No. 11631. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Thursday 1st February, 1951. Page 1.

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

03h. G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	03h.	1001·0 mb	991·0 mb	910 mb
STORNOWAY	03h.	1003·3 mb	1001·6 mb	905 mb
LEUCHARS	03h.	1009·6 mb	1008·7 mb	912 mb
ALDERGROVE	03h.	1012·7 mb	1003·4 mb	862 mb
LIVERPOOL	03h.	1018·7 mb	1013·6 mb	870 mb
DOWNHAM MARKET	03h.	1018·4 mb	1013·7 mb	905 mb
LARKHILL	03h.	1018·6 mb	1001·2 mb	873 mb
CAMBORNE	03h.	1018·1 mb	1007·3 mb	750, 762, 820 mb
VALENTIA	03h.	1014·1 mb	1013 mb	790 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	41	39	200	30	00·5	40	35	240	10	00·2	38	35	250	08
1000	0·3					0·8	40	38			2·5	38	34		
950		37	34	202	41		38	31	240	29		37	30	261	30
900	28·2	30	29	206	38	28·8	31	27	244	37	30·4	31	24	266	30
850		28	24	210	38		25	15	247	40		24	19	275	29
800	58·7	19	18	213	37	59·3	18	10	252	41	60·8	20	10	284	29
750		18	11	223	37		12	03	260	47		21	05	294	36
700	92·3	05	01	224	38	93·1	15	-01	273	48	95·0	21	05	287	48
650		-01	-08	222	37		10	-06	275	53		13	07	291	48
600	130	-11	-22	228	35	132	05	-06	274	64	134	05	-10	292	52
550		-21	-32	234	40		-05	-14	273	72		-04	-13	295	59
500	173	-24	-43	236	41	176	-14	-22	277	81	178	-13	-26	306	70
450		-30	-54	246	36		-27	-35	283	88		-23	-38	303	74
400	224	-40	-60	230	33	227	-41		285	102	230	-35	-47	303	81
350		-50		236	37		-54		292	105		-50		313	87
300	287	-56		251	41	290	-62		298	89	293	-66		320	89
250		-59		248	36		-66		282	59		-77		308	72
200	374	-57		255	32	375	-60		248	25	317	-61		289	30
170		-57		255	27		-62					-61		292	19
150		-60		255	25		-63					-61		292	15
130		-65					-64					-64		291	14
110							-67					-68		282	14
100						522	-69				523	-69		273	12
90							-71					-69		259	12
80												-70		257	12
70															
60															
Tropopause	Isothermal 350 - 325mb. -21°					Inversion 1002 mb. 40° - 885mb. 42° 758 mb. 12° - 683mb. 16° Isothermal 628 - 600 mb. 05° 324 - 310 mb. -60°					Inversion 770 mb. 20° - 738mb. 48° Isothermal 1009 - 962 mb. 38° 819 - 770 mb. 20° 722 - 700 mb. 21°				

Pressure mb	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	37	33	220	15	00·6	35	34	210	07	01·2	33	28	190	07
1000	3·5					4·1	38	37	216	15	4·8	34	28		
950		39	32	229	18		38	37	250	15		35	29	240	18
900	31·5	34	21	251	22	32·1	33	32	261	17	32·5	31	26	259	13
850		31	17	265	25		27	24	256	19		28	20	271	12
800	62·3	24	14	268	30	62·8	26	10	266	20	63·2	28	20	283	12
750		26	14	266	32		26	08	274	28		22	12	287	14
700	96·7	21	11	260	37	77·3	22	-01	278	30	97·5	18	06	305	17
650		16	06	262	40		16	-01	284	34		12	-02	315	22
600	136	09	00	268	42	136	09	-10	286	33	136	07	-09	321	25
550		00	-11				02	-19	272	36		00	-19	326	28
500	180	-07	-19	274	48	181	-09	-27	319	40	181	-10	-27	326	36
450		-19	-29	275	47		-22	-39	331	57		-23	-36	327	40
400	233	-31	-39	285	51	233	-33	-50	325	66	233	-34	-50	331	53
350		-44		293	69		-47		326	66		-48		328	47
300	296	-59		300	73	296	-63		334	73	296	-63		337	60
250		-74					-77		328	54		-76		332	51
200	380	-77				380	-75		321	48	380	-67		326	42
170		-66					-65		310	39		-66		337	27
150		-66					-64		318	24		-65		340	27
130		-69					-69		317	18		-65		342	24
110		-71					-66					-67		349	17
100	524	-71				524	-70				526	-68		360	18
90		-71				(096 mb)	-71					-69		356	16
80		-73													
70		-74													
60															
Tropopause	Inversion 1008mb. 37° - 958mb. 40° 772 mb. 19° - 743mb. 28° Isothermal 909 - 887 mb. 34°					Inversion 1014mb. 35° - 980mb. 41° 758mb. 25° - 744mb. 27° Isothermal 824 - 794 mb. 28°					Inversion 1002 mb. 33° - 990mb. 37° 970 mb. 35° - 940mb. 37° 779 mb. 31° - 750mb. 33° 730 mb. 22° - 713mb. 23°				

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	33	33	220	03	02·9	43	42	Calm		00·3	49	47		
1000	4·8	34	33			4·8	44	43			4·10	48	46		
950		36	30	259	09		42	41	277	10		43	41		
900	32·8	34	30	286	10	33·1	38	30	300	10	32·4	41	34		
850		30	27	290	09		34	06	303	11		35	28		
800	63·5	24	20	283	08	64·1	30	10	303	16	63·5	33	29		
750		23	13	304	15		32	10	310	22		27	23		
700	97·8	22	01	325	16	99·0	26	01	319	22	98·2	21	15		
650		16	-10	336	16		19	-11	331	26		17	05		
600	137	09	-16	338	18	138	13	-18	333	31	137	11	-11		
550		01	-23	334	21		04	-22	337	32		00	-17		
500	182	-09	-36	336	30	184	-07	-28	340	36	182	-08	-26		
450		-22	-44	343	37		-18	-35	341	39		-20	-37		
400	234	-35	-55	348	45	236	-30	-46	348	45	235	-32	-48		
350		-48		348	58		-44		344	55		-46			
300	297	-63		355	72	300	-60		353	59	298	-62			
250		-79		346	60		-77		334	51		-78			
200	380	-68		328	47	382	-85		336	55	381	-78			
170		-64		348	30		-82		333	35		-68			
150		-64		344	30		-79		332	35		-70			
130		-67		334	25		-74		338	27		-76			
110		-69		348	17		-68		331	27		-76			
100	525	-70				524	-66		342	26	523	-76			
90							-66		341	14		-76			
80							-66					-74			
70											(076 mb)	-73			
60															
Tropopause	Inversion 1002 mb. 33° - 990mb. 37° 970 mb. 35° - 940mb. 37° 779 mb. 31° - 750mb. 33° 730 mb. 22° - 713mb. 23°					Inversion 1007mb. 43° - 990 mb. 46° 907 mb. 37° - 900 mb. 38° 785 mb. 29° - 758 mb. 38°					Isothermal 950 - 920 mb. 43° 669 - 630 mb. 17°				

09h. G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	09h.	1005·3 mb	995·2 mb	901 mb
STORNOWAY	09h.	997·7 mb	996·8 mb	771 mb
LEUCHARS	09h.	1011·2 mb	1010·3 mb	850 mb
ALDERGROVE	09h.	1009·6 mb	1000·9 mb	758 mb
LIVERPOOL	09h.	1016·9 mb	1014·8 mb	768 mb
DOWNHAM MARKET	09h.	1019·7 mb	1015·0 mb	mb
LARKHILL	09h.	1020·4 mb	1003·8 mb	772 mb
CAMBORNE	09h.	1020·7 mb	1009·6 mb	750, 820, 837 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	41	36	200	25	00·5	45	43			00·2	39	34	230	12
1000	1·4					0·7					2·9	39	33		
950		37	33	204	33		40	39				39	29	226	30
900	29·5	32	26	212	29	27·5	37	36			31·0	35	20	233	33
850		26	19	216	28		35	32				32	22	239	33
800	60·0	21	11	220	24	58·7	34	31			61·9	29	24	238	29
750		17	02	237	28		31	27				26	21	244	34
700	94·0	16	11	243	31	93·7	24	19			96·5	22	18	253	37
650		09	05	249	35		16	11				16	13	260	43
600	103	03	01	256	42	133	10	04			136	08	05	260	41
550		-00	-05	261	59		03	-04				00	-03	267	33
500	177	-10	-12	266	65	179	-05	-13			180	-09	-13	270	38
450		-22	-24	272	59		-16	-25				-20	-24	275	43
400	223	-36	-39	274	60	231	-28	-39			233	-33	-37	287	47
350		-49		283	69		-44								
300	292	-63		283	81	294	-59								
250		-71		281	55		-73								
200	376	-63		261	30	379	-77								
170		-62		250	25		-70								
150		-69		243	22		-64								
130		-63		243	21		-63								
110		-66		238	19		-66								
100	523	-66				524	-68								
90							-70								
80							-69								
70															
60															
Tropopause	Inversion 737mb. 16° - 727mb. 18° 281 mb. -69° - 271 mb. -68°					Inversion 919 mb. 36° - 886mb. 37°					Inversion 1010mb. 39° - 939mb. 40° 795 mb. 28° - 785mb. 29°				

Pressure mb	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	44	38	200	23	00·6	36	36	180	03	01·2	34	31	165	07
1000	2·9	44	38			4·3	35	36	196	15	5·3	35	32	231	15
950		42	38	206	42		39	32	236	13		36	31	243	14
900	31·2	41	38	230	43	32·6	36	27	269	11	33·1	32	30	253	12
850		38	33	237	44		33	18	282	13		27	25	255	15
800	62·5	35	28	242	39	63·6	36	20	284	18	63·8	30	16	276	11
750		31	21	244	38		30	19	281	23		29	-05	301	11
700	97·6	25	10	246	38	98·5	25	13	271	24	95·8	22	-07	307	15
650		18	-03	250	39		20	02	266	20		15	-11	327	15
600	137	15	-07	259	39	138	11	-00	286	23	138	08	-17	329	21
550		06	-09	254	42		02	-06	290	27		-02	-25	241	21
500	182	-03	-12	254	43	183	-07	-14	287	29	182	-12	-31	338	29
450		-13	-24	258	42		-18	-26	288	34		-20	-40	336	29
400	235	-25	-36	267	45	236	-29	-36	277	31	234	-33	-49	338	45
350		-40	-51	267	42		-42		312	48		-46		341	60
300	300	-58		272	47	299	-57		319	47	298	-61		358	60
250		-75		270	45		-75		327	52		-75		351	50
200	383	-82		277	37	383	-87		322	52	381	-75		346	45
170		-73		266	26		-62		322	24					
150		-71		266	31		-67		321	20					
130		-68		268	28		-68		316	27					
110		-67		268	19		-63		312	13					
100						528	-68		315	06					
90							-70		318	07					
80															
70															
60															
Tropopause	Inversion 820mb. 35° - 809mb. 36° 650mb 18° - 638mb. 21° Isothermal 935 - 884 mb. 41°					Inversion 1015mb. 36° - 976mb. 42° 820mb. 29° - 802mb. 36° Isothermal 918 - 876 mb. 36°					Inversion 1015mb. 34° - 965mb. 37° 840mb. 26° - 790 mb. 34°				

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	36	36	220	03	02·9	38	38	180	02
1000	5·4					5·4	40	40	236	09
950		37	37	220	13		42	33	271	08
900	33·4	33	37	232	13	33·8	41	03	294	09
850		30	27	237	12		34	09	313	09
800	64·3	31	12	265	08	64·9	35	13	322	12
750		31	10	324	08		32	04	320	13
700	99·2	25	02	331	14	99·9	25	01	312	11
650		18	-04	337	20		20	-05	297	14
600	139	10	-07	331	25	139	12	-13	298	18
550		01	-23	330	19		03	-17	301	17
500	183	-10	-33	339	14	184	-06	-27	302	15
450		-21	-39	333	27		-16	-36	306	18
400	235	-33	-47	338	37	237	-29	-45	318	24
350		-46		342	45		-43		333	30
300	299	-63		353	57	301	-62		355	30
250		-78		352	53		-76		334	36
200	381	-87		348	46	383	-89		355	40
170		-73		341	33		-75		327	38
150		-65		334	34		-67		330	33
130		-68		346	27		-68		334	26
110		-71		353	20		-75		338	20
100	525	-70		358	12	526	-74		321	16
90		-68		008	10		-74		332	12
80		-70					-74		358	10
70						(073 mb)	-73			
60										
Tropopause	Inversion 1004mb. 36° - 975mb. 38° 850 mb. 30° - 772mb. 32°					Inversion 1010 mb. 38° - 981mb. 44° 960 mb. 42° - 918 mb. 43° 830 mb. 31° - 790 mb. 36°				

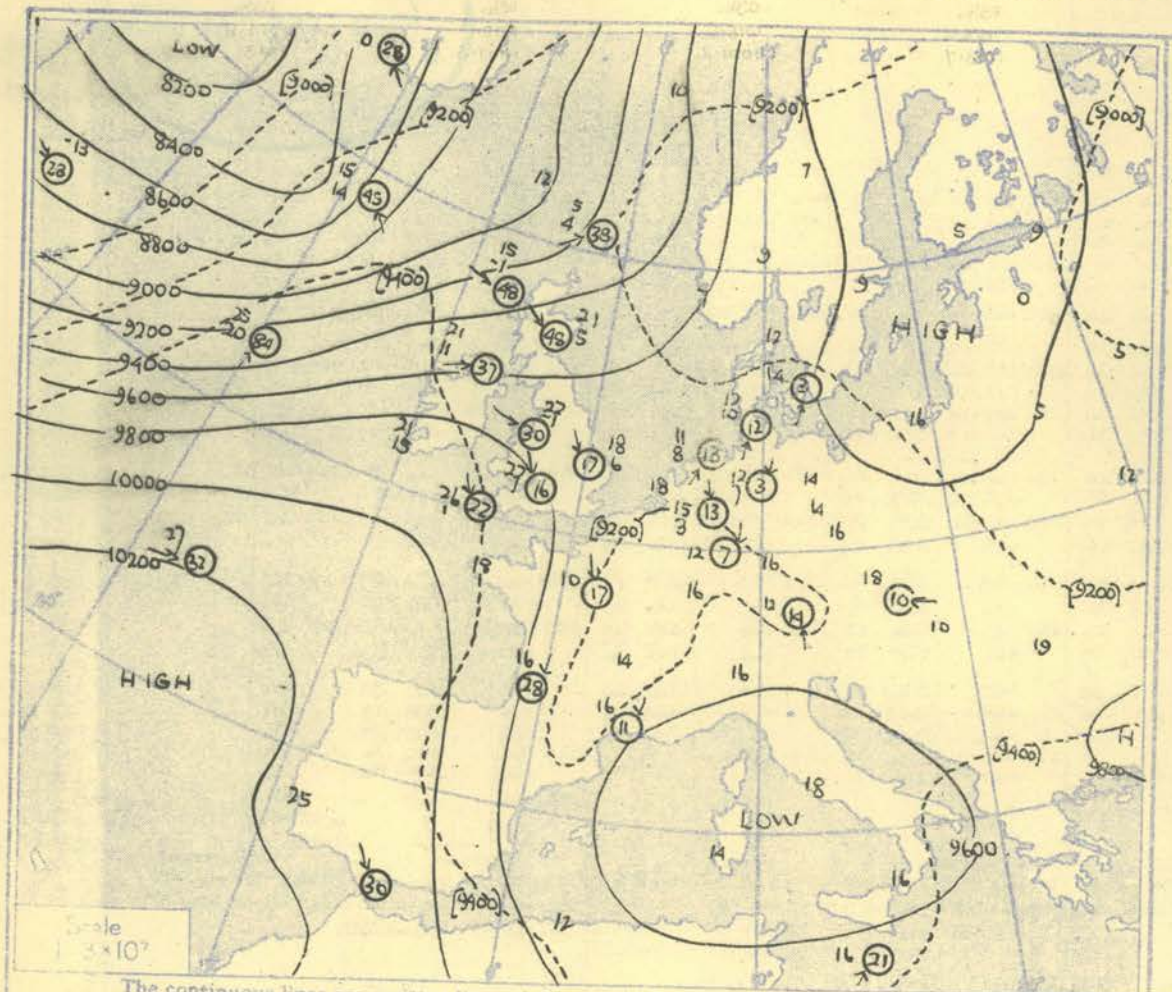
Station	Tropopause
LERWICK	III 296mb. -57° 29,000'
STORNOWAY	I 262mb. -72° 31,800'
LEUCHARS	I 245mb. -79° 33,400'
ALDERGROVE	I 215mb. -84° 36,300'
LIVERPOOL	I 227mb. -82° 35,500'
DOWNHAM MARKET	I 245mb. -77° 33,900'
LARKHILL	I 254mb. -80° 30,300'
CAMBORNE	I 227mb. -87° 35,800'
VALENTIA	I 218mb. -86° 36,300'

Station	Tropopause
LERWICK	I 231mb. -75° 34,500'
STORNOWAY	I 247mb. -74° 33,600'
LEUCHARS	N.R.
ALDERGROVE	I 202mb. -83° 38,200'
LIVERPOOL	I 200mb. -87° 38,250'
DOWNHAM MARKET	I 218mb. -84° 36,300'
LARKHILL	I 213mb. -88° 36,800'
CAMBORNE	I 193mb. -90° 37,100'
VALENTIA	

For rest of winds see page 3.

Thursday 1st February 1951.

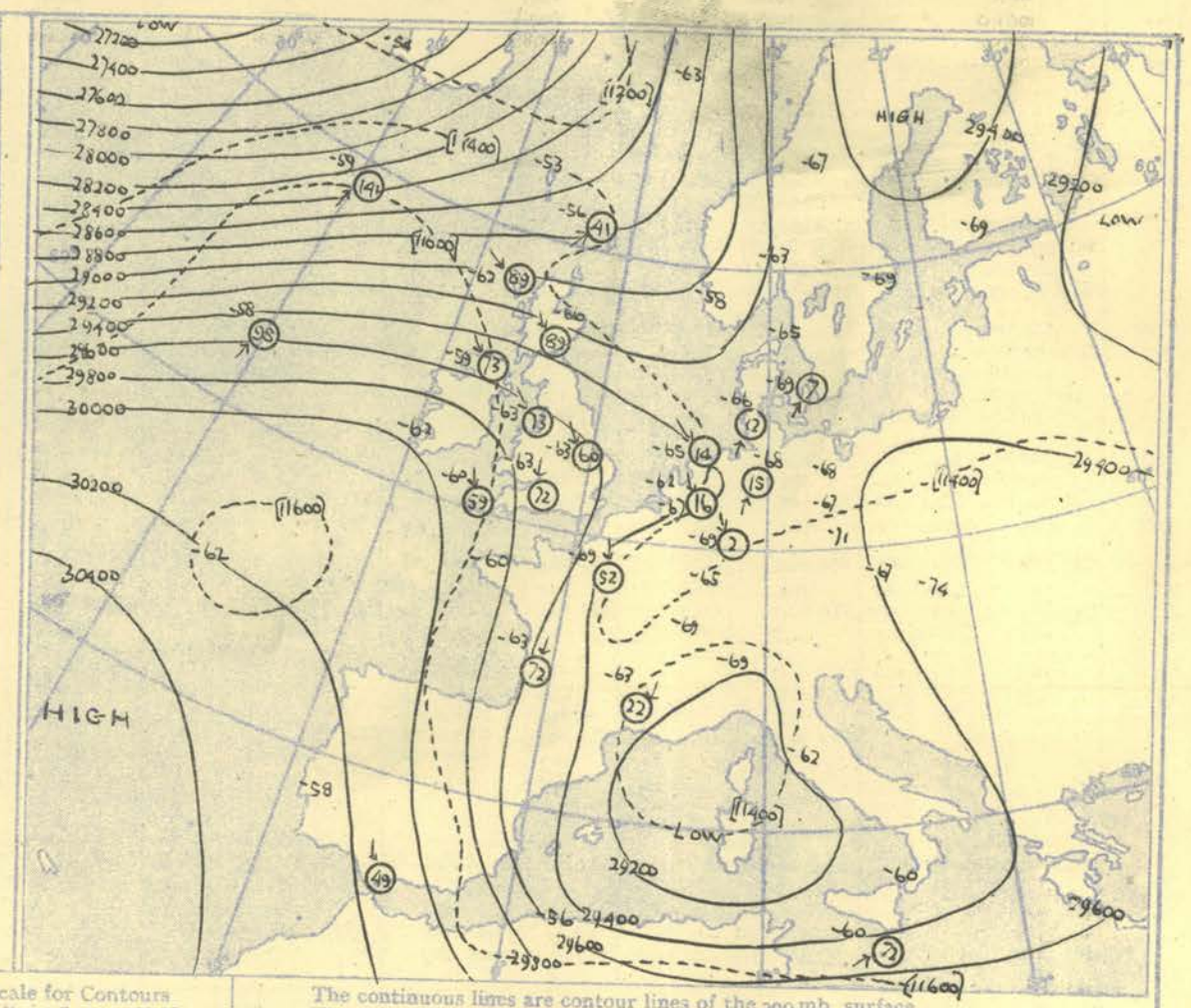
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03 h G.M.T.



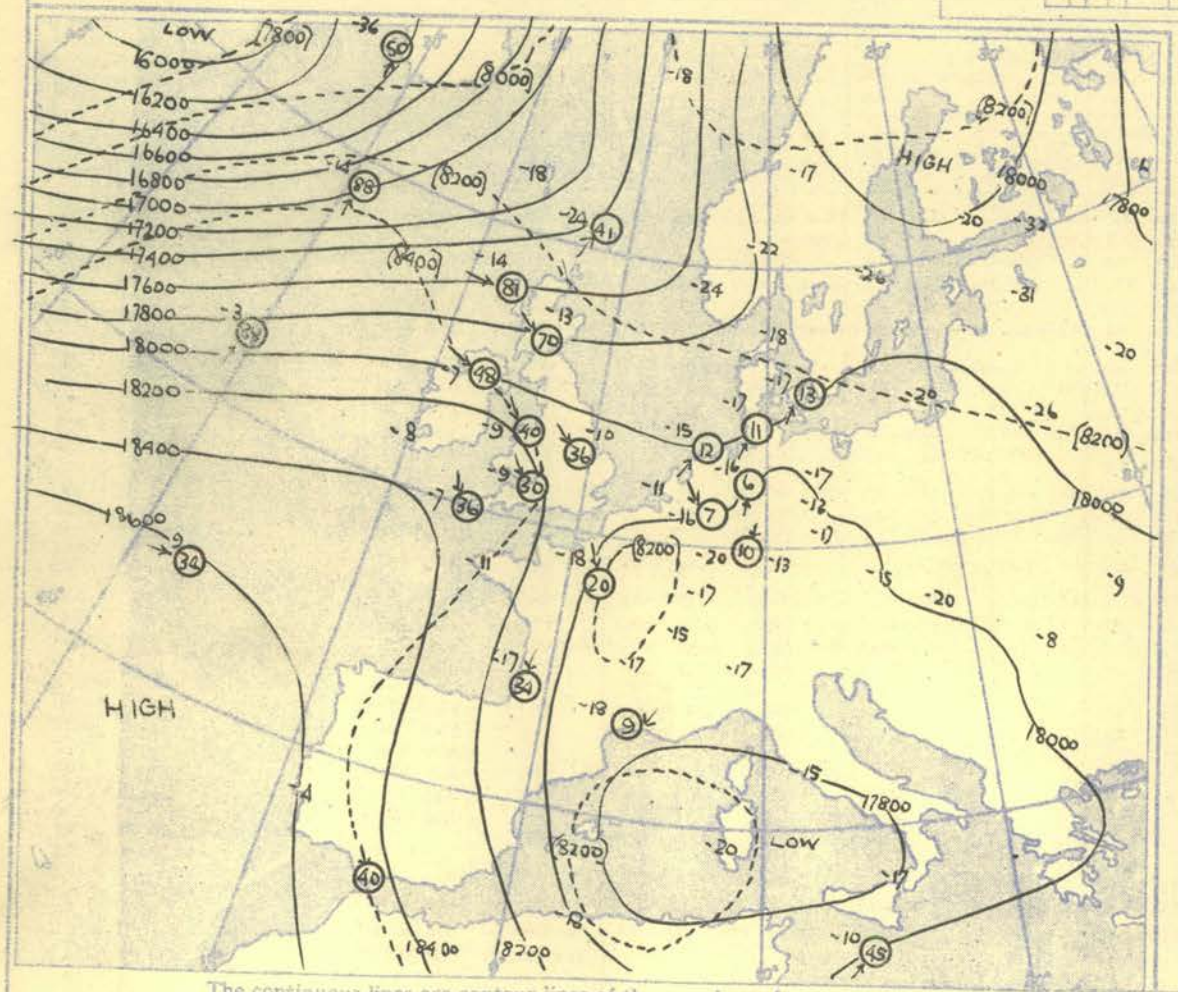
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000 – 700 mb.

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

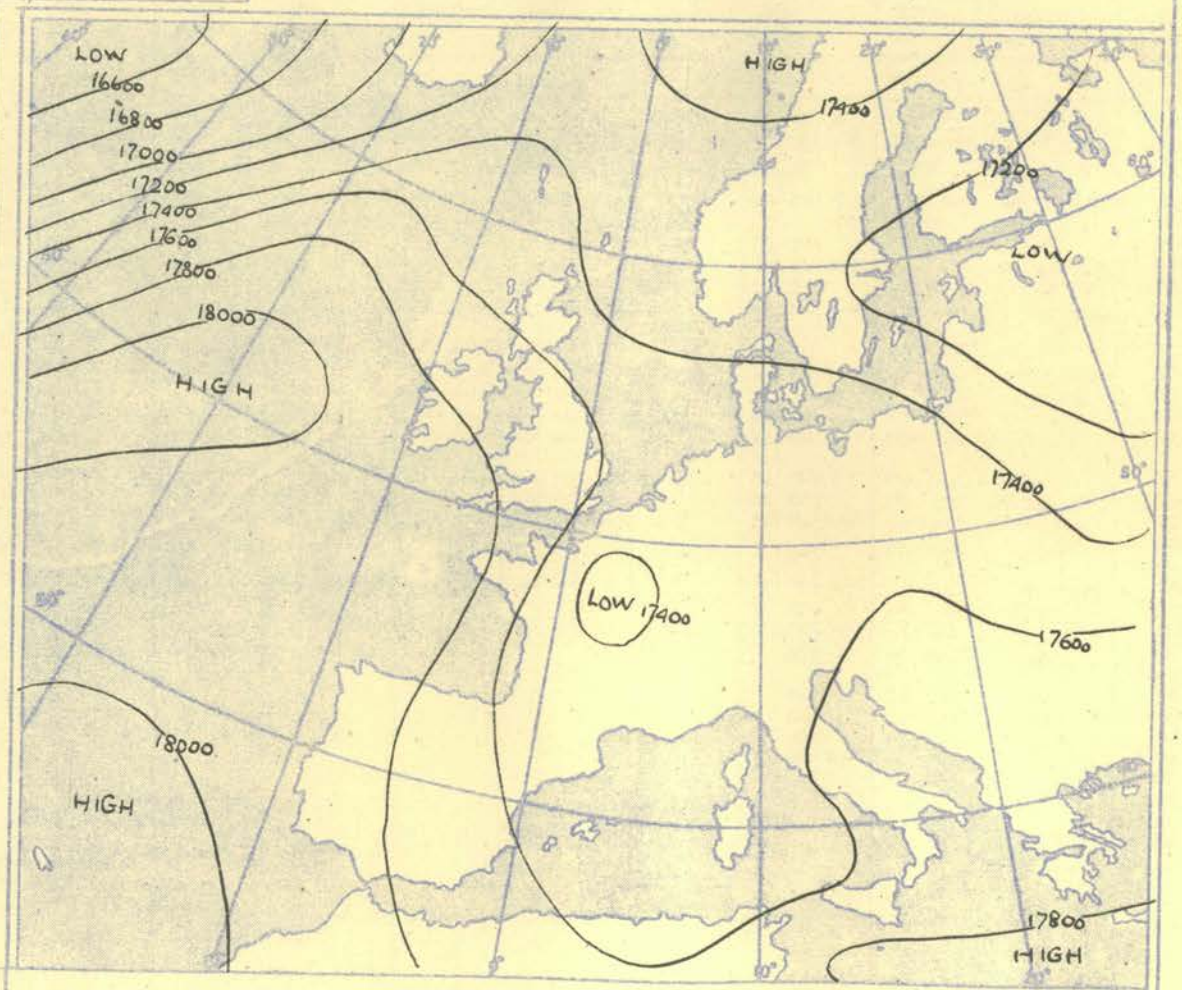
100 60 40 30 20 15 10 knots



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



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



Isopleths of Thickness 500 – 1000 mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	43·2N 17·0W			40·8N 13·6W			53·1N 01·3E		
Pressure Time	13L			15L			15L		
M.S.L.	1025 mb			1025 mb			1020 mb		
Surf	1022 mb			1022 mb			1018 mb		
Freezing	745 mb			750 mb			885, 805, 785 mb		
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.
Surf		56	49		56	54	00·5	39	36
1000	7·0	51	43	7·0	53	52	5·3		
950		45	41		47	47		39	33
900		40	40		42	41	33·3	33	32
850		39	27		35	35		27	26
800		37	14		38	22	64·2	33	15
750		33	19		32			31	15
700	102	25	19	102	26		99·2	25	12
650		19			19			16	
600		10			12		138	09	
550		01			02			-01	
500	186	-04		186	-08		183	-10	
450								-20	
400							235	-31	
350								-46	
300							299	-61	
250									
200									
170									

cloud:-
8/8 Sc 900 - 860 mb
2/8 Ci NR.
Surface wind W. 11-16 Kts.

cloud:-
8/8 Sc 830 - 810 mb
3/8 Sc 900 - 860 mb
3/8 Ci NR.
Surface wind NW 8-10 Kts
Inversion 850 mb 35° - 800 " 38°

cloud:-
7/8 Sc 870 - 850 mb
4/8 As 535 - 515 mb
Inversion 850 mb 27° - 800 " 33°
Isothermal 1018 - 950 mb 39°

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

Place	Leuchars		W. Watcher 59.0N 19.0W		Shoeburyness		Lympne		Stornoway		Lerwick		Aldergrove		Valentia		Leuchars		Lerwick	
Time	09L		09L		10L		11L		15L		15L		15L		15L		21L		21L	
Type	PILAR								PILAR		PILAR						PILAR		RADAR	
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.			250	32	170	05	170	04	200	40	190	38			190	25	250	30	190	38
1,000			250	35	200	18	180	09	210	57	184	51			210	39	227	33	190	54
2,000			250	38	200	09	170	12	210	60	189	53			210	46	225	45	192	52
3,000			250	41	250	07	230	01	210	63	206	52			220	49	224	45	198	51
4,000			250	42	290	04	050	03	212	62	217	47			220	48	224	47	207	47
5,000			250	45	290	06	320	10	214	64	228	46			230	47	224	39	219	44
6,000			250	50	290	08	310	08	216	66	232	47			230	45	225	40	224	42
8,000			240	60	200	07	330	09	215	72	231	40			240	50	232	45	221	45
10,000			240	70	220	11	350	15	216	74	232	45			230	55	234	55	216	47
14,000			230	85			010	16	228	66	226	46			230	51	225	45	217	54
18,000			220	88	250	22	360	23	224	67	229	50			230	52	236	55	217	61
24,000			220	99	350	35			221	63	228	54			250	56	240	45	224	80
30,000	296	64	210	102	360	61			(23,000')		(23,000')		260	49	240	55	233	52	224	85
40,000	301	29			350	35							(28,000')		240	65	245	45	241	65
50,000	288	15			010	21									(38,000')		245	34	212	37
	311	10															(47,000')		(45,000')	
	(55,000')																			

NEPHOSCOPE OBSERVATIONS

Place	
Time Type	NONE REPORTED.
Dir. Vel.	

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

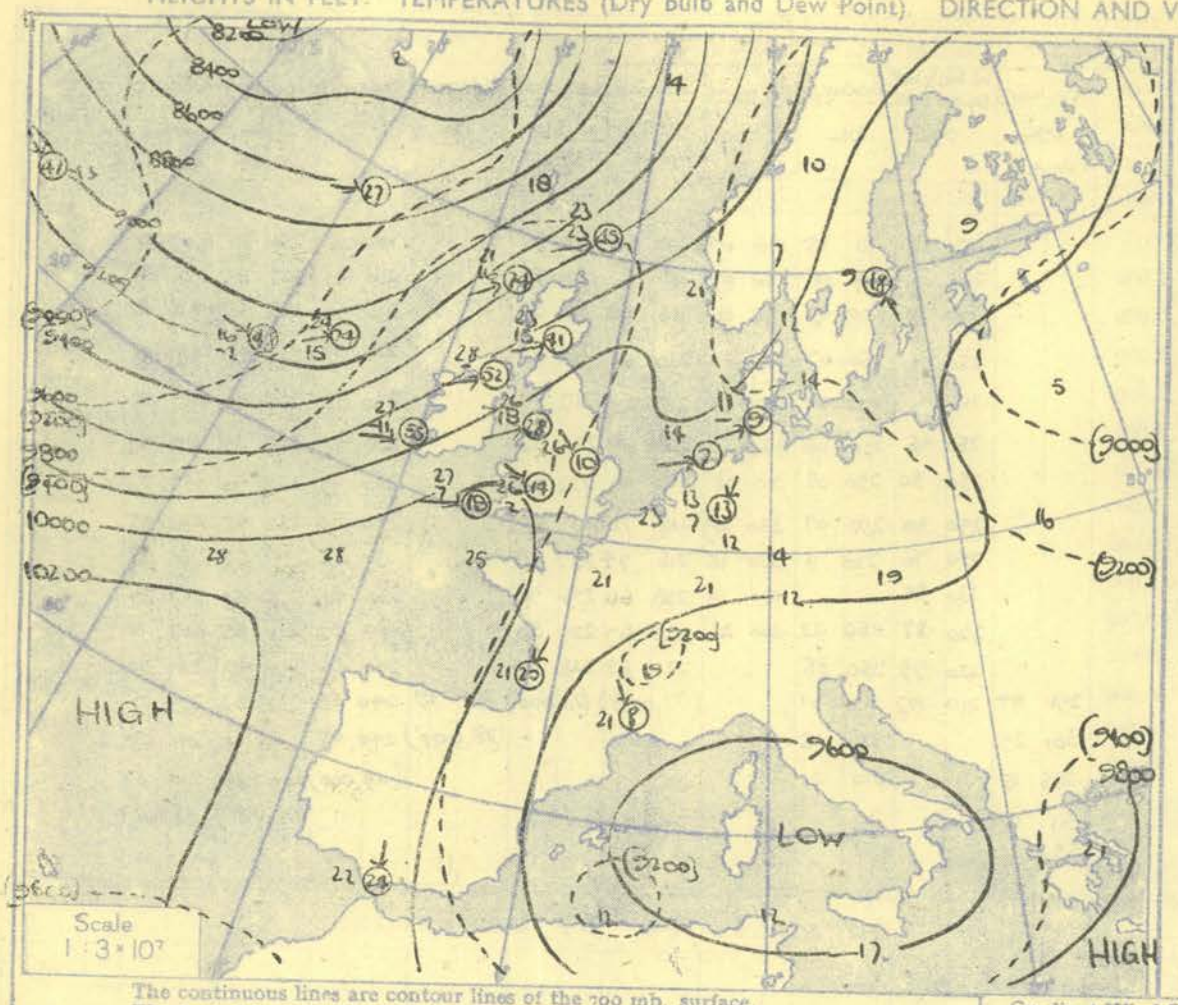
Ship	WEATHER WATCHER					WEATHER WATCHER					WEATHER WATCHER				
Lat/Long	58·9N 19·1					59·0N 19·0W					59·0N 19·3W				
Pressure Time	03h G.M.T.					09L G.M.T.					15L G.M.T.				
M.S.L.	977 mb					978 mb					982 mb				
Surf	977 mb					978 mb					982 mb				
Freezing	890 mb					930 mb					950 mb				
Pressure 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		39	38	110	26		39	25	For winds see top of page.			36	27	250	20
1000	-6·2					-5·9					-4·9				
950		37	37	107	31		35	23				32	25	256	20
900	21·8	33	33	112	35	22·0	27	16			22·8	26	21	258	20
850		28	28	120	37		20	10				18	14	261	20
800	52·5	23	23	127	40	52·2	13	03			52·8	11	02	264	22
750		19	18	143	42		07	-03				04	-04	265	24
700	86·7	15	14	159	45	85·4	00	-12			85·8	-05	-12	264	27
650		11	09	181	63		-07	-20				-11	-17	252	29
600	125	05	01	202	79	123	-15	-33			123	-18	-25	256	39
550		-04	-10	206	81		-20	-39				-26	-34	239	64
500	170	-14	-24	213	88	165	-27	-47			165	-36	-42	207	74
450		-23	-40	215	84		-35	-55				-44		212	86
400	222	-31	-52	218	113	(423) mb	-38				214	-54		203	80
350		-45		231	136							-50		199	68
300	285	-59		228	141						277	-45		200	64
250		-63		223	99							-45		200	60
200	372	-50		228	66						367	-44		209	59
170		-52		153	44							-42		218	57
150		-53										-48		213	59
130		-55										-50		212	64
110	(115 mb)	-61										-55			
100											519	-58			
90												-53			
80												-51			
70												-53			
60												-55			
												-55			
	Isothermal 660 - 640 mb 11° 455 - 450 " -23°										Inversion 930 mb 29° - 918 mb 31°				
Tropopause	I 272 mb - 67° 30,700'					NR.					I 400 mb - 54° 21,700'				

Ship	WEATHER WATCHER					WEATHER OBSERVER					WEATHER OBSERVER				
Lat/Long	59·0N 19·2W					52·5N 19·7W					52·5N 19·5W				
Pressure Time	21L G.M.T.					03L G.M.T.					09h G.M.T.				
M.S.L.	985 mb					993 mb					990 mb				
Surf	985 mb					993 mb					990 mb				
Freezing	960 mb					760 mb					800 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		37	21	260	28		55	49	220	40		50	46	230	28
1000	-4·0					-2·1					-2·7				
950		31	22	253	30		50	48	216	63		47	43	231	50
900	23·7	25	20	255	37	26·7	46	46	223	78	28·9	42	36	233	64
850		18	16	261	36		42	42	236	82		37	31	235	49
800	53·7	11	09	261	34	58·3	37	36	239	82	57·1	32	27	235	56
750		03	01	259	33		31	31	239	78		27	22	231	60
700	86·7	-06	-09	254	33	93·3	25	20	232	84	91·8	21	16	227	64
650		-14	-20	243	37		21	13	229	81		14	09	228	75
600	123	-23	-30	223	44	133	14	06	234	80	131	12	-17	227	86
550		-33	-41	210	52		07	02	234	90		04	-24	221	93
500	165	-43		212	57	178	-03	-06	236	88	176	-06	-37	213	90
450		-52		217	54		-14	-18	237	78		-17	-46	215	99
400	213	-53		227	43	231	-27	-31	231	87	229	-28	-44	226	111
350		-53		228	37		-42		231	97		-40	-53	225	129
300	276	-53		220	43	295	-58		231	95	293	-56		223	108
250		-48		208	52		-74		231	84		-75		216	117
200	365	-48		203	55	379	-78		239	78	377	-66		224	85
170		-48		205	56		-60		231	64		-62		225	59
150		-48		208	51		-64		232	60		-61		225	45
130		-49		213	42		-69		232	30		-69		225	48
110		-53		212	40		-71		232	30					
100	516	-56		213	40	524	-69		232	30					
90							-67		232	30					
80							-65		232	24					
70							-71		232	10					
60						(62 mb)	-74								
						Inversion 700 mb 25° - 687 mb 26° Isothermal 703 - 700 mb 25°					Inversion 630 mb 11° - 605 mb 13° Isothermal 990 - 978 mb 50°				
Tropopause	I 412 mb - 58° 20,600'					I 217 mb - 80° 36,200'					II 242 mb -75° 33,700'				

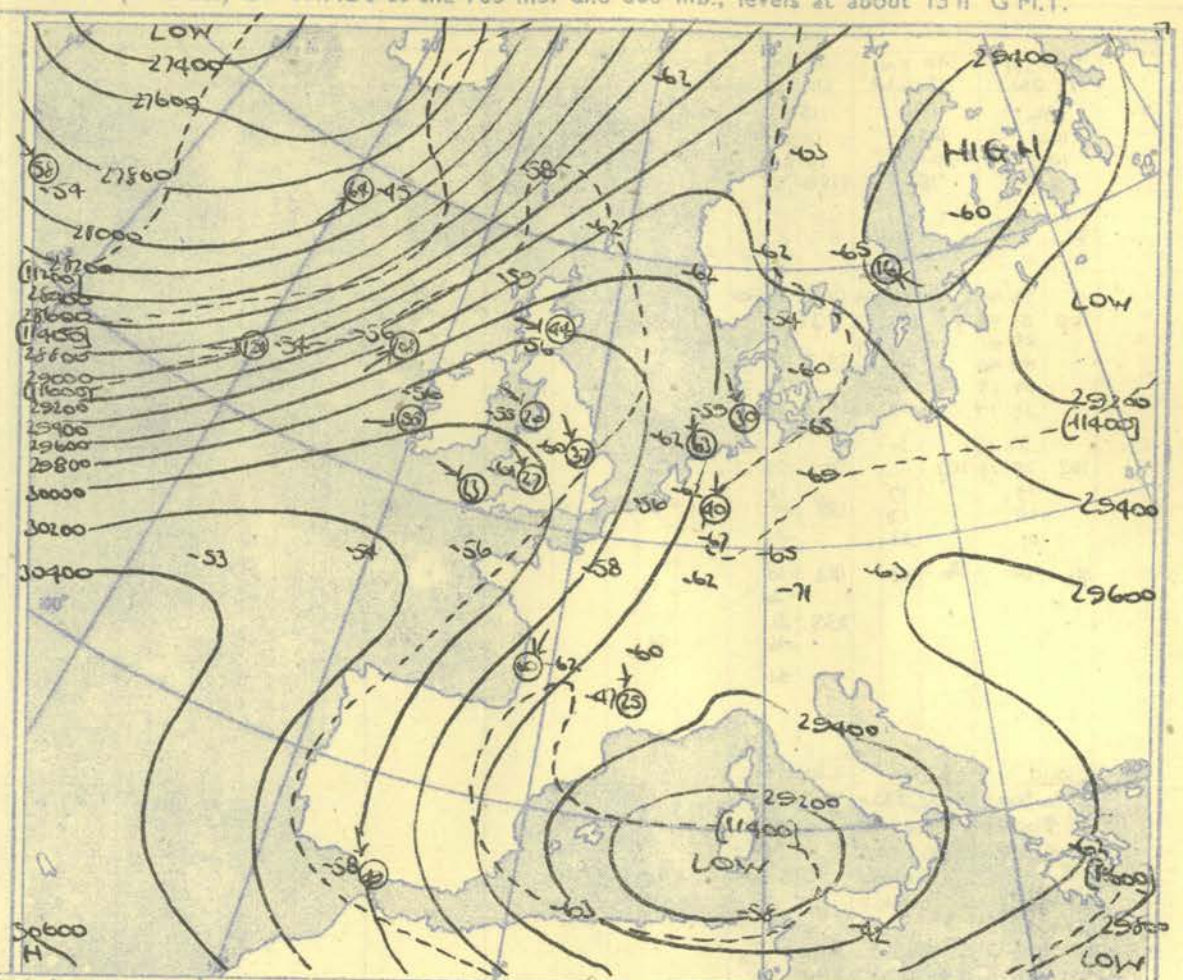
Ship	WEATHER OBSERVER					WEATHER OBSERVER					WEATHER EXPLORER				
Lat/Long	52·7N 19·0W					52·7N 19·0W					54·7N 11·7W				
Pressure Time	15L G.M.T.					21L G.M.T.					15L G.M.T.				
M.S.L.	997 mb					1006 mb					993 mb				
Surf	997 mb					1006 mb					993 mb				
Freezing	990 mb					950 mb					760 mb				
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		40	36	280	35		39	31	265	30		52	51	214	36
1000	-0·8					1·8	38	31			-1·9				
950		34	31	293	39		32	27	256	39		49	47	208	59
900	27·1	27	24	289	42	29·3	26	21	262	42	26·8	46	43	210	64
850		22	20	283	47		20	15	268	42		41	38	216	56
800	57·4	17	14	279	46	59·5	14	09	272	36	58·3	35	31	221	60
750		12	06	277	43		08	04	262	33		31	26	239	78
700	91·0	04	-02	271	28	92·8	01	-03	256	37	93·3	24	15	234	74
650		03	-06	257	60		-07	-12	268	42		16	-06	224	72
600	129	00	-26	226	115	130	-14	-21	250	54	133	12	-24	220	79
550		-04	-35	225	118		-18	-30	245	80		03	-23	221	76
500	173	-07	-49	224	125	173	-17	-32	242	101	177	-05	-19	223	92
450		-18	-56	225	129		-24	-40	242	112		-13	-25	223	87
400	226	-32	-59	228	124	225	-34	-48	227	129	231	-22	-33	220	99
350		-44		233	132		-45		219	150		-39	-52	222	99
300	279	-54		232	151	289	-56		225	120	295	-56		221	108
250		-58		280	136		-50		230	100		-71			
200	376	-59		224	83	377	-47		238	66					
170		-54		228	65		-46		247	69					
150		-56		226	62		-50		237	60					
130		-58		228	60		-57								
110		-63		232	51										
100		-60		233	48										
90		-60		235	47										
80		-61		235	37										
70		-65													
60															
	Inversion 665 mb 0° - 650 mb 03°					Inversion 534 mb -18° - 520 mb 25° Isothermal 600 - 586 mb -14° 567 - 534 " -18°									
Tropopause	I 263 mb -65° 31,800'					I 300 mb - 56° 28,900'					NR.				

February 1st 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

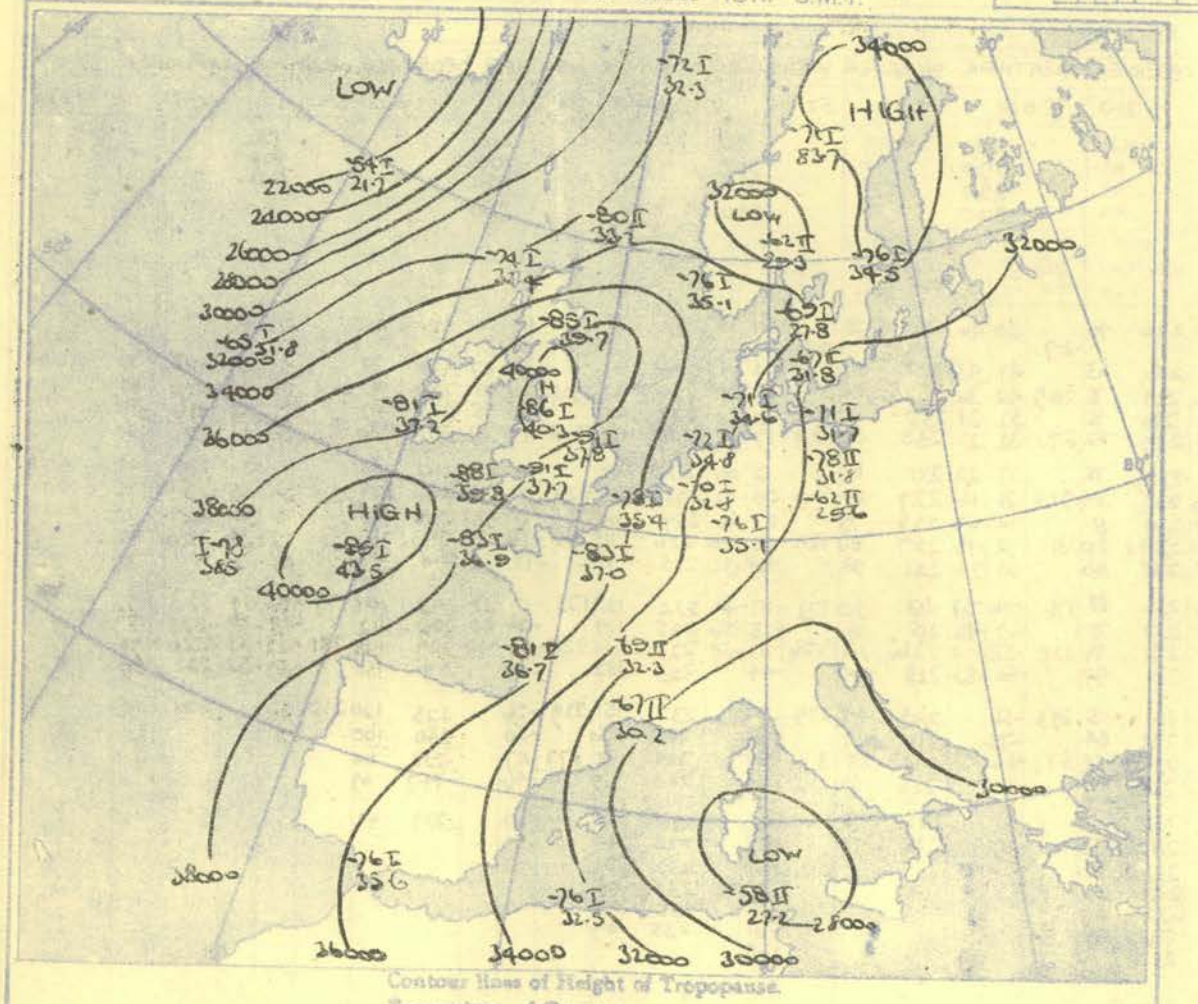


The continuous lines are contour lines of the 300mb. surface
The dotted lines are isopleths of the thickness of the layer 500–300 mb.

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

100 60 40 20 10 5 0 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 associated with the secondary depression over the Eastern Atlantic moved east over Britain to reinforce the warm ridge off Scandinavia whilst the cold trough over Western Europe and the Western Mediterranean persisted. The cold outbreak from the Davis Strait penetrated further eastwards in the rear of the cold front.

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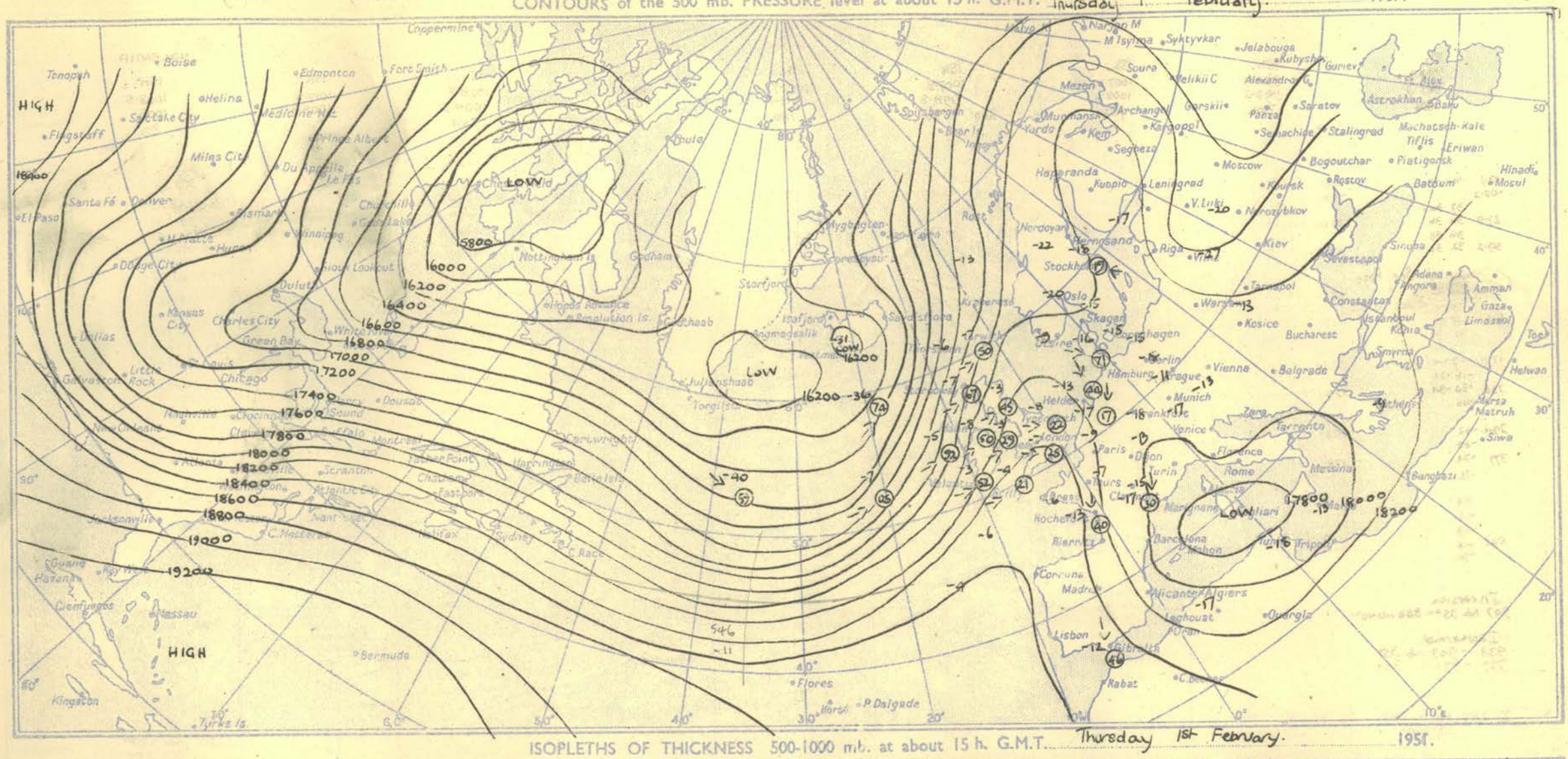
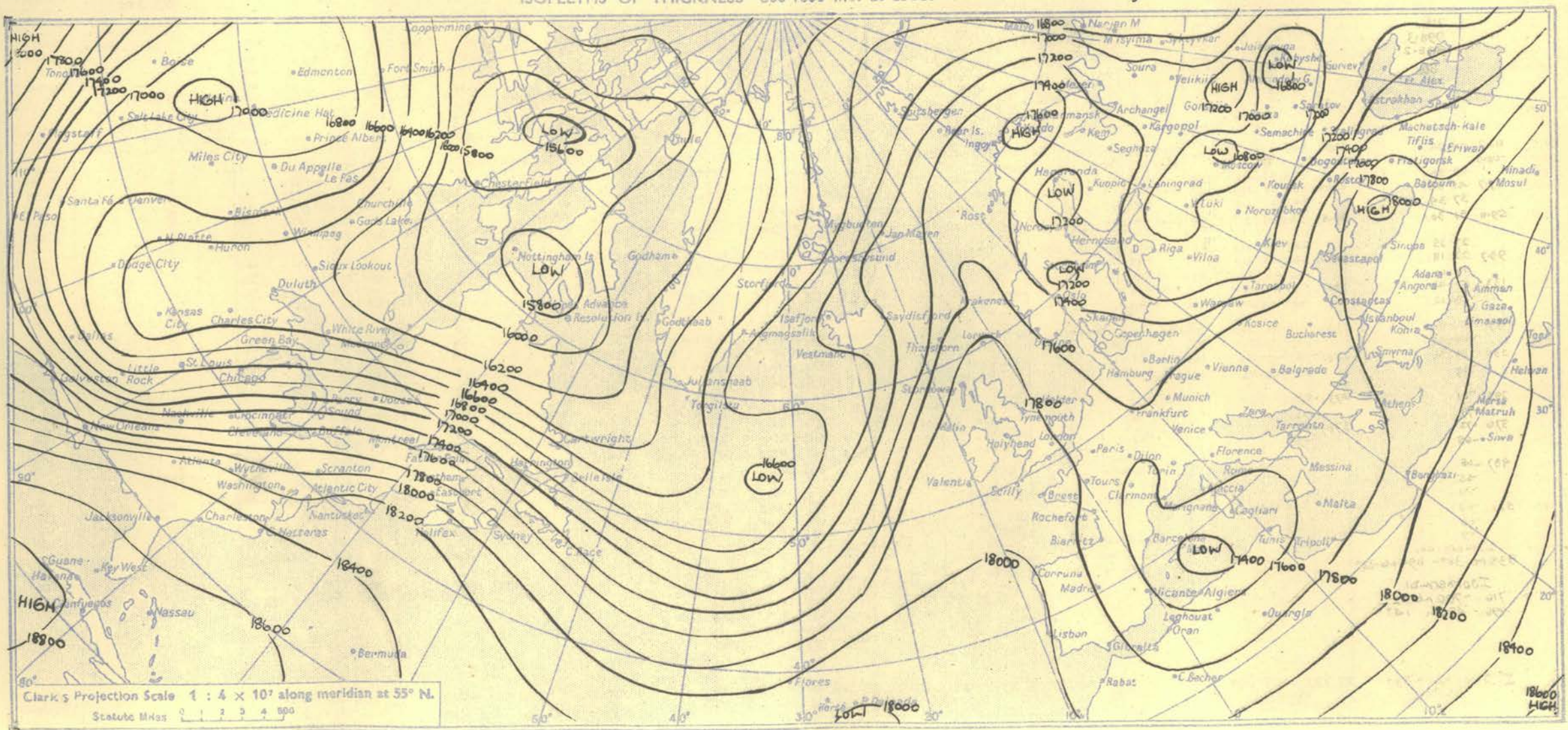
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

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



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Thursday 1st February. 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Thursday 1st. February 1951.

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

LERWICK

Pressure: Time 15h. G.M.T. | M.S.L. 997.3 mb | Surf 989.2 mb | Freezing 800 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	41	40		
1000	-00·2				
950		37	36		
900	27·9	36	36		
850		36	38		
800	59·2	32	32		
750		28	28	See Page 3 for Winds	
700	94·0	23	23		
650		17	16		
600	133	09	07		
550		01	-01		
500	17·8	-07	-10		
450		-18	-21		
400	230	-30	-34		
350		-46			
300	29·4	-62			
250		-80			
200	37·1	-74			
170		-72			
150		-64			
130		-68			
110		-69			
100	52·1	-69			
90		-70			
80					
70					
60					

Inversion 907 mb 35° - 886 mb 40°

Isothermal 933 - 907 mb 35°; 787 - 771 " 30°

Tropopause: I 250 mb - 80° 33,200'

STORNOWAY

Pressure: Time 15h. G.M.T. | M.S.L. 994·9 mb | Surf 993·2 mb | Freezing 796 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·5	48	47		
1000	-1·5				
950		44	42		
900	27·0	41	38		
850		39	35		
800	58·3	33	28		
750		27	23	See Page 3 for Winds	
700	93·0	21	16		
650		13	09		
600	132	08	01		
550		02	-05		
500	17·7	-07	-16		
450		-17	-27		
400	229	-29	-40		
350		-43			
300	29·3	-59			
250		-71			
200	37·8	-74			
170		-66			

Isothermal 618 - 594 mb 08°

Tropopause: I 260 mb -74° 32,400'

LEUCHARS

Pressure: Time 15h. G.M.T. | M.S.L. 1007·7 mb | Surf 1008·6 mb | Freezing 753 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	44	41	230	21
1000	02·2	43	41		
950		40	39	237	40
900	30·5	42	41	238	49
850		39	38	234	49
800	61·8	34	30	231	44
750		31	23	231	40
700	96·9	23	18	236	41
650		18	12	237	43
600	136	14	08	238	42
550		06	-12	245	45
500	18·1	-03	-15	249	45
450		-13	-25	247	42
400	234	-26	-38	253	41
350		-43	-50	264	36
300	29·8	-56		269	44
250		-73		268	42
200	38·2	-82		268	39
170		-81		257	31
150		-64		252	28
130		-69		252	24
110		-64		252	22
100	52·6	-68		244	19
90		-70		234	17
80		-65		210	15

Inversion 942 mb 39° - 906 mb 42°; 858 " 40° - 808 " 33°; 670 " 17° - 632 " 19°

Isothermal 234 - 219 mb -78°

Tropopause: I 186 mb -85° 39,700'

ALDERGROVE

Pressure: Time 15h. G.M.T. | M.S.L. 1007·8 mb | Surf 998·8 mb | Freezing 800 mb | 750 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	49	45	170	22
1000	02·3				
950		45	41	195	39
900	30·7	41	36	218	38
850		38	33	231	48
800	62·0	32	27	232	49
750		33	04	229	49
700	96·9	28		232	52
650		19		238	52
600	136	10		234	50
550		00		232	50
500	18·1	-08		236	50
450		-17		238	51
400	234	-26		240	35
(380 mb)		-30			

Inversion 780 mb 30° - 750 mb 32°

Tropopause: N.R.

LIVERPOOL

Pressure: Time 15h. G.M.T. | M.S.L. 1015·7 mb | Surf 1013·7 mb | Freezing 780 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	47	40	170	10
1000	04·2	46	39	178	17
950		43	32	221	19
900	32·6	42	33	243	23
850		40	34	249	24
800	64·0	35	28	235	22
750		28	23	227	24
700	98·9	26	18	238	28
650		20	07	256	25
600	138	13	-10	262	26
550		05	-19	263	31
500	18·3	-03	-20	262	29
450		-14	-30	268	28
400	236	-25	-45	273	31
350		-39	-57	277	20
300	30·1	-55		281	20
250		-73		306	31
200	38·5	-85		300	21
170		-76		300	28
150		-69		305	23
130		-66		296	19
110		-69		282	11
100	52·8	-71		224	14
90		-69		272	13
80		-66		266	05
70		-68		220	02
(65 mb)		-63			

Inversion 914 mb 41° - 903 mb 42°; 728 " 25° - 715 " 27°; 687 " 24° - 680 " 25°; 200 " -85° - 193 " -84°

Isothermal 980 - 960 mb 44°; 877 - 845 " 40°

Tropopause: I 200 mb -85° 38,400'; I 183 mb -86° 40,300'

DOWNHAM MARKET

Pressure: Time 15h. G.M.T. | M.S.L. 1020·0 mb | Surf 1015·4 mb | Freezing 754 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	40	35	195	08
1000	05·3	39	35	207	17
950		35	31	221	18
900	33·1	33	27	237	18
850		30	20	259	20
800	64·0	23	08	264	16
750		31	05	283	11
700	98·9	26	01	303	10
650		19	00	311	12
600	138	11	00	311	15
550		02	-06	315	22
500	18·3	-08	-15	316	22
450		-17	-24	323	33
400	236	-29	-39	332	33
350		-43		352	28
300	30·0	-60		350	37
250		-76		355	40
200	38·2	-87		345	33
170		-71		345	30
150	44·1	-69		358	18
130		-71		343	17
110		-70		345	15
100	52·6	-70			

Inversion 950 mb 35° - 930 mb 38°; 857 " 29° - 822 mb 33°

Isothermal 492 - 482 mb -10°

Tropopause: I 204 mb - 91° 37,800'

LARKHILL

Pressure: Time 15h. G.M.T. | M.S.L. 1020·7 mb | Surf 1004·3 mb | Freezing 744 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	42	41	220	10
1000	05·5	41	40		
950		37	37	218	13
900	33·5	32	29	243	12
850		35	09	270	12
800	64·5	35	07	276	10
750		33	03	296	09
700	99·6	26	02	292	14
650		18	-01	285	17
600	139	10	-10	282	16
550		02	-14	305	19
500	18·4	-07	-20	309	25
450		-17	-29	319	25
400	236	-30	-41	328	25
350		-44		341	29
300	30·0	-61		351	27
250		-78		354	34
200	38·2	-90		350	34
170		-79		350	29
150	44·1	-69		339	27
130		-72		342	24
110		-71		328	17
100	52·5	-72		334	13
90		-72		341	09
80		-71		359	06
70		-69		077	05
60	63·1	-65		313	07

Isothermal 900 - 878 mb 32°; 850 - 765 " 35°

Tropopause: I 205 mb - 91° 37,700'

CAMBORNE

Pressure: Time 15h. G.M.T. | M.S.L. 1019·5 mb | Surf 1008·8 mb | Freezing 742 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	50	46	180	05
1000	05·3	49	44	206	24
950		46	28	230	19
900	33·7	42	32	251	19
850		39	34	261	18
800	65·2	34	28	259	18
750		33	22	261	18
700	100	27	07	257	18
650		20	04	255	19
600	140	12	-04	252	18
550		06	-07	251	18
500	18·5	-04	-17	263	21
450		-14	-27	272	24
400	238	-25	-44	268	23
350		-39	-56	262	17
300	30·2	-56		290	13
250		-72		324	21
200	38·6	-84		329	22
170		-76		316	28
150	44·5	-64		317	24
130		-71		313	22
110		-74		309	22
100	52·9	-74		314	21
(84 mb)		-69			

Inversion 978 mb 44° - 950 mb 46°; 787 " 33° - 757 " 34°

Tropopause: I 189 mb -88° 39,800'

VALENTIA

Pressure: Time 15h. G.M.T. | M.S.L. 1008·5 mb | Surf 1008 mb | Freezing 800 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	54	50		
1000	2·6	52	48		
950		46	42		
900	30·6	42	38		
850		37	33		
800	61·9	32	28		
750		27	11		
700	96·7	27	-11		
650		22	-18		
600	136	14	-20		
550		05	-23		
500	18·1	-03	-27		
450		-11	-31		
400	235	-24	-45		
350		-39			
300	29·9	-56			
250		-70			
200	38·3	-76			
170		-62			
150		-66			
130		-70			
110		-75			
100	52·8	-75			
90		-74			
80		-76			
70					
60					

Isothermal 750 - 700 mb 07°

Tropopause: I 211 mb - 81° 37,200'

LERWICK

Pressure: Time 21h. G.M.T. | M.S.L. 998·3 mb | Surf 988·2 mb | Freezing 808 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	44	42		
1000	-00·5				
950		39	38		
900	27·7	41	38		
850		37	34		
800	59·0	31	30		
750		27	25		
700	93·7	22	18		
650		16	10		
600	133	07	-02		
550		-03	-12		
500	17·7	-13	-19		
450		-19	-24		
400	230	-31	-36		
350		-45			
300	29·3	-61			
250		-79			
200	37·6	-72			
170		-65			
150	43·1	-68			
130		-65			
110		-70			
100	52·1	-67			
90		-68			
80		-69			
70					
60					

Inversion 935 mb 38° - 894 mb 42°

Isothermal 716 - 700 mb 22°; 496 - 480 " 14°

Tropopause: I 241 mb - 82° 33,800'

STORNOWAY

Pressure: Time 21h. G.M.T. | M.S.L. 993·9 mb | Surf 991·2 mb | Freezing 824 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·5	49	47		
1000	-2·0				
950		44	43	212	58
900	26·9	38	37	219	58
850		34	33	218	69
800	57·5	30	29	217	69
750		25	24	213	68
700	92·0	20	18	219	77
650		14	09	220	81
600	131	07	-08	218	87
550		-02	-09	218	82
500	17·6	-10	-16	226	89
450		-17	-25	217	97
400	228	-27	-32	216	103
350		-39	-44	216	110
300	29·3	-53			
250		-70			
200	37·8	-65			
170		-69			

Tropopause: I 220 mb -73° 35,800'

LEUCHARS

Pressure: Time 21h. G.M.T. | M.S.L. 1006·0 mb | Surf 1005·1 mb | Freezing 766 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	46	43	250	30
1000	01·6	45	42		
950		44	41		
900	30·1	44	39		
850		40	35		
800	61·6	36	32		
750		30	26		
700	92·3	23	19		
650		15	12		
600	136	12	-02		
550		04	-11		
500	18·1	-02	-17		
450		-11	-26		
400	234	-23	-39		
350		-38	-54		
300	29·9	-54			
250		-70			
200	38·3	-87			

See Page 3 for Winds

Inversion 953 mb 43° - 927 mb 47°; 637 " 13° - 632 " 15°

Isothermal 632 - 616 mb 15°; 548 - 534 " 03°

Tropopause: N.R.

