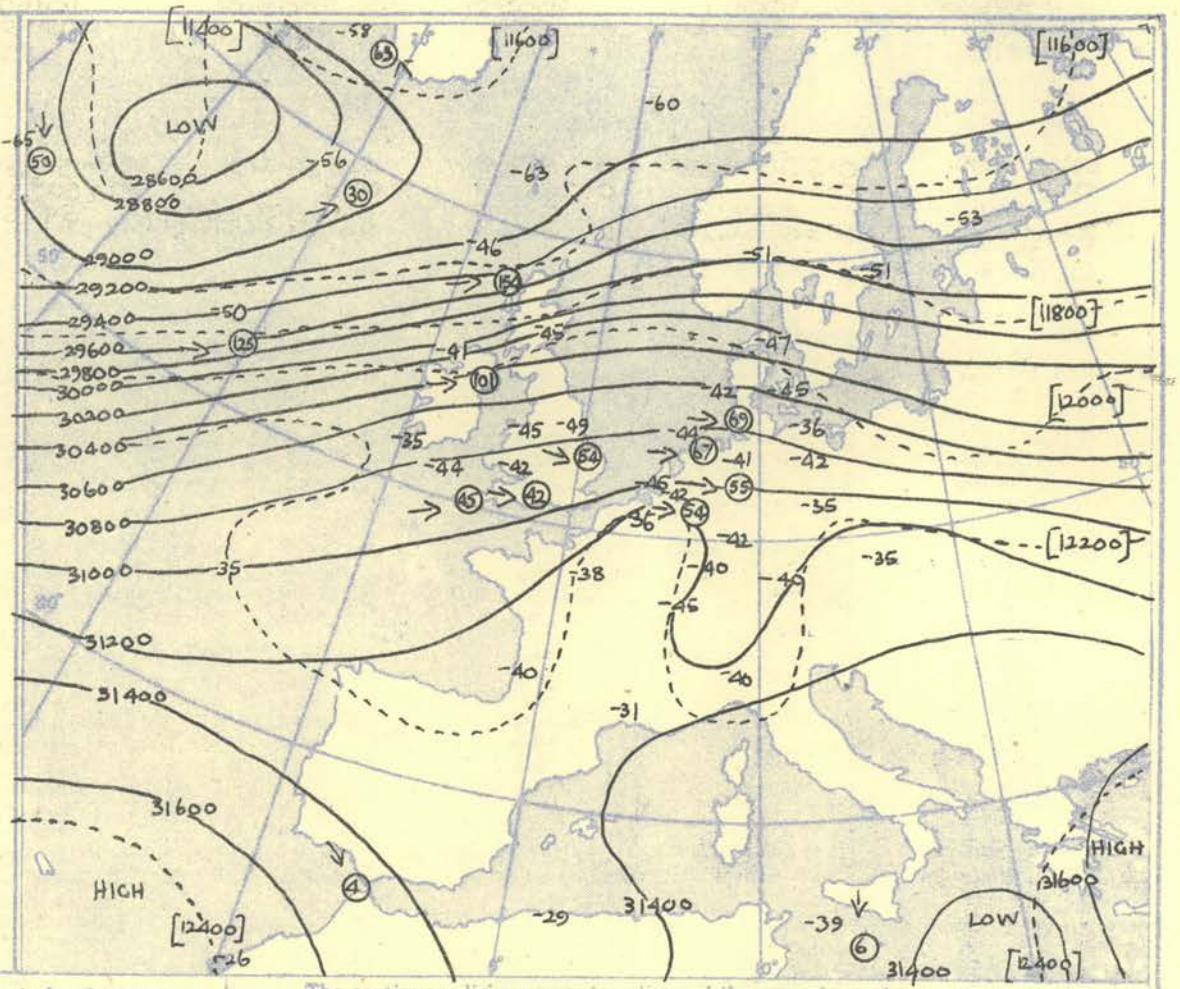
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. GMT.



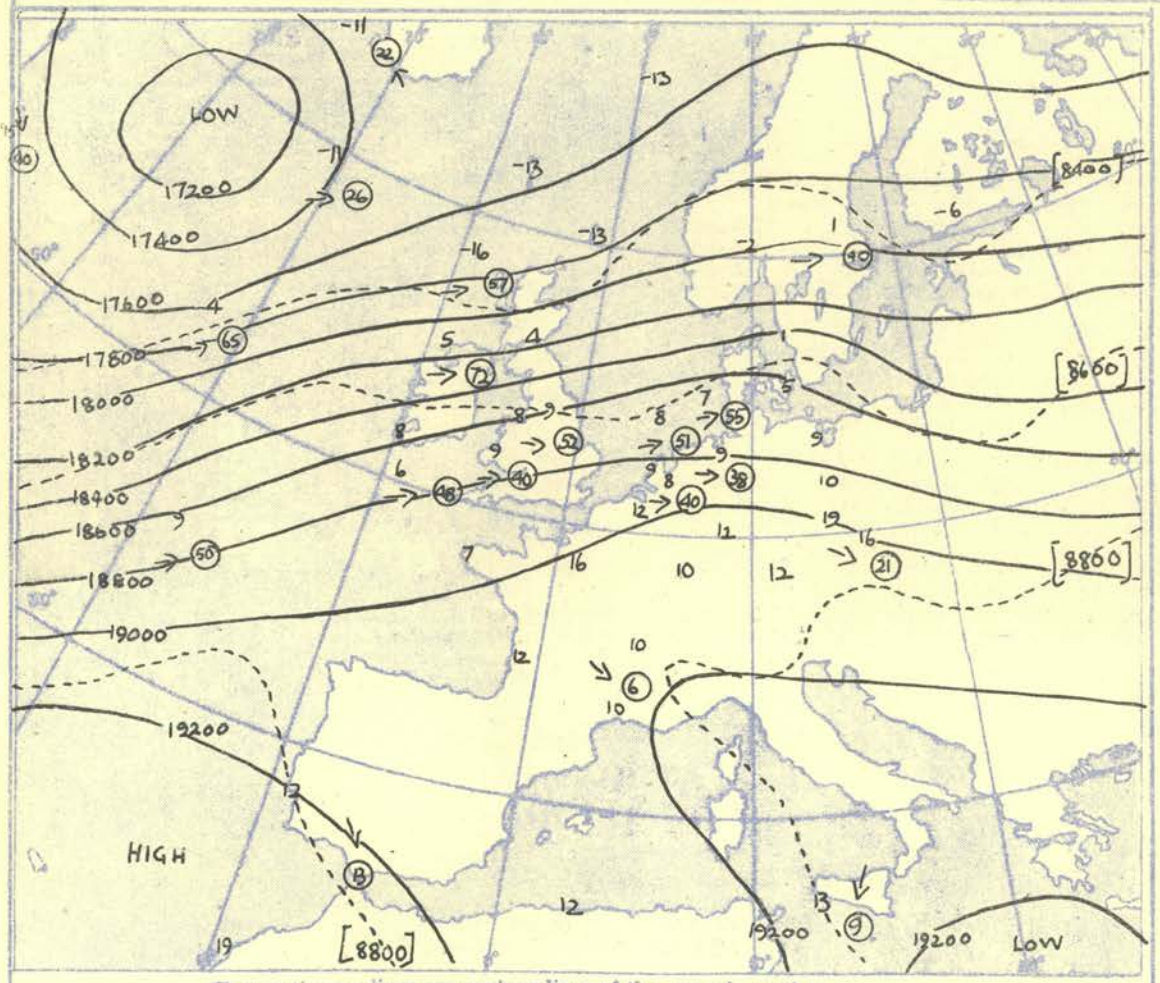
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

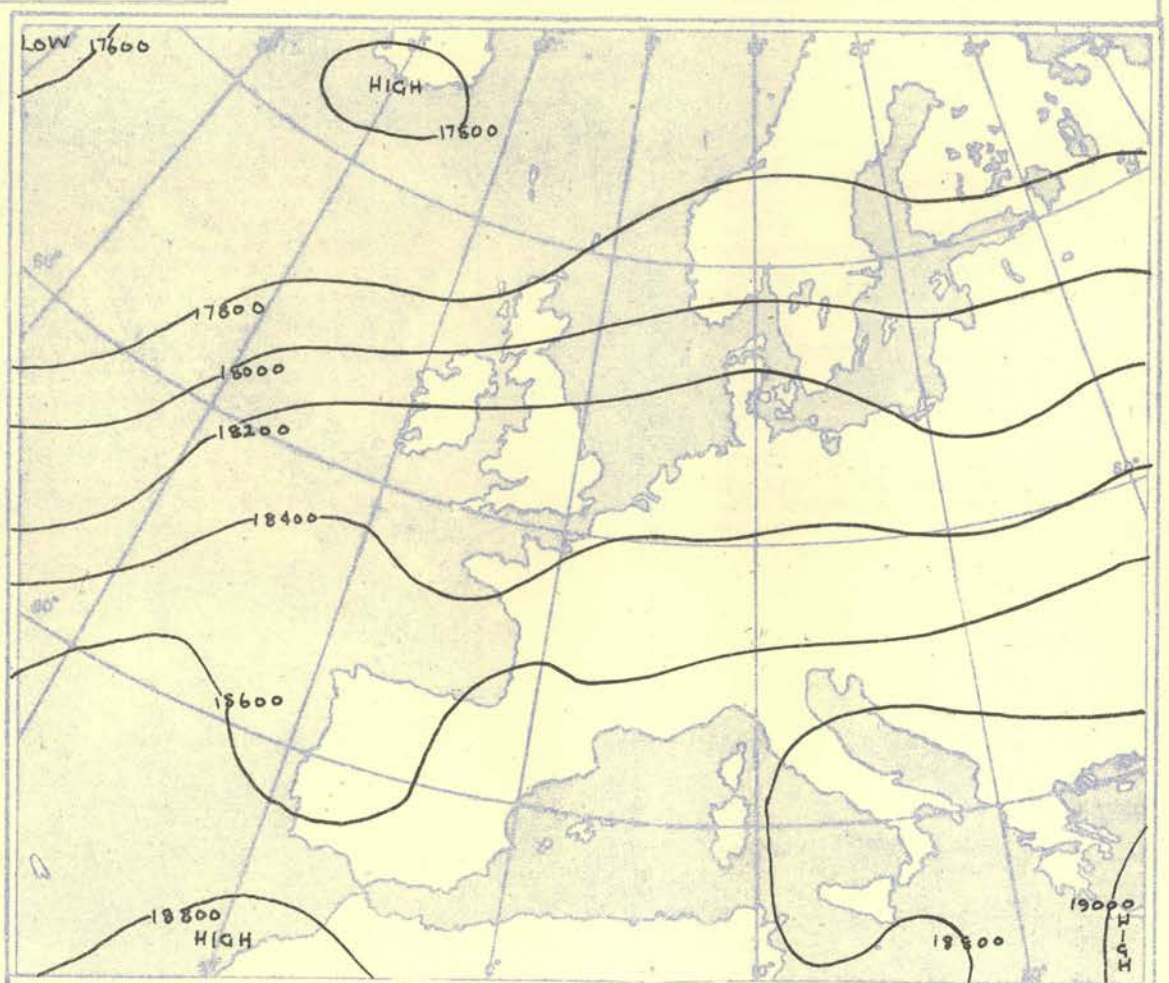
100 50 40 30 20 15 10 knots



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.

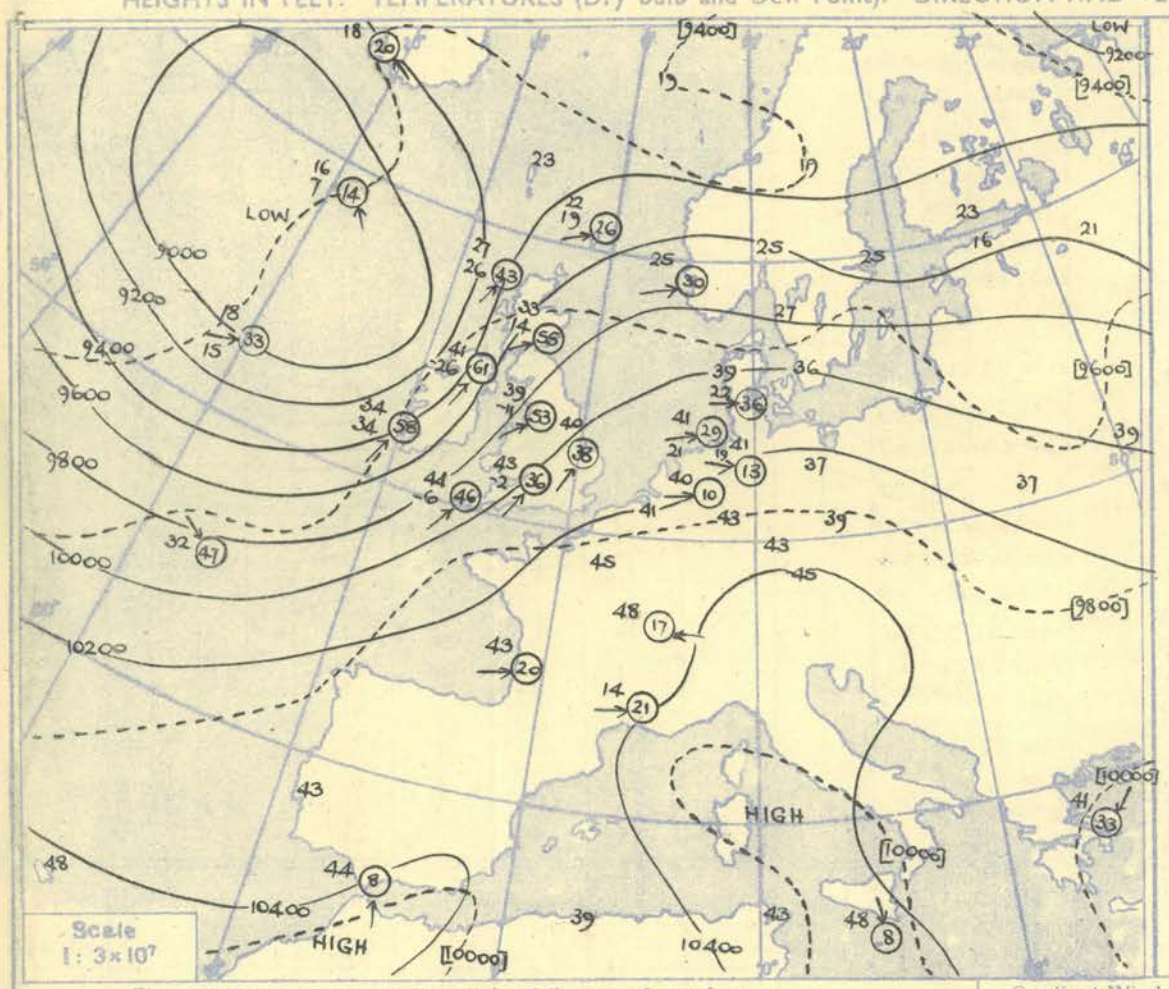
September 13th 1950. Page 3

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

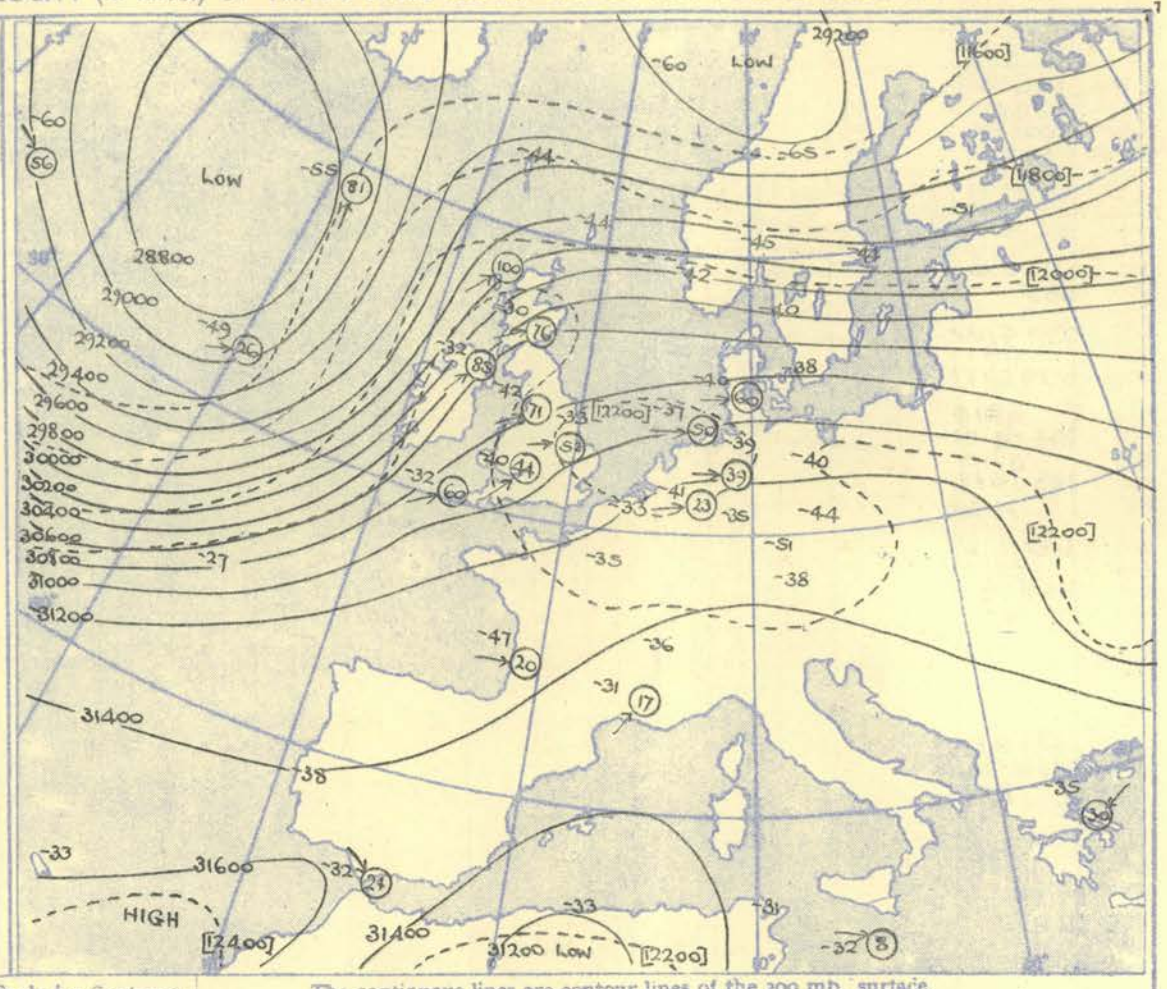
51·3°N 0·4°E

| 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 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

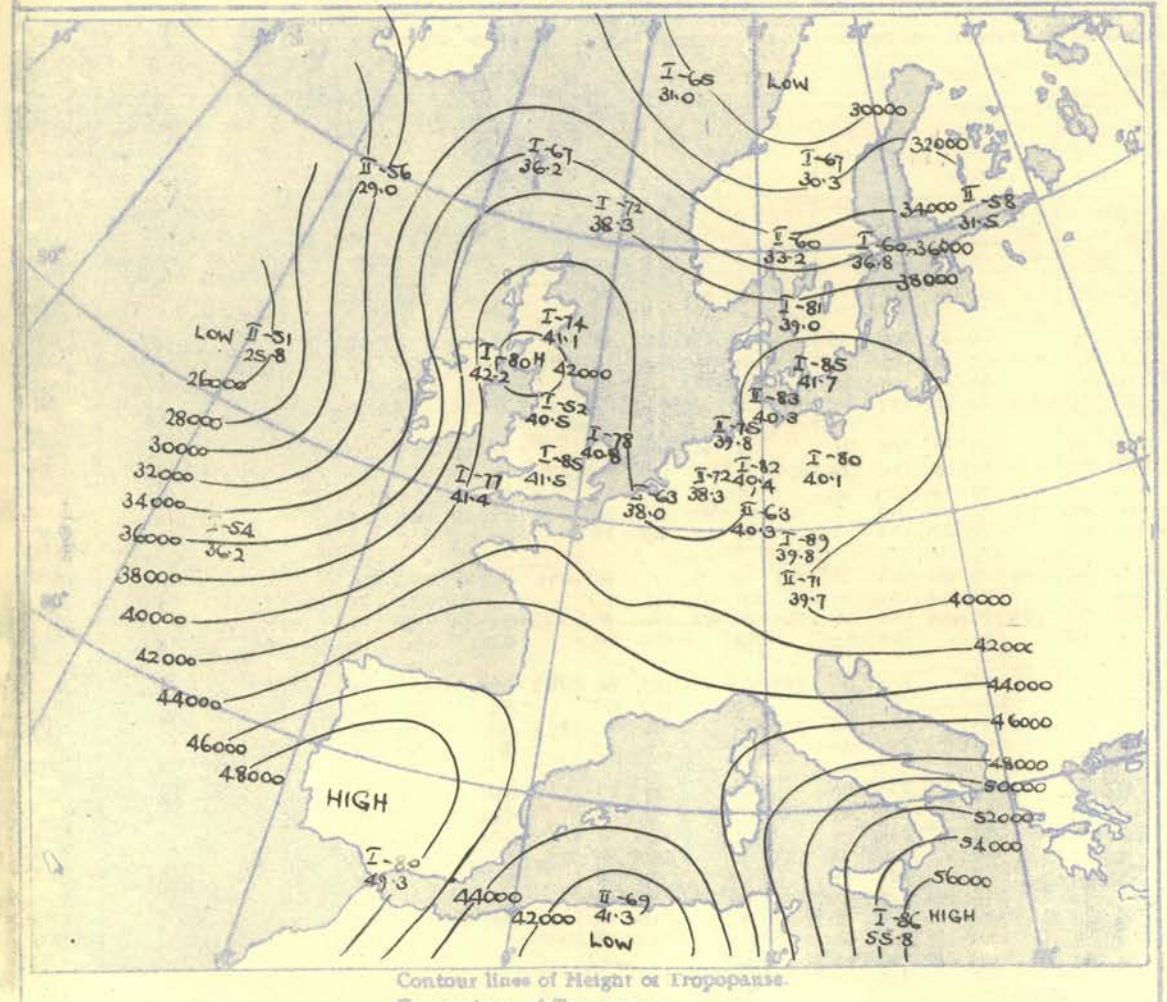


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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.

Subsidence over Great Britain ahead of the cold trough in East Atlantic assisted in the formation of a warm ridge. The southeastwards movement of the thickness line 17600feet was checked about 50°N. 30°W. probably mainly due to warming over the sea.

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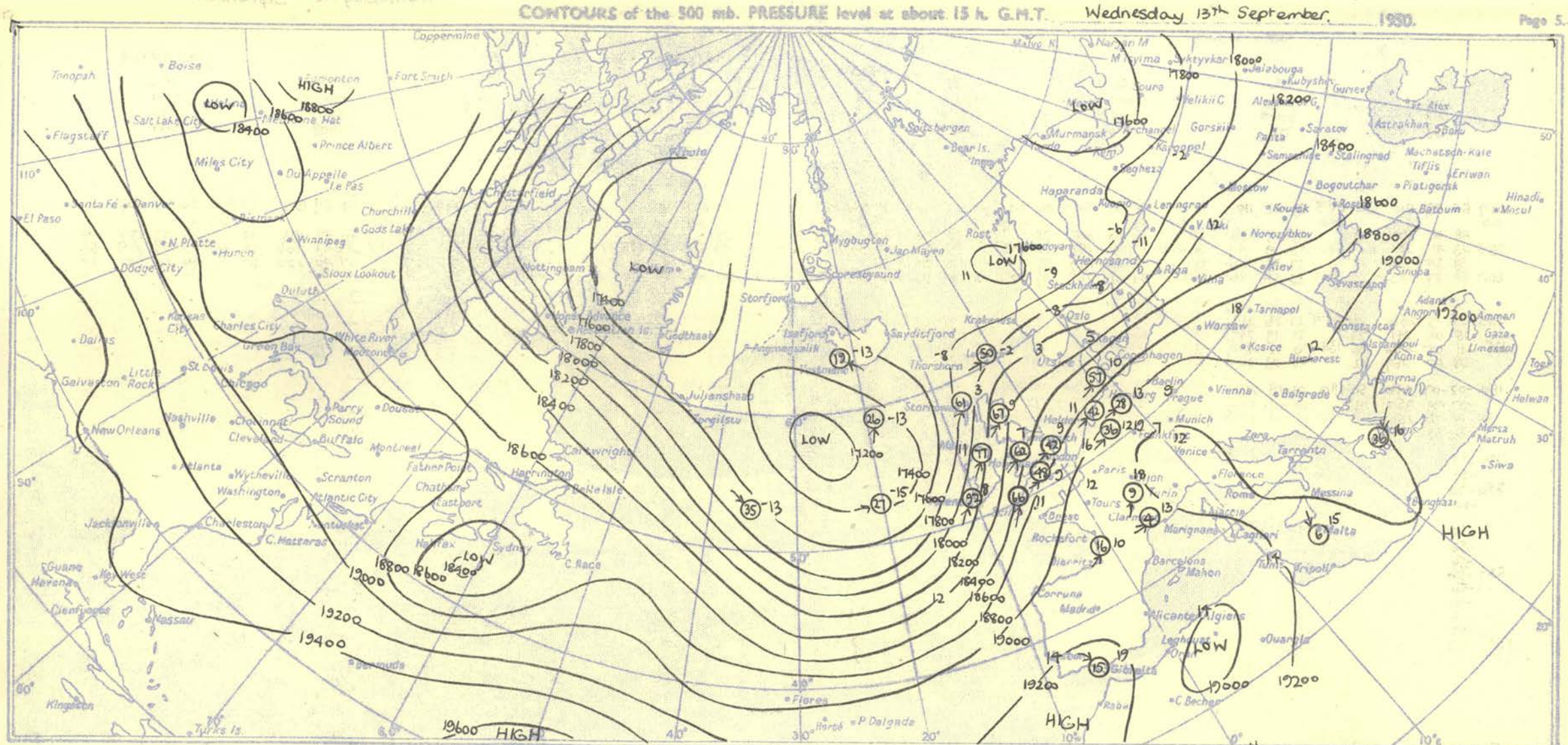
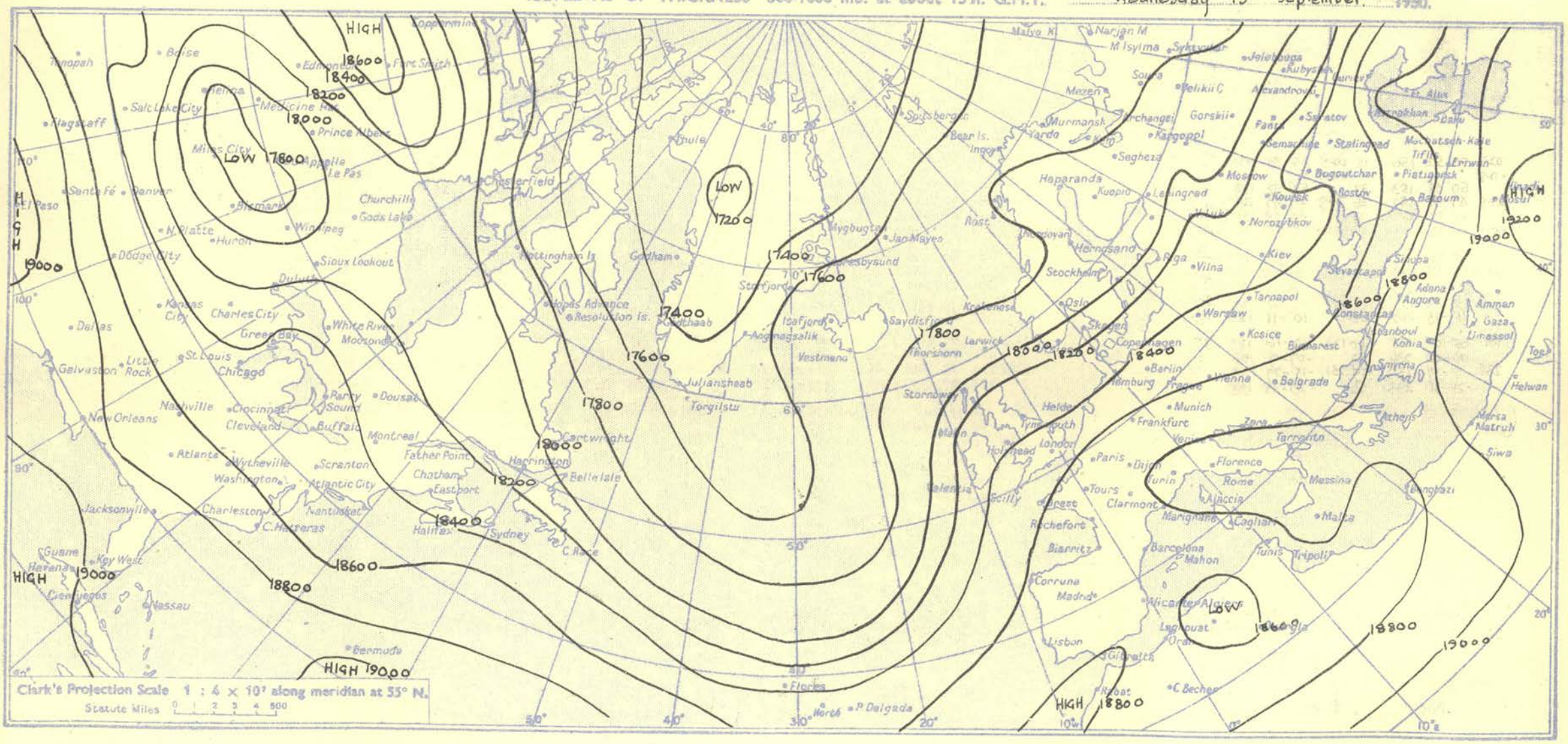
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Wednesday 13th September. 1950.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Wednesday 13th September 1950.



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

15h G.M.T.

Station	Time	Pressure M.S.L.	Pressure Surf	Pressure Freezing
LERWICK	15h G.M.T.	1002·4 mb	992·6 mb	783 mb
STORNOWAY	15h G.M.T.	997·9 mb	996·0 mb	773 mb
LEUCHARS	15h G.M.T.	1002·6 mb	1001·8 mb	670 mb
ALDERGROVE	15h G.M.T.	998·4 mb	990·4 mb	630 mb
LIVERPOOL	15h G.M.T.	1006·2 mb	1004·2 mb	650 mb
DOWNHAM MARKET	15h G.M.T.	1011·5 mb	1007·1 mb	622 mb
LARKHILL	15h G.M.T.	1011·8 mb	996·2 mb	618 mb
CAMBORNE	15h G.M.T.	1007·5 mb	997·1 mb	608 mb
VALENTIA	15h G.M.T.	991·5 mb	990 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
Surf	02·7	55	49	210	16	00·5	54	52	110	12	00·2	59	52	150	06
1000	0·6					-0·6					0·7	59			
980		48	46	224	18		49	45	138	21		53	47	161	23
900	29·3	43	41	221	19	28·1	43	39	147	31	29·6	47	40	186	28
850		39	34	218	21		37	35	166	31		43	36	199	36
800	60·7	34	27	223	22	59·4	33	31	186	35	61·3	41	31	208	47
750		28	24	231	23		31	30	206	39		37	24	212	47
700	95·5	22	19	236	26	94·4	27	26	217	43	96·8	33	14	220	55
650		15	09	241	27		21	19	217	36		30	03	228	53
600	135	11	05	246	36	134	16	12	210	50	137	24	-09	221	61
550		08	00	257	42		08	03	209	53		16	03	232	67
500	180	-02	-07	256	50	180	03	-03	219	61	183	09	00	230	65
450		-07	-09	250	73		-04	-11	229	73		02	-07	241	72
400	234	-18	-20	257	89	234	-13	-21	223	64	238	-09	-19	242	67
350		-31	-33									-18	-25	237	73
300	299	-44							225	100	306	-30	-38	241	76
250		-59										-46			
200	386	-70									305	-67			
170		-60										-70			
150		-60										-62			
130		-56										-58			
110		-56										-56			
100	534	-56									542	-55			
90		-56										-54			
80		-56										-51			
70		-54										-47			
60		-52										-43			
	(54 mb)											-47			
												-48			
											Isothermal 863 - 827 mb 43° 336 - 322 " -21° 288 - 284 " -35°				
Tropopause	I 203 mb 38,300' -72°					NR.					I 185 mb 41,100' -79°				

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	02·3	59	52	170	25	00·6	63	52	180	20	01·2	65	54	180	18
1000	-0·3					1·7	62	51			3·2	64	53		
980		66	60	174	30		55	45	193	32		52	42	194	24
900	28·8	51	45	182	45	30·7	47	39	203	39	32·3	49	43	196	32
850		47	42	190	55		40	34	204	41		43	36	196	36
800	60·7	42	38	195	60	62·8	46	26	210	50	64·3	53	16	208	35
750		39	33	202	61		44	-02	213	54		47	13	220	37
700	96·0	41	-26	208	61	98·4	39	-11	217	53	100	40	04	222	38
650		35	-29	214	62		32	-14	220	51		34	-08	235	39
600	137	28	-34	214	66	139	26	-33	222	55	141	28	-24	239	43
550		20	-25	214	70		17	-43	227	59		19	-38	241	46
500	184	11	-10	214	77	185	07	-50	228	62	188	09	-47	238	42
450		02	-07	217	78		-03	-57	230	65		00	-47	234	55
400	239	-05	-13	220	80	239	-12	-48	227	73	242	-08	-49	228	51
350		-17	-25	224	80		-19	-56	230	70		-18	-57	231	64
300	306	-32	-41	222	86	307	-32	-48	234	71	310	-33	-60	239	52
250		-48		224	86		-49		239	67		-51		249	36
200	395	-68		218	98	395	-68		248	77	398	-73		266	51
170		-77		230	99		-65					-74		253	60
150		-82					-67					-72		248	64
130							-63					-71		253	56
110							-56					-64		250	33
100						542	-54				541	-63		246	27
90							-51					-62		243	30
80							-48					-58		246	33
70							-48					-54		255	15
60						(61 mb)	-45					-54			
												-54			
	Inversion 758 mb 36°-732 mb 45°					Inversion 830 mb 38°-794 mb 48°					Inversion 838 mb 42°-819 mb 58° Isothermal 819 - 800 mb 53°				
Tropopause	I 175 mb 42,200' -80°					I 190 mb 40,500' -72°					I 190 mb 40,800' -78°				

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	62	50	225	18	02·9	62	54	157	25	00·3	56	55	205	19
1000	3·3					2·1					-2·3				
980		55	45	197	22		56	48	193	42		53	53	237	44
900	32·3	46	39	194	24	31·2	52	43	206	46	26·6	49	49	245	53
850		41	36	197	32		47	40	220	62		44	44	241	55
800	64·1	52	20	199	41	63·2	49	32	217	49	58·4	40	40	229	64
750		47	06	202	50		49	05	210	47		37	36	210	59
700	100	43	-02	218	36	99·4	44	-06	214	46	93·8	34	34	206	58
650		37	-24	222	39		37	-13	213	48		31	30	202	65
600	141	29	-38	224	41	140	31	-18	208	59	134	24	22	201	65
550		19	-50	220	45		20	-27	209	60		16	13	204	79
500	188	09	-60	228	48	187	11	-33	207	66	181	08	03	202	92
450		-03	-43	223	53		03	-26	213	60		00	-04	207	98
400	242	-11	-50	217	50	242	-05	-36	217	63	235	-07	-13		
350		-25	-58	226	48		-18	-42	218	57		-15	-22		
300	309	-40	-60	225	44	310	-32	-50	226	60					
250		-57		233	39		-51		230	59					
200	395	-77		260	44	398	-74		245	75					
170		-78		245	55		-71		245	60					
150		-83		248	64		-75								
130		-78		245	55		-71								
110		-80		238	54		-69								
100	536	-79		245	47	541	-68								
90		-75		251	42		-63								
80		-72		239	32		-58								
70		-66		240	30		-57								
60		-60					-55								
							-55								
	Inversion 835 mb 39°-813 mb 53° Isothermal 437 - 423 mb -06°					Inversion 816 mb 44°-790 mb 62° Isothermal 940 - 922 mb 54° 828 - 816 " 44° 470 - 460 " 06°					Isothermal 711 - 673 mb 34°				
Tropopause	I 182 mb 41,500' -85°					I 185 mb 41,400' -77°					NR.				

21h G.M.T.

Station	Time	Pressure M.S.L.	Pressure Surf	Pressure Freezing
LERWICK	21h G.M.T.	997·5 mb	987·6 mb	718 mb
STORNOWAY	21h G.M.T.	983·9 mb	982·0 mb	742 mb
LEUCHARS	G.M.T.	mb	mb	mb
ALDERGROVE	21h G.M.T.	992·0 mb	983·5 mb	750 mb
LIVERPOOL	21h G.M.T.	998·9 mb	996·9 mb	688 mb
DOWNHAM MARKET	21h G.M.T.	1007·2 mb	1003·3 mb	622 mb
LARKHILL	21h G.M.T.	1006·0 mb	990·4 mb	610 mb
CAMBORNE	21h G.M.T.	1002·2 mb	991·9 mb	660 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	52	52	130	15	00·5	55	54	180	20					
1000	-0·8					-4·5									
950		50	48	153	33		52	52	158	43					
900	27·9	47	38	157	36	24·3	47	47	168	48					
850		42	38	167	38		44	44	179	51					
800	59·5	39	36	177	37	56·0	39	29	188	57					
750		35	32	189	35		33	33	190	57					
700	94·9	30	26	185	33	91·2	30	09	188	50					
650		24	20	185	35		23	17	187	48					
600	135	19	02	199	41	131	17	10	185	50					
550		11	-13	209	54		10	-11	185	60					
500	181	05	-04	218	60	177	02	-16	189	70					
450		00	-08	236	57		-07	-17	193	69					
400	235	-11	-17	237	59	231	-15	-27	194	95					
350		-24	-31	233	76		-29	-48	195	100					
300	(30 mb)	-35	-42			297	-45								
250							-57								
200						384	-60								
170							-64								
150							-61								
130															
110															
100															
90															
80															
70															
60															
	Isothermal 955 - 931 mb 50°					Inversion 263 mb -58°-254 mb -56° Isothermal 737 - 700 mb 31° 417 - 406 " 13°									
Tropopause	NR.					I 218 mb 36,500' -65°									

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	02·3	52	49	225	18	00·6	59	52	180	25	01·2	58	49	180	15
1000	-2·2					-0·3					2·3				
950		50	46	229	28		54	49	183	32		53	43	197	29
900	26·5	46	40	226	33	28·8	51	47	201	42	31·1	48	40	215	22
850		44	35	226	46		51	46	215	59		46	37	220	37
800	58·2	38	27	228	52	60·9	46	41	224	54	63·2	53	20	215	42
750		32	23	230	56		41	36	226	51		49	14	206	44
700	93·2	25	20	227	64	96·6	33	30	217	51	99·4	43	07	207	48
650		26	23	210	68		28	26	209	55		36	-02	208	51
600	133	21	19	190	69	137	22	20	209	54	140	28	-08	213	54
550		14	12	187	75		15	14	213	64		17	-21	214	53
500	179	06	04	190	89	183	06	-02	211	71	187	08	-22	215	55
450		-02	-05	200	103		-04	-24	213	80		-02	-28	218	58
400	234	-14	-18	204	111	237	-12	-27	211	86	241	-13	-31	220	53
350		-24	-29	208	121		-22	-32	219	79		-22	-40	214	52
300	301	-35	-41	207	119	304	-38	-47			308	-37	-54	219	59
250		-50		206	118		-55					-55		225	51
200	389	-63				391	-77				395	-74		243	50
170		-62					-73					-77		245	56
150		-63					-71					-74		242	57
130		-62					-68					-76		236	55
110							-68					-73		234	47
100						535	-69				537	-72		247	38
90							-67					-66		245	26
80						(88 mb)	-67					-67			
70												-57			
60															
	Inversion 880 mb 44°-868 mb 45° 691 " 24°-640 " 26°					Isothermal 920 - 848 mb 51°					Inversion 843 mb 46°-813 mb 52° Isothermal 770 - 750 mb 49°				
Tropopause	I 208 mb 36,000' -64°					I 200 mb 39,100' -71°					I 192 mb 40,100' -78°				

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	58	50	190	16	02·9	58	58	180	30					
1000	1·7					0·6									
950		56	49	183	35		55	54	212	52					
900	30·8	52	47	199	39	29·8	53	51	231	55					
850		49	46	218	44		49	46	241	45					
800	62·8	43	37	227	44	62·0	45	42	231	38					
750		42	26	218	48		44	41	214	40					
700	99·0	46	15	211	57	97·9	38	35	211	46					
650		38	07	211	59		30	26	211	53					
600	140	30	-01	211	64	138	25	20	208	56					
550		21	-10	213	57		17	-17	212	63					
500	187	11	-10	218	59	185	10	-13	216	69					
450		01	-13	212	62		02	-14	214	72					
400	241	-10	-22	213	63	240	-07	-25	211	75					
350		-18	-35	211	55		-15	-27	212	82					
300	309	-36	-50	215	56	308	-27	-39	216	79					
250		-52		226	51		-46		218	85					
200	396	-70		238	60	397	-67								
170		-80		237	61		-76								
150		-80		231	61		-74								
130		-77		228	69		-72								
110		-77		230	61		-76								
100	538	-74		226	51	539	-76								
90		-70		248	31		-76								
80		-69		250	26		-74								
70		-66					-75								
60															
	Inversion 760 mb 39°-728 mb 50° Isothermal 870 - 858 mb 50°					Isothermal 782 - 750 mb 44° 570 - 540 " 17°									
Tropopause	I 180 mb 41,700' -72°					I 167 mb 43,300' -77°									

No. 11491

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Thursday 14th September 1950. 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.	984·7 mb	979·5 mb	991·5 mb	999·3 mb	998·5 mb	1005·3 mb	1003·2 mb	1004·6 mb	996 mb
Pressure: Surf	975·1 mb	977·7 mb	990·7 mb	984 mb	996·5 mb	999·0 mb	987·6 mb	994·2 mb	995 mb
Pressure: Freezing	725 mb	788 mb	800 mb	800 mb	770 mb	672 mb	697 mb	778 mb	785 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	58	53	170 31	00·5	53	49	180 30	0·2	53	47	
1000	-04·3				05·6				-2·4			
950		51	51	181 48		50	46	194 45		49	43	
900	24·5	47	47	188 54	23·1	44	41	191 51	26·2	43	37	
850		42	41	197 54		39	38	198 54		38	32	
800	56·2	38	37	198 50	54·5	33	32	203 58	57·6	32	26	
750		33	30	186 42		31	30	203 57		26	20	
700	91·4	29	26	173 39	89·4	23	21	206 57	92·3	23	07	
650		25	22	169 61		15	09	210 61		19	-01	
600	131	20	17	179 62	128	09	-01	213 62	132	13	-08	
550		12	08	181 75		01	-07	205 63		09	-04	
500	177	04	-01	185 53	173	-09	-18	204 61	177	-04	-02	
450		-05	-11	190 89		-20	-29	207 72		-04	-10	
400	221	-16	-23	193 90	226	-30	-40	205 81	231	-12	-19	
350		-27	-45			-31	-43	203 83		-22	-30	
300	257	+41			291	-33	-46		298	-37	-46	
250		-58								-55		
200									386	-61		
170										-62		
150										-65		
130										-65		
110												
100												
90												
80												
70												
60												
Inversion	741 mb 32°-730mb 33°				765 mb 30°-790mb 31°							
Tropopause	N.R		II 390mb -32° 23,100'		I 218mb -63° 36,700'							

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	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	02·3	51	45	200 20	00·6	56	51	210 05	01·2	59	53	175 15	04·4	55	58	220 11	02·9	55	52	225 10	00·3	54	49	
1000	-2·0				-00·4				00·9				00·9				01·3				-11			
950		47	41	224 39		54	47			55	51	209 36		57	55	233 24		52	48	250 30		50	44	
900	26·5	42	36	232 48	28·5	47	38		30·1	51	48	233 42	30·1	52	48	243 30	30·2	46	42	254 29	27·7	44	38	
850		37	31	239 50		41	27			47	43	248 33		46	42	241 34		40	34	249 28		39	33	
800	57·8	32	26	242 54	60·1	35	20		62·0	42	38	231 31	62·0	41	36	237 38	61·7	34	23	247 30	59·2	34	28	
750		26	18	238 56		30	16			40	55	221 42		36	31	226 44		31	09	246 32		28	21	
700	92·5	23	07	232 58	95·1	25	11		97·7	35	30	220 52	97·6	32	29	221 52	96·6	28	-10	242 40	94·0	23	14	
650		16	-02	228 58		19	01			29	21	220 58		29	25	226 66		21	-09	240 46		16	02	
600	132	08	-11	224 61	134	15	03		138	23	16	216 60	138	25	21	212 66	136	13	-11	240 48	133	10	-11	
550		00	-22	222 62		11	07			15	06	212 65		18	14	207 70		03	-14	232 61		02	-20	
500	176	-10	-31	224 63	180	03	00		184	06	-03	210 66	184	10	06	210 73	181	01	-07	217 87	178	-06	-26	
450		-20	-41	220 57		-05	-08			-02	-13	211 66		00	-05	212 73		-05	-16	211 93		-17	-35	
400	229	-30	-49	215 76	234	-13	-16		239	-12	-27	216 72	239	-10	-16	215 74	235	-13	-24	207 106	231	-10	-47	
350		-33	-52	210 121		-24	-27			-21	-38	215 72		-20	-26	211 78		-25	-33	209 101		-02		
300	294	-39	-59	203 151	301	-38	-42		306	-36	-49	206 70	306	-33	-41	207 80	302	-40	-49	208 107	295	-52		
250		-37		204 123		-59				-55		210 66		-53		209 75		-59		211 111		-41		
200	383	-49			388	-69			393	-74		213 68	394	-71		213 87	389	-70			385	-41		
170		-24				-69				-78		214 74		-73		219 81		-69				-45		
150		-57				-70				-75		217 60		-72		224 67		-70				-49		
130		-57				-70				-80		226 62		-74		225 59		-75				-49		
110		-56				-70				-73		235 50		-70		218 45		-73						
100	533	-56			532	-69			535	-74			537	-67		224 41	532	-71			(116 mb)	-50		
90		-57				-69				-72				-65		213 37		-69						
80		-58				-68				-69			(82 mb)	-63				-66						
70		-59				-65												-67						
60		-56				-62																		
		-56																						
Inversion	(33 mb) Inversion 750mb 26-742 mb 28° Isothermal 820-807 mb 34°				Inversion 997 mb 56°-981 mb 58° 620 " 12°-600 " 15°				Isothermal 800-775 mb 42°				Isothermal 988-979 mb 59° 742-730 " 35°				Inversion 224 mb -67°-217mb-66°							
Tropopause	I 260mb-52° 32,500'				II 209 mb -72° 37,800'				I 190 mb - 79° 40,300'				I 203mb-72° 39,000'				I 198mb-71° 39,100'				II 312 mb-52° 28,600'			

09h G.M.T.

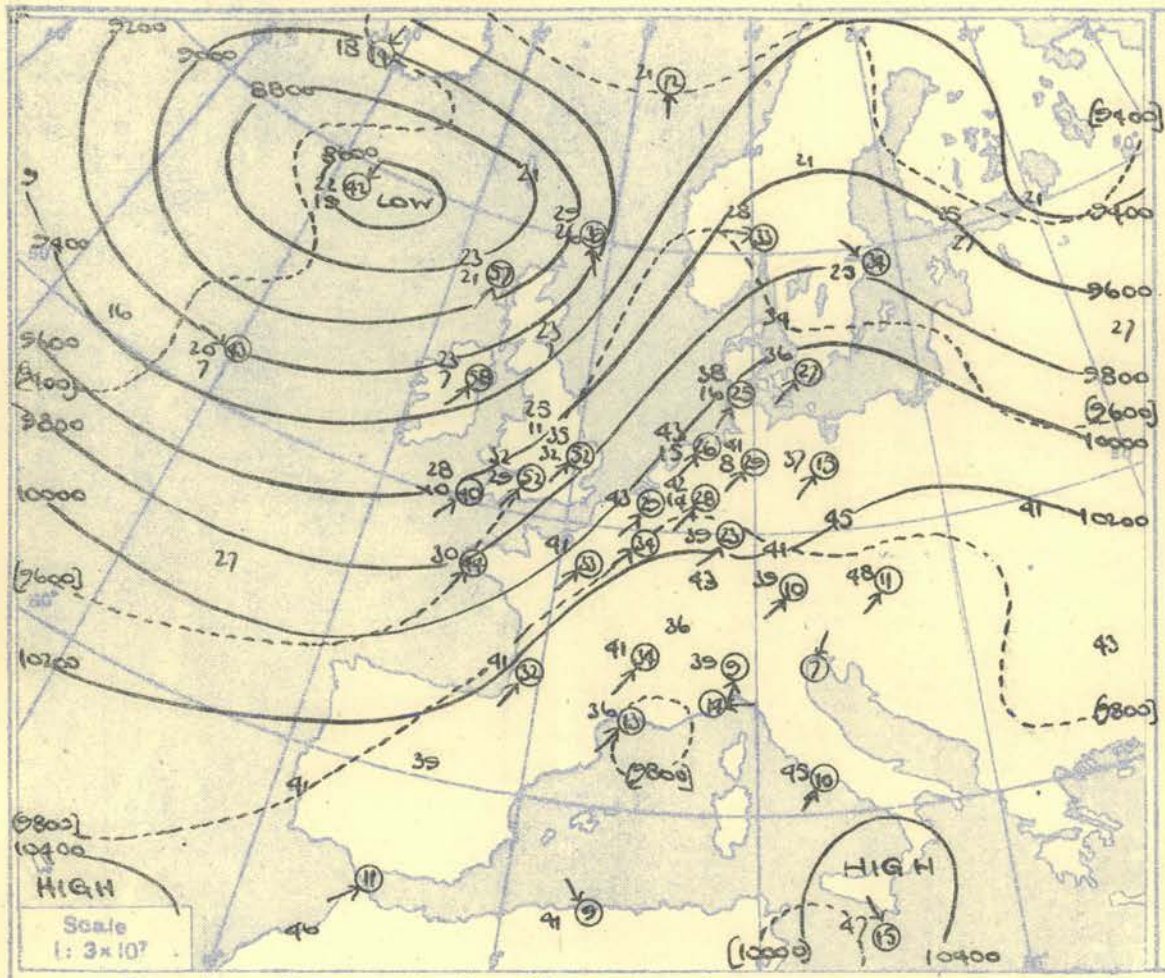
Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	09h G.M.T.	09h G.M.T.	G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	G.M.T.
Pressure: M.S.L.	984·2 mb	979·3 mb	mb	999·3 mb	1004·6 mb	1004·6 mb	1005·8 mb	1006·0 mb	mb
Pressure: Surf	974·6 mb	977·5 mb	mb	985 mb	998·2 mb	1000·5 mb	990·1 mb	995·6 mb	mb
Pressure: Freezing	770 mb	799 mb	mb	765 mb	800 mb	740 mb	714 mb	750 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
Surf	02·7	53	49	180 25	00·5	53	51						02·3	55	47		00·6	55	49	230 15	01·2	58	53	210 03	04·4	55	52	270 11	02·9	57	53	215 15				
1000	04·4				05·7								-2·0				00·1				01·4				01·6				01·6							
950		51	47	193 37		50	49							50	44			51	45	231 28		53	47	248 21		53	48	257 22		51	51	227 30				
900	24·3	45	41	204 39	23·0	43	43						26·8	44	40		28·8	44	41	238 27	30·4	50	40	247 22	30·5	48	39	256 22	30·4	47	43	234 30				
850		40	36	211 42		37	37							41	37			38	36	239 32		45	38	242 24		44	30	250 25		41	35	239 31				
800	55·8	35	38	214 41	54·3	32	32						58·3	36	29		60·2	32	31	241 39	62·1	39	29	238 33	62·2	40	19	251 30	62·0	37	30	244 33				
750		30	19	211 43		27	27							30	21	For		27	23	240 42		33	05	238 38		36	14	248 31		32	23	244 36				
700	30·7	25	09	209 44	89·0	21	20						93·3	24	12		94·9	21	15	241 37	97·2	30	-04	238 40	97·6	30	08	246 36	97·1	27	15	244 35				
650		18	06	202 44		13	09							17	02	winds		17	10	243 42		23	02	237 46		23	-02	246 39		24	03	246 34				
600	130	14	-01	201 50	128	06	00						133	10	-01		134	08	-01	245 47	137	15	01	239 53	137	16	-12	246 39	137	17	-10	244 40				
550		06	-09	201 55		-02	-15							01	-12	See		00	-12	244 50		13	06	215 76		07	-23	245 47		08	-21	246 46				
500	175	-03	-17	202 59	172	-12	-27						177	-08	-22		179	-11	-24	245 51	183	06	01	205 76	183	-02	-23	225 65	182	-01	-28	252 46				
450		12	-27	193 82		-23	-39							-20	-35	page		-23	-36	237 60		-03	-08	203 79		-02	-15	209 91		-11	-37	253 51				
400	228	21	-43	196 82	224	-36	-51						230	-33	-50	8	231	-28	-41	214 76	237	-13	-18	211 88	237	-12	-19	205 96	236	-23	-48	249 54				
350		22	-48			-50								-48				-33	-46	208 125		-22	-28	214 92		-27	-35	212 95		-35	-58	238 60				
300	295	30	-56		288	-48							293	-60			296	-46		207 127	304	-35	-43	206 102	304	-39	-50	208 108	301	-45		220 83				
250		-37	-60			-42								-49				-56		213 123		-52		206 101		-50		209 116		-55		215 100				
200	387	-36	-59		378	-45							381	-48			384	-54			392	-61		209 89	392	-58		215 99	388	-57		219 92				
170		-41				-49								-45				-59				-66		210 92		-60		219 78		-58		222 80				
150		-45				-46								-50				-61				-70		211 90		-59		219 60		-60		222 79				
130		-43				-40								-48				-59				-70		212 70		-59		218 53		-60		226 64				
110		-40				-44								-51				-57				-64		214 52		-55		222 48		-60						
100	542	-40			531	-49							533	-54			532	-57			637	-64		213 52	540	-53		225 32	536	-61						
90	(093 mb)	-40				-56								-52				-53				-64		211 45		-54				-62						
80						-64								-53			(89 mb)	-55				-64		211 30						-61						
70						-51							(75 mb)	-53								-57								-60						
60																						-54								-60						
																														-57						
																														-59						
Inversion	855 mb 39°-850mb 40° 625 " 13°-600 - 14° 350 " -22°-342 - 21° Isothermal 360 - 350 mb -22°												Inversion 864mb 39°-850mb 41°				412mb -30°-400mb -28° Isothermal 674-663mb 19° 383-363 " -29° Max Wind 210° 152 K/S 31,800' (275mb)				Inversion 583 mb 12°-550mb 13° Isothermal 942-917 mb 51° 728-709 " 31°				Inversion 500mb -02°-470mb-02°												
Tropopause	I 255mb -38° 33,100'				I 325mb -								I 284 mb -64° 30,600'				I 254 mb -56° 33,200'				I 206 mb -68° 37,800'				I 230mb-59° 36,200'				I 217mb-60° 37,000'							

METEOROLOGICAL OFFICE 22 SEP 1950

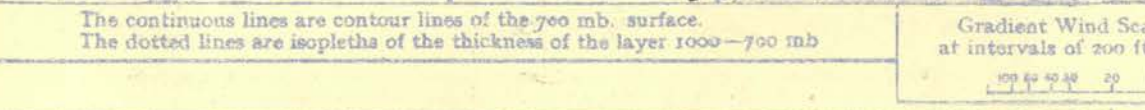
14th September 1950.

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.

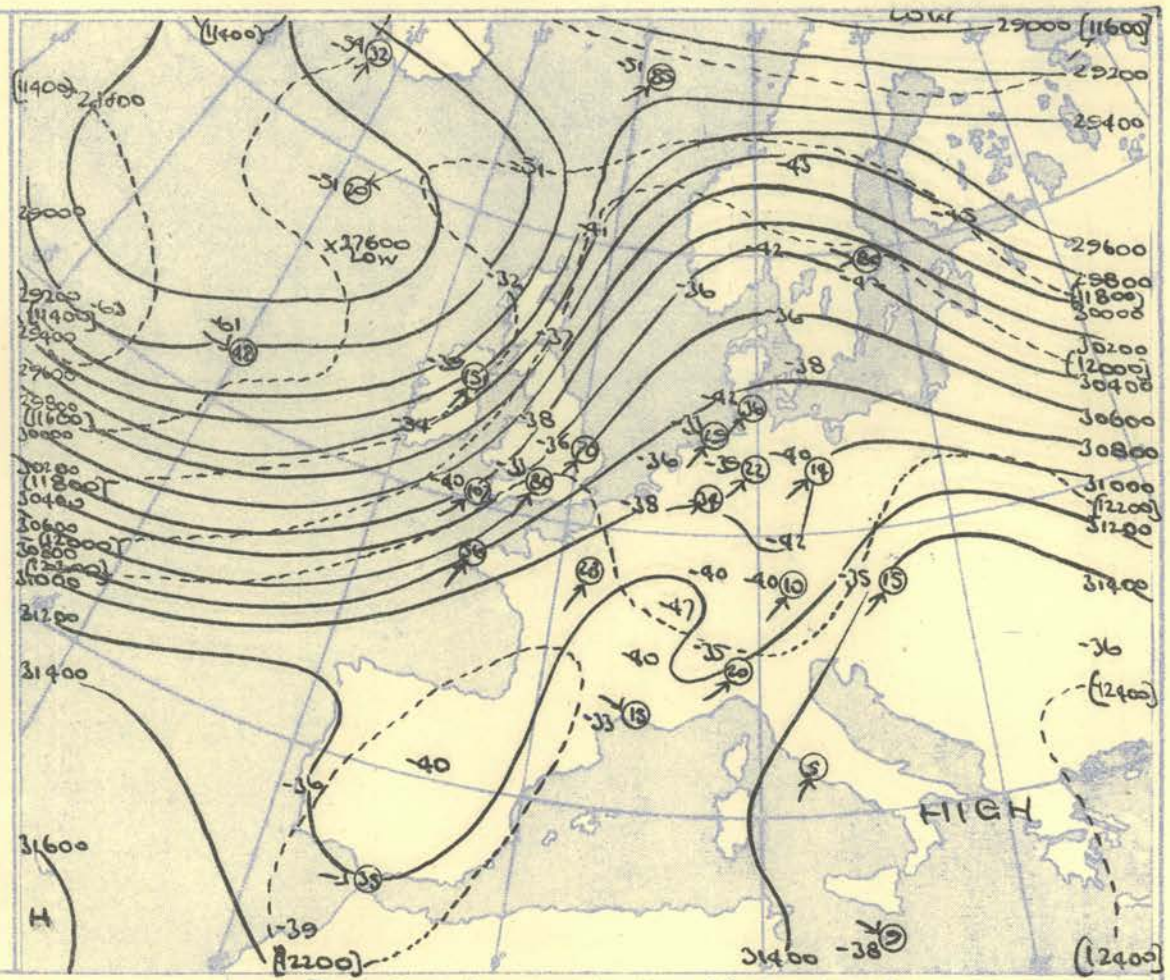


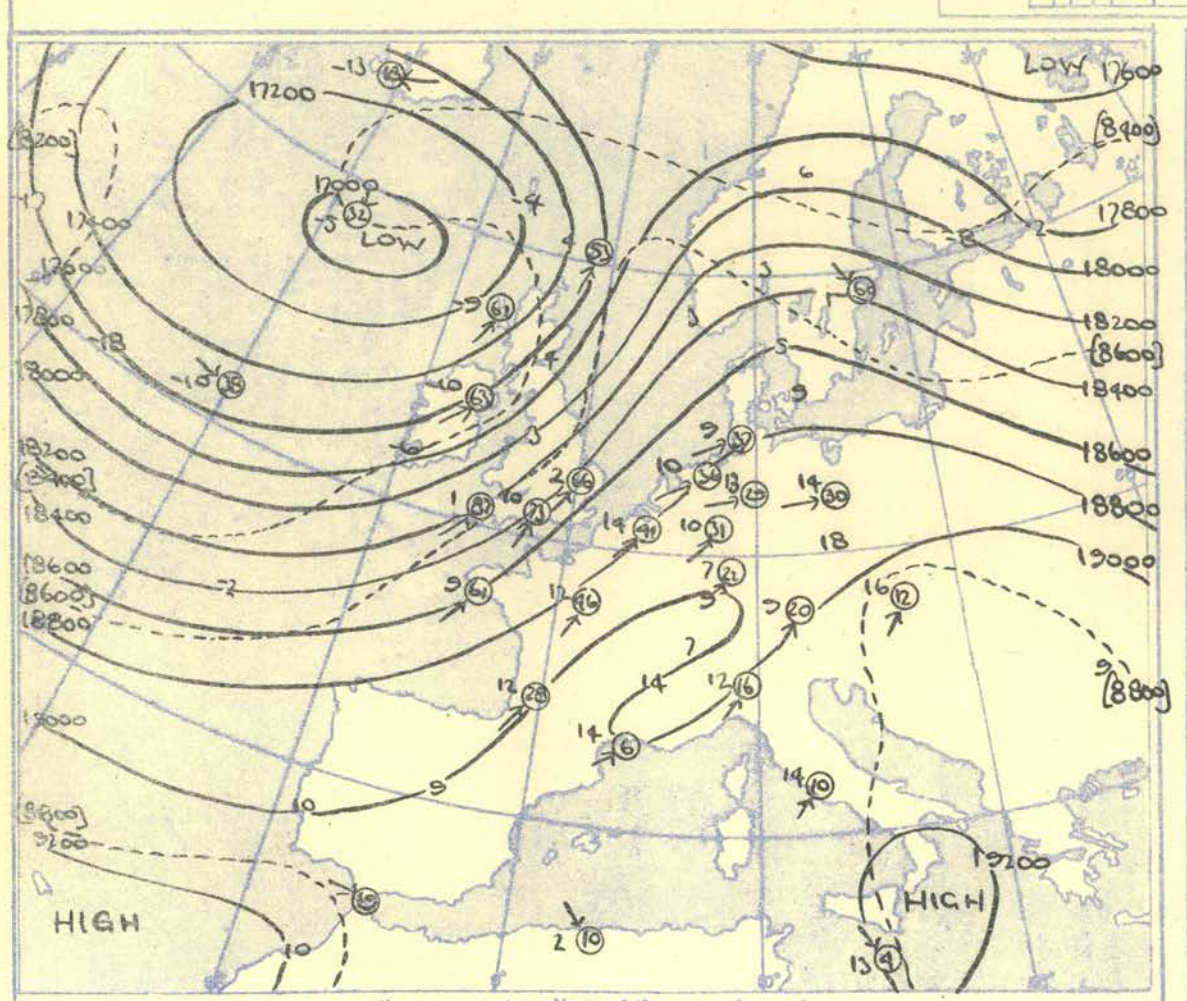
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

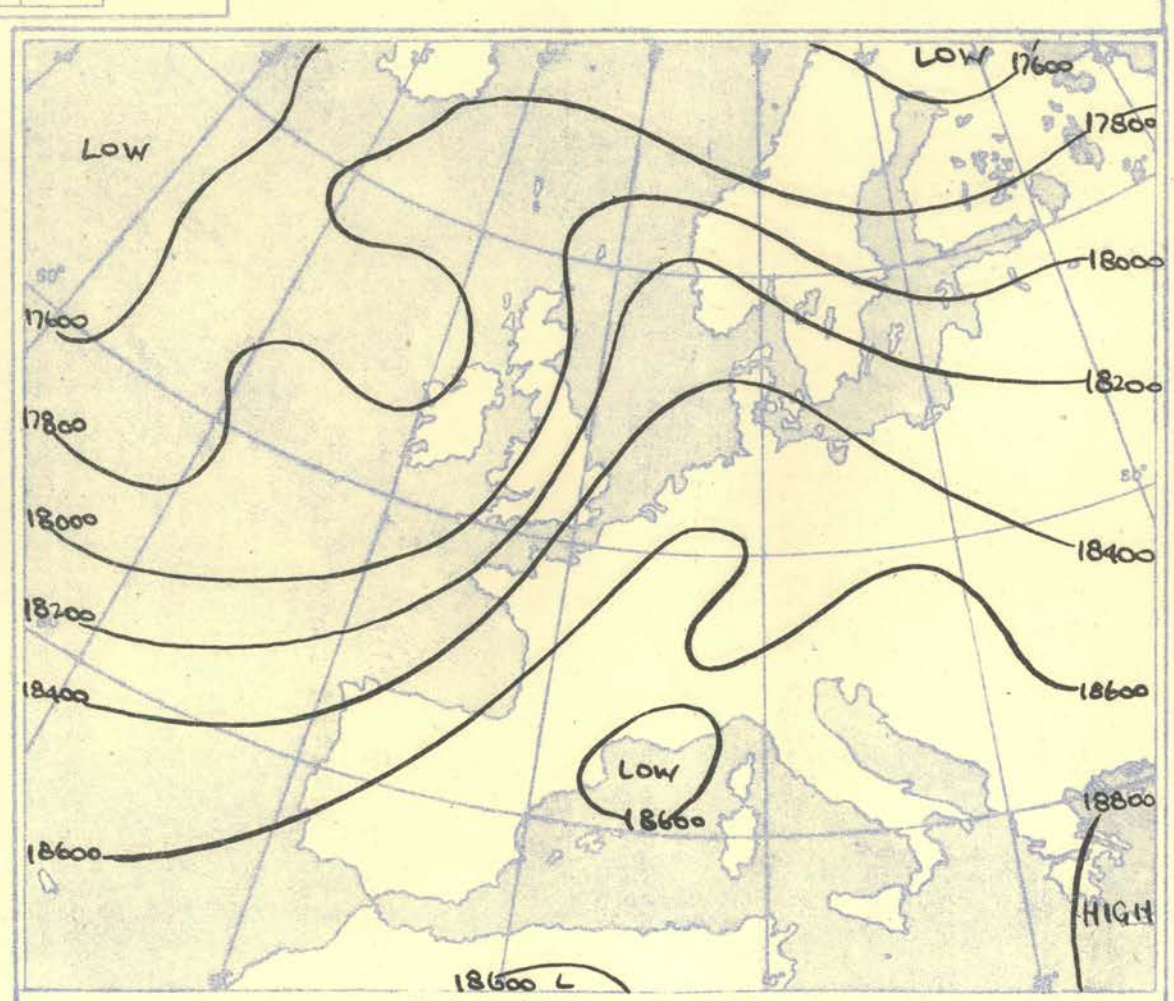


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500 — 300 mb





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

	48·2N 20·5W			49·5N 14·7W			43·2N 17W			39·5N 12·2W			51·3N 00·4E											
Time	13h			1430h			13h			15h			1425h											
Pressure M.S.L.	1004 mb			1001 mb			1011 mb			1013 mb			1009·0 mb			mb			mb			mb		
Pressure Surf	1000 mb			997 mb			1008 mb			1010 mb			992·9 mb			mb			mb			mb		
Pressure Freezing	820 mb			810 mb			770 mb			630 mb			704 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.	Height ft./100	°Temp. °F.	Dew °F.	Pressure mb
Surf	01·9	37	46	01·0	37	48		64	53		66	64	03·1	63	50										Surf
1000	01·3			00·2			3·2	63		3·8	65		01·1											1000
950		49	43		50	46		56	43		58	58													950
900	29·6	41	39	29·0	44	35		48	44		56	51	30·2	49	42										900
850		35	33		37	32		41	27		50	43		46	23										850
800	60·8	29	22	60·2	30			35	35		46	43	62·0	42	15										800
750		23			25			29			44	38		37	09										750
700	95·3	20		24·8	11		98·8	27		10·0	39	22	97·4	31	25										700
650		09			12			20			35			25	21										650
600	13·4	01		13·4	06			11			27		137	18	17										600
550		-06			-02			03			18			09	06										550
500	178	-18		178	14		183	-04		188	13		183	02											500
450														-09											450
400													237	-21											400
350														-28											350
300													303	-40											300
250																									250
200																									200
170																									170
	Cloud 5 Cu. 920-810mb 3 Sc. 780-690.. 3 As. 590-530..			Cloud 5 Cu. 930-760mb 2 Ac. 630-610.. 2 Ci N.R.			Cloud 1 Cu 910-900mb 7 As. 780-610.. Surf Wind W. 11-16 kts			Cloud 8 Sc. 980-910 mb 2 Ci. N.R. Surf Wind N.W 7-10 kts			Cloud 4 Cu. 900-850mb											

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

Place	Leeming		Shoeburyness		Lympne		Downham		Aldergrove		Bassingbourne		Carnbourne		Liverpool		Leuchars				Place
Time	09h		09h		09h		09h		09h		09h		15h		21h		21h				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.	170	08	240	05	230	10	210	15	210	23	230	12					230	20			Surf.
1,000	210	20	260	19	260	23	240	21	210	39	240	25					230	42			1,000
2,000	230	34	260	25	260	31	240	33	220	42	250	22					230	43			2,000
3,000	240	44	250	24	260	27	250	25	230	47	250	21					231	43			3,000
4,000	240	44	250	25	250	20	250	28	240	48	240	25					233	45			4,000
5,000			250	27	230	25	230	27	240	51							233	44			5,000
6,000			240	31	230	27	240	27	240	51	250	19					233	47			6,000
8,000			240	32	260	35	240	31	240	52	270	23					231	48			8,000
10,000			240	42			240	38	240	51	250	24					228	49			10,000
14,000			210	63			250	47	240	52							222	58			14,000
18,000			210	75			230	36	230	51							213	67			18,000
24,000			210	81					240	59							212	73			24,000
30,000			210	90			210	109	240	65	219	75					219	96			30,000
40,000			210	85			210	108	220	63	221	76			216	60					40,000
50,000			220	71			220	56	220	29	(39,000')				222	48					50,000
			(47,000')				220	16	230	15					(46,000')						
							(66,000')		(55,000')												

NEPHOSCOPE OBSERVATIONS

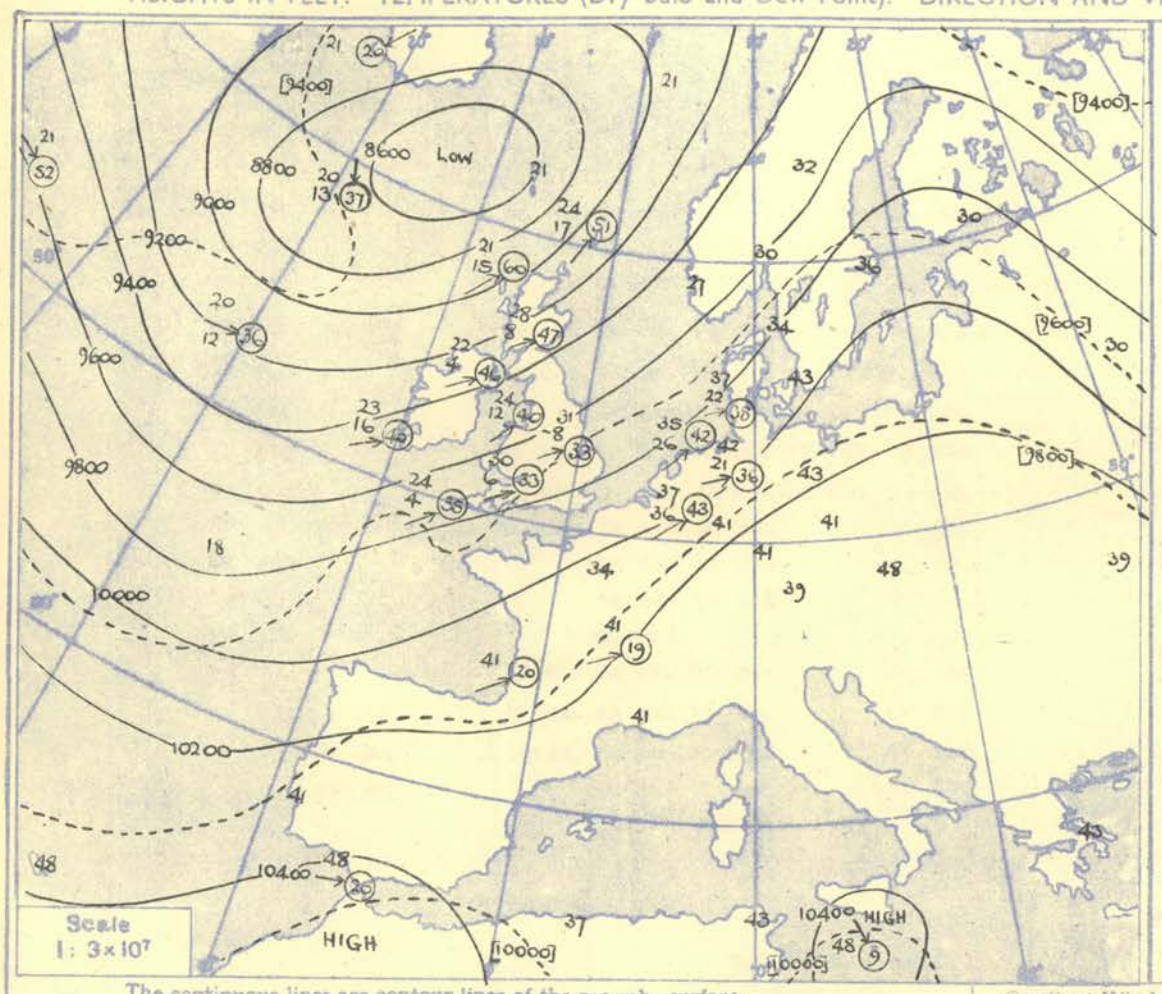
Place		NONE REPORTED								Place
Time Type										Time Type
Dir. Vel.										Dir. Vel.

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

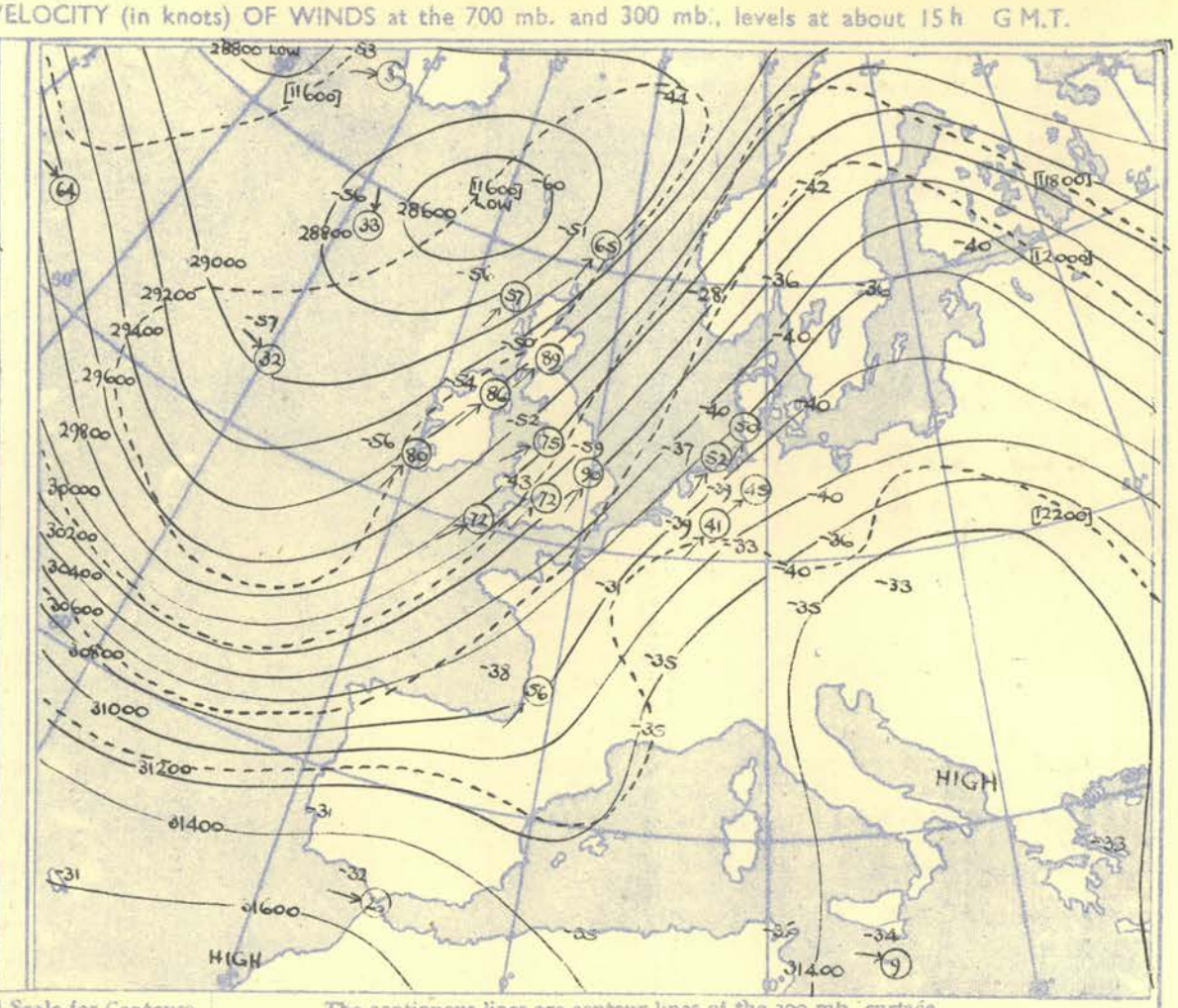
Ship	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER WATCHER	WEATHER WATCHER	WEATHER WATCHER	WEATHER WATCHER		Ship
Lat/Long	59·0N. 18·5W.	59·0N. 17·9W.	59·2N. 17·8W.	59·5N. 17·2W.	52·5N. 20·0W.	52·5N. 19·8W.	52·5N. 19·9W.	52·5N. 20·1W.		Lat/Long
Pressure Time	03h. G.M.T.	09h. 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.	968 mb	968 mb	971 mb	975 mb	989 mb	990 mb	990 mb	992 mb	mb	Pressure M.S.L.
Pressure Surf	968 mb	968 mb	971 mb	975 mb	989 mb	990 mb	990 mb	992 mb	mb	Pressure Surf
Pressure Freezing	810 mb	810 mb	815 mb	785 mb	800 mb	805 mb	800 mb	820 mb	mb	Pressure 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	Height ft./100 / °Temp. °F. / Dew °F. / Wind Dir. ° Vel. knots	Pressure mb
Surf	49 47 380 46	49 46 330 42	50 40 340 45	51 45 305 25	53 47 260 32	53 52 270 25	55 46 260 26	53 47 320 28		Surf
1000	-8·9	-8·8	-7·9	-6·9	-3·1	-2·9	-2·7	-2·1		1000
950	47 40 345 48	47 44 317 51	47 38 333 51	47 39 298 36	50 46 267 20	48 46 259 36	49 43 259 34	48 44 328 33		950
900	19·7 41 35 347 49	19·7 41 41 324 45	20·6 42 35 345 59	21·7 40 32 300 24	25·6 43 39 267 46	25·8 43 42 265 33	26·0 42 38 262 34	26·6 42 38 321 36		900
850	35 31 354 50	34 34 329 43	36 30 352 48	40 25 300 28	37 36 271 48	37 37 271 30	36 33 263 34	36 31 325 33		850
800	50·9 31 27 352 48	50·9 31 31 338 42	51·9 30 25 347 40	53·1 34 20 296 25	56·9 32 28 273 48	57·0 31 31 271 27	57·2 31 26 263 33	57·8 29 25 328 39		800
750	27 23 356 44	28 28 341 33	26 20 344 38	25 17 278 26	26 22 273 48	27 27 271 28	26 18 264 34	25 21 323 38		750
700	85·5 22 19 006 42	85·5 20 20 342 37	86·4 20 13 347 37	87·7 17 09 300 27	91·5 20 17 270 43	91·7 21 20 271 30	91·8 20 12 265 36	92·4 19 14 321 39		700
650	16 12 010 34	13 12 334 46	15 08 352 45	10 02 308 28	13 06 267 36	14 14 270 32	12 03 264 35	12 07 320 40		650
600	12·5 10 05 002 26	12·5 06 05 333 39	12·5 10 03 345 39	12·6 06 -04 324 27	13·0 06 -02 264 42	13·1 07 06 266 36	13·1 04 -04 264 27	13·1 04 -02 307 41		600
550	03 -03 357 31	00 -02 334 40	04 -04 345 48	00 -11 320 34	-01 -09 263 38	-01 -05 264 36	-05 -11 264 32	-04 -12 303 36		550
500	16·9 -05 -12 351 32	16·9 -06 -09 335 32	17·1 -03 -13 344 33	17·1 -07 -15 335 36	17·5 -10 -21 263 38	17·5 -11 -13 261 35	17·5 -15 -21 269 33	17·5 -14 -22 302 43		500
450	-14 -21 348 30	-17 -20 333 36	-13 -22 354 33	-16 -25 333 29	-22 -34 260 45	-22 -24 261 31	-26 -33 279 35	-24 -32 292 38		450
400	22·3 -25 -33 353 26	22·2 -28 -32 332 39	22·4 -25 -35 346 39	22·4 -28 -37 323 27	22·7 -34 -45 258 45	22·7 -34 -36 261 31	22·7 -38 -47 307 39	22·7 -37 -44 293 40		400
350	-35 -42 359 21	-42 335 34	-41 342 32	-41 320 28	-47 256 44	-46 256 35	-49 305 40	-50 295 34		350
300	28·7 -51 029 20	28·6 -59 342 39	28·8 -56 342 33	28·8 -54 326 28	29·0 -61 265 48	29·0 -61 253 30	28·9 -57 292 32	29·0 -58 287 36		300
250	-65 350 21	-67 345 24	-67 345 24	-69 334 30	-55 265 42	-47 255 35	-47 277 40	-46 297 47		250
200	(267 mb) -63	37·2 -49 354 06	37·4 -50 345 10	37·4 -52 340 22	37·8 -45 266 36	37·9 -43 264 32	37·9 -41 268 33	37·9 -43 303 34		200
170		-49 Calm	-47 346 06	-50 342 18	-47 264 39	-43 264 35	-44 256 45	-46 301 39		170
150		-47 Calm	-46	-49 339 12	-48 250 32	-44 264 36	-45 250 38	-47 295 39		150
130		-48	-45	-48 328 08	-48 244 30	-45 264 30	-46 241 42	-50 290 42		130
110		-48	-44	-49 321 06	-50 245 34	-45 264 27	-45 275 32	-51 285 39		110
100		52·4 -48	52·7 -44	52·6 -49 321 06	53·0 -52 240 32	53·3 -46 264 21	53·2 -47 282 33	53·2 -52 273 38		100
90		-46	-44	-48 321 04	-50 234 33	-46 264 26	-48 277 27	-53 275 35		90
80			-43	-49 317 05	-50 237 28	-46 264 24	-46 274 27	-53 269 36		80
70			-44	-49 215 10	-50 238 29	-43 264 21	-45 274 18	-53 301 26		70
60			-45	-50 230 15	-50 229 26	-45 264 27	-48 268 19	(067) mb -53		60
			(060) mb -46 (040) -46 (032) mb -45	(055) mb -51 Inversion 883mb. 38°- 800mb. 40°	(50) mb -54 (40) mb -52	(050) mb -47	(050) mb -48 (040) -48 (035) mb -48	Isothermal 800 - 784 mb. 29°		
					222 28		260 24			
					229 18					
Tropopause	N.R.	I 260mb. -74° 31,700'	I 257mb -69° 32,200'	I 258mb. -70° 32,000'	I 285mb. -65° 30,100'	II 294mb. -62° 29,500'	I 289mb. -59° 29,700'	I 302mb -60° 28,900		Tropopause

Thursday 14th September, 1950.

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

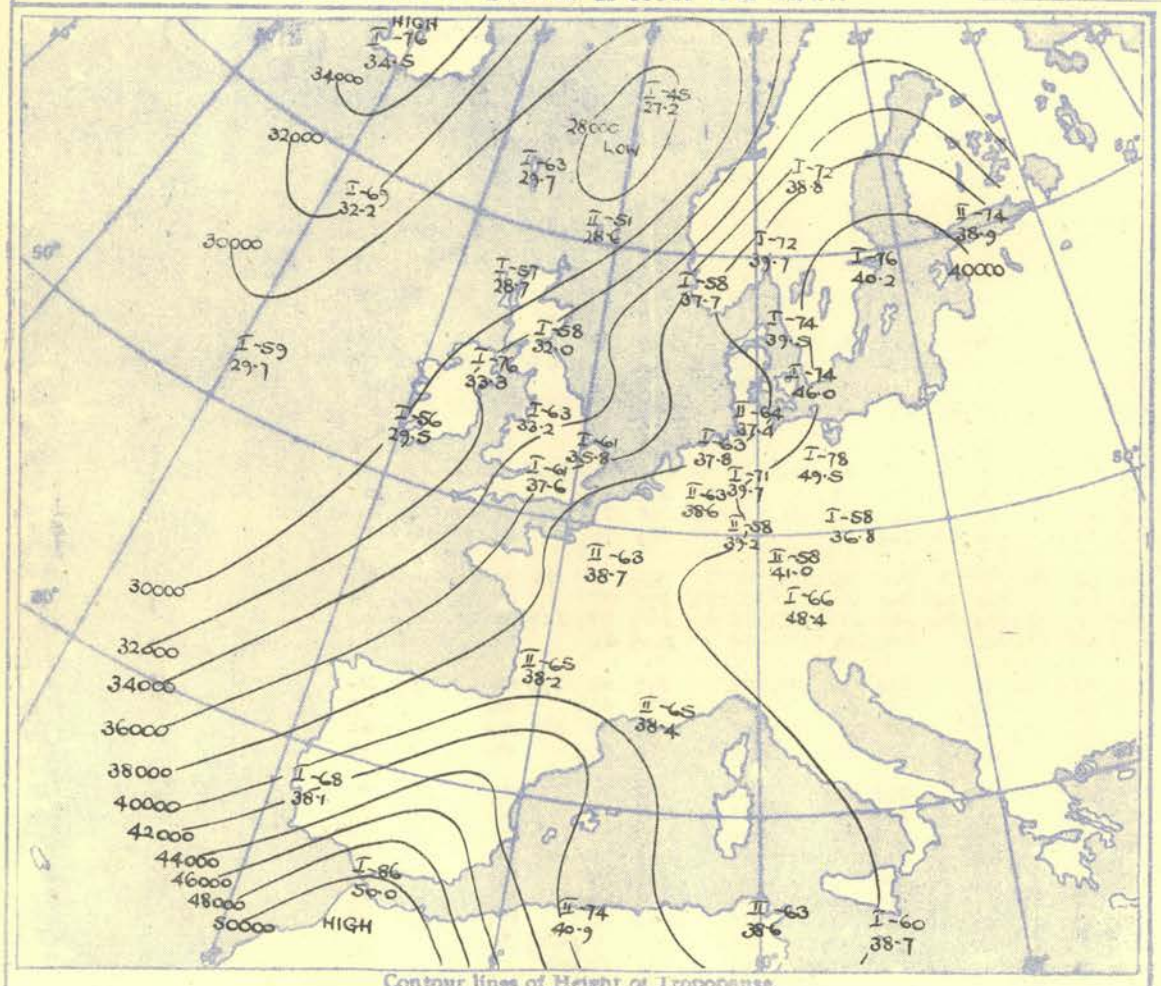


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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.

The thickness line 17600ft. appears to have retreated to 55°N. 30°W. although the 17800 line has continued to move southeastwards. The eastward movement of the cold trough line was aided by subsidence in the West Atlantic mainly north of 45° latitude.

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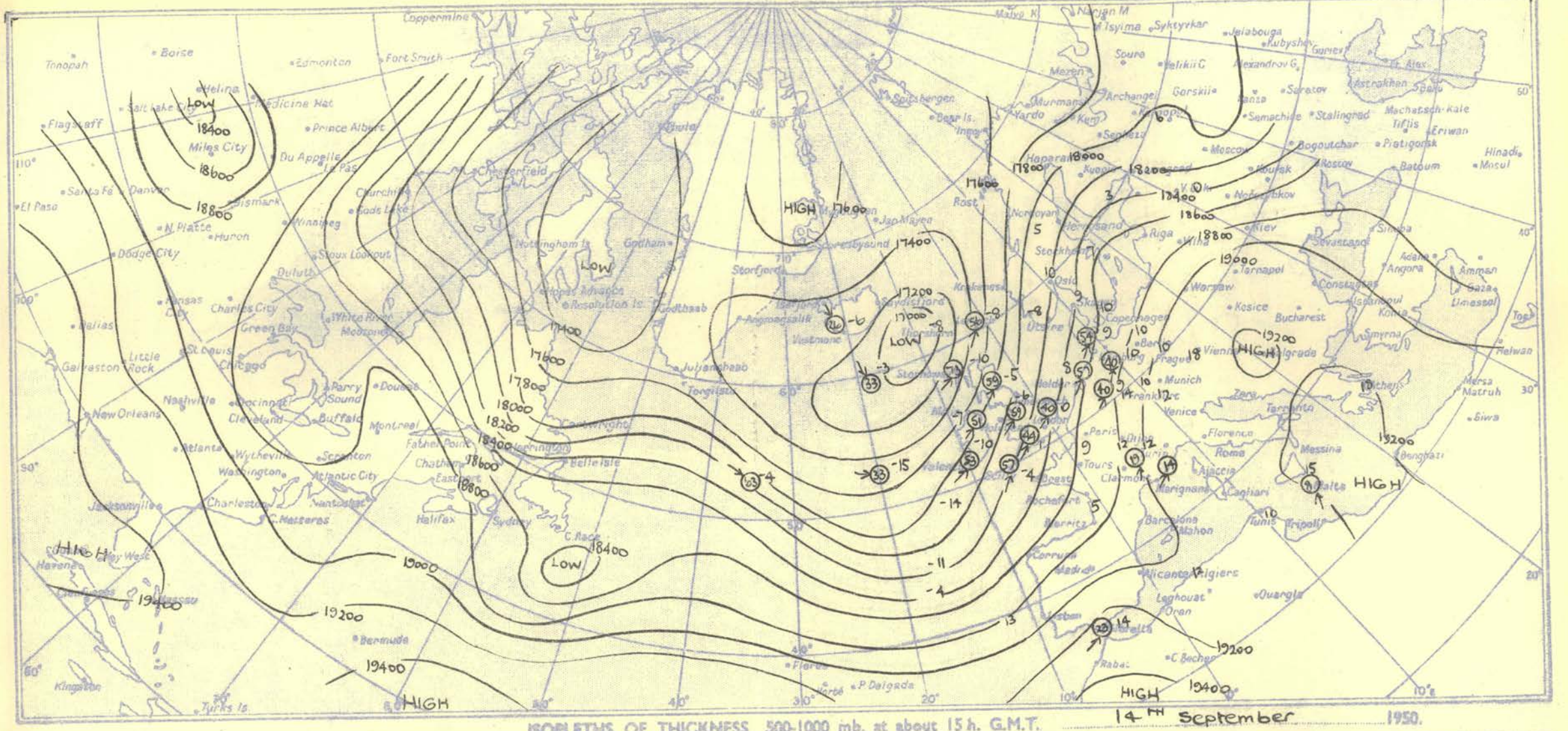
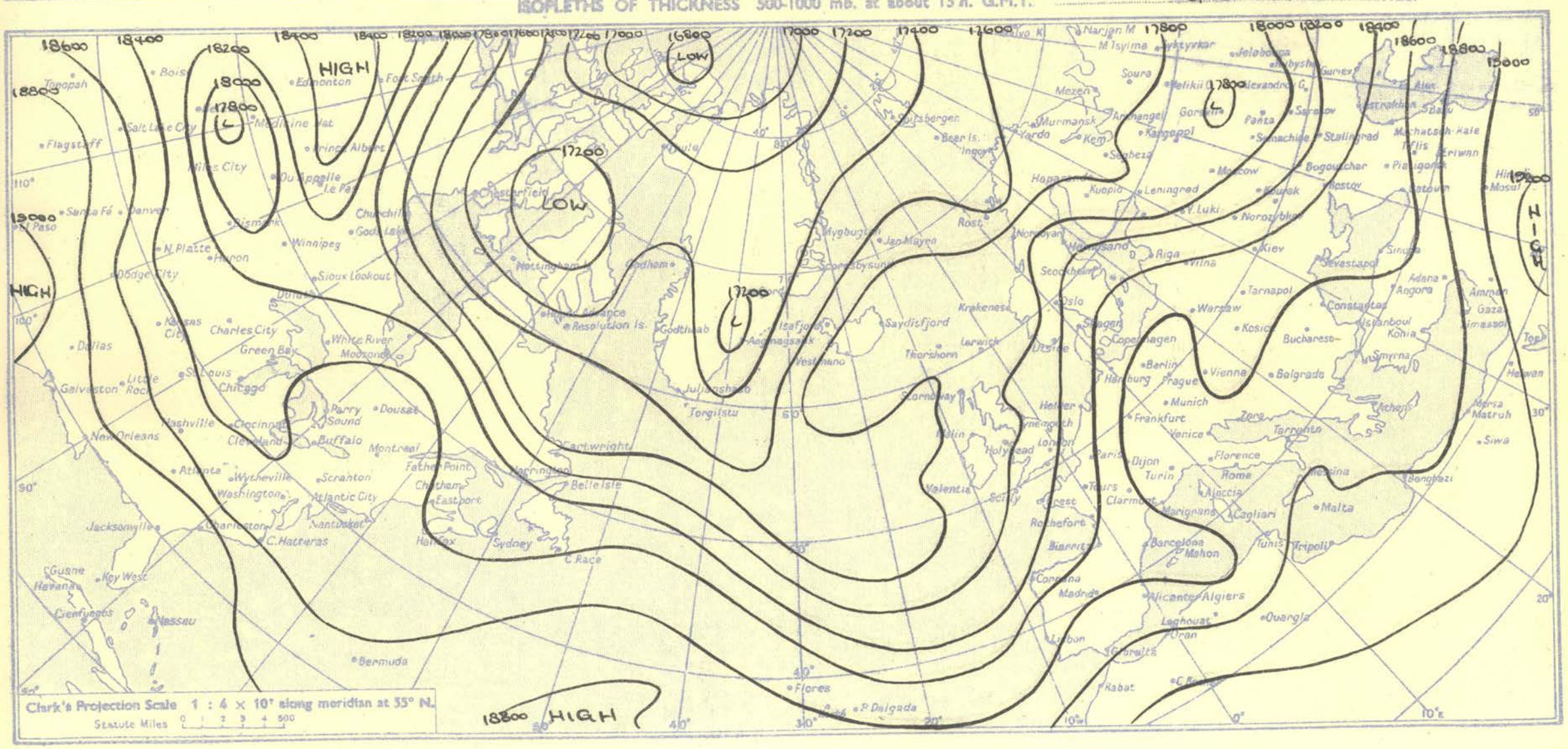
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Thursday 14th September. 1950.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. 14TH September 1950.



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.	984·9 mb	981·6 mb	993·4 mb	997 mb	1001·6 mb	1006·4 mb	1006·6 mb	1007·7 mb	998·2 mb
Pressure Surf	975·2 mb	979·8 mb	992·6 mb	987 mb	999·6 mb	1002·0 mb	991·1 mb	996·5 mb	997 mb
Pressure Freezing	778 mb	800 mb	730 mb	800 mb	789 mb	708 mb	728 mb	761 mb	780 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
Surf	027	57	49	190	26	005	57	47	210	35	002	61	47	240	35
1000	-43					-51					-19				
980		53	47	193	36		53	43	219	45		56	44	224	48
900	247	47	43	206	39	238	46	39	218	51	272	49	38	229	50
850		40	34	212	41		38	33	223	58		42	31	236	54
800	562	35	30	220	45	552	32	28	229	58	588	39	26	239	54
750		28	23	224	48		26	22	233	57		35	18	236	51
700	911	24	17	223	51	899	21	15	234	60	941	28	09	235	47
650		17	05	221	48		15	07	234	60		21	03	235	46
600	130	10	-01	219	50	29	07	-03	234	63	134	13	-07	234	48
550		01	-06	215	52		-01	-14	232	59		04	-21	230	54
500	75	-08	-21	214	56	173	-10	-20	229	73	179	-05	-29	230	59
450		-19	-29	208	56		-19	-30	233	73		-15	-32	232	63
400	227	-31	-37	203	53	226	-34	-46	230	72	232	-26	-45	232	66
350		-44		211	55		-45		226	69		-39	-56	230	79
300	291	-51		215	65	289	-56		230	57	236	-50		231	89
250		-40		213	71		-43		220	49		-54		224	84
200	382	-40		206	57	319	-44		215	44	384	-49		223	70
170		-46		210	49							-47		223	55
150		-47		200	51							-47			
130		-47		204	51							-48			
110		-46										-50			
100	535	-47									536	-49			
90		-45										-46			
80		-48										-48			
70		-52													
60		-51													
	(50 mb)	-50													

Pressure mb	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
Surf	023	59	48	210	15	006	63	46	210	18	012	66	47	220	12
1000	-14					04					18	65	46		
980		54	46	219	27		57	43	212	23		57	42	223	25
900	275	46	40	218	34	295	48	41	214	24	309	49	38	235	33
850		38	33	228	41		41	36	223	27		42	34	242	42
800	589	32	27	234	48	610	34	30	227	31	626	40	22	244	33
750		27	16	236	47		27	23	237	36		36	06	241	33
700	936	22	04	236	46	957	24	02	236	40	979	31	08	232	33
650		16	01	232	47		18	-08	228	44		24	-18	236	36
600	133	10	-02	228	49	135	13	-21	228	50	138	17	-25	236	39
550		00	-10	225	49		03	-31	231	51		08	-33	236	38
500	177	-07	-17	220	51	180	-06	-33	232	59	183	00	-41	233	40
450		-17	-27	224	65		-16	-37	231	62		-09	-50	228	52
400	230	-28	-39	223	64	233	-28	-45	230	66	237	-21	-54	226	61
350		-40	-51	220	70		-39	-57	221	72		-33	-59	216	72
300	294	-54		220	86	257	-52		221	75	302	-43		211	90
250		-70		220	75		-61		218	82		-57		209	100
200	381	-51		220	63	384	-60		220	45	390	-59		214	92
170		-48		223	66		-56					-63		217	80
150		-51		212	60		-59					-59		223	65
130		-52		221	43		-55					-63		219	56
110		-52		218	34		-58					-58		223	50
100	532	-51		222	27	534	-54				538	-56		227	45
90		-50		222	38		-53					-59		230	40
80		-49		222	37	(82 mb)	-52					-57		223	27
70		-46		222	28										
60		-45													
	(75 mb)	-47													

Pressure mb	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
Surf	044	64	51	210	15	029	62	53	228	15	003	59	52	200	19
1000	19					20					-5				
980		58	45	217	22		54	49	226	30		52	46	217	33
950	311	50	39	230	23	309	47	39	233	39	284	46	41	225	39
900		45	30	237	24		40	31	234	26		40	35	233	34
850	628	39	26	236	30	625	37	18	235	30	593	34	29	238	37
800		34	20	233	34		30	10	237	33		30	24	236	39
750	981	30	06	229	33	974	24	04	236	35	948	23	16	239	40
700		25	-13	223	32		20	-06	230	36		17	10	237	43
650	138	19	-25	224	35	137	15	-17	229	42	134	11	03	233	44
600		10	-33	226	40		07	-21	226	46		01	-11	231	49
550															
500	184	01	-41	228	44	182	-04	-33	224	57	179	-10	-18	239	53
450		-09	-50	227	52		-14	-42	225	52		-18	-30	236	66
400	237	-18	-57	227	60	235	-25	-49	229	43	231	-30	-43	236	73
350		-31	-58	224	62		-38	-56	225	72		-43		223	83
300	303	-43		218	72	(336 mb)	-41				295	-56		218	80
250		-54		211	96							-56			
200	391	-54		215	83						383	-48			
170		-58		213	80							-44			
150		-61		210	75							-43			
130		-58		220	68							-47			
110		-57		228	54							-48			
100	539	-59		220	66						536	-46			
90		-63		213	42							-44			
80		-52		221	36							-43			
70		-52		208	33							-43			
60		-53		203	30							-42			
	(57 mb)	-54									(48 mb)	-42			

Inversion 730 mb 24°- 714 mb 26°

Inversion 824 mb 38°- 800 mb 40°

Inversion 700 mb 30°- 692 mb 31°

Isothermal 842 - 817 mb 39°

Isothermal 823 - 782 mb 39°

	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Tropopause	I 306 mb -51° 28,600'	I 303 mb -57° 28,700'	I 267 mb -58° 32,000'	I 250 mb -70° 33,300'	I 255 mb -63° 33,200'	I 282 mb -61° 35,800'	I 215 mb -61° 37,600'	NR.	I 300 mb -56° 29,500'

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.	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.	986·3 mb	984·3 mb	mb	997·9 mb	1001·7 mb	1006·4 mb	1006·8 mb	1004·7 mb	mb
Pressure Surf	976·6 mb	982·5 mb	mb	987 mb	999·7 mb	1002·0 mb	991·1 mb	994·3 mb	mb
Pressure Freezing	783 mb	817 mb	mb	790 mb	770 mb	758 mb	734 mb	750 mb	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
Surf	027	53	47	190	31	005	52	47	216	30					
1000	-38					-44									
950		53	45	200	48		50	46	217	42					
900	250	46	38	210	42	243	44	41	222	43					
850		40	31	212	39		37	34	226	52					
800	565	34	24	218	40	556	30	25	226	53					
750		28	17	217	44		26	20	225	52					
700	913	22	08	213	45	901	19	13	223	52					
650		15	00	211	47		12	06	221	49					
600	130	08	-05	210	49	129	06	-02	221	47					
550		00	-11	209	54		-01	-09	225	48					
500	175	-10	-19	209	60	174	-11	-19	224	47					
450		-20	-30	212	63		-23	-30	225	49					
400	227	-33	-43	211	68	225	-36	-43	226	45					
350		-48		210	73		-50		240	86					
300	290	-59		209	90	289	-58		232	30					
250		-54		213	66		-50		219	41					
200	378	-46		215	33	377	-50		209	39					
170		-50		208	41		-49		218	44					
150		-53		205	43		-51		222	39					
130		-49		213	31		-46		202	35					
110		-50		207	27		-46		224	23					
100	530	-53		211	24	529	-47		209	21					
90		-52					-52		186	30					
80		-51					-53								
70	(86 mb)														
60															

Pressure mb	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
Surf	023	50	46	206	15	006	57	48	200	12	012	56	52	200	05
1000	-11					04					17				
950		47	43	221	30		54	46	215	32		54	49	233	30
900	275	44	38	236	36	294	47	40	224	32	307	47	41	234	28
850		38	31	235	39		40	33	233	40		42	36	222	24
800	589	33	24	240	38	609	35	24	234	39	622	36	28	221	28
750		28	18	228	40		30	22	232	35		31	20	224	30
700	937	22	09	230	43	957	22	17	229	36	973	26	14	216	29
650		15	01	230	46		17	06	229	43		23	01	212	34
600	133	08	-08	228	45	135	10	-05	230	44	137	15	-09	214	35
550		00	-19	226	47		02	-09	226	44		06	-21	218	36
500	177	-10	-28	225	52	180	-07	-19	222	49	182	-02	-27	223	44
450		-21	-38	226	65		-18	-29	217	63		-14	-36	219	48
400	230	-33	-48	226	59	242	-30	-41	219	69	285	-25	-43	216	65
350		-46		233	66		-43		220	74		-38	-53	215	72
300	293	-60		230	65	306	-56		219	88	300	-52		216	77
250		-54		245	66	(265 mb)	-65					-67		211	88
200	380	-50		210	64						385	-64		212	81
170		-48		226	50							-60		214	72
150		-48		228	41							-63		216	65
130		-49		228	26							-64		219	57
110		-55		224	25							-65		219	44
100	532	-53		234	39						532	-62		219	37
90		-51		217	39							-61			
80		-49													
70	(75 mb)	-47													
60															

	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
Surf	044	53	51	220	06	029	56	53	180	10					
1000	19					13									
950		53	51	220	22		54	51	203	30					
900	307	48	44	221	24	302	48	42	214	27					
850		43	36	225	21		42	36	218	28					
800	624	38	32	229	28	619	37	31	225	29					
750		34	25	231	27		32	25	230	28					
700	976	27	13	229	29	970	25	14	230	32					
650		25	-01	222	33		19	06	228	33					
600	137	17	-09	220	36	136	12	-10	224	37					
550		08	-18	223	38		05	-21	222	37					
500	183	-01	-27	225	44	181	-04	-35	220	49					
450		-11	-37	215	55		-13	-34	220	58					
400	236	-21	-41	213	64	234	-27	-53	218	62					
350		-34	-48	219	64		-39	-51	215	62					
300	301	-46		217	76	299	-52		215	78					
250		-60		209	79		-67		211	79					
200	389	-55		214	81	386	-52		217	62					
170		-54		218	75		-54		226	50					
150		-53		227	57		-55		230	52					
130		-56		220	42		-57		223	42					
110		-56		223	43		-59		222	40					
100	538	-56		225	38	535	-61		227	42					
90		-52		228	35		-57								
80		-50				(85 mb)	-55								
70															
60															

Inversion 977 mb 53°- 966 mb 54°

Isothermal 982 mb - 960 mb 52°
348 " - 330 " - 56°

Isothermal 950 - 921 mb 47°
772 - 760 " 30°

Isothermal 1000 - 977 mb 57°
664 - 644 " 17°

Inversion 1002 mb 56°- 979 mb 57°
Isothermal 789 - 713 mb 34°
709 - 685 " 26°
670 - 650 " 23°

Inversion 700 mb 27°- 670 mb 28°
Isothermal 991 - 950 mb 53°

	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Tropopause	I 284 mb - 60° 30,100'	I 287 mb - 62° 29,800'		I 290 mb -63 30,100'	NR.	I 230 mb - 70° 35,600'	I 231 mb - 64° 35,800'	I 250 mb -67° 33,700'	

For remainder of winds see page 3.

No. 11492. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Friday 15th September 1950. Page 1.

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

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LERWICK

Pressure: Time 03h G.M.T.; M.S.L. 987·1 mb; Surf 977·3 mb; Freezing 810 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	52	43		
1000	-3·6				
950		49	43		
900	25·1	44	41		
850		37	32		
800	56·4	31	26		
750		27	19	For	
700	91·1	21	13	winds	
650		14	05		
600	130	06	-03	see	
550		-03	-06		
500	174	-14	-24	page	
450		-26	-34		
400	226	-38	-45	3	
350		-49			
300	289	-60			
250		-47			
200	377	-47			
170		-47			
150					
130					
110					
100					
90					
80					
70					
60					

Tropopause: I 291 mb - 61° 29,600'

STORNOWAY

Pressure: Time 03h G.M.T.; M.S.L. 987·3 mb; Surf 985·5 mb; Freezing 819 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·5	52	48		
1000	-3·5				
950		49	45		
900	25·1	43	41		
850		36	35		
800	56·4	30	29		
750		25	23	For	
700	91·0	20	13	winds	
650		13	01		
600	130	05	-09	see	
550		-03	-19		
500	174	-13	-30	page	
450		-23	-39		
400	226	-34	-43	3	
350		-47			
300	289	-63			
250		-52			
200	377	-52			
170		-50			
150					
130					
110					
100					
90					
80					
70					
60					

Tropopause: I 285 mb - 68° 30,000'

LEUCHARS

Pressure: Time 03h G.M.T.; M.S.L. 996·1 mb; Surf 995·3 mb; Freezing 774 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	51	46		
1000					
950		47	42		
900	21·4	43	38		
850		39	33		
800	58·9	35	26		
750		29	17	For	
700	93·8	23	09	winds	
650		17	01		
600	133	10	-07	see	
550		02	-13		
500	178	-07	-20	page	
450		-18	-30		
400	230	-30	-42	3	
350		-46			
300	294	-61			
250		-60			
200	380	-53			
170		-54			
150		-53			
130		-52			
110		-50			
100	531	-53			
90		-58			
80		-58			
70		-51			
60		-53			
		-58			

Tropopause: I 285 mb -65° 30,500'

ALDERGROVE

Pressure: Time 03h G.M.T.; M.S.L. 996·9 mb; Surf 988·3 mb; Freezing 786 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·3	47	45	210	10
1000	-0·9				
950		47	42	225	18
900	27·6	43	35	228	26
850		39	26	287	23
800	59·1	34	25	235	25
750		28	23	227	26
700	93·8	22	15	222	30
650		15	07	218	30
600	133	08	03	214	36
550		01	-05	216	30
500	178	-10	-17	218	46
450		-21	-28	212	49
400	230	-33	-41	217	55
350		-47		220	61
300	293	-62		228	61
250		-58		214	52
200	380	-44		219	41
170		-47		221	30
150		-50		217	40
130		-52		231	33
110		-54		225	35
100	532	-52		249	29
90		-52		221	29
80		-53		230	30
70					
60					

Inversion 988 mb 47° - 972 mb 49°

Tropopause: I 280 mb -68° 30,700'

LIVERPOOL

Pressure: Time 03h G.M.T.; M.S.L. 1000·2 mb; Surf 998·2 mb; Freezing 789 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	54	52		
1000	0·1				
950		50	45		
900	28·9	45	39		
850		39	35		
800	60·3	33	30		
750		28	27		
700	95·0	23	21		
650		15	13		
600	134	10	06		
550		00	-03		
500	179	-10	-14		
450		-21	-25		
400	231	-33	-38		
350		-46			
300	294	-59			
250		-62			
200	381	-55			
170		-52			
150		-56			
130		-54			
110		-54			
100	531	-55			
90		-58			
80		-57			
70		-57			
60		-58			

Tropopause: I 263 mb - 65° 32,300'

DOWNHAM MARKET

Pressure: Time 03h G.M.T.; M.S.L. 1009·6 mb; Surf 1000·2 mb; Freezing 776 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	52	50	180	05
1000	1·2				
950		52	45	224	23
900	30·1	47	38	223	23
850		41	35	221	21
800	61·6	35	27	215	20
750		30	18	209	20
700	96·5	24	07	216	17
650		17	-08	226	18
600	136	13	-25	214	30
550		06	-35	206	37
500	181	-04	-43	200	46
450		-14	-52	206	54
400	234	-26	-54	213	63
350		-38	-53	215	75
300	298	-53		213	112
250		-69		213	111
200	384	-55		216	64
170		-56		214	62
150		-59		217	54
130		-60		225	45
110		-59			
100					
90					
80					
70					
60					

Max wind: 212° 132 kts 273 mb 31,800'

Inversion 1000 mb 52° - 980 mb 55°

Isothermal 617 - 600 mb 13°

Tropopause: I 245 mb - 70° 34,200'

LARKHILL

Pressure: Time 03h G.M.T.; M.S.L. 1003·5 mb; Surf 987·7 mb; Freezing 754 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·4	52	51	175	04
1000	1·0				
950		52	51	210	12
900	29·8	47	43	211	21
850		43	34	211	22
800	61·5	37	22	213	21
750		31	13	219	20
700	96·5	26	05	216	21
650		20	-08	212	32
600	136	13	-16	211	27
550		05	-24	209	31
500	181	-04	-33	207	38
450		-13	-43	213	42
400	234	-26	-52	214	60
350		-36	-58	206	80
300	299	-53		202	102
250		-66		206	91
200	385	-58		214	74
170		-55		223	51
150		-57		219	51
130		-58		221	51
110		-61		227	44
100	533	-57		229	39
90		-58		233	36
80		-59		233	29
70		-59			
60					

Inversion 988 mb 52° - 962 mb 53°

Tropopause: I 264 mb - 67° 32,500'

CAMBORNE

Pressure: Time 03h G.M.T.; M.S.L. 1000·2 mb; Surf 989·7 mb; Freezing 768 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	54	53	180	10
1000	0·0				
950		53	52	198	27
900	29·0	47	44	203	27
850		41	37	203	30
800	60·6	35	31	203	30
750		30	26	204	27
700	95·6	25	15	203	30
650		17	-03	203	31
600	135	10	04	205	34
550		02	-06	202	35
500	180	-07	-14	206	34
450		-19	-24	207	37
400	232	-32	-39	209	37
350		-47		215	39
300	295	-59		211	52
250		-57		202	55
200	383	-51		227	45
170		-57		232	37
150		-52		227	37
130		-54		236	38
110		-56		249	36
100	533	-57		249	27
90		-57		241	24
80		-57		246	18
70		-57			
60					

(75 mb)

Inversion 990 mb 54° - 970 mb 55°

Tropopause: II 295 mb - 60° 29,800

VALENTIA

Pressure: Time 03h G.M.T.; M.S.L. 997·8 mb; Surf 996 mb; Freezing 800 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	50	47	197	05
1000	-7				
950		49	45	225	11
900	27·9	43	38	256	13
850		36	29	256	16
800	59·2	32	25	254	20
750		27	17	253	24
700	93·9	22	06	247	23
650		14	00	242	22
600	133	06	-10	241	24
550		-03	-21	238	27
500	177	-13	-32	231	27
450		-24	-42		
400	229	-36	-53		
350		-49			
300	292	-60			
250		-44			
200	381	-43			
170		-45			
150		-51			
130		-53			
110	(145 mb)				
100					
90					
80					
70					
60					

Inversion 996 mb 50° - 980 mb 53°

Tropopause: I 300 mb - 60° 29,200'

LERWICK

Pressure: Time 09h G.M.T.; M.S.L. 988·8 mb; Surf 979·1 mb; Freezing 792 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	53	46	210	35
1000	-3·2				
950		50	44	217	45
900	25·5	43	37	223	42
850		37	31	225	41
800	56·9	33	29	224	41
750		27	20	225	42
700	91·5	21	08	226	44
650		14	03	220	47
600	130	06	-02	218	47
550		-03	-13	220	51
500	175	-13	-30	223	57
450		-25	-44	227	57
400	227	-35	-47	225	58
350		-46		235	52
300	290	-58		243	47
250		-52		223	41
200	378	-48		222	43
170		-48		225	40
150		-48		222	31
130		-46		214	27
110		-47		224	22
100	531	-48		219	24
90		-45		214	24
80		-44		233	20
70					
60					

Tropopause: I 306 mb - 59° 28,650'

STORNOWAY

Pressure: Time 09h G.M.T.; M.S.L. 990·8 mb; Surf 989·0 mb; Freezing 808 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·5	51	48		
1000	-2·5				
950		49	43		
900	26·2	42	38		
850		37	33		
800	57·5	31	25		
750		27	22		
700	92·3	22	12		
650		15	04		
600	131	09	-03		
550		01	-13		
500	176	-08	-25		
450		-17	-38		
400	229	-27	-46		
350		-39	-56		
300	293	-56			
250		-68			
200	381	-46			
170		-46			
150		-47			
130		-48			
110		-47			
100	533	-47			
90		-46			
80					
70					
60					

Inversion 989 mb 51° - 972 mb 52°

Tropopause: I 257 mb - 65° 32,600'

LEUCHARS

Pressure: Time 09h G.M.T.; M.S.L. mb; Surf mb; Freezing 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					

ALDERGROVE

Pressure: Time 09h G.M.T.; M.S.L. 997·4 mb; Surf 988·9 mb; Freezing 811 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·3	49	46	CALM	
1000	-0·4				
950		45	44	258	09
900	28·0	43	36	255	08
850		37	28	248	11
800	59·3	31	26	244	12
750		26	18	248	16
700	93·8	20	10	248	14
650		13	-02	228	15
600	133	06	-02	224	18
550		-02	-11	216	26
500	177	-12	-20	206	32
450		-22	-29	198	37
400	229	-33	-41	190	46
350		-45		186	46
300	292	-51		187	52
250		-52		209	81

Tropopause: I 295 mb - 63° 29,600'

LIVERPOOL

Pressure: Time 09h G.M.T.; M.S.L. 997·7 mb; Surf 995·7 mb; Freezing 800 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	54	51	160	10
1000	-0·7				
950		49	45	185	21
900	27·9	47	37	196	21
850		40	34	202	20
800	59·4	32	30	204	20
750		26	26	204	22
700	94·1	22	21	199	25
650		16	13	194	27
600	133	08	03	193	27
550		00	-04	206	28
500	178	-09	-16	215	30
450		-20	-29	217	31
400	230	-33	-43	217	39
350		-47		215	39
300	294	-60		194	65
250		-59		197	63
200	380	-50		216	89
170		-49		224	30
150		-53		231	30
130		-56		230	30
110		-53		225	31
100	531	-54		235	29
90		-53		256	26
80		-51		232	23
70		-51		217	20
60	(65 mb)	-50			

Inversion 953 mb 49° - 935 mb 51°

Tropopause: II 292 mb - 62° 29,900'

DOWNHAM MARKET

Pressure: Time 09h G.M.T.; M.S.L. 1000·5 mb; Surf 996·2 mb; Freezing 752 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	54	53	120	05
1000	0·2				
950		55	48	151	15
900	29·1	48	42	156	15
850		42	39	165	15
800	60·7	35	30	172	12
750		32	21	181	13
700	95·8	28	12	184	15
650		22	-13	190	16
600	135	13	-16	197	16
550		03	-23	201	20
500	180	-03	-22	203	30
450		-14	-31	204	48
400	233	-26	-38	194	58
350		-38	-47	195	75
300	298	-48		187	99
250		-65		183	101
200	384	-57		204	70
170		-57		210	48
150		-55		217	43
130		-58		213	36
110		-60		215	33
100	523	-59		220	34
90		-59		229	33
80		-54		235	27
70		-54		223	25
60		-54		212	23

Inversion 996 mb 54° - 962 mb 56°

Tropopause: I 223 mb - 74° 36,200'

LARKHILL

Pressure: Time 09h G.M.T.; M.S.L. 999·3 mb; Surf 984·1 mb; Freezing 750 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·4	55	54	CALM	
1000	-0·1				
950		53	50	CALM	
900	28·9	48	44	"	
850		41	38	187	06
800	60·5	38	33	180	12
750		32	15	181	12
700	95·6	27	03	183	11
650		20	-05	186	12
600	135	13	-18	196	14
550		08	+30	203	19
500	180	-03	-22	201	19
450		-14	-24	213	18
400	233	-25	-38	216	28
350		-38	-53	206	39
300	298	-50		179	76
250		-58		176	83
200	386	-48		208	46
170		-47		212	40
150		-47		222	40
130		-47		236	27
110		-52		221	23
100	538	-55		214	25
90		-56		219	32
80		-52		240	26
70		-52		235	-26
60		-52		229	24

Isothermal 575 - 552 mb 09°

Tropopause: I 250 mb - 58° 33,700'

CAMBORNE

Pressure: Time 09h G.M.T.; M.S.L. 998·3 mb; Surf 988·0 mb; Freezing 765 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	52	52	280	06
1000	-0·5				
950		49	49	286	21
900	28·2	44	44	293	22
850		40	39	296	20
800	59·8	35	32	297	19
750		30	27	289	22
700	94·8	23	21	279	20
650		17	14	263	12
600	134	11	08	261	12
550		02	01	238	14
500	179	-07	-12	221	20
450		-17	-23	207	22
400	232	-31	-37	199	33
350		-43		196	44
300	295	-59		199	54
250		-47		219	32
200	384	-42		237	31
170		-43		241	27
150		-45		241	30
130		-51		254	37
110		-51		261	19
100	536	-50		262	20
90		-54		251	20
80		-54		244	25
70		-52		234	14
60		-51			

Isothermal 875 - 852 mb 09°

Tropopause: I 276 mb -65° 31,300'

VALENTIA

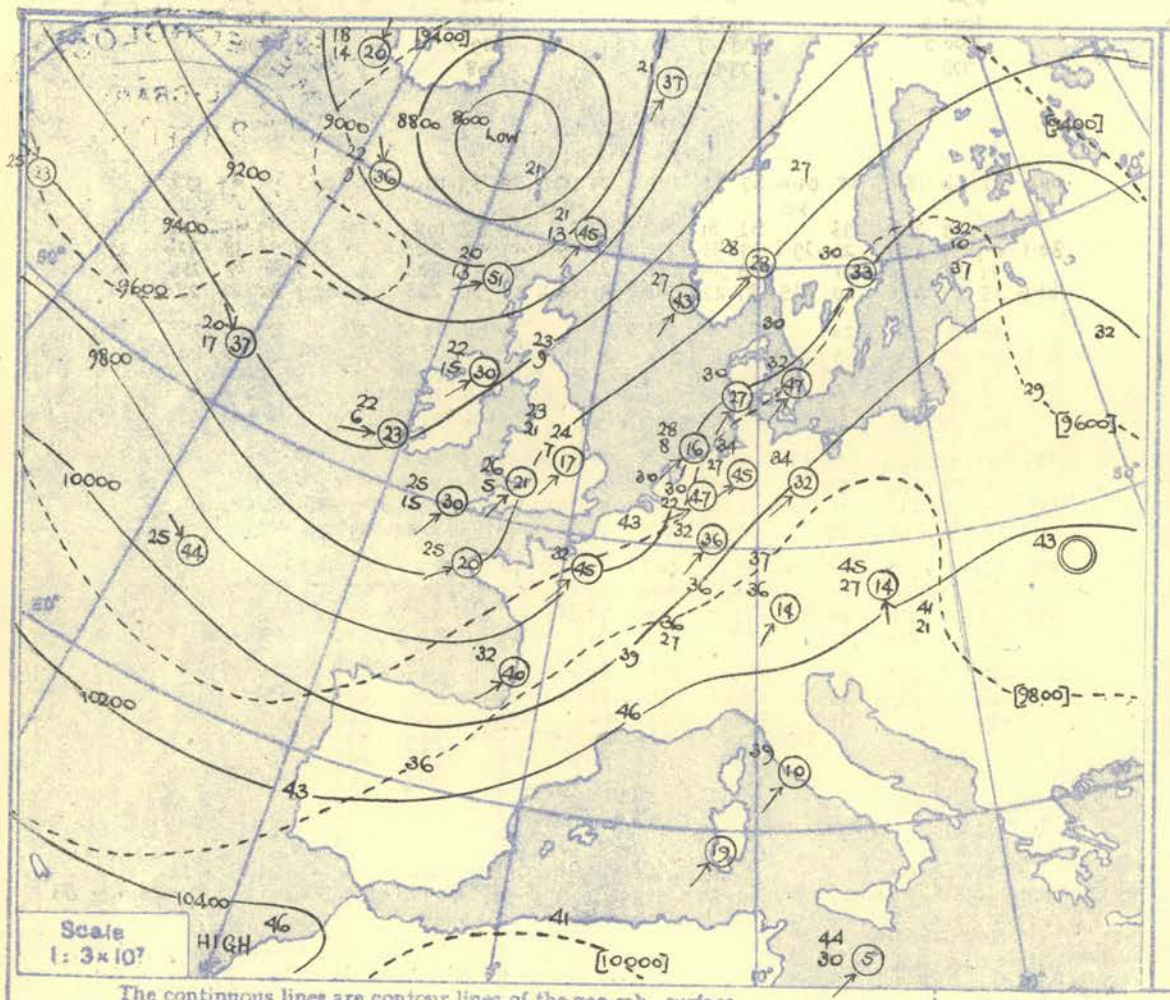
Pressure: Time G.M.T.; M.S.L.; Surf; Freezing

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 15th September 1950

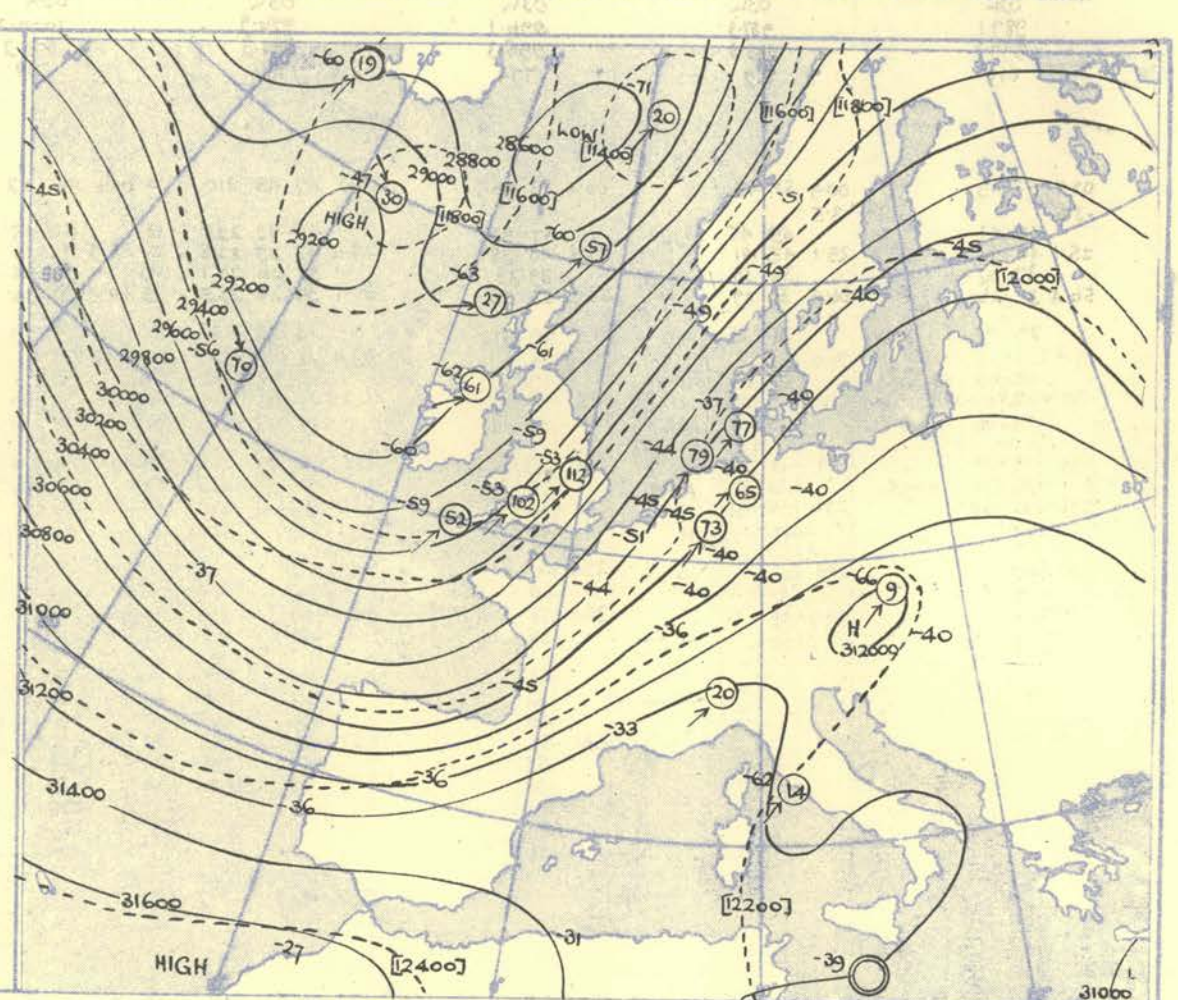
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. G.M.T.



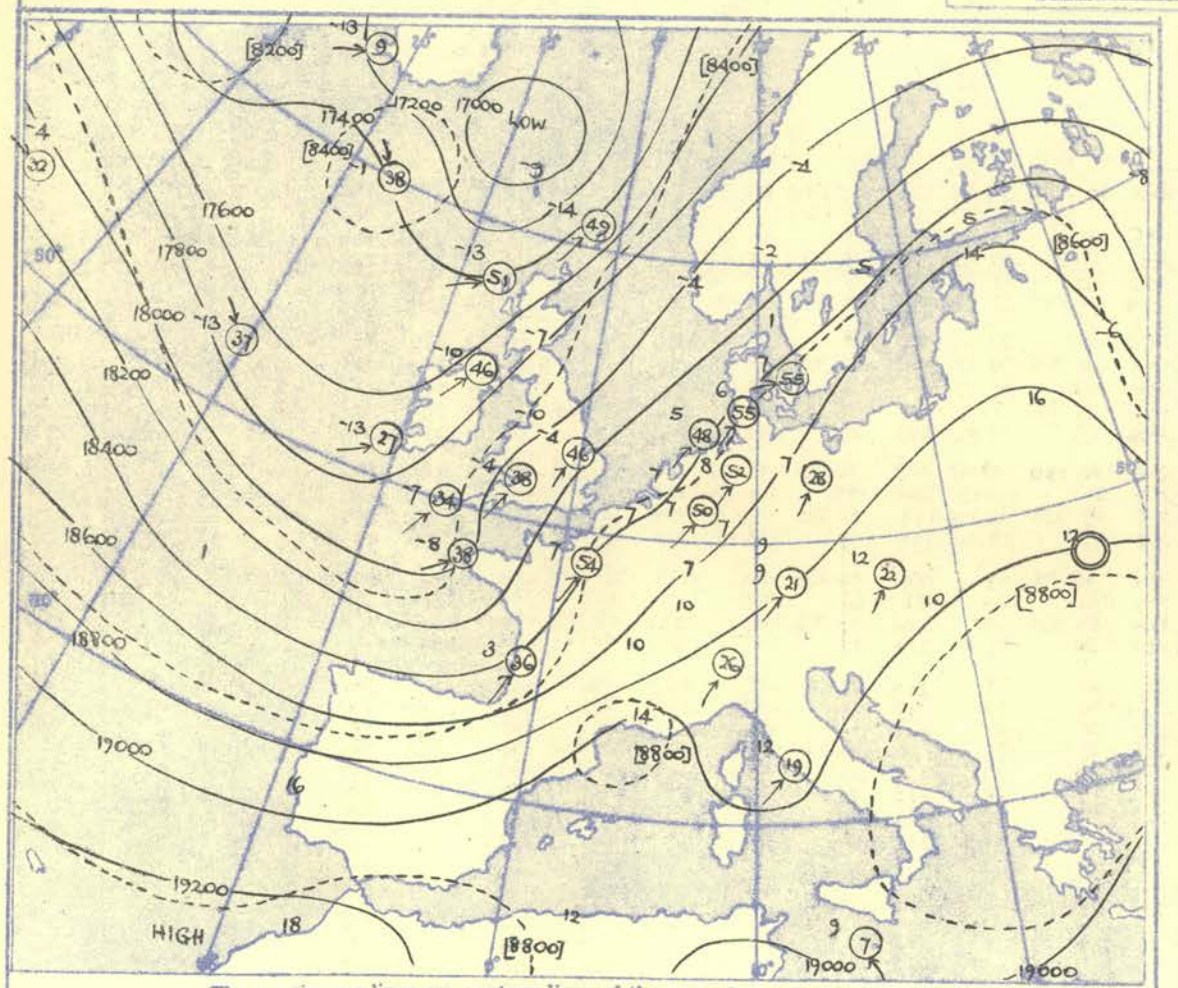
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

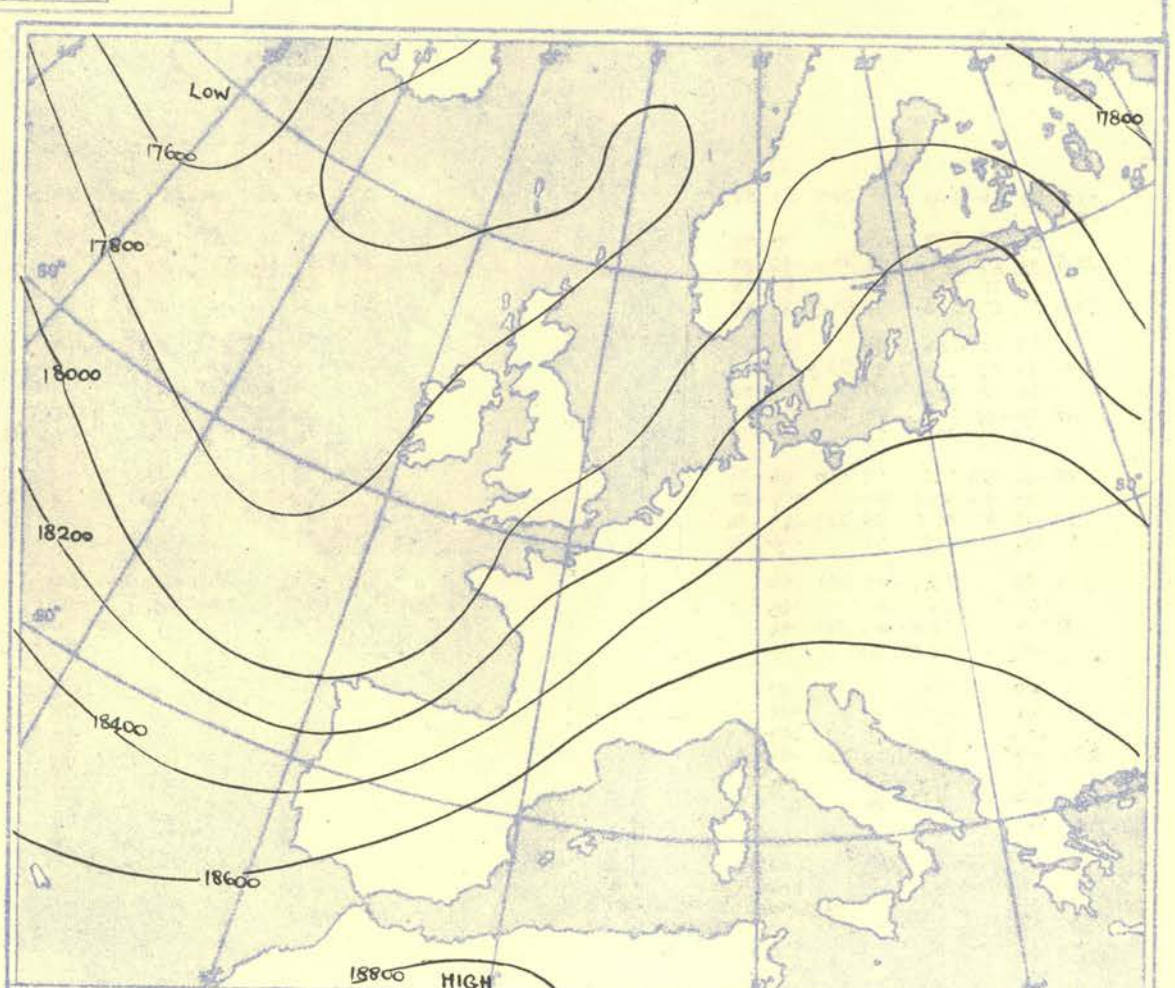
100 60 40 30 20 15 10 knots



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

	43·2N 17·0W	37·2N 12·5W	51·3N 00·4E										
Pressure Time	13h	15h	14·25h										Time
Pressure M.S.L.	1018 mb	1021 mb	998·3 mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	M.S.L.
Pressure Surf	1014 mb	1017 mb	987·2 mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	Surf
Pressure Freezing	675 mb	660 mb	760 mb	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	Pressure mb
Surf		62	50		67	55	03·1	58	54	Surf
1000	4·9	60		5·7	64					1000
950		53	44		56	53				950
900		44	43		51	40	28·6	48	40	900
850		38	38		49	-16		42	38	850
800		44	01		47	-23	60·3	38	34	800
750		39	-05		43	-11		30	27	750
700		35	-15	103	36	-21	95·4	27		700
650		29	-29		31			17		650
600		24			23		135	13		600
550		15			15			04	+01	550
500	18·7	03		19·0	05		18·0	-08		500
450								-17		450
400							23·3	-31		400
350								-44		350
300							29·6	-60		300
250										250
200										200
170										170

cloud:- 2/Stc 900-8/8 880 mb 4/Ac 660-8/8 630 mb 2/Ac 540-8/8 500 mb

Inversion 850 mb 38° - 800 .. 44° Surface wind W. 7-10 kts.

cloud:- 3/Stc 890-7/8 870 mb

Surface wind: CALM

cloud:- 7/8 St 970-8/8 940 mb 8/8 As 715-8/8 660 mb 8/8 As 610-8/8 600 mb

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

Place	Stornoway		Lerwick		Weather observer 60·3N 15·7W		Downham Market		Aldergrove		Stornoway		Liverpool		Leuchars		Lerwick		Downham Market		Place
Time	03L		03L		09L		09L		15h		15L		15h		21L		21h				Time
Type	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.	210	40	195	26	310	25	130	05	270	12	240	17	300	10	270	05	220	10	200	03	Surf.
1,000	226	42	202	39	290	33	140	14	300	23	253	27	297	12	272	18	230	27	310	18	1,000
2,000	229	43	209	42	230	30	150	13	300	22	251	27	294	14	278	19	240	27	300	18	2,000
3,000	231	39	218	45	300	27	150	14	310	20	249	27	287	13	280	17	240	25	310	13	3,000
4,000	234	40	216	45	310	28	160	12	300	19	245	22	272	13	283	15	240	25	310	10	4,000
5,000	237	46	221	45	310	30	160	11			243	23	287	13	276	15	230	26	310	10	5,000
6,000	236	48	223	47	300	30	170	10			240	23	250	13	270	15	230	27	320	10	6,000
8,000	234	49	220	45	310	28	180	10			235	27	250	13	261	16	220	30	320	12	8,000
10,000	237	51	216	45	320	27	190	8			235	28	247	15	259	22	230	30	310	15	10,000
14,000	239	50	218	48	320	18					230	28	231	15	247	23	230	33	300	13	14,000
18,000	238	51	219	49	300	22	210	22			234	20	196	22	242	30	210	32	290	09	18,000
24,000	249	34	220	44	300	36	290	42			269	11	184	25	279	31	210	22	240	15	24,000
30,000	246	27	222	57			170	87			016	05	206	33	280	33	190	11	220	15	30,000
40,000	228	36	229	42			200	50			230	24	224	27	247	25	220	29	260	21	40,000
50,000	223	22	222	30			210	33			234	24	243	26	250	23	230	24	250	30	50,000
			213	20			220	30					245	26			210	21	250	20	60,000
			(58,000')				(55,000')						(59,000')				200	28	230	10	70,000
																	260	10	310	09	80,000
																	250	15	030	18	90,000
																	280	03	170	09	100,000
																	210	11	320	05	
																	(105,000')		(107,000')		

METEOROLOGICAL LIBRARY 23 SEP 1950 OFFICE

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 Watcher	Weather Watcher	Weather Watcher	Weather Watcher	Weather Observer	Weather Observer	Weather Observer	Weather Observer		Ship
Lat/Long	52·5 N 20·0 W	52·5 N 20·1 W	52·5 N 20·1 W	52·5 N 20 W	59·9N 16·7W		60·7 N 14·7 W	60·9 N 14·2 W		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.	999 mb	1004 mb	1006 mb	1003 mb	978 mb	mb	986 mb	989 mb	mb	M.S.L.
Pressure Surf	999 mb	1004 mb	1006 mb	1003 mb	978 mb	mb	986 mb	989 mb	mb	Surf
Pressure Freezing	780 mb	815 mb	810 mb	745 mb	790 mb	mb	810 mb	835 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		51	49	300	25		53	51	300	20		54	43	265	12		53	43	180	08		52	47	330	27		51	46	275	25		51	45	260	30	Surf
1000	03					1·0	52	50	300	20	1·7	53	43	264	13	07	52	43	180	08	-6·0					-3·8					-3·2				1000
950		48	42	308	40		47	46	296	24		47	41	262	16		42	39	180	10		49	42	290	42		47	39	271	36		46	40	257	48	950
900	28·3	42	37	313	36	29·5	41	41	298	22	30·2	40	36	251	16	29·2	39	35	204	11	22·7	42	36	290	36	24·8	41	35	271	38	25·3	40	35	261	38	900
850		36	33	313	35		36	35	300	22		35	31	242	15		35	31	204	15		37	31	286	40		35	29	269	44		34	27	264	34	850
800	59·6	36	29	312	35	60·7	31	31	298	22	61·4	31	27	232	14	60·4	35	15	201	16	64·0	33	25	290	36	56·0	31	25	270	42	56·4	28	21	266	30	800
750		26	23	309	35		26	19	295	21		30	18	230	16		33	03	200	16		28	16	297	34		28	13	271	40		23	11	272	30	750
700	94·1	20	17	309	37	95·4	21	11	292	23	96·3	25	-01	232	24	95·5	26	13	196	12	88·7	22	09	300	36	90·7	22	05	271	36	90·8	17	04	274	29	700
650		13	10	309	37		16	04	291	22		19	00	237	29		22	17	193	14		15	01	300	34		16	-04	271	30		10	-05	272	29	650
600	133	05	-02	303	32	134	10	-06	284	24	136	13	-07	247	30	135	16	11	191	16	128	11	-06	300	33	130	09	-15	274	30	129	04	-15	264	30	600
580		-03	-10	312	35		04	-17	275	31		10	-02	255	33		15	10	189	19		06	-16	305	34		01	-27	274	27		-05	-26	262	27	550
500	177	-13	-21	317	37	179	-04	-18	278	36	181	03	-08	263	33	181	08	02	199	39	173	-01	-25	309	38	175	-09	-32	272	26	174	-13	-36	271	26	500
450		-24	-32	321	32		-11	-26	298	51		-04	-14	268	34		-01	-07	230	60		-10	-33	312	34		-18	-45	263	23		-23	-45	273	27	450
400	229	-35	-43	315	48	233	-21	-36	309	59	235	-12	-20	269	39	236	-11	-18	244	78	267	-21	-42	312	28	227	-29	-55	230	18	226	-34	-54	273	19	400
350		-46		320	51		-31	-46	304	76		-23	-30	270	55		-23	-31	242	78		-34	-51	307	27		-41		200	22		-44		270	21	350
300	292	-56		318	70	299	-38	-51	297	87	302	-36	42			302	-37	-44	247	78	292	-47		303	30	291	-52		194	23	289	-55		269	21	300
250		-54		309	72		-51		305	120							-54		235	93		-61		294	17		-54		226	30		-55		270	15	250
200	379	-50		304	61	243	-53									390	-69		243	78						379	-49		253	28	377	-51		263	28	200
170		-51		300	65	(mb)											-66		256	51							-47		253	26		-50		261	22	170
150		-52		297	61												-65		271	49							-45		253	24		-51		261	22	150
130		-53		292	45												-62		282	58							-48		253	20		-52		261	30	130
110		-54		290	43												-61		289	60							-45		248	22		-54		261	25	110
100																536	-61		288	42						532	-43		244	22	528	-54		259	22	100
90																	-61		277	27												-53		259	22	90
80																	-61		273	30												-63		268	22	80
70																(075	-66															-63		257	20	70
60																mb)																-54		267	15	60
																																-54				
																																(042 mb) -64				

Inversion 820 mb 32° - 800 mb 36°

Inversion 309 mb - 39° - 303 mb 37°

Inversion 795 mb 30° - 775 mb 31°

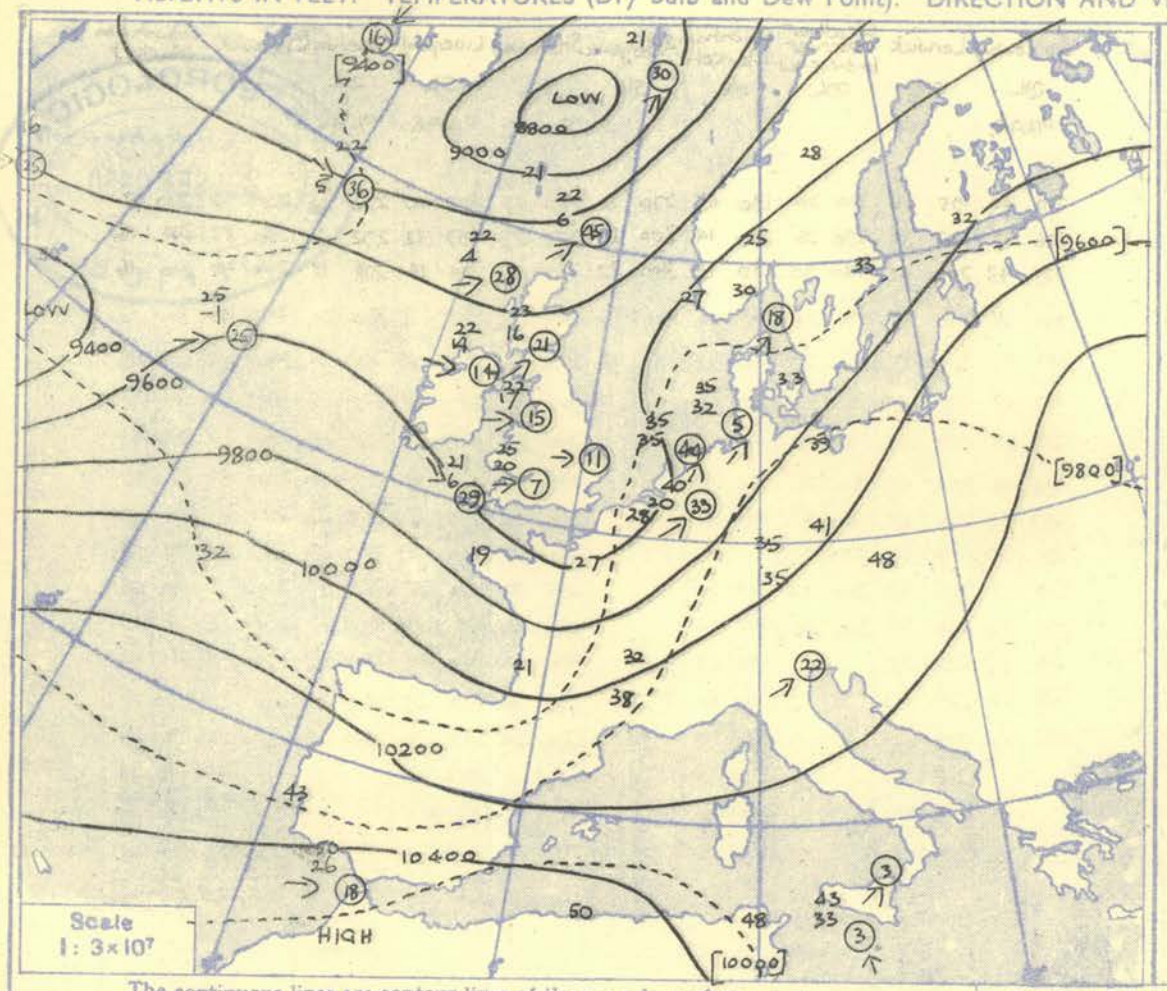
Inversion 838 mb 34° - 800 mb 35° Isothermal 800 - 780 mb 35° 690 - 674 .. 25° 593 - 550 .. 15°

Not Available. See Top of Page for Winds.