ALDERGROVE

Pressure: Time 21h. G.M.T. | M.S.L. 1006·1 mb | Surf 997·1 mb | Freezing 793 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	51	46	200	25
1000	01·8				
950		46	42	223	43
900	30·3	41	37	214	51
850		37	32	220	50
800	61·6	33	29	234	47
750		29	21	230	49
700	96·4	23	16	230	52
650		16	05	231	55
600	136	12	-15	224	54
550		03	-14	214	56
500	18·1	-06	-23	223	60
450		-15	-39	227	62
400	234	-25	-41	227	62
350		-40	-57	226	69
300	29·8	-58		225	60
250		-74		234	69
200	38·1	-86			
170		-67			
150	44·0	-67			
130		-71			
110		-76			
100	52·4	-79			
(92 mb)		-68			

Inversion 765 mb 28° - 745 mb 30°

Isothermal 663 - 628 mb 16°; 464 - 454 " -13°; 434 - 423 " -19°

Tropopause: I 204 mb -89° 37,800'

LIVERPOOL

Pressure: Time 21h. G.M.T. | M.S.L. 1014·8 mb | Surf 1012·8 mb | Freezing 746 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	47	40	170	05
1000	04·0	46	40	179	21
950		44	38	228	27
900	32·4	41	35	233	30
850		37	30	235	29
800	63·6	29	28	242	32
750		33	04	247	34
700	98·5	25	-21	244	39
650		17	-22	238	42
600	138	11	-22	230	36
550		01	-24	233	34
500	18·3	-06	-27	243	34
450		-13	-36	249	34
400	236	-23	-51	261	23
350		-37	-60	265	19
300	30·0	-55		256	18
250		-74		252	20
200	38·4	-86		269	36
170		-74		277	27
150	44·3	-66		270	19
130		-71		268	20
110		-73		268	18
100	52·7	-72		261	15
(89 mb)		-68			

Inversion 979 mb 44° - 962 mb 45°; 785 " 27° - 766 " 35°; 205 " -87° - 200 " -86°

Isothermal 926 - 880 mb 41°

Tropopause: I 205 mb -87° 37,900'; I 188 mb -88° 39,700'

DOWNHAM MARKET

Pressure: Time 21h. G.M.T. | M.S.L. 1020·3 mb | Surf 1015·7 mb | Freezing 765 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	36	34	170	07
1000	05·4	37	35		
950		36	34	220	23
900	33·4	36	30	227	18
850		36	21	266	09
800	64·6	35	17	280	06
750		31	14	252	07
700	99·5	26	16	272	10
650		18	08	288	16
600	139	11	02	283	16
550		03	-14	295	13
500	18·4	-05	-21	315	13
450		-13	-23	319	18
400	23·7	-23	-35	321	17
350		-37	-47	324	20
300	30·2	-53		330	19
250		-69		341	25
200	38·6	-82		338	30
170		-76		344	24
150	44·5	-68		340	19
130		-68		331	19
110		-68		337	12
100	52·9	-70			

Inversion 1016 mb 36° - 987 mb 39°; 950 " 36° - 867 " 37°

Tropopause: I 185 mb -83° 40,200'

LARKHILL

Pressure: Time 21h. G.M.T. | M.S.L. 1020·5 mb | Surf 1004·0 mb | Freezing 775 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	42	41	190	04
1000	05·5				
950		37	37	207	16
900	33·5	37	20	237	15
850		35	24	261	12
800	64·7	32	26	268	11
750		30	02	262	13
700	99·5	26	01	266	13
650		18	-03	278	13
600	139	10	-09	280	13
550		01	-14	285	17
500	18·4	-08	-23	286	18
450		-18	-35	287	13
400	23·6	-29	-48	287	18
350		-43		300	15
300	30·0	-60		307	12
250		-76		345	18
200	38·3	-89		320	31
170		-76		337	23
150	44·2	-69		324	21
130		-75		320	22
110		-76		333	19
100	52·4	-75		333	10
90		-78		325	07
80		-81		247	05
70		-81			
60					

Inversion 930 mb 35° - 888 mb 38°

Isothermal 800 - 775 mb 32°

Tropopause: I 192 mb -91° 39,100'

CAMBORNE

Pressure: Time 21h. G.M.T. | M.S.L. 1019·1 mb | Surf 1008·4 mb | Freezing 828, 810 + 740 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	48	47	180	12
1000	05·1	47	46	216	12
950		46	44	226	21
900	33·5	41	38	230	18
850		35	31	230	20
800	64·7	33	27	239	30
750		33	07	243	24
700	99·8	25	-08	247	26
650		17	-07	252	30
600	139	10	-12	253	26
550		02	-18	248	27
500	18·4	-05	-31	244	26
450		-17	-41	252	25
400	23·7	-28	-47	261	18
350		-41		287	27
300	30·1	-56		277	12
250		-74		289	16
200	38·4	-89		284	30
170		-82		292	24
150	44·2	-71		291	25
130		-74		292	21
110		-78			
(119 mb)					

Inversion 817 mb 31° - 780 mb 36°

Isothermal 1000 - 956 mb 47°

Tropopause: I 184 mb -93° 40,100'

H.M.S.O. Press, M.O., Dunstable.

No. 11632 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Friday 2nd. February 1951 Page 1.

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

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.	998·8 mb	1002·9 mb	1008·7 mb	1011·3 mb	1014·3 mb	1019·6 mb	1019·4 mb	1017·7 mb
	Surf	988·8 mb	1001·2 mb	1007·8 mb	1002·0 mb	1012·2 mb	1015·1 mb	1003·0 mb	1007·0 mb
	Freezing	886 mb	919 mb	850 mb	885 mb	784 mb	827 mb	825 mb	845 + 765 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	021	44	39			0·5	39	34	240	20	00·2	44	42	230	07	026	43	39	220	12	00·6	43	41	180	10	01·2	37	35	160	12	04·4	42	41	200	03	02·9	49	47	180	15	Surf
1000	04·0					0·7	40	35			02·2	43	41			03·1					03·8	42	39	184	15	05·2	37	35	200	18	05·2					04·8	49	46	213	24	1000
950			41	35			36	27	227	38		40	37	246	31		40	27	255	15		44	40	217	25		40	29	220	18		40	38	213	17		48	40	218	25	950
900	27·8	34	30			28·6	29	20	227	42	30·4	35	32	242	38	31·3	34	20	254	20	32·2	40	35	236	32	33·4	29	28	229	18	33·4	40	39	239	19	33·3	40	34	226	23	900
850		28	27				23	19	226	44		32	28	237	44		27	17	249	26		36	32	247	27		35	29	245	13		35	33	244	17		33	29	239	19	850
800	58·4	23	23			58·9	17	10	225	46	61·4	26	22	230	49	61·9	22	15	241	30	63·5	34	29	245	23	64·5	29	25	245	14	64·5	29	27	239	16	64·4	30	20	237	20	800
750		18	18	See Page 3 for Winds			10	03	225	46		23	20	226	48		26	22	233	48		28	21	235	28		27	17	243	13		29	20	243	15		30	16	236	23	750
700	92·5	19	-07			92·3	03	00	223	46	95·7	17	14	226	55	96·3	21	19	220	59	98·4	23	02	235	35	99·1	23	01	265	12	09·9	28	-01	248	15	99·2	22	09	232	25	700
650		14	-09				-02	-07	222	53		15	11	227	59		16	12	223	63		15	-09	232	23		16	-11	268	14		19	-02	255	16		14	-01	231	27	650
600	131	06	-06			130	-01	-26	228	72	135	10	04	237	59	135	10	01	231	65	137	09	-13	235	34	138	10	-16	258	16	139	09	-10	262	16	138	08	-12	243	24	600
550		-02	-11				-06	-36	228	91		03	-05	229	61		00	-09	224	69		03	-17	241	30		02	-19	260	16		00	-17	257	19		00	-20	250	24	550
500	176	-11	-15			174	-14	-42	223	100	180	-05	-14	228	63	180	-05	-11	220	63	185	-05	-22	246	37	183	-07	-25	266	14	183	-07	-26	255	19	183	-10	-29	240	21	500
450		-21	-25				-26	-45	222	102		-14	-24	229	69		-14	-24	226	72		-14	-29	243	33		-19	-37	265	15		-18	-35	266	15		-19	-35	256	20	450
400	228	-30	-35			226	-35	-45	221	107	233	-25	-35	228	67	233	-26	-37	229	64	235	-26	-42	244	36	236	-30	-51	269	14	236	-28	-48	267	13	235	-30	-45	248	15	400
350		-44					-48		220	115		-39	-50	228	68		-42		229	85		-40	-57	246	37		-42		280	16		-40	-59	267	11		-46		262	12	350
300	292	-60				289	-62		221	129	297	-56		226	67	299	-57		232	82	299	-57		249	32	300	-58		289	16	300	-57		282	15	299	-64		270	15	300
250		-77					-67					-70		227	75		-73		233	88		-75		242	37		-75		320	15		-72		309	14		-82		270	25	250
200	375	-69				374	-59				381	-84		227	71	381	-77		232	77	363	-86		257	40	383	-87		323	19	383	-85		313	21	381	-68		271	25	200
170		-59					-59					-72		234	55		-63					-70		248	29		-83		316	15		-79		300	15		-72		268	26	170
150		-63				436	-62				440	-65				441	-63					-68		249	28	440	-73		318	16		-71		301	19		-75		266	26	150
130		-68					-65					-67					-66					-73		246	23		-74		315	14		-72		299	17		-75		269	15	130
110		-68					-69					-64					-70					-67		243	17		-75		328	05		-73		285	08		-74		282	12	110
100	521	-68				521	-70				526	-67				526	-70				526	-74		240	14	524	-74		268	03	526	-72		277	07	524	-73		276	15	100
90		-66					-72					-72					-70					-71		246	21		-73		253	04		-72									90
80		-68					-72					-66					-65				(76mb)	-73		242	14		-73		225	05		-71									80
70																											-74	CALM												70
60		Inversion 734 mb 16° - 700 mb 19° Isothermal 989 - 978 mb 44°		Inversion 1001 mb 39° - 990 mb 42° 656 " 03° - 631 " 01° Isothermal 636 - 596 mb 01°		Inversion 883 mb 33° - 865 mb 34° 780 mb 24° - 765 " 25°		Inversion 780 mb 20° - 755 mb 27° 532 " 03° - 518 " 02° Isothermal 1002 - 977 mb 43° 920 - 910 " 36°		Inversion 980 mb 41° - 959 mb 45° 852 " 36° - 830 " 38° 215 " -86° - 205 " -85° Isothermal 1015 - 972 mb 37°		Inversion 972 mb 37° - 936 mb 43° 779 " 25° - 740 " 28° Isothermal 1015 - 972 mb 37°		Inversion 965 mb 39° - 928 mb 41° 770 " 25° - 740 " 32°		Inversion 790 mb 30° - 770 mb 33° Isothermal 1007 - 960 mb 49° 832 - 790 " 30°		Inversion 785 mb 19° - 767 mb 21° Isothermal 1012 - 994 mb 43° 800 - 785 " 19° 716 - 700 " 16°	60
Tropopause	I 230 mb - 81° 34,600'		I 275 mb - 79°		I 203 mb - 85° 37,700'		I 210 mb - 85° 37,000'		I 215 mb -86° 36,800' I 192 mb -88° 39,100'		I 183 mb - 92° 40,100'		I 191 mb -86° 37,300'		I 225 mb -90°		I 210 mb -87° 36,800'		Tropopause

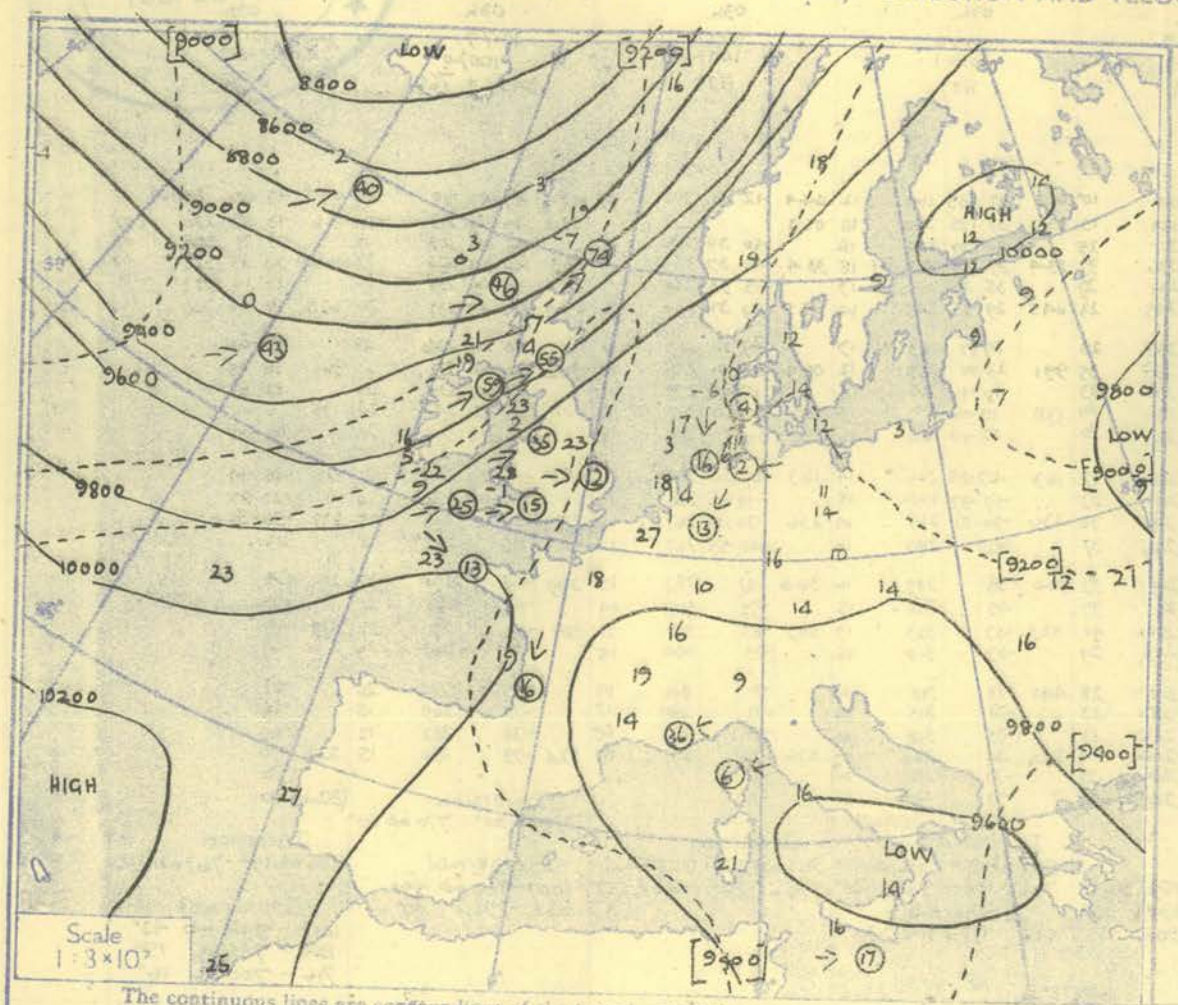
09h. G.M.T.

Station	Pressure	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE
	Time	09h. G.M.T.	09h. G.M.T.	09h. 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.	1006·1 mb	1006·7 mb	1011·9 mb	1012·8 mb	1012·5 mb	1018·5 mb	1017·9 mb	1015·2 mb
	Surf	996·0 mb	1005·0 mb	1011·0 mb	1003·2 mb	1010·5 mb	1013·9 mb	1001·6 mb	1004·6 mb
	Freezing	920 mb	930 mb	908 mb	921 mb	778 mb	762 mb	846 mb	830 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	027	40	32	220	30	00·5	37	32			00·2	40	37	230	05	036	39	34	CALM		00·6	46	44	170	10	01·2	37	36	150	13	04·4	42	42	200	12	02·9	49	49	157	12	Surf
1000	01·6					01·7	36	30			03·1	42	39			03·4					03·4	45	42	181	21	04·9	37	36			04·8					04·2	48	48			1000
950		36	28	223	39		33	27				37	34	244	15		35	27	264	10		43	40	202	24		42	41	202	19		39	39	194	20		43	42	211	26	950
900	29·4	30	23	224	37	29·9	29	19			31·1	32	30	247	18	31·3	29	19	260	13	31·9	40	37	218	28	33·1	40	39	212	15	32·9	38	38	215	21	325	39	35	217	24	900
850		26	18	223	33		23	09				26	20	235	30		28	12	258	15		37	34	227	35		34	31	223	15		33	32	213	22		34	30	217	22	850
800	59·9	19	09	220	31	59·7	17	-01			61·8	24	08	234	35	61·7	15	09	254	16	63·1	33	29	223	37	64·2	27	23	228	13	63·9	27	23	217	19	63·6	29	27	217	21	800
750		11	03	213	37		11	-01				25	18	224	43		15	10	226	24		29	23	218	28		31	05	235	10		28	14	233	18		26	12	217	25	750
700	93·4	08	-07	207	45	93·2	03	-04			96·2	20	19	218	49	95·7	16	12	198	43	98·0	22	17	214	25	99·0	24	05	237	13	99·0	23	07	228	20	98·1	24	-03	210	24	700
650		06	-23	209	54		-03	-12				15	13	219	53		11	07	202	65		15	10	217	25		16	-02	234	15		16	-01	228	20		17	-09	217	25	650
600	132	00	-29	214	72	131	-03	-21			135	09	04	222	57	134	06	01	206	58	137	09	03	221	28	138	08	-06	237	17	138	10	-13	226	20	137	10	-17	223	24	600
550		-08	-20	215	79		-07	-17				00	-03	224	58		00	-05	216	68		03	-06	231	34		00	-20	246	13		01	-30	228	15		02	-26	221	23	550
500	176	-13	-21	218	90	175	-13	-22			180	-08	-11	228	62	179	-08	-15	216	69	182	-04	-17	237	36	183	-06	-28	258	09	183	-09	-36	233	14	182	-07	-32	226	23	500
450		-25	-31	220	91		-22	-31				-18	-22	232	66		-19	-26	214	69		-16	-29	235	37		-18	-36	281	06		-19	-40	236	12		-17	-38	218	21	450
400	228	-34	-43	223	101	227	-33	-42			232	-28	-33	234	70	231	-32	-39	222	83	235	-25	-41	231	38	235	-28	-44	316	07	235	-29	-53	217	03	235	-27	-48	214	19	400
350		-47		225	106		-43					-42		226	73		-43		216	81		-40	-55	229	34		-42		339	13		-41		258	02		-39	-59	211	17	350
300	291	-63		228	104	291	-57				296	-58		223	69	295	-58		220	84	299	-55		222	34	299	-59		324	13	299	-57		303	07	299	-54		214	19	300
250		-78		216	110		-69					-76		234	76		-75		224	85		-72		232	35		-76		317	18		-72		290	12		-71		218	24	250
200	374	-69		219	69	376	-63				379	-86		231	64	378	-86		222	79	383	-84		237	42	382	-83		273	10	383	-83		265	12	383	-86		237	25	200
170		-63		216	53		-61					-67		232	51							-68		239	41		-66		275	14		-73		263	17		-82		242	27	170
150		-62		218	47	437	-57				439	-61		243	27							-62		241	33	442	-67		273	12		-65		267	19	441	-70		250	33	150
130		-64		219	49		-55					-61		241	28		Inversion 1003 mb 39° - 985 mb 40°					-65		233	24		-69		263	12		-69		265	18		-69		256	31	130
110		-65										-64		220	28		780 " 12° - 714 " 18°					-66		243	19		-68		255	07	(112mb)	-71					-70		267	27	110
100	520	-68									525	-66									528	-68		247	18	527	-67		217	07						526	-72		269	24	100
90		-64																				-64														-72				90
80	(85mb)	-66																			(89mb)	-64														-71				80
70																																								70
60		Inversion 715 mb 06° - 683 mb 11° Isothermal 865 - 847 mb 26°		Inversion 692 mb - 04° - 620 mb - 01°		Inversion 1011 mb 40° - 1000 mb 42° 801 " 24° - 770 " 27°		Inversion 1003 mb 39° - 985 mb 40° 780 " 12° - 714 " 18°		Inversion 203 mb -85° - 198 mb -84° Isothermal 795 - 778 mb 32° 445 - 435 " -17°		Inversion 988 mb 37° - 928 mb 44° 795 " 26° - 762 " 32° Isothermal 1014 - 988 mb 37°		Inversion 933 mb 38° - 920 mb 39° 800 " 27° - 777 " 31°		Inversion 760 mb 23° - 742 mb 28° Isothermal 928 - 913 mb 41°	60
Tropopause	I 222 mb - 87° 35,400'		I 229 mb - 72°		I 206 mb - 92°		I 210 mb - 91° 36,800'		I 203 mb. -85° 38,000' I 193 mb. -85° 39,000'		I 210 mb - 85° 37,300'		I 205 mb -85° 37,700'		I 180 mb - 88°				Tropopause

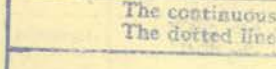
Friday 2nd February 1951.

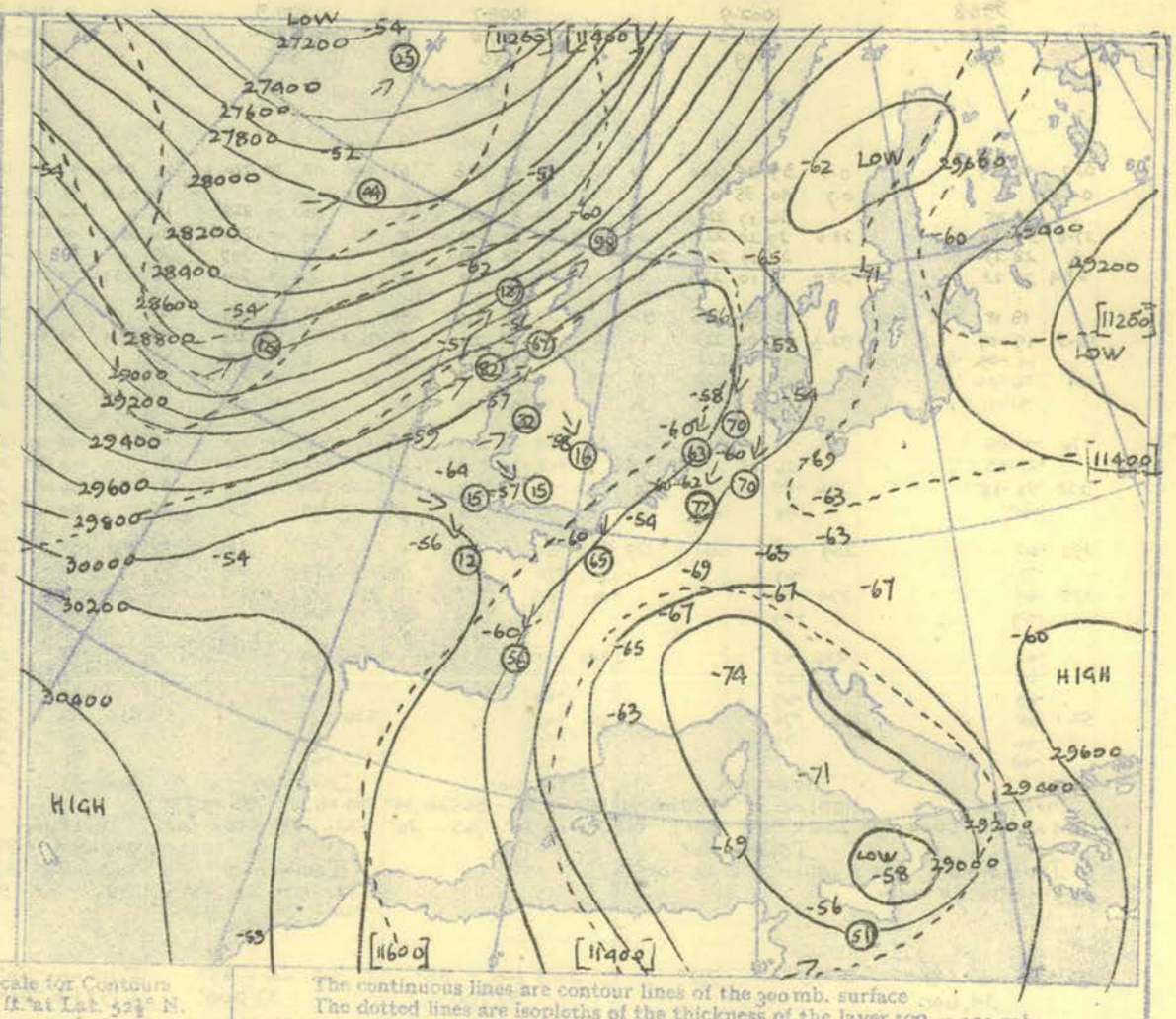
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03h G.M.T.



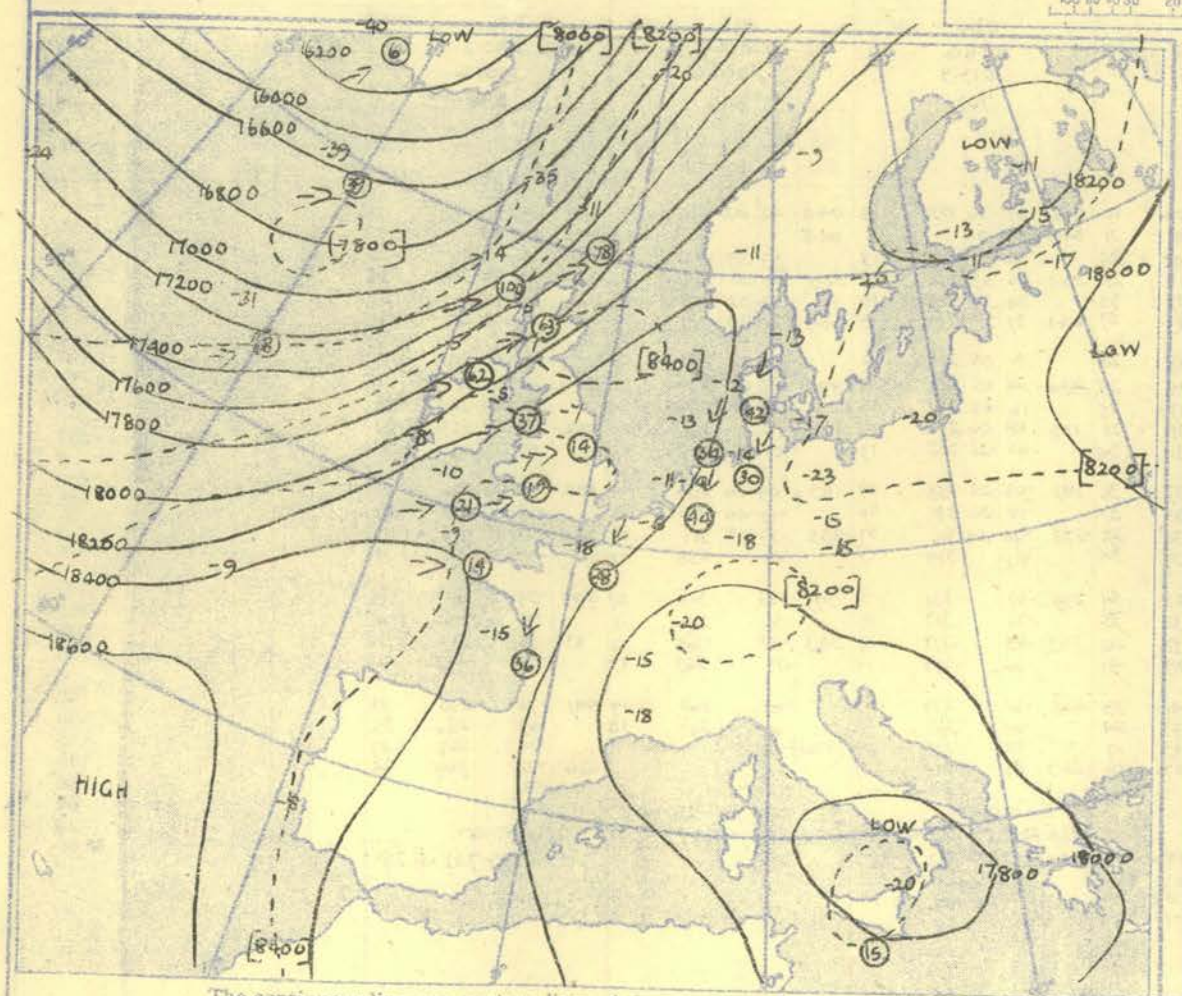
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000 – 700 mb.

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

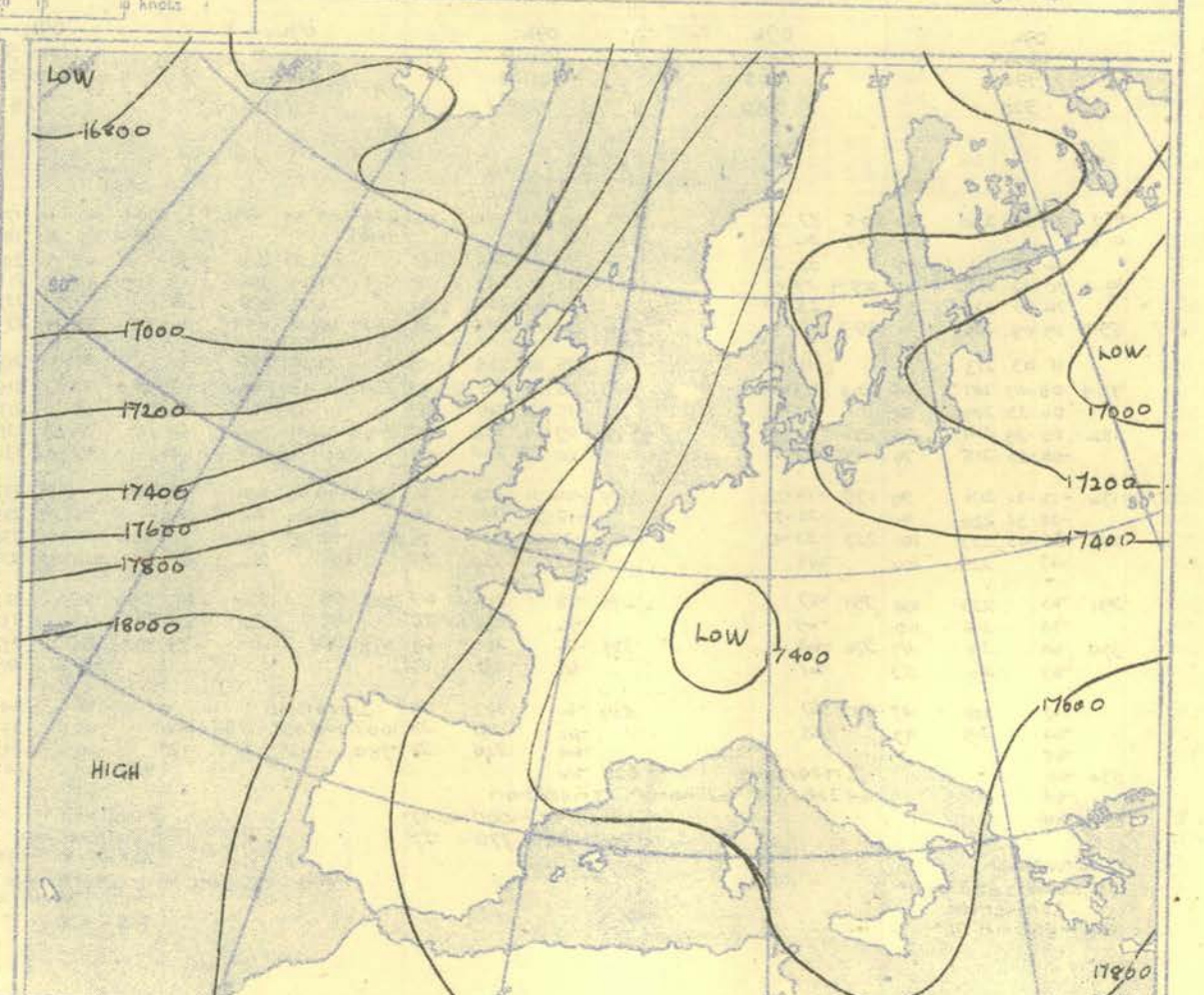




The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb



The continuous lines are contour lines of the 500mb. 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	48·1°N 17·0°W			47·6°N 12·3°W			43·2°N 17·0°W			39·5°N 12·2°W			53·1°N 1·3°E																		Pressure mb
Time	1215hrs			1400hrs			1245hrs			?			1530hrs			mb			mb			mb			mb			Time M.S.L. Surf Freezing	
M.S.L.	1011·7 mb			1008·5 mb			1020 mb			1019 mb			1016 mb			mb			mb			mb			mb				
Surf	1008·1 mb			1004·9 mb			1016 mb			1015 mb			1014 mb			mb			mb			mb			mb				
Freezing	920 mb			910 mb			910 mb			750 mb			835 mb			mb			mb			mb			mb				
	Height ft./100	°C Temp. °F.	Dew °F.	Height ft./100	°C Temp. °F.	Dew °F.	Height ft./100	°C Temp. °F.	Dew °F.	Height ft./100	°C Temp. °F.	Dew °F.	Height ft./100	°C Temp. °F.	Dew °F.	Height ft./100	°C Temp. °F.	Dew °F.	Height ft./100	°C Temp. °F.	Dew °F.	Height ft./100	°C Temp. °F.	Dew °F.	Height ft./100	°C Temp. °F.	Dew °F.		
Surf	01·0	45	34	01·6	43	28	–	48	43	–	55	50	00·5	41	35															Surf
1000	02·2			02·3			3·4			3·0			4·3																	1000
950		35	30		36	26		40	35		43	42		44	42															950
900	31·0	28	28	30·2	31	–		30	30		41	38	32·5	40	38															900
850		19	–		26	–		23	–		37	37		34	21															850
800	61·2	16	–	60·6	19	–		18	–		39	–	62·6	28	–															800
750		09	–		14	–		16	–		32	–		28	–															750
700	94	60	08	–	94	60	08	–	97·9	19	–	100	25	–	98·3	23	–													700
650		–3	–		01	–		18	–		19	–		15	–															650
600	132	–10	–	133	–8	–		04	–		10	–	13·7	07	–															600
550		–21	–		–11	–		–5	–		01	–		01	–															550
500	175	–32	–	176	–19	–	182	–13	–	184	–8	–	182	–7	–															500
450														–16	–															450
400													235	–28	–															400
350	Cloud.			Cloud.			Inversion			Inversion				–41	–															350
	818Cs 730–			718Cs 940–			750 ms 16			850 ms 37																				
300	770			850			700 ms 19			800 ms 39			299	–58	–															300
250																														250
200	818Cs 720–						Cloud.			Cloud.			Cloud.																	200
170	4–						718Cs 890–			485Cs 950–			818Cs 862–																	170
							790			940			820																	
							218Cs Hr			818Cs 780–																				
										720			Inversion																
							Surf wind. NW 17–21kts			218Cs Hr			997 ms 39																
										580 mb 44																				
										Surf wind. W 7–10kts.			Isothermal																
													800–750mb																
													28°																

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

Place	← Lerwick →						Wicks		Aldergrove		Leuchars		Downham market		Ronaldsway						Place
Time	03hrs		09hrs		15hrs		05hrs		15hrs		21hrs		21hrs		21hrs						Time
Type			Pilot								Pilot		Pilot								Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet
Surf.	230	40	230	40	170	40	210	11	010	08	Calm				150	25					Surf.
1,000	230	37	226	70	170	57	210	24	010	06	100	06	170	24	200	26					1,000
2,000	230	36	227	66	170	57	220	15	010	08	158	10	173	20	190	35					2,000
3,000	220	58	224	58	170	55	230	19	350	09	163	11	175	18	180	34					3,000
4,000	220	56	223	56	170	53	240	28	320	07	182	16	179	18	180	48					4,000
5,000	220	54	218	54	170	57	240	24	300	09	191	23	181	18							5,000
6,000	220	54	216	54	180	51	250	28	280	10	192	28	191	17							6,000
8,000	210	65	212	65	190	44	230	31	200	16	197	42	209	20							8,000
10,000	210	74	214	74	190	42			190	33	191	44	206	21							10,000
14,000	210	75	212	75	180	51			200	63	199	49	205	25							14,000
18,000	210	78	208	78	180	57			200	64	196	58	200	20							18,000
24,000	210	96	213	96	180	67			200	75	189	67	188	22							24,000
30,000	210	98	214	98	1	68			200	90	186	78	181	35							30,000
40,000	240	78	237	78	(25000′)				220	55	204	51	213	22							40,000
50,000									220	37	(29000′)		234	21							50,000

NEPHOSCOPE OBSERVATIONS

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

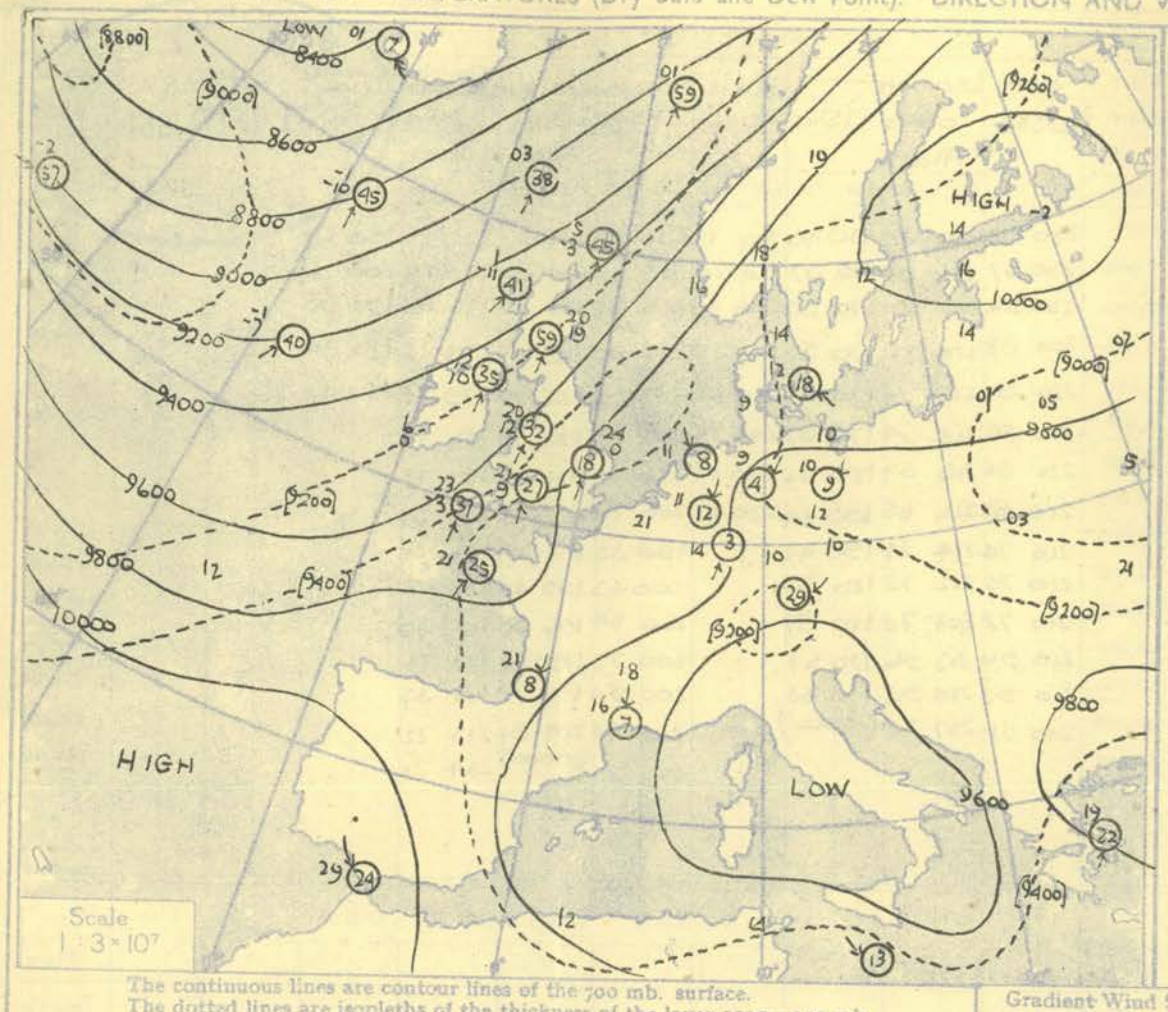
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Pressure mb	WEATHER OBSERVER					WEATHER OBSERVER					WEATHER OBSERVER					WEATHER OBSERVER					WEATHER WATCHER				
Ship																									
Lat/Long	52·9N. 18·7W.					53·0N. 18·2W.					53·0N. 17·7W.					53·3N. 17·2W.					59·0N. 19·0W.				
Time	08h. G.M.T.					09h. G.M.T.					15h. G.M.T.					21h. G.M.T.					03h. G.M.T.				
Pressure M.S.L.	1008 mb					1007 mb					1006 mb					1002 mb					985 mb				
Surf	1008 mb					1007 mb					1006 mb					1002 mb					985 mb				
Freezing	900 mb					940 mb					940 mb					950 mb					930 mb				
	Height ft./100	°C Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Height ft./100	°C Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Height ft./100	°C Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Height ft./100	°C Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Height ft./100	°C Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots
Surf		40	32	255	34		39	31	285	38		40	29	240	25		37	35	260	28		38	30	005	42
1000	2·2	39	30			2·0	38	31			1·6	39	28			6					–4·2				
950		31	22	240	38		33	29	252	35		34	23	241	37		32	28	252	31		34	27	230	47
900	29·8	22	14	243	40	29·7	25	25	251	37	29·3	26	18	240	34	28·2	26	22	252	24	23·6	27	21	230	46
850		18	11	244	39		19	18	249	37		19	04	235	24		21	16	252	21		20	17	230	42
800	59·8	12	06	249	37	59·6	10	09	245	31	59·4	12	–03	234	31	58·4	15	09	250	24	53·9	13	12	230	42
750		05	–03	250	40		05	–05	245	31		07	–12	236	42		08	00	249	22		06	03	230	42
700	92·9	00	–11	253	43	92·7	00	–12	238	38	92·6	–01	–17	239	40	91·7	02	–06	248	27	87·0	–02	–05	230	40
650		–07	–16	255	46		–08	–18	236	42		–10	–28	243	33		–06	–13	246	38		–11	–15	230	40
600	130	–16	–23	254	48	130	–17	–32	236	50	130	–19	–36	243	34	129	–14	–24	243	42	124	–20	–24	230	35
550		–25	–33	252	54		–27	–38	238	64		–28	–42	243	39		–23	–32	231	48		–29	–33	230	35
500	173	–31	–40	253	68	172	–38	–47	237	61	171	–36	–52	243	36	171	–34	–43	225	40	166	–39	–42	230	39
450		–33	–46	248	87		–43		228	46		–42		243	32		–40	–50	216	48		–48		230	42
400	223	–41		237	104	221	–48		228	48	221	–49		243	32	221	–49		226	40	215	–51		230	42
350		–48		225	122		–51		231	70		–55		244	32		–51		248	38		–55		230	42
300	286	–54		206	128	284	–55		226	62	283	–57		243	39	284	–55		266	33	277	–52		230	44
250		–56		203	106		–54		223	64		–55		240	38		–52		269	41		–51		230	42
200	374	–50		221	72	372	–54		213	52	371	–56		240	36	372	–55		275	44	366	–46		230	56
170		–51		227	66		–53		208	54		–55		236	39		–56		275	42		–45		232	51
150		–49		229	63		–54		220	47		–54		236	35		–55		274	30				240	46
130		–53		228	50		–56		225	44		–53		238	43		–56		269	33					
110		–56		226	44		–57		222	38		–56		239	36		–60		258	33					
100	525	–57		225	40	521	–60		219	36	521	–56		238	30	521	–58		255	32					
90		–59		224	40		–58		221	33		–58		235	24		–56		253	29					
80		–60		222	36		–63		226	28		–55		234	25		–57								
70		–61		222	24		–62		228	24		–55		233	20	(075 mb)	–59								
60	(064 mb)	–62					–63				(056 mb)	–57		231	24										
	Inversion 500mb. –31°–494mb. –30° Isothermal 900 – 891mb. 22° 583 – 526mb. –27° 494 – 475mb. –30° 388 – 378mb. –43°					Inversion 477 mb. –41° – 465mb. –40°					(046 mb) –57			228	21	Inversion 475mb. –40°– 460mb. –39° 400mb. –49°– 395mb. –48° Isothermal 405 – 400mb. –49°						Inversion 421mb. –58°– 414mb. –51° Isothermal 817 – 807mb. 16°				
Tropopause	335 – 322 mb. –50° II 288 mb. –56° 28,800′					II 396mb. –50° 22,200′					I 300mb. –57° 28,300′					II 315mb. –55° 27,300′					I 428mb. –53° 20,300′				

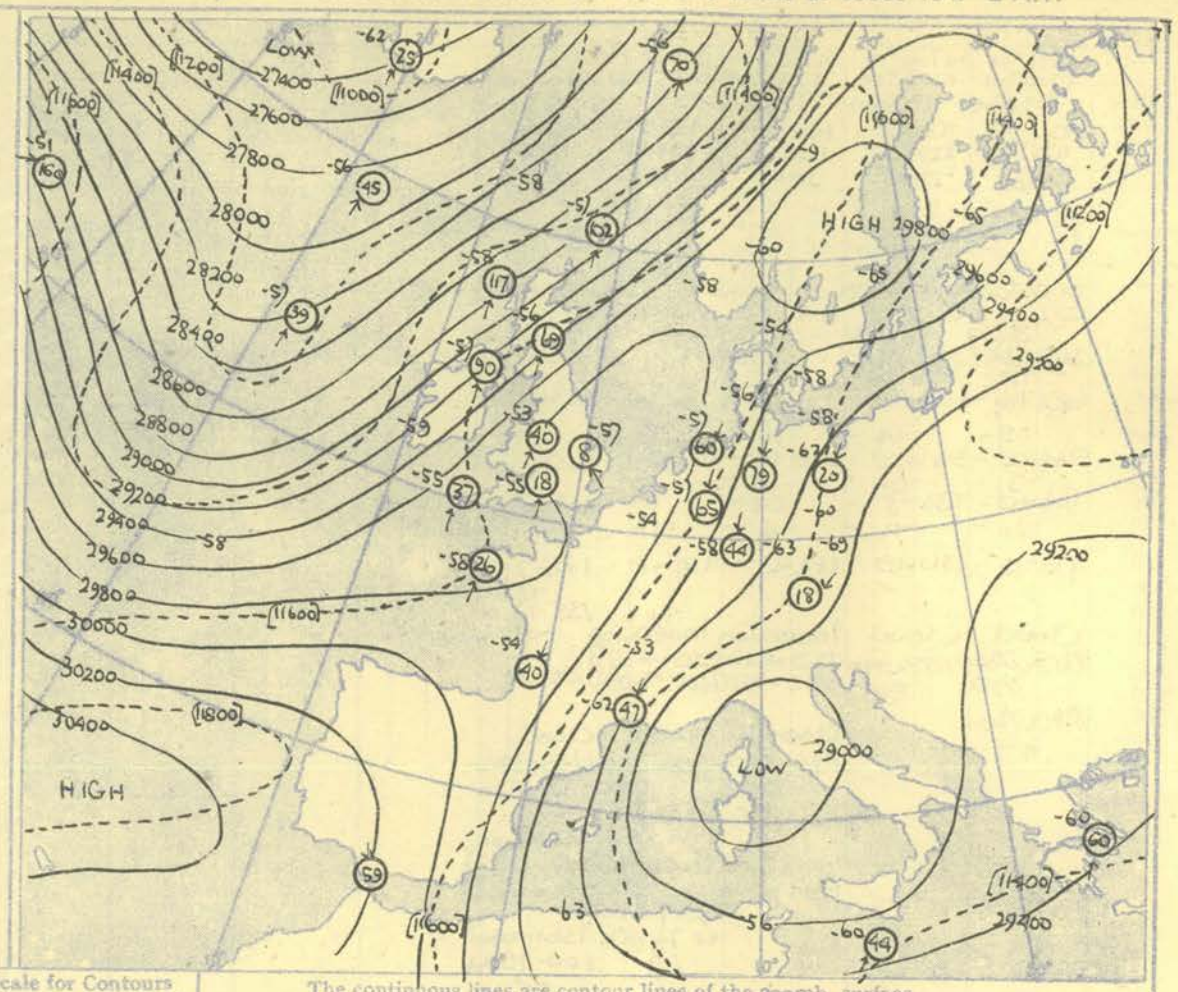
Pressure mb	WEATHER WATCHER					WEATHER WATCHER					WEATHER WATCHER										Pressure mb
Ship																					
Lat/Long	59·1N. 18·0W.					58·9N. 18·0W.					58·9N. 18·1W.										
Time	09h. G.M.T.					15h. G.M.T.					21h. G.M.T.					G.M.T.					Time
Pressure M.S.L.	985 mb					989 mb					990 mb					mb					Pressure M.S.L.
Surf	985 mb					989 mb					990 mb					mb					Surf
Freezing	920 mb					940 mb					955 mb					mb					Freezing
	Height ft./100	°C Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Height ft./100	°C Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Height ft./100	°C Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Height ft./100	°C Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	
Surf		39	30	240	35		39	29	240	48		38	35	230	25						Surf
1000	–4·1					–2·8					–2·8										1000
950		35	27	234	37		33	28	242	42		31	30	229	23						950
900	23·8	29	24	234	41	25·0	26	22	247	39	25·0	23	23	227	24						900
850		22	18	234	45		19	15	249	39		16	13	221	28						850
800	54·2	15	10	235	45	53·1	12	07	242	39	54·9	10	01	217	28						800
750		08	03	236	49		05	–03	237	40		04	–05	210	30						750
700	87·5	01	–05	236	48	88·2	–01	–10	225	45	87·9	–04	–14	211	35						700
650		–08	–15	233	49		–09	–19	224	38		–12	–23	212	35						650
600	125	–16	–26	232	41	125	–17	–28	224	34	125	–23	–32	210	41						600
550		–26	–37	226	27		–27	–35	227	41		–32	–41	215	46						550
500	167	–37	–47	229	28	167	–38	–48	233	39	166	–42		218	39						500
450		–49		221	28		–50		236	35		–52		217	35						450
400	216	–53		210	37	215	–53		229	40	215	–58		216	36						400
350		–62		216	50		–54		224	44		–58		200	50						350
300	277	–58		209	46	278	–56		210	45	277	–55		205	48						300
250		–53		207	58		–50		215	44		–53		208	42						250
200	365	–52		219	48	367	–51		242	46	364	–53		218	38						200
170		–48		204	48		–45		223	41	(178 mb)	–52									170
150		–47		204	51		–45		214	46											150
130		–51		199	62		–43		221	56											130
110		–51		199	47		–45		224	50											110
100	517	–52		212	30	520	–48		221	45											100
90		–54					–52		206	33											90
80		–56					–52														80
70		–59																			70
60	Inversion 421mb. –58°– 414mb. –51° Isothermal 817 – 807mb. 16°																				60
Tropopause	II 350mb. –62° 24,300′					I 413mb. –56° 20,800′					I 400mb. –58° 21,500′										Tropopause

Friday 2nd February 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

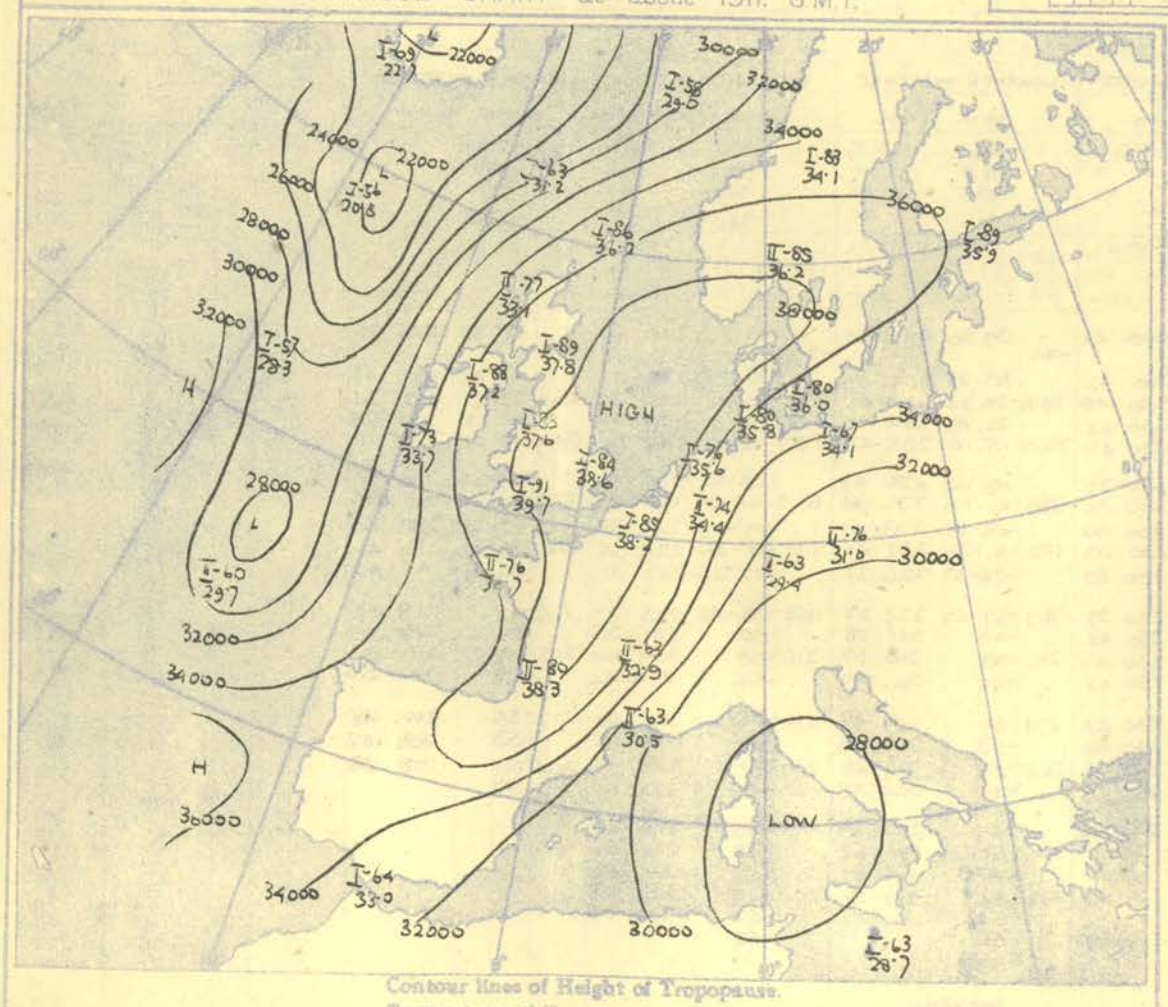


The continuous lines are contour lines of the 300mb. surface
The dotted lines are isopleths of the thickness of the layer 500 - 300 mb.

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.

There was slight southeastward movement and occlusion of the warm ridge over the British Isles and the cold trough over Germany and West Mediterranean. The Atlantic cold trough travelled about 800 miles in the twenty four hours in association with a very rapid advance of warm air northeast along the coast of America.

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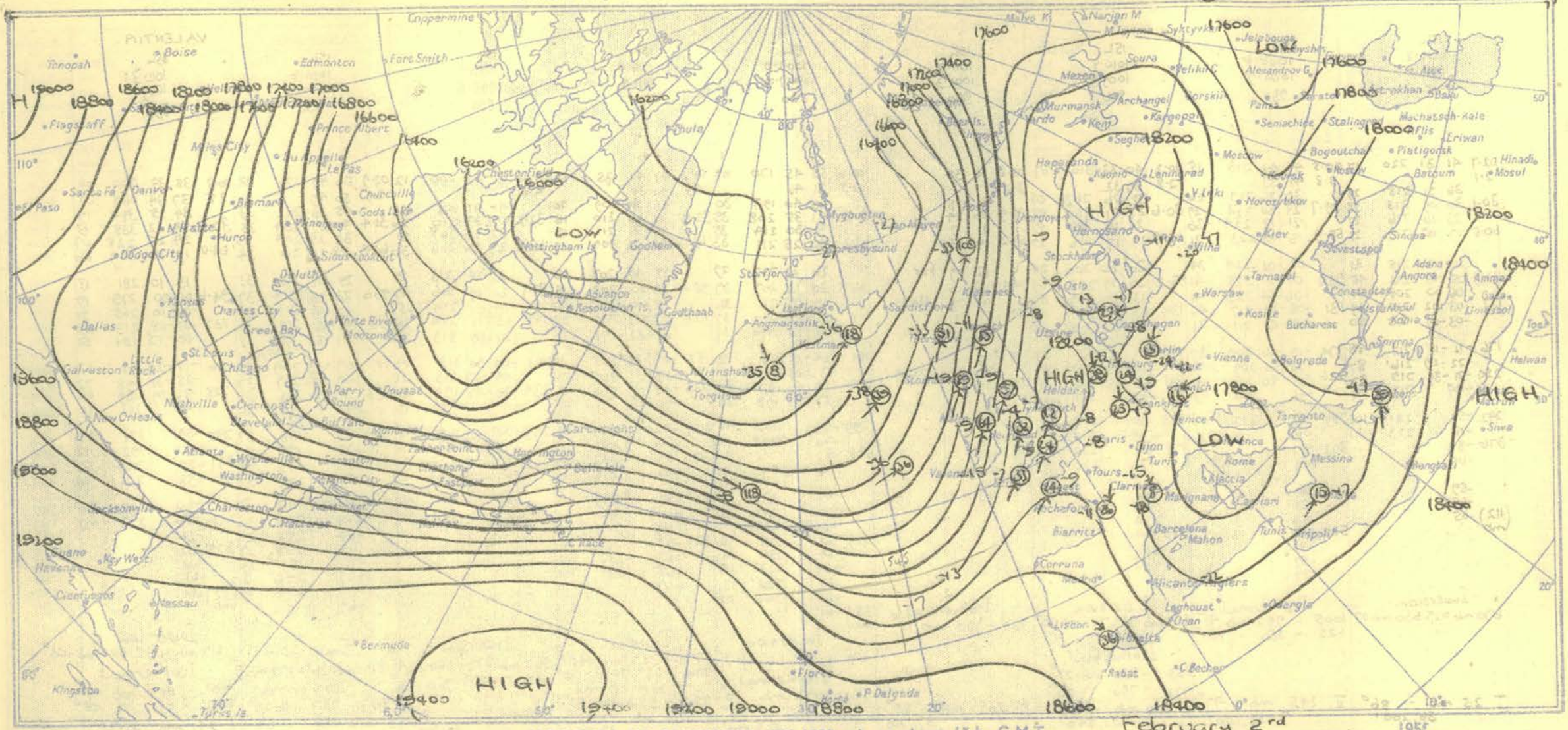
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

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



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

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Friday 2nd February. 1951.

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

15h G.M.T.

Station	Pressure: Time	M.S.L.	Surf	Freezing	Pressure mb
LERWICK	15h G.M.T.	1008·2 mb	998·0 mb	918 mb	
STORNOWAY	15h G.M.T.	1006·6 mb	1004·9 mb	930 mb	
LEUCHARS	15h G.M.T.	1010·8 mb	1009·9 mb	946 mb	
ALDERGROVE	15h G.M.T.	1011·7 mb	1002·3 mb	960 mb	
LIVERPOOL	15h G.M.T.	1009·0 mb	1007·0 mb	820 mb	
DOWNHAM MARKET	15h G.M.T.	1016·0 mb	1011·5 mb	830 mb	
LARKHILL	15h G.M.T.	1015·1 mb	998·8 mb	850 mb	
CAMBORNE	15h G.M.T.	1010·6 mb	1000·0 mb	850 mb	
VALENTIA.	15h G.M.T.	1010·3 mb	1009 mb	930 mb	

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA. Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	027	41	31	220	17	005	41	41	215	15	002	40	33	310	07	026	36	34			006	52	45	170	08	012	42	40	135	12	044	42	42	200	12	029	50	49	170	12	003	38	35	060	06	Surf
1000	21					18	41	33			028	39	32			032					025	51	46			A3	40	39			040					29	50	49			28	37	34	067	07	1000
950		36	21	218	28		35	26	219	26		32	26	262	08		31	28				46	40	197	30		41	39	209	20		41	41	198	23		45	38	202	33		34	25	340	14	950
900	30·1	30	09	213	28		28	20	214	29	30·6	27	21	230	08	30·9	26	24			31·0	41	35	208	35	32·5	34	36	210	18	32·2	37	37	219	26		40	32	204	33	30·6	29	22	338	13	900
850		23	10	216	27		21	12	224	36		21	16	230	09		21	19				36	30	214	35		35	31	211	18		32	32	208	29		32	28	204	33		24	20	328	07	850
800	60·5	17	05	217	27	59·9	15	08	223	31	60·9	19	17	190	24	61·2	16	13			62·2	30	25	211	33	63·6	24	25	209	17	63·2	27	26	206	30	62·3	28	26	210	34	61·0	19	16	309	06	800
750		11	-01	215	33		08	-02	224	39		20	20	200	34		12	09	For			26	21	202	27		28	19	207	16		28	24	213	21		28	02	213	33		13	10	281	13	750
700	93·9	05	-03	213	45	03·2	01	-11	225	41	95·2	20	19	205	69	94·9	12	10			96·8	20	12	207	32	98·4	24	00	207	18	97·7	21	09	216	27	97·0	23	-03	214	37	94·6	06	00	275	19	700
650		06	00	208	60		-06	-14	222	41		13	12	207	57		10	08	winds			19	05	211	36		15	04	215	20		14	01	214	25		17	-09	215	39		-02	-10	265	21	650
600	132	03	-02	210	69	131	-08	-15	217	46	134	06	04	207	54	134	05	02			136	12	-05	210	37	137	07	-02	221	22	137	05	-11	214	25	136	09	-18	218	36	137	-03	-08	213	33	600
550		-03	-09	215	80		-08	-15	211	72		-01	-03	208	55		-01	-04	see			04	-13	200	37		02	-22	208	18		01	-19	213	26		01	-23	213	38		-08	-12	191	51	550
500	176	-11	-18	217	85	174	-19	-26	209	89	179	-09	-12	211	57	178	-09	-12			181	-04	-25	198	32	182	-07	-25	205	12	181	-09	-30	213	24	171	-07	-33	209	33	176	-15	-20	198	67	500
450		-22	-29	216	87		-25	-30	209	106		-19	-23	209	57		-20	-24	page			-13	-29	197	35		-17	-31	205	08		-19	-37	213	21		-19	-37	207	37		-25	-31	198	72	450
400	229	-31	-39	215	97	226	-35	-40	210	106	231	-30	-35	216	63	231	-31	-35			234	-24	-40	197	40	235	-28	-43	170	07	234	-30	-47	194	15	233	-32	-46	206	39	228	-33	-39	189	90	400
350		-44		217	94		-46		208	117		-42		217	67		-41		3.			-37	-51	198	88		-40	-55	128	08		-41		149	18		+43		186	36		-46		191	54	350
300	292	-57		221	102	289	-68		212	117	295	-86		208	69	294	-59				299	-53		203	40	299	-57		155	08	298	-55		165	18	297	-55		188	37	292	-59		171	97	300
250		-76		223	111		-76		208	126		-74		215	71		-72					-70		208	40		-74		257	06		-72		192	16		-72		195	42		-71		192	112	250
200	376	-82				373	-67				378	-89		222	58	378	-82				383	-82		225	48	383	-84		247	16	382	-87		226	20	381	-82		212	40	377	-59		224	52	200
170		-60					-57					-70		220	49		-63					-66		229	41		-72		250	19		-69		243	24		-69		227	37		-58		221	49	170
150		-59					-56					-69					-62					-61		236	32		-68		259	18		+65		249	20		-61		242	33		-60		226	48	150
130		-64					-58					-64										-62		228	25		-69		249	20		-67		244	16		-64		245	30		-56		227	42	130
110	(112)	-65					-58					-64										-61		239	29		-65		247	12							-67		252	23		-60				110
100	mb					522	-57				523	-64									529	-61		255	24	527	-63		247	10						526	-69		258	17	525	-62				100
90							-53					-66										-64		254	19		-63		236	10							-71		251	15		-62				90
80							-52					-65										-64		223	14		-65		234	06							-69		246	18		-61				80
70							-54															-62		223	12		-67										-67		258	09	(74)	-61				70
60																						-61		241	08																				60
	Inversion 670 mb 02°-630 mb 07°					Isothermal 1005 - 992 mb 4.1° 625 - 560 " -0.8°					Inversion 809 mb 18°-771 mb 20° Isothermal 853 - 836 mb 21° 771 - 750 " 20°					Isothermal 762 - 700 mb 1.2°					Inversion 678 mb 20°-668 mb 21° Isothermal 712 - 678 mb 20°					Inversion 977 mb 38°-961 mb 42° 776 - 25°-744 - 29° Isothermal 950 - 922 mb 41°					Inversion 962 mb 37°-960 mb 41° 784 " 25°-750 " 2.5°					Inversion 815 mb 26°-797 mb 29° Isothermal 797 - 757 mb 29°					Inversion 617 mb -04°-600 mb -03° Isothermal 600 - 594 mb -03° 559 - 533 " -0.8°					
Tropopause	I 215 mb - 86° 36,200'					II 245 mb -77° 33,100'					I 200 mb - 89° 37,840'					I 207 mb - 88° 37,200'					I 207 mb - 83° 37,600'					II 205 mb - 84° 37,800'					I 184 mb - 91° 39,700'					I 210 mb - 84° 37,100'					I 241 mb - 78° 33,700'					Tropopause

21h G.M.T.

Station	Pressure: Time	M.S.L.	Surf	Freezing	Pressure mb
LERWICK	21h G.M.T.	1007·9 mb	997·8 mb	931 mb	
STORNOWAY	21h G.M.T.	1005·4 mb	1003·7 mb	932 mb	
LEUCHARS	21h G.M.T.	1007·7 mb	1006·8 mb	941 mb	
ALDERGROVE	21h G.M.T.	1007·0 mb	997·5 mb	971 mb	
LIVERPOOL	21h G.M.T.	1006·6 mb	1004·6 mb	850 mb	
DOWNHAM MARKET	21h G.M.T.	1012·6 mb	1008·1 mb	850 mb	
LARKHILL	21h G.M.T.	1012·1 mb	995·7 mb	868 mb	
CAMBORNE	21h G.M.T.	1009·8 mb	994·4 mb	820 mb	
VALENTIA.	G.M.T.	mb	mb	mb	

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA. Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	027	39	35	210	10	005	39	34	200	04	002	33	32			026	32	32			006	47	44	160	18	012	38	35	145	13	044	41	41	160	10	029	49	43	180	20						Surf
1000	21					15	39	33			020	33	33			033					018	46	43			34					032	37	37	175	21	13	45	40	182	43						1000
950		35	30	189	20		34	28	211	27		33	33			030						42	39	178	26		40	34			031	35	35	195	28		39	35	199	43						950
900	29·9	28	24	199	17	29·3	28	22	212	24	29·6	28	28			29·7	26	25			30·1	37	34	191	28	31·4	37	30				30	29	196	30		35	31	212	46						900
850		21	19	218	18		23	15	214	24		22	22				22	21				32	28	194	30							32	28	194	18	60·9	31	27	215	44						850
800	60·1	13	11	210	19	59·6	17	10	220	27	60·0	25	25			60·0	17	16			61·1	26	19	192	32	62·3	26	22																		800
750		14	10	200	32		10	02	217	23		22	22	For			12	11	For			24	12	196	31		23	19	For			26	15	207	23		25	20	210	40						750
700	92·8	11	08	209	47	93·1	04	-05	212	29	94·3	16	16	winds		93·5	07	03	winds		95·5	19	-04	204	34	96·1	21	13	winds		96·4	19	-01	207	29	95·4	19	11	206	40						700
650		07	04	211	57		-04	+10	208	39		09	09				03	00				14	-15	203	41		14	06				12	-12	202	25		10	-01	209	44						650
600	132	02	-01	204	66	131	-08	+13	202	41	133	02	00	see		132	00	-03	see		134	07	-21	199	39	136	05	-05	see		135	05	-21	204	28	134	04	-10	206	45						600
550		-04	-07	201	73		-14	-18	200	65		-04	-18				-06	-11				-82	-23	204	39		-02	-20				+03	-30	206	28		-02	-13	210	45						550
500	176	-13	-15	199	76	174	-18	-21	196	79	177	-10	-27			176	-15	-21			179	-10	-30	202	40	180	-09	-36			180	-11	-39	202	28	179	-11	-21	207	48						500
450		-24	-27	199	78		-24	-28	192	88		-22	-35	page			-23	-30	page			-19	-33	196	44		-20	-38	page			-21	-44	206	31		-20	-31	203	49						450
400	228	-34	-38	197	90	226	-36	-40	191	98	229	-33	-42			227	-33	-41			231	-31	-40	196	47	232	-30	-46			232	-33	-51	209	32	231	-31	-43	201	53						400
350		-47		197	85		-47		192	60		-45		3.			-44		3.			-43		195	53		-43		3			-45		205	35		-43		200	54						350
300	291	-60		206	95	289	-59		191	112	293	-57				291	-57				295	-56		186	55	296	-58				295	-60		194	37	295	-57		200	55						300
250		-78		208	91		-74		197	109		-72					-70					-71		193	60		-74				(270)	68				-70		201	58						250
200	374	-81		215	74	373	-66				376	-82				375	-75				379	-86		196	51	379	-89				mb					379	-76								200
170		-66		213	66		-60					-75					-63					-69		220	39		-74																		170
150		-62										-63										-66		211	27		-68																		150
130		-66					-57					-63										-64		211	38		-69																		130
110	(12	-62					-58					-66										-68		229	23		-72																		110
100	mb)										521	66									523	-67		218	23	522	-72																		100
90																						-66		228	22		-70																		90
80																						-67		233	22																				80
70																						-69																								70
60																																																60
	Inversion 787 mb 10°-768 mb 15° Isothermal 998 - 985 mb 3.9°					Inversion 1004 mb 39°-991 mb 4.0°					Inversion 1007 mb 33°-993 mb 34° 860 " 22°-810 " 26° Isothermal 993 - 960 mb 34°					Isothermal 998 - 971 mb 32° 655 - 625 " 0.3°					Inversion 768 mb 20°-753 mb 24° Isothermal 680 - 670 mb 17°					Inversion 975 mb 33°-950 mb 39° 769 " 21°-733 " 26° Isothermal 950 - 920 mb 37°					Inversion 772 mb 23°-750 mb 26°					Isothermal 586 - 571 mb 0.2°					
Tropopause	I 206 mb -87° 36,700'					I 230 mb -81° 34,500'					I 210 mb - 83° 36,700'					II 234 mb - 78° 34,300'					I 200 mb - 86° 37,880'					I 200 mb -89° 37,900'					NR.					I 215 mb - 78° 36,500'										Tropopause

HMSO. Press, MO, Dunstable

No. 11633 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Saturday 3rd. February 1951. Page 1.

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

LERWICK

Pressure	Time	M.S.L.	Surf	Freezing
	03h. G.M.T.	1005·2 mb	994·9 mb	968 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	35	35	CALM	
1000	01·3				
950		31	30	127	08
900	28·9	27	26	149	10
850		25	24	171	18
800	59·3	22	21	178	31
750		18	17	182	42
700	93·3	15	14	191	44
650		09	07	192	47
600	132	01	-01	189	54
550		-07	-12	190	55
500	176	-15	-21	191	66
450		-23	-28	189	70
400	228	-32	-37	190	75
350		-44		188	82
300	29·1	-58		187	90
250		-70		186	86
200	375	-80		199	72
170		-67			
150		-63			
130		-63			
110		-63			
100	521	-60			
90		-62			
80		-65			
70		-62			
60	630	-53			

Tropopause: I 204 mb -81° 37,100'

STORNOWAY

Pressure	Time	M.S.L.	Surf	Freezing
	02h. G.M.T.	1001·8 mb	990·1 mb	940 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	38	34	170	12
1000	00·4	38	34		
950		33	29	184	20
900	28·2	28	24	195	17
850		21	17	208	17
800	58·4	14	10	219	15
750		09	05	215	15
700	91·8	02	-01	203	18
650		-05	-08	204	20
600	129	-10	-13	189	29
550		-14	-17	181	57
500	172	-21	-24	180	84
450		-30	-34	180	95
400	223	-41		181	105
350		-50		180	103
300	286	-63		182	113
250		-74		183	96
200	371	-64		185	89
170		-58		185	79
150	432	-58		182	42

Tropopause: I 250 mb -74° 32,400'

LEUCHARS

Pressure	Time	M.S.L.	Surf	Freezing
	03h. G.M.T.	1001·3 mb	990·4 mb	875 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	39	39	080	03
1000	00·3	39	39		
950		34	33	170	24
900	28·3	35	33	167	27
850		30	29	174	34
800	59·1	25	24	180	37
750		19	17	182	38
700	93·3	13	11	188	37
650		10	08	191	45
600	132	03	00	194	46
550		-06	-11	190	47
500	17·6	-16	-24	192	41
450		-25	-33	184	65
400	228	-35	-43	186	78
350		-48		188	77
300	291	-62			
250		-74			
200		-74			
170		-69			
150	434	-66			
130		-64			
110		-67			
100	519	-65			
90		-69			

Inversion 950 mb 34° - 900 mb 35°

Isothermal 700 - 682 mb 13°

Tropopause: I 221 mb -81° 35,400'

ALDERGROVE

Pressure	Time	M.S.L.	Surf	Freezing
	03h. G.M.T.	1004·0 mb	995·0 mb	978 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	34	33	CALM	
1000	01·3				
950		29	27	302	13
900	28·9	27	23	302	15
850		23	17	300	15
800	59·3	19	11	298	16
750		13	08	292	14
700	93·0	07	02	255	10
650		00	-04	214	13
600	131	-06	-11	190	27
550		-12	-22	188	43
500	174	-19	-41	188	59
450		-26	-52	181	78
400	226	-36	-59	184	84
350		-47		185	90
300	289	-56		180	90
250		-65		180	79
200	375	-62		195	59
170		-60		204	49
150	436	-60		198	40

Inversion 942 mb 29° - 930 mb 30° 510 - -20° - 494 .. -18°

Tropopause: I 245 mb -66° 33,200'

LIVERPOOL

Pressure	Time	M.S.L.	Surf	Freezing
	03h. G.M.T.	1000·7 mb	998·6 mb	830 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	45	42	150	20
1000	00·2				
950		41	39	159	36
900	28·9	37	34	174	41
850		34	30	196	42
800	59·5	29	26	214	37
750		25	21	207	39
700	93·9	19	14	197	41
650		12	07	191	43
600	133	04	-01	199	40
550		-03	-09	196	48
500	177	-13	-21	198	44
450		-22	-33	195	49
400	229	-32	-43	194	56
350		-44		193	56
300	293	-61		194	59
250		-72		187	63
200	377	-73		194	53
170		-65		200	40
150		-60		195	32
130		-61			
110		-66			
100	523	-66			
90		-65			
80	(85mb)	-66			

Tropopause: I 220 mb -78° 35,800'

DOWNHAM MARKET

Pressure	Time	M.S.L.	Surf	Freezing
	03h. G.M.T.	1009·0 mb	1004·6 mb	848 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	39	36	140	13
1000	02·5	38	35		
950		33	30	233	23
900	30·4	38	32	180	21
850		32	25	186	18
800	61·4	25	21	189	17
750		20	16	199	19
700	95·6	19	10	204	23
650		13	07	207	22
600	134	04	-02	207	23
550		-05	-16	207	23
500	179	-13	-31	207	22
450		-22	-36	208	23
400	231	-34	-43	198	21
350		-44		182	25
300	294	-58		189	25
250		-75		194	31
200	377	-87		193	24
170		-74		210	28
150	436	-65		218	29
130		-65		230	21
110		-70		235	13
100	521	-71		236	14
90		-69		235	12
80	(85mb)	-69		236	10

Inversion 950 mb 33° - 896 mb 39° 759 .. 19° - 734 .. 21°

Tropopause: I 194 mb -88° 38,300'

LARKHILL

Pressure	Time	M.S.L.	Surf	Freezing
	03h. G.M.T.	1006·4 mb	990·2 mb	858 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·4	42	42	180	07
1000	1·7				
950		38	38	181	26
900	29·9	36	35	198	30
850		31	28	199	29
800	60·8	26	24	205	29
750		21	20	224	24
700	95·1	18	05	211	24
650		11	-04	210	30
600	134	04	-16	213	30
550		-03	-28	214	31
500	17·8	-16	-35	211	35
450		-24	-40	206	33
400	230	-34	-46	204	34
350		-47		198	39
300	293	-61		194	41
250		-75		193	50
200	377	-75		196	35
170		-68		207	34
150	437	-63		219	31
130		-63		225	21
110		-69		229	16
100	522	-69		231	09
90		-69			
80	(88mb)	-69			

Inversion 950 mb 38° - 938 mb 39°

Isothermal 750 - 727 mb 21°

Tropopause: I 215 mb -81° 36,200'

CAMBORNE

Pressure	Time	M.S.L.	Surf	Freezing
	03h. G.M.T.	1006·1 mb	998·4 mb	992 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	41	34	315	20
1000	01·8				
950		36	30	344	21
900	29·7	29	25	337	25
850		29	13	326	22
800	60·3	26	10	317	18
750		20	-33	289	10
700	94·5	13	-25	251	09
650		06	-32	237	12
600	133	-01	-38	205	24
550		-08	-43	197	37
500	17·7	-16	-45	203	45
450		-26	-48	205	55
400	228	-37	-54	200	70
350		-51		199	77
300	291	-62		196	83
250		-70		195	64
200	376	-66		209	40
170		-60		224	36
150	437	-64		216	34
130		-62		214	28
110		-64		241	36
100	523	-65		251	36
90		-67			

Inversion 878 - mb 28° - 833 mb 31°

Tropopause: I 263 mb -71° 31,800'

[unnamed]

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

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	33	31		
1000	1·7	33	31		
950		34	30		
900	29·3	28	24		
850		22	20		
800	59·7	16	15		
750		10	05		
700	93·1	02	-06		
650		-06	-14		
600	130	-14	-21		
550		-23	-31		
500	17·3	-33	-41		
450		-41			
400	223	-50			
350		-52			
300	284	-55			
250		-55			
200	372	-58			
170		-56			
150		-57			
130		-59			
110		-58			
100					
90					
80					
70					
60					

Inversion 1005 mb 33° - 950 mb 34°

Isothermal 409 - 367 mb -50°

Tropopause: I 321 mb -57° 27,000'

STORNOWAY

Pressure	Time	M.S.L.	Surf	Freezing
	09h. G.M.T.	996·1 mb	994·4 mb	944 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	37	34		
1000	01·1				
950		33	28		
900	26·6	27	22		
850		22	19		
800	56·8	17	12		
750		10	04		
700	90·3	03	-06		
650		-05	-17		
600	128	-13	-28		
550		-21	-37		
500	170	-26	-42		
450		-36	-51		
400	221	-47			
350		-54			
300	283	-57			
250		-60			
200	370	-58			
170		-55			
150	432	-53			
130					
110					
100	(103mb)	-61			
90					
80					
70					
60					

See Page 3 for Winds

Inversion 303 mb -58° - 300 mb -57°

Isothermal 367 - 350 mb -54°

Tropopause: I 303 mb -58° 30,300'

LEUCHARS

Pressure	Time	M.S.L.	Surf	Freezing
	09h. G.M.T.	998·2 mb	997·3 mb	957 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	33	32		
1000	00·5				
950		31	27		
900	27·2	28	21		
850		24	18		
800	57·6	19	13		
750		16	05		
700	91·5	12	-08		
650		08	-21		
600	130	02	-32		
550		-6	-39		
500	17·4	-16	-41		
450		-25	-43		
400	225	-37	-50		
350		-50			
300	288	-61			
250		-79			
200	373	-66			
170		-54			
150	435	-56			
130		-57			
110		-59			
100	522	-60			
90		-58			
80		-62			
70					
60					

See Page 3 for Winds

Inversion 303 mb 62° - 294 mb 60°

Isothermal 997 - 969 mb 33°

Tropopause: I 250 mb -74° 32,600'

ALDERGROVE

Pressure	Time	M.S.L.	Surf	Freezing
	09h. G.M.T.	1001·1 mb	991·7 mb	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	31	30	190	07
1000	00·4				
950		26	25	216	12
900	27·9	28	23	226	16
850		24	00	230	19
800	58·2	18	-06	232	19
750		12	-14	238	14
700	91·8	05	-18	246	15
650		-03	-24	246	17
600	129	-12	-30	246	19
550		-22	-39	228	23
500	17·2	-28	-43	210	50
450		-35	-51	198	69
400	223	-42		189	65
350		-52		180	65
300	285	-56		193	62
250		-59		200	47
200	372	-55		206	30

Inversion 950 mb 26° - 900 mb 28° 450 .. -35° - 435 .. -34° 330 - -56° - 325 .. -55°

Tropopause: I 275 mb -60° 30400'

LIVERPOOL

Pressure	Time	M.S.L.	Surf	Freezing
	09h. G.M.T.	1002·0 mb	999·9 mb	944 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	38	34		
1000	00·5				
950		33	26		
900	28·3	24	19		
850		26	09		
800	58·7	21	-07		
750		15	-14		
700	92·5	10	-15		
650		03	-19		
600	131	00	-15		
550		-09	-17		
500	17·5	-15	-24		
450		-26	-35		
400	226	-38	-48		
350		-50			
300	289	-61			
250		-75			
200	374	-62			
170		-59			
150		-58			
130		-55			
110		-59			
100	522	-57			
90		-58			
80	(86mb)	-61			

Inversion 898 mb 24° - 880 mb 26° 632 .. 00° - 616 .. 02°

Isothermal 1000 - 981 mb 38° 880 - 850 .. 26°

Tropopause: I 246 mb -76° 33,100'

DOWNHAM MARKET

Pressure	Time	M.S.L.	Surf	Freezing
	09h. G.M.T.	1003·6 mb	999·1 mb	850 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	38	35	135	16
1000	01·0				
950		33	22	178	21
900	28·9	36	33	201	20
850		32	29	210	17
800	59·8	26	23	195	14
750		19	17	192	12
700	94·0	14	10	190	13
650		09	03	184	20
600	133	01	-08	195	22
550		-07	-25	199	21
500	17·7	-16	-27	204	22
450		-25	-33	211	27
400	228	-36	-45	209	27
350		-50		199	30
300	291	-69		195	35
250		-79		191	38
200	374	-69		203	32
170		-64		216	23
150	435	-59		193	17
130		-63		225	20
110		-65		216	12
100	521	-65		203	12
90		-65			

Inversion 950 mb 33° - 910 mb 37°

Isothermal 717 - 700 mb 19°

Tropopause: II 287 mb -69° 32,200'

LARKHILL

Pressure	Time	M.S.L.	Surf	Freezing
	09h. G.M.T.	1001·9 mb	985·9 mb	900 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	39	38	010	03
1000	00·5				
950		37	35	340	18
900	28·5	32	31	337	14
850		28	27	182	03
800	59·2	25	24	182	12
750		21	21	180	21
700	93·5	19	13	183	22
650		08	06	180	26
600	132	02	-01	176	28
550		-07	-10	185	37
500	17·6	-16	-20	171	40
450		-26	-30	193	45
400	227	-37	-42	197	48
350		-50		200	53
300	290	-61		197	65
250		-72		193	56
200	375	-67		197	35
170		-61		211	29
150	436	-57		204	25
130		-56			

See Page 3 for Winds

Tropopause: I 243 mb -73° 33,500'

CAMBORNE

Pressure	Time	M.S.L.	Surf	Freezing
	09h. G.M.T.	1004·1 mb	993·4 mb	932 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	39	32		
1000	01·1				
950		35	29		
900	29·0	27	23		
850		26	07		
800	59·5	23	01		
750		14	-01		
700	93·3	09	01		
650		01	-09		
600	131	-06	-16		
550		-16	-27		
500	17·4	-26	-34		
450		-32	-40		
400	225	-40	-50		
350		-47			
300	288	-58			
250		-60			
200	375	-58			
170		-56			
150	437	-57			
130		-55			
110		-56			
100	524	-57			
90		-56			
80		-55			
70		-55			
60	634	-51			
		-50 ..			

See Page 3 for Winds

Inversion 900 mb 27° - 870 mb 28° 450 .. 32° - 440 .. 31°

Tropopause: II 375 mb -45° 28,800'

[unnamed]

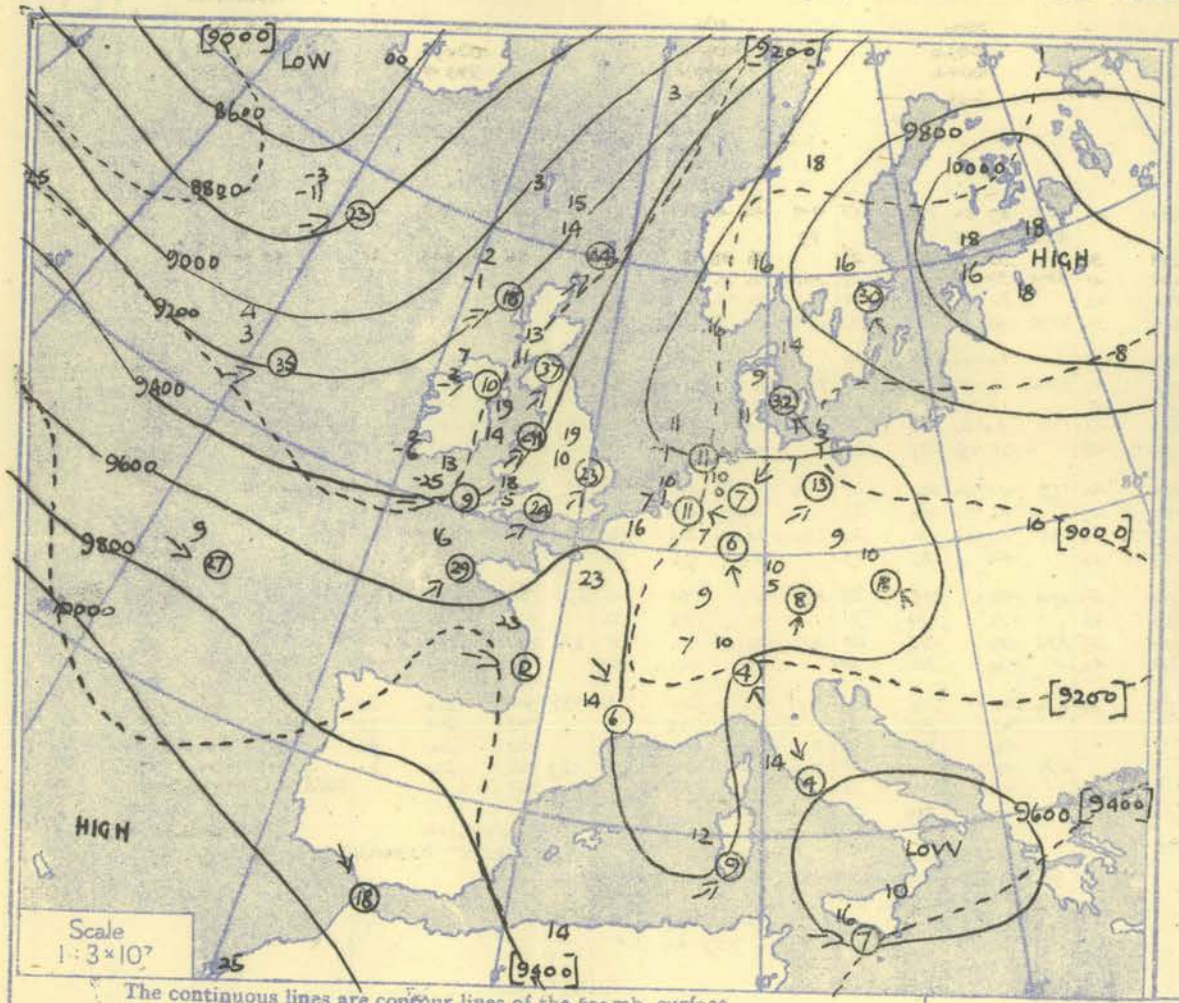
Pressure	Time	M.S.L.	Surf	Freezing
	G.M.T.	mb	mb	mb

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

Tropopause:

Saturday 3rd February 1951.

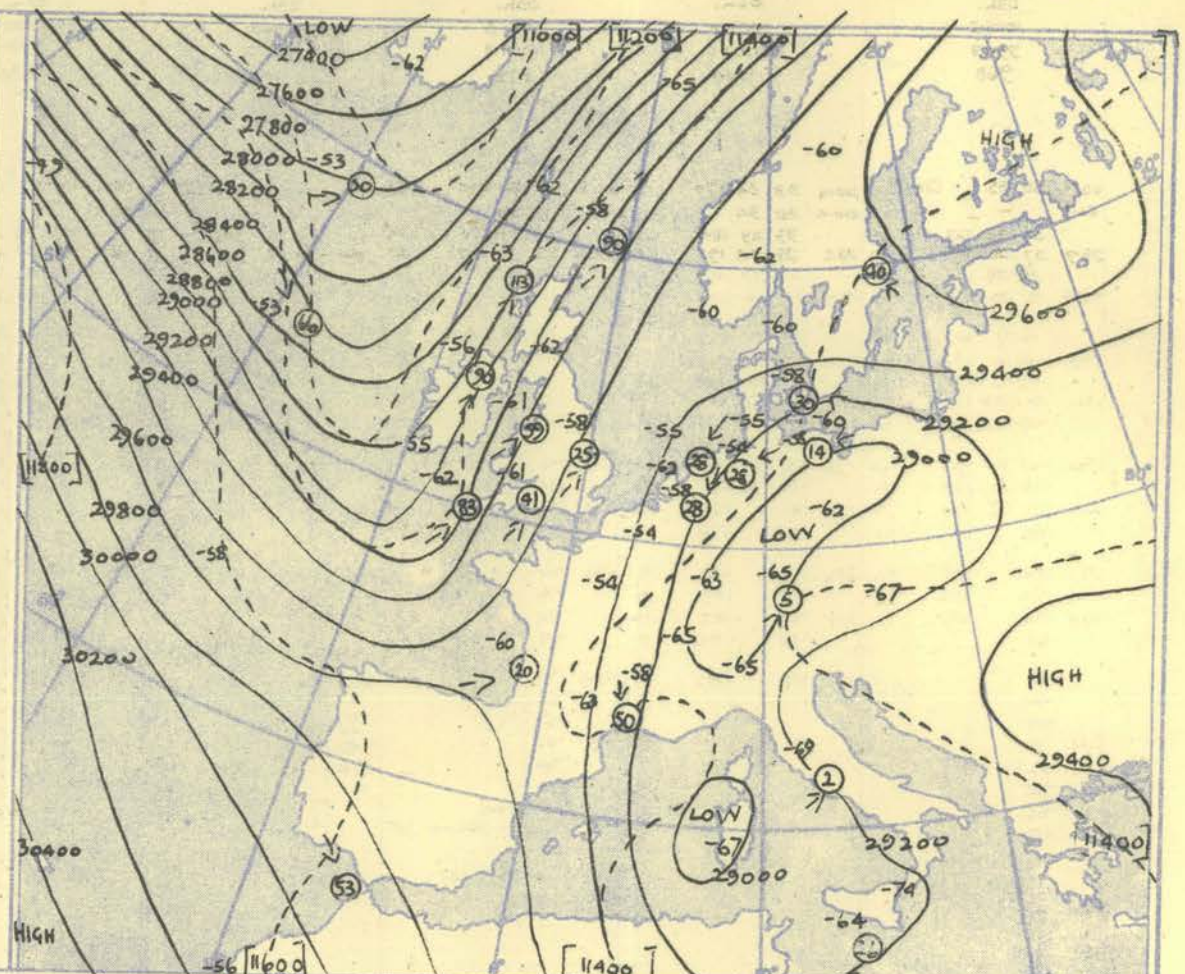
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03 h G.M.T.



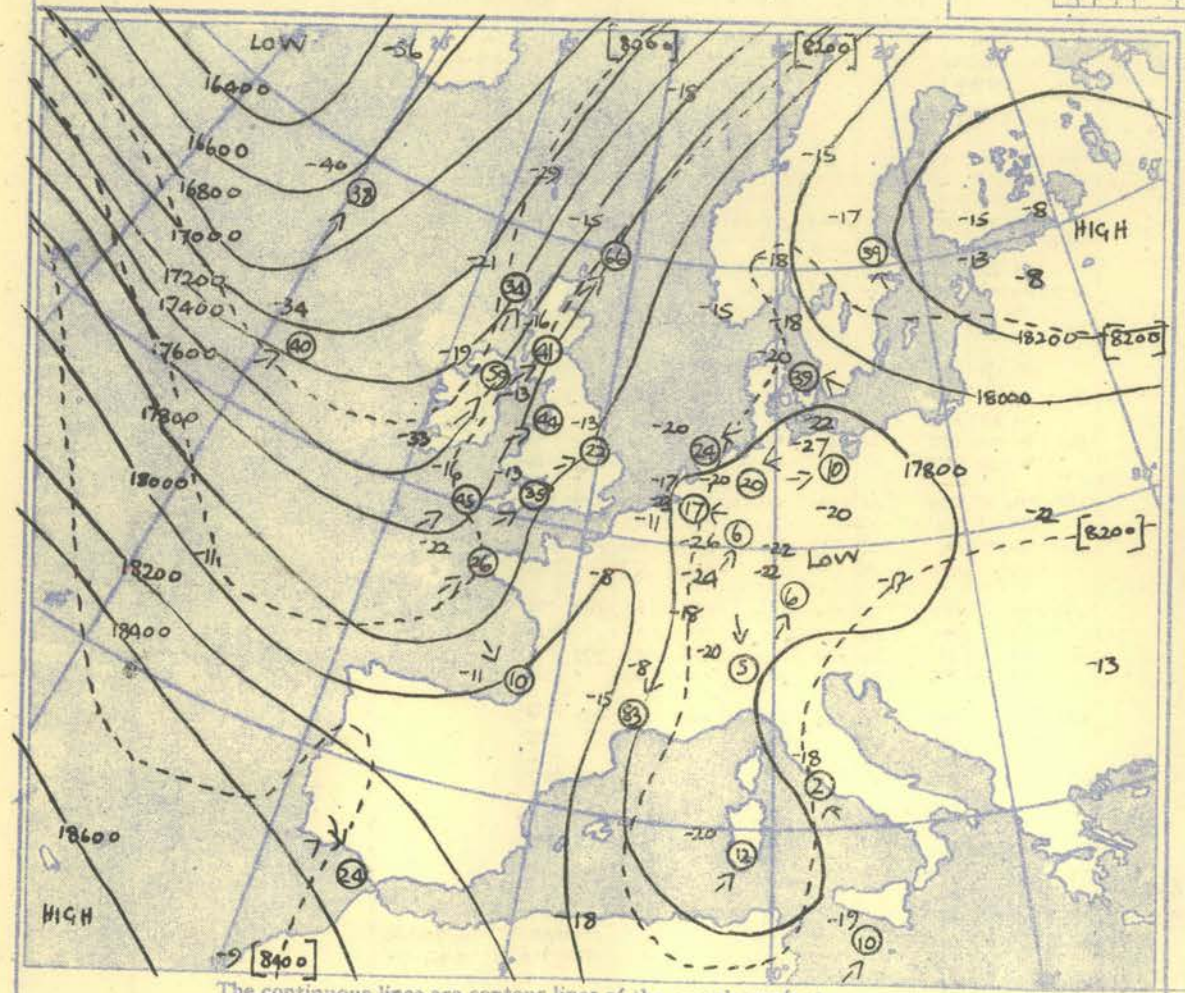
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

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

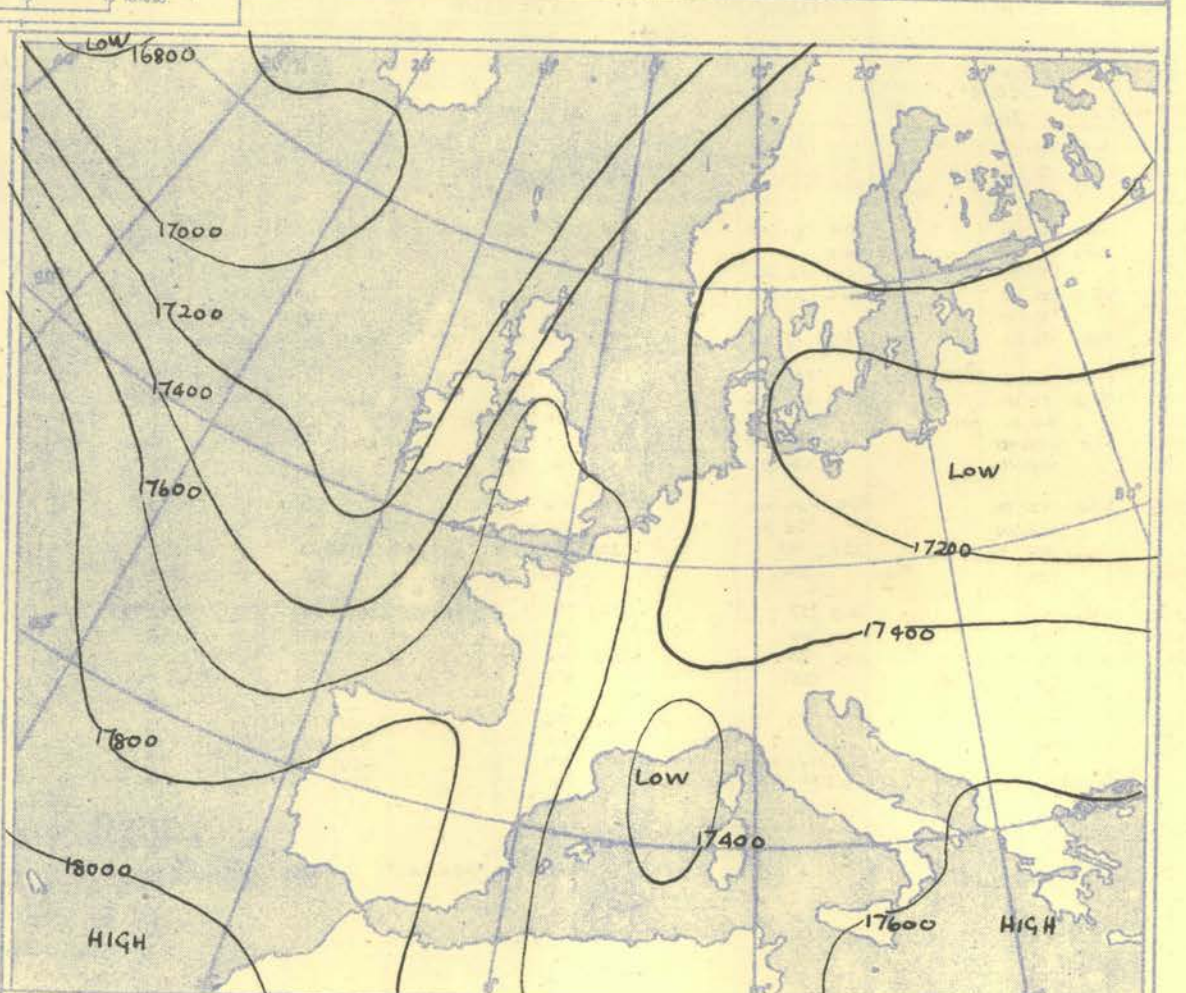
100 60 40 30 20 15 0 knots



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 - 1000 mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

53·1°N 1·3°E

Pressure: Time 13 hrs; M.S.L. 999 mb; Surf 997 mb; Freezing 928 mb

Pressure mb	Height ft./100	°F. Temp.	°F. Dew
Surf	0·3	41	33
1000	-0·2		
950		36	32
900	276	29	29
850		29	29
800	583	24	
750		19	
700	924	-13	
650		-05	
600	131	-1	
550		-9	
500	175	-17	
450		-29	
400	226	-41	
350		-52	
300	288	-64	
250			
200			
170			

Cloud.
8/8 Sc 914-650
8/8 As 508-460
Isothermal 900-850 mb 29°
Contrails DP. 460-450 DP 360-300
Light rime in cloud 780-700

Time M.S.L. / Surf / Freezing Pressure: mb mb mb

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			

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

Feet	Camborne 09hrs Pilot Dir.	Vel.	Leuchars 09hrs Pilot Dir.	Vel.	Liverpool 09hrs Pilot Dir.	Vel.	Lerwick 09hrs Pilot Dir.	Vel.	Lerwick 15hrs Pilot Dir.	Vel.
Surf.	330	06	280	09	340	03	165	37	170	40
1,000	322	15	270	18	329	09	164	54	167	57
2,000	331	16	270	14	314	12	165	51	165	57
3,000	328	14	264	14	306	14	168	53	167	55
4,000	315	14	251	13	308	13	173	54	172	53
5,000	302	13	240	18	307	15	176	54	175	57
6,000	298	13	227	21	272	20	180	49	180	51
8,000	273	15	191	33	240	33	185	46	190	44
10,000	245	21	181	37	226	34	186	52	186	42
14,000	235	24	194	50	192	44	181	55	180	51
18,000	216	31	184	54	178	55	182	60	180	57
24,000	187	55	186	72	198	74	184	66	182	67
30,000	206	50	178	83	185	68	174	87	182	68
40,000	222	28	199	46	204	34	198	48	(25000')	
50,000	232	23	208	33	216	30	200	45		
	224 (56000')	18			218 (65000')	15	(46000')			

NEPHOSCOPE OBSERVATIONS

Place	
Time Type	
Dir. Vel.	

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

Pressure mb	Weather Explorer 53·2°N 17·4°W 03hrs G.M.T. Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Vel. knots
Surf	—	40	38	225	12
1000	-1·2				
950		34	33	222	22
900	26·6	29	28	228	33
850		24	22	232	21
800	57·1	18	13	236	21
750		11	04	247	30
700	90·6	04	-3	248	35
650		-4	-13	240	36
600	128	-14	-24	236	43
550		-24	-35	237	40
500	170	-34	-45	237	40
450		-38	-53	242	49
400	221	-44		229	48
350		-50		245	46
300	283	-53		295	66
250		-51		307	86
200	311	-56		310	68
170		-57		316	64
150		-58		292	40
130		-58		282	34
110		-58		286	25
100					
90					
80					
70					
60					

Isothermal 500-466 mb -34°

Pressure mb	Weather Explorer 52·8°N 18·6°W 09hrs G.M.T. Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Vel. knots
Surf	—	35	27	285	16
1000	-1·7				
950		34	21	305	30
900	26·1	27	15	303	28
850		19	11	291	30
800	56·2	12	02	285	33
750		05	-3	261	31
700	89·4	-1	-10	278	32
650		-6	-21	273	36
600	127	-3	-27	281	49
550		-9	-40	296	66
500	171	-16	-40	306	80
450		-27	-44	313	92
400	222	-33	-47	310	95
350		-40	-56	300	99
300	287	-52		309	110
250		-58		313	108
200	373	-60		300	76
170		-60		310	74
150		-60		305	68
130		-60		284	60
110		-68		295	45
100	521	-57		303	44
90		-60			
80		-61			
70		(55)			
60					

Isothermal 655-650 mb -6°
Inversion 650 mb -6° 617 mb -2°

Pressure mb	Weather Explorer 52·5°N 19·5°W 15hrs G.M.T. Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Vel. knots
Surf	—	40	35	240	16
1000	-3·0				
950		35	31	252	17
900	24·9	28	24	250	18
850		21	17	249	24
800	58·2	14	09	248	30
750		11	06	255	36
700	88·8	13	08	265	44
650		09	04	279	52
600	127	04	-1	285	76
550		00	-4	290	85
500	172	-9	-13	293	97
450		-17	-23	285	103
400	224	-26	-33	295	138
350		-36	-43	298	143
300	289	-49		290	150
250		-63		298	143
200	376	-62		311	112
170		-64		308	87
150		-63		303	78

Inversion 739 mb 10° - 715 mb 14°

Pressure mb	Weather Explorer 52·5°N 20°W 20hrs G.M.T. Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Vel. knots
Surf	—	45	45	215	20
1000	-3·2				
950		50	45	230	40
900	25·5	24	20	214	20
850		18	13	216	17
800	54·6	11	08	220	17
750		04	-3	221	19
700	87·6	-3	-11	221	23
650		-11	-20	220	27
600	125	-19	-28	209	30
550		-29	-38	199	32
500	166	-40	-49	196	38
450		-51		198	37
400	215	-59		198	37
350		-56		203	36
300	277	-53		117	30
250		-51		232	30
200	365	-52		223	33
170		-53		229	33
150		-53		240	33
130		-52		249	34
110		-52			
100		(112)			

Inversion 967 mb 45° 950 mb 50° 550 mb 50° - 515 mb 1°

Pressure mb	Weather Recorder 58·9°N 19·8°W 09hrs G.M.T. Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Vel. knots
Surf	—	33	31	210	10
1000	-4·8				
950		29	27	207	20
900	23·0	23	22	267	15
850		17	14	268	14
800	52·9	11	08	259	15
750		04	02	242	18
700	85·9	-3	-5	228	18
650		-11	-14	213	19
600	123	-19	-23	195	21
550		-29	-43	186	21
500	165	-39	-45	187	22
450		-51		196	22
400	212	-49		285	45
350		-51		269	28
300	274	-58		276	38
250		-57		268	39
200	361	-56		266	44
170		-55		277	44
150		-54		286	39
130		-54		272	36
110	511	-54		266	35
100		-55		265	27
90		-56			

(155)

Pressure mb	Weather Recorder 59°N 19·3°W Surface Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Vel. knots
Surf	—	32	32	calm	
1000	-5·7				
950		29	28	226	07
900	21·8	22	21	226	08
850		15	12	228	14
800	51·7	08	04	224	18
750		01	-4	223	20
700	84·5	-6	-12	223	20
650		-16	-22	218	19
600	121	-25	-32	227	18
550		-34	-42	246	10
500	162	-41		256	19
450		-45		270	23
400	212	-49		285	45
350		-56		287	37
300	277	-58		276	32
250		-57		268	31
200	365	-56		266	44
170		-55		277	44
150		-54		286	39
130		-54		272	36
110	514	-54		266	35
100		-55		265	27
90		-56			

Pressure mb	Weather Recorder 59°N 19°W 21hrs G.M.T. Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Vel. knots
Surf	—	36	33	160	06
1000	-7·9				
950		32	28	191	03
900	19·8	25	20	197	03
850		18	11	210	04
800	49·8	12	04	228	06
750		05	-10	257	05
700	82·9	-3	-13	252	05
650		-11	-26		
600	120	-19	-34		
550		-27	-41		
500	162	-33	-48		
450		-40	-50	255	24
400	211	-50		249	24
350		-56		250	25
300	280	-48		205	27
250		-49		269	34
200	365	-49		261	40
170		-50		283	44
150		-51		279	30
130		-52		265	39
110		-52		274	33
100	514	-52		269	33
90		-52		268	30

(134)

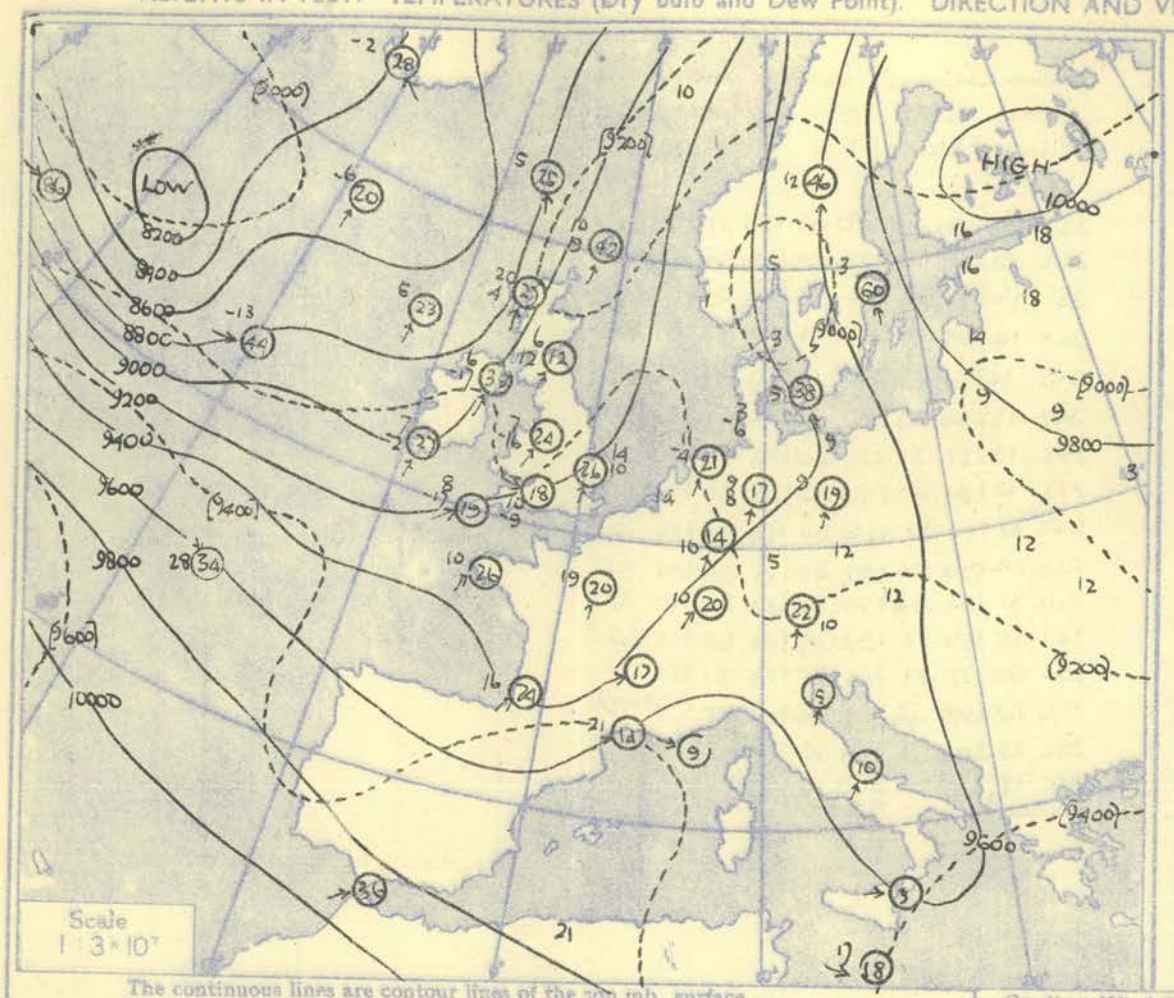
Pressure mb	Weather Watcher 56·9°N 12·2°W 03hrs G.M.T. Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Vel. knots
Surf	—	39	31	210	15
1000	-3·6				
950		35	29	208	14
900	24·3	28	23	204	15
850		22	17	201	17
800	54·6	16	11	211	17
750		10	05	255	18
700	88·1	-3	-8	228	18
650		-5	-13	228	17
600	128	-14	-21	220	18
550		-23	-28	208	23
500	168	-33	-37	202	30
450		-44		196	37
400	217	-53		192	34
350		-45		195	29
300	280	-48		205	27
250		-48		218	26
200	365	-50		215	26
170		-52		219	26
150		-53			
130		-51			
110		(134)			
100					
90					
80					
70					
60					

Tropopause	Weather Explorer	Weather Explorer	Weather Explorer	Weather Explorer	Weather Recorder	Weather Recorder	Weather Recorder	Weather Recorder	Weather Watcher
	I 256 mb -54° 28700'	II 232 mb -60° 34300'	I 222 mb -67° 35400'	NR.	I 373 mb -60° 23100'	II 450 mb -50° 19000'	II 335 mb -58° 25700'	I 300 mb -61° 27400'	II 415 mb -55° 21200'

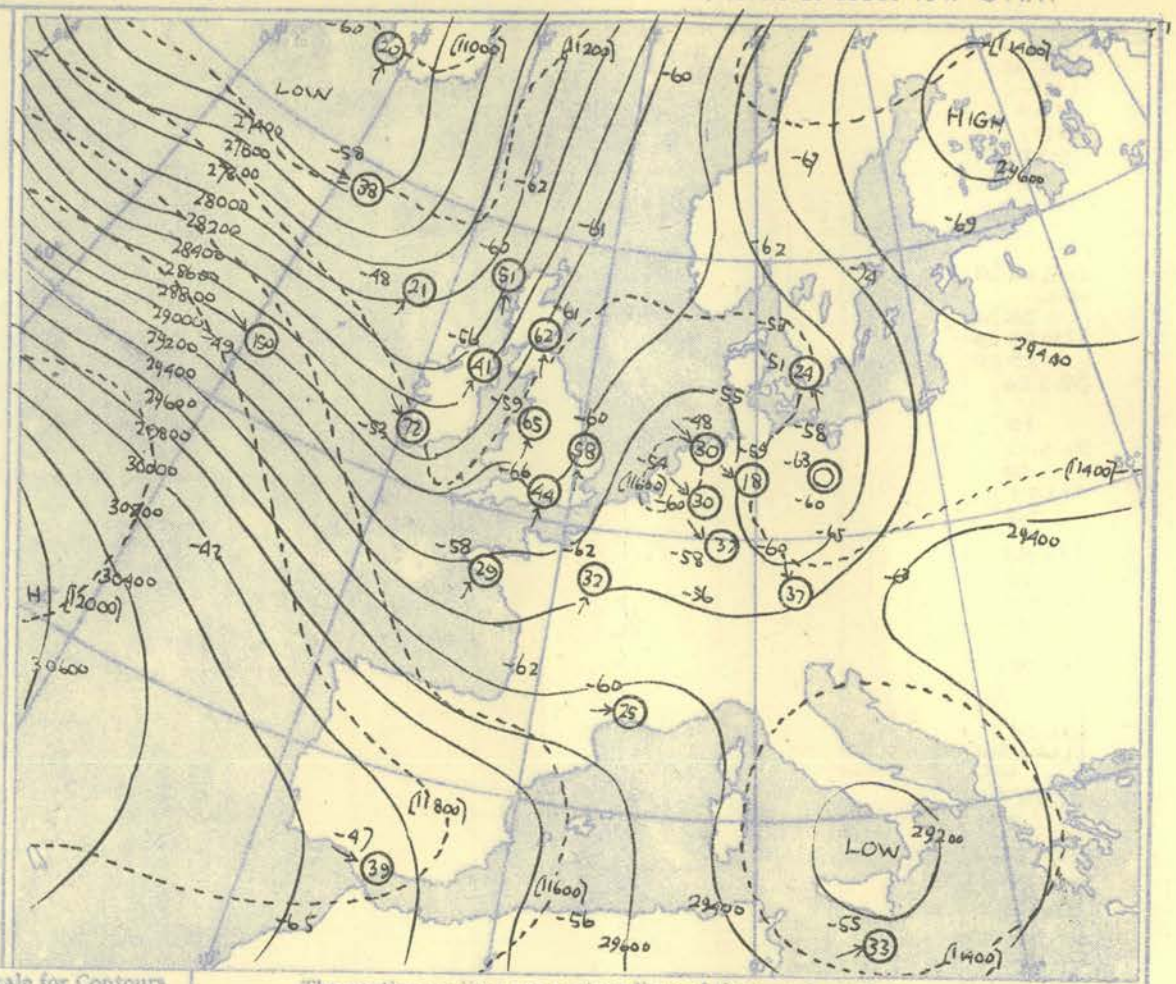
Ship / Lat/Long / Time M.S.L. / Surf / Freezing Pressure — Weather Explorer; Weather Explorer; Weather Explorer; Weather Explorer; Weather Recorder; Weather Recorder; Weather Recorder; Weather Recorder; Weather Watcher

Saturday 3rd February 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

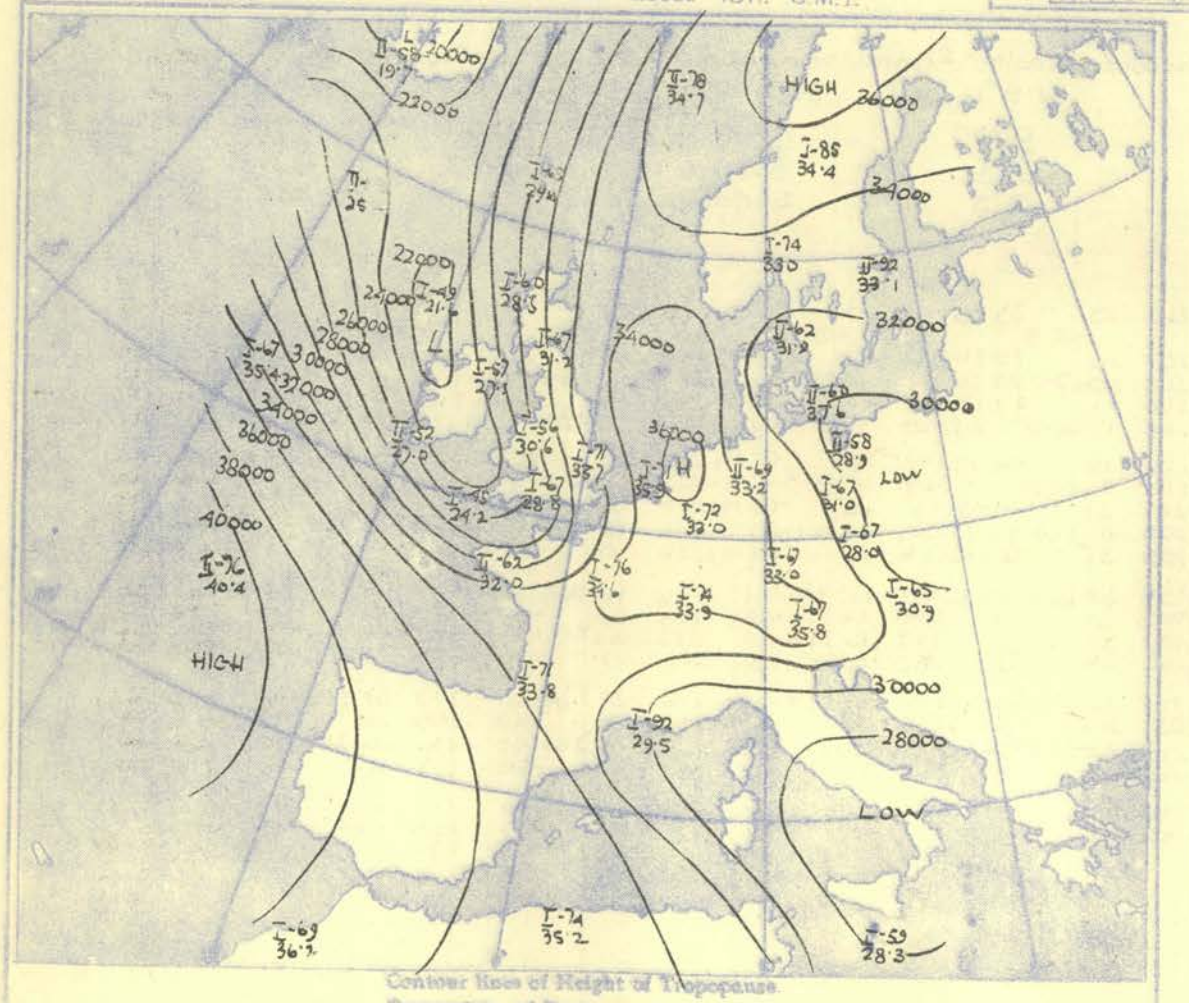


The continuous lines are contour lines of the 300mb. surface
The dotted lines are isopleths of the thickness of the layer 500 - 300 mb.

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

100 80 60 40 30 20 15 10 knots

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



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Very rapid occlusion of the warm ridge occurred as the Surface cold front moved slowly east across England. Strong dynamic warming reduced the intensity of the following cold trough in advance of a fast moving, deepening depression.

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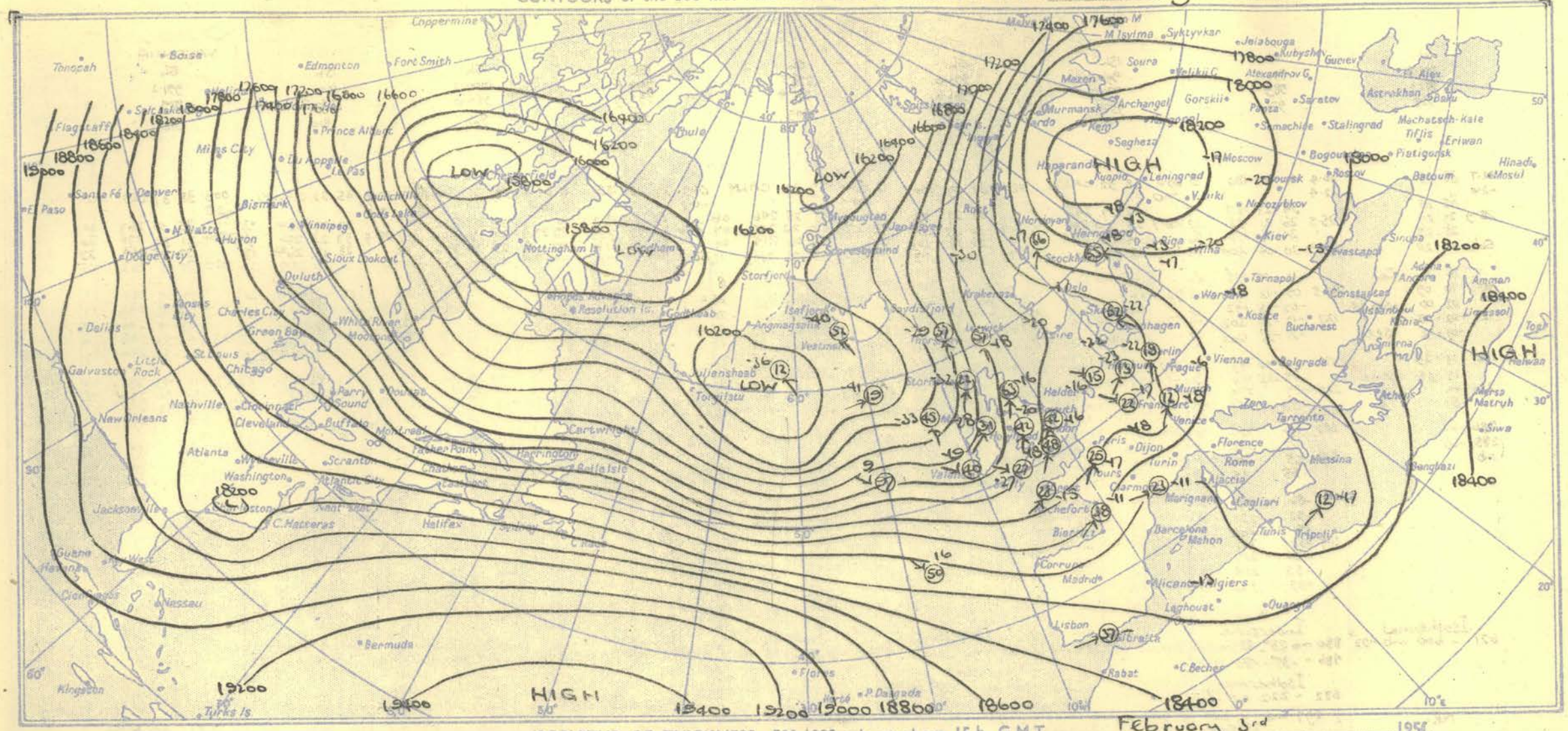
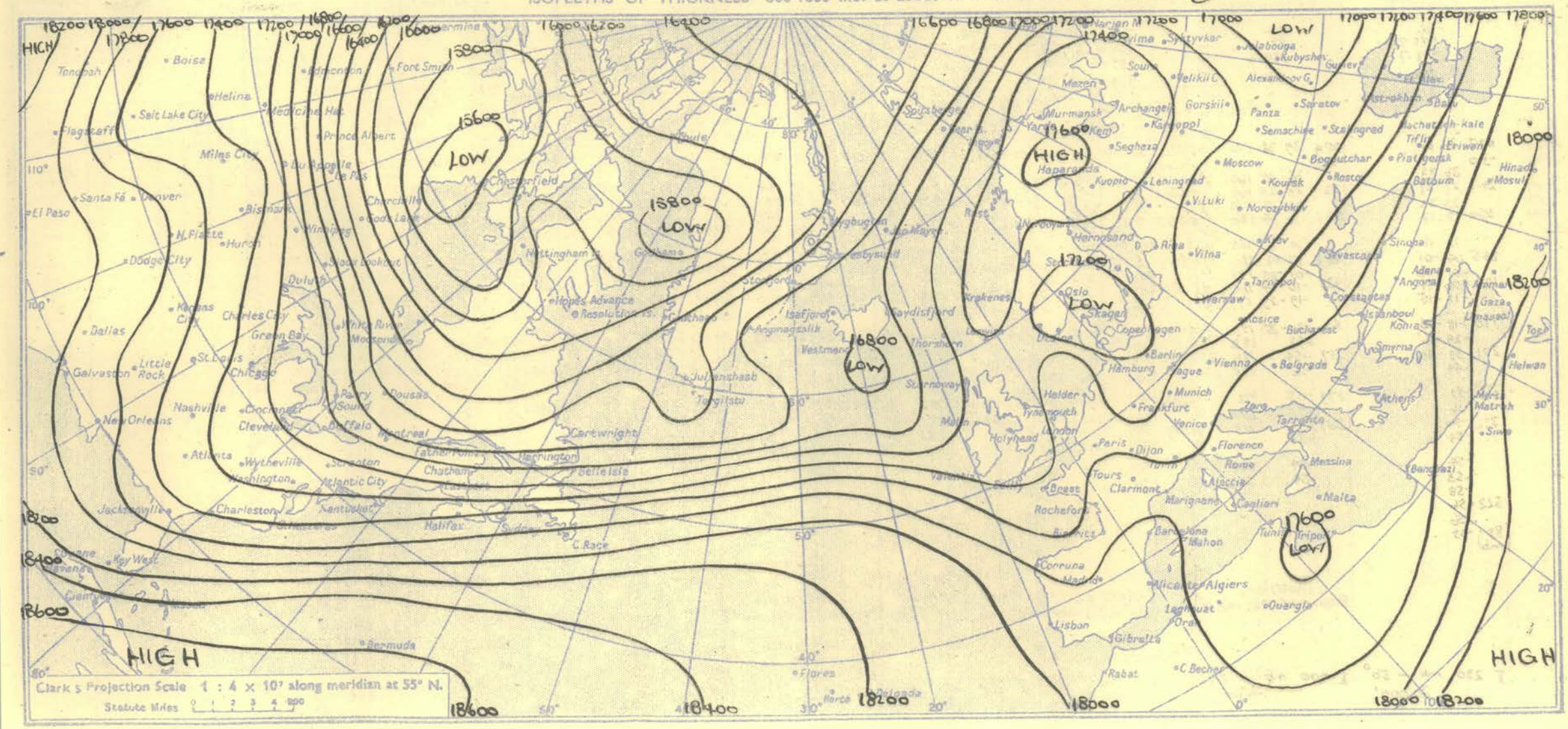
Nelson K. Johnson, K.C.B., D.Sc., Director.

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



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



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Saturday 3rd February. 1951.

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

LERWICK

Pressure: Time 15h G.M.T.; M.S.L. 992·3 mb; Surf 982·3 mb; Freezing 925 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	38	38		
1000	-2·0				
950		35	35		
900	25·9	29	29		
850		25	25		
800	56·3	20	20		
750		15	15	For	
700	90·2	10	09		
650		02	00	winds	
600	128	-02	-05		
550		-09	-12	see	
500	172	-18	-23		
450		-29	-34	page	
400	223	-41			
350		-51		3	
300	286	-61			
250	(285 mb)	-63			
200					
170					
150					
130					
110					
100					
90					
80					
70					
60					

Isothermal 621 - 600 mb -02°

Tropopause: NR.