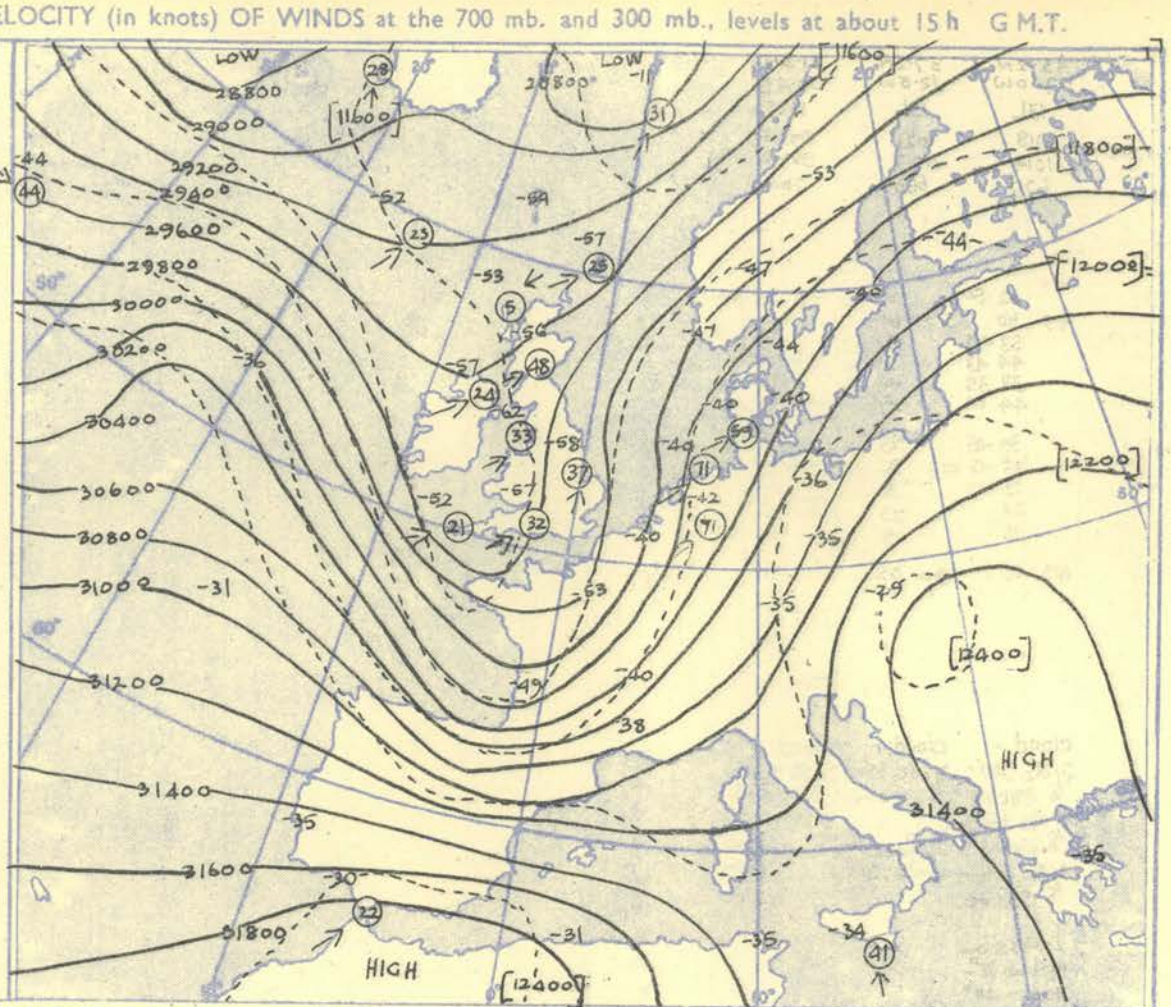
Tropopause	I 295 mb - 57° 29,600'	N.R.	N.R.	I 200 mb - 69° 39,000'	I 240 mb - 65° 34,000'		I 270 mb - 57° 31,400'	I 271 mb - 58° 31,100'		Tropopause

Friday 15 – September 1950.

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

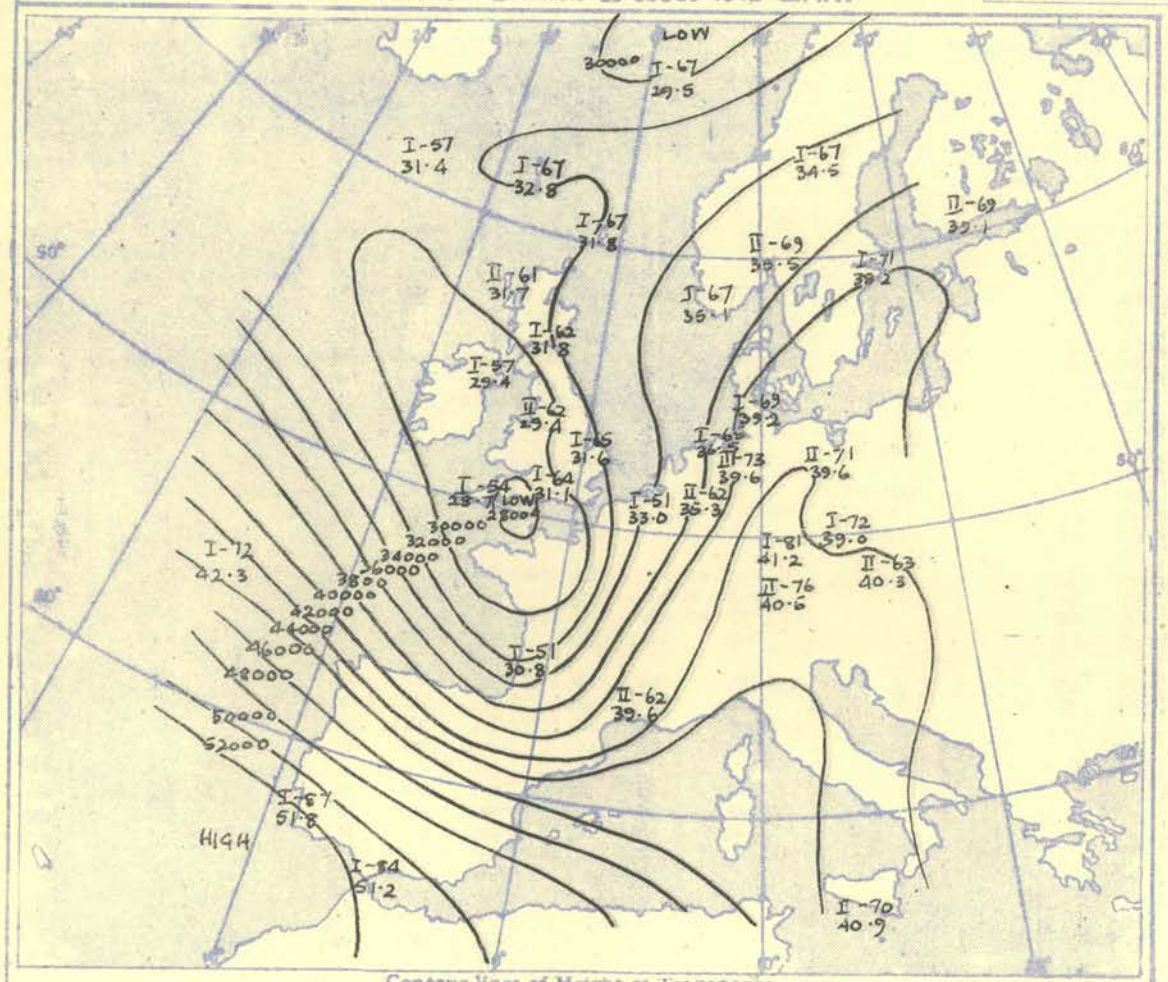


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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 15 h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Considerable warming took place ahead of the recurved tropical storm which was mainly due to subsidence in the early stages but later there was northward advection of warm air in the circulation of the storm. This led to the formation of cut off cold pool at the southeastern end of the cold trough.

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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 September 1950.

ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Friday 15th September 1950.

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

...September 1950.

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

LERWICK

Pressure — Time 15h G.M.T.; M.S.L. 992·7 mb; Surf 983·0 mb; Freezing 820 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·7	56	46	210	28
1000	-21				
950		50	41	225	35
900	26·7	43	35	227	35
850		35	29	232	37
800	57·9	30	25	234	38
750		29	17	232	40
700	92·6	22	06	223	43
650		16	-09	220	42
600	132	08	-21	224	47
550		00	-29	225	57
500	176	-09	-38	224	53
450		-20	-51	221	45
400	229	-30	-37	231	39
350		-42		222	33
300	293	-57		222	25
250		-61		225	41
200	379	-50		226	41
170		-50		214	39
150		-50		218	35
130		-52		218	28
110		-53		222	32
100	530	-50		224	31
90		-47		224	28
80		-47			
70					
60					

Isothermal
789 - 745 mb 29°

Tropopause: I 267 mb -67° 31·800

STORNOWAY

Pressure — Time 15h G.M.T.; M.S.L. 995·4 mb; Surf 993·5 mb; Freezing 816 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·5	55	45		
1000	-1·3				
950		51	41		
900	27·5	44	37		
850		37	31		
800	58·8	30	25		
750		27	15		
700	93·4	22	04		
650		17	10		
600	133	16	-04		
550		09	-07		
500	177	02	-19		
450		-07	-32		
400	230	-17	-30		
350		-28	-37		
300	294	-41			
250		-53			
200	382	-61			
170		-48			
150		-49			
130		-49			
110		-48			
100	533	-50			
90		-49			
80		-48			
70		-47			
60					

For winds see page 3.

Tropopause: I 270 mb -61° 31,700

LEUCHARS

Pressure — Time 15h G.M.T.; M.S.L. 998·4 mb; Surf 997·6 mb; Freezing 800 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·2	56	48	254	07
1000	0·5				
950		50	42	249	16
900	28·2	44	37	267	15
850		38	31	266	13
800	59·6	32	26	234	12
750		28	22	216	17
700	94·0	23	16	214	21
650		17	10	219	21
600	134	11	04	224	21
550		03	-05	213	23
500	179	-05	-13	206	24
450		-15	-24	205	30
400	231	-27	-36	209	35
350		-41		212	42
300	300	-56		212	48
250		-55		199	36
200	383	-46		214	29
170		-47		214	33
150		-48		221	36
130		-49		226	33
110		-50		226	31
100	535	-52		223	31
90		-51		224	30
80		-49		231	26
70		-47		248	24
60		-49		245	29
		-49		224	26
		-46		206	13
	(30 mb)	-50		216	13

Tropopause: I 269 mb -62° 31.800

ALDERGROVE

Pressure — Time 15h G.M.T.; M.S.L. 1000·0 mb; Surf 991·6 mb; Freezing 798 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·3	59	45	Calm	
1000	0·0				
950		52	41	242	11
900	28·9	44	34	266	13
850		37	31	278	15
800	60·2	32	27	280	14
750		28	22	282	15
700	95·0	22	14	287	14
650		14	02	276	16
600	134	08	-13	270	18
550		00	-28	265	19
500	179	-10	-41	254	21
450		-22	-53	238	20
400	231	-34	-57	222	23
350		-44		222	30
300	294	-57		234	24
250		-51		262	21
200	383	-47		252	29
170		-49		252	26
150		-50		254	25
130		-51		254	29
110		-51		246	20
100	534	-50		246	21
90		-50		240	29
80		-50		236	24
70		-50		237	29
60		-47		267	15
		-45			

Isothermal.
637 - 627 mb 12°

Tropopause: I 300 mb -57° 29·400

LIVERPOOL

Pressure — Time 15h G.M.T.; M.S.L. 998·7 mb; Surf 996·7 mb; Freezing 790 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·6	56	51		
1000	-0·4				
950		50	44		
900	28·4	44	38		
850		38	32		
800	59·7	33	28		
750		28	23		
700	94·5	22	17		
650		15	08		
600	134	09	01		
550		01	-09		
500	178	-08	-19		
450		-18	-30		
400	231	-31	-43		
350		-45			
300	294	-62			
250		-51			
200	382	-45			
170		-45			
150		-48			
130		-52			
110		-52			
100	534	-48			
90		-49			
80		-47			
70		-44			
60		-42			

For winds see page 3

Tropopause: I 300 mb -62° 29·400

DOWNHAM MARKET

Pressure — Time 15h G.M.T.; M.S.L. 998·3 mb; Surf 994·0 mb; Freezing 779·0 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	1·2	59	54	180	03
1000	-0·4				
950		54	50	110	04
900	28·5	48	41	058	05
850		42	33	019	06
800	60·1	33	29	339	04
750		30	25	276	06
700	95·1	25	21	237	11
650		19	13	219	11
600	135	13	08	188	15
550		06	01	189	19
500	180	-04	-10	190	20
450		-14	-21	188	19
400	233	-25	-32	194	20
350		-40	-47	184	30
300	297	-58		176	37
250		-51		192	47
200	385	-46		205	39
170		-49		217	32
150		-49		216	24
130		-52		227	30
110		-53		235	32
100	536	-52		226	25

Inversion.
998 mb 52° - 965 mb 54°

Isothermal.
776 - 760 mb 31°

Tropopause: I 275 mb -65° 31·600

LARKHILL

Pressure — Time 15h G.M.T.; M.S.L. 998·6 mb; Surf 983·1 mb; Freezing 767 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·4	58	49	270	15
1000	-0·3				
950		53	45	281	18
900	28·6	47	39	274	17
850		42	31	261	13
800	60·2	37	28	227	09
750		30	22	241	07
700	95·2	25	20	254	07
650		19	11	255	09
600	135	12	06	234	12
550		03	-03	213	16
500	179	-06	-12	192	17
450		-15	-21	194	18
400	232	-27	-33	187	16
350		-41		193	24
300	296	-57		197	32
250		-49		212	30
200	385	-45		227	23
170		-44		233	29
150		-46		240	29
130		-50		236	30
110		-54		240	31
100	537	-56		243	30
90		-52		248	29
80		-52		257	24
70		-55		252	18
60		-54		238	20
		-51			
	(47 mb)	-50			

Tropopause: I 281 mb -64° 31·100

CAMBORNE

Pressure — Time 15h G.M.T.; M.S.L. 1003·3 mb; Surf 993·0 mb; Freezing 800 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·9	59	49	300	12
1000	0·9				
950		52	44	285	22
900	29·8	45	40	290	22
850		39	33	291	23
800	61·2	32	27	291	26
750		27	19	290	31
700	98·9	21	06	289	29
650		14	-09	288	26
600	135	07	-18	283	23
550		-01	-21	277	22
500	179	-12	-31	271	24
450		-24	-42	263	25
400	231	-36	-54	246	25
350		-48		188	35
300	294	-52		245	21
250		-45		284	33
200	384	-45		286	33
170		-49		275	31
150		-50		273	34
130		-51		265	40
110		-55		271	28
100	535	-57		259	26
90		-57		244	25
80		-57		270	25
70		-57		257	30
60		-57			

(67 mb)

Tropopause: I 310 mb -54° 28·700

VALENTIA

Pressure — Time 15h G.M.T.

HOT AVAILABLE.

LERWICK

Pressure — Time 21h G.M.T.; M.S.L. 996·3 mb; Surf 986·5 mb; Freezing 803 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·7	51	47	225	13
1000	-1·1				
950		49	44	239	25
900	27·6	43	40	235	25
850		36	30	234	26
800	58·9	31	28	231	27
750		28	23	228	31
700	93·6	23	09	228	31
650		16	-02	229	34
600	133	12	-12	228	37
550		05	-22	218	40
500	178	-05	-31	215	40
450		-17	-42	217	41
400	231	-30	-52	228	32
350		-44		216	24
300	294	-59		205	09
250		-58		207	28
200	381	-52		215	35
170		-51		223	32
150		-51		222	32
130		-52		229	29
110		-55		233	24
100	532	-53		234	25
90		-53		225	24
80		-53			
70					
60					

Tropopause: I 279 mb -66° 30·900

STORNOWAY

Pressure — Time 21h G.M.T.; M.S.L. 998·5 mb; Surf 997·7 mb; Freezing 830 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·5	49	47	240	10
1000	-0·2				
950		48	42	267	24
900	28·4	42	38	260	25
850		36	32	257	23
800	59·6	29	25	269	22
750		23	18	275	23
700	94·1	24	06	279	24
650		15	-13	276	24
600	133	06	-32	275	24
550		-01	-45	268	24
500	178	-08	-50	264	25
450		-19	-44	261	26
400	230	-32	-50	263	24
350		-44		258	30
300	294	-58		246	26
250		-68		257	31
200	379	-54		257	30
170		-51		260	31
150		-52		253	24
130		-54		244	20
110					
100					
90					
80					
70					
60					

Inversion.
998 mb 49° - 990 mb 50°
743 - 722° - 703 - 25°

Tropopause: I 257 mb -72° 32·700

LEUCHARS

Pressure — Time 21h G.M.T.

ALDERGROVE

Pressure — Time 21h G.M.T.; M.S.L. 1005·6 mb; Surf 997·0 mb; Freezing 810 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °R	Wind Dir. °	Wind Vel. knots
Surf	2·3	50	44	300	07
1000	1·5				
950		48	41	302	15
900	30·1	43	36	301	16
850		37	30	299	18
800	61·4	31	20	296	18
750		26	16	292	21
700	96·0	21	01	300	22
650		14	-09	303	19
600	135	07	-17	294	22
550		-02	-25	295	23
500	179	-09	-28	288	20
450		-22	-38	285	24
400	232	-32	-44	287	30
350		-43		296	43
300	296	-51		294	71
250		-61		302	78
200	383	-55		285	43
170		-59		279	41
150		-57		272	32
130		-55		272	28
110		-61		263	22
100	531	-59		259	25
90		-58		256	19
80					
70					
60					

Isothermal
397 - 365 mb 50°

Tropopause: I 234 mb -65° 35·000

LIVERPOOL

Pressure — Time 21h G.M.T.; M.S.L. 1003·8 mb; Surf 1001·8 mb; Freezing 807 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·6	51	49	300	15
1000	0·1	51	47		
950		49	43	310	18
900	29·6	41	34	316	20
850		37	26	318	22
800	60·8	31	19	321	22
750		28	18	317	22
700	95·5	22	06	314	22
650		17	-09	305	15
600	135	09	-15	284	13
550		-01	-23	283	15
500	179	-11	-26	259	17
450		-21	-34	230	21
400	231	-34	-44	219	25
350		-47			
300	294	-60			
250		-54			
200	382	-51			
170		-53			
150		-56			
130		-57			
110		-57			
100	532	-58			
90		-60			
80		-58			
70		-57			
60					

Inversion
1002 mb 51° - 983 mb 54°

Isothermal
671 - 638 mb 18°

Tropopause: I 300 mb -62° 29·400

DOWNHAM MARKET

Pressure — Time 21h G.M.T.; M.S.L. 1002·3 mb; Surf 997·8 mb; Freezing 783 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	1·2	52	52	220	05
1000	0·6				
950		53	47	310	13
900	29·5	48	40	317	13
850		42	37	323	12
800	61·1	35	31	328	15
750		30	27	333	16
700	96·0	24	21	324	15
650		17	11	312	13
600	135	10	06	307	12
550		03	-05	300	13
500	180	-07	-17	270	10
450		-16	-28	257	10
400	233	-28	-44	219	10
350		-43		210	15
300	297	-59		200	13
250		-53		234	17
200	384	-51		248	22
170		-50		237	21
150		-52		231	26
130		-54		235	29
110		-57		243	27
100	535	-56		255	21
90		-57		255	18
80		-60			
70					
60					

Inversion.
998 mb 52° - 965 mb 54°

Isothermal.
776 - 760 mb 31°

Tropopause: I 278 mb -65° 31·200

LARKHILL

Pressure — Time 21h G.M.T.; M.S.L. 1005·2 mb; Surf 989·2 mb; Freezing 800 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·4	50	46	300	10
1000	1·4				
950		50	45	301	25
900	30·1	43	40	310	26
850		38	35	322	27
800	61·5	32	30	322	27
750		29	21	315	26
700	96·4	24	10	305	21
650		17	05	305	20
600	135	09	-03	305	21
550		00	-09	292	18
500	180	-08	-20	278	12
450		-19	-27	247	19
400	233	-31	-39	219	15
350		-45		195	18
300	296	-48		288	22
250		-43		303	30
200	386	-45		295	34
170		-48		282	29
150		-50		271	28
130		-52		266	26
110		-58			
100					
90					
80					
70					
60					

Inversion.
989 mb 50° - 967 mb 52°

Tropopause: I 317 mb - 54° 28·500

CAMBORNE

Pressure — Time 21h G.M.T.; M.S.L. 1008·9 mb; Surf 998·5 mb; Freezing 776 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·3	54	50	315	10
1000	2·5				
950		51	46	259	27
900	31·3	45	40	305	23
850		39	33	309	24
800	62·7	34	27	307	27
750		30	23	310	27
700	97·6	25	15	312	27
650		19	05	306	27
600	137	10	07	305	28
550		02	-19	308	32
500	182	-05	-29	318	45
450		-16	-36	320	57
400	235	-25	-42	317	58
350		-33	-50	316	92
300	300	-40	-57	323	110
250		-54		320	127
200	388	-57			
170		-59			
150		-59			
130					
110					
100					
90					
80					
70					
60					

(165 mb)

Inversion.
999 mb 54° - 983 mb 55°
326 - 38° - 314 - 37°

Isothermal.
384 - 369 mb 29°

Tropopause: I 214 mb - 64° 37·300

No. 11493 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Saturday 16th September. 1950. 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.	997.7 mb	987.9 mb	813 mb
STORNOWAY	03h G.M.T.	1001.4 mb	999.5 mb	825 mb
LEUCHARS	03h G.M.T.	1003.3 mb	1003.0 mb	807 mb
ALDERGROVE	03h G.M.T.	1006.9 mb	998.1 mb	808 mb
LIVERPOOL	03h G.M.T.	1007.0 mb	1005.0 mb	800 mb
DOWNHAM MARKET	03h G.M.T.	1007.6 mb	1003.2 mb	790 mb
LARKHILL	03h G.M.T.	1010.1 mb	993.9 mb	765 mb
CAMBORNE	03h G.M.T.	1011.5 mb	1000.9 mb	758 mb
VALENTIA	03h G.M.T.	1005.5 mb	1004 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
Surf	027	49	46	250	09	005	47	43	240	07	002	43	41		
1000	-07					-04					1.0				
950		49	45	255	20		48	40	249	24		47	44		
900	27·9	42	37	254	25	28·9	41	35	256	22	29·5	41	37		
850		37	32	258	27		34	30	254	22		36	30		
800	59·2	31	26	257	24	60·1	30	22	258	24	60·8	32	28		
750		26	20	254	22		25	13	217	24		28	10		
700	93·9	20	13	250	23	94·5	17	05	256	27	96·0	20	00		
650		15	05	256	25		10	-07	254	30		14	-09		
600	133	08	-06	248	25	133	06	-16	255	35	134	09	-13		
550		01	-19	233	27		00	-24	257	39		01	-18		
500	177	-09	-27	222	29	178	-10	-28	265	41	179	-07	-29		
450		-20	-37	217	29		-20	-39	269	45		-17	-39		
400	230	-34	-46	220	24	230	-28	-46	282	55	232	-30	-50		
350		-47		233	24		-41		287	64		-43			
300	293	-59		234	23	294	-55		284	79	296	-52			
250		-57		230	30		-60		290	88		-57			
200	380	-50		230	29	381	-53		274	36	383	-53			
170		-52		234	28		-50		268	38		-53			
150		-54		238	30		-53		260	37		-56			
130		-54		228	29		-52		255	28		-56			
110		-55		226	25		-49		266	28		-55			
100	530	-55		228	24	532	-50		258	28	533	-57			
90		-55		228	22		-51					-57			
80		-55		224	22		-52					-57			
70		-57		228	21							-57			
60		-53		230	13							-56			
	(55 mb)	-53									(50 mb)	-55			
Tropopause	I 277 mb -65° 31,000'					I 285 mb -60° 30,600'					II 288 mb -55° 30,400'				

Inversion 999 mb 47° - 975 mb 50°

Inversion 1003 mb 43° - 970 mb 49°

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	023	43	42	246	05	006	50	47			012	49	47	275	02
1000	1·8					1·9	50	47			2·1				
950		48	42	254	09		50	47				48	44	321	18
900	30·8	42	35	256	12	30·6	43	38	330	17	30·7	43	38	330	17
850		36	26	256	12		36	31				39	36	327	14
800	61·6	31	16	257	13	61·9	32	23			62·1	33	31	321	18
750		28	13	256	14		29	16				30	23	305	17
700	96·4	22	01	265	15	96·8	24	12			97·1	27	09	299	22
650		16	-10	267	18		18	05				19	03	292	22
600	135	11	-21	262	20	136	11	-05			136	12	-03	292	20
550		04	-28	271	24		04	-15				02	-10	295	20
500	181	-05	-33	278	28	181	-05	-21			181	-07	-19	277	25
450		-11	-38	287	37		-15	-31				-17	-33	263	23
400	234	-19	-46	288	41	234	-23	-40			234	-30	-46	266	23
350		-30	-50	298	56		-33	-49				-41		312	24
300	300	-44		296	78	299	-43				298	-51		317	56
250		-59		294	112		-59					-54		320	64
200	386	-74		298	87	386	-67				386	-54		300	41
170		-66		280	53		-61					-56		286	32
150		-62		278	39		-62					-55		275	31
130		-61		273	36		-61					-55		280	27
110		-62		277	29		-61					-59		269	25
100	533	-64		263	33	533	-63				536	-57		254	21
90		-63		258	33		-60					-60		248	24
80		-61		268	30		-62					-60		253	26
70		-61		260	21		-65					-59			
60							-65								
						(47 mb)	-61				(64 mb)	-59			
							-60								
Tropopause	II 204 mb -74° 38,200'					I 210 mb -71° 37,600'					I 300 mb -51° 29,800'				

Inversion 998 mb 43° - 984 mb 51°
486 " -07° - 474 " -06°

Inversion 1005 mb 50° - 964 mb 51°

Isothermal 771 -721 mb 30°
Max wind:- 325° 93 Kts 273 mb 31,900

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	014	44	43			029	50	48	240	04	003	53	50		
1000	2·7					3·1					1·5	52	49		
950		51	47				50	47	259	14		47	45		
900	31·4	46	38			31·8	44	40	262	12	30·1	42	41		
850		40	31				39	31	263	12		36	35		
800	62·9	33	22			63·3	36	20	265	15	61·4	33	23		
750		30	13				31	12	262	21		31	04		
700	98·0	25	07			98·3	27	03	264	25	96·3	25	03		
650		18	-01				22	-06	280	25		21	17		
600	137	11	-15			138	17	-19	286	28	136	21	20		
550		05	-21				12	-29	292	31		15	13		
500	182	-03	-27			184	04	-28	292	40	182	07	03		
450		-12	-37				-04	-20	298	49		-02	-06		
400	236	-19	-46			238	-12	-22	304	62	237	-12	-17		
350		-27	-53				-23	-32	307	71		-25	-31		
300	302	-42				305	-39	-47	303	81	303	-41			
250		-57					-55		301	90		-58			
200	389	-67				392	-23		311	80	390	-78			
170		-61					-70		301	61		-74			
150		-69					-66		298	54		-78			
130		-57					-65		286	51		-68			
110		-61					-65					-67			
100	537	-60				537	-64				534	-67			
90		-61					-63					-67			
80		-62					-63					-67			
70		-59					-63					-67			
60															
	(64 mb)	-59													
Tropopause	I 209 mb -71° 37,900'					II 197 mb -74° 39,500'					I 200 mb -78° 39,000'				

Inversion 994 mb 44° - 963 mb 52°
800 " 33° - 787 " 35°

Isothermal 710 - 700 mb 25°

Inversion 1001 mb 50° - 980 mb 54°

Inversion 672 mb 20° - 623 mb 23°

09h G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	09h G.M.T.	999.6 mb	989.7 mb	800 mb
STORNOWAY	09h G.M.T.	1001.5 mb	999.6 mb	832 mb
LEUCHARS	G.M.T.	mb	mb	mb
ALDERGROVE	09h G.M.T.	1007.1 mb	997.5 mb	800 mb
LIVERPOOL	09h G.M.T.	1008.1 mb	1006.1 mb	770 mb
DOWNHAM MARKET	09h G.M.T.	1011.0 mb	1006.6 mb	735 mb
LARKHILL	09h G.M.T.	1012.0 mb	996.0 mb	750 mb
CAMBORNE	09h G.M.T.	1009.6 mb	999.1 mb	710 & 680 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	027	51	45			005	52	48							
1000	-0·2					0·4									
950		48	42				47	41							
900	28·4	41	35			29·0	41	33							
850		35	30				35	28							
800	59·7	32	19			60·2	30	22							
750		25	11	For			23	13							
700	94·2	18	07			94·6	17	07							
650		12	03	winds			15	-03							
600	133	06	-11			134	07	-12							
550		-03	-26	see			03	-16							
500	177	-11	-33			178	-05	-20							
450		-21	-43	page			-14	-25							
400	230	-30	-51			232	-22	-32							
350		-39	-59	3.			-33	-43							
300	294	-50				297	-48								
250		-53					-64								
200	380	-48				383	-62								
170		-52					-58								
150		-52					-56								
130		-50					-53								
110		-50													
100	534	-50													
90		-50													
80		-50													
70															
60															
Tropopause	II 315 mb -50° 28,200'					I 217 mb -74° 36,500'									

Isothermal 990 - 975 mb 51°
858 - 826 " 35°

Isothermal 680 - 650 mb 15°
446 - 430 " -15°

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	023	48	46			006	51	46	170	05	012	51	49	200	03
1000	1·5					1·9	51	46	172	09	3·0	50	47	230	08
950		48	44				49	39	188	12		50	45	261	14
900	30·1	42	35			30·6	43	30	200	12	31·7	45	40	255	15
850		37	24				38	21	224	09		39	31	259	17
800	61·4	32	18			61·8	34	13	222	15	63·2	35	24	263	19
750		29	10	For			31	05	228	16		33	11	266	19
700	96·2	25	01			96·7	27	00	226	18	98·2	28	-04	263	17
650		20	-10	winds			20	-07	231	20		22	-08	266	16
600	136	14	03			136	16	-12	238	21	138	17	-23	275	15
550		16	08	see			11	-17	254	32		08	-27	287	20
500	182	08	00			182	04	-18	272	33	188	03	-34	305	27
450		-01	-08	page			-02	-13	284	49		-03	-46	303	39
400	236	-10	-19			286	-12	-22	280	62	238	-13	-39	301	55
350		-23	-31	3.			-27	-36	294	57		-23	-41	310	60
300	303	-39	-48			303	-41		291	71	305	-36	-50	313	76
250		-56					-59		291	73		-52		314	80
200	390	-72				389	-69		300	67	392	-69		321	84
170		-66					-65		282	39		-68		314	54
150		-61					-61		281	37		-62		298	39
130		-59					-57		279	27		-62		289	27
110		-59					-54		266	25		-62		286	27
100	537	-58				537	-55		271	15	539	-61		285	24
90		-59					-56		260	17		-61		279	23
80							-54		256	21		-61		270	21
70							-52		245	21		-61		287	20
60												-57		254	23
						(66 mb)	-53					-58		263	23
Tropopause	I 208 mb -74° 38,350'					I 216 mb -73° 37,400'					I 183 mb -74° 41,000'				

Inversion 997 mb 48° - 974 mb 51°
596 " 13° - 547 " 16°

Isothermal 1006 - 970 mb 51°
642 - 621 " 19°
580 - 561 " 13°
497 - 481 " 08°
Max wind:- 304° 84 Kts 222 mb 36,800

Inversion 976 mb 48° - 950 mb 50°
545 " 07° - 537 " 08°

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	014	51	50	210	05	029	56	50	180	10					
1000	3·3					2·7									
950		49	44	219	16		51	46	191	28					
900	32·0	45	41	220	15	31·5	45	38	198	27					
850		38	32	222	14		42	25	200	30					
800	63·4	33	24	227	18	63·1	40	07	208	29					
750		32	15	239	20		38	00	220	25					
700	99·0	29	08	261	19	98·5	32	28	238	38					
650		24	01	265	19		30	26	246	35					
600	138	21	-06	273	23	139	25	21	253	41					
550		15	-11	282	17		19	15	263	43					
500	184	07	-13	293	36	185	11	07	271	42					
450		00	-12	292	51		03	-03	269	44					
400	239	-10	-16	295	57	240	07	-16	270	46					
350		-23	-29	296	62		-22	-30	271	43					
300	306	-37	-43	301	66	307	-36	-43	274	48					
250		-57		311	68		-53		275	55					
200	393	-71		305	64	295	-68		273	51					
170		-66		289	53		-70		279	53					
150		-67		292	47		-62		285	50					
130		-59		307	29		-66		273	41					
110		-60		245	31		-64		270	29					
100	539	-62		257	31	541	-62		268	14					
90		-64		270	21		-60		239	17					
80		-61		272	13		-58								
70						Max wind 272° 71 Kts 225 mb 37,000'										
60	(74 mb)	-61													
Tropopause	I 208 mb -73° 38,900'					I 212 mb -70° 38,300'									

Inversion 996 mb 51° - 985 mb 52°
650 " 24° - 632 " 25°

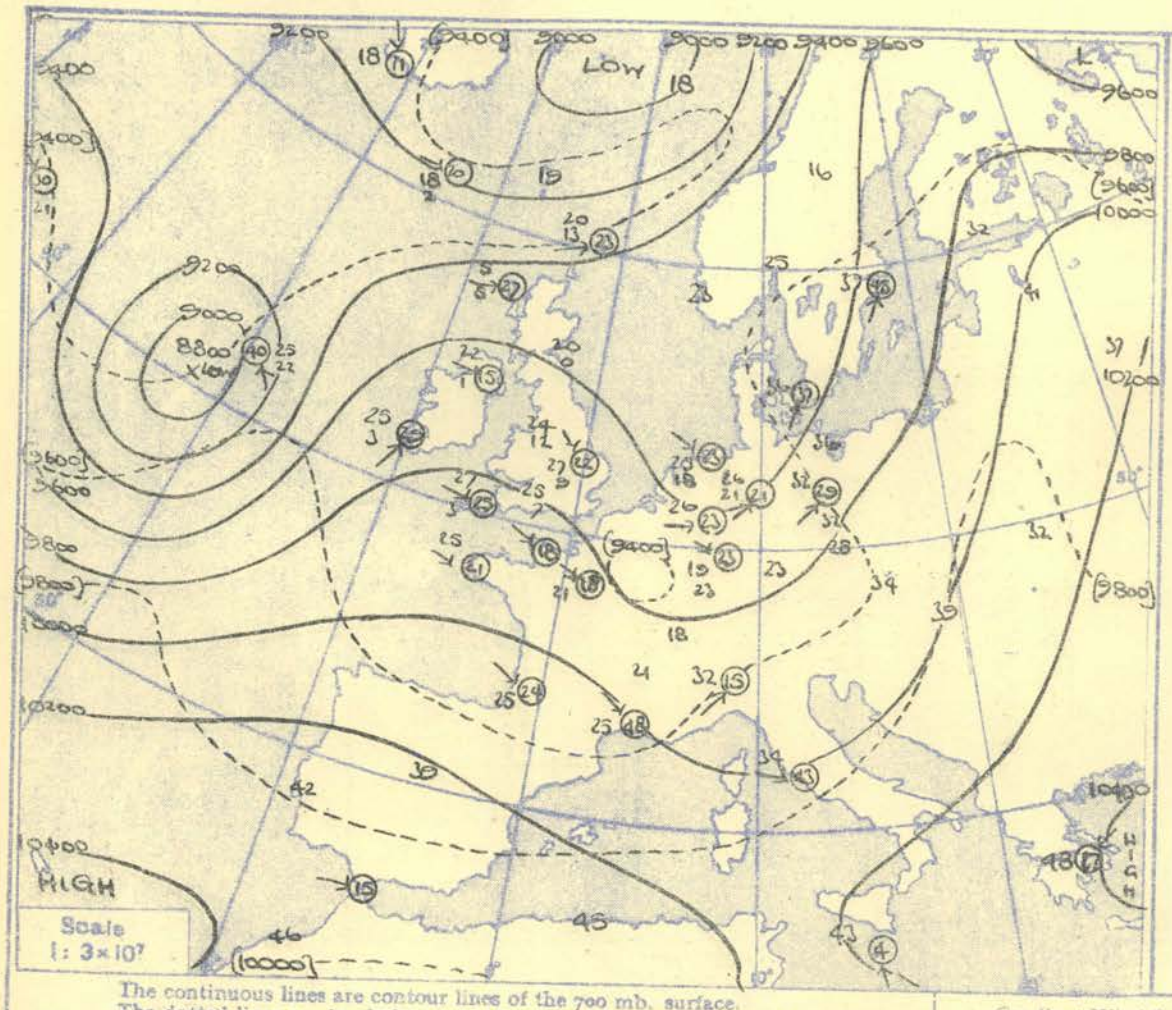
Isothermal 773 - 750 mb 32°

Inversion 868 mb 40° - 850 mb 42°
704 " 31° - 693 " 33°

Isothermal 999 - 992 mb 56°

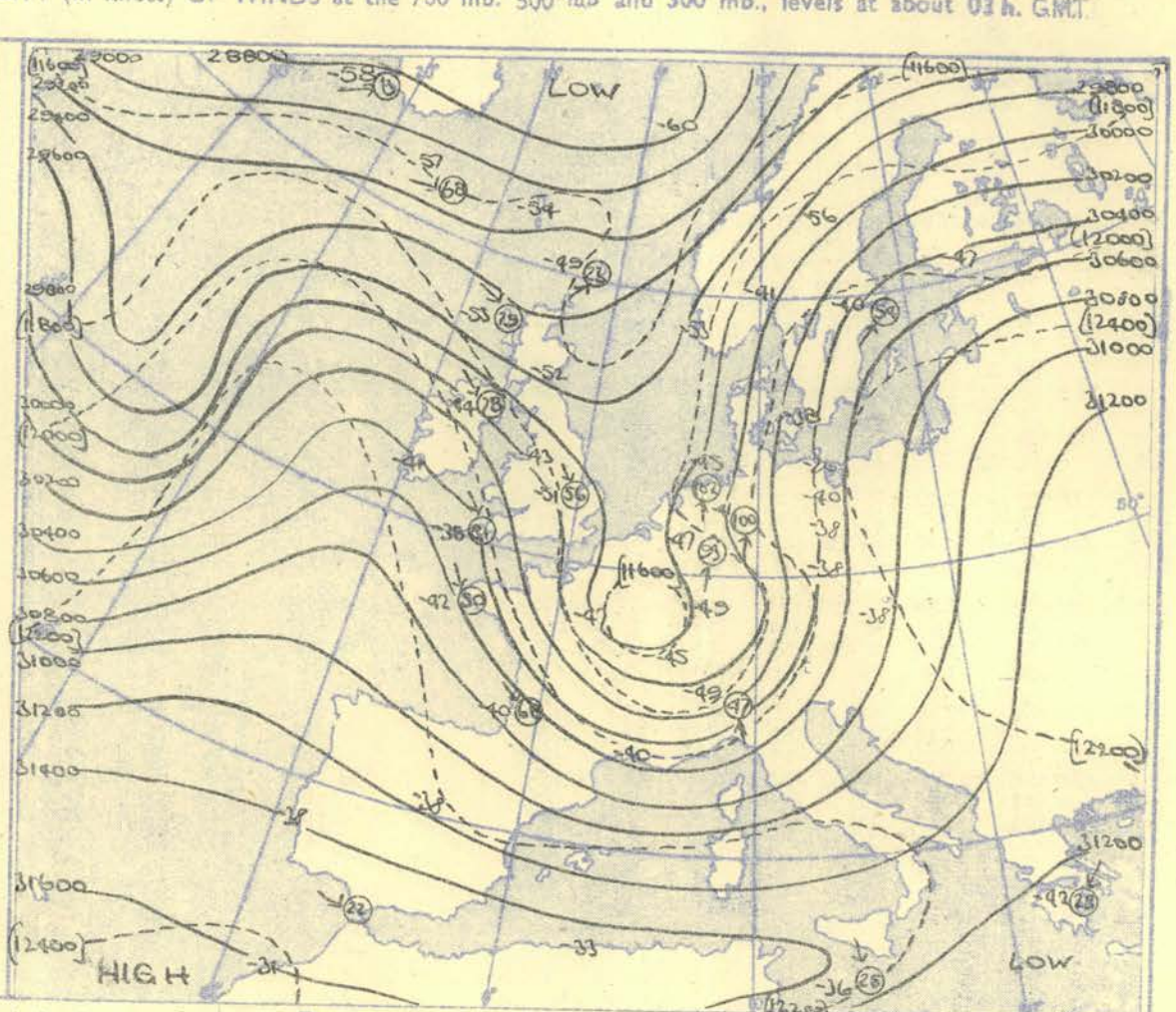
16TH September 1950.

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. GMT.

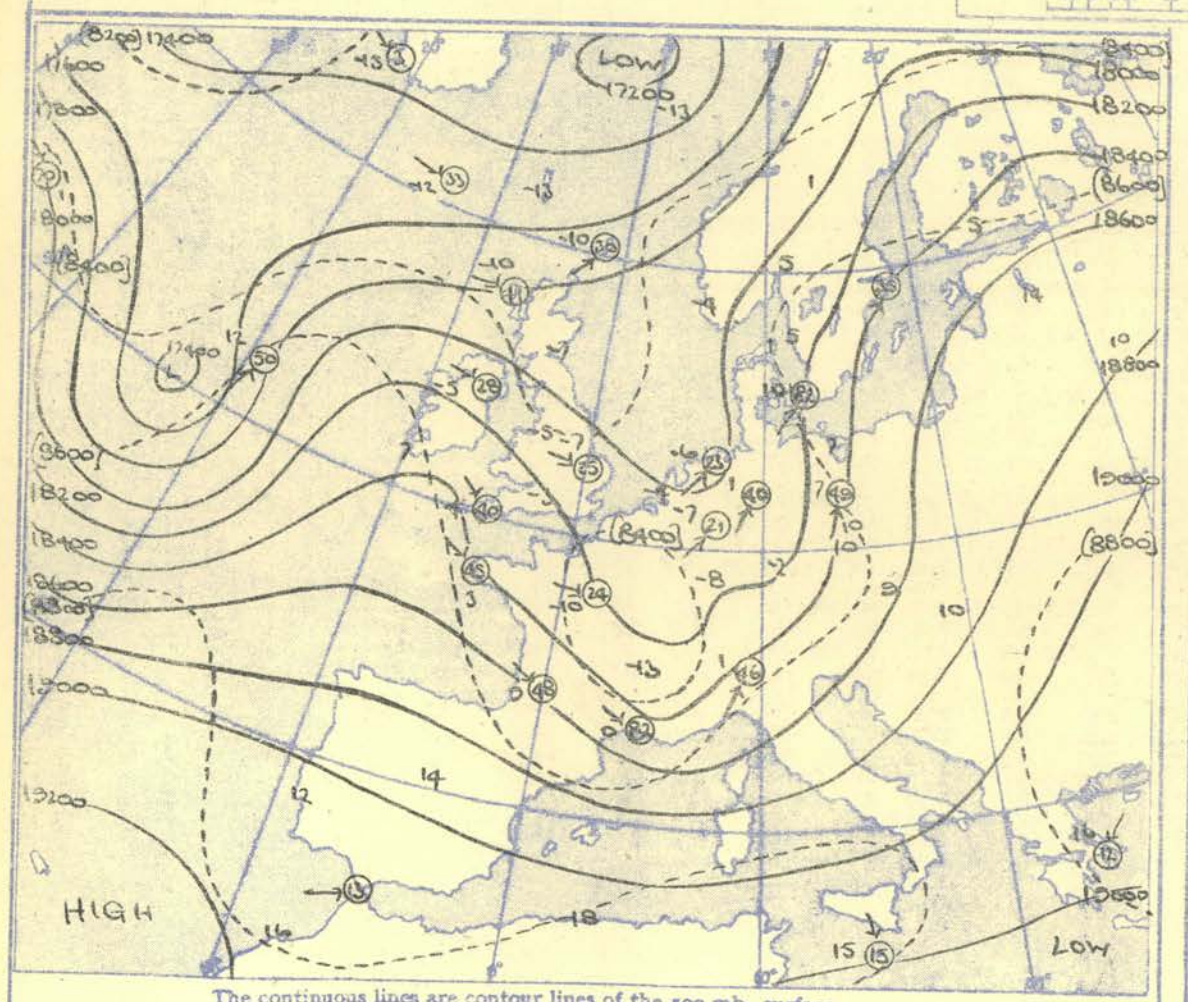


The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

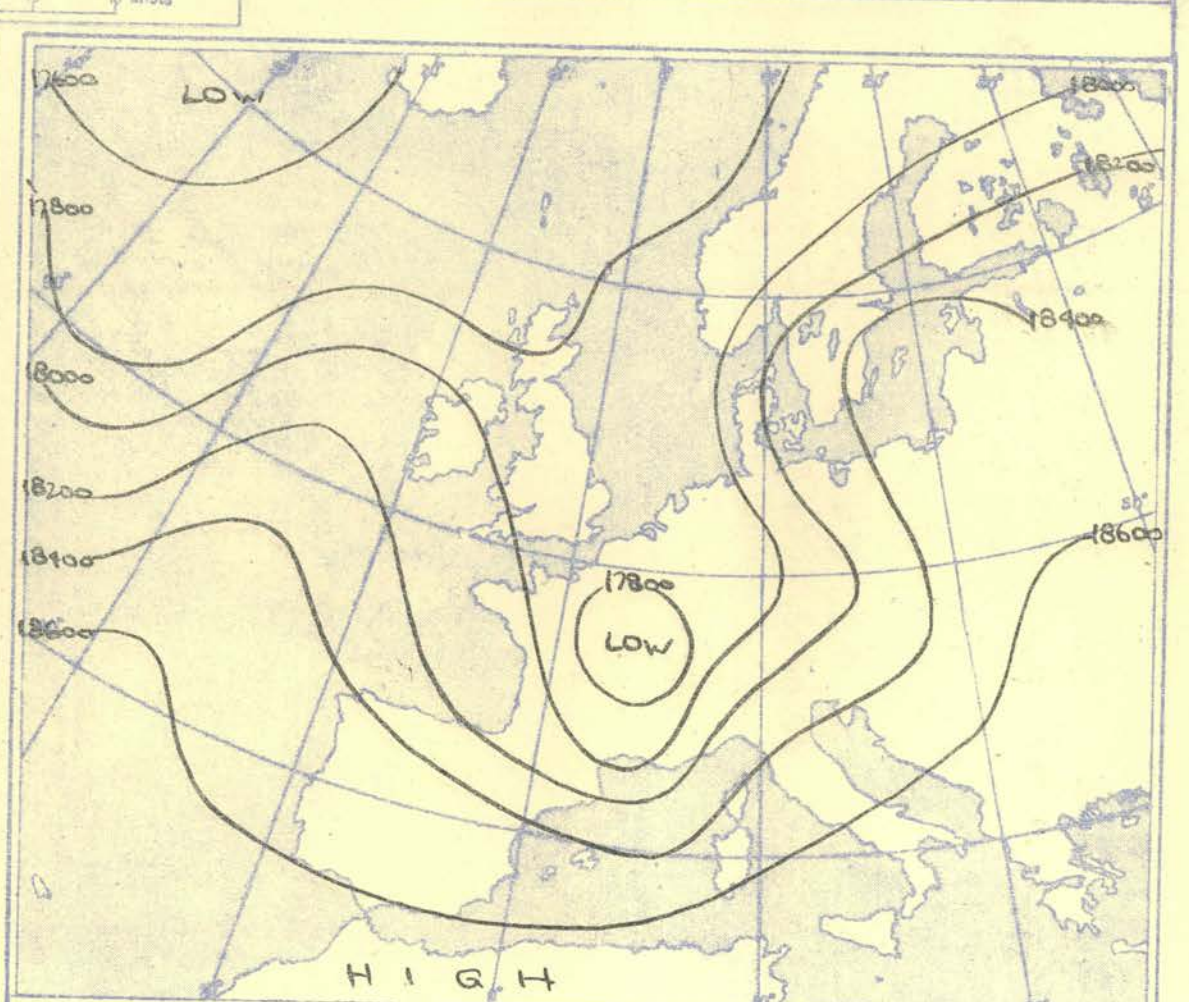
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.



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.



Isopiaths of Thickness 500-1000mb.

Saturday 16th September 1950. Page 3

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

Pressure mb	43·2N 17·0W 13h Height ft./100	°C Temp.	°F Temp.	°F Dew	39·5N 12·2W 15h Height ft./100	°C Temp.	°F Temp.	°F Dew	Height ft./100	°C Temp.	°F Temp.	°F Dew	Height ft./100	°C Temp.	°F Temp.	°F Dew	Height ft./100	°C Temp.	°F Temp.	°F Dew	Height ft./100	°C Temp.	°F Temp.	°F Dew	Pressure mb
Time M.S.L. Surf Freezing	1011 mb 1007 mb 625				1018 mb 1014 mb 630				mb mb mb				mb mb mb				mb mb mb				mb mb mb				Time M.S.L. Surf Freezing Pressure
Surf			72				68																		Surf
1000	2·9		70		4·9		66																		1000
950			54				59																		950
900			47	47			60																		900
850			48				59																		850
800			51				54																		800
750			48				49																		750
700	100		40		103		42																		700
650			35				36																		650
600			28				27																		600
550			20				21																		550
500	181		11		191		13																		500
450																									450
400																									400
350																									350
300																									300
250																									250
200																									200
170																									170

Cloud:- 3/8 Sc 880-790 mb 2/8 Cb 900-400 mb

Inversion 900 mb 47°- 800 " 51°

Surface wind W. 22-27 kts

Cloud:- 3/8 Sc 920-910 mb

Inversion 950 mb 59°- 900 " 60°

Surface wind S.W. 17-21 kts

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

Place	Weather observer 61·1N 14·0W		Valentia		Lerwick		Aldergrove		St. Eval		Leeming		Aldergrove		Liverpool		Levahars		Stornoway		Place
Time	03h.		03h.		09h.		09h.		09h.		09h.		15h.		21h.		21h.		21h.		Time
Type							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.			140	11	250	16	180	10	190	16	160	05	170	25	185	35	140	15	110	25	Surf.
1,000			170	21	268	24	171	18	190	28	260	05	144	47	190	48	145	45	102	38	1,000
2,000			180	26	260	24	176	20	190	29	240	04	155	62	192	57	153	45	109	35	2,000
3,000			180	28	261	24	180	26	210	29	250	06	162	67	192	60	163	42	122	30	3,000
4,000			190	29	262	25	185	27	210	30	250	13	165	73	192	60	175	43	133	27	4,000
5,000			190	28	262	27	184	21	210	27	250	14	168	68	193	60	183	45	150	27	5,000
6,000			200	29	259	27	187	21	210	31	250	16	172	68	193	61	193	51	162	31	6,000
8,000			200	30	253	25	191	22	210	26	230	15	190	66	194	63	229	50	187	43	8,000
10,000			200	29	251	24	191	32	210	38	250	15	210	65	203	66	224	41	198	32	10,000
14,000			230	23	253	30	226	36			240	22	212	69	204	64	213	49	194	17	14,000
18,000			220	33	271	33	242	43					214	58	199	65	225	61	182	29	18,000
24,000			(16,000')		283	50	250	55					214	41	197	95	210	62	197	42	24,000
30,000	270	68			291	90	258	64							200	89	214	60	188	69	30,000
40,000	260	44			259	35	263	63							204	89	223	62	200	72	40,000
50,000	260	24			248	21	255	28							(32,000')		(32,000')		(38,000')		50,000
60,000	260	18																			
	260	09																			
	(61,000')																				

NEPHOSCOPE OBSERVATIONS

Place	West Raynham										Place
Time Type	09h Ci										Time Type
Dir. Vel.	270 60										Dir. Vel.

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

Ship	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER WATCHER	WEATHER WATCHER	WEATHER WATCHER	WEATHER WATCHER		Ship
Lat/Long	61·1N. 14·0W.	61·0N. 14·0W.	61·0N. 14·1W.	61·0N. 14·0W.	52·5N. 20·1W.	52·0N. 20·0W.	52·6N. 20·1W.	52·7N. 20·1W		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.	G.M.T.	Time
Pressure M.S.L.	991 mb	993 mb	994 mb	993 mb	987 mb	976 mb	986 mb	997 mb	mb	Pressure M.S.L.
Pressure Surf	991 mb	993 mb	994 mb	993 mb	987 mb	976 mb	986 mb	997 mb	mb	Pressure Surf
Pressure Freezing	815 mb	850 mb	870 mb	845 mb	810 mb	800 mb	800 mb	810 mb	mb	Pressure Freezing

Pressure mb	Height ft./100	°C Temp.	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°C Temp.	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°C Temp.	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°C Temp.	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°C Temp.	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°C Temp.	°F Temp.	°F Dew	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf		81	45	265	27			51	45	255	15			52	41	266	05			50	41	Calm			49	47	070	34			51	47	330	46			53	50	320	33		Surf
1000	-2·5					-1·9						-1·7						-2·0						-3·5						-3·9						-0·7				1000
950		44	37	200	28		45	39	244	14			42	34	283	09			43	25	058	06			45	44	070	36			47	44	333	63			47	44	312	42		950
900	26·0	40	33	253	29	26·6	38	32	244	17	26·7	36	27	233	09	26·4	38	27	100	07	24·9	39	38	074	42	21·9	39	39	360	73	24·6	41	39	334	64	27·9	41	35	315	43	900
850		38	28	253	27		32	26	245	15		29	28	228	09		36	22	113	06		34	31	080	42		35	35	002	63		35	34	326	63		36	29	323	45	850
800	57·2	31	22	253	30	57·6	27	19	245	12	57·4	27	12	215	10	57·2	28	07	123	06	56·0	31	28	095	42	53·1	32	32	007	67	55·9	31	28	338	65	59·1	31	24	325	48	800
750		24	12	255	27		24	08	245	10		23	-11	202	13		24	02	122	07		28	25	106	42		27	27	017	54		26	22	337	58		26	15	321	43	750
700	91·6	18	02	262	20	92·0	20	-08	245	14	91·8	18	-02	203	13	91·6	19	-05	112	09	90·7	25	22	120	40	87·8	24	23	022	50	90·5	21	17	337	50	93·6	20	06	318	43	700
650		11	-06	269	18		13	-18	244	17		13	-07	205	11		14	-15	117	10		26	23	137	45		24	23	049	24		15	09	336	48		15	-03	318	62	650
600	130	-04	-17	271	23	131	06	-27	242	18	131	05	-14	174	11	131	08	-14	126	10	131	23	19	183	51	128	24	12	020	04	130	10	04	336	52	133	11	-09	317	64	600
550		-03	-28	271	27		04	-28	243	22		00	-15	192	13		00	-11	129	11		19	15	214	69		20	19	010	06		04	-02	338	45		04	-18	316	60	550
500	175	-12	-39	266	33	176	-05	-36	245	23	176	-05	-22	202	18	175	-03	-12	146	11	177	12	-07	206	50	174	07	05	050	07	175	-02	-09	337	42	178	-02	-23	315	72	500
450		-21	-48	259	38		-15	-46	245	24		-15	-29	208	25		-11	-21	158	18		04	-02	198	33		-02	-06	172	10		-08	-13	337	22		-09	-32	305	81	450
400	227	-31	-57	259	46	229	-26	-52	244	33	229	-23	-33	208	38	229	-19	-29	175	34	234	-08	-15	199	62	228	-15	-25	197	11	229	-14	-19	237	21	231	-16	-32	307	92	400
350		-41		260	62		-39	-59	244	57		-33	-43	208	51		-30	-39	194	48		-22	-30	201	54		-27		191	12		-24	-34	224	11		-25	-53	308	111	350
300	391	-57		267	68	293	-50		244	76	294	-45		210	84	295	-45		203	56	(333 mb)	-28	-36			294	-41		190	30	295	-41		202	15	298	-39	-59	303	111	300
250							-60		245	94		-60		213	99		-63		198	61							-49		186	80		-47		282	24		-54		308	103	250
200	(288 mb)	-61				380	-58		248	58	380	-65		214	67	(246 mb)	-64								383	-50		200	21	385	-46		287	32	387	-48		314	72	200
170							-53		246	36		-65		220	39											-53		223	19		-50		273	39		-51		313	55	170
150		For rest of winds					-53		245	30		-54		220	39											-56		240	23		-53		269	36		-50		312	46	150
130							-50		245	28		-55		218	36																-52		267	28		-55				130
110		See to of page.					-50		244	28		-53		215	26																-52		265	26		-58				110
100						530	-50		242	22	530	-54		213	28															536	-56		264	28	537	-60				100
90							-51		240	20		-55		213	25																-58		261	24		-61				90
80							-53		238	21		-56		213	24																-58		261	21	(083 mb)	-63				80
70							-53		238	18		-56		213	28																-60		257	19						70
60							-51		240	22		-56		213	15																-58		254	20						60
							-50		242	16	(050)	-54		213	24																								
							-48		244	13	(040)	-51		213	30																								
											(038 mb)	-50																											
Tropopause	N.R.					II 233 mb. -64° 35,300'					I 215 mb. -70° 36,500					N.R.					N.R.			II 260 mb. -49° 32,500'					I 268 mb. -53° 32,000'					II 250 mb. -54° 33,700					Tropopause

Isothermal 800 - 784 mb. 27° 570 - 556 mb. 05°

Inversion 819 mb. 28° - 794 mb. 29°

Isothermal 550 - 514 mb. 0° 450 - 440 mb. -11°

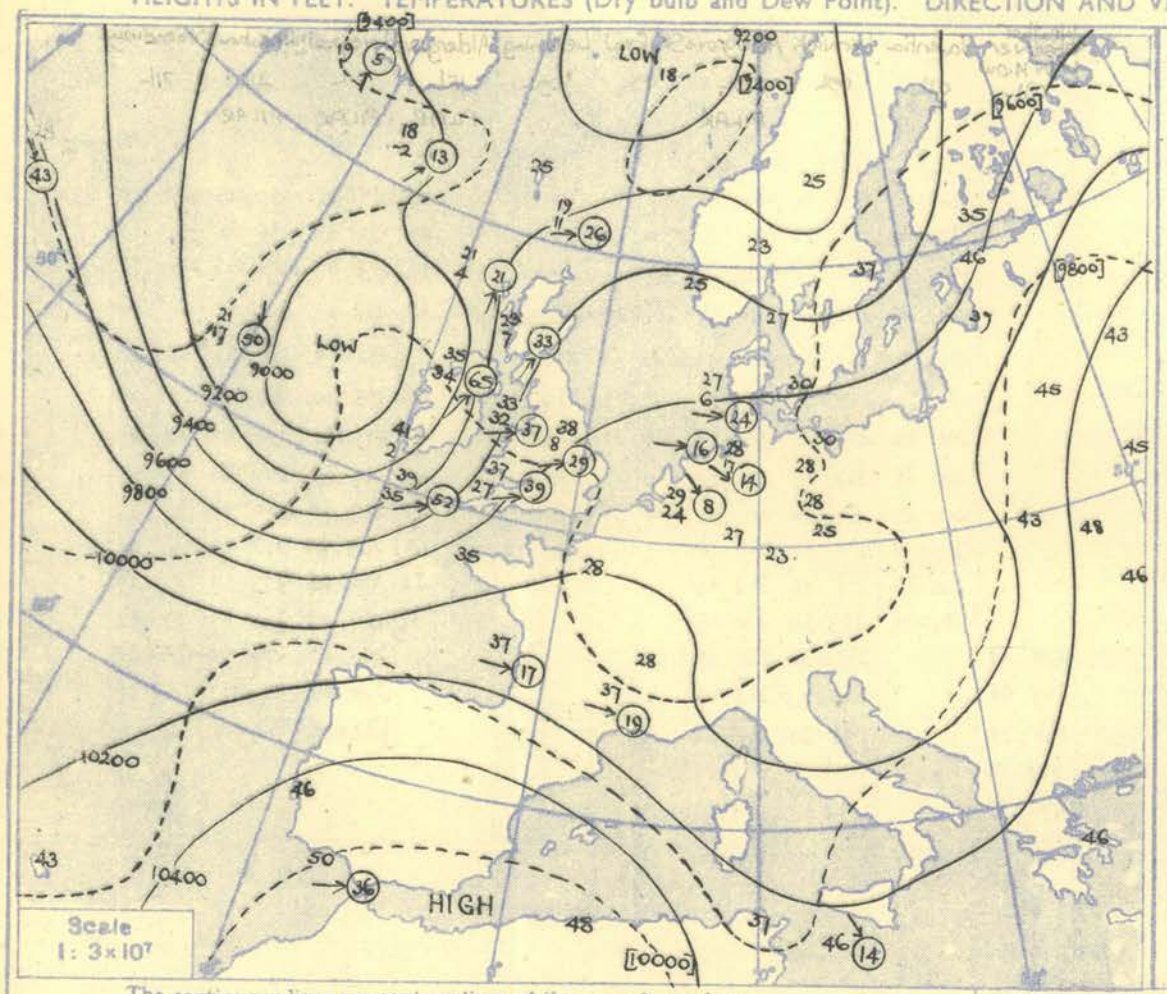
Inversion 690 mb. 24° - 650 mb. 26° Isothermal 650 - 631 mb. 26°

Inversion 700 mb. 24° - 674 mb. 25° 616 mb. 22° - 600 mb. 24°

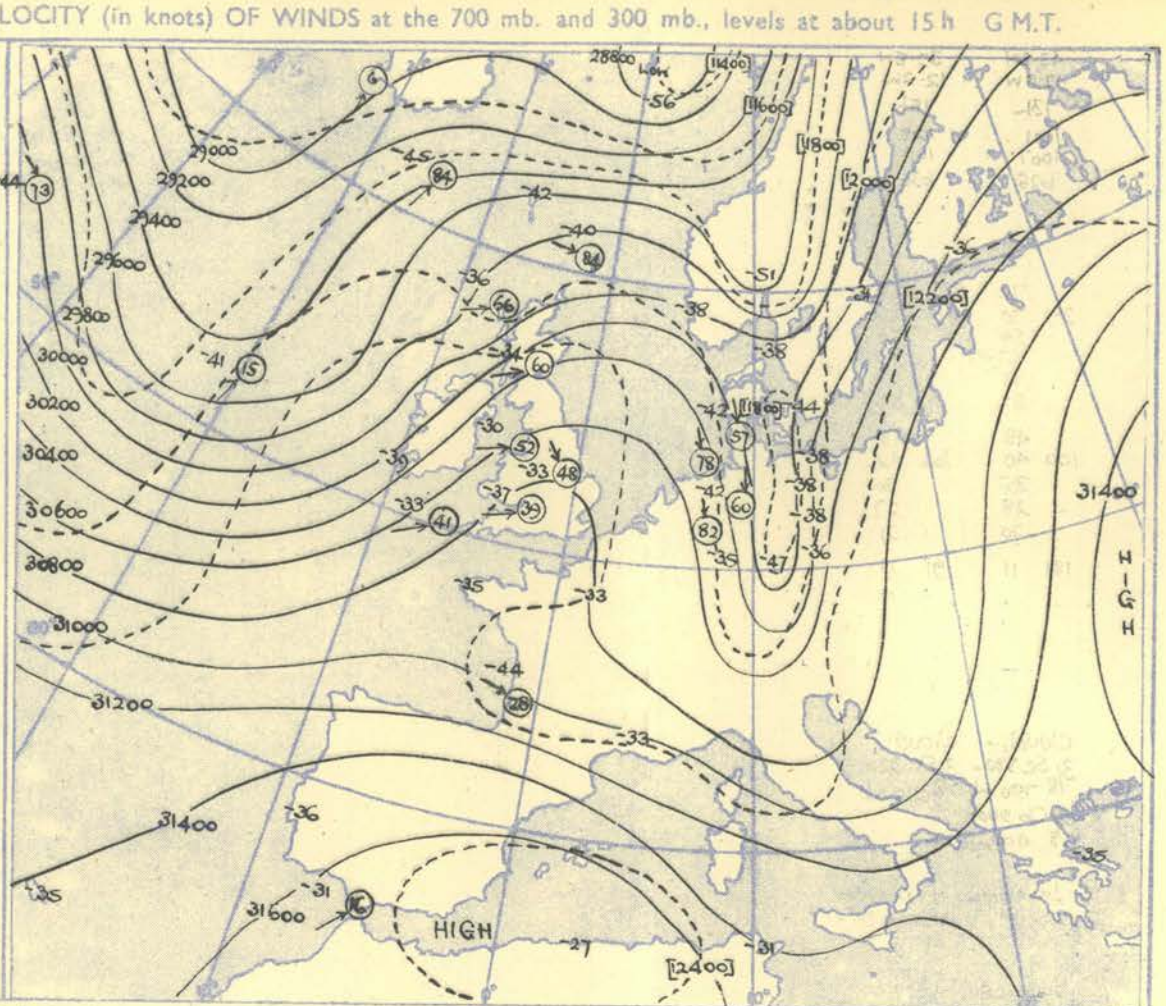
Isothermal 650 - 639 mb. 15°

Saturday 16th September 1950.

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

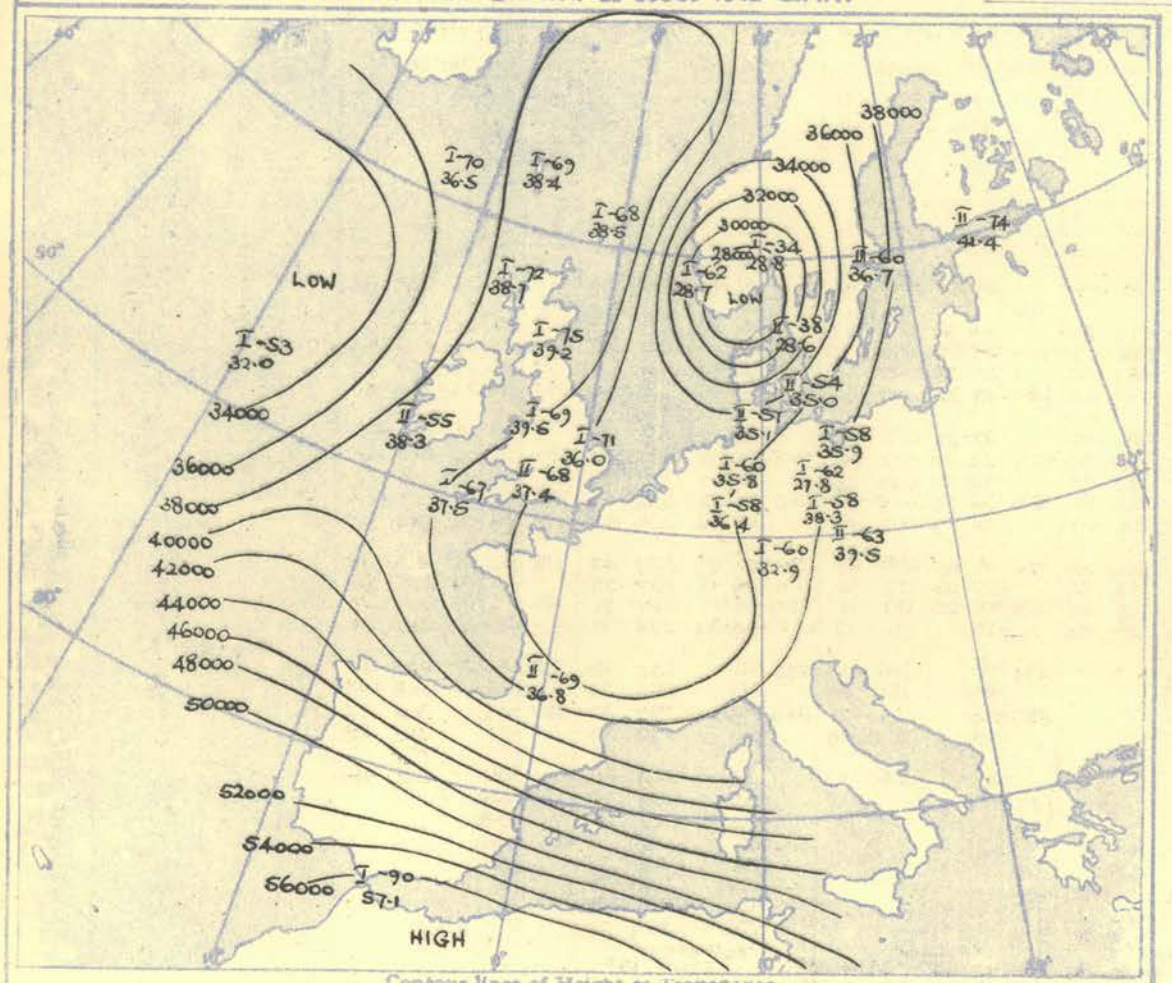


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 300—300 mb.

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 15 h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

The advection around the tropical storm produced considerable distortion in the thermal distribution. Pronounced troughs across the North Sea and in the Atlantic moved eastwards being separated by a marked ridge of warm air on the forward ridge of the tropical storm.

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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 16th September. 1950.

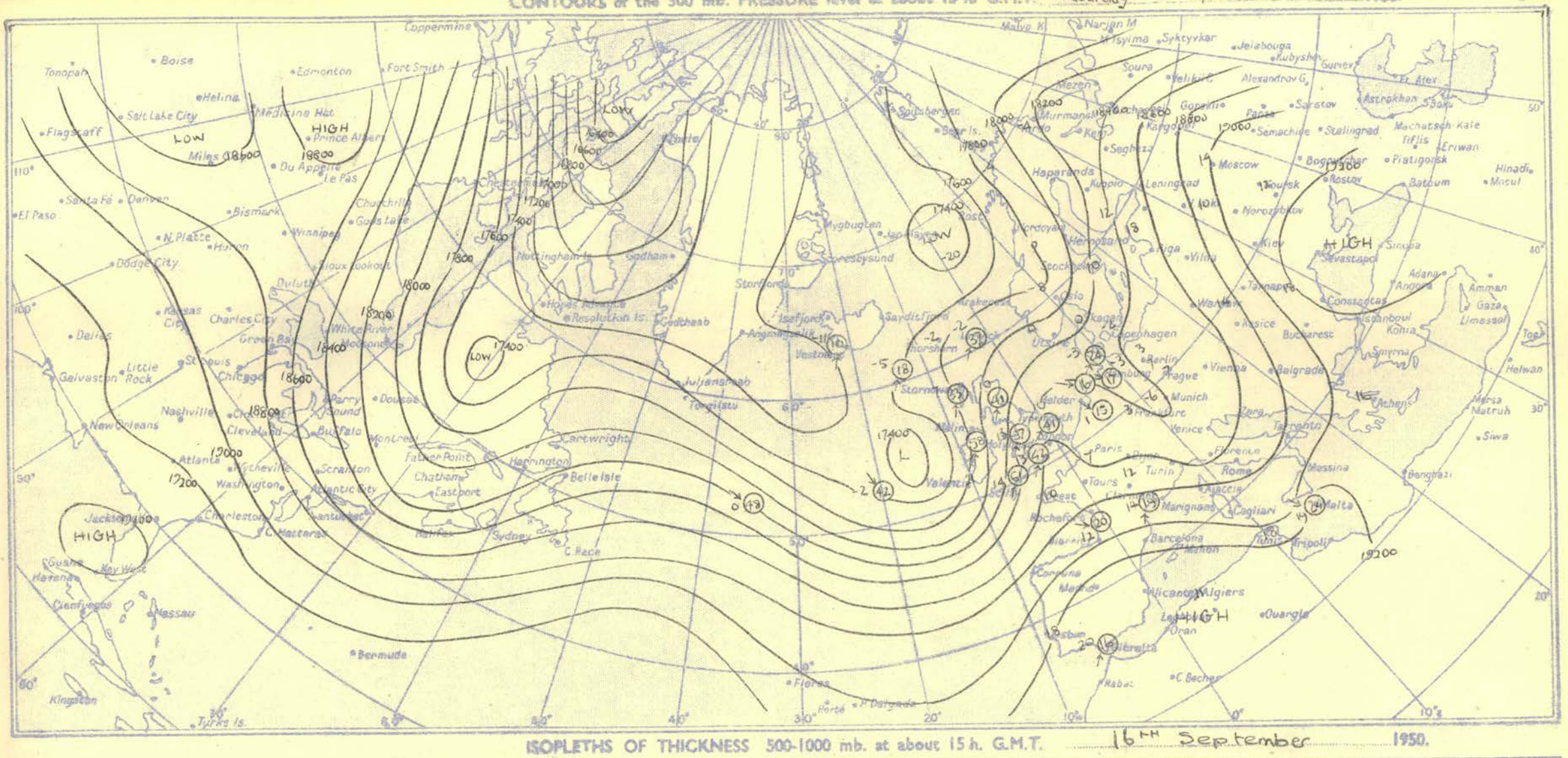

LOW
HIGH
LOW
HIGH
LOW
HIGH
LOW
HIGH
Coppermine
Boise
Edmonton
Fort Smith
Tonopah
Helina
Salt Lake City
Medicine Hat
Flagstaff
Miles City
Prince Albert
Du Appelle
Le Pas
Santa Fé
Denver
Bismark
Churchill
Gods Lake
El Paso
N. Platte
Winnipeg
Huron
Dodge City
Sioux Lookout
Duluth
Kansas City
Charles City
Green Bay
White River
Moosonee
Dallas
Galveston
Little Rock
St. Louis
Chicago
Nashville
Cincinnati
Cleveland
Buffalo
Parry Sound
Douglas
Montreal
New Orleans
Atlanta
Wytheville
Washington
Scranton
Atlantic City
Father Point
Chatham
Eastport
Cartwright
Harrington
Belle Isle
Jacksonville
Charleston
C. Hatteras
Halifax
Sydney
C. Race
Guane
Key West
Havana
Nassau
Bermuda
Kingston
Turks Is.
Mygbugten
Jan Mayen
Scoresbysund
Stornoway
Isafjord
Saydisfjord
Hopes Advance
Resolution Is.
Godthaab
Angmagssalik
Julianshaab
Torgilsstu
Vestmanø
Thorshavn
Lerwick
Utsire
Skagen
Skudenes
Oslo
Copenhagen
Stockholm
Helder
Tynemouth
Holyhead
London
Paris
Dijon
Tours
Brest
Scilly
Rochefort
Biarritz
Corruna
Madrid
Lisbon
Gibraltar
Kabat
C. Becher
Oran
Laghouat
Algiers
Alicante
Barcelona
Marignane
Cagliari
Ajaccio
Tunis
Tripoli
Malta
Messina
Rome
Florence
Turin
Venice
Zara
Tarrantia
Athens
Berghazi
Siwa
Matruh
Helwan
Cairo
Gaza
Amman
Limassol
Adana
Angora
Smyrna
Istanboul
Kohia
Constantza
Sevastapol
Sinope
Batoum
Mosul
Hinadi
Tiflis
Eriwan
Astrakhan
Soku
Machatsch-Kale
Pistigorsk
Bogoutchar
Rostov
Kharkov
Kursk
Moscow
Leningrad
Kuopio
Haparanda
Murmansk
Archangel
Kandalaksha
Kem
Soura
Mezen
Narjan M
M'Isyima
Syktyvkar
Jelabouga
Kubyshev
Gurev
Alexandrov G.
Gorkii
Saratov
Panza
Semachide
Stalingrad
Tsaritsyn
Kotelnitch
Seghoza
Kargopol
Parfino
Novgorod
Vilna
Riga
Libau
Warsaw
Kosice
Bucharest
Belgrade
Vienna
Prague
Berlin
Hamburg
Munich
Frankfort
Zurich
Venice
Nerozobkov
Tarnapol
Kiev
Vitebsk
Smolensk
Yaroslavl
Jelgava
Ostrov
Pskov
Leningrad
Kuopio
Haparanda

Fig 5.

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Saturday 16th September ..... 1950.

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

15h G.M.T.

Station	Pressure: Time	Pressure: M.S.L.	Pressure: Surf	Pressure: Freezing	Tropopause
LERWICK	15h G.M.T.	1001·3 mb	991·5 mb	823 mb	I 202 mb -68° 38·500
STORNOWAY	15h G.M.T.	999·3 mb	997·6 mb	809 mb	I 197 mb -72° 38·700
LEUCHARS	15h G.M.T.	1003·8 mb	1003·0 mb	780 mb	I 200 mb -75° 39·200
ALDERGROVE	15h G.M.T.	994·8 mb	986·3 mb	665 mb	NR.
LIVERPOOL	15h G.M.T.	1005·2 mb	1003·2 mb	695 mb	I 200 mb -69° 39·500
DOWNHAM MARKET	15h G.M.T.	1010·0 mb	1005·6 mb	697 mb	I 210 mb -71° 36·000
LARKHILL	15h G.M.T.	1009·4 mb	993·7 mb	652 mb	II 222 mb -68° 37·400
CAMBORNE	15h G.M.T.	1002·1 mb	991·8 mb	630 mb	I 220 mb -67° 37·500
VALENTIA	15h G.M.T.	978·9 mb	977 mb	600 mb	II 210 mb -55° 38·300

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	2·7	55	48	210	15	0·5	55	48	180	12	0·2	57	49	190	06	2·3	51	50			0·6	54	52	130	15	1·2	61	50	180	07	4·4	59	48	180	20	2·9	59	53	160	35	0·3	57	53			Surf
1000	0·3					-0·2					1·0	56	48			-1·4					1·4	53	50			2·8	60	49			2·6					0·6					-58					1000
960		49	43	234	21		49	44	178	14		50	43	192	17		48	48	For			49	45	174	29		53	43	191	24		54	43	188	25		55	51	182	59		54	47			950
900	29·0	42	35	236	21	28·5	41	38	178	16	29·8	44	38	187	19	27·2	43	43	Winds		30·1	43	36	178	32	31·7	46	37	198	25	31·5	47	39	194	30	29·6	50	47	191	62	23·2	49	43			900
850		36	28	237	19		36	32	178	22		37	33	186	20		38	37	See			37	31	177	38		42	22	206	27		40	31	200	31		53	37	203	63		43	39			850
800	60·2	29	20	237	19	59·7	31	23	178	23	61·2	34	26	185	24	58·6	34	33	page		61·4	35	28	206	42	63·4	40	12	214	28	63·1	42	23	206	40	61·6	50	20	207	57	55·0	39	32			800
750		23	14	239	23		27	15	177	23		29	18	192	29		33	32	5			33	29	221	48		35	06	219	29		42	16	216	39		47	41	211	53		43	25			750
700	24·6	18	11	247	26	24·4	21	04	180	21	26·0	23	07	195	33	23·9	35	34			96·7	33	32	232	37	98·7	33	08	222	29	98·9	37	27	232	39	97·6	39	35	220	52	90·7	41	02			700
650		16	04	254	27		14	05	178	25		19	-02	204	35		31	31				29	28	244	48		23	04	229	31		32	25	243	45		34	28	221	56		38	-22			650
600	13·4	12	-16	256	29	13·3	10	02	183	27	13·6	21	15	227	36						13·7	25	28	238	52	13·9	25	17	245	35	13·9	28	20	246	40	13·8	27	19	211	52	13·2	33	-31			600
550		05	-26	254	30		12	08	209	29		17	13	230	44							21	19	241	59		17	08	258	39		21	13	245	43		19	14	211	55		27	-35			550
500	17·9	-02	-45	252	37	17·9	07	02	218	33	18·2	10	05	241	41						18·4	13	09	244	57	18·5	10	01	266	41	18·6	13	05	241	42	18·5	14	-03	221	61	17·9	21	-40			500
450		-10	-25	265	41		-01	-07	227	36		02	-04	248	47							08	-03	246	53		02	-09	269	43		04	-05	240	45		05	-08	228	62		09	-49			450
400	23·2	-17	-28	270	55	23·6	-11	-18	226	42	23·7	-09	-15	249	53						23·9	-05	-12	239	51	24·0	-08	-19	275	40	24·1	-08	-22	244	37	24·0	-05	-12	230	54	23·5	-03	-57			400
350		-27	-39	270	62		-22	-30	236	50		-19	-25	252	55							-17	-25	249	49		-20	-31	279	55		-21	-30	244	36		-17	-24	232	42		-15				350
300	29·9	-40	-50	274	84	29·9	-36	-44	240	66	30·4	-34	-41	262	60						30·7	-30	-39	254	52	30·7	-33	-46	286	48	30·9	-37	-47	256	39	30·8	-33	-42	233	41	30·3	-29				300
250		-53		274	97		-53		236	74		-51		269	71							-46					-53		297	44		-55		271	42		-52		244	38		-44				250
200	38·6	-67		284	72	38·6	-71		241	74	39·2	-75									39·5	-69				39·5	-70		298	43	39·6	-68		279	50	39·5	-64		243	49	39·3	-44				200
170		-57		260	39		-64		244	50												-66					-70		282	42		-67		275	50		-63		253	54		-51				170
150		-53		260	36		-58		248	40												-61					-68		273	37		-64		281	45		-67		251	45		-55				150
130		-51		251	31		-55		241	35												-54					-64		270	34		-66		274	42		-70		266	39		-57				130
110		-51		248	24		-55		243	27												-55					-63		265	26		-60		278	35		-67		254	34		-55				110
100	35·6	-51		248	24	35·4	-55		233	30												-54					-61		262	23	34·2	-57		291	33	34·1	-63					-57				100
90		-51		224	21		-52		233	25												-57					-64		252	21		-52		300	45							-57				90
80	(92mb)						-50		231	25												-54					-58		242	21		-52		312	50							-56				80
70							-50		221	24												-51					-60					-55		321	48							-55				70
60							-50		223	27											(67mb)	-50									-46					-52					-51				60
							-47		229	14																															-46				

Isothermal 667 - 643 mb 16° 433 - 415 - -13°

Inversion 630 mb 18° - 600 mb 21°

Inversion 820 mb 35° - 730 mb 37°

Isothermal 750 - 700 mb 33°

Inversion 734 mb 34° - 715 mb 35° 640 " 21° - 620 · 28°. Isothermal 850 - 812 mb 42°

Inversion · 845 mb 39° - 816 mb 42°. Isothermal · 816 - 745 mb 42° 619 - 600 · 28°

Inversion 873 mb 47° - 850 mb 53°. Isothermal 670 - 645 mb 34°

(57mb) Inversion · 800 mb 39° - 750 mb 43° 700 " 41° - 686 " 42°

21h G.M.T.

Station	Pressure: Time	Pressure: M.S.L.	Pressure: Surf	Pressure: Freezing	Tropopause
LERWICK	21h G.M.T.	1000·4 mb	990·5 mb	797 mb	I 204 mb -74° 38·200
STORNOWAY	21h G.M.T.	987·5 mb	986·7 mb	818 mb	NR.
LEUCHARS	G.M.T.	mb	mb	mb	
ALDERGROVE	21h G.M.T.	980·4 mb	972·0 mb	750 mb	I 235 mb -49° 35·500
LIVERPOOL	21h G.M.T.	991·8 mb	989·8 mb	728 mb	I 205 mb -74° 38·400
DOWNHAM MARKET	21h. G.M.T.	1004·1 mb	999·8 mb	649 mb	I 187 mb -78° 40·900
LARKHILL	21h. G.M.T.	1001·7 mb	986·0 mb	680 mb	I 218 mb -67° 37·500
CAMBORNE	21h G.M.T.	996·7 mb	986·4 mb	670 mb	I 238 mb -59° 35·500
	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	2·7	51	47	170	09	0·5	50	48								2·3	56	49	172	35	0·6	58	53			1·2	57	48	150	20	4·4	56	56	215	30	2·9	56	54	200	35						Surf
1000	0·1					-32										-5·5					-23					1·2					0·5					-09										1000
950		48	40	176	21		45	43									54	47	167	44		54	50				53	45	173	42		53	57				52	49	243	42						950
900	28·7	42	33	170	22	25·3	40	37								23·4	48	44	168	61	26·8	48	46			30·1	49	42	189	52	29·5	49	47			28·0	46	41	229	55						900
850		37	23	172	21		36	33									41	36	178	62		48	46				48	29	200	48		45	42				40	37	229	58						850
800	60·0	32	22	180	20	56·6	30	27	See		55·0	37	32	184	64	58·5	39	38				44	43			62·1	49	09	205	42	61·3	41	38			59·5	37	29	224	58						800
750		27	09	190	21		30	27				32	28	186	65		34	32	For			45	39	211	45		39	35				39	19	221	60										750
700	24·6	21	-06	198	23	21·6	30	27	page		90·2	30	23	185	72	23·8	30	28			98·1	39	33	218	47	96·9	34	30			95·0	35	08	219	67										700
650		15	-13	195	23		25	21				25	13	184	74		29	05				32	26	215	47		31	27				29	-11	217	68										650
600	13·4	10	-03	192	25	13·1	19	15	3		13·0	21	05	180	63	13·4	28	-07			13·9	26	18	212	49	13·7	26	23			13·5	22	-39	219	78										600
550		11	06	209	27		12	07	for			14	-09	176	74		18	12				16	06	212	51		18	14				19	-41	214	79										550
500	17·9	06	01	225	33	17·7	04	-03								18·1	09	-16			18·5	12	-08	216	48	18·4	10	05			18·2	11	-47	211	76										500
450		-03	-08	232	38		-05	-17	winds								01	-12				01	-13	224	51		01	-05				+01	-56	213	75										450
400	23·4	-13	-19	233	43	23·1	-17	-26								23·5	-11	-20			24·0	-09	-21	229	52	23·9	-09	-16			23·6	+13	-54	210	80										400
350		-25	-32	238	51		-28	-37									-21	+34				-22	-31	221	43		-20	-28				-24	-57	207	88										350
300	30·0	-39	-46	243	66	29·7	-42									30·2	-37	-52			30·7	-35	-44	212	43	30·6	-36	-45			30·3	-36	-59	208	96										300
250		-56		245	79												-59					-53		216	42		-54					-55		211	96										250
200	38·7	-73		249	68											38·9	-71				39·5	-72		230	37	39·3	-63				39·1	-58													200
170		-63		242	36												-67					-69		242	46		-64					-63													170
150		-60		246	35												-65					-68		251	34		-67					-67													150
130		-59		234	29												-71					-69		256	34		-72					-71													130
110		-56		237	30												-72					-65		255	26		-73																	110
100		-54														34·5	-69				39·0	-65		250	29	38·8	-73				38·8	-71													100
90	(104mb)																-69					-64					-72					-68													90
80																	-71															-65													80
70																																														70
60																																														60

Inversion · 585 mb 08° - 568 mb 13°

Isothermal · 800 - 700 mb 27°

Inversion · 235 mb 49° - 224 mb 47°. Isothermal 550 - 516 mb 14°

Isothermal · 705 - 677 mb 30°

Inversion 862 mb 46° - 830 mb 51° 629 · 28° - 617 · 30°. Isothermal · 684 - 660 mb 36° 534 - 510 · 14°

Isothermal · 670 - 636 mb 31°

Inversion · 800 mb 37° - 790 mb 39°. Isothermal · 790 - 750 mb 39°

For winds see page 5

For winds see page 3

For winds see page 4

No. 11494 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Sunday 17th September 1950. Page 1.

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

M.O. METEOROLOGICAL OFFICE LIBRARY 2 SEP 1950 EXMOUTH

03h G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Pressure: Time	03h	03h	03h	03h	03h	03h	03h	03h	03h
M.S.L.	994·4 mb	979·4 mb	983·0 mb	971·2 mb	985·2 mb	997·5 mb	998·3 mb	998·8 mb	994·5 mb
Surf	984·5 mb	977·6 mb	982·2 mb	962·6 mb	983·2 mb	993·2 mb	983·2 mb	988·4 mb	994 mb
Freezing	804 mb	731 mb	768 mb	740 mb	779 mb	695 mb	743 mb	800 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	50	46	125	22	00·5	55	50	100	30	00·2	54	52		
1000	-1·6					-5·7					-4·8				
950		46	43	140	33		52	47	109	27		53	50		
900	26·9	41	37	147	36	23·2	49	42	136	27	24·2	48	45		
850		36	32	162	37		44	38	157	29		42	38		
800	58·1	31	27	170	40	55·0	39	33	161	36	55·8	36	32		
750		27	23	176	35		34	29	169	38		30	26		
700	92·9	25	20	187	31	90·3	29	24	165	38	90·7	25	20		
650		22	17	187	28		22	14	149	30		21	10		
600	133	21	14	195	47	130	17	07	139	31	130	17	-02		
550		14	07	200	54		09	-02	151	33		13	-17		
500	179	08	00	206	42	176	02	-11	158	44	176	09	-27		
450		-01	-10	210	43		-08	-24	141	51		-01	-35		
400	233	-11	-21	202	51	229	-19	-37	144	63	230	-12	-46		
350		-25	-36	197	56		-23	-42	152	81		-24	-51		
300	300	-38	-50	197	70	296	-33	-52	155	84	298	-38	-58		
250		-58		196	74		-48		167	65		-47			
200	387	-62		203	66	386	-50		192	41	387	-42			
170		-62		220	44		-55		198	38		-49			
150		-60		224	36		-50		200	30		-66			
130		-60					-56		214	26					
110							-58		218	29					
100						536	-68								
90															
80															
70															
60															

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	02·3	53	51	170	30	00·6	55	49			01·2	56	54		
1000	-7·7					-4·1					-0·7				
950		52	50	176	45		51	47				51	48		
900	21·1	46	44	176	48	24·7	45	42			28·2	46	42		
850		42	40	184	47		41	40				43	38		
800	52·8	39	37	190	44	56·3	34	34			59·9	40	34		
750		33	31	189	44		29	29				33	17		
700	88·0	27	24	192	44	91·2	24	24			95·1	33	09		
650		20	18	192	43		17	15				28	-02		
600	128	17	07	188	47	131	14	08			135	22	-07		
550		15	-08	180	45		08	-01				15	-14		
500	174	05	-14	188	45	176	03	-16			181	07	-21		
450		-05	-13	184	44		-04	-22				-02	-29		
400	228	-15	-26	183	43	230	-15	-40			236	-13	-29		
350		-29	-42	182	44		-26	-50				-35	-55		
300	294	-36	-52	194	47	297	-35	-58			302	-42			
250		-41		196	51		-40	-60				-60			
200	385	-47		192	48	387	-46				390	-62			
170		-49		198	36		-49					-64			
150		-50		208	27		-55					-65			
130		-56		212	23		-58					-63			
110		-64		220	29		-59					-64			
100	534	-63		226	36	537	-62				536	-62			
90		-63		228	31		-62								
80		-61		234	32		-58								
70		-60		229	23		-56								
60		-61		204	17										

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	55	50			02·9	54	50	220	30	00·3	54	47		
1000						-0·4					-1·5				
950		52	47				51	47	245	49		48	41		
900	28·6	46	42			28·4	44	41	252	54	27·1	41	36		
850		40	36				37	33	254	61		37	33		
800	60·1	34	30			59·7	32	28	255	67	58·5	34	30		
750		32	22				28	23	257	68		29	25		
700	95·1	27	09			94·5	22	15	258	62	93·3	19	15		
650		28	-02				14	05	254	65		12	06		
600	135	21	-08			133	09	02	255	54	132	05	-03		
550		14	-24				03	-10	252	52		-01	-12		
500	181	09	-32			179	-04	-18	254	55	177	-06	-20		
450		-02	-42				-12	-25	254	48		-13	-27		
400	235	-12	-52			232	-22	-38	258	43	230	-22	-37		
350		-24	-60				-33	-50			(371) mb	-28			
300	302	-36	-40			297	-39	-58							
250		-46					-41								
200	391	-52				288	-48								
170		-55					-56								
150		-58					-60								
130		-62					-65								
110		-66				(128) mb	-66								
100	539	-68													
90															
80															
70															
60															

Isothermal 730 - 678 mb 25° 637 - 600 " 21°

Inversion 643 mb 21°-627 mb 22° Isothermal 388 - 372 mb -21°

Inversion 638 mb 19°-626 mb 21° 590 " 16°-572 " 19°

Isothermal 855 - 840 mb 41°

Isothermal 750 - 730 mb 35°

Inversion 570 mb 13°-543 mb 15° Isothermal 785 - 743 mb 32°

	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Tropopause	I 220 mb - 68° 36,700'	I 250 mb - 48° 33,900'	I 230 mb - 50° 35,700'	II 338 mb - 33° 26,700'	II 275 mb - 40° 31,600'	I 250 mb - 60° 34,200'	II 241 mb - 49° 40,200'	I 813 mb - 41° 28,600'	NR.

09h G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Pressure: Time	09h	09h		09h	09h	09h	09h	09h	
M.S.L.	984·7 mb	972·9 mb		976·8 mb	986·1 mb	996·3 mb	1000·4 mb	1005·1 mb	
Surf	975·0 mb	971·1 mb		968·5 mb	984·1 mb	992·0 mb	984·7 mb	994·8 mb	
Freezing	738 mb	778 mb		769 mb	768 mb	740 mb	785 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
Surf	02·7	53	53	130	23	00·5	54	52							
1000	4·3					-7·5									
950		51	51	141	45		52	48							
900	24·5	46	46	147	45	21·3	47	40							
850		41	40	149	44		41	37							
800	56·3	37	35	151	45	52·9	35	33							
750		33	30	152	44		31	29							
700	91·4	27	23	154	43	87·8	25	22							
650		19	11	157	43		18	16							
600	131	17	-18	162	55	127	11	08							
550		16	-24	166	55		03	-01							
500	177	08	-38	166	60	172	-04	-10							
450		-02	-45	165	68		-13	-21							
400	231	-15	-56	164	74	225	-21	-37							
350		-28	-56	167	84		-30	-51							
300	297	-40	-60	161	89	291	-35	-56							
250		-53		165	71		-40								
200	385	-55		176	58	382	-41								
170		-57		186	44		-46								
150		-59		188	35		-46								
130		-56		193	23		-47								
110		-54		204	21		-50								
100	535	-54		219	24	535	-53								
90		-54					-55								
80	(84 mb)	-54					-52								
70															
60															

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	02·3	54	51	250	25	00·6	55	49	240	30		58	53	210	20
1000	-6·5					-3·9									
950		52	49	260	45		51	47	242	42		54	50	220	41
900	22·3	46	44	268	54	24·9	45	44	249	56		49	46	226	53
850		41	38	273	56		39	39	254	62		42	40	231	57
800	53·9	36	32	280	53	56·4	35	35	256	55		37	35	240	53
750		31	27	279	54		31	31	252	51		33	30	242	48
700	88·9	25	21	281	63	91·3	25	25	254	48		29	25	241	46
650		19	12	281	57		21	14	256	50		23	18	241	46
600	128	14	05	280	60	131	13	05	254	50		16	11	232	43
550		07	-02	276	43		04	-11	248	50		09	05	226	35
500	174	-01	-10	264	32	176	-06	-13	243	48		03	-02	222	36
450		-10	-19	254	34		-12	-24	241	48		-05	-12	223	37
400	227	-22	-30	254	42	229	-19	-34	230	42		-16	-23	228	36
350		-31	-45	254	52		-32	-46	222	45		-28	-37	231	40
300	293	-41		244	44	295	-48		204	31		-40	-53	227	42
250		-39		248	35		-45		228	34		-36		209	45
200	383	-40		237	28	384	-44					-45		208	57
170		-45		246	34		-47					-45		231	44
150		-45		245	24		-49					-47		216	44
130		-49		231	23		-51					-53		223	36
110		-51		229	17		-58					-58		224	39
100	536	-53		242	17	535	-54					-58		207	34
90		-54		217	20		-53					-59			
80		-49		212	17							-57			
70		-50		233	22							-55			
60												-56			
						(50 mb)	-51								

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	55	47			02·9	55	46	270	35					
1000	0·1					1·4									
950		51	44				50	42	272	49					
900	28·9	44	39			30·2	45	38	279	45					
850		38	34				38	33	280	54					
800	60·3	33	30			61·6	32	28	279	54					
750		29	25				29	16	278	42					
700	95·2	24	18			96·4	28	09	275	50					
650		19	11				20	-23	274	56					
600	135	13	05			136	17	-43	279	62					
550		05	-10				13	-46	281	75					
500	180	-01	-29			182	07	-50	281	88					
450		-07	-36				00	-55	279	91					
400	234	-10	-42			236	-11	-53	278	94					
350		-23	-53				-24	-57	277	93					
300	301	-35	-58			303	-39	-59	276	89					
250		-42					-48								
200	391	-48				293	-47								
170		-48					-48								
150							-50								
130							-51								
110							-54								
100						544	-54								
90							-54								
80							-53								
70															
60															

Inversion 590 mb 16°-555 mb 17° Isothermal 656 - 613 mb 19°

Isothermal 768 - 750 mb 31°

Inversion 470 mb -13°-437 mb -11° Isothermal 318 - 309 mb -38°

Inversion 411 mb - 11°-400 mb -10°

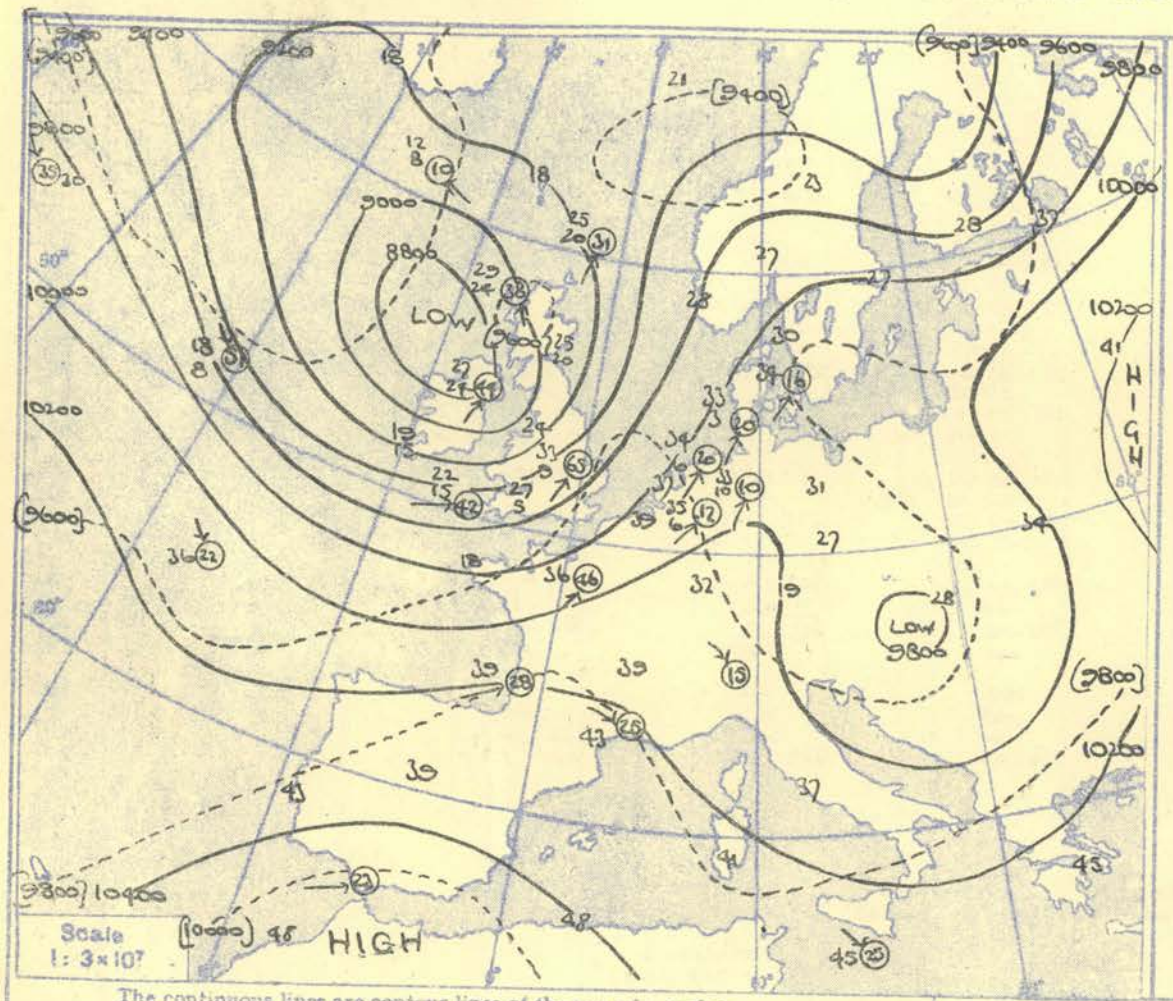
Isothermal 795 - 766 mb 31° 717 - 602 " 25° Max wind:- 278° 108 kts 380 mb 25,000'

	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Tropopause	I 220 mb - 62° 36,500'	I 261 mb - 41° 32,300'		I 280 mb - 45° 29,900'	I 280 mb - 48° 31,000'	I 288 mb - 43° 30,800'	II 270 mb - 47° 32,400'	I 264 mb - 49° 33,100'	

For winds see page 3

September 17TH 1950.

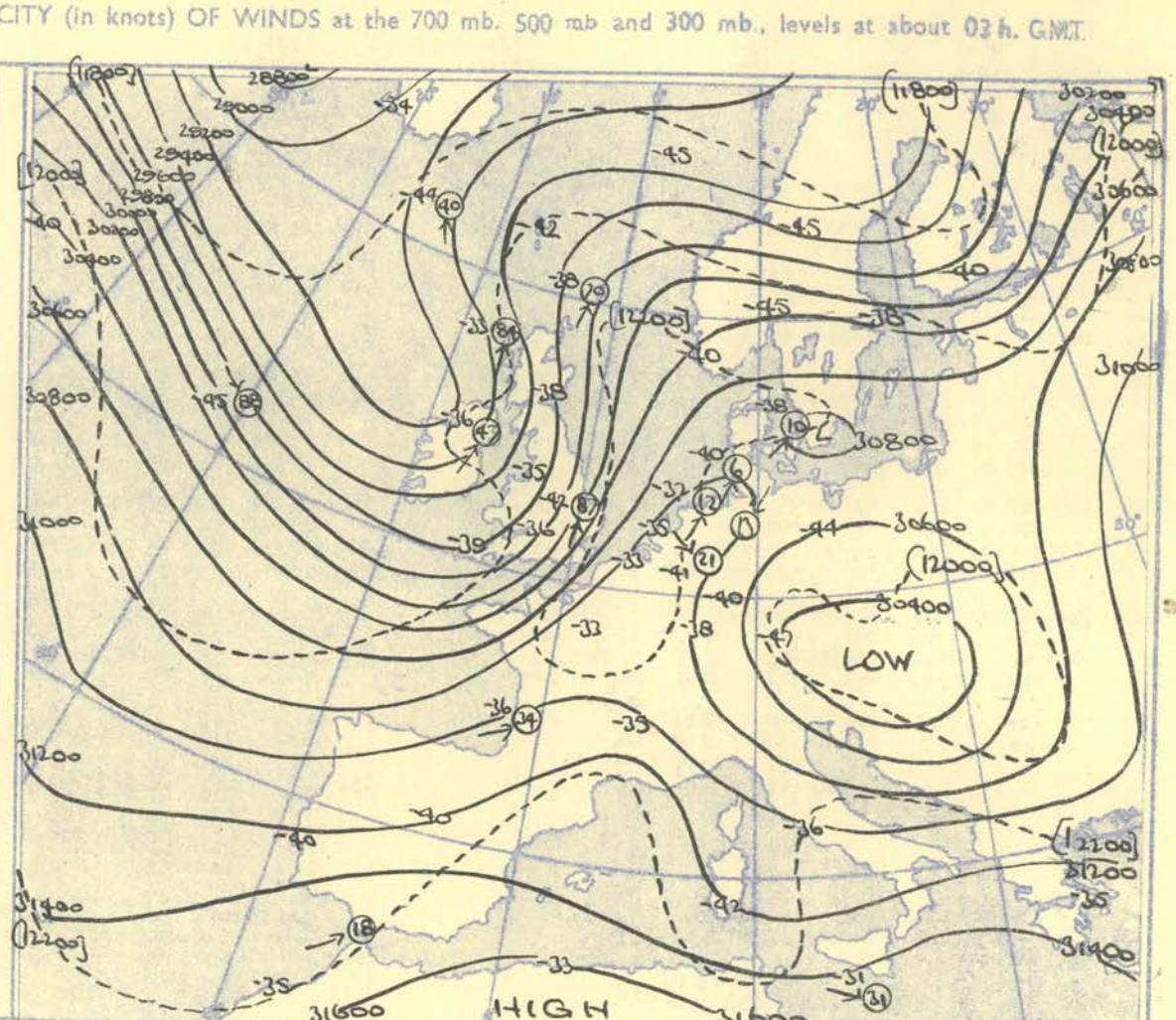
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. G.M.T.



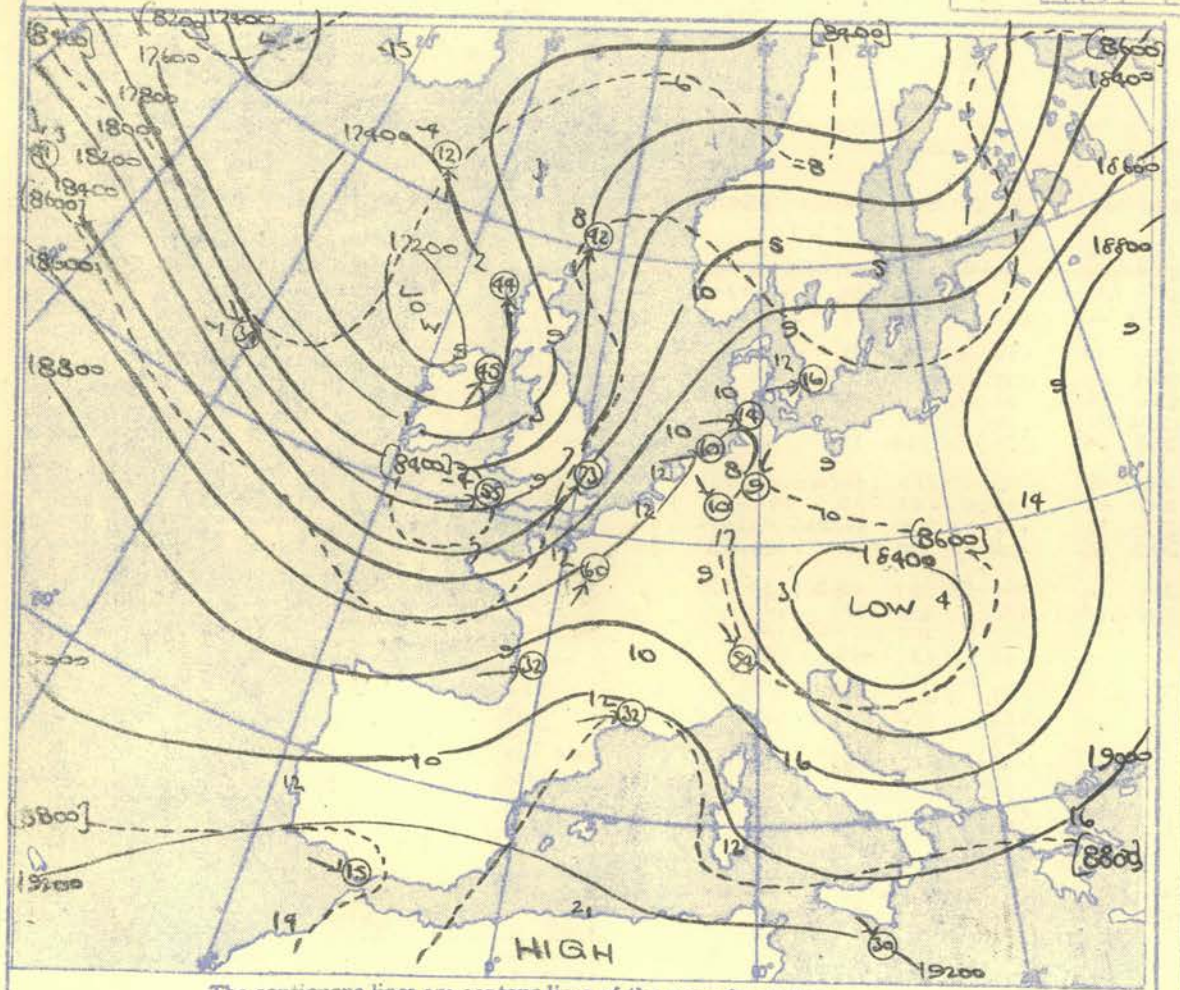
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

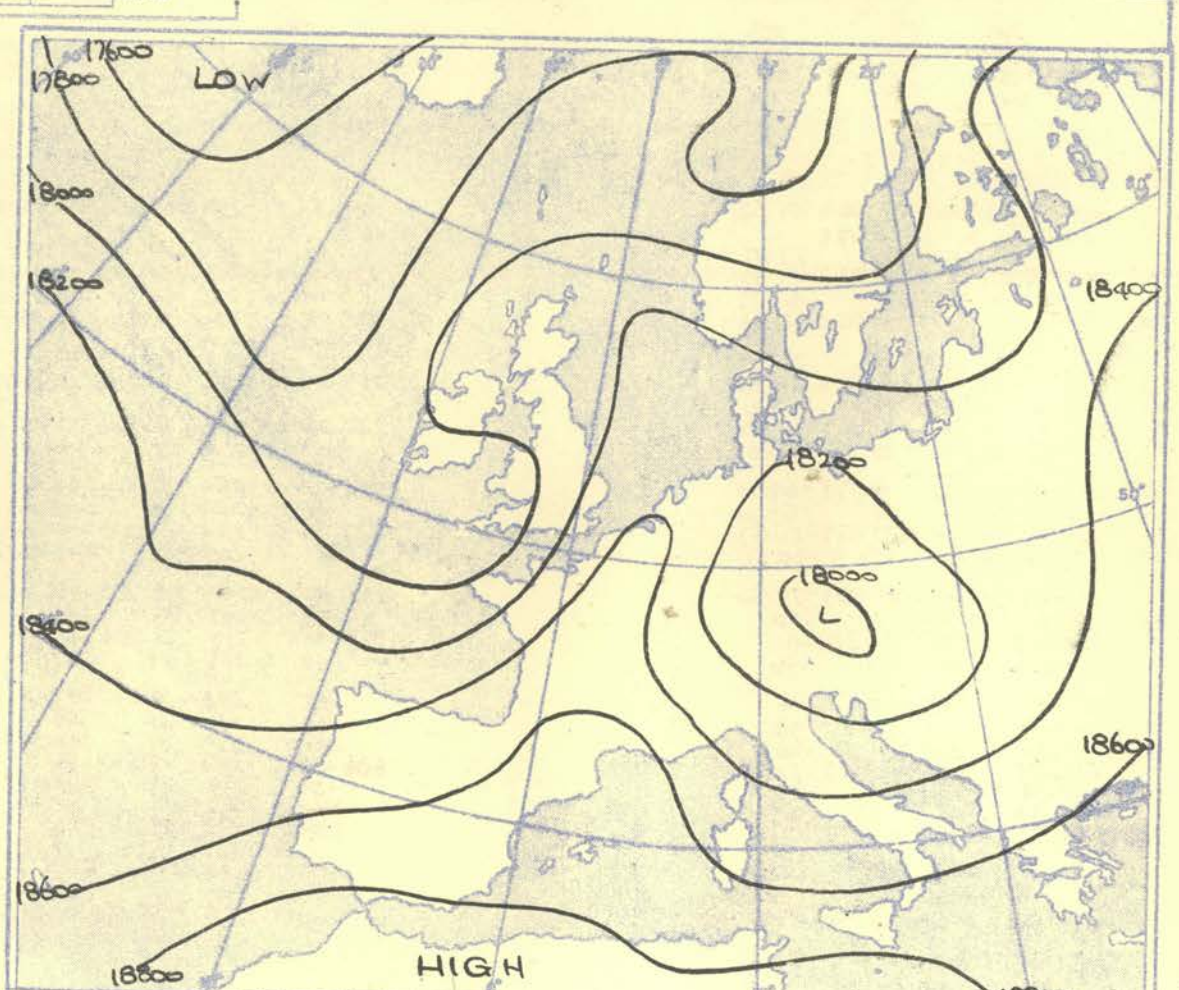
100 60 40 30 20 15 10 knots



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

	48·2N. 20·5W.	49·5N. 14·7W.									Time M.S.L. Surf Freezing Pressure
Pressure Time	13h.	14h.									
Pressure M.S.L.	1021·6 mb	1017·6 mb	mb	mb	mb	mb	mb	mb	mb	mb	
Pressure Surf	1018·0 mb	1014·0 mb	mb	mb	mb	mb	mb	mb	mb	mb	
Pressure Freezing	734 mb	725 mb	mb	mb	mb	mb	mb	mb	mb	mb	
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.	Height ft./100 / °F. / Dew °F.	Height ft./100 / °F. / Dew °F.	Height ft./100 / °F. / Dew °F.	Pressure mb
Surf	01·0 / 57 / 48	01·0 / 56 / 49									Surf
1000	5·9	4·8									1000
950	47 / 44	48 / 43									950
900	34·5 / 40 / 39	33·4 / 41 / 34									900
850	34 / 34	34 / 34									850
800	65·7 / 38 / 31	64·6 / 34 / 12									800
750	32 / 25	33 / 27									750
700	10·1 / 26 / 24	99·7 / 26									700
650	25 / 21	18									650
600	14·1 / 19 / 14	13·9 / 17									600
550	13 / 09	09									550
500	18·7 / 03 / --	18·5 / 00									500
450											450
400											400
350											350
300											300
250											250
200											200
170											170
	Cloud. 2/8 St. 930-920mb. 6/8 Sc 860-840mb. Inversion 850-800mb. 38°	Cloud. 7/8 Sc 810-800mb. Isothermal 850-800mb. 34°									

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

Place	Downham Market		Comborne		Leuchars		Aldergrove		Larkhill		Larkhill										Place
Time	03h.		15h.		21h.		21h.		09h.		21h.										Time
Type	Radar		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.	150	25	210	36	250	30	270	25	230	30											Surf.
1,000	189	49	259	42	240	50	266	42	230	36											1,000
2,000	198	48	266	39	250	55	270	45	250	47											2,000
3,000	209	52	269	39	250	56	272	50	256	48											3,000
4,000	214	51	270	40	260	55	276	52	258	54											4,000
5,000	212	57	272	41	270	50	276	56	264	57											5,000
6,000	213	59	271	42	270	50	276	57	263	55											6,000
8,000	213	66	272	40	270	49	282	56	263	55											8,000
10,000	202	65	273	54	260	29	284	52	261	56											10,000
14,000	195	69	275	60	250	16	289	43	252	60											14,000
18,000	196	73	273	57	210	11	305	23	250	54											18,000
24,000	195	76	264	63	150	19	320	13	267	86											24,000
30,000	186	87	258	76	220	17	276	40	267	82											30,000
40,000	174	56	261	58	230	26	270	35	240	62											40,000
50,000	168 (47,000')	47	259 (46,000')	42	240	17			240	55											50,000
					240 (57,000')	15			226 (55,000')	30	257 (60,000')	23									

NEPHOSCOPE OBSERVATIONS

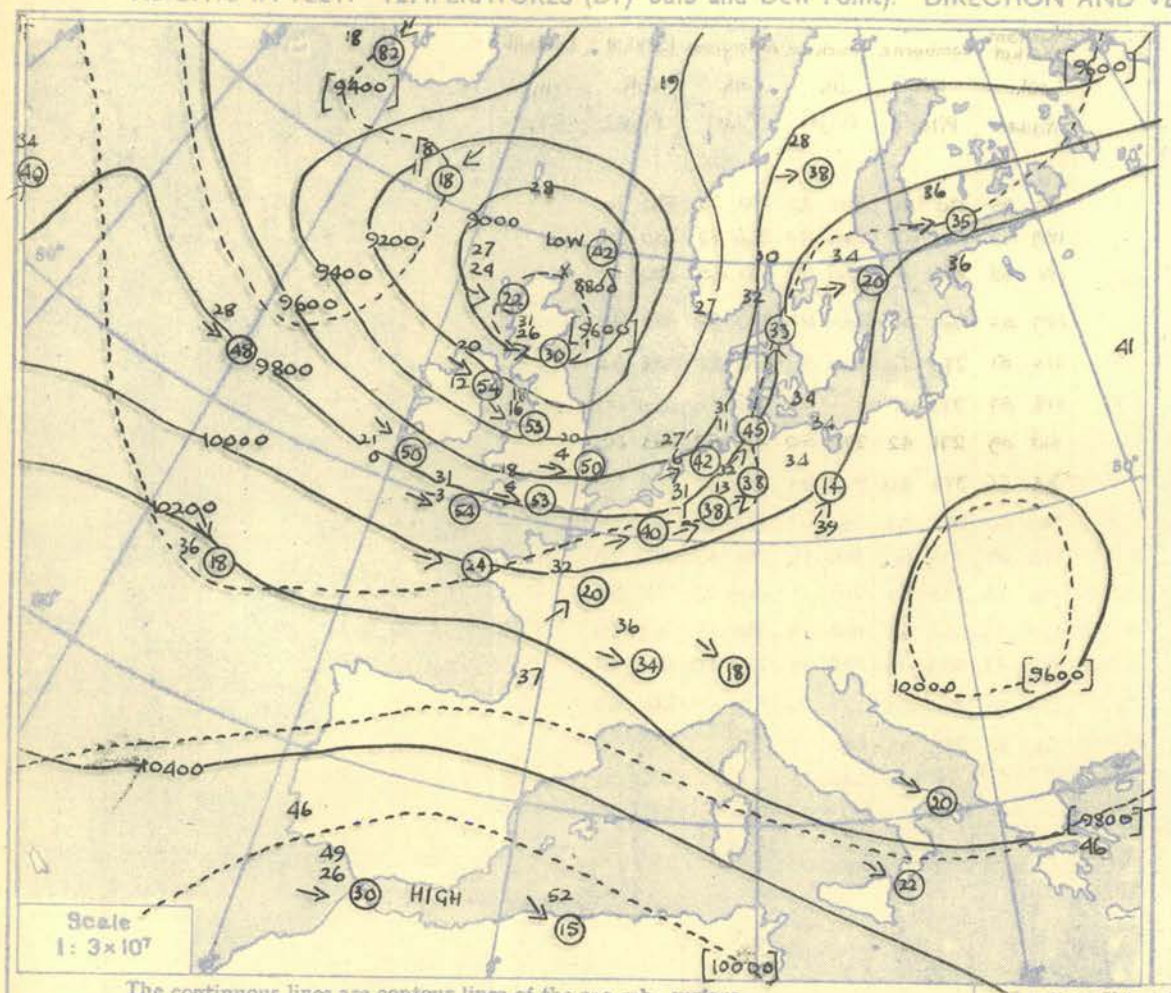
Place											Place
Time Type			None reported.								Time Type
Dir. Vel.											Dir. Vel.

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

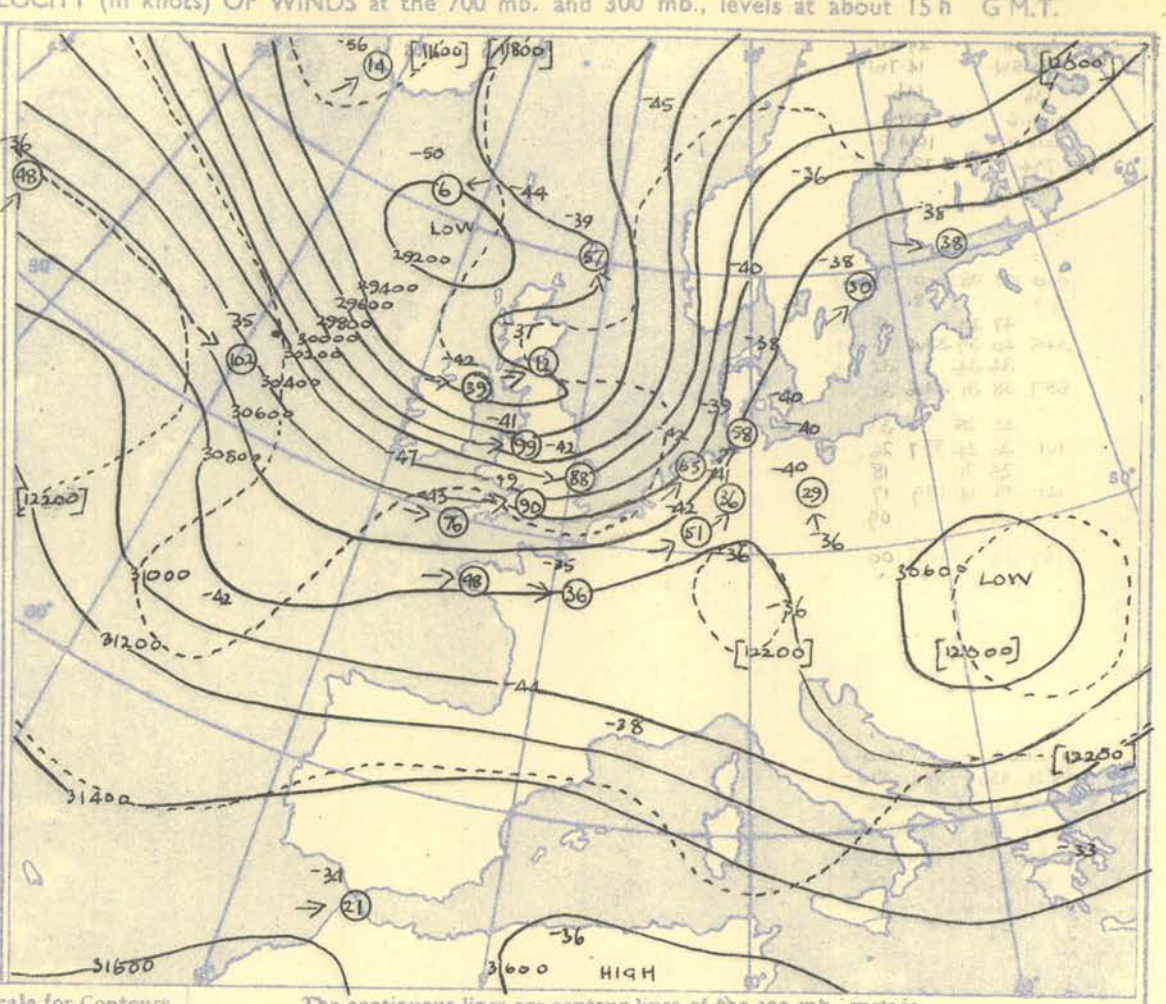
Ship	WEATHER WATCHER	WEATHER WATCHER	WEATHER WATCHER	WEATHER WATCHER	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER		Ship
Lat/Long	52·7N. 20·1W.	62·5N. 20·0W.	52·4N. 20·0W.	52·5N. 20·0W.	61·0N. 14·0W.	61·0N. 14·0W.	61·0N. 13·8W.	61·0N. 14·0W.		Lat/Long
Pressure Time	03h. G.M.T.	09h. 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.	1003 mb	1008 mb	1012 mb	1014 mb	991 mb	989 mb	990 mb	992 mb	mb	M.S.L.
Pressure Surf	1003 mb	1008 mb	1012 mb	1014 mb	991 mb	989 mb	990 mb	992 mb	mb	Surf
Pressure Freezing	825 mb	850 mb	850 mb	870 mb	850 mb	850 mb	840 mb	840 mb	mb	Freezing
Pressure mb	Height ft./100 / °F. / Dew °F. / Wind Dir. ° Vel. knots	Height ft./100 / °F. / Dew °F. / Wind Dir. ° Vel. knots	Height ft./100 / °F. / Dew °F. / Wind Dir. ° Vel. knots	Height ft./100 / °F. / Dew °F. / Wind Dir. ° Vel. knots	Height ft./100 / °F. / Dew °F. / Wind Dir. ° Vel. knots	Height ft./100 / °F. / Dew °F. / Wind Dir. ° Vel. knots	Height ft./100 / °F. / Dew °F. / Wind Dir. ° Vel. knots	Height ft./100 / °F. / Dew °F. / Wind Dir. ° Vel. knots	Height ft./100 / °F. / Dew °F. / Wind Dir. ° Vel. knots	Pressure mb
Surf	53 49 300 27	54 49 290 26	54 45 300 25	53 45 295 17	51 42 030 10	51 45 040 25	52 45 030 28	49 45 360 39		Surf
1000	9 53 49 300 27	2·1 53 49 285 42	3·2 52 43 300 25	3·9 51 44 282 18	-2·5	-2·9	-2·8	-2·2		1000
950	45 42 291 37	46 44 282 37	46 40 295 34	44 41 282 19	45 35 045 12	46 39 021 25	47 41 018 30	43 40 354 40		950
900	29·4 39 36 292 37	30·6 39 36 285 37	31·7 38 34 297 37	32·3 37 37 283 18	25·9 38 30 052 12	25·6 38 30 027 26	25·7 39 33 020 28	26·2 38 35 355 39		900
850	35 29 292 38	32 30 287 34	31 30 293 40	31 24 285 22	32 23 058 12	32 23 031 27	34 27 020 25	34 31 258 37		850
800	60·6 29 24 295 39	61·6 28 27 284 30	62·7 32 11 285 37	63·3 34 06 286 26	56·9 27 19 078 06	56·6 28 20 036 27	56·8 30 20 021 30	57·3 28 25 258 39		800
750	24 17 297 43	29 20 284 33	30 02 279 40	30 00 290 37	24 09 090 06	23 15 041 24	22 14 021 28	23 17 259 40		750
700	95·0 18 08 302 51	96·3 24 09 284 39	97·6 28 -02 282 48	98·2 28 -04 293 44	91·2 17 08 111 10	90·9 17 09 043 15	91·1 18 11 018 18	91·7 18 09 002 36		700
650	16 00 305 59	20 02 284 47	24 -08 286 56	24 -11 295 47	12 05 132 12	11 05 017 14		12 08 007 27		650
600	13·4 12 -08 307 63	13·6 16 -04 285 52	13·7 21 -12 288 63	13·8 20 -06 296 47	13·0 06 -01 144 08	13·0 06 -02 056 12	13·0 02 -05 018 07	13·1 10 05 011 17		600
580	07 -15 302 71	11 -11 284 55	14 -12 288 55	11 -13 293 61	00 -07 144 12	-02 -11 060 12		03 -01 019 12		550
500	17·9 -01 -23 300 84	18·1 03 -17 284 51	18·3 06 -11 293 61	18·4 04 -06 292 62	17·6 -04 -11 146 12	17·4 -03 -12 104 06	17·5 -04 -11 020 06	17·6 -04 -09 012 09		500
450	-09 -30 300 86	-06 -23 284 63	-03 -15 291 63	-04 -11 291 62	-10 -19 148 15	-13 -21 104 10	-15 -22 022 06	-14 -20 360 10		450
400	23·3 -19 -39 300 86	23·5 -17 -32 286 67	23·8 -18 -25 294 62	23·8 -11 -14 293 78	22·8 -22 -30 172 24	22·7 -25 -33 104 20	22·8 -27 -35 033 20	22·9 -26 -33 360 20		400
350	-30 -50 300 88	-32 -45 288 62	-24 -36 294 83	-22 -26 291 81	-32 -43 173 35	-33 -43 105 22	-39 -48 072 09	-38 -45 360 21		350
300	29·9 -45 300 88	30·1 -46 288 65	30·4 -35 -44 296 102	30·5 -35 -40 295 102	29·4 -44 173 40	29·3 -47 119 22	29·2 -50 093 06	29·3 -51 360 15		300
250	-62 300 88	-60 291 60	-46 296 99	-54 299 99	-58 173 32	-55 159 18	-51 097 08	-51 360 11		250
200	38·5 -60 299 78	38·8 -57 290 54	39·3 -58 305 118	(23·4 mb) -61	38·1 -59 181 44	38·1 -48 165 20	38·1 -46 187 18	38·1 -49 348 11		200
170	-57 291 87	-58 290 70	-52 318 91		-56 199 35	-47 184 20	-45 191 14	-49 L.V.		170
150	-59 277 82	-59 287 43	-58 319 86		-53 212 30	-47 194 20	-44 209 13	-49 L.V.		150
130	-60 237 66	-58 287 42	-54 315 77		-54 228 28	-49 217 19	-43 277 12	-49 338 07		130
110	(12·3 mb) -60	-60 287 32	-58 312 66		-54 227 30	-47 263 18	-46	-50 332 14		110
100		53·7 -62 287 37	54·3 -58		53·0 -55 212 15	53·3 -46 248 16	53·4 -48	53·3 -50 327 09		100
90		-60 287 22	-57		-56 214 16	-49 243 11	-48	-51 327 12		90
80		-58 287 17	-58		-57 218 21	-51 240 13	-48	-53 327 09		80
70		-55 287 06	-57		-57 218 19	-51	-49	-55 321 09		70
60		-54 287 06	-57		-56 204 15		-49	-56		60
	Inversion 670mb. 14°-650mb. 16° Isothermal 1003-1000mb. 53° 660-640mb. 16°	(50 mb) Inversion 818mb. 27°-795mb. 29° 770mb. 27°-750mb. 29°	(050) -54 (040) -51 (030) -49 Inversion 850mb. 31°-800mb. 32° Isothermal 800-790mb. 32°	Inversion 860mb 30°-807mb. 35° Isothermal 759-725mb. 30°	(637 mb) -58 Isothermal 775-759mb. 25° 483-469 mb. -06°	Inversion 523mb. -6°-510mb. -2°	(50) (40 mb) -48 -46 Isothermal 736-720mb. 20° 578-562 mb. 03°	Isothermal 656-611mb. 12°		
Tropopause	I 243mb. -64° 34,500'	I 252mb. -61° 33,800'	II 215mb. -58° 37,800'	N.R.	I 218mb. -65° 36,300'	I 246mb. -56° 33,700'	I 278mb. -52° 30,800'	I 280mb. -55° 30,800'		Tropopause

Sunday 17th September 1950.

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

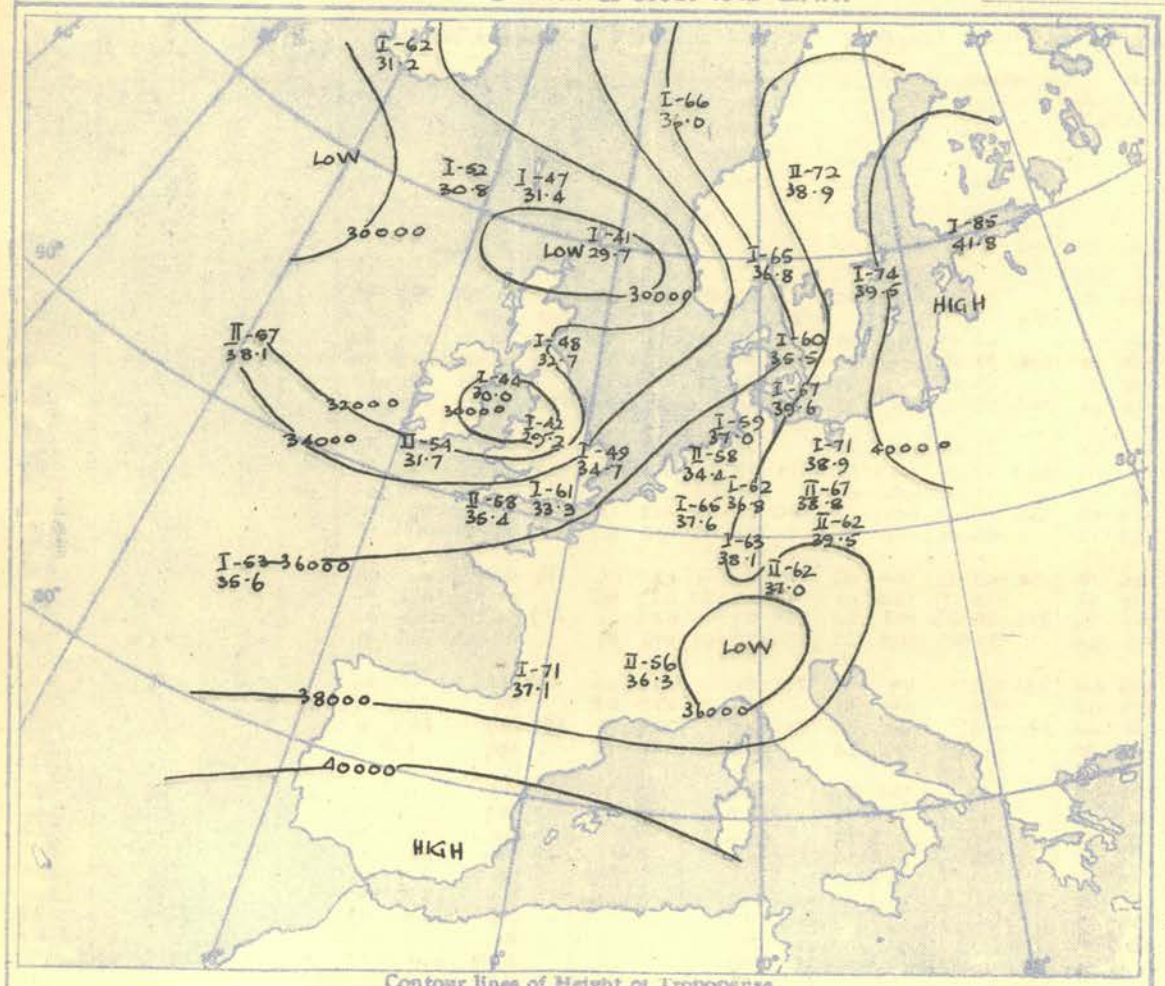


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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.

The cold air west of the British Isles was dragged quickly across the country in the strong northwesterly airstream set up by the storm off Scotland. A detached cold pool was finally formed over northern England. The cold pool over Austria moved away eastwards slowly.

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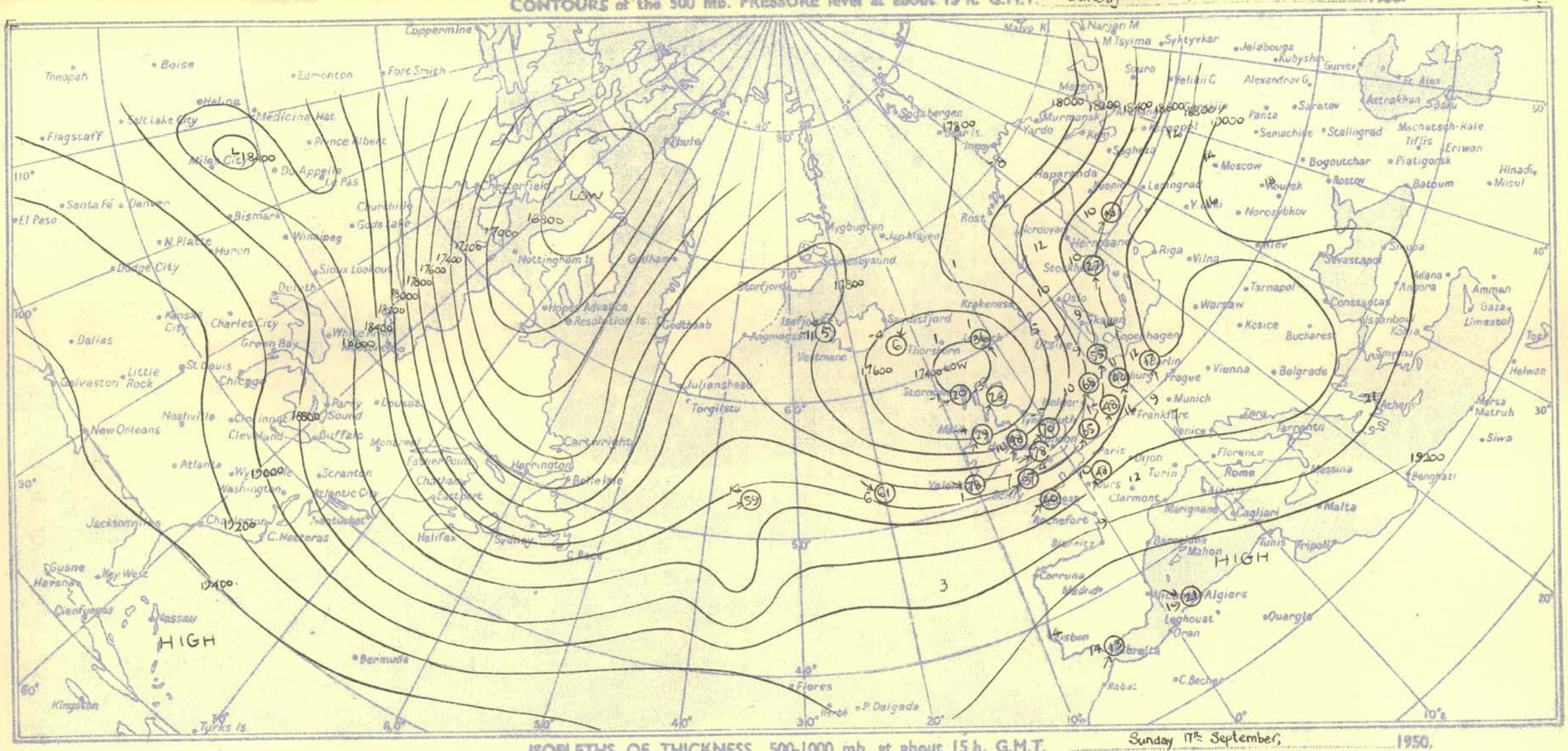
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Sunday 17th September 1950.