STORNOWAY

Pressure: Time 15h G.M.T.; M.S.L. 990·7 mb; Surf 989·1 mb; Freezing 936 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	00·4	40	31	180	13
	-2·4				
		34	27	187	27
	25·5	26	21	193	32
		24	16	198	36
	55·9	20	04	200	33
		12	-05	195	20
	89·5	05	-12	191	27
		-02	-18	192	23
	127	-12	-27	203	19
		-21	-36	202	19
	170	-32	-46	193	22
		-38	-52	190	30
	220	-47		179	46
		-53		183	58
	282	-60		185	57
		-57		188	44
	369	-55		205	33
		-55		198	28
		-56		205	36
		-52		221	32
		-51		202	29
	519	-52		212	26
		-54		217	19
		-52		214	22
		-53		223	17

Inversion 880 mb 23° - 857 mb 25°
486 " -35° - 480 " -34°
Isothermal 332 - 322 mb -56°

Tropopause: I 297 mb - 60° 28,500'

LEUCHARS

Pressure: Time 15h G.M.T.; M.S.L. 996·6 mb; Surf 995·7 mb; Freezing 950 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	00·2	38	32	CALM	
	-1·0				
		32	27	243	18
26·7		28	20	248	13
		24	12	244	16
51·1		18	05	241	16
		12	-04	232	14
90·7		06	-12	221	12
		00	-23	208	21
129		-05	-32	195	36
		-11	-29	192	48
172		-16	-24	184	63
		-28	-36	184	71
224		-39	-46	184	72
		-54		193	81
286		-61		177	62
		-66		190	66
372		-60		196	41
		-55		198	38
		-58		213	42
		-53		213	37
		-53		198	35
521		-55		211	30
		-58		216	28
		-54		218	18
		-58			
		-56			

Inversion 310 mb -62° - 300 mb -61°

Tropopause: I 265 mb -67° 31,200'

ALDERGROVE

Pressure: Time 15h G.M.T.; M.S.L. 993·0 mb; Surf 986·6 mb; Freezing 922 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	02·6	34	29	190	12
		34	27	195	33
26·8		30	22	204	44
		24	12	203	32
57·2		20	-02	195	27
		13	-12	200	32
90·9		06	-17	203	33
		-01	-24	196	24
129		-10	-29	214	27
		-18	-37	232	31
171		-28	-47	230	31
		-39	-59	230	35
222		-48		214	35
		-53		202	42
284		-56		205	41
		-55		218	30
372		-51		224	32
		-54		234	27
		-54		248	24
				220	24

Isothermal 986 - 943 mb 34°
Max. winds: 905 mb 205° 48 kts

Tropopause: I 318 mb - 57° 27,100'

LIVERPOOL

Pressure: Time 15h G.M.T.; M.S.L. 998·5 mb; Surf 996·4 mb; Freezing 945 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	00·6	39	34	CALM	
	-0·4				
		33	28	246	06
27·3		28	22	227	07
		25	06	214	09
57·7		20	-03	209	12
		13	-11	217	18
91·3		07	-16	232	24
		01	-22	233	28
129		-05	-22	225	33
		-13	-26	210	35
173		-20	-32	185	42
		-26	-37	186	57
224		-37	-47	184	63
		-48		185	69
287		-59		190	65
		-57		199	43
374		-56		204	29
		-52		219	32
		-51		229	34
		-53		193	27
		-50		212	29
525		-52		219	23
		-51		219	23
		-54		216	24
		-54		227	19
		-51		231	18
		-50			

Inversion 910 mb 27° - 885 mb 29°

Tropopause: I 275 mb -62° 30,600'
I 217 " -62° 35,600'

DOWNHAM MARKET

Pressure: Time 15h G.M.T.; M.S.L. 999·4 mb; Surf 994·9 mb; Freezing 942 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	01·2	37	35	155	11
	-0·2				
	01·9	32	30	192	16
27·6		31	28	223	13
		27	24	216	10
58·3		24	21	178	19
		20	17	184	25
92·5		14	10	185	26
		08	03	182	27
131		01	-05	185	28
		-07	-14	204	35
175		-16	-24	208	42
		-24	-35	200	40
227		-35	-45	201	42
		-49		199	48
290		-60		194	58
		-69		187	55
378		-61		199	33
		-55		221	30
		-55			
		-56			
		-60			
524		-60			

Inversion 305 mb -68° - 300 mb -56°

Tropopause: I 238 mb - 71° 33,700'

LARKHILL

Pressure: Time 15h G.M.T.; M.S.L. 1000·2 mb; Surf 984·0 mb; Freezing 928 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	04·4	38	34	340	10
	0·1				
		34	31	322	12
27·9		29	28	330	12
		25	25	326	12
58·4		22	10	323	14
		17	-02	299	16
92·3		10	-09	281	18
		02	-15	249	15
130		-06	-18	218	22
		-14	-23	196	39
174		-18	-24	194	48
		-29	-35	192	66
225		-42		196	63
		-52		199	55
287		-66		196	44
		-65		212	35
373		-60		212	30
		-55		229	30
		-57		214	25
		-58		223	19
		-59		206	18
521		-57		211	20
		-60		253	21
		-63		242	11
		-61		253	09
(66 mb)		-59			

Inversion 800 mb 29° - 840 mb 27°

Tropopause: I 297 mb - 67° 28,800'

CAMBORNE

Pressure: Time 15h G.M.T.; M.S.L. 1001·1 mb; Surf 990·5 mb; Freezing 810 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	02·9	45	32	CALM	
	0·3				
		39	27	234	12
28·4		33	23	259	13
		28	13	264	17
59·1		22	00	254	20
		15	-08	254	20
93·0		08	-17	263	19
		02	-25	290	16
131		-06	-30	300	23
		-16	-38	308	29
174		-27	-48	289	27
		-32	-53	257	29
225		-42		268	36
353 mb		-44			

Isothermal 491 - 470 mb 28°

Tropopause: I 370 mb - 45° 24,200'

VALENTIA

Pressure: Time 15h G.M.T.; M.S.L. 991·2 mb; Surf 989 mb; Freezing 910 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	00·3	38	37	055	02
	-2·5				
		35	35	267	20
25·4		31	31	279	20
		27	25	269	22
56·0		21	18	262	25
		14	09	252	23
89·7		07	-02	243	27
		03	-19	249	29
128		-03	-30	246	34
		-11	-36	254	37
171		-19	-43	283	40
		-30	-50	284	48
223		-40	-57	289	53
		-49		296	69
286		-53		299	72
		-53		302	66
373		-58		303	55
		-60		301	43
		-61		301	46

Tropopause: II 321 mb -52° 27,000'

LERWICK

Pressure: Time 21h G.M.T.; M.S.L. 988·8 mb; Surf 978·7 mb; Freezing 940 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	36	36		
1000	-3·0				
950		33	33		
900	24·7	27	27		
850		23	22		
800	55·0	18	17		
750		12	11		
700	88·5	04	-01		
650		-01	-06		
600	126	-06	-11		
550		-11	-15		
500	170	-18	-23		
450		-29	-36		
400	221	-35	-40		
350		-44			
300	285	-53			
250		-56			
200	372	-56			
170		-54			
150		-54			
130		-53			
110		-55			
100	522	-56			
90		-56			
80	(85 mb)	-55			
70					
60					

Tropopause: I 280 mb - 56° 30,000'

STORNOWAY

Pressure: Time 21h G.M.T.; M.S.L. 981·6 mb; Surf 980·0 mb; Freezing 930 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	00·4	39	33	170	30
	-0·5				
		34	28	160	42
22·9		28	23	169	45
		21	18	179	51
53·1		16	14	189	55
		14	11	186	54
86·8		07	02	180	51
		-01	-05	177	48
125		-10	-14	174	48
		-19	-23	177	48
167		-30	-35	181	46
		-42		183	46
217		-54		186	52
		-56		188	51
279		-58		192	51
		-53		204	38
367		-52		218	30
		-54		203	34
		-54		208	28
		-54		212	27

Inversion 800 mb 16° - 785 mb 18°

Tropopause: II 400 mb - 54° 21,700'

LEUCHARS

Pressure: Time 21h G.M.T.; M.S.L. 990·4 mb; Surf 989·5 mb; Freezing 950 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	00·2	32	30	160	05
	-2·6				
		32		169	15
25·1		29		190	18
		24		196	18
55·5		18		194	21
		13		201	21
89·2		06		211	20
		-02		202	22
127		-07		196	21
		-15		214	21
170		-26		235	18
		-38		192	19
220		-47		192	44
		-53		196	46
283		-57		194	43
		-60		213	35
369		-54		219	26
		-58		218	30
		-58		215	31
		-56			

Inversion 990 mb 32° - 973 mb 34°

Isothermal 410 - 385 mb -47°

Tropopause: I 280 mb - 62° 29,800'

ALDERGROVE

Pressure: Time 21h G.M.T.; M.S.L. 985·3 mb; Surf 975·1 mb; Freezing 922 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	02·6	35	34	150	25
		34	33	187	45
23·7		31	28	194	49
		26	22	154	44
54·3		20	15	193	45
		14	09	194	42
88·0		09	03	188	45
		01	-06	188	45
126		-09	-18	195	55
		-18	-28	197	57
169		-26	-39	209	48
		-34	-50	222	46
220		-47		234	37
		-51		245	33
282		-56		253	32
		-58		255	29
369		-57		253	34
		-59		271	28

Max wind:- 483 mb 213° 58 kts

Tropopause: II 390 mb -50° 22,500'

LIVERPOOL

Pressure: Time 21h G.M.T.; M.S.L. 992·2 mb; Surf 990·1 mb; Freezing 923 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	00·6	34	31	160	10
	-2·1				
		33	29	180	19
25·7		31	21	201	21
		25	11	208	21
56·1		18	05	205	20
		14	-07	221	21
89·8		07	-13	230	24
		00	-20	237	24
128		-07	-25	240	20
		-16	-29	251	26
171		-27	-37	255	34
		-37	-44	255	32
221		-48		226	28
		-51		215	37
284		-57		225	33
		-57		240	30
370		-60		255	23
		-55		234	17
		-56		212	18

Inversion 990 mb 34° - 978 mb 35°

Isothermal 402 - 374 mb -48°
315 - 301 " -57°

Tropopause: I 263 mb -61° 31,100'
I 202 " -60° 34,900'

DOWNHAM MARKET

Pressure: Time 21h G.M.T.; M.S.L. 995·0 mb; Surf 990·3 mb; Freezing 950 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	01·2	34	24	210	05
	-0·4				
		32	32	205	12
26·4		28	28	237	08
		23	23	257	09
56·8		20	20	281	12
		16	06	283	16
90·8		09	-04	280	18
		00	-08	288	22
128		-07	-12	205	32
		-12	-15	186	46
172		-22	-24	182	46
		-33	-35	188	48
223		-44		188	53
		-56		192	54
285		-63		208	34
		-67		223	33
370		-62		229	25
		-58		212	27

Tropopause: II 327 mb - 62° 26,600'

LARKHILL

Pressure: Time 21h G.M.T.; M.S.L. 996·9 mb; Surf 980·5 mb; Freezing 898 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	04·4	33	31	CALM	
	-0·9				
		35	31	227	08
27·0		32	14	243	13
		27	-02	235	17
57·5		19	-07	236	13
		12	-10	244	15
91·1		05	-16	250	18
		-01	-24	265	20
129		-09	-34	273	25
		-16	-39	293	35
172		-25	-46	306	31
		-35	-53	279	20
223		-43		225	29
		-50		224	31
285		-59		241	28
		-62		258	29
371		-62		272	29
		-58		257	26
		-61		239	23
		-61		231	23
		-61		229	23
519		-62		229	20
(94 mb)		-62			

Inversion 981 mb 33° - 959 mb 36°

Isothermal 418 - 394 mb -48°

Tropopause: I 257 mb -69° 31,800'
I 218 " -64° 35,800'

CAMBORNE

Pressure: Time 21h G.M.T.; M.S.L. 992·8 mb; Surf 982·2 mb; Freezing 890 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	02·9	42	36	190	25
	-1·9				
		39	33	200	43
26·3		33	28	200	42
		39	24	202	41
57·0		24	19	211	40
		19	14	226	39
91·0		12	07	226	34
		05	-01	232	29
129		-04	-11	237	31
		-13	-19	246	30
173		-21	-28	253	33
		-32	-40	259	35
223		-40	-49	286	42
		-48		308	44
286		-59		310	73
		-64		308	71
372		-64		300	46
		-68		300	42
		-71		300	38
		-67		294	29
		-67		262	18
517		-66		283	14
(88 mb)		-65			
		-65			

Isothermal 519 - 502 mb -20°
280 - 268 " -63°

Tropopause: I 230 mb - 68° 34,200'

H.M.S.O. Press, MO, Dunstable.

No. 11634 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Sunday 4th. February 1951. Page 1.

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

03h. G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Station
Pressure: Time	03h. G.M.T.	03h. G.M.T.	03h G.M.T.	03h. G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h. G.M.T.	Time
Pressure: M.S.L.	982.9 mb	973.9 mb	979.9 mb	975.5 mb	981.0 mb	990.0 mb	987.3 mb	979.3 mb	M.S.L.
Pressure: Surf	972.9 mb	972.3 mb	979.0 mb	965.8 mb	978.9 mb	985.4 mb	971.1 mb	968.8 mb	Surf
Pressure: Freezing	936 mb	950 mb	883 mb	959 + 925	862 mb	868 mb	915 mb	836 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	02.7	36	36			00.4	36	33	165	20	00.2	35	28	160	25	02.6	33	31	160	08	00.6	35	33	150	25	01.2	33	31	150	10	04.4	38	37	180	18	02.9	43	39			00.3	45	42			Surf
1000	-04.6					07.0					-05.5					-06.4					-05.1					-02.7					-03.4					-05.6					-7.30					1000
950		34	34				32	29	156	27		33	24	169	36		31	27	168	19		32	29	154	33		34	33	201	24		36	35	181	34		41	37				45	43			950
900	23.1	28	28			20.8	27	25	164	28	22.4	32	21	178	38	21.3	30	21	180	20	22.6	31	28	187	48	25.0	33	28	210	25	24.5	31	31	188	39	22.6	37	33			15.5	39	36			900
850		22	21				22	20	179	33		27	18	185	39		25	08	178	22		31	27	203	47		30	09	219	29		27	26	198	45		34	31				34	33			850
800	53.4	16	13			51.1	16	14	184	28	53.1	20	15	190	41	51.9	20	04	200	24	53.5	25	21	242	46	58.7	23	-13	211	28	55.1	23	22	207	44	53.7	29	24			46.5	28	25			800
750		10	05				10	07	178	24		14	11	194	44		14	-09	204	33		20	15	209	41		19	-26	212	24		18	17	215	42		25	15	See Page 3 for Winds			23	19			750
700	86.9	05	-02			84.6	04	00	178	27	86.8	08	05	193	42	85.8	13	-21	200	30	87.6	13	08	196	41	89.7	12	-34	225	25	89.1	12	09	207	39	88.2	17	13			80.8	18	14			700
650		00	-10				-03	-07	184	35		01	-03	193	45		07	-12	223	26		06	00	197	45		05	-39	226	24		05	00	209	40		12	06				13	09			650
600	12.5	-03	-18			12.2	-12	-16	186	37	12.5	-06	-14	200	46	12.9	03	-08	232	28	12.6	-02	-07	206	42	12.8	-02	-44	222	24	12.7	-02	-09	216	40	12.7	07	01			12.0	07	03			600
550		-16	-26				-15	-24	190	36		-16	-22	202	48		-04	-18	244	29		-11	-17	207	40		-12	-45	234	22		-12	-18	227	35		-01	-07				00	-03			550
500	16.8	-25	-36			16.5	-24	-33	188	31	16.8	-27	-33	202	51	16.9	-14	-31	253	37	16.9	-20	-26	216	36	17.2	-22	-49	242	20	17.1	-20	-25			17.2	-10	-16			16.4	-10	-14			500
450		-35	-45				-36	-43	192	34		-38	-44	196	48		-25	-39	257	56		-31	-38	240	37		-35	-55	251	34		-29	-35				-20	-27				-20	-24			450
400	21.8	-45				21.6	-48		189	31	21.8	-50		203	48	22.0	-36	-46	255	57	22.0	-40	-49	270	41	22.2	-48		256	34	22.2	-36	-46			22.4	-32	-39			21.7	-32	-36			400
350		-54					-57		195	33							-47		261	58		-47		280	51		-48		296	27		-46					-47					-46				350
300	28.0	-63				27.8	-59		216	39	For remainder of Winds See Page 3					28.4	-60		257	51	28.4	-62		278	44	28.5	-57		247	29	28.5	-62				28.7	-64				28.0	-59				300
250		-60					-55		218	39							-55		254	42		-59		262	38		-60		245	32		-67					-71					-50				250
200	36.7	-54				36.5	-52		228	30						37.1	-54		256	33	37.0	-61		297	30	37.2	-61		250	27	37.1	-63				37.2	-67				36.8	-53				200
170		-56					-55		225	29							-57		264	37		-59		263	31		-58		248	27		-63					-65					-53				170
150	42.8	-55				42.8	-54		227	22						43.3	-59		269	38		-59		270	30	43.3	-58		243	25		-62					-69					-55				150
130		-54					-55		230	20							-58		265	33		-62		269	23		-58		236	22		-67					-72					-59				130
110							-55		202	19							-58		258	32		-59		249	24		-58		230	30		-65					-70					(12mb) -62				110
100							Inversion									52.0	-59		260	26	51.7	-58				52.0	-58		217	24	51.7	-63				51.6	-73								100
90							585 mb -14° - 570 mb -13°										-60		258	27	(9mb)	-58					-59		202	22							-70								90
80																	-57		251	36							-60		242	22							-67								80
70																	-54		252	20		Inversion					-61					Inversion					Inversion								70
60																62.9	-57					902 mb 31° - 862 mb 32°					Inversion					298 mb 65° - 280 mb 64°										60
																Inversion						Isothermal					985 mb 33° - 950 mb 34°					Isothermal										
																950 mb 31° - 940 mb 34°						935 - 902 mb 31°										436 - 425 mb -32°										
																765 " 13° - 732 " 16°																												
Tropopause	I 288 mb -65° 28,900'					I 262 mb -58° 23,500'					N.R.					II 290 mb -63° 29,000'					I 282 mb -63° 29,800'					I 288 mb -59° 29,300'					I 280 mb -70° 30,000'					I 250 mb -71° 32,500'					I 308 mb -60° 27,400'				Tropopause

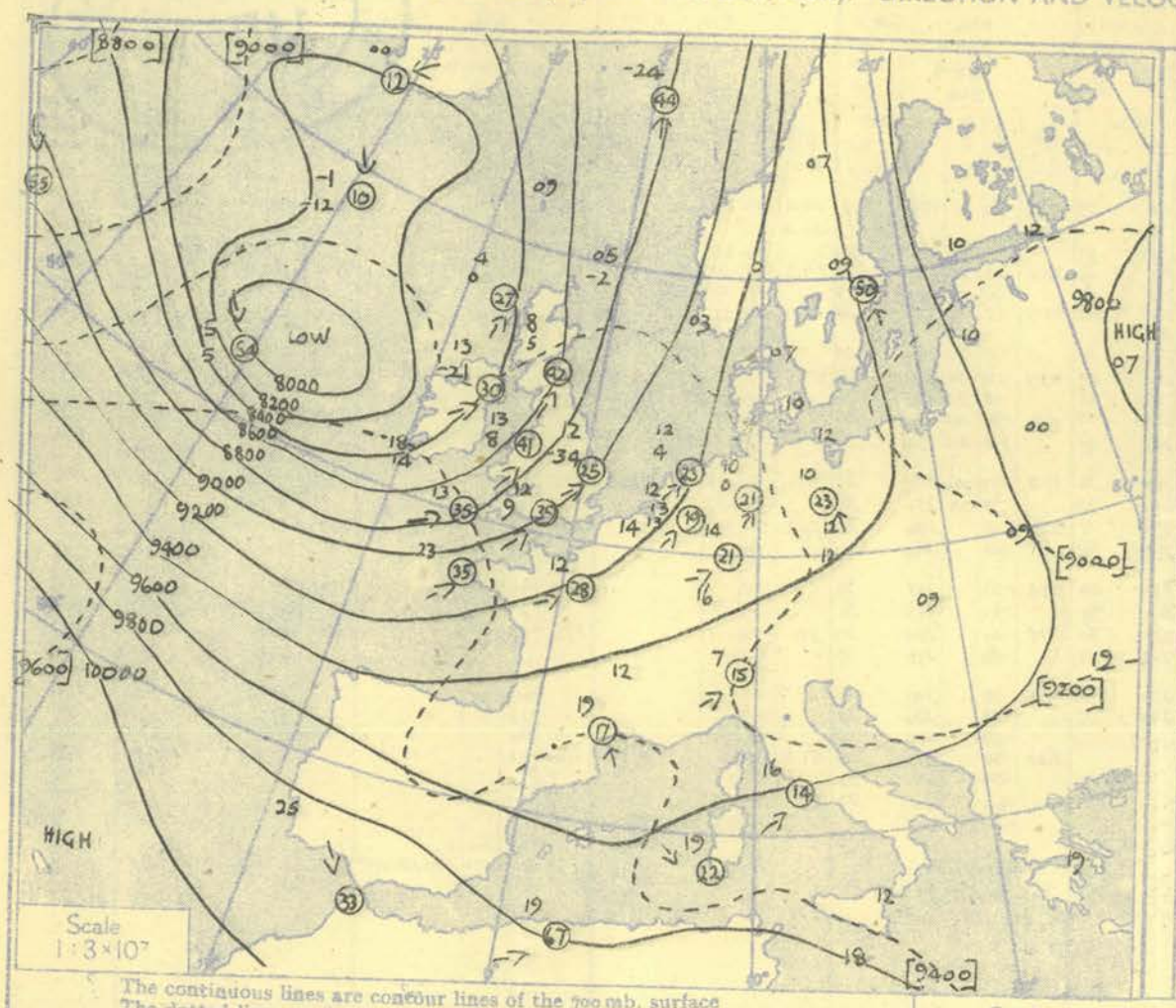
09h. G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Station
Pressure: Time	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	Time
Pressure: M.S.L.	976.5 mb	967.6 mb	970.6 mb	956.4 mb	960.6 mb	977.5 mb	969.9 mb	958.3 mb	M.S.L.
Pressure: Surf	966.6 mb	966.0 mb	969.8 mb	946.9 mb	958.6 mb	973.1 mb	954.2 mb	948.2 mb	Surf
Pressure: Freezing	908 mb	900 mb	929 mb	860 mb	815 mb	859 mb	850 mb	782 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	02.7	39	33			00.4	36	31			00.2	36	33	150	20	02.6	37	34			00.6	39	37			01.2	37	34	140	27	04.4	41	39			02.9	48	47	190	45						Surf
1000	06.3					08.8					08.0					-11.9					10.7					-06.1					-08.3														1000
950		38	33				37	32				34	31	167	34							40	37				35	32	153	42		29	28												950
900	26.7	31	21			19.2	32	27			19.9	29	26	166	34	16.1	36	33			17.4	33	30			21.8	32	29	170	62	19.2	35	34			17.3	44	43								900
850		25	09				25	19				26	23	164	36		31	27				32	29				31	27	183	60		32	31				39	37								850
800	52.1	20	-03			49.6	18	11			50.5	24	19	164	40	47.1	29	25			48.4	31	28			52.7	24	21	192	49	51.0	28	27			48.8	34	31								800
750		15	-13				11	-07				18	14	163	50		26	22				26	23	See Page 3 for Winds			22	19	205	36		26	24				28	24								750
700	85.9	07	-16			83.2	12	-25			84.5	11	10	164	53	81.7	21	17			83.1	23	21			86.9	17	13	196	33	88.7	21	19			83.6	22	18								700
650		02	-09				09	-15				04	03	171	50		15	10				16	14				11	07	196	39		17	15				17	13								650
600	12.4	-09	-12			12.2	02	-19			12.3	00	-12	179	38	12.1	09	01			12.2	10	06			12.6	05	00	205	39	12.5	10	07			12.3	11	06								600
550		-18	-24				-07	-28				-08	-17	175	33		01	07				02	-01				-03	-08	213	27		08	-02				02	-04								550
500	16.6	-30	-37			16.6	-18	-28			16.7	-16	-24	191	25	16.6	-07	-14			16.7	-06	-11			17.0	-11	-17	223	24	17.0	-05	-11			16.8	-06	-14								500
450		-39	-45				-29	-40				-23	-31	221	25		-18	-26				-15	-19				-20	-26	239	36		-16	-22				-20	-30								450
400	21.6	-50				21.7	-39	-48			21.8	-35	-43	238	25		-30	-39			22.0	-27	-32			22.2	-31	-38	258	38	22.3	-27	-34			22.0	-29	-41								400
350		-58					-50					-50		244	43	21.8	-45					-42					-46		266	45		-42					-43									350
300	27.8	-63				28.0	-64				28.1	-64		242	49	28.2	-61				28.4	-59				28.6	-61		260	57	28.7	-58				28.4	-58								300
250		-61					-61					-63		226	28		-60					-65					-71		263	39		-66					-61									250
200	36.4	-58				36.6	-54				36.7	-55		231	28	36.9	-50				35.9	-68				37.1	-60		249	31	37.3	-56				37.1	-51								200
170		-59					-55					-57		210	18							-64					-59		259	28		-53					-52									170
150		-57				42.8	-56										-60					-60				43.2	-61		257	21		-55				43.4	-53								150
130		-59					-52										-57					-62					-61		260	19		-60					-58									130
110		-54					-54										-62									(125mb)	-60		250	18	(125mb)	-61					-62									110
100	51.3	-55				51.6	-53														(109mb)	-62				51.9	-59		231	23						52.1	-62								100
90		-53					-53																				-57		211	24		Isothermal													90
80		Inversion					-54																									770 - 735 mb 26°					(95mb)	-59								80
70	37.2 mb -57° - 366 mb -56°						Inversion																																						70
60							738 mb 10° - 705 mb 12°																																							60
							671 " 08° - 657 " 10°																																							
Tropopause	I 315 mb -62° 26,800'					I 276 mb -71° 29,600'					I 280 mb -70° 29,500'					I 280 mb -65° 29,600'					I 262 mb -71° 31,500' I 236 " -71° 33,500'					I 255 mb -73° 31,900'					II 265 mb -71° 31,300'					II 307 mb -56° 31,700'									Tropopause

Sunday 4th February 1951.

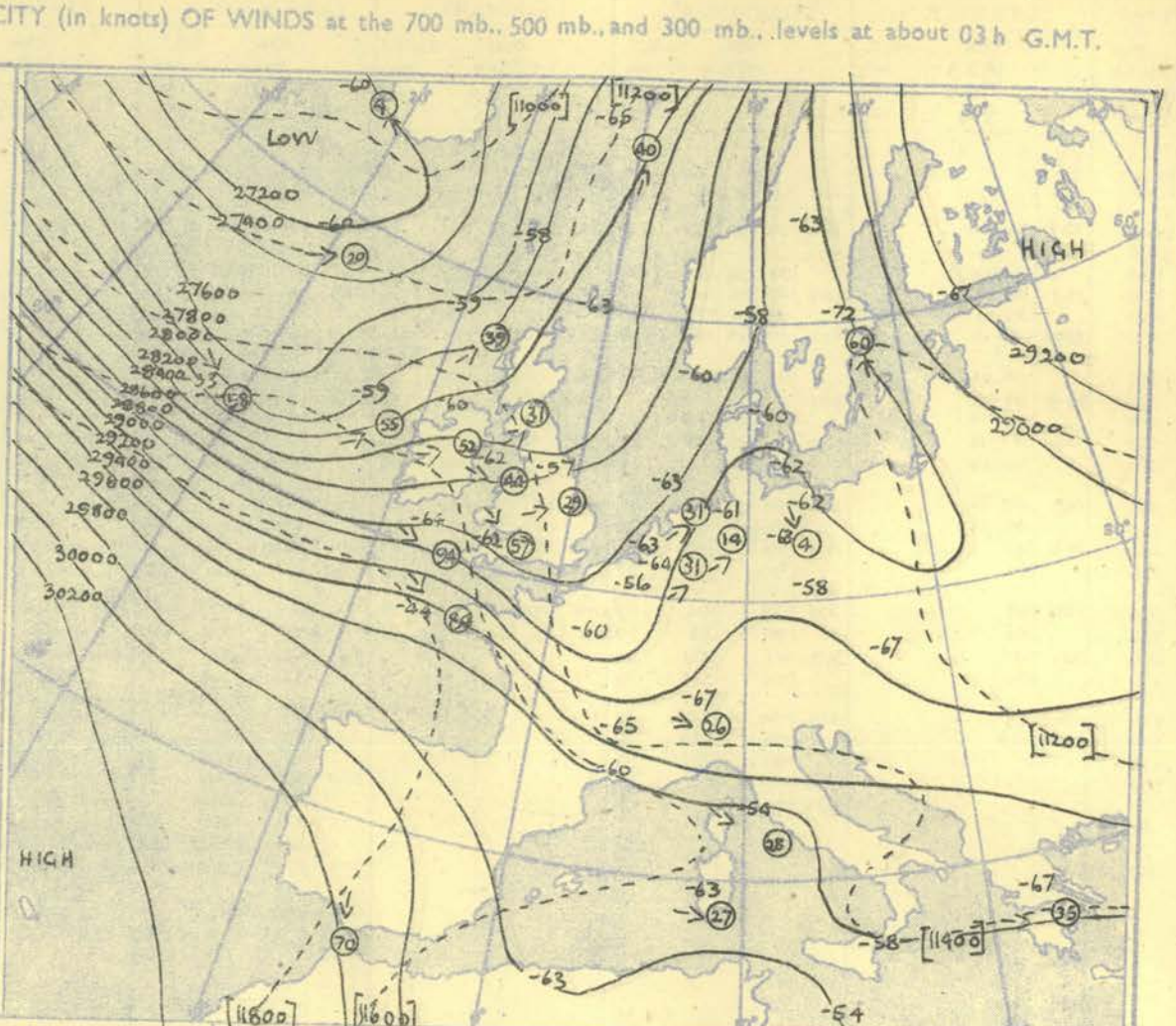
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03 h G.M.T.



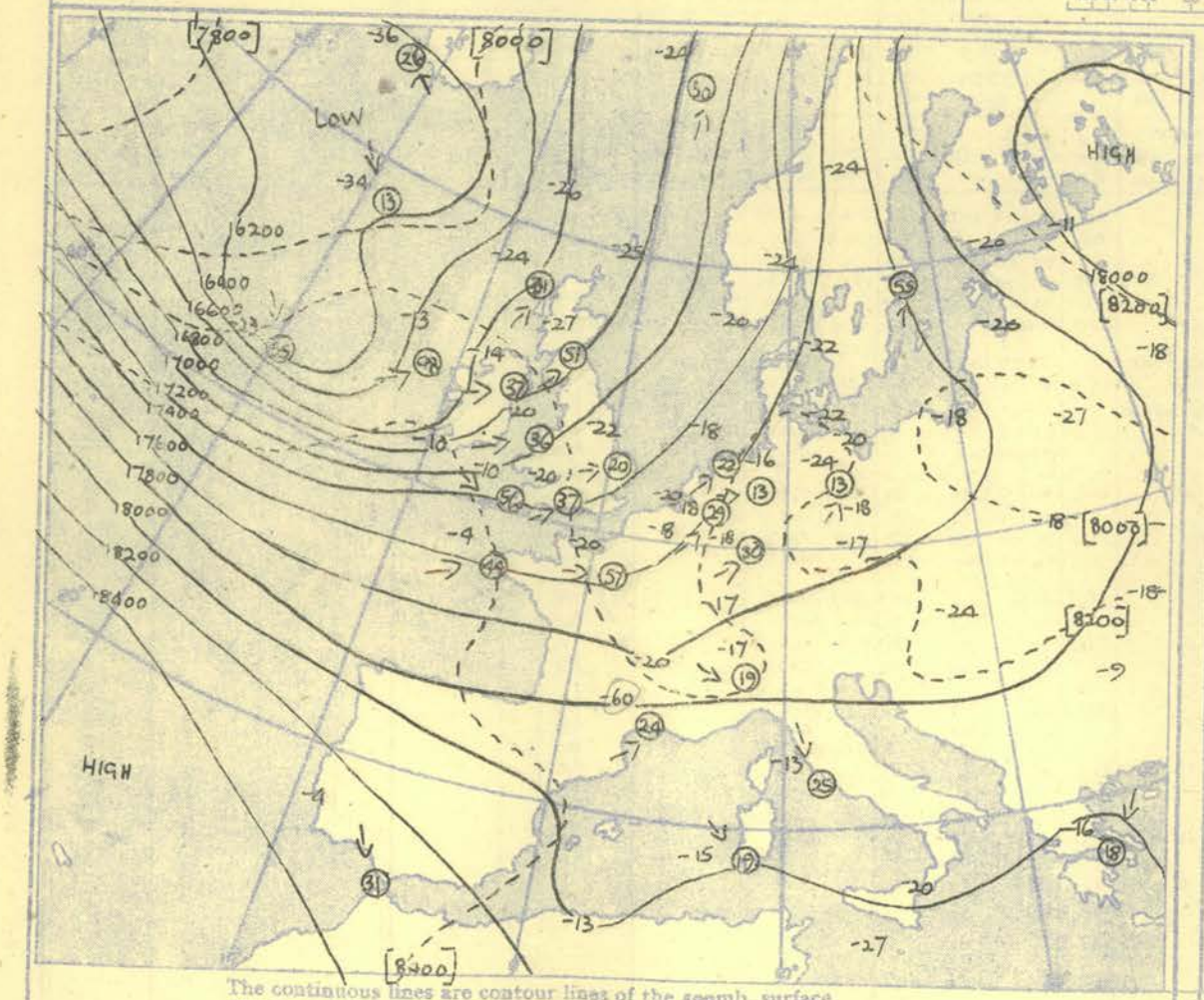
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

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

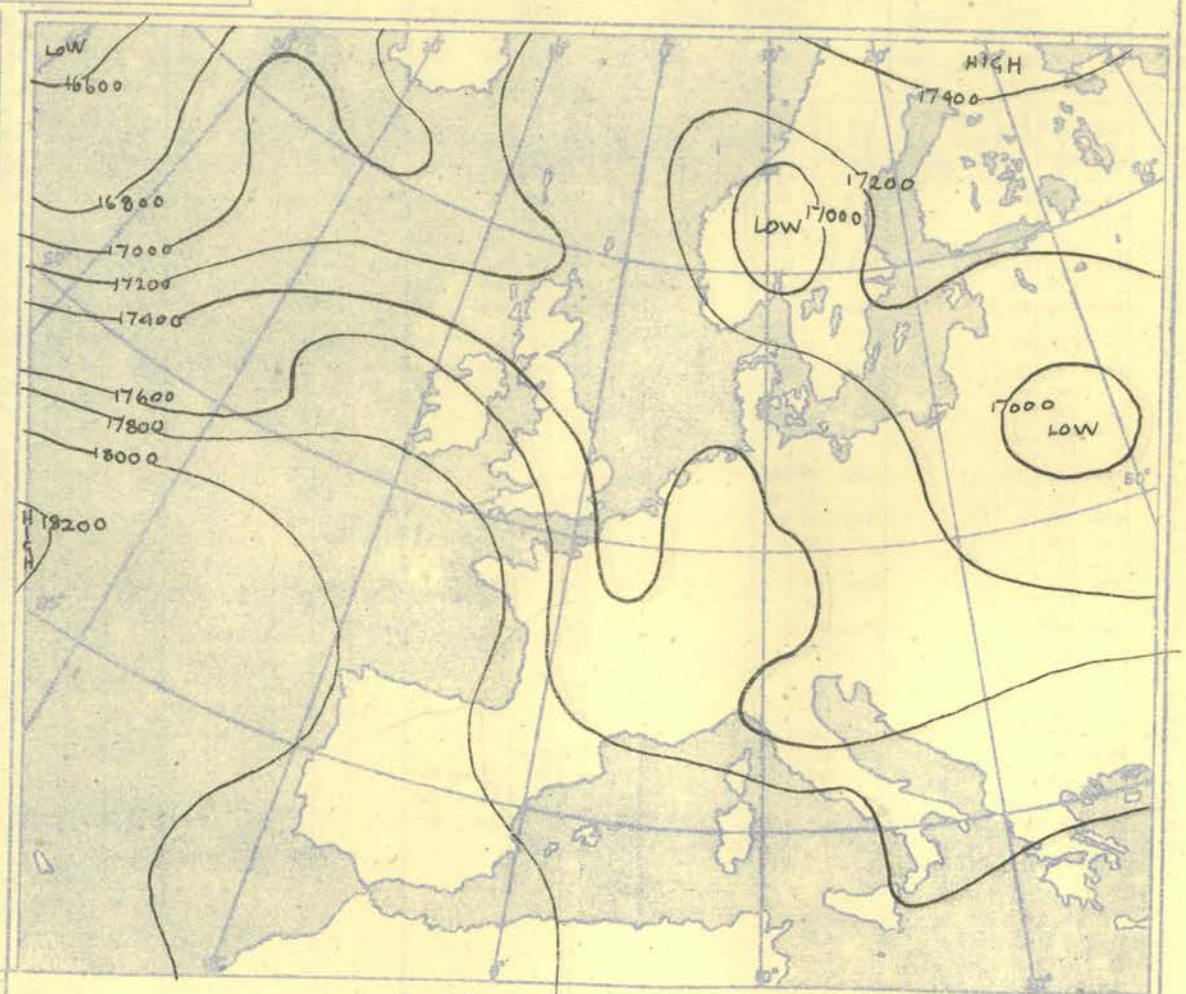
100 80 60 40 30 20 15 10 knots



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 500mb. 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

	49·7 N. 17·0W.			52·3N. 13·4W.			40·7 N. 14·0 W.			43·5N 18·0W			
Time	11·3hh.			12.30h.			13h.			14h.			Time
Pressure M.S.L.	995 mb			mb			999 mb			1004 mb			M.S.L.
Pressure Surf	968 mb			mb			995 mb			1000 mb			Surf
Pressure Freezing	890 mb			890 mb			mb			700 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.	Pressure mb
Surf	070	43	31					56			54	54	Surf
1000	-06·8						-0·3			1·0	54	54	1000
950								46	46		51	50	950
900	21·3	33	26	No Sea Level owing to violent turbulence				42	42		46	46	900
850		23	23					38	38		48	44	850
800	51·7	16	09					34	34		43	40	800
750		12	06					32	32		37		750
700	85·2	02					85·5	28	28	97·1	32		700
650		-09						22	22		26		650
600	17·3	-13						15			19		600
550		-21						12			09		550
500	165	-29					181	00		183	03		500
450													450
400	Cloud 7/8 Cu 910-680mb			Cloud 6/8 Cu 960-710mb			Cloud 8/8 Sc 880-900mb.			Cloud 8/8 Sc 930-870mb			400
350													350
300													300
250	5/8 Cb. 910-560mb.			3/8 As 550-500mb.			8/8 Ac 750-780mb						250
200													200
170							6/8 Ac 700-740mb.						170

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

Place	Camborne		Leuchars		Liverpool		Lerwick		Downham		Lerwick		Stornoway								Place
Time	03h.		03h.		09h.		15h.		15h.		21h.		21h.								Time
Type																					Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet.
Surf.	180	10			140	35	140	33	150	30	130	41	100	20							Surf.
1,000	193	26			142	39	143	48	158	50	129	54	112	33							1,000
2,000	196	35			154	42	146	47	169	60	132	59	119	33							2,000
3,000	204	31			165	60	150	45	172	68	137	62	126	35							3,000
4,000	207	35			174	61	153	45	191	69	139	63	135	34							4,000
5,000	211	40			181	57	153	45	195	61	145	61	132	33							5,000
6,000	219	39			182	51	154	46	202	50	145	58	133	32							6,000
8,000	226	35			185	47	154	46	200	41	143	51	137	31							8,000
10,000	241	35			186	46	159	42	184	40	148	41	138	41							10,000
14,000	260	31			188	45	176	33	179	46	155	33	135	47							14,000
18,000	275	56			196	42	184	17	185	47	157	38	132	45							18,000
24,000	282	60	215	49	194	53	242	31	187	59	169	29	135	42							24,000
30,000	293	94	221	31	207	56	233	37	193	60	205	27	155	39							30,000
40,000	307	37	228	22	248	27	216	27	234	23	210	23	196	24							40,000
			(37,000')																		
50,000	295	37			264	25	216	20	264	18	218	17									50,000
	(44,000')						216	15			224	17									
							(58,000')				(53,000')										

NEPHOSCOPE OBSERVATIONS

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

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

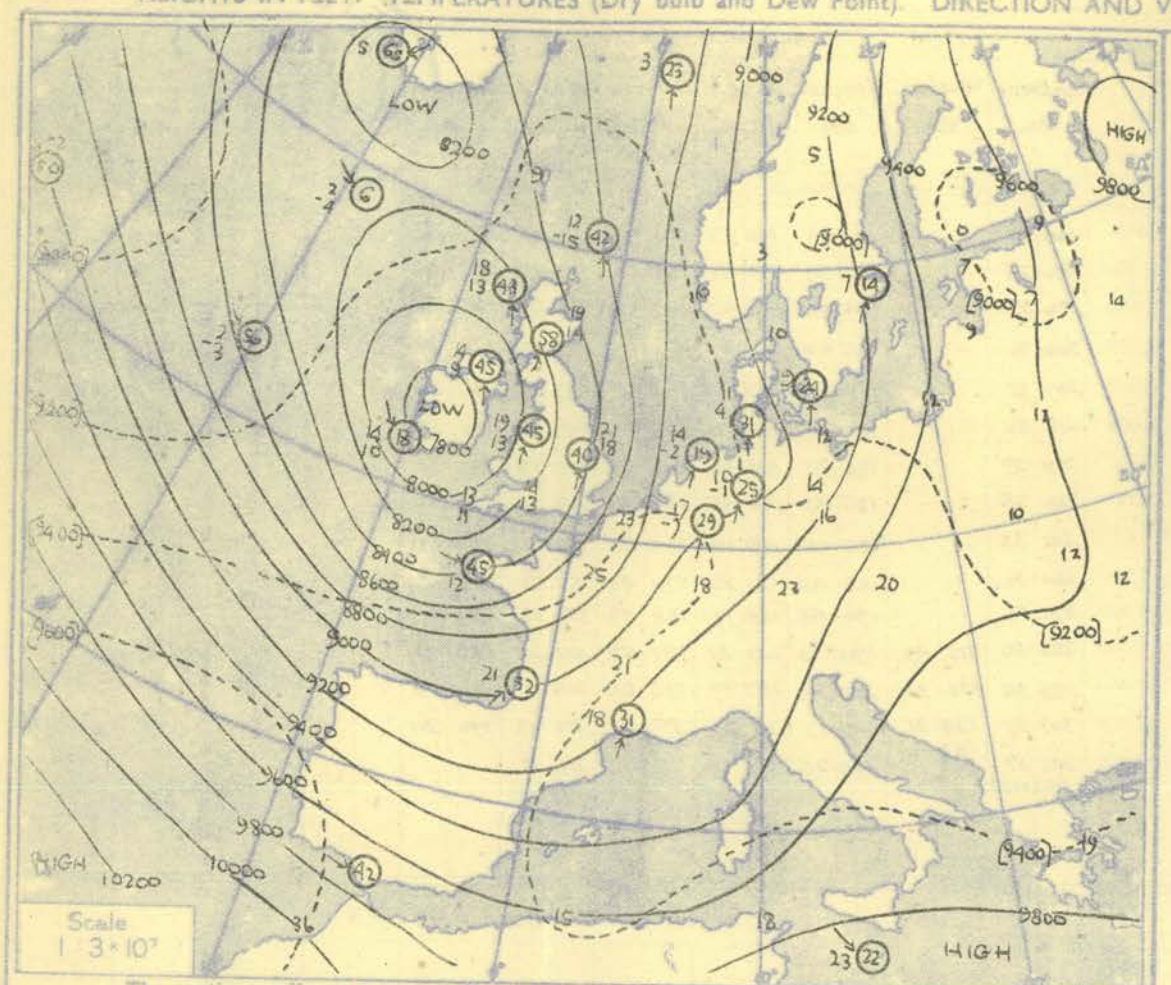
Ship	WEATHER RECORDER.					WEATHER RECORDER.					WEATHER RECORDER				
Lat/Long	59·1N 19·2W.					59·1N 19·1W					59·0N 19·0W				
Time	03h G.M.T.					09h G.M.T.					15h G.M.T.				
Pressure M.S.L.	966 mb					967 mb					967 mb				
Pressure Surf	966 mb					967 mb					967 mb				
Pressure Freezing	930 mb					925 mb					910 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		36	34	010	05		37	35	330	05		37	29	310	10
1000	-91					-90					-88				
950		34	30	356	04		35	32	300	07		36	28	317	06
900	187	26	20	014	06	189	28	25	307	08	191	30	24	316	06
850		18	09	023	05		21	19	313	09		22	18	315	06
800	488·	11	03	020	06	49·2	14	12	313	10	49·4	15	11	314	08
750		06	-05	007	07		07	-06	293	09		09	04	308	08
700	87·9	-01	-12	345	10	82·4	-01	-12	260	09	82·8	02	-04	287	06
650		-09	-23	325	09		-07	-16	258	08		-06	-13	283	08
600	119	-18	-34	308	08	119	-16	-36	280	05	120	-15	-22	291	08
550		-28	-43	300	07		-24	-43	296	06		-24	-30	291	08
500	161	-34	-47	293	13	162	-32	-47	308	08	162	-32	-37	269	09
450		-42		275	16		-40	-52	314	12		-40	-47	252	11
400	211	-52		262	22	212	-50		328	15	212	-47		224	10
350		-63		258	20		-56		325	11		-53		181	19
300	272	-60		250	20	274	-55		294	11	275	-59		191	30
250		-54		240	20		-51		296	24		-57		213	30
200	360	-51		254	30	362	-48		255	34	362	-53		236	22
170		-52		258	33		-49		247	39		-53		242	24
150		-53		263	35		-49		238	35		-51		251	24
130		-53					-49					-49		256	27
110	(135mb)					(140mb)						-48		224	33
100											513	-48		227	32
90												-48		259	29
80												-49		285	30
70												-51		268	27
60												-60			
Tropopause	I 350mb -63° 23·800'					I 364mb -58°. 23·100'					I 327mb -57°. 25·500'				

Ship	WEATHER RECORDER					WEATHER EXPLORER					WEATHER EXPLORER.				
Lat/Long	59·0N 18·8W					52·6N 19·7W					52·7N· 19·9W				
Time	21h G.M.T.					03h G.M.T.					09h G.M.T.				
Pressure M.S.L.	970 mb					951 mb					971 mb				
Pressure Surf	970 mb					951 mb					971 mb				
Pressure Freezing	920 mb					860 mb					900 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		39	38	320	17		43	41	290	53		41	33	310	42
1000	-8·2					-37					-80				
950		36	36	312	15		43	40	290	53		38	32	316	59
900	198	29	29	312	15	146	37	28	297	50	20·0	32	28	315	56
850		22	21	312	15		31	22	299	51		24	23	312	54
800	50·0	15	10	322	12	45·5	26	18	301	50	50·4	17	12	312	52
750		08	01	335	12		21	11	307	51		10	08	314	48
700	83·4	01	-04	329	13	79·7	15	05	314	54	83·9	03	-08	315	48
650		-06	-11	326	14		07	-04	313	57		-05	-14	312	51
600	121	-14	-20	326	15	118	-02	-14	304	57	121	-13	-18	310	45
550		-22	-29	318	13		-11	-25	299	59		-20	-29	313	39
500	163	-30	-38	278	17	162	-23	-38	294	55	164	-27	-38	316	38
450		-38		185	28		-25	-41	300	52		-34	-49	312	45
400	213	-41		180	44	213	-31	-49	302	48	215	-41		313	44
350		-54		185	32		-33	-55	292	58					
300	276	-58		187	22	279	-33	-60	286	58					
250		-59		176	31		-34	-57	284	58					
200	363	-54		242	23	371	-40	-60	270	75					
170		-53		257	19		-45		262	69					
150		-53		264	21		-51		267	64					
130		-51		270	15		-57		281	51					
110		-50		263	15		-61		280	43					
100	514	-49													
90															
80															
70															
60						Inversion 477mb 29°-452mb 25° Isothermal. 452-450mb-25°									
Tropopause	II 328mb -57°. 25·600					II 411mb -31°. 20·600					MR.				

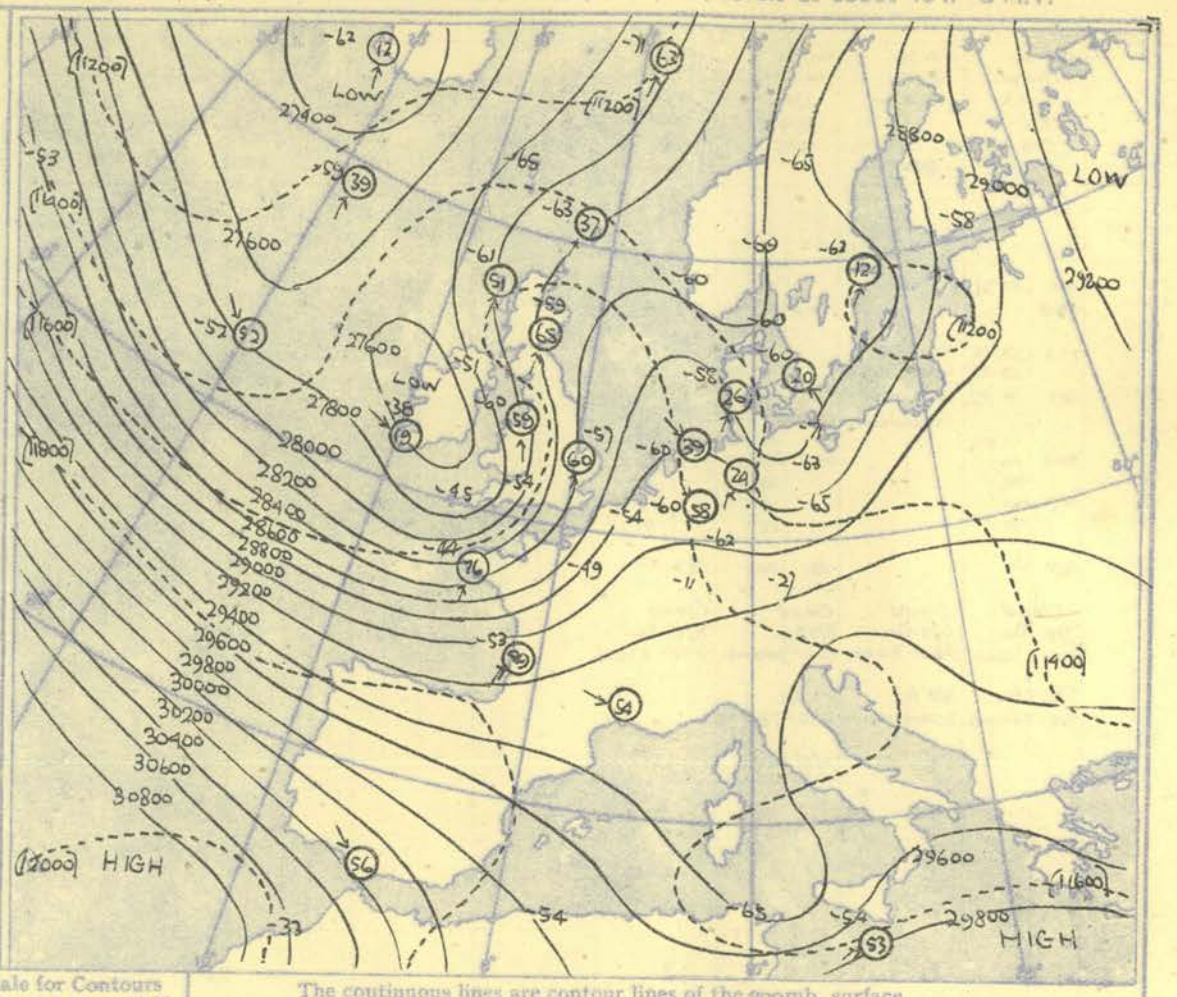
Ship	WEATHER EXPLORER.					WEATHER EXPLORER					WEATHER OBSERVER.					Ship
Lat/Long	52·5N 20·4W					52·7N 20·2W					54·6N 10·9W.					Lat/Long
Time	15h G.M.T.					21h G.M.T.					03h G.M.T.					Time
Pressure M.S.L.	974 mb					978 mb					962 mb					M.S.L.
Pressure Surf	974 mb					978 mb					962 mb					Surf
Pressure Freezing	920 mb					925 mb					910 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	Pressure mb
Surf		38	35	300	43		38	31	310	42		40	35	150	33	Surf
1000	-65					-5·9					-103					1000
950		35	32	313	55		35	27	301	46		39	33	139	48	950
900	21·0	30	29	308	53	22·0	27	18	309	53	177	31	27	139	33	900
850		23	20	308	57		21	11	318	63		26	22	139	36	850
800	67·3	16	11	310	56	52·2	14	04	320	53	48·2	22	20	139	37	900
750		09	07	310	60		07	-01	318	48		18	14	153	31	750
700	84·7	02	-03	310	56	85·4	00	-07	315	55	82·2	16	12	165	27	700
650		-05	-12	310	48		-07	-14	320	55		09	05	202	30	650
600	122	-13	-32	310	48	123	-16	-33	318	53	121	04	01	214	27	600
550		-23	-27	310	42		-26	-34	310	51		-03	-08	214	48	550
500	165	-32	-38	310	41	165	-37	-46	301	48	165	-13	-17	212	48	500
450		-40	-50	310	47		-43		300	48		-24	-29	209	39	450
400	214	-48		310	44	214	-49		307	43	217	-35	-40	217	50	400
350		-52		310	44		-50					-50		235	73	350
300	277	-52		310	52	(394mb)					280	-59		236	55	300
250		-46		310	43							-55		237	45	250
200	366	-43		310	52						367	-51		263	45	200
170		-44		302	52							-52		266	48	170
150		-45		280	64							-55		258	41	150
130		-47		262	76							-58		256	30	130
110		-51		280	53							-59				110
100	519	-52		288	53						(115mb)					100
90		-54		284	55											90
80		-55		283	53											80
70		-53		282	37											70
60		-55		280	26											80
		-57 (54mb)				Inversion 456mb-43°-444mb-42°					Isothermal. 903-891mb 31° 867-850 26° 738-710 17° 650-628 09° Inversion 819mb 22° 809mb 23°					
Tropopause	II 371mb -53° 23·000					MR.					I 314mb -61° 27·000					Tropopause

Sunday 4th February 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.



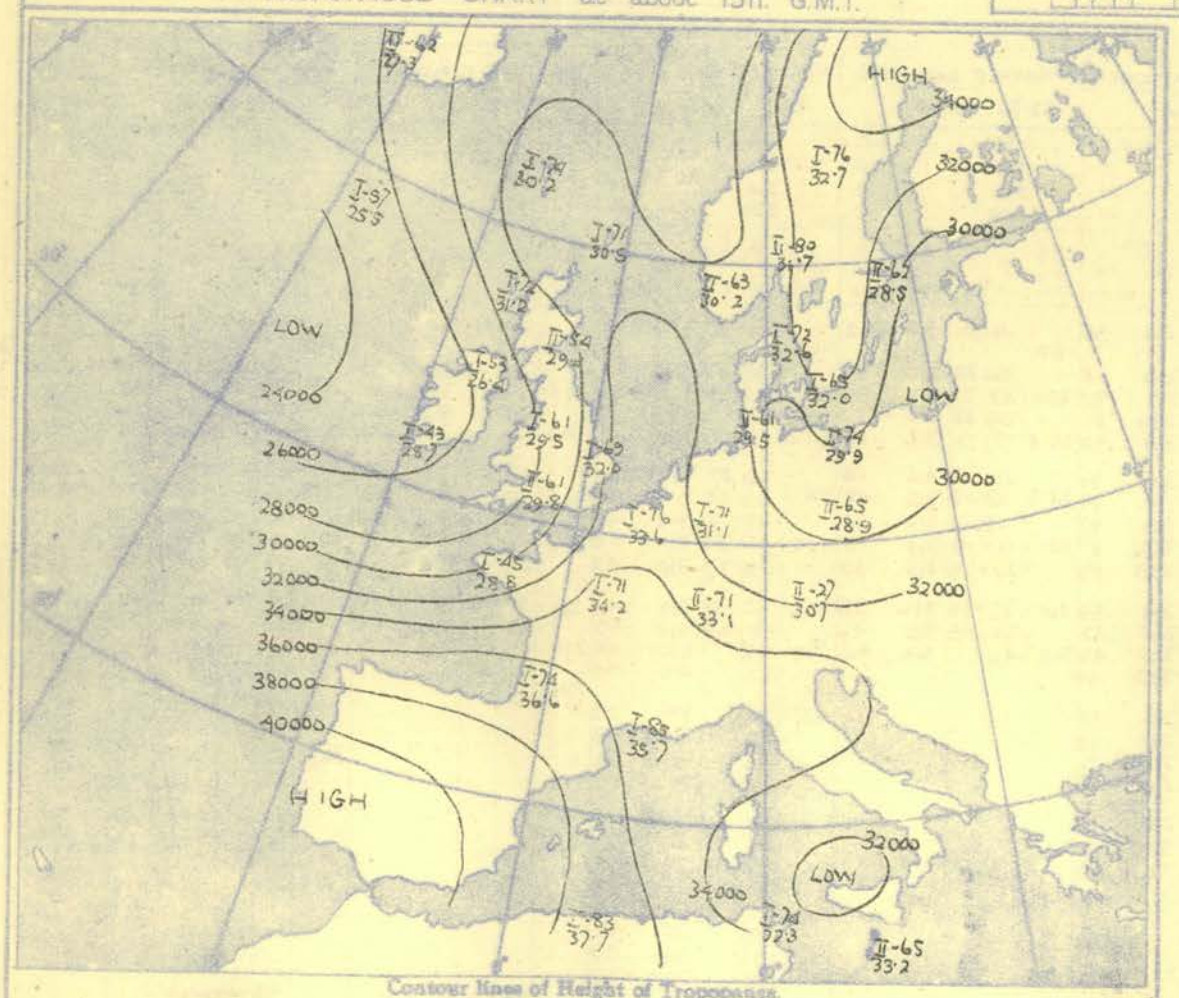
The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb



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

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

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



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

The cold trough just west of the British Isles weakened further and was finally replaced by a warmer ridge ahead of the very intense depression which had moved in over Ireland by noon.
A fresh cold trough then formed at 25 degrees West.

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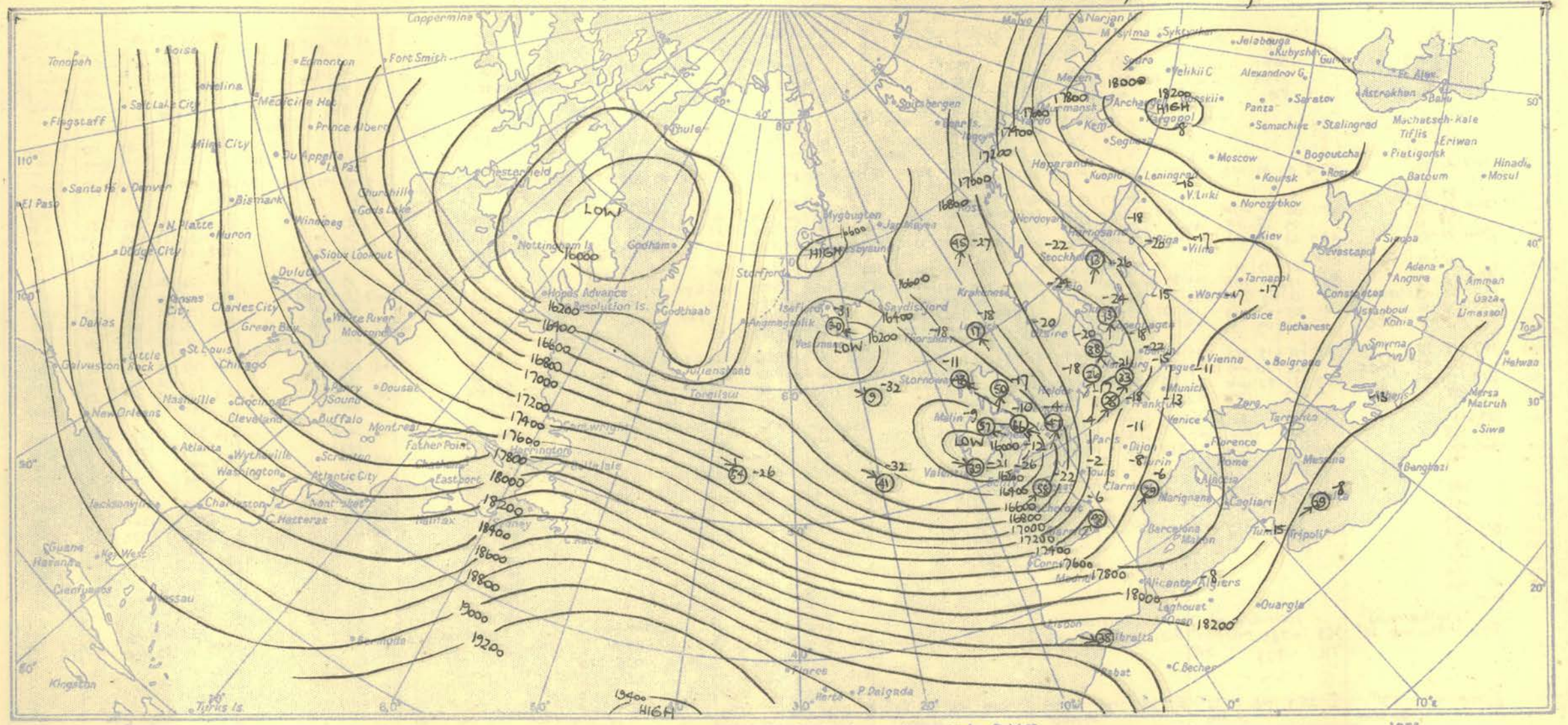
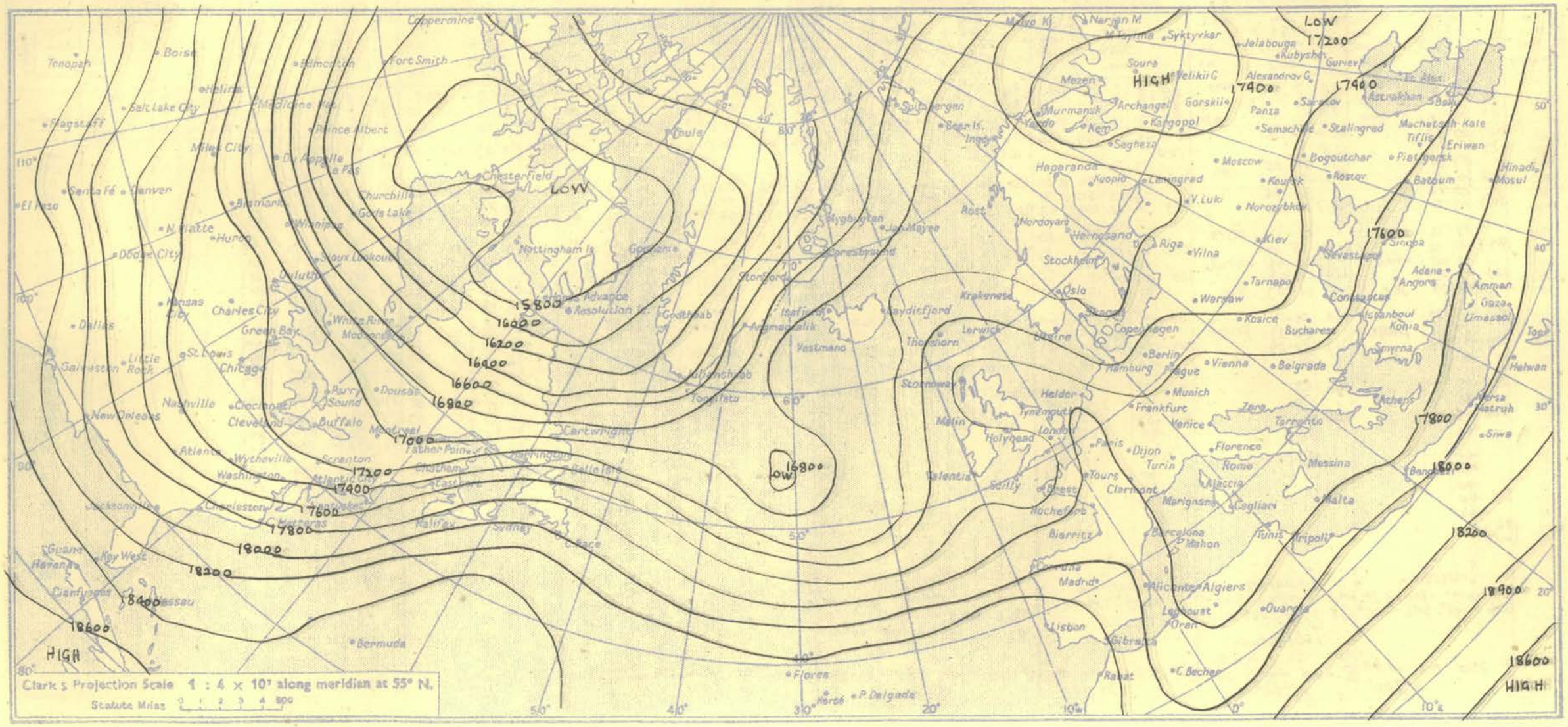
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Sunday 4th February 1951.



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



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.

Sunday 4th February 1951.