LOW
18400
16800
17000
17200
17400
17600
17800
18000
18200
18600
19000
19200
HIGH
HIGH
Coppermine
Boise
Edmonton
Fort Smith
Tonopah
Helena
Salt Lake City
Medicine Hat
Flagstaff
Miles City
Prince Albert
Du Appelle
Le Pas
Chesterfield
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
Dorval
Nashville
Cincinnati
Cleveland
Buffalo
Montreal
New Orleans
Atlanta
Wycheville
Washington
Scranton
Atlantic City
Jacksonville
Charleston
C. Hatteras
Halifax
Sydney
C. Race
Fisher Point
Chatham
Eastport
Harrington
Belle Isle
Cartwright
Nottingham Is.
Godhavn
Hopes Advance
Resolution Is.
Godthaab
Mygbugten
Jan Mayen
Scoresbysund
Storfjord
Isafjord
Angmagssalik
Julianshaab
Torgilstu
Vestmano
Thule
Spitsbergen
Bear Is.
Ingoy
Malyo K.
Narjan M.
M Tsyima
Syktyvkar
Jelabouga
Kubyshev
Gurev
Ft. Alex
Souro
Melkui C.
Alexandrov G.
Meken
Murmansk
Yardo
Kem
Archangel
Kargopol
Segheza
Astrakhan
Baku
Panta
Saratov
Semachike
Stalingrad
Mochatsch-Kale
Tiflis
Erivan
Moscow
Bogoutchar
Piatigorsk
Batoum
Hinadi
Mosul
Haparanda
Kemi
Leningrad
Rostov
Norozybkov
Riga
Vilna
Kiev
Sevastapol
Tarnapol
Warsaw
Kosice
Bucharest
Constantas
Adana
Angora
Amman
Gaza
Limassol
Istanbul
Konia
Smyrna
Helwan
Stockholm
Oslo
Skagen
Copenhagen
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Hamburg
Frankfurt
Prague
Vienna
Belgrade
Munich
Venice
Zara
Tarranto
Athens
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Siwa
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Rome
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Turin
Paris
Dijon
Tours
Clarmont
Marignane
Cagliari
Ajaccio
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Mahon
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Guane
Key West
Nassau
Lerwick
Thorshavn
Valentia
Scilly
Ushant
Brest
Holyhead
Falmouth
Helder
London
Malin
Skagen
Stornoway
Krakenes
Savdisfjord
Larwick
Vestfjord
Jacobshavn
Godthaab

... OF THE METEOROLOGICAL OFFICE, LONDON. Sunday 17th September. 1950.

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.	978·3 mb	973·9 mb	975·5 mb	991·5 mb	995·2 mb	1001·6 mb	1006·1 mb	1011·5 mb	1007·4 mb
Pressure: Surf	968·8 mb	972·1 mb	974·7 mb	983·0 mb	993·2 mb	997·2 mb	990·5 mb	1001·1 mb	1006 mb
Pressure: Freezing	750 mb	750 mb	716 mb	845 mb	820 mb	811 mb	829 mb	786 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
Surf	2·7	53	52	120	26	0·5	58	51	320	15	0·2	59	54	250	21
1000	-6·0					-7·3					-0·7				
980		51	50	140	52		59	50	308	18		55	51	243	36
900	22·8	46	45	144	52	21·7	47	45	306	17	22·1	51	46	260	42
850		41	39	147	50		42	38	304	15		47	42	266	42
800	54·3	36	34	152	46	53·3	37	35	285	16	54·0	41	36	267	36
750		32	29	155	49		32	30	269	18		35	30	263	28
700	89·4	27	24	156	42	88·4	27	24	273	22	85·4	31	26	257	30
650		21	18	159	40		20	16	287	24		24	19	253	27
600	129	15	09	159	37	128	12	07	290	18	129	17	10	262	27
550		09	04	159	36		05	-03	279	15		10	03	259	28
500	174	01	-07	159	36	173	-01	-12	266	20	175	-03	-05	247	24
450		-10	-18	160	36		-06	-14	259	21		-06	-14	227	30
400	328	-23	-32	160	53	227	-17	-26	257	22	228	-14	-30	247	23
350		-28	-47	165	63		-30	-37	248	28		-25	-38	249	33
300	294	-39	-59	159	57						295	-37	-51	245	12
250		-39		167	45							-43			
200	385	-45		185	39						386	-35			
170												-37			
150												-36			
130												-43			
110												-47			
100												-51			
90											541	-47			
80												-47			
70												-47			
60												-47			
												-45			
												-43			
	Inversion 391 mb -25° - 375 mb -23° Isothermal. 816 - 805 mb 16°					Inversion 463 mb - 8° - 450 mb - 6° Isothermal 560 - 536 mb 05°					(40 mb) - 51				
Tropopause	I 296 mb - 41° 29·700					MR					I 261 mb - 48° 32·700				

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	2·3	53	46	270	25	0·6	57	45	260	30	1·2	62	46	240	30	4·4	59	43	275	25	2·9	60	51			0·3	56	47	250	18
1000	-2·4					-1·3					0·4					1·7						59	50			2·0	55	46	252	19
980							51	40	257	47		54	40	243	38		52	43	282	33		52	44				49	40	268	33
900	26·2	41	35	274	51	27·5	44	35	260	55	29·4	46	39	247	41	30·6	43	37	256	37	31·9	44	36			30·7	43	34	280	43
850		33	27	276	53		37	31	262	59		38	33	252	44		35	31	259	42		39	28				37	28	280	44
800	57·3	29	22	280	57	58·7	29	27	265	59	60·8	30	26	252	48	61·7	29	23	270	45	63·8	33	20	For		62·0	32	25	277	42
750																														
700	91·9	20	12	278	54	93·2	18	16	274	53	99·5	20	04	252	50	96·2	18	04	270	53	98·0	31	-03	winds		96·5	21	20	276	50
650		14	04	275	48		13	09	269	51		16	+04	253	51		22	-06	267	63		27	-15				21	-14	274	57
600	132	07	-03	272	48	132	06	02	262	52	135	13	-15	254	51	135	15	-19	269	67	138	22	-26	See		136	15	-26	274	64
550		03	-08	268	33		-02	-05	268	48		02	-28	253	59		11	+26	273	70		16	-31	page			09	-28	271	77
500	176	-04	-15	252	29	177	-10	-16	269	48	180	05	-44	254	70	181	04	-32	273	78	185	07	-38	3		181	01	-33	273	78
450		-15	-25	236	21		-17	-30	268	50		-11	-53	266	76		-07	-41	268	82		-03	-36				-04	-31	271	79
400	229	-26	-35	213	21	229	-26	+40	268	60	233	-20	-60	267	98	235	-20	-53	265	85	239	-12	-39			236	-17	-41	270	81
350		-36	-56	227	30		-35	-51	270	76		-30	+60	262	95		-34	-57	263	90		-26	-39				-31	-54	268	85
300	294	-42		250	39	294	-41		270	79	299	-42		260	88	300	-49		262	90	305	-43				301	-47			
250		-39		249	45		-42		267	60		-47		245	69		-60		259	80		-56					-56			
200	385	-38		265	40	384	-53		258	47	388	-48		244	55	387	-57		256	61						389	-51			
170		-41		262	36		-53		247	40		-51		247	50		-60		256	52							-51			
150																														
130		-44		247	30		-53		252	39		-54		238	43		-59		256	46							-52			
110		-47		248	27		-53					-55		233	43		-61		253	40										
100		-51		257	35		-49					-58		230	32		-65		249	33										
90	538	-54		245	24	535	-51				538	-58		234	33	535	-66		243	38										
80		-53		257	15		-53					-58		240	20		-63		246	34										
70							-55					-55					-62													
60							-53					-55					-63													
							-49																							
						(4 mb)	-51																							
							-52																							
											Inversion 488 mb - 08° - 475 mb - 0° Isothermal 700 - 675 mb 20° 279 - 263 - 45°					Inversion 700 mb 18° - 674 mb 22° Isothermal. 674 - 650 mb 22°					Inversion 739 mb 28° - 710 mb 31°					Inversion 700 mb 21° - 677 mb 24° 490 - 470 - 1°				
Tropopause	I 302 mb - 42° 29·200					I 241 mb - 49° 34·700					I 257 mb - 61° 33·300					I 240 mb - 58° 35·100					I 278 mb - 54° 31·700									

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.	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.	973·2 mb	977·2 mb	mb	997·4 mb	1001·1 mb	1006·1 mb	1010·4 mb	1013·6 mb	mb
Pressure: Surf	963·6 mb	975·9 mb	mb	989·1 mb	999·1 mb	1001·9 mb	994·3 mb	1003·0 mb	mb
Pressure: Freezing	750 mb	773 mb	mb	831 mb	811 mb	805 mb	774 mb	810 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
Surf	2·7	53	52	150	23	0·5	54	52	290	18						2·3	49	45				53	43	240	25	1·2	53	46	210	10	4·4	51	46	230	20	2·9	53	47	258	18					
1000	-7·5					-6·3										-0·7										1·7	53	45			2·9					3·7	53	47	256	22					
950		52	51	162	33		51	50	289	24							45	41				48	39	250	37		49	41	237	40							48	41	254	35					
900	21·2	46	45	168	32	23·0	45	44	286	25						27·9	40	36				42	38	258	46	30·3	44	36	246	44	31·6	44	38	256	43	32·3	43	36	265	35					
850		41	40	172	28		40	39	285	25							34	30				37	27	263	54		38	30	251	42		38	32	261	44		38	31	276	39					
800	52·8	37	36	171	28	53·6	34	34	282	23						59·0	28	24				31	25	265	55	61·7	31	20	254	43	63·0	34	24	265	43	63·7	31	26	275	37					
750		32	30	166	31		30	30	282	24												24	20	263	55		27	15	268	42							27	17	270	45					
700	87·9	27	25	163	32	88·5	23	22	280	23						93·4	18	13	For			17	15	256	55	96·5	23	05	260	46	97·9	30	-01	262	44	98·0	25	11	270	49					
650		22	19	168	31		17	15	282	23							12	06	winds			09	08	254	55		22	-08	256	61		27	-08	258	60		20	12	266	48					
600	128	15	12	172	31	128	10	04	281	27						132	04	-03				03	-01	255	64	136	15	+21	256	56	137	21	+16	258	52	138	14	07	262	49					
550		07	03	174	30		03	-08	272	30							-04	-11	See			-05	+19	256	76		09	+30	258	65		14	-21	258	54		09	01	260	51					
500	173	-02	-05	170	28	173	-07	-23	267	31						176	-13	-20	page			-08	-25	258	88	182	01	-33	255	72	184	06	-20	256	58	183	00	-03	263	57					
450		-13	-16	185	30		-16	-33	259	27							-25	-32				-15	-36	257	100		-09	+36	248	74		-02	-19	255	59		-09	-18	263	56					
400	226	-21	-27	210	27	225	-25	-39	247	18						228	-34	-40	5.			-23	-42	252	108	235	-21	-41	250	78	238	-12	+26	253	61	237	-19	-29	262	57					
350		-33	-41	212	26		-35	-48	237	16							-47					-37		249	114		-34	-51	260	77		-27	-38	251	63		-33	-43	265	57					
300	291	-48		179	34	291	-46		242	15						293	-38					-48		246	95	300	-51		246	78	305	-42		251	63	302	-48		264	58					
250		-46		170	24		-44		257	12							-37					-46		246	87		-58		253	75		-57		254	66		-62		264	54					
200	381	-46		174	26	380	-43		246	11						384	-42					-43				388	-57		242	58	393	-52		248	54	389	-58		260	57					
170		-46		190	24		-42		247	14							-44					-52					-57		237	52		-53		256	54		-60		263	56					
150		-47		197	21		-42		242	17							-46					-56					-55		239	43		-55		265	55		-62		272	45					
130		-52		198	18		-43		244	15							-47					-57					-59		244	38		-56		257	58		-64		268	44					
110		-53		198	15																	-59					-59		243	33		-57		248	31		-66		269	36					
100	533	-50																				-57				536	-61				543	-57		250	36		-67								
90																						-56										-58		251	33		-68								
80																						-55														(97 mb)								
70																						-55																						
60																						(78 mb) 55																						
																					Inversion 550 mb - 05° - 528 mb - 03°					Inversion 693 mb 22° - 677 mb 26° Isothermal 1002 - 990 mb 53° 784 - 766 - 29°					Inversion 994 mb 51° - 978 mb 52° 730 - 27° 700 - 30° Isothermal. 815 - 800 mb 34°.					Inversion 765 mb 25° - 737 mb 29°				
Tropopause	I 298 mb - 49° 29·200					I 269 mb - 50° 31·500										I 342 mb - 48° 26·400					I 287 mb - 51° 30·50[illegible]					I 264 mb - 59° 32·800					I 255 mb - 58° 34·000					I 247 mb - 63° 34·500									

No. 11495. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Monday 18th September 1950. 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	03L G.M.T.	03L G.M.T.	03L G.M.T.	03L G.M.T.	03L G.M.T.	03L G.M.T.	03L G.M.T.	03L G.M.T.	03L G.M.T.	Time
Pressure: M.S.L.	975·7 mb	982·2 mb	985·1 mb	996·5 mb	1002·5 mb	1007·4 mb	1010·0 mb	1013·7 mb	1012·2 mb	M.S.L.
Pressure: Surf	966·1 mb	980·4 mb	984·3 mb	991 mb	1000·5 mb	1002·9 mb	994·0 mb	1003·1 mb	1011 mb	Surf
Pressure: Freezing	770 mb	780 mb	781 mb	820 mb	848 mb	813 mb	811 mb	827 mb	840 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	52	51	190	11	00·8	53	51	300	25	00·2	51	47			02·3	50	44	280	15	00·6	51	43			01·2	51	46	210	12	04·4	50	46	270	20	02·9	51	47	300	14	00·3	53	47	285	14	Surf
	-6·7					-4·9					-4·1					-0·4					0·7					2·0	51	47			2·8					3·7	51	47			3·3	53	45	288	8	
1000		50	49	194	29		50	48	299	35		50	45				46	41	274	39		48	40				47	43	236	38		47	41	266	30		51	47				46	40	294	12	1000
950	22·0	45	44	196	27	23·9	45	43	299	37	24·6	45	40			28·1	41	35	282	42	29·2	39	36			30·6	41	37	253	44	31·4	43	36	264	36	32·2	40	42	285	36	31·9	39	34			950
900		41	38	195	27		40	36	302	39		39	33				39	27	288	48		33	30				36	30	261	43		37	29	262	41		34	25	279	44		33	28			900
850		37	31	198	29		35	30	298	38		34	28				29	23	292	46		29	15				31	23	261	40		31	24	257	45		30	26	269	43		29	14			850
800	535					554					560					593					603					618					626					634					629					800
		30	25	202	31		28	24	303	38		29	24				25	12	289	46		23	08				25	15	257	40		24	18	252	46		25	21	257	40		23	00			
750	88·5																																												750
700		25	16	202	21	90·2	22	17	306	36	90·9	24	18			93·8	18	11	286	46	94·6	16	05			96·4	17	07	253	42	97·1	20	01	249	48	98·0	21	17	260	45	97·2	17	-01			700
650		20	06	203	22		16	10	303	32		18	12				12	04	294	47		08	-09				17	-05	245	52		15	-23	247	51		18	-15	263	55		09	-13			650
600	128	11	-01	201	21	129	10	04	305	29	130	11	05			133	06	-03	300	44	133	01	-15			135	02	-18	244	58	136	11	-09	247	59	137	14	-23	261	64	136	04	-10			600
550		07	-26	203	21		02	-05	304	24		02	-06				01	-10	305	36		-07	-16				05	-23	245	67		06	02	249	67		08	-28	265	69		02	-52			550
500	173	02	-41	206	16	174	-09	-17	302	24	175	-08	-17			177	-09	-18	315	26	177	-18	-30			180	-05	-29	238	72	181	-03	-21	249	69	183	00	-28	263	75	181	-04				500
450		-13	-25	189	08		-17	-26	306	23		-18	-28				-20	-28	332	26		-28	-39				-15	-26	238	78		-12	-20	249	79		-09	-32	265	80		-10				450
400	226	-24	-31	146	05	227	-30	-41	311	31	228	-29	-37			229	-33	-39	317	27	228	-38	-48			233	-25	-32	241	81	235	-19	-27	246	81	236	-20	-43	271	87	234	-16				400
350		-37	-44	118	05		-43		314	28		-41					-45		318	29		-44					-34	-43	239	84		-34	-47	248	80		-32	-55	287	93		-22				350
300	291	-52		127	06	291	-42		311	21	292	-51				293	-52		314	38	292	-39				298	-50		234	82	300	-48		250	78	302	-44		290	100	301	-31				300
250		-45		200	10		-44		301	20		-42					-43		317	34		-38					-55		235	67		-56		246	74		-53		299	102						250
200	380	-42		214	11	381	-41		282	19						383	-46		292	26	383	-44				386	-52		240	48	388	-49		261	59	390	-52									200
170		-48		206	15		-44		270	14							-48		280	36		-49					-50		245	48		-53		286	57		-55									170
150		-48		216	19		-47		262	18							-47		284	34		-53					-50		248	42		-58		260	56		-59									150
130		-48		228	19		-47		272	23												-53					-52		252	32		-58		263	47		-61									130
110		-52		225	14		-50															-58					-60		256	28		-58		264	37		-62									110
100	532	-53		219	11											534	-56		295	12	534	-59				587	-60		254	28	587	-58		264	28	588	-63									100
90		-54		226	17												-57		294	07		-60					-60		254	25		-61		263	28		-65									90
80		-54		239	16												-58										-60		259	24		-64		263	30		-66									80
70		-54		215	14											(75 mb)	-59														(66 mb)	-59		261	20		-64									70
60		-54																																												60

Inversion 585 - 564 mb 08°

Isothermal 340 mb 53° - 328 mb 56°

Isothermal 800 - 788 mb 29°; 680 - 670 " 15°; 600 - 581 " 46°

Inversion 825 mb 29° - 808 mb 30°

Inversion 693 mb 16° - 658 mb 18°

Inversion 700 mb 21° - 691 mb 22°

Isothermal 1011 - 1000 mb 53°

Tropopause	I 288 mb - 55° 29,900'	I 327 mb - 47° 27,000'	I 300 mb - 51° 29,200'	I 290 mb - 55° 30,100'	I 270 mb - 44° 24,600'	I 263 mb - 58° 31,500'	I 255 mb - 56° 32,700'	I 240 mb - 55° 35,000'	NR. VALENTIA.	Tropopause

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA	Station
Pressure: Time	09L G.M.T.	09L G.M.T.	G.M.T.	09L G.M.T.	09L G.M.T.	09L G.M.T.	09L G.M.T.	09L G.M.T.	G.M.T.	Time
Pressure: M.S.L.	976·8 mb	988·0 mb	mb	1013·3 mb	1005·1 mb	1008·0 mb	1011·8 mb	1015·6 mb	mb	M.S.L.
Pressure: Surf	967·0 mb	986·2 mb	mb	995 mb	1003·1 mb	1003·6 mb	995·8 mb	1005·1 mb	mb	Surf
Pressure: Freezing	729 mb	770 mb	mb	830 mb	830 mb	826 mb	817 mb	810 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	VALENTIA Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	53	52	160	12	00·5	52	50								02·3	49	47	270	15	00·6	53	46	270	30	01·2	51	44	225	15	04·4	50	46	220	12	02·9	54	44	280	15						Surf
	-6·5					-3·3										0·9					1·4	53	46			2·2					3·2					4·3	53	43	287	30						
1000		52	51	188	21		49	48									46	41	285	32		48	44	270	37		45	40	266	32		45	40				48	39	283	26						1000
950	22·3	47	46	185	13	25·4	44	42								29·4	40	36	283	37	30·0	40	37	271	40	30·7	40	33	277	32	31·7	40	35			32·9	42	34	283	22						950
900		43	41	188	17		39	36									34	30	288	43		34	33	279	42		35	28	278	33		35	31				36	24	294	22						900
850	53·9	37	34	198	17	56·8	35	32								60·5	28	24	286	45	61·1	29	29	283	36	61·9	30	23	275	29	62·7	31	20			64·0	31	16	297	23						850
800																																														800
		34	31	202	16		30	26									23	18	286	45		22	21	287	36		25	12	274	27		26	15				25	09	303	22						
750																																														750
700	89·1	29	25	200	13	91·8	25	21								95·0	18	11	286	42	95·5	17	09	284	39	96·4	18	07	274	26	97·5	19	05			98·7	21	00	294	21						700
650		22	17	200	13		19	15									11	-02	287	41		13	-04	279	37		10	-01	284	26		14	-03				16	-08	289	36						650
600	129	14	08	207	12	131	14	07								134	08	-12	285	34	134	07	-11	283	40	135	03	-08	293	29	136	07	-08			138	12	-14	291	54						600
550		07	-02	197	16		03	-04									04	-24	286	35		01	-16	286	40		-05	-13	305	31		-02	-15				08	-21	292	57						550
500	174	01	-15	173	11	176	-07	-15								179	-05	-29	285	30	179	-06	-21	292	38	179	-14	-24	313	33	181	-06	-21			183	09	-24	301	78						500
450		-09	-32	187	10		-12	-21									-16	-36	289	29		-18	-34	298	33		-21	-35	327	39		-17	-32				00	-31	311	70						450
400	228	-20	-32	119	03	229	-27	-36								232	-23	-42	291	32	232	-31	-45	306	33	231	-33	-49	339	37	234	-29	-43			238	-08	-38	303	92						400
350		-33	-45	017	10		-38	-48									-39	-56	297	40		-41		303	86		-43		325	43		-36	-49				-18	-45	302	84						350
300	293	-48		272	05	294	-43									296	-49		298	48	296	-51		301	45	295	-42		306	44	299	-41				305	-33	-36	303	99						300
250		-43		263	05		-45										-47		299	68		-44		296	66		-41		286	40		-41					-51		306	105						250
200	383	-40		237	16	384	-41									385	-46		302	56	385	-43		307	42	386	-43		274	42	389	-47				394	-07		309	92						200
170		-39		247	18		-44										-50		304	34		-47		300	36							-50					-52		309	84						170
150		-41		231	15												-53		293	28		-50		296	31							-50					-57									150
130		-44		243	15												-49		294	36		-48		289	28							-58					-60									130
110		-47		220	16												-53		287	31		-53										-57					-63									110
100	537	-47		236	15											536	-55		293	20	537	-55									539	-57				541	-65									100
90		-46		237	17												-55		273	29											(93 mb)	-55					-65									90
80		-43		242	13												-54		274	23																	-61									80
70		-39		241	09												-53		300	21																	-61									70
60		-51															-52		303	19																	-63									60
																																					(55 mb)	-64								

Isothermal 476 - 460 mb - 12°

Isothermal 630 - 581 mb 08°

Inversion 1003 mb 53° - 991 mb 54°

Isothermal 468 - 450 mb 21°

Isothermal 550 - 530 mb - 02°

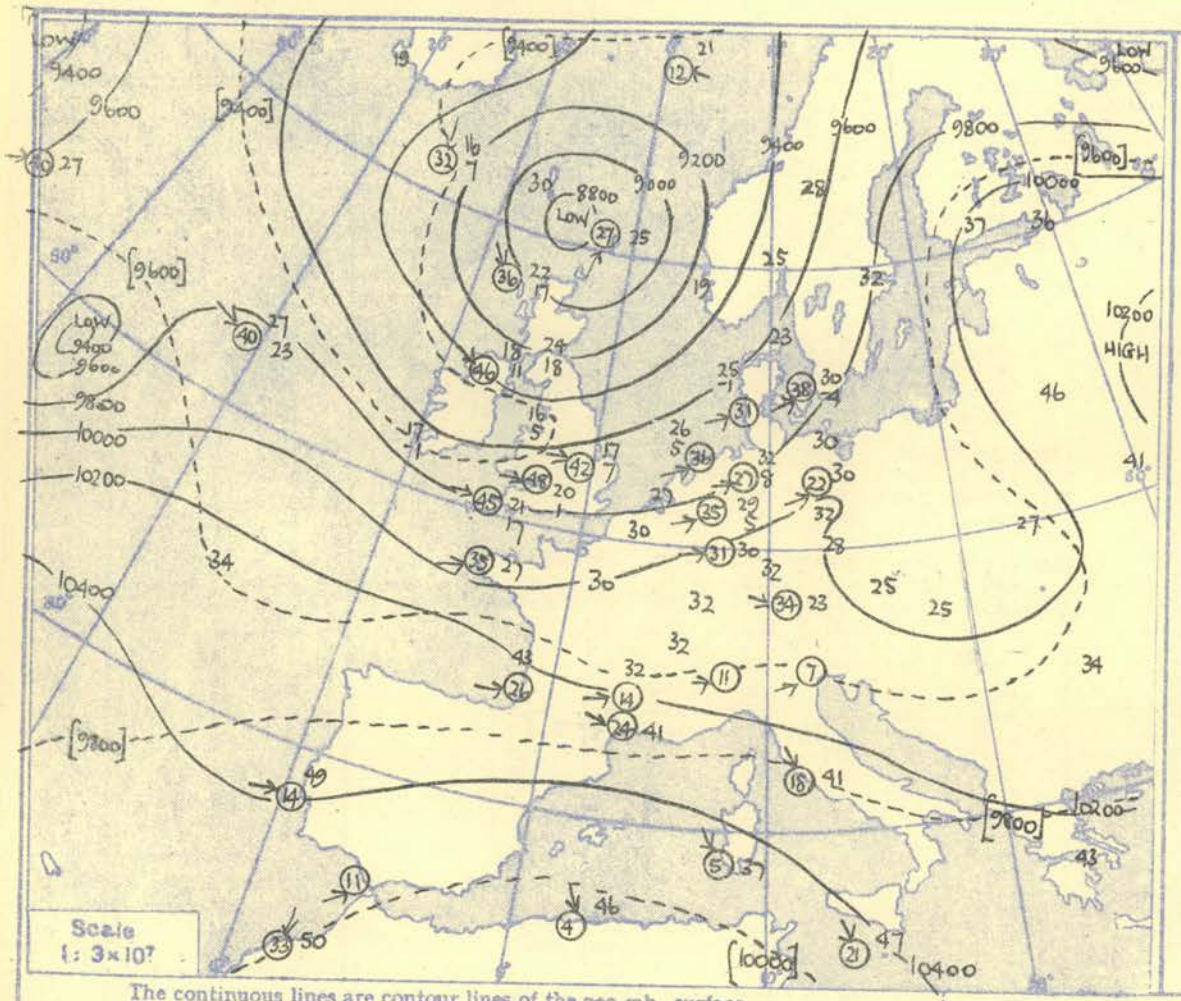
Inversion 525 mb 06° - 495 mb 10°

Isothermal 710 - 700 mb 21°

Tropopause	II 291 mb - 50° 31,500'	I 271 mb - 49° 31,600'	I 300 mb - 49° 29,600'	I 285 mb - 53° 30,700'	I 355 mb - 44° 28,700'	I 315 mb - 44° 28,700'	II 207 mb - 62° 38,500'		Tropopause

Monday 18th September 1950.

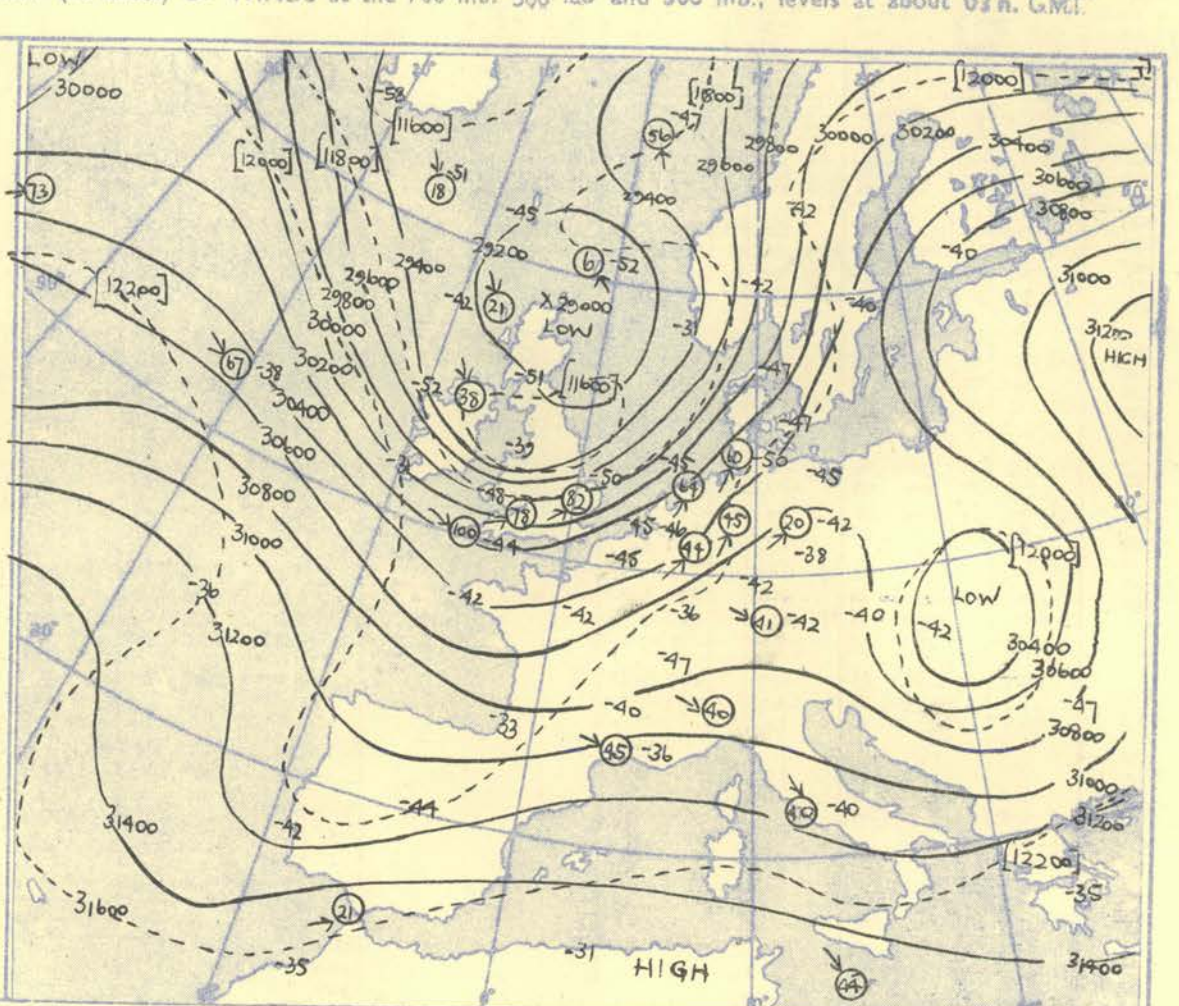
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 02 h. G.M.T.



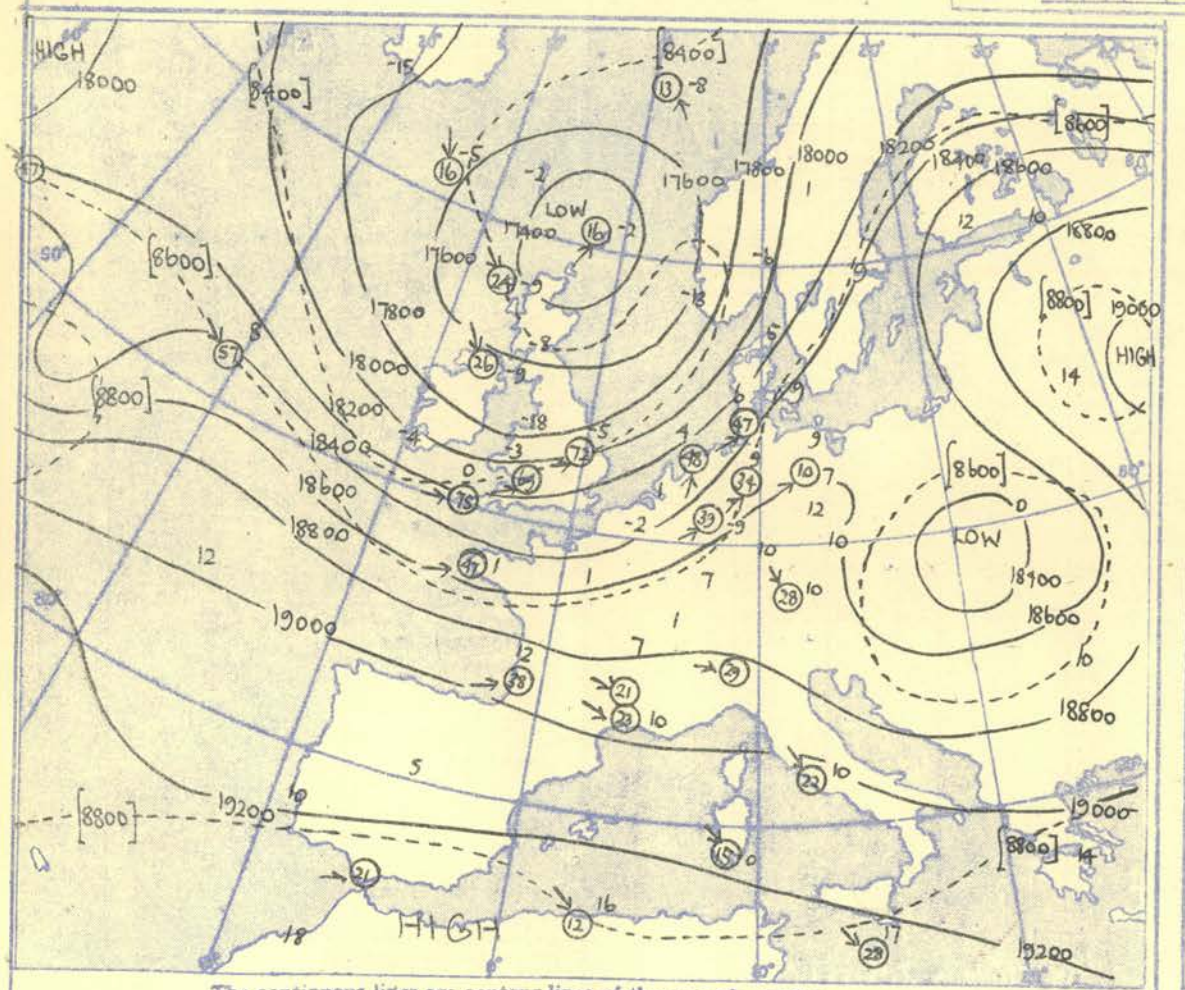
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

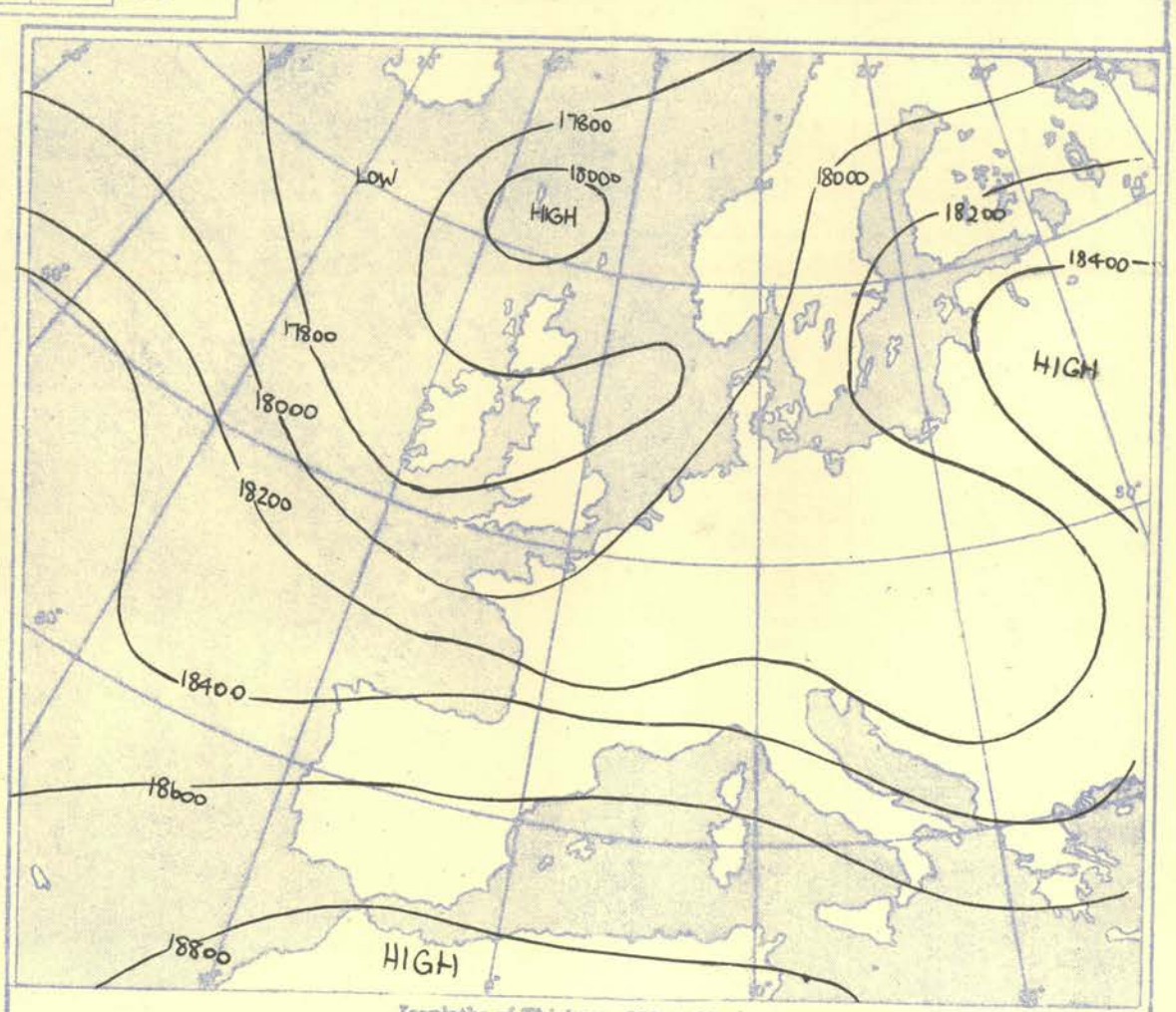
100 60 40 30 20 15 10 knots



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	43·2N. 17·0W.			39·5N. 12·2W.			51·3N. 00·4W.			49·8N. 17·8W															
Time	14h.			16h.			14h.			17.5h.															Time
M.S.L.	1025	mb		1023	mb		1012·8	mb		1014	mb			mb			mb			mb			mb			M.S.L.
Surf	1021	mb		1020	mb		1001·6	mb		1010	mb			mb			mb			mb			mb			Surf
Pressing	615			630			854			-																Pressing
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		63	58		65	53	031	62	47	010	56	55													Surf
1000	68	60	55	65	52		3·5			2·7															1000
950		56	52		56	53					46	46													950
900		57	28		47	47	32·2	42	32	34·2	44	44													900
850		56	29		47	33		31	30		52	42													850
800		50	39		54	33	63·2	26	22	66·2	48	38													800
750		46	31		49	25		25	11		43	34													750
700	104	42	18	104	43	26	97·8	20	-02	102	38	28													700
650		35	22		34	30		13	-02																650
600		31	25		29		137	09	-13																600
550		24			25			-01																	550
500	192	14		192	14		182	-07																	500
450								-19																	450
400							235	-23																	400
350								-28																	350
300							300	-45																	300
250																									250
200																									200
170																									170

Cloud. 3/8 Sc 940–930mb. Surf. wind:– W. 11–16kts. Inversion 950mb. 56° 900mb. 57°

Cloud. 7/8 Sc 920–850mb. 1/8 Cs N.R. Surf. wind:– N. 11–16kts. Isothermal 900–850mb 47° Inversion 850mb. 47°–800mb 54°

Cloud. 4/8 Cu 840–730mb.

Modified Bismouth ascent to 700mb at pos. 8. return or reciprocal track at 850mb. Cloud. 8/8 Sc 960–890mb. 3/8 Ac 6---6--mb. Inversion 900mb. 44°–850mb. 52°

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

Place	Leeming		Lympne		Weather Watcher 52·5N 20·1W.		Shoeburyness		Downham Market		Leuchars		Leuchars								Place
Time	09h.		09h.		09h.		09h.		09h.		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.	240	19	260	14	240	12	270	17	250	18	260	26	260	14							Surf.
1,000	250	27	260	22	230	18	270	21	260	29	260	42	268	47							1,000
2,000	260	25	270	28	230	18	270	23	260	30	260	42	276	43							2,000
3,000	270	29	280	28	230	18	270	27	270	35	270	40	291	41							3,000
4,000					230	18	280	32	280	37	280	42	296	48							4,000
5,000					230	15	280	30	280	32	290	45	302	44							5,000
6,000					240	11	280	33	280	31	290	47	309	43							6,000
8,000					240	09	280	30	280	28	290	45	309	38							8,000
10,000					240	13	290	30	280	28	290	39	303	31							10,000
14,000					260	15	290	30	290	34	290	35	290	21							14,000
18,000					300	48	310	39	300	36	290	33	290	32							18,000
24,000					280	55					290	46	294	44							24,000
30,000					280	45	290	58	300	39	290	50	293	70							30,000
40,000					270	13	290	44	290	36	280	26	301	42							40,000
50,000					280	45			270	30	270	30	278	18							50,000
					280	27	(60,000)		270	12	260 (60,000)	15	Max wind:– 291° 74kts.								
					(55,000)		(70,000)		190	03	250	15	30,220ft.								
							(80,000)		050	06	(66,000)										
							(70,000)		110	18											

NEPHOSCOPE OBSERVATIONS

Place	Plymouth	Valentia	Middleton	St. Eval	Middleton						Place
Time Type	09h. Ac	09h. Ci	09h. Ci	12h. Ci	12h. Ci						Time Type
Dir. Vel.	270 54	300 55	310 55	290 60	280 60						Dir. Vel.

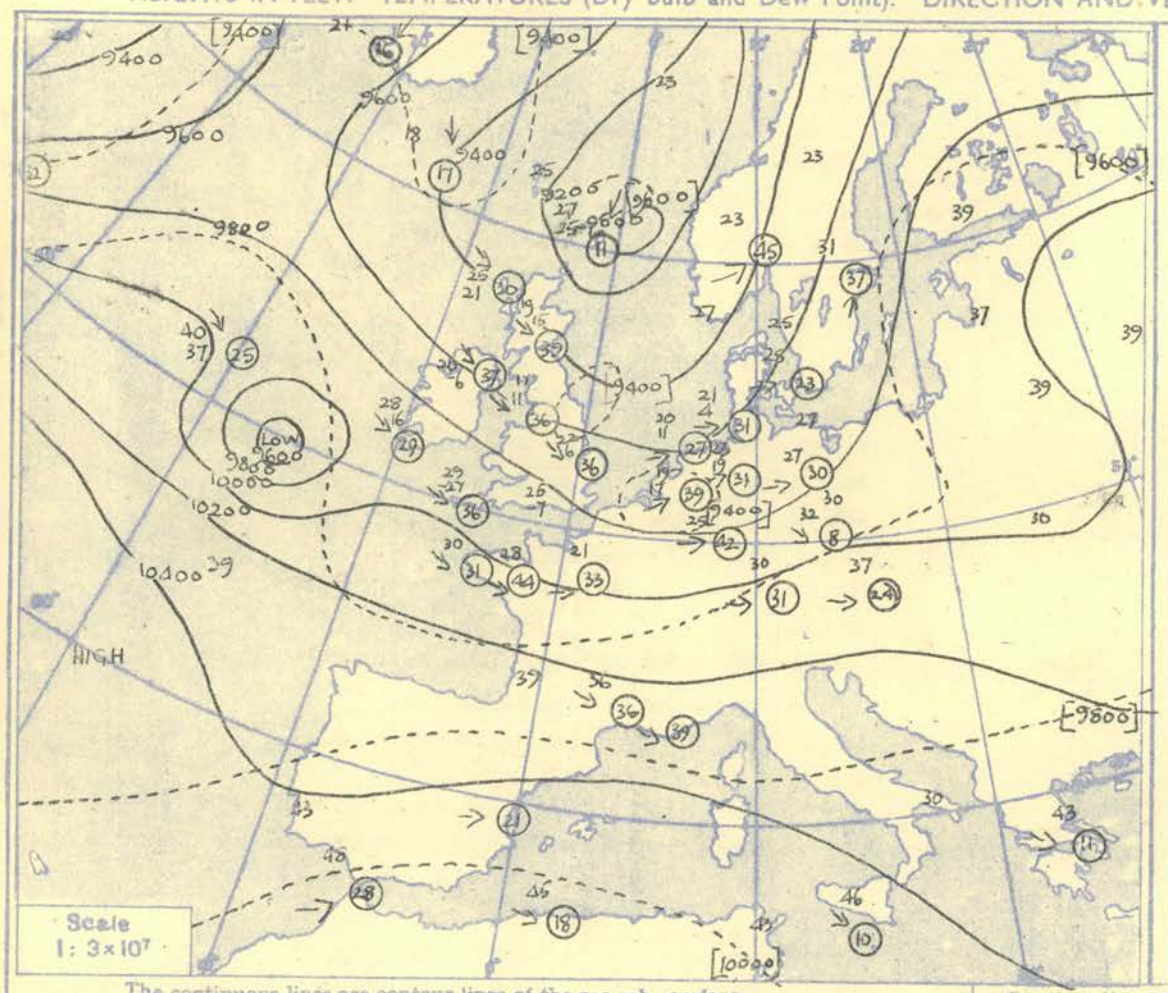
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L) FROM SHIPS.

Ship	Weather Observer	Weather Observer	Weather Observer	Weather Observer	Weather Watcher	Weather Watcher	Weather Watcher	Weather Watcher		Ship
Lat/Long	61·0 N 13·9 W	61·0 N 14 W	61·1 N 13·8 W	61·0N 14·0W	52·5 N 20·0 W	52·5N 20·1W	52·5 N 20·1W	52·5N 20·0W		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
M.S.L.	995 mb	998 mb	1002 mb	1004 mb	1013 mb	1009 mb	1011 mb	1010 mb	mb	M.S.L.
Surf	995 mb	998 mb	1002 mb	1004 mb	1013 mb	1009 mb	1011 mb	1010 mb	mb	Surf
Pressing	830	870	840	850	745	710	640	710		Pressing

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	42	360	45		49	42	005	28		48	44	350	27		48	44	025	18		53	48	180	10		54	53	240	12		56	54	240	12	Surf
1000	-1·5					-05					06					1·0	47	43			3·6	51	48	187	15	2·5	53	52			2·9	55	54	245	13	1000
950		44	37	348	46		40	34	350	42		42	36	358	26		42	40	005	16		45	45	204	14		49	49	for Winds			52	52	250	13	950
900	269	37	28	349	42	27·8	35	31	350	35	28·8	37	33	004	27	29·3	37	36	003	16	32·0	40	40	229	15	31·2	45	45			31·8	49	49	250	12	900
850		33	24	349	42		30	26	351	33		33		352	23		32	32	358	13		38	38	246	23		41	41	See Top			45	45	251	13	850
800	579	30	22	350	39	58·6	26	22	351	27	59·8	27		350	19	60·3	25	24	356	12	63·4	36	35	258	27	62·7	36	36			63·7	48	42	265	23	800
750		23	14	352	36		21	17	351	35		22		337	20		23	19	355	18		33	29	274	33		32	32	of Page.			46	42	266	21	750
700	92·3	16	07	355	32	92·8	16	10	347	32	94·1	18		340	17	94·6	18	14	353	16	98·5	27	23	276	40	97·9	31	31			99·8	40	37	298	25	700
650		13	03	355	26		11	07	342	25		12		347	21		13	05	336	10		23	18	274	37		29	26				34	31	304	32	650
600	131	10	01	360	21	131	07	02	342	17	133	05		344	19	133	06	-05	308	11	138	19	15	282	35	138	25	19			121	27	24	295	31	600
550		01	-09	338	15		00	-07	342	16		-01		344	13		-03	-09	308	14		13	08	287	53		18	14				22	08	289	40	550
500	176	-05	-16	333	16	176	-10	-11	340	12	178	-07		324	06	178	-10	-15	308	16	184	08	00	292	57	185	11	03			187	13	-02	283	57	500
450		-15	-26	338	20		-16	-23	339	15		-15		259	03		-19	-23	293	11		-01	-08	294	55		02	-19				03	-10	280	56	450
400	229	-26	-39	342	27	229	-27	-33	340	20	230	-27		224	05	230	-30	-35	283	15	239	-11	-20	295	58	240	-08	-37			242	-07	-17	276	54	400
350		-35	-50	343	25		-40	-47	338	21		-41		228	10		-45		270	18		-24	-85	293	68		-22	-47				-18	-29	276	72	350
300	294	-51		339	18	293	-53		336	18	295	-55		207	06	294	-56		278	24	306	-38	-49	279	67	307	-38	-58			310	-33	-43	275	89	300
250		-64		329	18		-60		336	16		-51		270	24		-52		261	39		-55		276	81		-65					-49		276	11	250
200	382	-50		339	29	380	-52		336	17	383	-46		269	36	382	-49		265	40	(234	-61				395	-57				399	-54		278	100	200
170		-49		326	19		-51		332	18	(196	-46					-50		280	35	mb)						-54					-64		278	78	170
150		-48		313	22		-51		330	16	mb)						-53		283	30						(160	-53					-54		278	59	150
130		-49		289	26		-53		328	13							-55		273	26						mb)						-56		278	47	130
110		-50		268	37		-54		324	18							-55		271	28												-59		278	48	110
100	533	-61		253	30	531	-53		319	22						533	-57		282	30											549	-60		278	53	100
90		-52		253	27		-54		307	21							-59		293	24												-60		278	46	90
80		-54		254	20		-56		296	21							-60		297	16												-57		278	27	80
70		-57		251	13		-56		284	16							-61		295	12												-59		278	21	70
60		-55		227	14	(062 mb)	-56										-61		295	14												-58		278	21	60
		-56															-53															-57				
						Inversion 500 mb-10°–492mb -08° Isothermal 762 – 738 mb 21° 667 – 650 " 11°											Isothermal 800 – 782 mb 25° 662 – 645 " 13°						Inversion 904mb 39°–886mb 41° Isothermal 850 – 838 mb 38° 783 – 768 " 34° 553 – 539 " 13°						Inversion 750mb 32°–740mb 34° 674 " 28°–639 " 30°						Inversion e25 mb 40°–765mb 47° Isothermal 576 – 556 mb 23°						Inversion 663 mb -25°–639mb 25° Isothermal 920 – 900 mb 49° 854 – 841 " 46° 470 – 460 " 0°					
Tropopause	II 275mb-57°31,200			I 260mb-62°32,400			I 277mb-60°31,100'			II 307mb-55°28,900'			N.R.			I 237mb-58°35,700'				I 228mb-56°37,100'			N.R.													Tropopause

Monday 18th September 1950.

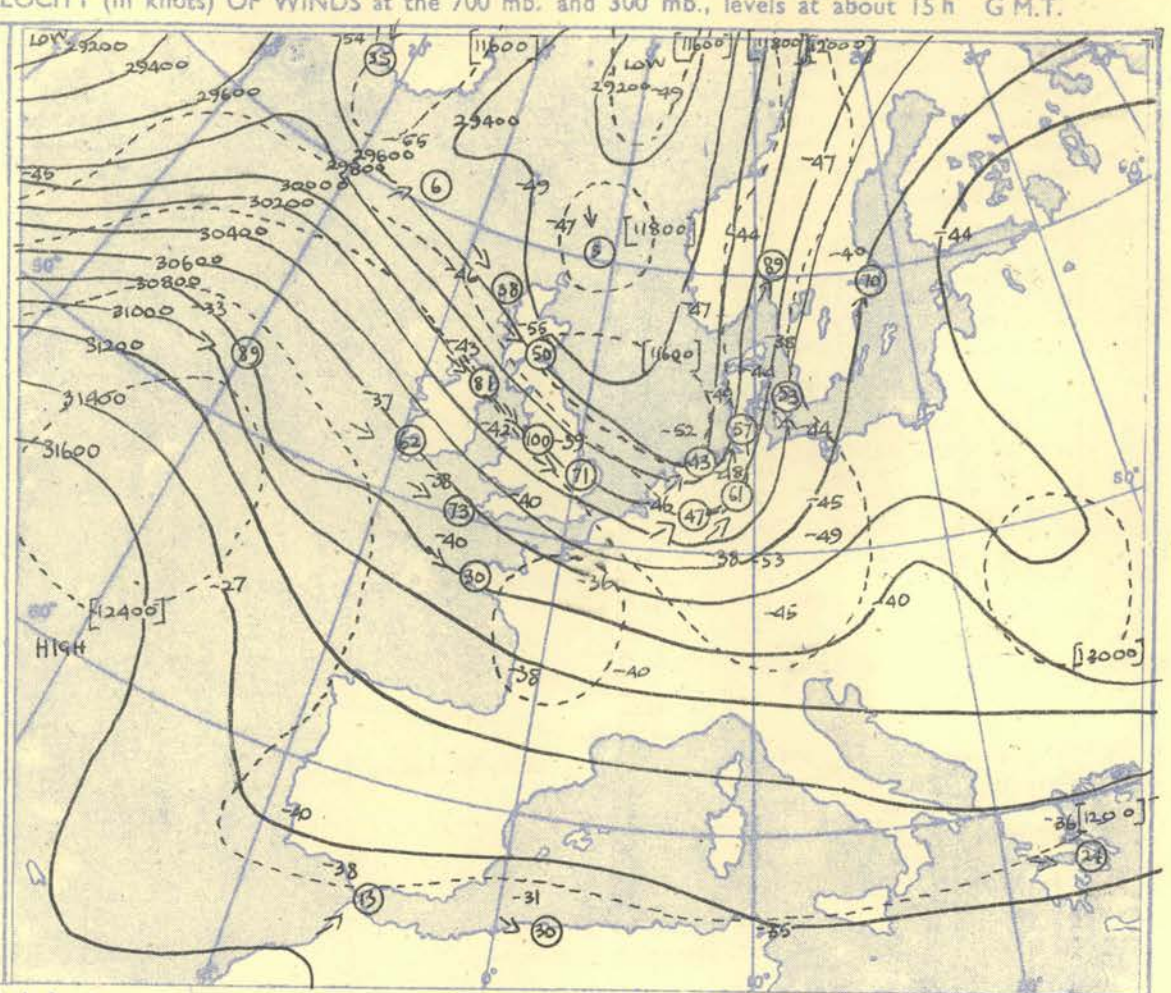
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h G.M.T.



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

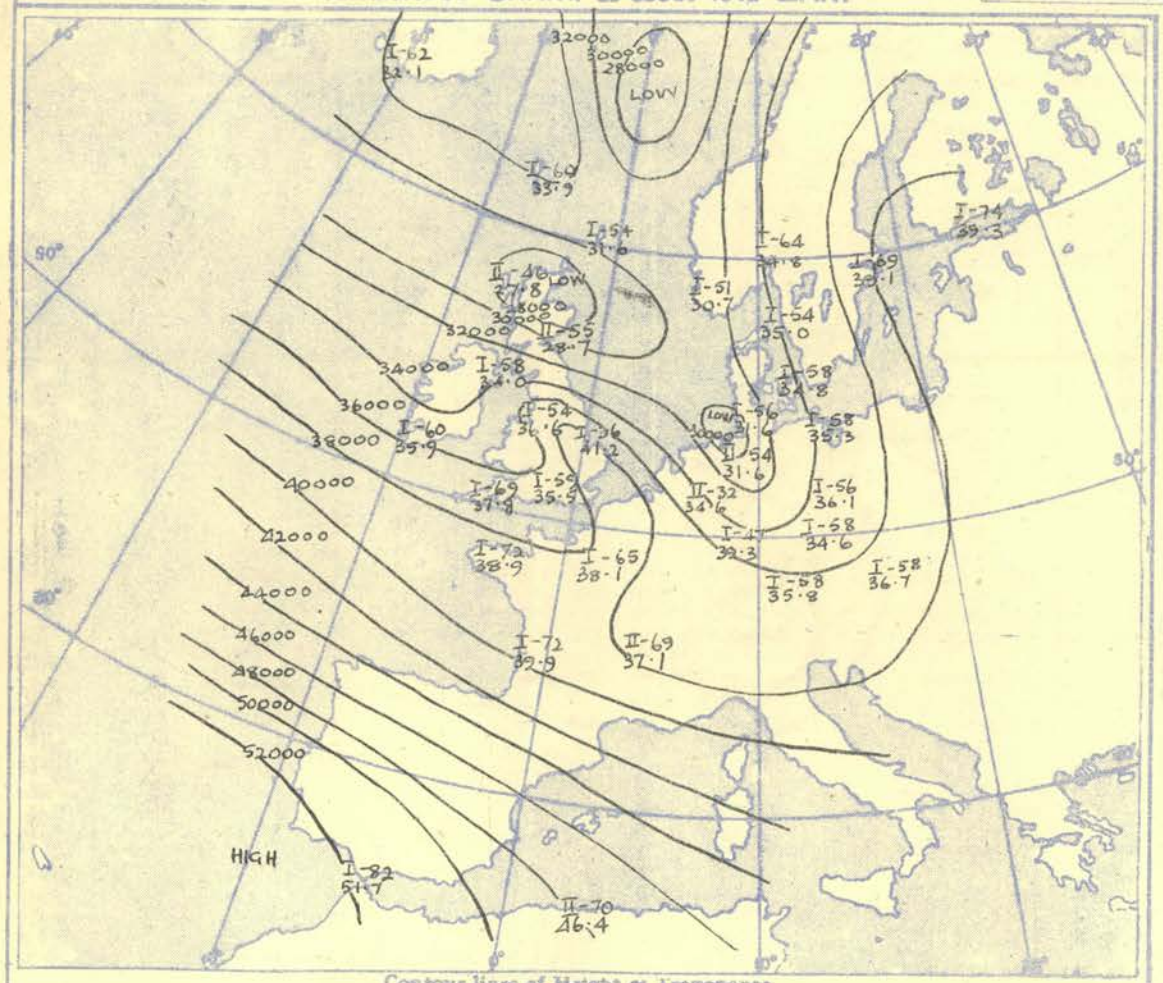
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

100 80 40 20 10 5° 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 15 h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

The extensive cold trough from Iceland to the British Isles continued to move eastwards with detached cold pools persisting over the British Isles and Germany. Meanwhile over the Atlantic an eastward moving warm ridge was being followed by a further intrusion of cold air from Labrador.

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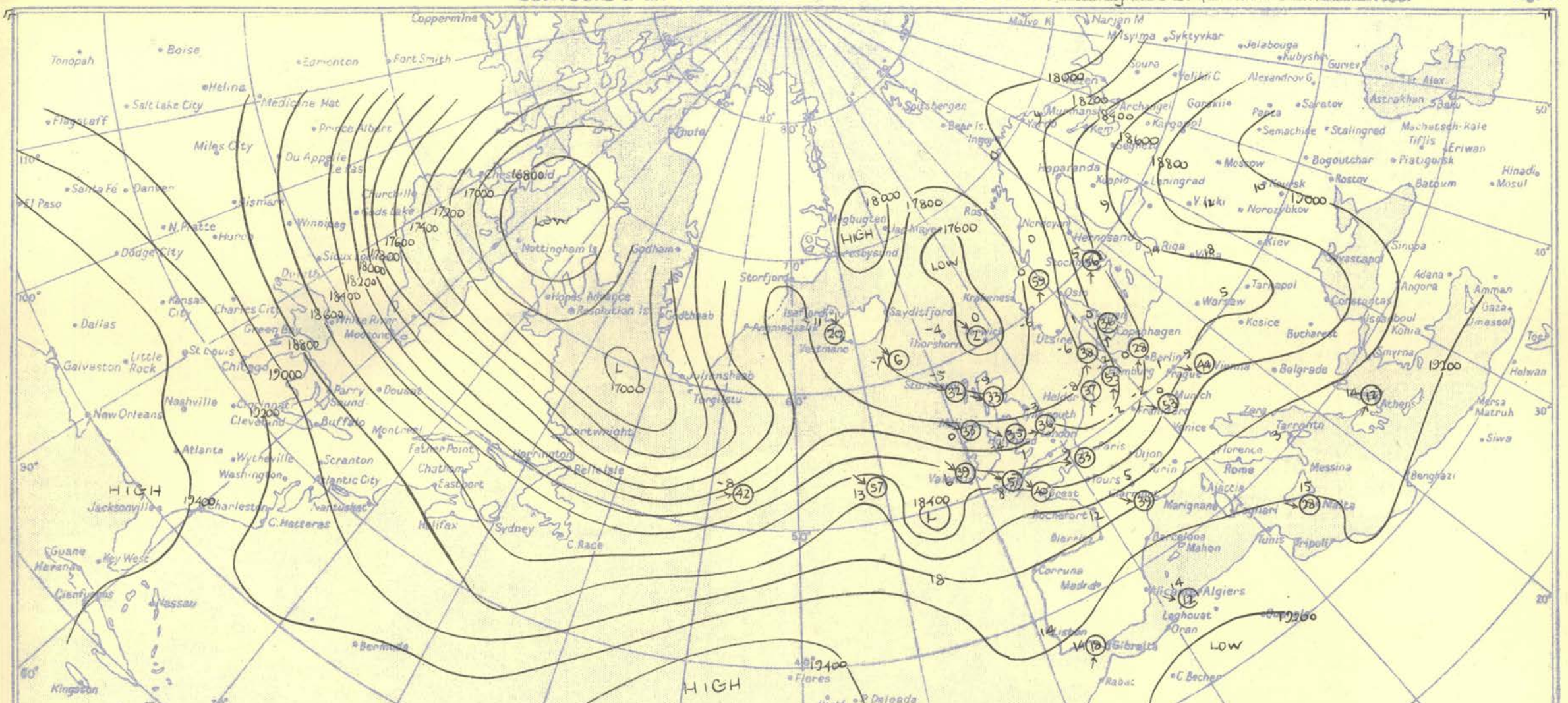
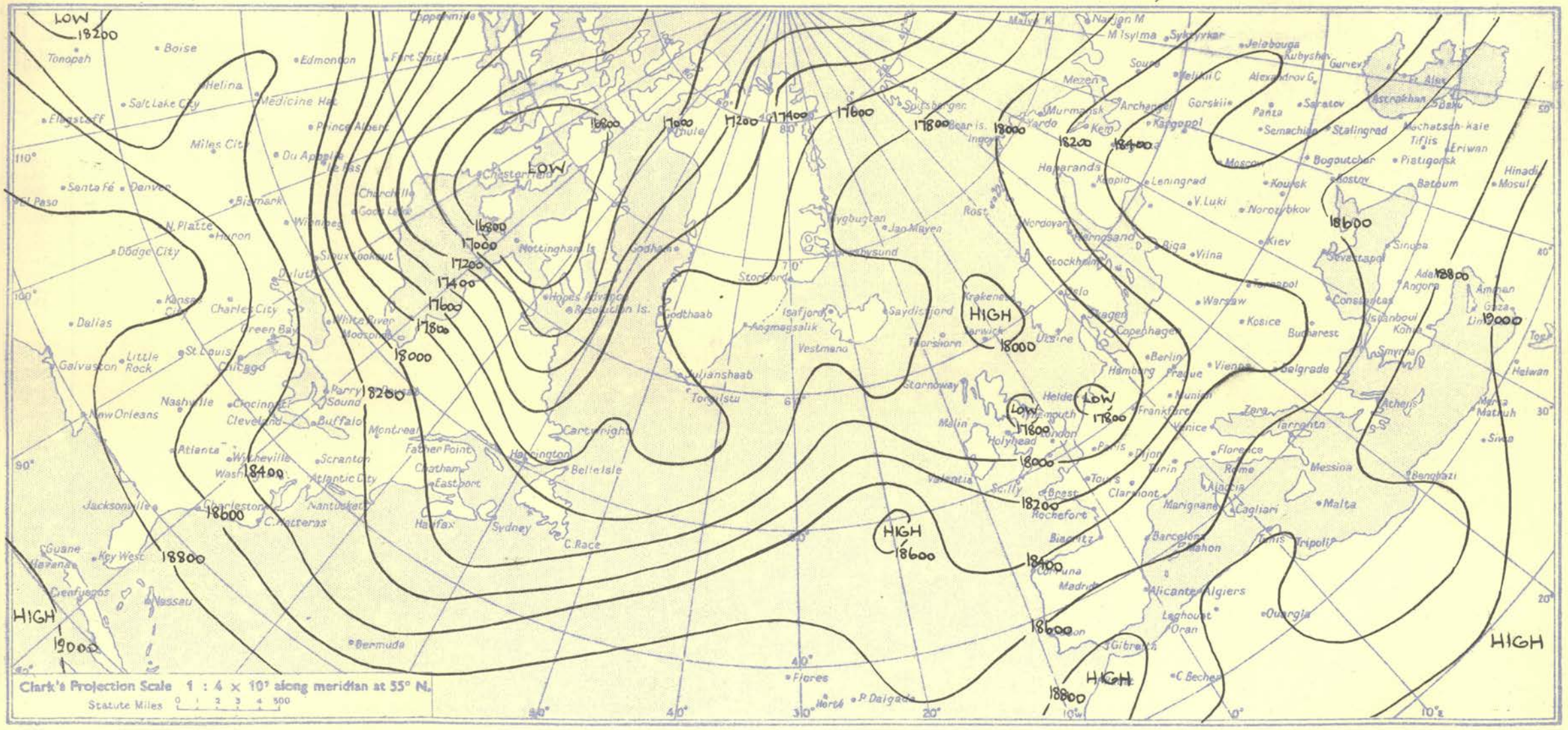
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Monday 18th September. 1950.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Monday 18th September. 1950.



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

LERWICK

Pressure	Time	15h	G.M.T.
	M.S.L.	979·5	mb
	Surf	969·9	mb
	Freezing	750	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·7	55	54	270	03
1000	-5·7				
950		51	51	289	09
900	23·1	47	47	278	07
850		43	42	275	05
800	54·8	38	37	310	05
750		32	31	340	06
700	89·9	27	25	014	11
650		20	16	331	07
600	29	12	06	280	09
550		07	-03	252	06
500	175	00	-14	325	02
450		-10	-30	061	07
400	228	-21	-37	353	03
350		-36	-49	358	07
300	293	-47		347	03
250		-43		270	14
200	380	-42		260	12
170		-43		249	15
150		-42		240	20
130		-44		230	21
110		-48		250	18
100	537	-49		250	12
90		-49		248	14
80		-50		241	16
70		-48		241	13
60		-46			

Tropopause I 269 mb -54° 31·600

STORNOWAY

Pressure	Time	15h	G.M.T.
	M.S.L.	994·1	mb
	Surf	992·9	mb
	Freezing	760	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·5	52	51	300	35
1000	-1·6				
950		48	47	303	44
900	27·0	44	43	308	49
850		39	36	310	42
800	58·4	35	36	309	38
750		31	27	312	35
700	99·3	25	21	309	30
650		19	14	315	35
600	33	12	07	312	34
550		04	-04	303	30
500	178	-05	-14	308	32
450		-16	-24	302	32
400	230	-29	-38	296	46
350		-39	-50	302	40
300	295	-46		303	38
250		-45		296	32
200	384	-48		290	35
170		-49		288	41
150		-48		290	37
130		-48		276	21
110		-53		260	15
100	536	-53		253	15
90		-48		245	09
80		-52		232	06
70					
60					

Isothermal 795 - 777 mb 34°
373 - 364 " - 35°

Tropopause II 323 mb -46° 27·800

LEUCHARS

Pressure	Time	15h	G.M.T.
	M.S.L.	997·4	mb
	Surf	996·6	mb
	Freezing	780	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·2	58	47	260	26
1000	-0·7				
950		51	47	258	42
900	28·1	43	43	264	42
850		39	39	279	43
800	59·5	34	31	293	47
750		27	22		
700	94·3	19	15	292	39
650		14	12		
600	133	08	04		
550		01	-04	293	35
500	178	-09	-12	285	33
450		-20	-23		
400	230	-32	-37	289	45
350		-44			
300	294	-55		289	48
250		-51			
200	382	-55		295	27
170					
150				281	17
130					
110					
100	536			268	20
90					
80					
70					
60					

Tropopause II 310 mb -55° 28·700

ALDERGROVE

Pressure	Time	15h	G.M.T.
	M.S.L.	1007	mb
	Surf	998	mb
	Freezing	810	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·3	58	45	280	15
1000	1·9				
950		53	43	285	21
900	30·8	46	39	285	27
850		37	30	287	30
800	62·1	30	24	288	31
750		25	13	288	36
700	96·6	20	-06	286	37
650		12	-13	290	36
600	135	07	-13	294	41
550		05	-24	290	41
500	181	00	-36	292	33
450		-10	-52	300	34
400	234	-15	-56	299	77
350		-25	-58	293	87
300	300	-43		290	81
250		-58		292	81
200	388	-53		294	61
170		-52		300	61
150		-55		283	55
130		-57		294	46
110		-59		306	30
100	538	-56		310	26
90		-52		266	25
80		-54		252	30
70		-58		279	20
60		-56		300	16

Tropopause I 250 mb -58° 34·000

LIVERPOOL

Pressure	Time	15h	G.M.T.
	M.S.L.	1008·2	mb
	Surf	1006·2	mb
	Freezing	830	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·6	56	47	270	34
1000	2·3	57	47		
950		49	43	270	34
900	30·9	40	38	273	36
850		34	32	278	37
800	62·0	29	28	280	36
750		23	21	288	36
700	96·5	17	11	290	36
650		11	04	290	40
600	135	03	-03	286	41
550		04	-15	290	40
500	180	-04	-31	288	35
450		-12	-42	290	30
400	234	-18	-50	304	56
350		-26	-56	303	96
300	299	-42	-56	304	100
250		-52		303	87
200	388	-50		297	60
170		-47		293	55
150		-53		290	59
130		-55		293	48
110		-52			
100	539	-52			
90		-53			
80		-53			
70		-57			

Inversion 1006 mb 56° - 1000 mb 57°

Tropopause I 222 mb -54° 36·600

DOWNHAM MARKET

Pressure	Time	15h	G.M.T.
	M.S.L.	1009·3	mb
	Surf	1004·8	mb
	Freezing	806	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	1·2	60	41	250	15
1000	2·5				
950		53	35	271	30
900	31·4	46	32	274	32
850		38	27	273	34
800	62·8	31	23	273	33
750		26	18	276	34
700	97·5	22	06	278	36
650		19	-01	277	36
600	137	13	-08	278	34
550		06	-17	270	34
500	182	-03	-24	270	36
450		-12	-31	278	30
400	235	-21	-38	288	30
350		-32	-49	295	55
300	301	-33	-56	302	71
250		-45		306	75
200	391	-52		295	56
170		-50		286	59
150		-45		290	54
130		-47		296	34
110		-53		298	30
100	542	-55		293	28
90		-54		281	22
80		-53		280	10
70		-54			

Inversion 700 mb 22° - 687 mb 23°

Isothermal 765 - 741 mb 26°

Tropopause I 182 mb - 56° 41·200

LARKHILL

Pressure	Time	15h	G.M.T.
	M.S.L.	1013·0	mb
	Surf	997·3	mb
	Freezing	808	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·4	57	42	270	18
1000	3·6				
950		51	38		
900	32·4	43	34		
850		37	30		
800	63·7	31	25		
750		29	11		
700	98·5	25	-07		
650		20	-09		
600	138	13	-16		
550		04	-26		
500	183	01	-33		
450		-01	-39		
400	237	-10	-44		
350		-24	-41		
300	304	-40	-54		
250		-55			
200	392	-56			
170		-55			

Inversion 770 mb 27° - 750 mb 29°
525 " 00° - 462 " 01°

Tropopause I 237 mb -59° 35·500

CAMBORNE

Pressure	Time	15h	G.M.T.
	M.S.L.	1017·1	mb
	Surf	1006·5	mb
	Freezing	791	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·3	56	45	270	15
1000	4·6	55	44	262	21
950		48	40	265	18
900	33·2	41	32	268	17
850		34	15	269	19
800	64·2	32	-03	273	22
750		29	-17	286	28
700	99·1	29	-27	290	36
650		27	-35	296	43
600	139	23	-38	294	47
550		15	-02	297	50
500	185	08	-03	297	57
450		-01	+12	293	66
400	240	-12	-21	292	62
350		-25	-34	290	65
300	306	-38	-48	288	73
250		-55		287	86
200	394	-64		285	69
170		-61		293	67
150		-62		294	60
130		-63			
110		-65			
100	540	-66			
90		-66			
80	(95 mb)				
70					
60	(61 mb)				

Inversion 824 mb 31° - 791 mb 32°
750 " 29° - 730 " 31°
615 " 27° - 662 " 28°

Tropopause I 214 mb -69° 37·800

VALENTIA

Pressure	Time	15h	G.M.T.
	M.S.L.	1014·0	mb
	Surf	1013	mb
	Freezing	870	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·3	55	46	215	10
1000	4·0	53	42	219	10
950		47	39	237	12
900	32·5	40	31	258	16
850		37	31	271	24
800	63·7	31	26	279	29
750		32	-10	283	08
700	98·6	28	16	295	29
650		23	11	295	31
600	138	18	10	280	36
550		14	05	277	37
500	185	06	-03	279	39
450		-03	-11	272	43
400	239	-11	-21	275	49
350		-23	-34	272	51
300	306	-37	-48	273	62
250		-55		264	65
200	394	-55		285	64
170		-55		280	64
150		-56			
130		-61			
110		-63			
100	542	-62			
90		-60			
80		-60			
70		-57			
60	(67 mb)	-56			

Inversion 786 mb 29° - 750 mb 30°

Tropopause I 236 mb -60° 35·900

LERWICK

Pressure	Time	21h	G.M.T.
	M.S.L.	987·0	mb
	Surf	977·2	mb
	Freezing	780	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·7	52	50	330	16
1000	-3·6				
950		49	48	336	30
900	25·1	44	43	340	30
850		38	36	344	30
800	56·5	34	30	344	25
750		30	25	343	25
700	91·4	24	19	341	24
650		17	11	337	21
600	131	09	01	331	16
550		01	-05	336	13
500	175	-07	-17	339	15
450		-17	-23	343	14
400	228	-28	-33	349	15
350		-40	-46	350	12
300	292	-56		347	14
250		-55		303	14
200	379	-52		279	18
170		-54		282	18
150		-54		265	18
130		-54		254	18
110		-57		258	16
100	529	-58		258	15
90		-60		250	15
80		-61		239	25
70		-63			
60					

Tropopause I 276 mb -65° 30·300

STORNOWAY

Pressure	Time	21h	G.M.T.
	M.S.L.	1000·1	mb
	Surf	998·2	mb
	Freezing	814	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·5	52	49	300	25
1000	0·0				
950		46	44	311	35
900	28·5	40	38	309	33
850		36	32	312	33
800	59·7	31	28	312	33
750		25	22	314	29
700	99·4	21	19	310	25
650		15	13	313	23
600	133	08	06	319	23
550		-02	-05	321	21
500	178	-11	-14	315	22
450		-21	-26	293	23
400	230	-32	-41	304	30
350		-45		300	31
300	294	-54		297	33
250		-51		301	48
200	382	-51		294	35
170		-52		283	39
150		-53		290	29
130		-57		289	29
110		-58		282	23
100	554	-58		267	16
90		-59			
80					
70					
60					

Tropopause II 300 mb -54° 29·400

ALDERGROVE

Pressure	Time	21h	G.M.T.
	M.S.L.	1009·6	mb
	Surf	1001	mb
	Freezing	830	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·3	49	43	285	07
1000	2·6				
950		42	35	290	17
900	30·8	38	29	290	24
850		34	25	293	33
800	61·7	30	22	296	33
750		25	17	299	33
700	96·4	21	13	298	35
650		16	01	298	32
600	135	13	-08	296	39
550		09	-24	190	43
500	180	02	-34	292	50
450		-10	-33	294	58
400	234	-22	-32	290	50
350		-35	-45	287	58
300	299	-47		284	62
250		-52		281	58
200	387	-51		294	44
170		-52		294	47
150		-52		284	43
130		-57		283	37
110		-59		285	31
100	536	-61		286	33
90		-60		291	30
80		-59			
70					
60					

Tropopause I 257 mb -56° 33·300

LIVERPOOL

Pressure	Time	21h	G.M.T.
	M.S.L.	1009·0	mb
	Surf	1007·0	mb
	Freezing	824	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·6	54	48	270	20
1000	2·5	50	42		
950		47	41	283	33
900	31·1	41	35	288	32
850		35	29	289	35
800	62·3	28	23	287	36
750		23	18	284	37
700	96·7	21	14	288	39
650		17	07	294	38
600	136	11	00	294	41
550		04	-08	291	44
500	181	00	-12	292	51
450		-08	-22	294	55
400	235	-21	-33	294	60
350		-35	-46	284	64
300	300	-49		281	67
250		-62		281	65
200	387	-54		286	54
170		-55		293	45
150		-59		301	45
130		-62		280	39
110		-57		290	45

Tropopause I 243 mb - 64° 34·500

DOWNHAM MARKET

Pressure	Time	21h	G.M.T.
	M.S.L.	1011·1	mb
	Surf	1006·6	mb
	Freezing	814	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	1·2	50	42	220	05
1000	3·0	50	42		
950		49	40	271	35
900	31·7	43	36	276	34
850		37	31	281	30
800	63·0	30	23	285	28
750		25	17	286	27
700	97·0	19	03	287	26
650		16	00	290	28
600	136	09	-06	290	30
550		01	-13	283	35
500	181	-05	-22	279	47
450		-08	-31	292	60
400	234	-17	-37	294	72
350		-30	-45	293	75
300	300	-46		289	85
250		-61		284	85
200	388	-57		294	54
170		-57		287	51
150		-61		288	51
130		-61		294	39
110		-64		292	36
100	536	-65		291	28
90		-65		290	16
80		-65		287	20
70		-64			
60					

Inversion 1001 mb 50° - 970 mb 52°

Isothermal 673 - 643 mb 16°

Tropopause I 253 mb - 67° 33·800

LARKHILL

Pressure	Time	21h	G.M.T.
	M.S.L.	1014·3	mb
	Surf	998·2	mb
	Freezing	775	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·4	49	45	260	10
1000	3·9				
950		47	42	266	22
900	32·4	42	36	276	25
850		37	30	283	24
800	63·8	34	26	284	24
750		29	05	280	28
700	98·6	25	-01	275	29
650		22	-06	279	33
600	138	17	-13	284	44
550		13	-11	286	45
500	184	04	-08	287	44
450		-03	-10	287	50
400	238	-15	-22	280	52
350		-30	-37	272	59
300	304	-46		266	63
250		-61		274	75
200	391	-58		285	60
170		-59		288	52
150		-60		291	44
130		-64		295	31
110		-69		281	30

Inversion 998 mb 49° - 981 mb 51°

Isothermal 510 - 482 mb 04°

Tropopause II 245 mb -63° 34·700

CAMBORNE

Pressure	Time	21h	G.M.T.
	M.S.L.	1016·3	mb
	Surf	1005·7	mb
	Freezing	750	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·9	51	49	240	15
1000	4·4	50	48	245	16
950		46	42	266	17
900	32·9	42	37	281	13
850		37	22	288	20
800	64·2	34	30	290	20
750		32	28	296	23
700	99·3	28	25	289	25
650		24	20	278	25
600	139	18	14	276	26
550		12	08	277	30
500	185	05	00	273	35
450		-03	-08	278	39
400	240	-12	-18	280	42
350		-25	-31	282	45
300	306	-41		279	42
250		-58		268	55
200	394	-61		287	58
170		-60		292	62
150		-63		292	58
130		-67			
110		-70			
100	(120 mb)				
90					
80					
70					
60					

Isothermal 830 - 800 mb 34°

Tropopause II 242 mb -62° 35·400

No. 11496 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Tuesday 19th September 1950. 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.	991.3 mb	1002.4 mb	1002.4 mb	1009.3 mb	1009.6 mb	1011.4 mb	1013.5 mb	1018.6 mb	1010.6 mb
Pressure: Surf	981.5 mb	1000.5 mb	1001.2 mb	1000.9 mb	1007.6 mb	1007.0 mb	997.3 mb	1003.1 mb	1009 mb
Pressure: Freezing	800 mb	815 mb	772 mb	780 mb	839 mb	818 mb	770 mb	763 mb	715 mb

Pressure mb	LERWICK Height ft./100	°F.	Dew °F.	Wind Dir. °	Vel. knots	STORNOWAY Height ft./100	°F.	Dew °F.	Wind Dir. °	Vel. knots	LEUCHARS Height ft./100	°F.	Dew °F.	Wind Dir. °	Vel. knots
Surf	02·7	49	47	320	25	00·5	49	48	316	15	00·2	49			
1000	02·4					00·7	49	48			00·6	49			
950		45	44	315	37		45	44	316	25		47			
900	26·1	40	39	320	38	29·1	40	39	311	22	29·1	42			
850		37	36	320	34		35	34	309	22		39			
800	57·3	32	31	319	30	60·3	31	30	299	21	60·5	36			
750		28	17	316	30		26	25	296	21		29			
700	92·1	26	11	313	24	94·9	19	17	301	24	95·4	22			
650		19	05	312	18		12	09	300	21		16			
600	13·1	10	-1	310	21	13·4	06	02	277	19	13·5	08			
550		00	-7	309	22		-02	-08	270	16		00			
500	17·6	-9	-17	308	21	17·8	-10	-18	287	24	17·9	-11			
450		-16	-23	301	17		-21	-31	284	27		-19			
400	22·9	-27	-36	279	11	23·1	-29	-41	284	39	23·2	-27			
350		-40	-48	256	07		-37	-50	292	52		-36			
300	29·3	-55		232	09	29·5	-49		292	54	29·6	-49			
250		-56		277	18		-57		289	50		-57			
200	38·1	-49		274	20	38·3	-52		276	38	38·4	-54			
170		-50		273	23		-52		283	40		-51			
150	44·4	-50		276	21	44·5	-52		283	36	44·6	-51			
130		-50		275	18							-58			
110		-53		260	18										
100	53·1	-53													
90															
80															
70															
60															

Inversion 767 mb 27° - 750 mb 28°

Inversion 863 mb 38° - 840 mb 40°

Pressure mb	ALDERGROVE Height ft./100	°F.	Dew °F.	Wind Dir. °	Vel. knots	LIVERPOOL Height ft./100	°F.	Dew °F.	Wind Dir. °	Vel. knots	DOWNHAM MARKET Height ft./100	°F.	Dew °F.	Wind Dir. °	Vel. knots	LARKHILL Height ft./100	°F.	Dew °F.	Wind Dir. °	Vel. knots	CAMBORNE Height ft./100	°F.	Dew °F.	Wind Dir. °	Vel. knots	VALENTIA Height ft./100	°F.	Dew °F.	Wind Dir. °	Vel. knots
Surf	02·3	47	45	280	04	00·6	53	47			01·2	48	45	220	12	03·7	45	43	CALM		02·9	53	50	180	05	00·3	53	52	000	29
1000	02·5					02·6	53	47			03·1	48	45								03·7	53	50			2·9	53	52		
950		46	39	280	18		47	44				47	43	278	17		48	44	268	16		48	44	200	18		48	46		
900	31·0	42	35	285	23	31·2	40	39			31·6	41	36	286	21	32·2	43	37	275	18	32·4	44	40	221	14	31·5	43	41		
850		35	26	290	25		34	31				37	32	286	21		37	32	277	18		40	37	241	14		40	37		
800	62·2	28	06	284	23	62·3	26	25			62·8	30	28	283	21	63·5	33	16	282	19	63·9	35	32	250	12	63·0	37	34		
750		24	03	280	25		25	18				28	19	280	24		31	03	287	22		31	28	258	13		34	31		
700	97·0	18	-8	282	25	96·9	22	06			97·5	20	09	280	24	98·3	27	-7	285	25	99·0	29	26	264	20	98·1	31	27		
650		14	-9	290	29		17	02	280	29		17	02	280	29		23	-21	291	31		25	22	272	30		27	22		
600	13·6	06	-3	298	42	13·6	15	-5			13·7	12	-08	280	34	13·8	17	-20	296	34	13·9	19	17	275	31	138	19	14		
550		-3	-11	296	42		08	-7				07	-09	288	42		12	07	288	33		14	4	280	36		15	1		
500	18·2	-10	-30	291	36	18·2	-2	-13			18·2	01	-25	287	48	18·4	03	00	282	36	18·5	7	-38	285	29	184	05	-10		
450		-21	-43	295	48		-13	-26				-09	-18	283	49		-7	-10	283	40		-4	-46	291	41		-7	-19		
400	23·5	-35	-55	289	55	23·5	-25	-38			23·6	-20	-35	283	51	23·8	-14	-29	290	47	23·9	-14	-52	298	46	238	-15	-26		
350							-37	-50				-32	-46	284	51		-29	-42	288	54		-29	-56	291	55		-26	-39		
300	30·0	-48		286	58	29·9	-53				30·1	-45		284	53	30·4	-40	-56	291	53	30·5	-45		291	61	304	-41			
250		-53		282	52		-61					-58		286	47		-55		290	59		-57		295	62		-48			
200	30·8	-50		285	46	30·6	-55				28·9	-55		287	47	29·2	-61		290	63	29·3	-57		294	74	29·4	-48			
170		-51		284	49		-55					-57		289	46		-55		291	51		-59		290	64		-50			
150	45·1	-54		282	44		-54				45·1	-57		287	44	45·3	-55		297	48		-62		289	57		-54			
130		-56					-61					-58		289	38		-57		289	42		-63		288	44		-56			
110							-64					-61		286	27		-65		288	43		-61		272	39		-58			
100						53·4	-68									54·0	-68		290	40	54·0	-62		293	25		-59			
90							-67										-69		289	39		-63		284	27	(94·4)	-60			
80							-62										-68		276	35		-62		285	21					
70							-63										-67		270	18		-61		285	18					
60						(69mb)	-63									64·7	-65		286	18		-63		285	14					
																	-64		275	15	(55mb)	-64								
																73·2	-70		305	12										

Isothermal 1001 mb 47° - 963 mb 47° ; 825 - 780 . 32° ; 731 - 714 . 26° ; 650 - 632 . 18°

Inversion 781 mb 24° - 755 mb 26°

Inversion 728 mb 27° - 750 mb 28°

Inversion 997 mb 45° - 960 mb 49° ; 814 . 32° - 800 . 33° ; 681 . 25° - 670 . 26° ; Isothermal 443 - 428 mb - 8°

Max wind 290° 92 kts 38,200 ft. 212 mb.

Isothermal 871 - 850 mb 40° ; 771 - 750 . 34°

	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Tropopause	I 281 mb -61° 30,700'	I 275 mb -57° 31,900'	I 263 mb -60° 32,500'	II 273 mb -53° 32,000'	II 250 mb -61° 33,800'	II 250 mb -42° 34,100'	II 228 mb -62° 36,300'	II 270 mb -55° 32,800'	II 285 mb -45° 31,600'

09h. G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Pressure: Time	09h. G.M.T.	09h. G.M.T.	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.	995·4 mb	1003·1 mb	mb	1008·0 mb	1008·8 mb	1011·1 mb	1012·2 mb	1009·5 mb	mb
Pressure: Surf	985·6 mb	1001·2 mb	mb	999·4 mb	1006·8 mb	1006·6 mb	996·2 mb	999·0 mb	mb
Pressure: Freezing	800 mb	850 mb	mb	786 mb	790 mb	824 mb	783 mb	688 mb	mb

Pressure mb	LERWICK Height ft./100	°F.	Dew °F.	Wind Dir. °	Vel. knots	STORNOWAY Height ft./100	°F.	Dew °F.	Wind Dir. °	Vel. knots	LEUCHARS Height ft./100	°F.	Dew °F.	Wind Dir. °	Vel. knots	ALDERGROVE Height ft./100	°F.	Dew °F.	Wind Dir. °	Vel. knots	LIVERPOOL Height ft./100	°F.	Dew °F.	Wind Dir. °	Vel. knots	DOWNHAM MARKET Height ft./100	°F.	Dew °F.	Wind Dir. °	Vel. knots	LARKHILL Height ft./100	°F.	Dew °F.	Wind Dir. °	Vel. knots	CAMBORNE Height ft./100	°F.	Dew °F.	Wind Dir. °	Vel. knots					
Surf	02·7	48	46	330	20	00·5	51	49								02·3	47	45	210	10	00·6	53	47	270	10	01·2	51	46	240	05	04·4	51	49	180	03	02·9	54	52	135	10					
1000	01·3					00·8	51	48								02·3					02·4	52	46			03·0	50	45			03·2					02·6									
950		45	43	303	31		45	43									42	39	229	11		46	42	277	10		46	40	256	15		47	44	239	14		51	49	152	18					
900	27·2	41	40	308	28	29·3	38	37								30·6	37	31	246	09	30·9	40	33	280	14	31·5	41	35	268	14	31·8	44	40	244	14	31·5	48	46	165	12					
850		36	32	311	25		32	29									33	29	262	22		36	32	280	15		35	30	261	15		38	34	251	14		45	42	180	10					
800	58·4	32	24	307	27	60·3	27	22								64·7	32	30	262	29	62·2	33	11	273	16	62·7	29	24	275	17	63·2	34	31	256	16	63·3	40	37	200	4					
750		28	16	309	27		20	10									27	26	272	26		29	01	286	20		27	12	290	22		29	26	265	17		38	35	241	12					
700	93·3	23	09	302	27	94·5	14	08								96·4	22	20	270	27	96·9	25	-8	288	27	97·3	22	02	284	27	09·8	28	17	278	21	98·8	34	31	258	16					
650		17	03	304	19		08	-03									17	15	270	24		21	11	289	24		19	-08	285	33		21	17	278	23		27	23	264	21					
600	132	10	-04	299	21	13·3	01	-16								13·6	10	07	269	30	13·6	14	04	288	26	13·7	14	-18	282	39	13·8	14	10	286	20	13·9	21	14	274	25					
550		03	-10	284	19		-07	-19									02	-1	265	27		01	-6	291	31		04	-06	285	36		06	01	290	27		15	01	281	33					
500	17·7	-06	-17	279	17	17·7	-14	-39								18·1	-5	-9	266	27	18·1	-6	-10	291	35	18·2	02	-23	288	36	18·3	04	-12	287	36	18·6	05	-16	283	36					
450		-16	-30	279	19		-24	-49									-13	-18	260	27		-14	-22	284	35		-10	-33	288	36		-10	-20	283	36		-6	-23	281	36					
400	23·0	-30	-42	273	18	22·9	-34	-52								23·4	-23	-30	263	33	23·4	-26	-30	283	42	23·6	-22	-39	289	45	23·7	-20	-28	275	39	23·9	-15	-35	281	48					
350		-41		269	14		-48										-40	-46	256	40		-40	-46	281	39		-35	-47	292	46		-34	-42	278	50		-27	-51	280	52					
300	29·4	-50		233	08	29·2	-61									29·8	-53		274	44	29·9	-53		284	52	30·0	-50		281	60	30·2	-46		275	53	30·5	-40	-60	283	60					
250		-50		260	19		-62										-60		278	45		-55		283	48		-59		281	49		-55		283	54		-51		288	77					
200	32·3	-45		282	21	32·8	-51									33·5	-55		270	41	33·6	-54		284	42	33·8	-54		280	45	34·0	-53		282	58	34·4	-54		286	74					
170		-45		272	17		-54										-55		269	44		-51		280	43		-54		280	44		-54		285	53		-56		283	70					
150		-47		286	18	44·1	-54									44·7	-56		285	41		-54		288	41	45·0	-54		285	45	45·2	-57		283	50	45·6	-56		283	59					
130		-47		269	22		-54										-59		283	35		-56		278	37		-58		287	42		-59		285	34		-59		285	52					
110		-48		267	18		-55										Isothermal					-58		283	26		-60		288	30		-65		279	37		-65		286	41					
100	53·6	-49		268	17	52·8	-56										834 - 786 mb 32°				53·6	-59		280	26	53·7	-61		288	26	53·9	-62		277	31	54·2	-65		287	35					
90		-49		269	13		-58															-55					-60		286	22		-60		276	21		-65		289	28					
80		-50		238	13		-60															-56					-60		286	20		-60		284	19		-66		285	29					
70		-52		240	12																	-56					-60		289	15		-61					-66		282	26					
60	64·7	-54					Isothermal																															(62·6)	-66								
							535 - 517 mb -10°																																Isothermal									
																																							778 - 750 mb 38°									

Isothermal 863 - 840 mb 36° ; 720 - 700 . 25°

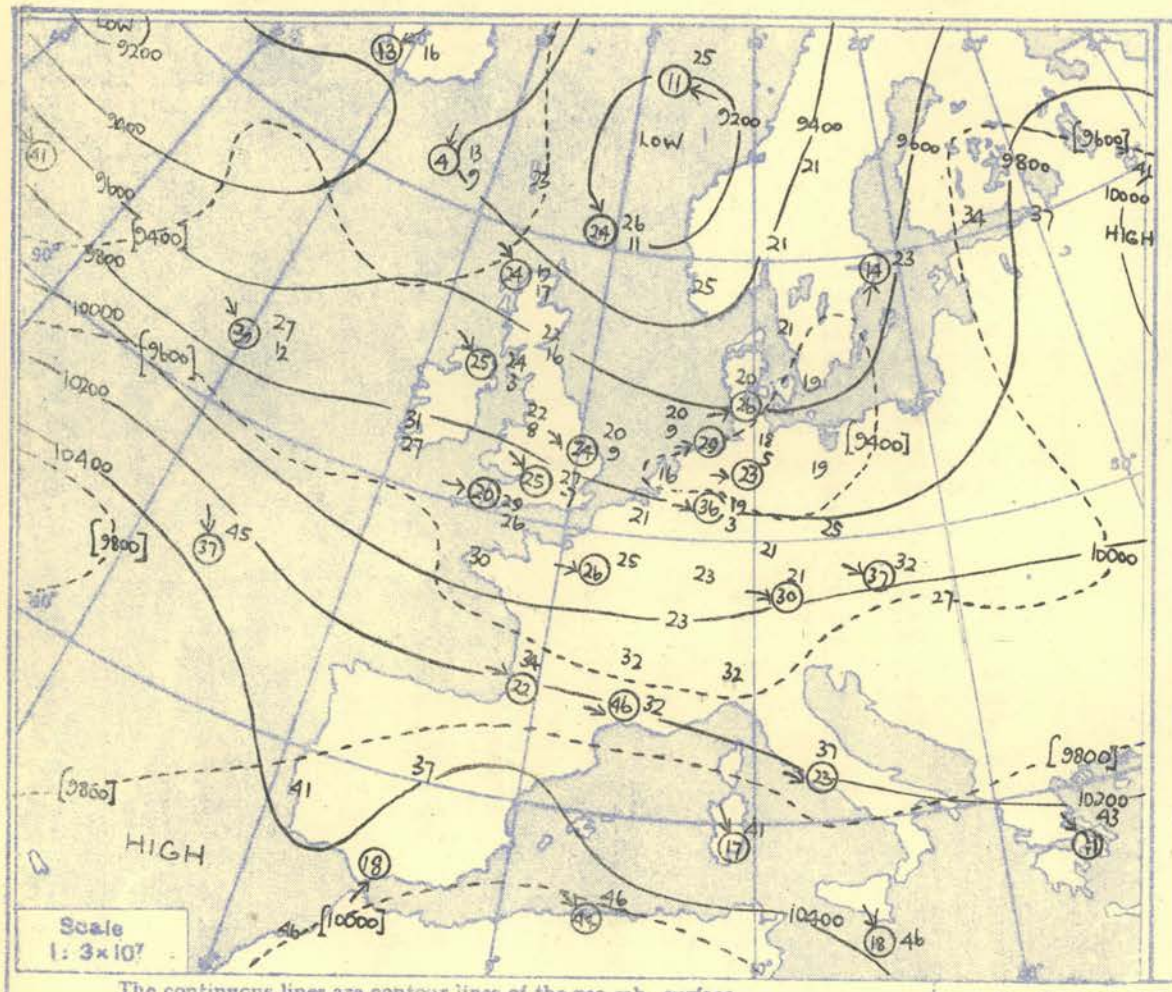
Inversion 792 mb 28° - 765 mb 29° ; 542 . 02° - 523 . 04°

Inversion 551 mb 6° - 529 mb 9° ; Isothermal 751 - 710 mb 29°

	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Tropopause	I 270 mb -54° 31,600'	I 275 mb -68° 31,000'		I 262 mb -61° 32,700'	I 265 mb -59° 32,500'	I 235 mb -62° 35,200'	I 236 mb -57° 35,300'	II 230 mb -54° 36,200'	

Tuesday 19th September: 1950.

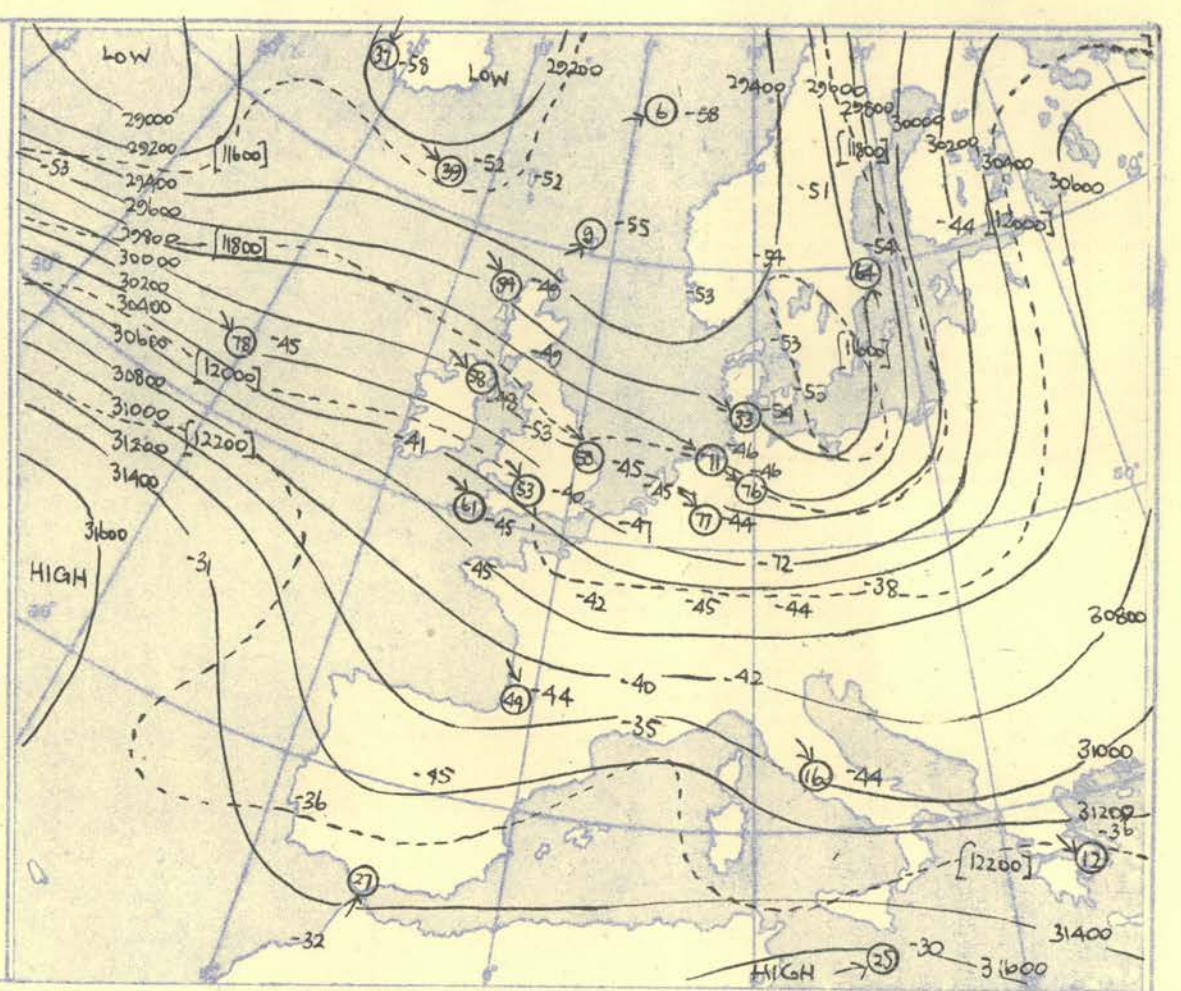
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. GMT.



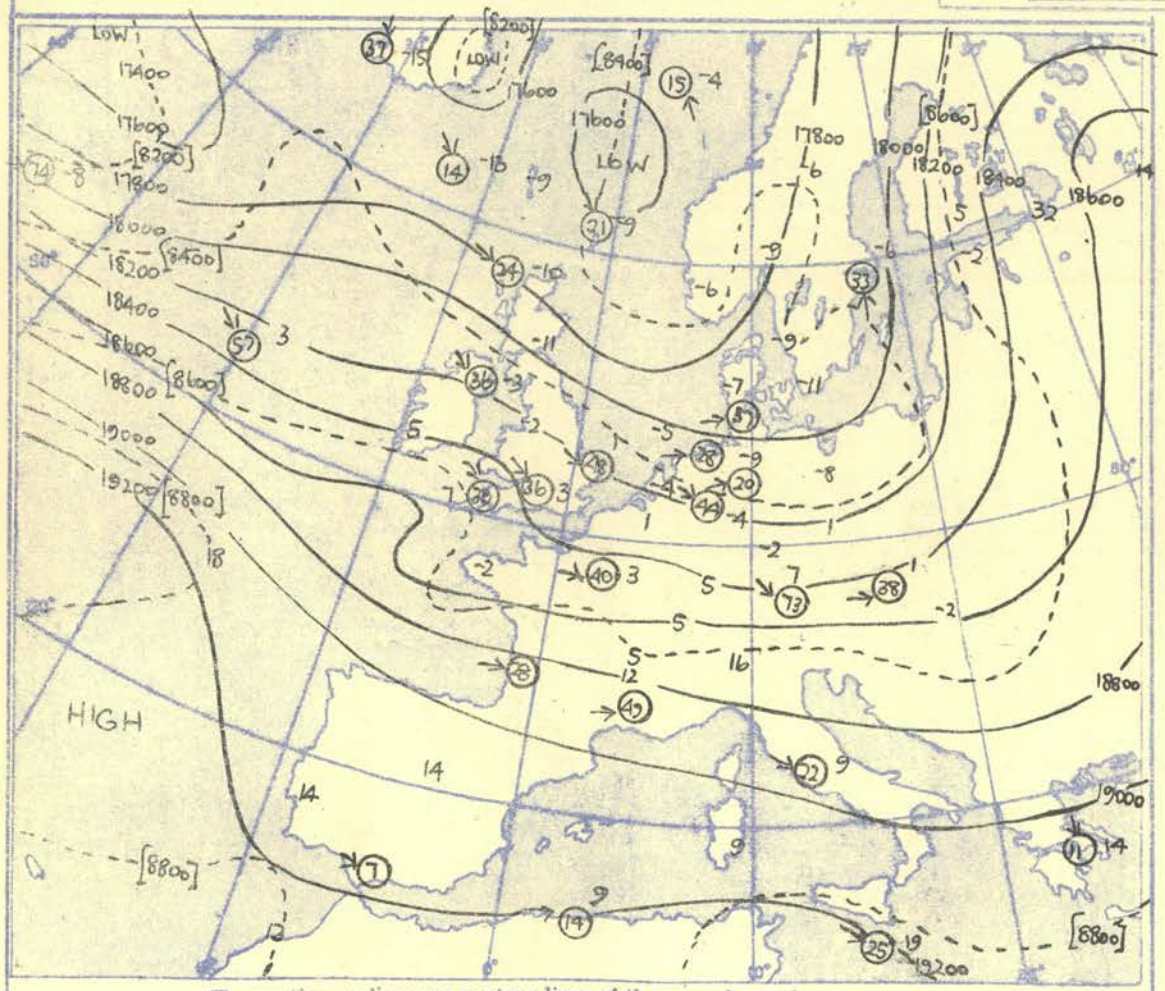
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

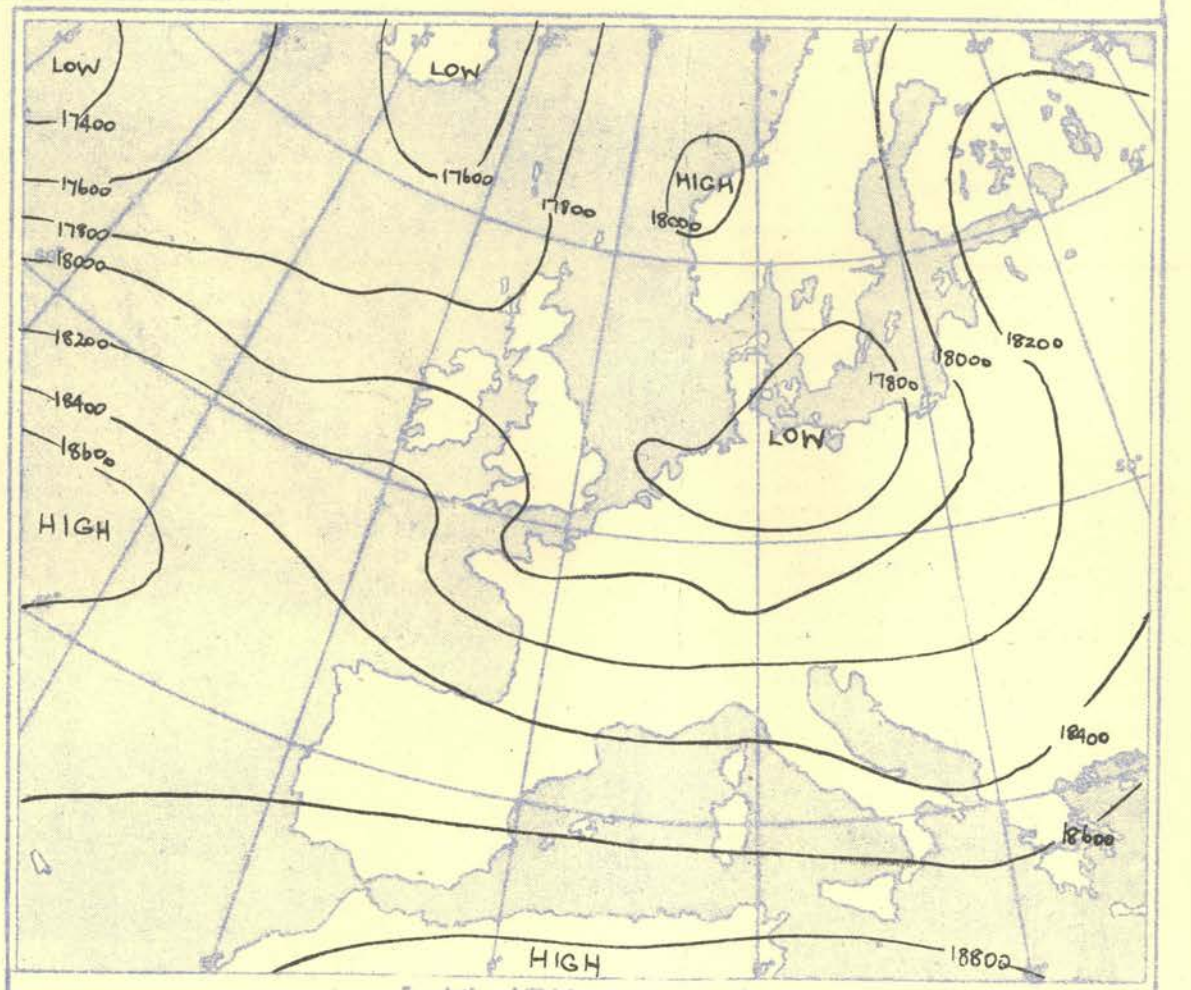
100 60 40 30 20 15 10 knots



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

Feet	Lympne Dir.	Lympne Vel.	W. OBSERVER 61·1N 14·0W Dir.	W. OBSERVER 61·1N 14·0W Vel.	Shoeburyness Dir.	Shoeburyness Vel.	Downham Dir.	Downham Vel.	Larkhill Dir.	Larkhill Vel.	Leuchars Dir.	Leuchars Vel.	Lerwick Dir.	Lerwick Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Place	Lympne		W. OBSERVER 61·1N 14·0W		Shoeburyness		Downham		Larkhill		Leuchars		Lerwick								Place
Time	09h.		09h.		09h.		09h.		15h.		21h.		21h.								Time
Type																					Type
Surf.	260	05	080	08	220	07	250	07			CALM		310	10							Surf.
1,000	270	13	070	12	260	14	270	15			234	21	280	21							1,000
2,000	260	15	080	12	270	16	270	15			238	16	280	18							2,000
3,000	270	17	090	14	270	18	260	15			246	14	280	12							3,000
4,000	260	18	090	13	270	21	260	15			246	17	280	17							4,000
5,000	260	20	090	15	280	26	270	17			246	24	270	15							5,000
6,000	280	20	L.V.		290	23	270	18			249	24	270	16							6,000
8,000	310	25	L.V.		290	25	270	10			249	18	270	15							8,000
10,000			L.V.		270	24	280	22			250	19	280	17							10,000
14,000			260	11	290	30	290	31			250	25	270	21							14,000
18,000			L.V.		280	28	300	35			229	33	270	29							18,000
24,000					280	35	280	37			301	35	280	35							24,000
30,000			270	43	270	51	280	48			262	36	260	24							30,000
40,000			230	24	280	51	290	45			268	26	250	14							40,000
50,000			270	15	280	33	280	32	278	37	259	23	240	13							50,000
55,000'							290	22	276	16	255 (53,000')	27	230	08							
60,000'							230	21	277 (64,000')	15			240	15							
70,000'							280	04					230	09							

NEPHOSCOPE OBSERVATIONS

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

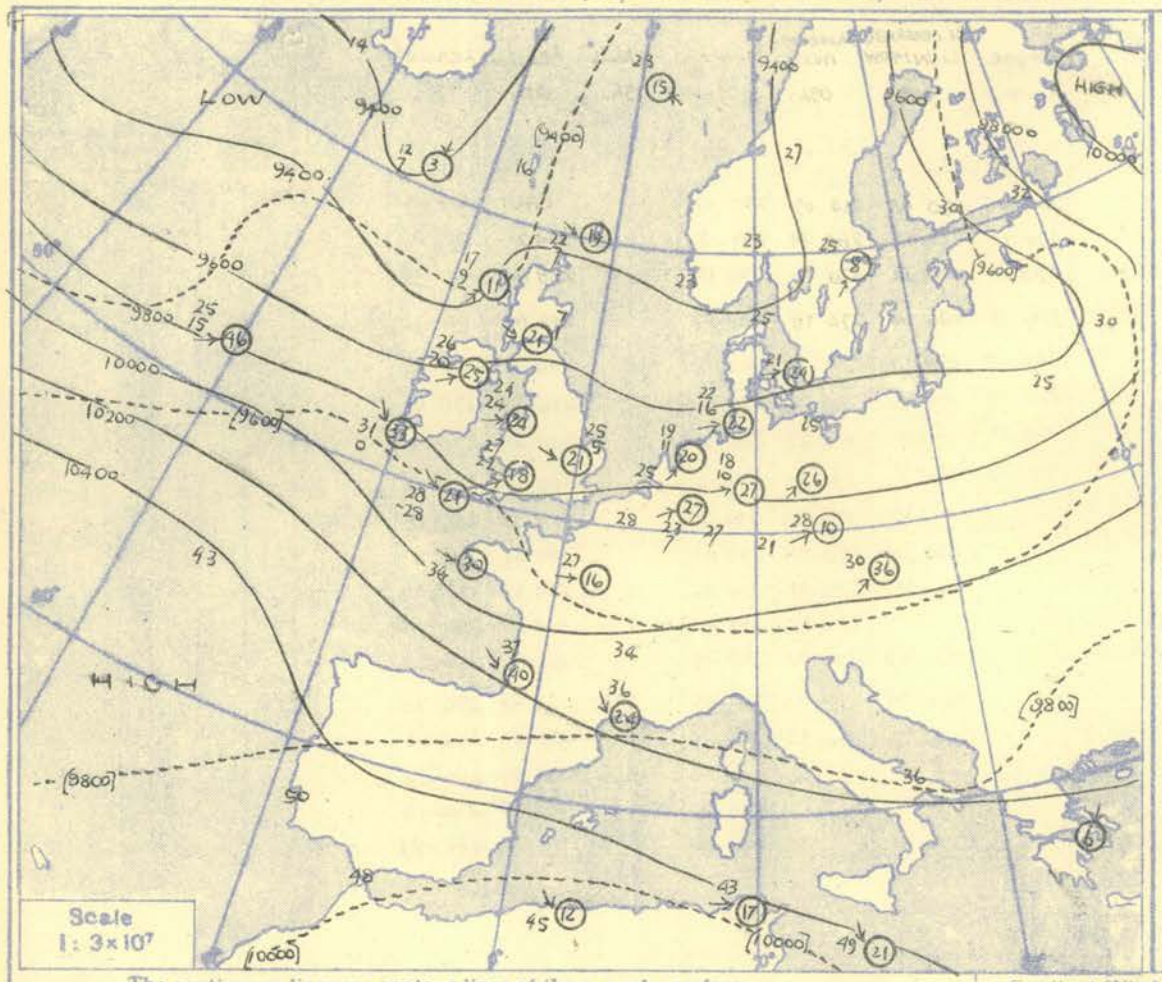
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	WEATHER OBSERVER.	WEATHER OBSERVER.	WEATHER OBSERVER.	WEATHER OBSERVER.	WEATHER WATCHER.	WEATHER WATCHER.	WEATHER WATCHER.	WEATHER WATCHER.		Ship
Lat/Long	61·0N 13·9W.	61·0N 14·0W	61·1N 13·9W.	61·0N 14·0W.	52·5N 20·0W.	52·5N 19·7W	52·5N 20·1W.	52·5N 20·0W		Lat/Long
Pressure Time	03Z G.M.T.	09Z G.M.T.	15h G.M.T.	21Z G.M.T.	03Z G.M.T.	09h G.M.T.	15h G.M.T.	21h G.M.T.	G.M.T.	Time
M.S.L.	1005 mb	1004 mb	1003 mb	1003 mb	1009 mb	1011 mb	1011 mb	1012 mb	mb	M.S.L.
Surf	1005 mb	1004 mb	1003 mb	1003 mb	1009 mb	1011 mb	1011 mb	1012 mb	mb	Surf
Freezing	880 mb	840 mb	895 mb	890 mb	770 mb	735 mb	800 mb	860 mb	mb	Freezing

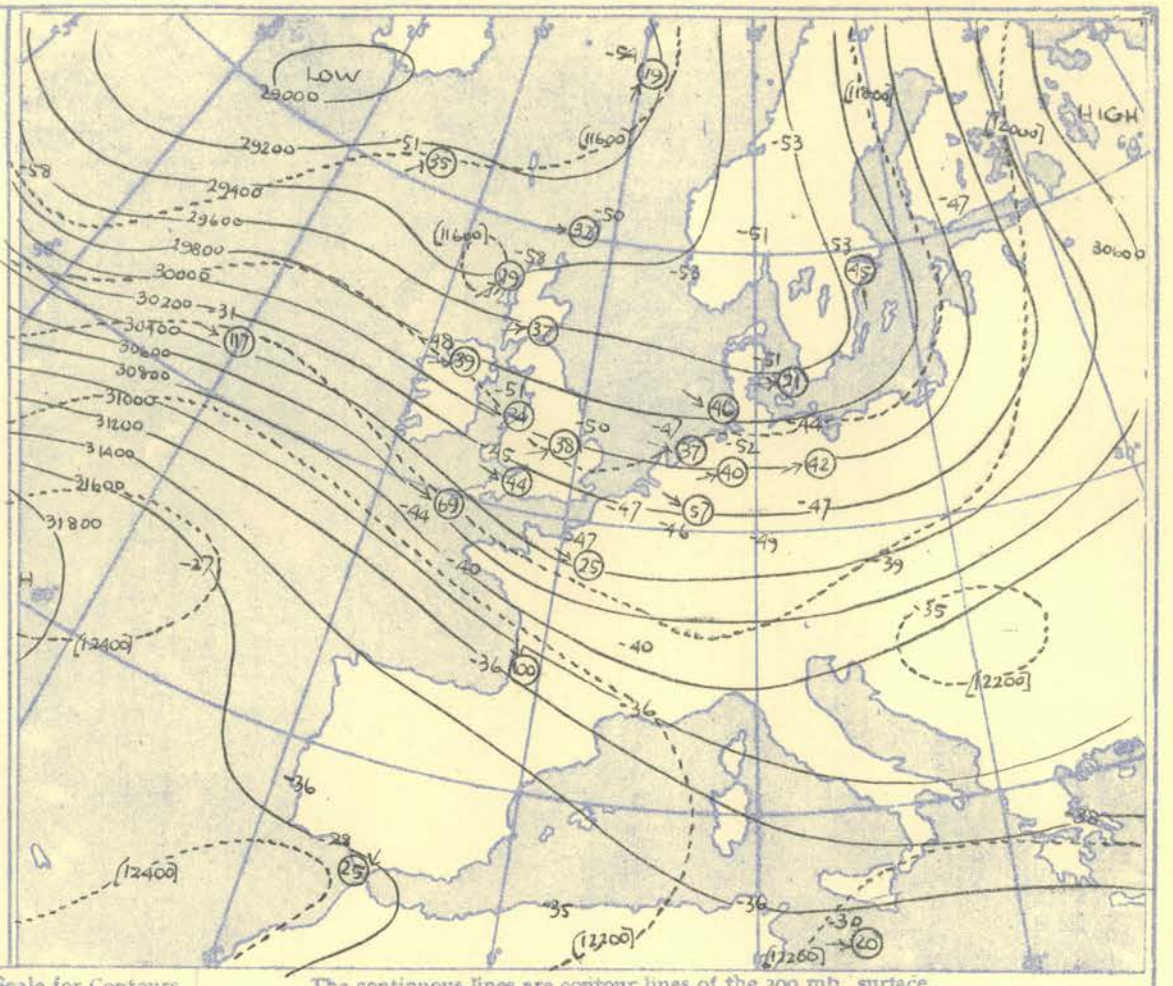
Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf		48	44	080	13		50	43	080	15		51	42	065	15		47	37	050	12		55	55	270	20		54	50	290	27		Surf
1000	1·2	47	43	039	12	0·9	43	37			0·9	50	42			0·8	46	36			2·3	54	54	271	30	2·9	52	49	290	27	3·1	1000
950		39	35	039	13		43	37				41	37	080	13		40	31	051	16		49	49	273	36		45	44	295	34		950
900	29·3	34	31	041	12	29·3	36	30			29·1	33	31	088	10	28·9	33	27	049	16	31·0	47	45	277	34	31·4	38	38	301	33	31·7	900
850		30	27	043	10		33	23				31	27	078	07		30	21	046	13		42	39	279	35		34	30	300	32		850
800	60·1	25	22	024	06	60·2	25	17	See		60·0	25	18	046	06	59·8	26	12	043	12	62·6	37	34	278	32	62·6	36	19	297	36	63·0	800
750		20	15	015	03		20	12	top			18	11	040	06		19	07	034	13		29	26	278	29		33	05	285	41		750
700	94·3	13	09	358	04	94·3	12	03			94·0	12	07	020	03	93·8	11	02	018	06	97·5	27	12	278	39	97·6	27	04	278	43	97·8	700
650		07	01	320	06		05	03	of			06	01	313	04		09	03	002	06		21	18	276	45		20	10	267	51		650
600	133	04	14	301	12	133	03	14	page		132	03	10	308	06	132	02	14	353	09	137	16	21	277	48	137	13	13	263	53	137	600
550		04	22	300	14		03	14				05	18	295	09		04	26	341	08		09	31	279	58		05	17	259	62		550
500	177	13	33	298	14	177	11	26	for		177	13	26	262	15	177	11	34	338	08	183	03	37	277	57	182	01	25	252	57	183	500
450		23	35	300	14		20	34				20	32	250	20		19	42	317	10		09	48	275	61		11	34	268	63		450
400	229	35	44	313	20	229	29	45	winds.		229	31	43	249	24	229	31	48	257	17	236	19	57	273	60	236	22	44	257	67	237	400
350		44		294	33		40	57				40	52	248	36		43		253	16		31	58	276	60		33	56	251	85		350
300	293	52		277	39	293	49				293	51		251	35	293	56				302	45		277	78	301	47		268	86	303	300
250		51		272	36		54					55		250	21		63					54		276	88		55		262	106		250
200	381	49		271	30	382	47				381	45		251	15		50				389	55		274	92	389	58		268	106	393	200
170		48		284	27		42					44		255	14		49					57		275	83		56		276	86		170
150		48		284	25		43					44		255	20		50					59		275	71		55		274	61		150
130		51		284	24		46					45		252	19		49					63		275	57		58		271	58		130
110		55		289	24		49					47		251	16		50										62		269	59		110
100		56		274	16		49				535	45				531	52										63		268	45	543	100
90		57		263	13	(109 mb)						48					55										61		268	35		90
80		58		268	13							47					55										60		268	32		80
70		58		270	12							46					54										59		268	29		70
60												47					55										59		268	24		60
												45				(54 mb)	55										58		268	18		
	Isothermal 667 - 618 mb 7°					Inversion 660 mb 04° - 635 mb 06° Isothermal. 888 - 860 mb 34°					(42 mb) Inversion 870 mb 29° - 850 mb 31° Isothermal. 481 - 470 mb - 16°					Isothermal. 875 - 835 mb 30° Inversion. 692 mb 10° - 670 mb 11°					Inversion. 724 mb 25° - 715 mb 29° Isothermal. 950 - 918 mb 49° 819 - 800 - 37° 615 - 600 - 16°					Inversion 861 mb 32° - 819 mb 37°					Isothermal. 730 - 683 mb 25°. Max Wind 236 mb. 265° 171 Kts.					Isothermal. 815 - 780 mb 25°. Inversion. 732 mb 20° - 711 mb 21°				
Tropopause	II 310 mb - 52° 28.500					I 283 mb - 54° 36.600					I 276 mb - 58° 31.100					I 256 mb - 65° 37.700					II 268 mb - 53° 32.600					II 279 mb - 53° 31.700					I 225 mb - 54° 36.800					I 285 mb - 52° 30.800					Tropopause

Tuesday 19th September 1950.

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

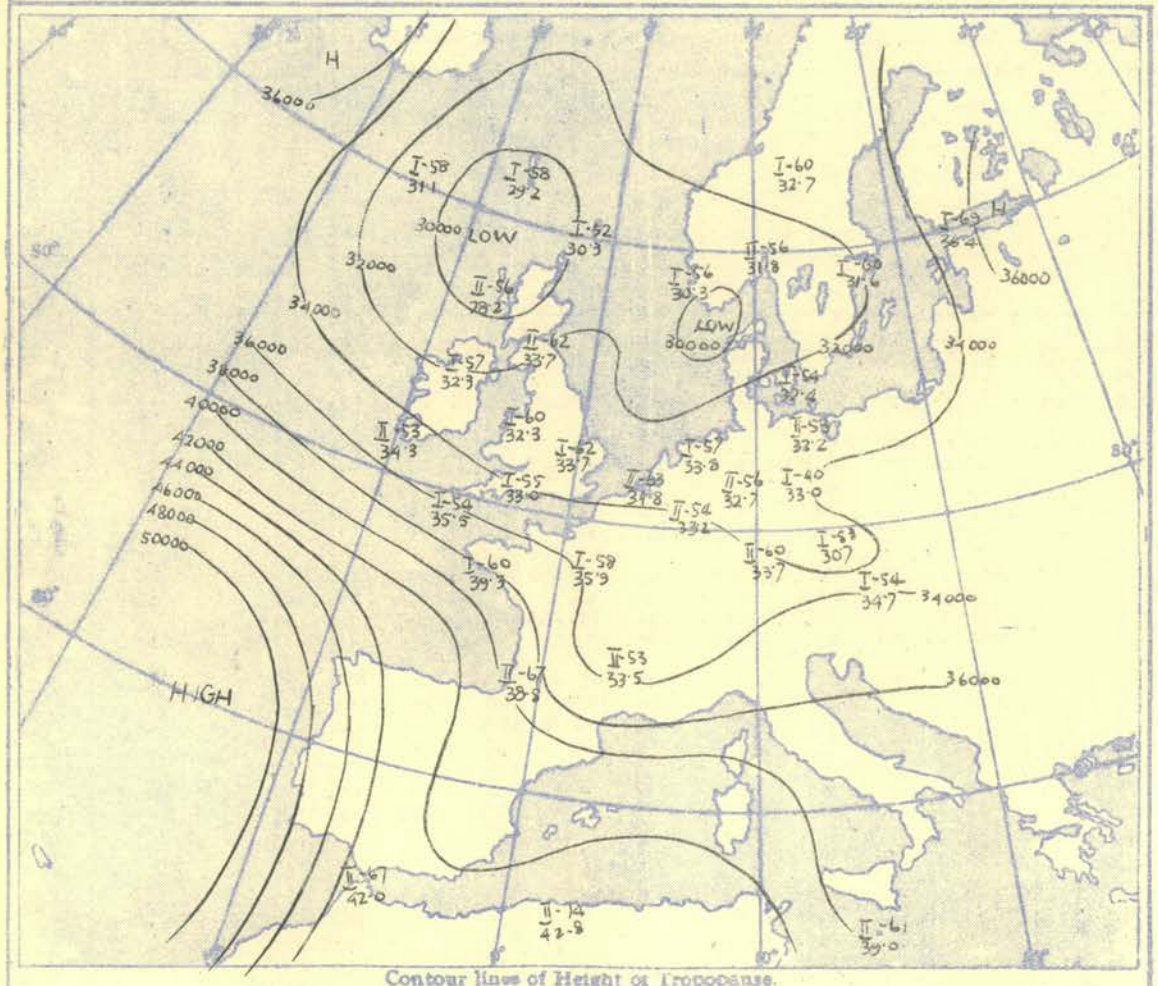


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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 15 h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

A cold cut-off pool from the Labrador source travelled east and warmed slightly.

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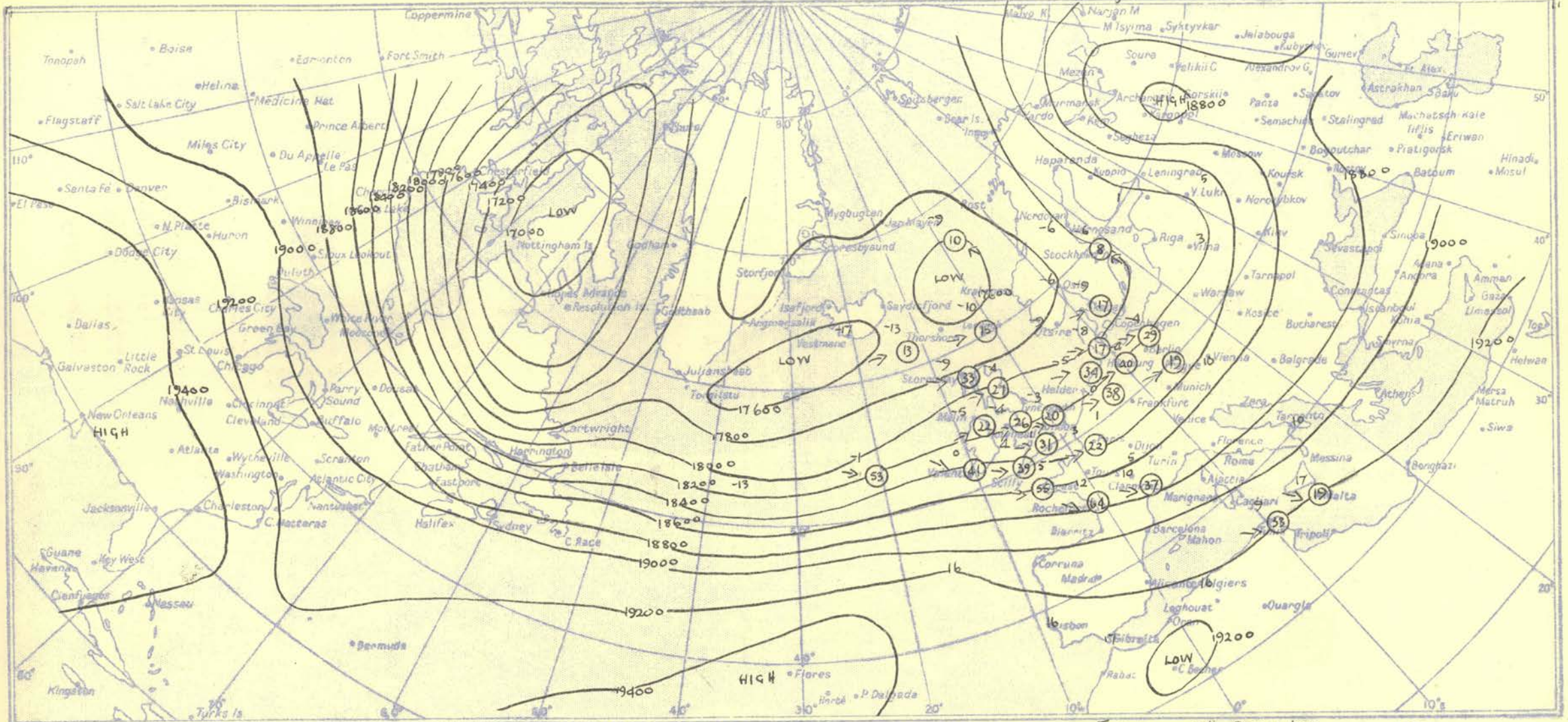
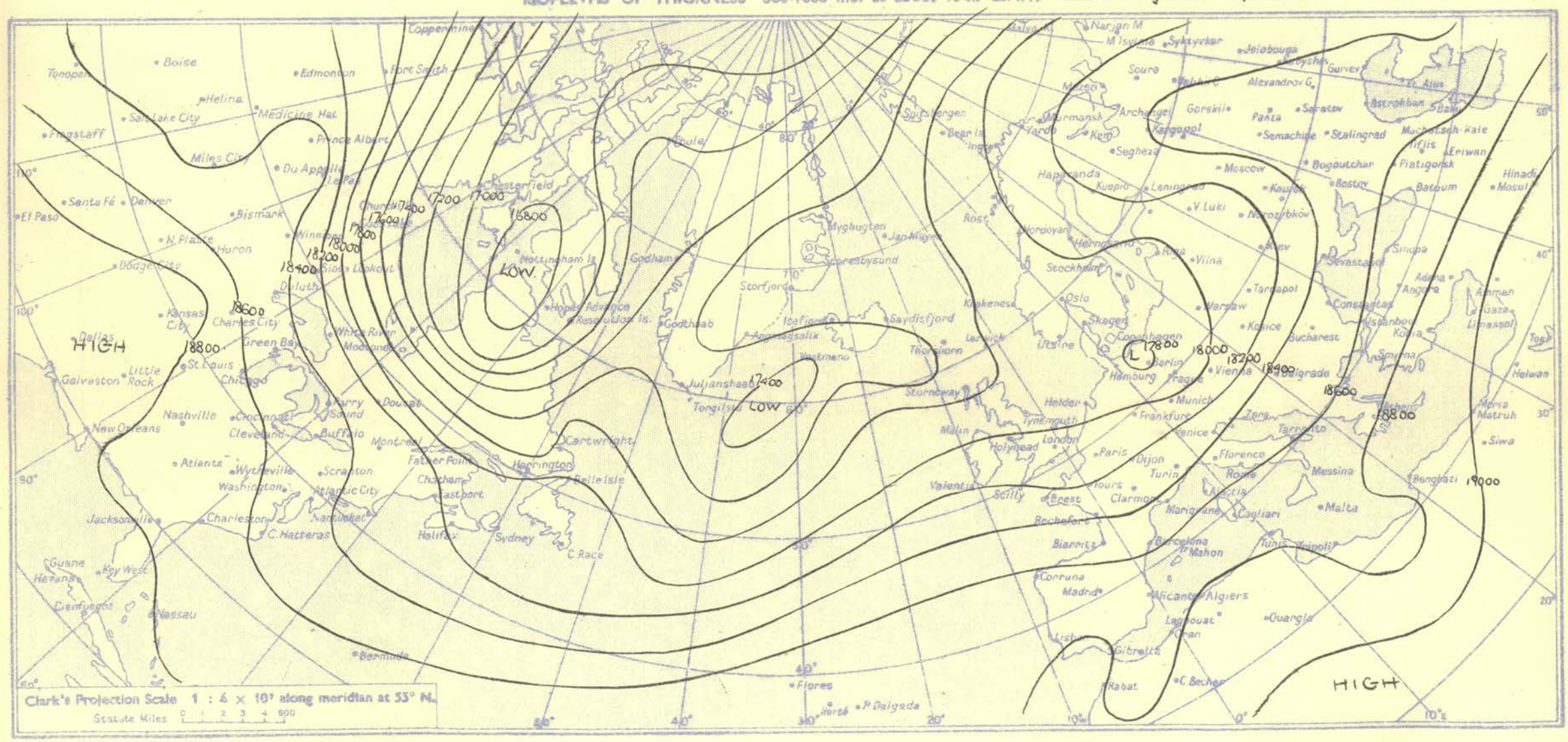
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Tuesday 19th September 1950.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Tuesday 19th September. 1950.



...Tuesday 19... September 1950.

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.	997·8 mb	1002·5 mb	1003·6 mb	1005·3 mb	1007·7 mb	1008·9 mb	1008·7 mb	1008·1 mb	1009·5 mb
Pressure: Surf	987·9 mb	1000·6 mb	1002·5 mb	996·7 mb	1005·7 mb	1004·6 mb	993·1 mb	997·7 mb	1008 mb
Pressure: Freezing	810 mb	823 mb	811 mb	746 mb	775 mb	739 mb	762 mb	703 mb	750 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
Surf	02·7	52	47	310	14	00·5	53	48	350	06	00·2	60	50	280	09
1000	-00·7					00·6	53	49	Calm		00·9	60	48		
960		47	42	291	21		43	42	"			54	39	253	18
900	27·9	40	36	297	21	29·1	38	37	"		29·8	45	34	265	14
850		36	31	297	21		33	32	"			37	28	262	12
800	69·1	31	25	299	21	60·2	30	29	286	06	61·0	31	20	249	09
750		26	16	299	19		25	21	260	10		27	11	262	12
700	93·7	22	07	290	19	94·6	17	09	232	11	95·7	22	01	270	21
650		17	-05	275	19		12	-03	255	18		17	04	277	27
600	133	08	-09	268	19	133	09	01	266	29	135	12	04	278	27
550		00	-15	273	17		02	-07	277	29		05	-04	279	28
500	177	-10	-20	268	16	178	-09	-19	276	33	180	04	-14	295	27
450		-20	-31	261	17		-20	-30	278	35		-15	-23	281	40
400	230	-31	-42	277	18	231	-31	-40	278	38	233	-28	-37	271	33
350		-43		261	19		-44		268	34		-42		270	39
300	294	-50		269	32	294	-58		248	29	297	-53		266	37
250		-47		271	28		-54		260	27		-62		274	39
200	383	-43		265	29	382	-50		270	24	385	-51		272	37
170		-46		265	28		-50		261	29		-49		270	35
150		-48		267	19		-51		275	18		-50		273	34
130		-46		263	16		-54		268	25		-50		274	24
110		-49		247	15		-52		267	14		-56		275	21
100	536	-48		237	17	533	-52		261	15	536	-58		280	19
90		-47		247	16		-52		256	20		-56		270	21
80		-46		238	17		-50					-55		256	18
70		-46		249	14							-55		265	12
60		-48										-56			

Inversion 646 mb 11° - 631 mb 12°
Isothermal 831 - 823 mb 32°

Pressure mb	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
Surf	02·3	52	50	220	15	00·6	53	49	170	05	01·2	63	44	235	05
1000	01·4					02·1	52	48			02·5				
960		49	47	225	19		46	44	231	10		53	36	253	15
900	30·1	46	43	236	24	30·7	42	42	265	20	31·4	45	29	252	15
850		42	39	251	27		38	37	262	19		37	22	273	14
800	61·7	38	35	256	28	62·0	33	32	261	19	62·8	34	04	281	17
750		33	29	260	27		30	39	268	20		31	-05	284	17
700	96·8	26	20	259	26	96·9	24	24	268	24	97·7	25	05	281	21
650		20	13	258	22		19	18	266	26		22	09	274	26
600	136	12	03	255	19	136	12	10	269	25	137	14	01	265	23
550		04	-08	248	17		04	02	268	24		05	-09	270	28
500	181	-05	-19	250	22	181	-04	-06	259	26	182	-03	-17	281	20
450		-14	-31	250	20		-15	-18	254	28		-14	-26	267	25
400	234	-26	-47	262	32	234	-26	-30	237	22	235	-26	-38	275	27
350		-36	-59	270	39		-37	-46	265	34		-39	-50	261	32
300	299	-48		273	39	299	-51		281	24	300	-50		271	38
250		-56		272	39		-58		273	39		-60		271	43
200	387	-47		275	43	386	-50		283	39	287	-51		282	46
170		-48		268	39		-52		278	42		-50		280	37
150		-49		267	34		-51		275	37		-54		280	37
130		-52		271	33		-54		268	42		-59		272	37
110		-54		277	27		-57		266	30		-62		279	26
100	538	-55		278	25	536	-57		272	20	537	-58		288	22
90		-57		277	21		-58		289	14		-63		274	22
80		-56		279	13		-59					-58		265	22
70		-53										-56		277	18
60															

Isothermal 808 - 784 mb 33°
668 - 645 " 19°

Inversion 756 mb 30° - 739 mb 32°
Isothermal 834 - 800 mb 34°

Pressure mb	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
Surf	04·4	57	51	180	08	02·9	57	55	045	05	00·3	58	56	260	10
1000	02·5					02·3					2·6	57	55	262	11
950		50	45	151	09		52	49	005	06		52	50	278	19
900	31·3	45	39	165	08	31·1	48	44	335	07	31·5	47	45	278	25
850		41	36	187	10		45	41	323	12		42	40	278	27
800	62·9	36	31	213	11	63·0	41	36	303	14	63·2	37	32	275	26
750		31	26	239	12		36	31	288	18		32	26	274	28
700	98·0	27	22	261	18	98·4	31	19	287	21	98·4	31	00	283	33
650		23	16	265	26		25	-24	287	26		25	-15	286	37
600	138	17	07	251	29	138	17	-36	278	31	138	17	-11	286	38
550		09	00	258	33		12	-46	285	36		06	-21	283	41
500	183	01	-13	261	31	184	04	-52	288	39	184	00	-29	280	41
450		-12	-27	265	32		-07	-50	289	40		-11	-39	280	51
400	390	-20	-49	272	36	238	-19	-59	290	41	237	-21	-48	279	58
350		-33	-60	278	44		-32	-59	292	58		-32	-57	285	73
300	302	-45		278	44	303	-44		291	69	302	-48		282	101
250		-54		285	49		-51		290	81		-53		289	102
200	390	-50		283	54	(205 mb)	-55				390	-56			
170		-60		277	49							-56			
150		-53		282	49							-57			
130		-57		281	45							-59			
110				293	26							-63			
100				For Rest							538	-59			
90				of Winds								-60			
80				See Page 3.											
70															
60															

Inversion 285 mb 48° - 270 mb 47°
Isothermal 750 - 725 mb 36°

Inversion 736 mb 30° - 714 mb 38°

Tropopause	III 339 mb -45° 30,300'	II 318 mb -56° 28,200'	I 245 mb -62° 33,700'	I 267 mb -57° 32,300'	I 268 mb -60° 32,300'	I 254 mb -62° 33,700'	II 263 mb -55° 33,000'	I 235 mb -54° 35,500'	II 250 mb -53° 34,300'	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.	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.	998·4 mb	1000·1 mb	mb	1013·9 mb	1003·3 mb	1007·9 mb	1007·8 mb	1010·9 mb	mb
Pressure: Surf	988·4 mb	998·2 mb	mb	995·3 mb	1005·3 mb	1003·6 mb	992·1 mb	1000·4 mb	mb
Pressure: Freezing	820 mb	842 mb	mb	755 mb	780 mb	781 mb	760 mb	750, 700, 690 mb	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
Surf	02·7	46	44	320	15	00·5	51	47							
1000	-00·5					00·0									
950		44	43	289	24		45	42							
900	27·9	40	38	278	23	28·5	40	38							
850		35	31	286	16		33	29							
800	59·1	30	21	286	15	59·6	26	22							
750		24	13	279	12		24	20							
700	93·5	18	06	279	18	94·0	22	19							
650		13	-08	278	15		15	13							
600	132	04	-10	265	13	133	09	06							
550		-05	-15	254	17		01	-03							
500	177	-12	-32	273	24	178	-08	-14							
450		-21	-42	278	27		-18	-24							
400	229	-31	-53	279	31	230	-30	-36							
350		-43		278	35		-44								
300	293	-59		270	34	294	-54								
250		-62		262	21		-59								
200	980	-51		263	17	382	-48								
170		-51		268	18		-49								
150	(160	-51					-49								
130	mb)						-50								
110							-55								
100						533	-55								
90															
80															
70															
60															

Inversion 706 mb 17° - 696 mb 19°

Isothermal 800 - 770 mb 26°
717 - 694 " 22°

Pressure mb	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
Surf	02·3	52	48	270	10	00·6	54	51	Calm		00·4	54	53	260	03
1000	01·0					01·5	53	50			02·2	54	52		
950		47	43	266	22		50	46	252	17		50	47	250	13
900	29·6	42	35	264	26	30·2	45	43	262	21	30·9	44	42	246	15
850		36	32	259	26		39	36	270	22		39	37	261	15
800	60·9	33	16	258	27	61·7	35	33	272	21	62·3	33	33	249	14
750		31	-32	264	31		27	24	270	20		29	29	254	16
700	95·8	25	-37	264	29	96·6	23	19	270	19	97·2	24	24	260	19
650		18	-12	260	32		15	10	274	22		18	18	261	21
600	135	07	-10	248	32	136	07	02	275	22	136	11	10	263	18
550		02	-54	252	35		02	-06	278	20		04	01	254	16
500	180	-04	-58	259	36	180	-07	-15	284	28	182	-06	-10	256	19
450		-17	-57	260	39		-15	-26	288	36		-16	-23	265	30
400	232	-31	-58	258	43	233	-27	-38	285	36	234	-28	-40	274	31
350		-43		258	47		-40	-52	283	37		-41		272	32
300	296	-57		258	49	298	-53		279	33	298	-54		276	37
250		-57		270	45		-61		271	40		-55		255	45
200	384	-50		271	32	385	-57		285	46	386	-51		283	44
170		-56		272	39		-53		286	43		-50		282	27
150		-60		269	42		-56		276	43		-56		275	35
130		-52		262	42		-56		281	36		-60			
110		-55		262	29		-60		267	25					
100						534	-62		276	25					
90	533	-58					-63		287	25					
80		-62					-63								
70															
60															

Inversion 812 mb 32° - 783 mb 35°
700 " 25° - 688 " 26°
Isothermal 597 - 568 mb 06°

Isothermal 800 - 789 mb 33°

Pressure mb	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
Surf	4·4	53	53	Calm		02·9	64	52	293	10					
1000	2·3					02·9	54	52							
950		50	50	264	09		49	47	280	21					
900	31·0	46	46	280	10	31·6	44	42	294	20					
850		42	41	277	13		41	39	296	20					
800	62·6	37	35	269	14	63·1	37	33	291	22					
750		32	28	267	17		32	27	290	26					
700	97·6	25	22	278	21	98·3	32	10	292	32					
650		18	15	277	22		26	-13	293	33					
600	136	11	10	263	18	138	17	-19	291	39					
550		04	01	254	16		08	-11	292	43					
500	182	-06	-10	256	19	184	02	-26	289	49					
450		-16	-23	265	30		-06	-39	286	54					
400	234	-28	-40	274	31	238	-16	-50	283	61					
350		-41		272	32		-27	-56	294	85					
300	298	-54		276	37	304	-36	-59	294	120					
250		-55		255	45		-50		294	137					
200	386	-51		283	44	393	-65		303	115					
170		-50		282	27		-62								
150		-56		275	35		-62								
130		-60					-63								
110							-65								
100						539	-65								
90							-67								
80							-67								
70							-64								
60							-67								

Inversion 580 mb 06° - 557 mb 07°

Inversion 725 mb 30° - 696 mb 33°
Isothermal 500 - 490 mb 02°

Tropopause	III 300 mb -59° 32,600'	II 272 mb -60° 31,500'		I 285 mb -61° 30,600'	I 260 mb -62° 32,800'	I 286 mb -56° 30,800'	I 290 mb -55° 30,700'	I 191 mb -67° 40,300'		Tropopause

No 11497 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Wednesday 20th September 1950. Sheet 1.

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

METEOROLOGICAL OFFICE 22 SEP 1950 LIBRARY

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.	998·1 mb	996·1 mb	998·1 mb	1001·9 mb	1004·1 mb	1006·1 mb	1007·5 mb	1010·7 mb	1008·8 mb
Pressure: Surf	988·1 mb	994·2 mb	997·3 mb	993·4 mb	1002·1 mb	1001·6 mb	991·5 mb	1009·2 mb	1007 mb
Pressure: Freezing	820 mb	800 mb	816 mb	821 mb	831 mb	769 mb	773 mb	740 & 820 mb	810 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	00·6	46	44	300	04	00·5	50	46	045	15	00·2	47	47		
1000						-1·1					-0·5				
950		44	42	265	12		45	42	070	18		46	46		
900	2·8	37	35	262	11	2·4	40	38	092	12	2·8·0	42	41		
850		34	32	264	12		37	36	137	09		36	35		
800	58·9	30	25	265	11	58·6	32	31	197	07	59·2	31	30		
750		25	18	263	09		26	23	208	13		26	18		
700	93·5	20	12	257	11	93·4	23	04	208	16	93·8	21	02		
650		14	04	238	15		16	05	208	18		15	00		
600	132	06	-05	245	17	133	08	-13	218	12	133	05	-06		
550		-02	-14	275	21		00	-20	203	09		-01	-20		
500	177	-07	-25	272	27	177	-09	-26	166	08	177	-09	-29		
450		-17	-29	274	30		-19	-30	183	12		-19	-39		
400	230	-29	-36	270	32	229	-30	-45	204	12	229	-31	-50		
350		-43		263	30		-43		199	15		-45			
300	293	-59		257	26	293	-55		193	12	293	-56			
250		-59		242	20		-52		235	15		-59			
200	380	-49		238	14	381	-47		240	19					
170		-49		237	14		-47		247	19					
150		-49		247	13		-47		238	19					
130		-51		247	09		-49		249	20					
110		-53		247	13		-54		256	17					
100	532	-53		243	12	533	-55		245	14					
90		-55		229	11		-62		236	10					
80		-55		226	13		-51		247	10					
70		-55		238	14		-51								
60		-55													

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	02·3	49	45	240	15	00·6	52	47			01·2	53	52	215	05	04·4	49	49	CALM		02·9	53	49	290	12	00·3	52	43	260	13
1000	0·8					1·1	52	46			1·6	53	52			2·0					2·9					2·4	51	42	262	14
950		48	40	254	22		46	40				49	48	251	17		49	47	271	18		49	43	286	25		46	38	275	27
900	29·3	40	34	258	22	29·7	41	37			30·3	45	43	254	17	30·7	44	41	275	20	31·6	41	37	283	27	30·9	40	32	278	32
850		35	31	262	25		34	31				41	37	259	19		42	37	274	21		34	31	277	30		35	23	279	36
800	60·5	29	27	268	31	60·8	29	28			61·9	36	31	265	19	62·2	36	32	268	21	62·9	37	06	279	30	62·0	31	15		
750		23	19	270	32		27	14				30	26	267	19		29	21	262	21		33	-18	271	30		23	08		
700	94·9	21	14	268	33	95·5	23	-06			96·8	25	21	266	21	97·1	28	16	264	20	98·0	28	-22	266	33	96·4	22	-08		
650		15	-08	266	37		15	-17				17	07	269	22		21	-18	268	27		20	-15	269	42		17			
600	184	10	-26	267	37	185	07	-24			136	13	01	274	23	137	12	-10	269	35	137	14	-22	270	47	136	11			
550		02	-31	264	34		02	-30				06	-17	277	23		04	-15	271	42		05	-33	270	48		04			
500	179	-08	-38	257	36	179	-09	-39			181	-01	-33	277	29	182	-02	-25	273	43	183	-04	-42	271	44	181	-06			
450		-19	-48	255	39		-21	-50				-12	-46	271	33		-14	-35	277	45		-13	-31	267	62		-15			
400	231	-31	-58	254	49	232	-31	-57			234	-23	-50	269	35	235	-24	-44	276	59	236	-21	-28	272	76	234	-24			
350		-44		253	47		-46					-36	-57	274	37		-36	-53	274	73		-30	-42	270	109		-35			
300	295	-57		260	49	295	-60				299	-50		273	43	300	-46		278	101	302	-44		269	114	299	-43			
250		-54		265	52		-54					-52		281	39		-58		282	105		-57		277	125		-49			
200	383	-48		268	47	382	-55				387	-53		281	54	387	-61		277	74	388	-71				387	-52			
170		-52		270	31		-56					-50		274	43		-60		277	57		-66								
150		-56		258	36		-54					-53		273	39		-59		280	55		-67								
130		-57		256	34		-59					-52		269	36		-62		282	50		-68								
110		-54		260	31		-63					-59		272	36		-65		273	46		-73								
100	533	-53		264	21	531	-61				538	-58		273	33	534	-67		265	35	533	-74								
90		-53		266	17		-63										-68		274	23		-74								
80		-61		270	18		-68										-65		287	12		-73								
70		-62		272	13												-65		292	13		-72								
60		-60		270	13											(65 mb)	-64													
		-59																												

	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
	Isothermal 988 - 968 mb 46°	Isothermal 900 - 883 mb 40°; 742 - 716 " 25°	Inversion 997 mb 47° - 974 mb 48°	Inversion 712 mb 19° - 692 mb 22°	Inversion 806 mb 29° - 791 mb 30°	Inversion 611 mb 11° - 595 mb 13°; Isothermal 665 - 550 mb 06°	Inversion 730 mb 26° - 700 mb 28°; Isothermal 991 - 937 mb 49°	Inversion 1000 mb 53° - 990 mb 54°; 822 - 31° - 800 - 37	Isothermal 741 - 700 mb 22°
Tropopause	III 300 mb - 59° 29,300'	I 281 mb - 60° 30,800'	I 265 mb - 62° 32,000'	I 284 mb - 61° 37,000'	I 281 mb - 61° 30,800'	I 280 mb - 56° 32,000'	I 215 mb - 64° 37,200'	I 194 mb - 72° 39,500'	I 265 mb - 50° 32,500

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.	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.	996·6 mb	993·5 mb	mb	999·6 mb	1002·4 mb	1004·8 mb	1008·5 mb	1010·3 mb	mb
Pressure: Surf	986·8 mb	991·6 mb	mb	991·0 mb	1000·4 mb	1000·3 mb	991·1 mb	999·7 mb	mb
Pressure: Freezing	813 mb	821 mb	mb	807 mb	838 mb	790 mb	792 mb	805 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	47	CALM		00·5	50	49							
1000	-0·9					-1·5									
950		46	41	226	04		46	45							
900	27·5	37	34	225	05	26·7	41	41							
850		34	30	222	04		36	36							
800	58·5	30	22	221	05	58·0	31	30							
750		24	14	228	05		26	25							
700	92·9	19	06	245	06	92·6	20	18							
650		13	00	236	06		14	09							
600	132	08	-10	244	08	131	06	01							
550		01	-05	244	11		-03	-09							
500	177	-08	-13	238	12	176	-11	-22							
450		-18	-23	231	11		-23	-36							
400	229	-30	-35	228	10	228	-35	-50							
350		-44		226	09		-44								
300	293	-59		230	11	291	-57								
250		-61		224	12		-53								
200	380	-48		214	11	379	-47								
170		-48		210	07		-47								
150		-48		208	08		-48								
130		-48		215	10		-48								
110		-52		200	10		-48								
100	531	-54		206	11	532	-50								
90		-54		227	08										
80		-54													
70															
60															

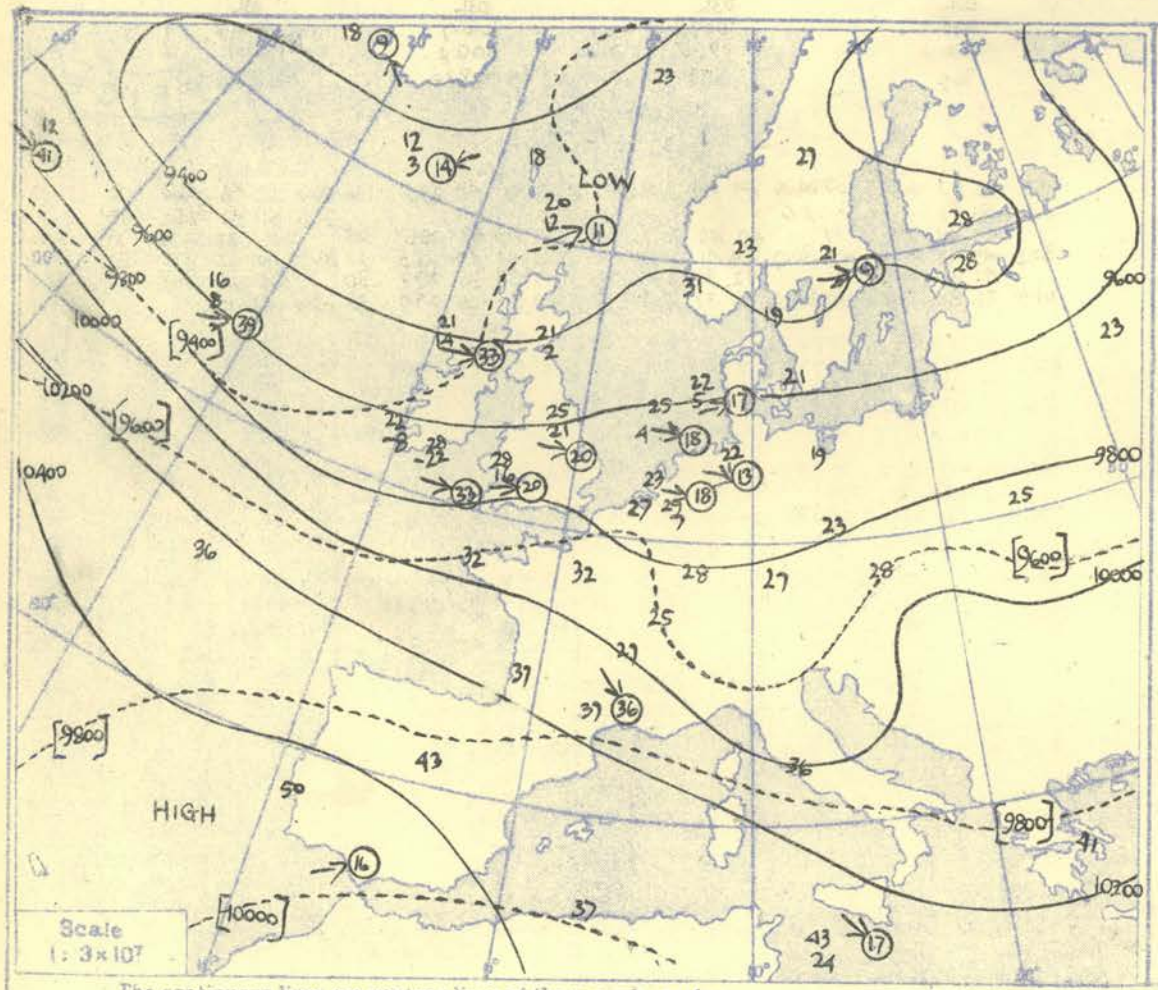
Pressure mb	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	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	02·3	50	43			00·6	53	47	250	12	01·2	53	52	250	07	04·4	52	48	280	09	02·9	50	47	293	10					
1000	-0·2					0·7	53	47			1·3	53	52			1·9					2·8									
950		44	40				45	42	268	24		46	44	268	18		48	38	281	23		48	41	278	33					
900	28·3	39	36			29·2	40	33	281	29	29·8	39	36	268	18	30·5	43	29	285	22	31·3	41	37	281	32					
850		36	32				33	29	281	29		35	31	256	27		37	26	288	22		35	31	281	31					
800	59·4	32	26			60·3	28	23	272	36	61·0	33	25	237	31	61·8	33	23	286	24	62·5	31	21	279	33					
750		26	17	For			22	09	276	35		27	23	229	30		26	17	272	25		25	22	274	29					
700	94·0	19	08	winds		94·5	16	03	272	36	95·8	21	13	236	26	96·6	26	-09	266	30	97·2	22	14	270	30					
650		14	-15				13	-10	257	34		15	-10	248	27		20	-19	265	33		16	18	264	36					
600	133	09	-29	see		133	05	-23	258	33	135	09	-22	258	33	136	12	-23	262	35	136	10	-24	260	40					
550		-01	-27				-04	-29	257	37		02	-28	260	36		06	-24	266	37		03	-19	257	44					
500	178	-11	-30	page		178	-14	-38	258	38	180	-04	-31	258	38	181	-04	-26	255	38	181	-08	-23	258	55					
450		-21	-39				-23	-43	248	36		-16	-36	256	36		-13	-37	252	39		-18	-38	257	63					
400	230	-32	-51	3		200	-32	-49	247	36	233	-29	-47	253	35	234	-24	-47	257	51	234	-28	-51	260	81					
350		-44					-44		246	39		-39	-56	258	45		-31	-57	258	72		-37	-60	257	89					
300	293	-55				293	-55		242	44	297	-49		262	65	300	-43		261	84	299	-44		262	120					
250		-49					-49		252	54		-49		261	20		-51		259	102		-50		260	108					
200	382	-49				381	-49		258	44	385	-52		266	57	388	-53		263	80	387	-52		265	77					
170		-49					-51		257	39		-57		270	44		-52		263	63		-53								
150		-47					-53		265	36		-53		265	37		-54		263	54		-60								
130							-53		261	30		-55		265	30		-54		272	44		-56								
110							-54		263	22		-55		264	27		-56		270	40		-59								
100						532	-53		273	16	535	-56				539	-56		262	35	536	-60								
90							-57		273	15							-58		254	26		-61								
80						(85 mb)	-58										-59		254	21		-62								
70																	-58		265	17		-60								
60																	-58					-61								
																						-62								

	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
	Isothermal 981 - 825 mb 34°					Isothermal 823 - 312 mb - 46°	Inversion 746 mb 25° - 733 mb 30°	Isothermal 720 - 700 mb 22°; 606 - 581 " 10°	
Tropopause	III 305 mb - 58° 31,700'	III 288 mb - 60° 30,100'		I 295 mb - 57° 29,700'	II 294 mb - 56° 29,700'	I 265 mb - 55° 32,500'	I 241 mb - 54° 34,800'	II 239 mb - 52° 34,800'	

For winds see page 3

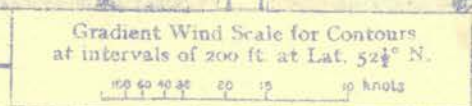
Wednesday 20th September 1950.

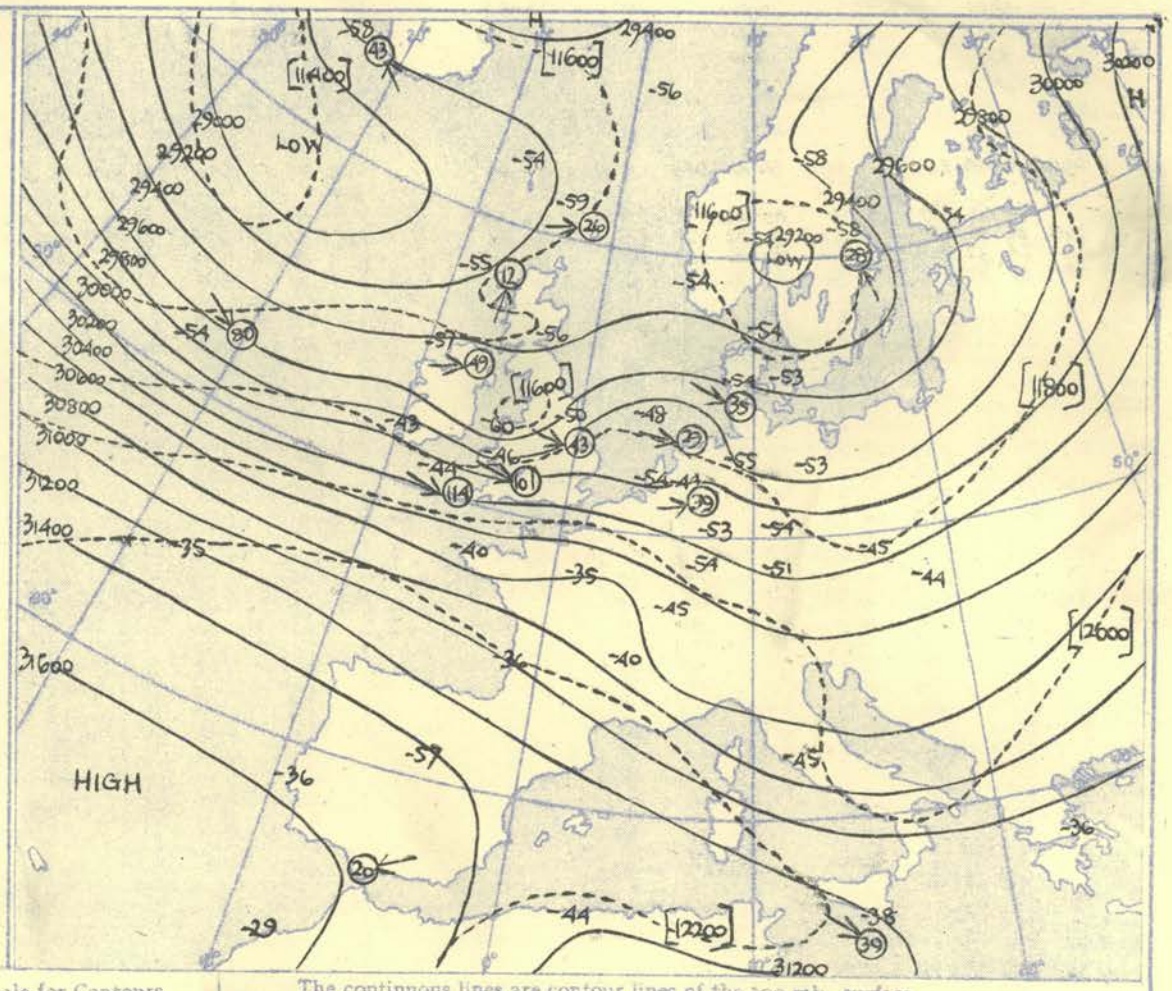
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. G.M.T.



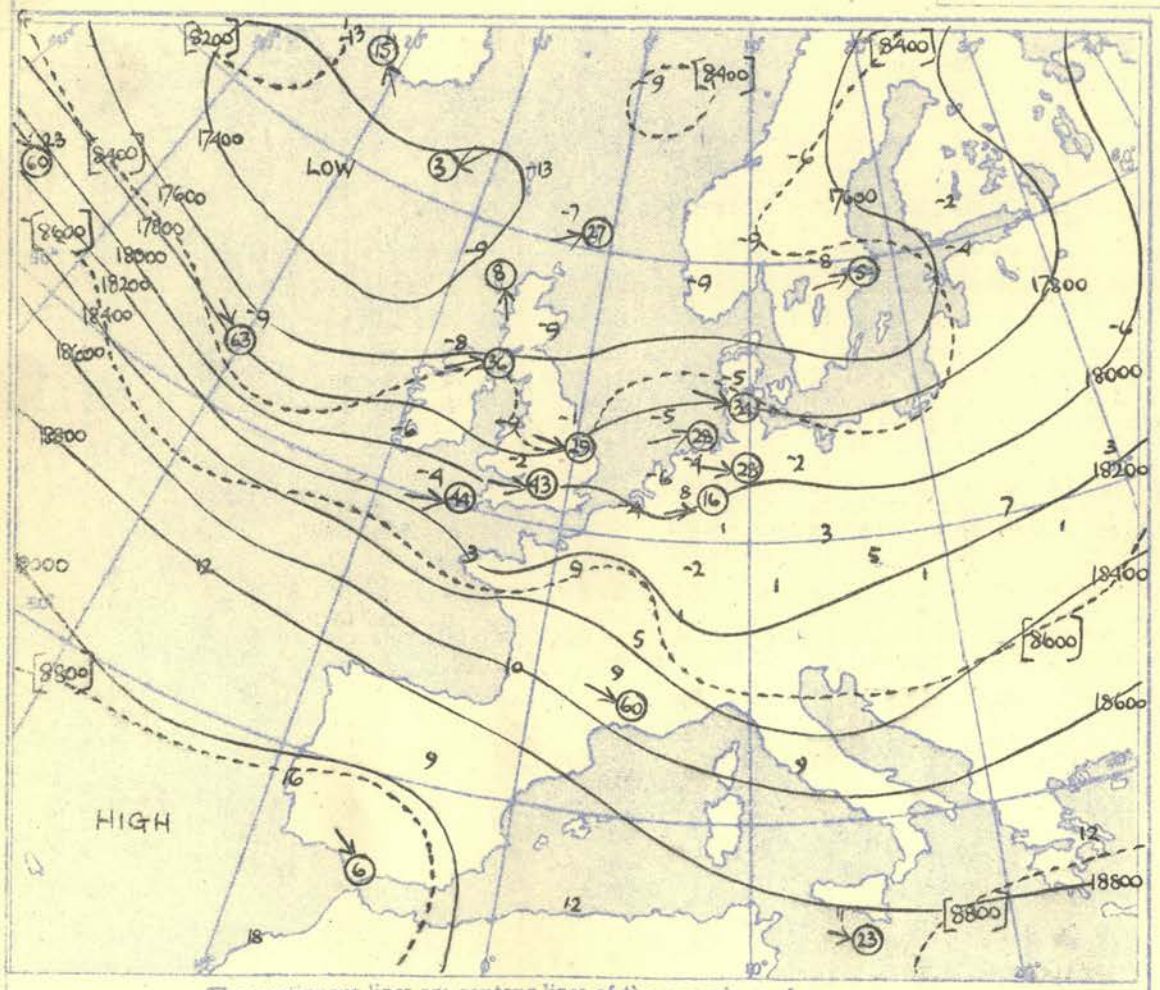
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

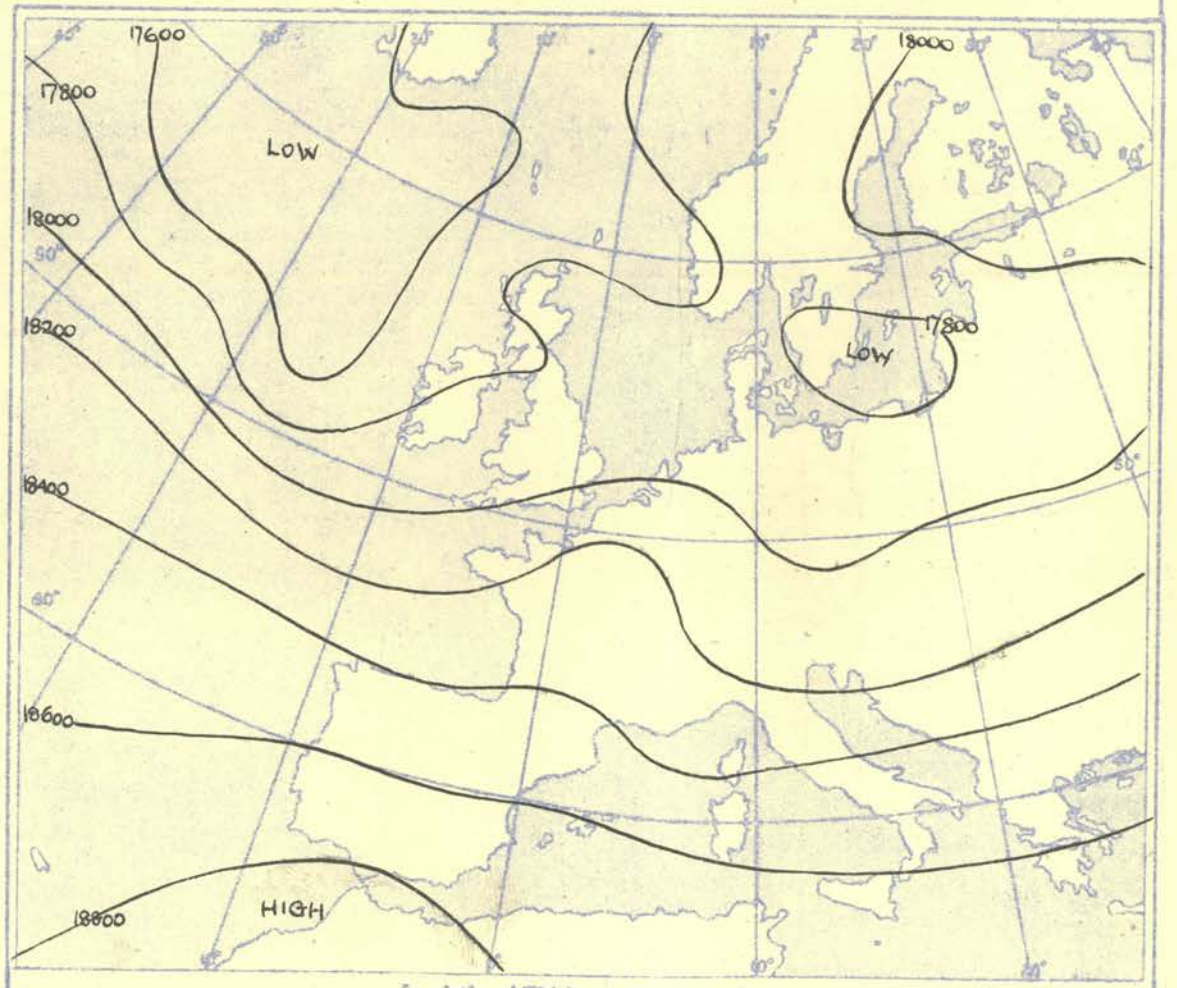




The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500 — 300 mb



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.

Wednesday 20th September 1950 — Page

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

Pressure		48·2N 20·5W	49·5N 14·7W	43·2N 17·0W	39·5N 12·2W	51·3N 00·4E	51·3N 00·4E					Pressure
Time		1330L	15L	14L	1530L	14L	1430L					Time
M.S.L.	mb	1025	1011	1026	1019	1010·6	1005·8					M.S.L.
Surf	mb	1022	1008	1022	1015	999·3	994·8					Surf
Freezing	mb	850	838	680	615	750	808					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.	Height ft./100 / °Temp. °F. / Dew °F.	Height ft./100 / °Temp. °F. / Dew °F.	Pressure mb
Surf		1·0 55 41	1·0 53 45	62	66	03·1 58 51	03·1 55 49					Surf
1000		7·0	3·4	7·0 58	5·2 65	2·9						1000
950		45 36	45 43	51	63							950
900		35·4 38 34	31·9 39 34	45 43	59	31·7 44	30·3 40 38					900
850		31 28	34	45	59	39 35	38 26					850
800		66·5 36 06	62·9 27	47	53	63·2 35 35	61·6 31 20					800
750		32 16	22	41	49	32 26	26 14					750
700		101 28 18	97·2 17	103 34	104 43	98·2 26 25	96·3 20 17					700
650		22 17	15	29	35	25 25	15 -04					650
600		141 16	136 07	24	31	138 16	135 06 -06					600
550		09	01	16	23	07	-05					550
500		187 -01	181 -08	190 05	191 12	183 -01	180 -13					500
450						-11	-23					450
400						237 -24	232 -33					400
350						-36	-42					350
300						302 -48	296 -51					300
250												250
200												200
170												170
		cloud:- 5/8 Cu 900-840 mb Inversion 850 mb 31°-800 .. 36°	cloud:- 4/8 Cu 900-620 mb 2/8 Sc 730-710 mb	cloud:- 2/8 St 930-920 mb 4/8 Sc 900-850 mb Inversion 850 mb 45°-800 .. 47° Isothermal 900-850 mb 45° Surface wind N. 11-16 kts	cloud:- 2/8 Ns at 960 mb 6/8 Cs at 450 mb Isothermal 900 - 850 mb 59° Surface wind. N.R	cloud:- 8/8 Cu 510-860 mb 8/8 As 680-670 mb 1/8 Ci 400- T.N.G.	cloud:- 3/8 Cu 880-700 mb 1/8 As 490-470 mb No cloud entered. Occasional tops to about 23000 estimated.					

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

Place	Shoeburyness	Downham Market	Odiham	Aldergrove	Stornoway	Cumulus 61·1N 17·4W	Wyton	Leeming	Leuchars		Place
Time	09L	09L	09L	09L	15L	15L	18L	18L	21L		Time
Type				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.	270 08	240 06	270 08	230 15		030 10	250 10	190 10	CALM		Surf.
1,000	280 19	270 21	270 12	272 21		020 12	250 21	250 23	059 12		1,000
2,000	280 20	270 21	280 19	267 34		020 13	260 25	240 40	047 08		2,000
3,000	260 25	280 21	290 23	269 37		020 15	280 26	240 50	038 09		3,000
4,000	260 28	280 20	280 21	268 38		020 15	280 27	250 46	035 10		4,000
5,000	250 26	280 21	280 19	267 39		020 15	290 26	250 46	033 09		5,000
6,000	250 26	270 23	290 22	266 34			280 29		032 08		6,000
8,000	250 23	250 27	270 31	271 28			260 28		026 05		8,000
10,000	250 28	250 28	260 34	272 22		360 15			021 04		10,000
14,000	260 31	250 34	(9,000')	260 10		350 16			339 11		14,000
18,000	250 38	250 38		264 19		340 16			318 14		18,000
24,000	250 44	250 38		265 23		(15,000')			286 18		24,000
30,000	260 71	250 55		249 24					272 15		30,000
40,000	280 78	260 51		262 43					264 11		40,000
50,000	230 40	260 27		262 18	220 15				259 11		50,000
60,000	(48,000')	270 09		261 20	240 09				249 11		60,000
70,000		260 06			(57,000')				(55,000')		70,000
80,000		340 10									80,000
90,000		110 09 110 06 (99,000')									90,000

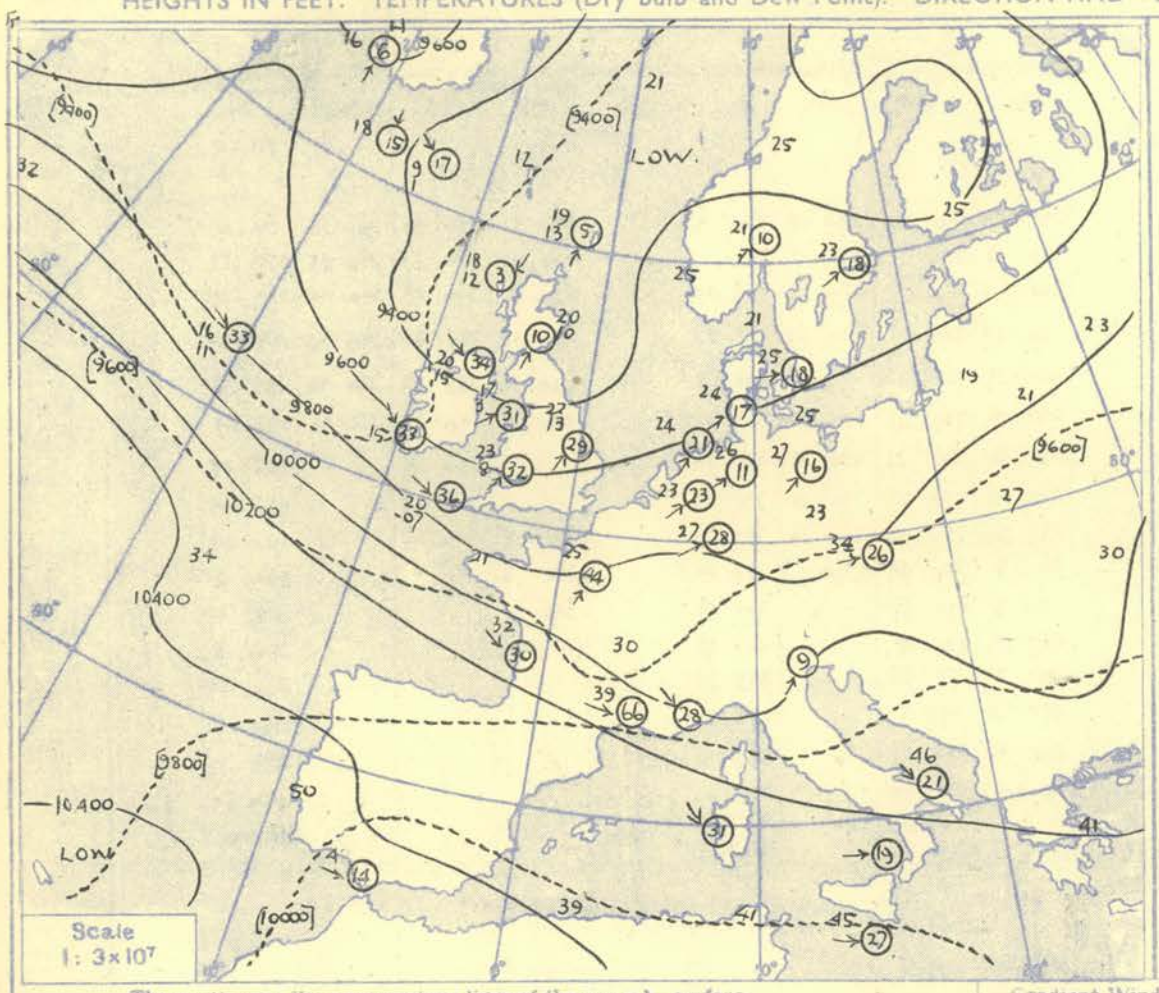
NEPHOSCOPE OBSERVATIONS

Place	Leeming										Place
Time Type	09L C										Time Type
Dir. Vel.	250 35										Dir. Vel.

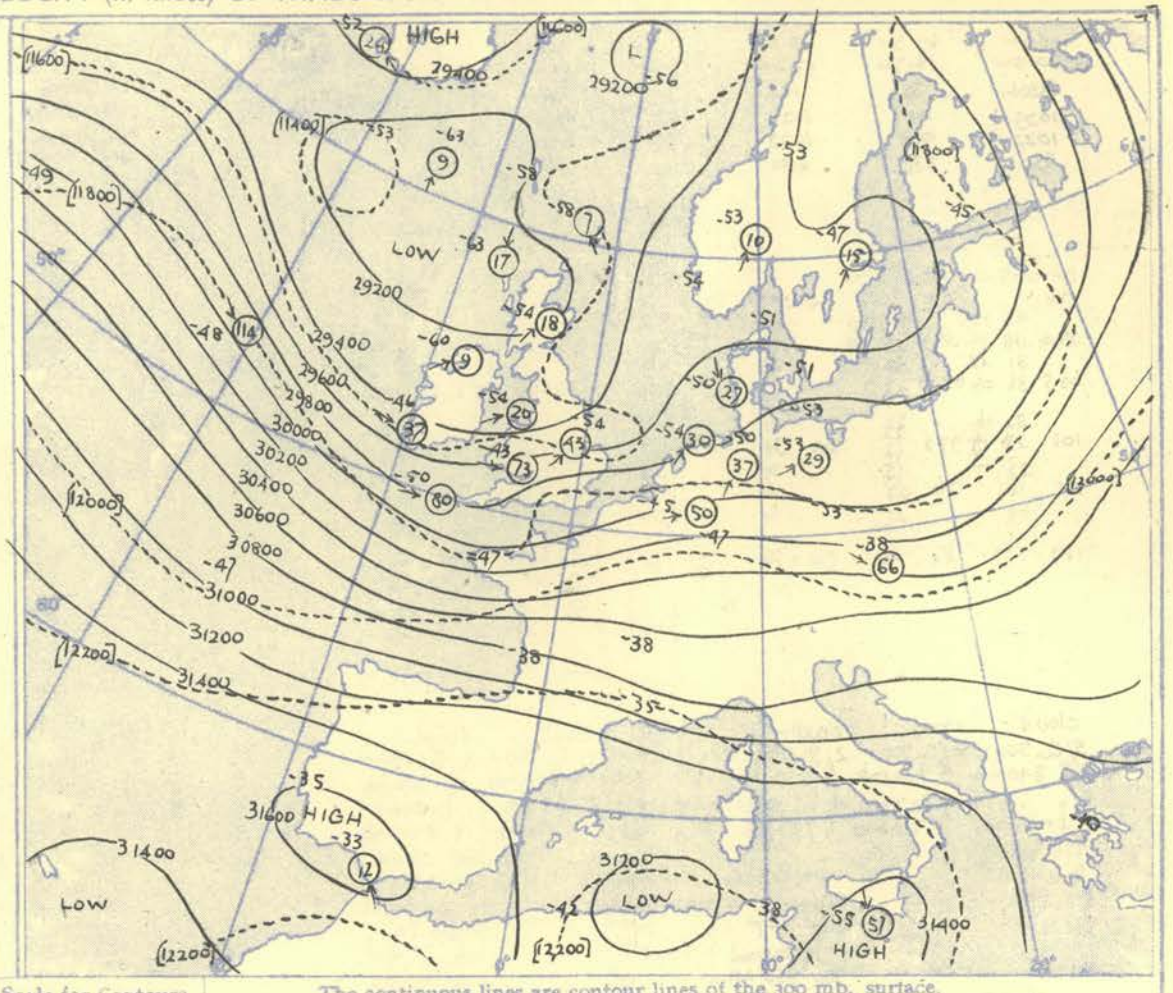
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	WEATHER OBSERVER.	WEATHER OBSERVER.	Weather Observer.	WEATHER OBSERVER	WEATHER WATCHER	WEATHER WATCHER	WEATHER WATCHER	WEATHER WATCHER		Ship
Lat/Long	60·9N 13·8W.	61·0N 14·0W	61·1N 13·9W	61·0N 14·0W	52·4N 20·0W	52·3N 20·1W.	52·5N 20·2W.	52·5N 20·1W		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.	1002 mb	1001 mb	1004 mb	1006 mb	1011 mb	1010 mb	1014 mb	1016 mb	mb	M.S.L.
Surf	1002 mb	1001 mb	1004 mb	1006 mb	1011 mb	1010 mb	1014 mb	1016 mb	mb	Surf
Freezing	900 mb	880 mb	905 mb	900 mb	860 mb	850 mb	820· mb	860 mb	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	Height ft./100 / °Temp. °F. / Dew °F. / Wind Dir. ° Vel. knots		Pressure mb
Surf	46 44 050 14	48 42 030 27	48 30 020 15	46 39 010 17	51 45 270 25	50 47 280 23	54 51 300 27	53 50 310 20			Surf
1000	0·5	4 48 43	1·2	1·7	3·0 50 45	49 46 280 30	3·8 51 48 310 30	4·4 51 50 309 30			1000
950	38 32 036 18	40 35 019 17	40 33 018 21	40 33 360 18	45 41 275 38	42 41 281 33	44 43 310 32	45 45 309 26			950
900	08·5 32 27 040 18	28·6 35 31 020 14	29·3 31 26 010 18	29·9 32 26 359 20	31·4 37 35 270 42	31·0 37 37 284 42	32·1 39 39 306 30	32·8 38 38 310 26			900
850	27 22 048 18	29 25 020 18	27 19 002 16	27 22 353 27	31 31 270 42	32 30 292 44	34 34 300 28	30 30 307 21			850
800	59·1 23 15 052 18	59 4 25 09 020 20	59·8 24 12 332 15	60·5 25 04 348 27	62·3 26 26 270 36	62·0 26 23 293 49	63·2 30 29 294 30	63·7 27 22 305 27			800
750	17 05 062 16	18 07 018 13	17 05 319 13	20 -06 346 26	21 18 271 38	20 18 296 45	23 18 291 35	22 12 307 30			750
700	93·1 12 03 067 14	93·4 12 03 013 10	93·7 09 01 313 17	94·7 14 04 344 27	96·5 16 08 265 39	96·2 13 10 298 45	97·6 16 11 291 33	98·0 18 06 314 28			700
650	06 -10 073 13	05 -06 354 12	04 -05 296 13	07 01 348 27	08 04 267 46	06 02 295 43	10 05 297 43	15 00 313 34			650
600	131 00 -28 077 12	132 -01 -17 326 11	132 -01 -13 280 11	133 -02 -09 347 27	135 04 -04 282 54	134 -02 -07 293 43	136 04 -11 305 50	137 10 -07 314 37			600
550	-06 -47 048 05	-07 -33 318 12	-08 -31 280 11	-05 -18 345 18	-02 -16 294 60	-11 -15 292 44	01 -21 310 54	04 -13 319 50			550
500	176 -14 -55 061 03	176 -14 -40 309 07	176 -18 -40 306 08	177 -13 -29 344 15	180 -09 -22 302 63	178 -21 -25 292 39	181 -06 -29 313 74	182 -03 -10 322 57			500
450	-23 -51 282 03	-24 -47 305 06	-26 -50 316 09	-24 -37 338 12	-19 -33 298 69	-31 -36 285 50	-15 -39 312 82	-13 -16 318 61			450
400	227 -34 -50 242 11	227 -36 -48 297 07	227 -37 -60 252 15	229 -35 -50 335 12	232 -30 -34 292 75	229 -31 -43 278 79	234 -23 -46 314 96	235 -24 -27 315 68			400
350	-48 235 12	-49 292 06	-49 235 13	-46 334 15	-42 289 87	-36 -54 278 87	-34 -53 316 104	-35 -39 314 73			350
300		290 -62	290 -63 240 09	292 -61 335 14	296 -54 287 80	294 -44 281 68	299 -48 317 114	300 -46 306 83			300
250		-55	-57 286 03	-62	-56 285 76	-46 287 65	-64 316 121	-63 308 87			250
200		377 -51	377 -50 L-V.	(2)9mb	384 -48 297 72	384 -46 287 59	385 -67 311 69	386 -77 305 84			200
170		-50	-50 "		-49 286 70	-47 281 54	-61 311 63	-67 303 78			170
150		-50	-50 "		-52 286 52	-51 287 45	-61 311 49	-65 303 48			150
130		-50	-50		-52 286 48	-47 287 53	-61 311 41	-64 311 42			130
110		-52	-51		-56 286 54	-52 287 49	-61 311 35	-62 294 21			110
100		-57	528 -52		-55 286 48	-53 287 36	533 -59 311 29	531 -61 289 30			100
90		-50	-53		-58 286 46	-53 287 23	-59	-60 283 27			90
80		-52	-54		-57 286 38	-54 287 21	-58				80
70		-50	-54		-58 286 27	-54 287 24	-57				70
60			-52		-60 286 36	-54 287 23	-56				60
			-51 (58mb)		-60 286 27	-54	-55 (45mb) -54				
	Inversion. 712 mb 11°-700 mb 12° Isothermal. 700-693 mb 12°			Inversion. 818 mb 23°-795 mb 26° 580 .. -06°-562 .. -04°	-60 286 22 -59 286 29 Isothermal. 715-707 mb 17° 630-611 .. 5°	Inversion. 400 mb 41°-370 mb 33° Max Winds 463 mb 292° 42 kts. & 436 mb 280° 69 kts.	Isothermal. 593-569 mb 8°	Max Wind. 202 mb 307° 100 kts.			
Tropopause	N.R	I 285 mb -65° 30·200	II 286 mb -65° 30·000'	III 300 mb -61° 29·200	I 296 mb -55° 29·900'	II 316 mb -44° 28·300	II 250 mb -64° 33·800	I 191 mb -78° 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 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

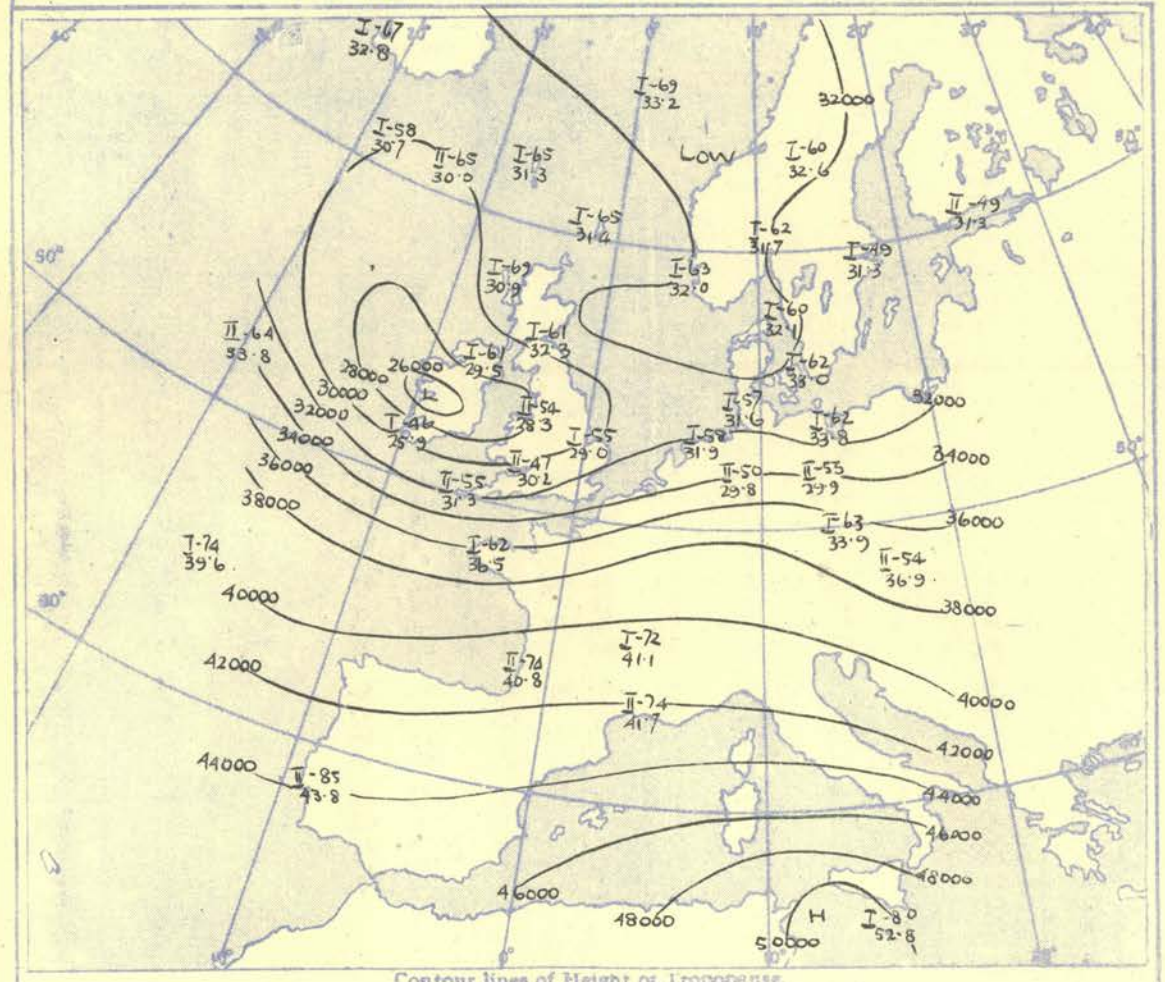


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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 15 h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

A fairly narrow tongue of cold air penetrated quickly south eastwards and was followed by a warm ridge which appeared to consist of subsided air and to be located somewhat ahead of the weak surface warm sector.

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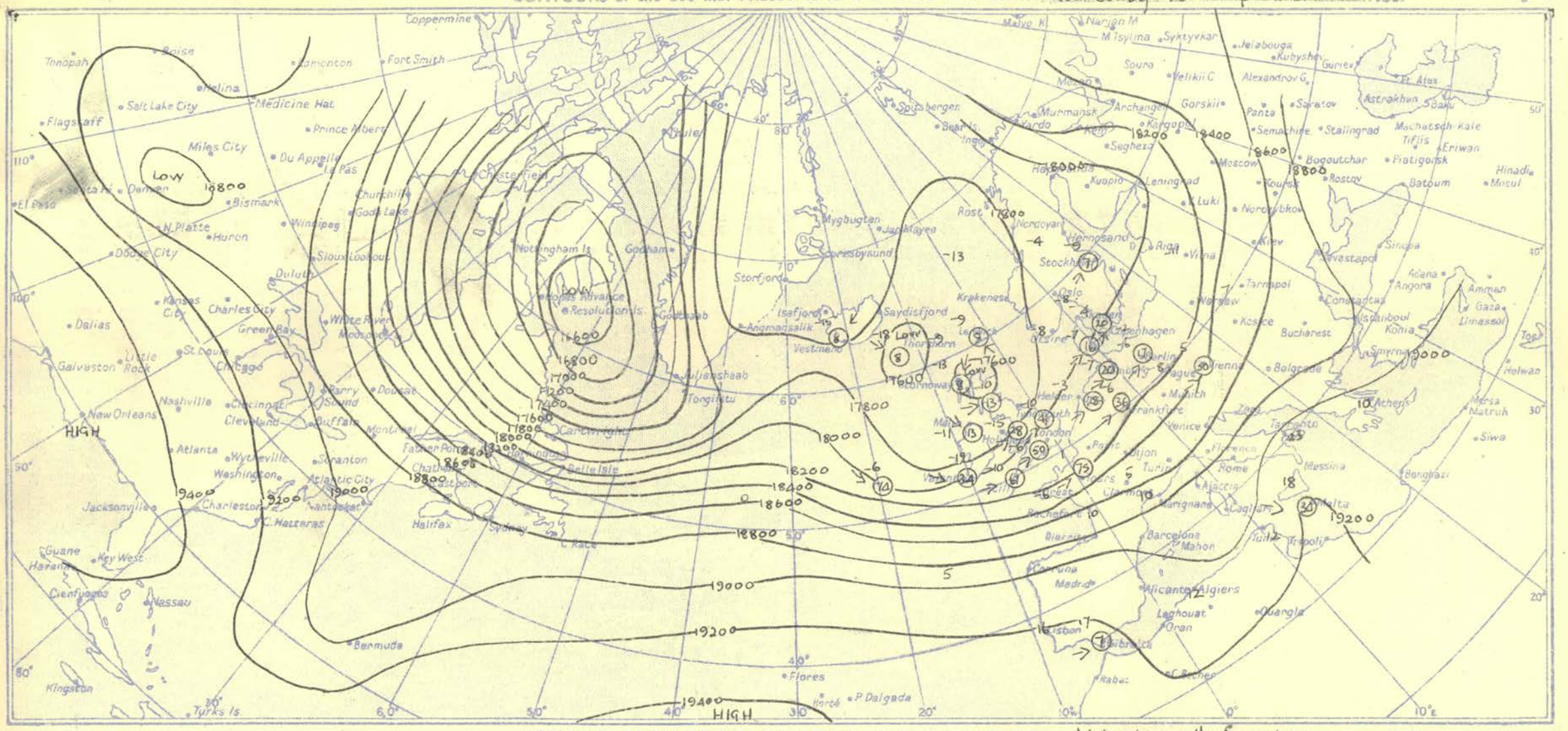
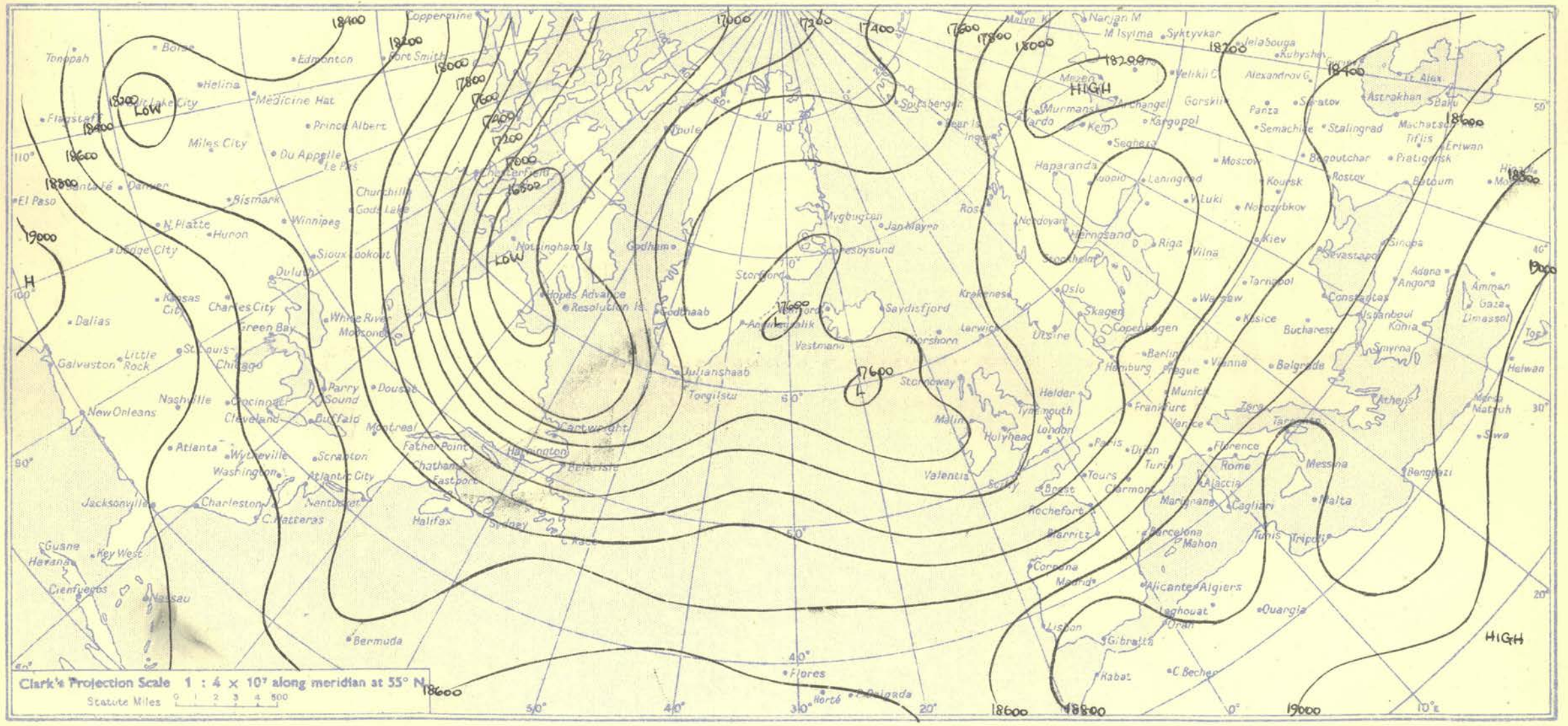
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Wednesday 20th September 1950.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Wednesday 20th September 1950.



Clark's Projection Scale 1 : 4 × 10⁷ along meridian at 55° N.

Statute Miles 0 1 2 3 4 500

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	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.	Time
Pressure: M.S.L.	996·3 mb	994·7 mb	994·7 mb	998·2 mb	1001·1 mb	1002·9 mb	1006·3 mb	1009·9 mb	1000·7 mb	M.S.L.
Pressure: Surf	986·4 mb	992·8 mb	993·9 mb	989·6 mb	999·1 mb	998·8 mb	990·3 mb	999·3 mb	1005 mb	Surf
Pressure: Freezing	815	816	790	816	832	779	806	830	840	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	Height ft./100 · °Temp. · °F. · Dew °F. · Wind Dir. ° · Vel. knots	Pressure mb
Surf	2·7 52 43 Calm	00·5 50 49 030 21	00·2 56 47 240 12	02·3 53 45 255 22	00·6 57 43 250 16	61·2 68 43 250 10	4·4 52 48 260 15	02·9 55 42 275 12	00·3 54 50 270 10	Surf
1000	-1·1	-01·5	-1·5	-0·5	00·3	00·8	1·7	02·7	1·9	1000
950	46 39 104 03	46 46 036 28	50 42 232 21	47 40 270 37	50 40 253 24	52 47 248 17	49 40 271 29	48 38 277 26	46 42 283 18	950
900	27·5 39 34 153 04	27·0 41 40 043 23	27·2 43 36 242 18	28·1 41 35 272 40	29·0 42 34 259 27	29·7 46 35 258 18	30·4 44 37 266 31	31·3 41 34 282 27	30·5 38 35 284 24	900
850	36 30 163 04	36 32 046 17	37 30 244 18	36 30 274 38	35 28 269 35	39 27 262 25	37 31 263 31	34 23 284 30	33 30 285 28	850
800	58·7 30 25 172 03	58·3 31 22 045 09	58·4 33 24 243 13	59·3 31 26 276 36	60·2 27 21 266 32	61·1 35 23 270 32	61·7 31 24 262 30	62·4 29 15 279 48	61·4 27 24 281 29	800
750										
700	24 19 168 05	25 18 041 05	27 16 237 08	26 21 282 35	22 12 264 31	29 16 271 30	18 23 266 28	24 06 277 35	21 17 285 34	750
650	93·1 19 13 196 05	92·8 18 12 042 03	93·0 20 10 217 10	93·9 20 15 284 34	94·5 17 03 266 31	96·9 22 13 260 29	96·5 23 08 263 32	96·9 20 07 277 36	95·7 15 10 284 33	700
600	13 08 205 06	12 06 046 03	14 05 223 09	14 09 288 24	11 -10 266 33	15 01 255 29	16 -12 266 39	14 -11 273 41	10 05 289 35	650
550	132 06 00 207 08	132 04 -02 056 06	132 06 -02 246 07	133 08 -02 296 25	133 04 -17 257 32	135 07 -13 256 29	136 09 -08 260 39	136 08 -12 270 48	134 01 -05 284 31	600
500	-01 -07 156 06	-04 -12 060 06	-02 -12 255 09	-01 -09 301 19	-04 -20 257 28	-01 -22 247 33	01 -20 258 42	-01 -10 270 55	-08 -15 285 33	550
450	177 -09 -15 163 09	176 -13 -25 032 08	176 -10 -25 271 13	177 -11 -22 314 13	177 -15 -29 255 28	179 -10 -27 237 41	180 -06 -30 262 50	180 -10 -19 270 61	178 -19 -23 280 34	500
400	-20 -26 133 09	-15 -40 360 06	-20 -36 278 14	-23 -40 310 07	-25 -39 251 21	-20 -33 230 39	-15 -38 266 63	-20 -28 271 72	-29 -33 284 29	450
350	229 -31 -38 109 08	228 -38 -53 026 11	229 -31 -46 289 17	229 -36 -51 309 08	229 -35 -49 260 19	233 -34 -47 230 38	223 -26 -42 265 67	233 -30 -39 270 81	229 -39 -44 291 28	400
300	-44 160 07	-52 018 14	-43 281 18	-47 307 07	-46 276 14	-48 241 37	-36 -55 267 73	-40 -50 267 99	-41 284 24	350
250	293 -58 158 07	290 -63 010 17	293 -56 251 17	293 -60 266 09	293 -54 265 20	295 -54 248 43	298 -45 266 73	297 -50 267 80	293 -46 282 37	300
200	-58 173 09	-61 277 05	-58 244 14	-45 268 27	-48 257 33	-50 253 47	-46 260 70	-55 261 92	-42 278 39	250
170	380 -47 198 07	377 -52 242 08	380 -48 253 16	382 -44 264 22	381 -46 256 32	384 -47 256 44	388 -44 262 57	385 -50 267 67	383 -46 276 44	200
150	-47 196 07	-53 242 11	-47 246 17	-46 250 25	-48 254 33	-50 255 35	-46 257 46	-53	-44 275 43	170
130	-47 204 10	-51 245 09	-46 238 18	-47 255 28	-49 258 30	-50 257 36	-50 259 44	-55	-47 283 43	150
110	-50 179 08		-50 241 18	-48 261 21	-51 260 33	-53 252 37	-50 261 42	-55	-50 285 31	130
100	-50 223 10		-54 250 18	-49 266 22	-50 265 25		-53 251 39	-57	-53 271 28	110
90	532 -62 247 07		532 -50 257 17	534 -49 269 22	533 -49 271 20		539 -54 236 39	535 -56	536 -49 273 29	100
80	-52 209 09		-53 269 16	-50 266 11	-53 265 18		-57 262 31	-60	-52 268 22	90
70	-52 211 11		-56 283 18	-50 243 10	-65 260 20		-55 290 25	-60	-55 283 19	80
60	-52 246 10		-56 256 13		-53 250 11		-51 255 17	-60	-52 276 19	70
	-50		-53 242 11		(63 mb) -53			-57	-53 289 10	60
			-56					-56	(52 mb) -54	
			Inversion 817mb 30°-800mb 33°		Isothermal 785-773mb 25°		Isothermal 991-980 mb 52°			
Tropopause	I 272 mb-65° 31,400'	I 275mb-69° 30,900'	I 260mb-61° 32,300'	I 297 mb-61° 29,500'	II 314 mb-54° 28,100'	I 306mb-55° 29,000'	II 295 mb-47° 30,200'	II 278mb-55° 31,300'	I 350 mb-51° 25,900'	Tropopause

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA	Station
Pressure: Time	21h G.M.T.	21h G.M.T.	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.	996·9 mb	998·1 mb	mb	1009·2 mb	999·2 mb	1002·6 mb	1007·1 mb	1007·6 mb	mb	M.S.L.
Pressure: Surf	986·1 mb	996·2 mb	mb	990·6 mb	997·2 mb	998·3 mb	989·8 mb	997·0 mb	mb	Surf
Pressure: Freezing	819 mb	846 mb	mb	831 mb	840 mb	826 mb	739 mb	842 mb	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	Height ft./100 · °Temp. · °F. · Dew °F. · Wind Dir. ° · Vel. knots	Pressure mb
Surf	02·7 47 44 036 04	00·5 50 49 360 20		02·3 49 44 300 15	00·6 51 43 270 15	01·2 49 44 225 04	4·4 46 44 280 10	02·9 48 46 270 15		Surf
1000	-01·1	-00·5		-0·3	-00·2	00·8	·6	02·1		1000
950	46 40 048 05	45 44 010 30		46 41 306 35	46 38 260 30	47 37 262 23	43 39 277 20	45 38 272 22		950
900	27·4 40 35 048 05	27·9 39 36 018 26		28·2 39 35 311 29	28·3 39 33 266 32	29·4 42 33 261 23	30·0 39 35 271 27	30·5 39 32 287 26		900
850	35 33 049 04	33 32 020 23		34 30 314 30	34 30 277 35	35 30 268 24	33 30 265 30	33 28 289 28		850
800	58·6 30 27 049 04	59·0 27 18 018 22		59·3 28 22 320 30	59·4 28 27 278 31	60·6 29 24 276 25	61·0 28 26 264 30	61·6 28 22 288 31		800
750										
700	24 21 033 03	21 12 015 17		25 12 320 34	22 20 275 25	22 14 264 22	23 22 265 32	23 16 287 32		750
650	93·0 19 15 326 03	93·2 16 14 002 12		93·8 20 09 316 30	93·6 16 10 277 25	94·9 16 03 260 25	95·3 16 10 260 33	95·9 17 09 287 33		700
600	13 08 270 02	11 06 330 11		12 00 315 28	10 01 282 24	08 -11 266 24	09 02 262 32	10 04 285 35		650
550	132 05 00 133 03	132 03 00 333 12		133 04 -06 316 25	132 02 -04 306 18	133 00 -16 273 26	134 01 -03 268 28	135 03 -05 270 35		600
500	-02 -09 126 05	-05 -10 347 13		02 -17 317 19	-07 -10 330 17	-08 -21 270 27	-07 -11 271 30	-07 -14 266 37		550
450	176 -11 -21 103 04	176 -15 -18 357 13		177 -13 -27 316 12	176 -17 -23 337 12	177 -17 -31 266 26	178 -17 -22 260 33	179 -18 -24 257 40		500
400	-22 -32 140 04	-26 -31 002 12		-26 -40 310 15	-28 -39 331 09	-27 -41 269 28	-27 -37 263 39	-30 39 248 39		450
350	228 -32 -44 163 05	228 -37 -43 357 12		229 -37 -50 313 10	228 -40 -49 326 08	229 -37 -50 264 31	229 -41 261 41	230 -42 244 39		400
300	-46 115 05	-48 352 13		-47 322 06	-54 299 04	-48 263 40	-49 250 54	-47 267 43		350
250	292 -60 157 05	291 -61 340 10		292 -59 340 07	290 -59 279 10	292 -54 256 38	298 -54 248 52	293 -47 270 58		300
200	-60 164 03	-61 336 10		-54 316 18	-51 276 25	-50 261 36	-50 267 51	-43 274 55		250
170	379 -50 160 05	377 -53 288 07		380 -48 290 20	378 -48 267 26	380 -48 254 38	381 -50 264 48	382 -50 271 51		200
	-49	-52 292 07		-48 297 22	-52 265 21	-50 257 32	-53 270 40	-53 272 45		170
150	(167 -49	-52 306 08		-48 274 15	-52 263 24	-52 255 30	-56 265 38	-53 266 40		150
130	mb)	-52 279 07		-51 283 17	-52 271 21	-52 264 25	-65 257 35	-55 270 38		130
110		-52 291 08		-50 278 15	-54 256 20		-54 270 27	-59		110
100		528 -53 303 05		531 -52 307 16	528 -57 276 19		530 -69			100
90		-56 256 03			(95 mb) -58					90
80		-56 272 08								80
70										70
60										60
				Isothermal 787-765 mb 27°		Inversion 998 mb 49°-984 mb 50° Isothermal 339-326 mb -51°		Inversion 997 mb 98°-980 mb 49°		
Tropopause	II 300mb-60° 29,200'	II 276 mb-66° 20,800'		I 288mb-61° 30,000'	I 312 mb-60° 28,100'	I 290 mb-65° 29,900'	I 287mb-56° 30,100'	I 370 mb-50° 24,700'		Tropopause

No. 11498

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Thursday 21st September 1950. Page 1.

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

METEOROLOGICAL OFFICE LIBRARY 29 SEP 1950

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA	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.	03h. G.M.T.	Pressure: Time
Pressure: M.S.L.	995·8 mb	1001·3 mb	995·9 mb	1001·7 mb	998·3 mb	1000·5 mb	1003·8 mb	1007·7 mb	1010·3 mb	Pressure: M.S.L.
Pressure: Surf	985·9 mb	999·4 mb	995·0 mb	993·1 mb	996·3 mb	996·1 mb	987·6 mb	997·2 mb	1009 mb	Pressure: Surf
Pressure: Freezing	837 mb	853 mb	820 mb	820 mb	826 mb	828 mb	832 mb	839 mb	mb	Pressure: 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	48	43	350	07	00·5	48	42	315	15	00·2	45	44			02·3	49	45	315	15	00·6	52	46			01·2	44	42	200	05	04·4	44	42	270	08	02·9	51	42	293	15	00·3	52	46	320	15	Surf
1000	01·3					00·4					51·2					00·5					00·5					00·2					01·0					02·1					2·8	51	45	322	15	1000
950		45	39	336	05		44	38	329	22		46	42				44	38	321	31		46	41				45	41	262	27		44	41	292	24		48	41	298	27		46	43	340	30	950
900	27·2	39	35	339	05	28·7	38	31	334	27	27·3	41	38			28·9	40	36	324	36	28·0	40	36			28·6	41	34	268	26	29·3	39	33	294	28	30·7	40	34	305	28	31·3	40	35	336	56	900
850		33	30	335	04		31	26	331	24		36	34				35	33	330	36		35	32				35	28	265	25		33	26	292	26		34	29	307	28		35	26	333	34	850
800	58·3	29	22	331	03	59·7	26	20	323	21	58·5	29	28			60·1	30	27	334	33	59·2	29	26			59·8	29	22	262	22	60·4	29	17	286	27	61·8	27	23	308	29	62·5	31	19	333	35	800
750		23	15	294	03		20	08	314	22		24	21				25	21	338	30		23	21				23	11	263	24		24	14	279	25		22	17	309	32		25	12	334	37	750
700	92·7	18	13	L+V		93·8	13	02	303	22	09·3	19	12			94·6	18	13	340	28	93·4	17	15			94·2	17	03	265	24	94·8	17	09	267	24	96·2	18	10	310	34	97·1	19	7			700
650		13	04	"			10	-11	302	20		13	06				11	06	332	23		11	06				10	-04	268	25		09	01	270	18		10	01	307	33		12	-3			650
600	13·1	05	+08	"		13·2	03	-20	310	16	13·2	06	02			13·3	04	-1	330	22	13·2	04	-3			13·3	04	-13	267	26	13·3	00	-6	265	17	13·5	02	-08	307	35	13·6	4	+11			600
550		-2	-14	"			-4	-22	321	15		-03	-08				-4	+11	328	23		-5	-14				04	-20	268	25		-9	-16	258	17		-06	-17	309	35		-4	-20			550
500	17·6	-12	-26	056	03	17·7	-13	-25	328	17	17·6	-13	-19			17·8	-14	-21	326	23	17·6	-15	-24			17·7	-10	-29	280	19	17·7	-19	-27	272	19	17·9	-15	-27	308	31	18·0	-12	-29			500
450		-23	-41	046	05		-25	-34	337	16		-24	-30				-24	-33	324	20		-26	-35				-26	-39	314	11		-30	-39	282	20		-23	-36	307	30		-20	-37			450
400	22·8	-33	-53	079	04	22·8	-38	-47	353	16	22·8	-36	-42			23·0	-35	-43	326	20	22·8	-39	-48			22·9	-36	-45	360	15	22·8	-42		286	18	23·1	-34	-47	300	35	23·3	-29	-46			400
350		-47		083	05		-51		338	19		-49					-48		326	20		-57					-50		005	13		-46		288	24		-45		294	43		-38	-56			350
300	29·1	-61		165	05	29·1	-64		336	17	29·1	-57				29·3	-57		329	27	29·0	-60				29·2	-57		307	14	29·2	-51		292	24	29·4	-53		278	44	29·7	-49				300
250		-60		170	03		-61		318	13		-57					-63		324	25		-62					-49		271	22		-52		280	30		-51		299	50		-57				250
200	37·8	-50		L+V		37·7	-54		326	11	37·9	-50				38·0	-54		315	30	37·7	-52				38·0	-47		269	25	38·0	-49		273	33	38·3	-47		297	47	38·4	-60				200
170		-50		"			-52		306	10		-51					-53		310	26		-53					-47		255	28		-51		276	32		-49		285	47		-57				170
150	44·1	-51		"		44·0	-53		302	09	44·2	-51				44·2	-53		296	21		-54				44·4	-50		265	27	44·3	-53		276	31	44·6	-54		282	39		-59				150
130		-51		178	06		-54		298	07		-53					-54		303	21		-55					-50		267	25		-55		272	30		-55		283	40		-56				130
110		-53		258	07		-56		244	11		-53					-55		318	16		-56					-51		289	23		-55		272	29		-55		281	35		-59				110
100	52·9	-55				52·7	-56		293	09	53·0	-53				53·0	-55		298	12	52·7	-57				53·2	-52		255	25	53·0	-56				53·3	-56		287	30	53·3	-60				100
90		-57					-57		335	08		-55					-56		305	19		-58					-53		251	15							-57					-57				90
80		-57					-57		298	05		-55					-57		331	21		-58																				-57				80
70		-57					-57					-56					-56		340	14	(78·6)	-58																				-58				70
60											64·0	-57				63·9	-58																										-59				60

Inversion 808 mb 25° - 793 mb 27°

Inversion 995 mb 45° - 970 mb 48°

Isothermal 315 - 292 mb -57°

Isothermal 328 - 318 mb -56°
292 - 280 " -62°

Inversion 998 mb 44° - 934 mb 46°

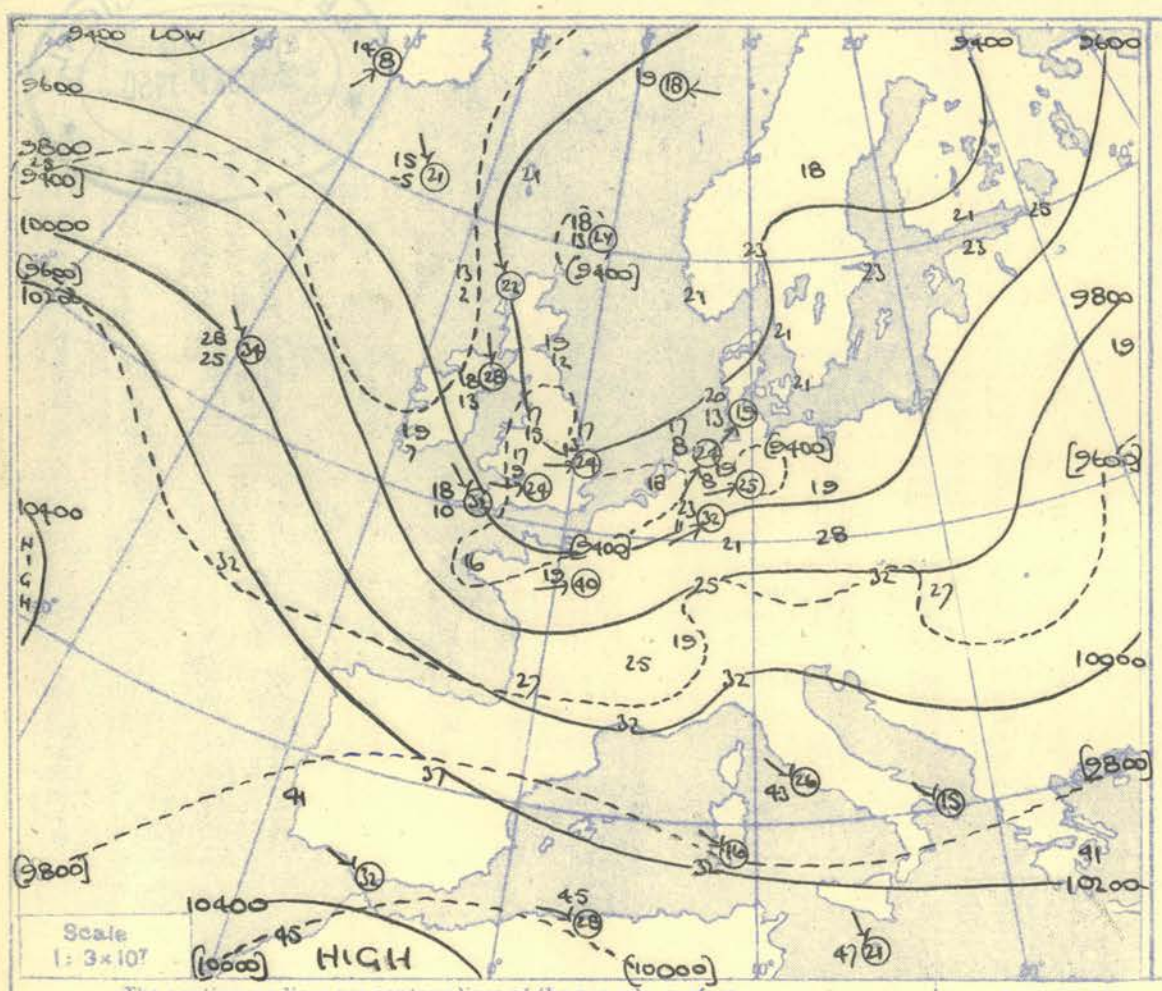
Inversion 988 mb 44° - 966 mb 46°
381 " 46° - 370 " 44°

Tropopause	III 316 mb -58° 28,000'					I 283 mb -68° 30,400'					I 279 mb -59° 30,700'					I 255 mb -65° 32,800'					I 260 mb -66° 32,200'					I 286 mb -60° 30,200'					I 296 mb -51° 29,200'					I 273 mb -55° 31,300'					I 231 mb -61° 35,300'					Tropopause
Station	LERWICK					STORNOWAY					LEUCHARS					ALDERGROVE					LIVERPOOL					DOWNHAM MARKET					LARKHILL					CAMBORNE					VALENTIA					Station
Pressure: Time	09h. G.M.T.					09h. G.M.T.					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: Time
Pressure: M.S.L.	996·0 mb					1002·3 mb					mb					1007·8 mb					1001·8 mb					998·9 mb					1005·8 mb					1011·3 mb					mb					Pressure: M.S.L.
Pressure: Surf	986·2 mb					1000·4 mb					mb					999·2 mb					999·8 mb					996·4 mb					989·8 mb					1000·7 mb					mb					Pressure: Surf
Pressure: Freezing	mb					848 mb					mb					818 mb					823 mb					815 mb					825 mb					812 mb					mb					Pressure: 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	48	44	315	06	00·5	48	45								02·3	51	43	300	21	00·6	52	48	340	10	01·2	48	44	240	06	04·4	50	45	280	14	02·9	52	47	285	15						Surf
1000	1·1					00·6	48	46													00·5					00·2					01·5					03·1	52	47								1000
950		45	40	251	03		44	43									46	39	304	36		49	45	337	22		43	39	287	30								47	44	299	32						950
900	27·3	40	36	250	03	29·0	38	37								30·6	41	32	307	36	29·1	42	38	333	25	28·6	41	37	308	30	30·0	40	33	301	31	31·6	41	39	305	28						900
850		37	27	243	03		32	31									35	24	312	38		36	33	331	26		36	32	308	26		35	28	312	29		36	34	306	29						850
800	58·6	33	21	215	03	60·0	29	28								61·8	30	13	318	32	60·3	29	28	332	25	59·9	31	26	300	23	61·1	30	25	313	30	62·8	31	28	310	30						800
750		26	18	177	03		22	21									24	07	320	30		23	19	328	28		27	21	290	24		26	13	309	33		27	20	311	31						750
700	53·3	21	14	185	03	54·4	17	12								55·3	18	03	320	24	54·8	17	14	326	30	09·5	20	14	287	26	55·8	19	09	312	32	57·5	23	10	310	32						700
650		15	06	226	03		10	02									12	01	316	26		11	06	327	30		13	09	290	29		12	-2	313	32		15	03	312	31						650
600	13·2	07	-1	251	03	13·3	04	-15								13·5	02	-10	310	28	13·4	04	-03	326	27	13·3	04	00	296	32	13·5	05	-4	315	30	13·6	07	-6	312	34						600
550		-1	-11	208	03		-02	-17									-7	-19	302	27		-05	-11	319	25		-02	-07	299	32		-3	-14	321	24		-01	-14	314	32						550
500	17·7	-11	-20	065	04	17·8	-11	-25								17·9	-12	-25	308	27	17·8	-15	-21	316	31	17·8	-12	-21	303	30	17·9	-12	-22	325	20	18·1	-10	-23	313	32						500
450		-20	-31	326	03		-22	-34									-21	-35	302	23		-25	-33	306	34		-23	-32	307	28		-23	-33	322	20		-20	-33	311	34						450
400	22·9	-33	-46	L+V		23·0	-36	-46								23·1	-30	-44	304	27	22·9	-37	-43	304	31	23·0	-35	-45	312	24	23·1	-35	-45	324	24	23·3	-28	-41	318	45						400
350		-43		312	05		-48										-44		298	32		-49		315	33		-47		313	20		-50		324	30		-39	-52	324	54						350
300	29·3	-54		185	05	29·2	-64									29·5	-58		305	51	29·2	-62		317	36	29·3	-58		323	20	29·3	-59		327	38	29·8	-50		323	76						300
250		-55		341	03		-62										-61		303	50		-59		319	39		-55		305	30		-55		318	39		-56		328	93						250
200	38·1	-48		351	03	37·9	-50									38·2	-57		316	41	37·9	-53		310	27	38·1	-49		290	21						38·5	-58		314	63						200
170		-44		085	03		-51										-53		315	30		-51		307	24		-48		288	22	Isothermal 807 - 783 mb 30°						-57		310	51						170
150		-44		214	02	44·1	-54									44·4	-55		316	24		-51		305	21	44·4	-48		282	21							-57		309	44						150
130		-46		L+V			-52										-59		312	24		-55		299	16		-49		277	22							-58		317	37						130
110		-48		236	03		-54										-50		298	19		-50		287	15		-51		273	14							-59		314	34						110
100	53·4	-48		188	04	53·0	-53									53·1	-51		290	16	53·0	-53		285	15	53·3	-53		267	10						53·4	-60		319	27						100
90		-50		250	08		-53										-54		300	12		-56					-53		270	12							-60									90
80		-50		301	06	57·8	-53										-57		262	09	(88·6)	-57					-53		286	12							-57									80
70	(75·6)	-50															-56		313	14	Inversion					Inversion											-57									70
60																64·2	-55				1000 mb 52° - 985 mb 53°					933 mb 41 - 909 mb 42°											-58									60
	Isothermal 893 - 868 mb 38°																																			-59									

Tropopause	I 268 mb -60° 31700'	I 295 mb -66° 29,700'	I 284 mb -59° 30,600'	I 277 mb -64° 30,800'	I 280 mb -64° 30,800'	II 298 mb -60° 29500'	I 255 mb -56° 33,000'	Tropopause

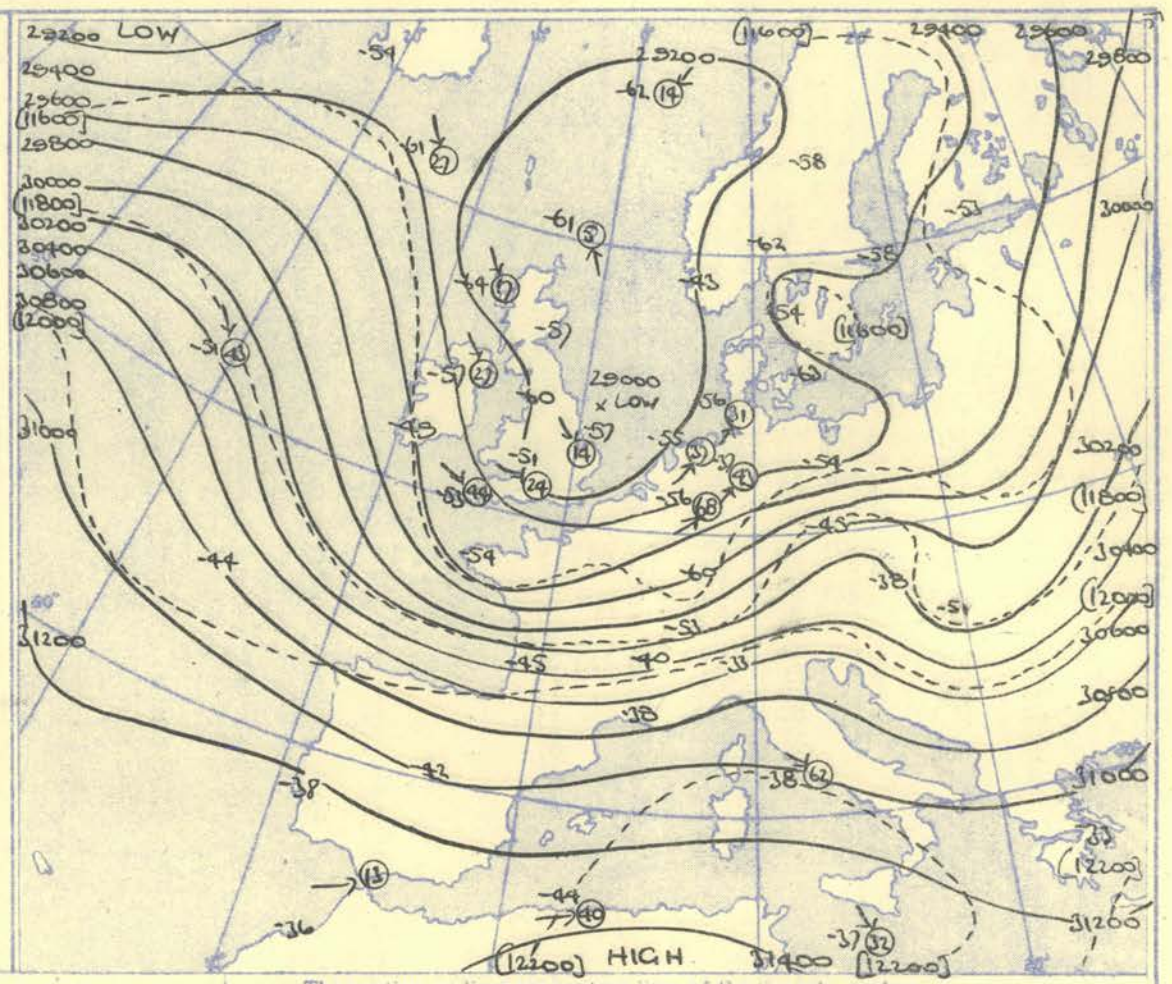
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. GMT.



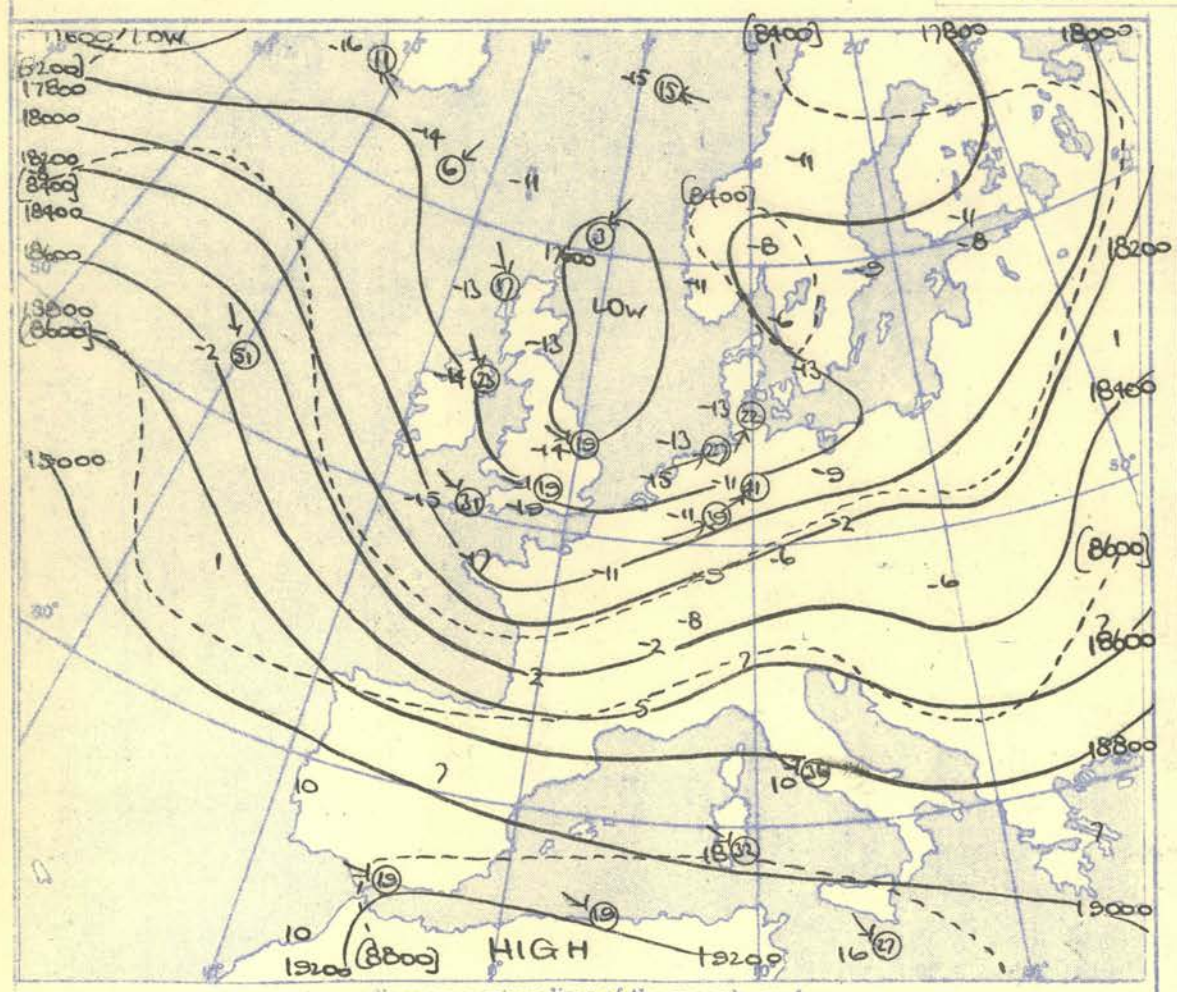
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

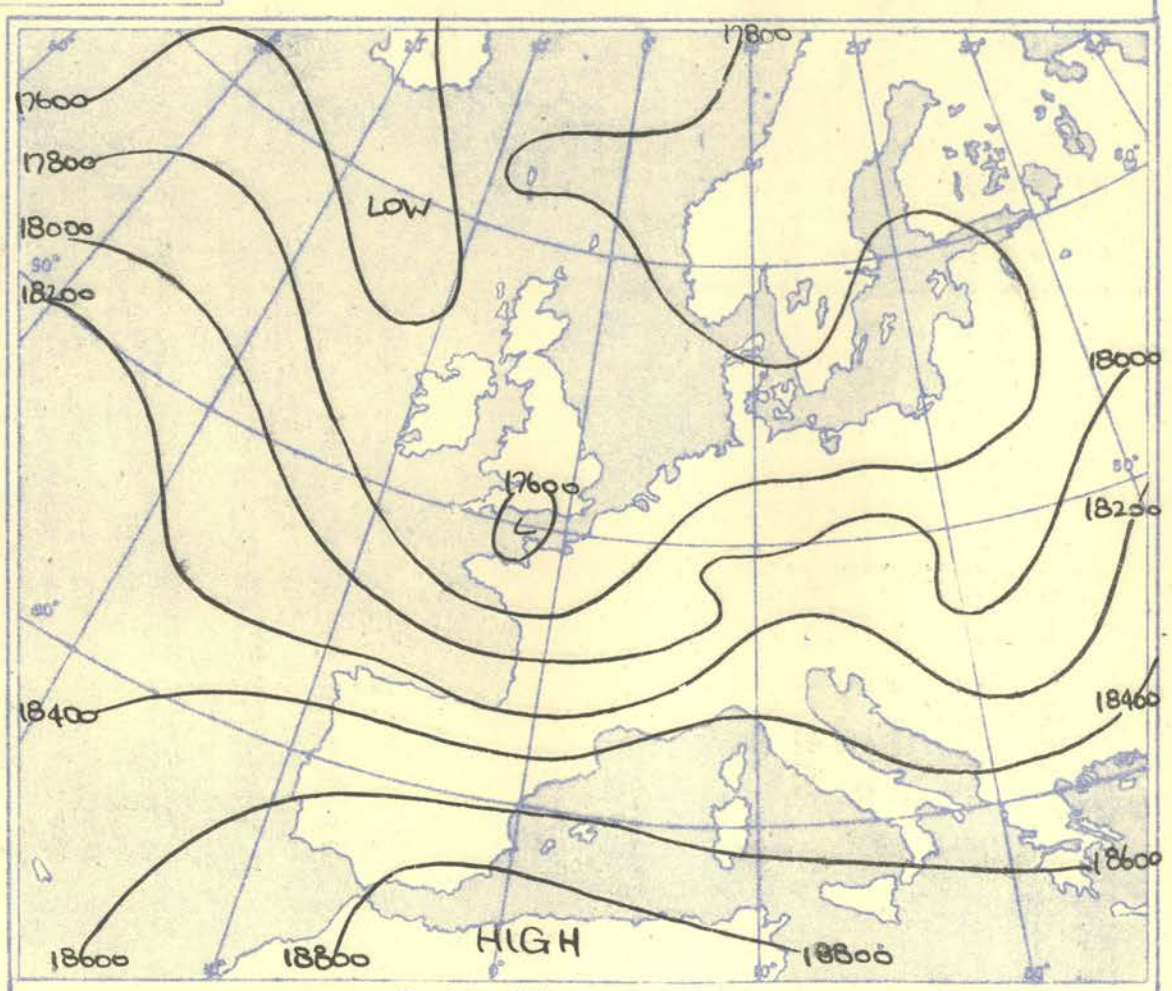
100 60 40 30 20 15 10 knots



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

	48·2N 20·5W			49·5 N. 14·7 W			51·3N. 00·4E.																	
Pressure Time	12.50			14.35			15h.																	
Pressure M.S.L.	1026	mb		1023	mb		1008·2	mb			mb			mb			mb			mb			mb	
Pressure Surf	1023	mb		1019	mb		997·0	mb			mb			mb			mb			mb			mb	
Pressure Freezing	690			700			816				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.	01·0	50	50	01·0	55	48	03·1	58	47															
1000	07·0			06·1																				
950		47	43		45	45																		
900	35·5	41	34	34·7	41	31	31·1	45	35															
850		34	32		35	25		36	33															
800	66·1	36	15	65·9	34	19	62·4	30	25															
750		36	15		35	20		23																
700	10·2	33	08	10·1	31	20	96·9	18																
650		22	19		23			11																
600	14·2	17	11	14·1	15		13·6	07																
550		11	05		05			-04																
500	18·9	01		18·6	-03		18·0	-15																
450								-24																
400	Cloud			Cloud			23·2	-37																
350	2/8 Sc			1/8 Sc				-45																
300	950-890mb 7/8 Sc			950-880mb Inversion			29·5	-61																
250	840-800mb Inversion			800mb 34°			Cloud																	
200	850 mb 34°			750 " 35°			3/8 Cu																	
170	800 " 36°						900-700mb																	
	Isothermal						1/8 Cu. nim																	
	800-750mb						900-350mb																	
	36°						No cloud entered except Shallow Cu at about																	
							900 mbs.																	

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

Place	Lympne		Shoeburyness		Downham Market		Lerwick		Leuchars									
Time	03h.		09h.		09h.		15h.		21h.									
Type																		
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.	250	08	280	15	280	15			260	05								
1,000	280	27	280	25	280	25			285	24								
2,000	270	25	280	25	300	25			300	24								
3,000	270	27	300	27	320	26			301	29								
4,000	270	23	300	28	330	27			314	27								
5,000	270	20	300	27	320	26			311	28								
6,000	270	59	290	23	320	25			318	28								
8,000			290	28	320	26			313	24								
10,000			300	30	310	29			303	22								
14,000			310	24	300	28			294	14								
18,000			320	30	310	31			293	16								
24,000			320	26	310	29			309	39								
30,000			320	33	310	30			310	99								
40,000			290	31	290	22			301	22								
50,000			270	20	260	16	254	09	284	11								
60,000					260	14	245	09	(46,000')									
70,000					310	04	(54,000)											
80,000					160	09												

METEOROLOGICAL OFFICE LIBRARY 29 SEP 1950

NEPHOSCOPE OBSERVATIONS

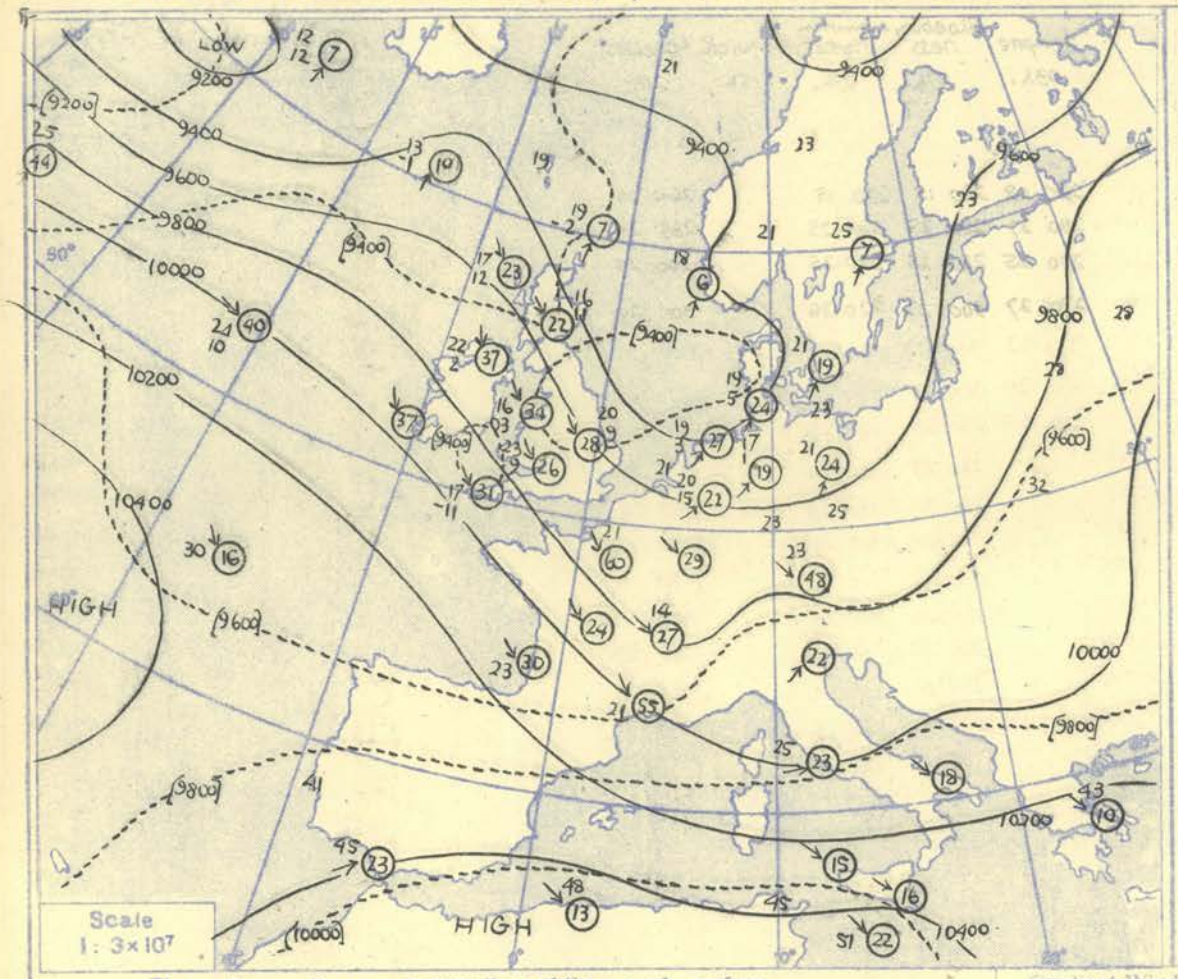
Place												
Time Type												
Dir. Vel.												

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

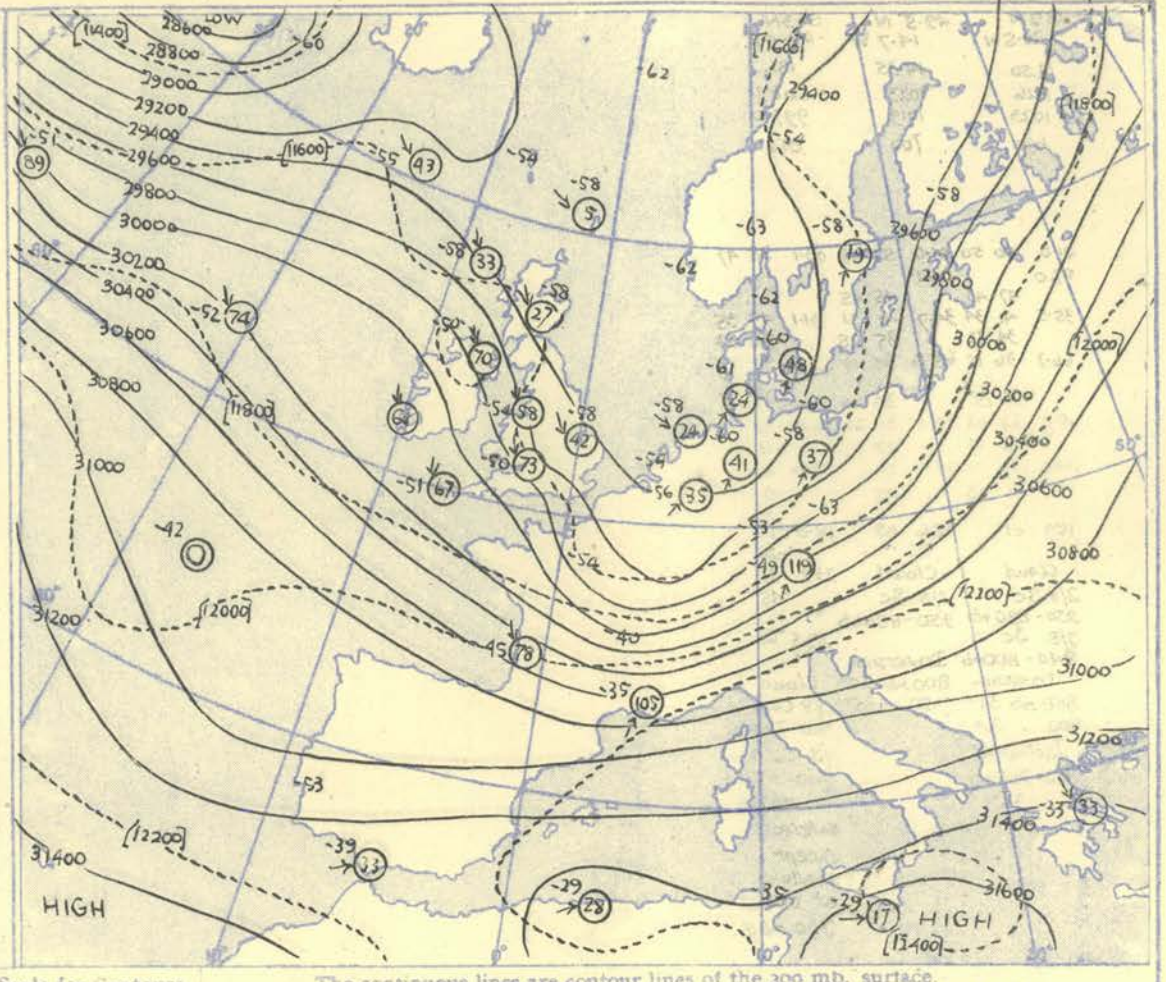
Ship	WEATHER OBSERVER					WEATHER OBSERVER					WEATHER OBSERVER					WEATHER OBSERVER.					WEATHER WATCHER.				
Lat/Long	61·0N 13·8W.					61·0N 14·0W					60·8N 14·0W					61·0N 14·0W.					52·5N 20·0W.				
Pressure Time	03L			G.M.T.		09L			G.M.T.		15L			G.M.T.		21L			G.M.T.		03L			G.M.T.	
Pressure M.S.L.	1007			mb		1006			mb		1005			mb		1003			mb		1019			mb	
Pressure Surf	1007			mb		1006			mb		1005			mb		1003			mb		1019			mb	
Pressure Freezing	880			mb		875			mb		880			mb		865			mb		790			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
Surf		47	41	320	10		48	44	Calm			51	42	255	08		49	45	110	03		53	48	290	18
1000	1·8	46	40			1·7	47	43			1·4	50	41			17	48	44			5·2	51	48	282	22
950		39	35	327	11		41	37	300	13		42	30	240	09		41	36	156	09		45	45	288	22
900	299	34	31	326	15	29·9	35	31	299	16	29·7	35	25	237	12	29·0	36	30	160	07	33·7	40	37	291	21
850		30	26	323	21		31	28	297	17		30	20	233	13		30	23	206	03		36	30	296	24
800	60·7	25	21	318	24	60·7	26	21	297	20	60·6	25	17	228	10	59·8	25	12	238	04	64·9	33	23	295	26
750		20	04	312	24		20	12	298	18		19	08	224	12		20	02	255	09		31	17	294	28
700	94·9	15	-05	312	21	94·8	13	-03	298	15	94·6	13	-01	221	10	93·9	12	-11	255	10	99·8	28	25	294	34
650		08	-11	314	16		06	-16	295	15		05	-07	225	09		06	-19	252	09		25	15	297	40
600	133	00	-11	316	10	133	-01	-23	278	08	133	-01	-15	232	09	132	-02	-28	240	04	140	18	03	305	45
550		-05	-20	360	05		-08	-29	128	06		-07	-24	229	07		-10	-38	240	05		06	-05	307	53
500	178	-14	-30	027	06	177	-18	-31	119	08	177	-16	-33	219	09	176	-17	-38	249	10	185	-02	-14	305	51
450		-24	-34	004	07		-27	-38	214	06		-25	-41	180	07		-25	-33	282	30		-11	-25	301	57
400	229	-34	-43	348	10	229	-37	-48	250	07	229	-34	-50	143	13	228	-36	-42	303	32	238	-23	-34	298	63
350		-47		338	15		-49		278	12		-43		220	19		-48		317	23		-36	-47	305	55
300	293	-61		328	27	291	-62		280	19	292	-55		293	43	291	-62		329	15	303	-51		300	43
250		-54		318	16		-61		282	18		-59		295	29		-62		282	10		-65		300	44
200	380	-51		312	10	378	-54		282	20	379	-53		278	14	377	-55		282	13	388	-76		300	15
170		-53		308	07		-55		283	15		-54		269	15		-54		282	13		-70		300	49
150		-54		301	06		-57		285	11		-53		261	14		-55		282	13		-69		292	48
130		-53		281	05		-54		284	10		-53		255	03		-54		282	11		-67		286	41
110		-53		265	03		-54		282	05		-51		255	12		-57		282	09		-64		283	36
100	531	-54		288	06	528	-56		249	04	530	-49		255	09	527	-55		280	08	533	-64		281	32
90		-55		311	05		-56		358	05		-49		255	07		-56		277	07		-64		277	28
80		-57		284	05		-55					-49		255	09		-57		268	11		-64		275	26
70		-56		270	06	(87mb)						-48		255	09		-57					-64		275	25
60		-56		261	04						(40mb)	-47		255	11	(75mb)						-64		279	21
	(52mb)	-56																			(50mb)	-61			
	Inversion 867 mb 29°-848mb 30° Isothermal 602-581mb 0°					Isothermal 865-836 mb 30°															Isothermal 782-750mb 31° 725-700 " 28°					
																					(43mb) Inversion 825 mb 31°-798mb 38°				
Tropopause	I 297 mb -62° 29·500					I 281mb -64° 30·500					II 286mb -59° 30·200					I 265 mb -67° 31·700					I 200mb -76° 38·800				
																					II 231mb -70° 35·900				

Ship	WEATHER WATCHER					WEATHER WATCHER									Ship
Lat/Long	52·5N 20·0W					52·5N 19·9W.									Lat/Long
Pressure Time	09L			G.M.T.		21L			G.M.T.					G.M.T.	Time
Pressure M.S.L.	1019			mb		1019			mb					mb	M.S.L.
Pressure Surf	1019			mb		1019			mb					mb	Surf
Pressure Freezing	730			mb		765			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	Pressure mb
Surf		55	51	280	15		54	54	300	20						Surf
1000	5·3	53	51	271	21	5·0	54	52	250	31	5·2	52	52	284	33	1000
950		46	46	265	27		51	44	262	35		49	49	275	30	950
900	33·8	39	35	270	21	33·7	46	42	264	36	33·9	45	45	272	33	900
850		33	33	275	22		37	37	262	32		41	41	274	34	850
800	64·9	32	20	278	26	65·1	36	28	270	32	65·4	36	36	299	37	800
750		34	20	282	30		30	23	279	35		30	30	281	41	750
700	100	29	13	285	32	999	24	10	278	40	100	24	22	285	47	700
650		22	08	291	81		19	11	277	40		18	09	284	47	650
600	140	15	04	286	42	139	14	14	273	48	140	15	-01	280	48	600
550		06	-02	277	45		05	-10	270	51		06	+12	280	48	550
500	185	-06	-12	276	41	185	-05	-29	277	45	185	-04	-20	280	51	500
450		-15	-21	277	44		-14	-26	285	56		-25	-28	280	65	450
400	238	-23	-31	277	58	237	-27	-38	273	51	238	-24	-38	280	65	400
350		-35	-41	277	57		-37	-47	273	76		-37	-49	280	67	350
300	303	-49		280	57	302	-52		280	74	303	-49		280	57	300
250		-64		286	63		-67		284	86		-65		280	77	250
200	389	-66		280	69	387	-66		290	76	388	-76		289	94	200
170		-63		280	58		-64					-69		294	74	170
						(185mb)										
150		-65		280	56							-67		297	60	150
130		-62		280	45							-67		299	50	130
110		-59		280	31							-67		296	39	110
100	536	-59		280	31						533	-65		292	32	100
90		-59		278	38							-63		292	30	90
80		-58		279	27							-64		290	27	80
70		-58		279	33							-65		286	22	70
60		-59		280	27							-65				60
		-60		280	20						(68mb)					
		-61														
	Inversion 835 mb 34°-800mb 35° Isothermal 600-590 mb 14° 333-315°-32°					Isothermal 650-627mb 18°										
Tropopause	II 227 mb -72° 36·000					I 194 mb -77° 39·400										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

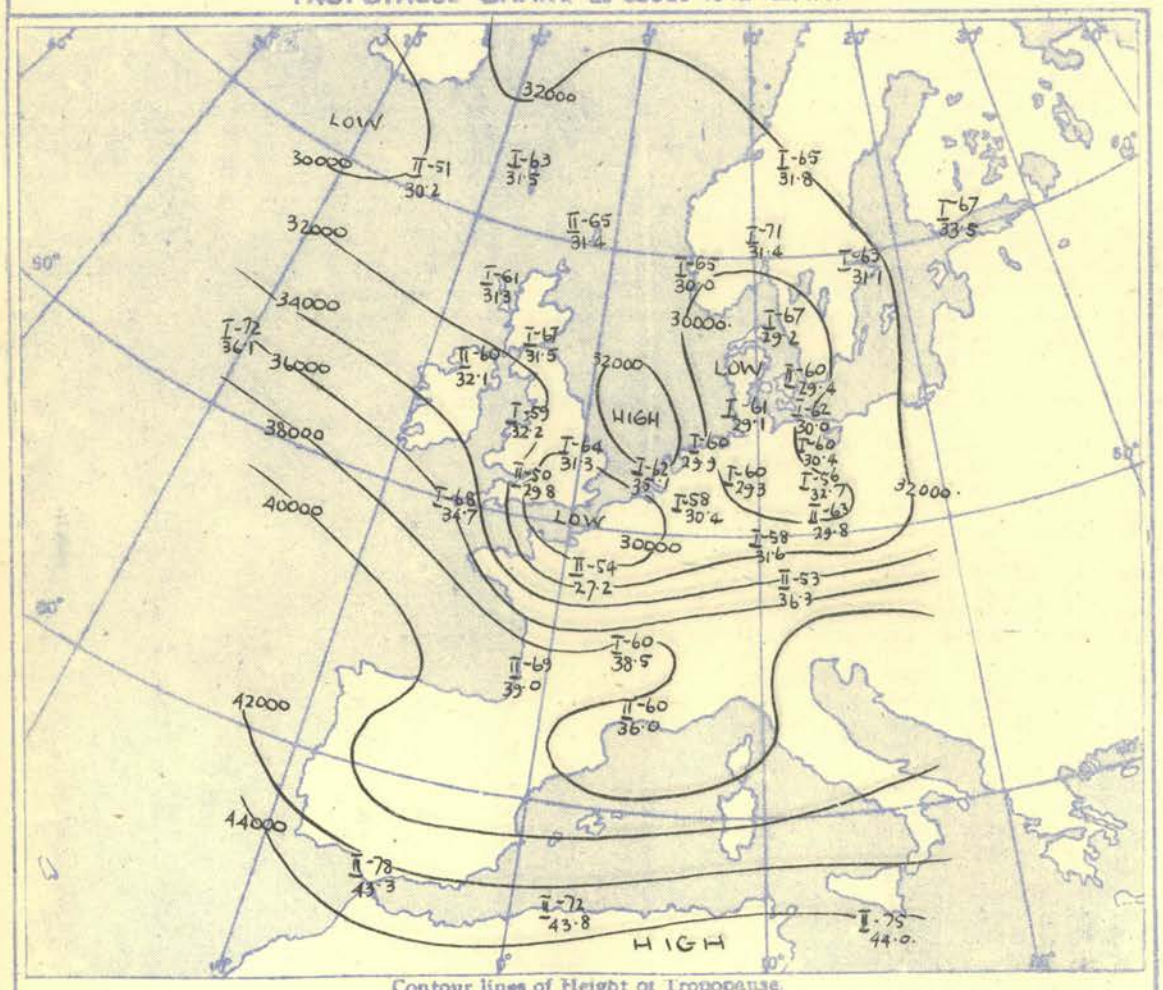


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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

100 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.

The cold trough from Southwest Iceland to the British Isles moved slowly northeastward in its southern portion. A strong thermal gradient existed from Labrador well into the Atlantic, but this gradient became less strong east of about 25 W. A strong thermal gradient also existed from South France to Western Russia.

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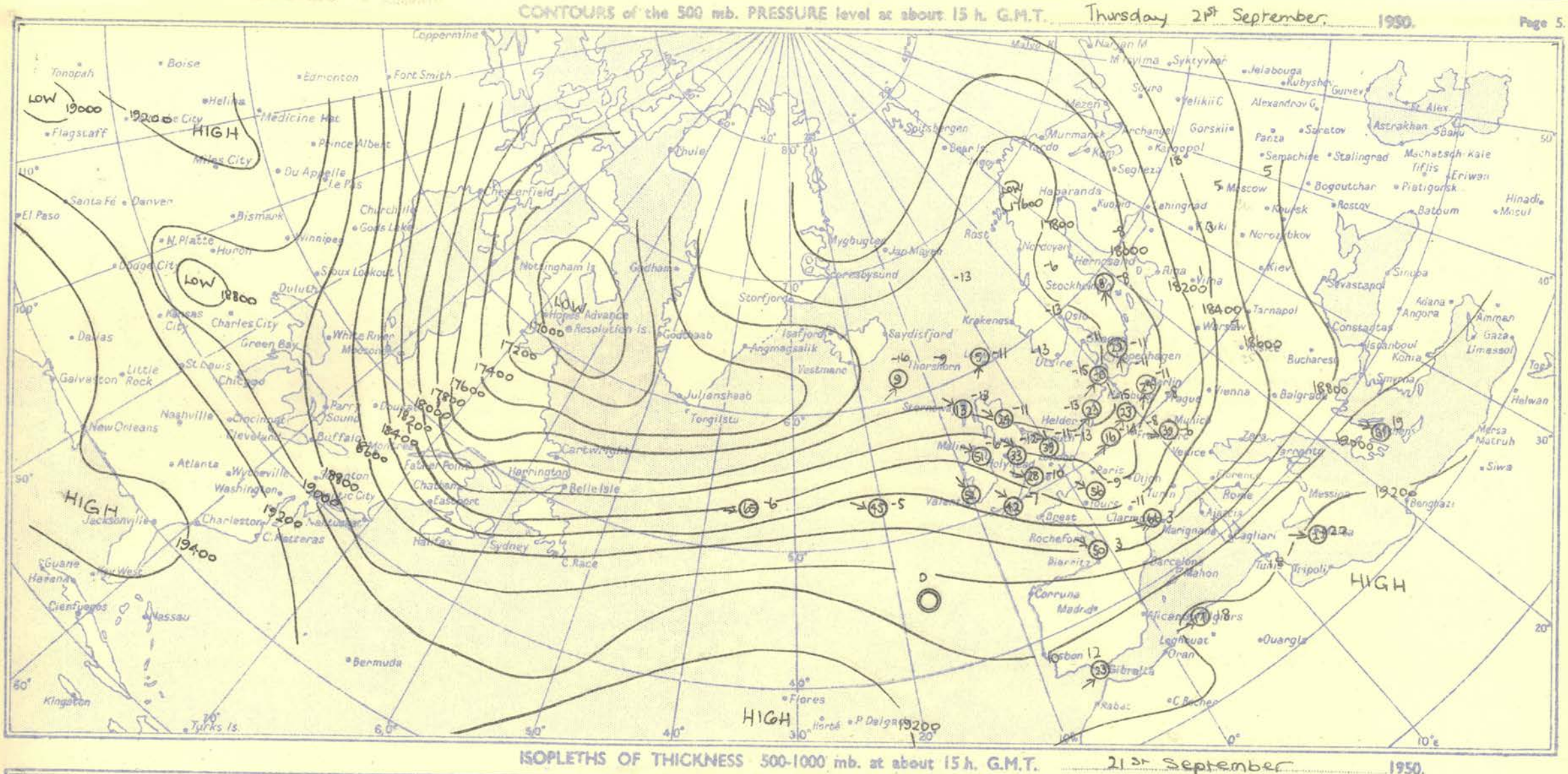
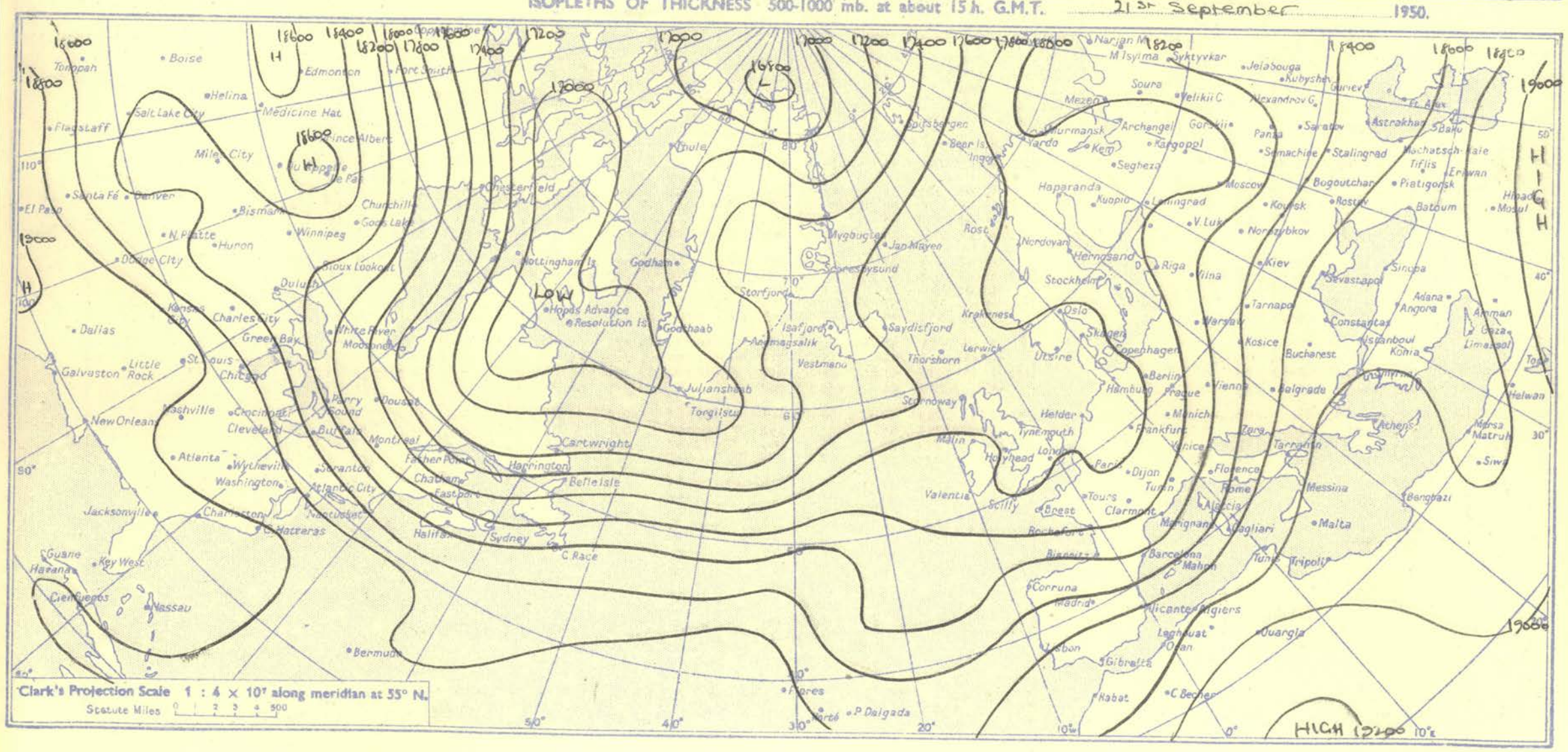
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Thursday 21st September 1950.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. 21st September 1950.



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

LERWICK

Pressure — Time 15h G.M.T. | M.S.L. 996.7 mb | Surf 986.9 mb | Freezing 822 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	54	45	CALM	
1000	-0·9				
960		43	37	239	06
900	27·5	37	32	235	05
850		34	23	198	03
800	58·6	31	11	192	04
750		25	09	221	06
700	93·1	19	-02	232	07
650		14	-16	240	06
600	132	05	-20	234	05
550		-03	-18	222	06
500	176	-11	-25	218	05
450		-21	-32	274	04
400	228	-34	-46	279	06
350		-46		266	05
300	292	-58		276	05
250		-65		287	08
200	378	-54		257	06
170		-51		294	06
150		-51		286	08
130		-51		255	05
110	(113 mb)	-53			
100					
90					
80					
70					
60					

For rest of winds see page 3.

Isothermal 712 - 686 mb 19°

Tropopause: II 271 mb -65° 31,400'

STORNOWAY

Pressure — Time 15h G.M.T. | M.S.L. 1003·7 mb | Surf 1001·8 mb | Freezing 840 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·5	50	46	305	25
1000	1·0	50	46		
960		43	38	305	27
900	29·4	37	33	314	32
850		33	29	317	28
800	60·4	28	24	313	24
750		22	18	306	22
700	94·7	17	12	308	23
650		11	05	317	18
600	133	03	-02	310	15
550		-05	-10	293	12
500	178	-13	-25	298	13
450		-24	-36	304	13
400	230	-36	-48	311	16
350		-48		311	31
300	293	-58		308	33
250		-60		304	30
200	379	-53		306	22
170		-53		291	30
150		-54		284	14
130		-55		294	12
110				282	09

Isothermal 712 - 700 mb 17°

Tropopause: I 273 mb -61° 31,300'

LEUCHARS

Pressure — Time 15h G.M.T. | M.S.L. 1003·3 mb | Surf 1002·2 mb | Freezing 830 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	57	42	280	14
1000	1·9	56	41	264	36
960		49	40	271	33
900	29·5	42	36	284	31
850		34	33	302	33
800	60·6	28	28	313	31
750		23	19	325	26
700	95·0	16	11	326	22
650		08	05	314	21
600	133	04	-15	310	29
550		-02	-20	311	29
500	178	-11	-25	308	24
450		-21	-34	292	19
400	230	-33	-45	279	18
350		-46		295	21
300	293	-58		294	27
250		-63		315	35
200	379	-56		314	32
170		-53		310	25
150		-55		288	23
130		-53		283	20
110		-55		282	16
100	529	-55		281	14
90		-53		280	13
80		-55		290	18
70		-56		306	15
60		-51		272	14
(50 mb)		-52		261	16
(40 mb)		-53		271	21
(30 mb)		-53		308	14

Isothermal 712 - 700 mb 17°

Tropopause: I 270 mb -67° 31,500'

ALDERGROVE

Pressure — Time 15h G.M.T. | M.S.L. 1011·6 mb | Surf 1003·0 mb | Freezing 792 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·3	55	43	315	20
1000	3·2	54	43		
960		48	37	310	27
900	31·8	42	31	304	27
850		36	26	301	30
800	63·0	32	15	306	33
750		26	11	313	35
700	97·7	22	02	311	37
650		15	-06	315	39
600	137	09	-14	313	42
550		02	-23	316	47
500	181	-06	-35	321	51
450		-12	-30	319	55
400	235	-22	-37	318	61
350		-34	-50	312	68
300	300	-50		308	70
250		-61		310	66
200	387	-55		306	51
170		-54		310	33
150		-54		309	31
130		-52		291	22
110		-50		285	09
100	537	-51		287	19
90		-51		285	30
80		-50		269	15
70		-50		274	08
60		-50		284	09
(82 mb)		-52			

Inversion 850 mb 31° - 800 mb 32° / 497 " -06° - 487 " -05°

Tropopause: II 273 mb - 60° 32,100'

LIVERPOOL

Pressure — Time 15h G.M.T. | M.S.L. 1009·2 mb | Surf 1007·2 mb | Freezing 837 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	56	45	310	20
1000	2·5	55	45		
960		47	38	307	29
900	31·0	40	32	307	31
850		34	24	312	35
800	62·1	27	19	310	32
750		22	11	303	32
700	96·4	16	00	301	34
650		09	-12	297	36
600	135	03	-20	301	39
550		-03	-29	304	35
500	179	-12	-29	307	33
450		-23	-39	306	30
400	231	-35	-50	301	29
350		-46		307	42
300	295	-54		322	58
250		-56		313	57
200	382	-52		311	30
170		-54		311	30
150		-55		283	29
130		-51		296	19
110		-50		287	13
100	533	-49		272	18
90		-48		275	20
(82 mb)		-52			

Tropopause: I 263 mb -59° 32,200'

DOWNHAM MARKET

Pressure — Time 15h G.M.T. | M.S.L. 1005·1 mb | Surf 1000·8 mb | Freezing 800 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	57	45	320	12
1000	1·4	57	45		
960		49	40	322	20
900	30·1	41	34	319	25
850		37	29	318	30
800	61·4	32	24	316	33
750		24	17	314	29
700	95·9	20	09	314	28
650		12	03	312	32
600	135	04	-05	308	30
550		-03	-15	304	30
500	179	-11	-25	295	39
450		-23	-36	294	37
400	231	-35	-45	301	34
350		-47		303	36
300	294	-58		310	42
250		-60		311	41
200	381	-52		306	33
170		-52		299	30
150		-55		286	24
130		-54		285	24
110		-55		287	20
100	530	-55		283	15
90		-54		269	10

Tropopause: I 276 mb -64° 31,300'

LARKHILL

Pressure — Time 15h G.M.T. | M.S.L. 1009·3 mb | Surf 993·5 mb | Freezing 779 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	53	46	360	18
1000	2·6				
960		49	42	342	26
900	31·4	44	38	316	21
850		39	32	292	23
800	62·9	34	20	290	21
750		29	16	299	24
700	97·8	23	09	302	26
650		15	01	301	25
600	137	08	-09	303	22
550		-02	-22	308	24
500	181	-10	-34	305	28
450		-20	-47	297	31
400	234	-30	-55	305	36
350		-40	-60	315	59
300	298	-50		318	73
250		-53		318	62
200	386	-54		304	48
170		-51		296	43
150		-52		295	33
130		-50		299	30
110		-50		291	15
100	537	-48		271	18
90		-49		270	20
(76 mb)		-49		273	14

Tropopause: II 300 mb - 50° 29,800'

CAMBORNE

Pressure — Time 15h G.M.T. | M.S.L. 1016·5 mb | Surf 1006·0 mb | Freezing 835 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	56	49	315	15
1000	4·5	55	47		
960		46	42	315	27
900	33·0	40	35	320	26
850		34	30	320	27
800	64·1	28	25	318	27
750		22	09	314	28
700	98·4	17	-11	313	31
650		13	-22	317	34
600	137	08	-27	316	36
550		01	-32	316	40
500	182	-07	-29	316	42
450		-15	-29	312	55
400	235	-25	-39	317	49
350		-39	-50	315	57
300	300	-51		307	67
250		-66		305	72
200	385	-66		299	58
170		-66		309	53
150		-66		310	40
130		-66		315	28
110		-66		322	27
100	531	-66		322	20
90		-67			
80		-69			
70		-67			
60		-66			
		-65			
(43 mb)		-63			

Tropopause: I 240 mb - 68° 34,700'

VALENTIA

Pressure — Time 15h G.M.T. | M.S.L. 1013·3 mb | Surf 1011·7 mb | Freezing NR.

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	58	48	280	10
1000	5·2	55	45	283	12
960		47	39	291	19
900	33·7	40	34	293	27
850		34	29	294	36
800	64·8	28	20	294	28
750		26	03	293	31
700	99·3	23	-03	304	37
650		18	03	315	44
600	139	12	-05	312	49
550		03	-06	312	52
500	184	-07	-15	313	62
450		-16	-24	311	47
400	236	-24	-40	304	49
350				299	45
300				300	64
250					
200					
170	(391 mb)	-26	-40		
150					
130					
110					
100					
90					
80					
70					
60					

Tropopause: NR

LERWICK

Pressure — Time 21h G.M.T. | M.S.L. 999·1 mb | Surf 989·2 mb | Freezing 818 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	49	47	320	07
1000	-0·3				
960		45	41	300	12
900	28·2	40	36	303	13
850		35	31	303	14
800	59·4	30	25	299	13
750		25	18	294	12
700	93·9	19	05	290	10
650		13	02	278	09
600	133	06	-11	265	09
550		-02	-14	277	13
500	177	-12	-22	289	09
450		-22	-34	253	05
400	229	-34	-47	239	06
350		-47		227	06
300	292	-59		259	01
250		-61		286	05
200	379	-51		287	06
170		-50		274	05
150		-52		263	07
130		-52		264	07
110		-52		266	07
100	530	-54		208	04
90		-54		194	04

Tropopause: I 270 mb - 66° 31,500'

STORNOWAY

Pressure — Time 21h G.M.T. | M.S.L. 1006·8 mb | Surf 1004·9 mb | Freezing 862 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·5	47	40	290	07
1000	1·8	48	40		
960		44	38	298	21
900	30·2	38	34	296	22
850		31	28	292	22
800	61·1	26	19	290	22
750		21	09	292	21
700	95·3	15	02	292	18
650		07	-08	277	18
600	134	01	-13	266	17
550		-06	-21	268	16
500	178	-15	-30	278	17
450		-24	-36	295	21
400	230	-33	-42	296	32
350		-45		294	34
300	293	-56		293	35
250		-65		297	31
200	379	-54		289	21
170		-52		286	17
150		-54		274	15

Isothermal 1005 - 984 mb 48°

Tropopause: I 253 mb -56° 32,500'

LEUCHARS

Pressure — Time 21h G.M.T.