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

LERWICK

Pressure — Time: 15h G.M.T. | M.S.L.: 974·9 mb | Surf: 964·1 mb | Freezing: 900 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	41	32		
1000	7·1				
950		39	28		
900	21·0	32	23		
850		28	13		
800	51·6	21	-06		
750		16	-17		
700	85·4	12	-15		
650		04	-13		
600	124	-03	-16		
550		-12	-21		
500	167	-18	-35		
450		-26	-45		
400	219	-37	-54		
350		-48			
300	282	-63			
250		-65			
200	367	-57			
170		-57			
150		-55			
130		-55			
110		-53			
100	517	-52			
90		-51			
80		-53			
70		-54			
60	(67 mb)	-54			

For winds see page 3

Isothermal 877 - 850 mb 28°

Tropopause: I 269 mb -71° 30,500'

STORNOWAY

Pressure — Time: 15h G.M.T. | M.S.L.: 959·1 mb | Surf: 957·5 mb | Freezing: 878 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	40	34	140	15
1000	11·0				
950		40	34		
900	17·1	35	31	090	33
850		29	25	114	33
800	47·9	23	19	133	41
750		21	17	141	50
700	82·1	18	13	145	43
650		12	07	139	42
600	121	05	-01	138	45
550		+03	-09	135	45
500	165	-11	-18	195	44
450		-22	-30	149	42
400	217	-33	-42	160	38
350		-47		179	40
300	281	-61		186	51
250		-69		194	40
200	366	-57		206	28
170		-53		216	26
150		-52		217	26
130		-53		237	22
110		-53		236	20
100	517	-52		212	17
90		-51			

Isothermal 988 - 939 mb 40° 771 - 728 " 21°

Tropopause: I 257 mb -72° 31,200'

LEUCHARS

Pressure — Time: 15h G.M.T. | M.S.L.: 959·2 mb | Surf: 958·3 mb | Freezing: 986 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	40	38	140	32
1000	-11·0				
950		39	37	182	46
900	16·8	34	32	227	54
850		28	25	228	58
800	47·5	25	21	197	50
750		23	18	213	54
700	82·0	19	14	212	58
650		13	07	211	57
600	121	08	01	206	56
550		02	-06	209	51
500	166	-07	-16	207	50
450		-18	-28	207	53
400	218	-29	-40	198	52
350		-43		190	57
300	282	-59		193	68
250		-64		154	35
200	368	-56		183	23
170		-53			
150		-55			
130		-57			
110		-60			

Inversion 812 mb 24° - 785 mb 27°

Tropopause: I 284 mb -69° 29,400'

ALDERGROVE

Pressure — Time: 15h G.M.T. | M.S.L.: 947·7 mb | Surf: 938·9 mb | Freezing: 852 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	42	39	200	15
1000	-14·3				
950					
900	14·0	38	35	196	29
850		32	28	187	27
800	45·0	28	20	175	32
750		20	09	166	36
700	79·2	14	09	160	45
650		10	05	146	54
600	118	05	-03	140	54
550		00	-09	143	63
500	163	-09	-18	136	57
450		-19	-27	136	66
400	215	-31	-39	138	61
350		-46			
300	279	-51			
250		-54			
200	367	-50			
170		-53			
150		-52			
130		-52			
110		-53			
100		-52			
90	517	-52			
80		-54			
70		-53			
60		-51			

Inversion 280 mb -61° - 273 mb -58°

Isothermal 826 - 810 mb 31° 680 - 658 " 16°

Tropopause: I 322 mb -53° 26,400'

LIVERPOOL

Pressure — Time: 15h G.M.T. | M.S.L.: 952·7 mb | Surf: 950·7 mb | Freezing: 832 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	42	39	150	30
1000	-13·0				
950		42	39		
900	15·1	35	34	159	51
850		33	32	169	51
800	46·1	30	29	189	42
750		25	22	191	39
700	80·6	19	13	189	45
650		15	09	184	60
600	120	07	03	168	52
550		01	-03	167	55
500	164	-10	-19	166	66
450		+21	-26	172	57
400	216	+33	-41	180	72
350		-48		172	84
300	280	-60		176	59
250		-89		191	39
200	367	-52		189	35
170		-50		232	21
150		-54		259	31
130		-55			

Inversion 438 mb -34° - 421 mb -30°

Isothermal 826 - 810 mb 31° 680 - 658 " 16°

Tropopause: I 280 mb -61° 29,500' I 255 " -68° 31,500'

DOWNHAM MARKET

Pressure — Time: 15h G.M.T. | M.S.L.: 963·7 mb | Surf: 959·4 mb | Freezing: 898 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	39	36	145	27
1000	-9·8				
950		38	35		
900	18·2	32	20		
850		29	27		
800	49·0	25	23		
750		23	21		
700	83·4	21	15		
650		16	13		
600	123	11	07		
550		04	-01		
500	168	-04	-09		
450		-15	-21		
400	220	-27	-39		
350		-41			
300	284	-57			
250		-68			
200	370	-60			

For winds see page 3

Isothermal 876 - 850 mb 29° 742 - 710 " 22°

Tropopause: I 253 mb -69° 32,000'

LARKHILL

Pressure — Time: 15h G.M.T. | M.S.L.: 959·4 mb | Surf: 943·9 mb | Freezing: 840 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	43	40		
1000	608				
950		40	38		
900	17·6	34	34		
850		26	26		
800	48·7				
750		20	20		
700	82·8	14	13		
650		07	05		
600	121	00	-04		
550		-10	-14		
500	165	-12	-24		
450		-20	-29		
400	217	-31	-44		
350		-41			
300	281	-54			
250		-61			
200	369	-56			
170		-56			
150		-59			
130		-59			
110		-62			
100	518	-62			
90		-62			
80		-61			
70		-61			
60		-60			

Isothermal 540 - 512 mb -12°

Tropopause: I 279 mb -61° 29,800'

CAMBORNE

Pressure — Time: 15h G.M.T. | M.S.L.: 953·7 mb | Surf: 943·5 mb | Freezing: 866 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	43	41	190	50
1000	-12·8				
950	856	37	36		
900		31	30		
850	46·5	25	24		
800					
750		19	18		
700	80·7	13	11		
650		04	00		
600	119	-05	-10		
550		-15	-23		
500	162	-26	-34		
450		-35	-43		
400	213	-38	-47		
350		-40	-52		
300	277	-45			
250		-42			
200	367	-45			
170		-48			
150		-46			
130	(198 mb)	-46			
110					
100					
90					
80					
70					
60	(103 mb)	-56			

Isothermal 540 - 512 mb -12°

Tropopause: I 326 mb -43° 25,100'

VALENTIA

Pressure — Time: 15h G.M.T. | M.S.L.: 944·3 mb | Surf: 943 mb | Freezing: 870 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	40	37	330	01
1000	-15·3				
950	130	35	32	291	21
900		30	27	295	24
850	43·8	25	21	299	23
800					
750		20	16	305	22
700	78·0	14	10	304	18
650		06	01	295	23
600	116	-02	-08	287	24
550		-11	-18	302	31
500	160	-21	-28	296	39
450		-31	-38	298	46
400	211	-34	-47	298	38
350		-40	-57	293	30
300	276	-38		282	19
250		-37		268	17
200	367	-41		256	31
170		-44		259	31
150		-44		265	42
130		-47		269	32
110		-54		270	22
100	(103 mb)	-56			

Isothermal 455 - 432 mb -31°

Tropopause: I 326 mb - 43° 25,100'

LERWICK

Pressure — Time: 21h G.M.T. | M.S.L.: 971·7 mb | Surf: 961·8 mb | Freezing: 913 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	39	33		
1000	-7·7				
950		37	31		
900	20·3	30	26		
850		23	22		
800	50·7	20	16		
750		17	12		
700	84·7	14	12		
650		10	05		
600	123	02	-03		
550		-06	-08		
500	167	-13	-20		
450		-24	-31		
400	219	-37	-43		
350		-50			
300	282	-65			
250		-80			
200	366	-63			
170		-62			
150		-61			
130		-60			
110		-60			
100	513	-60			
90		-60			
80	(86 mb)	-60			
70					
60					

For winds see page 3.

Inversion 815 mb 19° - 800 mb 20° 556 " -06° - 546 " -05°

Isothermal 298 " -66° - 288 " -65°

Tropopause: I 250 mb -80° 31,900'

STORNOWAY

Pressure — Time: 21h G.M.T. | M.S.L.: 954·7 mb | Surf: 953·1 mb | Freezing: 862 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	42	36		
1000	12·5				
950		42	35		
900	15·8	37	30		
850		30	24		
800	46·7	29	20		
750		19	17		
700	80·9	15	09		
650		08	03		
600	120	06	04		
550		01	-07		
500	164	-08	-17		
450		-20	-27		
400	217	-33	-38		
350		-48			
300	280	-65			
250		-70			
200	365	-57			
170		-55			
150		-57			

For winds see page 3.

Inversion 642 mb 07° - 625 mb 09° 605 " -58° - 587 mb 06°

Isothermal

Tropopause: I 260 mb -70° 30,900'

LEUCHARS

Pressure — Time: 21h G.M.T. | M.S.L.: 956·5 mb | Surf: 955·6 mb | Freezing: 900 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	38	37	150	30
1000	-12·0				
950		37	36		
900	16·0	32	31	146	30
850		29	28	150	31
800	46·8	24	22	154	33
750		19	14	156	33
700	81·0	17	14	149	33
650		11	07	146	36
600	120	05	01	151	39
550		-02	-07	151	52
500	164	-09	-15	149	60
450		-18	-25	144	63
400	217	-29	-36	137	67
350		-44		146	70
300	281	-58		146	70
250		-58		154	43
200	368	-57		188	09
170		-54		185	13
150		-54		150	11
130		-60		150	12
110		-59			
100	516	-57			

Inversion 755 mb 19° - 734 mb 21°

Tropopause: I 282 mb - 63° 29,700'

ALDERGROVE

Pressure — Time: 21h G.M.T. | M.S.L.: 946·4 mb | Surf: 936·2 mb | Freezing: mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	40	37	150	25
1000	-16·1				
950					
900	13·0	36	33	116	36
850		31	30	109	36
800	43·9	27	24	099	35
750		22	20	096	38
700	78·3	15	11	102	35
650		08	+03	106	33
600	118	00	-16	104	33
550		-10	-26	100	26
500	160	-22	-34	099	22
450		-35	-49	098	19
400	211	-33	-51	126	31
350		-36	-54	138	29
300	276	-38	-58	154	21
250		-37	-60		

Max wind:- 742 mb 093° 42 kts

Tropopause: I 428 mb -42° 19,800'

LIVERPOOL

Pressure — Time: 21h G.M.T. | M.S.L.: 950·4 mb | Surf: 948·4 mb | Freezing: 865 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	42	36	160	30
1000	-13·8				
950		39	35		
900	14·8	36	33	163	52
850		30	29	167	49
800	45·3	28	26	174	44
750		23	18	185	39
700	79·6	17	09	183	40
650		08	-03	187	40
600	118	00	-08	187	36
550		-09	-16	181	35
500	162	-20	-27	178	32
450		-31	-37	164	36
400	213	-33	-42	159	49
350		-40	-51	158	59
300	278	-44		169	99
250		-45		171	94
200	367	-46		202	29
170		-47		187	23
150		-53		205	22
130		-54		248	21
110		-57		254	16
100	518	-57		246	15
90		-56		244	11
80		-57			

Inversion 438 mb -34° - 421 mb -30°

Tropopause: I 270 mb - 48° 30,000'

DOWNHAM MARKET

Pressure — Time: 21h G.M.T. | M.S.L.: 961·3 mb | Surf: 956·9 mb | Freezing: 855 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	40		150	16
1000	-10·6				
950		39	35		
900	17·4	36	34	183	43
850		31	28	190	43
800	48·3	25	21	194	45
750		20	12	198	44
700	82·4	14	04	197	43
650		06	-02	195	42
600	121	-02	-13	198	46
550		-11	-21	198	44
500	164	-20	-32	185	43
450		-26	-42	168	60
400	216	-33	-54	162	81
350		-43		165	84
300	280	-50		170	66
250		-58		177	57
200	367	-55		183	35
150		-62		205	22
130		-65		234	22
110		-61		235	19
100		-63		247	18
90	516	-63		248	12
80		-65		254	18
70		-62		262	15

Isothermal 793 - 782 mb 24° 467 - 450 " -26°

Tropopause: I 270 mb -66° 35,200'

LARKHILL

Pressure — Time: 21h G.M.T. | M.S.L.: 957·4 mb | Surf: 941·9 mb | Freezing: 869 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	40	37	220	35
1000	-6·5				
950		35	33	197	46
900		30	28	204	48
850	47·5	25	24	213	54
800		19	18	212	58
750	81·6	13	09	215	59
700		06	-01	217	53
650	120	-03	-08	219	53
600		-13	-19	221	62
550	163	-23	-31	220	62
500		-33	-40	214	59
450	214	-45		215	49
400		-44		205	41
350	277	-50		198	38
300		-50		201	37
250	366	-49		214	29
200		-51		214	29
170		-51		235	26
150		-57		262	23
130		-61		254	21
110	515	-64			
100	(95 mb)	-66			

Isothermal 540 - 512 mb -12°

Tropopause: I 286 mb -49° 22,300' I 306 " -50° 27,300'

CAMBORNE

Pressure — Time: 21h G.M.T. | M.S.L.: 954·3 mb | Surf: 944·1 mb | Freezing: 855 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	43	39	270	45
1000	-12·6				
950	851	39	36	262	55
900		31	30	272	61
850	46·1	24	22	274	63
800					
750		19	13	272	62
700	80·2	14	03	271	61
650		07	-04	271	61
600	119	+01	-15	269	60
550		-09	-25	266	61
500	162	-18	-37	264	61
450		-30	-46	263	54
400	214	-40	-52	246	45
350		-55		247	43
300	276	-49		237	39
250		-43		234	30
200	366	-46		246	24
170		-47		244	27
150		-48		254	25
130		-52		251	30
110		-59			

Tropopause: I 355 mb - 55° 24,300'

VALENTIA.

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

Tropopause:

HMSO Press, MO, Dunstable

No. 11635

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.

Monday 5th. February 1950. Page 1.

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

LERWICK

03h. G.M.T.
Pressure: Time 970.9 mb; M.S.L. 961.1 mb; Surf 900 mb; Freezing

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.7	40	35		
1000	-07.9				
950		39	34		
900	20.2	32	28		
850		26	22		
800	50.7	22	17		
750		18	10	See Page 3 for Winds	
700	84.7	13	06		
650		10	03		
600	12.3	04	-05		
550		-05	-14		
500	16.7	-11	-21		
450		-22	-34		
400	22.0	-34	-47		
350		-47			
300	28.3	-63			
250		-82			
200	36.7	-66			
170		-64			
150	42.8	-62			
130		-63			
110	51.4	-59			
100		-61			
90	(96mb)	-62			
80					
70					
60					

Isothermal 532 - 525 mb -08°

I 25 mb -82° 32,000'

Tropopause

STORNOWAY

03h. G.M.T.
Pressure: Time 956.7 mb; M.S.L. 995.1 mb; Surf 875 mb; Freezing

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.4	42	36	140	10
1000	11.9				
950		41	34		
900	16.3	36	29	19	19
850		30	23	137	23
800	47.1	25	15	136	25
750		20	11	123	23
700	81.2	13	07	126	29
650		06	-01	126	36
600	12.0	01	-04	126	47
550		-03	-09	125	57
500	16.4	-10	-17	116	59
450		-17	-26	111	65
400	21.6	-29	-40	107	72
350		-44		113	71
300	28.0	-58		110	62
250		-61		118	43
200	36.7	-55		156	20
170		-54		196	25
150	42.9	-54		217	22
130		-53			

Inversion 463 mb -18° - 450 mb -17°

Isothermal 800 -780 mb 25° 576 - 535 " -03°

I 275 mb - 36° 29,800'

Tropopause

LEUCHARS

03h. G.M.T.
Pressure: Time 956.7 mb; M.S.L. 955.8 mb; Surf 866 mb; Freezing

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.2	42	38	140	25
1000	-11.9				
950		41	37		
900	16.3	36	32	133	34
850		30	26	134	36
800	47.2	25	21	132	37
750		19	14	132	42
700	81.2	12	07	137	44
650		05	-01	143	49
600	11.9	-02	-09	147	47
550		-12	-21	150	46
500	16.3	-22	-33	137	50
450		-33	-45	135	51
400	21.4	-38	-52	142	48
350		-45		132	57
300	27.8	-52			
250		-54			
200	36.6	-51			
170		-60			
150	42.8	-52			
130		-59			
110		-60			
100		-60			
90		-59			
80		-59			
70		-62			
60	(67mb)	-63			

Inversion 436 mb 37° - 425 mb 34°

II 300 mb -52° 27,800'

Tropopause

ALDERGROVE

03h. G.M.T.
Pressure: Time 948.4 mb; M.S.L. 939.3 mb; Surf 870 mb; Freezing

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.6	37	37	CALM	
1000	-14.0				
950					
900	14.0	35	34	118	12
850		30	29	120	13
800	44.9	24	22	123	13
750		18	14	106	09
700	78.9	12	06	098	08
650		05	-03	094	15
600	11.7	-02	-11	080	13
550		-12	-21	088	14
500	16.1	-22	-33	086	15
450		-34	-44	084	20
400	21.1	-40	-53	102	07
350		-43		127	08
300	27.5	-47		161	06
250		-49		160	10
200	36.4	-51		186	17
170		-52		186	13
150	42.6	-55		205	15
130		-55		232	14
110	(123mb)	-55			

I 415 mb -45° 20300'
I 375 mb -44° 22,700'

Tropopause

LIVERPOOL

03h. G.M.T.
Pressure: Time 951.4 mb; M.S.L. 949.4 mb; Surf 860 mb; Freezing

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.6	39	35	160	10
1000	-13.2				
950		41	37		
900	14.7	35	31	173	25
850		31	24	189	32
800	45.5	25	19	201	34
750		20	15	205	36
700	79.6	12	08	201	38
650		04	00	199	40
600	11.8	-04	-09	203	39
550		-13	-19	200	39
500	16.1	-25	-32	200	39
450		-38	-46	201	41
400	21.2	-39	-49	197	40
350		-43		194	32
300	27.6	-48		183	28
250		-47		192	23
200	36.5	-49		182	27
170		-49		204	25
150		-53		218	21
130		-56		223	28
110	(113mb)	-59			

Inversion 432 mb -41° 405 mb -38°

I 432 mb -41° 19300'
I 319 mb -48° 26,200'

Tropopause

DOWNHAM MARKET

03h. G.M.T.
Pressure: Time 961.8 mb; M.S.L. 957.5 mb; Surf 871 mb; Freezing

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01.2	42	38	165	18
1000	-10.4				
950		41	37		
900	17.7	35	33	198	45
850		30	27	207	50
800	48.6	25	21	216	48
750		19	12	217	51
700	82.7	14	05	219	57
650		07	-09	221	55
600	12.1	-01	-14	220	53
550		-09	-26	212	58
500	16.5	-18	-37	202	54
450		-31	-45	199	55
400	21.6	-44		196	54
350		-48		194	50
300	27.9	-51		194	40
250		-48		192	33
200	36.7	-49		194	33
170		-48		201	24
150	43.1	-50		206	21
130		-55		208	20
110		-58		219	20
100	51.8	-62		223	18

I 375 mb -51° 23,000'

Tropopause

LARKHILL

03h. G.M.T.
Pressure: Time 962.2 mb; M.S.L. 946.6 mb; Surf 878 mb; Freezing

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04.4	41	35	235	25
1000	-10.3				
950					
900	17.8	35	30	230	42
850		28	24	232	48
800	48.4	23	18	235	52
750		18	11	237	49
700	82.4	12	04	238	45
650		05	-06	237	48
600	12.1	-03	-15	234	55
550		-14	-22	227	62
500	16.4	-25	-37	222	58
450		-37	-48	214	47
400	21.4	-48		218	41
350		-58		217	37
300	27.6	-55		214	38
250		-52		215	31
200	36.5	-49		219	24
170		-50		215	26
150	42.8	-51		220	25
130		-55		232	21
110		-64		234	17
100	51.5	-65		249	16
90		-66			

I 340 mb -60° 24,900'

Tropopause

CAMBORNE

03h. G.M.T.
Pressure: Time 964.1 mb; M.S.L. 953.8 mb; Surf 843 mb; Freezing

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.9	43	34	270	40
1000	-09.8				
950		43	34		
900	17.7	38	30	272	48
850		33	26	273	50
800	48.7	26	19	273	49
750		20	13	271	47
700	82.8	13	04	268	46
650		06	-06	262	47
600	12.1	-02	-12	256	46
550		-11	-24	252	47
500	16.5	-21	-37	248	42
450		-32	-47	243	33
400	21.6	-43		248	30
350		-54		252	29
300	27.8	-56		244	31
250		-48		246	29
200	36.7	-46		228	21
170		-45			
150	(169mb)	-45			

I 340 mb -57° 25,000'

Tropopause

VALENTIA

03h. G.M.T.
Pressure: Time 963.1 mb; M.S.L. 962 mb; Surf 885 mb; Freezing

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.3	42	30		
1000	-10.0				
950		41	28		
900	18.2	34	29		
850		27	19		
800	48.9	20	13		
750		13	05		
700	82.5	06	-03		
650		-01	-12		
600	12.0	-09	-19		
550		-19	-29		
500	16.3	-29	-38		
450		-37	-47		
400	21.3	-47			
350		-57			
300	27.5	-57			
250		-53			
200	36.3	-50			
170		-50			
150		-52			
130		-56			
110	(112mb)	-58			

I 330 mb -64° 25,400'

Tropopause

LERWICK

09h. G.M.T.
Pressure: Time 971.4 mb; M.S.L. 961.6 mb; Surf 900 mb; Freezing

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.7	40	38		
1000	-07.8				
950		39	37		
900	20.3	32	31		
850		26	26		
800	50.9	22	22		
750		17	17	See Page 3 for Winds	
700	84.8	12	11		
650		05	01		
600	12.3	-03	-10		
550		-09	-20		
500	16.7	-15	-28		
450		-20	-33		
400	21.9	-33	-44		
350		-46			
300	28.2	-61			
250		-68			
200	36.8	-59			
170		-56			
150		-56			
130		-57			
110		-56			
100	51.7	-56			
90		-58			
80		-59			
70	(74mb)	-53			
60					

Inversion 436 mb -16° - 430 mb -13°

I 370 mb -68° 30,500'

Tropopause

STORNOWAY

09h. G.M.T.
Pressure: Time 958.2 mb; M.S.L. 956.6 mb; Surf 870 mb; Freezing

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	11.5	43	38		
1000					
950		42	37		
900	16.7	36	32		
850		29	26		
800	47.5	23	21		
750		15	12		
700	81.3	07	03		
650		02	-02		
600	11.9	-04	-09		
550		-13	-19		
500	16.3	-24	-31		
450		-36	-45		
400	21.3	-44			
350		-45			
300	27.7	-48			
250		-51			
200	36.5	-50			
170		-51			
150	42.8	-53			
130		-53			
110		-53			
100	51.6	-52			
90		-53			
80		-54			
70					
60					

I 410 mb -46° 20700'

Tropopause

LEUCHARS

09h. G.M.T.
Pressure: Time 956.9 mb; M.S.L. 956.0 mb; Surf 875 mb; Freezing

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.2	40	37	140	15
1000	-11.9				
950		39	36		
900	16.3	36	33	142	25
850		30	27	147	30
800	47.1	25	21	150	27
750		20	16	149	27
700	81.2	13	09	145	33
650		06	01	140	39
600	12.0	-02	-08	140	36
550		-10	-19	146	35
500	16.3	-19	-26	145	36
450		-29	-37	147	36
400	21.4	-41		154	35
350		-42		156	31
300	27.6	-46		153	30
250		-48		168	23
200	36.8	-46		154	18
170		-51		171	19
150	43.1	-50		179	22
130		-50		192	16
110		-58		217	17
100	51.9	-53		227	15
90		-53		225	10
80		-53		211	08
70					
60					

Isothermal 755 - 720 mb 19°

I 400 mb -46°

Tropopause

ALDERGROVE

09h. G.M.T.
Pressure: Time 953.5 mb; M.S.L. 945.6 mb; Surf 863 mb; Freezing

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.6	38	35	CALM	
1000	-12.3				
950					
900	15.8	35	31	306	09
850		31	26	310	08
800	46.7	27	23	310	10
750		20	12	308	12
700	80.9	15	04	310	12
650		07	-04	307	12
600	11.9	-02	-14	306	13
550		-11	-27	310	16
500	16.3	-21	-37	312	24
450		-34	-47	310	28
400	21.4	-46		295	18
350		-44		252	10
300	27.7	-46		231	12
250		-45		202	10
200	36.9	-47		209	12
170		-47		211	09
150	43.0	-46		211	10
130		-48		216	11
110		-48		225	15
100	51.9	-50		236	13
90		-49		275	09
80		-50			
70					
60					

Isothermal 858 - 825 mb 27°
366 - 338 " -46°

I 400 mb -44° 21,370'
II 326 mb -49° 25,900'

Tropopause

LIVERPOOL

09h. G.M.T.
Pressure: Time 958.3 mb; M.S.L. 956.3 mb; Surf 880 mb; Freezing

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00.6	40	35	190	08
1000	-11.4				
950		39	35		
900	16.7	35	31	208	27
850		28	24	220	30
800	47.5	23	18	226	32
750		17	11	226	33
700	81.4	10	06	224	34
650		04	-01	222	36
600	11.9	-03	-09	220	30
550		-12	-19	217	29
500	16.3	-22	-29	212	33
450		-33	-39	210	37
400	21.4	-44		216	36
350		-46		211	34
300	27.7	-49		209	24
250		-49		199	24
200	36.6	-46		198	22
170		-44		193	18
150		-59		188	20
130		-58		193	24
110		-57		202	21
100	51.9	-58		207	17
90		-61			
80	(88mb)	-62			
70					
60					

Inversion 400 mb 49° - 387 mb 42°

Isothermal 838 - 825 mb 27°
366 - 338 " -46°

II 326 mb. -49° 25,900'

Tropopause

DOWNHAM MARKET

09h. G.M.T.
Pressure: Time 968.2 mb; M.S.L. 963.9 mb; Surf 847 mb; Freezing

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01.2	39	36	165	22
1000	-08.6				
950		38	34	191	42
900	19.5	36	32	201	45
850		32	29	214	45
800	50.5	27	17	213	44
750		20	09	211	41
700	84.7	14	00	214	40
650		07	-09	214	36
600	12.3	-03	-19	207	37
550		-13	-27	200	41
500	16.6	-24	-37	193	45
450		-36	-48	204	48
400	21.7	-49		195	45
350		-52		207	45
300	27.9	-59		201	38
250		-51		200	32
200	36.7	-48		189	29
170		-50		203	25
150	43.0	-50		203	24
130		-52		204	24
110		-53		195	22
100	51.8	-59		206	21
90		-60		209	18
80		-62			
70					
60					

Inversion 379 mb -31° - 342 mb -51°

I 303 mb -61° 27,600'

Tropopause

LARKHILL

09h. G.M.T.
Pressure: Time 969.1 mb; M.S.L. 953.5 mb; Surf 890 mb; Freezing

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04.4	39	35	240	18
1000	-08.4				
950		39	35		
900	19.8	33	29	234	31
850		28	25	236	33
800	50.5	22	19	235	38
750		16	10	230	40
700	84.4	09	05	233	37
650		02	-02	239	35
600	12.2	-07	-11	236	35
550		-17	-22	242	35
500	16.5	-27	-33	247	33
450		-37	-44	233	30
400	21.6	-44		226	30
350		-54		229	33
300	27.8	-57		211	31
250		-51		215	29
200	36.6	-51		212	25
170		-48		211	25
150	42.9	-47		237	25
130		-49		243	21
110		-53		212	19
100	51.7	-56		221	21
90		-56		275	11
80	(87mb)	-54		239	10
70		-55		232	10
60					

I 311 mb -61° 26,900'

Tropopause

CAMBORNE

09h. G.M.T.
Pressure: Time 971.0 mb; M.S.L. 960.6 mb; Surf 886 mb; Freezing

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.9	42	34	260	25
1000	-07.9				
950		41	33	260	39
900	20.3	34	28	269	32
850		27	22	274	30
800	51.0	22	12	271	29
750		15	03	272	32
700	84.7	08	-01	273	34
650		01	-09	274	30
600	12.3	-08	-20	270	27
550		-17	-30	287	
500	16.6	-27	-39	245	22
450		-30	-42	243	18
400	21.6	-48		248	15
350		-60		244	14
300	27.7	-55		248	19
250		-51		235	21
200	36.6	-48		244	17
170		-46		246	18
150	42.9	-47		219	20
130		-52		248	24
110		-55		239	10
100	51.7	-60		233	15
90		-60			
80	(87mb)	-60			
70					
60					

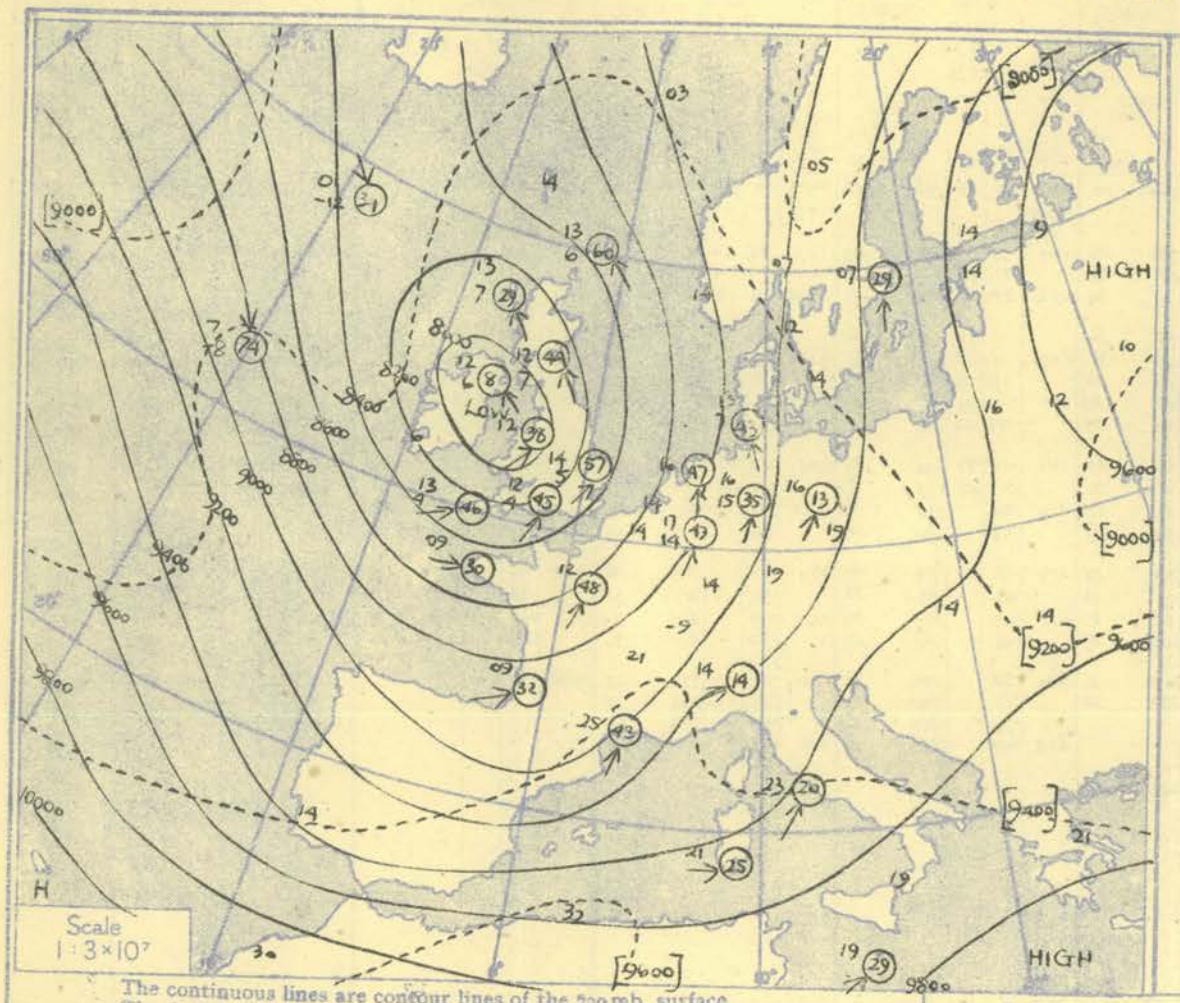
Inversion 379 mb -31° - 342 mb -51°

I 331 mb -65° 25,300'

Tropopause

Monday 5th. February 1951.

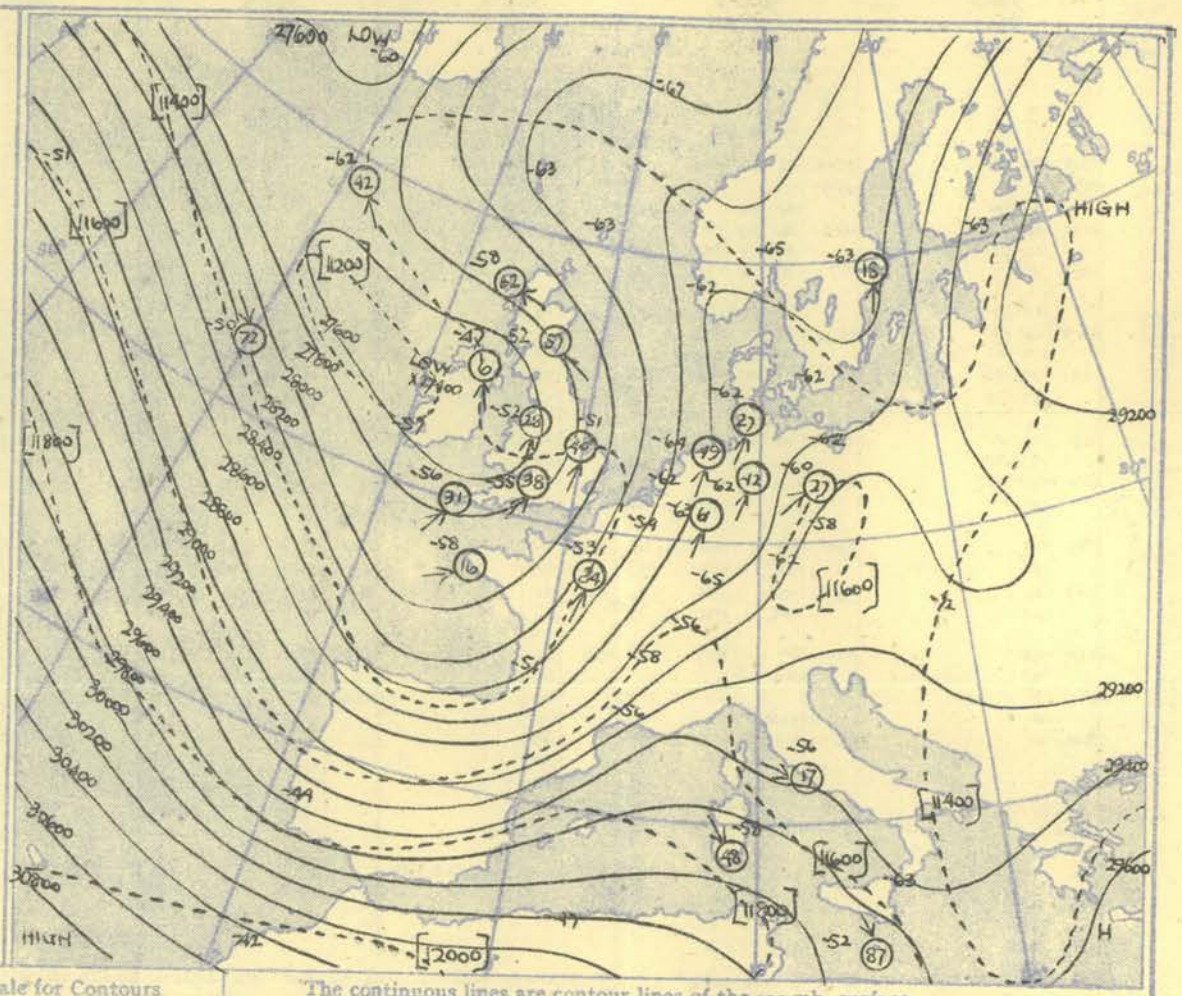
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03 h G.M.T.



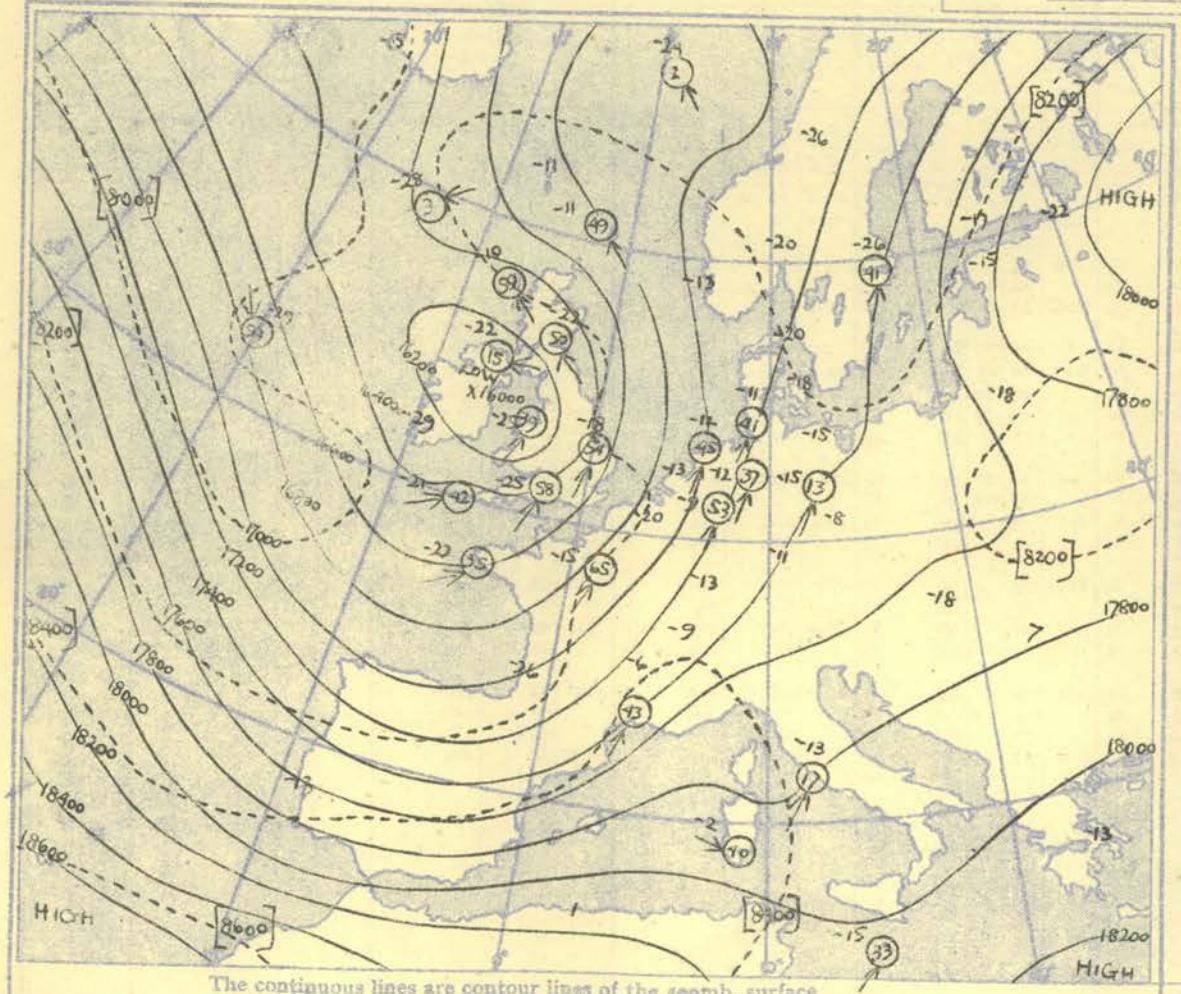
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000 – 700 mb.

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

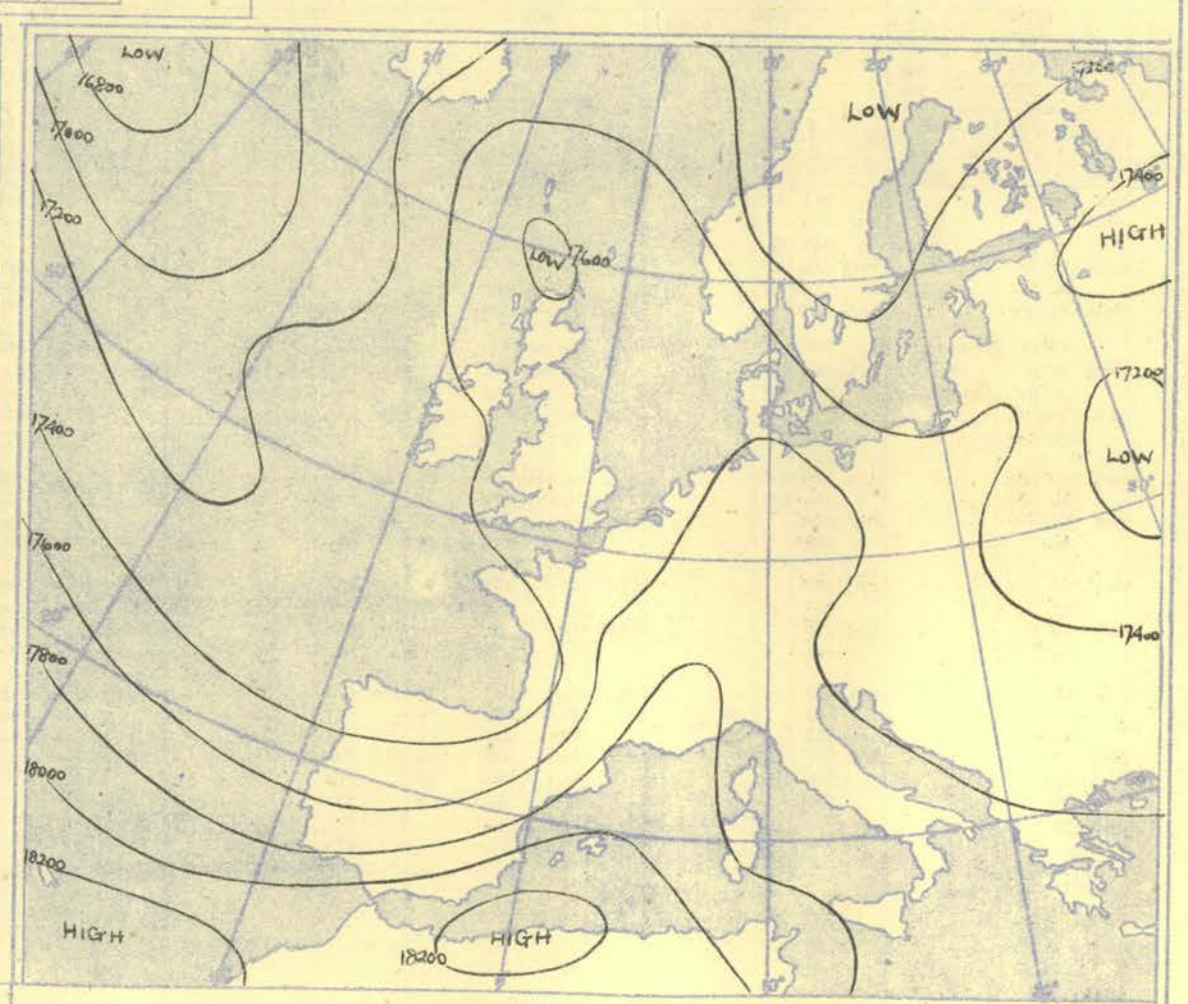
100 80 40 30 20 15 10 knots



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

Position	43·2N 17·0W			39·5N 12·2W			51·3N 00·4E		
Time	15h			17h			1427h		
Pressure M.S.L. (mb)	1009			1008			977·5		
Pressure Surf (mb)	1002			998			966·3		
Pressure Freezing (mb)	745			740			878		
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.
Surf		55	48		57	52	03·1	42	38
1000	2·5			1·5			-6·1		
950		49	46		52	46	5·0	43	36
900		41	40		48	32	22·1	34	34
850		36	35		45	22		28	
800		35	21		39	20	52·8	25	
750		33	18		33	25		18	
700	97·4	26	18	97·3	28		86·7	09	
650		20			20			01	
600		15			17		125	-07	
550		05			09			-17	
500	182	-03		182	-02		168	-26	
450								-39	
400							218	-47	
350									
300									
250									
200									
170									

43·2N 17·0W: cloud:- 4/8 Sc 990-900 mb; 2/8 Cu 940-800 mb. Surface wind NW 34-40 Kts

39·5N 12·2W: Cloud:- 3/8 Cu 940-750 mb; 3/8 Sc 940-910 mb. Surface wind NW 34·40 Kts

51·3N 00·4E: cloud:- 4/8 Cu 900-850 mb; Distant Cu tops estimated 550 mb. Inversion 966 mb 42°- 949" 43°

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

Place	Lerwick		Leuchars		Aldergrove		Lerwick		Shoeburyness		Lerwick		Lympne		Lerwick		[illegible]		Downham Market	
Time	03h		02h		03h		09h		10h		15h		15h		21h		15h		22h	
Type	PILAR						PILAR				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.	120	39	220	20	230	15	120	35	180	12	130	34	210	11	130	40	270	30	170	10
1,000	125	60	210	33	240	16	130	51	220	15	132	65	210	24	139	52	278	30	220	20
2,000	129	59	220	30	250	24	130	51	230	19	134	63	220	24	137	57	278	30	220	23
3,000	130	59	320	27	260	24	131	51	230	17	137	61	230	23	139	60	283	28	240	25
4,000	134	56	220	25	270	29	132	51	230	17	140	58	240	21	140	60	286	26	240	27
5,000	136	56	220	24	270	30	136	53	230	17	143	56	230	23	143	59	286	27	240	29
6,000	138	57	220	24	270	29	137	51	230	18	144	55	240	25	146	57	286	26	240	30
8,000	138	61	230	24	240	21	140	46	210	24	149	53	240	31	146	52	286	27	240	32
10,000	138	60	230	25	230	15	144	48	200	28	156	50	240	26	144	48	276	27	240	34
14,000	137	45	230	24	200	18	142	53	210	33	151	50	250	25	139	49	272	28	250	34
18,000	132	49	200	26	180	21	121	76	200	33	141	44	(12,000')		140	45	275	26	240	39
24,000	142	49	210	15	180	21	112	73	220	33	132	57			144	48	282	22	230	48
30,000	146	36	170	8	240	14	132	52	240	24	134	51			152	43	272	15	250	27
40,000	(26,000')		190	18	260	11	156	24	220	23	138	23			159	27	244	20	260	21
50,000			(39,000')		250	13			198	28	194	16			201	15	237	16	250	12
60,000									49,000'		218	22							250	04
70,000																			170	05
																			130	05
																			(78,000')	

NEPHOSCOPE OBSERVATIONS

Place										
Time Type										
Dir. Vel.										

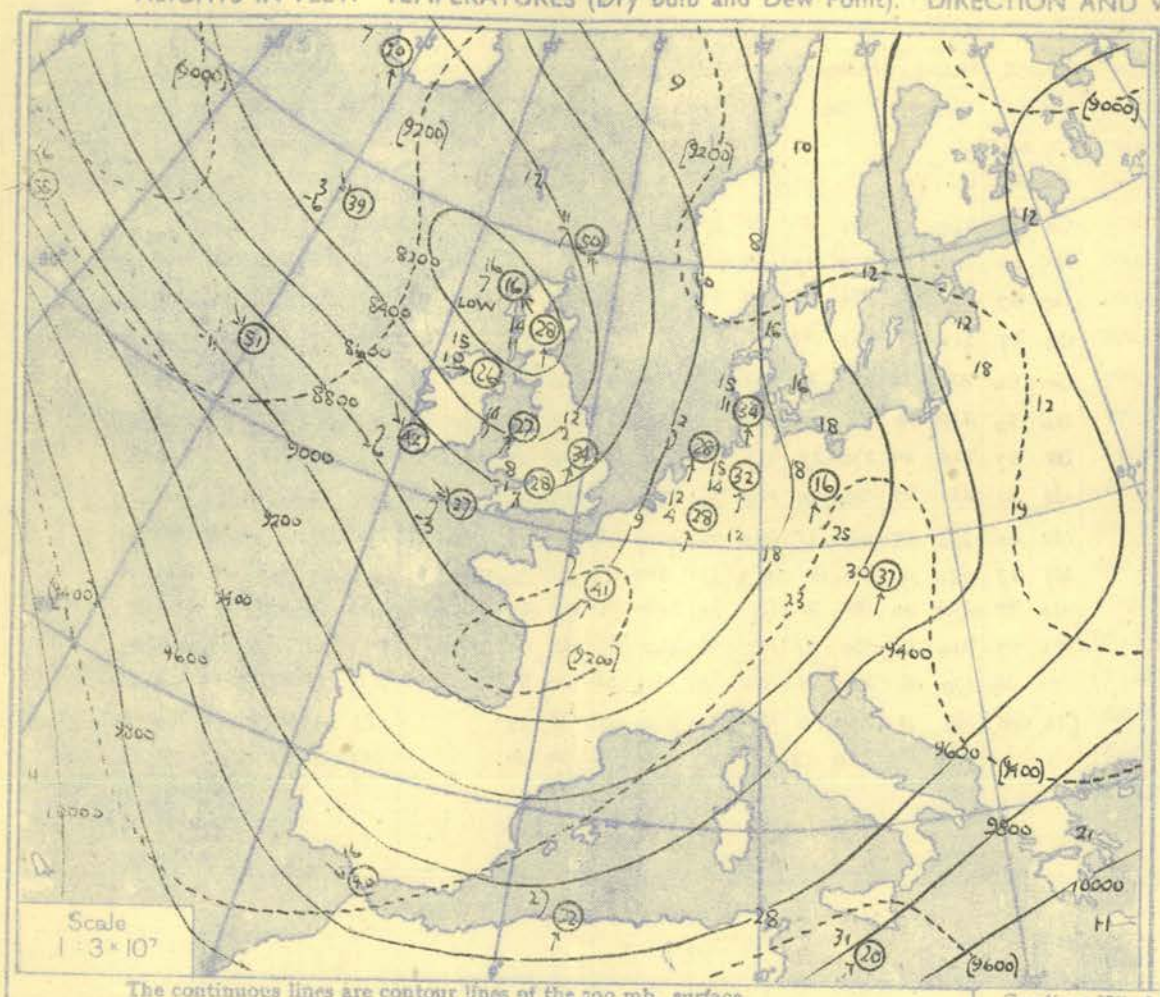
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	WEATHER EXPLORER.					WEATHER EXPLORER					WEATHER EXPLORER					WEATHER EXPLORER.				
Lat/Long	52·9N 20·6W					53·0N 20·6W					52·5N 20·3W					52·7N 19·7W				
Time G.M.T.	03h					09h					15h					21h				
Pressure M.S.L. mb	981					989					990					988				
Pressure Surf mb	981					989					990					988				
Pressure Freezing mb	900					940					920					920				
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
Surf		40	37	310	45		39	37	300	40		40	37	305	35		41	37	280	33
1000	-5·0					-3·1					-27					3·2				
950		38	31	320	67		33	20	313	56		36	29	299	51		36	33	290	42
900	23·0	32	21	320	72	24·8	27	15	315	60	25·2	29	24	296	54	24·8	30	29	290	42
850		25	13	319	74		20	09	312	63		28	11	293	58		24	22	290	40
800	53·6	19	06	319	74	55·0	14	02	309	62	55·5	15	05	289	51	55·2	18	16	290	45
750		14	01	319	79		09	-05	306	64		09	02	286	50		12	08	290	42
700	87·3	07	-08	322	74	88·3	03	-12	304	60	88·8	01	-11	290	51	88·8	08	04	290	48
650		-01	-17	323	65		-02	-34	305	61		00	-20	305	53		04	-07	290	54
600	125	-10	-24	323	63	126	-07	-48	313	73	127	-05	-22	307	45	127	-01	-15	290	55
550		-20	-33	325	61		-13	-52	317	84		-11	-29	306	65		-06	-22	290	59
500	168	-29	-41	321	99	169	-24	-57	315	91	170	-18	-38	305	72	271	-14	-26	290	73
450		-41		321	63		-31	-48	316	91		-27	-48	305	78		-19	-27	290	86
400	218	-43		321	63	220	-40	-60	316	102	222	-35	-54	311	86	223	-32	-39	290	107
350		-48		321	65		-47		317	118		-46		313	109		-43		290	120
300	281	-50		321	72	283	-57		320	118	285	-56		309	118	287	-53		290	119
250		-52		321	76		-58		320	93		-59		306	105		-59		303	114
200	369	-53		321	73	370	-56		315	78	372	-57		305	78	374	-52		314	103
170		-53					-57		315	75		-54		307	73		-51		311	72
150	(175mb)						-58		315	66		-55		313	62		-55		293	70
130							-59					-55		320	48		-59			
110						(138 mb)						-59		319	42		-60			
100											521	-58		322	42	(125mb)				
90												-61		309	42					
80												-58		305	36					
70																				
60																				
Notes	Inversion. 425 mb -41°- 422 mb -40°. Isothermal. 450- 425 mb -41°										Inversion 696 mb 0°- 680 mb 4°					Isothermal. 500- 490 mb 14°; 319- 297" -53°. Inversion 270 mb -53°- 258 mb -56°				
Tropopause	II 382 mb -46° 22·700					I 282 mb -59° 29,700					I 260 mb -60° 31·600					I 229 mb -64° 34·600				

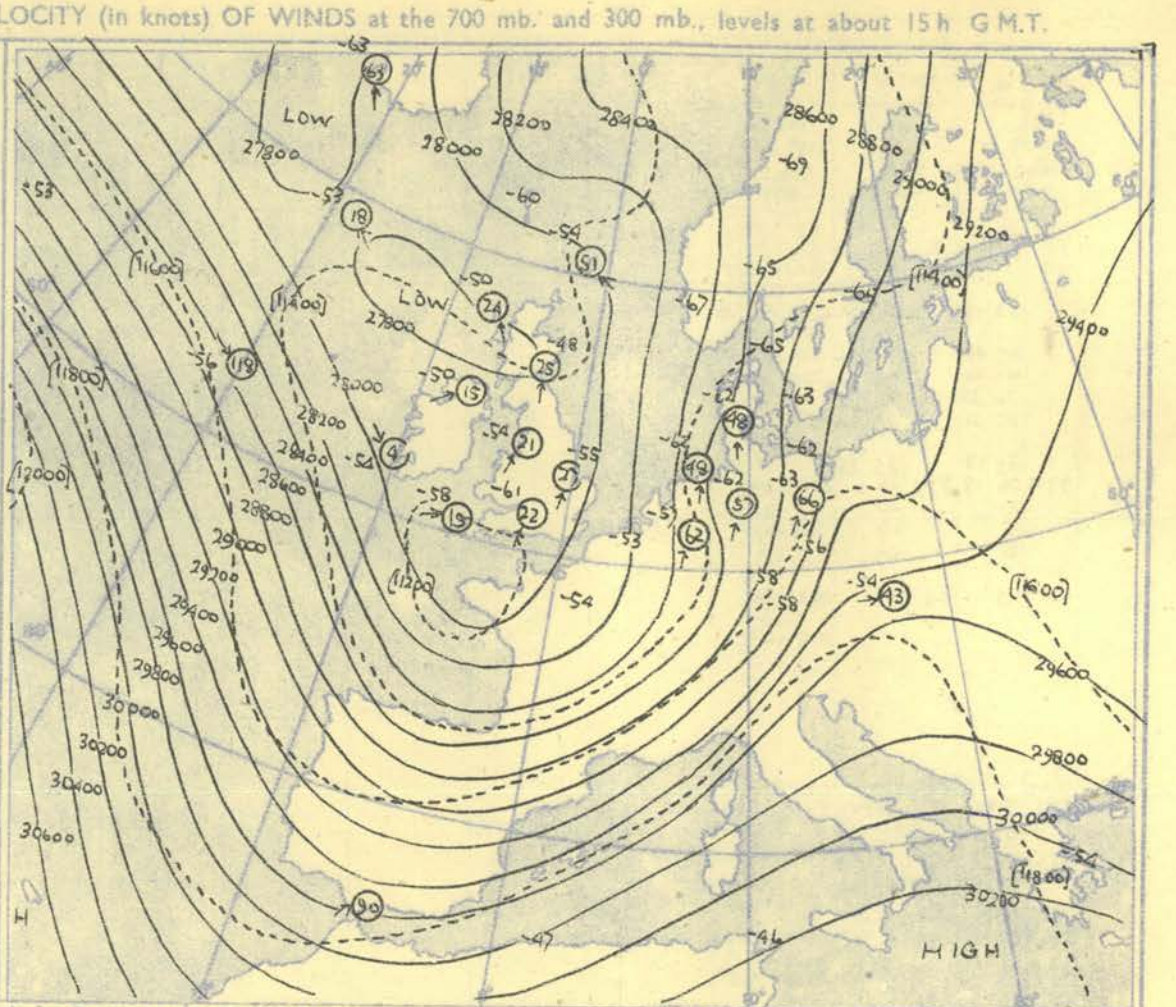
Ship	WEATHER RECORDER					WEATHER RECORDER					WEATHER RECORDER					WEATHER RECORDER				
Lat/Long	58·9N 18·7W					58·9N 18·5W.					58·9N 18·8W					59·1N 19·1W				
Time G.M.T.	03h					09h					15h					21h				
Pressure M.S.L. mb	971					968					968					968				
Pressure Surf mb	971					968					968					968				
Pressure Freezing mb	910					915					940					930				
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
Surf		40	29	310	25		40	39	300	35		35	34	290	28		36	36	290	30
1000	-78					-87					-8·7					-86				
950		37	26	318	28		37	35	318	36		33	26	307	36		34	33	277	29
900	20·1	30	22	321	30	193	30	23	331	37	191	27	19	308	37	193	28	25	297	31
850		22	15	321	33		24	15	331	36		21	13	312	45		22	18	315	42
800	50·5	15	05	325	35	49·8	19	09	311	29	49·3	15	07	315	39	49·6	15	09	314	42
750		07	-06	328	34		14	01	313	28		10	02	312	39		10	02	312	35
700	83·7	01	-18	324	34	83·5	06	-12	322	30	82·7	03	-06	314	39	83·0	03	-05	310	29
650		-07	-30	324	27		-02	-27	318	34		-04	-12	306	34		-04	-12	317	24
600	121	-15	-37	327	23	121	-11	-26	335	28	120	-12	-21	300	36	120	-12	-18	Calm	
550		-22	-42	328	17		-17	-31	323	06		-19	-38	140	30		-20	-26	136	13
500	163	-28	-47	060	03	164	-20	-42	144	14	163	-19	-32	146	21	163	-22	-29	130	24
450		-30	-51	143	15		-29	-42	145	20		-27	-39	165	22		-32	-38	134	19
400	214	-39	-56	153	30	215	-40	-52	155	23	214	-37	-49	158	21	214	-40	-45	130	21
350		-53		155	42		-50		145	33		-45		130	18		-42		Calm	
300	277	-62		144	42	278	-60		148	26	278	-53		133	18	278	-46		303	15
250		-62					-56		160	18		-49					-45		302	26
200	363	-58					-57									368	-45		291	27
170		-59				(225mb)											-47		304	46
150		-59															-48		305	43
130		-58															-50		298	37
110		-58															-51		277	30
100	511	-57														520	-52		279	30
90		-58															-53			
80		-58														(92mb)				
70		-57																		
60		-56																		
	(63mb)																			
Notes	Inversion 465 mb 32°- 455 mb -30°. Isothermal. 455- 450 mb -30°					Isothermal. 573- 518 mb -17°					Inversion. 535 mb -20°- 526 mb -16°; 375- -43°- 365" -42°					Isothermal. 565- 550 mb -20°; 535- 520" -17°; 383- 357- -43°. Inversion. 542 mb -21°- 535 mb -17°; 357" -43°- 340" -41°				
Tropopause	I 285 mb -65° 28·800					I 285 mb -63° 29·000					I 300 mb -53° 27·800					I 300 mb -46° 27800				

Monday 5th February 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

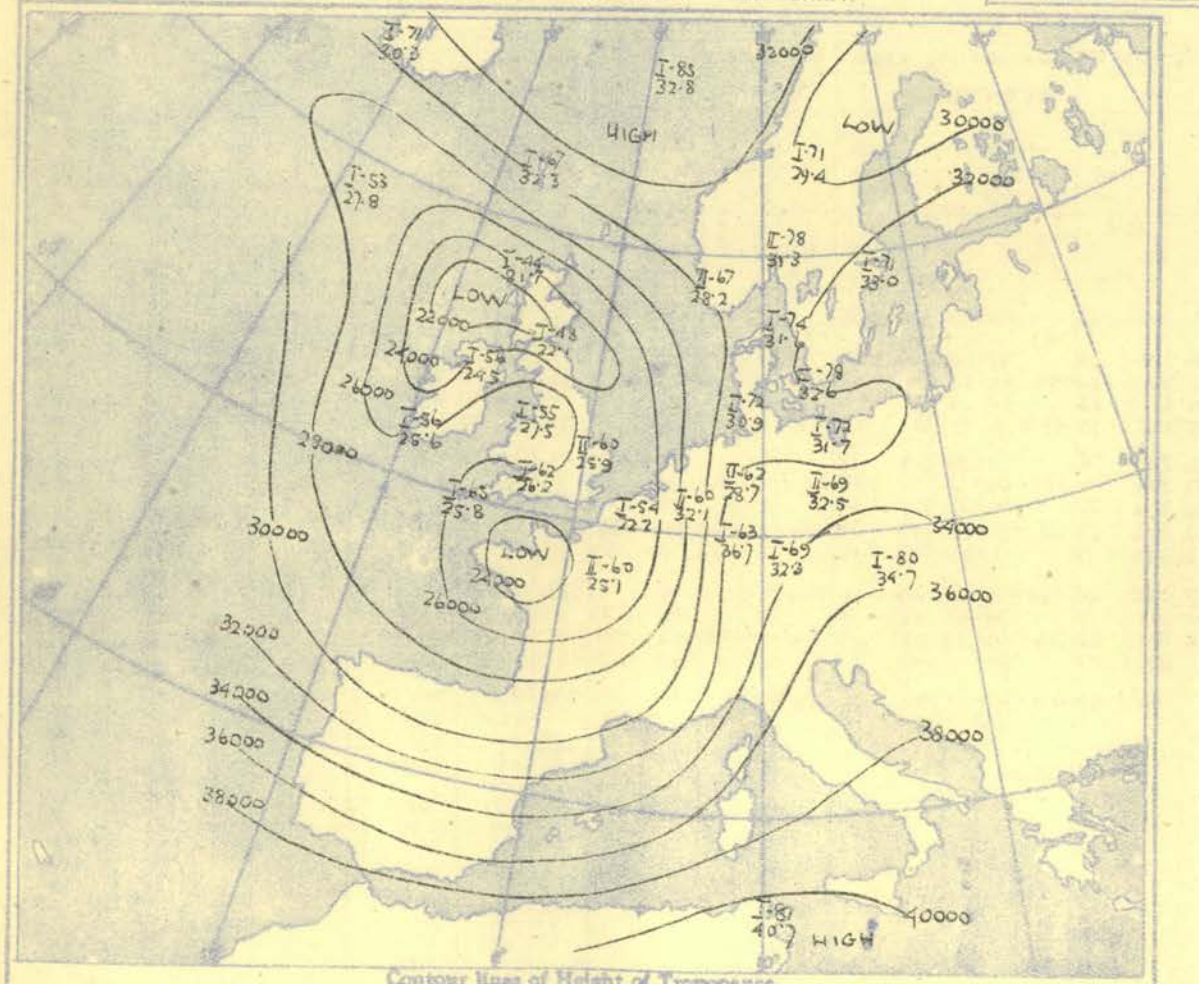


The continuous lines are contour lines of the 300mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

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 over France and Eastern Britain moved slowly east to Eastern Germany and cooled by occlusion. The cold trough in the Eastern Atlantic swung into France and also enveloped the British Isles with the exception of Scotland. A new warm ridge South of 55°N advanced rapidly eastward to the Central Atlantic.