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf					
1000					
960					
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:

ALDERGROVE

Pressure — Time 21h G.M.T. | M.S.L. 1012·4 mb | Surf 1003·8 mb | Freezing 840 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·3	50	45	280	10
1000	3·4				
960		45	40	272	20
900	31·8	40	35	274	20
850		33	29	277	24
800	62·9	28	24	278	27
750		23	18	279	31
700	97·4	16	08	284	32
650		10	02	291	36
600	136	05	-01	296	41
550		-01	-10	297	44
500	181	-09	-16	298	44
450		-20	-31	295	43
400	233	-31	-43	288	43
350		-44		286	43
300	297	-59		283	42
250		-67		288	42
200	383	-54		295	35
170		-58		295	35
150		-57		292	32
130		-57		290	27
110		-57		287	24
100	532	-56		294	20
90		-45		314	17
80		-48		292	14
70		-41		252	10

Inversion 527 mb -05° - 510 mb 04°

Tropopause: I 245 mb - 67° 34,000'

LIVERPOOL

Pressure — Time 21h G.M.T. | M.S.L. 1011·4 mb | Surf 1009·4 mb | Freezing 847 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	51	41	310	15
1000	3·1	51	41		
960		48	40	306	25
900	31·7	41	35	300	28
850		32	23	301	34
800	62·8	28	12	306	34
750		22	05	309	35
700	97·1	16	09	311	37
650		08	-05	310	37
600	136	02	-07	313	36
550		-03	-10	309	48
500	180	-10	-18	312	46
450		-19	-26	312	46
400	232	-29	-39	308	52
350		-43		304	52
300	296	-59		304	51
250		-73		298	47
200	381	-59		301	45
170		-62		298	33
150		-62		306	24
(135 mb)		-62			

Inversion 1009 mb 56° - 977 mb 52° / 820 " 28° - 801 " 29°

Tropopause: I 247 mb -74° 33,700'

DOWNHAM MARKET

Pressure — Time 21h G.M.T. | M.S.L. 1011·5 mb | Surf 1007·0 mb | Freezing 844 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	49	41	270	07
1000	3·1	49	41		
960		45	35	302	34
900	31·6	39	28	309	35
850		33	23	307	32
800	62·6	28	19	306	32
750		23	09	300	34
700	96·9	16	-06	293	37
650		10	-10	290	34
600	136	04	-19	290	33
550		-03	-26	298	31
500	180	-13	-36	296	33
450		-22	-43	302	37
400	232	-33	-53	306	42
350		-42		317	55
300	296	-54		320	67
250		-65		311	55
200	382	-60		303	43
170		-56		303	36
150		-58		298	30
130		-58		290	23
110		-59		298	17
100	530	-58			
90		-57			
80		-57			
70		-59			

Isothermal 1007 - 990 mb 49° / 885 - 846 " 10°

Tropopause: I 262 mb -64° 32,500'

LARKHILL

Pressure — Time 21h G.M.T. | M.S.L. 1015·5 mb | Surf 999·2 mb | Freezing 849 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	43	42	280	05
1000	4·1				
960		47	43	297	22
900	32·6	40	38	305	28
850		32	29	310	31
800	63·1	27	23	313	31
750		24	11	310	32
700	98·1	18	05	316	31
650		11	00	315	34
600	137	05	-02	309	34
550		-02	-06	310	41
500	181	-10	-13	310	46
450		-21	-24	307	48
400	233	-30	-33	308	54
350		-42		309	57
300	297	-58		308	60
250		-71		306	56
200	382	-66		296	48
170		-66		294	50
150		-67		292	50
130		-65		295	35
110		-63			
100	528	-64			
(76 mb)		-49			

Inversion 999 mb 43° - 970 mb 49°

Tropopause:

CAMBORNE

Pressure — Time 21h G.M.T. | M.S.L. 1019·7 mb | Surf 1009·1 mb | Freezing 815 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	52	48	275	12
1000	5·4	52	47		
960		47	43	287	24
900	33·9	41	34	298	21
850		36	29	303	20
800	65·1	31	19	306	22
750		28	11	305	28
700	100	25	02	310	31
650		19	02	317	33
600	139	13	02	312	44
550		06	-03	311	50
500	184	-05	-14	211	56
450		-16	-24	305	51
400	237	-26	-34	297	48
350		-38	-47	293	57
300	302	-53		297	63
250		-64		295	46
200	388	-59		293	55
170		-58		296	45
150		-58		295	39
130		-58		293	33
110		-59		300	33
100	536	-56		302	24
90		-56		301	25
80		-55			
70		-55			
60					
(76 mb)		-55			

Tropopause: I 240 mb - 66° 35,000'

VALENTIA

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

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf					
1000					
960					
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:

No. 11499 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Friday 22nd September 1950. 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.	1000·1 mb	1005·0 mb	1007·8 mb	1010·9 mb	1012·1 mb	1014·2 mb	1017·1 mb	1020·6 mb	1018·9 mb
Pressure: Surf	990·2 mb	1003·1 mb	1006·5 mb	1002·3 mb	1010·1 mb	1009·6 mb	100·8 mb	1009·9 mb	1017 mb
Pressure: (Freezing)	830 mb	860 mb	834 mb	800 mb	850 mb	821 mb	831 mb	835 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
Surf	02·7	47	46	305	12	00·5	44	41	220	08	00·2	45	42		
1000	0·0					01·5	45	42			01·9	45	42		
950		45	44	291	21		42	37	254	14		44	37		
900	28·4	39	38	295	17	29·6	37	33	239	12	30·3	39	34		
850		34	33	297	15		31	27	246	11		34	27		
800	59·5	29	28	298	15	60·6	27	22	254	15	61·4	28	22		
750		26	22	288	16		21	16	264	18		31	17		
700	94·1	19	13	282	18	94·8	14	08	264	21	96·0	15	13		
650		12	03	280	14		07	02	271	22		08	06		
600	13·3	04	-09	282	13	13·3	-01	-07	286	23	13·4	01	-01		
550		-05	-16	288	12		-06	-12	286	27		-07	-09		
500	17·7	-14	-24	277	10	17·7	-14	-26	282	30	17·8	-13	-16		
450		-24	-35	245	09		-25	-34	274	30		-24	-29		
400	22·9	-36	-50	245	08	22·9	-39	-46	281	22	23·0	-36	-43		
350		-49		242	07		-54		274	19		-49			
300	29·2	-61		233	08	29·1	-63		256	20	Isothermal 1006 - 960 mb 45°				
250		-61		280	07		-57		259	20					
200	37·9	-52		281	09	37·8	-53		277	20					
170		-52		273	07		-55		277	16					
150		-51		269	09	44·0	-56		277	15					
130		-51		249	07		-55		269	14					
110		-53		235	09		-54		268	12					
100	52·9	-54		257	11	52·8	-55		268	12					
90		-54		249	10		-56		274	10					
80		-54		255	08		-57								
70		-54		239	07	Inversion 1003 mb 44° - 992 mb 48°									
60	Inversion 990 mb 47° - 978 mb 48°					300 " -63° - 282 " -62° Isothermal 595 - 582 mb - 2°									
Tropopause	I 281 mb -64° 30,600'			I 269 mb -65° 31,400'		N.R. 340 mb 26,500'					I 262 mb -65° 32,700'				

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	02·3	49	47	225	15	00·6	52	46			01·2	43	40	210	09
1000	02·9	49	46			03·3	51	44			03·8	45	42	277	22
950		43	40	244	27		46	43				46	39	297	28
900	31·3	39	36	260	28	31·8	39	38			32·2	41	28	305	31
850		34	31	270	27		32	31				36	17	306	31
800	62·5	32	29	260	27	62·8	21	24			63·3	29	11	307	29
750		27	23	270	31		21	19				22	10	299	30
700	97·2	22	18	275	30	97·1	16	14			97·6	15	08	292	33
650		16	12	277	39		10	08				09	04	297	39
600	13·6	08	03	272	41	13·6	03	02			13·6	04	-02	299	44
550		-01	-07	270	37		-5	-7				-02	-09	298	47
500	18·7	-10	-17	274	33	18·0	-14	-17			18·1	-09	-20	299	42
450		-21	-28	284	33		-25	-28				+21	+33	300	39
400	23·3	-36	-43	280	33	23·2	-38	-43			23·3	+34	-42	289	39
350		-45		286	48		-48					+46		286	39
300	29·7	-54		292	98	29·5	-58				29·6	-60		288	45
250		-61		286	56		-64					-69		284	36
200	38·3	-59		288	40	38·1	-58				38·1	-56		291	34
170		-57		280	36		-58				38·3	-59		283	33
150	44·5	-58		284	30	44·2	-59				44·3	-60		285	30
130		-57		292	26		-61					-61		284	24
110		-60		276	23		-59					-59		280	17
100	53·2	-60		262	23	52·9	-58				52·9	-58		265	14
90		-59					-59					-58		264	19
80		-59					-60					-61		279	17
70							-61					-61			
60							-60				Inversion 1010 mb 43° - 990 mb 47° Isothermal 990 - 958 mb 47°				
Tropopause	I 262 mb -65° 32,700'					II 277 mb -63° 31,200'					I 239 mb -70° 34,300'				

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	43	41	260	05	02·9	53	48	275	12	00·3	55	53		
1000	04·6	43	41			05·6	52	48			51	53	51		
950		45	42	284	24		46	42	279	27		48	48		
900	33·0	40	36	285	26	34·1	40	36	285	28	33·8	43	43		
850		34	30	292	26		34	30	291	27		38	38		
800	64·1	28	23	295	25	65·2	30	23	287	31	65·1	32	27		
750		25	17	287	29		30	17	285	35		26	22		
700	98·7	21	03	285	30	10·0	26	09	289	35	99·8	22	+17		
650		15	03	289	35		18	07	293	35		16	-9		
600	13·8	06	01	292	40	13·9	10	01	299	43	13·9	13	+11		
550		-03	-07	291	43		03	-10	301	51		5	-16		
500	18·2	-12	-19	292	45	18·4	-5	-16	298	54	18·4	-6	-24		
450		-23	-32	295	53		-16	-26	297	55		-15	-32		
400	23·4	-36	-43	292	60	23·7	-28	-36	299	58	23·7	-25	-41		
350		-46		299	64		-43		305	70		-41			
300	29·7	-58		295	64	30·1	-55		307	74	30·1	-56			
250		-70		297	61		-70		307	75		-70			
200	38·3	-57		281	43	38·6	-69		306	64	38·6	-66			
170		-63		285	37		-64					-62			
150		-63		288	34	(65mb)	-64					-59			
130		-67		290	22						(125mb)	-59			
110		-62		288	28	Isothermal 820 - 742 mb 30°					Isothermal 740 - 720 mb 24° 630 - 608 " 14°				
100		-59		290	16										
90		-63		283	21										
80		-63		285	20										
70		-64		283	16										
60	Inversion 1001 mb 43° - 975 mb 48° Isothermal 800 - 786 mb 28°	-63		297	10										
Tropopause	I 245 mb -71° 34,000'					I 236 mb -74° 35,100'					I 235 mb -75° 35,300'				

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.	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.	1000·9 mb	1003·2 mb	mb	1011·8 mb	1010·6 mb	1014·1 mb	1016 mb	1021·2 mb	mb
Pressure: Surf	991·0 mb	1001·3 mb	mb	1003·2 mb	1008·6 mb	1009·6 mb	1000·8 mb	1010·6 mb	mb
Pressure: (Freezing)	836 mb	840 mb	mb	855 mb	817 mb	832 mb	815 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
Surf	02·7	48	42	310	10	00·5	48	47							
1000	00·2					00·9	48	47							
950		43	38	280	18		44	41							
900	28·5	36	32	277	16	29·2	38	36							
850		31	28	276	14		33	31							
800	59·5	30	18	276	12	60·3	28	26							
750		25	09	275	12		23	21							
700	94·1	19	10	268	12	94·8	17	14							
650		11	02	260	11		10	06							
600	13·3	05	-6	258	08	13·3	03	+02							
550		-5	-15	225	08		-5	-11							
500	17·1	-16	-24	202	09	17·8	-15	-22							
450		-27	-36	193	07		-26	-34							
400	22·9	-37	-46	202	09	22·9	-38	-46							
350		-50		240	08		-50								
300	29·1	-61		263	09	29·2	-54								
250		-57		274	08		-53								
200	37·9	-47		269	07	38·0	-46								
170		-47		267	07		-49								
150		-48		263	07										
130	(142mb)	-49													
110	Inversion 991 mb 39 - 838 mb 32°														
100															
90															
80															
70															
60															
Tropopause	I 290 mb -62° 29,800'			II 333 mb -54° 26,800'											

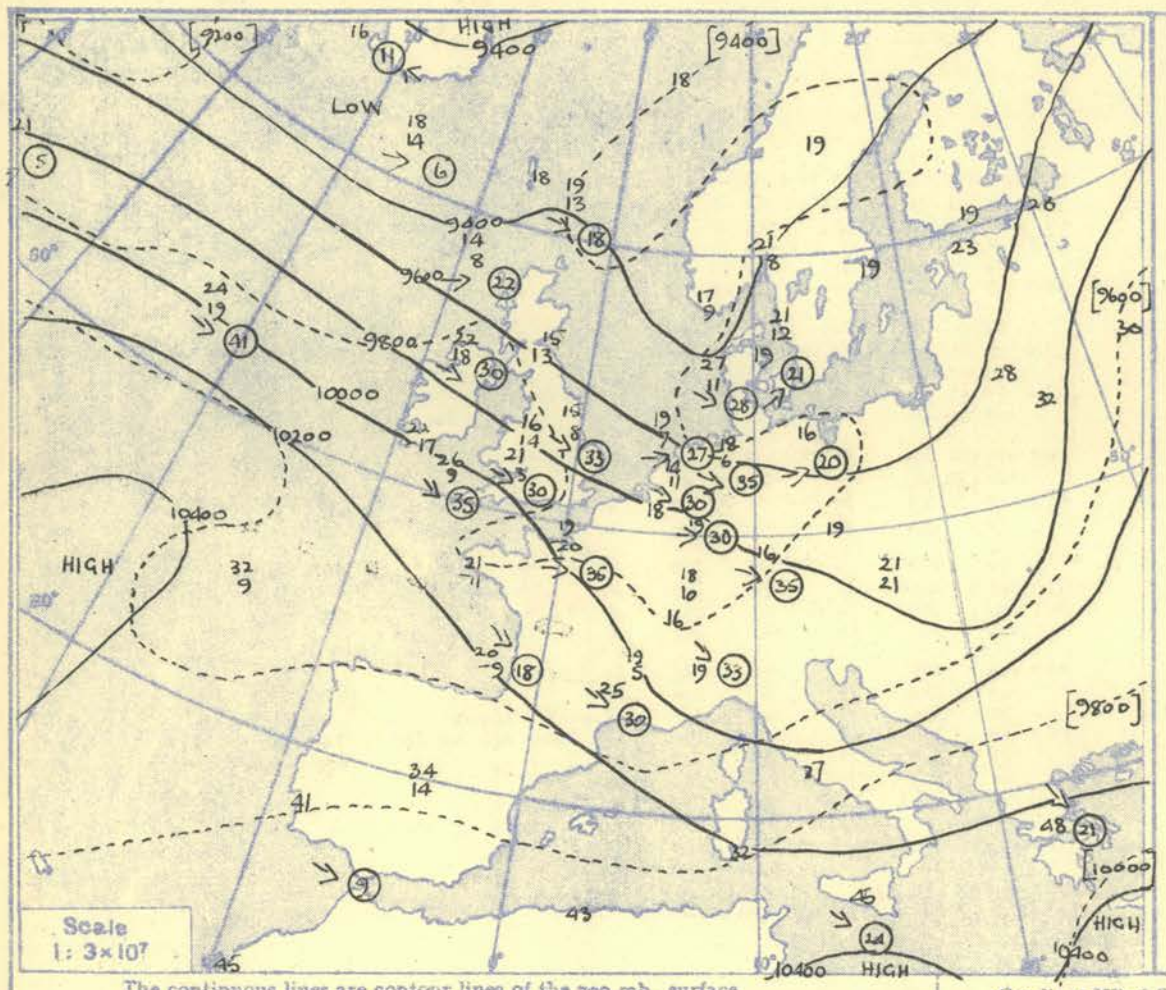
Pressure mb	Aldergrove Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Liverpool Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Downham Market Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·3	49	40	280	18	00·6	54	48	270	18	01·2	49	45		
1000	03·2					02·9	53	49			03·7	48	45		
950		43	35	282	30		48	45	276	37		46	41		
900	31·5	37	29	296	38	31·5	41	38	279	41	32·2	40	35		
850		31	24	298	42		34	31	280	42		34	30		
800	62·5	25	18	297	42	62·7	30	28	283	42	63·3	28	24		
750		20	12	292	38		24	23	282	42		24	20	See	
700	96·8	17	-01	288	39	97·2	19	-02	279	39	97·7	18	14	Page 3	
650		13	+16	287	42		13	+11	281	37		12	06	for Winds	
600	13·5	02	+21	284	40	13·6	04	+17	280	38	13·6	04	-06		
550		-09	-29	278	40		-05	+17	277	40		-4	+17		
500	18·0	-11	-37	283	43	180	-15	-28	279	43	18·1	-14	-26		
450		-22	-48	288	48		-24	-42	288	49		-24	-37		
400	232	-35	-58	288	57	232	-35	-54	289	61	23·3	-34	-51		
350		-45		295	78		-43		292	67		-45			
300	29·5	-56		292	75	296	-56		295	71	29·6	-57			
250		-56		292	73		-59		292	59		-61			
200	36·3	-49		290	46	38·3	-54		288	37	38·3	-53			
170		-57		290	32		-53		295	31		-53			
150	44·5	-58		290	25	44·8	-54		292	30	44·5	-53			
130		-54		283	27		-56		292	28		-56			
110		-58		290	22		-52		299	19		-54			
100						53·3	-53		282	15	53·3	-56			
90						Inversion 710 mb 18° - 700 mb 19°							-51			
80												-54			
70												-55			
60						Isothermal 850 - 833 mb 34°					Isothermal 984 - 950 mb 46°					
Tropopause	I 282 mb -59° 31,000'			II 286 mb -60° 30,500'							II 275 mb -61° 31,500'				

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	4·4	52	48	250	12	02·9	55	49	270	15					
1000	4·6					05·8	54	48							
950		46	43	264	30		48	42	279	32					
900	33·1	42	39	280	30	34·4	44	38	288	32					
850		36	32	292	31		39	33	297	32					
800	64·4	21	27	291	32	65·8	32	28	299	37					
750		26	22	289	33		26	21	299	39					
700	99·0	20	14	290	33	10·1	25	10	294	39					
650		14	-01	290	40		20	06	296	39					
600	13·8	09	-07	289	41	14·0	15	04	296	44					
550		00	-11	291	53		05	-06	293	47					
500	18·3	-09	-18	292	62	18·5	-4	-14	293	48					
450		-19	-33	298	70		-14	-24	294	48					
400	23·5	-31	-43	300	70	23·8	-24	-33	293	52					
350		-42		298	77		-37	-45	295	52					
300	29·9	-56		300	82	30·3	-49		302	62					
250		-69		300	82		-64		305	68					
200						38·9	-69		308	66					
170							-61		304	46					
150							-62		301	42					
130							-62		295	39					
110							-61								
100						536	-60								
90							-59								
80							-59								
70							-59								
60							-57								
						(56mb)	-57								
						Inversion 756 mb 26° - 720 mb 28° Isothermal 935 - 920 mb 46°									
Tropopause	I 239 mb -71° 34,700'					I 213 mb -74° 37,500'									

METEOROLOGICAL OFFICE LIBRARY 30 SEP 1950

Friday 22 September 1950.

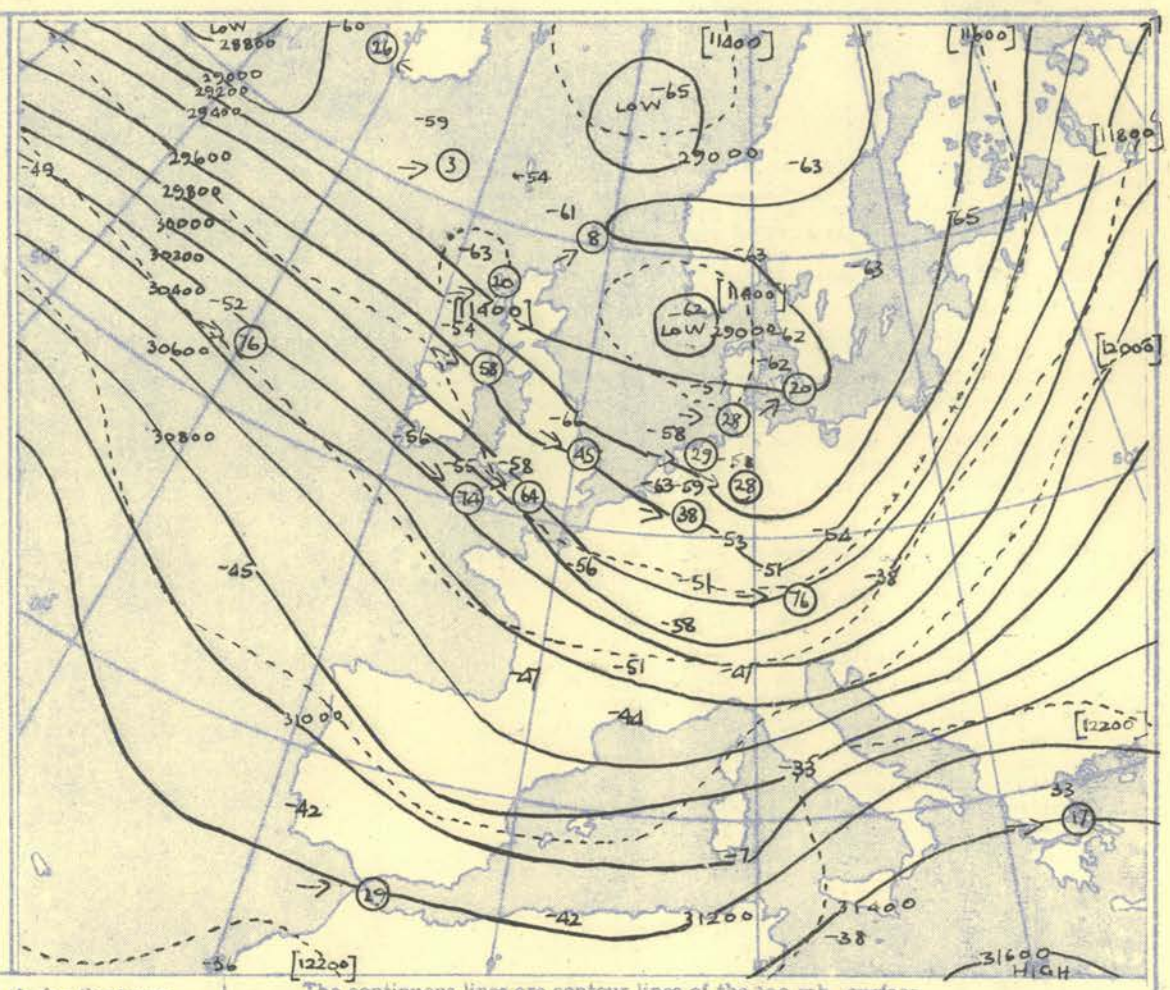
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. GMT.



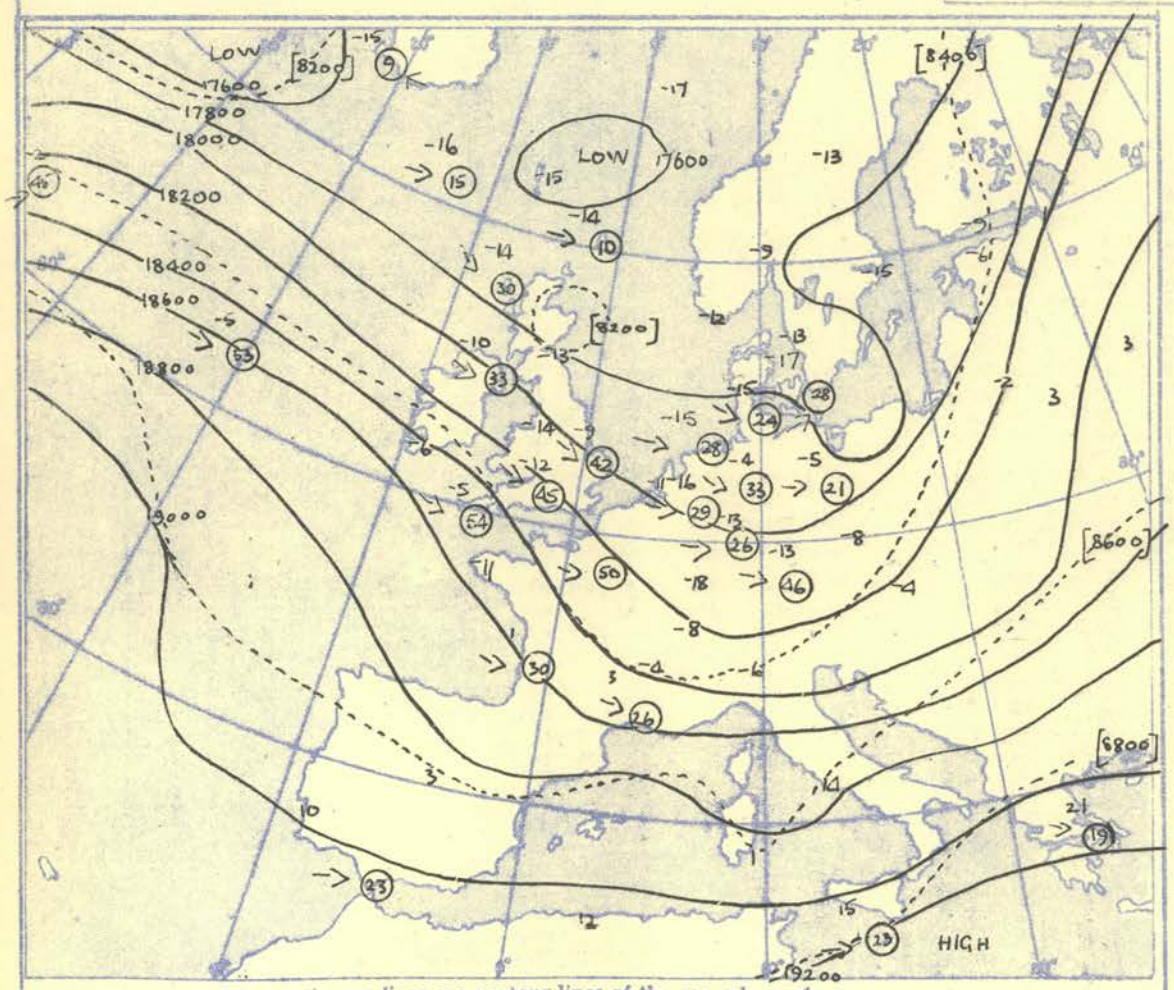
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

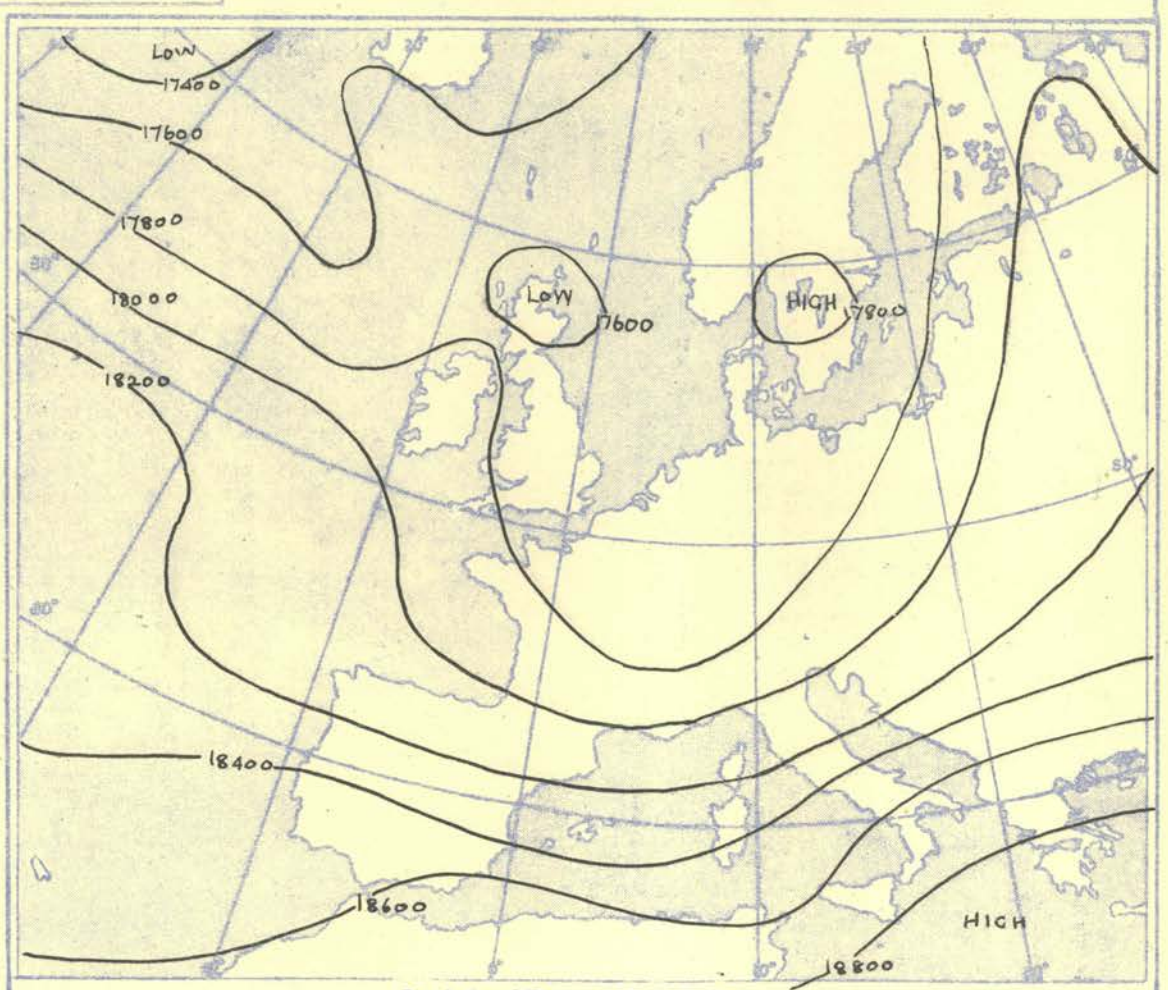
100 60 40 30 20 15 10 knots



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

51·3N. 00·4E.

Pressure	Time	Surf	1000	950	900	850	800	750	700	650	600	550	500	450	400	350	300	250	200	170	Time	Pressure
	15h.																				M.S.L.	
M.S.L.	1016·0 mb																				Surf	
Surf	1004·8 mb																				Freezing	
Freezing	820 mb																					
Height ft./100		03·1	04·4		32·8		64·0			98·6		13·7			18·2		23·4		29·8			
°F. Temp.		60			40	34	31	25	21	11	6	-2	-10	-21	-31	-45	-58					
°F. Dew		48			35	31	25	22		10	-5											

Cloud 6/8 Cu 970-820 mb
2/8 Sc 745-700 mb.

Pressure mb	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	Downham		Shoeburyness		Wick		Pembroke		Leuchars										Place
Time	09h.		09h.		09h.		15h.		21h.										Time
Type																			Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Surf.	230	05	250	20	210	05	280	20	270	07									Surf.
1,000	261	32	250	30	240	05	300	17	293	19									1,000
2,000	265	29	260	30	240	07	290	20	297	26									2,000
3,000	265	27	270	35	260	11	300	44	301	32									3,000
4,000	267	27	280	30	260	11	290	42	303	33									4,000
5,000	267	29	270	30	250	11			305	36									5,000
6,000	271	29	280	35	250	11	300	32	306	34									6,000
8,000	276	30	280	30	280	17			303	28									8,000
10,000	287	36	280	28	280	20			303	24									10,000
14,000	285	35	290	32	290	19			304	18									14,000
18,000	277	35	280	37					288	11									18,000
24,000	283	39	290	60					239	03									24,000
30,000	296	60	300	82					311	35									30,000
40,000	285	34	270	45					299	32									40,000
50,000	288	23	270	30					312	27									50,000
	282 (54,000')	18																	

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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 WATCHER	WEATHER WATCHER	WEATHER WATCHER	WEATHER WATCHER	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER		Ship
Lat/Long	52·5N. 20·1W.	52·5N. 20·0W.	52·5N. 19·9W.	52·5N. 20·0W	61·1N. 13·9W	61·0N. 14·0W.	60·9N. 14·2W.	60·8N. 14·1W.		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.	G.M.T.	Time
M.S.L.	1021 mb	1021 mb	1022 mb	1000 mb	1000 mb	999 mb	1004 mb	1007 mb	mb	M.S.L.
Surf	1021 mb	1021 mb	1022 mb	1000 mb	1000 mb	999 mb	1004 mb	1007 mb	mb	Surf
Freezing	800 mb	780 mb	700 mb	750 mb	850 mb	828 mb	840 mb	840 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		50	50	320	09		50	50	030	05		53	52	Calm			56	56	235	12		50	45	155	13		49	46	130	12		50	45	015	04		40	40	290	31						Surf
1000	5·6	48	48	312	07	5·4	48	48	035	05	5·9	52	51	225	08	5·9	54	54	238	27	1	50	45	155	13	·3				1·0				1·9	46	42						1000
950		45	45	282	12			46	46	308	07		47	47	227	14		50	50	239	23		44	40	142	12										40	36	292	31		950
900	34·1	41	41	261	23	34·0	44	44	270	13	34·5	44	44	228	17	34·5	46	46	248	18	28·5	38	34	142	12	28·1	39	33	118	09	29·4	44	39	012	09	30·0	35	31	281	26		900
850		37	36	256	32		40	40	259	22		42	40	237	19		48	42	249	21		32	29	147	12		35	30	115	08		37	32	359	10		31	27	276	16		850
800	68·4	32	31	261	32	65·5	35	35	259	23	66·2	42	04	249	25	66·2	38	37	252	27	59·5	27	23	160	12	59·2	29	24	121	07	60·4	28	24	320	09	61·0	27	23	290	10		800
750		27	26	268	33		31	24	260	26		38	05	265	30		33	28	245	30		23	18	182	07		25	18	159	04		23	19	313	09		21	16	269	10		750
700	100	24	19	274	41	100	28	15	265	33	102	32	06	270	33	101	26	19	252	32	93·8	18	14	252	06	93·6	18	11	213	05	94·8	16	11	310	08	95·2	15	10	256	07		700
650		20	04	278	45		22	14	273	40		25	01	267	31		20	09	247	28		11	09	254	06		12	06	195	06		10	05	321	10		09	03	258	04		650
600	139	12	-03	284	51	140	17	02	277	45	141	16	-02	266	31	141	13	08	248	21	132	02	06	247	11	132	03	-02	203	05	133	03	-02	318	09	134	02	-06	218	06		600
550		04	-11	288	48		10	00	281	50		12	-08	268	38		06	02	246	24		-06	-10	253	18		-04	-09	210	05		-05	-12	309	05		-08	-16	225	09		550
500	185	-05	-19	278	53	185	01	-09	287	48	187	02	-19	266	47	186	04	02	250	36	177	-16	-21	267	18	177	-13	-18	294	08	178	-15	-22	304	05	178	-18	-28	187	13		500
450		-19	-34	283	65		-07	-25	290	57		-06	-17	272	48		-03	-08	275	39		-26	-32	278	06		-23	-28	332	05		-26	-34	L.V.			-28	-40	149	22		450
400	237	-28	-40	291	68	239	-18	-34	283	63	241	-14	-24	276	54	241	-13	-16	270	52	228	-37	-44	263	05	229	-34	-39			229	-39	-48	L.V.		229	-38	-49	135	21		400
350		-38	-50	297	75		-29	-43	281	68		-26	-34	287	66		-24	-27	293	69		-51		255	04		-45					-49		313	05		-48		181	15		350
300	302	-52		295	76	305	-43		286	84	308	-38	-47	287	83	307	-38	-42	283	72	291	-59		240	03	292	-55				292	-59		320	08	292	-52		238	29		300
250		-66		291	87		-58		291	96		-53		283	110		-55		276	99		-62		205	09		-67					-55		319	10		-51		264	39		250
200	387	-75		297	81	392	-75		289	112	395	-71		290	123	394	-77		285	88	378	-50		205	15	379	-50				380	-50		293	36	381	-52		287	39		200
170		-69		297	64		-78		294	93		-74		301	104		-84		291	87		-52		218	19		-49					-51		266	22		-53		293	32		170
150		-67		296	60		-70		299	69		-69		307	84		-76		282	90		-48		212	10		-50					-49		266	20		-55		297	34		150
130		-68		301	51		-69		303	61		-67		305	82		-74					-43		230	14		-50					-47		268	23		-55		303	34		130
110		-63		306	36		-69		307	51		-63		284	42		-71				(118) mb	-47					-49					-47		272	21		-55		303	30		110
100	532	-65		307	33	535	-67		302	46	539	-62		283	36		-70										-48										-54		290	22		100
90							-63		295	45		-62		283	27		-66										-51					532	-51		273	18		-55		283	21		90
80							-57		290	34		-61		283	26												-51					-50		273	12		-58		274	19		80
70							-57		287	23		-57		283	27												-50					-50		272	09							70
60							-58		287	22		-54		283	27												-50					-50		272	15							60
												-54		283	14												-50					-51		291	13							
												-57		283	14												-51					-51		295	08							
																											-51				(035) mb	-49		296	06							

Isothermal 729 - 680mb. 24°

Isothermal 968 - 920mb. 46° 772 - 750mb. 31° 617 - 600 mb. 17°

Max wind:- 205mb. 290° 134 kts. Inversion 855mb. 41° - 827mb. 45° Isothermal 800 - 791mb. 42° 490 - 480mb. 01°

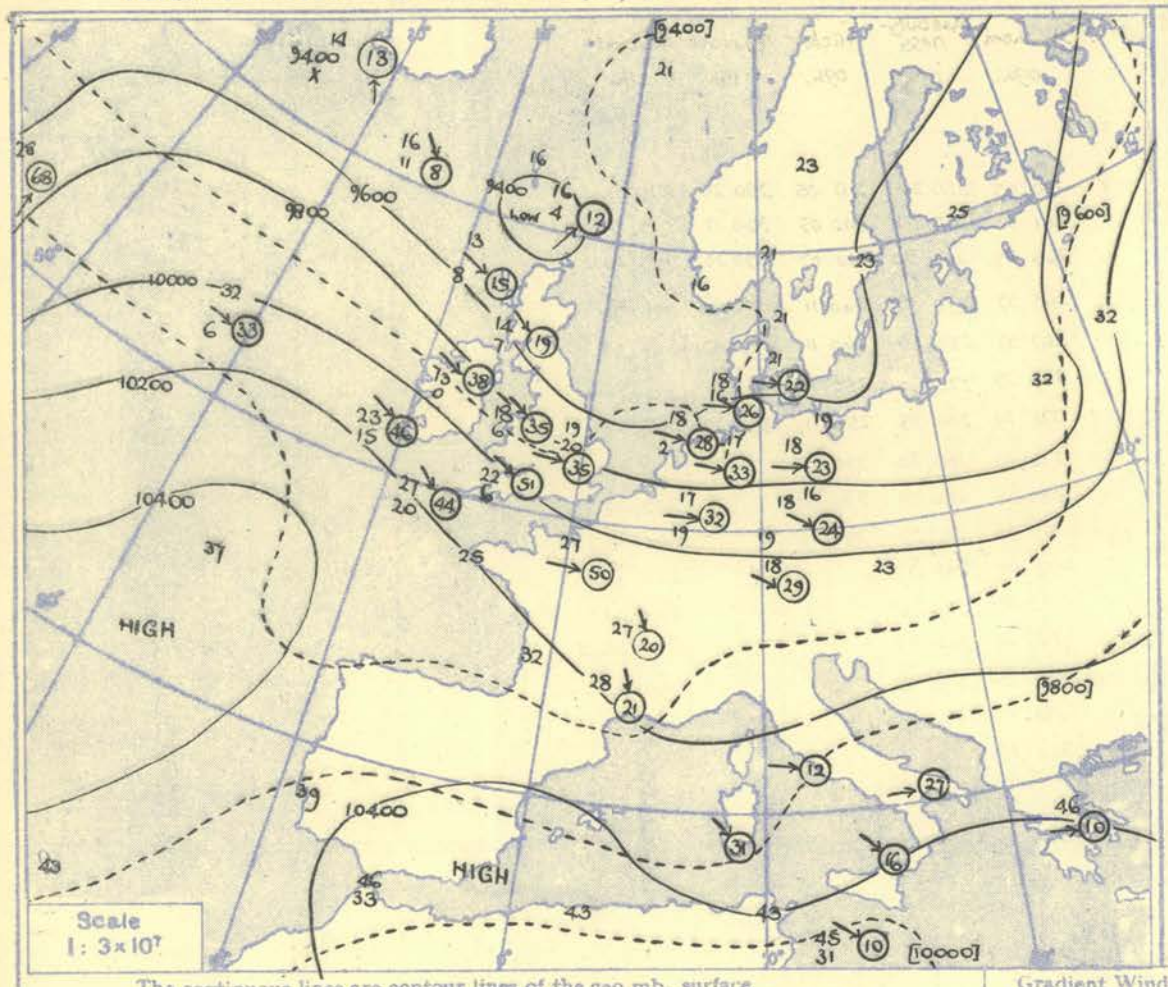
Isothermal 550 - 528mb. 07°

Isothermal 766 - 742mb. 23°

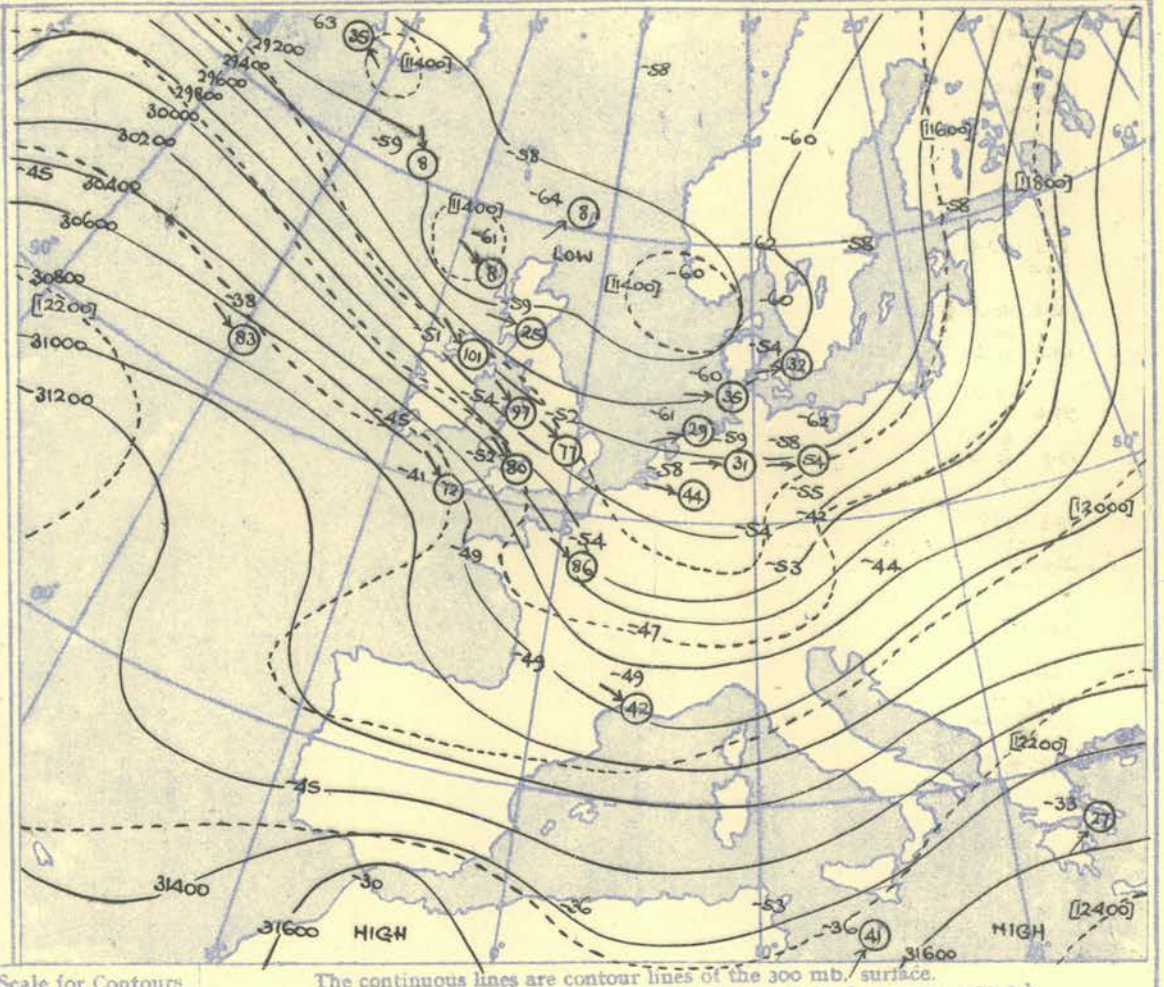
Isothermal 794 - 773mb. 28°

Tropopause	I 207mb. -76° 38,000	I 185mb. -80° 40,900	II 186mb. -76° 41,100'	I 184mb. -85° 41,300'	I 231mb. -67° 34,200'	I 250mb. -67° 33,200'	I 275mb. -62° 31,100'	I 309mb. -54° 28,600'		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

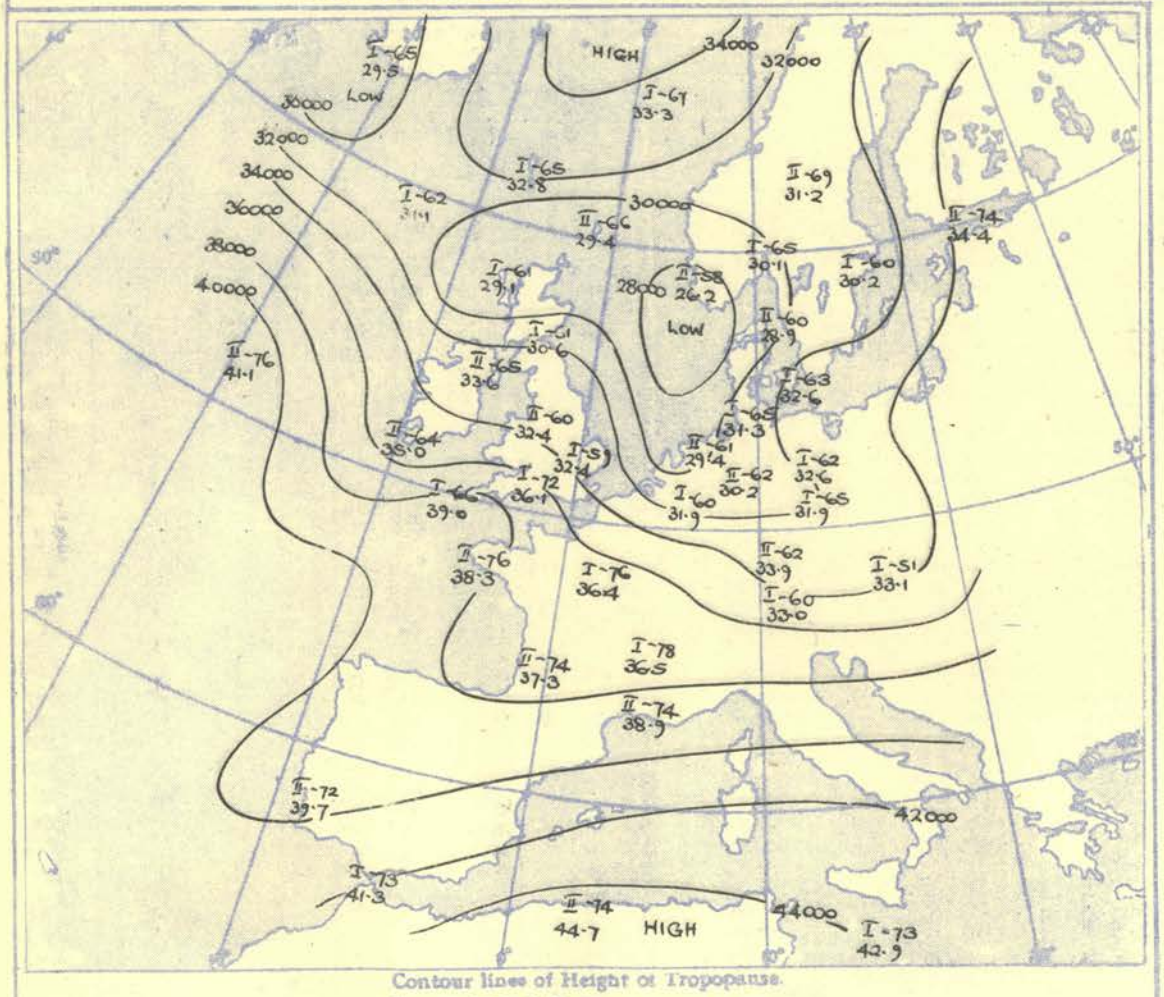


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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

100 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 the unusually short wavelength between the thermal troughs in the Davis Strait and Hudson Bay.

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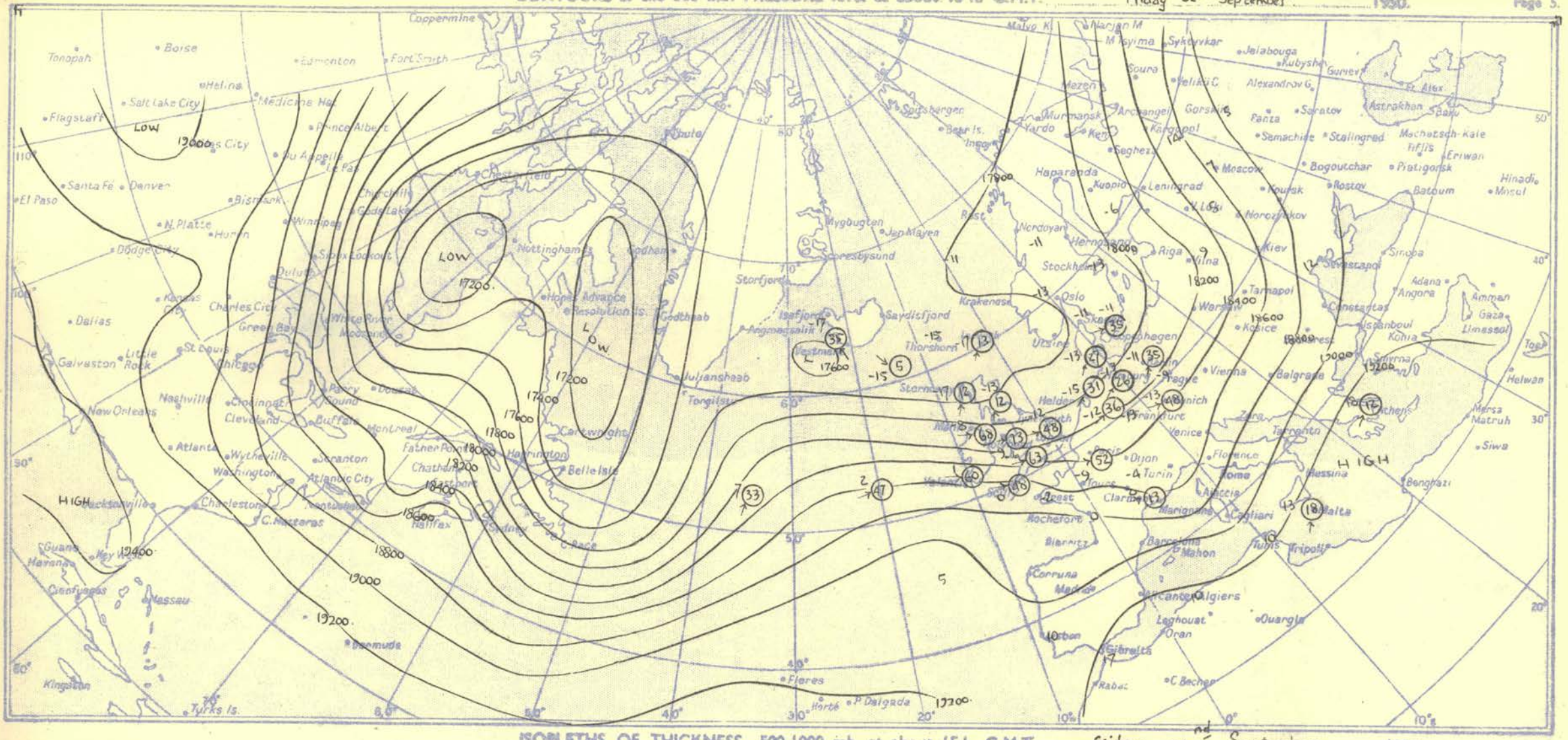
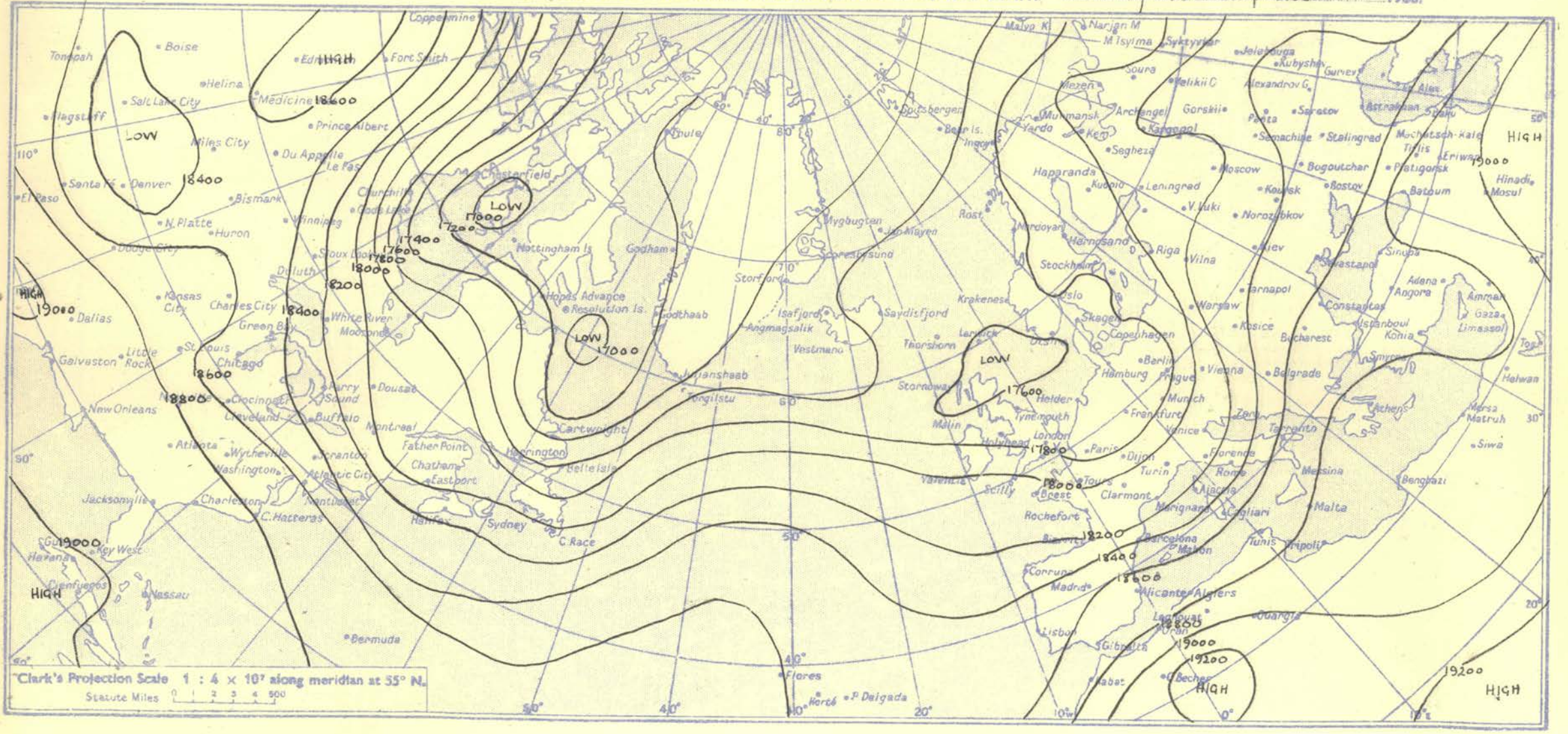
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Friday 22nd September 1950.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Friday 22nd September 1950.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON

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

LERWICK

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1002·8 mb	992·9 mb	880 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·7	51	37	300	10
1000	0·7				
960		43	32	276	16
900	2·9·1	36	29	277	20
850		30	22	274	16
800	59·9	27	10	268	16
750		22	+01	257	15
700	94·2	16	+04	235	12
650		18	+10	192	08
600	133	02	-17	190	10
550		-08	+21	202	13
500	177	-17	+30	254	13
450		-26	-39	279	15
400	228	-38	-52	271	15
350		-51		242	10
300	291	-64		240	08
250		-57		260	08
200	377	-53		262	10
170		-52		270	10
150		-52		263	09
130		-52		253	06
110		-53		246	07
100	528	-53		253	14
90		-53		271	11
80	(85 mb)	-53			
70					
60					

Inversion
860 mb 29° - 841 mb 31°
Isothermal.
639 - 627 mb 06°

Tropopause: II 295 mb - 66° 29·400'

STORNOWAY

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1006·1 mb	1004·2 mb	866 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·5	52	44	290	30
1000	1·7	51	43		
960		44	38	285	36
900	30·1	37	30	283	35
850		30	26	282	34
800	61·0	25	20	282	31
750		19	15	282	22
700	95·1	13	08	284	15
650		07	02	286	09
600	133	00	-11	287	05
550		-07	-29	207	11
500	177	-17	-37	195	12
450		-28	-44	170	12
400	229	-39	-53	166	15
350		-51		178	11
300	291	-61		280	08
250		-49		288	20
200	380	-49		288	26
170		-50		288	21
150		-51		291	19
130		-51		287	18
110		-50		276	19
100	531	-51		282	18
90		-52		286	16
80		-52		290	15
70		-52		290	12
60		-51			

Inversion
1007 mb 47° - 980 mb 49°
Isothermal
790 - 773 mb 23°

Tropopause: I 300 mb -61° 29·100'

LEUCHARS

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1007·1 mb	1006·3 mb	835 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·2	51	45	300	14
1000	1·9	50	44		
960		45	40	291	21
900	30·3	39	35	300	30
850		34	26	305	82
800	61·4	28	22	308	30
750		21	14	309	27
700	96·0	14	07	295	19
650		08	-03	269	16
600	134	02	-08	267	16
550		-04	-10	258	14
500	178	-13	-19	226	12
450		-24	-31	222	11
400	230	-37	-44	223	13
350		-50		245	16
300	293	-59		277	25
250		-50		297	24
200	381	-48		289	28
170		-50		295	27
150		-52		295	24
130		-53		289	22
110		-52		283	21
100	532	-52		290	19
90		-52		288	12
80		-52		304	12
70		-53		291	14
60		-53		286	10

Tropopause: I 283 mb -61° 30·600'

ALDERGROVE

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1015·3 mb	1006·8 mb	855 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·3	53	39	290	20
1000	4·2	52	39		
960		45	32	287	30
900	32·7	39	25	284	33
850		31	22	288	33
800	63·7	26	15	293	30
750		20	07	292	35
700	97·8	13	00	292	38
650		09	-09	296	45
600	136	04	-22	296	48
550		00	-32	295	62
500	181	-08	-29	294	68
450		-18	-31	292	77
400	233	-29	-44	294	87
350		-41		300	90
300	298	-51		304	101
250		-65		300	95
200	384	-55		302	59
170		-51		300	46
150		-54		297	38
130		-53		292	30
110		-52		282	23
100	535	-52		282	20
90		-50		280	14
80		-54		270	13
70		-54		282	13

Isothermal.
676 - 655 mb 10°

Tropopause: I 248 mb -65° 33·700'

LIVERPOOL

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1014·8 mb	1012·8 mb	856 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·6	51	39	285	18
1000	4·1	49	36	284	31
960		44	33	291	37
900	32·5	32	80	295	40
850		31	22	301	39
800	63·5	26	15	298	40
750		22	15	295	38
700	97·9	18	06	294	35
650		11	-21	298	42
600	137	03	-26	298	46
550		-02	-33	299	54
500	181	-03	-71	305	73
450		-18	-47	308	81
400	234	-31	-51	302	91
350		-43		304	91
300	297	-54		312	97
250		-60		306	76
200	384	-54			
170		-53			
150		-54			
130		-54			
110		-49			
100	535	-53			
90		-50			
80		-49			
70		-52			
60		-50			
50		-49			
(47 mb)		-48			

Inversion.
587 mb 01° - 572 mb 02°

Tropopause: II 265 mb -60° 32·400'

DOWNHAM MARKET

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1013·3 mb	1008·9 mb	822 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	1·2	60	47	290	23
1000	3·7	58	46		
960		51	39	285	32
900	32·4	44	36	292	33
850		36	32	292	36
800	63·3	29	22	285	38
750		22	17	278	37
700	98·0	18	-10	273	35
650		12	-03	277	38
600	137	03	-03	281	39
550		-07	-18	281	44
500	181	-12	-31	284	48
450		-23	-45	287	57
400	231	-33	-55	295	70
350		-42		294	77
300	297	-52		300	77
250		-58		295	67
200	384	-51		294	54
170		-55		293	45
150		-55		288	36
130		-54		287	32
110		-56		285	23
100	534	-54		286	21
90		-52		284	19
80		-52		282	18
70		-53		278	15
60		-54		274	12
50		-52		268	10

Isothermal.
608 mb - 587 mb 04°
322 - 310 -51°

Tropopause: I 264 mb -59° 32·400'

LARKHILL

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1016·9 mb	1001·0 mb	782 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·4	57	42	290	22
1000	4·6	57	42		
960		49	36	277	29
900	33·3	41	30	283	29
850		34	25	295	34
800	64·4	29	20	299	40
750		28	04	292	45
700	99·1	22	06	289	51
650		18	-08	287	57
600	138	10	+12	290	62
550		02	+17	293	63
500	183	-06	28	292	63
450		-16	-35	294	62
400	236	-29	-43	296	64
350		-38	-53	302	78
300	301	-52		304	80
250		-67		307	78
200	386	-63		307	69
170		-59		291	51
150		-60		293	49
130		-56		295	37
110		-58		315	33
100	534	-55			
90		-54			
80		-55			
70		-56			
60		-50			
(55 mb)		-48			

Inversion.
800 mb 29° - 782 mb 32°
Isothermal.
700 - 675 mb 22°

Tropopause: I 225 mb -72° 36·100'

CAMBORNE

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1023·9 mb	1012·8 mb	756 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·9	55	53	270	12
1000	6·4	54	51	289	25
960		49	48	291	28
900	35·1	44	43	295	34
850		39	38	291	36
800	66·5	35	32	287	44
750		31	27	289	45
700	102	27	20	291	44
650		24	11	290	43
600	141	17	04	290	45
550		08	-01	288	53
500	187	00	-09	291	48
450		-07	-17	295	53
400	241	-18	-26	301	59
350		-28	-36	301	60
300	307	-41		310	72
250		-57		310	71
200	394	-65		304	72
170		-58		312	46
150		-55		304	50
130		-56			
110		-54			
100	543	-50			
90		-50			
80		-50			
70		-52			
60		-47			
50		-48			

Inversion.
714 mb 26° - 687 mb 28°
Isothermal.
687 - 673 mb 28°
218 - 210 · -64°

Tropopause: I 204 mb -66° 39·000'

VALENTIA

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1023·5 mb	1022 mb	800 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·3	55	48	270	09
1000	6·3	52	47	270	10
960		44	42	276	13
900	34·8	39	38	280	21
850		36	33	291	34
800	65·5	32	31	290	39
750		27	24	286	43
700	101	23	15	287	46
650		19	09	289	46
600	140	11	06	289	47
550		08	-18	294	53
500	186	01	-20	297	60
450		-09	-28	296	56
400	239	-20	-38	302	61
350		-32	-48	304	77
300	305	-45			
250		-61			
200	391	-67			
170		-60			
150		-60			
130		-59			
110		-53			
100		-52			
90	(101 mb)				
80					
70					
60					

Isothermal.
920 - 900 mb 39°
595 - 577 " 10°

Tropopause: II 242 mb -64° 35·000'

LERWICK

Pressure	Time	M.S.L.	Surf	Freezing
	21h G.M.T.	1004·8 mb	994·8 mb	870 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·7	47	42	Calm	
1000	1·2				
960		43	36	269	14
900	29·5	36	33	261	11
850		30	27	263	12
800	60·4	26	14	271	13
750		21	-07	275	14
700	94·6	15	-06	281	14
650		08	-15	288	14
600	133	00	-16	291	16
550		-09	-34	284	22
500	177	-18	-38	276	23
450		-29	-47	248	16
400	228	-41		200	13
350		-54		186	11
300	290	-61		218	07
250		-53		301	10
200	378	-51		304	11
170		-53		297	09
150		-51		294	09
130		-51		291	09
110		-53		295	07
100	529	-54		275	07
90					
80					
70					
60					

Tropopause: I 286 mb -62° 30·000'

STORNOWAY

Pressure	Time	M.S.L.	Surf	Freezing
	21h G.M.T.	1009·0 mb	1007·1 mb	855 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·5	47	45	290	30
1000	2·5	48	45		
960		45	38	290	37
900	30·9	38	32	289	39
850		31	26	290	33
800	61·8	25	21	290	27
750		20	14	296	21
700	95·9	14	07	316	15
650		07	-02	312	12
600	134	00	-14	331	11
550		-09	-26	322	10
500	178	-19	-35	315	12
450		-31	-46	323	12
400	229	-40	-55	318	23
350		-49		319	30
300	292	-55		318	30
250		-55		309	42
200	380	-52		306	35
170		-53		301	27
150		-54		303	26
130		-54		304	26
110		-54		314	16
100	530	-54		304	20
90					
80					
70					
60					

Inversion.
1007 mb 47° - 980 mb 49°
Isothermal
790 - 773 mb 23°

Tropopause: I 270 mb -60° 31·500'

LEUCHARS

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

ALDERGROVE

Pressure	Time	M.S.L.	Surf	Freezing
	21h G.M.T.	1018·4 mb	1009·8 mb	875 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·3	46	42	270	15
1000	5·0	46	42		
960		43	38	297	31
900	33·3	36	31	299	30
850		29	26	300	27
800	64·1	24	17	302	34
750		20	05	297	40
700	98·3	13	-02	298	40
650		09	-06	309	48
600	137	06	-09	304	63
550		00	-14	305	69
500	181	-09	-23	303	71
450		-19	-32	302	74
400	234	-29	-41	306	83
350		-40	-52	320	109
300	298	-55		312	120
250		-60		313	104
200	337	-60		306	65
170		-60		308	70
150		-60		309	45
130		-60			
110		-60			
100	532	-60			
90		-60			

Isothermal.
1010 - 1000 mb 46°

Tropopause: II 275 mb -60° 31·700'

LIVERPOOL

Pressure	Time	M.S.L.	Surf	Freezing
	21h G.M.T.	1017·3 mb	1015·3 mb	862 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·6	51	37	300	20
1000	4·7	49	34	300	30
960		44	31	296	33
900	33·0	37	28	293	35
850		30	23	294	36
800	63·9	24	17	294	38
750		17	08	292	40
700	97·9	13	02	293	39
650		07	-08	297	41
600	136	02	-16	299	55
550		-04	-21	297	70
500	181	-11	-25	300	79
450		-20	-35	297	79
400	233	-33	-47	298	79
350		-46		304	92
300	296	-55		302	99
250		-66		308	100
200		-67			
(235 mb)					

Inversion
712 mb 12° - 697 mb 13°

NR

DOWNHAM MARKET

Pressure	Time	M.S.L.	Surf	Freezing
	21h G.M.T.	1017·3 mb	1012·8 mb	839 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	1·2	48	42	260	04
1000	4·7	47	41	283	82
960		44	38	292	34
900	33·1	37	29	298	35
850		34	26	302	37
800	64·0	27	17	301	36
750		20	13	298	35
700	98·2	14	08	295	36
650		10	-08	296	41
600	137	04	-16	294	50
550		00	-22	294	60
500	181	-09	-23	291	66
450		-18	-33	293	71
400	234	-30	-44	288	73
350		-45		294	72
300	298	-54		298	99
250		-68		300	86
200	384	-58		299	57
170		-58		298	46
150		-57		294	37
130		-57		295	30
110		-56		292	22
100	532	-58		295	22
90		-60		295	20
80		-60		295	18
70		-57		295	15

Isothermal.
608 mb - 587 mb 04°
322 - 310 · -51°

Tropopause: I 245 mb - 63° 34·100'

LARKHILL

Pressure	Time	M.S.L.	Surf	Freezing
	21h G.M.T.	1021·1 mb	1004·7 mb	850 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·4	45	41	275	07
1000	5·6	47	43		
960		45	39	290	25
900	34·1	38	33	293	29
850		32	25	294	30
800	65·1	27	19	292	31
750		23	09	294	38
700	99·5	23	04	301	45
650		18	04	297	54
600	139	10	01	295	55
550		01	-05	294	57
500	183	-05	-16	298	60
450		-14	-28	299	67
400	236	-25	-38	302	67
350		-39	-52	300	75
300	301	-56		296	69
250		-69		304	76
200	386	-71		303	68
170		-61		307	60
150		-61		303	51
130		-64		304	40
110		-61		294	30
100	532	-63		282	27
90		-60		280	21
80		-64			
70					
60					

Inversion.
1005 mb 45° - 990 mb 50°
776 " 23° - 761 " 24°
737 " 22° - 700 · 23°

Tropopause: I 219 mb -75° 36·600'

CAMBORNE

Pressure	Time	M.S.L.	Surf	Freezing
	21h G.M.T.	1025·1 mb	1014·3 mb	770 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·3	32	49	280	09
1000	6·7	51	47	258	25
960		47	39	269	24
900	35·3	43	36	292	28
850		39	28	297	33
800	66·7	35	27	297	36
750		30	23	295	36
700	102	24	16	288	36
650		18	08	295	42
600	141	11	-01	300	46
550		05	-11	305	48
500	186	-03	-15	306	49
450		-14	-26	302	52
400	239	-28	-39	303	53
350		-38	-48	304	62
300	303	-52		306	69
250		-66		312	74
200	389	-76		321	84
170		-74		321	73
150		-74		315	64
130		-75		318	52
110		-73		308	46
100	531	-71			
90		-70			
80		-69			
70					
60					

Tropopause: I 195 mb -71° 39·300'

No. 11500 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Saturday 23rd September 1950. Page 1.

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

METEOROLOGICAL LIBRARY OCT 1950 OFFICE

03h G.M.T.

Station	Pressure: Time	M.S.L.	Surf	Freezing	Tropopause
LERWICK	03h	1006·7 mb	996·7 mb	840 mb	III 300mb -59° 29,600'
STORNOWAY	03h	1010·8 mb	1008·9 mb	853 mb	I 263mb -62° 32,200'
LEUCHARS	03h	1012·5 mb	1011·6 mb	850 mb	II 272mb -62° 31,600'
ALDERGROVE	03h	1019·4 mb	1010·8 mb	858 mb	I 227mb -77° 35,700'
LIVERPOOL	03h	1019·0 mb	1017·0 mb	878 mb	I 218mb -70° 36,700'
DOWNHAM MARKET	03h	1019·0 mb	1014·4 mb	858 mb	II 275mb -60° 31,500'
LARKHILL	03h	1023·0 mb	1006·6 mb	826 mb	I 230mb -76° 35,800'
CAMBORNE	03h	1025·3 mb	1014·5 mb	798 mb	I 202mb -81° 38,300'
VALENTIA	03h				

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	40	290	08	0·5	48	48	300	25	00·2	43	37		
1000	01·8					2·8	47	47			03·3	44	38		
950		43	36	272	18		42	42	294	36		42	35		
900	30·1	37	33	281	15	31·1	37	37	287	36	31·6	37	31		
850		32	27	282	14		32	32	284	35		32	24		
800	61·1	27	19	280	14	62·1	26	25	287	28	62·6	30	19		
750		22	04	280	17		20	19	299	21		22	13		
700	95·4	16	01	277	17	96·3	14		300	16	96·9	12	05		
650		09	-03	269	16		09		262	15		08	-06		
600	134	02	-10	263	18	135	01		249	17	136	03	-17		
550		-06	-20	271	22		-07		250	20		-06	-30		
500	178	-16	-25	269	23	179	-16		275	28	179	-15	-37		
450		-27	-36	262	20		-24		290	43		-23	-46		
400	229	-39	-48	248	16	231	-31		295	73	231	-33	-50		
350		-52		265	14		-40		295	108		-42			
300	292	-59		266	10	295	-53		301	114	295	-55			
250		-59		293	15		-58		301	90		-63			
200	379	-52		305	16	391	-56		300	57	381	-58			
170		-52		291	20		-55		297	41		-59			
150		-55		301	16		-56		308	28		-57			
130		-54		298	13		-57		297	30		-59			
110		-55		276	11		-57					-56			
100	530	-56		274	11						530	-58			
90		-57		290	15							-58			
80		-58		318	13										
70		-58		325	13										
60		-57													

Inversion 997mb 45°-990mb 47° 860 .. 31°-845 .. 33°

Inversion 1012 mb 43°-983mb 46°

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	02·3	45	41	290	15	00·6	49	40	300	05	01·2	43	39	290	12
1000	05·2	46	40	297	27	05·1	49	41			05·0	44	39	275	33
950		42	36	298	27		43	37				43	37	291	34
900	33·5	37	29	297	30	33·5	35	31			33·3	38	30	300	36
850		31	26	298	29		28	21				31	23	301	39
800	64·4	25	17	297	29	64·2	23	11			64·2	25	21	304	38
750		22	07	297	30		19	00				19	14	306	35
700	98·7	18	04	301	42	98·3	16	-12			98·3	12	05	303	35
650		15	07	303	48		11	-14				05	-10	300	44
600	138	09	-02	308	56	137	06	-12			137	00	-20	294	56
550		01	-12	307	60		-01	-16				-02	-27	298	72
500	182	-08	-18	303	42	182	-07	-24			181	-11	-34	305	90
450		-17	-25	303	74		-16	-32				-20	-36	303	98
400	235	-27	-37	304	78	234	-27	-39			233	-30	-47	306	101
350		-38	-44	307	89		-39	-50				-38	-57	318	127
300	300	-52		310	96	299	-53				297	-54		321	117
250		-69		308	101		-66					-60		316	110
200	385	-69		312	74	384	-66				384	-56		305	62
170		-65		318	62		-61					-57		309	46
150		-64		309	61		-60					-58		312	42
130		-63		303	55		-57					-57			
110		-64		307	31		-59								
100	531	-64		308	30	532	-61								
90		-65		308	36		-58								
80		-63		305	22		-59								
70							-59								
60						(1065 mb)	-59								

Inversion 1011 mb 45°-981 mb 46°

Isothermal 1017-990mb 49° 714-689 .. 16° 610-591 .. 06°

Inversion 1014 mb 43°-986 mb 45° Isothermal 570-545 mb -02° 408-390 .. -30°

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	45	41	280	08	02·9	56	55	270	10					
1000	06·1	46	42			07·1	55	53	263	30					
950		46	38	296	26		49	48	269	24					
900	34·5	40	33	293	32	35·8	45	44	280	22					
850		33	28	293	38		39	38	281	28					
800	65·7	30	17	296	45	67·2	33	32	282	34					
750		25	21	298	51		26	15	291	34					
700	10·0	24	11	301	50	10·2	23	05	294	33					
650		19	05	300	54		19	-03	297	35					
600	140	11	-02	297	56	141	13	-07	295	33					
550		03	-10	298	61		06	-16	299	41					
500	185	-02	-16	302	64	187	-01	-28	304	41					
450		-13	-26	304	69		-09	-38	300	41					
400	238	-24	-37	309	77	240	-21	-42	299	46					
350		-36	-47	314	83		-34	-57	314	54					
300	303	-53		320	91	305	-50		309	65					
250		-71		323	93		-66		346	33					
200	387	-73		315	75	390	-80		016	23					
150		-64		313	69		-74								
130		-63					-76								
110							-74								
100							-70								
90						533	-70								
80															
70															
60															

Not Available.

Inversion 1007mb 46°-984mb 48° 725 .. 22°-711 .. 25° Isothermal 840-816mb 32°

Inversion 710 mb 22°-700mb 23° Isothermal 755-743mb 26°

09h G.M.T.

Station	Pressure: Time	M.S.L.	Surf	Freezing	Tropopause
LERWICK	09h	1007·3 mb	997·3 mb	845 mb	I 295mb -57° 29,700'
STORNOWAY	09h	1013·3 mb	1011·4 mb	864 mb	II 215mb -52° 33,500'
LEUCHARS					
ALDERGROVE	09h	1020·3 mb	1011·4 mb	787 mb	II 208mb -72° 38,100'
LIVERPOOL	09h	1021·1 mb	1019·1 mb	869 mb	I 209mb -76° 37,800'
DOWNHAM MARKET	09h	1021·3 mb	1016·7 mb	842 mb	I 222mb -73° 36,500'
LARKHILL	09h	1024·1 mb	1007·7 mb	758 mb	II 218mb -75° 37,200'
CAMBORNE	09h	1026·7 mb	1015·4 mb	730 mb	I 200mb -78° 39,500'
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	49	43	275	10	0·5	49	44							
1000	02·0					3·6	48	41							
950		45	38	263	21		44	38							
900	30·4	38	32	265	17	32·0	37	33							
850		32	28	259	13		30	28							
800	61·4	28	24	264	18	62·8	23	22							
750		24	17	269	15		16	12							
700	95·9	18	09	272	14	96·7	12	03							
650		13	02	273	12		05	-05							
600	135	05	-07	260	13	135	-02	-11							
550		-04	-13	256	15		-11	-19							
500	179	-14	-23	258	16	178	-21	-30							
450		-24	-34	250	11		-27	-39							
400	231	-35	-45	238	08	230	-32	-50							
350		-47		258	06		-36	-56							
300	294	-56		299	07	295	-41								
250		-49		293	10		-49								
200	383	-46		306	20	384	-52								
170		-44		293	18		-53								
150		-46		293	18		-54								
130	(132 mb)	-48					-55								
110							-55								
100						524	-55								
90							-57								
80							-53								
70															
60															

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	02·3	47	43			00·6	51	42	280	04	01·2	48	42	270	08
1000	05·4	46	42			05·8	49	41			06·7	45	39	286	24
950		42	38				43	34	285	19		43	34	301	25
900	33·8	36	29			34·1	36	31	284	22	34·0	38	24	307	24
850		31	24				30	26	285	23		33	18	300	23
800	64·8	32	22			64·9	26	19	292	25	65·0	28	10	293	25
750		28	16				28	14	300	36		24	-01	299	33
700	99·5	21	12			10·0	24	15	301	43	99·4	19	00	307	40
650		16	05				18	09	297	44		13	03	309	52
600		11	-03			139	11	01	298	46	138	09	-04	311	57
550		04	-15				03	-04	292	50		01	-13	324	54
500	184	-04	-18			184	-05	-17	296	54	183	-10	-20	317	61
450		-13	-23				-14	-29	300	59		-18	-25	310	69
400	237	-21	-37			207	22	-36	304	66	235	-26	-34	311	75
350		-30	-47				35	37	311	66		-40	-49	315	78
300	303	-46				302	49		315	89	300	-51		320	97
250		-62					66		318	100		-67		320	86
200	388	-72				387	76		320	95	285	-71		319	73
170		-67					65		317	64		-62		320	54
150		-62					62					-61		316	42
130		-62					58					-60		306	39
110		-63					57					-59		308	28
100	537	-60				534	58				532	-60		321	15
90		-56					58					-61		323	15
80		-56					59					-59		319	13
70		-56					57					-59			
60															

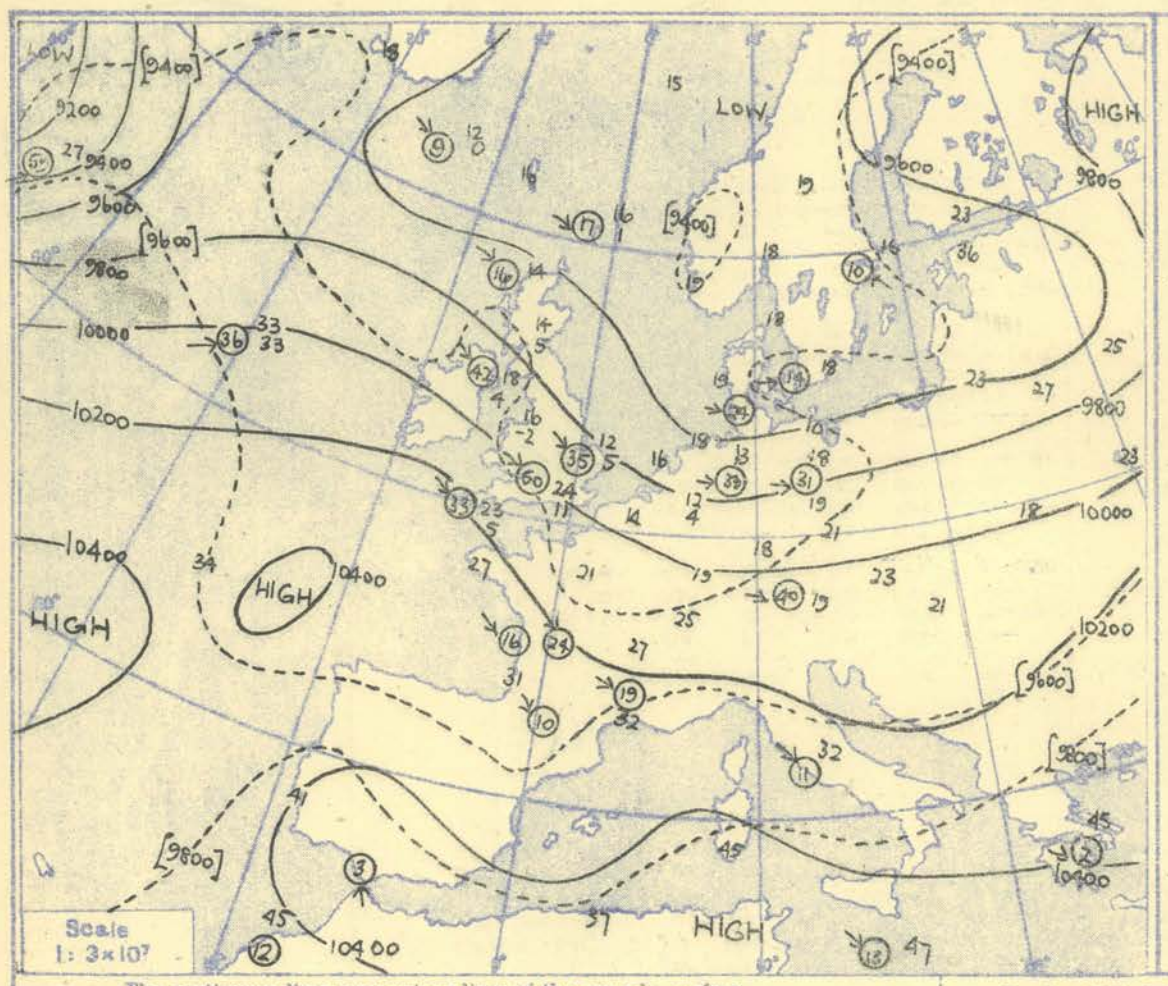
Inversion 830mb 28°-794mb 33°

Inversion 658mb 12°-643mb 13° Isothermal 468-450mb -18°

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	49	46			02·9	56	55	280	07					
1000	06·4	48	44			07·1	54	53	270	20					
950		46	38				49	46	281	20					
900	34·8	39	33			35·8	44	40	283	20					
850		37	23				40	37	284	20					
800	66·1	35	18			67·3	34	24	283	21					
750		31	17				34	17	275	24					
700	10·1	24	12			10·2	29	14	270	25					
650		19	08				23	07	271	31					
600	141	13	-02			142	17	-04	277	33					
550		05	-08				10	-07	279	32					
500	187	-03	-21			188	01	-07	279	33					
450		-11	-26				-04	-11	301	38					
400	240	-20	-32			242	-14	-24	309	50					
350		-34	-46				-25	-38	315	57					
300	305	-46				308	-41		327	66					
250		-63					-58		330	82					
200	391	-77				395	-78		335	84					
150		-67					-71		322	83					
130		-67													
110		-64					-71		321	51					
100		-65					-68		320	47					
90		-65					-64		323	27					
80		-61				539	-63		329	23					
70		-61					-63		311	23					
60		-61					-63		313	22					
		-59													

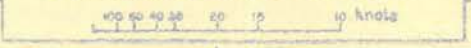
Inversion 800mb 34°-763mb 35° 494 .. 20°-477 .. 01°

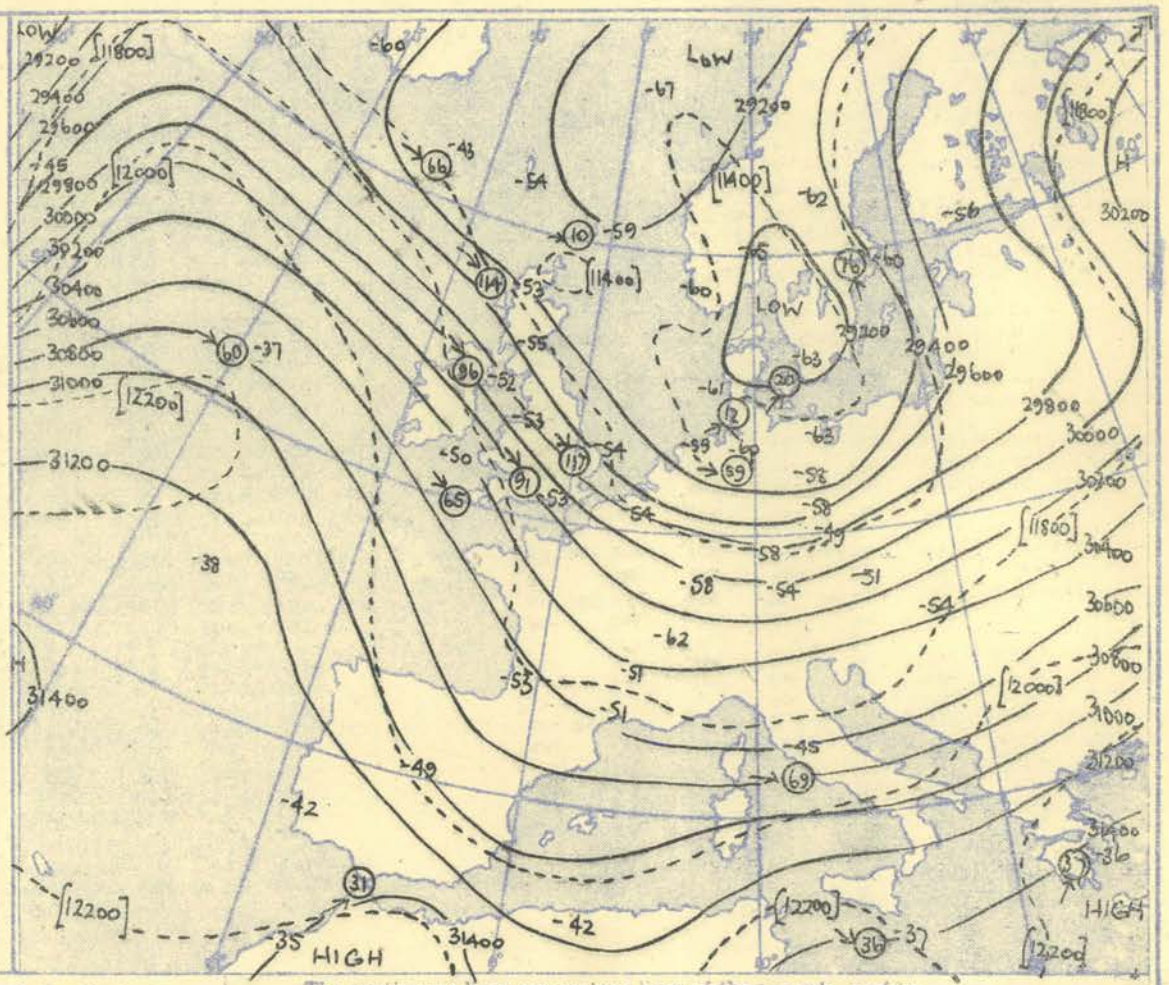
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. GMT.



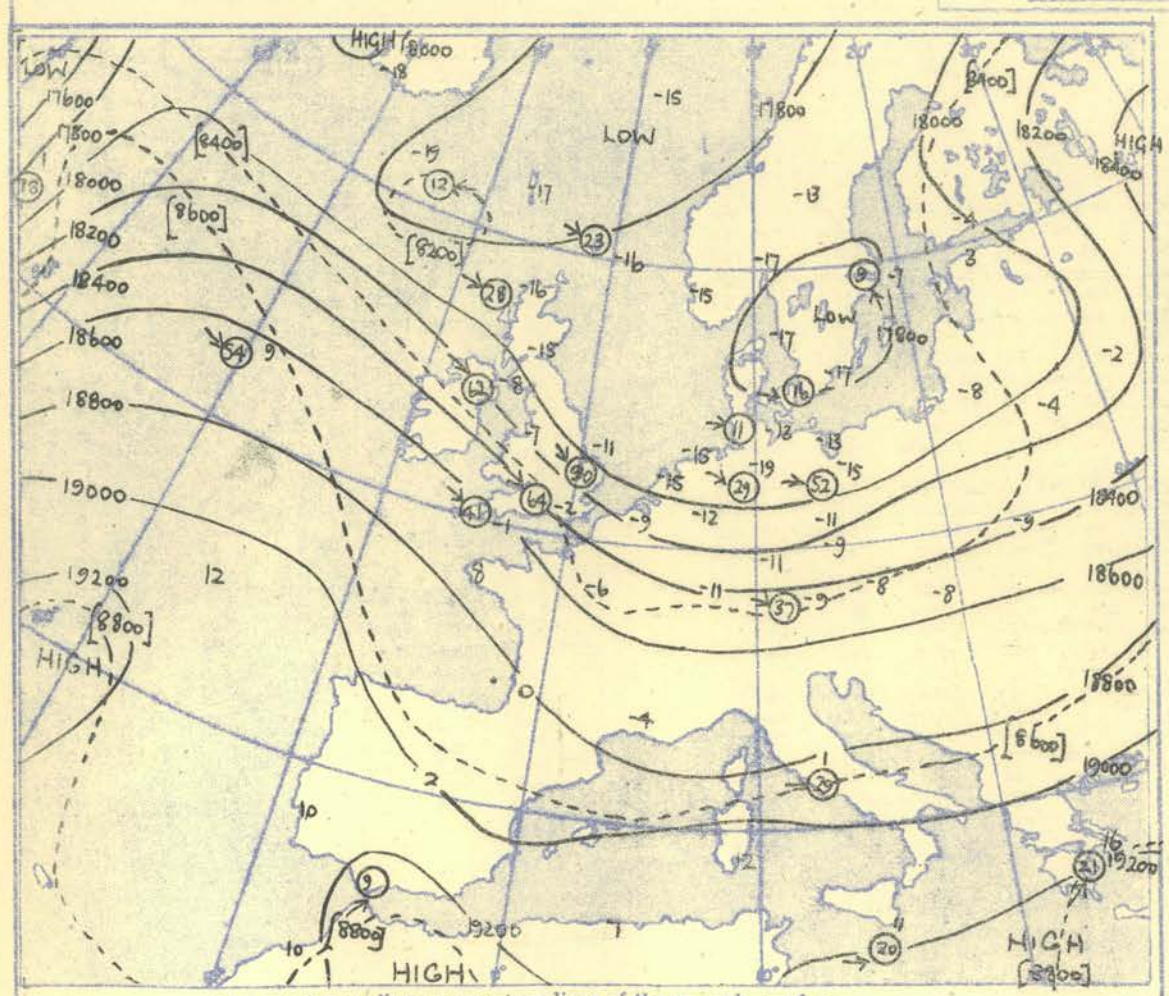
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

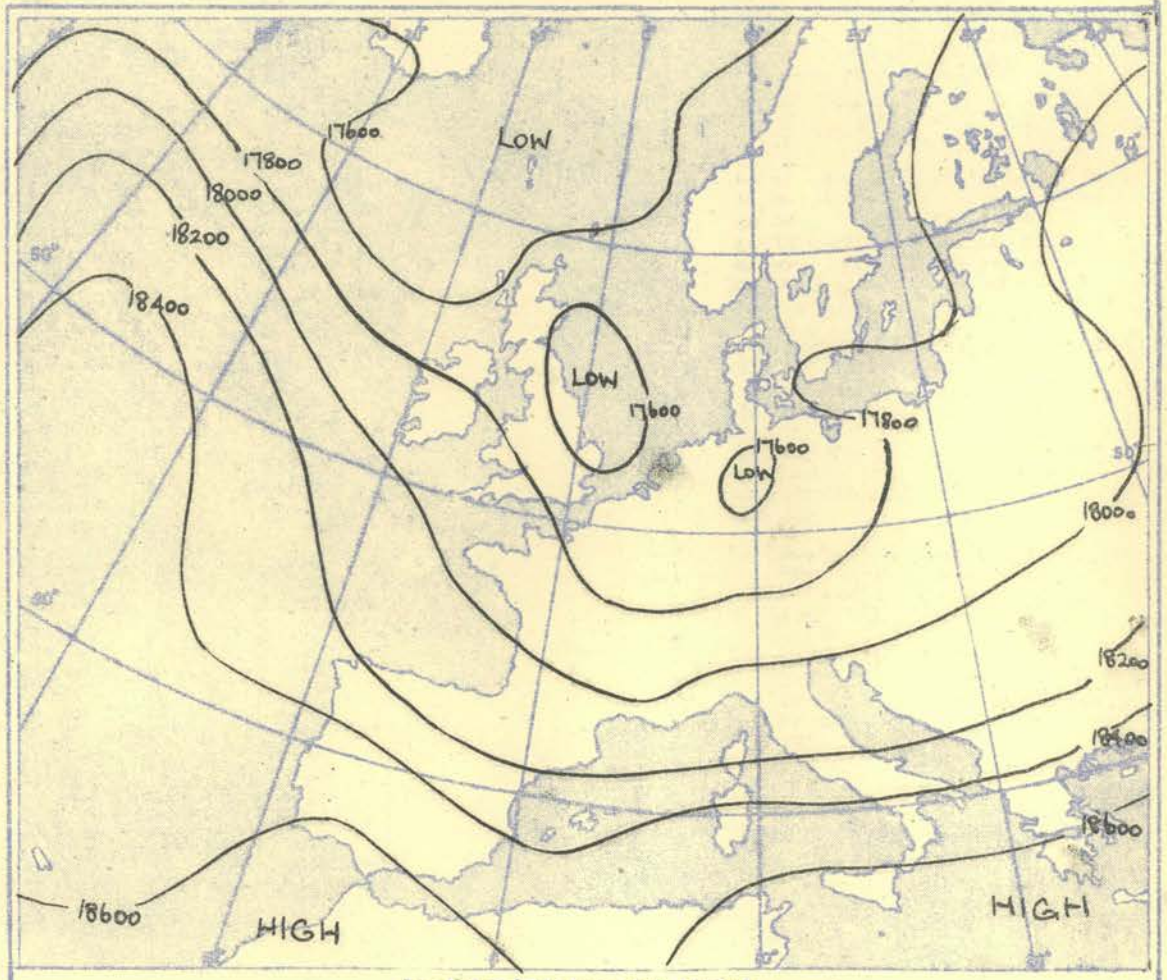




The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500 — 300 mb



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.



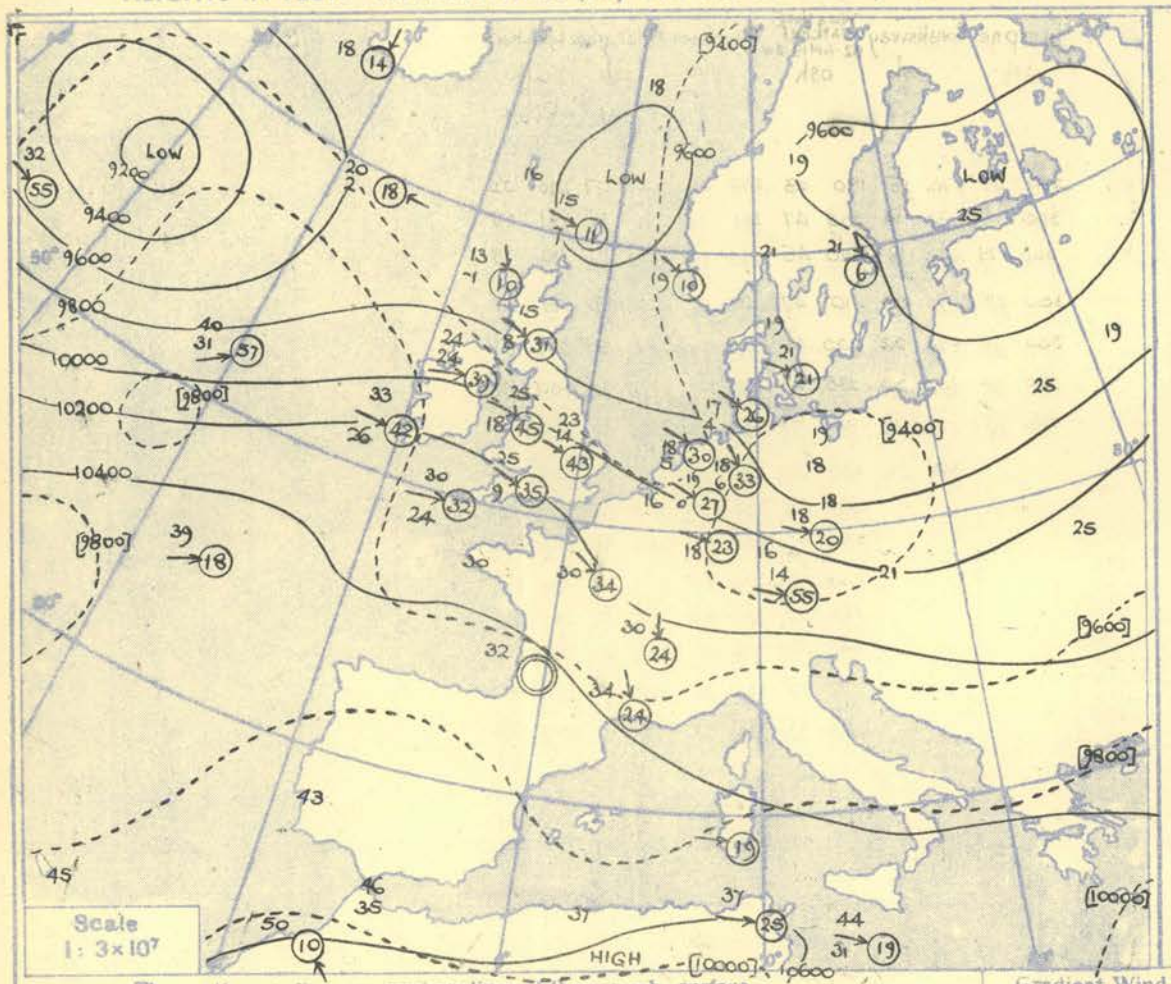
Isopleths of Thickness 500 - 1000mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

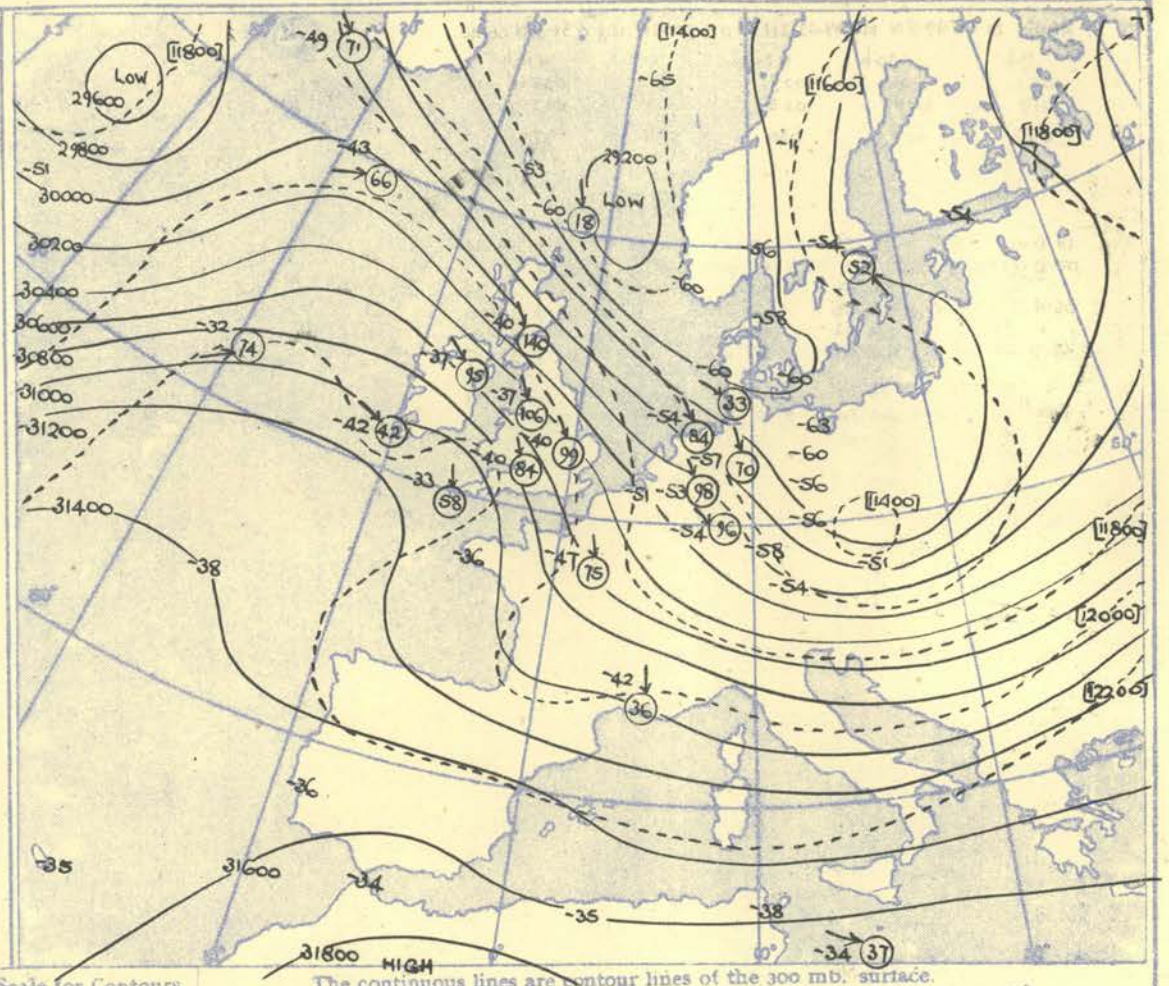
| | 48·2N 20·5W | 49·5N 14·7W | 43·2N 17·0W | 39·5N 02·2W | 51·3°N 00·4E° | | |

Saturday 28rd September, 1950.

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

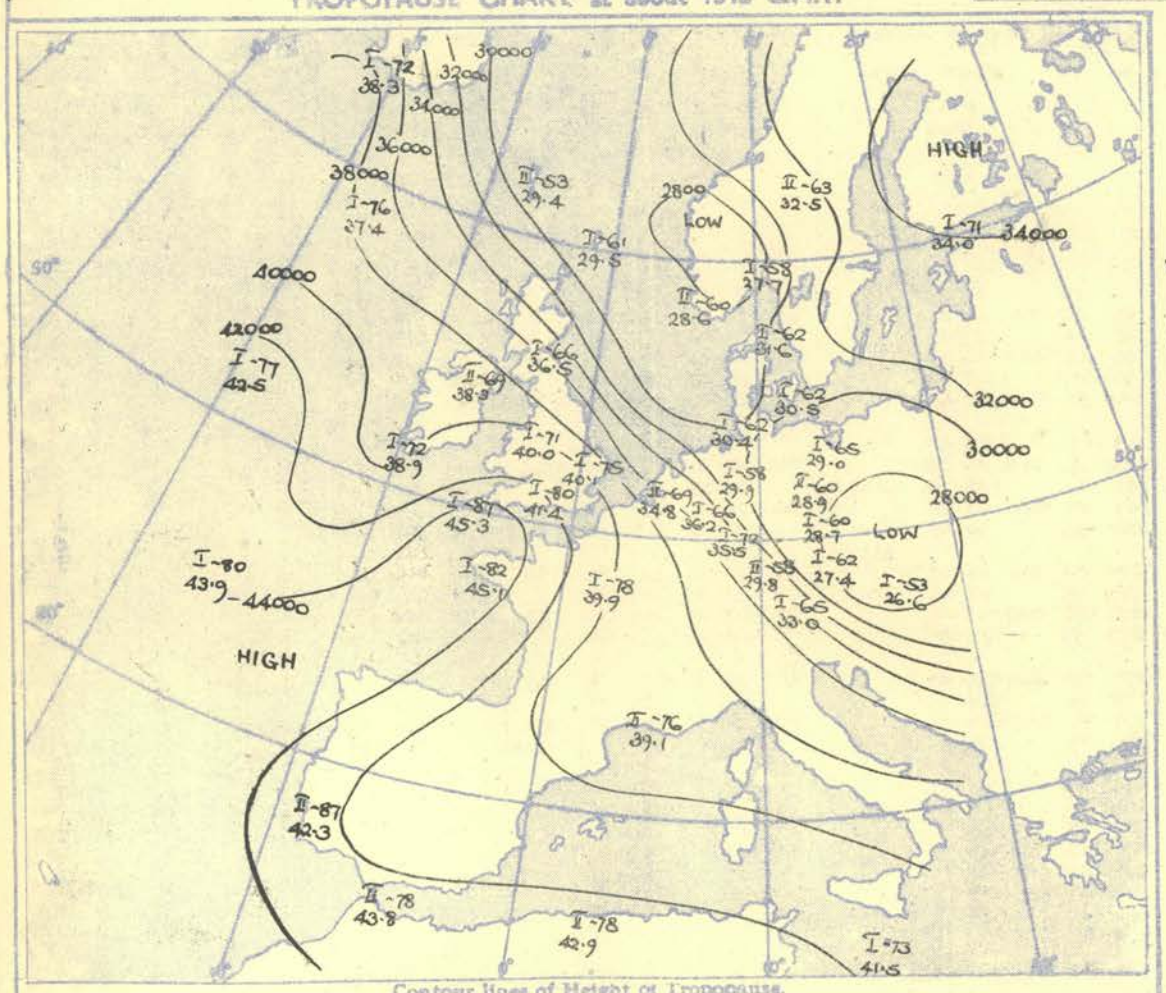


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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.

The thermal trough from the Davis Strait has driven southeastwards, while declining in intensity. This and the building up of the very strong thermal gradient over and to northwest of the British Isles give conditions suitable for the formation of a secondary depression at the point of occlusion of the eastern Atlantic system. This secondary will probably move east or east south east.

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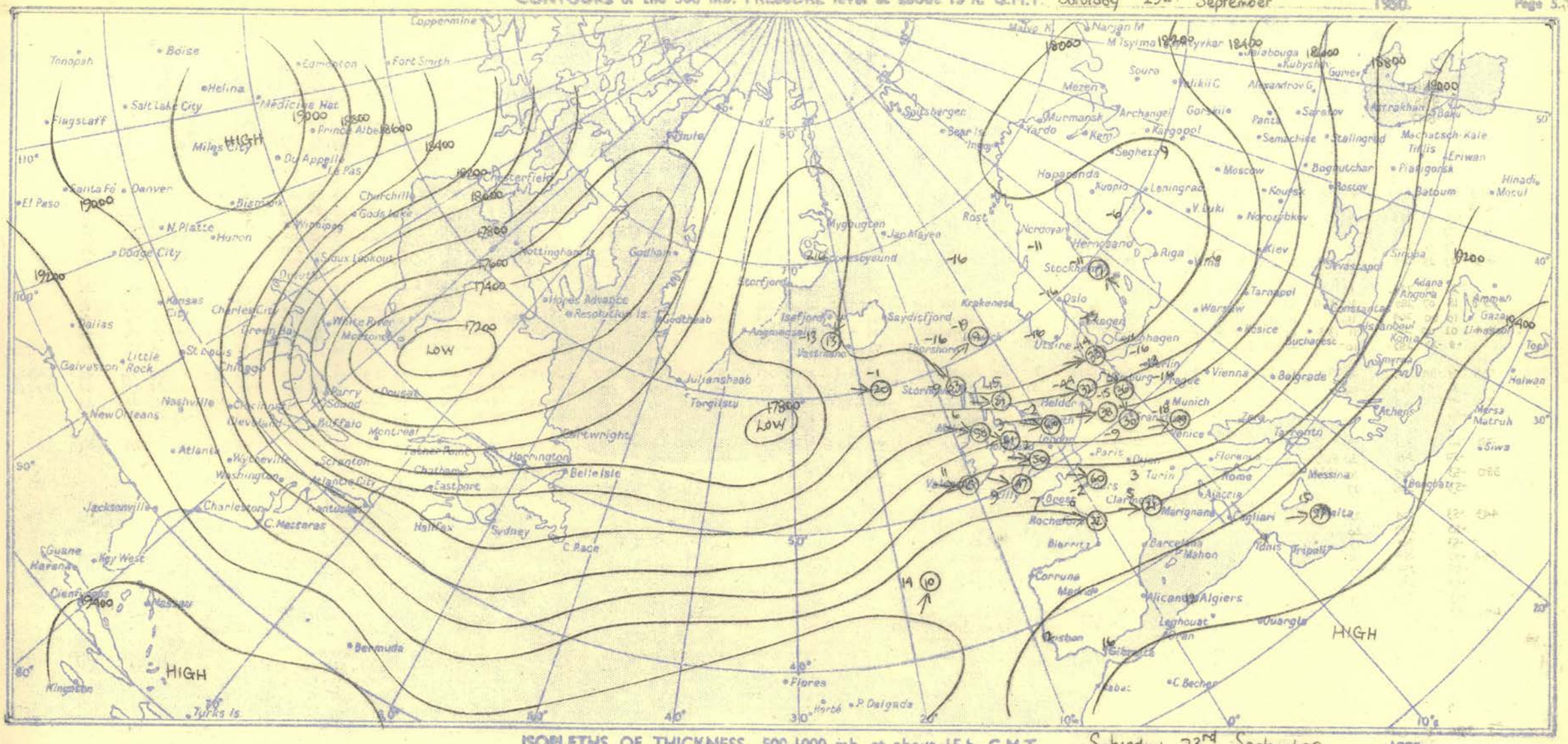
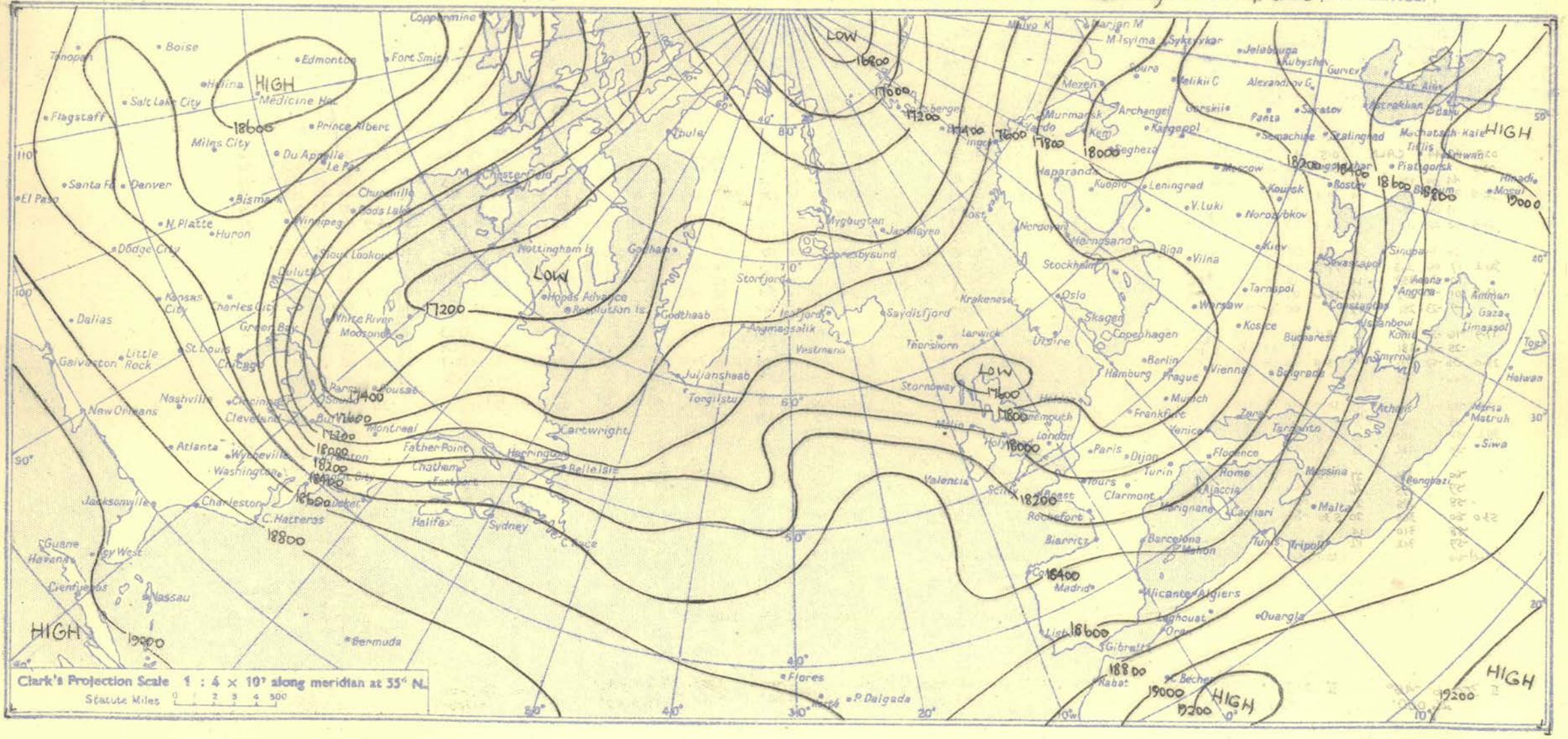
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Saturday 23rd September 1950.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Saturday 23rd September 1950.



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

LERWICK

Time 15h G.M.T. | M.S.L. 1008·1 mb | Surf 998·1 mb | Freezing 847 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	52	45	290	12
1000	02·2				
960		43	37	283	15
900	305	37	31	283	13
850		32	31	283	13
800	61·5	27	25	283	12
750		22	15	283	11
700	95·8	15	07	280	11
650		10	00	269	11
600	13·4	02	-10	261	11
550		-8	-23	252	10
500	17·8	-19	-34	244	09
450		-31	-43	226	06
400	229	-41		312	03
350		-52		336	06
300	292	-60		321	18
250		-50		318	30
200	380	-53		305	32
170		-53		305	27
150	443	-53		304	22
130		-53		293	20
110		-53		301	17
100	53·0	-57		298	15
90		-55		298	17
80		-53		298	12
70		-53		293	13
60	64·1	-53			

Tropopause I 296 mb -61° 29500'

STORNOWAY

Time 15h. G.M.T. | M.S.L. 1013·7 mb | Surf 1011·8 mb | Freezing 876 mb

Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
0·5	51	41	250	08
3·5	48	40		
	43	34	276	15
32·1	36	29	294	13
	29	21	313	15
62·9	24	15	322	14
	19	07	294	12
97·0	13	-1	320	10
	07	-10	017	12
13·5	01	-15	020	14
	-9	-23	346	19
18·0	-9	-30	312	33
	-19	-40	302	52
23·2	-23	-46	303	71
	Isothermal 565 - 554 mb -3			
	432 - 400 " -23°			

Tropopause 400 mb N.R. 23,200'

LEUCHARS

Time 15h G.M.T. | M.S.L. 1014·8 mb | Surf 1014·2 mb | Freezing 848 mb

Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
00·2	51	40	250	08
04·0	49	39	274	24
	43	35	277	26
32·3	38	30	281	23
	33	26	290	25
63·3	27	20	292	27
	21	14	288	29
97·6	15	08	287	31
	08	01	289	34
36·0	00	-05	293	36
	-09	-18	293	57
180	-15	-22	289	81
	-15	-36	293	100
32·5	-21	-46	300	108
	-26	-53	308	130
98·8	-40	-60	316	140
	-55			
86·4	-60			
	-55			
48·0	-56			
	-54			
35·6	-55			
	-55			
	-55			
	Inversion 482 mb -18° - 444 mb -15°			
	400 " -21° - 378 " -19°			

Tropopause I 220 mb -66° 36,500'

ALDERGROVE

Time 15h. G.M.T. | M.S.L. 1018·7 mb | Surf 1010·1 mb | Freezing 818 mb

Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
02·3	49	46	250	03
05·1	47	46	242	07
	42	39	246	09
33·4	38	36	260	14
	34	33	268	20
64·5	31	30	273	31
	27	27	262	34
99·3	24	24	263	39
	18	17	266	44
13·9	16	15	272	44
	12	10	286	57
18·5	06	02	290	58
	-3	-8	290	69
23·9	-12	-18	292	80
	-24	-30	296	87
30·6	-37	-43	298	95
	-54		310	120
39·3	-70		303	64
	-68			
45·3	-64			
	-60			
	-57			
54·0	-55			
	-54			
	-53			
	Max. Wind. 258 mb 311° 135kts 33700'			

Tropopause II 210 mb -69° 38300'

LIVERPOOL

Time 15h. G.M.T. | M.S.L. 1020·3 mb | Surf 1018·3 mb | Freezing 777 mb

Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
00·6	54	42	270	08
05·6	53	42	273	21
	46	35	262	21
34·1	39	30	253	20
	31	22	276	29
65·1	34	27	282	39
	30	24	285	45
100	25	18	286	45
	19	12	283	49
13·9	13	06	284	51
	08	-02	287	57
18·5	03	-05	293	61
	-04	-13	297	70
23·9	-14	-24	302	79
	-25	-36	298	90
30·6	-37	-48	314	106
	-54		302	104
39·3	-70			
	-69			
	-66			
	-56			
	-64			
	-59			
	-58			
	-57			
	-56			
53·9	-54			
	-57			
	-59			
	-51			
(55·6)	-55			
	Inversion 832 mb 28° - 810 mb 34°			
	535 " 05° - 515 " 06°			
	Isothermal 550 - 535 mb 05°			

Tropopause I 193 mb -71° 40,000'

DOWNHAM MARKET

Time 15h. G.M.T. | M.S.L. 1021·2 mb | Surf 1016·5 mb | Freezing 775 mb

Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
01·2	55	40	250	07
05·7	53	38	264	18
	47	45	265	22
34·2	40	31	262	18
	33	23	266	21
65·4	33	11	280	29
	30	16	282	39
10·0	23	14	278	43
	16	08	284	47
13·9	09	01	290	52
	05	-02	288	56
18·4	-02	-09	287	60
	-09	-16	295	69
23·8	-19	-27	299	70
	-29	-37	308	67
30·4	-40	-49	317	99
	-55		321	102
39·1	-73		322	108
	-68		313	71
45·1	-65		310	63
	-57		319	44
	-58		305	20
53·8	-57		305	29
	-57		304	26
	-60		296	22
	-57		310	16
64·7	-57		295	14
	-53			
	Inversion 842 mb 32° - 800 mb 33°			
	577 mb 05° - 563 " 07°			
	Isothermal 800 - 790 mb 33°			
	508 - 490 " -02°			

Tropopause I 191 mb -75° 40,100'

LARKHILL

Time 15h. G.M.T. | M.S.L. 1023·3 mb | Surf 1007·3 mb | Freezing 760 mb

Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
04·4	55	51	250	04
06·3	54	51		
	49	45	265	22
34·9	43	40	273	30
	39	36	271	36
66·3	37	22	281	35
	31	11	289	33
10·1	25	09	281	35
	19	08	280	35
14·1	11	01	279	36
	03	-04	280	39
18·6	02	-09	290	50
	-05	-12	306	59
24·0	-14	-21	306	68
	-25	-33	312	78
30·6	-40	-48	320	84
	-56		322	90
39·3	-78		327	89
	-79		316	75
45·2	-71		314	62
	-70		316	51
	-69		315	45
53·6	-69		310	36
	Inversion 550 mb 03° - 522 mb 05°			

Tropopause I 183 mb -80° 41400'

CAMBORNE

Time 15h. G.M.T. | M.S.L. 1026·0 mb | Surf 1015·5 mb | Freezing 713 mb

Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
02·9	60	54	247	12
07·2	58	54	252	24
	49	45	251	21
36·0	44	43	254	20
	39	38	248	20
67·5	40	38	251	19
	34	30	269	27
10·3	30	24	265	32
	24	15	271	33
14·2	20	16	282	38
	16	15	296	42
18·9	09	07	297	47
	02	00	299	51
24·4	-7	-10	307	48
	-19	-26	308	63
31·1	-33	-42	312	58
	-50		316	70
40·0	-70		316	69
	-81		320	66
	-86		308	52
	-80		310	54
	-76			
54·0	-75			
	-74			
(58·6)	-74			
	Inversion 860 mb 39° - 837 mb 41°			
	Isothermal 837 - 808 mb 41°			
	759 - 730 " 34°			
	615 - 582 " 20°			

Tropopause I 155 mb -37° 45,300'

VALENTIA

Time 15h G.M.T. | M.S.L. 1020·5 mb | Surf 1019 mb | Freezing 655 mb

Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
00·3	59	53	200	20
05·5	56	51	206	24
	50	45	222	28
34·3	45	41	226	32
	41	33	247	33
65·9	42	25	261	34
	42	31	270	38
10·2	33	26	279	42
	31	10	278	47
14·2	24	-3	276	44
	17	-15	276	49
18·9	11	-28	279	45
	01	-34	278	51
24·3	-11	-43	281	53
	-23	-51	281	57
31·0	-42		291	42
	-59			
39·6	-70			
	-67			
	-62			
	-59			
	-53			
54·5	-49			
	-47			
(84·6)	-46			
	Isothermal 961 - 940 mb 50°			
	563 - 540 " 17°			
	Inversion 700 mb 33° - 675 mb 34°			
	854 - 839 " 47°			

Tropopause I 208 mb -72° 38,900'

STATION

Time | M.S.L. | Surf | Freezing

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

LERWICK

Time 21h. G.M.T. | M.S.L. 1009·0 mb | Surf 999·2 mb | Freezing 842 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	48	44	CALM	
1000	02·5				
950		44	39	276	09
900	30·8	38	32	275	16
850		33	28	274	10
800	61·9	28	22	271	10
750		23	14	269	11
700	96·2	17	06	260	12
650		10	-3	253	14
600	13·5	01	-12	252	14
550		-9	-23	251	12
500	17·9	-16	-32	257	11
450		-25	-41	281	14
400	23·0	-36	-52	300	19
350		-46		302	31
300	29·4	-48		300	53
250		-55		301	71
200	382	-55		302	43
170		-59		302	32
150		-60		296	27
130		-59		295	26
110		-58		298	21
100	53·0	-60		308	20
90		-58		310	14
80		-59		312	12
70	(73 mb)	-60			
60					

Tropopause II 350 mb -46° 26,000'

STORNOWAY

Time 21h G.M.T. | M.S.L. 1013·0 mb | Surf 1011·0 mb | Freezing 850 mb

Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
0·5	44	40	CALM	
3·5	48	44		
	42	36	LAV	
31·8	36	28	"	
	32	20	"	
62·8	28	10	"	
	24	07	"	
97·3	19	01	"	
	12	-8	314	06
13·6	03	-17	326	10
	00	-23	307	23
18·1	-4	-29	293	47
	-7	-29	286	60
23·4	-18	-30	285	62
	-31	-42	285	71
30·0	-44		283	81
	-62		279	89
38·6	-74		287	75
	-69		297	48
44·6	-69		298	34
	-66		294	29
	-64		288	32
53·0	-63			
	Inversion 1011 mb 44° - 1000 mb 48°			

Tropopause II 213 mb -74° 37,400'

ALDERGROVE

Time 21h. G.M.T. | M.S.L. 1014·8 mb | Surf 1006·2 mb | Freezing 755 mb

Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
02·3	50	50		
04·1				
	47	46		
32·6	43	41		
	39	38		
64·0	35	32		
	32	28	See Page 3 for Winds.	
99·1	30	25		
	24	18		
13·9	20	13		
	13	04		
18·5	05	-5		
	-5	-17		
23·9	-15	-27		
	-28	-41		
30·5	-44			
	-63			
39·1	-80			
	-74			
44·8	-72			
	Isothermal 750 - 724 mb 32°			

Tropopause II 200 mb -80° 39,100'

LIVERPOOL

Time 21h. G.M.T. | M.S.L. 1017·4 mb | Surf 1015·4 mb | Freezing 787 mb

Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
00·6	52	50	270	08
04·7	51	49	270	09
	49	45	267	19
33·4	43	37	270	27
	38	34	273	34
64·7	33	29	277	31
	29	25	277	32
99·7	28	23	283	44
	25	20	291	52
14·0	19	14	295	58
	13	08	302	55
18·6	07	-01	299	63
	-02	-09	296	69
24·0	-11	-20	295	65
	-22	-33	301	69
30·7	-37	-50	302	69
	-58		294	91
39·4	-75			
	-77			
	-69			
	-66			
	-63			
53·8	-64			
	-65			
	-66			
(78 mb)	-66			
	Isothermal 742 -686 mb 28°			
	558 - 547 " 13°			
	Max Wind 294° 114kts 231 mb 36,300'			

Tropopause I 182 mb -79° 41,300'

DOWNHAM MARKET

Time 21h. G.M.T. | M.S.L. 1020·0 mb | Surf 1015·4 mb | Freezing 785 mb

Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
01·2	48	47	180	04
05·4	48	47		
	45	44	263	19
33·8	43	42	271	27
	38	37	275	33
65·2	33	33	273	33
	30	30	272	35
10·0	25	24	272	41
	20	19	274	47
14·0	13	10	278	48
	10	05	291	53
18·5	05	-01	300	64
	-3	-10	307	76
24·0	-13	-21	305	84
	-23	-32	305	80
30·6	-37	-46	304	82
	-55		317	97
39·4	-71		308	92
	-80		309	89
45·2	-80		317	78
	-74		339	60
	-70		343	49
	Isothermal 570 - 583 mb 10°			

Tropopause II 173 mb -81° 42,400'

LARKHILL

Time 21h. G.M.T. | M.S.L. 1022·3 mb | Surf 1006·3 mb | Freezing 750 mb

Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
04·4	53	49	260	10
06·1	53	49		
	49	45	263	29
34·8	44	39	263	32
	40	33	258	36
66·3	36	30	251	36
	32	22	265	36
10·1	27	21	278	37
	26	22	295	41
14·1	24	16	296	45
	15	10	299	48
18·7	04	00	303	53
	-03	-09	300	59
24·2	-13	-19	297	63
	-24	-33	296	59
30·8	-39	-49		
	Inversion 715 mb 27° - 691 mb 28°			
	500 " 04° - 485 " 06°			
	Isothermal 862 - 834 mb 40°			
	768 - 750 " 32°			

Tropopause NR. 296 mb 31200'

CAMBORNE

Time 21h. G.M.T. | M.S.L. 1024·2 mb | Surf 1013·4 mb | Freezing 682 mb

Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
02·9	55	53	203	10
06·6	56	54	235	24
	50	48	238	27
35·3	44	40	252	27
	37	34	260	29
66·9	46	24	270	27
	41	29	279	26
10·3	35	31	283	31
	30	23	290	36
14·3	24	09	288	39
	16	00	283	45
18·9	10	-08	284	44
	02	-17	284	41
24·4	-08	-26	283	40
	-20	-31	290	49
31·1	-36	-53	287	48
	-51		284	58
39·9	-69		288	52
	-77		290	50
	03		295	45
	-78		305	49
	-73		300	40
54·1	-72		301	39
	-71		345	28
	-69			
	-67			
(66·6)	-66			
	Inversion 1013 mb 55° - 1000 mb 56°			
	847 - 36° - 822 - 46°			
	Isothermal 822 - 800 mb 46°			

Tropopause I 150 mb -83° 45,800'

VALENTIA

Time | M.S.L. | Surf | Freezing

Pressure mb

Tropopause

No. 11501. DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Sunday 24th September 1950. 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.	1008·7 mb	1008·4 mb	1010·3 mb	1007·8 mb	1011·7 mb	1016·9 mb	1018·5 mb	1019·8 mb	1011·1 mb
Pressure: Surf	998·6 mb	1006·5 mb	1009·5 mb	999·2 mb	1009·7 mb	1012·4 mb	1002·4 mb	1009·3 mb	1010 mb
Pressure: Freezing	858 mb	790 mb	827 mb	686 mb	683 mb	718 mb	710 mb	658 mb	710 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LERWICK					
Surf	02·7	45	44	Calm	
1000	02·3				
950		43	41	257	06
900	30·6	39	36	250	06
850		32	27	245	07
800	61·7	28	24	246	07
750		24	16	257	06
700	96·1	18	06	274	06
650		09	-05	276	06
600	135	01	-13	281	08
550		-07	-23	290	10
500	178	-16	-32	289	18
450		-24	-42	292	30
400	230	-31	-50	294	51
350		-36	-58	292	67
300	295	-46		293	71
250		-63		293	67
200	381	-66		288	45
170		-61		287	36
150		-61		288	31
130		-61		286	30
110		-61		282	23
100	528	-61		287	21
90		-61		290	17
80		-61		295	18
70		-61			
60					

Inversion 999 mb 45°-993 mb 48° 575 .. -34°-370 .. -33°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
STORNOWAY					
Surf	0·5	47	42	120	05
1000	2·3	47	42		
950		43	38	120	12
900	30·6	36	29	121	11
850		34	21	124	12
800	61·7	32	09	132	12
750		28	03	147	12
700	96·4	23	-03	170	09
650		18	-07	194	09
600	136	12	-11	252	12
550		06	-02	280	28
500	181	-01	-13	270	44
450		-10	-19	-64	51
400	234	-21	-35	263	63
350		-34	-47	265	53
300	299	-51		261	60
250		-67		264	63
200	385	-67		265	46
170		-54			
150					
130					
110					
100					
90					
80					
70					
60					

Inversion 1007 mb 47°-991 mb 48°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LEUCHARS					
Surf	0·2	45	41		
1000	2·8	45	42		
950		44	41		
900	31·2	39	36		
850		34	31		
800	62·3	30	27		
750		27	26		
700	97·0	25	20		
650		22	18		
600	135	18	16		
550		11	09		
500	183	06	09		
450		04	25		
400	237	15	32		
350		28	46		
300	303	44			
250		59			
200	389	71			

Inversion 1010 mb 45°-964 mb 46°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
ALDERGROVE					
Surf	02·3	53	52	220	15
1000					
950		53	52	251	22
900	31·0	51	50	258	25
850		48	46	266	28
800	63·0	45	43	264	33
750		39	36	262	36
700	98·7	34	31	255	42
650		28	24	252	44
600	139	23	03	255	42
550		15	-20	265	46
500	185	06	-28	264	49
450		-05	-36	261	53
400	239	-16	-44	262	55
350		-30	-45	262	60
300	305	-45		257	77
250		-58		251	88
200	391	-76		259	93
170		-67		264	63
150		-64		270	45
130		-65		280	44
110		-65		275	37
100	537	-63		280	32
90		-61		288	28
80		-64		297	24
70					
60					

Isothermal 999-950 mb 63°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LIVERPOOL					
Surf	00·6	51	50	180	08
1000	03·2	51	50		
950		49	48		
900	31·9	46	44		
850		44	41		
800	63·6	40	36		
750		37	33		
700	99·0	33	29		
650		28	23		
600	139	21	15		
550		13	07		
500	185	05	-03		
450		-03	-11		
400	240	-15	-23		
350		-27	-36		
300	306	-42			
250		-60			
200	392	-79			
170		-73			
150		-73			
130		-69			
110		-68			
100	533	-67			

Isothermal 1010 -1000 mb 51°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
DOWNHAM MARKET					
Surf	01·2	52	50	210	03
1000	04·6	51	50	264	21
950		47	44	266	13
900	33·2	42	39	267	25
850		37	34	269	26
800	64·5	32	29	272	29
750		33	30	273	33
700	10·0	30	27	273	44
650		25	21	278	51
600	140	20	16	286	58
550		14	09	290	60
500	186	05	-03	295	58
450		-05	-20	292	63
400	240	-14	-29	297	60
350		-28	-40	299	59
300	306	-43		286	59
250		-61		289	66
200	392	-80		287	66
170		-78		299	59
150		-77		307	52
130		-74		296	36
110		-71			

Inversion 781 mb 30°-750 mb 33° Isothermal 750 - 724 mb 33°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LARKHILL					
Surf	04·4	52	49	230	12
1000	05·0	52	49		
950		48	46	248	28
900	33·7	45	42	260	32
850		42	38	275	36
800	65·4	45	39	274	37
750		38	33	275	38
700	10·1	30	24	281	39
650		29	08	283	40
600	141	21	01	282	42
550		14	01	278	45
500	187	06	-07	282	43
450		-03	-21	287	40
400	241	-15	-32	283	44
350		-27	-45	281	48
300	307	-42		283	50
250		-59		289	45
200	394	-75		287	46
170		-80		283	56
150		-79		285	61
130		-80		293	58
110		-78		294	43
100	535	-76		289	35
90		-76		290	30
80		-75		290	30
70		-73		295	23
60		-72		300	18
		-71		301	18
		-70		307	15

(33 mb) -69 Inversion 900 mb 45°-884 mb 46° 832 .. 40°-809 .. 46° Isothermal 700 - 653 mb 30°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
CAMBORNE					
Surf	02·9	55	54	203	15
1000	05·4	54	54	225	33
950		50	50	240	36
900	34·2	50	50	250	36
850		49	49	260	33
800	66·3	47	45	274	31
750		40	36	284	33
700	10·2	38	09	273	34
650		31	03	265	37
600	142	25	-08	270	37
550		13	-09	274	36
500	189	06	-17	277	39
450		-03	-23	288	42
400	243	-15	-36	275	61
350		-27	-47	275	54
300	309	-43		278	42
250		-61		284	39
200	395	-79		275	43
170		-76		274	59
150		-76		282	46
130		-74		294	40
110		-72		298	24
100	537	-72		280	22
90		-71		271	18
80		-70		275	12
70		-70			
60					

(375 mb) Inversion 812 mb 46°-800 mb 47° Isothermal 950 -900 mb 50° 737 - 700 .. 38°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
VALENTIA					
Surf	00·3	58	57		
1000	3·0	57	57		
950		54	54		
900	32·1	51	51		
850		48	48		
800	64·2	44	44		
750		38	35		
700	99·7	30	15		
650		28	-14		
600	140	20	-30		
550		14	-31		
500	186	04	-41		
450		-07	-50		
400	239	-21			
350					
300	(389 mb)	-24			
250					
200					
170					
150					
130					
110					
100					
90					
80					
70					
60					

Isothermal 700 - 684 mb 30°

Tropopause	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
	I 214 mb -74° 36,600'	II 221 mb -73° 36,500'	I 208 mb -72° 38,100'	I 202 mb -77° 39,000'	I 200 mb -79° 39,180'	I 189 mb -83° 40,400'	I 181 mb -82° 41,400'	I 207 mb -80° 39,200'	N.R.

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.	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.	1008·2 mb	1003·8 mb	mb	1005·0 mb	1007·2 mb	1012·2 mb	1013·7 mb	1015·4 mb	mb
Pressure: Surf	998·1 mb	1001·5 mb	mb	996·4 mb	1005·2 mb	1007·6 mb	997·8 mb	1004·9 mb	mb
Pressure: Freezing	861 mb	790 mb	mb	695 mb	707 mb	695 mb	668 mb	680 mb	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LERWICK					
Surf	02·7	46	46	Calm	
1000	02·2				
950		43	41	205	03
900	30·6	37	33	230	03
850		30	25	261	03
800	61·6	28	20	291	04
750		23	11	302	07
700	95·9	18	03	310	08
650		08	-10	312	09
600	134	02	-16	290	07
550		-05	-25	283	09
500	179	-13	-36	287	23
450		-18	-45	281	36
400	231	-28	-42	279	46
350		-37	-49	288	49
300	296	-54		276	43
250		-65		272	30
200	382	-54		281	33
170		-54		284	26
150		-54		284	24
130		-56		283	22
110		-54		281	22
100	532	-54		302	18
90		-54		296	13
80		-54		264	13
70		-54		286	14
60					

Inversion 843 mb 29°-820 mb 30° Isothermal 998 -985 mb 47°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
STORNOWAY					
Surf	0·5	48	44		
1000	0·9	48	44		
950		43	38		
900	29·3	45	36		
850		40	27		
800	66·8	33	23		
750		29	26		
700	95·7	25	22		
650		20	18		
600	135	14	06		
550		07	-08		
500	181	00	-12		
450		-09	-27		
400	234	-22	-41		
350		-36	-49		
300	299	-51			
250		-63			
200	386	-54			
170		-51			
150		-49			
130		-50			
110		-55			
100	557	-51			
90		-53			
80		-54			
70		-53			
60		-52			

Inversion 915 mb 43°-900 mb 45° 770 - 29°-762 .. 30° Isothermal 950 -915 mb 43° 510 - 500 .. 00°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LEUCHARS					
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					

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
ALDERGROVE					
Surf	02·3	53	49	190	04
1000	01·9				
950		48	44		
900	30·1	46	40		
850		44	33	See Page	
800	61·8	43	26	3	
750		38	13	for Winds	
700	97·2	33	03		
650		25	-08		
600	137	16	-11		
550		10	-10		
500	183	02	-12		
450		-10	-25		
400	236	-24	-39		
350		-34	-50		
300	301	-48			
250		-66			
200	387	-64			
170		-58			
150		-59			
130		-60			
110		-60			
100	535	-60			
90		-60			
80		-59			
70					
60					

Inversion 865 mb 43°-815 mb 45°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LIVERPOOL					
Surf	00·6	57	56	230	10
1000	02·0	57	56	230	15
950		53	52	257	18
900	31·0	51	51	272	21
850		47	42	279	29
800	63·0	43	40	276	33
750		37	37	263	42
700	98·5	31	30	259	45
650		24	20	257	48
600	138	22	-37	257	45
550		15	-42	256	48
500	184	05	-49	256	50
450		-06	-58	260	55
400	238	-17	-57	261	69
350		-31	-58	258	52
300	304	-46		265	67
250		-63		258	75
200	390	-76		261	75
170		-64		264	56
150		-65		267	46
130		-64			
110		-59			
100	536	-58			
90		-57			
80		-59			
70		-58			
60	(66 mb)	-57			

Inversion 636 mb 22°-611 mb 24° (Max Wind 207 mb 38,100' 261° 87 kts)

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
DOWNHAM MARKET					
Surf	01·2	52	52	180	05
1000	03·3	52	51		
950		49	48	260	33
900	32·1	49	48	262	30
850		46	45	267	27
800	63·9	43	42	255	27
750		38	35	268	29
700	99·5	33	31	292	31
650		27	25	290	33
600	140	21	18	284	36
550		12	06	282	38
500	186	04	-18	282	43
450		-04	-22	277	48
400	240	-16	-28	275	49
350		-28	-38	265	48
300	306	-45		268	59
250		-58		272	67
200	392	-77		272	81
170		-71		281	69
150		-65		284	52
130		-65		286	44
110		-64		283	33
100		-63		287	31
90		-63		288	27
80					
70					
60					

Inversion 940 mb 49°-910 mb 50°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LARKHILL					
Surf	04·4	57	55	260	15
1000	03·9				
950		53	52		
900	48·6	54	53		
850		50	49		
800	65·1	45	44		
750		40	39		
700	10·1	36	33		
650		30	29		
600	141	25	23		
550		17	12		
500	188	10	-01		
450		01	-17		
400	242	-12	-23		
350		-24	-33		
300	309	-37	-45		
250		-57			
200	396	-77			
170		-78			
150		-73			
130					
110					
100					
90					
80					
70					
60					

Inversion 925 mb 51°-900 mb 54°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
CAMBORNE					
Surf	02·9	51	46	225	12
1000	04·3	56	55		
950		52	51	239	37
900	33·1	49	48	246	40
850		50	49	260	40
800	65·1	47	36	256	40
750		41	32	259	42
700	10·1	35	17	261	43
650		28	05	260	44
600	141	23	02	257	38
550		15	04	258	40
500	181	08	-07	262	43
450		-02	-15	263	45
400	241	-13	-27	256	52
350		-25	-35	256	57
300	308	-38	-47	262	68
250		-55		260	69
200	395	-75		258	68
170		-77		256	63
150		-71		257	57
130	(137 mb)	-69			
110					
100					
90					
80					
70					
60					

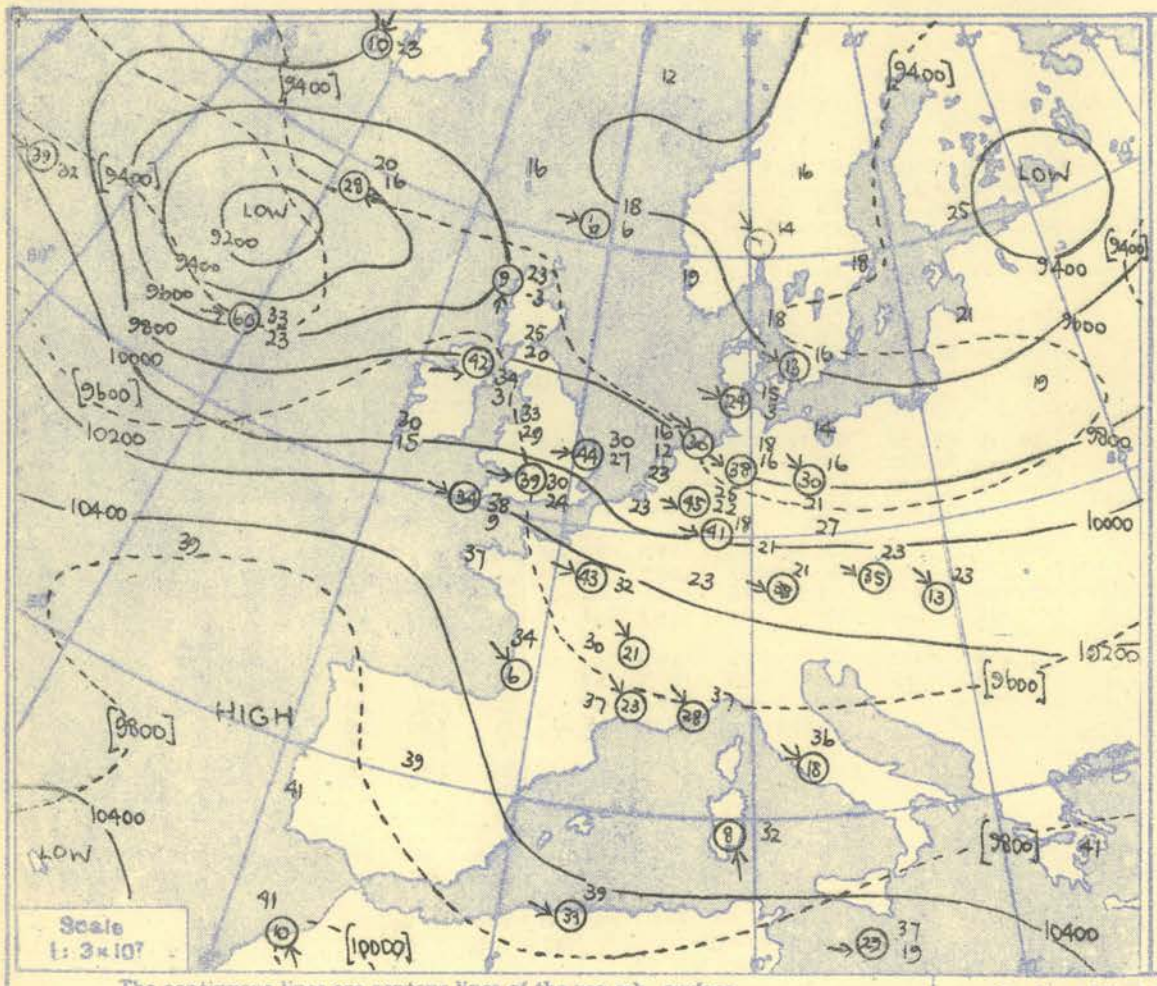
Inversion 900 mb 49°-872 mb 51°

Tropopause	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
	I 240 mb -67° 34,200'	I 260 mb -65° 33,000'		I 233 mb -72° 35,500'	I 202 mb -67° 38,700'	II 182 mb -21° 40,200'	I 182 mb -83° 41,500'	I 182 mb -82° 41,500'	

METEOROLOGICAL OCT 1950

Sunday 24th September. 1950.

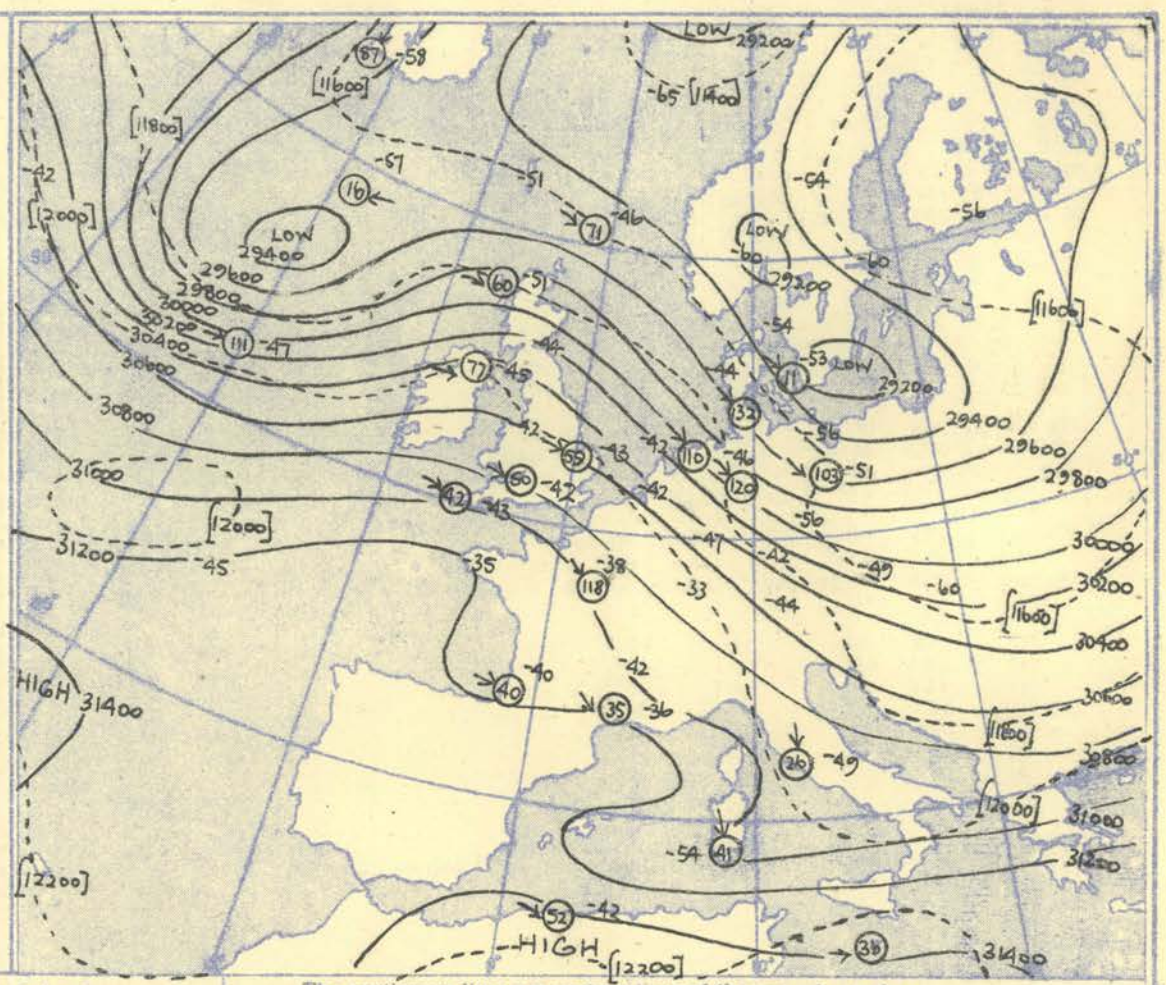
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. G.M.T.