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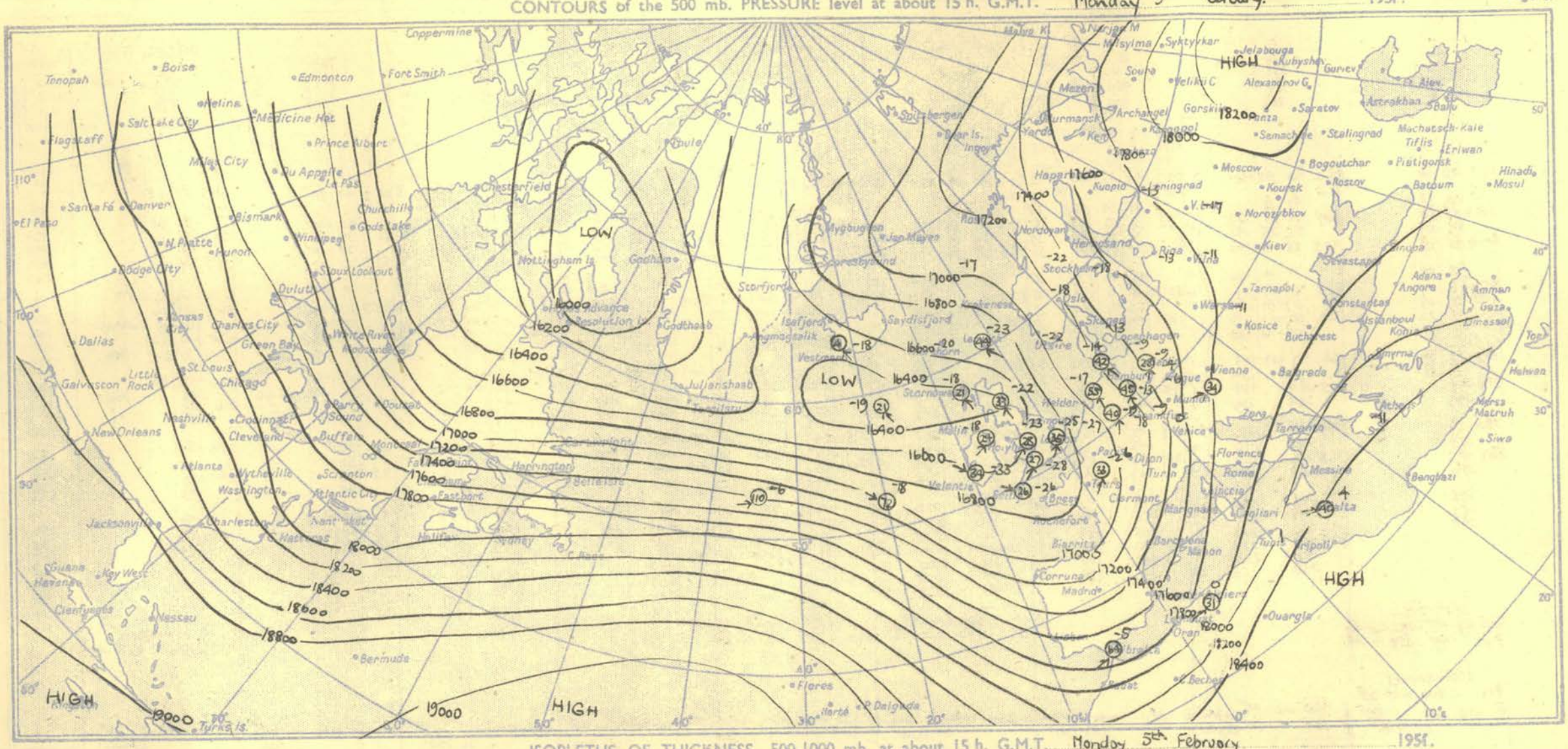
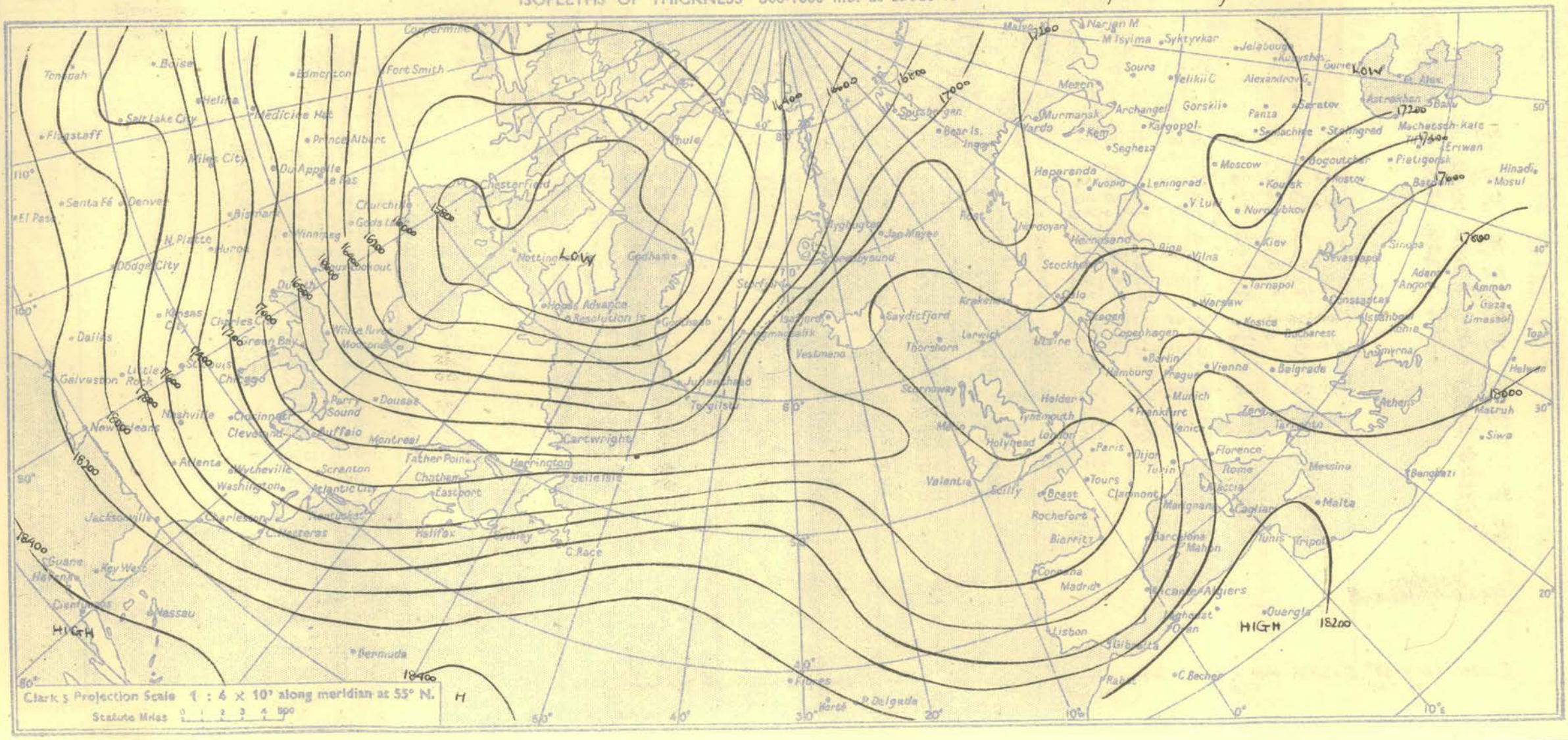
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

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



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



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Monday 5th February 1951.

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

LERWICK

Pressure: 15h — Time G.M.T.; M.S.L. 971·3 mb; Surf 961·3 mb; Freezing 878 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	42	40		
	-7·9				
1000		40	39		
950	20·3	35	35		
		29	29		
900	60·6	25	25		
		18	17		
850	84·6	11	07		
		07	-08		
800	123	00	-22		
		-11	-31		
750	166	-23	-40		
		-35	-51		
700	217	-48			
		-49			
650	280	-54			
		-53			
600	367	-52			
		-52			
550		-55			
		-57			
500		-55			

Inversion 400 mb -48° - 392 mb -46°; 370 " -49° - 358 " -48°

Isothermal 817 - 800 mb 25°

Tropopause: I 278 mb - 58° 29,500'

STORNOWAY

Pressure: 15h — Time G.M.T.; M.S.L. 958·0 mb; Surf 956·4 mb; Freezing 880 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	93	41	130	12
	11·6				
1000		42	38		
950	167	36	33	153	18
		31	25	148	15
900	47·5	25	18	142	12
		21	14	136	14
850	81·8	16	07	131	16
		07	-01	124	18
800	120	00	-07	117	17
		-09	-16	138	15
750	164	-17	-27	146	21
		-20	-41	134	29
700	215	-44		134	30
		-44		139	22
650	279	-50		139	24
		-45		140	24
600	368	-49		156	16
		-48		159	20
550		-48		196	22
		-49		217	13
500	520	-52		223	16
		-52		222	16
450		-51		223	17
		-50		225	22

I 400 mb -44° 21,700'; I 300 " -50° 28,000'

LEUCHARS

Pressure: 15h — Time G.M.T.; M.S.L. 960·4 mb; Surf 960·0 mb; Freezing 870 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	42	35	160	12
	-10·7				
1000		41	34	156	24
950	17·3	36	31	167	33
		30	27	176	39
900	48·1	24	23	181	30
		19	18	179	28
850	82·3	14	11	172	28
		08	01	164	27
800	120	-05	-10	164	35
		-12	-17	172	31
750	164	-22	-29	172	33
		-34	-40	179	37
700	215	-46		173	25
		-45		173	34
650	278	-48		169	25
		-48		168	21
600	367	-42		190	18
		-47		195	21
550		-47		191	20
		-50		179	24
500	520	-48		181	17
		-50		188	17
450		-48		188	17
		-46		198	13

I 391 mb - 48° 32,100'

ALDERGROVE

Pressure: 15h — Time G.M.T.; M.S.L. 960·9 mb; Surf 951·6 mb; Freezing 867 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	40	39	270	20
	-10·7				
1000		40	39		
950	17·4	35	34	273	22
		30	29	276	21
900	48·3	25	24	274	26
		20	19	274	28
850	82·4	15	10	270	26
		08	00	268	26
800	121	02	-07	260	24
		-02	-17	253	24
750	165	-18	-30	248	24
		-30	-44	248	25
700	216	-44		249	25
		-56		253	22
650	279	-50		262	15
		-49		232	16
600	368	-44		227	15
		-45		214	10
550		-50		210	13
		-50		224	15
500	520	-50		228	10
		-48		216	12
450		-48		200	15
		-51		205	13
400		-52		278	15

Isothermal 735 - 724 mb 18°

I 350 mb - 56° 24,600'

LIVERPOOL

Pressure: 15h — Time G.M.T.; M.S.L. 964·7 mb; Surf 966·2 mb; Freezing 875 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	42	37	200	15
	-9·3				
1000		40	35	209	24
950	19·0	35	32	231	22
		29	25	243	24
900	49·8	23	22	247	30
		17	15	250	30
850	83·7	11	07	249	27
		06	01	241	25
800	122	-03	-08	243	29
		-12	-18	247	28
750	165	-23	-29	249	28
		-34	-41	242	27
700	216	-47		248	25
		-54		244	24
650	278	-54		225	21
		-53		222	15
600	367	-46		201	20
		-49		203	22
550		-49		219	27
		-49		233	24
500	518	-51		226	17
		-54		214	13
450		-55			

Isothermal 370 - 351 mb -54°

I 370 mb -54° 23,400'; I 305 " -55° 27,500'

DOWNHAM MARKET

Pressure: 15h — Time G.M.T.; M.S.L. 973·8 mb; Surf 969·4 mb; Freezing 873 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	44	38	175	16
	-7·1				
1000		42	36	205	30
950	21·2	36	31	207	32
		29	24	217	38
900	52·0	23	19	224	38
		17	11	228	36
850	85·9	12	02	229	34
		04	-11	223	33
800	124	-05	-20	213	32
		-08	-18	236	26
750		-13	-27	212	34
		-17	-28	231	27
700	167	-25	-39	213	35
		-37	-52	217	38
650	218	-46		216	32
		-56		208	25
600	280	-55		200	27
		-49		195	27
550	368	-49		195	25
		-48		215	33
500		-51		224	27
		-50		213	34
450		-54		213	26
	519	-57		212	18
400		-60			
		-61			
350		-58			

II 334 mb - 60° 25,900'

LARKHILL

Pressure: 15h — Time G.M.T.; M.S.L. 974·5 mb; Surf 958·9 mb; Freezing 880 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	45	34	250	15
	-7·0				
1000		44	34		
950	21·4	35	27	232	24
		27	20	236	26
900	52·0	21	16	243	28
		14	05	238	28
850	85·8	08	-01	235	28
		02	-10	235	29
800	124	-03	-18	236	26
		-17	-28	231	27
750	167	-28	-39	231	27
		-36	-80	236	34
700	217	-47		224	19
		-57		227	20
650	279	-61		222	22
		-49		220	29
600	367	-55		218	25
		-45		219	29
550		-47		228	23
		-50		205	21
500	518	-58		212	29
		157		238	24
450		-57		242	16
		-58		229	19
400		-59		251	14
		-59		240	10
350		-57			

I 325 mb - 62° 26,200'

CAMBORNE

Pressure: 15h — Time G.M.T.; M.S.L. 977·6 mb; Surf 967·3 mb; Freezing 885 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	44	31		
	-6·1				
1000		42	30		
950	22·1	35	25		
		28	20		
900	52·7	21	12		
		14	04	For	
850	86·3	07	-03		
		00	-11	winds	
800	124	-08	-18		
		-17	-27	See	
750	167	-26	-36		
		-37	-47	page	
700	218	-48			
		-53		3.	
650	279	-58			
		-52			
600	368	-48			
		-49			
550		-49			
		-50			
500	122 (mb)	-51			

I 330 mb - 65° 25,800'

VALENTIA

Pressure: 15h — Time G.M.T.; M.S.L. 979·9 mb; Surf 978 mb; Freezing 920 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	38	35		
	-5·9				
1000		35	34		
950	22·3	30	30		
		24	24		
900	52·7	18	18		
		12	11	For	
850	86·2	03	-06		
		-02	-08	winds	
800	124	-10	-16		
		-21	-26	See	
750	166	-33	-39		
		-43		Page	
700	216	-45			
		-52		3	
650	279	-54			
		-51			
600	367	-52			
		-53			
550		-54			
		-53			
500		-54			

Inversion 436 mb -46° - 420 mb -42°

I 332 mb - 56° 25,600'

LERWICK

Pressure: 21k — Time G.M.T.; M.S.L. 973·2 mb; Surf 963·4 mb; Freezing 885 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	41	39		
	-7·8				
1000		39	37		
950	20·7	34	32		
		29	26		
900	51·3	23	18		
		17	14		
850	85·2	12	07		
		04	-04		
800	123	-04	-16		
		-14	-27		
750	167	-25	-35		
		-38	-47		
700	217	-48			
		-53			
650	279	-56			
		-53			
600	367	-53			
		-52			
550		-55			
		-57			
500		-59			
	516	-59			
450		-58			
	(85 mb)	-60			

Inversion 394 mb -49° - 385 mb -48°

I 320 mb - 58° 26,500'

STORNOWAY

Pressure: 21k — Time G.M.T.; M.S.L. 961·2 mb; Surf 959·6 mb; Freezing 876 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	10·6	41	39	180	05
1000		40	37		
950	17·6	35	34	179	20
		29	28	171	23
900	48·4	23	22	169	21
		17	15	179	19
850	82·3	11	07	187	20
		03	00	188	16
800	120	-05	-10	192	15
		-14	-18	189	15
750	164	-24	-31	190	15
		-36	-45	206	15
700	214	-49		201	17
		-50		173	17
650	277	-50		165	16
		-50		163	13
600	366	-50		171	15
		-51		202	16
550		-53		195	16
		-54		201	19
500		-57		201	17
	516	-57		222	15
450		-56		237	16
		-59		245	15

I 385 mb - 53° 22,000'

LEUCHARS

Pressure: 21k — Time G.M.T.; M.S.L. 966·5 mb; Surf 965·6 mb; Freezing 880 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	40	36	160	07
	-9·2				
1000		39	35	176	18
950	18·9	34	28	187	18
		28	25	202	20
900	49·7	22	20	205	21
		15	13	203	23
850	83·5	10	06	196	31
		04	-01	197	33
800	122	-05	-11	206	33
		-13	-19	216	29
750	165	-23	-30	209	33
		-35	-44	205	36
700	215	-48		202	34
		-50		205	32
650	278	-53		197	18
		-52		191	18
600	365	-50		197	21
		-50		194	18
550		-52		191	15

I 367 mb - 57° 23,500'

ALDERGROVE

Pressure: 21k — Time G.M.T.; M.S.L. 970·6 mb; Surf 960·8 mb; Freezing 921 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	36	34	250	20
	-8·0				
1000		35	32		
950	19·8	29	27	272	35
		25	22	284	39
900	50·3	20	18	281	36
		14	10	278	37
850	84·1	07	03	276	32
		00	-04	278	31
800	122	-06	-12	270	21
		-15	-22	265	15
750	165	-24	-32	236	21
		-36	-46	233	23
700	216	-47		237	22
		-58		261	25
650	278	-53		248	12
		-53		253	20
600	366	-50		236	12
		-56		227	15
550		-54		212	14
		-56		200	09
500		-56		220	11

I 333 mb - 60° 25,500'

LIVERPOOL

Pressure: 21k — Time G.M.T.; M.S.L. 974·7 mb; Surf 972·6 mb; Freezing 892 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	40	35	230	15
	-6·8				
1000		39	33	248	23
950	21·1	33	27	258	33
		27	21	262	30
900	51·6	20	13	259	29
		14	07	253	27
850	85·4	07	00	247	23
		00	-07	241	23
800	123	-08	-17	234	22
		-16	-27	227	24
750	166	-27	-38	226	22
		-38	-50	221	18
700	216	-49		236	19
		-55		239	19
650	279	-55		237	18
		-49		221	17
600	367	-50		205	15
		-48		214	11
550		-51		212	17
		-53		215	18
500		-55		228	8
	598	-54			

I 365 mb - 57° 23,500'

DOWNHAM MARKET

Pressure: 21k — Time G.M.T.; M.S.L. 979·6 mb; Surf 975·2 mb; Freezing 892 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	37	34	170	15
	-3·5				
1000		37	33	208	26
950	22·5	33	27	227	25
		27	22	228	24
900	53·2	22	14	225	24
		15	08	225	21
850	87·0	08	00	218	28
		01	-09	214	25
800	125	-07	-16	213	29
		-17	-28	208	29
750	168	-27	-39	203	27
		-40	-52	201	25
700	218	-48		219	21
		-58		212	20
650	280	-60		212	23
		-50		206	25
600	368	-50		197	22
		-48		202	25
550		-50		202	27
		-55		214	29
500					
	(116 mb)				

I 322 mb - 63° 26,500'

LARKHILL

Pressure: 21k — Time G.M.T.; M.S.L. 981·0 mb; Surf 965·0 mb; Freezing 900 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	35	33	240	07
	-5·0				
1000		36	33	252	18
950	22·4	32	29	257	21
		27	23	264	25
900	53·4	21	15	259	25
		15	08	251	25
850	87·2	07	-01	252	26
		-01	-08	255	26
800	125	-09	-17	250	27
		-19	-26	244	21
750	168	-27	-34	239	29
		-37	-43	237	27
700	218	-47		245	25
		-57		250	21
650	280	-57		243	18
		-53		232	20
600	368	-47		215	20
		-46		202	21
550		-49		203	22
		-53		209	24
500		-55			

Inversion 965 mb 35° - 946 mb 37°

I 326 mb - 64° 26,200'

CAMBORNE

Pressure: 21k — Time G.M.T.; M.S.L. 983·3 mb; Surf 972·8 mb; Freezing 895 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	42	34	270	25
	-4·5				
1000		39	32	279	27
950	23·6	33	27	271	23
		27	22	273	21
900	54·2	21	15	274	21
		14	05	274	24
850	87·9	07	-04	274	27
		00	-12	272	26
800	126	-08	-19	275	25
		-17	-28	273	28
750	169	-27	-37	265	28
		-38	-48	249	27
700	219	-44		245	23
		-54		254	19
650	281	-64		270	22
		-57		288	24
600	368	-49		297	17
		-51		270	19
550		-52		260	16
		-51		255	14
500		-53		240	15
	519	-55		225	17
450		-56		245	21
		-58		279	08
400		-60			

Isothermal 770 - 753 mb 15°

I 305 mb - 66° 27,700'

VALENTIA

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

HMSO: Press, MO, Dunstable

No. 11636. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Tuesday 6th February Page 1.

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

Station	LERWICK					STORNOWAY					LEUCHARS				
Pressure Time	03h G.M.T.					03h G.M.T.					03h G.M.T.				
M.S.L.	973.6 mb					964.5 mb					971.1 mb				
Surf	963.8 mb					962.9 mb					970.2 mb				
Freezing	872 mb					909 mb					879 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	41	41			0.4	41	38	180	12	0.2	39	36	220	20
1000	-7.2					9.7					-7.9				
950		40	39				39	36	168	23		37	33		
900	20.9	35	31			18.4	31	30	177	25	20.1	33	30		
850		30	26				25	24	192	22		30	27		
800	51.6	24	19	For		49.0	20	19	194	25	51.0	25	20	For	
750		19	14	winds			15	11	194	24		16	14	winds	
700	85.7	13	07			82.8	07	01	190	22	84.9	09	08		
650		06	-02	See			00	-07	187	22		02	-01	See	
600	124	-02	-12			121	-08	-13	189	23	123	-06	-11		
550		-12	-22	page			-17	-21	194	21		-15	-19	page	
500	167	-23	-33	3.		164	-28	-34	204	19	166	-24	-29	3.	
450		-34	-44				-41		210	17		-35	-44		
400	218	-47				213	-53		192	16	217	-47			
350		-56					-53		187	16					
300	280	-56				276	-52		176	18					
250		-51					-50		192	15					
200	368	-55				364	-50		186	17					
170		-51					-54		198	17					
150		-55					-52		195	19					
130		-55					-52		215	20					
110		-53					-52		204	17					
100						515	-53		213	15					
90															
80															
70															
60															
Tropopause	II 360 mb -56° 24.700'					I 381 mb -56° 22.300'					NR.				

Station	ALDERGROVE					LIVERPOOL					DOWNHAM MARKET				
Pressure Time	03h G.M.T.					03h G.M.T.					03h G.M.T.				
M.S.L.	975.0 mb					978.3 mb					982.8 mb				
Surf	965.9 mb					976.2 mb					978.3 mb				
Freezing	923 mb					909 mb					893 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	2.6	35	34			0.6	36	33	180	05	1.2	35	32	175	09
1000	-6.6					-5.8					-4.6				
950		34	33				36	32	232	15		37	32	210	21
900	21.2	31	30			221	31	27	257	21	23.3	33	24	242	22
850		25	24				25	21	251	21		27	20	238	22
800	51.7	18	17	For		52.5	20	14	254	20	54.0	21	15	234	21
750		11	08	winds			14	-05	246	20		16	06	226	25
700	85.4	07	02			86.3	08	-04	243	22	87.8	08	00	229	26
650		02	-06	See			00	-07	239	22		01	-08	231	27
600	123	-07	-17			124	-08	-16	236	24	126	-07	-16	231	28
550		-17	-30	page			-18	-29	228	26		-15	-24	220	31
500	166	-28	-42	3.		167	-27	-36	218	27	169	-26	-35	217	32
450		-39	-49				-33	-45	210	25		-36	-43	221	29
400	217	-42				218	-45		234	18	219	-48		227	26
350		-52					-57		241	14		-58		227	23
300	279	-55				280	-62		236	15	281	-60		227	19
250		-55					-56		231	15		-55		206	18
200	367	-47				367	-51		216	17	369	-49		208	19
170		-53					-51		219	21		-47		213	26
150		-52					-52		216	18		-50		206	25
130		-55					-53		216	19		-49		202	23
110		-53					-53		219	10		-55		203	16
100	518	-52				518	-56		202	17	520	-57		205	29
90		-52					-59		194	16		-59		217	18
80		-51					-62					-58		199	16
70							-60								
60															
	Inversion 423 mb -45° - 400 mb -42°					Inversion 976 mb 36° - 971 mb 38° 495 " -28° - 485 " -27°					Inversion 978 mb 35° - 940 mb 38°				
Tropopause	I 319 mb -59° 26.800'					II 330 mb -63° 25.800'					I 334 mb -61° 25.700'				

Station	LARKHILL					CAMBORNE					VALENTIA				
Pressure Time	03h G.M.T.					03h G.M.T.					03h G.M.T.				
M.S.L.	984.1 mb					985.5 mb					983.7 mb				
Surf	967.8 mb					974.9 mb					981 mb				
Freezing	900 mb					904 mb					920 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	4.4	32	30	230	07	2.9	40	30	270	15	0.3	38	31	300	13
1000	4.3					-3.9					-4.6				
950		36	33	241	15		38	29	274	31		35	29	297	19
900	25.5	32	28	240	18	24.1	31	24	277	21	23.2	29	24	292	26
850		25	24	237	20		25	20	276	24		23	18		
800	53.9	19	18	241	20	54.5	18	08	272	24	53.7	19	11		
750		12	05	243	27		11	02	269	24		13	03		
700	87.5	05	-03	243	25	88.0	05	-09	271	27	87.3	06	-03		
650		-03	-12	241	27		-03	-15	269	28		-02	-09		
600	125	-11	-20	237	29	126	-11	-26	263	29	125	-09	-20		
550		-22	-33	233	29		-9	-34	252	28		-18	-29		
500	168	-34	-43	234	32	168	-29	-49	262	22	168	-23	-38		
450		-45		227	34		-37	-58	288	30		-31	-48		
400	217	-50		219	32	219	-45		299	43	219	-38	-55		
350		-60		223	21		-51		303	45		-48			
300	279	-65		228	12	280	-54		304	45	282	-55			
250		-58		259	20		-54		298	32		-48			
200	365	-53		222	17	369	-52		297	28	370	-55			
170		-52		205	18		-53		302	23		-49			
150		-55		220	25		-53					-52			
130		-54		228	22	(152 mb)						-54			
110		-58		189	13							-55			
100	515	-63		191	15						521	-56			
90		-63		204	14							-58			
80		-64		202	15							-58			
70		-64									(86 mb)				
60															
	Inversion 968 mb 32° - 950 mb 36° 387 - -53° - 379 - -52° Isothermal 435 - 420 mb -47°					Isothermal. 975 - 964 mb 40°									
Tropopause	I 322 mb -68° 26.300'					II 331 mb -53° 26.000'					I 313 mb -57° 27.300'				

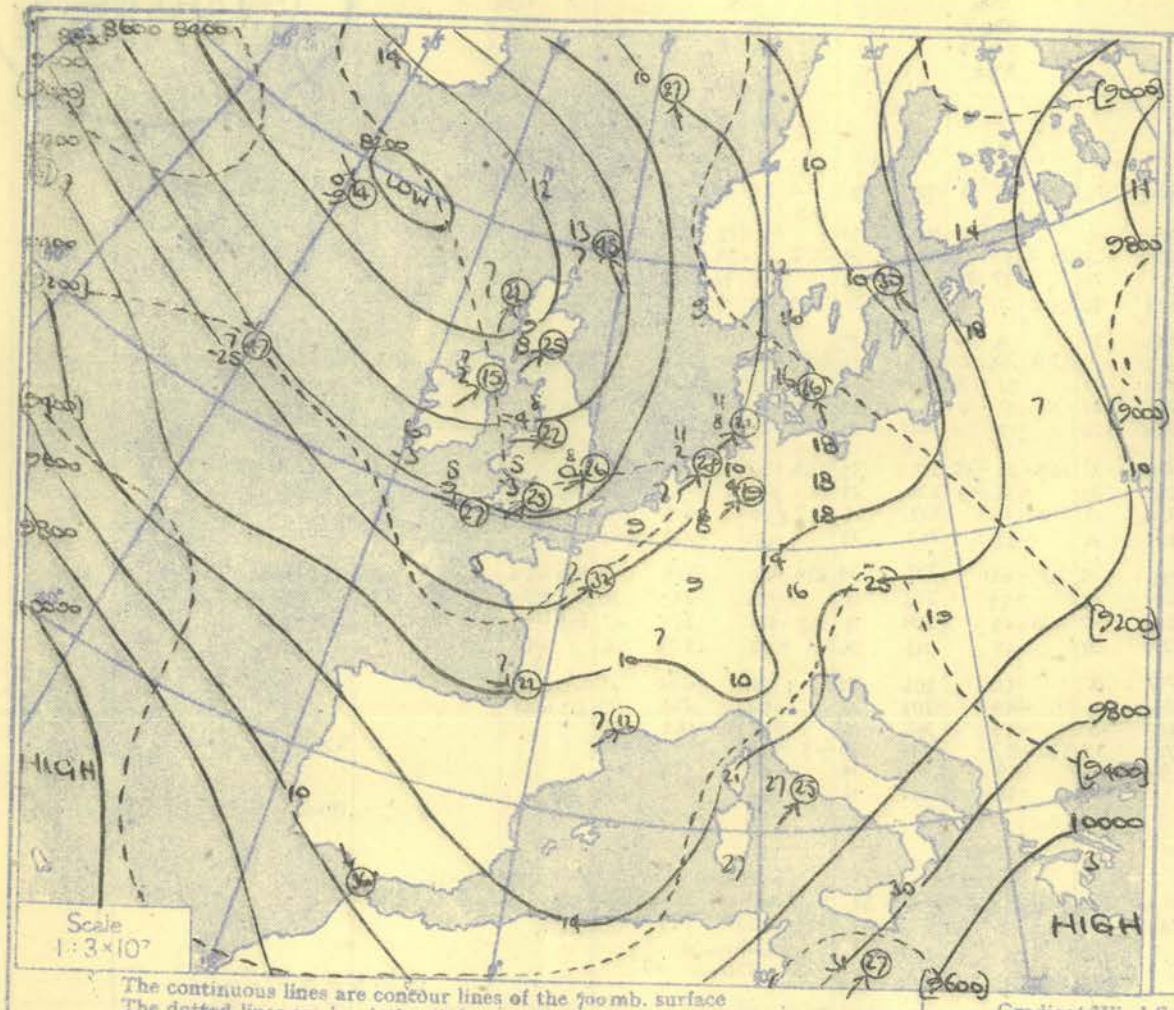
Station	LERWICK					STORNOWAY					LEUCHARS				
Pressure Time	09h G.M.T.					09h G.M.T.					09h G.M.T.				
M.S.L.	976.7 mb					970.8 mb					976.6 mb				
Surf	966.9 mb					969.2 mb					975.7 mb				
Freezing	904 mb					878 mb					906 mb				
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind 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	41	40	140	28	0.4	39	35			0.2	37	35	225	05
1000	-6.3					-7.9					-6.4				
950		40	39	136	40		39	35				35	33	236	20
900	21.8	32	32	153	43	20.2	35	30			21.5	31	30	237	17
850		27	27	156	48		29	23				26	25	244	15
800	51.4	23	19	153	45	50.9	22	17			52.1	21	19	240	13
750		17	10	153	40		16	08				15	13	207	08
700	85.3	10	02	153	38	84.7	10	-02			86.0	09	07	175	11
650		03	-04	163	39		02	-11				00	-02	171	12
600	123	-06	-13	153	39	123	-07	-16			124	-09	-12	170	12
550		-16	-24	153	39		-16	-23				-18	-23	177	19
500	166	-26	-34	151	37	166	-26	-33			167	-28	-34	173	20
450		-39	-46	150	36		-38	-44				-39	-45	151	127
400	217	-51		147	36	216	-47				217	-50		170	24
350		-60		147	36		-57					-58		175	20
300	279	-58		149	30	278	-55				278	-60		192	20
250		-56		145	36		-51					-50		188	16
200	365	-52		165	34	366	-50				367	-48		195	16
170							-50					-48		196	15
150				For rest of			-53								
130				winds see			-52								
110				page 3			-52								
100						517	-52								
90							-53								
80							-52								
70							-51								
60															
	Radar heights used above 350 mb.					Isothermal. 969 mb - 950 mb 39°									
Tropopause	I 359 mb -61° 23.900'					I 334 mb -59° 25.500'					I 320 mb -64° 26.500				

Station	ALDERGROVE					LIVERPOOL					DOWNHAM MARKET				
Pressure Time	09h G.M.T.					09h G.M.T.					09h G.M.T.				
M.S.L.	978.3 mb					981.6 mb					985.1 mb				
Surf	969.3 mb					979.5 mb					980.5 mb				
Freezing	957 mb					920 mb					913 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	2.6	33	31			0.6	34	32	220	03	1.2	35	33	180	10
1000	-5.6					-4.8					-4.0				
950		31	30				33	28	223	10		34	31	223	22
900	22.0	28	28			22.9	29	22	239	17	23.7	31	28	226	22
850		24	21				23	15	237	24		26	23	225	22
800	52.4	17	13			53.3	16	08	231	21	54.2	21	17	222	22
750		12	06				10	03	209	21		15	10	219	22
700	86.0	06	-03			86.8	04	-05	207	20	88.0	09	03	214	22
650		-03	-14				-03	-12	210	12		02	-07	215	26
600	124	-12	-22			124	-11	-20	190	15	126	-06	-16	216	28
550		-21	-28				-21	-29	184	26		-14	-25	212	30
500	166	-32	-40			167	-31	-40	182	26	169	-25	-36	212	36
450		-36	-47				-42		192	27		-37	-48	208	44
400	217	-40	-55			217	-46		204	23	220	-42		202	35
350		-42					-47		221	22		-53		198	31
300	281	-46				280	-50		245	20	282	-55		213	27
250		-45					-47		250	12		-50		227	18
200	370	-48				369	-44		239	14	371	-46		212	21
170		-45					-46		225	15		-44		205	22
150		-48					-44		206	11		-45		189	18
130		-45					-46		202	14		-44		206	22
110		-47					-48		233	21		-46		198	25
100	523	-49				522	-49		290	10	524	-48		211	19
90		-51					-48					-50		216	12
80												-52		213	12
70												-54			
60															
						Inversion 440 mb 44° - 423 mb 42° Isothermal. 805 - 790 mb 16° 395 - 352 - -47					Inversion 418 mb -44° - 400 mb -42°				
Tropopause	III 428 mb -39° 20.100' I 290 " -47° 28.800'					II 323 - 50° 26.400'					I 324 mb -60° 26.700				

Station	LARKHILL					CAMBORNE									
Pressure Time	09h G.M.T.					09h G.M.T.					G.M.T.				
M.S.L.	986.0 mb					986.8 mb					mb				
Surf	969.7 mb					976.2 mb					mb				
Freezing	970 mb					914 mb					mb				
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4.4	31	29	240	06	1.9	37	33	230	10					
1000	-3.7					-3.5									
950		34	32	246	19		35	28	246	29					
900	24.0	30	26	257	21	24.4	30	22	258	22					
850		24	21	258	24		24	16	264	22					
800	54.4	17	15	258	23	54.9	17	10	268	24					
750		11	06	253	25		12	04	276	29					
700	87.9	04	-04	251	26	88.5	06	-01	277	36					
650		-05	-14	252	27		-01	-07	276	41					
600	125	-12	-21	234	32	126	-08	-15	277	42					
550		-21	-29	213	39		-15	-25	289	40					
500	168	-29	-38	210	38	169	-24	-36	293	41					
450		-38	-50	242	28		-35	-49	293	40					
400	218	-46		266	30	220	-43		292	43					
350		-63		263	32		-52		290	39					
300	281	-55		269	32	282	-63		286	36					
250		-50		265	19		-56		295	32					
200	369	-50		256	16	370	-53		303	31					
170		-49		237	16		-53		307	31					
150		-49		235	14		-52		305	25					
130		-50		207	18		-53		302	26					
110		-51		238	24		-54		300	23					
100	520	-50		267	17	520	-58		306	18					
90							-56		298	12					
80							-54								
70															
60															
	Inversion 970 mb 31° - 950 mb 34°					Isothermal. 950 - 938 mb 35°									
Tropopause	I 321 mb -56° 26.600					I 286 mb -66° 27.300									

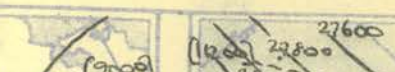
February 6th 1951.

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

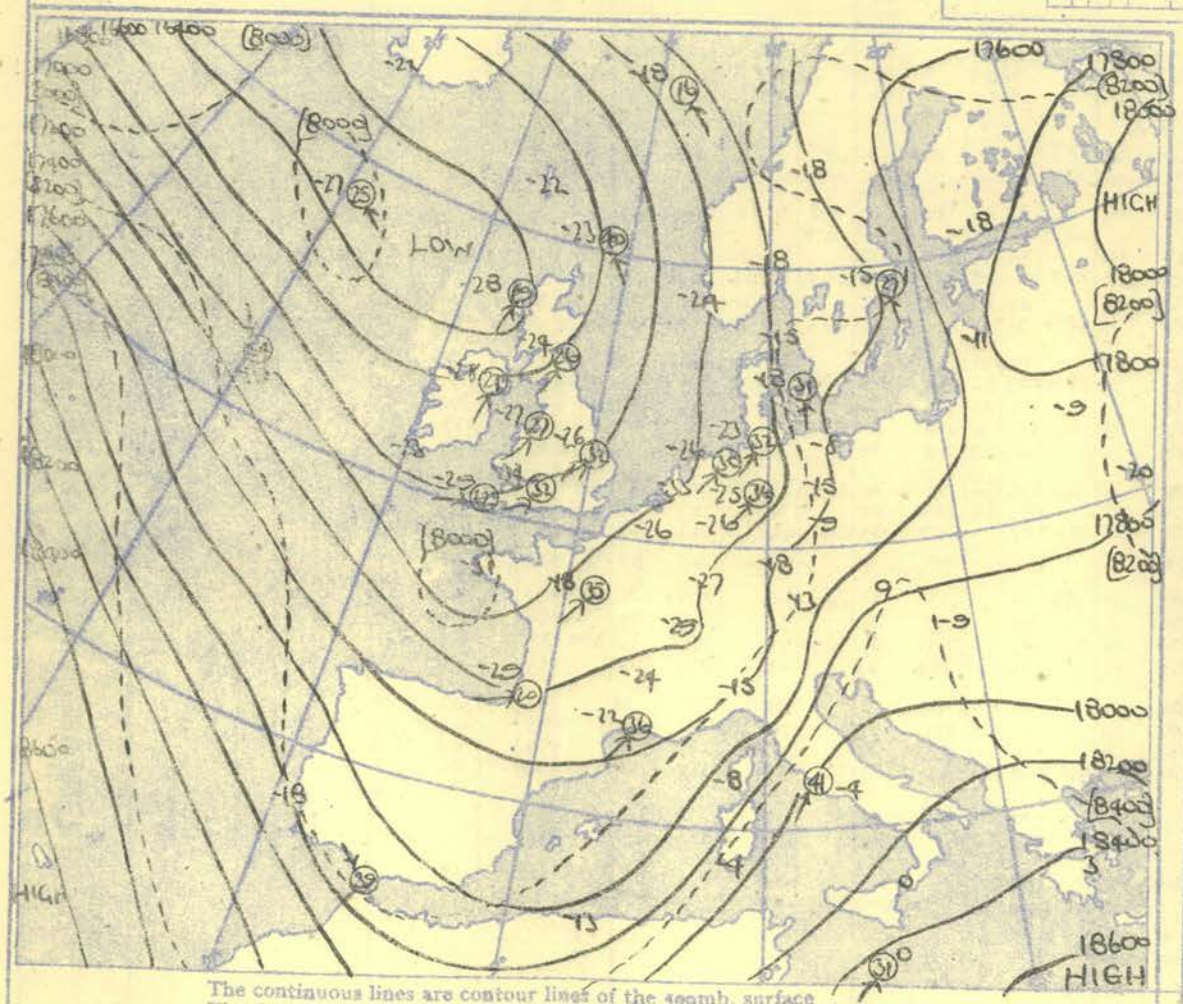


The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

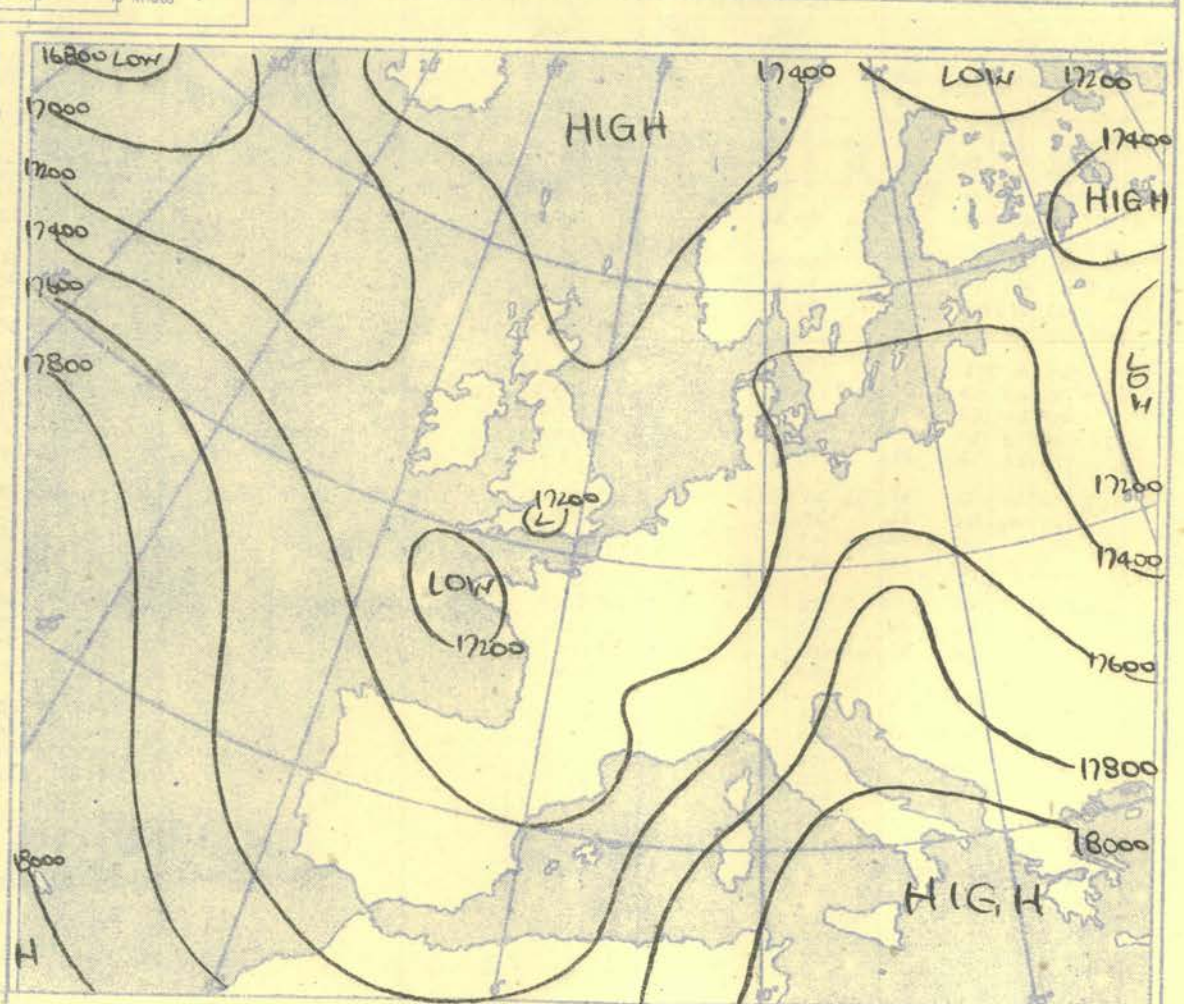
Gradient Wind Scale for Contours
at intervals of 200 ft. at Lat. 52½° N.



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



The continuous lines are contour lines of the 500mb. 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			39·5N 12·2W			51·3N 00·4E																		Pressure mb
Time	15h			17h			1436h																		Time M.S.L. Surf Freezing Pressure
M.S.L.	1009 mb			1005 mb			989·3 mb			mb			mb			mb			mb			mb			
Surf	1007 mb			998 mb			977·9 mb			mb			mb			mb			mb			mb			
Freezing	745 mb			740 mb			885 mb			mb			mb			mb			mb			mb			
	Height ft./100	°C Temp.	Dew °F.	Height ft./100	°C Temp.	Dew °F.	Height ft./100	°C Temp.	Dew °F.	Height ft./100	°C Temp.	Dew °F.	Height ft./100	°C Temp.	Dew °F.	Height ft./100	°C Temp.	Dew °F.	Height ft./100	°C Temp.	Dew °F.	Height ft./100	°C Temp.	Dew °F.	
Surf		55	48		57	52	3·1	43	35																Surf
1000	2·6			1·5			-2·8																		1000
950		49	46		52	46																			950
900		41	40		48	32	25·3	33	28																900
850		36	35		45	22		27	26																850
800		35	21		39	20	55·9	17																	800
750		33	18		33	25		12																	750
700	97·4	26	18	97·3	28		89·5	05																	700
650		20			20			-01																	650
600		15			17		127	-10																	600
550		05			09			-19																	550
500	182	-03		182	-02		170	-27																	500
450								-35																	450
400							220	-46																	400
350								-56																	350
300							282	-63																	300
250																									250
200																									200
170	Cloud.			Cloud.			Cloud.																		170
	4/8 Sc 940-900mb.			3/8 Cu 940-750mb.			4/8 Cu 900-750mb.																		
	2/8 Cu 940-800mb.			3/8 Sc 940-910mb.																					
	Surf wind. N.W 34-40kts.			Surf wind. N.W 34-40kts.																					

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

Place	Lerwick.		Leuchars		Aldergrove		Shoebury		Lerwick		Lerwick.		Lympne		Downham						Place
Time	03h		03h		03h		10h		09h		15h		15h		21h						Time
Type	Pilot.		Pilot.		Pilot.				Pilot		Radar.										Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet.
Surf.	130	38	220	20	230	15	180	12			150	23	210	11	170	10					Surf.
1,000	135	60	214	33	238	16	220	15			153	39	210	24	220	20					1,000
2,000	138	61	216	30	248	24	230	19			155	33	220	24	230	23					2,000
3,000	141	62	219	27	258	24	230	17			157	30	230	23	240	25					3,000
4,000	143	63	220	25	268	29	230	17			157	29	240	21	240	27					4,000
5,000	148	59	219	24	274	30	230	17			157	31	230	23	240	29					5,000
6,000	152	58	219	24	268	29	230	18			157	31	240	25	240	30					6,000
8,000	160	52	226	24	239	21	210	24			156	31	240	31	240	32					8,000
10,000	158	45	230	25	231	15	200	28			155	28	240	26	240	34					10,000
14,000	159	40	226	24	195	18	210	33			155	27	250	25	250	34					14,000
18,000	152	40	198	26	176	21	200	33			147	24	(42.000)		240	39					18,000
24,000	150	43	205	15	180	21	220	33			150	25			230	48					24,000
30,000	154	36	174	18	241	14	240	24			149	23			250	27					30,000
40,000	177	25	195	18	260	11	220	23	173	21	172	23			260	21					40,000
50,000	175	29	(39.000)		246	13	190	28	180	15	197	20			250	13					50,000
	(46.000)						(49.000)		180	15					250	04	(60.000)				
									(52.000)						170	05	(70,000)				
															130	05	(78.000)				

NEPHOSCOPE OBSERVATIONS

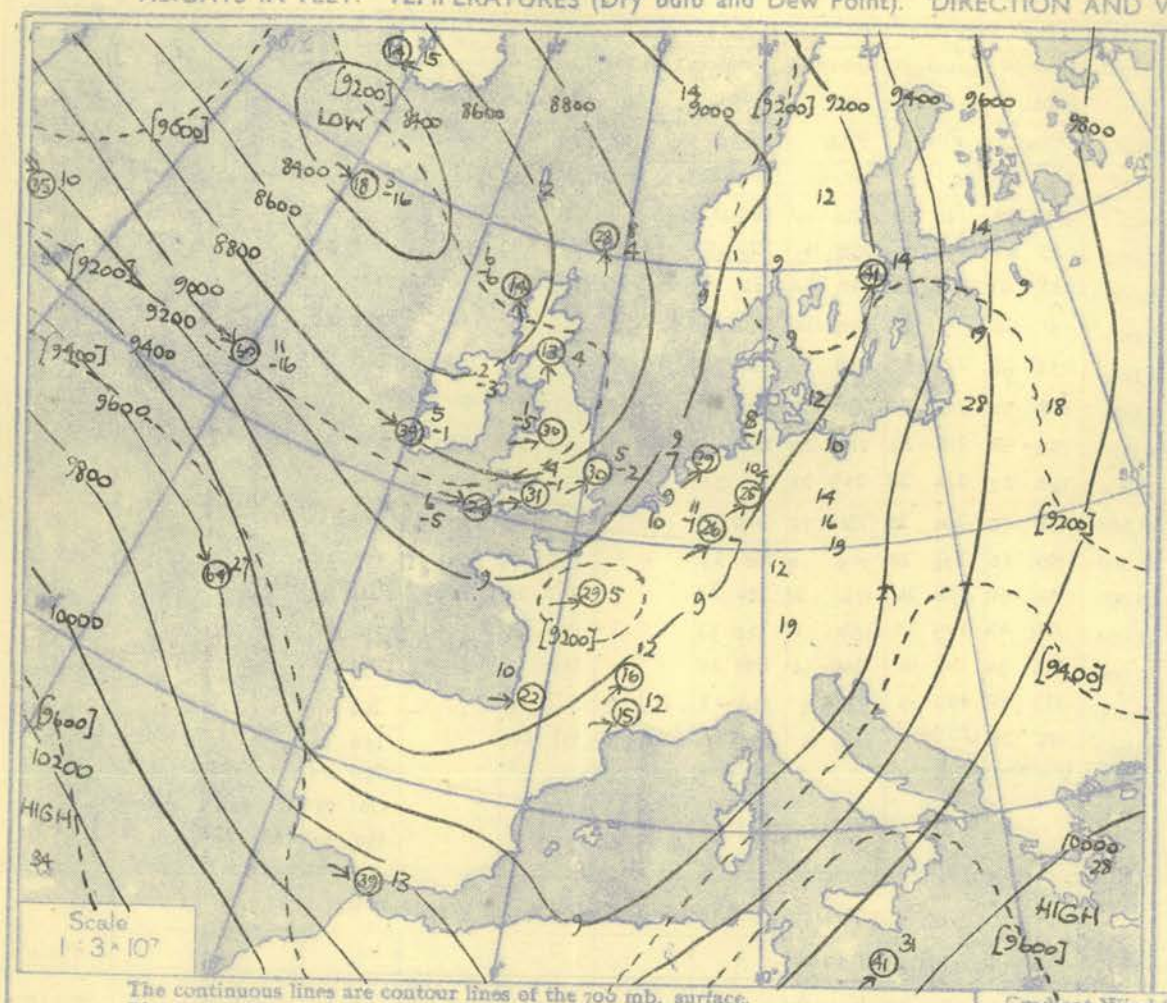
Place	Plymouth.	Valentia.	Middleton.							Place
Time Type	12h. Cu.	12h. Ac	15h. Ac							Time Type
Dir. Vel.	260 35	340 54	260 45							Dir. Vel.

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

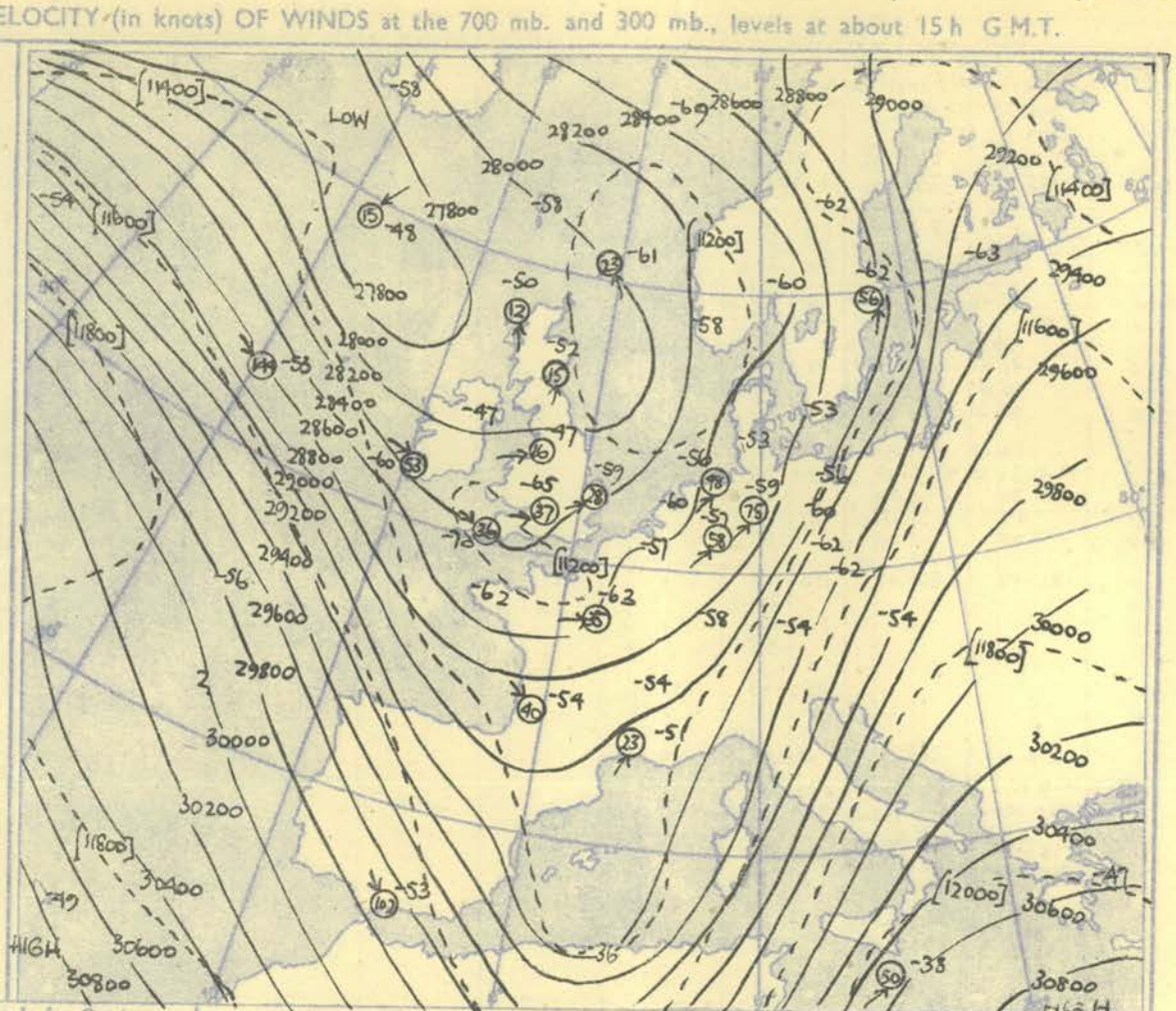
Ship	WEATHER RECORDER		WEATHER RECORDER		WEATHER RECORDER		WEATHER RECORDER		WEATHER EXPLORER		WEATHER EXPLORER		WEATHER EXPLORER		WEATHER EXPLORER		Ship
Lat/Long	59·1N	19·4W	59·1N	19·2W	59·1N	19·5W	59·1N	19·2W	52·6N	20·1W	52·5N	20·0W	52·1N	20·0W	52·3N	20·1W	Lat/Long
Time	03h G.M.T.		09h G.M.T.		15h G.M.T.		21h G.M.T.		03h G.M.T.		09h G.M.T.		15h G.M.T.		21h G.M.T.		Time
Pressure M.S.L.	967 mb		967 mb		969 mb		975 mb		988 mb		991 mb		994 mb		998 mb		Pressure M.S.L.
Surf	967 mb		967 mb		969 mb		975 mb		988 mb		991 mb		994 mb		998 mb		Surf
Freezing	930 mb		930 mb		925 mb		895 mb		910 mb		910 mb		910 mb		915 mb		Freezing
Pressure mb	Height ft./100	°C Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Pressure mb
Surf		36	36	300	25		37	35	290	30		38	38	200	18		41	39	290	20	-3.3	42	36	295	25	-2.7	40	39	295	26	-1.8	44	27	280	35	-7	44	34	295	29	Surf
1000	-8·8					-8·7					-8·4					-6·8																					1000
950		34	34	305	28		34	31	307	21		35	35				29	35	300	23		37	27	306	40		37	34	302	40		38	23	302	48		37	18	300	36	950
900	19·0	27	27	301	25	19·1	28	21	301	23	19·5	28	28			21·3	33	26	299	24	24·7	30	27	299	41	25·3	30	27	299	41	26·2	30	18	304	44	27·3	29	15	298	37	900
850		21	21	294	22		21	11	299	25		21	21				26	20	297	26		28	18	294	42		21	18	293	40		23	14	302	42		22	12	293	37	850
800	49·3	15	15	291	18	49·4	14	06	303	22	49·7	15	12			51·8	18	13	298	27	55·0	17	12	293	43	55·7	15	13	292	40	56·6	16	11	302	45	57·5	17	09	286	40	800
750		08	06	289	15		09	00	313	18		10	-05				11	04	308	29		12	07	295	45		08	03	299	46		11	04	303	48		15	-13	287	40	750
700	82·6	00	-09	296	14	82·7	02	-09	319	16	83·1	03	-16	281	18	85·4	08	-04	311	31	88·6	07	-25	297	47	89·1	08	-09	302	46	90·2	11	-16	302	60	91·3	10	-23	292	39	700
650		-08	-14	303	09		-06	-18	326	18		-05	-19	278	19		-02	-10	322	34		02	-29	301	49		00	-20	303	47		03	-27	302	58		06	-32	305	48	650
600	120	-16	-20	320	06	120	-13	-26	320	13	120	-15	-28	259	16	123	-10	-17	334	35	127	-04	-32	304	48	127	-06	-26	301	61	128	-04	-33	302	61	130	-01	-43	314	61	600
550		-20	-24	115	14		-21	-34	133	07		-23	-38	262	15		-20	-27	342	29		-11	-29	307	49		-14	-33	298	66		-12	-39	302	66		-05	-41	307	75	550
500	162	-27	-30	123	25	163	-26	-37	138	20	163	-28	-43	CALM		166	-36	-36	340	22	170	-19	-36	307	54	170	-23	-41	302	64	172	-20	-46	302	76	174	-12	-35	300	81	500
450		-33	-37				-35	-45	120	17		-35	-45	128	21		-36	-48	335	22		-28	-44	305	55		-35	-52	299	60		-28	-53	302	92		-21	-40	300	95	450
400	213	-43				213	-45		122	24	213	-45		128	24	216	-48	-56	330	19	221	-38	-54	306	66	221	-45		297	61	223	-31	-56	302	123	226	-29	-45	299	126	400
350		-48					-46					-46		152	18		-50		321	18		-42		305	82		-53		298	89		-42		302	142		-39	-52	293	147	350
300	276	-48				277	-44				277	-48		018	15	279	-53		296	27	285	-47		303	96	(221 mb)	-54				287	-53		302	144	290	-54		295	154	300
250		-48					-42					-47					-48		294	28		-49		302	85							-61		302	117		-70		298	147	250
200	365	-47				367	-44				366	-46				367	-51		286	25	374	-47		292	74						379	-53		302	76	276	-60		298	88	200
170		-49					-45		280	35		-47					-56		271	26		-50		292	73							-54		302	68		-61		298	62	170
150		-48					-49		278	42		-47				(162 mb)	-57					-53		288	70						(154) mb	-56					-59		298	49	150
130		-49					-52		280	34		-46		298	15						(133 mb)	-55															-63		298	41	130
110		-51					-52		314	32		-49		284	16																					-62		298	38	110
100	517	-53				518	-52				518	-51		281	16																					523 -61		298	35	100
90		-56					-52					-53		278	20																					98) -61				90
80		-56					-54					-51		277	23																					mb				80
70		-56					-56					-50		267	21																									70
60		-56					-57					-50		266	17																									60
		-55									(5am)	51		269	17																									
		-54									(4pm)	-51																													
	(33 mb)	-53				(55 mb)	-58																																	
Inversion							Isothermal 783 - 769 mb 13°				Max wind:- 272 mb 302° 103 kts		Inversion 745 mb 07° - 730 mb 09°		Isothermal 455 - 450 mb - 28° Max wind 292 mb 302° 171 kts		Isothermal 650 - 644 mb 06° 580 - 554 - 04°				
Tropopause	I 378 mb - 48° 22,600'		I 370 mb - 48° 23,000'		I 390 mb - 47° 21,900'		I 390 mb - 51° 22,000'		II 300 mb - 47° 28,800'		I 362 mb - 54° 24,100'		I 255 mb - 62° 32,200'		I 252 mb - 70° 32,800'						Tropopause

Tuesday 6th February 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

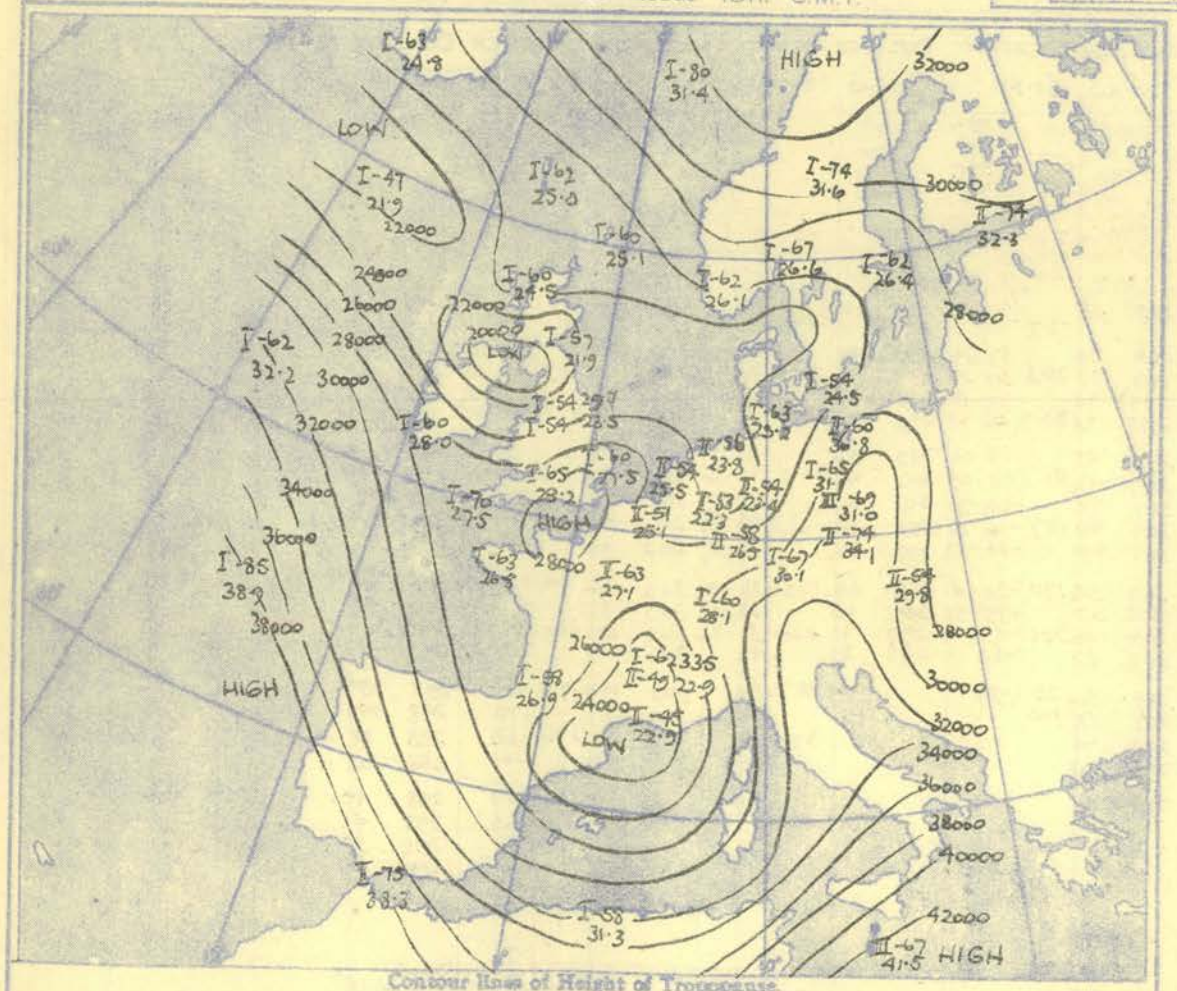


The continuous lines are contour lines of the 300mb. surface
The dotted lines are isopleths of the thickness of the layer 500 - 300 mb.

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 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

The warm ridge over Eastern Europe showed little change. The cold trough over Britain and France cooled a little and formed a shallow cold pool over Britain. The warm ridge south of latitude 55°N which had advanced rapidly in the previous 24 hrs changed little as the low with which the motion had been associated reached the crest of the ridge and was steered rapidly southeastward in the main thermal gradient.