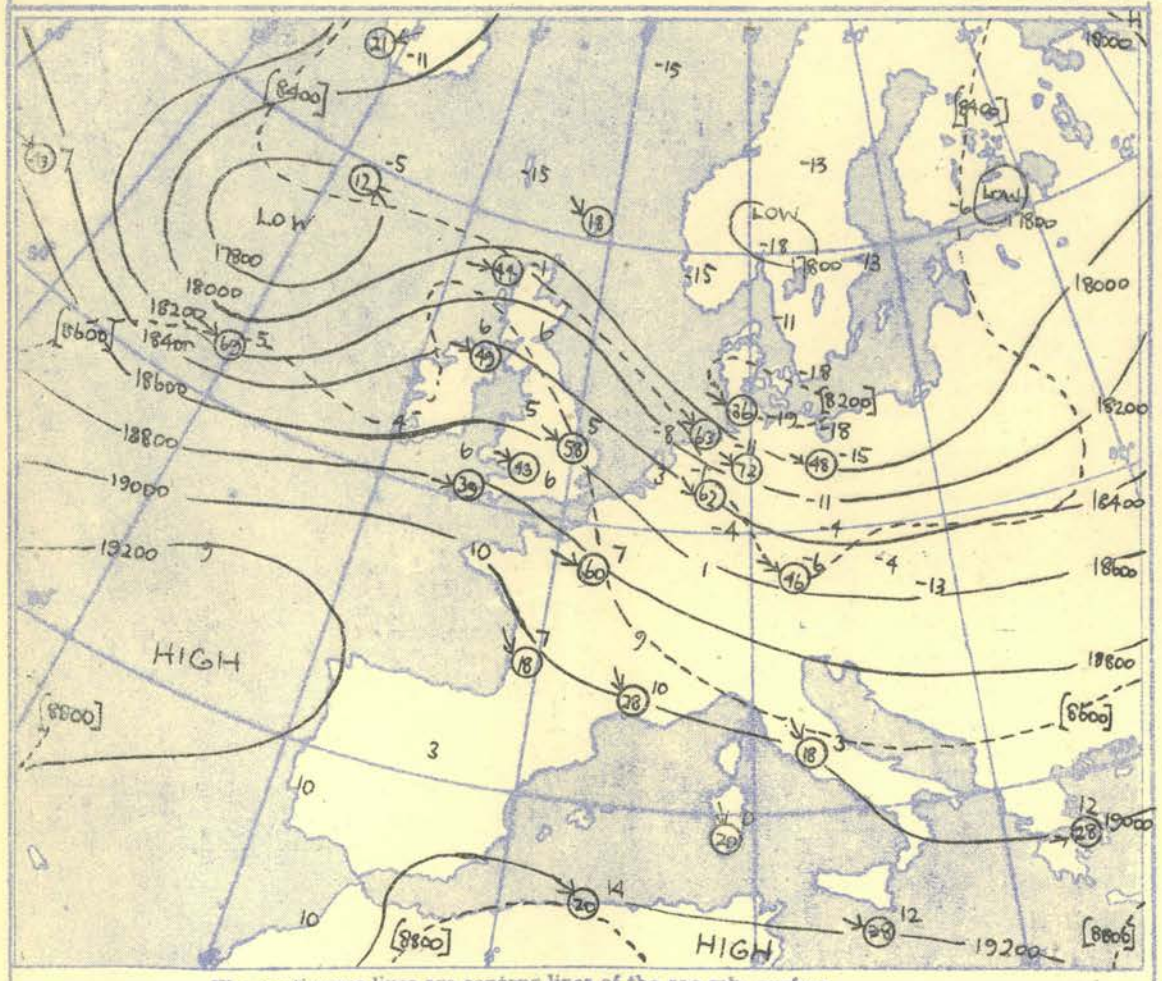
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

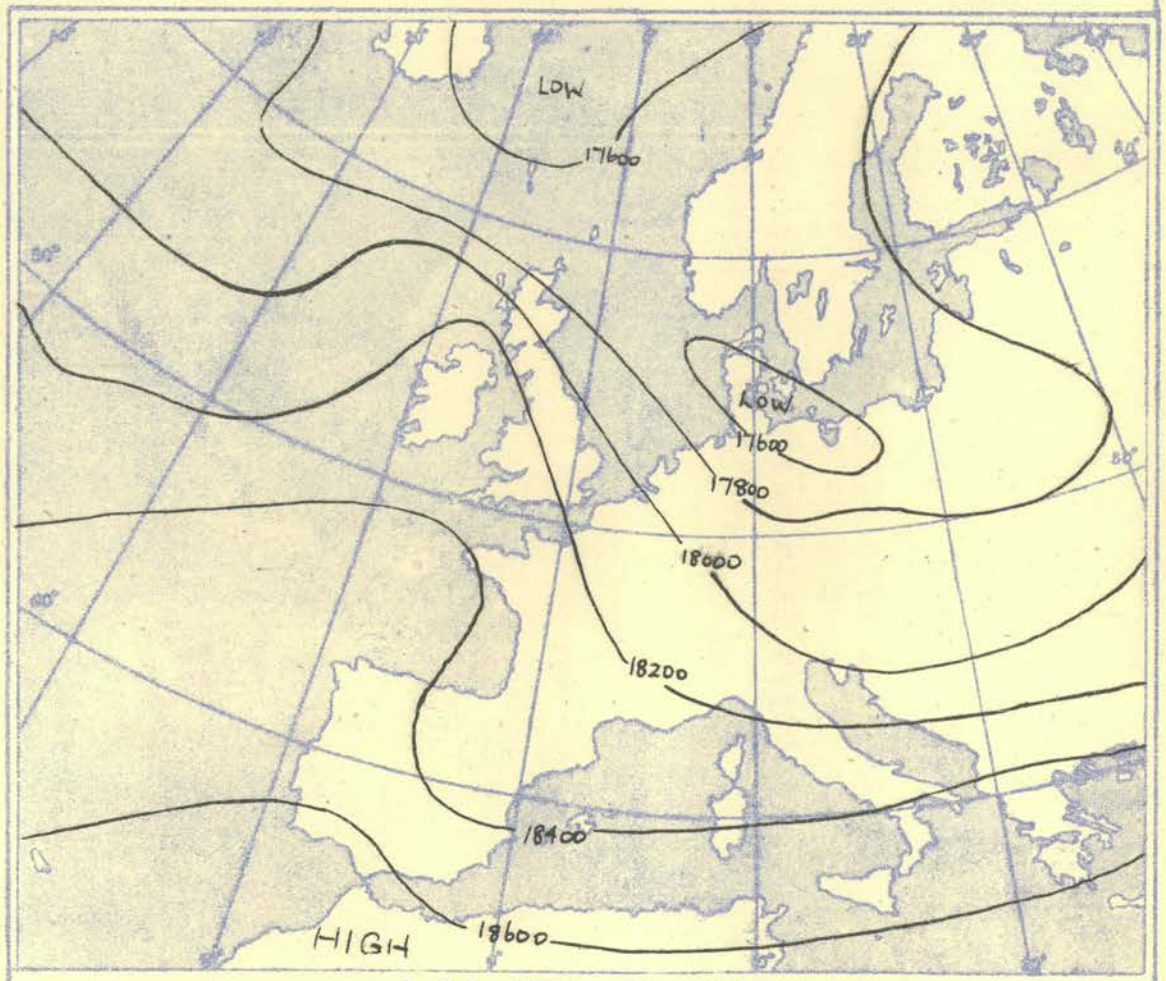
100 60 40 30 20 15 10 knots



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

	48·2N 20·5W			49·5N 14·7W			43·2N 17·0W			39·5N 12·2W															
Time	1240h			1420h			14h			15h															
Pressure M.S.L.	1023 mb			1015 mb			1025 mb			1021 mb			mb			mb			mb			mb			mb
Pressure Surf	1019 mb			1011 mb			1022 mb			1017 mb			mb			mb			mb			mb			mb
Pressure Freezing	655 mb			675 mb			640 mb			620 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.	Height ft./100	°Temp. °F.	Dew °F.	Pressure mb
Surf	01·0	57	50	01·0	57	48		67			66														Surf
1000	06·2			04·0			7·0	64		5·6	66														1000
950		46	44		47	45		59			65														950
900	34·8	47	20	32·6	41	40		55			65														900
850		51	19		36	34		53			59														850
800	66·9	51	13	64·0	43	37		49			60														800
750		46	14		38	28		45			49														750
700	10·3	37	11	99·6	34	26	10·5	38		6·4	44														700
650		30	21		27			33			36														650
600	143	23		140	21			28			30														600
550		16			13			19			20														550
500	189	05		186	02		191	08		192	12														500
450																									450
400																									400
350																									350
300																									300
250																									250
200																									200
170																									170

Cloud 6Sc. 8/8 930-900mb Inversion 950mb 46° 850 .. 51° Isothermal 850-800mb 51°

Cloud 4St. 8/8 930-910mb 7Sc. 7/8 880-840 .. 3Cs. 3/8 H N G. Inversion 850mb 36° - 800 .. 43°

Cloud 1Sc. 8/8 990-980 mb 8Sc. 8/8 970-960 .. 8Sc. 8/8 890-880 .. Surf Wind N.W. 7-10 kts

Cloud 3Sc. 8/8 970-960mb Isothermal 950-900mb 65° Surf. Wind Nwly 11-16 kts.

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

Place	Rineanna	Castle Archdale	Aldergrove	Penrham	Leuchars															
Time	09h		09h		09h		15h		21h											
Type					Pilar				Pilar											
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.	250	12	200	11	190	04			Calm											
1,000	270	14	200	12	246	14			Calm											
2,000	260	15	250	12	246	14			078	07										
3,000			260	16	246	15			089	09										
4,000			250	19	245	17			154	07										
5,000			250	11	243	21			179	10										
6,000			270	28	242	25			201	14										
8,000					242	33			193	14										
10,000					240	42			186	20										
14,000					236	45			184	25										
18,000					238	46			199	29										
24,000					244	60			210	46										
30,000					238	75	251	43	215	51										
40,000					250	42	249	63	257	25										
50,000							257	40	263	23										
							(45,000')		(44,000')											

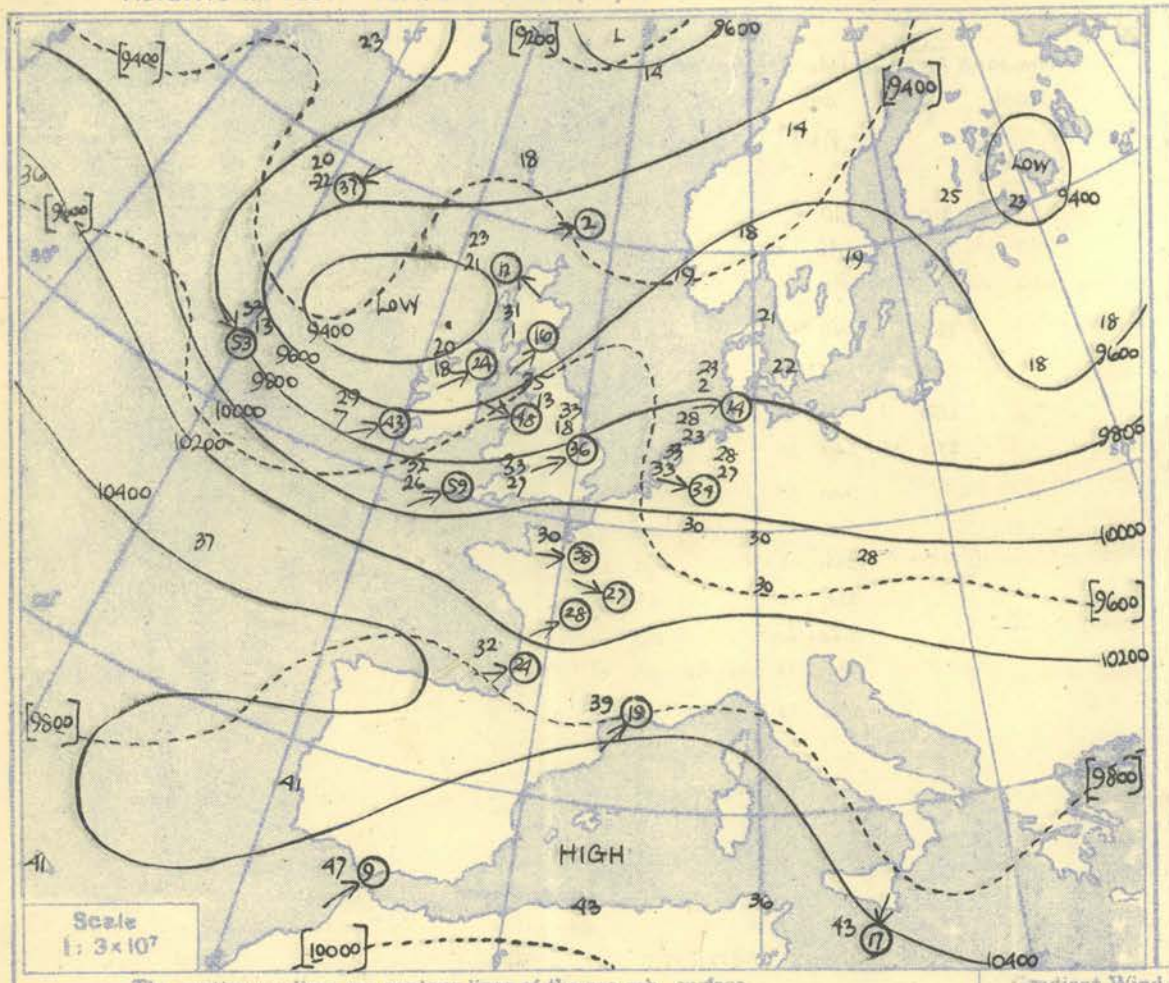
NEPHOSCOPE OBSERVATIONS

Place			NONE REPORTED.							
Time Type										
Dir. Vel.										

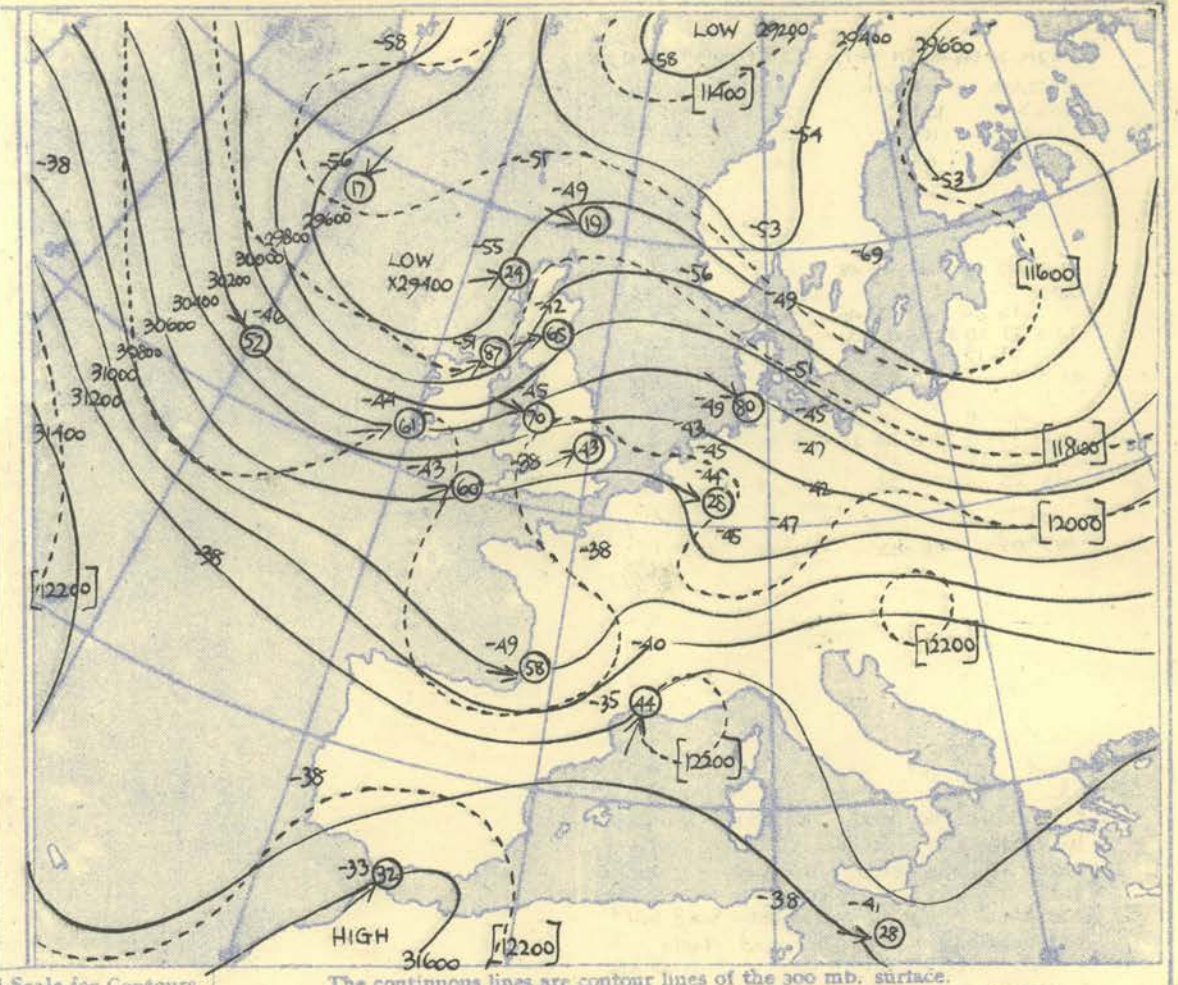
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER OBSERVER	WEATHER WATCHER	WEATHER WATCHER	WEATHER WATCHER	WEATHER WATCHER	
Lat/Long	59·2 N 18·5 W	59·1 N 19·0 W	59·2 N 18·5 W	59·2 N 18·7 W	52·5 N 20·1 W	52·5 N 20·1 W	52·4 N 20·3 W	52·4 N 20·0 W	
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.	1001 mb	1004 mb	1010 mb	1016 mb	1006 mb	1005 mb	1007 mb	1011 mb	mb
Pressure Surf	1001 mb	1004 mb	1010 mb	1016 mb	1006 mb	1005 mb	1007 mb	1011 mb	mb
Pressure Freezing	880 mb	850 mb	840 mb	845 mb	750 & 690 mb	655 mb	690 mb	730 mb	mb
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	Height ft./100 / °Temp. °F. / Dew °F. / Wind Dir. ° Vel. knots
Surf	51 47 090 42	51 47 060 37	51 44 040 35	51 47 025 25	53 50 260 32	53 52 280 28	56 52 290 30	55 53 350 25	
1000	0·2	1·0	2·7	4·3	1·7	1·3	2·0	3·1	
950	43 37 080 47	50 45	49 41 023 34	49 46 030 30	52 49 260 36	53 52 280 28	55 52 290 30	54 53 352 32	
900	28·5	42 36 062 42	43 38 028 36	43 41 029 30	47 44 255 46	48 48 271 43	50 48 288 39	49 48 356 40	
850	35 30 082 47	29·3 37 30 068 43	30·9 36 30 032 36	32·6 36 36 029 33	30·2 41 41 255 45	43 43 276 46	30·7 44 43 289 39	31·7 42 42 013 38	
800	31 21 085 48	32 25 073 51	33 24 040 35	30 30 025 30	35 35 256 44	39 39 281 43	41 34 293 41	39 39 011 39	
	59·4 27 20 088 50	60·2 26 19 077 48	61·9 30 14 046 37	63·5 25 18 017 38	61·5 33 30 257 48	61·3 34 33 285 41	62·2 39 25 296 42	63·1 38 32 013 39	
750	22 17 090 39	19 12 082 42	27 -14 041 37	26 -1 011 30	32 23 257 55	34 12 283 43	35 19 301 44	34 25 357 42	
700	93·8 20 16 092 28	94·3 15 08 082 42	96·3 20 -22 036 37	97·9 20 -13 003 31	96·6 33 23 260 60	96·6 38 03 281 51	97·6 33 13 304 53	98·4 29 20 348 36	
650	14 10 096 18	08 03 079 46	13 -28 035 35	14 -15 002 33	28 01 262 68	31 -10 283 60	29 09 305 63	23 09 343 45	
600	133 07 03 101 21	133 03 -2 076 30	13·5 05 -33 033 38	137 07 -21 357 37	137 21 -6 260 68	137 23 -8 284 58	138 19 01 310 54	138 20 02 340 54	
550	01 -4 104 18	-2 -7 065 20	-2 -38 030 37	-2 -27 358 37	14 -15 259 72	17 -9 294 54	10 -7 305 54	15 -41 325 64	
500	17·8 -5 -13 121 12	17) -10 -16 060 16	17·9 -11 -49 025 35	181 -10 -36 003 39	183 05 -27 259 69	183 07 -16 298 54	183 05 -15 299 59	184 05 -13 322 76	
450	-14 -23 138 12	-17 -23 049 13	-23 -56 020 29	-21 -47 003 42	-6 -31 250 78	-5 -26 300 60	-4 -26 295 57	-6 -28 333 62	
400	231 -25 -34 101 24	230 -27 -34 043 07	231 -33 -60 019 17	233 -32 -58 007 40	237 -19 -48 250 90	237 -17 -36 300 65	237 -17 -40 302 52	238 -20 -39 335 62	
350	-39 -47 081 20	-39 -46 039 08	-43 019 10	-44 006 53	-32 -59 256 98	-31 -48 303 56	-31 -53 312 48	-31 -49 338 67	
300	295 -57 065 16	294 -53 004 05	295 -56 005 17	297 -55 005 37	302 -47 256 111	303 -47 300 59	303 -46 302 52	304 -44 341 72	
250	(2604) -69	-65 306 16	-56 352 29	-67 002 59	-56 256 98	-60 293 61	-52 300 69	-51 342 105	
200		381 -56 322 30	383 -55 336 31	383 -59 356 45	389 -56 256 62	390 -54 292 54	391 -55 294 71	391 -64 340 120	
170	Isothermal 766 - 718 mb 22°	-54 323 17	-53 320 35	-57 349 47	-53 256 51	-54 296 48	-59 303 70		
150		-56 325 19	-50 314 30	-56 336 42	-56 256 50	-55 301 60	-59 301 60	Inversion	
130		-57 325 30	-53 309 27	-61 316 32	-59 256 48	-58 296 49	-58 300 56	818 mb 37° - 799 mb 39°	
110		-57 316 27	-52 303 26	-60 299 30	-57 256 38	-55 292 38	-60 300 40		
100		530 -56 309 25	533 -52 307 24	532 -60 302 33	539 -57 256 37	540 -54 292 30	540 -58 300 33		
90		-56 300 25	-52 297 25	-59 302 26	-59 256 21	-55 292 30	-59 300 34		
80		-57 295 25	-49 293 28	-57 291 33	-59 256 03	-56 292 37	-57 300 33		
70		-56 292 24	-50 291 26	-56 289 30	-59 256 02	(756) -57	-56 300 27		
60		-53 292 25	-51 288 27	-54 285 28	-60	Isotherm 800-740 mb 34°	-53 300 25		
		-56 295 20	Inversion 810mb 28° - 800mb 30°	(5046) -59 275 20	-60	Inversion 740 mb 34° - 700mb 38°	-55 300 23		
		(4246) -54	Isothermal 888 - 864 mb 34°	(4404) -61 309 24	Inversion 810mb 32° - 777mb 35°		Inversion 865 mb 40° - 840 mb 42°		
			800 - 776 " 30°	Inversion 800 mb 25° - 766 mb 27°	735 - 30° - 708 " 33°		724 " 33° - 712 " 34°		
					Max Wind 289 mb 28° 126 kts				
Tropopause	N.R	I 234 mb -67° 34,800'	II 285 mb -59° 39,700'	I 250 mb -67° 33,700'	II 250 mb -56° 34,000'	I 255 mb -61° 33,800'	I 274 mb -54° 32,300'	N.R. 41,900'	

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

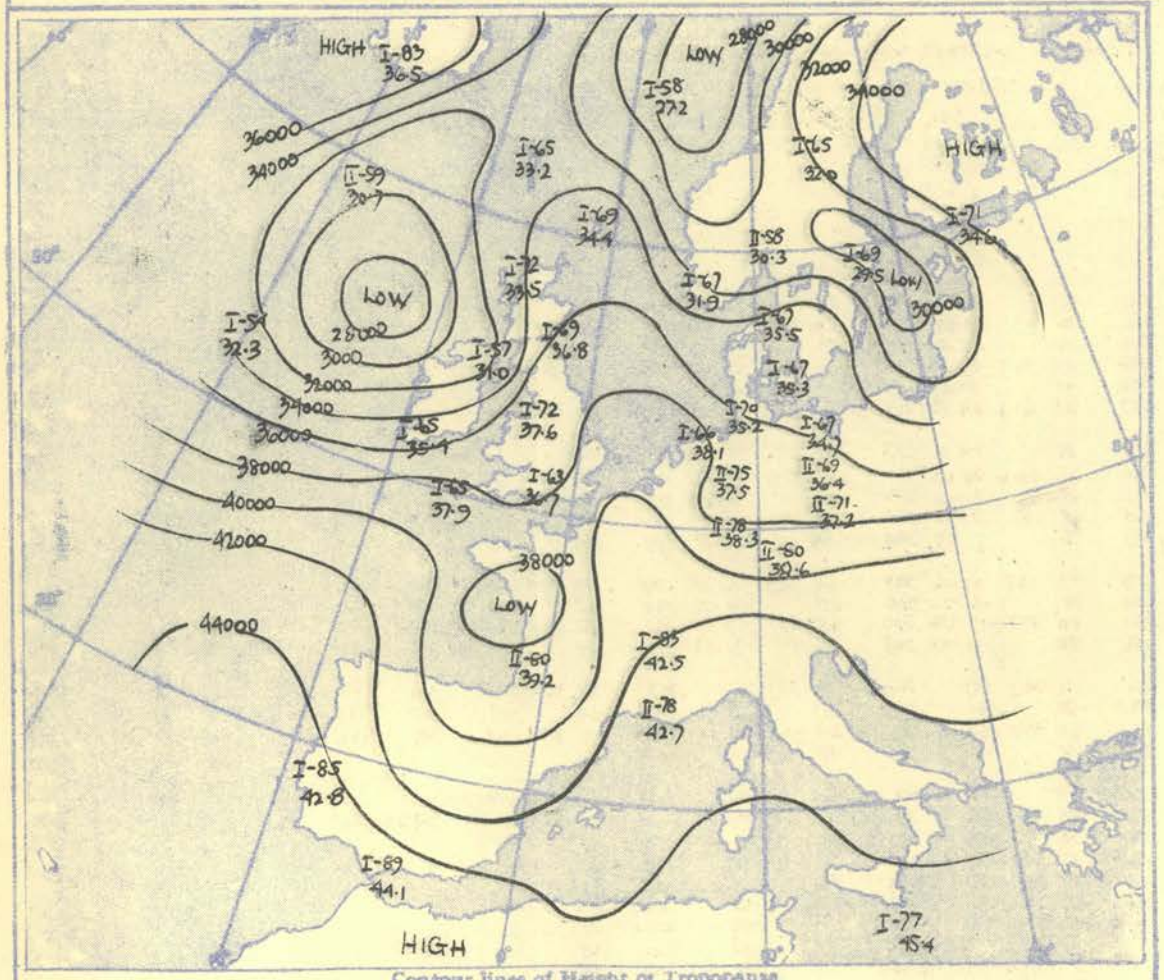


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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

100 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 the eastward movement of the thermal troughs over Europe and the eastern Atlantic, while the intense trough over Quebec Province remained stationary.

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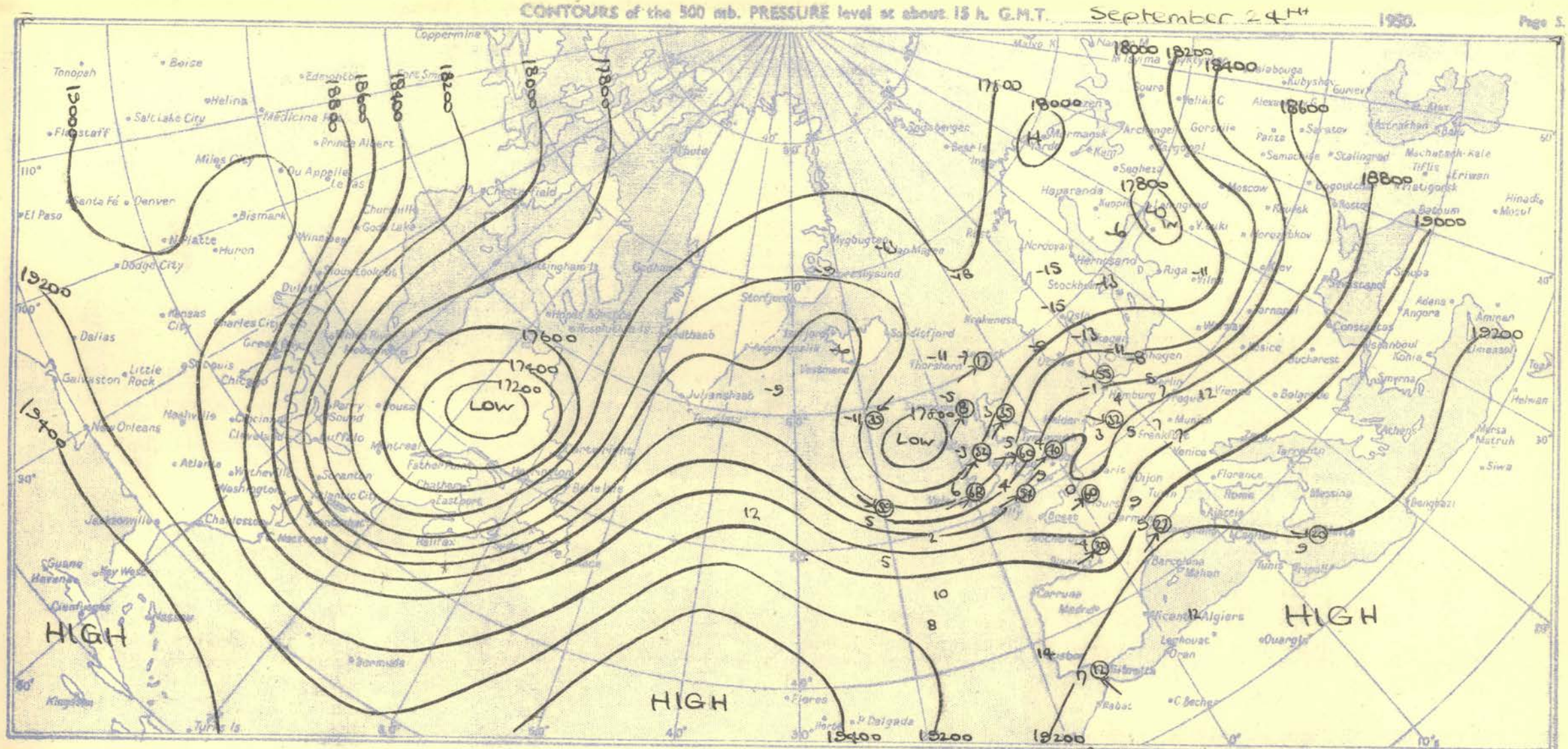
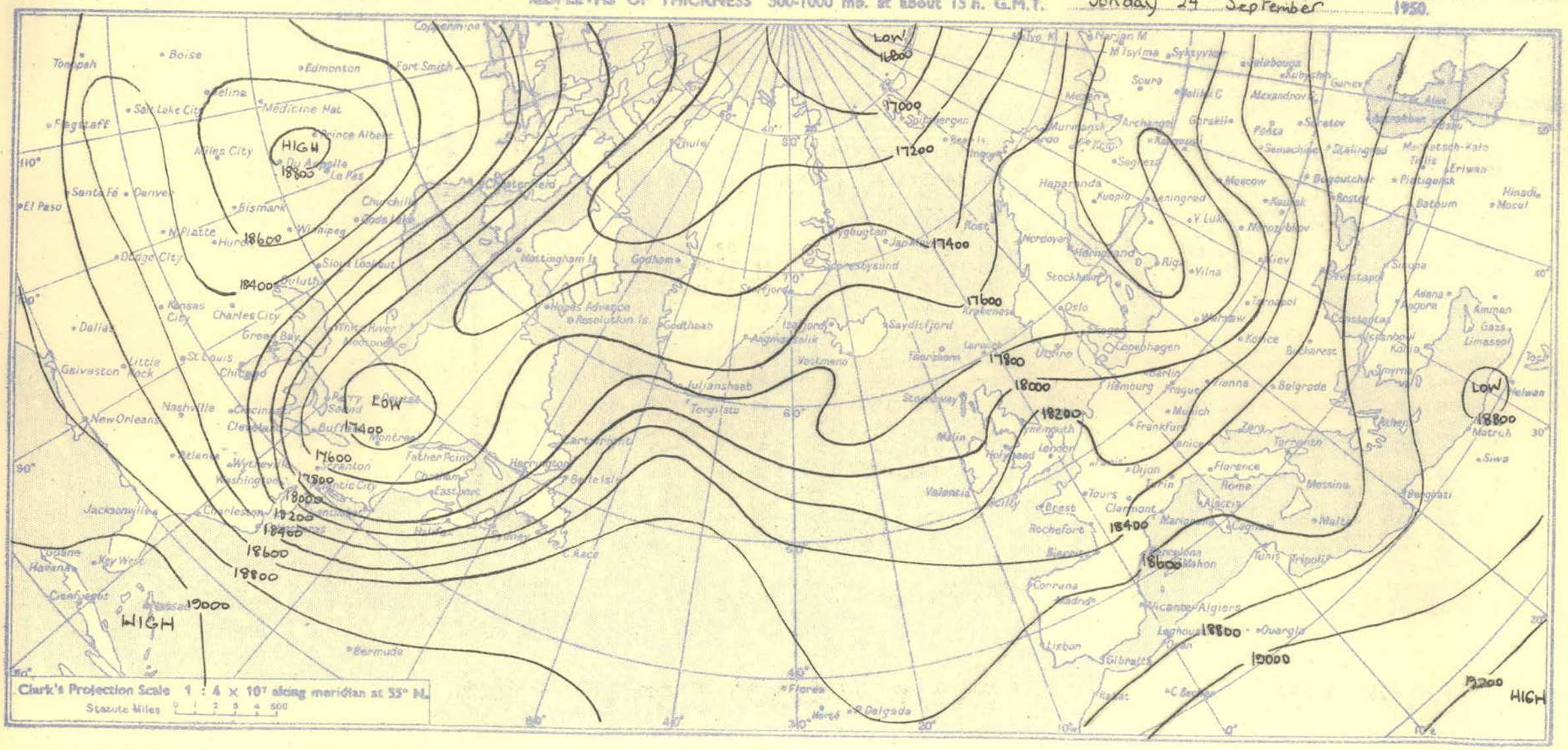
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. September 24th 1950.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Sunday 24th September 1950.



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 G.M.T.	15hrs	15hrs	15hrs	15hrs	15hrs	15hrs	15hrs	15hrs	15hrs
Pressure: M.S.L.	1006·9 mb	1000·6 mb	1000·7 mb	1000·7 mb	1002·1 mb	1002·2 mb	1010·0 mb	1008·5 mb	1004·4 mb
Pressure: Surf	996·9 mb	998·7 mb	999·9 mb	992·3 mb	1000·1 mb	1002·8 mb	994·3 mb	998·1 mb	1003 mb
Pressure: Freezing	850 mb	797	710	815	666	665	696	700	780 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	53	47	120	01	0·5	50	45	090	05	0·2	55	53	calm		02·3	53	50	210	15	0·6	60	58	270	03	01·2	56	58	200	12	04·4	58	57			02·9	58	57	200	15	0·3	56	51	230	20	Surf
1000	01·8					0·2					0·2										0·6					01·7	58	57			02·8														1000
950		45	39	175	08		46	45	104	08		49	46	270	10		48	45	218	21		55	54	274	27		54	51	233	35		53	52				54	53	245	37		49	47	248	30	950
900	30·3	38	31	168	08	28·7	41	41	140	07	28·9	46	40	258	11		42	39	227	19	29·7	50	50	275	28	31·0	50	46	249	45	31·8	50	48			31·8	51	50	258	37	30·0	42	35	260	34	900
850		32	26	165	07		37	34	148	09		41	37	239	21		36	33	226	20		45	41	282	22		49	40	258	39		49	46				47	47	253	38		37	34	267	38	850
800	61·2	27	22	201	02	60·0	32	29	125	11	60·5	36	32	217	22		31	28	228	20	61·5	40	31	252	25	63·0	43	35	259	36	63·8	45	38			63·8	43	43	249	46	61·4	34	31	267	40	800
750		24	14	235	02		27	25	118	12		34	10	208	20		26	23	228	20		37	24	291	37		38	23	252	35		40	33				38	35	247	58		28	24	267	41	750
700	95	6	3	247	02	94·8	23	21	129	12	95·7	31	01	208	16		20	18	228	24	96·9	35	13	285	48	98·5	33	18	252	36	100	33	27			99·3	32	26	245	59	96·3	25	07	266	43	700
650		12	42	237	03		18	4	143	12		24	04	217	17		18	2	230	34		29	13	280	53		25	15	249	31		30	25				27	23	248	63		27	21	265	56	650
600	134	05	22	225	04	134	11	5	143	12	136	17	2	228	24		12	12	226	39	137	20	32	274	61	139	22	08	248	44	140	24	19			139	20	06	232	65	136	24		261	56	600
550		3	35	251	07		03	32	160	13		05	3	231	31		06	9	226	45		13	32	270	63		19	1	248	41		15	09				14	45	247	57		15		258	60	550
500	179	7	43	267	17	179	5	30	207	08	181	3	7	240	35		3	19	222	52	183	05	42	277	60	185	09	11	249	40	186	09	9			185	09	52	258	54	182	06	30	261	68	500
450		17	42	270	24		14	36	206	10		6	18	234	36		13	30	222	61		6	49	278	64		3	17	251	43		1	13				7	50	245	57		5	33	261	68	450
400	232	23	41	265	27	232	24	41	230	14	235	17	26	242	42		24	41	228	78	237	19	57	282	63	239	16	30	245	45	241	11	12			239	17	57	245	63	237	13	47	260	66	400
350		36	53	264	25		38	53	244	18		29	41	240	58		37	53	224	82		32	58	277	72							23	34				28	36	243	60		28		270	67	350
300	297	49		270	19	297	55		240	24	301	42		238	65		51		220	87	303	45		276	70						307	38	50			305	43		245	60	303	44		269	61	300
250		66		280	18		72		232	20		58		237	78		61		218	54		62		277	70							54						55	24	7	61		208	99	250
200	383	56		261	21	382	55		263	18	388	59		247	48		50		256	35	388	70		282	62						395	70				393	63				390	51				200
170		54		269	30		54		269	19		54		256	31		55		261	27		66		290	44							67						59				50				170
150		54		275	21		56		279	20		51		258	27		53		256	33		60		295	36							63						58				55				150
130		54		287	21		55		272	21		50		276	24		50		263	25		59		299	34							60						58				56				130
110		54		277	18		55		280	21		51		278	23		54		284	26												60										57				110
100	533	54		274	16	532	56		273	19	539	51		275	23		53		272	24	536	56											60										60				100
90		54		281	19		55		280	20		52		274	23		52		280	18		58											61										58				90
80		54		293	20		55		285	18		53		281	20		52		279	18		59											60										56				80
70		54		270	11		54		288	19		53		290	21		53					59											60										55				70
60		54		285	21		53		291	27		52		277	14							58											59														60
	(35)	54					52					52										57																									
	Inversion 540 ms 4°-526 ms -3° Isothermal 782 - 758 ms 25°					Inversion 654 ms 17 - 650 ms 18°					Isothermal 934 - 905 ms 47° 780 - 728 ms 34°					Inversion 700 ms 20° - 680 ms 22°					Inversion 760 ms 36°-747 ms 37°					Isothermal 692 - 665 ms 32°					Inversion 871 ms 48°-850 ms 49°					Isothermal 720 - 708 ms 33°					Inversion 725 ms 25°-711 ms 30° Isothermal 620 - 600 ms 24°					
Tropopause	I 242 mb -69° 34400'			I 250 mb -72° 33500'			I 220 mb -69° 36800'			I 282 mb -57° 31000'			I 213 mb -72° 37600'			TYR			II 227 mb -63° 36700'			I 213 mb -65° 37900'			I 228 mb -65° 35400'			Tropopause
Station	LERWICK			STORNOWAY			LEUCHARS			ALDERGROVE			LIVERPOOL			DOWNHAM MARKET			LARKHILL			CAMBORNE						Station
Pressure: Time G.M.T.	21hrs			21hrs						21hrs			21hrs			21hrs			21hrs			21hrs						Time
Pressure: M.S.L.	1006·2 mb			1000·4 mb						996·6 mb			999·3 mb			1002·5 mb			1005·5 mb			1007·8 mb						M.S.L.
Pressure: Surf	996·1 mb			998·5 mb						988·1 mb			987·3 mb			998·2 mb			989·5 mb			996·5 mb						Surf
Pressure: Freezing	858 mb			882 mb						818 mb			782 mb			731 mb			713 mb			699, 725 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	47	44	090	05	0·5	51	49	070	25	02·3	49	47	180	05	0·6	59	50	250	05	01·2	57	57	170	10	4·4	52	51	270	10	02·5	53	49	250	10	Surf
1000	01·6					0·1					-0·9					-0·2					00·8					1·5					1·0					1000
950		43	39	087	14		46	45	069	27		47	44	232	17		51	47	251	12		53	53	215	35		49	43	266	25		50	46	257	27	950
900	29·9	37	34	092	15	28·6	40	39	090	21	27·7	42	38	230	15	28·6	47	41	256	16	29·8	49	49	224	39	30·2	46	39	250	30	30·6	44	40	255	31	900
850		31	27	093	15		35	34	074	21		36	31	245	15		40	34	254	25		45	45	231	39		46	38	237	37		38	31	258	33	850
800	60·9	25	20	092	14	59·8	30	25	073	30	58·9	30	25	245	14	60·1	34	28	251	27	61·6	40	40	234	41	61·9	40	29	233	51	61·9	33	29	262	32	800
750		22	07	094	09		24	22	066	21		26	19	252	15		29	24	248	28		34	34	236	42		35	12	236	57		36	30	260	40	750
700	98·1	15	-5	094	08	99·3	18	16	064	22	99·6	20	13	266	11	99·8	23	16	248	28	96·9	29	28	240	46	97·2	30	10	236	54	97·2	33	28	255	46	700
650		08	-14	096	05		11	06	060	30		(20)		258	12		25	04	234	33		23	22	238	44		27	05	242	52		26	15	254	48	650
600	133	00	-24	098	04	133	03	-7	065	22	132	05	-1	253	13	135	13	-7	238	40	136	17	14	237	49	(137)	20	-5	240	57	(137)	13	09	256	44	600
550		-3	-28	256	06		-6	-12	078	21		-4	-11	246	13		13	-11	240	43		11	-6	238	55		11	-10	240	56		12	-8	257	48	550
500	178	-11	-26	262	08	177	-13	-24	076	15	177	-14	-23	242	15	181	04	-15	235	61	182	03	-23	238	55	183	01	-21	240	50	(183	04	-21	257	52	500
450		-20	-30	267	15		-21	-31	055	13		-26	-33	255	21		-7	-23	262	63		-7	-30	237	51		-10	-28	245	51		-8	-28	255	51	450
400	230	-31	-41	259	13	229	-30	-42	067	16	228	-36	-45	253	23	234	-18	-35	235	63	236	-16	-34	237	60	236	-22	-35	245	51	237	-21	-40	253	52	400
350		-44		236	12		-41		059	17		-42		251	30		-32	-53	234	60		-25	-45	237	54		-36	-48	240	60		-35	-53	251	48	350
300	294	-58		243	14	293	-56		062	16	293	-42		243	39	300	-48		234	56	302	-44		234	67	301	-51		236	61	302	-50		251	45	300
250		-70		258	12		-68		030	07		-47		252	31		-65		254	58		-60		233	75		-62		233	73		-60		264	46	250
200	379	-60		261	16	379	-54		286	11	382	-50		265	26	387	-52		246	29	388	-72		235	78	387	-65		246	61	389	-56		257	51	200
170		-57		271	18		-52		288	18		-53		268	23		-54		246	36		-65		243	61		-62		243	51		-56		260	50	170
150		-59		282	21		-56		287	13		-55		268	25		-56		255	38		-62		247	51		-62		243	40		-60		261	44	150
130		-59		279	14		-55		295	15		-58					-53		262	31		-62		245	39		-64		261	38		-59		260	45	130
110		-59		281	16		-55		285	13							-52		275	23		-61		257	35		-62		276	26		-60		270	32	110
100	527	-59		289	15	529	-55									537	-55		284	21	534	-60		270	32	534	-62				537	-59		260	32	100
90		-59		286	14												-56		291	15		-60		280	31		-63					-60				90
80		-59		283	11											(86)	-57					-60														80
70	(73)	-59																																		70
60																																				60
	Isothermal 776 - 750 ms 22° 587 - 550 ms -3°										Inversion 988 ms 49°-971 ms 50°					Inversion 675 ms 18°-650 ms 25°										Inversion 871 ms 44°-850 ms 46° Isothermal 988 - 975 ms 52° 872 - 857 ms 28°					Inversion 800 ms 33°-772 ms 36° 714 ms 31°-704 ms 33° Isothermal 820 - 800 ms 33° 772 - 750 ms 36° 704 - 693 ms 33°					
Tropopause	I 237 mb -78° 39400'			I 257 mb -71° 32500'						II 364 mb -42° 24900'			I 246 mb -66° 34300'			I 195 mb - 75° 38300'			II 228 mb -60° 36000'			II 272 mb -53° 32300'						Tropopause

No. 11532

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Monday 25th September 1950 Page 1.

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

LERWICK

Pressure — Time 03h G.M.T. | M.S.L. 1005·2 mb | Surf 995·3 mb | Freezing 850 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	49	44	080	16
1000	01·4				
950		45	37	060	24
900	29·9	35	33	063	21
850		32	27	066	20
800	60·9	27	21	068	20
750		24	08	071	18
700	95·2	17	-02	070	18
650		10	-12	060	13
600	134	03	-21	049	10
550		-01	-20	285	03
500	178	-12	-29	273	04
450		-21	-31	235	04
400	230	-33	-42	223	07
350		-42		218	12
300	293	-57		220	14
250		-71		229	16
200	379	-59		269	12
170		-57		283	14
150		-57		269	4
130		-57		275	14
110		-58		283	14
100	527	-58		290	16
90		-58		298	21
80		-58			
70					
60					

Isothermal 995 - 984 mb 49°

Tropopause I 237mb -72° 34,200'

STORNOWAY

Pressure — Time 03h G.M.T. | M.S.L. 1002·7 mb | Surf 1000·8 mb | Freezing 830 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·5	52	47	035	30
1000	00·7	52	47		
950		46	42	039	36
900	29·2	39	33	046	36
850		34	26	042	36
800	60·3	29	21	040	36
750		24	09	044	36
700	94·7	18	08	048	34
650		13	09	048	22
600	133	07	01	046	21
550		-01	-07	037	21
500	178	-12	-17	034	20
450		-21	-27	051	18
400	230	-31	-38	052	16
350		-42		026	20
300	294	-56		038	20
250		-66		016	14
200	380	-53		344	14
170		-53		336	09
150		-54		308	16
130		-52			

Tropopause I 256mb -71° 32,700'

LEUCHARS

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

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	49	49		
1000	01·5				
950		47	46		
900	27·0	43	41		
850		38	36		
800	58·4	33	31		
750		28	26		
700	93·1	21	18		
650		14	11		
600	132	08	04		
550		-01	-06		
500	177	-10	-16		
450		-19	-26		
400	229	-38	-38		

N. R.

ALDERGROVE

Pressure — Time 03h G.M.T. | M.S.L. 996·3 mb | Surf 987·8 mb | Freezing 819 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·3	46	46	330	04
1000	-01·0				
950		47	46	333	15
900	27·5	42	40	341	12
850		37	33	343	12
800	58·8	30	27	344	16
750		27	23	344	15
700	93·4	21	16	343	15
650		14	10	346	15
600	132	08	01	347	18
550		-01	-09	335	18
500	177	-12	-19	335	16
450		-24	-31	338	16
400	229	-37	-45	352	22
350		-43		345	22
300	293	-46		314	17
250		-44		285	18
200	382	-47		286	15
170		-50		280	10
150		-52		282	22
130		-53		292	18
110		-55		287	13
100	533	-56		293	15
90		-56		302	15

Inversion 988 mb 46° - 968 mb 49°

Tropopause I 374mb -45° 24,300'

LIVERPOOL

Pressure — Time 03h G.M.T. | M.S.L. 996·2 mb | Surf 994·2 mb | Freezing 792 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	50	47	Calm	
1000	-01·0				
950		49	45		
900	27·7	45	40		
850		39	33		
800	59·1	33	27		
750		27	19		
700	93·8	21	07		
650		16	01		
600	133	10	-06		
550		03	-14		
500	178	-05	-18		
450		-13	-29		
400	231	-18	-40		
350		-32	-53		
300	297	-49			
250		-63			
200	384	-61			
170		-61			
150		-54			
130		-54			
110		-55			
100	534	-54			
90		-53			
80		-52			
70		-54			
60		-56			
(054 mb)		-58			

Inversion 994 mb 50° - 982 mb 52° 425 " -18° - 416 " -16°

Tropopause I 250 mb -63° 33,600'

DOWNHAM MARKET

Pressure — Time 03h G.M.T. | M.S.L. 1001·0 mb | Surf 996·1 mb | Freezing 795 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	52	49	190	03
1000	00·2				
950		48	44	247	27
900	28·8	43	39	260	26
850		38	33	264	27
800	60·0	33	24	262	29
750		25	18	260	31
700	94·5	22	10	252	36
650		24	-06	238	42
600	134	16	00	235	47
550		09	-06	233	48
500	180	-02	-13	230	40
450		-10	-23	230	42
400	233	-22	-40	238	39
350		-38	-54	238	37
300	298	-54		237	30
250		-68		240	30
200	383	-60		243	43
170		-60		249	30
150		-62		257	33
130		-63		255	29
110		-62		259	27
100	530	-62		270	24
90		-62		271	20
80		-63		263	18

Inversion 712 mb 19° - 680 mb 28°

Tropopause I 227mb -75° 35,600'

LARKHILL

Pressure — Time 03h G.M.T. | M.S.L. 1002·4 mb | Surf 986·5 mb | Freezing 792 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	50	48	220	10
1000	00·6				
950		47	44	240	24
900	29·2	43	39	247	29
850		38	34	251	31
800	60·6	33	30	253	31
750		27	20	253	30
700	95·0	23	02	246	37
650		20	13	237	45
600	135	14	04	238	48
550		07	01	243	47
500	180	00	-15	242	50
450		-11	-27	238	48
400	234	-22	-41	240	42
350		-27	-45	236	37
300	298	-54		226	37
250		-67		236	44
200	384	-59		246	51
170		-57		248	45
150		-58		251	43
130		-62		263	34
110		-61		253	31
100	532	-61		250	30
90		-62		269	25
80		-62		275	24
70		-62		268	18
60		-63			

Inversion 717 mb 22° - 689 mb 25°

Tropopause I 260mb -67° 33,000'

CAMBORNE

Pressure — Time 03h G.M.T. | M.S.L. 1002·6 mb | Surf 992·0 mb | Freezing 800 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	53	52	250	10
1000	00·7				
950		48	47	251	28
900	29·3	43	41	260	33
850		37	34	263	34
800	60·6	32	28	263	34
750		28	20	259	33
700	95·2	20	16	259	32
650		15	00	260	36
600	134	10	-04	254	47
550		05	-03	247	51
500	179	-04	-22	248	46
450		-13	-45	255	47
400	232	-26	-58	258	49
350		-39	-59	255	47
300	297	-55		263	48
250		-64		253	52
200	383	-56		258	51
170		-58		262	47
150		-59		273	40
130		-60		276	31
110		-61		264	34
100	531	-62		268	36
90		-62		272	24
80		-63		272	18

Isothermal 765 - 745 mb 28°

Tropopause I 256mb -66° 33,000'

VALENTIA

Pressure — Time 03h G.M.T. | M.S.L. 1001·1 mb | Surf 1000 mb | Freezing 810 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	52	49		
1000	03	52	49		
950		48	47		
900	29·0	41	40		
850		37	36		
800	60·3	31	30		
750		25	21		
700	94·9	20	13		
650		15	05		
600	134	10	-06		
550		03	-15		
500	179	-06	-25		
450		-16	-35		
400	232	-27	-46		
350		-39	-56		
300	296	-57			
250		-58			
200	383	-52			
170		-55			
150		-57			
130		-56			
110		-61			

Tropopause I 266mb - 63° 32,200'

LERWICK

Pressure — Time 09h G.M.T. | M.S.L. 1005·5 mb | Surf 995·6 mb | Freezing 832 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	51	45	050	28
1000	01·4				
950		45	41	040	28
900	29·9	39	33	044	34
850		34	29	048	37
800	61·1	30	22	052	38
750		25	06	051	28
700	95·6	19	-02	044	25
650		12	-11	044	18
600	134	06	-20	047	15
550		00	-28	059	15
500	179	-09	-38	044	09
450		-19	-35	268	05
400	232	-27	-38	211	18
350		-42		202	17
300	296	-58		192	08
250		-69		260	07
200	382	-57		280	07
170		-56		281	15
150		-55		280	16
130		-53		292	10
110		-53		288	11
100	521	-53		275	15
90		-54		289	16
80		-54		303	15
70		-54			
60					

Isothermal 814 - 792 mb 30°

Tropopause I 250 mb -69° 33,400'

STORNOWAY

Pressure — Time 09h G.M.T. | M.S.L. 1006·4 mb | Surf 1004·5 mb | Freezing 850 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·5	53	47		
1000	01·8	52	45		
950		46	39		
900	30·3	39	35		
850		32	28		
800	61·3	26	23		
750		22	14		
700	95·6	17	02		
650		10	-13		
600	134	04	-21		
550		-03	-32		
500	179	-11	-41		
450		-20	-35		
400	231	-31	-43		
350		-43			
300	295	-55			

N.R.

LEUCHARS

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

N.R.

ALDERGROVE

Pressure — Time 09h G.M.T. | M.S.L. 997·9 mb | Surf 989·3 mb | Freezing 775 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·3	50	47	010	12
1000	-00·6				
950		47	44	004	27
900	28·0	43	40	007	37
850		38	35	005	34
800	59·4	34	31	360	30
750		29	26	359	33
700	94·3	24	21	003	36
650		19	15	012	42
600	134	12	07	015	40
550		03	-04	015	40
500	179	-06	-16	016	41
450		-17	-27	017	44
400	231	-30	-39	013	42
350		-44		020	44
300	295	-60		006	41
250		-46		343	26
200	384	-52		332	21
170		-47		325	17
150		-50		312	19
130		-51		317	17
110		-54		324	18
100	536	-51		310	15

Tropopause I 320 mb - 53° 28,100'

LIVERPOOL

Pressure — Time 09h G.M.T. | M.S.L. 994·0 mb | Surf 992·0 mb | Freezing 811 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	50	48	250	05
1000	-01·6				
950		46	44	273	13
900	26·9	42	39	295	15
850		37	34	295	16
800	58·2	31	27	296	15
750		25	21	299	15
700	92·8	20	15	306	17
650		14	07	323	19
600	132	06	00	325	18
550		-02	-08	302	11
500	176	-12	-19	291	10
450		-24	-32	268	09
400	228	-36	-45	247	15
350		-42		209	28
300	292	-44		219	25
250		-47		258	15
200	382	-46		266	16
170		-51		277	15
150		-52		286	14
130		-48		286	16
110		-51			
100	533	-51			

Tropopause I 370mb - 43° 24,600'

DOWNHAM MARKET

Pressure — Time 09h G.M.T. | M.S.L. 997·3 mb | Surf 992·9 mb | Freezing 791 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	52	50	190	07
1000	-00·8				
950		47	45	228	27
900	27·9	44	41	231	20
850		39	34	231	17
800	59·3	33	29	231	18
750		27	23	229	21
700	94·1	21	17	228	22
650		14	10	232	24
600	133	09	-18	227	30
550		02	-21	221	40
500	178	-04	-14	217	46
450		-10	-45	218	53
400	231	-23	-56	220	51
350		-38	-58	217	48
300	296	-53		217	39
250		-63		228	57
200	383	-54		237	36
170		-56		240	30
150		-56		248	29
130		-54		264	22
110		-54		255	15
100	532	-55		255	15
90		-57		258	14
80		-60		263	14
70		-57			

Inversion 503 mb -05° - 480 mb -03°

Tropopause I 260 mb - 60° 32,600'

LARKHILL

Pressure — Time 09h G.M.T. | M.S.L. 998·3 mb | Surf 992·5 mb | Freezing 800 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	51	49	225	03
1000	+00·4				
950		49	46	256	21
900	28·2	44	40	256	22
850		37	34	255	23
800	59·5	32	29	255	24
750		26	22	254	27
700	94·2	20	15	253	28
650		15	08	251	29
600	133	09	01	250	30
550		01	-12	251	33
500	178	-10	-20	252	34
450		-18	-32	235	41
400	230	-27	-42	223	59
350		-37	-53	216	70
300	295	-48		215	66
250		-50		243	48
200	384	-48		245	36
170		-52		256	36
150		-53		261	27
130		-53		265	26
110		-53		259	21
100	535	-54		264	19
90		-56		274	16
80		-57			

Tropopause I 270mb - 54° 31,800'

CAMBORNE

Pressure — Time 09h G.M.T. | M.S.L. 1000·4 mb | Surf 989·9 mb | Freezing 833 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	53	48	315	15
1000	00·1				
950		48	44	287	28
900	28·7	40	37	293	21
850		34	31	292	24
800	59·8	28	24	287	30
750		28	18	286	30
700	94·0	15	10	289	29
650		10	03	295	30
600	132	01	-08	297	30
550		-03	-15	302	27
500	177	-11	-25	300	27
450		-23	-36	288	35
400	229	-35	-47	292	33
350		-49		301	35
300	292	-66		285	33
250		-74		269	40
200	376	-63		270	40
170		-64		280	34
150		-67		278	30
130		-69		266	33
110		-72		282	28
100	521	-71		294	21
90		-71		295	18
80		-75		285	19
70		-72			

Tropopause II 280mb - 75° 30,500

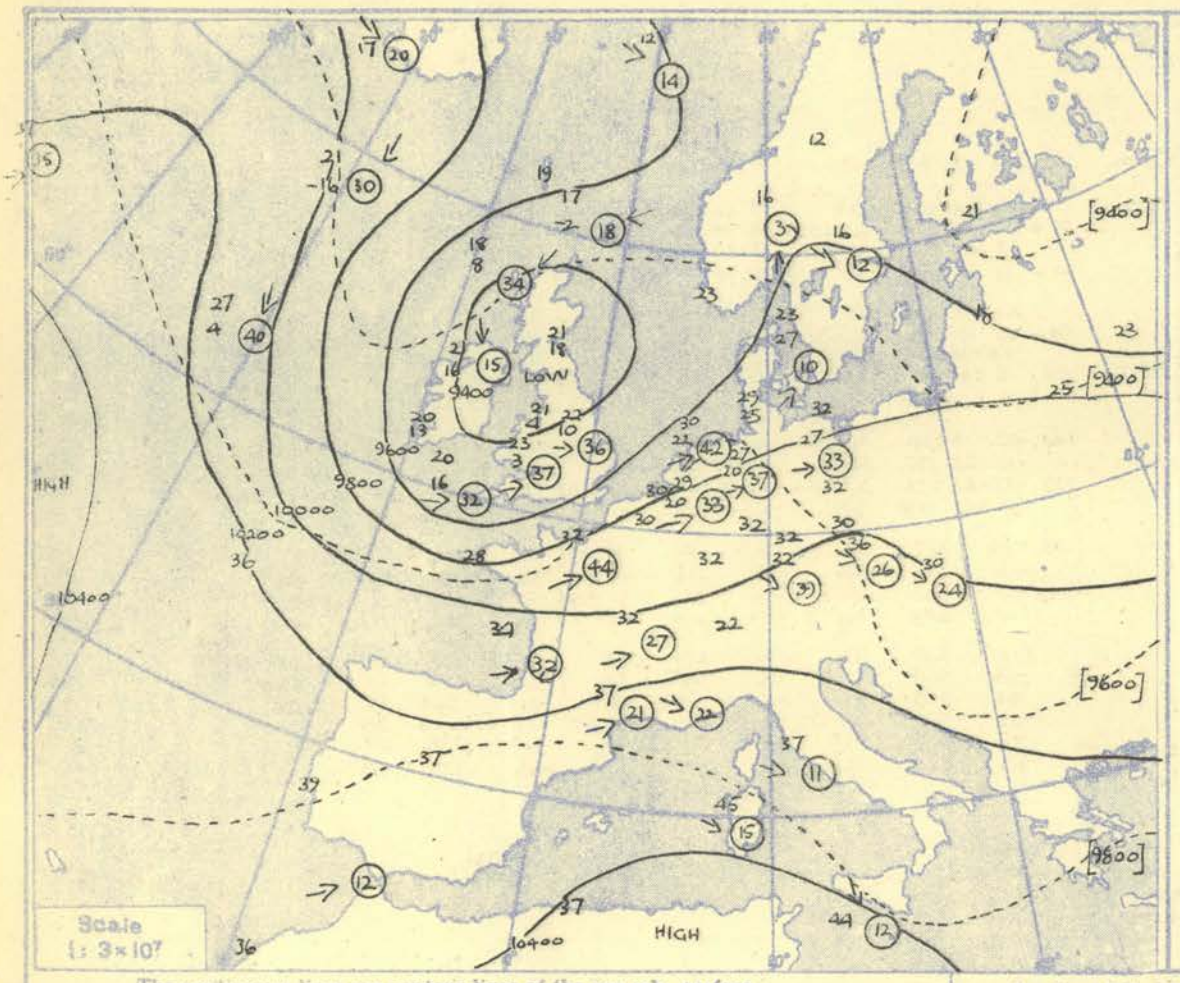
VALENTIA

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

METEOROLOGICAL OFFICE ESSENTIAL LIBRARY

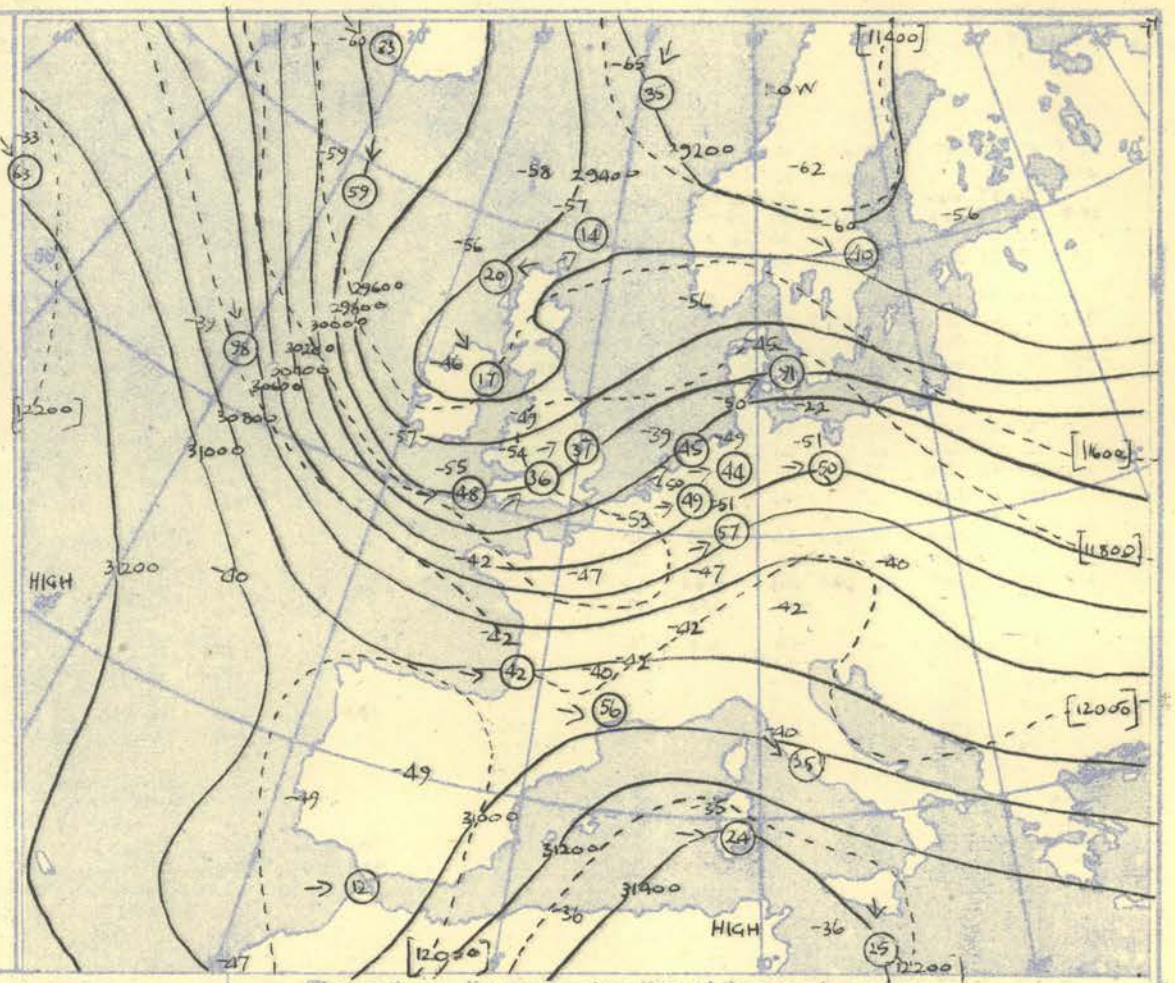
Monday 25th September 1950

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 02h. GMT.

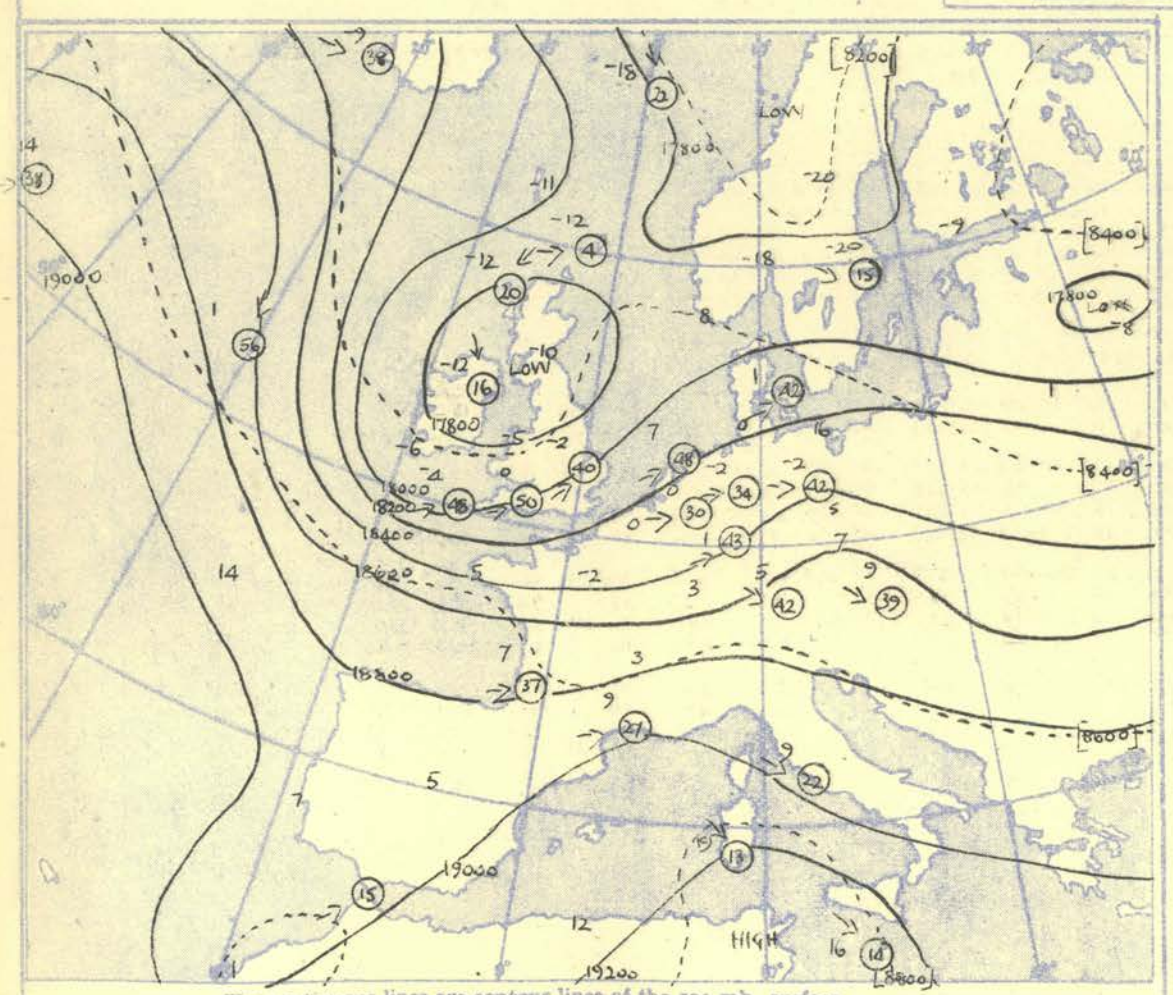


The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

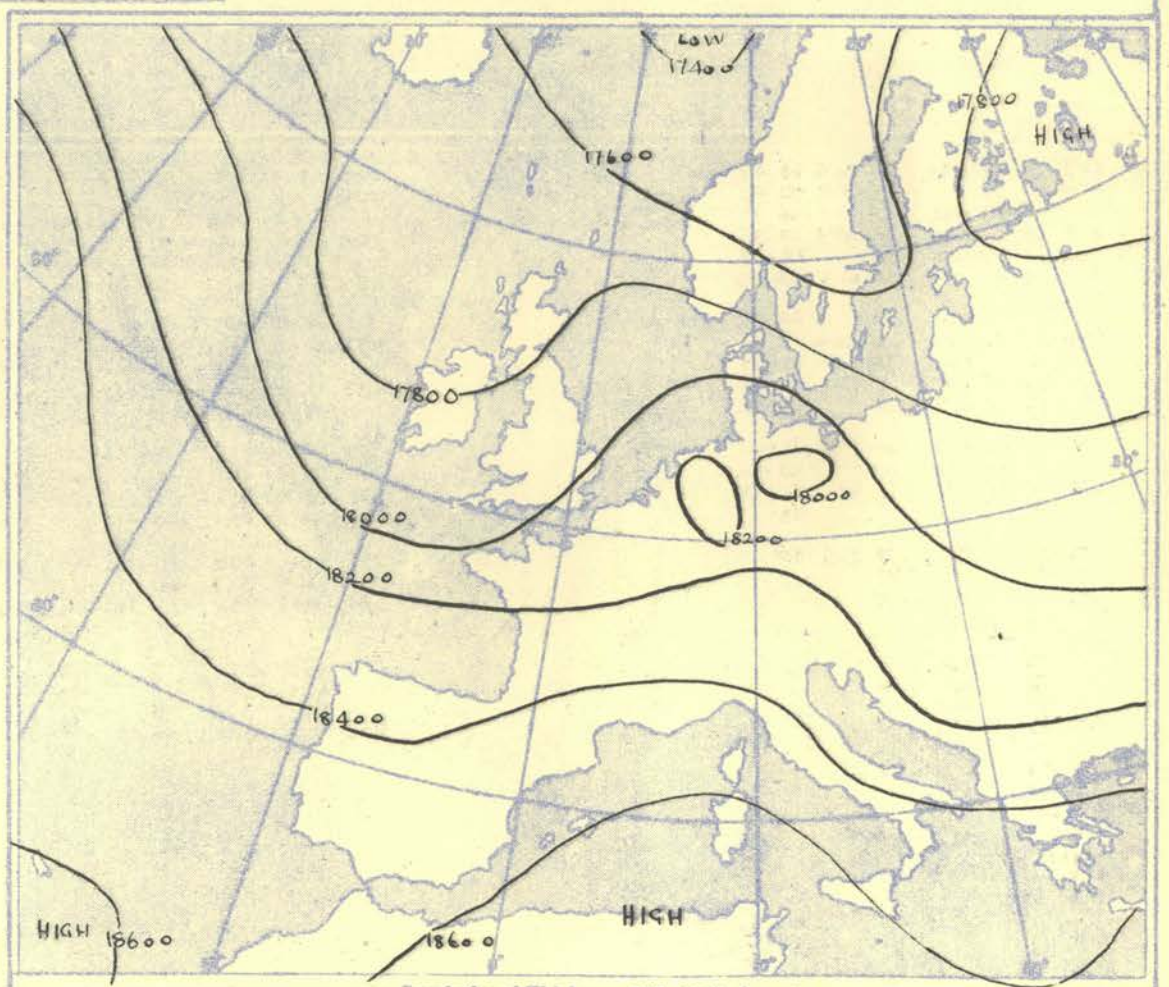
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.



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

51·3N. 00·4E.

Pressure — Time 14h. M.S.L. 997 mb. Surf 986 mb. Freezing 800 mb.

Pressure mb	Height ft./100	°F. Temp.	°F. Dew
Surf	03·1	58	48
1000			
950		47	43
900	28·0	42	39
850		37	37
800	53·2	32	30
750		27	
700	33·3	21	
650		14	
600	13·3	08	
550		-02	
500	17·7	-10	
450		-21	
400	23·0	-29	
350		-42	
300	29·4	-54	
250			
200			
170			

Cloud. 8/8 Cu+Cn 950-470mb. Inversion 968 mb. 45°- 951 mb. 47°

Time M.S.L., Surf, Freezing — mb mb mb (repeated for each column)

Pressure mb	Height ft./100	°F. Temp.	°F. Dew
Surf			
1000			
950			
900			
850			
800			
750			
700			
650			
600			
550			
500			
450			
400			
350			
300			
250			
200			
170			

Time M.S.L. Surf Freezing Pressure

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

Place	Shoeburyness		Downham Market		Aldergrove		Leuchars		Leuchars		Downham Market									
Time	09h.		10h.		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.	220	10	230	07	350	35	010	30	010	18	Calm									
1,000	230	19	230	18	350	36	045	39	013	42	310	12								
2,000	230	21	230	20	348	45	040	44	017	45										
3,000	230	20	230	21	350	46	037	42	023	49	310	10								
4,000	230	23	230	23	356	48	029	46	024	56	310	09								
5,000	240	25	230	23	002	45	026	48	024	58	330	06								
6,000	240	28	230	25	013	48	024	52	027	56	320	06								
8,000	240	33	230	25	014	42	045	34	035	46	300	06								
10,000	230	32	220	27	002	41	046	30	028	42	260	06								
14,000	220	47	220	32	356	39	043	30	040	34	270	05								
18,000	210	58	210	41	353	40	043	24	046	33	280	08								
24,000	220	65	190	63	358	36	055	33	041	28	290	14								
30,000	220	57	200	54	356	44	124	25	033	21	290	13								
40,000	240	39	240	27	338	24	352	09	340	21	300	11								
50,000			240	16	296	14	320	13	311	16	270	11								
60,000			290	11	306	26	(47,000')		324	21	310	11								
70,000			320	11					(54,000')		230	07								
80,000			290	06																
90,000			320	05																

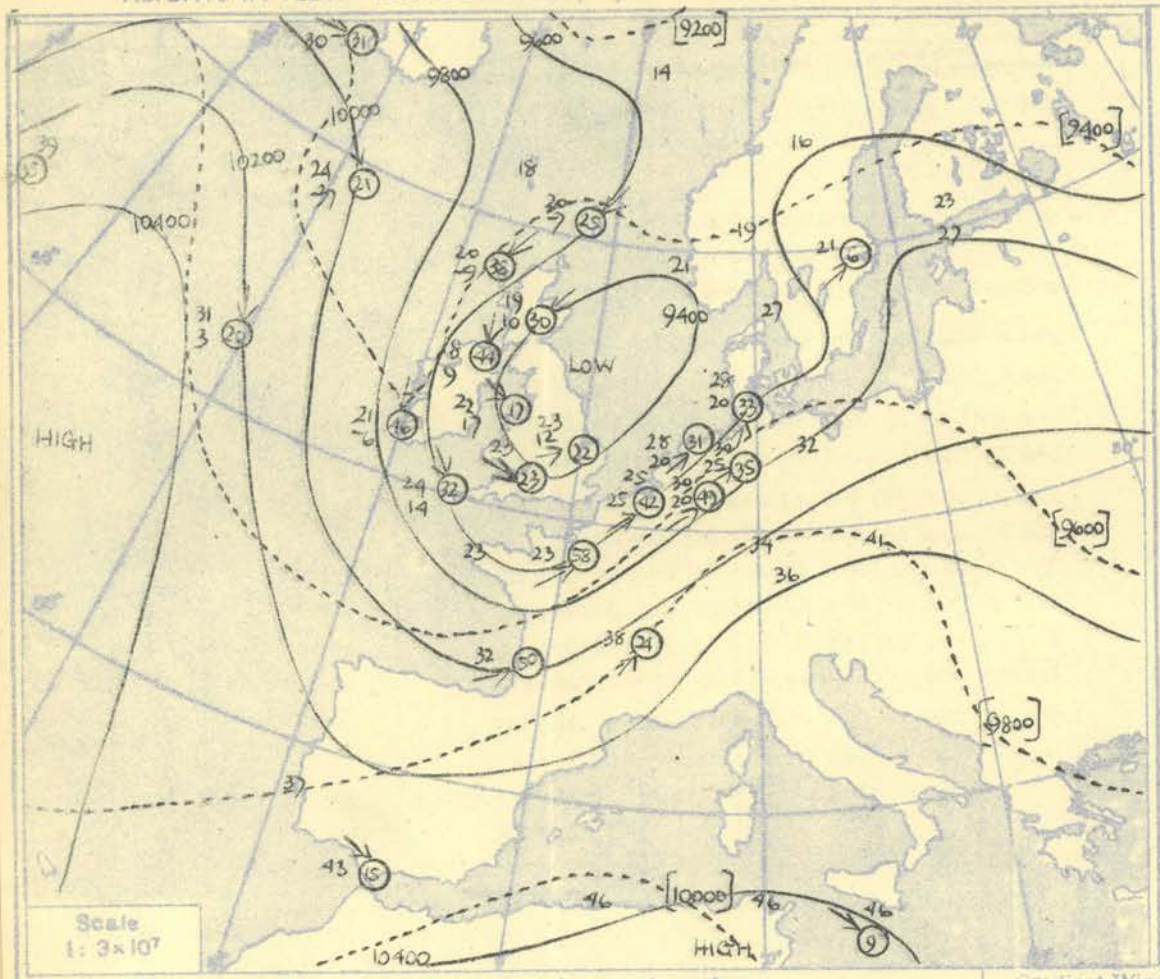
NEPHOSCOPE OBSERVATIONS

Place	Hemswell											
Time Type	09h.	Ac										
Dir. Vel.	250	30										

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

Ship	WEATHER WATCHER				WEATHER WATCHER				WEATHER WATCHER				WEATHER WATCHER				WEATHER OBSERVER				WEATHER OBSERVER				WEATHER OBSERVER				WEATHER OBSERVER			
Lat/Long	52·4 N 20·0W				52·3N 20·0W				52·5 N 20·0W				52·5 N 20·0W				58·9 N 19·0W				59·0 N 18·8W				59·0N 18·6W				59·1N 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.			
Pressure M.S.L.	1020 mb				1025 mb				1028 mb				1029 mb				1021 mb				1021 mb				1025 mb				1024 mb			
Surf	1020 mb				1025 mb				1028 mb				1029 mb				1021 mb				1021 mb				1025 mb				1024 mb			
Freezing	740 mb				740 mb				710 mb				700 mb				905 mb				760 mb				885 mb				870 1770 mb			
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
Surf		53	47	360 23		55	49	010 17		55	47	355 12		53	45	330 07		49	43	010 20		49	42	010 14		50	45	315 14		50	46	290 13				
1000	5·3	51	46	359 36	6·7	51	46	019 18	7·5	51	47	350 12	7·8	49	43	327 07	5·7	46	40	360 18	6·2	46	40	355 15	6·6	47	42	309 17	6·3	47	41	281 15				
950		44	41	358 33		44	41	017 20		44	42	353 12		43	42	331 08		38	34	003 21		40	36	356 14		39	34	305 8		40	35	267 16				
900	33·7	38	34	360 36	35·1	37	36	015 21	35·9	36	35	354 15	36·1	36	36	331 10	33·8	31	28	006 24	34·4	32	29	357 17	34·7	34	29	305 20	34·5	35	30	292 18				
850		41	27	001 35		42	24	010 22		43	26	353 16		44	01	323 23		27	24	007 22		27	24	357 18		28	23	306 20		28	24	292 21				
800	65·2	40	18	002 35	66·6	39	18	357 28	67·4	40	15	350 17	67·6	44	-7	318 28	64·6	30	1	010 25	65·2	33	-7	357 18	65·4	24	17	308 19	65·4	34	04	293 21				
750		33	10	004 40		33	10	353 33		36	9	350 20		36	-18	309 28		26	-6	010 30		31	-30	334 20		29	-16	311 19		31	-5	298 24				
700	10·0	27	4	001 40	10·2	28	5	350 33	10·3	31	3	348 20	10·3	32	-32	304 27	9·92	21	-16	008 30	10·0	26	-36	326 24	10·0	24	-37	312 21	10·0	26	02	304 29				
650		21	-2	001 45		25	1	350 36		26	-3	346 18		27	-21	303 30		17	-25	008 33		17	-43	323 26		18	-42	315 25		22	19	310 34				
600	14·0	20	-3	001 50	14·1	18	-6	349 38	14·3	19	-11	336 17	14·3	21	-12	303 31	13·8	10	-36	007 40	13·9	14	-45	313 25	13·9	11	-7	315 28	14·0	17	08	320 41				
550		12	-11	001 55		10	-13	342 39		12	-17	327 27		14	-6	305 38		1	-54	001 42		04	-43	303 26		5	-3	313 46		10	02	325 16				
500	18·6	1	-21	355 56	18·7	2	-20	336 46	18·9	3	-17	329 33	18·9	5	-17	316 48	18·3	-10	-52	001 52	18·5	-6	-44	325 33	18·5	-2	-13	318 53	18·6	04	-8	321 54				
450		-12	-33	343 57		-7	-28	325 51		-4	-23	335 48		-4	-31	333 59		-19	-59	360 49		-16	-39	324 38		-14	-22	323 55		-6	-20	321 62				
400	23·9	-19	-39	331 65	24·1	-18	-37	326 66	24·3	-14	-31	337 52	24·3	-16	-37	342 69	23·5	-32	-59	358 42	23·7	-25	-36	318 46	23·8	-25	-36	325 59	24·0	-18	-31	325 66				
350		-25	-44	331 97		-31	-48	326 84		-26	-41	330 63		-28	-49	355 72		-46		355 51		-59	-48	322 54		-37	-47	328 46		-32	-44	327 61				
300	30·5	-39	-57	333 98	30·7	-44		321 79	30·9	-39	-53	335 82	30·9	-43		354 83	29·9	-59		355 59	30·2	-51		326 72	30·2	-50		327 77	30·5	-42		330 73				
250		-56		332 100		-58		334 93		-55		334 99	(274mb)	-51				-71		340 88		-65		326 84		-65		327 80		-57		333 76				
200	33·3	-74		319 132	33·3	-73		334 50	33·6	-70		336 90					38·3	-66		329 72	38·7	-72		376 87	38·8	-79		328 93	39·2	-71		339 75				
170		-70		316 99		-76		337 78		-75		336 85						-69		325 50		-67		325 60		-73		330 69		-74		338 72				
150		-70		318 60		-71		335 63		-76		336 77		Inversion				-65		325 44		Inversion				-67		327 50		-76		330 66				
130		-65		324 55		-66		334 64		-73		336 66		900 mb 36° - 865 mb 45°				-63		330 35		850 mb 26° - 800 mb 33°				-65		324 45	(133mb)	-72						
110		-64		325 45		-65		330 40		-69		336 65						-62		337 42						-67		324 51								
100	53·7	-66		325 48	53·8	-66		333 32		Inversion				Isothermal			53·0	-65		344 44		Isothermal				-65		328 48		Inversion						
90		-67		329 51		-66		095 37		900 mb 36° - 874 mb 44°				850 - 800 mb 44°				-60		344 37		640 - 615 mb 16°				-66		328 33		850 mb 28° - 800 mb 34°						
80		-67		338 39		-64		088 45										-62		337 25						-65		330 30								
70		-66		338 33		-64		071 28		Isothermal								-61		335 18						-61		329 25		Max Wind						
60		-64		338 30		-59		064 56		700 - 687 mb 31°								-60								-57		329 30		280 mb 331° 91 kts						
		-62				-57		058 48		550 - 537 " 12°								-60								-54		326 26								
	Inversion 900 mb 38° - 850 mb 41° Isothermal 645 - 600 mb 20°				Inversion 890 mb 36° - 865 mb 43° Isothermal 675 - 645 mb 25°				472 - 456 " -3°								(584mb) -60								Inversion 800 mb 24° - 782 mb 31°										
						-56		043 28									Inversion 850 mb 26° - 800 mb 30°																				
Tropopause	II 204 mb -74° 38,800'				I 200 mb -73° 39,300'				I 160 mb -77° 44,300'				N.R.				I 260 mb - 72° 33,000'				II 224 mb -72° 36,500'				I 200 mb -79° 38,800'				II 188 mb -74° 40,500'						

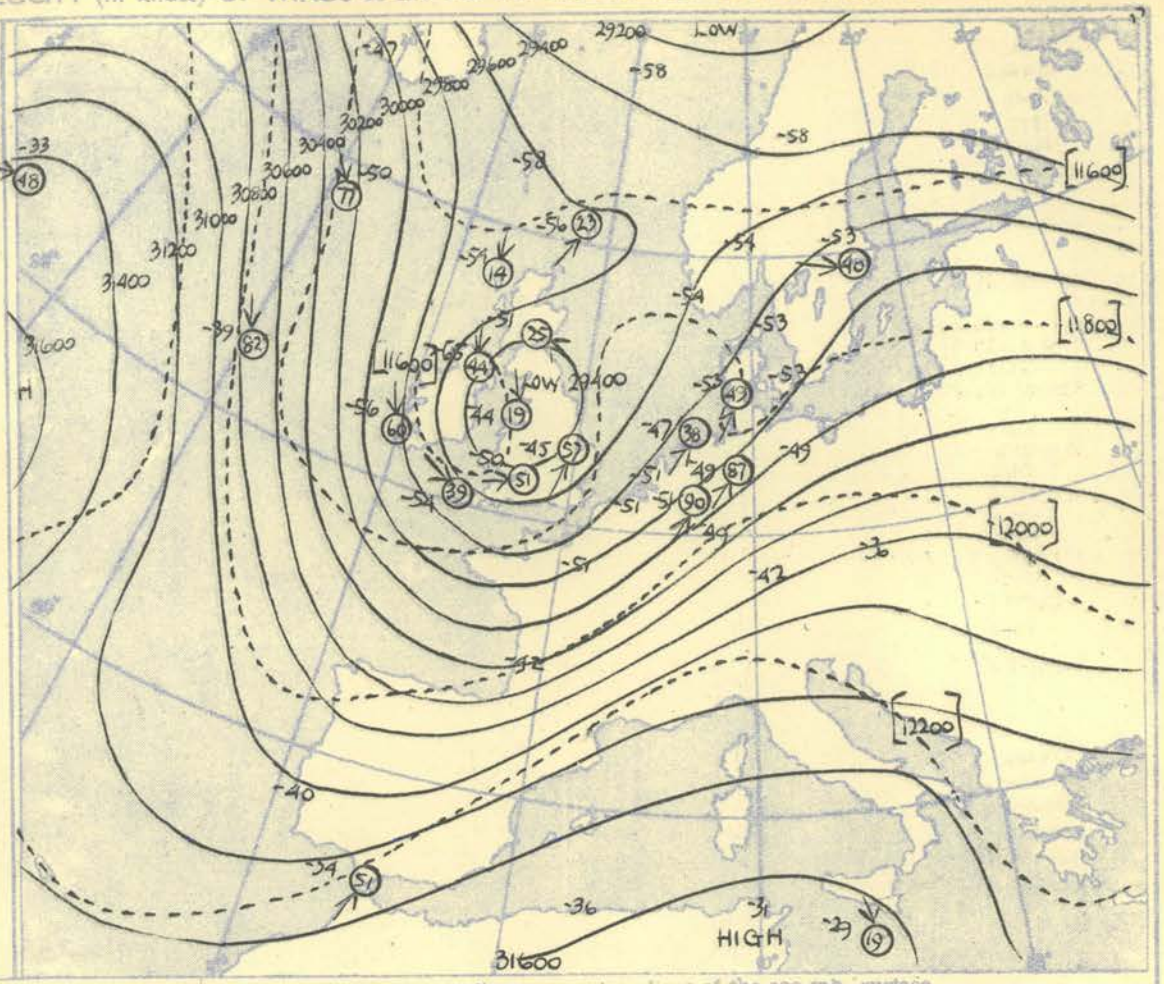
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h G.M.T.



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

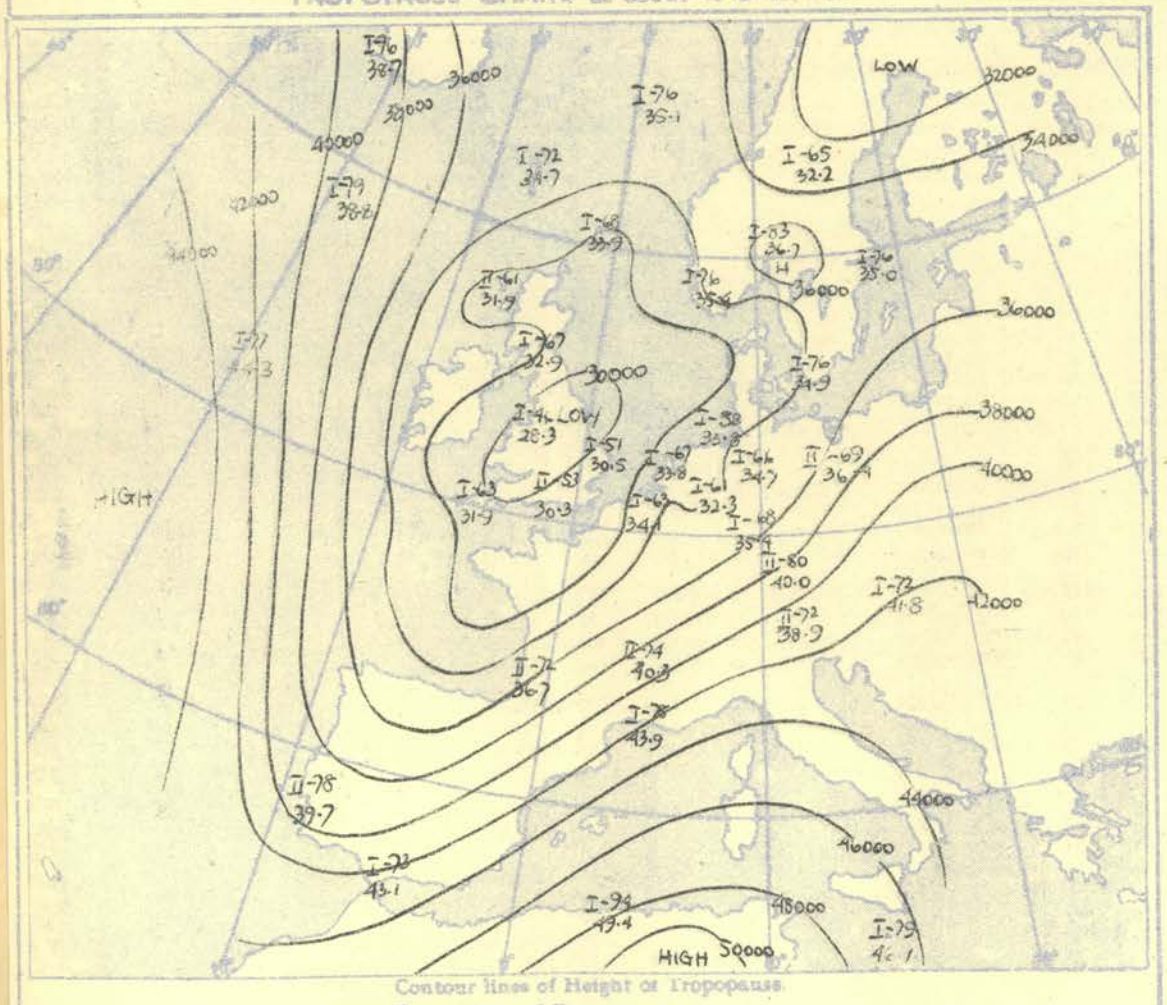
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

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.

A cold trough moved across the British Isles and intensified. A large warm ridge in the Western Atlantic advanced steadily eastward. A very light southwesterly thermal gradient advanced into the Western Atlantic.

The Camborne 0900 ascent is considered to be too cold.

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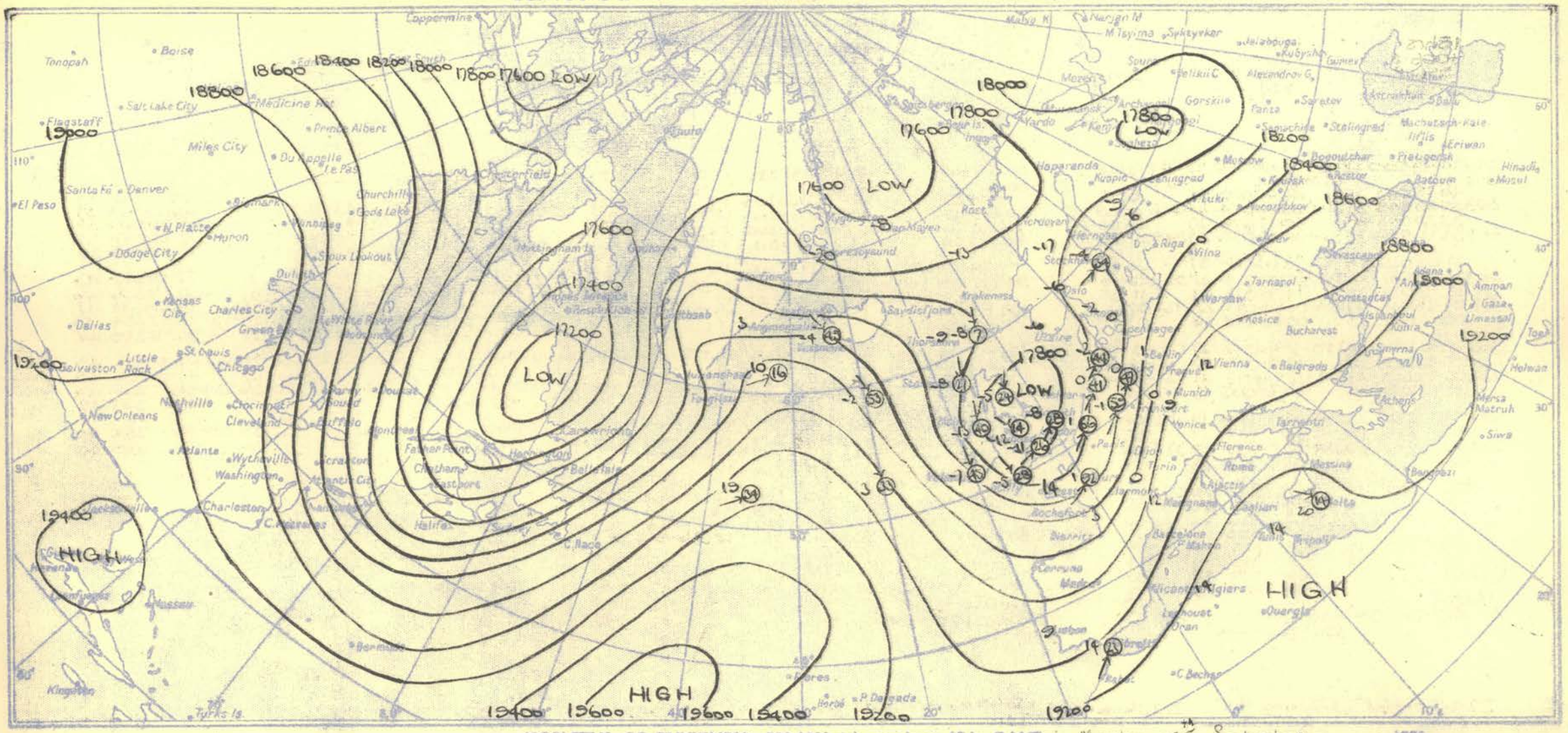
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. September 25TH 1950.


18600
18400
18200
18000
17800
17600 LOW
18800
19000
17600
17400
17200 LOW
19400 HIGH
19400
15600
19600
15400
19200
17800 LOW
17600 LOW
18000
17800
17600
18200
18400
18600
18800
19000
19200
HIGH
Tonopah
Boise
Edmonton
Fort Smith
Coppermine
Flagstaff
Salt Lake City
Medicine Hat
Miles City
Prince Albert
Du Lappelle
Le Pas
Churchill
Santa Fé
Denver
El Paso
Bismarck
N. Platte
Winnipeg
Huron
Dodge City
Sioux Lookout
Duluth
Kansas City
Charles City
Green Bay
Dallas
Galveston
Little Rock
St. Louis
Chicago
Nashville
Cincinnati
Cleveland
Buffalo
New Orleans
Atlanta
Wytheville
Washington
Charleston
Bermuda
Turks Is.
Kingston
C. Race
Halifax
Sydney
Montreal
Father Point
Chatham
Fredericton
Hopedale
Nottingham Is.
Cape Dyer
Godthaab
Hopes Advance
Resolution Is.
Angmagssalik
Julianshaab
Ivigtut
Isafjord
Saydisfjord
Thorshavn
Vestmanno
Stornoway
Krakenes
Oslo
Skagen
Copenhagen
Stockholm
Tarnapol
Warsaw
Kosice
Bucharest
Constantza
Riga
Vilna
Kiev
Berlin
Hamburg
Prague
Vienna
Belgrade
Munich
Frankfurt
Venice
Helder
Tynemouth
London
Holyhead
Paris
Brest
Rochefort
Bordeaux
Turin
Rome
Florence
Messina
Ajaccio
Cagliari
Malta
Barcelona
Mahon
Algiers
Oran
Lisbon
Gibraltar
Rabat
Tripoli
Benghazi
Mersa Matruh
Siwa
Athens
Smyrna
Istanbul
Kobia
Adana
Amman
Gaza
Beirut
Haparanda
Murmansk
Archangel
Scura
Jokanga
Gorskiie
Panza
Saratov
Stalingrad
Moscow
Leningrad
Kazan
Batoum
Mosul
Tarnaby
Jan Mayen
Scoresbysund
Reykjavik
Narjan M
M Isyima
Syktyvkar
Jaisbouga
Kuibyshev
Gurjev
Astrakhan
Baku
Tiflis
Erivan
Pietigorsk
Nuapio
Sodankyla
Kuopio
Kemi
Semachina
Sengiley
Buguruslan
Kuibyshev
Sengiley
Mochatsch-Kale
Hinadi
Amipan
Gaza
Umassat
Holwan
Tobruk
Siwa
Mersa Matruh
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Maracaibo
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Curacao
Georgetown
Paramaribo
Cayenne
Belem
Fortaleza
Natal
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Bahia Blanca
Comodoro Rivadavia
Rio Gallegos
Punta Arenas
Port Stanley
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
Luanda
Lobito
Elisabethville
Leopoldville
Port Gentil
Libreville
Douala
Fort Lamy
Kano
Lagos
Accra
Abidjan
Freetown
Bathurst
Dakar
Nouakchott
Port Etienne
Agadir
Casablanca
Tangier
Gibraltar
Malaga
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Messina
Palermo
Ajaccio
Cagliari
Malta
Tripoli
Benghazi
Mersa Matruh
Siwa
Cairo
Alexandria
Port Said
Suez
Aswan
Wadi Halfa
Khartoum
Port Sudan
Asmara
Addis Ababa
Mogadiscio
Nairobi
Mombasa
Dar es Salaam
Tabora
Kigoma
Bukavu
Stanleyville
Coquilhatville
Bangui
Fort Archambault
Abeche
Faya Largeau
Tamanrasset
Colomb Bechar
Oran
Algiers
Laghouat
Ouargla
Biskra
Tebessa
Constantine
Bone
Tunis
Sfax
Gabes

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

LERWICK — 15hrs G.M.T.

Time 15hrs G.M.T. | M.S.L. 1006·8 mb | Surf 996·8 mb | Freezing 800 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	52	44	060	28
1000	01·8				
950		46	45	043	30
900	30·3	39	39	045	33
850		35	29	045	30
800	61·5	32	13	043	25
750		27	02	039	26
700	96·1	20	-7	037	25
650		13	-18	034	25
600	135	07	-26	033	27
550		00	-33	033	15
500	180	-8	-41	006	07
450		-18	-48	268	07
400	232	-30	-52	240	15
350		-43		230	14
300	296	-56		222	23
250		-67		226	19
200	382	-57		258	10
170		-55		258	14
150		-55		252	14
130		-52		248	16
110		-53		253	17
100	532	-52		284	15
90		-52		279	16
80		-53		252	15
70	(24)	-53			
60					

Isothermal 312–300 mb –56°

Tropopause I 245 mb –68° 33900′

STORNOWAY — 15hrs G.M.T.

Time 15hrs G.M.T. | M.S.L. 1009·7 mb | Surf 1007·8 mb | Freezing 857 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·5	54	46	010	28
1000	02·6	53	45		
950		46	40	020	35
900	31·1	35	36	024	34
850		30	27	026	37
800	62·1	30	16	025	37
750		26	05	028	37
700	96·7	20	-9	024	38
650		14	-20	023	41
600	136	08	-26	021	38
550		00	-33	018	36
500	180	-8	-42	018	27
450		-17	-51	012	21
400	233	-28	-56	018	21
350		-40	-60	005	13
300	297	-54		360	14
250		-63		014	21
200	384	-57		358	29
170		-55		352	23
150		-57		343	20
130		-54		331	22
110		-56		326	21
100	533	-55		330	22
90		-54		325	22
80		-54		330	14
70		-54		292	08
60		-54		295	25

Isothermal 850–782 mb 30°

Tropopause II 271 mb –61° 31900′

LEUCHARS — 15hrs G.M.T.

Time 15hrs G.M.T. | M.S.L. 997·0 mb | Surf 996·2 mb | Freezing mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	49	48		
1000	-0·9				
950		44	43		
900	27·6	40	39		
850		36	35		
800	88	31	29		
750		25	23		
700	93·4	19	16		
650		11	05		
600	133	08	-3		
550		03	-12		
500	178	-5	-19		
450		-16	-26		
400	231	-30	-42		
350		-41			
300	295	-51			
250		-65			
200	334	-53			
170		-53			
150		-54			
130		-55			
110		-55			
100	532	-54			
90		-54			
80		-54			
70		-53			
60		-52			
50		-50			
40	(40)	-53			

Tropopause I 256 mb –67° 32900′

ALDERGROVE — 15hrs G.M.T.

Time 15hrs G.M.T. | M.S.L. 1001·8 mb | Surf 993·4 mb | Freezing 845 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·3	55	43		
1000	00·6				
950		48	39		
900	29·2	41	33		
850		33	26		
800	60·3	28	24		
750		24	19	See p3	
700	94·7	18	09	for	
650		11	05	winds.	
600	133	04	-9		
550		-4	-21		
500	178	-13	-24		
450		-21	-40		
400	230	-34	-57		
350		-50			
300	292	-65			
250		-63			
200	378	-58			
170		-59			
150		-59			
130		-60			
110		-60			
100	527	-60			
90		-60			
80		-61			
70		-61			

Isothermal 483–470 mb –16°

Tropopause D260 mb –69° 25600′ | I 310 mb –64° 28400′

LIVERPOOL — 15hrs G.M.T.

Time 15hrs G.M.T. | M.S.L. 994·0 mb | Surf 992·0 mb | Freezing 808 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	52	48	280	12
1000	-1·6				
950		47	43	284	17
900	26·9	41	37	303	18
850		35	31	310	16
800	58·2	31	27	312	17
750		27	23	314	16
700	93·0	22	17	303	17
650		14	08	298	17
600	132	07	-2	302	17
550		-1	-12	327	17
500	176	-12	-24	319	14
450		-22	-35	346	11
400	228	-34	-48	001	30
350		-43		350	34
300	293	-44		337	15
250		-42		308	13
200	383	-46		308	14
170		-49		286	11
150		-50		300	13
130		-51		319	12
110		-49		286	11
100	535	-51		283	18
90		-52			
80		(96)			

Inversion 996 mb 50 – 980 mb 52°

Tropopause I 314 mb –46° 28300′

DOWNHAM MARKET — 15hrs G.M.T.

Time 15hrs G.M.T. | M.S.L. 994·5 mb | Surf 990·3 mb | Freezing 784 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	55	48	190	12
1000	-1·5				
950		53	42	226	21
900	27·4	46	35	230	20
850		39	32	234	20
800	58·9	34	27	241	18
750		28	20	238	18
700	93·2	23	12	239	22
650		17	05	243	21
600	133	10	-2	247	20
550		02	-14	243	21
500	178	-8	-26	234	28
450		-19	-38	231	30
400	230	-31	-42	228	39
350		-39	-55	224	61
300	295	-49		225	37
250		-45		230	35
200	384	-45		233	23
170		-47		236	21
150		-50		246	22
130		-50		257	21
110		-51		261	16
100	536	-51		263	17
90		-52		264	16
80		-53		260	15
70		-52		259	15
60		-53		276	12
50		-54		275	13
40		-55		250	14
30		-56			

Isothermal 991–975 mb 51°

Tropopause I 285 mb –51° 30500′

LARKHILL — 15hrs G.M.T.

Time 15hrs G.M.T. | M.S.L. 999·8 mb | Surf 981·4 mb | Freezing 791 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	55	46	270	08
1000	03·8				
950		51	43	275	20
900	28·0	45	37	276	21
850		39	32	276	21
800	55·4	33	26	276	21
750		27	20	275	22
700	94·2	23	10	276	23
650		16	04	279	21
600	133	09	-4	274	21
550		00	-15	268	23
500	178	-11	-23	266	26
450		-22	-33	262	31
400	230	-31	-44	246	36
350		-38	-56	239	55
300	294	-50		247	51
250		-49		255	36
200	383	-48		255	25
170		-51		256	29
150		-52		255	30
130		-51		277	27
110		-53		261	16
100	534	-56		258	17
90		-55		264	19
80		-53		276	15
70		-51		290	14
60		-53			
50	(94)	-53			

Tropopause II 287 mb –55° 30300′

CAMBORNE — 15hrs G.M.T.

Time 15hrs G.M.T. | M.S.L. 1002·3 mb | Surf 991·8 mb | Freezing 802 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	53	50	315	12
1000	00·6				
950		48	44	311	29
900	28·3	42	35	318	30
850		37	26	318	31
800	60·5	32	31	314	33
750		29	20	316	31
700	95·4	24	14	320	32
650		17	04	326	33
600	135	13	-6	326	30
550		05	-18	321	28
500	180	-5	-29	324	28
450		-17	-39	321	33
400	233	-27	-48	310	36
350		-38	-56	304	48
300	297	-54		293	39
250		-60		293	36
200	384	-50		294	27
170		-52		283	30
150		-53		285	24
130		-54		291	30
110		-54		291	16
100	534	-56		287	20
90		-56		283	30
80		-57		283	27
70		-58		293	16
60		-59		323	14
50		-60		320	14
40		-59			

Tropopause I 271 mb –63° 31900′

Valentia — 15hrs G.M.T.

Time 15hrs G.M.T. | M.S.L. 1012·2 mb | Surf 1011 mb | Freezing 825 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·3	55	46	330	25
1000	00·3	53	44	338	30
950		46	35	354	32
900	31·9	41	36	001	38
850		35	28	257	32
800	63·0	28	19	357	35
750		25	08	257	43
700	97·6	21	-6	356	46
650		16	-20	358	48
600	137	10	-28	354	45
550		02	-38	345	48
500	182	-7	-47	352	43
450		-17	-55	355	45
400	234	-30		355	42
350		-43		355	45
300	298	-56		352	60
250		-57		349	60
200	385	-53			
170		-53			
150		-57			
130		-61			
110		-61			
100		(113)			

Isothermal 722–233 mb 26°
678–656 mb 19°

Tropopause I 265 mb –60° 32400′

ALDERGROVE — 21hrs G.M.T.

Time 21hrs G.M.T. | M.S.L. 1007·8 mb | Surf 995·2 mb | Freezing 816 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·3	51	45	360	25
1000	02·1				
950		46	40	356	45
900	30·6	41	35	012	45
850		35	30	018	43
800	61·8	31	26	020	42
750		26	21	010	38
700	96·4	20	(5	007)	39
650		14	09	008	40
600	135	09	02	010	43
550		01	-8	008	43
500	180	-8	-20	002	41
450		-21	-31	004	41
400	232	-33	-43	005	40
350		-46		005	42
300	296	-58		022	18
250		-62		338	34
200	382	-56		350	48
170		-59		353	33
150		-57		349	31
130		-61		338	24
110		-63		335	25
100	530	-63		332	36
90		-62		328	19
80		-62		318	12

Max wind. 357 mb 009° 50 kts 25800′

Tropopause I 278 mb –65° 31200′

LIVERPOOL — 21hrs G.M.T.

Time 21hrs G.M.T. | M.S.L. 992·8 mb | Surf 985·8 mb | Freezing 800 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	50	48	010	10
1000	-0·5				
950		48	45	012	15
900	28·1	43	40	013	18
850		36	33	013	20
800	59·4	32	28	014	23
750		25	22	258	08
700	93·9	20	17	012	34
650		11	06	007	29
600	133	06	-2	001	29
550		-2	-12	002	35
500	177	-12	-22	003	31
450		-22		010	36
400	229	-33		012	38
350		-41		018	48
300	294	-49		023	48
250		-53		005	28
200	382	-48		341	21
170		-53		321	17
150		-52		322	18
130		-52		315	16
110		-56		312	17
100	532	-56		320	11
90		-56			
80		(96)			

Inversion 996 mb 50 – 980 mb 52°

Tropopause I 314 mb –46° 28300′

DOWNHAM MARKET — 21hrs G.M.T.

Time 21hrs G.M.T. | M.S.L. 995·6 mb | Surf 982·7 mb | Freezing 798 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	48	46	290	05
1000	03·4				
950		48	44	311	24
900	28·1	42	39	309	24
850		37	34	311	27
800	55·4	32	31	313	30
750		28	27	315	33
700	94·2	23	22	314	32
650		18	11	306	34
600	133	12	-2	302	37
550		05	-9	298	43
500	179	-5	-17	296	43
450		-16	-29	293	46
400	231	-28	-39	291	49
350		-44		290	46
300	295	-54		290	40
250		-47		284	29
200	384	-45		278	21
170		-50		291	20
150		-52		301	19
130		-53		292	15
110		-55		302	17
100	535	-56			
90		-57			
80		(91)			

Isothermal 991–975 mb 51°

Tropopause II 288 mb –55° 30300′

CAMBORNE — 21hrs G.M.T.

Time 21hrs G.M.T. | M.S.L. 1006·1 mb | Surf 995·7 mb | Freezing 830 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·5	54	49	337	25
1000	01·7				
950		48	44	326	28
900	30·4	42	34	336	35
850		35	31	333	39
800	61·6	28	26	330	36
750		26	15	329	35
700	96·2	22	11	322	33
650		18	10	317	31
600	135	08	-2	316	30
550		00	-11	301	28
500	180	-8	-20	286	29
450		-20	-33	284	27
400	232	-33	-41	315	29
350		-46		303	28
300	296	-60		315	31
250		-58		323	31
200	383	-54		317	28
170		-57		312	27
150		-57		315	27
130		-57		316	20

Isothermal 772–233 mb 26°
678–656 mb 19°

Tropopause I 273 mb –63° 31600′

No. 11503.

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Tuesday 26th September 1950. Page 1.

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

LERWICK

Pressure: Time 03h G.M.T.; M.S.L. 1011·0 mb; Surf 1000·9 mb; Freezing 835 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	45	44	020	17
1000	2·9	45	44		
950		41	39	012	25
900	31·1	35	35	007	24
850		29	29	005	19
800	62·0	29	20	006	19
750		25	08	011	20
700	96·6	21	00	010	21
650		14	-08	006	21
600	136	07	-11	360	21
550		-01	-15	358	21
500	180	-10	-22	360	17
450		-20	-31	358	17
400	232	-32	-44	353	17
350		-45		358	18
300	296	-57		327	15
250		-66		332	20
200	382	-60		334	27
170		-59		335	33
150		-61		340	25
130		-59		338	21
110		-62		324	20
100	530	-59		311	17
90		-59			
80					
70					
60					

Inversion 850 mb 29° - 835 mb 32°

Tropopause: I 252 mb - 67° 33,300'

STORNOWAY

Pressure: Time 03h G.M.T.; M.S.L. 1017·3 mb; Surf 1015·4 mb; Freezing 900 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	00·5	47	39	366	15
	4·7	45	38		
		38	32	006	25
	32·8	32	27	011	23
		27	22	010	24
	63·4	27	12	004	25
		24	00	360	27
	97·8	19	-11	357	25
		17	-17	001	24
	137	08	-23	349	24
		-01	-24	341	23
	181	-12	-29	340	22
		-23	-40	337	20
	253	-34	-51	347	35
		-44		355	53
	297	-51		358	76
		-55		357	82
	384	-61		358	68
		-63		360	49
		-65		356	36
		-61		348	39
		-62			

Inversion 830 mb 25° - 820 mb 27°; 700 " 19° - 684 " 20°; 310 " -51° - 305 " -50°

Isothermal 820 - 777 mb 27°

Tropopause: I 269 mb -57° 32,000'

LEUCHARS

Pressure: Time 03h G.M.T.; M.S.L. 1009·2 mb; Surf 1008·4 mb; Freezing 841 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	00·2	50	43		
	2·9	50	44		
		45	39		
	31·3	39	34		
		33	28		
	62·4	28	14		
		25	07		
	97·0	21	00		
		14	-08		
	136	09	-02		
		02	-04		
	181	-09	-13		
		-19	-23		
	233	-31	-35		
		-43			
	297	-56			
		-66			
	383	-56			
		-58			
		-58			
		-61			
		-57			
	532	-61			

Tropopause: I 241 mb -67° 34,500'

ALDERGROVE

Pressure: Time 03h G.M.T.; M.S.L. 1012·8 mb; Surf 1002·3 mb; Freezing 796 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	02·3	48	44	350	12
	3·5				
		45	41	353	33
	32·0	39	33	005	33
		34	29	012	33
	63·1	31	20	015	33
		27	08	011	36
	97·7	20	00	010	39
		14	-09	008	44
	137	07	-20	004	47
		-01	-26	005	47
	181	-10	-34	008	46
		-20	-43	008	47
	234	-31	-53	007	41
		-46		001	44
	297	-60		346	51

For rest of winds see page 3.

Inversion 816 mb 31° - 796 mb 32°

Isothermal 1002 - 979 mb 48°

NR.

LIVERPOOL

Pressure: Time 03h G.M.T.; M.S.L. 1002·2 mb; Surf 1000·2 mb; Freezing 790 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	00·6	49	47		
	0·6	49	47		
		45	43		
	29·1	41	40		
		37	36		
	60·4	33	21		
		28	14		
	95·1	23	08		
		16	02		
	134	06	-03		
		-01	-07		
	179	-10	-16		
		-19	-24		
	231	-32	-38		
		-43			
	295	-56			
		-56			
	382	-53			
		-52			
		-58			
		-57			
		-59			
	531	-60			
		-59			
		-60			
		-61			
	(63 mb)	-62			

Inversion 827 mb 24° - 818 mb 35°

Tropopause: II 287 mb - 61° 30,300'

DOWNHAM MARKET

Pressure: Time 03h G.M.T.; M.S.L. 999·9 mb; Surf 995·4 mb; Freezing 819 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	01·2	49	49	305	05
	0.0				
		46	43	355	15
	28·5	42	39	352	14
		36	32	344	13
	59·7	30	26	339	12
		23	19	347	13
	94·1	16	11	356	13
		11	02	354	09
	133	03	-06	353	09
		-05	-15	348	11
	177	-15	-26	334	10
		-28	-39	325	10
	228	-40	-52	319	10
		-53		330	12
	291	-49		331	15
		-47		301	15
	380	-51		303	13
		-55		284	13
		-57		291	16

Isothermal 700 - 683 mb 16°

LARKHILL

Pressure: Time 03h G.M.T.; M.S.L. 1002·2 mb; Surf 986·4 mb; Freezing 818 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	04·4	48	46	310	10
	0.6				
		45	41	340	29
	29·2	42	39	349	26
		36	32	343	25
	60·6	30	27	340	27
		25	20	340	24
	95·0	21	14	334	24
		15	07	330	26
	134	06	-03	329	29
		-04	-10	329	26
	179	-13	-23	319	23
		-25	-34	323	26
	230	-32	-46	333	31
		-40	-57	341	42
	294	-54		334	38
		-58		317	31
	382	-54		307	20
		-56		304	15
		-59		312	12
		-62		301	11
		-59		308	09
	530	-59		305	07
		-60		306	09
		-61		304	10
		-63			

Isothermal 945 - 923 mb 44°; 451 - 435 " -25°

Tropopause: I 350 mb -53° 25,800'

CAMBORNE

Pressure: Time 03h G.M.T.; M.S.L. 1009·5 mb; Surf 998·6 mb; Freezing 800 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	02·9	53	47	337	30
	2·5				
		47	43	331	39
	31·1	42	39	342	44
		38	31	355	42
	62·4	32	31	350	38
		29	25	337	35
	97·3	25	18	349	34
		20	12	347	32
	137	13	05	347	36
		07	-02	349	37
	182	-03	-15	347	42
		-14	-25	346	43
	235	-25	-34	348	38
		-35	-47	354	28
	300	-47		360	27
		-53		356	31
	389	-45			

Tropopause: II 273 mb - 53° 32,000'

VALENTIA

Pressure: Time 03h G.M.T.; M.S.L. 1019·7 mb; Surf 1018 mb; Freezing 770 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. Knots
	00·3	52	46	330	19
	5·3	50	44	338	23
		45	40	355	33
	33·7	40	36	357	35
		34	27	359	35
	64·9	36	06		
		29	03		
	99·7	22	-13		
		17	-22		
	139	10	-28		
		00	-30		
	184	-09	-28		
		-18	-41		
	236	-27	-51		
		-38			
	301	-51			
		-59			
	387	-64			
		-65			
		-63			
		-65			
		-61			
	533	-65			

Inversion 850 mb 34° - 807 mb 37°; 278 " -57° - 269 " -55°

Tropopause: II 232 mb - 64° 35,600'

LERWICK

Pressure: Time 09h G.M.T.; M.S.L. 1013·1 mb; Surf 1003·0 mb; Freezing 820 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	45	39	020	12
1000	3·5	45	38		
950		39	34	360	25
900	31·6	33	27	357	24
850		31	23	355	23
800	62·5	31	10	350	22
750		25	01	346	21
700	97·0	19	-05	341	23
650		14	-09	335	24
600	136	08	-13	328	25
550		00	-23	322	24
500	181	-10	-33	325	25
450		-21	-44	330	29
400	233	-31	-54	346	46
350		-36	-56	355	87
300	298	-48		355	106
250		-59		355	102
200	384	-61		343	56
170		-59		348	40
150		-59		339	39
130		-59		339	29
110	(115 mb)	-59			
100					
90					
80					
70					
60					

Inversion 868 mb 28° - 836 mb 33°

Max wind 353° 130 kts 273 mb

Tropopause: I 235 mb - 63° 35,000'

STORNOWAY

Pressure: Time 09h G.M.T.; M.S.L. 1019·9 mb; Surf 1018·0 mb; Freezing 848 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	00·5	48	39		
	5·4	46	39		
		38	33		
	32·5	33	30		
		31	28		
	64·5	31	16		
		27	03		
	99·1	21	-04		
		13	-13		
	138	05	-21		
		-04	-29		
	182	-15	-33		
		-23	-38		
	254	-31	-45		
		-41			

Inversion 863 mb 29° - 840 mb 34°

Isothermal 840 - 818 mb 34°

NR

ALDERGROVE

Pressure: Time 09h G.M.T.; M.S.L. 1018·6 mb; Surf 1010·2 mb; Freezing 807 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	02·3	49	41	010	10
	5·1	48	41	361	30
		41	34	356	29
	33·4	34	27	360	31
		32	20	358	30
	64·4	31	05	358	29
		25	-04	358	27
	98·8	19	-13	358	25
		16	-17	358	24
	138	07	-18	360	27
		-03	-23	009	29
	182	-10	-30	004	40
		-18	-43	010	60
	235	-21	-46	014	92
		-30	-54	012	107
	301	-44		009	113
		-61		360	132
	387	-70		006	98
		-69		006	73
		-71		005	62
		-68		358	37
		-65		352	31
	532	-65		350	32
		-66		353	26
		-67		004	24

Inversion 861 mb 29° - 835 mb 25°; 460 " -18° - 430 " -19°

Tropopause: I 221 mb - 69° 35,700'

LIVERPOOL

Pressure: Time 09h G.M.T.; M.S.L. 1012·3 mb; Surf 1010·3 mb; Freezing 836 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	00·6	50	44	350	18
	3·3	49	43	354	34
		48	39	360	34
	31·7	38	34	009	31
		33	29	024	25
	62·8	29	22	019	26
		26	11	010	28
	97·5	23	13	005	30
		17	09	002	30
	137	10	02	014	33
		01	-07	021	28
	181	-10	-17	019	32
		-19	-27	011	36
	234	-24	-38	014	37
		-38	-51	011	37
	299	-53		004	40
		-62		011	50
	385	-59		011	51
		-61		003	46
		-59		360	36
		-56		358	30
		-58		002	24
	534	-61		004	18
		-63		004	13
		-62			

Tropopause: I 250 mb - 62° 33,800'

DOWNHAM MARKET

Pressure: Time 09h G.M.T.; M.S.L. 1006·0 mb; Surf 1001·5 mb; Freezing 798 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	01·2	52	50	350	15
	1·6				
		47	45	356	32
	30·2	42	40	004	27
		37	34	007	27
	61·5	32	28	003	29
		27	18	356	28
	96·3	23	11	355	23
		16	04	360	24
	135	09	-04	003	21
		01	-12	013	23
	180	-09	-16	015	31
		-21	-31	019	33
	232	-33	-42	024	37
		-44		026	37
	296	-55		023	40
		-50		006	22
	385	-49		331	16
		-55		329	16
		-53		328	12
		-51		323	09
		-54		316	11
	534	-57		312	12
		-56		312	12
		-57		312	08

Isothermal 720 - 693 mb 23°

Tropopause: I 277 mb -57° 31,400'

LARKHILL

Pressure: Time 09h G.M.T.; M.S.L. 1008·1 mb; Surf 992·1 mb; Freezing 810 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	04·4	50	47	360	12
	2·2				
		44	42	013	29
	30·7	42	36	017	33
		36	32	017	34
	62·0	31	23	017	31
		27	23	018	30
	97·0	21	16	016	28
		13	09	015	25
	136	07	01	016	25
		00	-08	014	31
	180	-10	-21	010	34
		-21	-36	015	35
	232	-31	-46	020	49
		-41		001	53
	297	-54		007	53
		-49		002	36
	385	-50		353	21
		-53		340	16
		-51		346	19
		-54		350	11
		-53		354	13
	536	-53		336	10
		-55			

Isothermal 950 - 924 mb 44°

Tropopause: I 300 mb - 54° 29,600'

CAMBORNE

Pressure: Time 09h G.M.T.; M.S.L. 1013·3 mb; Surf 1002·7 mb; Freezing 815 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	02·9	53	49	350	24
	3·6	52	52	351	28
		46	46	355	42
	32·1	41	41	001	42
		35	34	003	43
	63·3	31	28	001	44
		27	24	001	48
	98·0	21	14	005	37
		18	07	005	34
	137	10	-02	002	31
		01	-11	358	29
	182	-08	-21	355	29
		-19	-31	352	31
	234	-30	-40	004	31
		-42		006	28
	298	-56		004	25
		-54		005	57
	386	-53		002	51
		-56		002	44
		-58		003	39
		-62		002	30
		-60			
	535	-54			

Tropopause: I 290 mb - 59° 30,500'

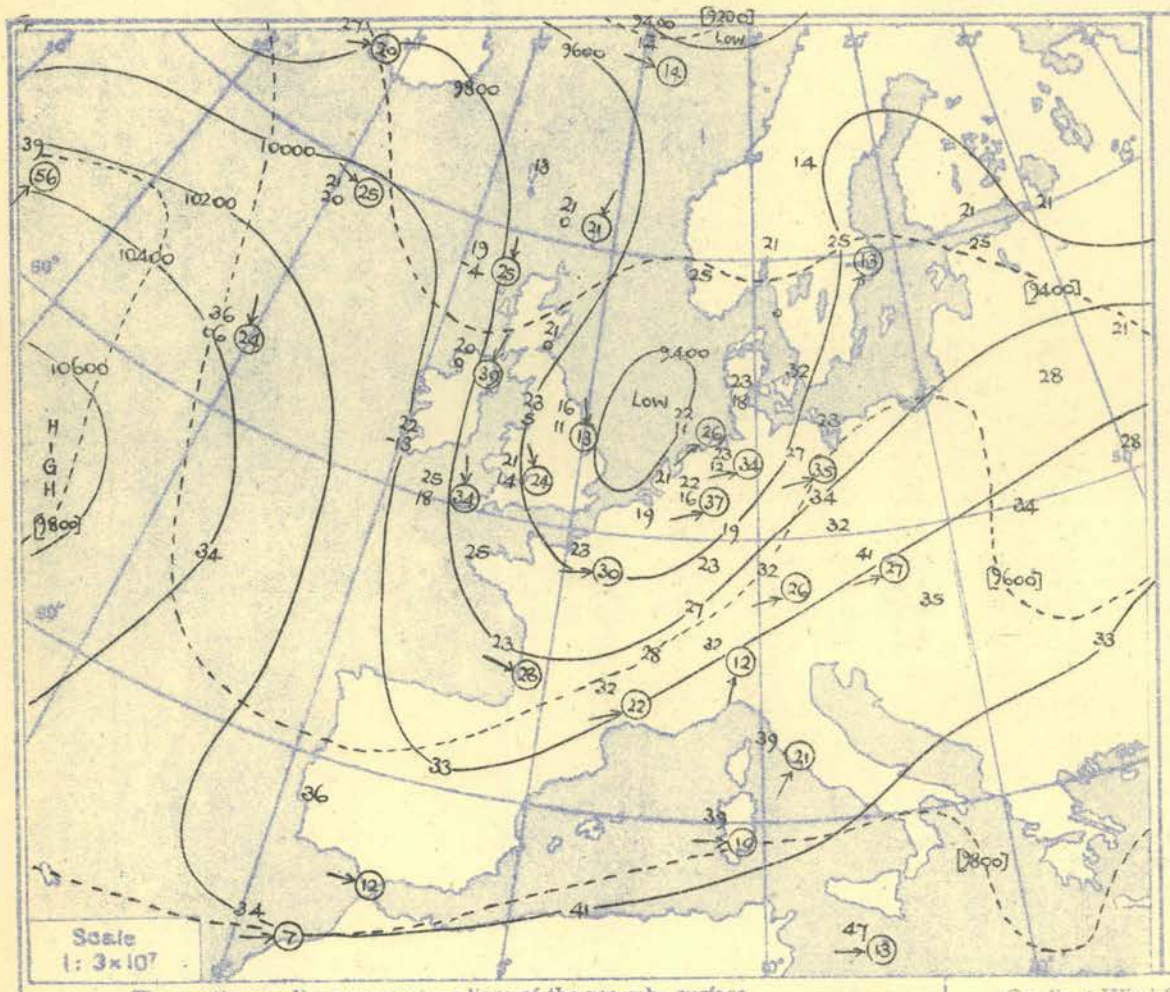
VALENTIA

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots

Tropopause

Tuesday 2nd September, 1930.

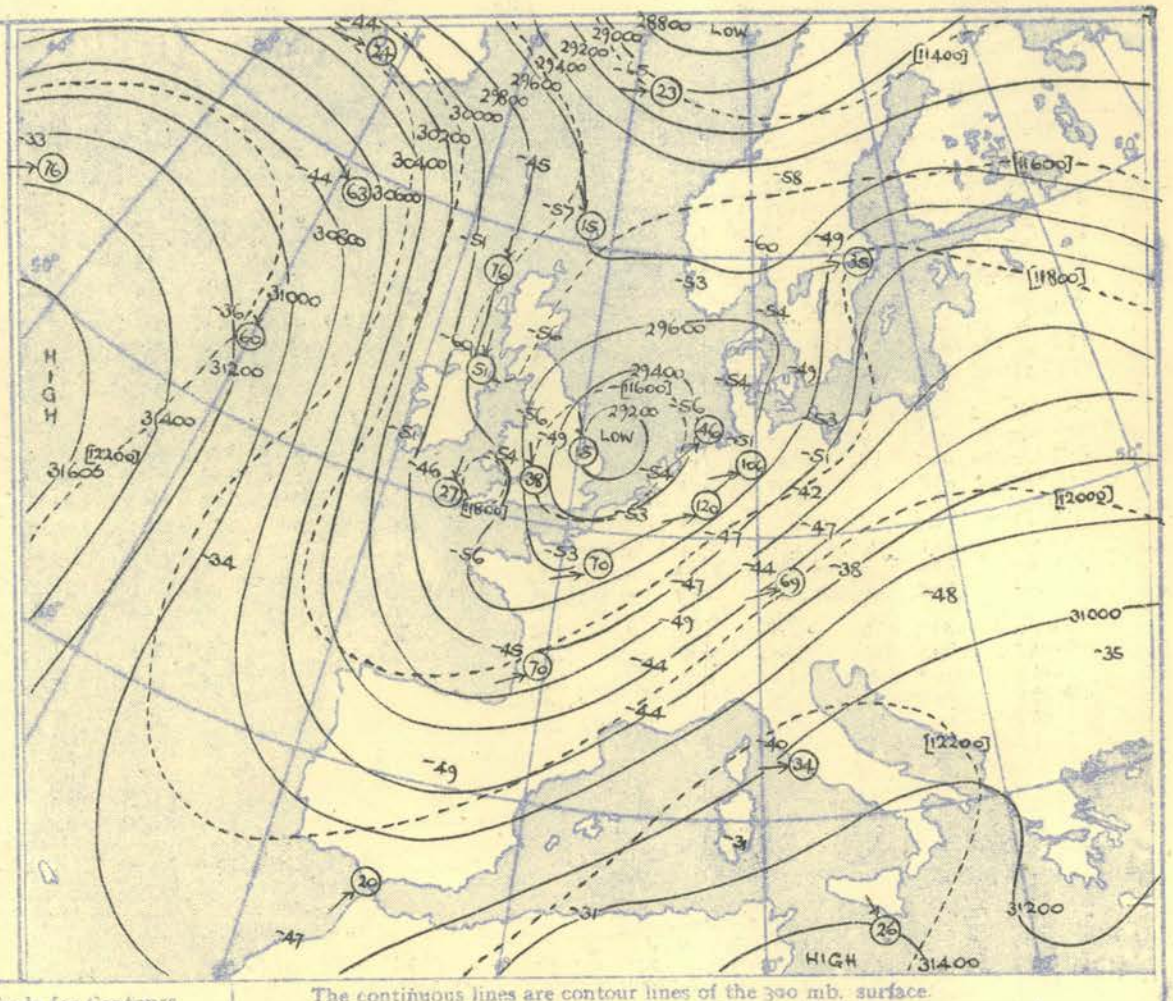
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. G.M.T.



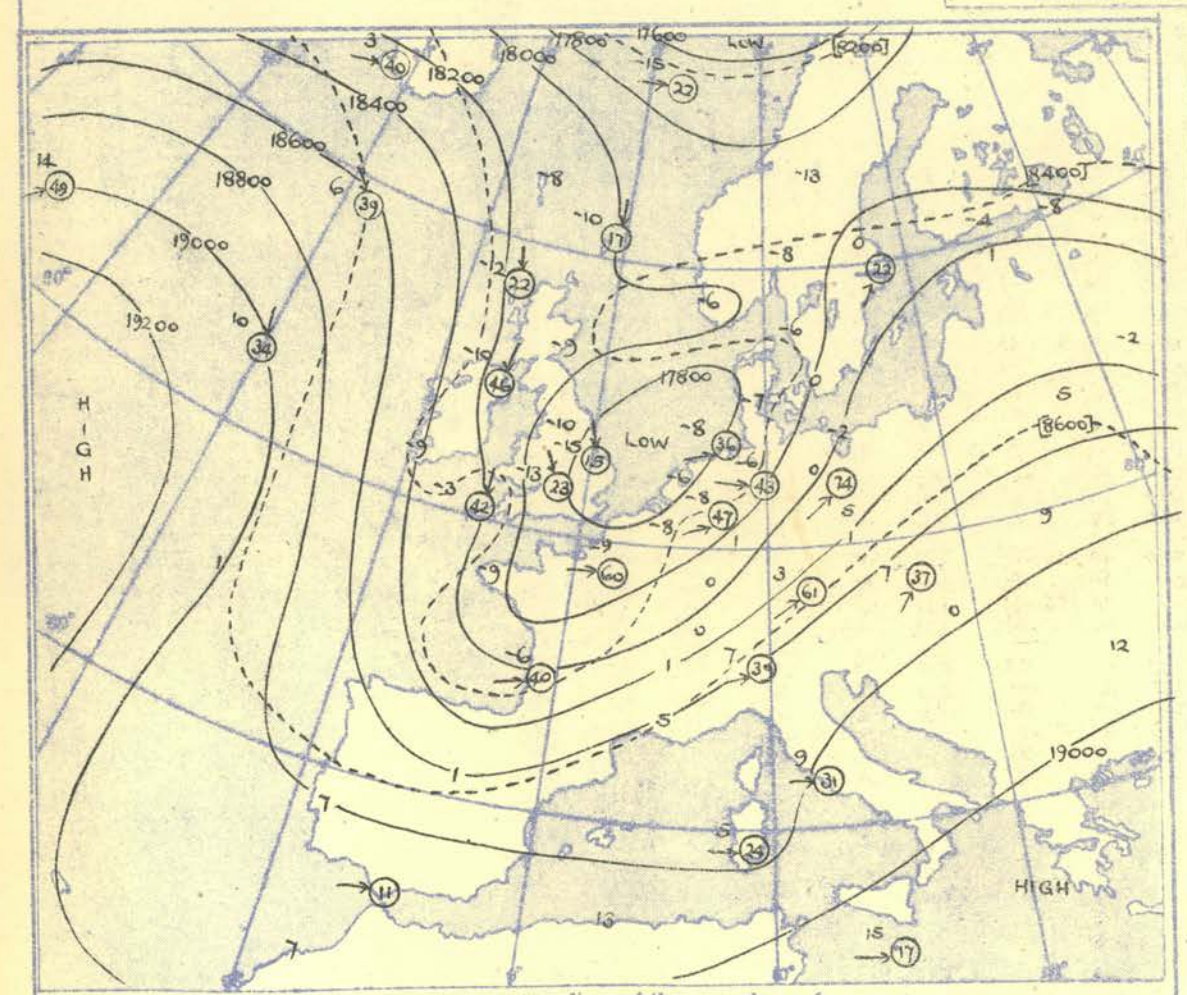
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

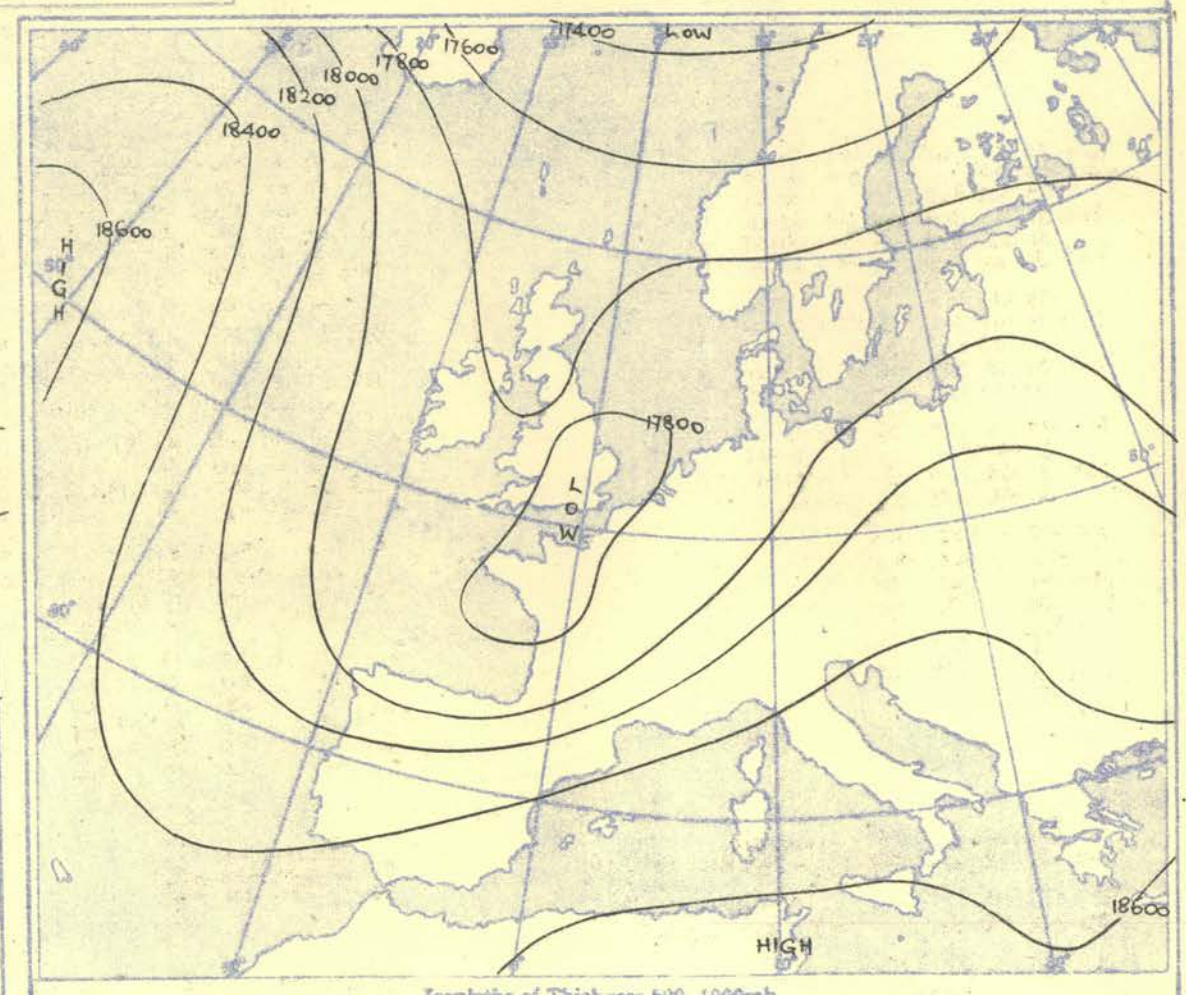
100 50 40 30 20 15 10 knots



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

	49·0 N 17·0 W	48·4 N 12·0 W	43·2 N 16·0 W	51·3 N 00·4 E									
Pressure Time	12L	1415L	14L	1353L									Time
Pressure M.S.L.	1031 mb	1027 mb	1031 mb	1012 mb	mb	mb	mb	mb	Pressure M.S.L.
Pressure Surf	1027 mb	1023 mb	1027 mb	1001 mb	mb	mb	mb	mb	Pressure Surf
Pressure Freezing	660 mb	722 mb	660 mb	820 mb	mb	mb	mb	mb	Pressure Freezing

Pressure mb	Height ft./100	°C Temp.	°C Dew	°F.	Height ft./100	°C Temp.	°C Dew	°F.	Height ft./100	°C Temp.	°C Dew	°F.	Height ft./100	°C Temp.	°C Dew	°F.	Height ft./100	°C Temp.	°C Dew	°F.	Height ft./100	°C Temp.	°C Dew	°F.	Pressure mb
Surf	01·0	55	43		01·0	55	16			60	50		03·1	53	48										Surf
1000	8·2				7·2				8·3																1000
950		44	44			44	40			49	45			47	46										950
900	36·6	37	37		35·6	38	31			43	38		32·0	41	40										900
850		46	08			40	13			37	33			36	36										850
800	68·3	42	-02		67·0	38	18			44	15		63·2	29											800
750		40	30			34	19			41	19			31	27										750
700	104	36	09		102	29			104	37	23		98·0	22											700
650		30	07			26				20				17											650
600	144	26	12		142	19				23			137	09											600
550		20				15				15				01											550
500	191	11			188	08			191	10			182	-08											500
450														-18											450
400													235	-27											400
350														-41											350
300													299	-51											300
250																									250
200																									200
170																									170
	Cloud:- 7/8 Sc 930 - 880 mb Inversion 900 mb 37° - 850 - 46°				Cloud:- 4/8 Sc 920 - 880 mb Inversion 900 mb 38° - 850 - 40°				Cloud:- 5/8 Ci 450 mb 5/8 Sc 910 - 860 mb Inversion 850 mb 37° - 800 - 44°				Cloud:- 2/8 Cu 950 - 880 mb 8/8 Sc 855 - 780 mb 8/8 Ac 760 - 710 mb 7/8 As 660 - 635 mb Inversion 800 mb 29° - 750 - 31°											

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

Place	Aldergrove		Stornoway		Ronaldsway		Leeming		Leuchars												Place
Time	03L		15L		1930L		21L		21L												Time
Type	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.					340	13	300	08	290	05											Surf.
1,000					330	30	346	27	311	14											1,000
2,000					330	14	350	28	312	14											2,000
3,000					340	09			312	12											3,000
4,000					330	07			298	13											4,000
5,000									305	14											5,000
6,000					350	15			312	18											6,000
8,000					350	24			323	22											8,000
10,000					350	17			334	21											10,000
14,000					340	22			335	37											14,000
18,000					(12,000')				335	38											18,000
24,000									342	52											24,000
30,000			330	72					350	84											30,000
40,000	354	55	340	76					357	117											40,000
50,000	335	29	330	46					(33,000')												50,000
60,000	320	14	330	15																	
			(58,000')																		

NEPHOSCOPE OBSERVATIONS

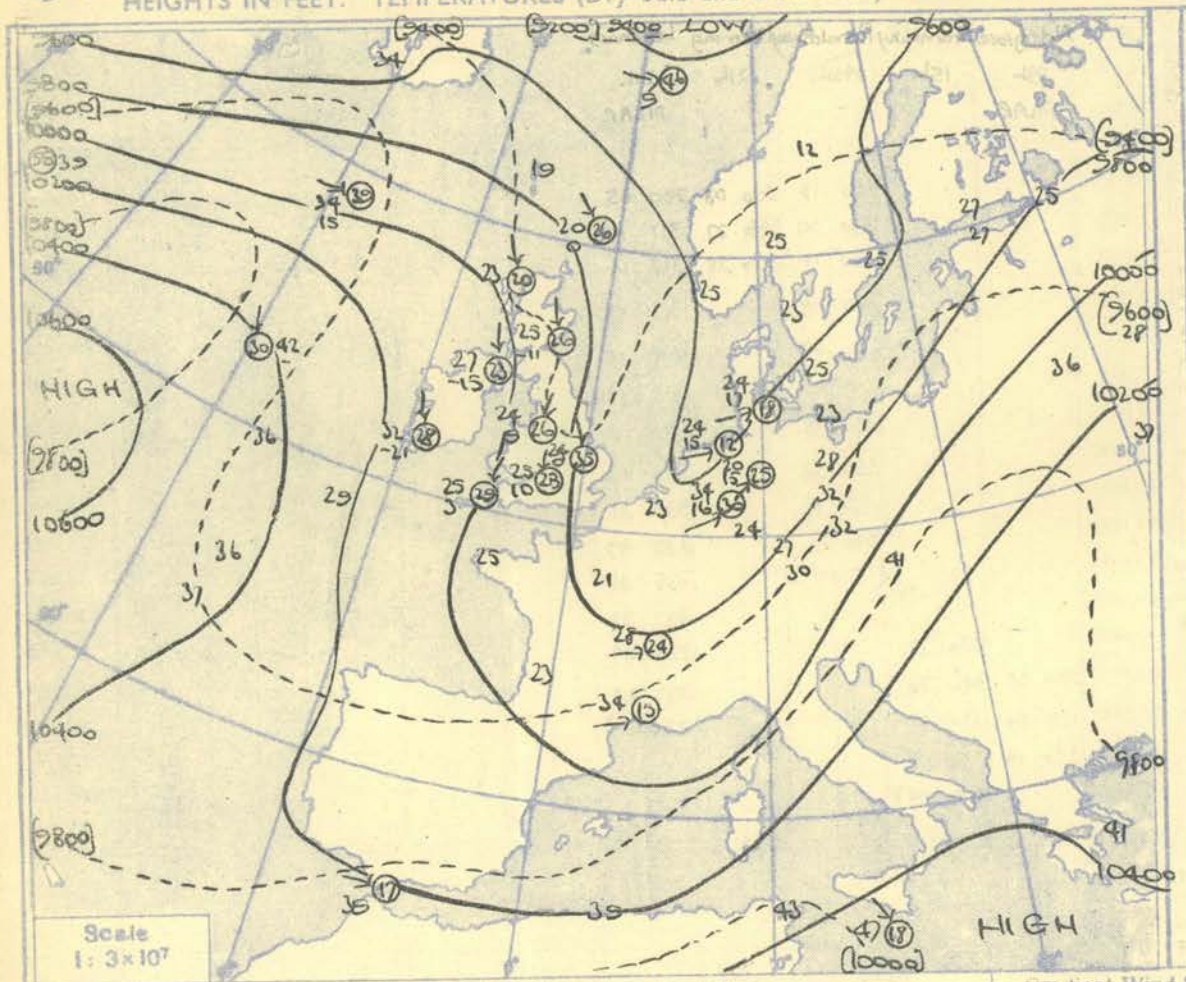
Place													Place
Time Type	NONE	REPORTED											Time Type
Dir. Vel.													Dir. Vel.