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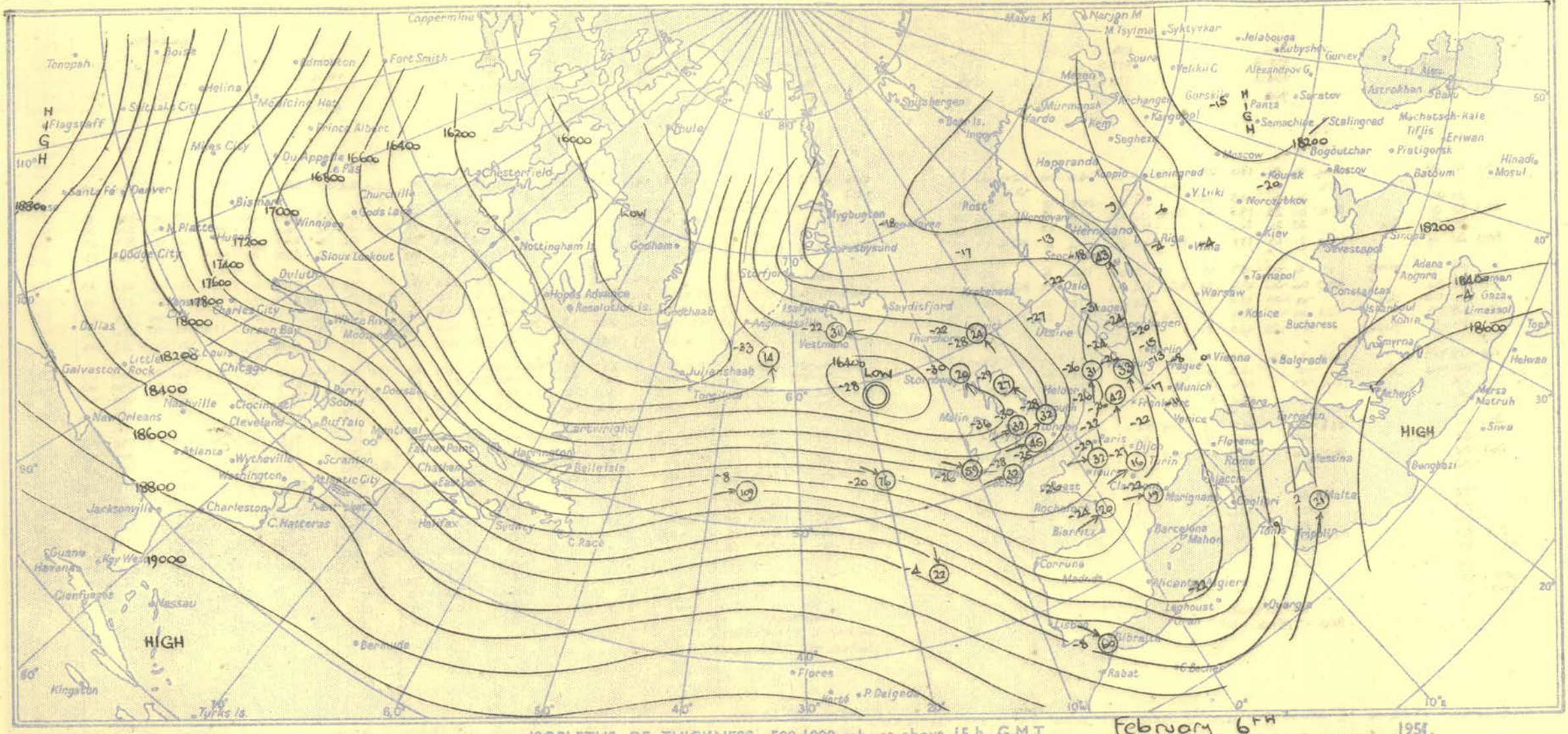
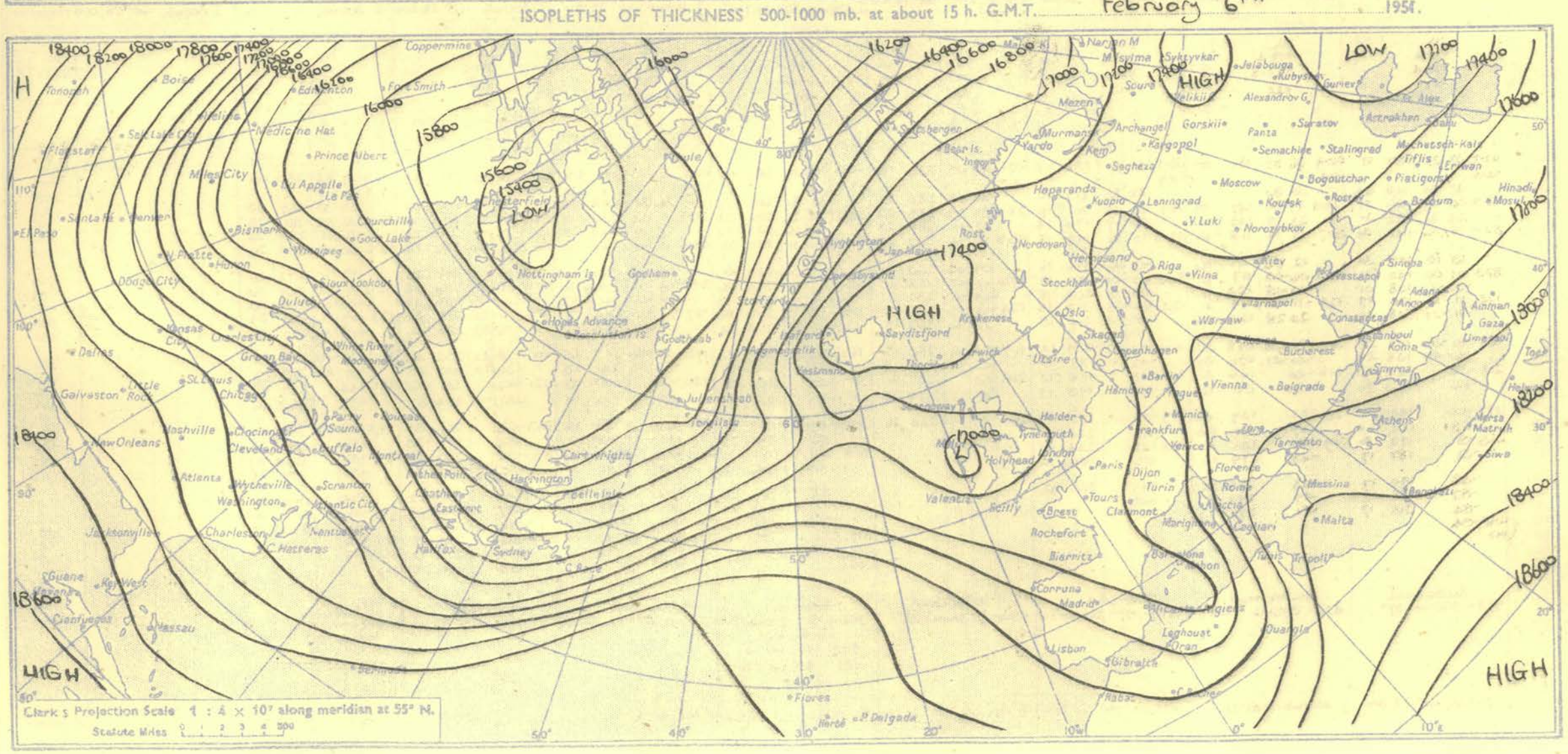
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Tuesday 6th February, 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. February 6TH 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Tuesday 6th February, 1951.

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

LERWICK

Pressure — Time: 15h. G.M.T. | M.S.L.: 980·4 mb | Surf: 970·5 mb | Pressing: 898 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	41	39		
1000	-5·3				
960		39	35		
900	22·8	33	31		
850		25	24		
800	53·3	20	19		
750		15	11		
700	87·1	08	04		
650		01	-03		
600	125	-08	-13		
550		-17	-21		
500	168	-28	-32		
450		-40	-44		
400	218	-50			
350		-59			
300	280	-61			
250		-52			
200	367	-52			
170		-52			
150		-52			
130		-52			
110		-55			
100	518	-53			
90		-52			
80		-54			
70		-55			
60	(076 mb)				

For winds see page 3.

Tropopause: I 342mb. -60° 28,100'

STORNOWAY

Pressure — Time: 15h. G.M.T. | M.S.L.: 978·8 mb | Surf: 974·2 mb | Pressing: 908 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	00·4	40	36	180	05
	-6·6				
		37	31	195	12
	21·4	31	28	195	16
		28	21	200	18
	51·9	21	13	197	17
		16	-02	187	15
	85·7	06	-06	158	14
		-01	-09	134	15
	123	-09	-16	139	18
		-19	-25	144	20
	166	-30	-36	149	27
		-41		142	36
	216	-49		146	35
		-60		143	27
	278	-50		145	12
		-47		181	13
	367	-46		225	06
		-45		242	04
		-46		247	14
		-42		326	10
		-45		220	12
	521	-44		256	10
		-48		256	10
		-53			

Isothermal 800 - 778mb. 21°

Tropopause: I 350mb. -60° 24,500'

LEUCHARS

Pressure — Time: 15h. G.M.T. | M.S.L.: 979·5 mb | Surf: 978·6 mb | Pressing: 915 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	00·2	42	31	240	06
	-5·6				
		38	30	207	17
	22·4	30	26	214	16
		22	17	217	17
	52·7	17	09	194	11
		12	08	182	16
	863	04	03	177	13
		-03	-05	172	14
	124	-11	-14	162	20
		-19	-24	156	29
	167	-29	-39	143	27
		-41		129	31
	216	-55		131	35
		-53		144	29
	279	-52		174	15
		-50		194	15
	367	-49		207	12
		-49		192	13
		-49		210	15
		-49			

Tropopause: I 394mb. -57° 21,900'

ALDERGROVE

Pressure — Time: 15h. G.M.T. | M.S.L.: 970·1 mb | Surf: 947 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	02·6	35	33		
	-5·4				
		33	31		
	22·3	26	25		
		21	21		
	52·6	17	15		
		10	07		
	86·0	02	-03		
		-07	-12		
	123	-15	-22		
		-25	-33		
	165	-36	-43		
		-44			
	215	-44			
		-44			
	279	-47			
		-45			
	368	-48			
		-47			
		-48			
		-48			
		-51			
	520	-50			

Tropopause: II 468mb. -44° 18,100'

LIVERPOOL

Pressure — Time: 15h. G.M.T. | M.S.L.: 982·7 mb | Surf: 980·6 mb | Pressing: 924 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	00·6	40	32	240	08
	-4·7				
		36	27	242	15
	23·3	28	23	241	19
		21	16	239	24
	53·5	15	10	239	26
		08	02	236	31
	86·8	01	05	238	30
		-04	-10	246	27
	124	-13	-23	254	28
		-23	-34	258	30
	167	-30	-41	256	32
		-37	-53	252	40
	217	-44		256	40
		-47		255	33
	280	-47		233	16
		-50		257	23
	369	-48		273	13
		-48		263	14
		-45		269	17
		-45		261	09
		-46		211	12
	522	-50		213	18
		-50		263	15
		-47			

Inversion 662mb. -05° - 648mb. -04° 368mb. -48° - 306mb. -45°

Tropopause: I 368mb. -48° 23,500' / I 278mb. -54° 29,700'

DOWNHAM MARKET

Pressure — Time: 15h. G.M.T. | M.S.L.: 986·9 mb | Surf: 982·5 mb | Pressing: 919 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	01·2	41	36	200	14
	-3·5				
		36	32	219	18
	24·5	30	26	233	18
		25	19	238	22
	54·9	19	11	234	24
		13	06	234	26
	88·6	05	-02	238	30
		-04	-12	228	31
	126	-13	-21	234	32
		-21	-29	240	35
	169	-28	-41	237	32
		-36	-52	241	35
	219	-45		255	38
		-54		244	36
	281	-59		233	28
		-53		239	27
	369	-51		241	18
		-46		205	19
		-48		201	23
		-49		221	21
		-52		160	19

Tropopause: I 369mb. -60° 27,500'

LARKHILL

Pressure — Time: 15h. G.M.T. | M.S.L.: 987·1 mb | Surf: 971·2 mb | Pressing: 900 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	04·4	42	38	260	10
	-3·4				
		39	30	245	15
	24·7	32	25	238	18
		25	20	238	27
	55·1	18	14	240	33
		12	08	243	34
	88·7	04	-01	245	31
		-03	-07	256	29
	126	-11	-18	260	33
		-17	-28	267	43
	169	-25	-41	268	45
		-34	-52	267	43
	220	-44		265	39
		-53		259	40
	282	-65		259	37
		-53		259	24
	369	-52		283	19
		-55		280	19
		-53		269	18
		-51		254	18
		-50		227	09
	520	-51		226	11
		-54		230	17
		-57		233	17
		-58		238	12
		-58		205	11
	(085 mb)	-58			

Tropopause: I 300mb. -65° 28,200'

CAMBORNE

Pressure — Time: 15h. G.M.T. | M.S.L.: 998·4 mb | Surf: 977·9 mb | Pressing: 895 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	02·9	44	37	250	12
	-3·2				
		40	33	262	20
	28·0	33	34	264	21
		26	16	269	21
	55·6	22	10	275	20
		14	03	278	21
	89·1	06	-05	278	24
		-01	-14	275	22
	127	-08	-29	273	32
		-17	-39	270	29
	170	-46	-60	268	32
		-49		277	35
	220	-60		277	38
		-70		274	41
	281	-61		275	36
		-56		286	31
	367	-56		303	30
		-56		306	29
		-59		307	25
		-60		308	21
		-61		300	22
	516	-62		308	21
		-63		306	14
		-64			

Tropopause: II 308mb. -70° 27,500'

VALENTIA

Pressure — Time: 15h. G.M.T. | M.S.L.: 986·9 mb | Surf: 985 mb | Pressing: 920 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	00·3	39	34	290	09
	-3·6				
		35	30	295	20
	24·3	30	24	292	32
		24	20	289	37
	54·7	18	13	285	37
		12	06	280	35
	88·2	05	-01	279	39
		-04	-09	278	42
	126	-12	-20	280	48
		-21	-30	282	52
	169	-26	-38	283	59
		-37	-50	290	63
	219	-44		290	61
		-51		296	64
	281	-60		294	53
		-47		306	42
	370	-50		297	42
		-52		312	39
		-52		324	36
		-53		310	28
		-58		310	25
	520	-62		310	26
		-59		317	27
		-55		316	26
	(076 mb)	-54			

Tropopause: I 300mb. -60° 28,000'

LERWICK

Pressure — Time: 21h. G.M.T. | M.S.L.: 983·4 mb | Surf: 973·4 mb | Pressing: 912 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	37	37	150	12
1000	-4·5				
950		37	34	148	24
900	23·3	30	29	146	27
850		24	23	142	31
800	53·9	18	16	141	31
750		13	10	143	30
700	87·5	07	00	142	31
650		01	-10	138	30
600	125	-11	-18	130	29
550		-21	-27	128	30
500	168	-31	-36	128	28
450		-40	-45	138	26
400	218	-50		144	23
350		-60		143	20
300	279	-60		140	22
250		-53		144	24
200	365	-51		172	16
170		-51		187	17
150		-53		190	17
130		-52		185	18
110		-54		215	17
100	(108 mb)	-54			
90					
80					
70					
60					

Isothermal 973 - 950mb. 37°

Tropopause: I 359mb. -61° 24,000'

STORNOWAY

Pressure — Time: 21h. G.M.T. | M.S.L.: 979·4 mb | Surf: 977·8 mb | Pressing: 922 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	00·4	36	32	180	05
	-5·6				
		35	30		
	22·2	29	22	147	09
		23	15	142	10
	52·7	18	14	115	15
		12	06	111	16
	86·3	06	-05	117	13
		-03	-15	124	17
	124	-11	-21	119	21
		-20	28	107	23
	167	-30	-38	098	30
		-40	-47	096	39
	216	-45		106	31
		-54		110	16
	279	-52		139	06
		-47		097	03
	369	-47		251	12
		-47		279	12
		-48		288	14
		-49		294	18
		-51		297	13

Isothermal 426 - 395mb. -45°

Tropopause: I 350mb. -46° 24,600'

LEUCHARS

Pressure — Time: 21h. G.M.T. | M.S.L.: 982·4 mb | Surf: 981·5 mb | Pressing: 942 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	00·2	32	31	250	08
	-4·9				
		32	30	217	16
	22·7	26	25	201	16
		20	19	196	14
	52·9	15	14	192	13
		09	06	196	16
	86·3	02	-04	197	18
		-06	-15	203	18
	124	-16	-25	213	18
		-25	-33	214	15
	166	-34	-43	209	14
		-42		183	15
	215	-43		194	12
		-46		193	12
	279	-48		232	18
		-46		241	12
	368	-48		244	11
		-48		246	16
		-49		265	12
		-48			

Inversion 981mb. 32° - 955mb. 33°

Tropopause: I 425mb. -45° 20,300'

ALDERGROVE

Pressure — Time: 21h. G.M.T. | M.S.L.: 982·7 mb | Surf: 973·5 mb | Pressing: 960 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	02·6	33	32	230	16
	-4·5				
		31	29	240	21
	23·2	29	22	258	22
		22	15	268	23
	53·5	16	14	262	23
		09	06	262	24
	87·0	02	-02	254	23
		-05	-10	252	24
	124	-13	-19	263	15
		-23	-30	262	15
	167	-34	-41	280	15
		-45		264	18
	216	-53		252	20
		-46		270	18
	280	-49		280	26

Isothermal 950 - 923mb. 31°

Tropopause: II 400mb. -53° 21,600'

LIVERPOOL

Pressure — Time: 21h. G.M.T. | M.S.L.: 984·0 mb | Surf: 986·1 mb | Pressing: 921 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	00·6	35	31	240	12
	-3·7				
		36	31	246	20
	23·6	30	24	254	24
		23	16	248	27
	53·9	16	11	242	29
		09	01	243	26
	87·3	03	-03	249	26
		-06	-13	254	28
	125	-14	-22	255	30
		-24	-32	264	34
	167	-36	-42	257	40
		-42		250	37
	217	-45		247	45
		-50		251	38
	280	-49		257	31
		-50		266	25
	368	-48		286	21
		-51		286	26
		-53		287	20
		-52		303	20
		-56		288	09
	519	-54		287	10
	(098 mb)	-53			

Inversion 984mb 38° - 950mb. 36°

Isothermal 489 - 464mb. -39°

435 - 423mb. -42°

Tropopause: II 354mb. -50° 24,200'

DOWNHAM MARKET

Pressure — Time: 21h. G.M.T. | M.S.L.: 989·7 mb | Surf: 985·2 mb | Pressing: 910 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	01·2	35	32	170	08
	-2·7				
		36	31	224	24
	28·2	31	24	239	24
		25	17	248	24
	58·6	19	10	246	24
		12	00	240	26
	89·2	04	-06	239	30
		-04	-13	241	33
	127	-11	-25	244	37
		-19	-35	245	42
	170	-25	-46	245	45
		-35	-55	241	43
	220	-46		237	43
		-55		240	39
	282	-62		244	35
		-53		250	23
	369	-53		250	20
		-52		251	21
		-54		247	18
		-50		234	18
		-54		223	17
	520	-53		248	08
		-54		274	03
		-56			

Inversion 985mb. 35° - 943mb. 36°

Tropopause: I 300mb. -62° 24,200'

LARKHILL

Pressure — Time: 21h. G.M.T. | M.S.L.: 991·2 mb | Surf: 975·0 mb | Pressing: 890 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	04·4	34	30	270	09
	-2·3				
		38	33	251	22
	25·7	33	21	250	23
		26	17	246	24
	56·2	20	07	244	26
		14	00	250	28
	89·9	06	-09	254	28
		-02	-12	256	27
	128	-10	-25	257	30
		-18	-32	250	36
	171	-26	-42	252	41
		-36	-51	255	40
	221	-47		251	36
		-57		254	37
	283	-64		267	35
		-54		274	30
	370	-52		287	25
		-52		284	20
		-55		289	22
		-57		300	23
		-56		284	16
	519	-56		275	17
		-57		276	12
		-58		265	07
	(075 mb)	-60			

Inversion 975mb. 34° - 950mb. 38°

Tropopause: I 307mb. -65° 27,700'

CAMBORNE

Pressure — Time: 21h. G.M.T. | M.S.L.: 992·7 mb | Surf: 982·1 mb | Pressing: 900 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
	02·9	37	34	250	05
	-1·9				
		38	33	267	23
	26·0	32	28	281	25
		26	21	283	26
	56·6	20	18	277	26
		13	11	272	27
	90·2	06	04	267	30
		-02	-04	265	35
	128	-09	-11	267	39
		-17	-31	272	38
	171	-28	-45	275	34
		-37	-54	268	37
	221	-44		277	41
		-53		283	46
	283	-63		289	46
		-53		299	40
	371	-51		303	32
		-51		299	29
		-54		309	32
		-56		312	30
		-58		324	19
	521	-58		320	29
	(095 mb)	-58			

Inversion 982 mb. 37° - 975 mb. 40°

Tropopause: I 292mb. -64° 29,000'

HMSO Press, MO, Dunstable

No. 11637 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Wednesday 7th. February 1951. Page 1.

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

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	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.	988·5 mb	981·8 mb	984·9 mb	986·5 mb	989·1 mb	993·7 mb	994·4 mb	996·0 mb	993·9 mb
Pressure: Surf	975·6 mb	980·2 mb	984·0 mb	977·8 mb	987·0 mb	989·1 mb	978·0 mb	985·4 mb	992 mb
Pressure: Freezing	913 mb	923 mb	948 mb	mb	940 mb	912 mb	925 mb	900 mb	890 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	39	36	150	20	00·4	31	27	150	05	00·2	35	30	210	06
1000	-03·9					-04·8					-04·1				
950		36	31	146	30		35	31	137	07		32	28	224	21
900	24·0	30	27	145	30	23·0	29	24	134	06	23·6	27	22	224	21
850		24	23	143	30		22	18	125	05		22	15	225	20
800	54·4	19	16	140	32	53·4	19	11	119	06	53·8	15	07	228	15
750		14	08	136	32		13	01	113	05		08	-01	222	14
700	88·1	07	01	135	33	87·1	05	-08	112	06	87·1	01	-07	215	15
650		-02	-08	135	35		-03	-17	108	10		-06	-12	225	16
600	12·6	-11	-18	139	38	12·5	-11	-25	107	12	12·4	-14	-24	234	19
550		-20	-28	131	40		-21	-34	101	16		-24	-37	237	19
500	16·8	-30	-38	128	42	16·7	-30	-42	087	24	16·7	-35	-46	256	15
450		-42		130	45		-42		054	33		-47		263	16
400	21·8	-53		130	41	21·7	-53		068	35	21·6	-52		232	16
350		-59		125	30		-52		074	12		-50		227	14
300	28·0	-60		130	22	28·0	-51		308	06	27·9	-50		239	13
250		-52		145	11		-48		292	10		-48		243	15
200	36·7	-52		155	12	36·8	-49		289	13	36·8	-49		287	16
170		-52		168	15		-49		292	16		-51			
150		-52		183	19	43·1	-49		302	18					
130		-55		197	18		-51		288	15					
110		-54		190	20		-53		291	16					
100	51·8	-57		206	20	52·0	-54		303	15					
90		-57		253	20		-55		302	15					
80		-57		227	10		-55		282	11					
70		-57		227	10		-52		283	15					
60	(65mb) -57														

Inversion 405 mb 54° - 389 mb -55°

Inversion 980 mb 31° - 963 mb 37° 825 . 18° - 790 . 20°

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.	Pressure mb
Surf	02·6	31	30	240	08	00·6	36	32	200	03	01·2	34	31	180	08	04·4	32	31	210	03	02·9	39	35	320	10	00·3	42	33			Surf
1000	-03·3					-02·9					-01·6					-01·5					-01·1					-01·6					1000
950		30	27	242	15		33	28	219	12		35	30	220	21		35	33	242	24		36	33	284	22		37	28			950
900	24·9	28	24	276	23	24·9	28	24	251	18	26·3	30	25	239	20	26·2	29	27	242	25	26·9	32	30	281	26	26·4	33	28			900
850		23	16	277	23		22	20	255	22		24	19	231	23		23	21	240	27		26	25	281	28		24	22			850
800	54·7	17	08	278	21	55·1	17	12	252	24	56·6	18	10	233	32	56·5	18	13	236	29	57·5	19	18	284	32	56·9	18	16			800
750		10	-02	276	17		11	02	248	25		12	07	233	33		10	02	231	30		11	07	287	34		11	10			750
700	08·8	03	-10	277	14	08·5	04	-03	247	27	90·2	06	-02	219	33	89·9	02	-03	235	32	91·1	06	-07	285	37	90·4	05	04			700
650		-06	-20	294	18		-01	-13	243	25		-03	-10	227	35		-04	-07	241	35		-01	-14	286	36		-01	-06			650
600	12·5	-14	-29	303	21	12·6	-10	-23	245	26	12·9	-12	-17	225	33	12·7	-13	-17	243	35	12·9	-09	-19	278	41	12·8	-09	-20			600
550		-23	-40	307	24		-20	-32	243	25		-22	-26	227	33		-23	-27	242	39		-19	-27	278	41		-17	-31			550
500	16·8	-33	-50	312	28	16·9	-30	-40	240	29	17·0	-30	-35	225	39	17·0	-32	-36	237	41	17·2	-25	-39	285	46	17·1	-18	-34			500
450		-45		312	27		-41		236	29		-38	-43	222	48		-40	-45	233	49		-29	-54	297	65		-25	-43			450
400	21·7	-54		294	29	21·9	-49		235	32	22·1	-47		222	54	22·0	-47		239	47	22·3	-36	-59	297	62	22·3	-32	-50			400
350		-47		294	31		-46		259	27		-54		220	51		-51		254	40		-44		301	65		-41				350
300	28·0	-48		293	30	28·2	-46		259	22	28·3	-56		230	37	28·2	-52		267	33	28·7	-52		300	63	28·7	-53				300
250		-48		287	35		-48		265	26		-54		243	27		-49		277	34		-53		298	61	(29·2mb)	-55				250
200	36·9	-47		291	31	37·1	-45		278	31	37·1	-49		273	24	37·1	-51		292	30	37·5	-49		305	35						200
170		-54		298	29		-46		290	27		-55		282	22		-52		299	28		-51		295	34	Isothermal 559 - 550 mb -17°					170
150		-52		307	26		-49		288	23	43·4	-53		291	20	43·3	-54		304	26		-52		306	31						150
130		-51		298	22		-51		314	33		-57		282	18		-59		307	21		-55		311	36	Inversion 550 mb -17° - 514 mb -16°					130
110		-60		292	22		-52		303	20		-55		245	10		-58		301	19	(115mb)	-58									110
100		-60		286	18	51·3	-53		298	20	52·1	-56				52·1	-59		297	20											100
90		-60					-53		305	15							-59														90
80							-54		303	15																					80
70							-55		279	15																					70
60						(56mb)	-55																								60

Isothermal 401 - 385 mb -49°

Inversion 989 mb 34° - 973 mb 37° 978 mb 31° - 950 mb 35°

Inversion 445 mb -40° - 410 mb -39° 388 . -44° - 370 . -42°

Inversion 991 mb 38° - 960 mb 36° 775 . 12° - 762 . 14°

Isothermal 450 - 400 mb -43°

Inversion 989 mb 36° - 975 mb 41° 550 . -13° - 540 . -12° 450 . -25° - 441 . -24°

	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Tropopause	I 339 mb -62° 25,400'	I 400 mb -53° 21,700'	II 424 mb -54° 20300'	I 407 mb -56° 21,400'	I 385 mb -49° 23,700' I 345 mb -47° 25,200'	II 338 mb -55° 25,700'	II 336 mb -53° 25,600'	II 292 mb - 53° 29,300'	N.R.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Pressure: Time	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	G.M.T.
Pressure: M.S.L.	988·5 mb	984·7 mb	987·8 mb	988·7 mb	993·5 mb	996·0 mb	997·3 mb	999·9 mb	mb
Pressure: Surf	978·5 mb	983·0 mb	986·9 mb	979·8 mb	991·4 mb	991·3 mb	980·9 mb	989·2 mb	mb
Pressure: Freezing	926 mb	920 mb	960 mb	953 mb	932 mb	931 mb	918 mb	905 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	Pressure mb
Surf	02·7	37	37	140	19	00·4	31	26			00·2	34	29	240	15	02·6	34	32	210	18	00·6	35	31	200	05	01·2	34	33	190	07	04·4	32	30	275	09	02·9	36	34	203	08	Surf
1000	-03·1					-04·1					-03·3					-02·8					-01·8					-01·4					-00·7					00·1					1000
950		36	33	151	27		34	28				31	27	233	21		32	30	238	22		35	28	235	15		34	30	236	21		36	32	270	26		38	29	272	26	950
900	24·8	28	27	152	27	23·5	27	20			24·3	27	23	244	18	24·8	28	25	241	25	26·0	28	24	260	16	26·2	28	21	238	22	27·0	30	26	271	25	28·1	31	23	282	26	900
850		21	19	157	31		24	16				22	15	247	17		24	21	244	29		21	17	268	19		22	15	233	20		24	16	266	25		25	12	286	28	850
800	55·0	16	11	150	31	53·9	20	01			54·6	19	13	228	14	53·3	18	15	246	26	56·3	15	13	275	21	56·5	17	07	232	26	57·4	19	09	273	23	58·6	19	05	286	30	800
750		10	02	142	30		14	-02				11	03	216	15		12	07	249	25		13	07	273	25		11	02	231	27		12	01	279	25		12	-01	291	31	750
700	88·4	04	-03	146	28	87·6	07	-09			88·1	05	-03	222	14	88·3	06	-01	254	27	90·0	05	-01	270	22	90·0	04	-05	225	29	91·0	05	-08	281	27	92·2	06	-09	297	33	700
650		-05	-23	151	25		-01	-18				03	-10	228	15		-02	-10	265	24		-03	-12	281	25		-04	-13	218	34		-05	-18	273	26		-01	-15	298	38	650
600	12·6	-15	-30	148	28	12·5	-10	-26			12·6	-11	-20	223	16	12·7	-08	-22	274	24	12·8	-10	-20	279	27	12·7	-13	-19	214	31	12·8	-14	-27	271	25	13·0	-08	-24	298	43	600
550		-25	-38	145	36		-20	-32				-20	-31	219	17		-18	-29	279	39		-20	-33	282	26		-22	-32	205	32		-24	-36	270	24		-13	-31	301	53	550
500	16·8	-37	-46	140	40	16·8	-29	-36			16·8	-30	-41	239	19	17·0	-29	-38	281	31	17·0	-31	-43	283	30	17·0	-32	-48	200	36	17·1	-35	-45	276	26	17·3	-17	-37	312	70	500
450		-47		136	37		-40	-46				-41		283	19		-40	-49	288	40		-42		293	30		-43		201	33		-46		283	25		-25	-43	314	96	450
400	21·7	-50		135	31	21·8	-49				21·8	-49		255	16	22·0	-42		296	54	22·0	-47		295	36	22·0	-43		213	28	22·0	-41		304	58	22·5	-30	-46	310	124	400
350		-54		145	22		-51					-47		258	15		-45		298	62		-44		302	46		-46		236	28		-45		310	66		-42		307	133	350
300	28·0	-54		161	16	28·1	-48				28·2	-44		267	19	28·4	-46		297	55	28·4	-47		298	45	28·4	-46		252	25	28·4	-50		306	56	28·9	-54		315	130	300
250		-52		160	14		-48					-44		274	17		-48		299	45		-46		301	29		-47		257	25		-51		301	43		-65		319	102	250
200	36·8	-53		185	10	37·0	-47				37·1	-44		265	20	37·3	-48		287	37	37·3	-46		282	33	37·3	-45		264	27	37·2	-52		287	35	37·5	-58		315	46	200
170		-51		195	08		-47					-46		284	21		-46		285	31		-48		297	29		-51		243	24		-51		293	29		-54					170
150		-50		195	12	Inversion 983 mb 31° - 959 mb 35°					43·5	-43		276	22	43·6	-49		284	30		-49		294	29		-60		273	25	43·5	-56		292	26	43·7	-60					150
130		-51										-47		280	26		-51					-53		291	23		-53		289	22		-55		299	24		-62					130
110	(120mb)	-62										-50		292	19		-54					-55		311	19		-60		269	12		-58		314	16							110
100											52·4	-50				52·4	-55					-55		319	14	52·4	-53		261	09	52·2	-58		286	13	52·4	-60					100
90																						-51					-53		259	06		-59		004	09		-60					90
80																					(84mb)	-55									-57		005	03		-61					80
70																																									70
60																																									60

Inversion 990 mb 34° - 958 mb 35° 981 mb 32° - 956 mb 37°

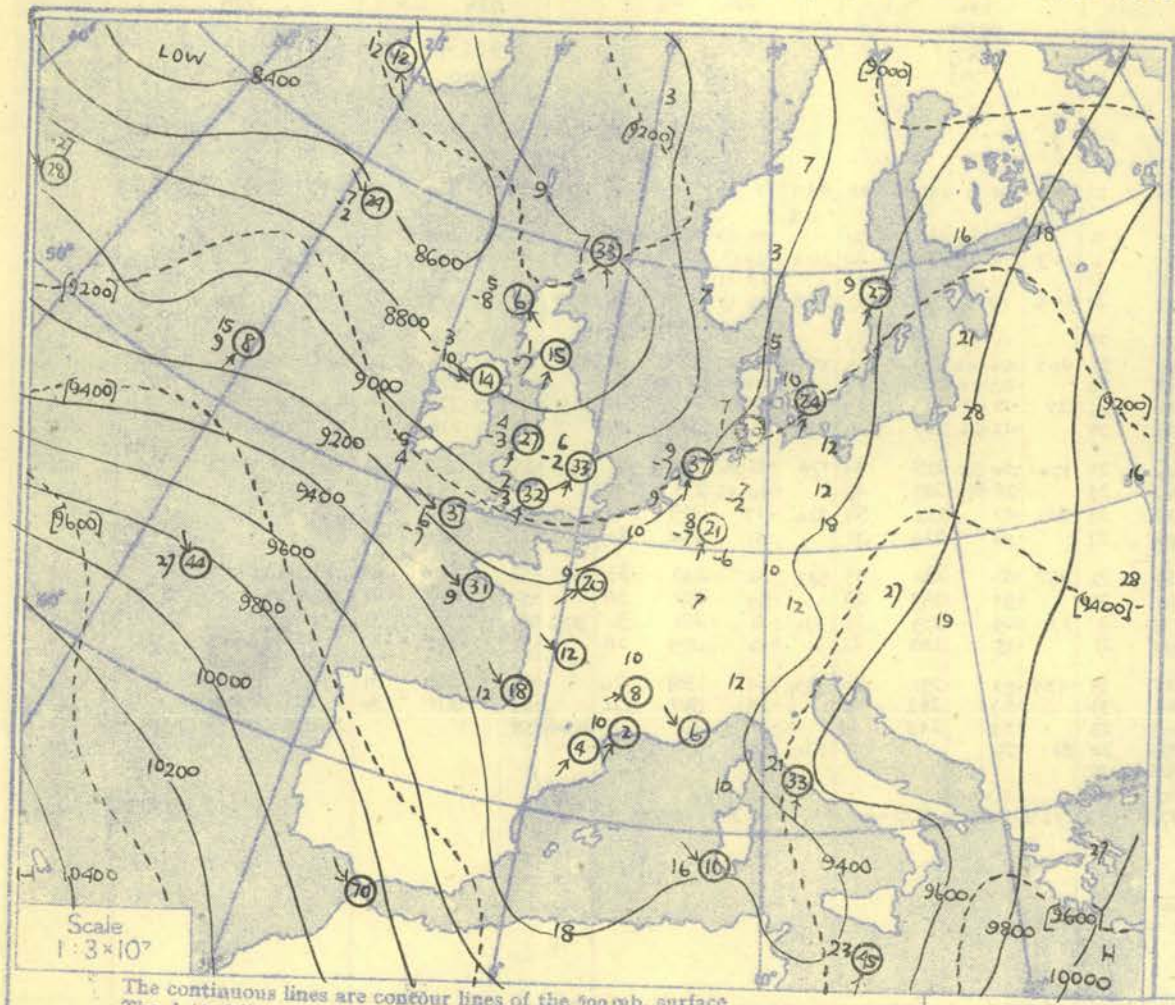
Isothermal 450 - 400 mb -43°

	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Tropopause	I 350 mb -54° 24,600'	II 394 mb - 50° 22,200'	I 415 mb -50° 20900'	I 316 mb -48° 27,200'	I 409 mb -49° 26,000	25,500	20,300'	404 mb 68° 38,400	

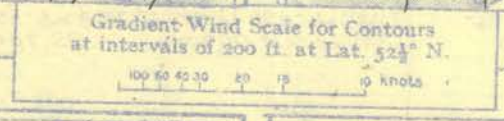
Inversion 989 mb 36° - 975 mb 41° 550 . -13° - 540 . -12° 450 . -25° - 441 . -24°

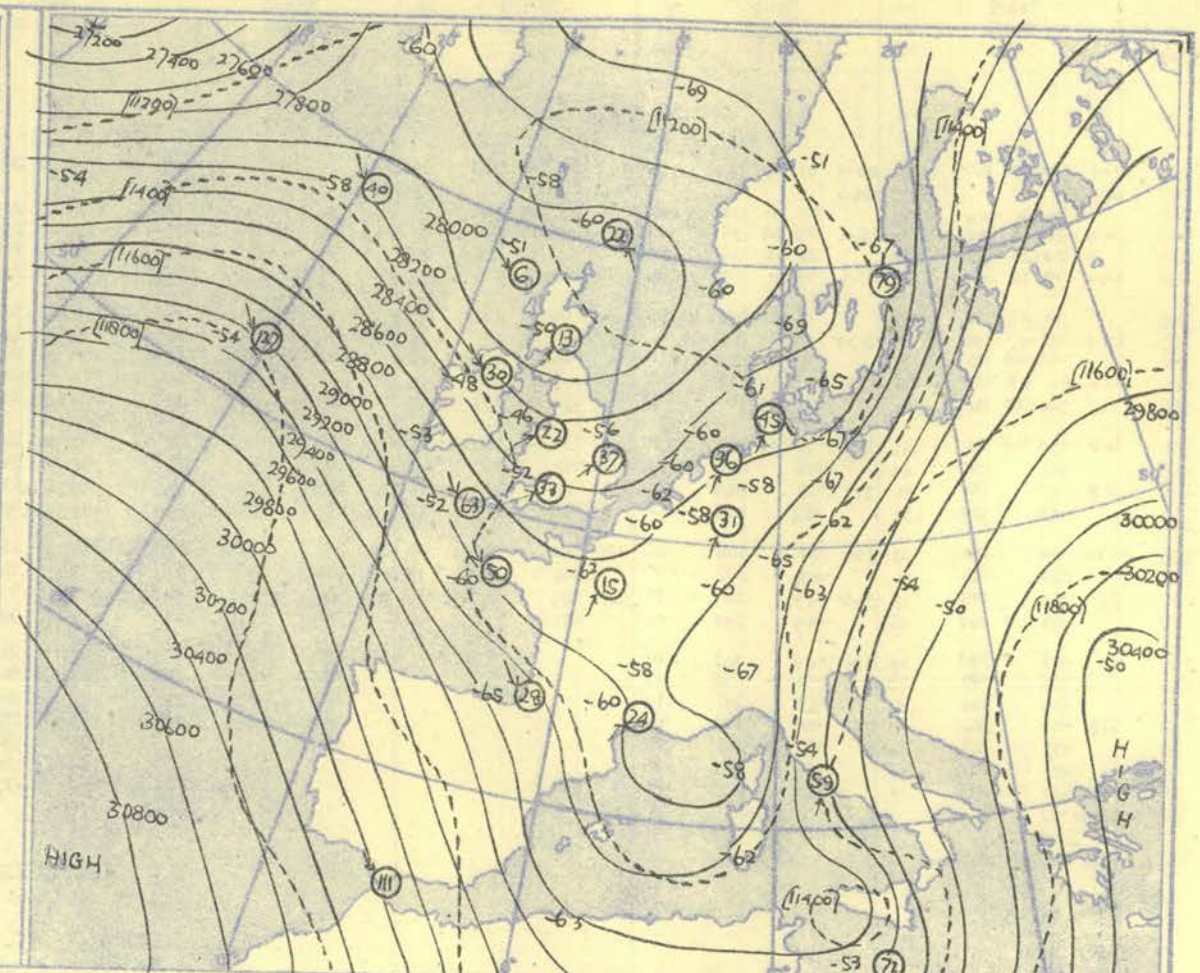
Wednesday 7th February. 1951.

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

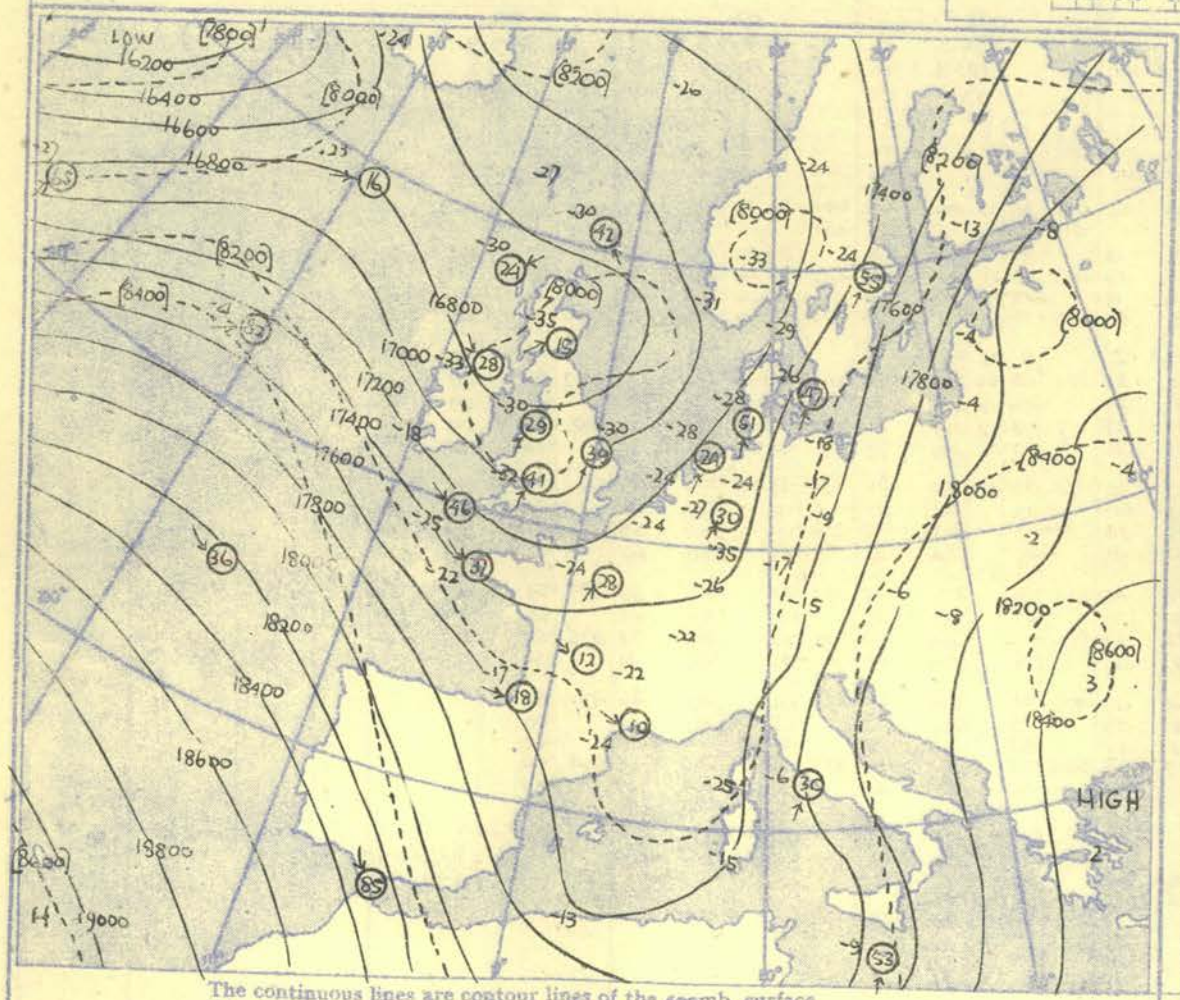


The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

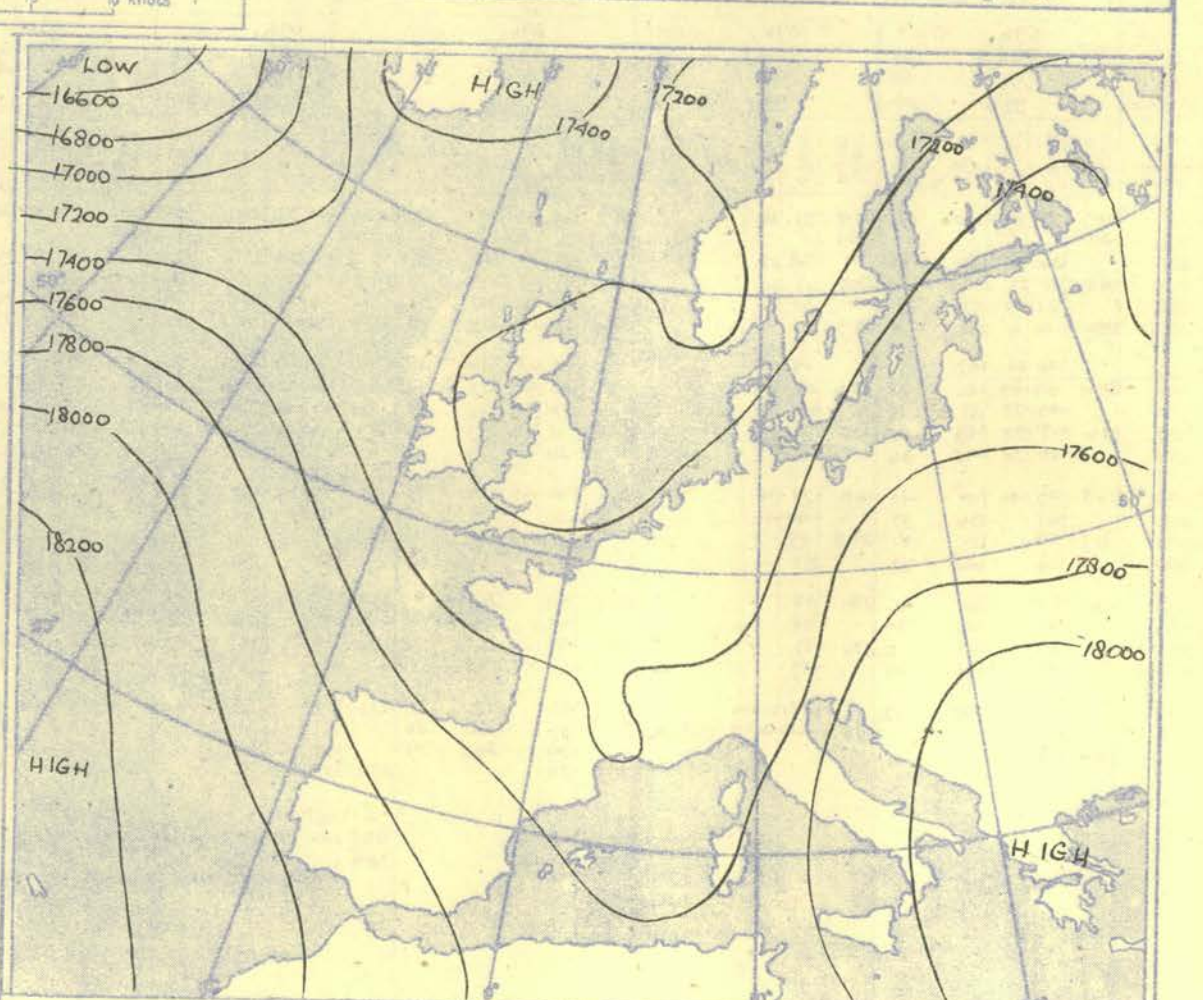




The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb



The continuous lines are contour lines of the 500mb. 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

Position	51·3 N 00·4E
Time	15h
Pressure M.S.L.	1000·7 mb
Pressure Surf	989·9 mb
Freezing	880 mb

Pressure mb	Height ft./100	°F. Temp.	°F. Dew
Surf	03·1	44	35
1000	00·4	40	
950			
900	28·5	35	35
850		24	
800	59·2	19	
750			
700	92·8	05	
650			
600	130	-11	
550			
500	174	-18	
450			
400	225	-38	
350			
300	288	-56	
250			
200			
170			

Cloud 3 Cu. 865-750mb

Isothermal 550- 500mb -18°

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

Place	Downham Market
Time	15h
Type	Pilar

Feet	Dir.	Vel.
Surf.	190	16
1,000	221	25
2,000	229	21
3,000	237	21
4,000	240	22
5,000	244	24
6,000	240	24
8,000	235	32
10,000	235	28
14,000	245	28
18,000	275	42
24,000	304	93
30,000		
40,000		
50,000		

NEPHOSCOPE OBSERVATIONS

Place	Shawbury	Castle Archdale
Time Type	15h Ac	15h Ci.
Dir. Vel.	240 45	310 35

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

	Weather Explorer					Weather Explorer				
Lat/Long	52·6N 19·9W					52·7N 19·4W				
Time G.M.T.	03h					09h				
M.S.L. mb	996					983				
Surf mb	996					983				
Freezing mb	905					890				
Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Vel. knots
Surf		42	28	210	02		43	40	125	27
1000	-1·1					-4·7				
950		37	29	229	08		39	36	133	35
900	27·0	31	25	229	13	32·4	33	27	142	38
850		26	23	229	14		30	23	150	36
800	57·5	20	18	229	12	54·3	30	23	172	33
750		15	09	223	09		26	18	217	44
700	91·4	15	09	237	08	88·9	21	13	233	53
650		12	06	260	36		15	04	255	59
600	130	09	02	274	49	128	09	-29	260	63
550		02	-06	272	65		03	-34	258	68
500	175	-04	-12	267	82	173	-06	-44	255	72
450		-14	-23	276	90		-16	-50	255	89
400	228	-25	-33	275	105	225	-24	-57	258	127
350		-39	-48	272	104		-36	-59	265	143
300	293	-54		277	127					
250		-69		283	128					
200	378	-59		286	75					
170		-61		291	51					
150		-60		296	40					
Notes	Inversion 731mb 15°- 720mb 16°; Isothermal 750- 731mb 15°					Inversion 950mb 30°- 910mb 31°; 636 .. 10°- 626 .. 11°				
Tropopause	I 228mb -76° 35,000'					N.R.				

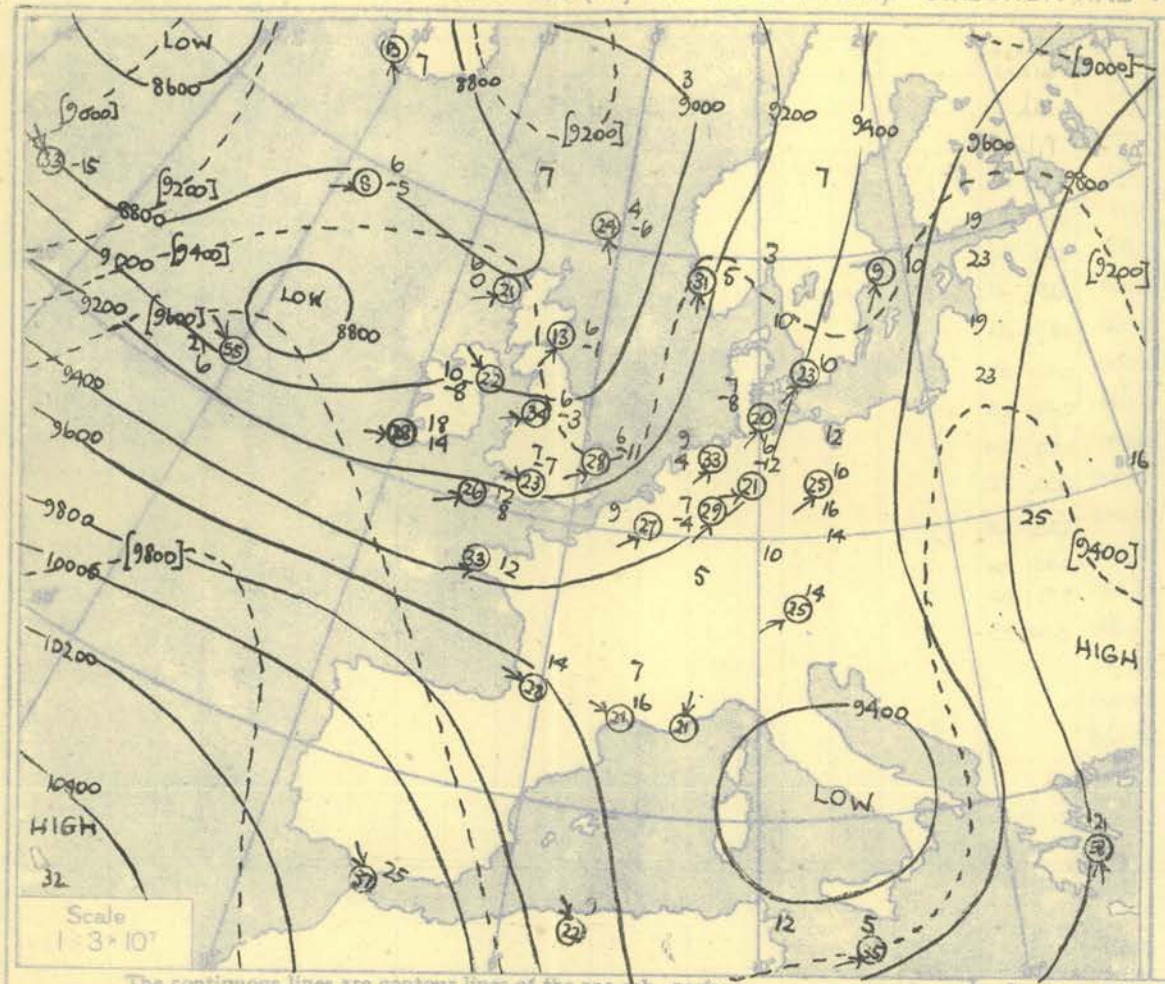
	Weather Explorer					Weather Explorer				
Lat/Long	51·9N 20·1W					52·3N 20·2W				
Time G.M.T.	15h					21h				
M.S.L. mb	977					991				
Surf mb	977					991				
Freezing mb	900					900				
Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Vel. knots
Surf		49	45	240	22		44	36	307	24
1000	-6·2					-2·6				
950		49	47	281	29		37	33	305	31
900	22·3	41	40	282	29	25·5	32	27	307	32
850		35	34	280	38		26	21	304	30
800	53·5	30	27	281	35	56·2	21	15	295	26
750		28	16	287	43		16	09	293	25
700	88·2	21	06	293	56	90·1	08	03	294	23
650		17	-06	292	55		00	-11	297	27
600	127	13	-01	277	64	128	-08	-25	285	42
550		05	-23	288	78		-14	-32	282	50
500	173	-01	-31	293	98	171	-19	-38	271	77
450		-10	-38	292	96		-25	-46	268	114
400	226	-21	-50			223	-30	-53	246	136
350	(398 mb)	-22					-41		243	125
300						287	-51		247	142
250							-56		248	116
200						(235 mb)	-53			
Notes	Inversion 665mb 16°- 632mb 18°; Isothermal 977- 950mb 49°					Isothermal 475- 445mb -25°; 345- 330.. -43°				
Tropopause	N.R.					I 260mb -59° 31,800'				

	Weather Recorder					Weather Recorder				
Lat/Long	59·1N 19·2W					59·2N 19·5W				
Time G.M.T.	03h					09h				
M.S.L. mb	982					986				
Surf mb	982					986				
Freezing mb	922									
Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Vel. knots
Surf		39	39	300	28		39	39	330	25
1000	-4·9					-3·9				
950		35	30	290	33		34	34	328	16
900	22·9	29	20	294	35	24·0	28	28	311	19
850		23	14	300	33		22	18	287	24
800	53·3	17	09	306	34	54·2	14	14	281	17
750		10	03	306	30		06	06	282	12
700	86·9	07	-02	297	29	87·6	07	-05	281	13
650		-01	-17	286	24		00	-12	282	18
600	125	-06	-21	267	22	125	-07	-17	264	24
550		-14	-27	256	17		-15	-25	261	21
500	168	-23	-36	273	16	169	-24	-33	282	16
450		-34	-43	288	23		-34	-41	285	16
400	219	-45		289	26	219	-46		273	21
350		-52		289	39		-57		269	27
300	281	-58		289	40	281	-59		298	39
250		-55		271	33		-56		265	27
200	369	-52		261	35	269	-49		259	30
170		-52		270	32		-48		255	33
150		-52		278	27		-47		259	26
130							-47		262	20
110							-51		262	20
100						521	-53			
Notes	Isothermal 753- 725mb 10°; 300- 295.. -59°; 650- 635.. -1°					Inversion 750mb 06°- 720mb 09°				
Tropopause	II 300mb -68° 28,100					I 325mb -60° 26,400'				

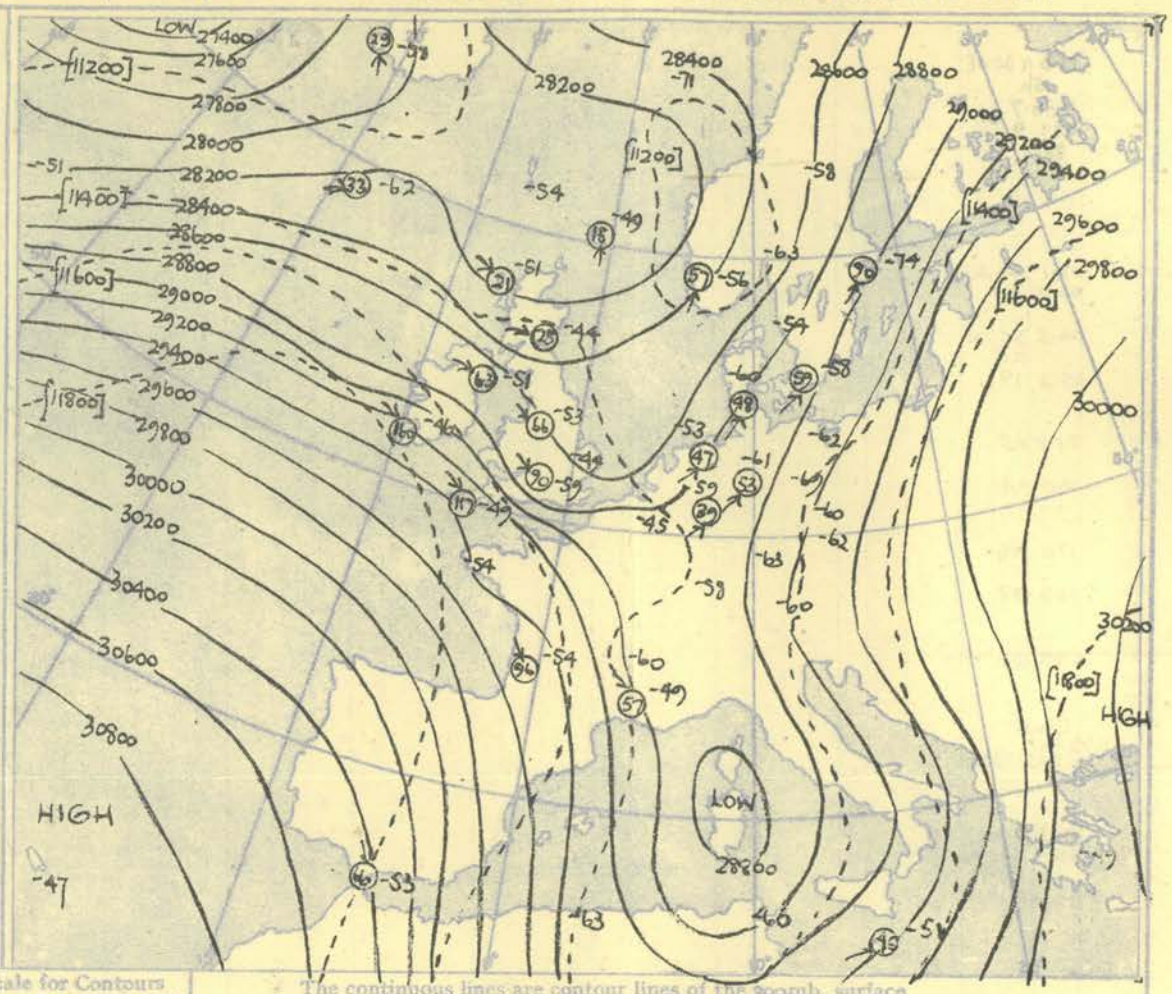
	Weather Recorder					Weather Recorder				
Lat/Long	59·1N 19·4W					59·1N 19·2W				
Time G.M.T.	15h					21h				
M.S.L. mb	988					988				
Surf mb	988					988				
Freezing mb	930					935				
Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Vel. knots
Surf		39	38	340	09		40	38	030	10
1000	-3·2					-3·2				
950		34	31	348	06		34	31		
900	24·6	27	22	339	07	24·6	26	22		
850		20	12	325	08		21	14		
800	54·9	14	06	317	09	54·9	15	09		
750		08	-01	280	09		09	03	For Winds	
700	88·3	06	-05	248	08	88·3	03	-04		
650		01	-14	233	09		-04	-11		
600	126	-07	-19	222	13	126	-12	-19	See	
550		-14	-26	221	19		-20	-27		
500	169	-22	-33	235	15	168	-27	-35	Top of	
450		-32	-43	235	17		-36	-43		
400	220	-44		212	21	219	-47			
350		-56		219	21		-58		Page.	
300	282	-62		235	33	280	-66			
250		-52		221	29		-56			
200	371	-46		227	27	367	-50			
170		-47		230	37		-50			
150		-48		233	35		-50			
130		-49		231	31		-50			
110		-49		215	25		-50			
100	523	-49		217	24	519	-55			
90		-48		226	18		-54			
80		-48		221	19		-54			
70		-50		217	19		-54			
60		-47		198	26		-54			
	(050 mb)	-44								
Notes	Isothermal 730- 695mb 6°									
Tropopause	I 296mb -63° 28,600'					I 315mb -68° 27,000'				

Wednesday 7th February 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.

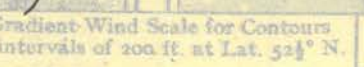


The continuous lines are contour lines of the 700 mb. surface.
The dotted lines are isopleths of the thickness of the layer 1000—700 mb

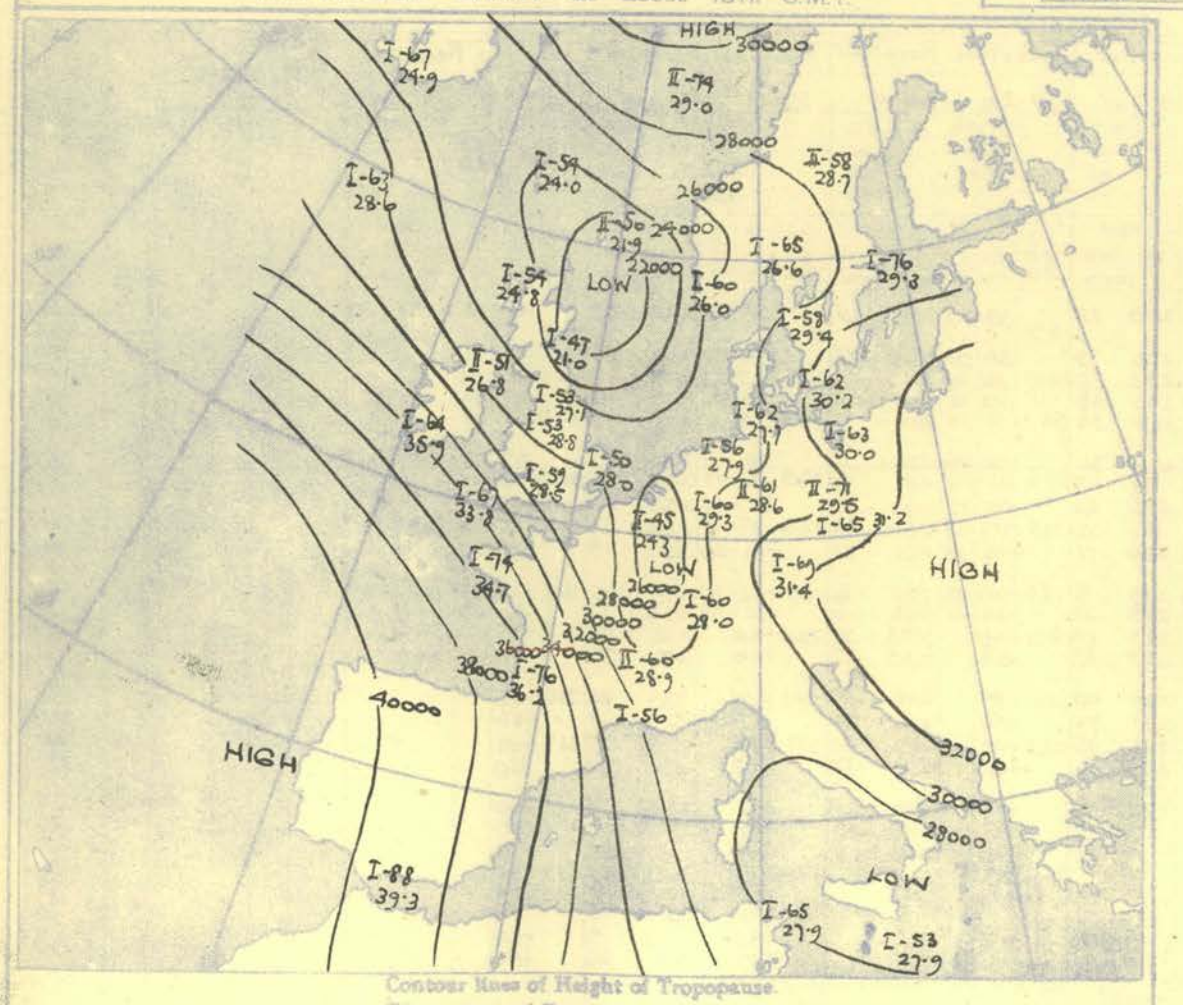


The continuous lines are contour lines of the 300mb. surface
The dotted lines are isopleths of the thickness of the layer 500 - 300 mb.