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

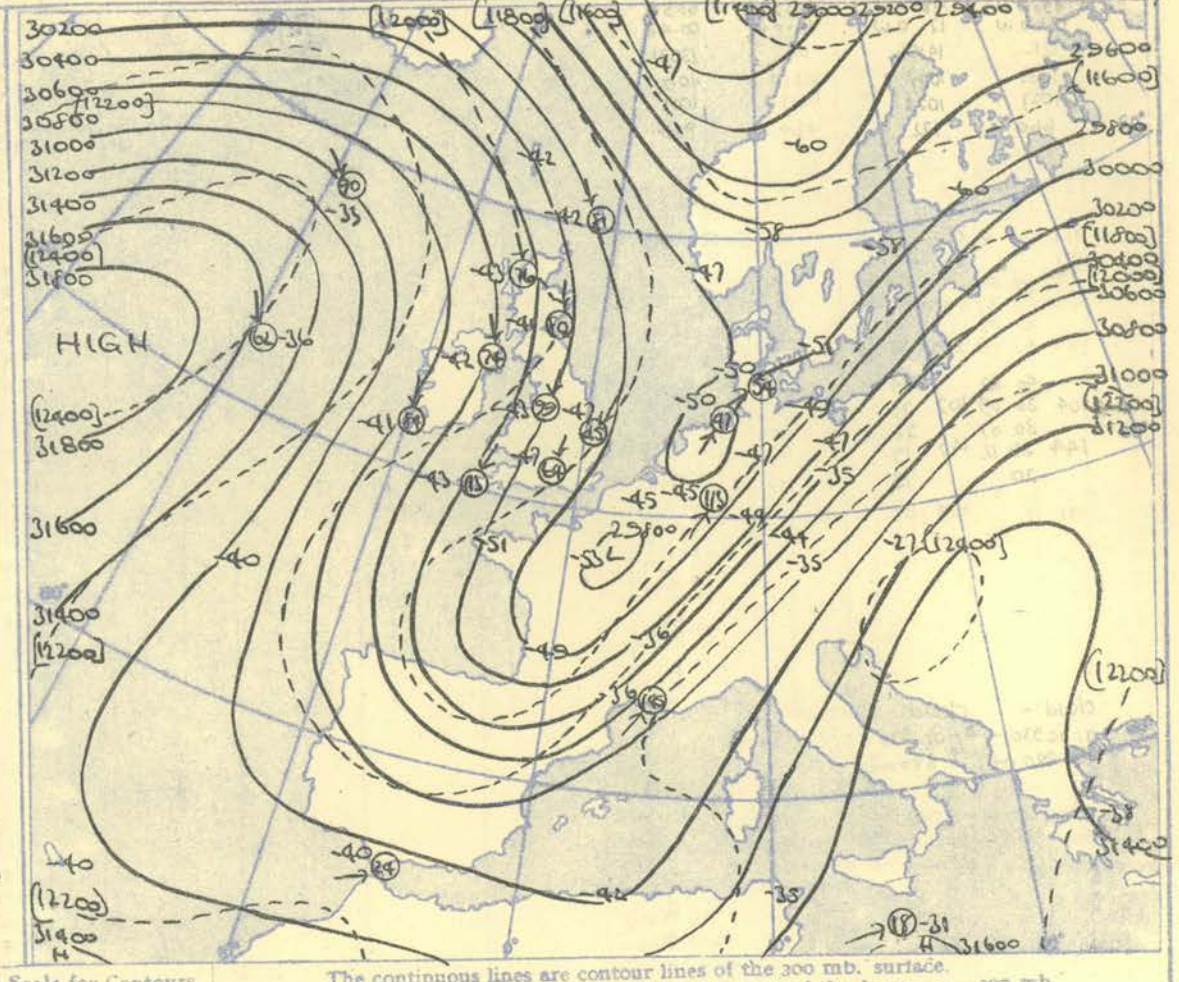
Ship	Weather Observer	Weather Observer	Weather observer	Weather observer	Weather Watcher	Weather Watcher	Weather Watcher	Weather Watcher		Ship
Lat/Long	59°N 18·8°W	59·1°N 18·7°W	59·1°N 18·7°W	59°N 18·9°W	52·5°N 20°W	52·4°N 20°W	52·5°N 20°W	52·4°N 20°W		Lat/Long
Pressure Time	03hrs G.M.T.	03hrs G.M.T.	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.	1022 mb	1019 mb	1010 mb	1004 mb	1029 mb	1029 mb	1026 mb	1023 mb	mb	Pressure M.S.L.
Pressure Surf	1022 mb	1019 mb	1010 mb	1004 mb	1029 mb	1029 mb	1026 mb	1023 mb	mb	Pressure Surf
Pressure Freezing	885 mb	670 mb	625 mb	620 mb	650 mb	650 mb	620 mb	620 mb	mb	Pressure Freezing

Pressure mb	Height ft./100	°C Temp.	°C Dew	°F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°C Temp.	°C Dew	°F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°C Temp.	°C Dew	°F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°C Temp.	°C Dew	°F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°C Temp.	°C Dew	°F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°C Temp.	°F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	—	51	43	260	10	—	50	46	240	24	—	53	51	230	20	—	54	46	270	05	—	55	51	230	16	—	57	56	235	17	—	58	58	235	18	Surf
1000	6·0	47	38	248	12	5·0	48	44	207	24	2·6	52	51	185	19	1·2	52				7·5	50	44	268	09	7·5	51	51	220	23	7·0	54	53	230	23	6·1	55	55	248	25	1000
950		41	34	248	15		42	39	204	24		46	43	207	34		51	49	234	21		50	44	268	09		44	41	228	22		54	54	236	25		61	59	262	33	950
900	34·1	34	28	245	16	33·3	37	34	207	26	31·2	48	47	233	25	30·1	54	34	239	24	36·3	38	38	269	12	360	46	38	252	21	36·0	56	56	248	28	35·6	56	56	273	34	900
850		38	23	251	14		35	21	207	27		50	45	246	27		50	32	233	26		46	21	274	13		43	31	275	18		52	52	277	24		55	53	287	30	850
800	65·1	35	05	262	16	64·5	35	32	207	27	63·3	47	40	259	30	62·2	46	43	233	36	67·9	41	05	287	16	67·7	41	41	258	17	68·2	50	41	305	25	68·1	52	45	287	30	800
750		33	03	275	21		35	32	216	30		43	26	263	39		44	41	233	45		38	-4	316	22		33	33	313	24		46	37	317	38		48	42	257	27	750
700	100	31	20	286	25	99·8	34	30	234	32	99·1	34	18	267	39	98·1	40	37	233	54	103	36	06	322	29	103	36	36	323	27	104	42	29	323	30	104	43	36	252	26	700
650		21	13	293	26		30	25	270	44		36	11	270	39		35	32	236	54		32	14	320	27		27	32	335	25		27	30	330	28		36	33	306	32	650
600	140	22	-1	304	28	140	24	17	285	62	138	28	-3	275	43	139	30	27	243	58	144	24	10	324	28	144	26	24	344	29	145	30	24	334	27	145	29	26	308	33	600
550		16	-10	306	30		17	12	296	55		20	-8	281	40		21	17	243	63		17	07	335	33		17	16	341	29		23	15	339	33		22	19	311	34	550
500	186	06	-26	307	39	187	08	04	292	47	186	10	-7	289	42	186	15	09	260	20	190	10	-10	344	24	190	11	09	336	28	192	15	10	343	39	192	14	10	316	36	500
450		-5	-26	308	48		00	-11	280	44		00	-26	273	48		06	-2	268	70		01	-18	335	42		02	-5	352	38		08	-5	347	42		06	01	310	36	450
400	240	-16	-21	307	53	241	-2	-22	275	51	241	-7	-25	273	60	241	-6	-14	276	84	245	-3	-29	354	50	245	-10	-13	329	48	248	-1	-10	350	43	247	-4	-7	310	34	400
350		-29	-38	300	57		-25	-33	275	57		-18	-25	282	81		-20	-27	272	88		-21	-43	003	60		-19	-23	330	51		-14	-22	358	47		-16	-21	325	38	350
300	306	-44		299	62	307	-40	-53	281	66	309	-33	-45	291	80	308	-36	-44	273	86	312	-36	-54	355	60	313	-22	-27	331	57	316	-30	-36	347	62	315	-30	-36	336	46	300
250		-53		301	70		-55		289	92		-49		299	102		-55		262	100		-51		353	78		-49		332	76		-47		345	61		-49		337	45	250
200	352	-83		305	66	355	-76		294	(122	357	-65		299	110	356	-76		265	99	400	-71		343	92						405	-66		354	74	404	-72		331	52	200
170		-78		309	57		-74		313	85		-74		297	115		-83		266	82		-80		343	99							-80		003	82		-84		331	55	170
150		-77		314	60		-76		310	76		-73		305	89		-76		268	68		-77		343	86							-83		009	80		-80		331	45	150
130		-74		316	53		-72		302	52		-76		307	78		-81		277	43		-80		343	83							-83		018	77		-93		328	40	130
110		-72		322	43		-71		302	38		-75		310	75		-76		272	47		-80		343	80							-77		020	58		-91		324	36	110
100	533	-73		330	40	533	-70		302	36	540	-77		311	54	536	-74		265	42	541	-78		343	76						546	-78		013	39	542	-90		319	34	100
90		-70		320	37		-64		303	42		-72		313	60		-73					-75		343	57							-75		353	35		-81		330	28	90
80	(87)	-70					-64		307	33		-71		317	51							-75		343	35							-72		350	49		-81		360	27	80
70	Inversion						-64		308	36		-71		324	58	Inversion						-74		343	29	Inversion						-68		349	38		-79		358	24	70
60	876 mb 31° - 856 mb 39°					Inversion						-72		318	56	965 mb 42° - 931 mb 53°						-72		343	39	950 mb 44° - 935 mb 45°						-64		349	26		-78		350	33	60
	765 mb 32° - 750 mb 33°					907 mb 37° - 890 mb 38°						-73		324	56	914 mb 54° - 891 mb 55°						-72		343	36	920 mb 48° - 900 mb 46°						-60		349	27	Isothermal					
	648 mb 20° - 617 mb 24°					836 mb 34° - 760 mb 36°					Inversion					820 mb 44° - 772 mb 46°						-60		343	30							-54		349	21	1023 - 1004 mb 58°					
											810 mb 44° - 890 mb 51°											-66		343	24	Inversion						-45		349	24	900 - 858 mb 56°					
											700 mb 34° - 670 mb 38°															902 mb 37° 876 mb 48°										715 - 700 mb 43°					
											Isothermal															Isothermal										Inversion					
											850 - 860 mb 51°															772 - 743 mb 38° 560 - 540 mb										1004 mb 58° - 979 mb 64°					
											810 - 775 mb 47°																													
Tropopause	I205 mb -83° 38600'		I183 mb -81° 40300'		I164 mb -75° 43900'		I174 mb -85° 42200'		I163 mb -82° 44200'	17°	NR		I159 mb -85° 45100'		I130 mb -93° 48200'																						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

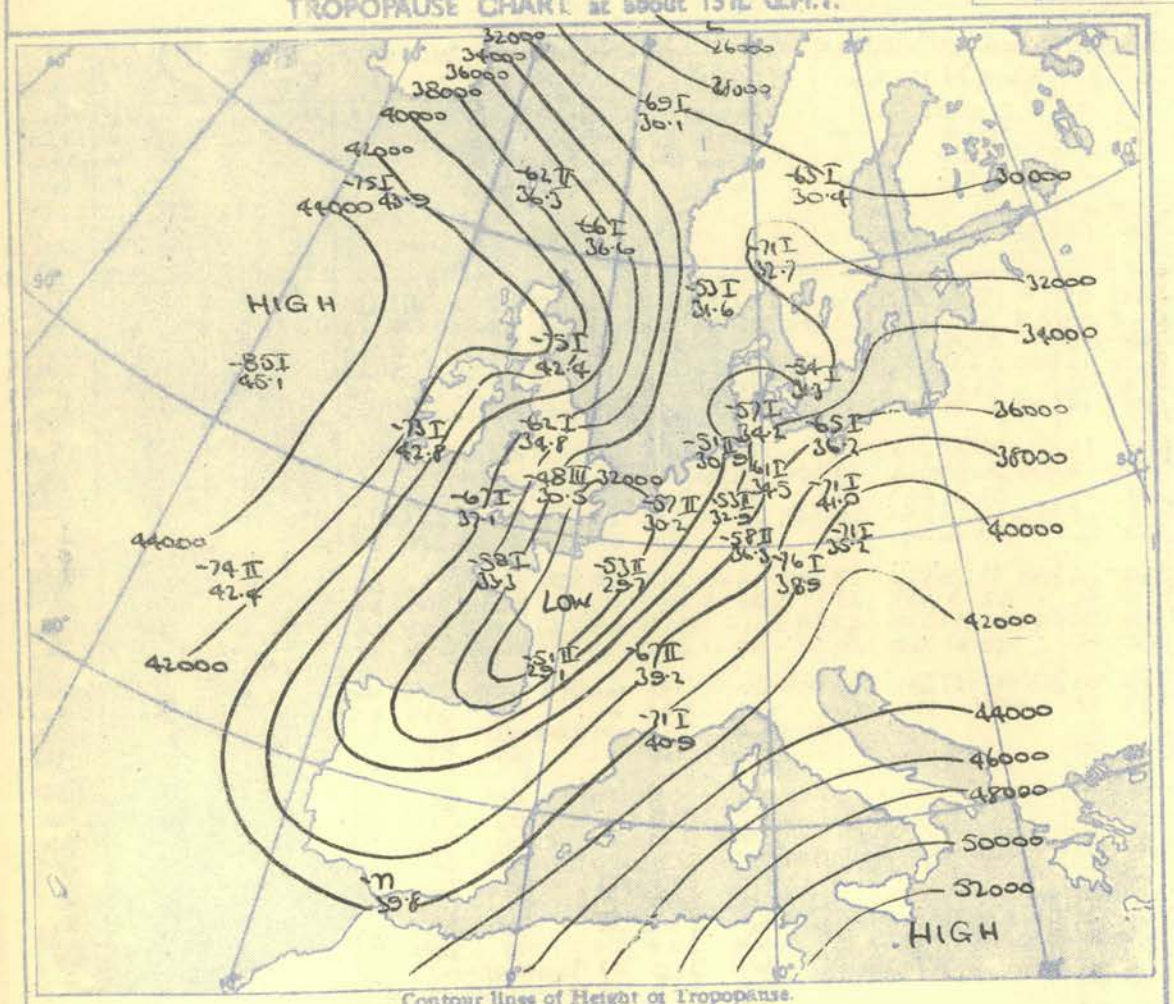


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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.

The warm ridge in the Atlantic continued its eastward advance, with its axis apparently rotating about an area to the West of the Azores. The cold trough over the British Isles also moved East but more slowly than the warm ridge. In consequence the cold trough was sharpened, the thermal gradients were tightened and very strong winds were produced. A blue sun and subsequently a blue moon observed in Britain were caused by a haze layer to between 30,000' and 40,000' which was reported to have crossed the Atlantic in association with the very strong winds.

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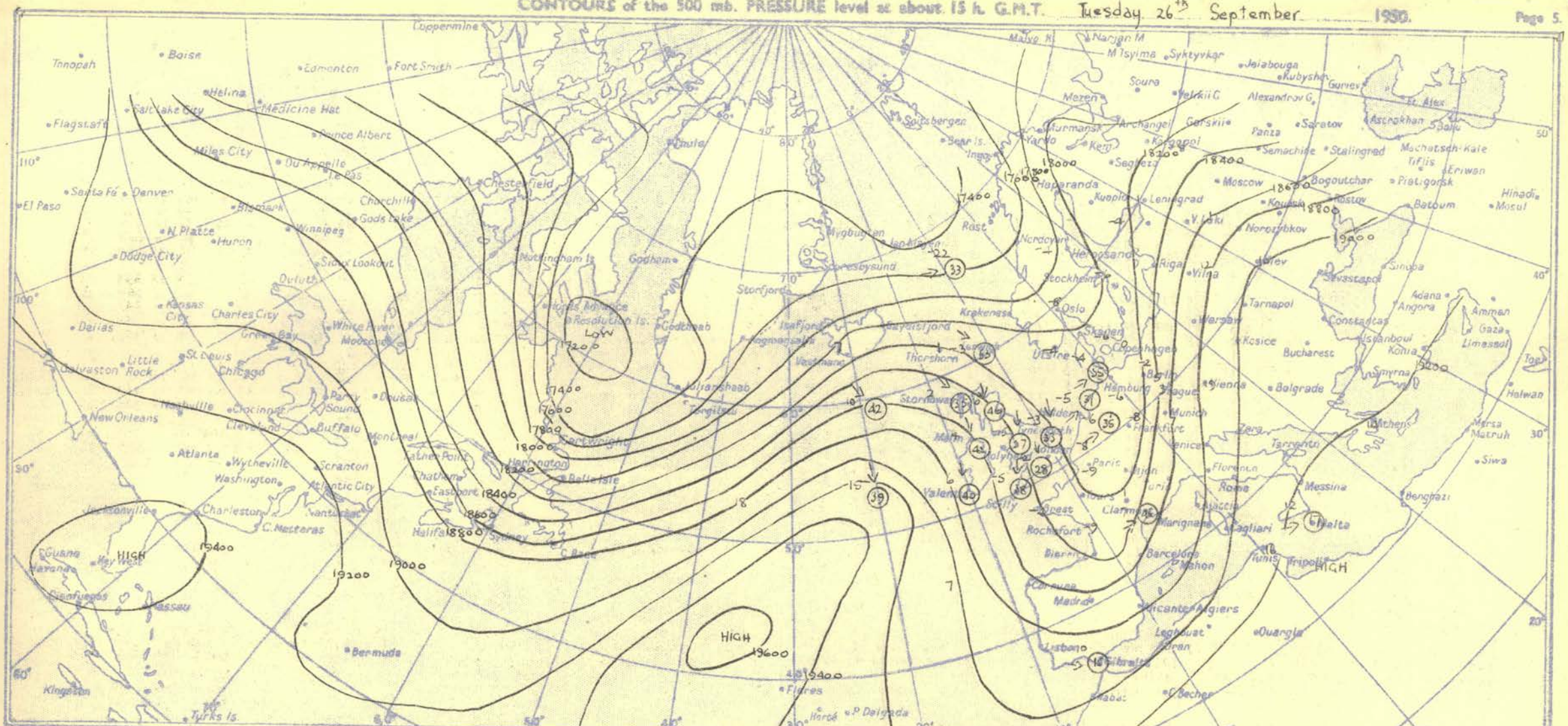
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Tuesday 26th September 1950.


Coppermine
Tonopah
Boise
Edmonton
Fort Smith
Helena
Medicine Hat
Salt Lake City
Flagstaff
Prince Albert
Miles City
Du Appelle
Le Pas
Chesterfield
Santa Fé
Denver
El Paso
Churchill
Bismark
Gods Lake
N. Platte
Winnipeg
Huron
Dodge City
Sioux Lookout
Duluth
Kansas City
Charles City
Dallas
White River
Moosonee
Green Bay
Galveston
Little Rock
St. Louis
Chicago
Nashville
Cincinnati
Parry Sound
Cleveland
Buffalo
Montreal
New Orleans
Atlanta
Wytheville
Scranton
Washington
Atlantic City
Father Point
Chatham
Eastport
Jacksonville
Charleston
Nantucket
C. Hatteras
Halifax
Sydney
C. Race
Guane
Havana
Key West
Cienfuegos
Nassau
Bermuda
Kingston
Turks Is.
HIGH
15400
19200
19000
HIGH
19600
19400
Flores
P. Delgada
Horta
LOW
17200
17400
17600
17800
18000
18200
18400
18600
18800
19000
Nottingham Is.
Godhavn
Hopes Advance
Resolution Is.
Godthaab
Cartwright
Harrington
Belleisle
Storfjord
Julianshaab
Tugtilik
Ivigtut
Isafjord
Vestmanna
Thorshavn
Lerwick
Stornoway
Malin
Holyhead
Valentia
Scilly
Krakenaes
Oslo
Skagen
Utsire
Stockholm
Copenhagen
Helder
Tynemouth
London
Brest
Rochefort
Biarritz
Corunna
Madrid
Lisbon
Gibraltar
Rabat
C. Beche
Oran
Algiers
Alicante
Barcelona
Mahon
Marignane
Cagliari
Tunis
Tripoli
Malta
Messina
Rome
Florence
Venice
Zara
Tarrentin
Athens
Belgrade
Vienna
Prague
Berlin
Hamburg
Munich
Frankfurt
Paris
Dijon
Turin
Clermont
Ajaccio
Bengazi
Siwa
Mersa Matruh
Helwan
Cairo
Gaza
Amman
Adana
Angora
Konia
Smyrna
Istanboul
Constantza
Bucharest
Kosice
Warsaw
Tarnapol
Sevastapol
Simpa
Kiev
Vilna
Riga
Hernosand
Nordoyan
Rost
Mygbuyten
Ian Mayen
Spitsbergen
Bear Is.
Inga
Murmansk
Vardo
Kem
Archangel
Kargopol
Soura
Mezen
Malye K.
Narjan M.
Mtsyima
Syktyvkar
Jelabouga
Kubyshev
Gurev
Alexandrov G.
Gorskii
Panza
Saratow
Semachike
Stalingrad
Ascrokhan
Baku
Tiflis
Erivan
Batoum
Hinadi
Mosul
Pratigorsk
Bogoutchar
Moscow
Kouibek
Rostov
Leningrad
Kuopio
Haparanda
Seghezk
Kemijarvi
Petsamo
Inari
Seglitza
Kandalaksha
Lulea
Arjeplog
Hernosand
Skellefteå
Umea
Sundsvall
Gefle
Stockholm
Oslo
Skagen
Copenhagen
Utsire
Thorshavn
Lerwick
Stornoway
Malin
Holyhead
Valentia
Scilly

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON

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

LERWICK

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1013·9 mb	1003·8 mb	895 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	46	35	340	15
1000	03·7	46	35		
960		39	31	320	20
900	31·8	33	28	324	19
850		28	20	319	19
800	62·6	31	11	315	21
750		28	08	313	24
700	97·2	20	00	312	26
650		14	+07	316	27
600	136	09	-16	332	57
550		02	-18	333	47
500	181	+03	-23	335	53
450		-11	-33	338	56
400	234	-20	-35	337	62
350		-31	-44	337	67
300	300	-44		335	81
250		-61		337	78
200	387	-64		332	69
170		-66		328	59
150		-65		328	47
130		-63		329	37
110		-61		318	30
100	533	-61		318	28
90		-60		323	27
80		-61		323	27
70		-61		296	30
60		-59		282	23
(058 mb)		-58			

Inversion
858mb 27°-825mb 31°
Isothermal
825 - 800 mb 31°

Tropopause: I 220 mb -66° 36,600'

STORNOWAY

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1019·8 mb	1017·9 mb	817 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·5	48	38	290	06
1000	05·3	46	37		
960		39	32	293	13
900	33·4	33	28	294	14
850		27	23	292	16
800	64·2	31	03	288	15
750		27	-10	302	15
700	98·9	23	-01	312	20
650		22	-09	316	29
600	138	16	03	317	38
550		08	-05	315	35
500	184	02	-09	318	35
450		-05	-14	330	45
400	238	-17	-26	331	52
350		-28	-39	326	60
300	304	-43		326	76
250					
200				338	94
170					
150				336	53
130					
110					
100				328	39
90				For Rest	
80				of Winds	
70				See Page 3	
60					

Inversion
850mb 27°-817mb 32°
Isothermal
693 - 634 mb 22°

Tropopause: N.R.

LEUCHARS

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1017·1 mb	1016·3 mb	783 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	54	41	300	12
1000	04·6	52	38	346	21
960		44	34	346	20
900	33·0	36	29	346	20
850		28	25	349	18
800	64·0	34	03	351	16
750		29	-03	347	23
700	99·0	25	-11	347	26
650		19	-20	349	27
600	138	15	-36	353	35
550		07	-30	354	45
500	183	00	-28	356	46
450		-07	-31	365	52
400	237	-15	-36	362	63
350		-27	-44	362	69
300	303	-41		359	80
250		-59		360	80
200	390	-65		357	70
170		-75		353	66
150		-71		354	43
130		-67		351	42
110		-63		351	32
100	535	-62		353	33
90		-62		353	27
80		-62			

Inversion
835 mb 27°-820 mb 36°
221 .. -66°- 206 -64°
Isothermal
641 - 628 mb 18°

Tropopause: I 170mb -75° 42,400'

ALDERGROVE

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1020·7 mb	1012·1 mb	755 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·3	51	39	020	10
1000	05·6	51	40		
960		44	35	348	20
900	34·0	36	27	345	24
850		41	26	348	21
800	65·4	38	16	353	20
750		31	-11	352	21
700	100	27	-15	350	23
650		23	-18	002	30
600	140	17	-23	002	36
550		12	-19	357	37
500	186	04	-21	359	42
450		-05	-24	357	48
400	240	-16	-31	357	60
350		-28	-42	360	69
300	306	-42		357	74
250		-61		354	84
200	393	-75		357	88
170		-77		358	72
150		-72		357	60
130		-70		357	46
110		-70		35	38
100	536	-70			

Inversion
863mb 33°-850mb 41°
Max Wind - 214 mb 356°
111 k/s 32,700'
Isothermal
800 -765 mb 30°
687 - 677 .. 22°

Tropopause: I 174mb -78° 39,200'

LIVERPOOL

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1017·3 mb	1015·3 mb	805 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	54	41	340	10
1000	04·8	52	40	340	12
960		44	34	343	17
900	33·2	37	28	346	19
850		30	23	352	24
800	64·1	30	23	004	26
750		29	18	008	29
700	98·9	24	09	010	26
650		18	02	008	32
600	138	10	-05	008	33
550		03	-14	005	34
500	183	-05	-21	010	37
450		-13	-28	015	57
400	236	-21	-37	018	79
350		-31	-46	017	85
300	302	-43		015	99
250		-60		019	97
200	389	-68		010	87
170		-66		355	75
150		-63			
130		-63			
110		-68			
100	535	-66			
90		-62			
80		-58			
70		-55			
(63mb)		-60			

Inversion
810mb 27°-800mb 30°
Isothermal
800 -765 mb 30°
687 - 677 .. 22°

Tropopause: I 244mb -62° 34,800'

DOWNHAM MARKET

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1011·5 mb	1007·2 mb	800 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	55	47	350	22
1000	03·2	54	46		
960		46	40	353	36
900	31·7	41	37	353	33
850		37	32	355	33
800	63·0	32	27	355	33
750		26	11	354	28
700	97·7	24	00	348	35
650		19	12	358	36
600	137	13	05	002	32
550		05	-06	003	33
500	182	-03	-10	003	33
450		-14	-25	003	32
400	235	-25	-36	007	35
350		-35	-46	002	40
300	300	-47		006	45
250		-51		014	56
200	389	-51		005	45
170		-55		360	33
150		-55		346	23
130		-52		322	17
110		-56		322	20
100	539	-56		327	18
90		-56		319	13
80		-56		309	06
70		-56		306	07
60		-56		306	07
		-65		306	12
		-52			

Isothermal
753 - 722 mb 26°

Tropopause: I 222 mb -52° 37,600'

LARKHILL

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1014·4 mb	998·5 mb	808 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	54	46	360	21
1000	03·9				
960		48	41	351	27
900	32·6	42	37	360	28
850		37	32	005	26
800	63·9	31	26	008	22
750		29	20	009	28
700	99·0	25	10	008	28
650		21	13	004	25
600	138	14	05	002	25
550		07	-03	360	24
500	183	-02	-11	002	28
450		-13	-23	002	34
400	237	-25	-35	004	40
350		-37	-47	004	42
300	301	-47		014	64
250		-52		013	86
200	390	-53		009	49
170		-56		007	34
150		-61		003	23
130		-61		334	18
110		-61		335	17
100	538	-60		346	15
90		-57		346	09
80		-57		335	06
70		-59		336	07
60		-55			

Inversion
775mb 27°-750mb 29°
Isothermal
700 - 687 mb 25°

Tropopause: III 295mb -48° 30,500'

CAMBORNE

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1018·4 mb	1007·9 mb	770 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	58	52	350	15
1000	05·0	57	52		
960		50	46	001	38
900	33·8	43	39	001	30
850		36	33	358	30
800	65·1	35	16	357	29
750		30	10	006	28
700	10·0	25	03	012	29
650		20	-03	011	30
600	139	13	-20	016	31
550		04	-20	020	32
500	184	-05	-28	007	38
450		-16	-37	003	47
400	237	-20	-40	019	83
350		-29	-49	021	113
300	303	-43		017	113
250		-59		018	107
200	390	-64			
170		-67			
150		-64			
130		-62			
110		-64			
100	536	-65			

Inversion
832 mb 33°- 800mb 35°

Tropopause: I 220mb -67° 37,100'

VALENTIA

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1025·3 mb	1024 mb	700, 875 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	53	41	340	14
1000	6·8	50	37	347	15
950		42	36	352	16
900	35·1	36	34	355	17
850		32	18	357	19
800	66·1	35	-21	353	23
750		33	-12	358	26
700	10·1	32	-21	356	28
650		26	-31	249	33
600	141	18	-20	348	41
550		15	-21	351	41
500	187	06	-22	359	40
450		-07	-23	359	52
400	241	-13	-17	360	60
350		-25	-31	358	68
300	308	-41		357	84
250		-51		258	104
200	395	-63			
170		-73			
150		-72			
130		-71			
110		-70			
100	537	-69			

Inversion
873mb 32°-790mb 37°
592 - 17°-579 .. 19°
Isothermal
750 - 712mb 33°
450 - 429 .. -07°

Tropopause: I 170mb -73° 42,800'

LERWICK

Pressure	Time	M.S.L.	Surf	Freezing
	21h G.M.T.	1013·8 mb	1003·6 mb	882 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	42	39	320	09
1000	03·6	43	39		
950		41	36	298	18
900	31·8	34	27	302	18
850		27	24	312	20
800	62·6	26	12	320	24
750		22	11	308	27
700	97·0	22	01	306	29
650		19	05	319	27
600	136	14	08	318	33
550		67	02	313	37
500	182	02	-12	315	36
450		12	-19	315	39
400	235	-22	-30	322	48
350		-34	-42	327	50
300	300	-47		326	72
250		-57		331	86
200	387	-69		333	93
170		-68		329	59
150		-69		332	55
130		-69		325	46
110		-69		312	38
100	531	-69		321	32
90		-69			
80					
70					
60					

Inversion
1004mb 42°-980mb 45°
Isothermal
850 - 810mb 27°
750 - 700 .. 22°
176 -260 .. -55°

Tropopause: I 323mb -71° 28,200'

STORNOWAY

Pressure	Time	M.S.L.	Surf	Freezing
	21h G.M.T.	1017·8 mb	1015·9 mb	860 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·5	48	43	225	03
1000	04·8	48	42	254	15
950		42	33	253	14
900	33·1	36	32	253	15
850		31	27	256	21
800	64·0	28	07	263	23
750		29	10	267	21
700	98·8	27	23	284	22
650		24	20	296	25
600	139	19	14	310	29
550		15	10	318	41
500	185	08	-17	322	47
450		-02	-23	328	53
400	239	-11	-34	326	57
350		-23	-45	330	65
300	306	-39	-56	331	99
250		-55		333	115
200	393	-72		336	119
170		-78		336	90
150		-77		330	71
130		-69		327	60
110		-60			

Inversion
810 mb 27°-781mb 31°
574 " 14°-557 " 16°

Tropopause: I 155 mb -81° 44,000'

LEUCHARS

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

ALDERGROVE

Pressure	Time	M.S.L.	Surf	Freezing
	21h G.M.T.	1022·8 mb	1014·2 mb	742 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·3	49	41	297	12
1000	06·1	47	39		
950		42	35	298	13
900	34·3	36	29	299	14
850		36	18	300	14
800	65·4	38	02	301	13
750		33	06	301	16
700	10·5	30	09	298	17
650		25	13	299	23
600	140	20	13	310	34
550		12	04	335	41
500	186	03	-07	349	44
450		-06	-17	346	51
400	240	-12	-25	347	67
350		-24	-41	352	81
300	307	-40		351	93
250		-56		358	103
200	394	-71		001	84
170		-79		357	96
150		-78		356	54
130		-75		008	42
110		-74		320	27
100	538	-73		332	32

Inversion
880 mb 33°-812mb 39°
Max Wind 243mb 013°
144 k/s. 35,300'

Tropopause: I 175mb -80° 42,200'

LIVERPOOL

Pressure	Time	M.S.L.	Surf	Freezing
	21h G.M.T.	1020·5 mb	1018·5 mb	750 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	46	42	340	03
1000		49	43	336	09
960		44	35	340	14
900	33·9	30	29	341	15
850		29	25	344	13
800	64·8	33	09	351	18
750		32	01	352	20
700	99·7	25	-04	347	21
650		23	-08	349	22
600	139	16	-04	005	32
550		09	-03	356	42
500	185	01	-10	352	45
450		-07	-16	357	49
400	239	-17	-25	001	57
350		-29	-37	001	65
300	304	-43		358	80
250		-59		002	86
200	391	-69		004	81
170		-68		359	66
150		-73		001	50
130		-74		005	43
110		-70		002	32
100	535	-69			
(97 mb)		-68			

Inversion
1019 mb 46°-996mb 50°
845 .. 28°-800 .. 33°
770 - 31°- 750 .. 32°
660 .. 22°-658 .. 24°
Max Wind 218mb 009°
100kts 37,200'

Tropopause: I 202mb -70° 33,800'

DOWNHAM MARKET

Pressure	Time	M.S.L.	Surf	Freezing
	21h G.M.T.	1018·0 mb	1013·2 mb	871 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	49	43	310	08
1000	04·8	48	42		
960		43	37	348	28
900	33·1	36	31	357	31
850		29	24	358	30
800	64·0	30	20	358	29
750		31	01	358	30
700	98·8	25	-04	355	31
650		20	-09	354	28
600	138	12	-17	356	31
550		04	-23	359	32
500	183	-03	-30	019	41
450		-11	-37	010	61
400	237	-20	-45	010	61
350		-31	-54	010	75
300	302	-44		009	70
250		-59		009	76
200	389	-66		007	69
170		-65		010	49
150		-65		002	45
130		-64		360	29
110		-65		346	17
100	536	-64		353	16
90		-66		323	21
80		-68			
70					
60					

Inversion
825 mb 26°- 755mb 32°

Tropopause: I 203mb -67° 38,500'

LARKHILL

Pressure	Time	M.S.L.	Surf	Freezing
	21h G.M.T.	1020·6 mb	1004·1 mb	780 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	47	42	350	04
1000	05·5				
960		44	38	358	24
900	33·9	38	34	006	22
850		31	26	004	21
800	64·9	38	19	002	21
750		29	-01	002	22
700	10·0	25	-09	353	27
650		18	-10	358	26
600	139	11	-16	007	30
550		01	-26	012	35
500	184	-04	-33	020	48
450		-11	-36	018	60
400	237	-19	-28	013	66
350		-31	-47	009	79
300	303	-47		011	83
250		-60		011	84
200	389	-63		010	74
170		-71		016	57
150		-72		020	43
130		-72		025	33

Inversion
1004 mb 47°-983mb 48°
837 " 29°-800 .. 33°

Tropopause: II 259 mb -59° 33,500'

CAMBORNE

Pressure	Time	M.S.L.	Surf	Freezing
	21h G.M.T.	1022·9 mb	1012·2 mb	742 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	52	44	360	10
1000	06·2	51	43	354	21
960		44	39	354	21
900	34·6	37	34	353	18
850		35	19	353	19
800	65·9	37	04	357	19
750		33	-04	357	20
700	10·1	26	-05	357	19
650		18	-08	367	19
600	140	10	-15	006	24
550		08	-21	018	44
500	186	03	-17	007	52
450		-08	-23	014	54
400	239	-17	-28	016	63
350		-28	-39	012	75
300	305	-43		012	75
250		-58		011	97
200	392	-69		019	87
170		-71		013	75
150		-74			
130		-76			
(138 mb)					

Inversion
863mb 34°-830mb 38°
Isothermal
584 - 560mb 08°

Tropopause: I 200mb -69° 39,200'

YALENTIA

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

No. 11304

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Wednesday 27th September 1950. Page 1.

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

LERWICK

Pressure: Time 03h G.M.T.; M.S.L. 1009.9 mb; Surf 999.9 mb; Freezing 868 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.7	48	42	270	09
1000	2.7				
950		43	38	252	21
900	31.0	36	33	255	23
850		30	27	257	23
800	61.9	28	21	260	24
750		25	09	267	26
700	96.5	22	08	271	27
650		21	19	278	27
600	136	17	13	286	30
550		12	06	303	32
500	182	06	-07	312	38
450		-05	-20	303	45
400	236	-13	-25	304	50
350		-21	-36	303	57
300	302	-41		313	83
250		-55		314	133
200	389	-66		318	98
170		-67		299	69
150		-72		298	61
130		-70		298	53
110		-67		293	40
100	534	-71		292	38
90		-71		291	35
80		-71			
70	(77 mb)	-71			
60					

Isothermal
1000 - 985 mb 48°
832 - 800 " 28°
700 - 671 " 22°
450 - 434 " -05°

Tropopause: I 210 mb - 69° 31,900'

STORNOWAY

Pressure: Time 03h G.M.T.; M.S.L. 1011.3 mb; Surf 1009.4 mb; Freezing 698 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.5	50	46	200	15
1000	3.0	49	45	221	25
950		44	40	223	28
900	31.4	39	33	229	30
850		34	31	244	30
800	62.7	38	38	262	29
750		37	37	270	30
700	98.2	33	33	270	30
650		26	21	272	29
600	138	19	09	276	31
550		12	07	283	33
500	184	14	13	300	66
450		05	03	304	68
400	239	-06	-09	303	69
350		-18	-21	301	72
300	307	-34	-38	304	72
250		-54		313	90
200	394	-74		316	106
170		-84		319	95
150		-73		316	78
130		-81			
110		-76			
100	534	-75			
90					
80					
70					
60					

Inversion
848 mb 34° - 783 mb 40°
556 - 10° - 528 " 15°

Isothermal
528 - 508 mb 15°

Tropopause: I 173 mb -85° 42,500'

LEUCHARS

Pressure: Time 03h G.M.T.; M.S.L. 1016.8 mb; Surf 1015.9 mb; Freezing 776 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.2	41	38		
1000	4.5	41	38		
950		39	33		
900	32.5	32	29		
850		27	23		
800	63.7	35	03		
750		29	14		
700	99.0	25	22		
650		21	13		
600	138	19	05		
550		13	-09		
500	184	07	-18		
450		-03	-16		
400	239	-15	-23		
350					
300					
250					
200					
170					
150					
130					
110					
100					
90					
80					
70					
60					

Inversion
886 mb 30° - 837 mb 40°

Isothermal
106 - 965 mb 41°
725 - 675 " 25°

Tropopause: NR. 380 mb 25,000'

ALDERGROVE

Pressure: Time 03h G.M.T.; M.S.L. 1019.7 mb; Surf 1011.1 mb; Freezing 680 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	020	47	43	222	08
1000	5.4	46	42		
950		42	35	242	21
900	33.7	37	33	253	22
850		38	21	264	23
800	65.0	38	21	275	23
750		40	36	292	23
700	101	35	31	306	23
650		29	17	314	24
600	141	26	01	324	32
550		19	-02	322	36
500	187	11	-01	327	47
450		03	-02	332	62
400	242	-07	-14	338	69
350		-21	-29	340	75
300	310	-37	-46	342	83
250		-54		346	90
200	397	-76		343	83
170		-77		356	72
150		-81		354	55
130		-80		342	42
110		-77		338	30
100	538	-75		333	23
90		-74		334	21
80		-78		336	23
70					
60					

Inversion
1019 mb 46° - 1000 mb 49°
860 " 36° - 830 " 38°
781 " 30° - 713 " 32°
578 " 14° - 567 " 15°

Tropopause: I 153 mb - 87° 44,900'

LIVERPOOL

Pressure: Time 03h G.M.T.; M.S.L. 1020.8 mb; Surf 1018.8 mb; Freezing 713 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.6	46	42		
1000	5.6	49	43		
950		43	36		
900	33.9	37	31		
850		36	20		
800	65.2	36	11		
750		31	07		
700	100	31	01		
650		26	07		
600	140	18	09		
550		13	07		
500	186	06	-03		
450		00	-15		
400	241	-09	-25		
350		-23	-35		
300	308	-38	-47		
250		-54			
200	395	-70			
170		-81			
150		-85			
130		-79			
110		-77			
100	536	-76			
90		-74			
80		-72			
70		-74			
60	(54 mb)	-73			

Inversion
831 mb 27° - 800 mb 36°
269 " -24° - 265 " -23°

Isothermal
1015 - 975 mb 45°

Tropopause: I 183 mb - 71° 41,100'

DOWNHAM MARKET

Pressure: Time 03h G.M.T.; M.S.L. 1020.0 mb; Surf 1015.5 mb; Freezing 730 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01.2	45	42	290	08
1000	5.4	45	42	234	19
950		42	39	339	17
900	33.7	36	32	343	16
850		29	26	342	15
800	64.6	36	03	336	17
750		32	00	337	18
700	99.6	27	-08	340	20
650		21	-16	340	24
600	139	16	-06	351	25
550		10	-10	359	21
500	185	01	-15	005	32
450		-07	-21	354	42
400	239	-17	-26	355	49
350		-27	-36	001	72
300	305	-37	-47	011	111
250		-52		012	124
200	393	-67		017	103
170		-68		003	74
150		-73		006	52
130		-67		002	52
110		-69		359	30
100	537	-72		360	29
90		-75			
80					
70					
60					

Inversion
1019 mb 46° - 1000 mb 49°
860 " 36° - 830 " 38°
781 " 30° - 713 " 32°
578 " 14° - 567 " 15°

Isothermal
1015 - 975 mb 45°

Tropopause: I 183 mb - 71° 41,100'

LARKHILL

Pressure: Time 03h G.M.T.; M.S.L. 1023.2 mb; Surf 1006.5 mb; Freezing 745 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04.4	37	35	340	04
1000	6.1				
950		42	36	323	10
900	34.5	36	31	330	14
850		33	21	330	15
800	65.7	35	07	331	14
750		32	-03	331	15
700	101	28	-04	339	23
650		23	-04	351	27
600	140	16	-01	005	27
550		07	-05	002	35
500	186	02	-05	006	40
450		-06	-13	002	51
400	240	-15	-23	007	61
350		-22	-39	014	86
300	307	-38	-52	011	100
250		-54		023	117
200	394	-70		013	85
170		-72		013	76
150		-75			
130		-69			
110		-70			
100	(105 mb)	-70			
90					
80					
70					
60					

Inversion
1007 mb 37° - 989 mb 42°
863 " 31° - 829 " 35°

Isothermal
704 - 691 mb 28°

Tropopause: II 225 mb -64° 36,900'

CAMBORNE

Pressure: Time 03h G.M.T.; M.S.L. 1024.5 mb; Surf 1013.8 mb; Freezing 716 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.9	51	48	320	02
1000	6.6	51	48	320	15
950		45	44	325	14
900	36.0	38	34	329	10
850		31	28	338	12
800	66.1	37	10	342	14
750		36	-12	348	14
700	101	31	-16	356	15
650		28	-03	359	18
600	141	20	04	002	29
550		12	06	002	39
500	187	05	01	001	45
450		-01	-08	008	55
400	242	-09	-24	011	87
350		-19	-32	014	82
300	309	-37	-47	020	93
250		-52		025	117
200	397	-68		024	101
170		-81		020	90
150		-78		021	61
130		-77			
110		-77			
100	539	-75			
90		-79			
80		-75			
70		-75			
60					

Inversion
834 mb 26° - 785 mb 40°
504 " 04° - 498 " 06°

Isothermal
1014 - 1000 mb 51°
550 - 540 " 12°

Tropopause: I 160 mb - 85° 44,200'

VALENTIA

Pressure: Time 03h G.M.T.; M.S.L. 1023.4 mb; Surf 1022 mb; Freezing 645 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.3	51	48		
1000	6.3	49	47		
950		44	39		
900	34.7	41	39		
850		48	48		
800	66.7	46	46		
750		41	41		
700	103	36	34		
650		33	33		
600	143	27	27		
550		21	20		
500	190	14	13		
450		5	2		
400	245	-7	-11		
350		-21	-26		
300	312	-35	-43		
250		-53			
200	400	-72			
170		-78			
150	(1360 mb)	-82			
130		-88			
110					
100					
90					
80					
70					
60					

Inversion
907 mb 39° - 835 mb 49°

Isothermal
674 - 650 mb 33°

Tropopause: II 177 mb -78° 42,500'

LERWICK

Pressure: Time 09h G.M.T.; M.S.L. 1001.6 mb; Surf 991.7 mb; Freezing 723 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.7	48	46	220	28
1000	0.4				
950		43	41	218	33
900	28.7	39	38	227	34
850		35	33	237	36
800	59.9	33	30	246	39
750		33	29	251	42
700	95.1	31	26	252	45
650		26	19	260	46
600	135	20	11	271	52
550		15	04	272	54
500	181	03	-10	280	60
450		-04	-18	290	72
400	235	-15	-29	292	81
350		-27	-41	294	91
300	301	-40	-55	289	123
250		-57			
200	388	-72			
170		-66			
150		-65			
130	(147 mb)	-65			
110					
100					
90					
80					
70					
60					

Inversion
811 mb 32° - 768 mb 39°

Tropopause: I 190 mb - 74° 39,800'

STORNOWAY

Pressure: Time 09h G.M.T.; M.S.L. 1009.7 mb; Surf 999.8 mb; Freezing 638 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.5	54	52		
1000	0.5	54	52		
950		50	49		
900	29.3	47	47		
850		48	48		
800	61.4	48	46		
750		43	38		
700	97.4	37	33		
650		33	32		
600	138	28	13		
550		21	-06		
500	185	11	-14		
450		-01	-20		
400	239	-10	-20		
350		-23	-31		
300	306	-36	-45		
250		-53			
200	394	-75			
170		-74			
150		-72			
130		-72			
110					
100					
90					
80					
70					
60					

Inversion
900 mb 47° - 872 mb 50°

Isothermal
850 - 800 mb 48°

Tropopause: I 187 mb -80° 40,800'

LEUCHARS

No data.

ALDERGROVE

Pressure: Time 09h G.M.T.; M.S.L. 1014.7 mb; Surf 1006.2 mb; Freezing 600 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.3	49	48		
1000	4.0	48	48		
950		44	44		
900	32.6	49	49		
850		50	50		
800	64.7	47	47		
750		43	43	For	
700	101	38	38		
650		32	32	winds	
600	141	32	32		
550		27	27	see	
500	189	16	16		
450		09	08	page	
400	244	00	-01		
350		-10	-12	3	
300	313	-28	-31		
250		-52			
200	401	-68			
170					
150					
130					
110					
100					
90					
80					
70					
60					

Inversion
950 mb 44° - 850 mb 50°

Isothermal
656 - 600 mb 32°

Tropopause: I 212 mb - 69° 37,900'

LIVERPOOL

Pressure: Time 09h G.M.T.; M.S.L. 1019.4 mb; Surf 1017.4 mb; Freezing 692 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.6	49	40	230	03
1000	5.3	48	39	232	15
950		43	35	244	17
900	33.7	39	30	252	20
850		42	14	259	22
800	65.2	40	23	284	23
750		38	24	297	30
700	101	33	27	297	16
650		29	23	314	26
600	141	27	23	326	42
550		22	18	332	54
500	188	15	10	339	54
450		07	01	342	58
400	243	-05	-11	347	63
350		-19	-25	342	63
300	311	-36	-42	352	67
250		-53		347	74
200	398	-73		352	80
170		-71		341	58
150		-76		350	33
130		-76		354	36
110		-71			
100	540	-70		Max wind	
90		-70		215 mb 38,300	
80		-70		360° 90 kts	
70	(75 mb)	-68			
60					

Inversion
898 mb 39° - 865 mb 43°
808 " 40° - 772 " 41°

Isothermal
668 - 627 mb 29°

Tropopause: I 183 mb - 80° 41,700'

DOWNHAM MARKET

Pressure: Time 09h G.M.T.; M.S.L. 1021.8 mb; Surf 1017.1 mb; Freezing 689 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01.2	43	39	220	03
1000	5.8	43	37	228	15
950		43	27	238	15
900	34.0	37	21	259	13
850		38	16	291	15
800	65.1	36	08	297	14
750		32	05	301	16
700	100	32	05	301	20
650		25	13	301	24
600	140	18	10	322	24
550		14	02	338	25
500	186	08	-11	348	32
450		01	-16	352	39
400	241	-10	-14	355	54
350		-21	-27	350	73
300	308	-38	-46	357	78
250		-56		360	90
200	395	-73		007	92
170		-76		008	65
150		-76		006	52
130		-77		003	40
110		-76		002	28
100	537	-73		358	34
90		-71		341	17
80		-71		324	12
70	(83 mb)				
60					

Inversion
874 mb 33° - 846 mb 39°

Isothermal
1017 - 941 mb 43°
750 - 689 " 32°

Tropopause: I 160 mb - 78° 44,100'

LARKHILL

Pressure: Time 09h G.M.T.; M.S.L. 1024.2 mb; Surf 1007.6 mb; Freezing 691 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04.4	41	39	CALM	
1000	6.4	42	39		
950		43	37	282	11
900	34.7	36	32	290	15
850		32	22	292	15
800	65.9	39	10	299	15
750		36	04	313	16
700	101	33	24	317	22
650		28	19	323	22
600	141	23	16	345	24
550		14	07	355	21
500	188	11	-04	358	36
450		02	-07	003	45
400	243	-07	-14	006	60
350		-19	-25	005	63
300	310	-36	-43	004	77
250		-53		009	90
200	398	-71		014	84
170		-72		022	65
150		-73		015	50
130		-70		010	44
110		-74		006	29
100	541	-69		015	21
90		-70		022	18
80	(83 mb)	-71			
70					
60					

Inversion
1008 mb 41° - 976 mb 47°
852 " 36° - 836 " 42°
520 " 11° - 509 " 12°

Isothermal
763 - 730 mb 36°

Tropopause: I 194 mb - 74° 40,300'

CAMBORNE

Pressure: Time 09h G.M.T.; M.S.L. 1026.1 mb; Surf 1015.3 mb; Freezing 670 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.9	51	44	270	06
1000	7.1	51	40	267	16
950		43	35	264	18
900	35.5	39	30	269	18
850		45	10	283	17
800	67.2	43	10	303	17
750		39	30	331	22
700	103	36	22	338	23
650		29	19	337	22
600	143	22	10	355	28
550		15	08	360	38
500	190	12	04	354	47
450		03	-06	001	95
400	245	-06	-16	358	55
350		-20	-30	012	64
300	312	-36	-47	012	68
250		-53		018	73
200	399	-72		017	70
170		-75		018	51
150		-84		017	50
130		-81		011	50
110		-79			
100	540	-76			
90		-74			
80		-75			
70		-75			
60	(76 mb)	-75			

Isothermal
908 - 895 mb 39°

Inversion
1016 mb 51° - 1007 mb 52°
895 " 39° - 858 " 46°
718 " 35° - 700 " 36°
560 " 16° - 545 " 19°

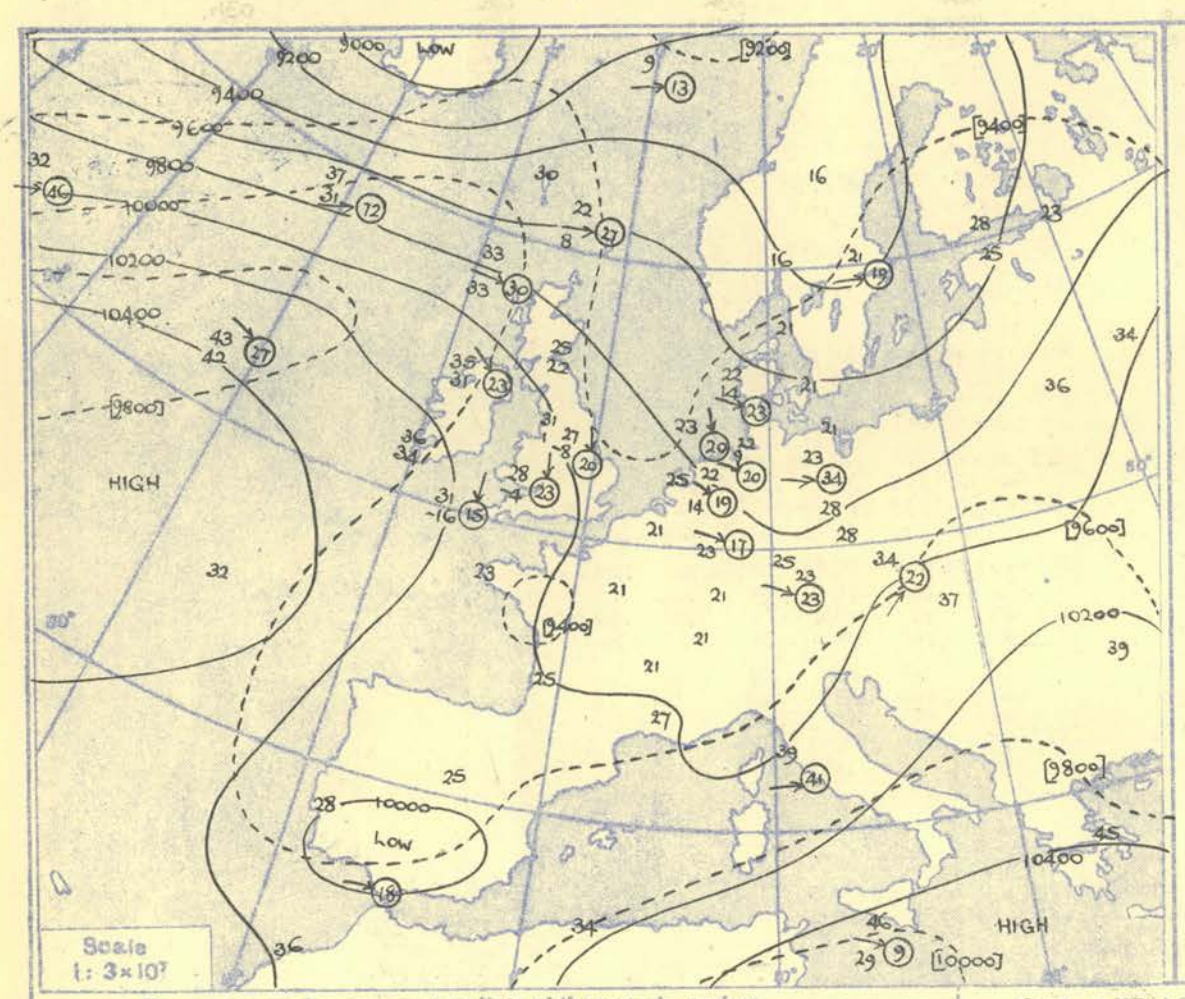
Tropopause: II 203 mb - 72° 39,800'

VALENTIA

No data.

METEOROLOGICAL OFFICE 5 OCT 1950 LIBRARY

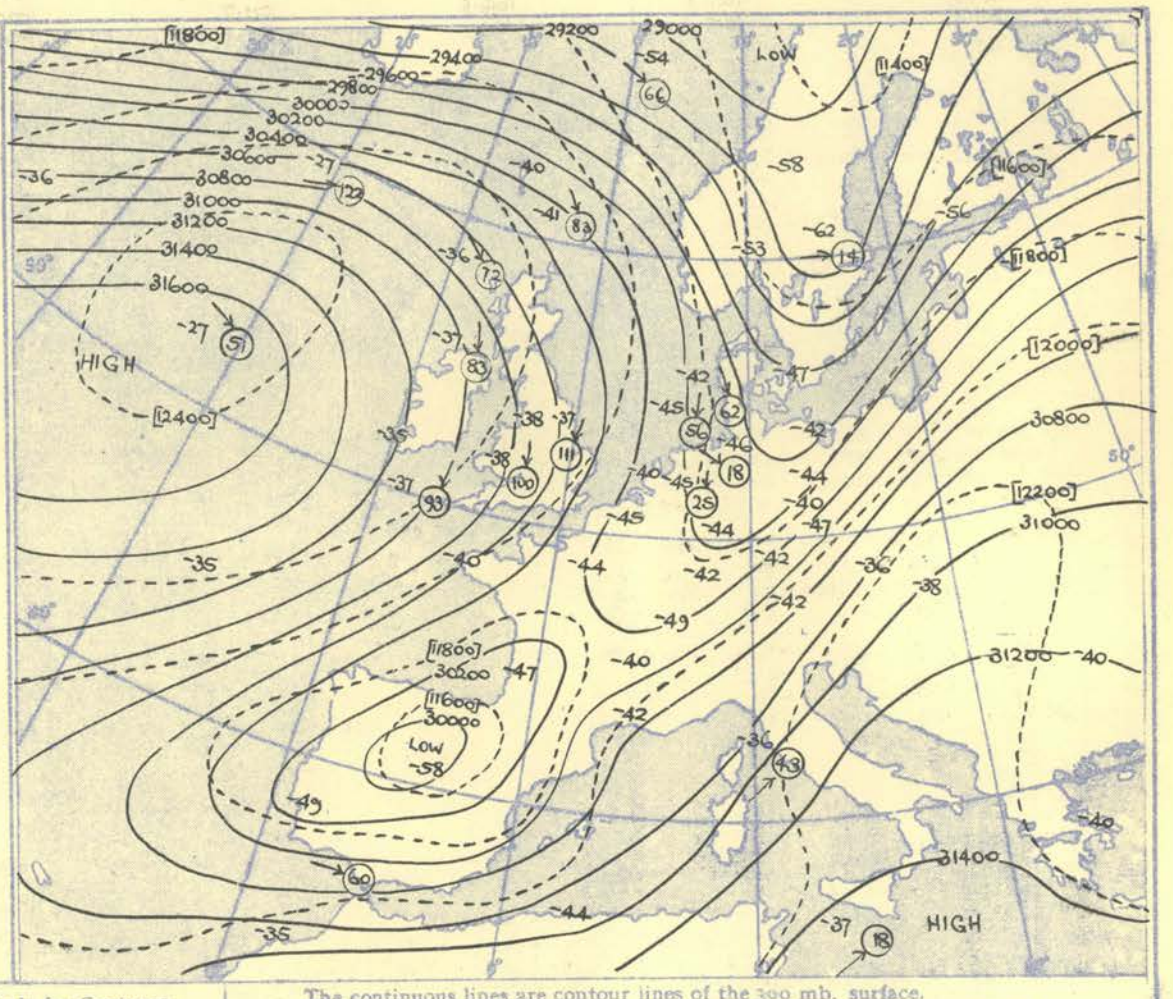
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. G.M.T.



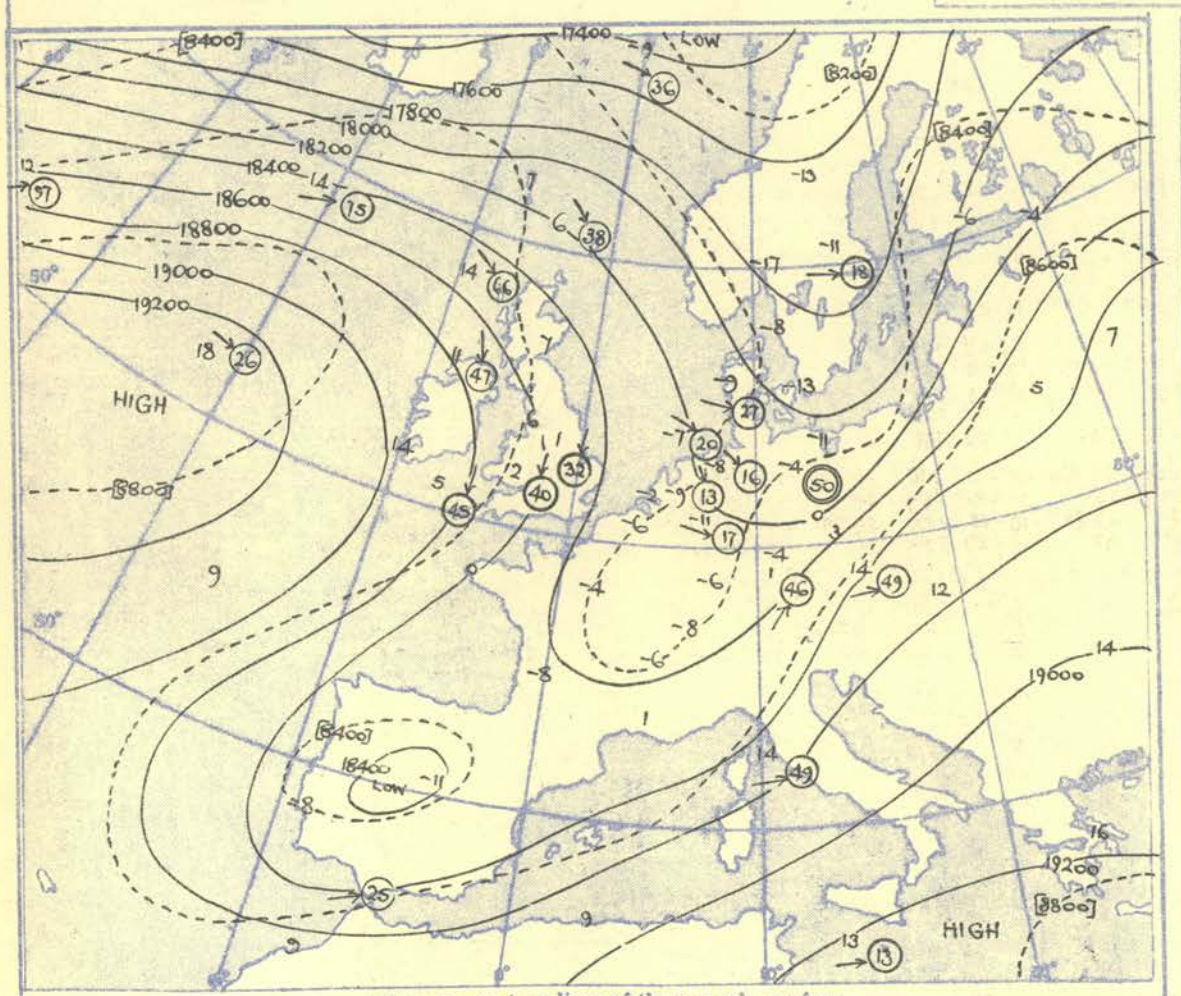
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

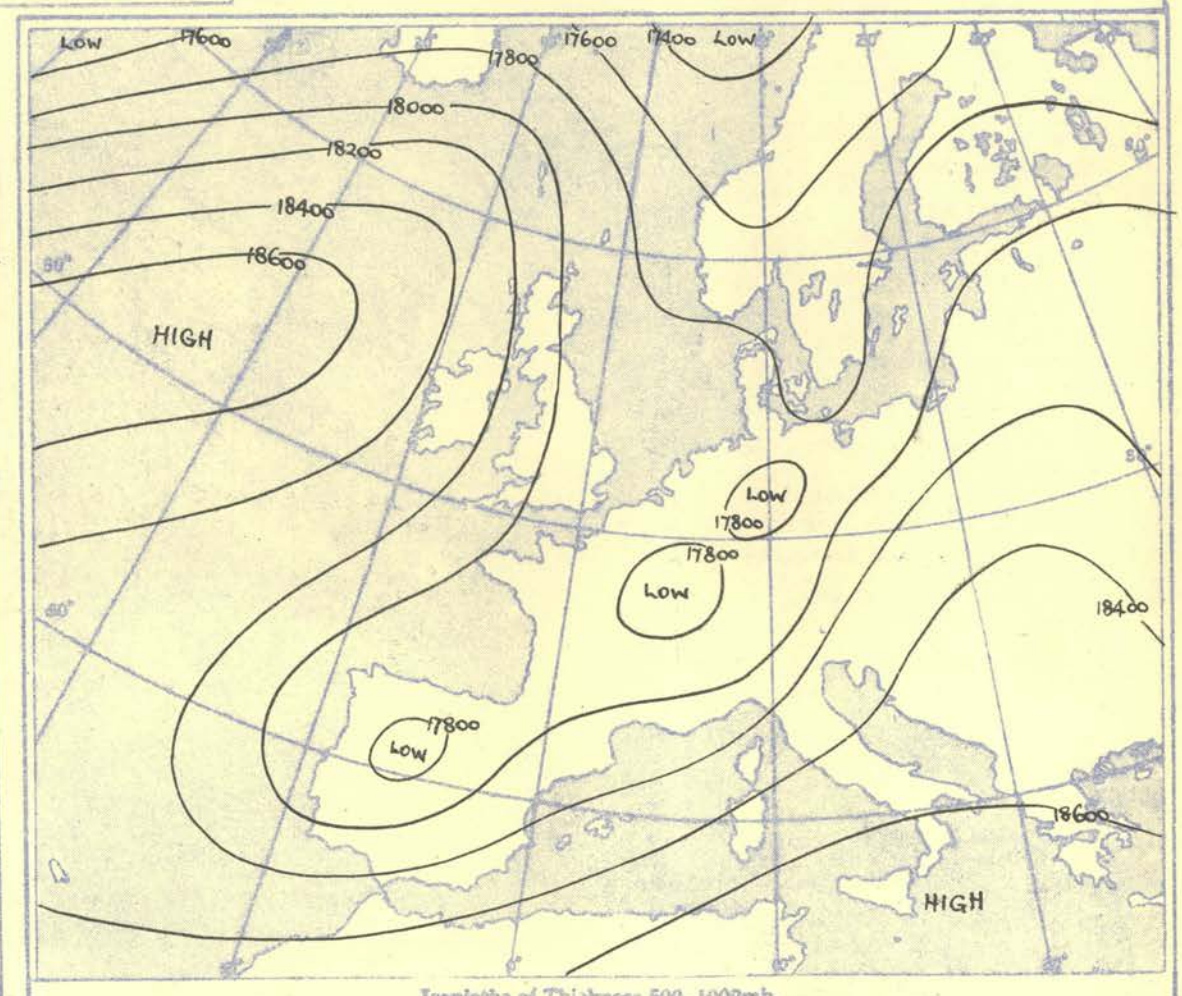
100 50 40 30 20 15 10 knots



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.

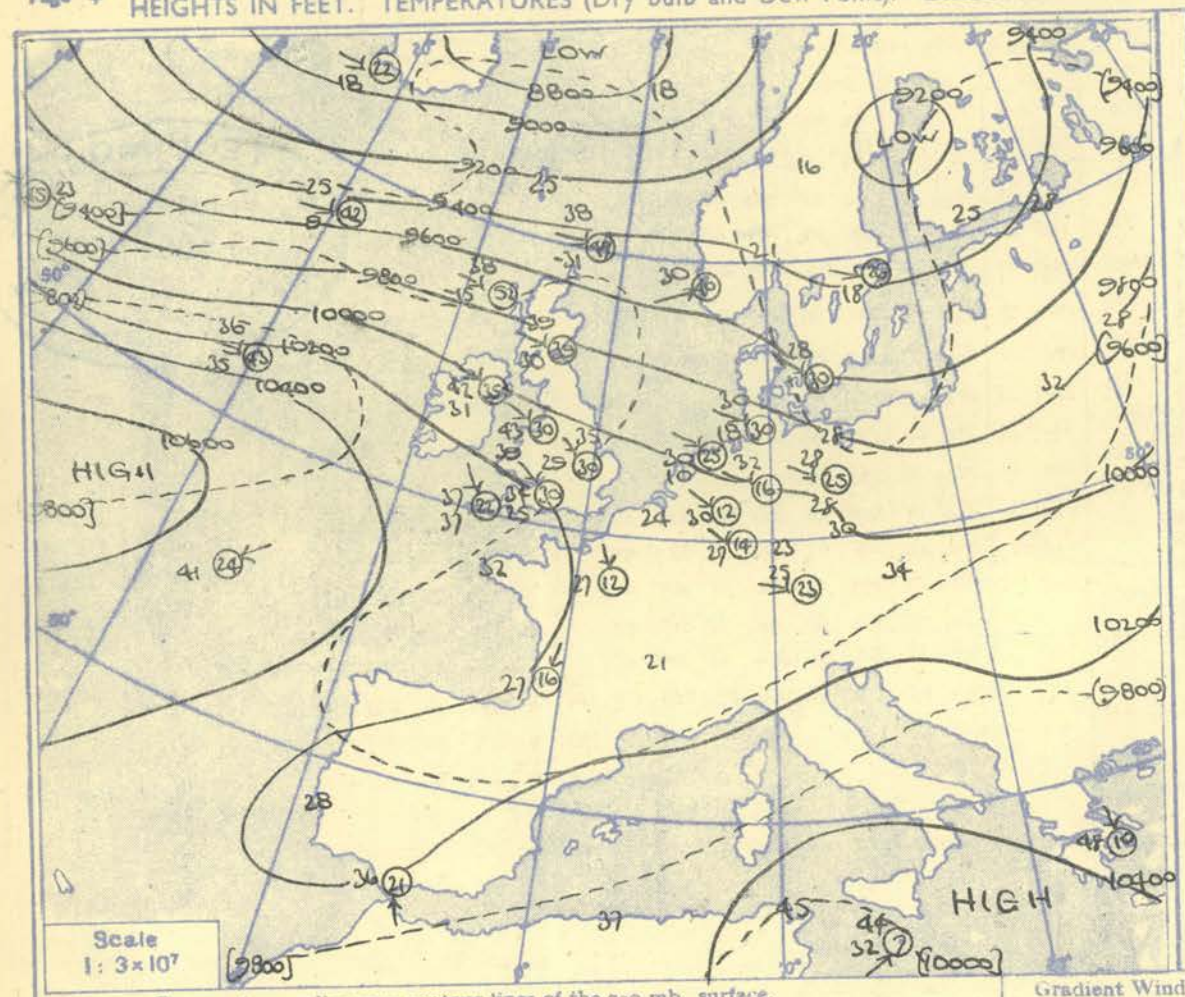
Wednesday 27th September 1950. Page 3

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

| Pressure | | |

27th September 1950.

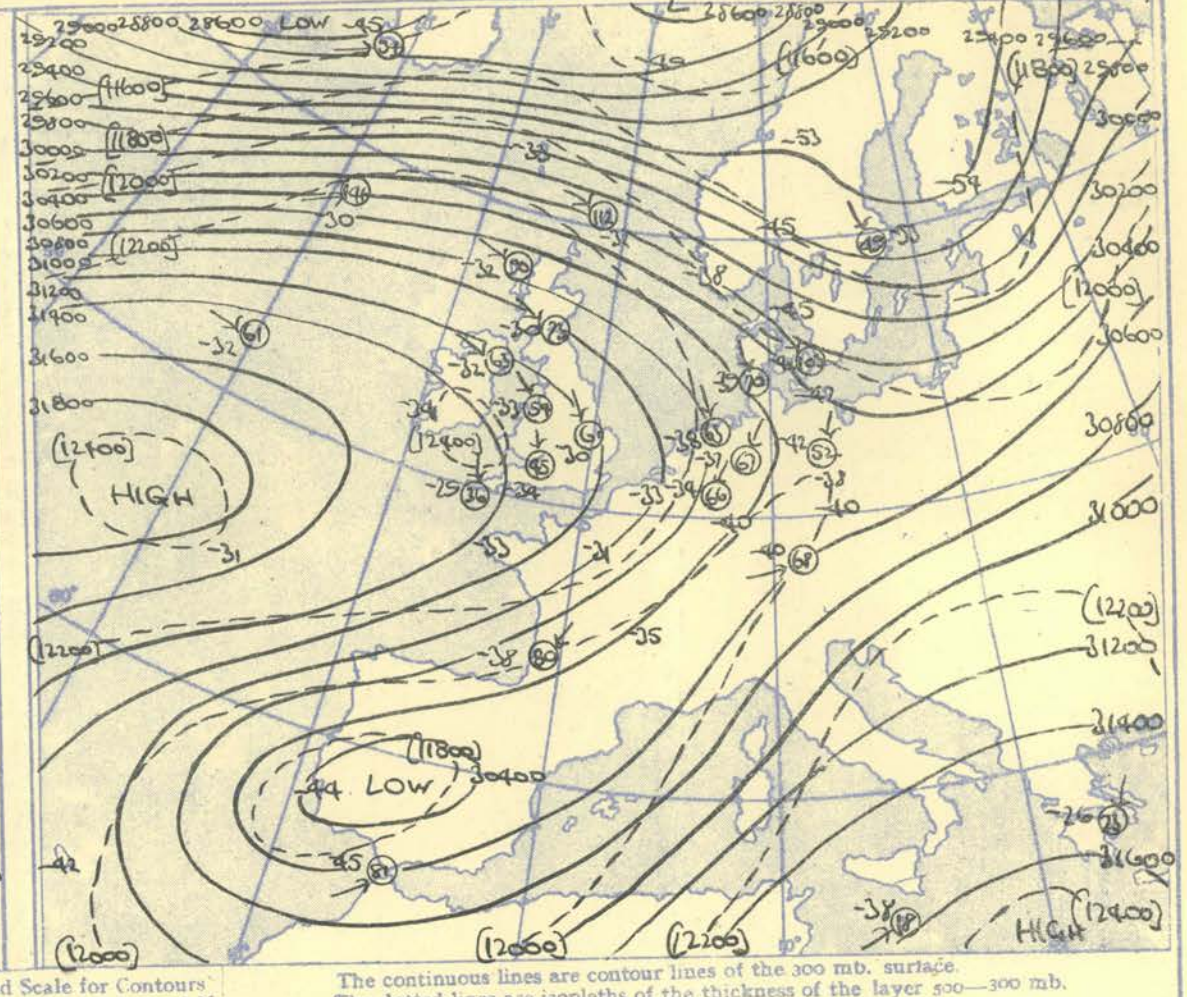
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h G.M.T.



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

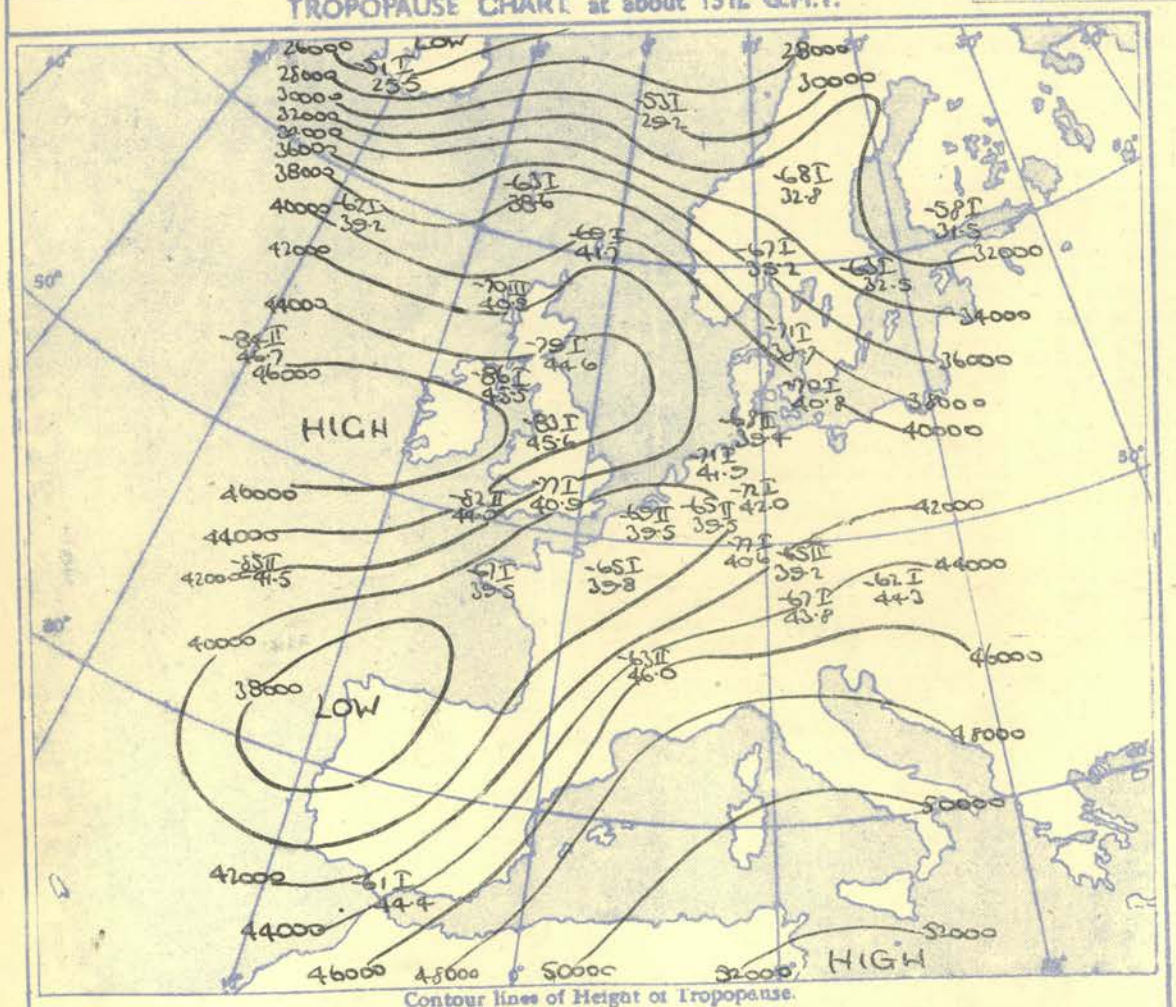
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

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 warm ridge on the Atlantic continued its eastward motion in the North, to reach the British Isles. The cold trough over Europe moved only slowly east to reach an axis from Spain to the Baltic and was warmed slightly to reduce the light thermal gradient round its perimeter. The light thermal gradient on the Atlantic moved slowly Southeastward and weakened in the extreme West.

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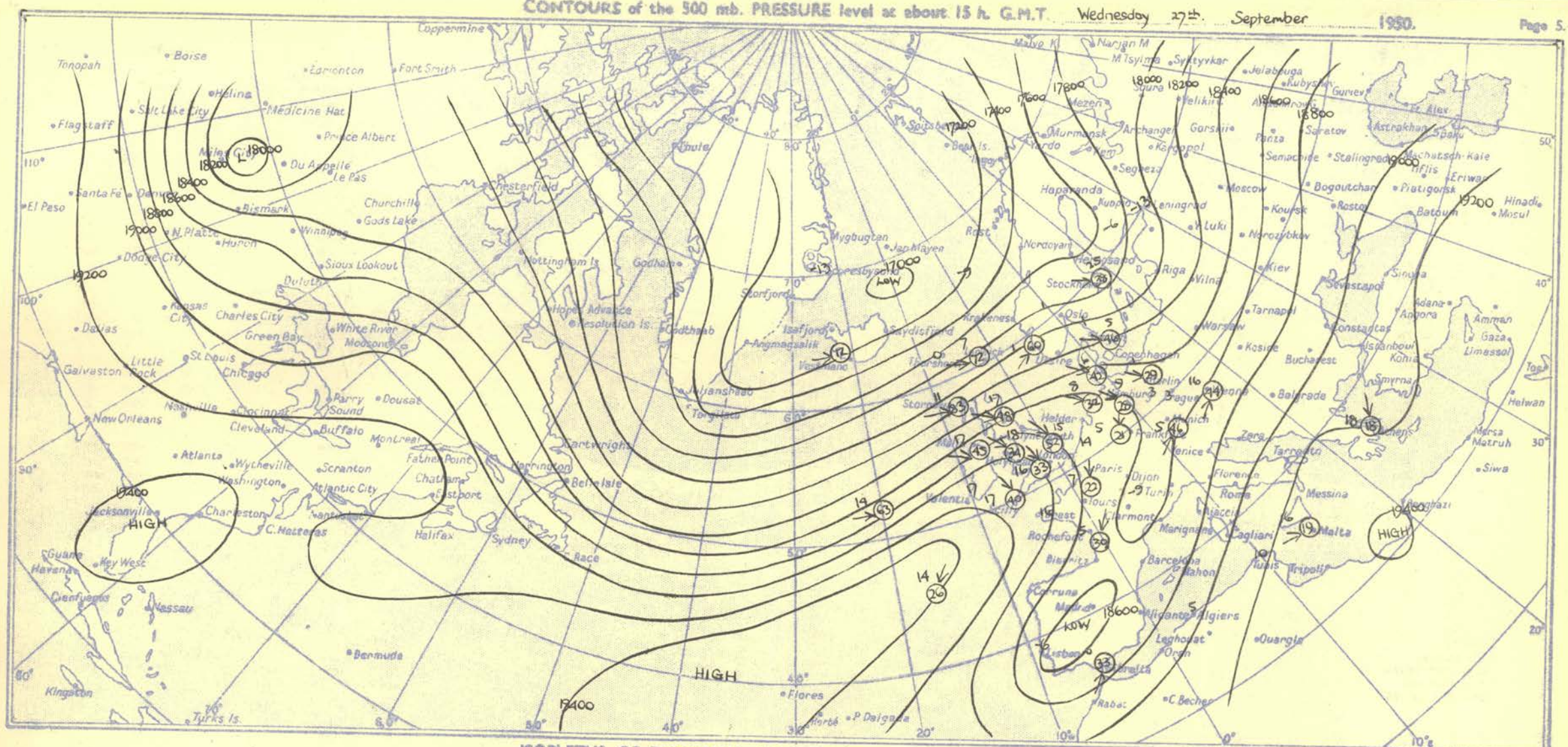
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Wednesday 27th. September 1950.


Coppermine
Tonopah
Boise
Edmonton
Fort Smith
Helena
Medicine Hat
Salt Lake City
Flagstaff
Prince Albert
Miles City
Du Appelle
Le Pas
Santa Fe
Denver
El Paso
Bismark
Churchill
Gods Lake
Winnipeg
N. Platte
Huron
Dodge City
Sioux Lookout
Duluth
Kansas City
Charles City
Dallas
White River
Moosonee
Green Bay
Galveston
Little Rock
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Dousat
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Cleveland
Buffalo
Montreal
Atlanta
Wytheville
Scranton
Washington
Atlantic City
Father Point
Chatham
Eastport
Jacksonville
Charleston
C. Hatteras
Halifax
Sydney
Cape Race
Guyana
Havana
Key West
Cienfuegos
Nassau
Bermuda
Kingston
Turks Is.
HIGH
Nottingham Is.
Godhavn
Mygbugten
Jan Mayen
Spitsbergen
Bear Is.
Storfjord
Hopes Advance
Resolution Is.
Godthaab
Isafjord
Angmagssalik
Julianshaab
Torgilaq
Vestmano
Kraknese
Saydisfjord
Thorshavn
Lerwick
Ursine
Stornoway
Valentia
Malin
Holyhead
Scilly
Brest
Rochefort
Biarritz
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Madrid
Lisbon
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C Bechar
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Archangel
Gorskii
Kem
Kargopol
Panta
Saratov
Semachine
Stalingrad
Segheza
Astrakhan
Baku
Mozdok
Tiflis
Eriwan
Batoum
Hinadi
Mosul
Hapsaranda
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Sevastopol
Sinope
Tarnapol
Warsaw
Oslo
Skagen
Copenhagen
Constantza
Adana
Angora
Amman
Gaza
Limassol
Kosice
Bucharest
Istanbul
Konia
Smyrna
Belgrade
Berlin
Hamburg
Prague
Vienna
Munich
Frankfurt
Venice
Zara
Tarranto
Florence
Rome
Messina
Ajaccio
Cagliari
Malta
Marignane
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Tours
Clermont
Paris
Helder
Ijmuiden
Roche
Valentia
Shannon
Belle Isle
Harrington
Cartwright
Resolution
Godthaab
Julianshaab
Torgilaq
Vestmano
Isafjord
Angmagssalik
Saydisfjord
Thorshavn
Lerwick
Ursine
Stornoway

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE

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

LERWICK

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	995·4 mb	985·6 mb	695

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	027	51	50	290	26
1000	013				
950		47	47	287	33
900	213	45	44	282	33
850		42	26	277	35
800	590	43	05	275	42
750		38	-25	274	45
700	944	33	-31	276	47
650		26	-36	278	54
600	135	20	-40	272	66
550		14	01	271	70
500	180	07	-2	274	72
450		00	-5	279	90
400	235	-11	-18	284	106
350		-23	-34	285	103
300	302	-32	-46	281	112
250		-51		284	108
200	390	-72			
170		-73			
150	449	-69			
130		-68			
110		-68			
100	534	-70			
90		-72			
80		-71			
70		-70			
60		-68			
(54mb)		-67			

Inversion 820 mb 39° - 800 mb 43°
Isothermal 924 - 870 mb 45°

Tropopause: I 175 mb -76° 41,700'

STORNOWAY

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1005·4 mb	1003·5 mb	660

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	005	55	49	270	18
1000	015	54	49		
950		47	42	270	21
900	300	41	37	269	24
850		37	31	275	28
800	614	44	08	277	35
750		41	-1	273	41
700	971	38	-15	268	52
650		31	21	268	70
600	137	24	20	271	75
550		17	14	276	75
500	184	11	7	277	83
450		03	-02	276	87
400	239	-7	-14	275	85
350		-19	-30	277	87
300	306	-32	-47	280	90
250		-48		282	86
200	395	-65			
170		-71			
150	455	-71			
130		-72			
110		-72			
100	539	-73			
90		-72			
80		-70			

Inversion 843 mb -37° - 820 mb -39°
820 " -39° - 800 " -44°
Isothermal 860 - 843 mb -37°

Tropopause: III 190 mb -70° 40,500'

LEUCHARS

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1007·1 mb	1005·9 mb	591

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	002	56	52	260	15
1000	018	55	51		
950		48	45	280	31
900	306	52	47	286	36
850		58	43	284	38
800	630	52	35	281	40
750		47	34	282	39
700	099	39	30	285	39
650		35	18	291	40
600	140	33	90	301	40
550		25	06	301	46
500	187	17	02	300	48
450		05	94	300	49
400	242	94	87	294	53
350		82	67	296	68
300	310	70	54	294	73
250		54		292	65
200	399	36		294	63
170		25		295	63
150	458	28		296	57
130		24		301	48
110		25		304	47
100	541	25		307	42
90		31		321	35

Inversion 925 mb 47° - 860 mb 59°
665 " 34° - 624 " 36°

Tropopause: I 160 mb -79° 44,600'

ALDERGROVE

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1012·4 mb	1004·0 mb	598

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	023	57	55	290	10
1000	034				
950		54	53	276	22
900	324	50	49	292	25
850		54	49	296	27
800	646	51	39	290	31
750		46	35	290	32
700	100	42	31	292	35
650		40	11	294	38
600	142	32	00	291	33
550		25	07	290	42
500	189	17	-03	295	45
450		06	-17	292	47
400	244	-04	-30	294	58
350		-16	-42	285	62
300	312	-32	-58	282	63
250		-48		304	69
200	401	-70		300	68
170		-80		307	67
150	460	-84		295	41
130		-76		278	44
110		-74		300	33
100	543	-73		295	28
90		-72		297	22
80		-72			

Inversion 900 mb 50° - 843 mb 54°
Isothermal 690 - 650 mb 40°
556 - 540 " 25°
Max. Wind. 304° 75Kts 220 mb 38,000ft.

Tropopause: I 153 mb - 86° 45,500'

LIVERPOOL

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1015·1 mb	1013·1 mb	598

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	006	56	49	220	12
1000	042	54	48	230	21
950		49	45	247	29
900	329	47	43	259	33
850		45	30	247	36
800	648	49	45	277	31
750		47	43	285	30
700	101	43	39	297	30
650		37	28	303	36
600	142	32	20	308	38
550		27	15	319	29
500	189	18	08	331	34
450		09	-2	316	44
400	245	-4	-16	316	45
350		-18	-38	318	47
300	312	-33	-54	320	54
250		-50		302	55
200	401	-70		323	69
170		-79		329	58
150		-82		328	33
130		-81		309	29
110		-78		307	25
100	541	-83		327	22
90		-81		323	22
80		-77		320	17
70		-71		317	16
60		-69		311	20
(46mb)		-70			
		-67			

Inversion 900 mb 47° - 850 mb 48°
855 " 44° - 816 " 50°
770 " 46° - 742 " 47°
Isothermal 915 - 900 mb 47°

Tropopause: I 152 mb - 83° 45600'

DOWNHAM MARKET

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1019·3 mb	1014·8 mb	650

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	012	55	45	215	10
1000	053	53	43	229	24
950		46	38	235	30
900	339	45	30	247	36
850		44	18	263	30
800	656	43	36	276	30
750		39	32	280	33
700	101	35	29	312	30
650		32	26	331	30
600	142	28	23	336	27
550		25	13	336	31
500	189	15	07	341	39
450		08	-7	350	43
400	249	-02	-17	351	52
350		-16	-31	351	51
300	312	-30	-47	349	61
250		-50		339	57
200				344	54

See Page 3 for remainder of winds

Inversion 927 mb 43° - 900 mb 45°
Isothermal 835 - 780 mb 43°

N.R.

LARKHILL

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1021·5 mb	1015·4 mb	636

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	044	52	46	220	10
1000	095	51	44		
950		45	38	237	22
900	344	41	29	250	28
850		46	39	270	28
800	662	45	38	282	27
750		41	34	285	24
700	102	34	28	321	30
650		33	26	339	30
600	143	29	21	353	29
550		23	13	001	27
500	189	16	07	352	33
450		07	-01	350	36
400	245	-04	-13	350	44
350		-17	-27	345	40
300	313	-34	-44	349	45
250		-54		351	51
200	400	-76		358	52
170		-79		357	44
150	459	-82		354	35
130		-86		359	23
110		-83		015	15
100	540	-78		002	10

Inversion 910 mb 40° - 835 mb 47°
Isothermal 700 - 661 mb 34°

I 191 mb - 77° 40,900'

CAMBORNE

Pressure	Time	M.S.L.	Surf	Freezing
	15h G.M.T.	1024·8 mb	1014·0 mb	620

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	029	51	49		
1000	067	49	49		
950		46	46		
900	353	46	46		
850		49	49		
800	674	45	45		
750		41	41		
700	103	37	37		
650		34	34		
600	144	30	30		
550		24	23		
500	191	17	11		
450		09	02		
400	247	-2	-13		
350		-14	-22		
300	315	-29	-39		
250		-49			
200	404	-68			
170		-81			
150		-80			
130		-83			
110		-84			
100	544	-81			
90		-77			
80		-77			
70		-76			

See Page 3 for Winds

Inversion 918 mb 44° - 875 mb 49°
Isothermal 875 - 850 mb 49°

II 162 mb - 82° 44,000'

VALENTIA

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1020·0 mb	1018 mb	595

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	003	58	58	250	09
1000	054	54	54	265	13
950		54	54	290	26
900	345	56	56	291	40
850		52	52	291	40
800	669	51	41		
750					
700					
650		38	23	305	37
600	144	33		302	39
550		25			
500	191	17		291	32
450		07		293	45
400				292	32
350		-09		292	31
300	315	-34		298	34
250		-49		319	31
200	403	-69		313	44
170		-82		314	49
150		-85		314	50
130		-80			
110		-76			
100	544	-75			
90		-75			
80	(81mb)	-76			
70					
60					

Isothermal 1000 - 950 mb 54°
850 - 812 " 52°
Inversion 950 mb 54° - 922 mb 58°

I 150 mb - 85° 46,300'

ALDERGROVE

Pressure	Time	M.S.L.	Surf	Freezing
	21h. G.M.T.	1012·3 mb	1003·8 mb	613

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	023	57	54	240	15
1000	034				
950		53	50	250	30
900	324	56	46	265	36
850		55	51	274	42
800	668	51	46	274	45
750		45	40	278	45
700	101	42	33	279	42
650		37	17	277	48
600	142	30	15	278	46
550		21	07	277	52
500	189	11	00	280	58
450		02	-13	282	51
400	244	-06	-22	275	63
350		-17	-34	275	63
300	312	-33	-56	302	53
250		-52		309	59
200	400	-72		304	60
170		-81		311	58
150		-87		306	47
130		-88		296	30
110		-84		292	40
100	539	-83		292	39
90		-78		285	29
80	(84mb)	-80			

Inversion 950 mb 53° - 890 mb 57°
856 " 54° - 840 " 56°
725 " 42° - 710 " 43°
680 " 38° - 664 " 39°

Inversion 1012·4 mb 57° - 986 mb 58°
Isothermal 915 - 850 mb 51°
468 - 455 " 05°

NR. 322 mb 29,100'

II 144 mb - 88° 46,700'

DOWNHAM MARKET

Pressure	Time	M.S.L.	Surf	Freezing
	21h. G.M.T.	1017·5 mb	1012·9 mb	600

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	012	51	49		
1000	049	50	49		
950		47	46		
900	333	46	45		
850		49	49		
800	654	50	50		
750		45	45		
700	102	41	37		
650		38	11		
600	143	32	00		
550		24	03		
500	190	12	-01		
450		02	-12		
400	245	-09	-29		
350		-21	-49		
300	312	-35			
250					
200					

See Page 3 for Winds

Inversion 885 mb 44° - 840 mb 50°
Isothermal 840 - 800 mb 50°
666 - 645 " 38°
930 - 900 " 46°

NR. 280 mb 32,600'

LARKHILL

Pressure	Time	M.S.L.	Surf	Freezing
	21h. G.M.T.	1020·5 mb	1004·3 mb	620

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	044	51	49	240	12
1000	096	51	49		
950		47	45	252	28
900	342	47	45	271	35
850		51	48	278	30
800	664	49	47	300	24
750		44	41	310	21
700	103	38	34	310	21
650		33	28	320	21
600	143	31	18	335	26
550		24	10	334	27
500	190	17	-04	334	25
450		09	-23	335	26
400	246	-04	-40	335	26
350		-20	-52	329	31
300	313	-36	-60	330	45
250		-50		344	44
200	401	-71		341	45
170		-80		341	37
150		-85		328	28
130		-85		324	23
110		-84		329	18
100	541	-83		340	16
90		-82		345	16
80		-80		342	15
70		-79			

Inversion 935 mb 46° - 873 mb 51°
Isothermal 873 - 817 mb 51°

II 155 mb - 84° 45,300'

CAMBORNE

Pressure	Time	M.S.L.	Surf	Freezing
	21h. G.M.T.	1022 mb	1011·3 mb	612

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	029	55	55	230	12
1000	060	54	54		
950		51	51	256	32
900	350	55	55	290	31
850		53	53	305	29
800	674	47	47	302	20
750		46	46	317	29
700	104	39	39	328	29
650		35	32	332	25
600	144	31	25	346	27
550		24	15	354	21
500	194	19	07	352	20
450		06	00	344	22
400	247	-07	-14	337	21
350		-19	-29	333	20
300	314	-35	-43	337	29
250		-52		350	29
200	402	-72		344	39
170		-83		358	34
150	460	-88		349	26
130		-82		342	20
110		-81		335	15
100	(106mb)	-78			

Inversion 937 mb 51° - 895 mb 56°
778 " 43° - 767 " 48°
Isothermal 950 - 937 mb 51°

I 153 mb - 89° 49,500'

Station	Tropopause
LERWICK	I 185 mb -70° 40500'
STORNOWAY	N.R 325 mb 28,200'
LEUCHARS	
ALDERGROVE	NR. 322 mb 29,100'
LIVERPOOL	II 144 mb - 88° 46,700'
DOWNHAM MARKET	NR. 280 mb 32,600'
LARKHILL	II 155 mb - 84° 45300'
CAMBORNE	I 153 mb - 89° 49,500'
VALENTIA	

No. 1505

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Thursday 28th September 1950.

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

METEOROLOGICAL OFFICE 6 - OCT 1950 630

03h G.M.T.

Station	Pressure	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE
	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.
	M.S.L.	993·0 mb	998·3 mb	1001·0 mb	1009·5 mb	1012·5 mb	1015·6 mb	1018·1 mb	1020·8 mb
	Surf	983·2 mb	996·4 mb	1000·2 mb	1000·9 mb	1010·5 mb	1011·1 mb	1002·2 mb	1010·3 mb
	Freezing	828 mb	794 mb	648 mb	632 mb	624 mb	605 mb	624 mb	610 mb

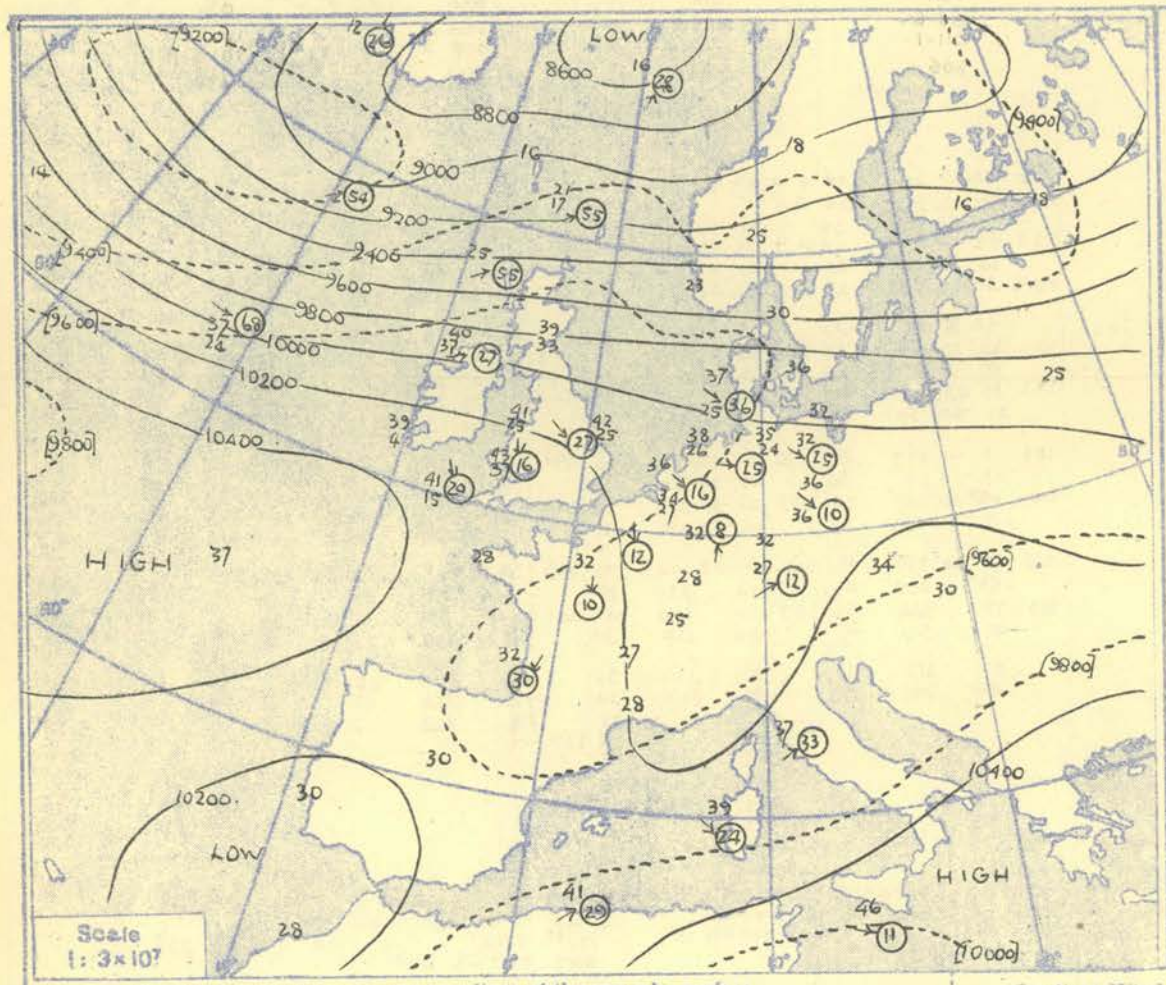
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	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	49	46	257	27	00·5	53	51	240	16	00·2	58	55			02·3	57	57	260	15	00·6	57	55			01·2	53	52	200	08	4·4	55	54	240	18	02·9	57	56	250	10	00·3	58	57			Surf
1000	-01·9					0·5										02·6					03·5	58	57			04·3	52	50	237	26	5·0					05·7	56	55	257	24	4·9	57	56			1000
950																						50	46	254	26										59	58	283	22			58	57			950
900	26·6	46	40	259	38		49	47	274	27		54	51			31·6	54	51	267	34	33·1	52	48	278	25	33·9	53	52	290	25	35·0	56	56	312	24	34·2	56	54			900
850		38	33	261	36	28·2	44	41	274	39	29·4	49	48				50	47	268	49		56	43	290	22		53	47	301	18		61	51	325	24		50	49			850
800	57·7	34	31	265	36		40	35	271	40		50	46			63·9	53	51	268	49	65·5	50	42	295	23	66·2	51	44	312	17	67·3	47	44	320	23	66·4	45	43			800
750		25	24	260	45		25	21	261	51		43	36				47	46	266	44							44	36	293	25								42	19			750
700	92·3	21	17	253	55	94·5	25	11	261	55	97·0	39	33				43	43	264	57		46	32			10·1	42	25	291	27	10·2	43	37	310	16	10·3	41	15	307	20	10·2	39	04	700
650		13	09	257	63		20	-13	263	65		33	26			10·0	40	37	264	59	10·1	41	25				39	11	295	25		35	24	310	18		37	03	307	16		35	06	650
600	131	07	02	247	69	134	19	-41	266	78	138	23	21				34	31	263	60		36	20			142	31	03	299	30	143	29	09	309	21	144	30	-05	309	15	143	28	-11	600
550		00	-06	250	75		11	-47	268	89		17	10			14·1	28	20	264	66	14·2	29	10				21	-01				22	-24	308	16		22	-13			550
500	176	-03	-28	259	95	180	02	-54	267	97	184	09	-02				19	11	264	66		21	-01																			500
450		-11	-46	260	114		-07	-50	254	105		00	-09			18·7	10	-06	266	66	18·9	11	-05			18·9	11	-11	299	28	19·0	13	-31	303	19	19·0	12	-21			450
400	229	-23	-56	259	127	234	-15	-54	252	120	239	-09	-18				02	-11	264	75		01	-12				03	-28	291	34		03	-46	295	19		05	-33			400
350		-36	-59	256	135		-25	-39	256	137		-24	-33			24·2	-08	-23	265	80	24·4	-08	-27			24·4	-07	-40	289	35	24·6	-08	-50	292	28	24·1	-04	-41			350
300	295	-40	-60	255	145	300	-39	-50	256	138	306	-39	-52				-19	-30	263	81		-17	-39				-17	-51	293	36		-21	-52	294	28		-15	-50			300
250		-53		255	142		-62					-55				31·0	-34	-43	264	91	31·1	-34	-55			31·2	-33	-60	297	45	31·2	-35	-58	302	31	31·3	-34	-57	317	32	31·3	-31	-59	250
200																	-50		266	98							-53		302	49		-54		322	39		-51		318	32		+52		200
170	383	-51		262	100	388	-62				393	-72				39·8	-70		270	105	39·9	-73				39·9	-73		304	51	39·9	-73		322	41	40·1	-71		325	37	40·1	-70		170
		-58					60					-80					-75		277	90							-81		310	49		-84		322	39		-82		322	27	(188	-75		
150																																											150
130		60					-58					-84					-79		276	89		-86					-85		312	48		-89		322	35		-88		323	28	mb)			130
110		62					-59					-80					-69		261	56		-84										-93		322	34		-92		330	27				110
100	532	59					-61					-66					-69		264	33												-87		311	21		-88		324	17				100
90		63				536	-62				535	-64				41·0	-72		252	30		-84									537	-88		295	14									90
80		63					-63					-70					-74					-83										-87		288	12									80
70	075	63					-61					-74					-72					-78										-84		281	10									70
60	mb)											-77					-69					-77										-83		281	09									60
												-75										-75									(065	-82											
												-76									(63 mb)									mb)												
		Isothermal 538-506 mb -2° 346-313 .. -37°		Inversion 750 mb 25°-713 mb 27° 616 .. 18°-591 .. 19°		Inversion 897 mb 49°-867 mb 51°		Inversion 833 mb 50°-850 mb 53° Isothermal 967-950 mb 55° 468-447 .. 02°		Inversion 1011 mb 57°-972 mb 59° 943 .. 56°-920 .. 60°		Inversion 943 mb 50°-922 mb 54° 900 .. 52°-850 .. 56° Isothermal 710-690 mb 42°		Inversion 932 mb 51°-912 mb 53° Isothermal 912-814 mb 53°		Inversion 989 mb 55°-964 mb 60 725 .. 40°-697 .. 42° Isothermal 807-782 mb 47°		Inversion 977 mb 52°-955 mb 59° Isothermal 776-733 mb 42°	
Tropopause	I 239 mb -56° 34,500'		I 208 mb -65° 37,800'		I 148 mb -85° 45,300'		II 183 mb -74° 41,500'		II 175 mb -84° 42,600'		I 240 mb -87° 47,000'		I 128 mb -84° 48,800'		I 134 mb -94° 47,600'		N.R.		Tropopause

09h G.M.T.

Station	Pressure	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE
	Time	09h G.M.T.	09h G.M.T.	G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.
	M.S.L.	990·3 mb	998·4 mb	mb	1010·3 mb	1010·2 mb	1013·4 mb	1016·9 mb	1019·5 mb
	Surf	980·5 mb	996·5 mb	mb	1001·7 mb	1008·2 mb	1009·0 mb	1001·1 mb	1009·0 mb
	Freezing	850 mb	840 mb	mb	698 mb	655 mb	614 mb	611 mb	621 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	49	42	280	25	00·5	50	44								02·3	55	51	270	20	00·6	64	58	260	15	01·2	68	57	220	05	04·4	56	56	240	06	02·9	58	58	270	10						Surf
1000	-02·7					0·4										02·8					02·9	63	57			03·7	58	57			04·7					05·4	57	57	266	21						1000
950		46	39	263	30		45	39									49	46	272	53		59	54	264	38		60	56	266	31		58	57	270	19		59	59	274	22						950
900	25·8	39	34	259	31	28·1	39	32			31·4	-2	39	271	42	31·4	35	23	271	42	32·2	53	49	268	48	33·1	60	51	278	33	33·9	56	53	281	24	34·7	56	56	277	24						900
850		32	27	261	33		33	26				35	23	273	52							50	46	273	52		53	47	282	39		52	48	283	30		52	52	278	24						850
800	56·8	26	21	261	46	59·2	27	20			62·9	42	30	269	47	64·4	48	44	274	53	65·6	48	42	277	35	10·2	47	42	280	36	10·2	47	42	280	36	67·0	48	48	270	24						800
750		20	09	260	51		22	12				38	-14	262	41		43	37	272	52		46	32	273	34		49	31	281	30		43	43	277	30											750
700	91·0	15	00	256	51	98·5	16	08			98·3	32	-18	263	67	10·0	38	31	270	51	10·2	44	20	271	36	14·3	45	05	278	25	14·3	44	20	293	27											700
650		09	-10	255	52							28	-15	259	82		31	26	267	53		37	15	271	40		36	-01	279	27		36	15	287	29											650
600	129	01	-29	256	56	132	08	-17			139	22	14	260	87	14·1	28	01	268	65	14·3	31	02	274	41	143	30	-04	279	29	144	29	05	279	30											600
550		-04	-33	257	64							16	05	262	87		21	-04	267	63		22	-06	273	41		22	-11	281	31		23	-08	272	25											550
500	174	-18	-46	260	70	177	-07	-23			185	08	-01	261	90	18·8	12	-15	263	63	19·0	13	-12	271	38	190	14	-19	279	31	190	14	-19	279	31	191	13	-11	272	25						500
450		-21	-43	258	90							-02	-11	268	96		02	-20	262	65		04	-16	274	43		06	-27	272	30							06	-25	270	30						450
400	226	-27	-46	266	107	230	-26	-47			239	-14	-22	256	104	24·3	-07	-28	266	69	24·5	-08	-28	281	42	245	-07	-37	281	35	245	-07	-37	281	35	246	-04	-33	277	30						400
350		-37	-60	255	104		-27	-57				-23	-37	260	90		-17	-39	269	74		-20	-41	278	55		-14	-44	281	36							-12	-42	283	80						350
300	291	-43		257	107	295	-44				306	-39	-56	266	109	31·0	-32	-53	263	78	31·2	-32	-51	282	54	313	-32	-59	288	41	313	-30	-54	286	31	314	-30										300
250		-45		259	96		-49					-56					-50		279	87		-50		285	61		-50		290	47	(270	-42											250
200	219	-45				381	-46				394	-69				35·8	-67				400	-68		289	63	402	-69		296	51	mb)												200
170	mb)						-48					-70					-76					-75		284	55		-78		292	+3													170
150							+54																																				150
130							-60					-70					-81					-80		283	47		-82		295	39													130
110							-65					-60					-87					-81		277	39		-84		287	32													110
100												-60					-69					-78		270	29		-77		265	30													100
90						533	-64				539	-69				40·1	-61				542	-78		261	22	542	-71																	90
80							-59										-64					-78		264	20																	80
70																	-72					-78		249	18																	70
60																	-63					-78		245	15																	60
																	-62					-78		256	13																	
																	-61				(59 mb)	-78																					
		Inversion 429 mb 26°-414 mb 24°		Inversion 665 mb 10°-650 mb 11°				Inversion 850 mb 35°-836 mb 42° Isothermal 836-797 mb 42°		Inversion 612 mb 27°-600 mb 28° Isothermal 850-820 mb 50°		Inversion 983 mb 57°-938 mb 62° 742 .. 46°-729 .. 48° 505 .. 12°-500 .. 13° Isothermal 938-910 mb 62° 774-742 mb 46°		Inversion 977 mb 52°-960 mb 58° 776 .. 44°-755 .. 49° 397 .. 8°-375 .. 7° Isothermal 960-930 mb 58°		Inversion 1000 mb 57°-975 mb 60° 718 .. 38°-700 .. 44°											
Tropopause	I 310 mb -42° 28,400'		II 315 mb -44° 28,200'				I 177 mb -75° 41,900'		I 130 mb -87° 48,700'		I 145 mb -82° 42,800'		III 180 mb -77° 42,300'		N.R.																						Tropopause

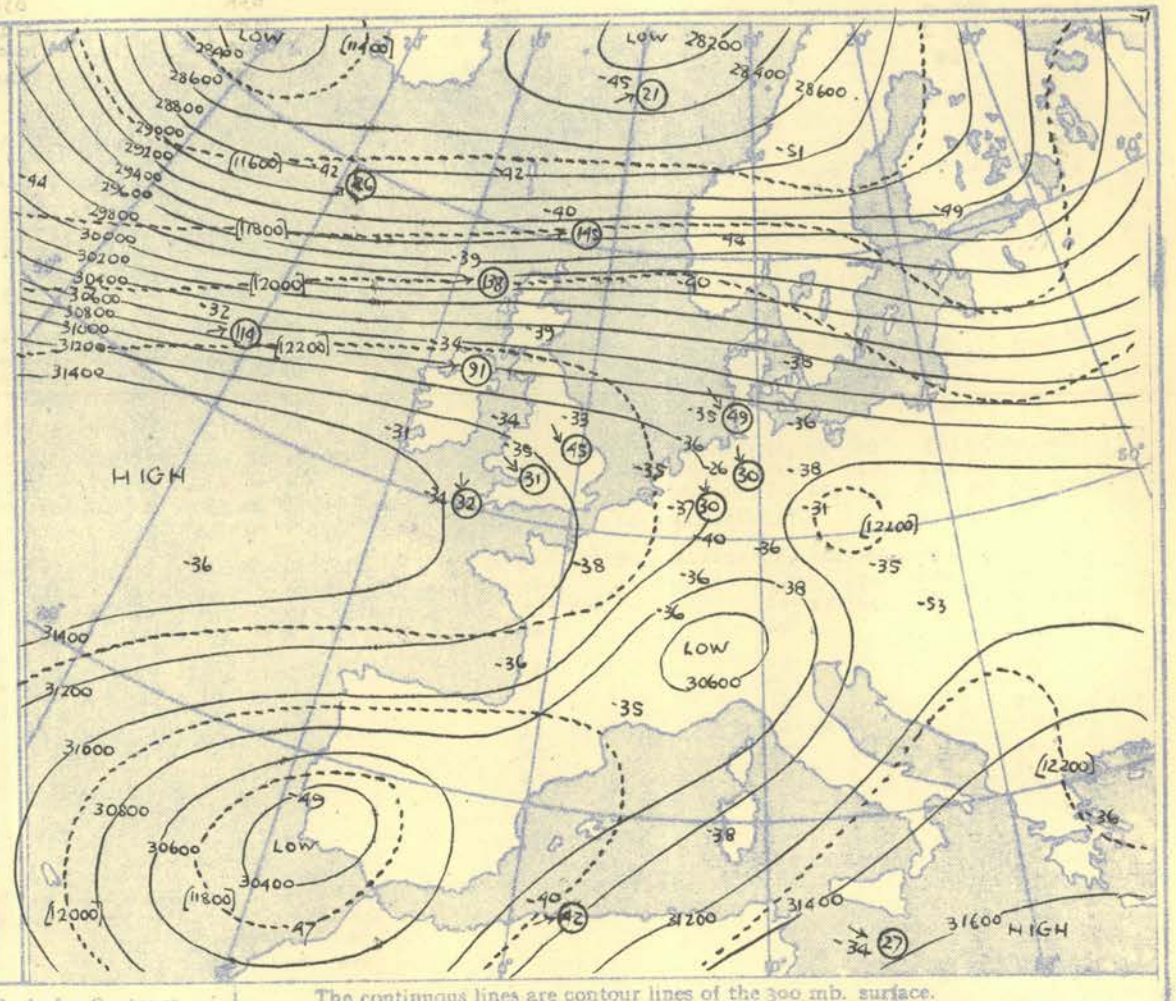
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. G.M.T.



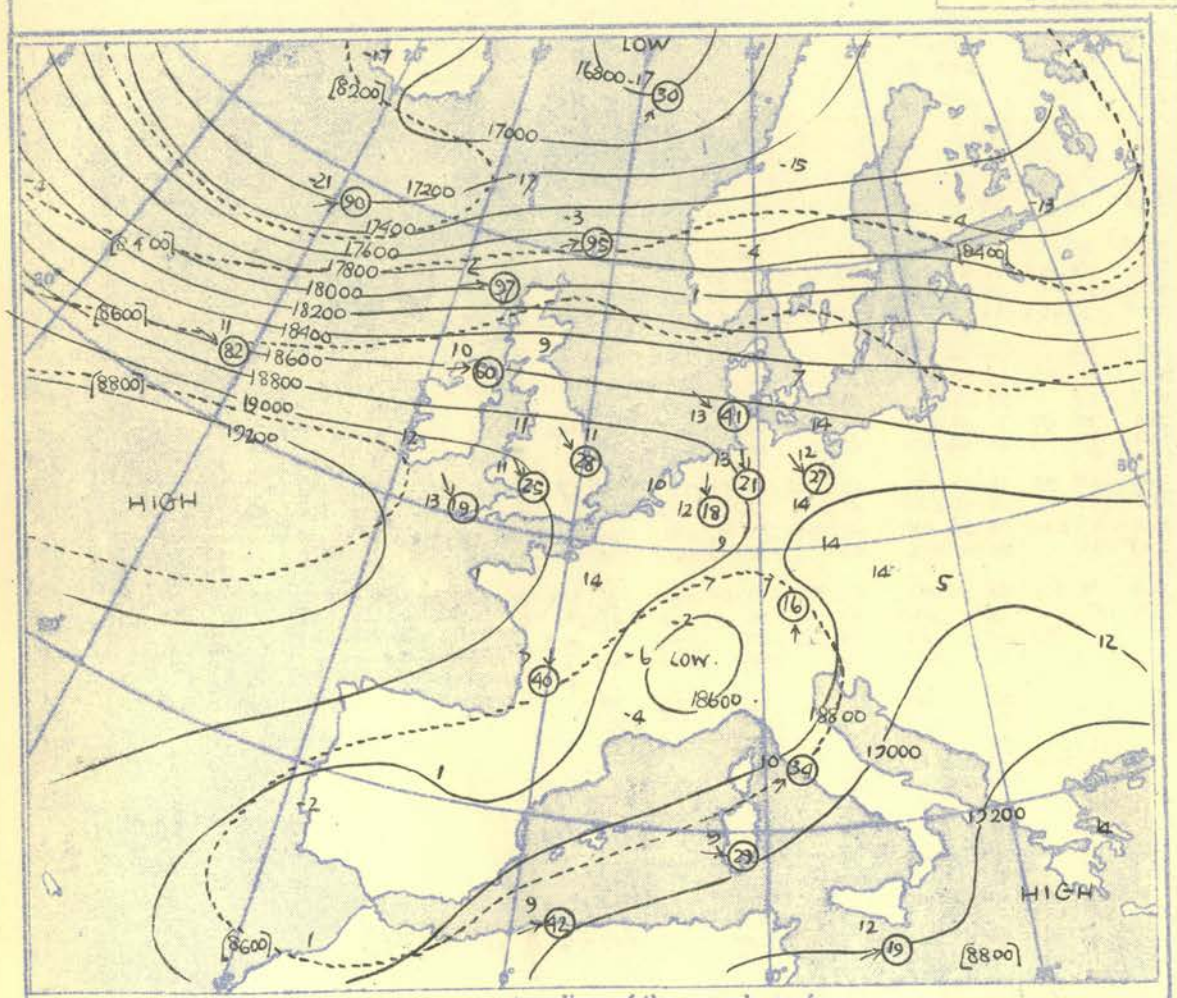
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

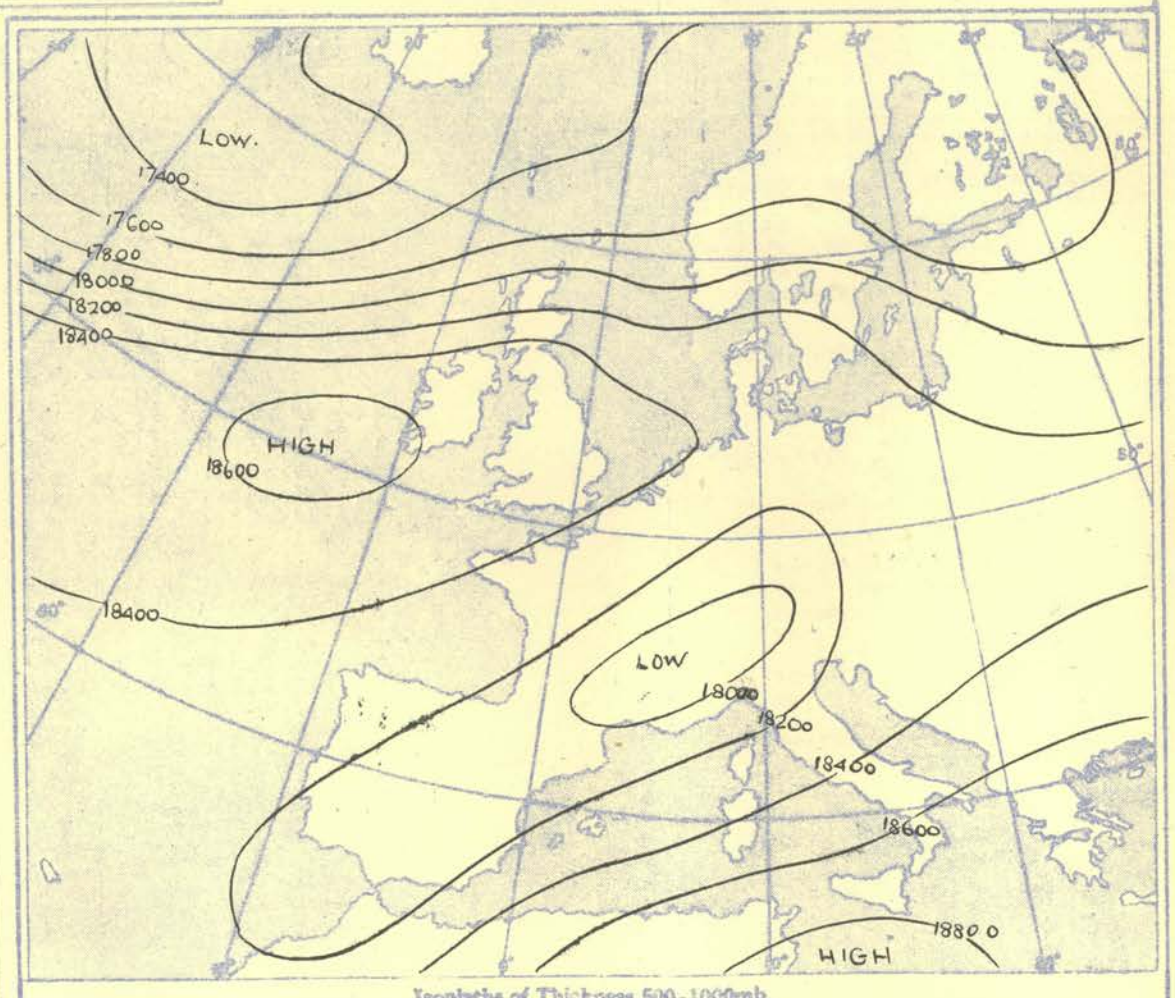
100 60 40 30 20 15 10 knots



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—300 mb.



Isopleths of Thickness 500-1000mb.

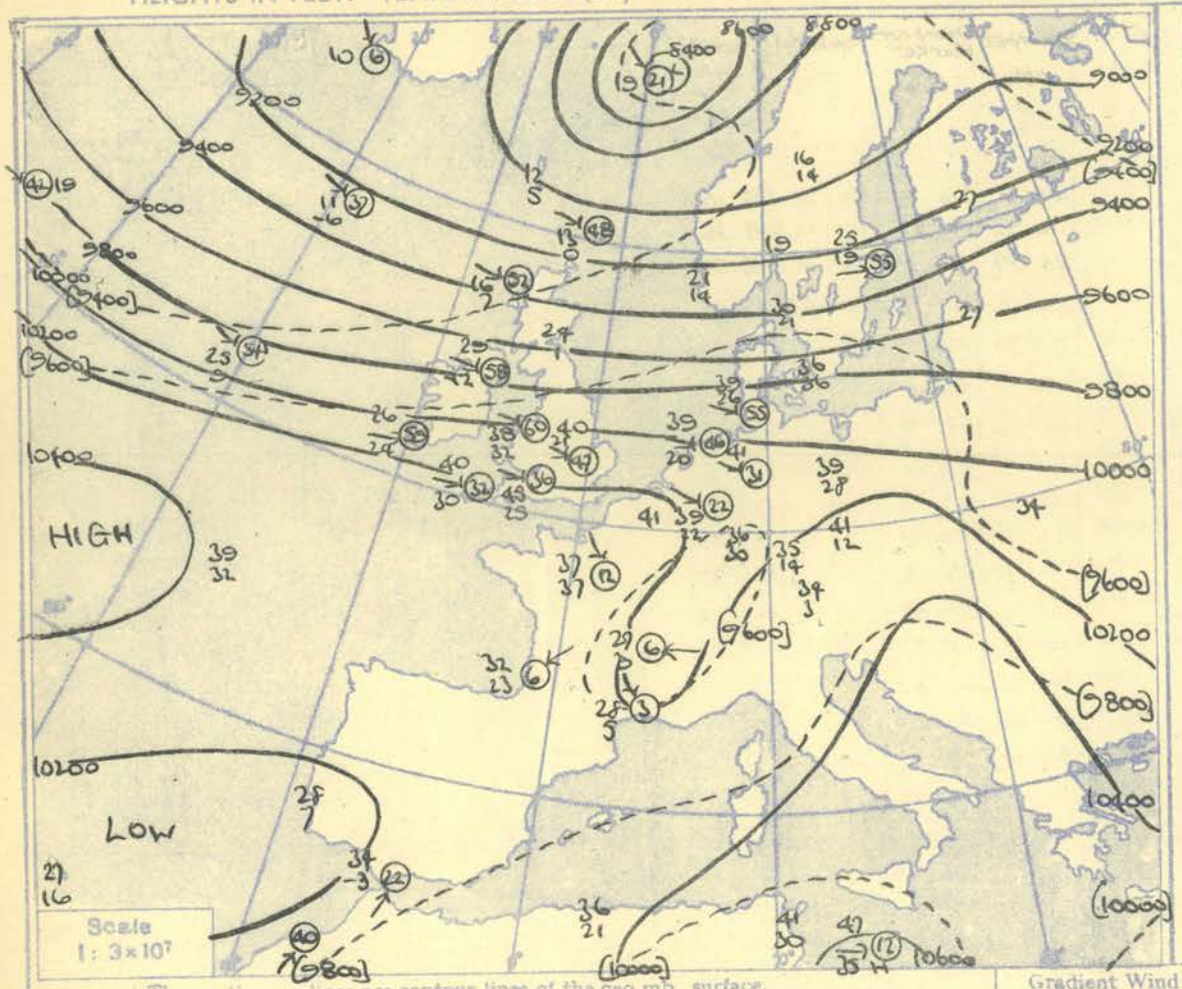
Thursday 28th September. 1950. Page 3

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

51·3 N 00·4 E

| Pressure | | |

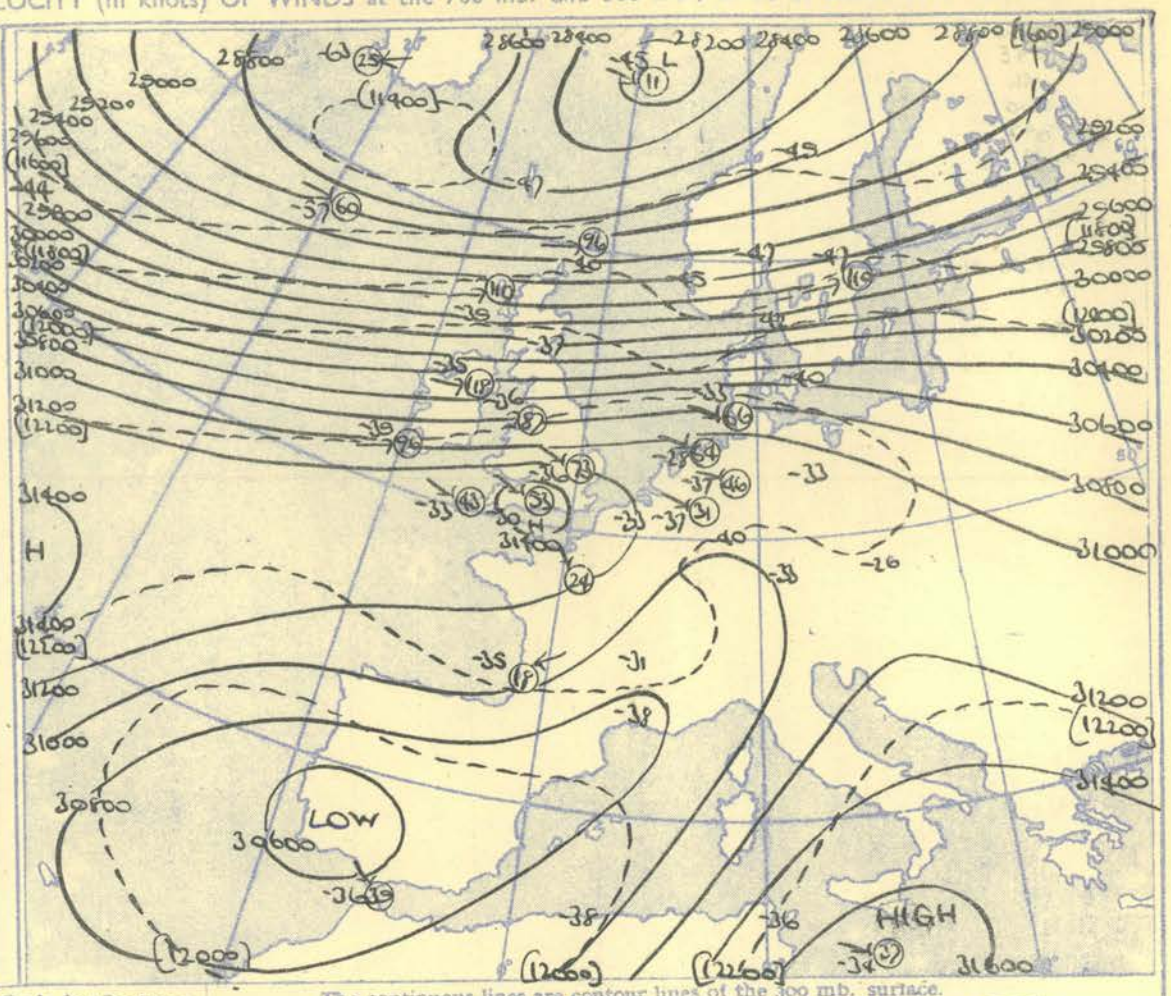
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15h G.M.T.



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

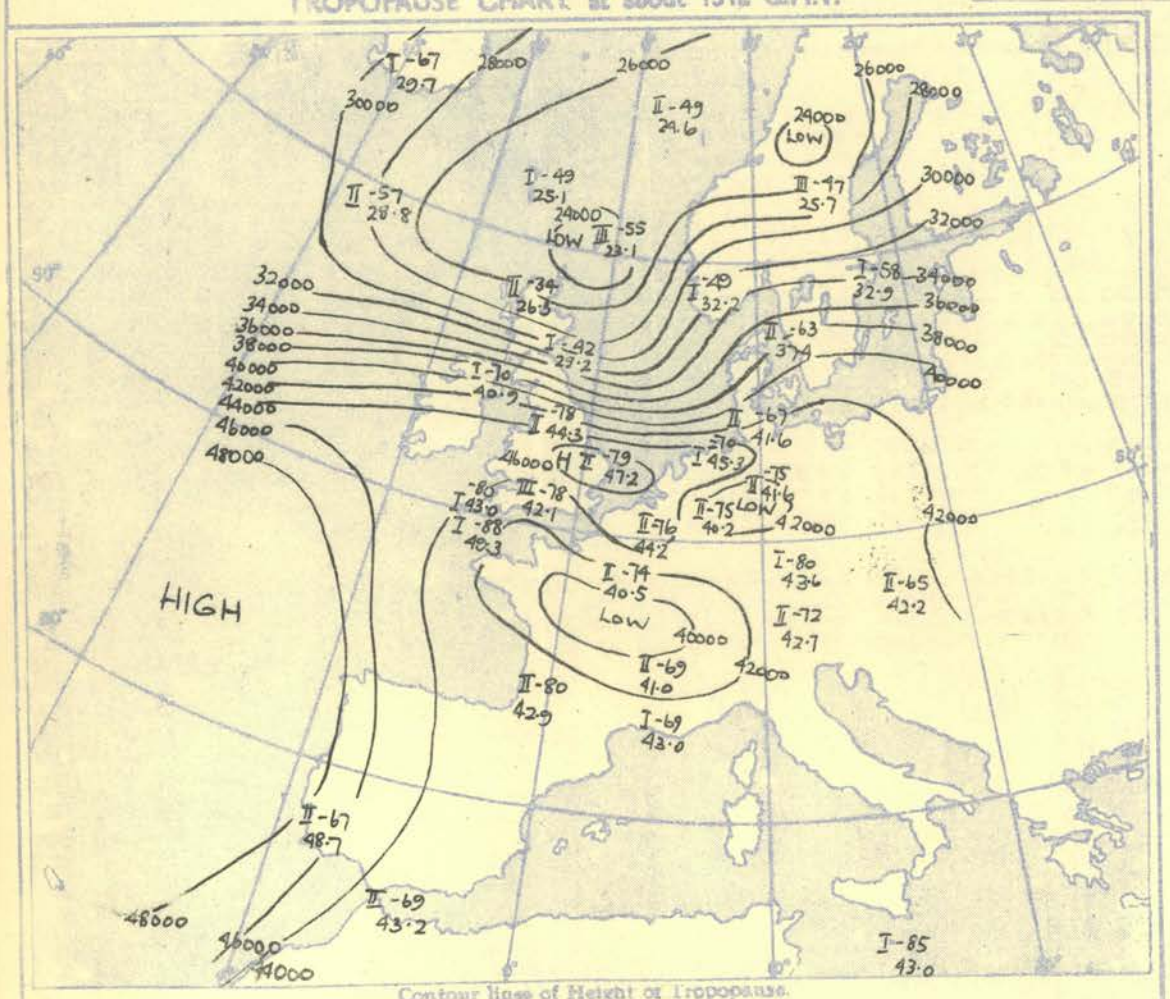
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½°N.

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.

The cut. off cold pool over South France and Spain was formed by rapid advancement eastward of the warm air across North Germany. The very strong westerly thermal gradient in the Atlantic moved steadily south and extended across the British Isles to Southern Scandinavia

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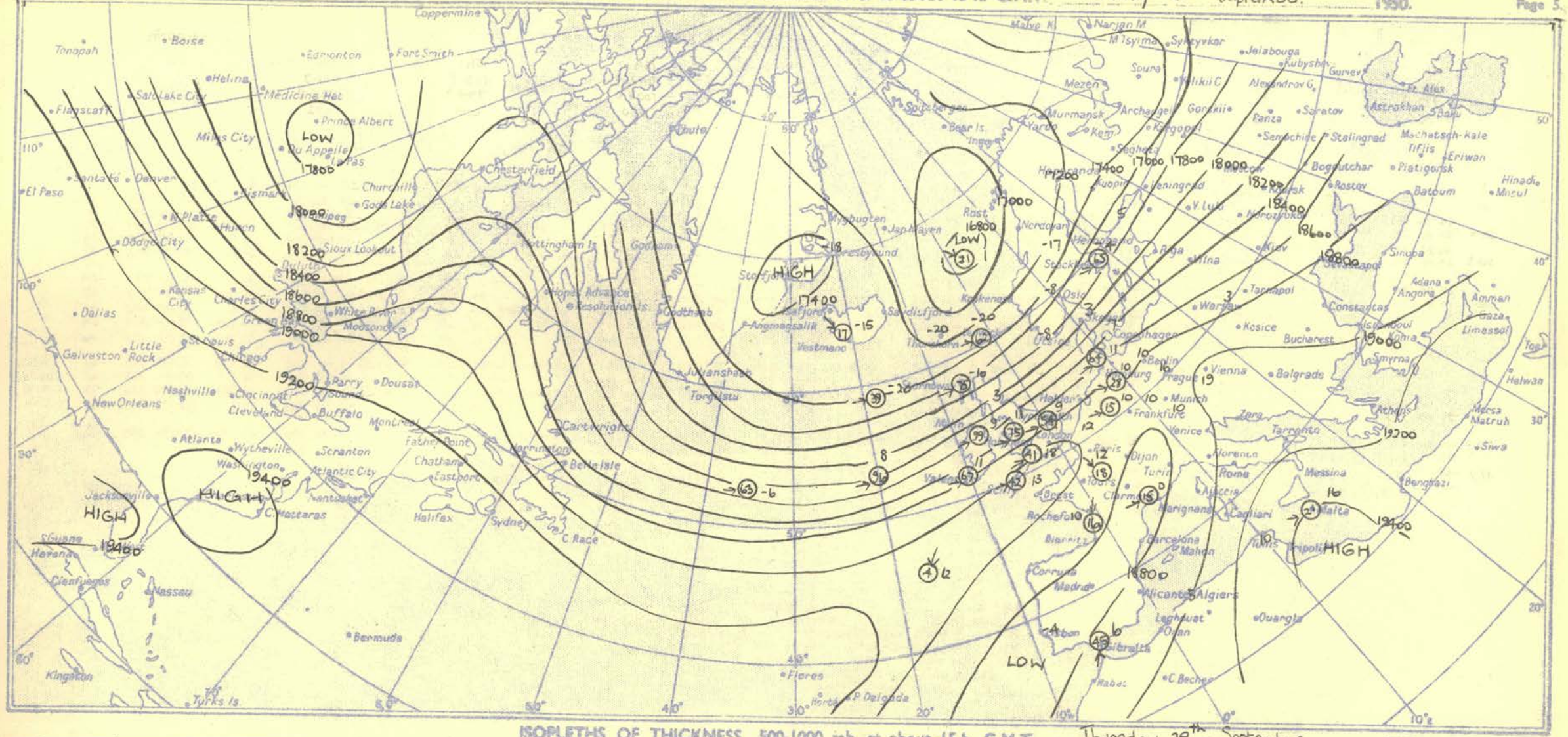
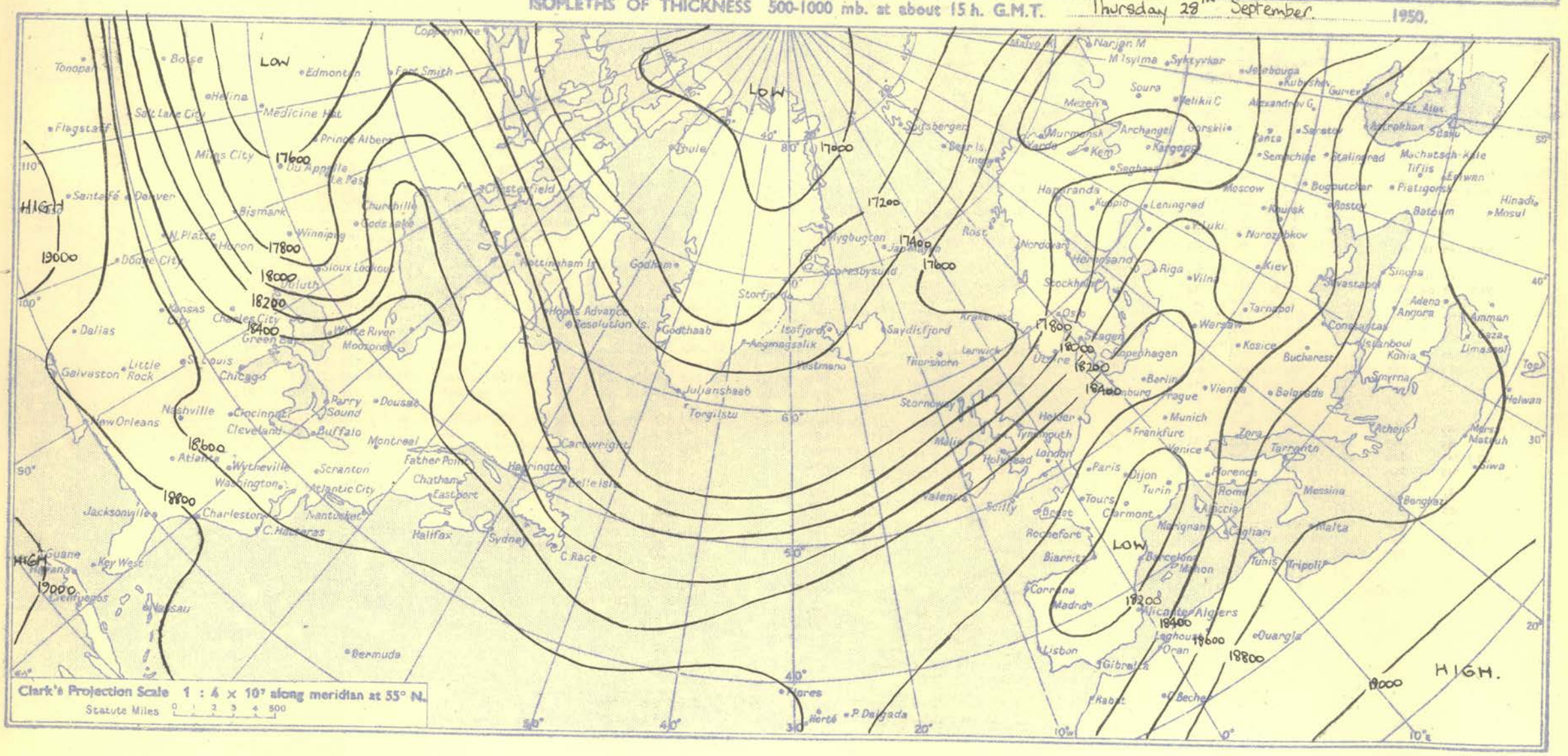
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Thursday 28th September. 1950.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Thursday 28th September. 1950.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE

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.	15h.	15h.	15h.	15h.	15h	15h.	15h	15h.
M.S.L.	989·4 mb	999·5 mb	1003·7 mb	1010·2 mb	1011·4 mb	1012·4 mb	1015·3 mb	1019·7 mb	mb
Surf	979·5 mb	997·6 mb	1002·6 mb	1001·7 mb	1009·4 mb	1008·0 mb	999·7 mb	1008·2 mb	mb
Freezing	865 mb	852 mb	826 mb	730 mb	650 mb	630 mb	603 mb	632 mb	1014 mb / 670 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Lerwick					
Surf	02·7	48	39	280	34
1000	03·0				
950		44	36	264	39
900	25·4	37	30	271	42
850		30	23	275	44
800	56·3	23	15	272	48
750		18	03	267	48
700	90·3	13	00	266	48
650		06	+10	267	49
600	12·9	−02	−14	267	48
550		−11	−22	263	52
500	17·2	−20	−34	260	62
450		−27	−43	260	70
400	22·4	−34	−53	260	83
350		−38	−58	260	100
300	28·6	−40	−60	258	96
250		−43		256	83
200	37·9	−44		259	75
170		−49		261	75
150		−50		264	75
130	(43 mb)	−51			
110					
100					
90					
80					
70					
60					
Tropopause	III 386 mb −55° 23,100′				
Stornoway					
Surf	00·5	51	41	280	30
1000	02·1				
950		46	35	266	45
900	25·4	39	30	264	44
850		32	25	264	42
800	59·4	27	22	266	44
750		21	15	269	47
700	93·6	16	07	271	52
650		09	−02	271	53
600	13·2	03	−11	271	54
550		−05	−22	266	61
500	17·6	−10	−30	263	75
450		−18	−35	263	90
400	22·9	−26	−44	263	95
350		−33	−53	262	105
300	29·5	−39	−89	261	110
250		−42		263	104
200	38·5	−42			
170		−44			
150	94·9	−44			
130		−47			
110		−50			
100	53·8	−52			
Tropopause	II 344 mb −34° 26,300′				
Leuchars					
Surf	00·2	57	43	260	18
1000		56	42		
950		49	36	270	39
900	29·7	42	31	273	37
850		36	28	277	37
800	61·0	28	21	280	37
750		26	16	272	44
700	09·6	24	01	270	58
650		20	−10	270	68
600	13·5	13	−22	268	74
550		10	−27	266	91
500	18·1	03	−34	268	99
450		−06	−44	267	102
400	23·5	−16	−56	265	109
350		−28	−56	266	118
300	30·1	−37	−60		
250		−51			
200	38·9	−60			
170		−61			
150	95·0	−58			
130		−54			
110		−48			
100	53·8	−50			
90		−57			
Tropopause	I 232 mb −58° 29200′				
Aldergrove					
Surf	02·3	55	44	270	20
1000	02·8	54	45		
950		48	40	273	28
900	31·4	42	35	274	35
850		36	26	278	44
800	62·7	32	20	275	42
750		34	−2	270	47
700	91·8	29	−12	266	58
650		25	−15	266	70
600	13·8	21	−16	262	75
550		16	−13	262	84
500	18·4	7	−12	262	99
450		−3	−15	258	111
400	23·8	−14	−23	258	109
350		−20	−31	258	116
300	30·5	−35	−47	259	118
250		−50		255	130
200	39·4	−65			
170		−64			
150	75·4	−67			
130		−70			
110		−65			
100		−68			
90	53·9	−62			
80		−62			
70		−65			
60		−68			
	64·7	−69			
Tropopause	I 185 mb −70° 40900′				
Liverpool					
Surf	00·6	56	53	280	14
1000	03·1	55	53		
950		51	48	270	26
900	32·0	50	47	266	32
850		45	42	263	39
800	63·8	38	25	271	51
750		40	02	273	55
700	99·4	38	32	264	60
650		32	26	262	70
600	14·0	25	15	264	69
550		18	08	262	75
500	18·6	11	01	263	75
450		00	−12	266	80
400	24·1	−08	−21	265	81
350		−20	−33	263	88
300	30·9	−36	−49	267	87
250		−47		265	99
200	39·7	−65			
170		−75			
150		−78			
130		−80			
110		−77			
100	53·9	−70			
90		−01			
80	(85 mb)	−57			
70					
60					
Tropopause	II 160 mb −78° 44,250′				
Downham Market					
Surf	01·2	69	61	220	07
1000	03·5	67	61		
950		60	54	264	32
900	32·9	55	51	273	36
850		51	47	276	41
800	65·1	48	42	272	42
750		45	38	271	41
700	10·1	40	21	279	47
650		35	08	266	51
600	14·2	27	−01	269	51
550		19	−05	269	54
500	18·8	09	−18	267	54
450		02	−22	264	57
400	24·3	−08	−29	271	64
350		−20	−39	274	71
300	31·1	−36		272	73
250		−51		276	78
200	39·9	−66		282	82
170		−73		277	70
150	45·8	−77		275	64
130		−79		269	60
110		−72		261	45
100	54·1	−74			
Tropopause	II 140 mb −79° 47,200′				
Larkhill					
Surf	04·4	66	60	270	12
1000	04·3				
950		60	55	270	24
900	33·7	56	52	271	28
850		51	47	270	32
800	66·1	54	37	270	37
750		49	27	270	38
700	10·2	45	25	270	36
650		39	25	270	38
600	14·3	31	19	268	39
550		25	15	269	37
500	19·1	18	03	260	41
450		09	−04	273	45
400	24·6	−01	−21	278	47
350		−11	−29	273	54
300	31·5	−30	−46	273	53
250		−47		275	60
200	40·4	−70		274	60
170		−79		279	60
150	46·2	−81		278	54
130		−84		271	46
110		−79		276	30
100	54·4	−76		276	27
Tropopause	III 184 mb −78° 42,100′				
Camborne					
Surf	02·9	65	60	270	08
1000	05·2	64	58	261	18
950		59	54	274	27
900	34·4	51	48	267	24
850		52	48	260	33
800	66·6	51	40	266	30
750		47	29	259	28
700	10·3	40	30	256	32
650		34	20	254	27
600	14·3	26	10	255	28
550		20	02	261	34
500	19·0	13	00	268	42
450		03	−10	269	41
400	24·5	−07	−24	271	42
350		−16	−32	260	45
300	31·3	−33	−46	270	47
250		−50		268	46
200	40·1	−69			
170		−79			
150		−80			
130		−87			
110		−85			
100	54·1	−81			
90		−81			
80		−75			
70	(72 mb)	−76			
Tropopause	I 173 mb −80° 43,000′ / I 127 mb −88° 49,300′				
Valentia					
Surf	00·3	55	54	280	04
1000	4·3	53	52	285	05
950		49	47	292	14
900	33·0	44	43	274	22
850		42	35	262	34
800	64·7	44	33	262	47
750		41	41	262	54
700	100	36	34	258	59
650		39	29	255	61
600	141	23	18	254	64
550		17	−3	255	66
500	187	11	−8	255	67
450		03	−11	255	67
400	242	−8	−28	256	73
350		−22	−39	258	85
300	309	−39	−54	255	96
250					
200					
170					
150					
130					
110					
100					
90					
80					
70					
60					
Tropopause	N.R.				

21h. G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne		
Pressure: Time	21h.	21h.		21h.	21h.	21h.	21h.	21h.		
M.S.L.	991·5 mb	999·9 mb	mb	1010·5 mb	1010·8 mb	1011·3 mb	1015·7 mb	1017·5 mb	mb	
Surf	981·6 mb	998·0 mb	mb	1001·9 mb	1008·8 mb	1006·9 mb	999·7 mb	1007·0 mb	mb	
Freezing	868 mb	858 mb	mb	835 mb	688 mb	688 mb	650 mb	650 mb	mb	

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Lerwick					
Surf	02·7	46	39	300	30
1000	02·3				
950		44	38	280	40
900	26·1	37	32	279	40
850		30	25	280	42
800	56·9	24	18	281	41
750		18	10	280	39
700	90·9	13	04	280	37
650		05	−1	280	40
600	12·9	−4	−10	280	38
550		−13	−19	280	36
500	17·3	−25	−31	279	31
450		−37	−43	275	33
400	22·3	−42		269	62
350		−42		267	78
300	28·7	−43		263	76
250		−45		262	63
200	37·7	−47		260	64
170		−48		266	62
150		−51		262	54
130		−55		262	49
110		−55		275	49
100	52·7	−54		266	42
90		−52		273	40
80					
70	Isothermal				
60	982 − 965 mb 46°				
Tropopause	I 413 mb −45° 21,600′				
Stornoway					
Surf	00·5	47	41	260	15
1000	01·1				
950		43	37	267	34
900	28·3	37	33	269	38
850		31	24	270	41
800	59·1	27	17	270	39
750		20	06	271	42
700	93·3	13	−01	271	42
650		06	−08	273	43
600	13·2	−02	−15	270	47
550		−12	−25	267	47
500	17·5	−20	−33	271	53
450		−28	−40	271	60
400	22·6	−38	−50	271	68
350		−46		270	60
300	29·0	−48		267	76
250		−45		262	92
200	37·9	−45		264	81
170		−50			
150	44·2	−50			
130					
110	Inversion				
100	998 mb −47° − 988 mb −18°				
90					
80					
70					
60					
Tropopause	I 275 mb −51° 30,800′				
Leuchars					
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					
Aldergrove					
Surf	02·3	49	45	260	10
1000	02·8	49	44		
950		47	38	264	24
900	31·3	41	36	268	30
850		34	28	267	35
800	62·4	29	25	265	36
750		23	18	264	39
700	96·8	19	1	266	48
650		14	−13	269	61
600	13·6	13	−11	260	80
550		12	−14	258	91
500	18·2	4	−26	258	101
450		−5	−39	257	105
400	23·6	−14	−57	255	108
350		−28		257	124
300	30·2	−43		264	134
250		−53		260	139
200	38·9	−60		260	123
170		−63			
150	44·0	−63			
130		−65			
110		−65			
100	53·6	−66			
90	(96 mb)	−67			
80					
70	Inversion				
60	720 mb 18° − 680 mb 20°				
	628 „ 10° − 604 „ 13°				
	582 „ 13° − 564 „ 15°				
	Isothermal				
	817 − 798 mb 29°				
	604 − 587 „ 13°				
	Max Wind 272 mb 32400′				
	262 mb 154 kts				
Tropopause	II 270 mb −50° 32,100′ / I 222 mb −61° 36,800′				
Liverpool					
Surf	00·6	54	47	260	10
1000	03·0	53	47	263	18
950		47	43	270	25
900	31·6	42	38	274	27
850		39	32	266	39
800	62·0	37	33	261	51
750		34	15	263	55
700	98·3	33	05	266	61
650		29	13	258	73
600	13·8	22	08	262	75
550		17	12	258	76
500	18·5	09	04	261	93
450		00	−5	264	82
400	23·9	−10	−19	262	95
350		−21	−31	261	92
300	30·6	−37	−47	262	91
250		−51			
200	39·5	−68			
170		−76			
150		−77			
130		−78			
110		−75			
100	53·6	−72			
90		−68			
80		−62			
70	Inversion				
60	750 mb 34° − 737 mb 35°				
	Isothermal				
	800 − 782 mb 37°				
Tropopause	I 160 mb −79° 44,000′				
Downham Market					
Surf	01·2	61	59	215	04
1000	03·1	60	58	264	21
950		56	53	263	23
900	32·3	52	48	256	25
850		48	45	250	33
800	64·4	45	42	260	43
750		41	38	266	50
700	10·0	35	32	264	49
650		30	21	261	55
600	14·0	24	05	262	60
550		12	04	262	63
500	18·6	06	−05	264	61
450		−03	−15	264	67
400	24·0	−11	−29	265	70
350		−23	−40	266	71
300	30·7	−37	−57	262	90
250		−53		231	94
200	39·5	−71		275	91
170		−75		273	89
150	45·4	−78		273	68
130		−78		267	51
110		−75		257	40
100	53·6	−77		247	33
90		−78		246	30
80		−79			
70	Max Wind 210 mb				
60	38,500′ 276° 108 kts				
Tropopause	I 181 mb −77° 41,500′				
Larkhill					
Surf	04·4	59	59	260	03
1000	04·3				
950		55	55	254	25
900	33·4	52	52	262	36
850		50	50	266	36
800	65·6	45	42	269	35
750		44	37	268	42
700	10·2	39	35	262	46
650		32	31	256	44
600	14·2	26	23	255	48
550		19	17	255	47
500	18·9	10	08	263	47
450		02	−10	265	56
400	24·3	−08	−20	266	54
350		−11	−20	263	69
300	31·2	−36	−46	266	66
250		−53		268	75
200	39·9	−70		266	77
170		−79		269	76
150	45·8	−80		270	66
130		−80		263	44
110	Inversion				
100	793 mb 44° − 760 mb 45°				
90	475 „ 03° − 467 „ 05°				
80					
70					
60					
Tropopause					
Camborne					
Surf	02·9	68	57	225	12
1000	04·8	57	56	248	27
950		55	54	261	28
900	33·9	53	53	266	28
850		48	48	266	26
800	66·0	45	45	273	24
750		39	30	264	31
700	10·2	39	32	255	33
650		32	27	257	34
600	14·2	24	17	260	36
550		14	10	259	37
500	18·9	12	03	259	42
450		01	−23	263	49
400	24·4	−08	−27	264	53
350		−20	−42	262	57
300	31·1	−35	−56	266	61
250		−53		269	64
200	39·9	−70		261	64
170		−76		269	59
150		−83		264	55
130		−88		265	42
110		−82		268	29
100	53·8	−84		266	26
90		−80		265	24
80		−79			
70	Inversion				
60	745 mb 39° − 723 mb 41°				
	190 „ 74° − 178 mb −73°				
Tropopause	I 134 mb −89° 48,000′				
Valentia					
Tropopause					

No. 11506 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Friday 29th. September 1950. Page 1.

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

METEOROLOGICAL LIBRARY 7 OCT 1950

03h. G.M.T.

Station	Pressure	Time	M.S.L.	Surf	Freezing
LERWICK	mb	03h.	993.0	983.1	850
STORNOWAY	mb	03h.	1001.3	999.3	857
LEUCHARS	mb	03h.	1004.6	1003.8	842
ALDERGROVE	mb	03h.	1010.7	1002.1	848
LIVERPOOL	mb	03h.	1011.4	1009.4	700
DOWNHAM MARKET	mb	03h.	1012.4	1007.9	700
LARKHILL	mb	03h	1014.2	998.4	665
CAMBORNE	mb	03h.	1005.5	1015.9	660
VALENTIA	mb	03h.	1014	1020	850

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	44	41	290	30	0.5	45	43	260	23	00.2	47	41		
1000	-01.9					00.3					01.2	47	43		
950		43	40	275	36		43	40	266	27		43	39		
900	26.4	37	31	271	39	28.6	37	34	265	30	29.5	37	33		
850		32	28	272	42		31	27	266	33		33	26		
800	57.4	26	19	275	39	59.6	26	19	268	35	60.5	29	17		
750		19	09	275	38		19	12	269	35		24	14		
700	91.5	13	03	273	38	09.4	13	08	268	33	09.5	18	02		
650		06	01	271	39		06	00	273	38		11	-11		
600	13.0	-01	-10	273	38	13.2	-01	-06	278	48	13.4	04	-05		
550		-11	-24	273	39		-09	-14	275	50		-03	-17		
500	17.3	-22	-33	273	42	17.6	-16	-23	272	53	17.8	-06	-24		
450		-35	-44	272	42		-23	-33	270	63		-16	-36		
400	22.4	-43		272	47	22.8	-31	-44	270	72	23.1	-25	-46		
350		-50		272	59		-43		269	75		-33	-54		
300	28.7	-52		269	63	29.2	-54		268	79	29.6	-48			
250		-50		271	55		-50		267	90		-56			
200	37.5	-51		264	60	38.0	-50		265	75	38.4	-58			
170		-50		266	59		-53		263	73		-55			
150		-53		265	52	44.3	-53		266	60	44.5	-56			
130		-54		268	51		-57		264	43		-58			
110		-54		262	38							-63			
100	52.6	-53		259	36	Inversion					53.2	-62			
90		-51		277	31	999 mb 45° - 982 mb 47°						-64			
80		-57		256	37						Inversion				
70		-64									554 mb -04° - 524 mb -03°				
60	Inversion														
	983 mb 44° - 969 mb 45°														
Tropopause	I 340 mb -52° 25,900'					I 293 mb -55° 29,700'					I 248 mb -57° 33,700'				

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	02.3	47	43	230	10	00.6	52	47			01.2	52	51	300	07
1000	02.9						51	46			03.3	51	50		
950		42	35	261	23		47	43				48	45	299	21
900	31.2	37	31	278	28	31.7	41	37			32.0	45	44	279	25
850		32	25	282	31		35	31				43	42	289	34
800	62.2	28	20	280	32	62.9	32	18			63.6	39	37	262	42
750		25	11	278	34		32	05				37	35	267	55
700	96.7	21	-02	272	42	97.9	32	04			99.0	32	29	265	61
650		19	-12	268	47		27	-5				27	24	262	64
600	13.6	12	-26	270	53	13.8	21	-12			13.9	21	19	258	64
550		08	-41	270	60		13	-20				13	11	262	67
500	18.1	03	-47	268	83	18.4	08	-38			18.5	07	00	268	70
450		-06	-49	263	96		-1	-24				-03	-16	270	80
400	23.5	-12	-50	264	106	23.9	-10	-30			24.0	-11	-31	266	78
350		-24	-57	262	115		-24	-45				-24	-48	272	76
300	30.2	-41		262	119	30.6	-41				30.6	-40	-60	272	86
250		-58		268	112		-56					-55		269	96
200	38.9	-61		261	124	39.3	-69				39.4	-70		275	109
170		-60		260	83		-69					-72		271	86
150	45.1	-62		264	55		-70				45.3	-75		272	80
130		-63		266	54		-76					-79		286	62
110		-66		266	51		-67					-72		284	52
100	53.6	-68		266	39	53.7	-64				53.6	-76		286	91
90		-67					-65					-73			
80		-65					-67					-80			
70							-68								
60							-58								
	Inversion					Inversion					Inversion				
	674 mb 17° - 655 mb 19°					812 mb 31° - 771 mb 35°					785 mb 38° - 775 mb 39°				
	591 " 11° - 585 " 13°					733 " 30° - 711 " 34°					Isothermal				
	530 " 04° - 515 " 06°					Isothermal					519 - 495 mb 07°				
	Isothermal					584 - 565 mb 20°									
	775 - 757 mb 26°										Max. Wind. 202 mb				
	Max Wind 205 mb										39,200 ft.				
	38400' 259° 135 kts										274° 112 kts.				
Tropopause	I 216 mb -66° 37,200'					I 188 mb -72° 40,600'					II 195 mb -72° 39800'				

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	57	56	270	08	02.9	57	57	280	10	00.2	48	44	280	01
1000	03.9					04.4	57	57	278	13	4.2	50	44	279	08
950		53	52	278	23		54	54	271	22		44	40	280	13
900	32.9	48	46	280	30	33.4	51	51	267	26	32.6	37	31	283	15
850		47	46	273	36		47	47	261	27		32	28	283	18
800	64.9	46	42	263	40	65.5	44	44	259	27	63.8	37	12		
750		40	33	263	41		40	38	260	29		33	08		
700	10.1	37	28	265	42	10.1	37	24	254	36	98.9	31	-9		
650		30	23	260	47		30	24	251	39		29	-16		
600	14.1	22	14	259	49	14.2	25	13	256	40	13.9	23	-24		
550		17	07	260	50		15	-8	260	37		15	-17		
500	18.7	09	01	266	50	18.8	07	-12	261	42	18.5	07	-4		
450		01	-11	264	54		00	-28	260	48		-4	-11		
400	24.2	-9	-24	268	56	24.2	-11	-33	260	48	23.9	-12	-24		
350		-23	-35	270	60		-22	-52	264	59		-24	-35		
300	30.9	-36	-48	270	70	30.9	-36	-59	263	63	30.6	-37	-47		
250		-52		270	83		-53		261	59		-54			
200	39.7	-67		275	82	39.7	-70		262	64	39.4	-69			
170		-76		265	78		-80		264	57		-77			
150	45.6	-79		263	69	45.6	-84		267	52		-76			
130		-83		264	76		-83		262	42		-77			
110		-81		272	36		-83		260	28		-78			
100	53.8	-78		272	33	53.7	-79		261	24	53.6	-76			
90		-80					-71		262	20		-74			
80												-72			
	Inversion					Inversion					Inversion				
	900 mb 48° - 850 mb 49°					630 mb 27° - 614 mb 28°					830 mb 30° - 811 mb 38°				
	722 " 36° - 700 " 37°														
Tropopause	I 181 mb -76° 41,800'					II 165 mb -83° 46,100'					I 163 mb -79° 43,100'				

09h. G.M.T.

Station	Pressure	Time	M.S.L.	Surf	Freezing
LERWICK	mb	09h.	994.7	984.8	850
STORNOWAY	mb	09h.	1002.7	1000.8	869
LEUCHARS	mb				
ALDERGROVE	mb	09h.	1011.5	1002.9	817
LIVERPOOL	mb	09h.	1012.4	1010.4	784
DOWNHAM MARKET	mb	09h.	1014.1	1009.6	672
LARKHILL	mb	09h.	1015.1	999.1	690
CAMBORNE	mb	09h.	1016.4	1005.2	700
	mb				

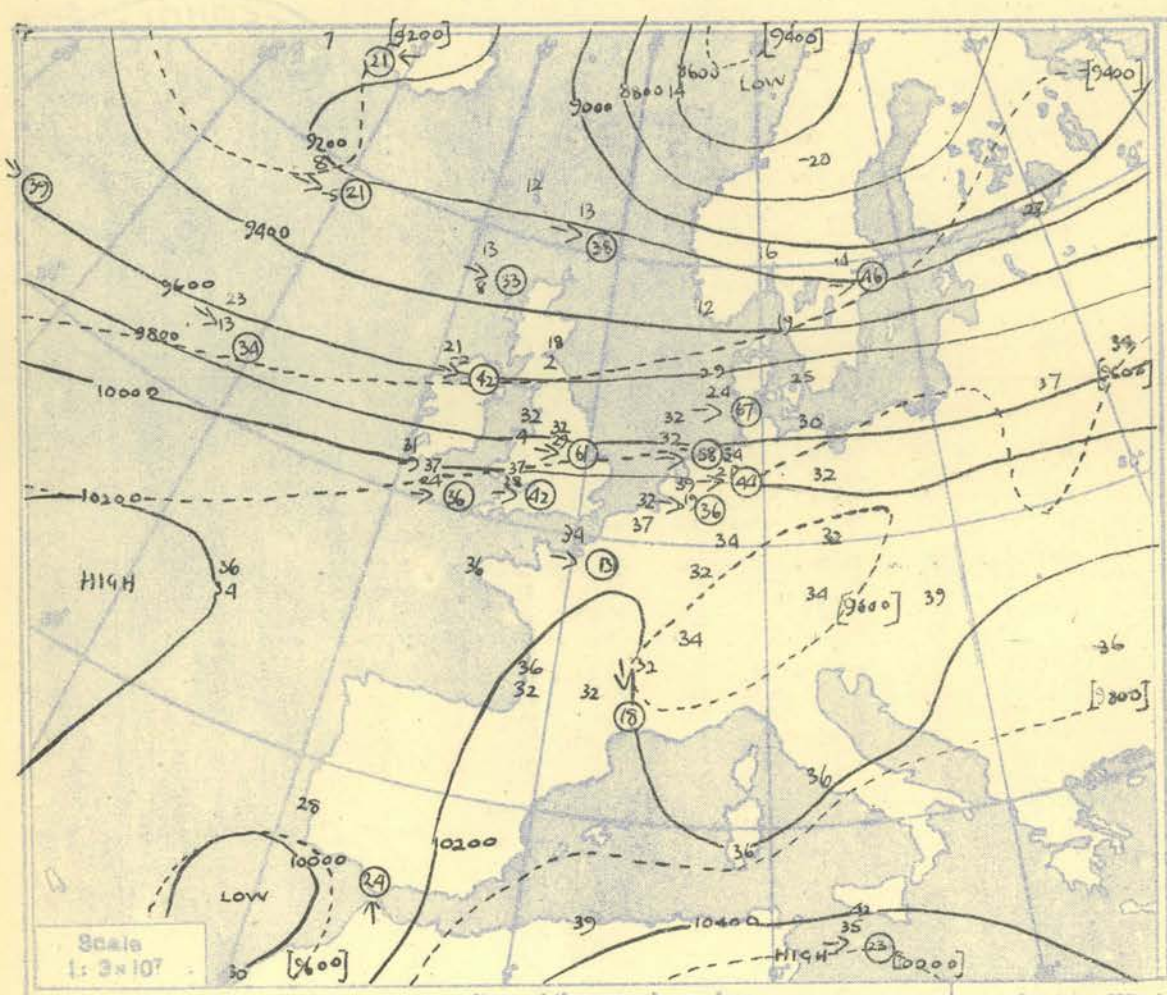
Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.7	45	43	300	16	00.5	48	43							
1000	-01.5					00.7	48	42							
950		43	38	270	25		42	35							
900	26.8	36	33	271	25	29.1	36	31							
850		32	27	271	25		30	23							
800	57.8	26	18	275	30	59.9	23	15							
750		20	13	275	35		17	04							
700	92.0	14	07	273	31	93.9	13	03							
650		06	-3	271	33		05	-02							
600	13.0	-2	-13	273	38	13.2	-01	-16							
550		-11	-29	270	44		-08	-25							
500	17.4	-20	-43	269	48	17.6	-16	-33							
450		-32	-49	267	49		-25	-39							
400	22.5	-39	-58	265	51	22.8	-33	-44							
350		-47		272	48		-45								
300	28.8	-50		270	54	29.2	-54								
250		-49		270	60		-60								
200	37.7	-46		264	58	37.8	-57								
170		-50		266	54		-57								
150		-50		274	51	44.0	-56								
130		-51		270	52		-57								
110		-54		264	40		-60								
100	52.8	-55		259	40	52.7	-61								
90		-56		253	37		-62								
80		-57		249	42		-63								
70		-56					-65								
60						63.5	-68								
							-55								
						Inversion									
						453 mb 26° - 438 mb 24°									
Tropopause	II 438 mb -35° 20,500'					I 247 mb -61° 33,300'									

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	02.3	46	43	250	10	00.6	51	46	250	10	01.2	51	48	250	03
1000	03.1					03.4	50	45	263	19	03.8	50	47		
950		45	39	261	21		46	41	274	20		46	40	281	13
900	31.5	39	31	280	21	31.9	41	33	284	19	32.3	42	34	273	14
850		34	23	279	25		35	24	280	20		37	25	254	21
800	62.6	30	16	278	29	63.1	33	19	273	27	63.7	40	05	268	28
750		34	12	273	31		30	14	263	33		35	04	271	41
700	97.1	23	04	270	39	98.2	30	09	259	33	98.9	32	-08	268	50
650		19	-08	262	41		26	-01	259	44		29	-19	267	57
600	13.7	13	-14	261	49	13.8	21	-09	264	53	13.9	23	-23	268	57
550		09	-15	261	59		13	-13	264	63		16	-31	267	59
500	18.2	00	-12	261	58	18.4	06	-00	261	69	18.5	07	-06	267	65
450		-09	-14	259	73		-09	-10	270	75		-04	-09	266	69
400	23.6	-17	-21	261	94	23.8	-14	-21	263	80	23.9	-11	-21	266	69
350		-28	-32	260	108		-25	-34	262	84		-23	-34	263	69
300	30.2	42		259	111	30.5	-42		259	90	30.6	-26	-51	262	75
250		-56		251	120		-58		264	76		-51		264	99
200	38.9	-61		252	100	39.1	-67				39.4	-68		270	90
170		-61		253	75		-70					-76		267	93
150	45.0	-62		252	79		-69				45.4	-75		266	86
130							-69					-77		264	69
110							-65					-76		262	59
100						53.6	-63				53.7	-76		261	49
90							-64					-75		261	40
80							-64					-73		259	34
70												-69			
60															
	Inversion					Inversion					Inversion				
	974 mb 44° - 950 mb 45°					731 mb 30° - 710 mb 31°					820 mb 36° - 806 mb 40°				
	715 " 22° - 700 " 23°					676 " 27° - 670 " 28°					700 " 32° - 685 " 33°				
	575 " 09° - 562 " 11°					Isothermal					Isothermal				
	Isothermal					737 - 800 mb 33°					842 - 820 mb 36°				
	468 - 455 mb -07°					750 - 731 " 30°					Max. Wind 245 mb.				
	Max. Wind 244 mb										35,100 ft. 263° 116 kts.				
	-69° 126 kts														
	34,800'														
Tropopause	I 238 mb -61° 35,200'					I 209 mb -71° 38,100'					I 170 mb -76° 42,800'				

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	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04.4	53	53	CALM		02.9	55	54	CALM						
1000	04.1					04.3	54	54	255	10					
950		48	48	263	07		49	49	261	14					
900	32.8	46	45	259	13	33.0	49	49	271	15					
850		44	43	258	22		45	44	272	20					
800	63.7	40	05	268	28	64.8	41	39	267	26					
750		38	36	262	38		36	35	260	27					
700	10.0	34	30	258	42	10.0	32	27	261	27					
650		29	-19	267	57		27	16	255	33					
600	13.9	23	-23	268	57	14.0	23	12	263	45					
550		16	-31	267	59		16	09	265	48					
500	18.7	08	03	265	51	18.6	06	-5	256	39					
450		00	-11	261	48		-4	-18	250	45					
400	24.1	-11	-20	257	54	24.1	-17	-28	251	52					
350		-22	-33	259	64		-27	-40	252	56					
300	30.8	-33	-47	257	72	30.7	-40	-53	250	59					
250		-50		256	82		-61		247	69					
200	39.7	-66		266	80	39.3	-79		246	57					
170		-79		263	69		-82		245	55					
150							-86		249	47					
130							-86		251	41					
110							-81								
100						53.2	-77								
90							-78								
80							-74								
70							-69								
60							-67								
						(57.5 mb)	67								
	Inversion					Inversion									
	820 mb 36° - 806 mb 40°					666 mb 26° - 659 mb 27°									
	700 " 32° - 685 " 33°					185 " -83° - 170 " -82°									
	Isothermal					Isothermal									
	842 - 820 mb 36°					950 - 900 mb 49°									
	Max. Wind 245 mb.					729 - 718 " 34°									
	35,100 ft. 263° 116 kts.														
Tropopause	I 170 mb -76° 42,800'					I 157 mb -89° 49,200'									

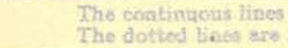
Friday 29th September. 1950.

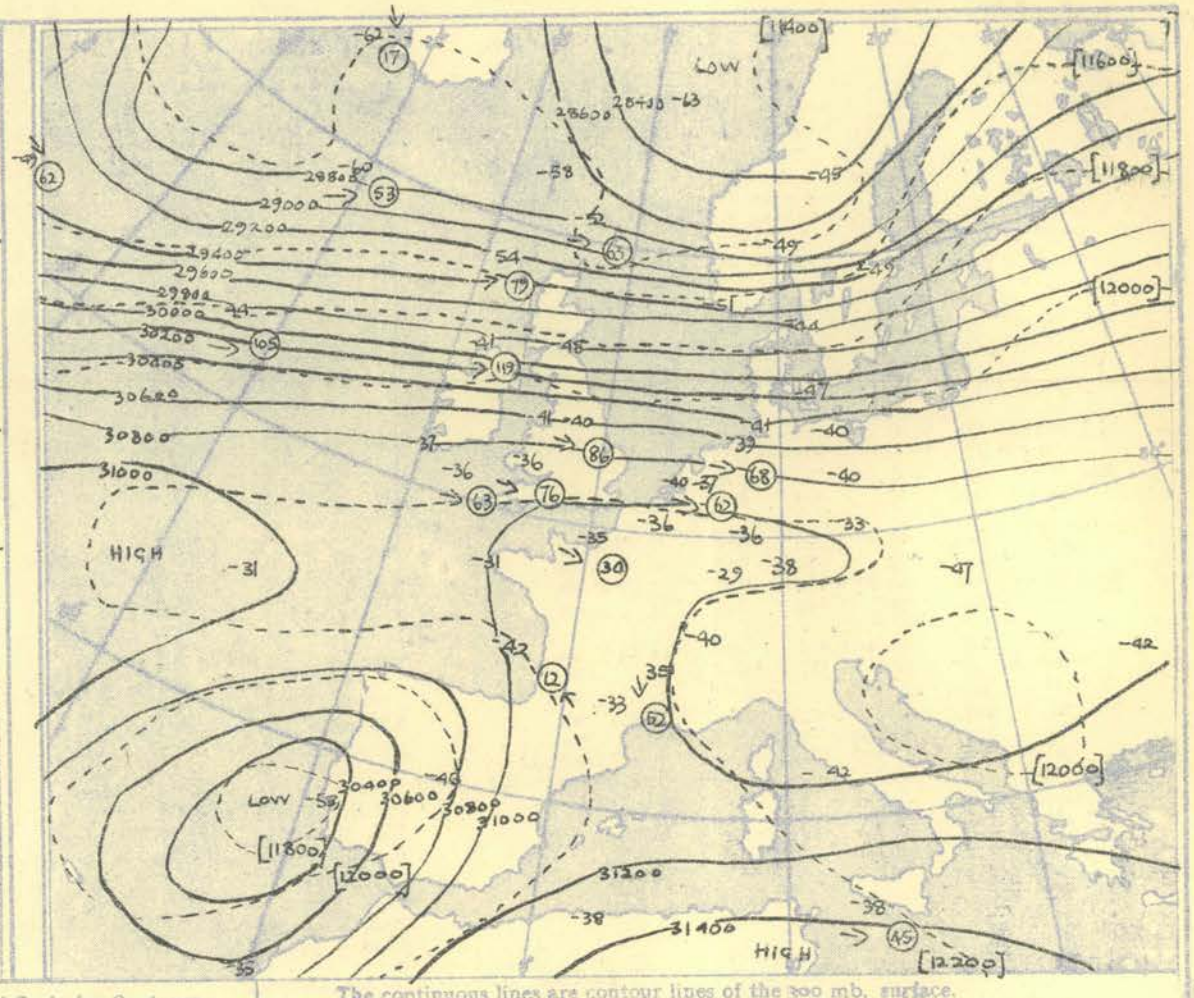
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 03 h. G.M.T.



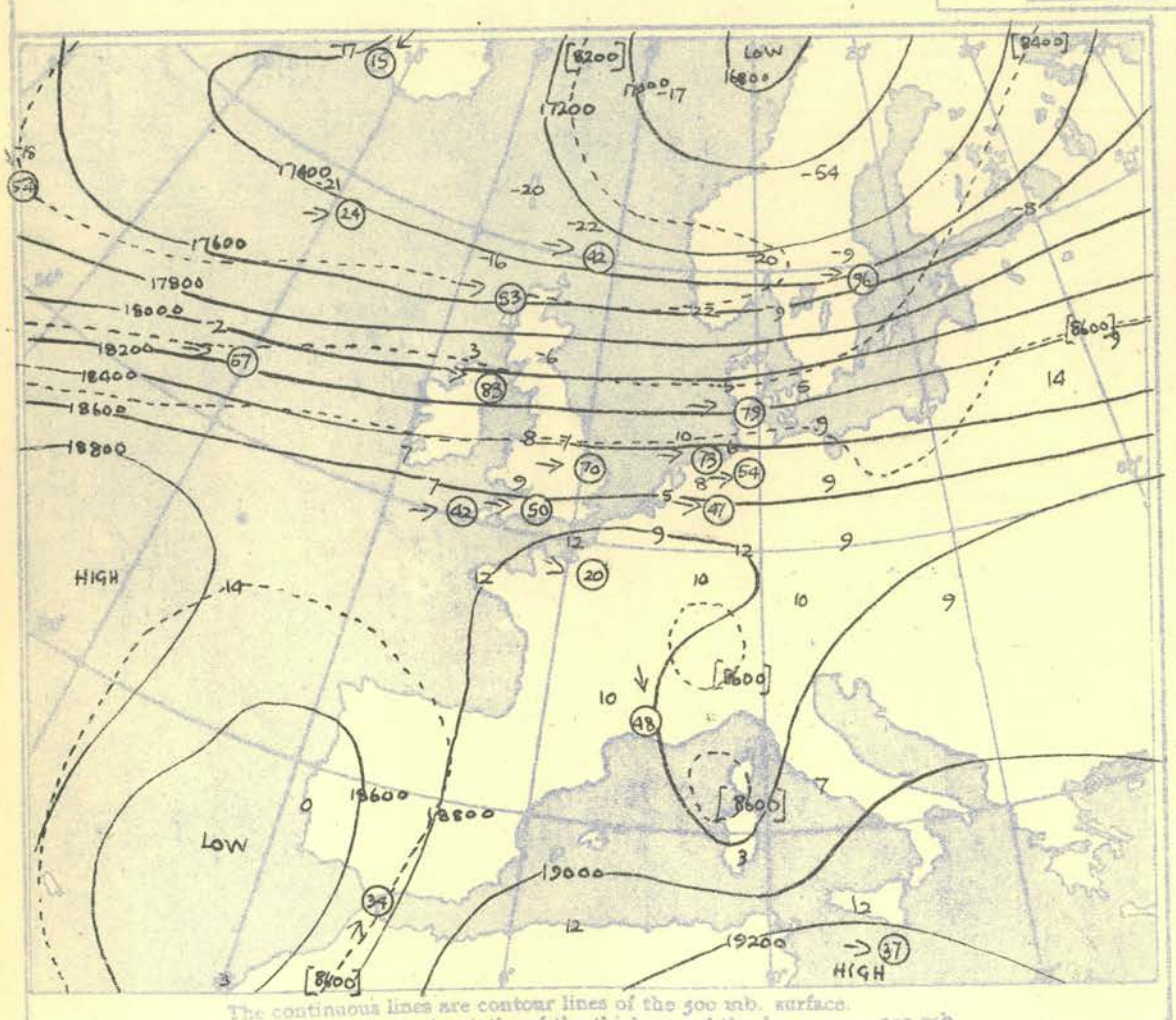
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

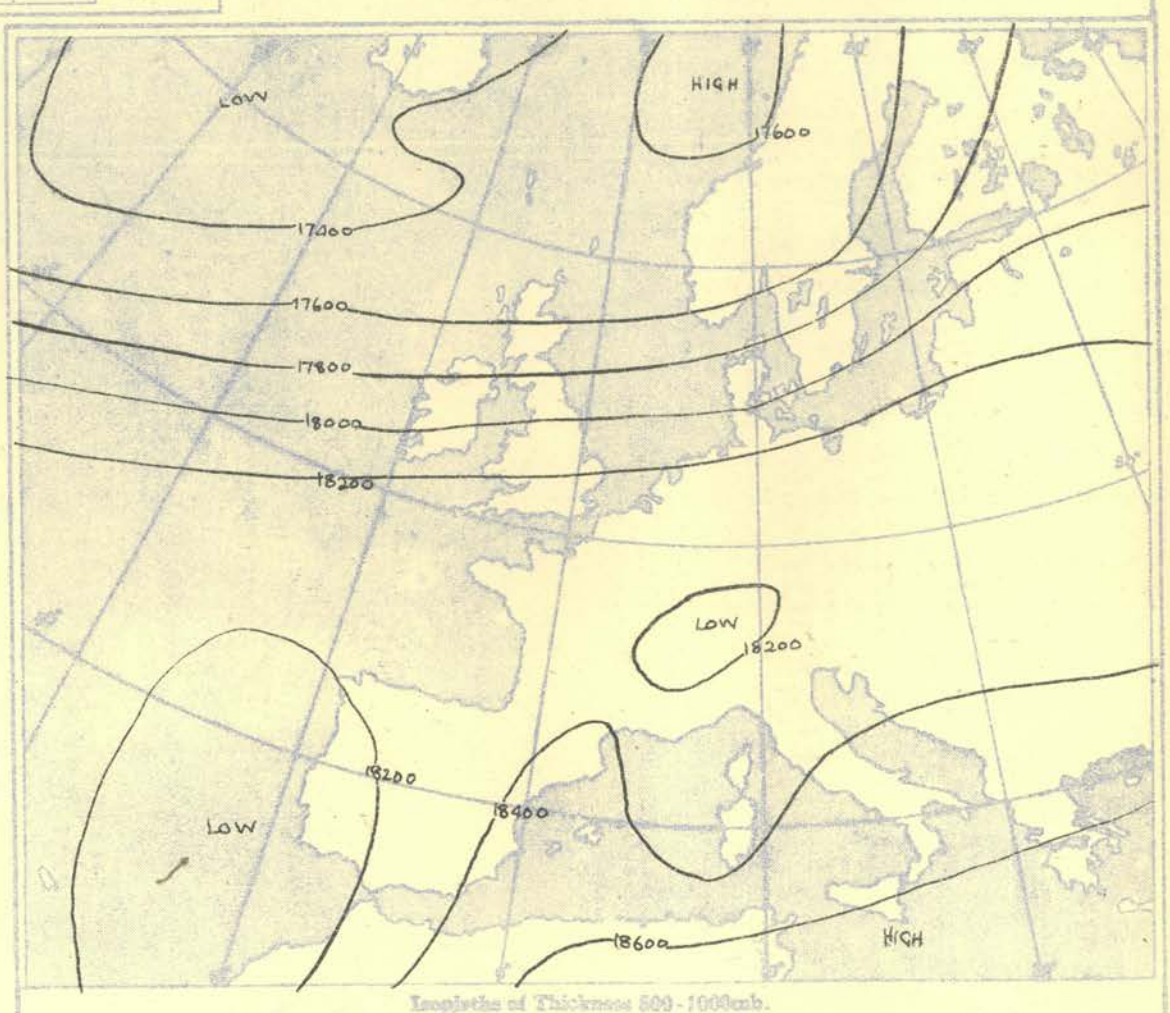




The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500 — 300 mb



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.

Friday 29th September 1950. Page 3

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

Pressure mb	48·2 N 20·5 W Height ft./100	°Temp. °F.	Dew °F.	49·5N 14·7W Height ft./100	°Temp. °F.	Dew °F.	51·3N 00·4 E Height ft./100	°Temp. °F.	Dew °F.	mb Height ft./100	°Temp. °F.	Dew °F.	mb Height ft./100	°Temp. °F.	Dew °F.	mb Height ft./100	°Temp. °F.	Dew °F.	mb Height ft./100	°Temp. °F.	Dew °F.	Pressure mb
Time	13h.			1925h			14h.															
M.S.L.	1012 mb			1010 mb			1014.6 mb			mb			mb			mb			mb			M.S.L.
Surf	1008 mb			1006 mb			1003.3 mb			mb			mb			mb			mb			Surf
Freezing	710 mb			700 mb			661 mb			mb			mb			mb			mb			Freezing
Surf	01·0	51	45	01·0	48	48	03·1	55	53													Surf
1000	03·2			02·6																		1000
950		45	43		46	46		55	52													950
900	31·7	43	36	31·2	47	47	29·0	50	50													900
850		38	36		43	43		47	47													850
800	63·1	35	34	62·9	38	38	65·0	45	45													800
750		36	30		35	35		41	39													750
700	98·9	29	29	98·2	31	29	10·1	35	35													700
650		26	11					31	31													650
600	13·8	19	10	Cloud			14·1	23														600
550		11		8/8 NS				17														550
500		04		990-6xx			18·8	07														500
450	Cloud			Inversion				-01														450
400	3/8 St.			950 mb 46°			242	-11														400
350	960-950 mb			900 " 47°				-21														350
300	6/8 Sc 840-830 mb						30·9	-37														300
250	2/8 Ci HNG						Cloud															250
200							8/8 St.															200
170	Inversion						990-950 mb															170
	800 mb 35°						(occasionally															
	750 " 36°						990-840)															
							8/8 Thin Cs															
							340-320															
							Inversion															
							942 mb 51°-															
							934 " 52°															

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

Place	Ronaldsway		W. observer 59.0N 13.0W		Skerryvore		Leuchars														Place
Time	09h.		09h.		09h.		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.	270	13	CALM		360	02	240	10													Surf.
1,000	270	18	240	04	320	06	254	24													1,000
2,000	270	17	250	06	250	05	255	24													2,000
3,000	270	17	250	05	250	17	261	21													3,000
4,000	280	18	250	06	250	22	262	21													4,000
5,000	280	23	250	08	250	26	269	23													5,000
6,000	270	20	250	09	260	32	271	23													6,000
8,000	270	30	250	11	260	40	268	27													8,000
10,000							260	28													10,000
14,000			240	20	260	46	251	41													14,000
18,000			240	34	270	46	253	54													18,000
24,000			240	41	260	51	254	69													24,000
30,000			260	31	260	77	253	114													30,000
40,000			250	36	260	79	247	93													40,000
50,000			250	30	270	28	(39,000')														50,000
			250	30																	
			(58,000')																		

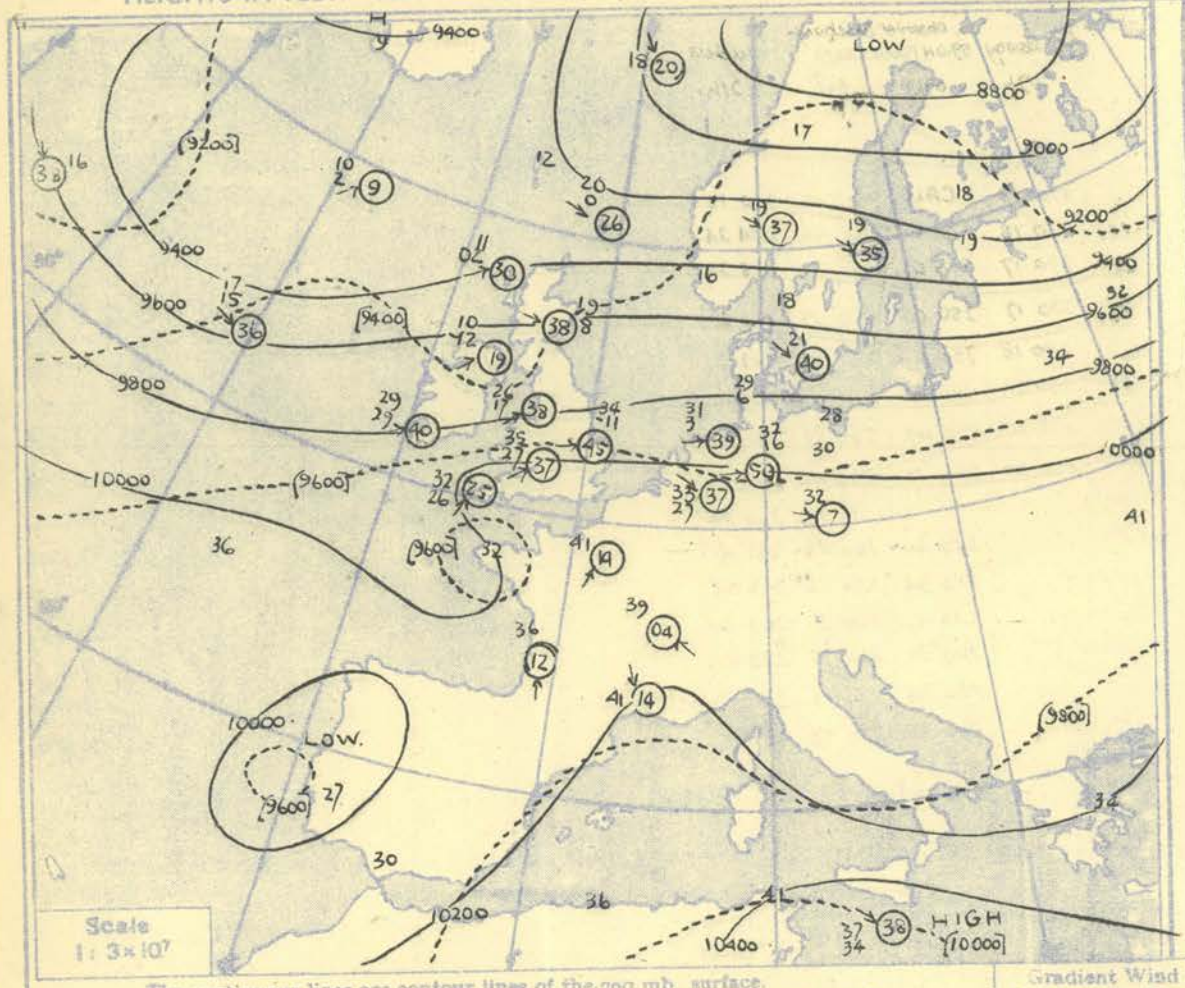
NEPHOSCOPE OBSERVATIONS

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

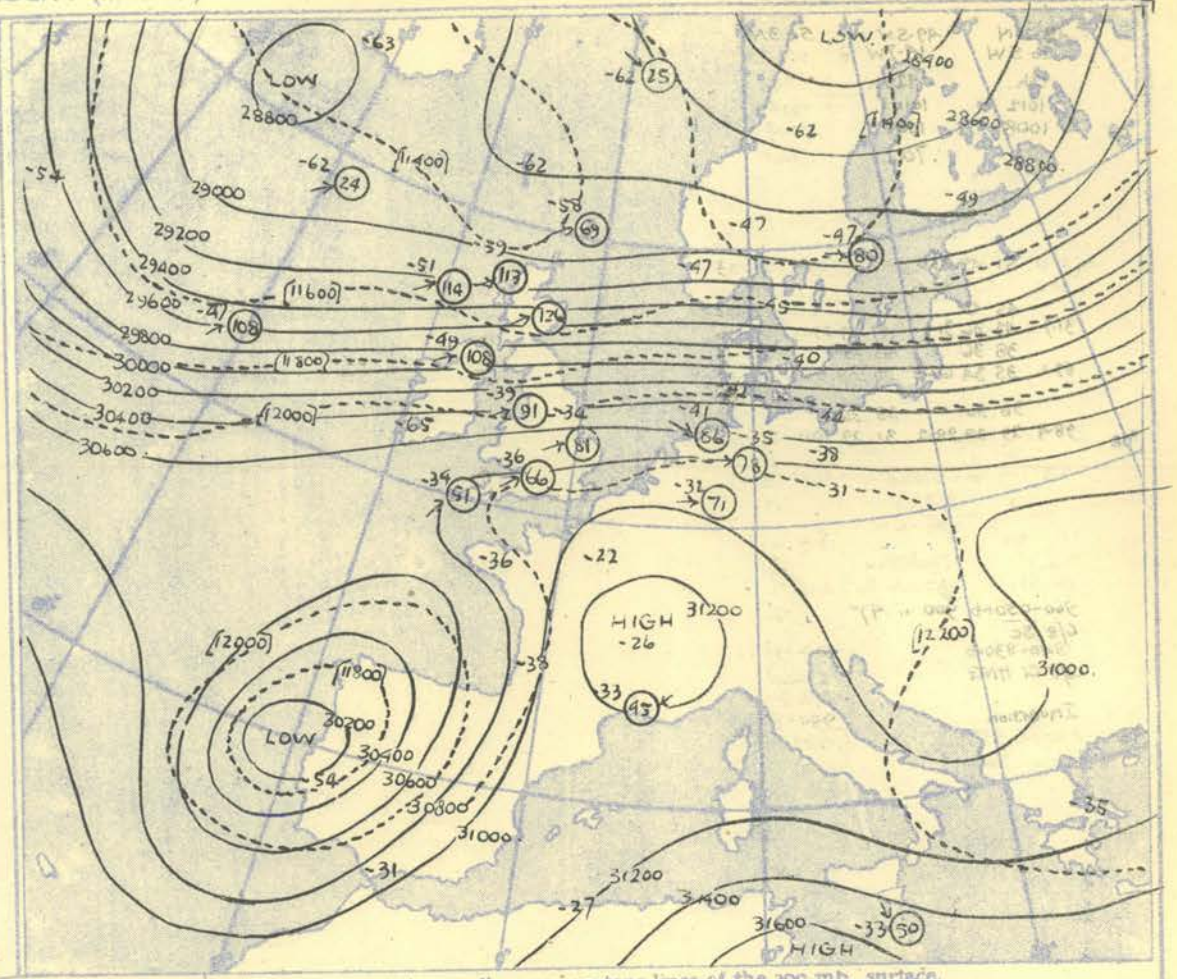
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	WEATHER OBSERVER.	WEATHER OBSERVER.	WEATHER OBSERVER.	WEATHER OBSERVER.	WEATHER WATCHER.	WEATHER WATCHER	WEATHER WATCHER	WEATHER WATCHER			Ship
Lat/Long	58·7N 18·7W.	59·0N 19·0W	58·9N 19·3W.	59·0N 19·0W	52·5N 19·9W.	52·5N 20·0W.	52·4N 19·9W	52·4N 19·9W.			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.	G.M.T.		Time
Pressure M.S.L.	1001 mb	1000 mb	1000 mb	1000 mb	1013 mb	1010 mb	1007 mb	1002 mb	mb		Pressure M.S.L.
Surf	1001 mb	1000 mb	1000 mb	1000 mb	1013 mb	1010 mb	1007 mb	1002 mb	mb		Surf
Freezing	900 mb	885 mb	880 mb	885 mb	840 mb	mb	800 mb	850 mb	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	Height ft./100 / °Temp. °F. / Dew °F. / Wind Dir. ° Vel. knots		Pressure mb
Surf	49 38 280 11	49 36 Calm	49 38 Calm	48 38 Calm	53 49 280 20	53 49 265 14	55 48 230 13	52 47 220 13			Surf
1000	3		1	-2	3·5 51 48 280 19	2·6 52 49 270 15	1·9 54 48 227 13	6 52 47 220 15			1000
950	40 30	41 30 240 04			44 42 284 24	45 44 268 19	48 46 228 15	45 44 219 18			950
900	28·4 32 25 269 19	28·3 34 24 250 06	28·4 34 27 208 07	28·1 34 27 L.V.	31·9 38 36 286 27	31·0 38 36 262 22	30·5 41 40 232 15	29·1 39 39 223 20			900
850	26 18 269 20	28 18 250 05	28 20 234 15	28 21 "	33 30 286 29	33 32 261 24	35 34 241 18	33 33 232 24			850
800	58·9 23 11 267 19	59·0 23 12 250 06	59·1 22 12 242 15	58·8 23 16 "	62·9 28 26 285 30	62·0 28 28 261 29	61·8 32 28 247 26	60·1 28 28 239 25			800
750	15 01 267 22	17 05 250 14	16 05 243 12	17 09 "	25 17 278 32	22 21 261 33	25 20 258 30	23 23 242 25			750
700	92·7 08 -05 266 21	93·0 12 -01	92·9 10 02 242 09	92·7 11 03 "	97·4 23 13 272 34	96·4 17 14 259 36	96·3 17 15 267 36	94·5 17 17 242 26			700
650	00 -11 264 25	03 -08	03 -04 233 10	04 -05 "	18 05 267 37	19 09 258 44	14 08 265 37	10 09 240 30			650
600	131 -05 -16 262 21	131 -06 -16 240 20	131 -04 -10 223 10	131 -04 -11 "	137 15 01 262 44	136 12 03 255 46	135 11 -02 250 39	133 02 -01 230 31			600
550	-12 -25 262 23	-14 -27	-11 -17 218 11	-12 -19 "	08 -07 259 55	06 -04 256 57	04 -11 241 49	-06 -09 222 37			550
500	174 -21 -33 260 24	175 -17 -31 240 34	175 -19 -25 225 12	174 -20 -27 "	182 -02 -10 253 57	181 -02 -13 255 63	180 -05 -19 242 61	177 -16 -23 224 35			500
450	-29 -39 263 49	-24 -40	-24 -40 232 19	-27 -36 "	-12 -17 251 61	-11 -21 253 66	-16 -26 237 73	-25 -55 230 49			450
400	225 -36 -49 264 52	226 -34 -52	226 -34 -52 241 30	226 -36 -48 "	236 -18 -22 255 71	234 -23 -33 251 78	233 -25 -33 228 95	229 -32 -43 237 55			400
350	-48 257 57	-47 240 41	-48 244 30	-49 "	-29 -32 257 97	-36 -46 247 84	-35 -44 230 107	-39 -51 252 57			350
300	288 -60 251 53	289 -59 260 31	289 -62 249 24	289 -62 "	301 -44 252 105	299 -54 241 90	298 -47 234 108	293 -49 255 59			300
250	-60 251 52	-51	-53 251 27	-53 "	-60 246 116	-56 241 99	-53 237 100	-50 246 61			250
200	375 -51 248 42	378 -46 250 36	377 -50 233 25	377 -49 203 25	388 -62 239 114	386 -59 240 98	387 -52 229 81	382 -50 239 59			200
170	-54 251 46	-49	-49 227 30	-50 227 22	-65 236 102	-60 240 76	-53 223 84	-52 239 65			170
150	-55 253 44	-49	-49 231 27	-52 234 15	-64 240 85	-60 243 69	-53 219 78	-53 239 58			150
130	-54 255 44		-48 235 24	-53 235 24	-74 248 70	-62 245 71	-53 216 58	-55 239 30			130
110	-60 255 41		-52 238 24	-55 237 22	-74 253 55	-65 245 63	-59 225 42	-57 239 27			110
100	525 -61 255 40		529 -54 240 22	527 -56 246 18	533 -74 253 51	533 -65 246 51	536 -56 232 38	532 -58			100
90	-61 254 44		-54 247 22	-58 246 22		-63 246 34	-55 234 32				90
80	-62 256 33		-54 252 22	-60 265 20		-58 247 29	-52 234 25				80
70			-55 256 21	-61 270 25		-53 247 25	-53 234 07				70
60			-55 240 14	-62 300 27							60
		Isothermal. 730-715 mb 15° 524-500 " 17°	-55 235 15		Isothermal. 736-700 mb 24° 600-590 " 15° 435-422 " -16°	Inversion. 708 mb 14° - 635 mb 20°	Isothermal. 681-650 mb 24° 616-600 " 11° 250-240 " -53°				
Tropopause	I 275 mb -65° 30.000'	I 297 mb -60° 29.000'	I 294 mb -63° 29.400'	I 313 mb -61° 27.900'	I 217 mb -66° 37.200'	I 237 mb -57° 33.200'	I 221 mb -58° 36.500'	I 295 mb -50° 29.700'			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

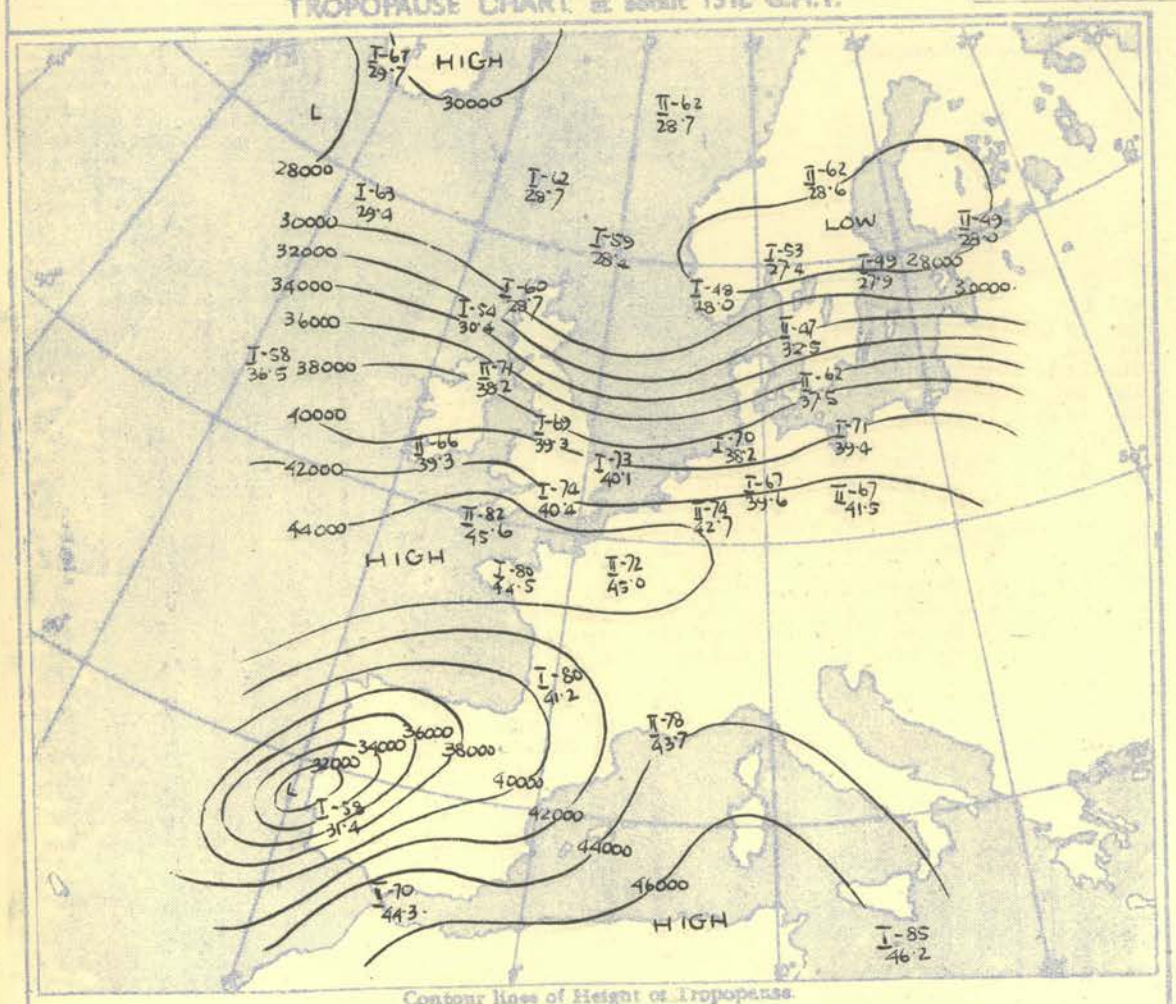


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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

100 80 60 40 30 20 15° 10 knots

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



Contour lines of Height of Tropopause.
Temperatere of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

The cut off cold pool over Spain moved to West of Portugal and subsequently degenerated into a trough to the south-west of the main thermal belt in the Atlantic as this moved southward. The very strong thermal gradient in the Atlantic which had been a feature of recent charts weakened a little.

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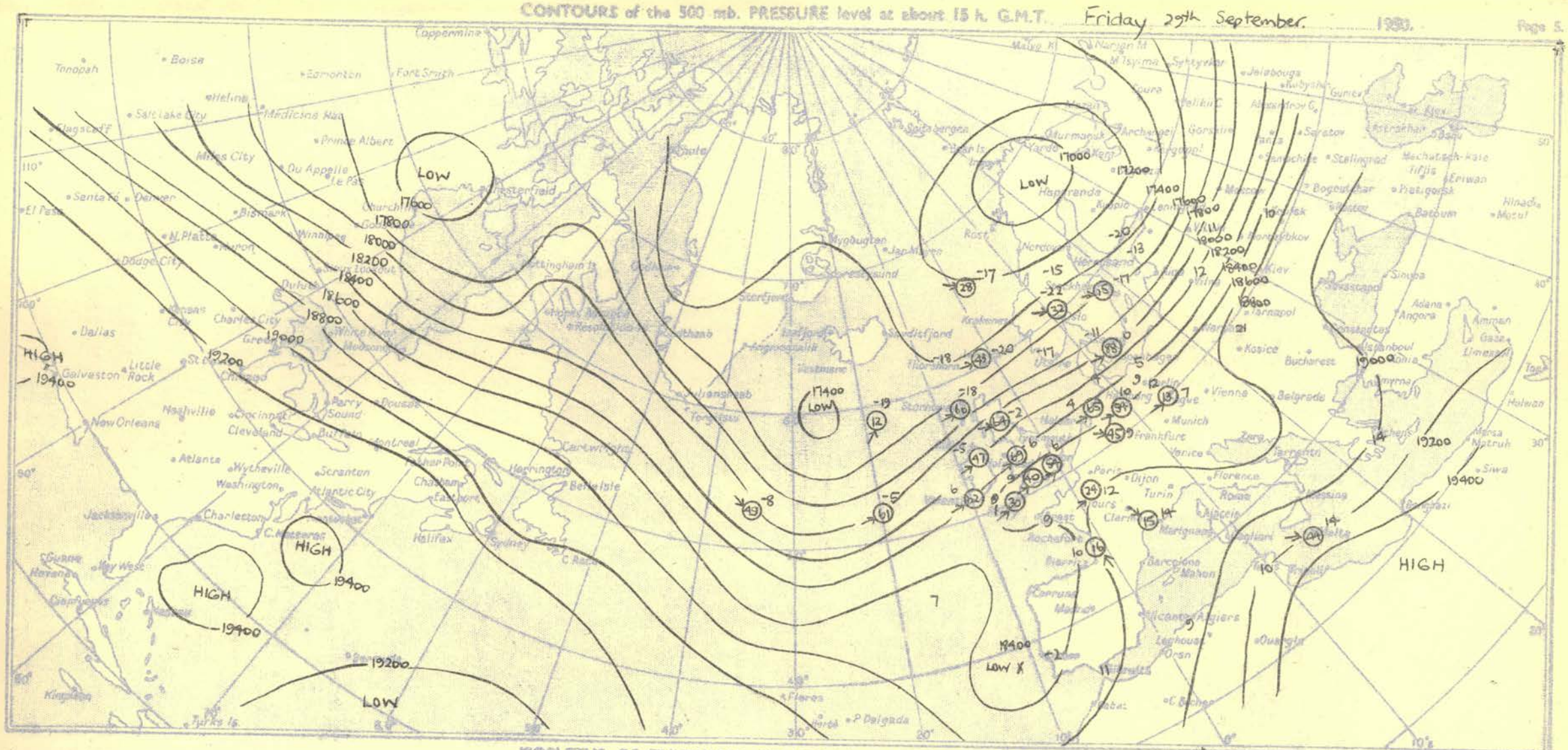
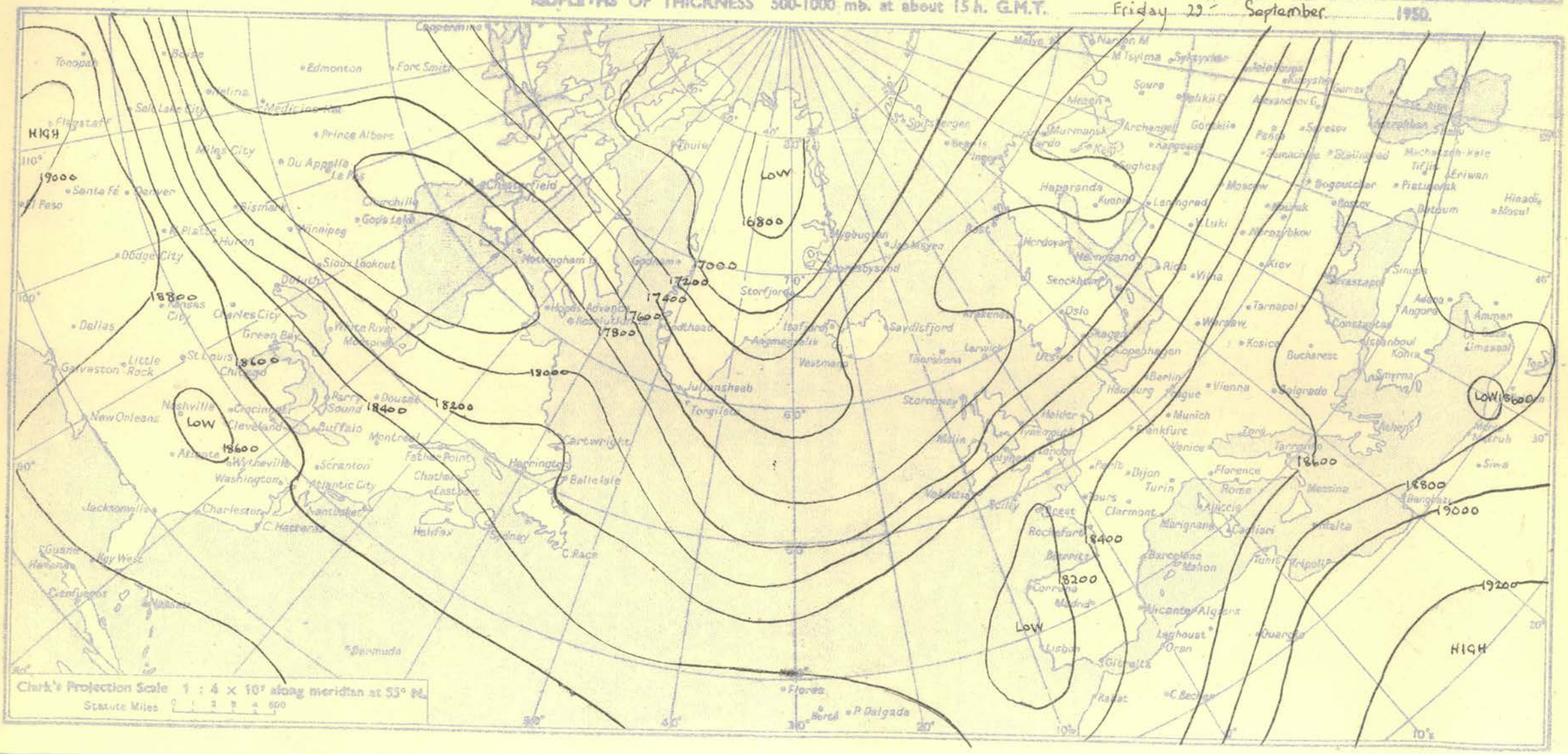
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Friday 29th September. 1950.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Friday 29th September 1950.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. ... May 45

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

LERWICK

Pressure — Time 15h G.M.T. | M.S.L. 999·5 mb | Surf 989·6 mb | Freezing 888 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	027	50	36	290	23
1000	-01				
950	43	31	27	276	27
900	28·2	34	25	279	22
850	29	29	17	283	24
800	58·9	23	08	284	34
750	17	04	29	279	36
700	92·9	12	00	276	36
650	04	-08		273	36
600	131	-02	-13	267	36
550		-12	-29	263	38
500	175	-20	-37	266	43
450		-32	-46	265	55
400	226	-37	-53	263	61
350		-48		264	63
300	289	-58		265	69
250		-53		263	67
200	377	-48		262	64
170		-53		260	61
150		-53		260	53
130		-59		261	52
110		-59		262	45
100	526	-59		252	45
90		-58		256	45
80		-59		265	39
70		-63			
60	(68 mb)	-64			

Isothermal 450 - 428 mb -32°

Tropopause: I 306 mb -59° 28,400'

STORNOWAY

Pressure — Time 15h G.M.T. | M.S.L. 1004·8 mb | Surf 1002·9 mb | Freezing 863 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	005	50	41	270	15
1000	1·3	49	40		
950		43	36	262	22
900	29·7	37	32	259	22
850		31	27	259	22
800	60·5	24	19	258	27
750	94·6	17	01	262	29
700		11	02	259	30
650		03	-06	252	31
600	133	-04	-15	253	36
550		-10	-22	262	51
500	176	-18	-36	261	60
450		-29	-46	261	69
400	228	-36	-54	261	94
350		-49		260	105
300	291	-59		259	113
250		-52		253	102
200	378	-54			
170		-58			
150		-62			
130		-63			
110		-61			

Inversion 593 mb -05° - 580 mb -04°; 550 " -10° - 537 " -09°
Isothermal 450 - 437 mb -29°

Tropopause: I 306 mb -60° 28,700'

LEUCHARS

Pressure — Time 15h G.M.T. | M.S.L. 1008·1 mb | Surf 1006·9 mb | Freezing 850 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	002	58	51	230	10
1000	2·1	53	50	249	18
950		48	43	259	21
900		41	38	265	24
850	30·7	34	31	271	27
800	61·8	29	25	273	30
750	96·0	23	18	272	35
700		19	08	272	38
650		16	01	273	43
600	135	11	-04	272	51
550		05	-12	271	57
500	180	-02	-17	270	64
450		-11	-25	270	72
400	234	-23	-36	263	84
350		-34	-46	263	102

Isothermal 717 - 671 mb 19°

Tropopause: NR.

ALDERGROVE

Pressure — Time 15h G.M.T. | M.S.L. 1010·9 mb | Surf 1007·3 mb | Freezing 858 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	023	52	47	220	10
1000	3·0				
950		44	41	238	17
900		37	35	252	19
850	31·4	31	27	262	20
800	62·4	27	20	268	22
750	96·8	22	09	254	30
700		18	01	253	38
650		14	-05	257	49
600	136	10	-12	258	45
550		04	-15	253	45
500	181	-05	-19	252	47
450		-15	-30	257	57
400	234	-24	-37	252	96
350		-36	-44	251	105
300	299	-49		246	108
250		-61		243	120
200	385	-71		243	98
170		-70		237	89
150		-73		239	70
130		-75		255	60

Inversion 933 mb -05° - 880 mb -04°
Isothermal 782 - 738 mb 33°

Tropopause: I 202 mb -71° 38,200'

LIVERPOOL

Pressure — Time 15h G.M.T. | M.S.L. 1012·6 mb | Surf 1010·6 mb | Freezing 732 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	006	54	46	270	10
1000	3·5	52	44	284	15
950		45	37	268	16
900	32·0	40	31	258	20
850		34	25	254	18
800	63·2	34	18	256	19
750	98·3	33	18	256	27
700		26	17	253	38
650		24	17	254	49
600	138	21	15	258	60
550		14	07	259	64
500	184	06	-02	260	69
450		-02	-11	259	70
400	239	-15	-25	257	70
350		-27	-38	254	82
300	305	-39	-52	253	91
250		-52		248	104
200	393	-69			
170		-70			
150		-71			
130		-70			
110		-69			
100	537	-65			
90		-63			
80		-62			
70		-62			
60		-62			
		-58			
	(98 mb)	-57			

Max wind: 258 114 kts, 252 mb 34,300

Inversion 842 mb 33° - 800 mb 34°
Isothermal 782 - 738 mb 33°

Tropopause: I 200 mb -69° 39,200'

DOWNHAM MARKET

Pressure — Time 15h G.M.T. | M.S.L. 1013·6 mb | Surf 1009·4 mb | Freezing 675 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	012	53	46	260	09
1000	3·8	58	45		
950		48	39	257	11
900	32·5	42	35	251	15
850		39	15	247	19
800	64·0	38	09	260	27
750	99·0	36	09	261	41
700		34	-14	261	45
650		29	15	261	48
600	140	23	15	260	57
550		15	06	261	54
500	186	06	-02	261	54
450		-03	-13	257	57
400	240	-14	-22	256	62
350		-25	-32	256	65
300	307	-34	-48	257	87
250		-52		253	92
200	394	-71		257	77
170		-71		258	78
150		-77		252	66
130		-78		257	58
110		-75		261	42
100	537	-72		259	40
90		-65		253	32
80		-66		261	27
70		-70		259	22
60		-60		253	24

Inversion 862 mb 37° - 836 mb 41°
Isothermal 771 - 695 mb 34°; 342 - 332 " -26°

Tropopause: I 198 mb -73° 40,100'

LARKHILL

Pressure — Time 15h G.M.T. | M.S.L. 1013·7 mb | Surf 998·0 mb | Freezing 680 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	014	59	52	CALM	
1000	3·8				
950		50	44	259	06
900	32·6	45	40	260	12
850		45	39	260	24
800	64·4	43	37	255	27
750	100	41	30	255	31
700		35	27	247	37
650		31	15	245	40
600	140	24	06	250	39
550		16	04	251	37
500	187	07	-02	250	40
450		01	-17	248	43
400	241	-12	-24	246	50
350		-21	-36	250	59
300	308	-36	-48	246	66
250		-50		236	70
200	396	-70		242	70
170		-76		239	65
150		-78		241	55
130		-77		249	48
110		-73		245	36
100	539	-75		244	30
90		-72		245	30
80		-69			

Inversion 865 mb 43° - 850 mb 45°; 790 " 42° - 775 " 43°
Isothermal 850 - 820 mb 45°; 675 - 643 " 31°

Tropopause: I 192 mb -74° 40,900'

CAMBORNE

Pressure — Time 15h G.M.T. | M.S.L. 1013·9 mb | Surf 1003·4 mb | Freezing 653 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	029	55	54	CALM	
1000	3·8	55	54		
950		52	52	194	09
900	32·8	51	51	231	18
850		47	47	236	21
800	64·8	43	43	241	20
750	100	38	38	231	22
700		33	26	226	25
650		32	25	237	29
600	141	28	13	244	26
550		18	-06	245	26
500	187	09	-10	241	30
450		-01	-12	232	37
400	242	-09	-22	232	45
350		-20	-34	235	46
300	309	-34	-50	229	51
250		-51		221	57
200	397	-68		219	56
170		-78		220	54
150		-82		232	45
130		-78		246	37
110		-76		237	32
100	539	-75		230	27
90		-76		229	27
80		-73		237	29

Tropopause: I 150 mb -82° 45,600'

VALENTIA

Pressure — Time 15h G.M.T. | M.S.L. 1011·8 mb | Surf 1010 mb | Freezing 780 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	003	52	42	170	04
1000	3·2	51	43		
950		45	38	201	11
900	31·7	40	33	230	13
850		34	34	236	11
800	62·8	33	33	236	20
750	97·8	29	29	244	40
700		24	24	240	44
650	138	19	19	244	48
600		14	13	235	59
550	184	06	02	234	62
500		-02	-05	237	64
450	238	-16	-20	235	65
400		-26	-32	238	70
350	305	-37	-45		
300		-50			
250		-66			
200		-69			
170		-71			
150		-70			
130		-66			
110	537	-64			
100		-67			
90		-60			

Tropopause: II 200 mb -66° 39,300'

LERWICK

Pressure — Time 21h G.M.T. | M.S.L. 1002·3 mb | Surf 992·3 mb | Freezing 875 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	027	44	38	280	08
1000	0·6				
950	42	36	257	16	
900	28·9	35	21	262	18
850	29	25	264	18	
800	59·6	24	20	264	21
750	18	14	264	22	
700	93·6	12	-03	264	22
650	06	-09	263	21	
600	132	-04	-18	264	26
550		-10	-26	266	32
500	176	-17	-37	265	41
450		-26	-43	263	48
400	227	-37	-52	260	52
350		-46		263	75
300	291	-56		263	90
250		-56		260	87
200	378	-57		259	75
170		-56		260	66
150		-60		259	60
130		-65		260	51
110	(116 mb)	-66			
100					
90					
80					
70					
60					

Inversion 932 mb 44° - 918 mb 46°

Tropopause: II 292 mb - 58° 29,700'

STORNOWAY

Pressure — Time 21h G.M.T. | M.S.L. 1005·0 mb | Surf 1003·1 mb | Freezing 860 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	003	46	44	CALM	
1000	1·3	47	44		
950		44	40	232	14
900	29·8	37	35	239	15
850		31	29	247	18
800	60·7	26	24	237	23
750	95·0	20	18	232	24
700		14	11	235	28
650		07	02	237	30
600	133	01	-09	247	34
550		-03	-22	251	47
500	178	-11	-20	252	57
450		-20	-26	252	63
400	230	-29	-35	249	93
350		-40	-46	247	105
300	294	-51		247	113
250		-60		245	109
200	381	-57		247	82
170		-57			
150		-60			
130		-62			
110		-62			

Inversion 1003 mb 46° - 987 mb 49°
Isothermal 605 - 580 mb 01°

Tropopause: I 265 mb - 60° 32,100'

LEUCHARS

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

No data.

ALDERGROVE

Pressure — Time 21h G.M.T. | M.S.L. 1009·5 mb | Surf 1008·9 mb | Freezing 835 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	023	50	46	280	06
1000	2·6				
950		46	42	212	13
900	31·1	41	37	220	13
850		34	31	219	12
800	62·2	29	25	226	13
750	96·8	25	16	236	15
700		23	05	230	20
650		18	-08	228	30
600	136	14	07	233	37
550		07	02	235	40
500	182	01	-10	248	56
450		-08	-15	252	67
400	235	-21	-27	242	77
350		-34	-40	237	87
300	300	-45		234	98
250		-58		230	109
200	387	-71		230	94
170		-69		243	73
150		-71		256	58
130		-69		252	52
110		-69		252	50
100	531	-69		248	45
90		-67		246	25

Isothermal 725 - 705 mb 24°; 525 - 513 " 02°

Tropopause: I 198 mb -72° 30,000'

LIVERPOOL

Pressure — Time 21h G.M.T. | M.S.L. 1011·2 mb | Surf 1009·2 mb | Freezing 742 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	006	52	46	CALM	
1000	3·1	51	45	"	
950		47	38	210	06
900	31·6	41	33	213	12
850		36	28	236	15
800	62·9	32	27	244	20
750	97·9	31	27	248	32
700		28	25	248	39
650		25	21	248	42
600	138	20	15	245	51
550		12	03	245	54
500	184	02	-06	248	53
450		-05	-24	244	59
400	238	-19	-31	245	59
350		-31	-40	246	72
300	304	-42		240	74
250		-56		239	87
200	391	-73		238	78
170		-75			
150		-73			
130		-75			
110		-72			
100	533	-71			
90	(94 mb)	-70			

Inversion 772 mb 30° - 742 mb 32°
Isothermal 500 - 473 mb 02°

Tropopause: I 190 mb - 76° 40,100'

DOWNHAM MARKET

Pressure — Time 21h G.M.T. | M.S.L. 1011·6 mb | Surf 1008·9 mb | Freezing 692 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	012	53	48	K N V	
1000	3·6	52	47		
950		48	39	210	07
900	32·2	42	36	220	08
850		37	25	248	13
800	63·7	41	-05	258	30
750	99·0	34	27	253	35
700		26	21	251	35
650	139	23	14	248	39
600		15	06	240	43
550	185	04	-07	245	46
500		+06	-28	249	49
450	239	-15	-26	248	51
400		-25	-34	248	59
350	306	-36	-48	242	66
300		-54		235	75
250	394	-67		229	77
200		-69		246	65
170		-71		250	54
150		-74		244	44
130		-77		243	39
110	537	-75			

Inversion 853 mb 37° - 818 mb 43°
Isothermal 765 - 750 mb 27°; 658 - 642 " 26°

Tropopause: II 225 mb - 64° 36,900'

LARKHILL

Pressure — Time 21h G.M.T. | M.S.L. 1012·2 mb | Surf 996·4 mb | Freezing 705 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	014	55	55	CALM	
1000	3·4				
950		51	50		
900	32·3	48	46		
850		47	46		
800	64·2	42	41		
750	99·1	35	33		
700		32	29		
650		29	25		
600	140	22	19		
550		15	11		
500	186	07	-02		
450		-04	+10		
400	240	-14	-22		
350		-26	-36		
300	307	-39	-49		
250		-54			
200	394	-72			
170		-79			
150		-76			
130		-80			
110		-78			
100		-77			
90		-76			
80		-75			

Inversion 887 mb 47° - 873 mb 49°

Tropopause: I 170 mb - 79° 42,700'

CAMBORNE

Pressure — Time 21h G.M.T. | M.S.L. 1010·5 mb | Surf 1000·1 mb | Freezing 690 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	029	57	56	203	06
1000	2·9	57	56		
950		54	54	212	17
900	31·9	50	48	233	13
850		45	41	235	12
800	62·7	40	37	221	15
750	99·1	36	35	224	20
700		34	31	221	25
650		27	20	220	30
600	139	21	15	221	33
550		12	08	220	30
500	185	06	01	221	30
450		-05	-12	220	35
400	239	-14	-29	218	36
350		-26	-45	213	45
300	306	-42		216	51
250		-59		216	47
200	392	-73		212	50
170		-77		223	42
150		-78		231	39
130		-78		232	33
110		-76		231	27
100	534	-75		235	21
90		-74		235	21
80	(85 mb)	-73			
70					
60					

Isothermal 740 - 707 mb 35°

Tropopause: I 175 mb - 81° 42,000'

No. 11507 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Saturday 30th. September 1950. 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.	1004·0 mb	1004·2 mb	1007·3 mb	1007·1 mb	1007·7 mb	1011·5 mb	1010·6 mb	1007·5 mb	1000 mb
Pressure: Surf	994·2 mb	1002·3 mb	1006·5 mb	998·7 mb	1005·7 mb	1007·1 mb	994·8 mb	997·1 mb	998 mb
Pressure: Freezing	862 mb	850 mb	838 mb	811 mb	715 mb	721 mb	687 mb	700 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
Surf	02·7	44	39	255	08	00·5	43	42	CALM		00·2	49	45		
1000	01·1					01·4	44	43			02·0	48	45		
950		43	38	240	16		44	38	240	15		44	43		
900	29·4	36	32	242	19	29·5	38	31	239	18	30·4	39	32		
850		31	27	243	20		32	25	222	20		34	28		
800	60·2	25	21	248	21	60·5	26	19	220	21	61·5	27	23		
750		20	11	251	21		20	13	225	21		21	19		
700	94·3	14	01	255	24	94·7	13	06	232	18	09·6	15	11		
650		07	-06	257	28		08	01	234	20		16	-02		
600	13·3	00	-13	255	32	13·3	04	-03	230	27	13·5	11	-06		
550		-04	-27	251	37		-02	-08	229	37		03	-04		
500	17·7	-12	-30	252	47	17·8	-10	-16	227	46	18·0	-02	-13		
450		-21	-29	252	66		-21	-34	233	56		-12	-21		
400	22·9	-30	-40	252	75	23·0	-31	-41	234	79	23·3	-25	-37		
350		-40	-56	252	96		-40	-51	235	96		-35	-44		
300	29·4	-51		251	110	29·4	-51		231	111	28·8	-50	-57		
250		-60		252	112		-60		233	99		-62			
200	38·0	-59		249	78	38·1	-59		241	60	38·4	-72			
170		-56		247	65		-59		238	72		-68			
150	44·2	-58		245	55	44·2	-59				44·3	-69			
130		-55		253	47		-61								
110		-62		249	43										
100	52·8	-62		249	42										
90		-62		257	37										
80		-61		265	29										
70		-62		265	35										
60		-65													

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
Surf	02·3	48	46	180	10	00·6	50	47			01·2	52	51	CALM		04·4	56	56	CALM.	
1000	02·4					02·3	49	45			03·2	52	51			02·9				
950		43	37	166	11		46	42				50	44	186	13		55	54		
900	30·3	38	34	150	12	30·8	43	39			31·9	46	43	202	13	31·9	51	49		
850		34	31	150	14		46	44	215	16		47	45				47	45		
800	61·4	31	29	174	15	62·4	39	34			63·6	41	39	220	22	63·8	43	40		
750		29	27	203	15		35	29				35	32	216	27		39	35		
700	96·3	25	23	225	21	97·7	30	25			98·5	30	27	217	30	10·0	34	31		
650		20	18	223	18		24	19				25	22	232	35		27	22		
600	13·6	15	12	219	36	13·8	16	06			13·9	19	17	238	34	13·9	20	13		
550		08	04	220	40		12	03				11	07	230	36		11	02		
500	18·1	01	-3	221	49	18·3	05	-3			18·5	04	-01	228	36	18·5	06	-7		
450		-08	-14	219	54		-5	-12				-07	-14	233	41		-3	-14		
400	23·5	-19	-25	225	70	23·7	-16	-24			23·9	-17	-32	231	54	23·9	-13	-20		
350		-33	-39	229	83		-28	-37				-28	-41	224	59					
300	30·0	-48		224	85	30·3	-43				30·5	-43		229	67					
250		-62		223	99		-58					-58		229	69					
200	38·7	-70		222	91	38·9	-68				39·1	-75		235	69					
170		-67		220	60		-71					-82		234	65					
150	44·7	-69					-71				44·9	-81		236	48					
130		-70					-69					-82		234	52					
110		-68					-65					-80		226	41					
100	53·1	-67				53·4	-68				53·1	-81		229	33					
90							-70					-78		243	24					
80							-70					-78		243	29					
70							-70					-76		238	20					
60																				

Pressure mb	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	02·9	58	57	203	05	00·3	54	52		
1000	02·1					00·0				
950		54	54	207	2		51	50		
900	31·2	51	51	206	20	28·8	48	47		
850		47	47	210	20		44	44		
800	63·2	43	43	213	20	60·6	39	38		
750		38	38	223	20		35	33		
700	98·7	32	32	210	26	95·9	29	26		
650		27	26	201	21		23	21		
600	13·9	21	13	200	30	136	14	8		
550		11	05	213	22		5	-1		
500	18·5	06	-16	206	29	181	-3	-40		
450		-3	-14	223	35		-12			
400	23·9	-14	-22	214	41	234	-22			
350		-25	-34	210	43		-34			
300	30·6	-39	-50	204	41	299	-48			
250		-54		206	52		-63			
200	39·3	-67		205	46	385	-72			
170		-72		209	39		-66			
150		-70		219	40		-68			
130		-72		222	37		-71			
110		-72		225	31		-69			
100	53)	-71		212	33		-68			
90		-70				(92mb)	-68			
80										
70										
60										

Isothermal 1000 - 976 mb 54°

Tropopause	II 262 mb -59° 32,200'	I 262 mb -61° 32,400'	I 202 mb -72° 38,200'	I 202 mb -71° 38,500'	II 219 mb -68° 36,800'	I 168 mb - 82° 42,500'	N.R.	II 175 mb -72° 42,600'	II 200 mb -72° 38,500'	Tropopause

Inversion 994 mb 44° - 980 mb 46°

Isothermal 988 - 973 mb 47°

Inversion 1002 mb 43° - 988 mb 47°

Isothermal 694 mb 14° - 661 mb 16°

Isothermal 661 - 641 mb 16°
547 - 529 " 03°

Inversion 853 mb 39° - 839 mb 41°

Isothermal 600 - 580 mb 16°

Inversion 1000 mb 52° - 975 mb 53°

Isothermal 900 - 850 mb 46°
361 - 345 " -28°

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.	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.	1004·2 mb	1002·2 mb	mb	999·8 mb	1002·8 mb	1006·2 mb	1005·1 mb	1003·7 mb	mb	M.S.L.
Pressure: Surf	994·2 mb	1000·3 mb	mb	991·2 mb	1000·8 mb	1001·9 mb	989·4 mb	993·2 mb	mb	Surf
Pressure: Freezing	866 mb	850 mb	mb	743 mb	697 mb	697 mb	700 mb	704 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
Surf	02·7	47	44	230	02	00·5	49	46							
1000	01·1					00·6	49	46							
950		44	38	212	17		44	41							
900	29·5	37	31	214	20	29·0	37	34							
850		30	26	217	21		32	28							
800	60·4	24	20	219	20	60·0	27	20							
750		18	16	221	24		21	14							
700	94·5	12	08	214	24	94·2	16	11							
650		06	00	231	21		10	03							
600	13·3	00	-07	237	22	13·3	03	+12							
550		-03	-19	237	33		-3	-15							
500	17·7	-13	-24	238	51	17·7	-10	-19							
450		-20	-35	247	74		-17	-24							
400	22·9	-31	-30	247	84	23·0	-27	-36							
350		-42		246	100		-37	-48							
300	29·3	-52		243	103	29·4	-47								
250		-65		241	100		-60								
200	37·9	-59		245	66	38·1	-62								
170							-57								
150						44·3	-57								
130							-57								
110							-57								
100						53·0	-57								
90															
80															
70															
60															

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
Surf	02·3	50	48	105	12	00·6	53	52	160	12	01·2	57	57	150	06	04·4	57	57	CALM	
1000	00·0					00·8	53	52			01·7					01·4				
950		46	44	121	24		55	54	192	19		54	53				56	55	171	15
900	28·5	43	40	155	24	29·8	50	49	216	19	30·8	51	50			30·5	52	51	184	18
850		41	38	196	25		45	43	212	21		47	45				48	47	185	21
800	60·1	38	35	213	27	61·6	40	38	211	25	62·8	43	41			62·6	43	41	188	20
750		33	29	200	31		37	34	212	30		38	35	See Page 3 for Winds.			37	35	198	18
700	95·2	27	23	211	33	97·1	33	30	204	34	98·3	32	29			98·1	32	30	196	18
650		21	13	221	37		25	21	211	40		27	24				28	26	195	18
600	13·5	15	02	219	38	13·7	19	15	218	45	13·8	18	15			13·8	21	19	200	23
550		06	-14	220	44		13	08	218	45		11	06				13	10	204	24
500	18·0	-02	-24	216	50	18·3	05	-02	221	44	18·4	03	-06			18·4	04	00	204	22
450		-10	-33	217	57		-06	-13	218	39		-05	-14				-04	-10	203	28
400	23·3	-22	-47	214	60	23·7	-18	-27	220	46	23·8	-15	-25			23·9	-14	-20	201	39
350		-35	-58	215	69		-31	-40	221	51		-30	-38				-25	-33	199	50
300	29·9	-49		212	79	30·3	-43		216	67	30·4	-41				30·5	-38	-48	196	60
250		-62		211	98		-57		217	84		-60					-52		199	63
200	38·5	-61		212	77	39·0	-65				39·0	-74				39·3	-66		201	55
170		-60		226	60		-62					-66					-69		202	46
150	44·6	-61		225	49		-65				45·0	-62				45·3	-65		202	44
130		-60		230	47		-64					-68					-61			
110		-58		219	32		-65					-65				(125mb)	-64			
100	53·3	-58		241	32	53·6	-62				53·6	-62								
90		-59		246	30		-59					-59								
80						(86mb)	-59													
70																				
60																				

Pressure mb	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots					
Surf	02·9	57	57	180	05					
1000	01·0									
950		53	53	202	17					
900	30·0	49	49	201	16					
850		45	45	207	17					
800	61·8	42	42	208	15					
750		37	34	202	18					
700	97·3	32	28	205	21					
650		26	02	195	31					
600	13·7	19	07	196	32					
550		11	06	190	24					
500	19·3	04	-02	203	21					
450		-06	-08	208	18					
400	23·7	-17	-19	195	29					
350		-29	-31	204	28					
300	30·3	-43		202	35					
250		-57		184	59					
200	39·0	-65		187	46					
170		-69		210	41					
150	45·0	-67		217	34					
130		-69		220	27					
110		-67		219	33					
100	(103mb)	-68								
90										
80										
70										
60										

Isothermal 517 - 507 mb 05°

Tropopause	I 239 mb -68° 34,200'	II 208 mb -65° 37,100'		I 232 mb -64° 35,400'	I 218 mb - 66° 37,100'	I 205 mb -77° 38,500'	I 179 mb -72° 41,600'	I 210 mb -66° 37,800'		Tropopause

Isothermal 488 - 472 mb 12°
422 - 415 " 24°

Inversion 994 mb 47° - 975 mb 48°

Isothermal 714 - 700 mb 12°
606 - 581 mb 0°

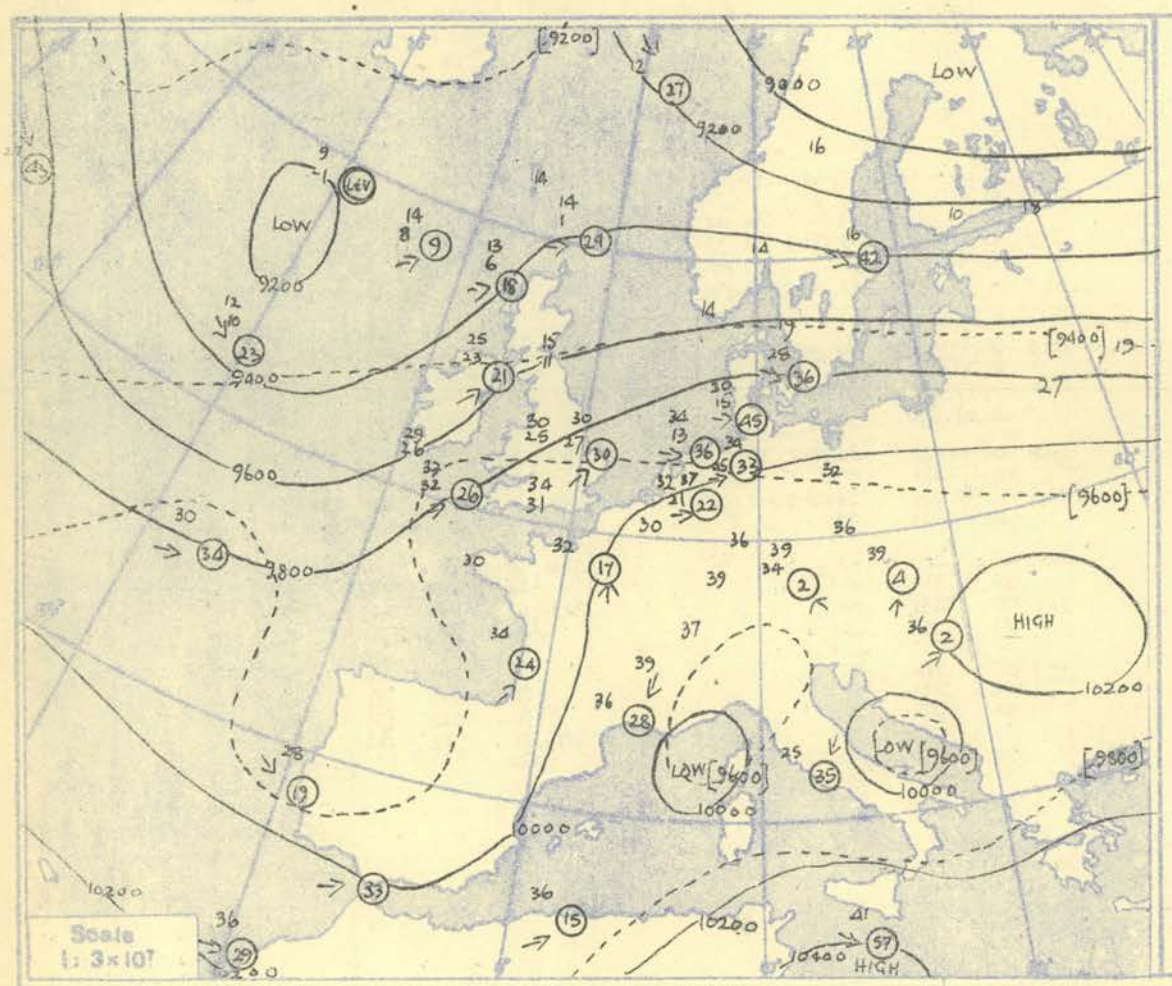
Inversion 978 mb 52° - 950 mb 55°

Isothermal 723 - 700 mb 33°

Isothermal 335 - 327 mb -34°
310 - 303 " -40°

Saturday 30 September 1950

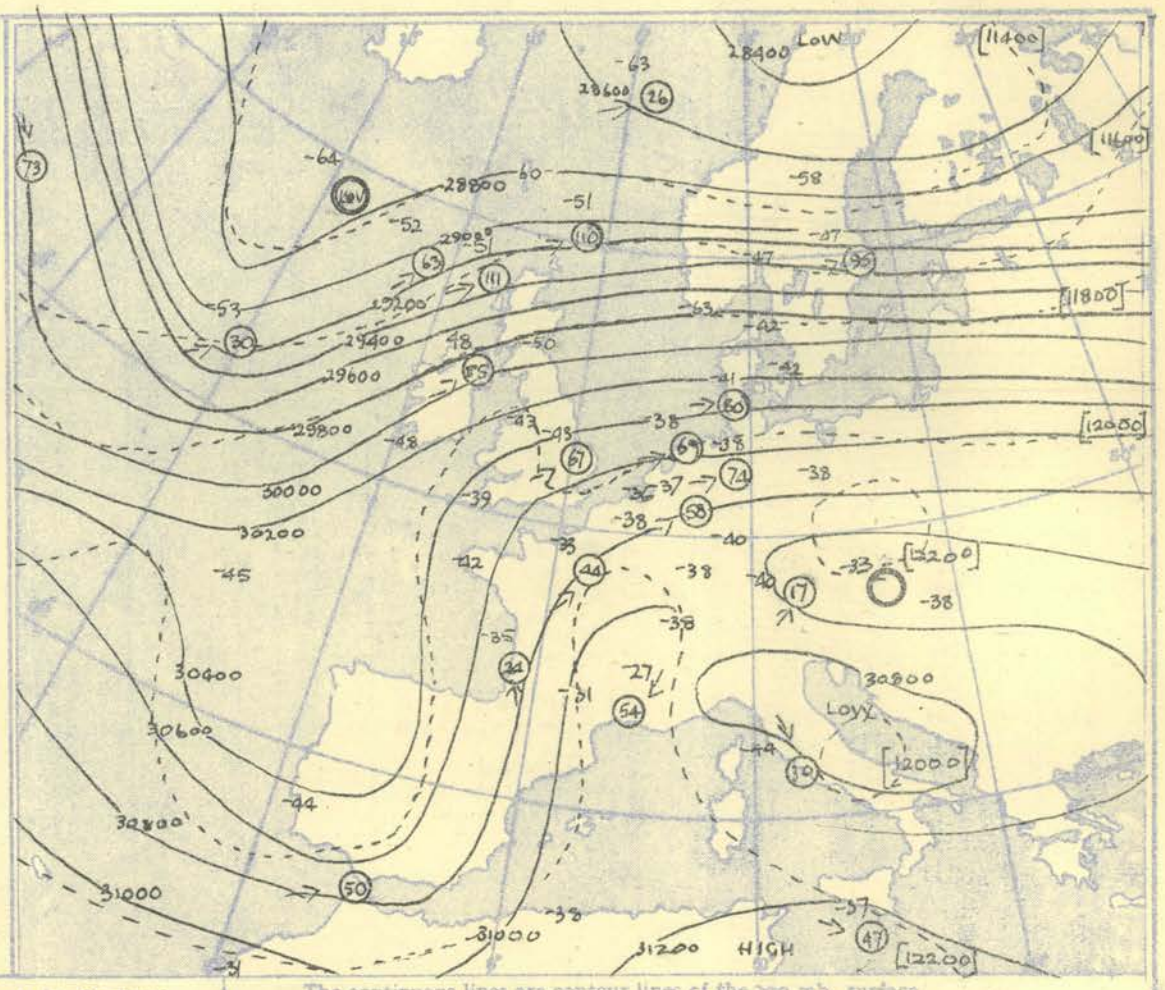
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. 500 mb and 300 mb., levels at about 02 h. GMT.



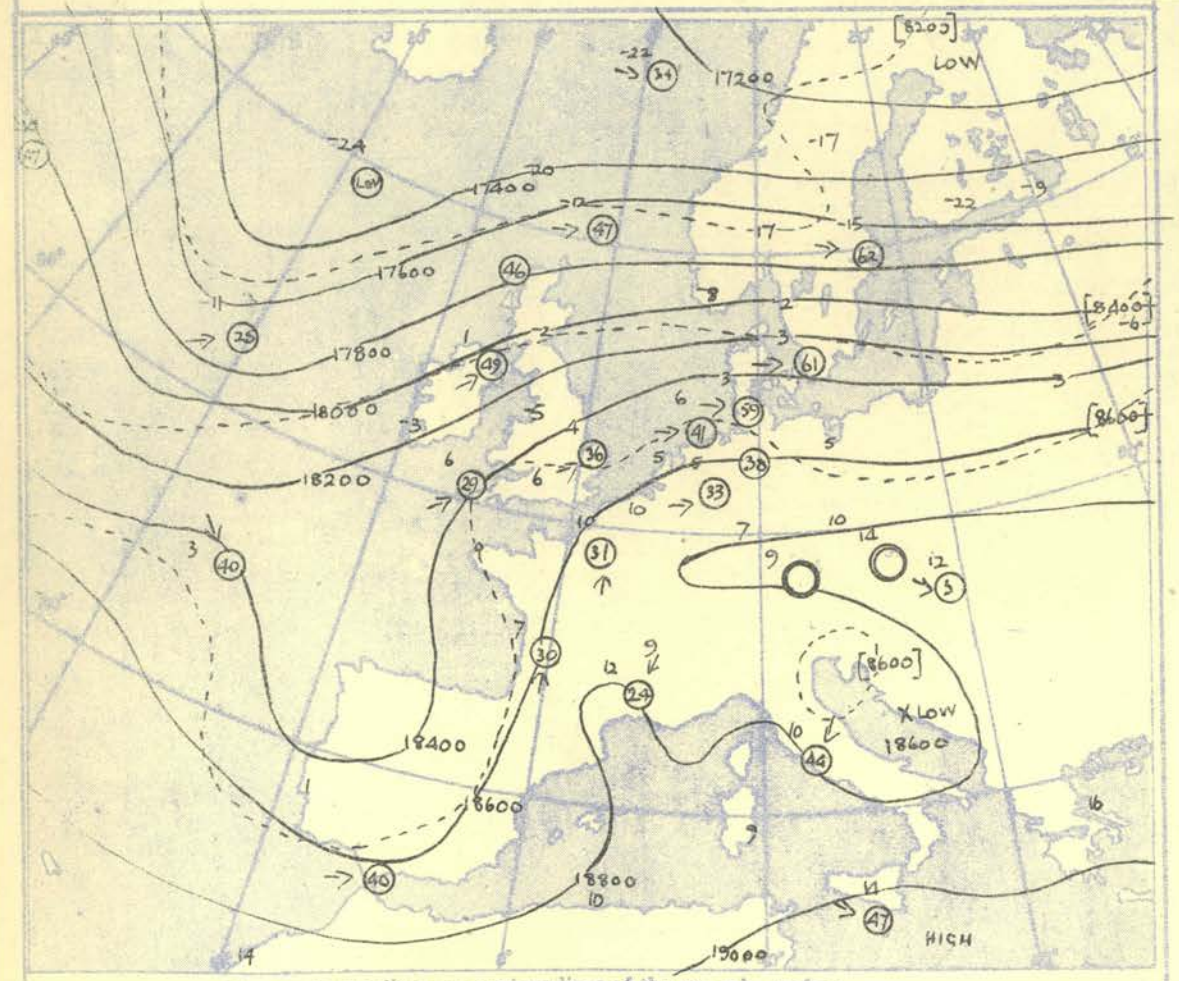
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

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

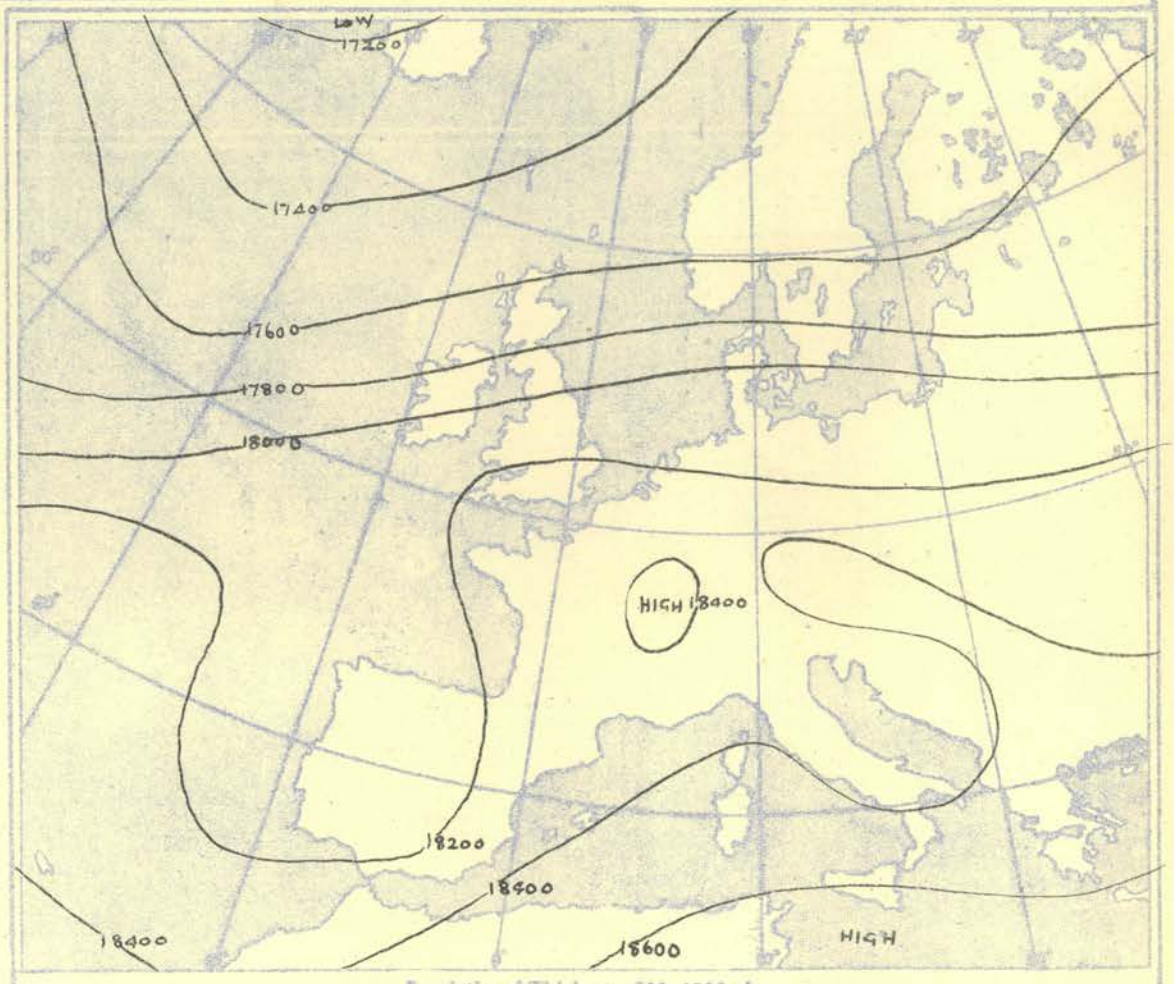
100 60 40 30 20 15 0 knots



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.



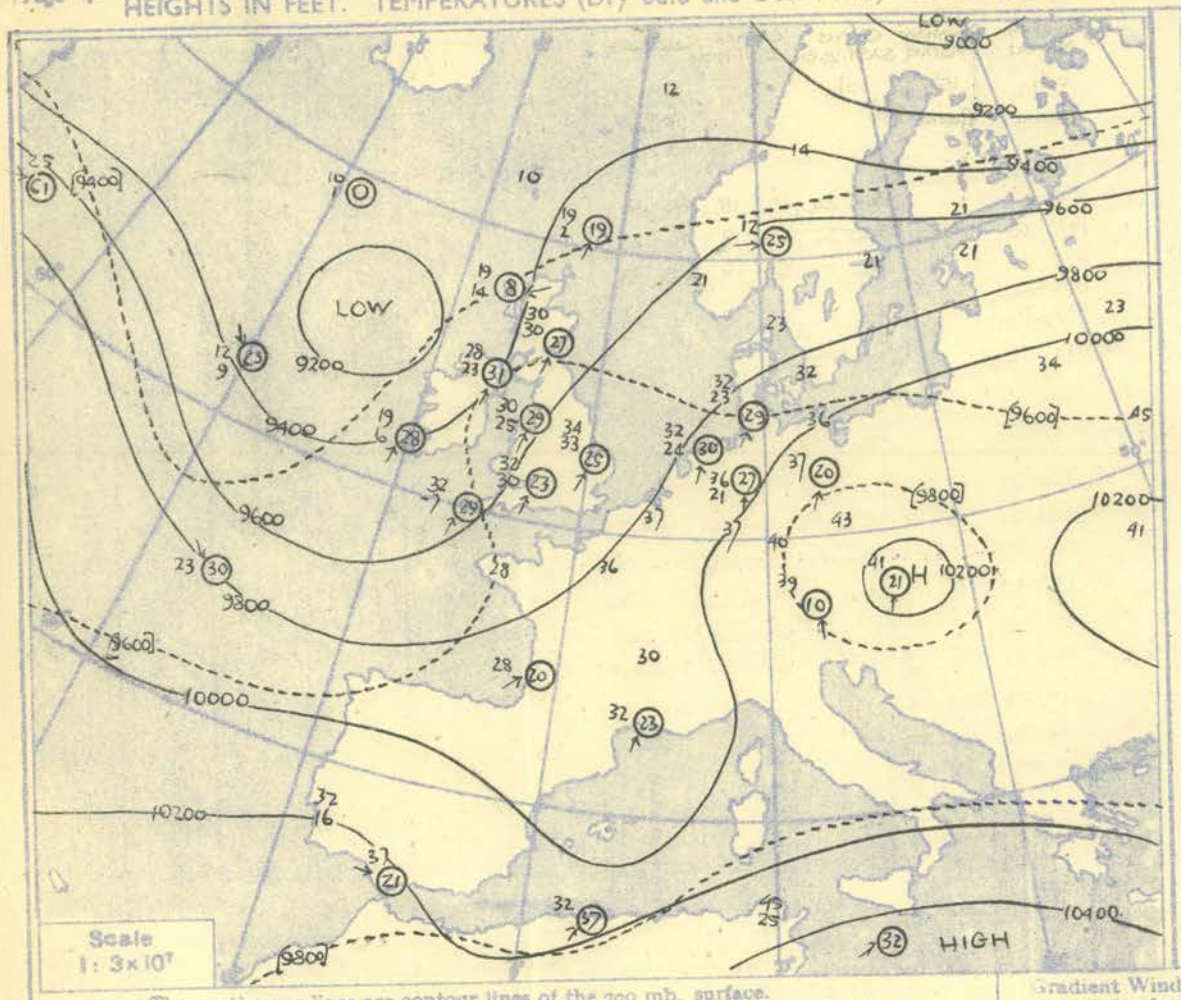
Isopleths of Thickness 500 - 1000mb.

Saturday 30th September, 1950. Page 3

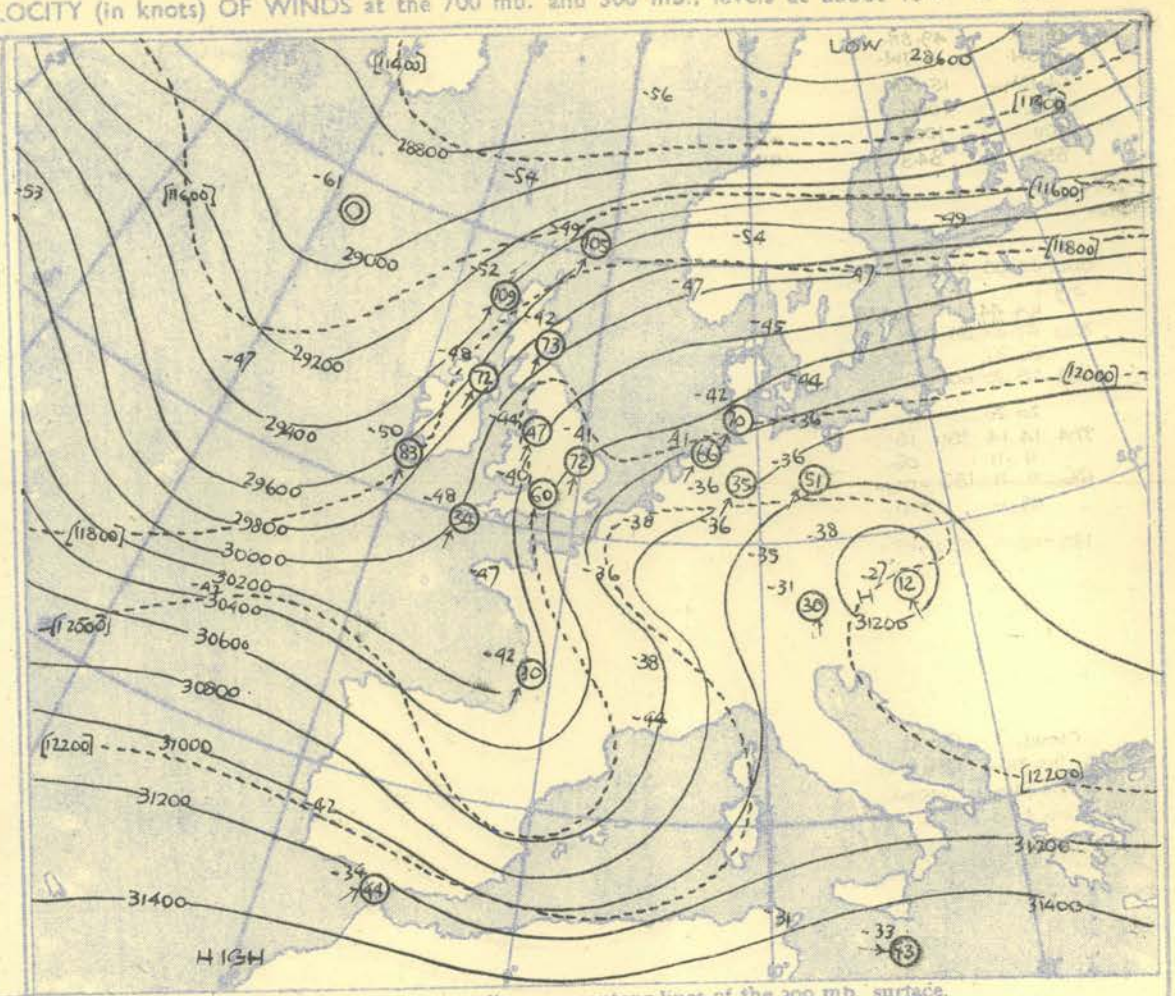
AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

| Pressure | | 48·2N. 20·5W. | | | 49·5N. 14·7W. | | |

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

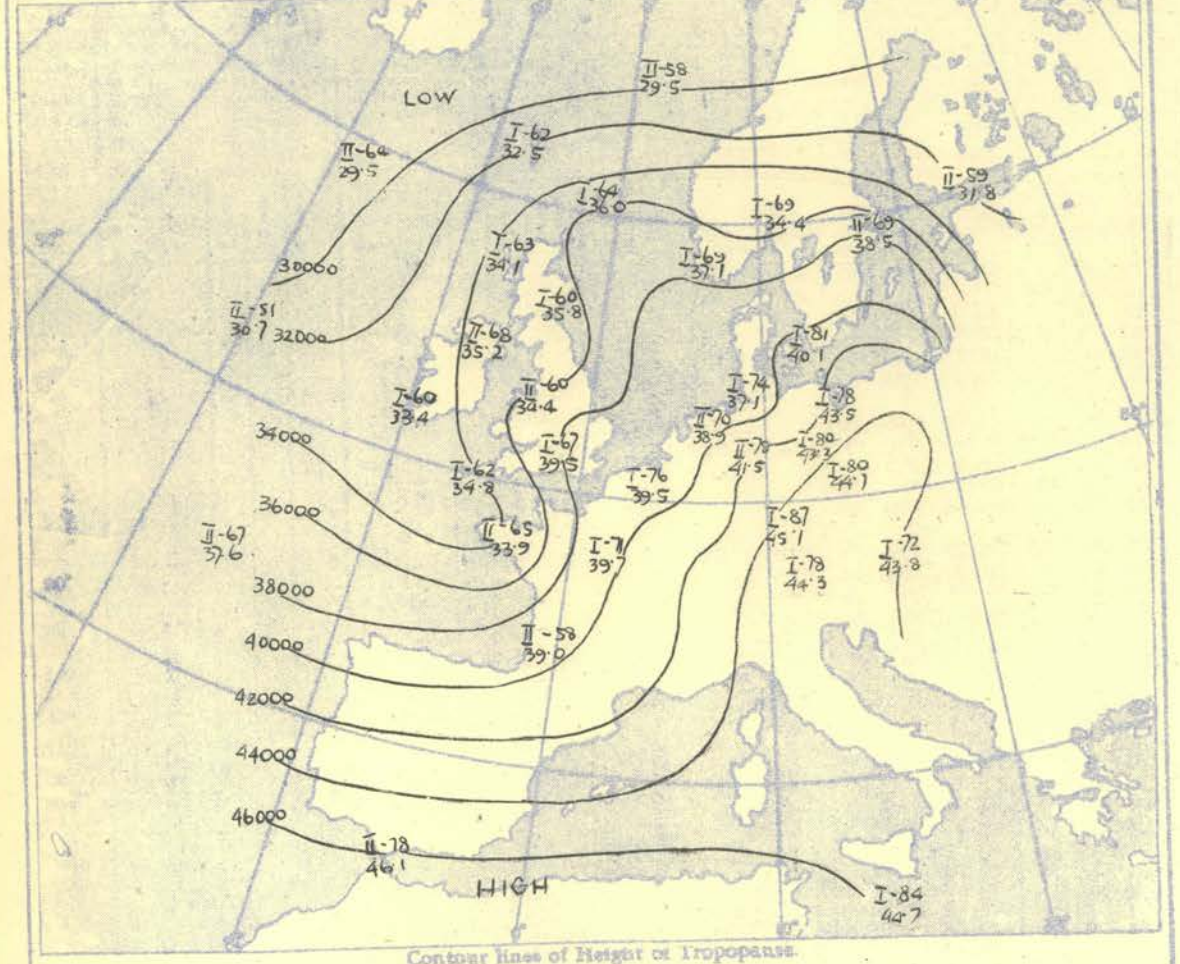


The continuous lines are contour lines of the 300 mb. surface.
The dotted lines are isopleths of the thickness of the layer 500—300 mb.

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.

Simultaneously with the deepening of the depression over Ireland a southern advance of the cold air behind the depression produced a marked cold trough which moved east. The original trough across Spain became a southeastward extension across South France of the new trough. The thermal jet showed some signs of increasing again in the Western Atlantic.

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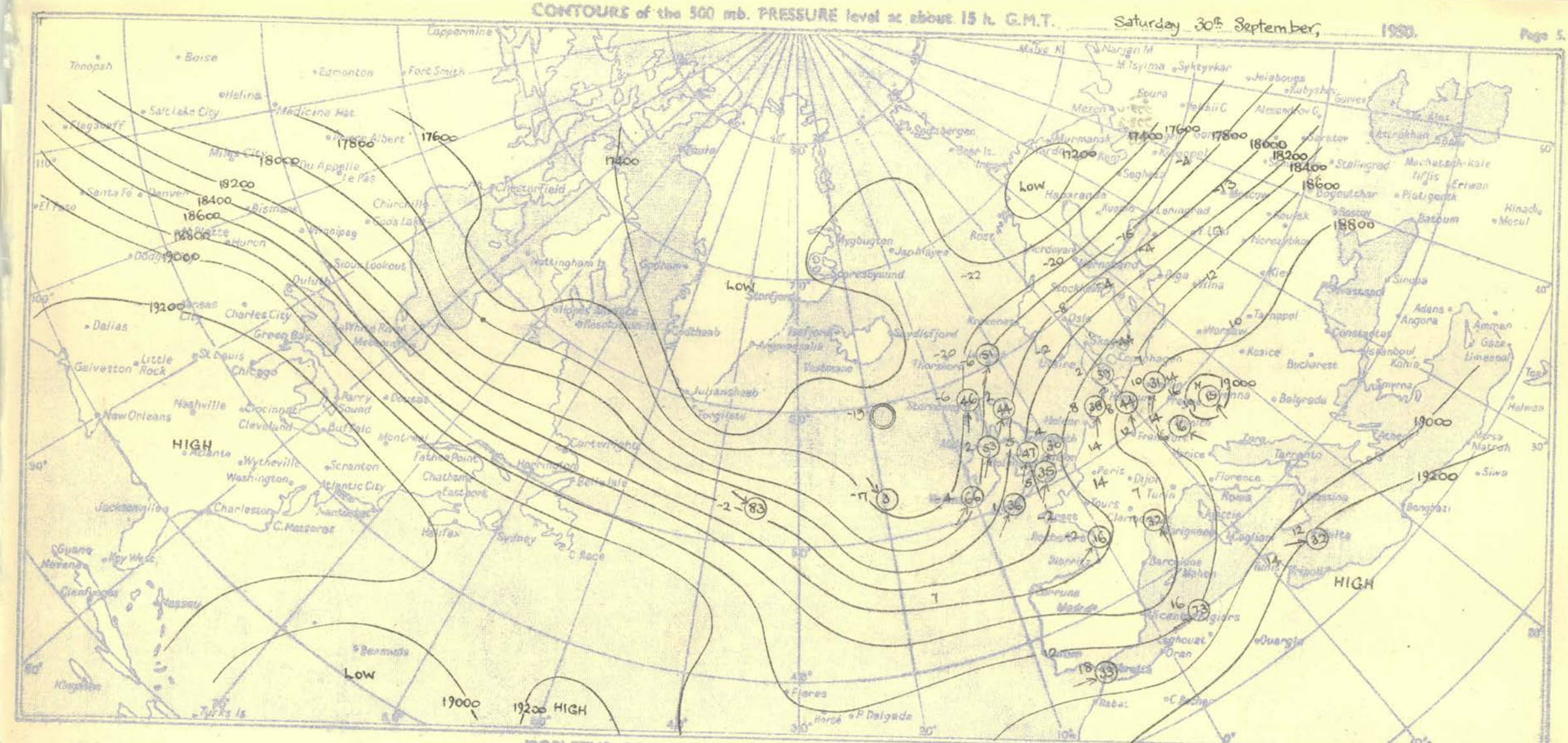
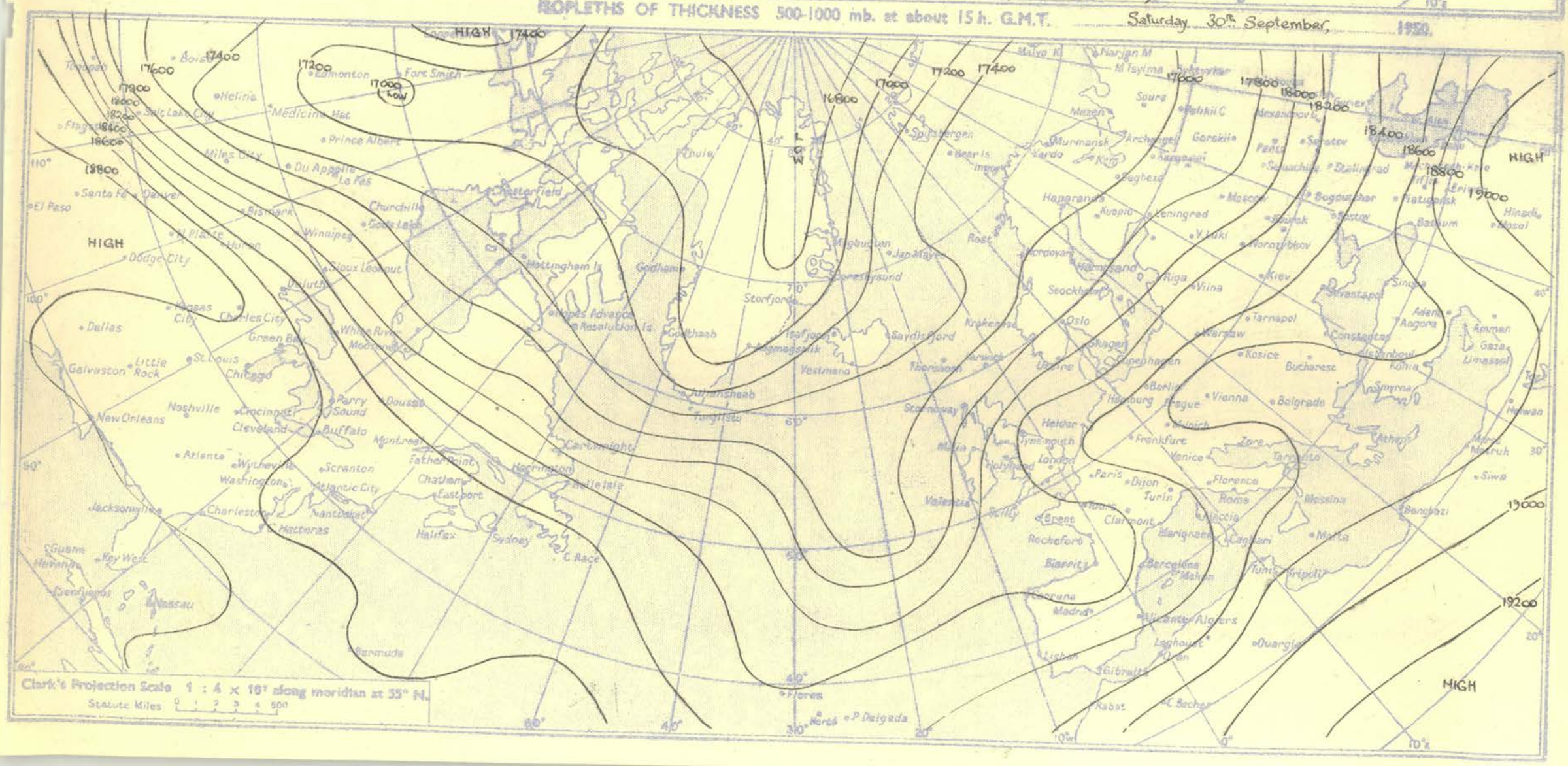
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Saturday 30th September, 1950.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Saturday 30th September, 1950.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, DUNSTABLE

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

LERWICK

15h G.M.T.
Time 1003·3 mb
M.S.L. 993·4 mb
Surf Pressing 838 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	51	46	200	11
1000	0·9				
950		45	41	191	13
900	29·4	40	37	199	14
850		34	27	196	16
800	60·5	29	25	200	16
750		26	20	207	19
700	94·9	19	02	211	19
650		11	-07	212	19
600	134	03	-10	224	24
550		00	-12	232	33
500	178	-06	-15	226	51
450		-14	-24	233	61
400	231	-25	-35	234	77
350		-36	-49	235	89
300	296	-49		233	105
250		-60		234	109
200	383	-64		230	88
170		-65			
150		-60			
130		-58			
110		-58			
100	530	-59			
90		-60			
80		-61			
70		-62			
60		-62			
(50 mb)					

Tropopause: I 223 mb - 64° 36,000'

STORNOWAY

15h G.M.T.
999·6 mb
997·7 mb
840 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·5	51	47	090	06
1000	-0·2				
950		46	42	086	12
900	28·3	38	39	109	13
850		33	32	142	11
800	59·3	28	23	129	11
750		23	23	114	10
700	93·8	19	14	092	08
650		12	08	145	20
600	133	09	04	200	28
550		03	+01	220	40
500	178	-06	-12	217	46
450		+17	+28	208	65
400	230	-28	-44	213	81
350		-38	-53	217	94
300	295	-52		214	109
250		-62		214	99
200	381	-58		219	77
170		-56		225	42
150		-56		232	36
130		-59		220	37
110		-57		224	33
100	530	-56			
90		-56			
80		-56			
70		-56			
60					

Inversion 611 mb 08° - 603 mb 10°
Isothermal 720 - 708 mb 19°

Tropopause: I 242 mb - 63° 34,100'

LEUCHARS

15h G.M.T.
999·0 mb
998·2 mb
735 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	51	50	130	10
1000	-0·3				
950		46	45	167	21
900	28·3	45	44	198	22
850		43	43	215	25
800	59·9	38	38	211	27
750		33	33	198	30
700	95·0	30	30	206	27
650		24	23	199	30
600	135	17	16	207	30
550		11	08	207	37
500	181	02	-02	217	44
450		-06	-11	217	51
400	235	-19	-23	222	56
350		-29	-34	218	67
300	300	-42		211	73
250		-56		211	83
200	388	-58		209	84
170		-60			
150		-61			
130		-61			
110		-56			
100	536	-56			

Inversion 935 mb 44° - 920 mb 46°

Tropopause: I 230 mb - 60° 35,750'

ALDERGROVE

15h G.M.T.
994·5 mb
985·9 mb
730 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·3	58	55	170	18
1000	-1·7				
950		54	51	181	35
900	27·3	49	46	191	33
850		44	40	196	34
800	59·0	41	35	192	32
750		35	28	189	27
700	94·3	28	23	204	31
650		23	14	215	29
600	134	16	08	214	42
550		09	02	212	50
500	180	02	-06	204	52
450		-08	-17	198	57
400	233	-19	-29	196	58
350		-33	-47	194	61
300	299	-48		194	72
250		-62		198	78
200	385	-63		207	77
170		-61		207	62
150		-62		209	60
130		-61		214	45
110		-63		233	36
100	532	-66		236	36
90		-64		226	46
80		-62		224	33
70		-60		224	29
60		-60		207	27
		-61		223	17

Isothermal 663 - 637 mb 23°

Tropopause: II 235 mb - 68° 35,200'

LIVERPOOL

15h G.M.T.
998·8 mb
996·8 mb
712 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	60	57	170	10
1000	-0·3				
950		55	53	176	19
900	28·7	53	51	192	20
850		47	44	193	21
800	60·7	42	39	199	24
750		37	34	209	26
700	96·1	30	25	210	29
650		25	14	212	35
600	136	20	13	207	40
550		14	08	199	44
500	172	05	-01	195	47
450		-04	-10	201	43
400	236	-16	-22	208	34
350		-29	-36	197	37
300	302	-44		200	41
250		-59		197	71
200	389	-58		202	57
170		-62		213	47
150		-63		220	47
130		-60		211	38
110	537	-57		206	33
100		-59		211	24
90		-61		213	24
80		-58			
70		-55			
60		-52			
		-51			
(43 mb)		-49			

Isothermal 940 - 900 mb 33°
685 - 670 " 28

DOWNHAM MARKET

15h G.M.T.
1001·5 mb
997·1 mb
689 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	59	58	140	04
1000	0·5				
950		54	52	179	18
900	29·6	51	50	192	19
850		48	48	194	24
800	61·7	45	44	193	25
750		40	40	194	25
700	97·4	34	33	196	25
650		27	24	197	23
600	138	21	16	201	25
550		12	04	205	25
500	184	04	-02	207	30
450		-05	-11	198	37
400	238	-17	-25	201	45

For rest of wind see page 3.

Tropopause: NR.

LARKHILL

15h G.M.T.
1001·0 mb
985·5 mb
694 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	59	58	190	05
1000	0·3				
950		56	55	194	20
900	29·4	51	50	199	21
850		47	46	203	22
800	61·4	43	41	205	22
750		38	36	210	22
700	97·0	32	30	207	23
650		27	24	200	29
600	137	21	16	192	38
550		14	08	190	35
500	183	05	-04	196	35
450		-05	-10	186	37
400	237	-15	-21	183	38
350		-25	-38	193	51
300	303	-40	-50	187	60
250		-56		188	76
200	391	-67		191	60
170		-63		203	51
150		-62		205	44
130		-67		203	39
110		-64		210	35
100	537	-64		215	37
90		-64		222	35
80		-64		225	27
70		-63		223	27
60		-60			

Inversion 863 mb 44° - 833 mb 46°

Tropopause: I 197 mb - 67° 39,500'

CAMBORNE

15h G.M.T.
1000·1 mb
989·7 mb
700 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	57	55	180	10
1000	0·0				
950		52	51	211	28
900	28·9	48	46	208	25
850		44	40	216	28
800	60·7	40	31	216	25
750		36	11	212	26
700	96·0	32	-07	209	29
650		25	-06	208	33
600	136	18	03	213	33
550		11	03	223	33
500	182	01	-07	219	36
450		-08	-15	210	34
400	235	-19	-27	210	38
350		-32	-40	210	34
300	301	-48			
250		-60			
200	388	-62			
170		-62			
150		-66			
130		-63			
110		-62			
100	534	-62			
90		-64			
80		-63			
70		-62			
60					

Isothermal 250 mb - 60°

Tropopause: I 240 mb - 62° 34,800'

VALENTIA

15h G.M.T.
996·7 mb
995 mb
815 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	55	49	240	11
1000	-9				
950		48	43	251	17
900	27·8	41	38	251	16
850		36	32	251	18
800	59·0	30	24	244	21
750		25	19	235	26
700	93·4	19	06	239	28
650		13	-07	239	27
600	132	07	-17	217	37
550		03	-25	204	51
500	177	-04	-33	196	66
450		-16	-40	195	71
400	230	-26	-48	195	81
350		-40		192	84
300	294	-50		191	83
250		-60		191	71
200	382	-55			
170		-57			
150		-59			
130		-59			
110		-61			
100	530	-62			

Isothermal 600 - 575 mb 07°

Tropopause: I 250 mb - 60° 33,900'

LERWICK

21h G.M.T.
Time 1000·9 mb
M.S.L. 991·0 mb
Surf Pressing 838 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	48	46	130	06
1000	0·2				
950		46	43	132	20
900	28·6	38	34	120	20
850		33	30	116	20
800	59·6	29	26	124	20
750		24	21	137	18
700	94·0	19	16	186	20
650		17	13	204	28
600	133	11	06	212	34
550		06	00	214	43
500	178	-04	-11	214	54
450		-14	-23	215	61
400	231	-24	-03	221	71
350		-37	-46	215	76
300	296	-54		220	88
250		-68		224	92
200	382	-64		228	74
170		-63		221	66
150		-65		219	56
130		-61		219	45
110		-63			
100	(112 mb)				
90					
80					
70					
60					

Inversion 657 mb 16° - 647 mb 17°

Tropopause: I 243 mb - 69° 34,000'

STORNOWAY

21h G.M.T.
994·0 mb
992·1 mb
830 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·5	50	47	050	15
1000	-1·6				
950		44	43	064	24
900	26·8	38	36	062	18
850		34	31	080	20
800	58·0	29	26	091	21
750		26	23	092	12
700	92·6	23	20	164	06
650		17	13	206	14
600	132	11	07	182	19
550		04	-03	178	33
500	177	-06	-15	183	47
450		-19	-27	196	54
400	230	-29	-40	202	59
350		-42		196	88
300	294	-55		197	87
250		-69		200	88
200	379	-63		208	62
170		-62		216	45
150		-62		219	44
130		-62			

Inversion 758 mb 22° - 745 mb 24°

Tropopause: I 235 mb - 74° 39,500'

ALDERGROVE

21h G.M.T.
992·4 mb
984·1 mb
680 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·3	56	52	250	10
1000	-2·1				
950		52		244	22
900	26·8	46		247	27
850		41		237	27
800	58·4	41		225	24
750		35		207	25
700	93·8	34		196	35
650		29		196	42
600	134	20		196	45
550		11		194	42
500	180	04		192	54
450		-05		186	57
400	224	-17		188	60
350		-30		182	66
300	300	-45		182	61
250		-62		183	71
200	367	-53		192	60
170		-57		197	57
150		-53		205	50
130		-57		217	37
110		-54		212	33
100	536	-57		211	38
90		-59		222	34
80		-57		237	39
70					
60					

Inversion 825 mb 39° - 810 mb 42°
734 " 33° - 700 " 34°

Tropopause: II 231 mb - 65° 34,600'

LIVERPOOL

21h G.M.T.
994·3 mb
992·3 mb
726 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	58	56	180	12
1000	-1·6				
950		55	53	190	21
900	27·6	51	48	214	22
850		47	43	221	24
800	59·5	44	37	209	27
750		36	27	193	28
700	94·9	28	22	190	30
650		25	19	194	33
600	135	19	13	210	31
550		11	05	211	26
500	181	03	-03	203	26
450		-07	-14	194	31
400	235	-18	-25	193	37
350		-34	-41	198	44
300	300	-49		192	49
250		-63		186	54
200	386	-61		200	56
170		-62		204	54
150		-62		214	55
130		-64		216	40
110		-64			
100	(105 mb)	-64			
90					
80					
70					
60					

Inversion 683 mb 25° - 659 mb 26°

Tropopause: I 134 mb - 67° 35,200'

DOWNHAM MARKET

21h G.M.T.
998·7 mb
994·3 mb
713 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	57	56	190	03
1000	-0·4				
950		54	53	205	23
900	28·7	51	51	215	22
850		46	46	216	23
800	60·6	41	41	211	22
750		37	36	207	22
700	96·0	31	30	204	25
650		26	25	199	30
600	136	20	19	190	25
550		12	09	196	30
500	182	04	00	189	31
450		-06	-12	187	39
400	236	-18	-24	182	42
350		-31	-40	195	56
300	302	-41		187	94
250		-57		200	98
200	388	-67		200	67
170		-65		200	45
150		-64		199	44
130		-64		200	39
110		-65		200	30
100	534	-65			
90					
80					
70					
60					

Isothermal 555 - 541 mb 12°

Tropopause: I 206 mb - 73° 38,300'

LARKHILL

21h G.M.T.
1000·2 mb
984·5 mb
710 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	53	53	230	04
1000	0·1				
950		51	50		
900	29·0	47	43		
850		45	32		
800	60·8	43	17		
750		39	10		
700	96·0	31	19		
650		23	17		
600	136	17	12		
550		11	05		
500	183	02	-03		
450		-08	-15		
400	238	-19	-33		
350		-33	-46		
300	301	-48			
250		-63			
200	387	-63			
170		-64			
150		-66			
130		-68			
110		-69			
100	533	-67			
90		-66			
80					
70					
60					

Inversion 833 mb 44° - 804 mb 46°

Tropopause: I 254 mb - 64° 33,600'

CAMBORNE

21h G.M.T.
998·6 mb
987·5 mb
772 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	51	50	315	10
1000	0·6				
950		47	46	303	16
900	27·9	43	41	311	21
850		38	37	286	20
800	59·3	35	33	258	28
750		29	28	252	24
700	94·2	25	24	210	19
650		21	20	175	30
600	134	15	14	180	43
550		08	06	184	56
500	179	00	-03	190	69
450		-10	-13	197	64
400	233	-22	-26	191	60
350		-37	-42	202	60
300	297	-52		199	62
250		-63		197	55
200	384	-55		200	62
170		-61		200	50
150		-64		200	52
130		-64			
110		-66			
100	530	-68			
90		-67			
80		-65			
70		-65			
60					

Isothermal 836 - 807 mb 36°
716 - 687 " 25°

Tropopause: I 224 mb - 69° 36,000'

67