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



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



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

The warm ridge in the Atlantic advanced again to reach Ireland, produce a tight thermal gradient over Southwestern England, and to sharpen the cold trough over France. A further cold trough formed on the Western Atlantic

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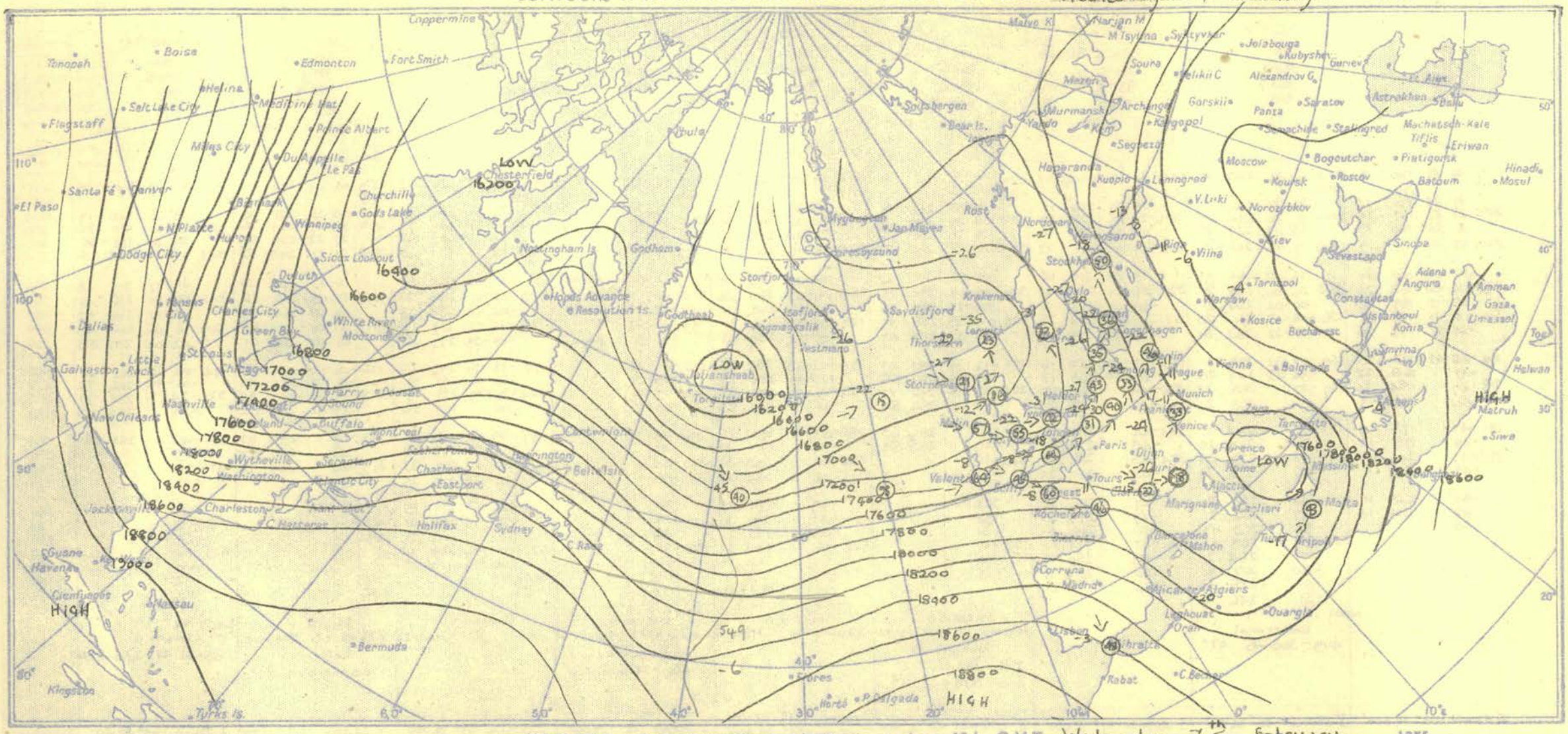
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

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



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

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Wednesday 7th February, 1951.

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

LERWICK

Pressure	Time	G.M.T.
	15h.	
M.S.L.	989·5	mb
Surf	979·5	mb
Freezing	920	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	40	37	180	18
1000	-2·9				
950		37	34	170	24
900	25·0	29	27	167	24
850		21	20	165	29
800	35·2	17	15	161	29
750		10	03	160	26
700	88·7	04	-06	165	24
650		-05	-12	169	26
600	126	-14	-21	172	28
550		-24	-31	173	25
500	168	-35	-42	173	23
450		-47		165	22
400	218	-49		154	20
350		-50		160	18
300	281	-49		173	15
250		-48		195	13
200	370	-49		206	09
170		-48		227	11
150		-48		245	11
130		-48		245	13
110		-58			
100					
90					
80					
70					
60					

Tropopause: II 420mb. -53° 29,600'

STORNOWAY

Pressure	Time	G.M.T.
	15h.	
M.S.L.	985·2	mb
Surf	983·7	mb
Freezing	915	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	40	34	225	08
1000	-4·0				
950		36	31	226	15
900	24·0	31	26	234	15
850		25	19	239	17
800	54·6	19	15	243	18
750		14	07	244	19
700	88·3	06	00	250	21
650		00	-04	263	21
600	126	-08	-13	281	20
550		-17	-22	284	20
500	169	-27	-32	298	21
450		-38	-43	309	25
400	219	-47		313	22
350		-54		303	20
300	282	-51		284	21
250		-51		268	24
200	371	-48		275	25
170		-46		278	21
150		-46		270	21
130		-47		266	21
110		-51		262	18
100	523	-51		263	19
90		-51		264	21
80		-50		267	16
70		-49		245	13
60		-51		246	16
(980) mb		-53			

Isothermal 409 - 300 mb 47°

Tropopause: I 350mb. -46° 24,800'

LEUCHARS

Pressure	Time	G.M.T.
	15h.	
M.S.L.	990·0	mb
Surf	989·1	mb
Freezing	938	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	40	33	220	07
1000	-2·7				
950		34	29	216	12
900	25·1	28	25	221	13
850		22	20	220	16
800	55·4	19	11	221	17
750		13	03	217	14
700	89·1	06	-01	207	13
650		-03	-09	208	21
600	127	-09	-18	218	25
550		-17	-25	227	19
500	170	-27	-37	242	16
450		-39	-50	263	13
400	220	-44		271	19
350		-42		278	29
300	284	-44		271	25
250		-45		274	29
200	374	-45		281	23
170		-45		269	24
150		-47		280	25
130		-47		279	25
110		-50		280	16
100	526	-52		274	15
90		-49		280	15
80		-50		256	11
70		-50			
60					

Tropopause: I 415mb. -47° 24,000'

ALDERGROVE

Pressure	Time	G.M.T.
	15h.	
M.S.L.	989·0	mb
Surf	980·0	mb
Freezing	885	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	40	37	210	18
1000	-2·8				
950		38	35	246	18
900	25·3	33	29	265	26
850		28	21	283	26
800	56·0	23	15	292	23
750		18	05	295	22
700	90·0	10	-08	290	22
650		02	-21	287	25
600	128	-04	-28	288	41
550		-09	-34	288	57
500	172	-12	-38	287	57
450		-23	-44	287	66
400	224	-35	-52	286	72
350		-45		284	84
300	287	-51		286	63
250		-46		285	54
200	376	-46			
170		-42			
150		-44			
130		-54			
110		-51			
100	529	-49			
90		-50			
80		-51			

Inversion 540 mb. 71° - 512 mb. 70°

Isothermal 195 - 184 mb. 22° 613 - 578 mb. -4°

Tropopause: II 328 mb. -51° 26,800'

LIVERPOOL

Pressure	Time	G.M.T.
	15h.	
M.S.L.	993·7	mb
Surf	991·6	mb
Freezing	900	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	43	35	210	12
1000	-1·7				
950		38	29	223	18
900	26·4	32	25	237	21
850		24	20	248	23
800	56·9	18	16	253	28
750		12	06	259	30
700	90·5	06	-03	262	34
650		-01	-12	264	31
600	128	-08	-17	271	31
550		-15	-24	284	43
500	171	-22	-33	287	55
450		-25	-39	292	73
400	223	-36	-52	296	87
350		-48		296	83
300	286	-53		293	66
250		-49		293	42
200	374	-51		285	35
170		-46		284	29
150		-49		274	29
130		-53		272	30
110		-53		282	21
100	526	-56		283	24
90		-59		268	16
80		-57		262	11
70		-55		274	06
60		-54			

Inversion 820 mb. -53° - 311 mb. -51°

Tropopause: I 323 mb. -53° 27,100' I 298 mb. -53° 28,800'

DOWNHAM MARKET

Pressure	Time	G.M.T.
	15h.	
M.S.L.	999·3	mb
Surf	994·1	mb
Freezing	925	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	43	33		
1000	-0·5				
950		36	26		
900	27·8	30	20		
850		25	13	For	
800	57·9	19	05		
750		12	-04	winds	
700	91·5	06	-11		
650		-02	-18	see	
600	129	-11	-27		
550		-20	-36	page	
500	172	-31	-46		
450		-35	-51	3.	
400	222	-39	-55		
350		-48			
300	286	-49			
250		-47			
200	375	-50			
150		-50			
130		-52			
110		-54			
100		-58			
90	525	-58			
80		-57			
70		-57			
60		-58			

Inversion 400 mb. -37° - 455 mb. -34°

Isothermal 440 - 415 mb. -36°

Tropopause: I 308mb. -50° 28,000'

LARKHILL

Pressure	Time	G.M.T.
	15h.	
M.S.L.	999·2	mb
Surf	983·1	mb
Freezing	914	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	43	34	250	12
1000	-0·2				
950		38	28	241	18
900	27·8	30	23	248	22
850		24	19	249	25
800	58·2	18	14	252	25
750		13	04	264	24
700	91·8	07	-07	266	23
650		-02	-16	258	23
600	129	-11	-22	279	29
550		-13	-28	292	51
500	173	-18	-36	296	64
450		-28	-46	297	71
400	224	-38	-49	298	87
350		-50		297	96
300	287	-59		302	90
250		-55		299	54
200	374	-55		287	33
170		-52		275	25
150		-56		279	25
130		-58		258	21
110		-61		309	21
100	523	-61		301	24
90		-60		324	05
80		-59			
(983 mb)					

Inversion 280 mb. -35 - -33 mb. 72°

Tropopause: I 305mb. -59° 28,500'

CAMBORNE

Pressure	Time	G.M.T.
	15h.	
M.S.L.	999·4	mb
Surf	988·8	mb
Freezing	895	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	44	39	225	10
1000	-2·2				
950		40	35	221	26
900	28·0	33	29	229	26
850		27	22	239	24
800	58·6	21	17	245	24
750		16	13	250	25
700	92·4	12	08	255	26
650		08	03	264	34
600	131	06	01	277	42
550		01	-03	280	51
500	176	-08	-12	286	54
450		-18	-22	284	83
400	228	-29	-33	288	89
350		-39	-44	296	105
300	293	-49		298	117
250		-63		299	150
200	379	-60		300	72
170		-59			
150		-60			
130		-60			
(946 mb)					

Inversion 825 mb. 05° - 788 mb. 07°

Isothermal 700 - 684 mb. 12°

Tropopause: I 243mb. -67° 33,800'

VALENTIA

Pressure	Time	G.M.T.
	15h.	
M.S.L.	990·8	mb
Surf	989	mb
Freezing	890	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	42	39	160	09
1000	-2·5				
950		38	36	162	19
900	28·5	33	30	170	26
850		29	26	174	28
800	56·3	24	21	184	26
750		21	17	219	28
700	90·5	18	14	236	28
650		14	10	256	42
600	129	10	06	265	45
550		02	-04	287	53
500	174	-08	-21	262	64
450		-14	-46	266	74
400	227	-24		281	99
350		-34		285	128
300	292	-46		288	160
250		-59			
200	379	-61			
170		-52			
150		-54			
130		-53			
110		-54			
100	529	-54			
90		-54			
80		-54			
70		-56			
60		-56			
(858 mb)		-52			

Inversion 658 mb. 13° - 650 mb. 14°

Tropopause: I 226mb. -64° 35,400'

LERWICK

Pressure	Time	G.M.T.
	21h.	
M.S.L.	990·0	mb
Surf	980·0	mb
Freezing	935	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	38	34	190	19
1000	-2·7				
950		34	29	164	28
900	28·1	27	23	167	26
850		21	17	168	25
800	58·3	15	10	170	23
750		10	04	172	23
700	88·7	03	-05	174	26
650		-06	-13	174	25
600	126	-16	-24	171	22
550		-25	-33	172	19
500	168	-37	-44	181	15
450		-47		201	10
400	217	-53		220	11
350		-50		208	12
300	280	-54		203	10
250		-49		203	10
200	369	-49		240	18
170		-50		266	18
150		-51		270	16
130		-51		260	14
110		-54			
100	(115 mb)				

Tropopause: I 397mb. -54° 21,900'

STORNOWAY

Pressure	Time	G.M.T.
	21h.	
M.S.L.	986·6	mb
Surf	985·0	mb
Freezing	896	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	36	34	230	05
1000	-0·6				
950		37	32	248	17
900	24·3	32	28	265	14
850		27	23	259	14
800	54·8	21	17	257	17
750		14	03	269	19
700	88·6	07	00	277	20
650		00	-06	264	19
600	126	-07	-22	280	24
550		-17	-31	282	23
500	169	-27	-38	276	20
450		-38	-47	273	18
400	220	-46		265	21
350		-49		275	36
300	282	-52		264	30
250		-48		269	28
200	371	-44		255	20
170		-47		267	26
150		-49		265	23
130		-51		260	22
110		-51		253	16
100	523	-53		247	15
90		-55		238	16
80		-52		254	16
70		-54		243	21
60		-56		244	10

Inversion 985 mb. 36° - 971 mb. 38°

Tropopause: I 379mb. -51° 23,100'

LEUCHARS

Pressure	Time	G.M.T.
	21h.	
M.S.L.	990·0	mb
Surf	989·1	mb
Freezing	937	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	36	34	190	03
1000	-2·7				
950		33	32	250	08
900	25·4	28	28	246	09
850		23	22	227	09
800	55·5	17	16	219	09
750		10	12	202	09
700	89·1	06	-02	215	09
650		-02	-14	225	08
600	127	-09	-26	280	05
550		-18	-36	288	09
500	170	-26	-45	299	14
450		-31	-52	281	29
400	220	-43		285	40
350		-48		284	49
300	283	-50		283	43
250		-47		276	31
200	373	-47		287	32
170		-49		270	25
150		-48		267	23
130		-53		252	21
110		-54		235	17
100	524	-55		254	15
90		-55		331	10

Tropopause: I 327mb. -53° 26,400'

ALDERGROVE

Pressure	Time	G.M.T.
	21h.	
M.S.L.	989·7	mb
Surf	980·2	mb
Freezing	921	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	35	33	180	08
1000	-2·7				
950		33	20	195	06
900	25·1	31	26	192	06
850		25	19	192	10
800	55·6	19	11	193	14
750		14	04	200	21
700	89·4	10	-05	217	13
650		03	-21	238	07
600	127	-05	-29	242	14
550		-13	-23	247	24
500	171	-18	-25	253	30
450		-28	-35	252	31
400	222	-40	-52	262	40
350		-47		265	51
300	286	-52		266	74
250		-54		278	66
200	374	-53		265	45
170		-51		265	37
150		-52		269	30
130		-58		268	31
110		-58		252	24
100	523	-58		251	21
90		-60			

Tropopause: I 360mb. -48° 24,800'

LIVERPOOL

Pressure	Time	G.M.T.
	21h.	
M.S.L.	993·2	mb
Surf	991·2	mb
Freezing	890	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	39	35	185	12
1000	-1·8				
950		39	28	203	19
900	26·2	33	22	219	19
850		26	16	220	20
800	56·7	19	07	220	20
750		15	02	220	21
700	90·5	08	-07	224	22
650		00	-12	244	21
600	128	-08	-24	247	25
550		-11	-20	264	32
500	172	-17	-27	266	39
450		-27	-36	266	44
400	223	-39	-49	273	49
350		-46		282	71
300	287	-54		283	80
250		-53		285	59
200	374	-53		274	41
170		-53		271	36
150		-57		280	26
130		-57		251	26
110		-57		277	15
100	524	-57		259	11
90		-58		285	10

Inversion 991 mb. 39° - 967 mb. 40°

Isothermal 615 - 588 mb. -5° 535 - 523 mb. -13°

Max wind:- 28,300' 303 mb. 284° 96 kts.

Tropopause: II 378mb. -46° 23,700' I 296mb. -55° 28,800'

DOWNHAM MARKET

Pressure	Time	G.M.T.
	21h.	
M.S.L.	998·9	mb
Surf	994·5	mb
Freezing	910	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	36	32	160	12
1000	-0·3				
950		37	28	202	24
900	27·7	21	22	212	23
850		24	17	220	21
800	58·1	19	08	224	18
750		13	-02	226	26
700	91·7	07	-11	228	28
650		-02	-14	233	24
600	129	-08	-24	244	28
550		-14	-31	260	32
500	173	-19	-24	270	42
450		-27	-34	271	53
400	224	-39	-47	280	48
350		-49		285	66
300	287	-56		287	75
250		-57		292	63
200	374	-56		280	39
170		-54		278	35
150		-56		278	27
130		-59		273	22
110		-63		267	16
100	523	-61		263	15
90		-61		268	12

Inversion 995 mb. 36° - 963 mb. 39°

Tropopause: II 306mb. -57° 28,200

LARKHILL

Pressure	Time	G.M.T.
	21h.	
M.S.L.	997·6	mb
Surf	981·5	mb
Freezing	912	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	39	37	200	11
1000	-0·6				
950		36	33	187	23
900	27·3	31	29	187	26
850		26	25	190	27
800	58·0	21	19	193	26
750		16	14	203	30
700	91·9	11	08	219	32
650		07	03	245	37
600	130	04	01	255	44
550		-03	-05	271	46
500	175	-13	-16	275	50
450		-22	-26	275	64
400	227	-31	-45	286	86
350		-42		295	106
300	291	-56		296	132
250		-70		293	120
200	376	-58		292	54
170		-64		273	34
150		-62		261	24
130		-64			

Isothermal 660 - 635 mb. 07°

Tropopause: I 242 mb. -73° 33,600'

CAMBORNE

Pressure	Time	G.M.T.
	21h.	
M.S.L.	989·4	mb
Surf	978·8	mb
Freezing	775	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	44	43	160	30
1000	-2·9				
950		42	41	191	37
900	25·5	42	40	218	36
850		36	33	236	38
800	56·8	34	26	250	35
750		29	22	254	37
700	91·6	24	-07	257	42
650		19	-24	264	50
600	131	14	-45	265	55
550		08	-29	267	56
500	176	-03	-29	283	66
450		-13	-26	291	84
400	229	-22	-29	284	109
350		-33	-41	290	117
300	294	-60		286	107
250		-68		300	113
200	379	-78		275	111
170		-70			
150		-67			
130		-67			
110		-68			
100	524	-69			
90		-70			

Inversion 944 mb. 41° - 913 mb. 44°

Isothermal 609 - 586 mb. 14° 452 - 446 mb. -13°

Max wind: 302° 125 kts. 270 mb. 31,600'

Tropopause: I 193 mb. -80° 38,600'

H.M.S.O. Press, M.O., Dunstable.

No. 11638 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Thursday 8th February. 1951. Page 1.

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

03h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.	03h G.M.T.
Pressure: M.S.L.	989·5 mb	986·9 mb	989·7 mb	986·3 mb	987·4 mb	993·5 mb	989·6 mb	991·5 mb	981·3 mb
Pressure: Surf	979·5 mb	985·3 mb	988·8 mb	977·4 mb	985·3 mb	989·1 mb	973·7 mb	981·1 mb	980 mb
Pressure: Freezing	918 mb	905	940	913	914	887	845	771.	820

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
LERWICK					
Surf	02·7	39	31	180	17
1000	-02·8				
950		36	31	170	21
900	25·1	30	29	172	23
850		23	22	176	24
800	55·5	18	14	181	23
750		09	02	185	23
700	88·9	02	-08	186	22
650		-06	-20	185	22
600	126	-14	-30	186	18
550		-23	-36	204	14
500	169	-34	-45	219	14
450		-46		241	15
400	218	-52		264	14
350		-58		236	14
300	280	-53		229	18
250		-50		235	20
200	369	-49		244	19
170		-49		241	19
150		-51		245	18
130		-51		242	18
110		-55		252	18
100	520	-57		260	16
90		-59		256	12
80	(80 mb)	-58			
70					
60					

Inversion 985 mb 37° - 976mb 38°

Tropopause I 353mb -59° 29,500'

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
STORNOWAY					
Surf	00·4	37	35	240	10
1000	-03·6				
950		36	32	219	17
900	24·4	31	26	232	12
850		26	22	246	12
800	55·0	21	13	230	14
750		14	04	225	10
700	88·7	08	-09	238	11
650		01	-18	226	15
600	127	-07	-25	223	18
550		-17	-34	227	21
500	170	-25	-41	259	23
450		-34	-51	270	28
400	220	-43		276	39
350		-61		270	30
300	283	-60		259	26
250		-45		246	26
200	372	-45		249	25
170		-45		242	21
150		-48		242	25
130		-51		258	24
110		-50		236	11
100	525	-52			
90					
80					
70					
60					

Inversion 984mb 39° - 963mb 37°

Tropopause I 326mb -56° 36,500'

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
LEUCHARS					
Surf	00·2	29	29	260	02
1000	-02·7				
950		34	31	204	08
900	25·1	26	23	215	09
850		22	17	212	12
800	55·5	18	08	212	12
750		13	-02	196	10
700	89·2	08	-11	162	09
650		01	-19	155	07
600	127	-06	-27	187	08
550		-24	-37	237	13
500	170	-22	-44	252	18
450		-31	-51	248	23
400	221	-42		260	29
350		-53		256	28
300	284	-53		259	45
250		-51		261	41
200	372	-50		259	36
170		-48		259	30
150		-50		254	27
130		-53		265	23
110		-58		251	20
100	522	-58			
90					
80					
70					
60					

Inversion 989mb 29° - 955mb 35°

Tropopause I 320mb -56° 27,000'

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
ALDERGROVE					
Surf	02·6	36	35	090	15
1000	-03·5				
950		35	34	107	21
900	24·4	31	30	126	20
850		27	26	123	18
800	55·1	22	21	144	21
750		17	16	166	20
700	89·1	11	10	170	15
650		05	03	186	20
600	127	-02	-05	206	18
550		-10	-14	220	22
500	171	-19	-23	226	24
450		-29	-34	235	28
400	223	-38	-44	251	49
350		-42		261	75
300	286	-53		256	84
250		-49		256	68
200	374	-53		268	48
170		-51		248	43

Isothermal 977-964mb 36°
400 - 373 .. -38°
Max Wind 303 mb 257° 87 kts

Tropopause I 294 mb -54° 23,100'

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
LIVERPOOL					
Surf	00·6	37	37	150	15
1000	-3·4				
950		35	32	147	30
900	24·5	31	28	156	35
850		28	25	171	37
800	55·2	26	23	193	33
750		21	19	193	24
700	89·5	16	14	197	22
650		09	05	198	19
600	128	03	00	201	24
550		-06	-12	228	36
500	172	-16	-23	238	38
450		-20	-30	266	55
400	224	-27	-41	278	97
350		-40	-52	275	120
300	289	-54		278	126
250		-64		267	99
200	375	-57		282	53
170		-56		257	42
150		-57			
130		-61			
110		-63			
100					
90					
80					
70					
60					

Inversion 506mb -16° 490mb -15°
461 .. -21° 454 .. -20°
261 .. -66° 228 .. -59°

Tropopause I 261mb -66° 31,800
I 206 .. -62° 36,800

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
DOWNHAM MARKET					
Surf	01·2	40	37	135	15
1000	-01·7				
950		37		166	35
900	26·3	33		174	45
850		29		185	41
800	57·1	25		194	38
750		20		200	35
700	91·3	15		204	34
650		11		220	30
600	130	05		234	80
550		-02		248	40
500	174	-11		258	50
450		-22		269	63
400	227	-26		283	87
350		-37		287	120
300	291	-50		286	130
250		-61		280	107
200	378	-67		283	63
170		-57		272	39
150		-58		267	39
130		-60		260	25
110		-63		266	25
100	525	-64		266	23
90		-63		250	18
80					
70					
60					

Inversion 450 mb -22° - 436mb 19°

Tropopause I 230mb -66° 34,800

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
LARKHILL					
Surf	04·4	43	42	230	15
1000	02·8				
950		42	42	245	29
900	25·5	38	36	249	32
850		33	27	258	36
800	56·5	26	22	256	36
750		30	-06	255	39
700	91·2	26	-23	266	48
650		17	-32	265	52
600	130	09	-39	261	63
550		05	-36	261	69
500	175	-04	-30	274	63
450		-15	-30	289	75
400	228	-22	-32	285	102
350		-32	-43	280	116
300	294	-46		281	111
250		-64		280	107
200	379	-71		278	78
170		-62		280	47
150		-59		280	32
130		-62		279	27
110		-66		269	26
100	526	-65		260	23
90		-69		260	21
80		-66			
70		-65			
60	(73 mb)				

Inversion 785mb 26° - 750mb 30°
Isothermal 810 - 785mb 26°
578 - 556 .. 06°
425 - 400 .. -22°

Tropopause I 219mb -76° 36,000

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
CAMBORNE					
Surf	02·9	47	44	240	10
1000	-02·3				
950		44	41	242	36
900	26·1	40	37	257	39
850		33	23	264	44
800	57·3	33	07	267	57
750		31	-03	259	61
700	92·2	24	03	253	55
650		22	11	266	50
600	132	14	05	276	63
550		06	00	273	75
500	177	-02	-07	270	70
450		-11	-15	274	85
400	230	-20	-24	268	90
350		-32	-37	271	107
300	296	-46		268	85
250		-65			
200	381	-82			
170		-65			
150		-62			
130		-62			
110		-67			
100	526	-69			
90		-69			
80		-64			
70					
60					

Inversion 850mb 33° - 811mb 34°
Isothermal 700 - 665mb 24°

Tropopause I 196mb -83° 38,600

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
VALENTIA					
Surf	00·3	47	44		
1000	-6·2				
950		45	42		
900	23·3	39	37		
850		35	34		
800	54·4	30	28		
750		26	16		
700	89·0	21	-11		
650		13	-29		
600	128	09	-42		
550		05	-25		
500	173	-05	-25		
450		-15	-27		
400	226	-21	-28		
350		-31	-38		
300	292	-47			
250		-60			
200	379	-59			
170		-51			
150		-55			
130		-59			
110		-56			
100	528	-57			
90					
80					
70					
60					

Inversion 600mb 9° - 576mb 10°

Tropopause I 250mb -60° 33,000'

09h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	G.M.T.
Pressure: M.S.L.	989·1 mb	985·8 mb	985·8 mb	980·9 mb	981·6 mb	988·6 mb	989·9 mb	990·3 mb	mb
Pressure: Surf	979·1 mb	984·2 mb	984·9 mb	971·1 mb	979·5 mb	984·2 mb	973·9 mb	979·8 mb	mb
Pressure: Freezing	929 mb	910	915	929	837	847	800	850, 830	mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
LERWICK					
Surf	02·7	39	37	180	19
1000	-02·9				
950		36	35	166	24
900	25·0	28	27	170	21
850		22	19	170	22
800	55·3	16	12	168	22
750		12	03	172	16
700	88·8	05	-08	183	12
650		-03	-12	197	12
600	126	-12	-21	213	12
550		-23	-32	212	13
500	169	-33	-41	209	14
450		-44		214	14
400	218	-54		211	20
350		-55		240	27
300	280	-54		233	21
250		-47		224	21
200	369	-45		229	29
170		-49		248	20
150		-50		245	21
130		-50		231	15
110		-55		218	15
100	521	-54		229	19
90		-50		252	18
80	(85 mb)	-47			
70					
60					

Tropopause II 395mb -55° 22,100'

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
STORNOWAY					
Surf	00·4	33	32		
1000	-03·8				
950		36	34		
900	23·4	31	27		
850		25	23		
800	54·4	20	12		
750		14	-01		
700	88·1	07	-08		
650		00	-17		
600	126	-08	-27		
550		-17	-37		
500	169	-26	-41		
450		-35	-46		
400	219	-45			
350		-57			
300	282	-56			
250		-48			
200	370	-46			
170		-46			
150		-47			
130		-52			
110		-52			
100	622	-52			
90		-53			
80		-53			
70		-53			
60					

Inversion 984mb 39° - 963mb 37°

Tropopause I 330mb -62° 26,200'

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
LEUCHARS					
Surf	00·2	35	35	045	07
1000	-39·0				
950		35	35	092	20
900	24·0	30	30	097	19
850		25	25	114	20
800	54·5	21	21	128	23
750		16	16	137	18
700	88·5	11	10	146	16
650		05	03	167	10
600	127	+01	-04	168	10
550		-09	-13	184	10
500	171	-18	-24	207	16
450		-30	-35	197	22
400	222	-43		208	22

for Rest of Winds See Page 3.

Isothermal 985 - 945 mb 35°

N.R.

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
ALDERGROVE					
Surf	02·6	36	35		
1000	-05·2				
950		34	32		
900	22·7	29	26		
850		26	22		
800	53·3	23	19		
750		19	16		
700	87·3	13	10		
650		08	03		
600	126	-01	-08		
550		+10	-19		
500	167	-20	-30		
450		-31	-42		
400	220	-35	-47		
350		-41			
300	285	-50			
250		+50			
200	373	-44			
170		-47			
150		-51			
130		-54			

Inversion 425mb -36° - 416mb -34°

Tropopause I 275mb -52° 30,200'

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
LIVERPOOL					
Surf	00·6	43	41	200	10
1000	-05·0				
950		43	37	207	22
900	23·2	38	34	231	34
850		33	29	238	37
800	54·2	28	24	241	34
750		23	16	240	34
700	88·4	18	-05	245	40
650		12	-10	246	57
600	127	08	-21	241	67
550		03	-17	246	74
500	172	-07	-26	253	78
450		-16	-32	256	89
400	225	-23	-36	250	103
350		-36	-46	252	113
300	290	-52		258	119
250		-66		260	101
200	377	-55			
170		-54			
150		-53			
130		-63			
110		-55			
100	527	-55			
90		-58			
80		-57			
70	(76 mb)	-56			
60					

Inversion 980mb 43° - 961mb 40°

Tropopause II 266mb -63° 31,500'

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
DOWNHAM MARKET					
Surf	01·2	44	43	180	15
1000	-03·1				
950		41	37	223	37
900	25·2	39	34	233	40
850		32	28	239	40
800	56·2	26	24	240	38
750		30	-03	250	37
700	90·9	22	-22	258	45
650		14	-23	254	54
600	130	12	-01	240	60
550		05	-12	250	54
500	175	-05	-14	264	67
450		-14	-19	261	78
400	228	-23	-27	260	84
350		-61		252	43
300	293	-51		261	106
250		-66		263	92
200	379	-70		256	76
170		-61		252	43
150		-57		252	34
130		-57		251	27
110		-63		262	15
100	526	-60		269	13
90		-58		271	10
80		-59		228	14
70		-58			
60					

Inversion 782 mb 24° - 758mb 31°
650 .. 14° - 633 .. 16°

Tropopause I 236 mb -71° 34,400

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
LARKHILL					
Surf	04·4	45	42	230	14
1000	02·7				
950		41	38	220	22
900	25·5	37	34	227	34
850		38	18	238	41
800	56·7	32	-03	245	41
750		27	07	242	47
700	91·3	25	21	246	58
650		19	15	252	64
600	131	13	08	253	69
550		07	03	249	71
500	176	-01	-04	246	75
450		-11	-15	246	81
400	229	-22	-27	252	80
350		-34	-40	255	90
300	295	-49		265	96
250		-68		259	92
200	379	-74		251	87
170		-59		252	40
150		-56		266	35
130		-60		275	37
110		-63		274	25
100	527	-61		279	14
90		-59		284	11
80		-58			
70	(75 mb)	-58			
60					

Inversion 876mb 35° - 840mb 39°
763 .. 26° - 732 .. 28°

Tropopause I 213mb -76° 36,600'

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
CAMBORNE					
Surf	02·9	40	40	203	15
1000	-02·7				
950		44	40	239	33
900	25·7	38	35	249	32
850		32	29	250	30
800	56·7	26	15	251	36
750		27	23	243	45
700	91·3	23	19	239	60
650		19	15	242	70
600	131	14	09	244	74
550		07	02	243	74
500	176	-02	-08	242	81
450		-11	-17	240	83
400	229	-23	-29	244	85
350		-35	-43	245	84
300	294	-51		248	101
250		-68		259	90
200	379	-68			
170		-58			
150		-59			
130		-66			
110		-65			
100	526	-64			
90		-66			
80	(91 mb)				
70					
60					

Inversion 800mb 26° - 768mb 28°
Isothermal 850 - 830mb 32°

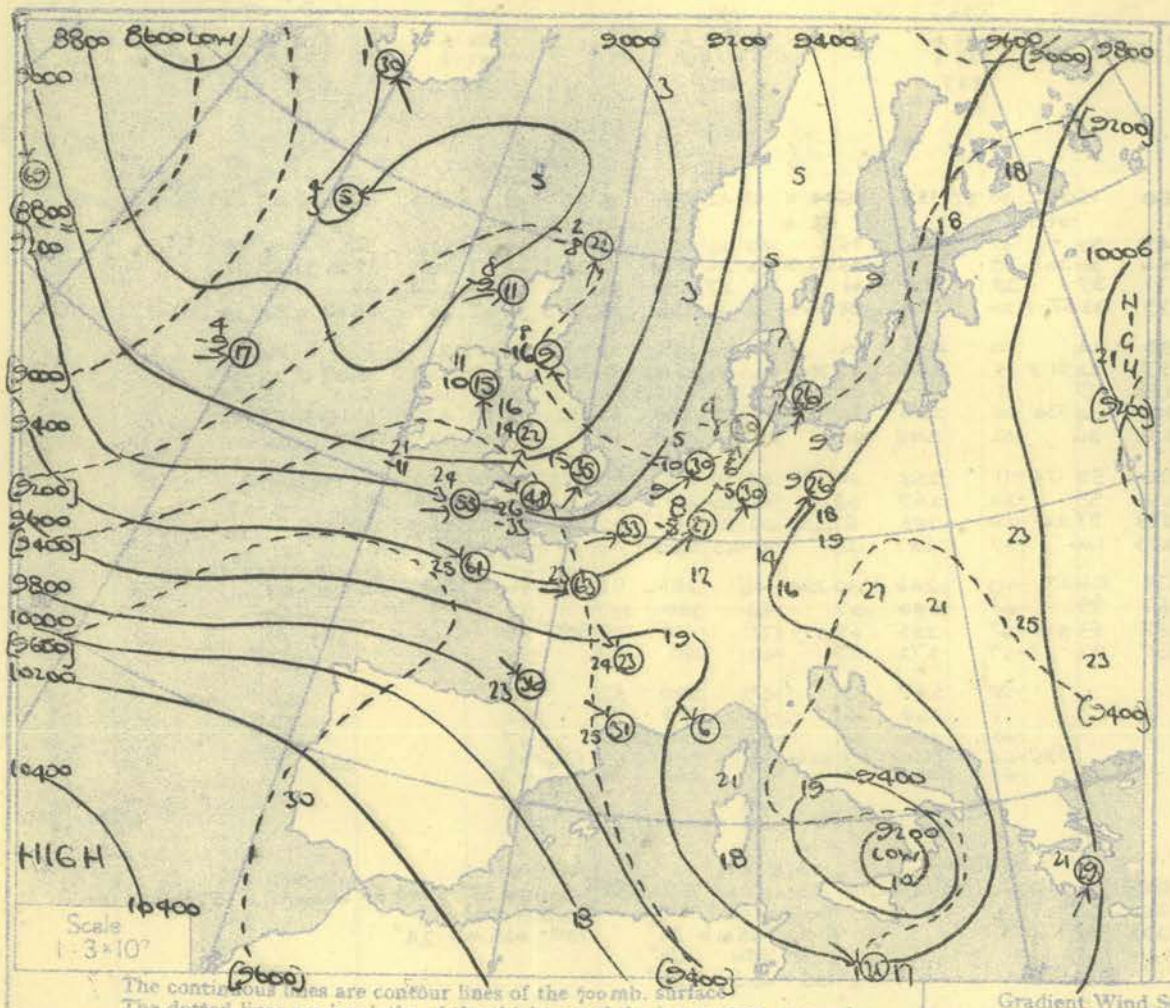
Tropopause I 216mb -75° 36,900

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

Tropopause

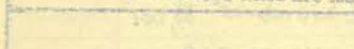
February 8th 1951.

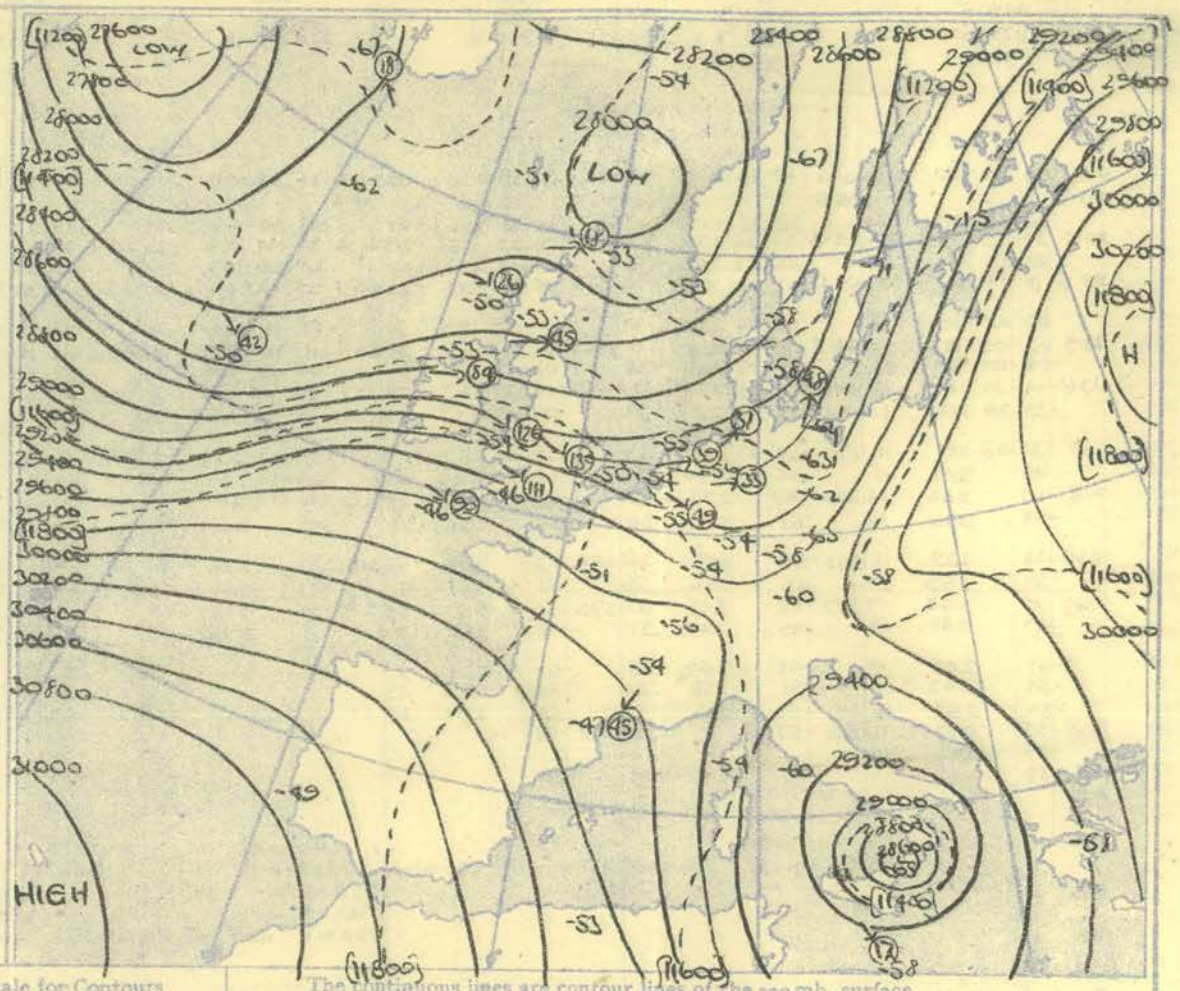
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03 h G.M.T.



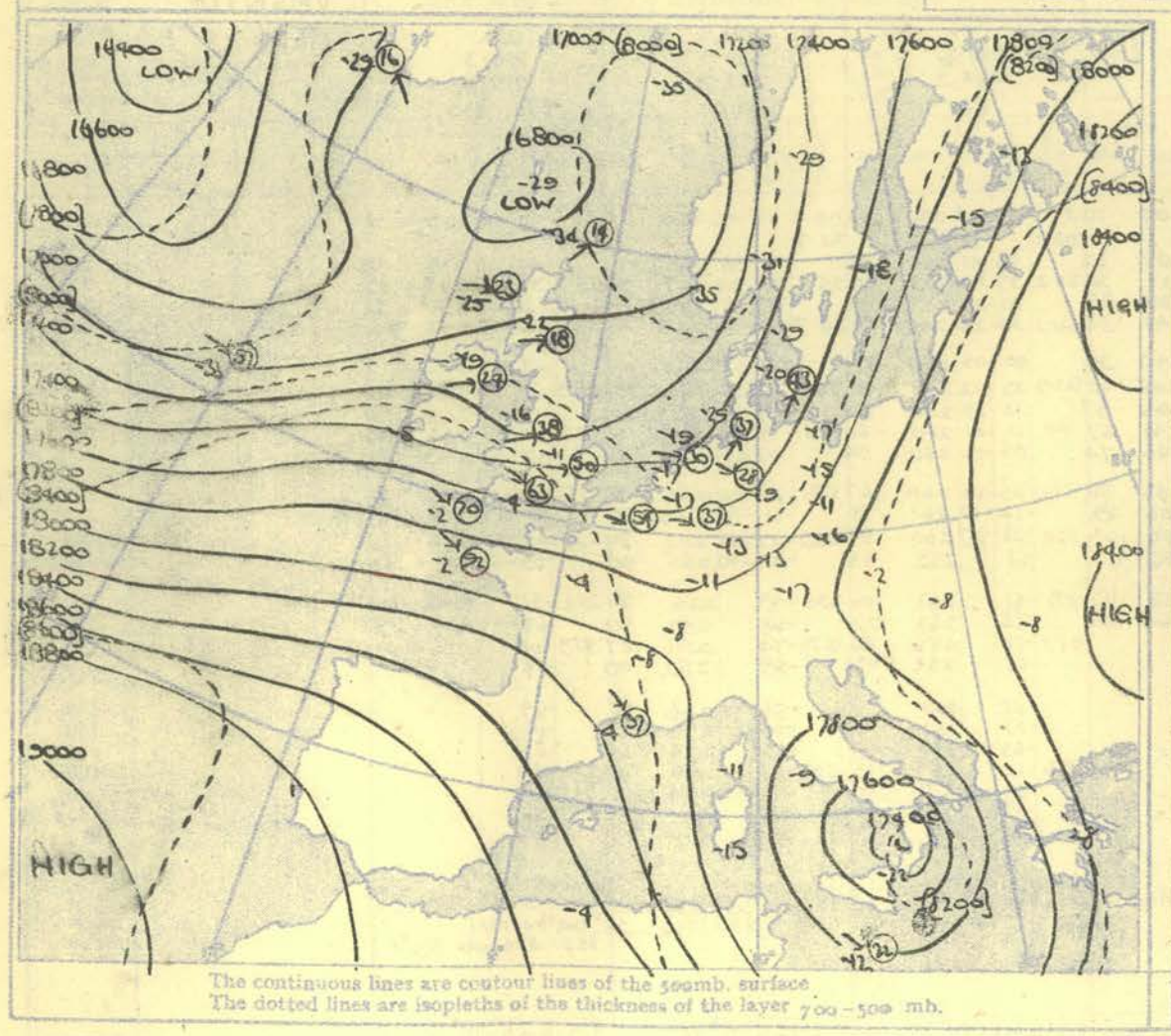
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000 – 700 mb.

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

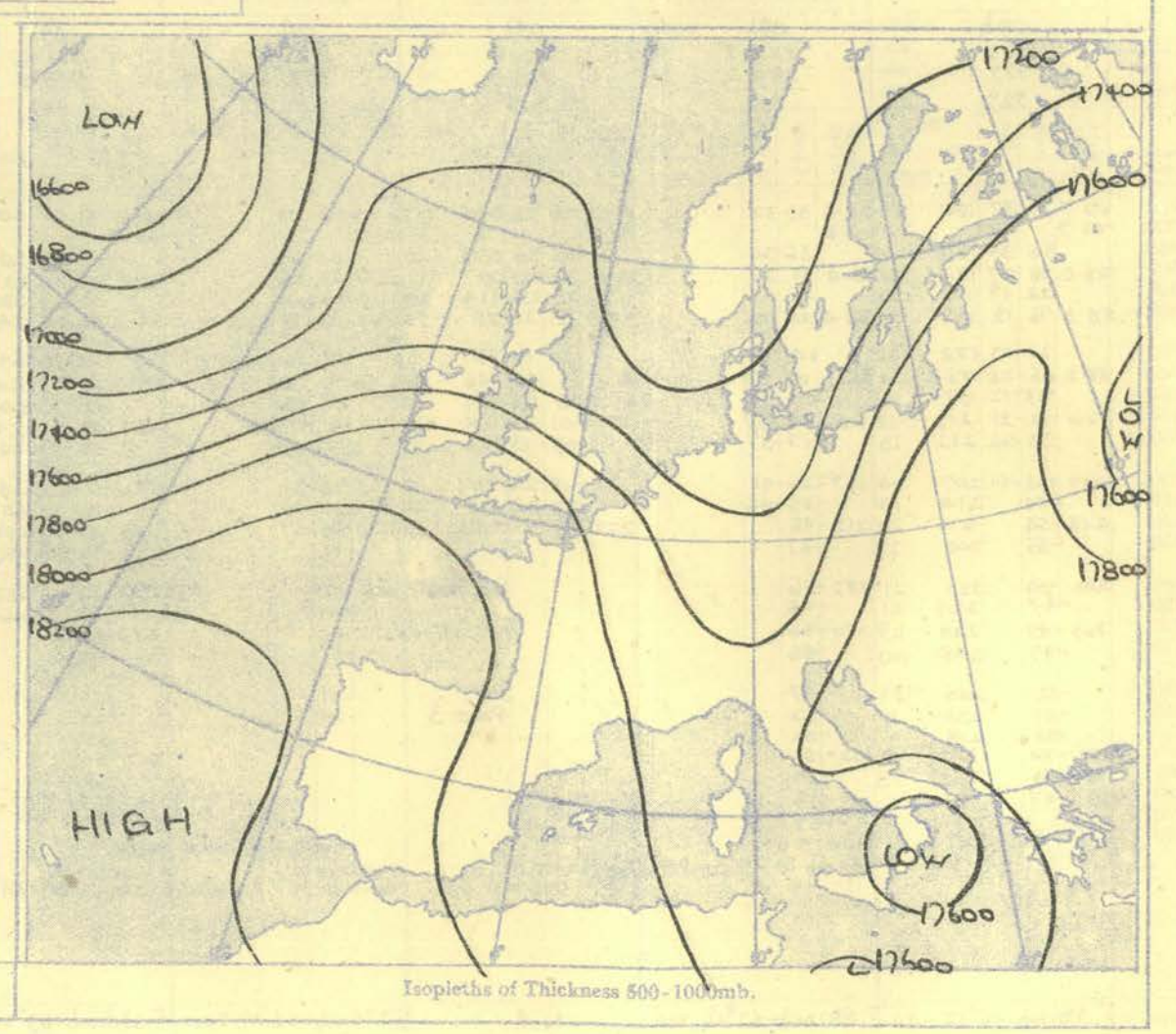




The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb



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



Isopleths of Thickness 500 - 1000mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	48·1N 17·0W			47·6N 12·3W			43·2N 17·0W			40·8N 13·6W		
Time	1230h			1415h			13h			15h		
Pressure M.S.L.	998·6 mb			991·4 mb			1014 mb			1014 mb		
Pressure Surf	995·0 mb			984·0 mb			1010 mb			1009 mb		
Pressure Freezing	940 mb			940 mb			920 mb			820, 730 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.
Surf	01·0	39	31	02·0	35	35		47	36		58	46
1000	-00·3			-02·3			3·8			4·1		
950		33	26		31	31		38	34		48	44
900	27·4	24	22	25·4	29			29	29		40	34
850		19			24			21			36	29
800	57·5	12		55·8	19			16			30	30
750		06			13			09			35	28
700	90·7	01		89·5	09		95·5	04		99·0	28	
650		-07			05			-03			22	
600	128	-16		128	-03			-14			11	
550		-27			-13			-25			05	
500	170	-39		171	-23		175	-30		184	-05	
450												
400												
350												
300												
250												
200												
170	Cloud 4 Cu. 8 930-700mb 3 Cu.B. 8 930-500 .. 6 Ac. 8 636-500 ..			Cloud 8 Ns. 8 950-xxx			Cloud 5 Cu. 8 940-830mb 3 Cu. 8 940-680 .. Surf Wind. W. 41-47 Kts.			Cloud 4 Sc. 8 940-830mb 4 St. 8 920-500 .. 8 Cs. 8 980-400 .. Surf Wind W. 41-47 Kts. Inversion 800mb 30°- 750 .. 35°		

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

Place	Leuchars		Shoeburyness		Tiree	
Time	09h		09h		15h	
Type	Pilar					
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.			200	22		
1,000			220	39	010	10
2,000			220	43	350	12
3,000			230	42	350	11
4,000			230	41	360	08
5,000			240	45		
6,000			240	52	330	08
8,000			240	55	320	03
10,000			250	57	320	07
14,000			250	56	330	06
18,000			250	65	(12,000')	
24,000	237	35	250	75		
30,000	250	34	260	86		
40,000	241	34	250	44		
50,000	242	24	270	22		
60,000	255	17	270	11		
			(53,000')			

NEPHOSCOPE OBSERVATIONS

Place

Time Type

Dir. Vel.

NONE REPORTED.

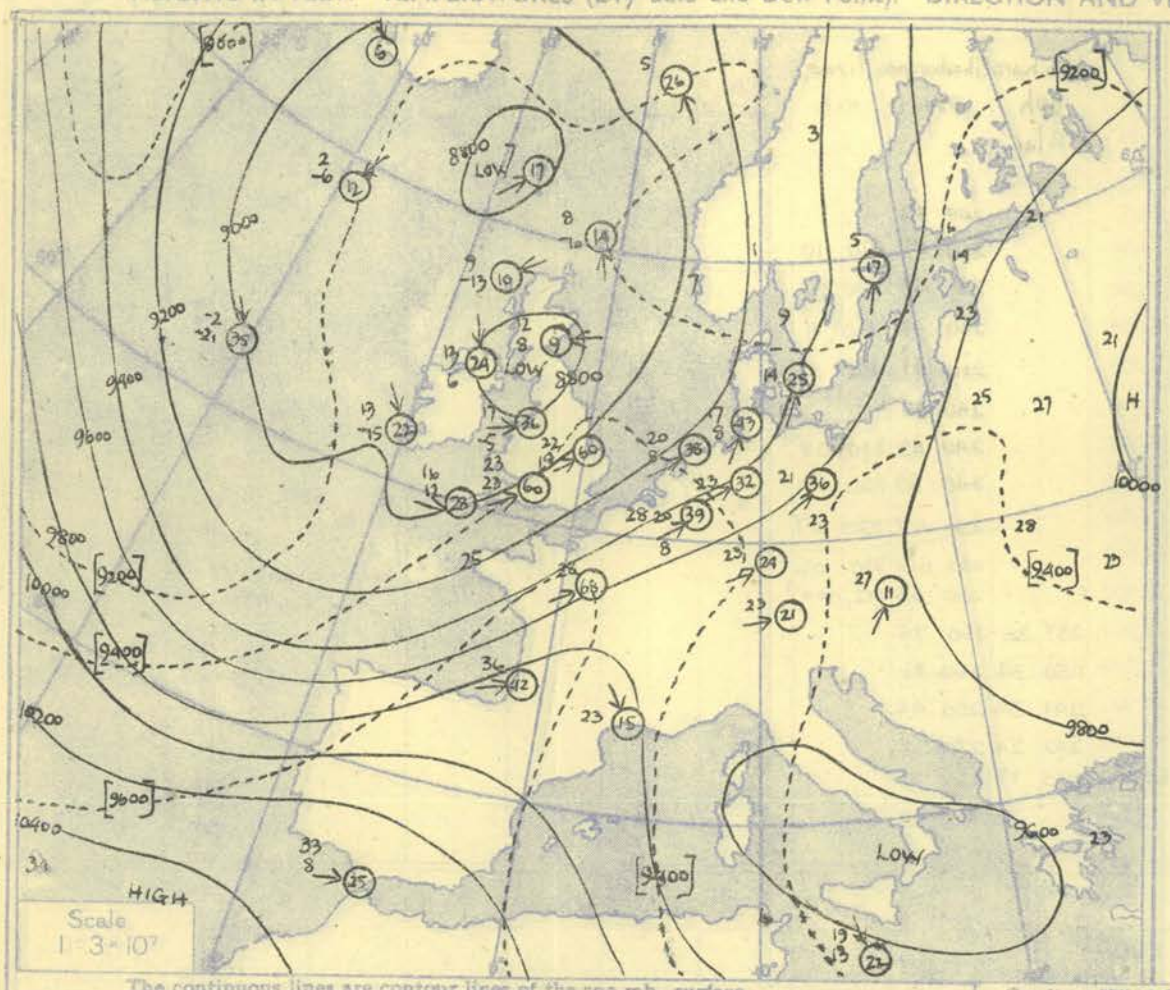
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	WEATHER EXPLORER						WEATHER EXPLORER						WEATHER EXPLORER						WEATHER EXPLORER					
Lat/Long	52·6N 20·1W						52·7N 19·7W						52·5N 19·7W						52·7N 20·1W					
Time	03h. G.M.T.						09h. G.M.T.						15h. G.M.T.						21h. G.M.T.					
Pressure M.S.L.	991 mb						992 mb						994 mb						993 mb					
Pressure Surf	991 mb						992 mb						994 mb						993 mb					
Pressure Freezing	910 mb						940 mb						930 mb						935 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	
Surf		43	31	300	23			40	32	295	36			39	20	295	29			40	32	300	30	
1000	-2·4						-2·2						-1·7						-1·8					
950		38	21	305	28			34	26	306	52			34	06	300	38			34	28	307	39	
900	25·5	30	17	302	26		25·6	27	20	313	51		26·0	28	06	300	38		26·1	27	24	304	40	
850		23	10	300	25			20	19	315	46			21	-01	299	36			21	18	314	38	
800	55·8	18	05	292	20		557	13	08	311	37		562	15	04	299	37		56·3	15	11	319	37	
750		11	-05	277	18			08	01	313	30			06	-04	299	37			08	04	330	34	
700	894	04	-09	255	17		890	00	-05	310	31		894	-02	-21	296	35		89·6	01	-06	336	28	
650		-03	-17	251	19			-07	-17	300	24			-10	-25	292	36			-06	-12	341	29	
600	127	-13	-24	252	21		126	-16	-30	295	24		126	-19	-32	287	29		127	-15	-20	348	33	
550		-22	-33	261	37			-27	-39	287	27			-27	-39	266	22			-24	-28	001	37	
500	169	-33	-44	248	57		168	-38	-48	256	19		168	-37	-51	223	17		169	-34	-39	005	37	
450		-46		229	88			-44		241	55			-43		321	21			-46		360	33	
400	219	-43		229	78		21·8	-54		201	90		21·8	-43		276	24		21·8	-55		356	33	
350		-43		258	46			-53		237	37			-46		278	18			-43		358	29	
300	283	-50		276	42		280	-47		292	31		282	-43		277	18		281	-47		008	30	
250		-50		266	59			-45		234	39			-41		283	25			-46		352	24	
200	372	-41		256	56		370	-43		229	39		372	-41		273	26		371	-46		346	27	
170								-44		238	33			-40		265	19			-47		348	21	
150								-50		234	34			-43		262	21			-47		350	16	
130								-52		244	34			-44		256	29			-46		003	10	
110								-50		254	25			-46		217	27			-51		323	10	
100							522	-51		256	21		526	-46		212	28		523	-52		297	11	
90								-54		257	19			-42		233	20			-49		280	13	
80								-56		257	19			-43		250	09			-54				
70								-54		257	18			-47		253	10							
60														-48		256	07							
														-50										
													(48mb)	-50										
Tropopause	I 438 mb -49° 20,100'						I 400 mb -54° 21,800'						I 380 mb -47° 23,000'						I 410 mb -54° 21,300'					

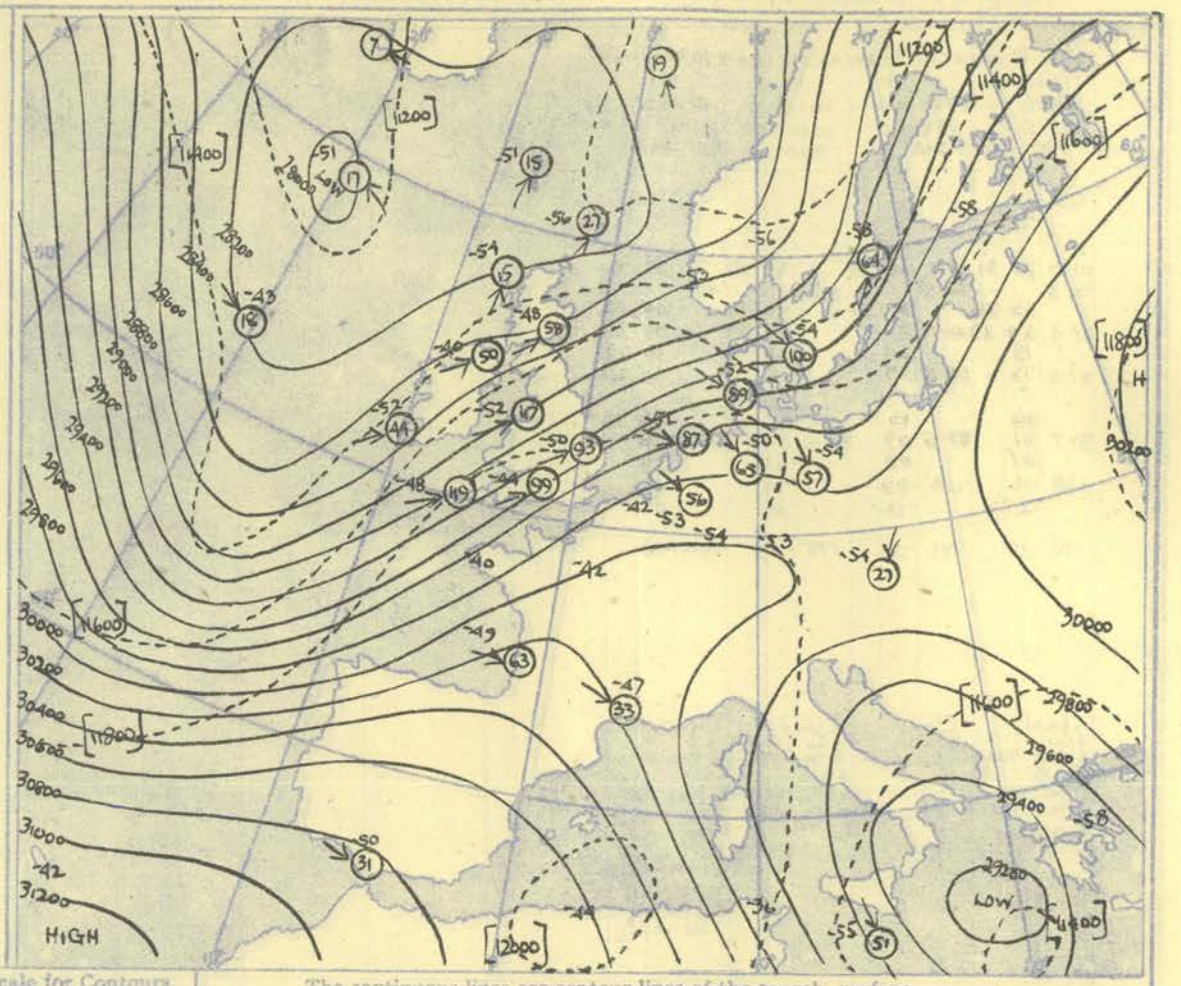
Ship	WEATHER RECORDER						WEATHER RECORDER						WEATHER RECORDER						WEATHER RECORDER					
Lat/Long	59·1N 19·2W						59·0N 19·2W						58·9N 19·1W						58·9N 19·0W					
Time	03h G.M.T.						09h. G.M.T.						15h G.M.T.						21h. G.M.T.					
Pressure M.S.L.	988 mb						987 mb						988 mb						993 mb					
Pressure Surf	988 mb						987 mb						988 mb						993 mb					
Pressure Freezing	940 mb						930 mb						920 mb						900 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	
Surf		36	35	360	16			40	35	010	08			41	40	350	15			42	39	350	23	
1000	-3·3						-3·6						-3·2						-2·0					
950		33	32	016	10			35	25					36	33	356	21			38	38	003	31	
900	245	28	28	022	05		243	29	19				24·8	29	24	356	20		260	32	32	001	29	
850		22	20	028	05			22	12					22	15	356	23			26	26	360	31	
800	54·8	16	15	050	06		54·7	15	06				552	16	05	355	21		56·7	20	20	005	33	
750		10	09	053	06			08	00					10	-03	351	15			14	14	004	31	
700	88·2	04	03	057	06		88·0	02	-06				88·6	02	-06	360	12		90·4	08	08	010	25	
650		-03	-05	288	09			-05	-12					-05	-12	009	11			00	-02	018	23	
600	126	-10	-12	276	08		125	-13	-20				126	-14	-21	011	09		128	-08	-11	020	21	
550		-18	-20					-23	-30					-22	-30	020	07			-17	-21	016	20	
500	169	-26	-28				16·8	-32	-38				168	-31	-39	034	09		171	-27	-33	022	19	
450		-35	-37					-40	-46					-40	-47	068	08			-38	-45	018	18	
400	219	-45					218	-50					21·8	-56		085	12		221	-48		023	04	
350		-56						-56						-63		096	14			-60		040	24	
300	281	-62					380	-59					280	-51		100	17		283	-59		031	21	
250		-51		198	20			-49						-54		133	10			-50		022	14	
200	369	-45		203	27		368	-48					36·7	-47		180	09		372	-47		022	07	
170		-43		210	22			-47						-45		225	13			-47		360	03	
150		-46		210	22			-46						-45		229	15			-47		L+V		
130		-50		220	26			-48						-46		229	14			-50		"		
110		-49		205	21			-48						-47						-48		"		
100	522	-48		200	24		521	-49					521	-48						-49		"		
90								-48						-47						-54		"		
80								-48						-47						-52		"		
70														-46					(75mb)	-51				
60														-45										
													(50mb)	-46										
													(40mb)	-48										
Tropopause	II 330 mb -61° 25,900'						I 320 mb -60° 26,500'						I 350 mb -63° 24,500'						I 340 mb -62° 25,500'					

Thursday 8th. February 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

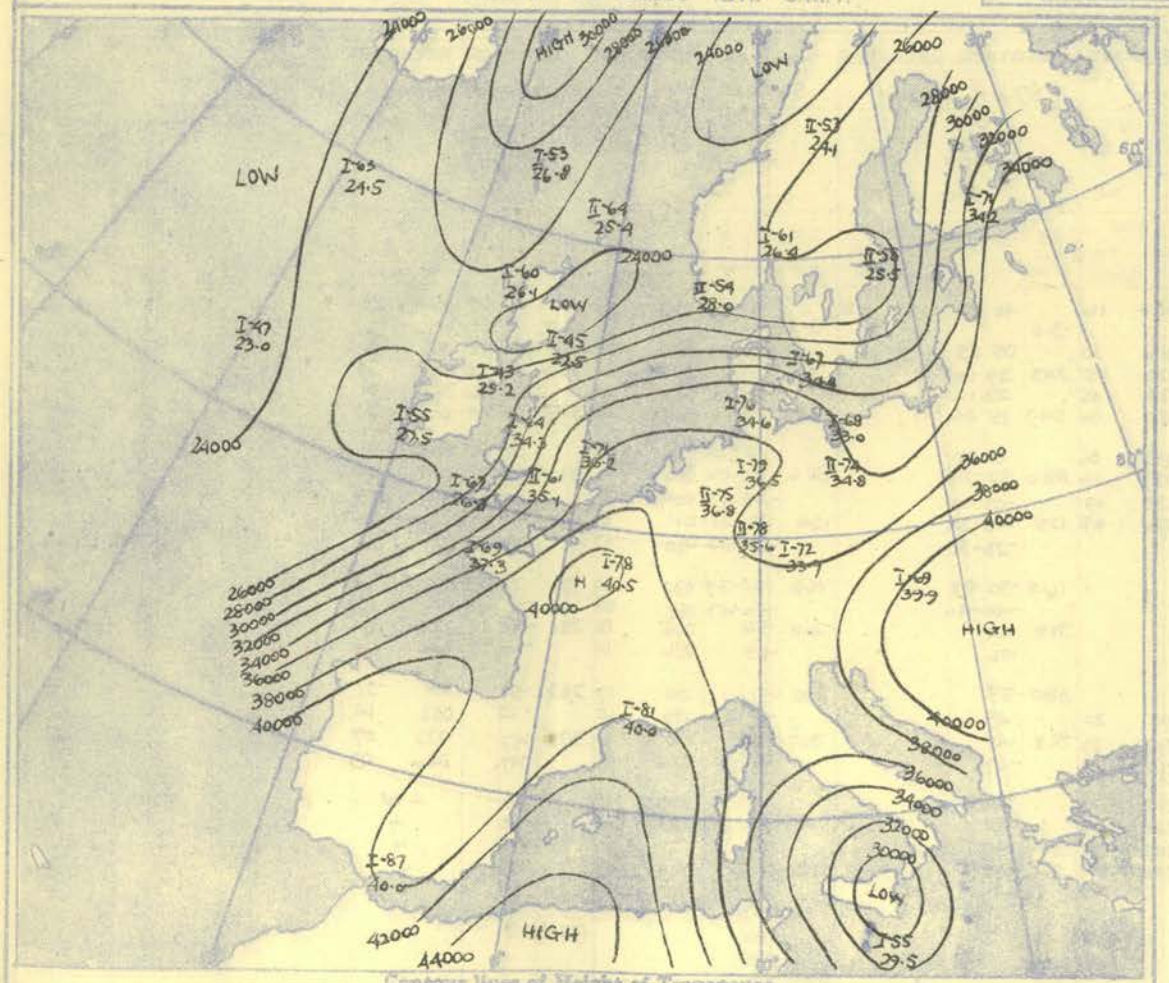


The continuous lines are contour lines of the 300mb. surface
The dotted lines are isopleths of the thickness of the layer 500–300 mb.

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 extending north across the western British Isles moved steadily eastwards to North Germany. Over the Atlantic a strong Southerly advection produced a very sharp cold trough with thickness values falling very low. This trough extended steadily towards Biscay with a strong cyclonic vorticity developing in this area.

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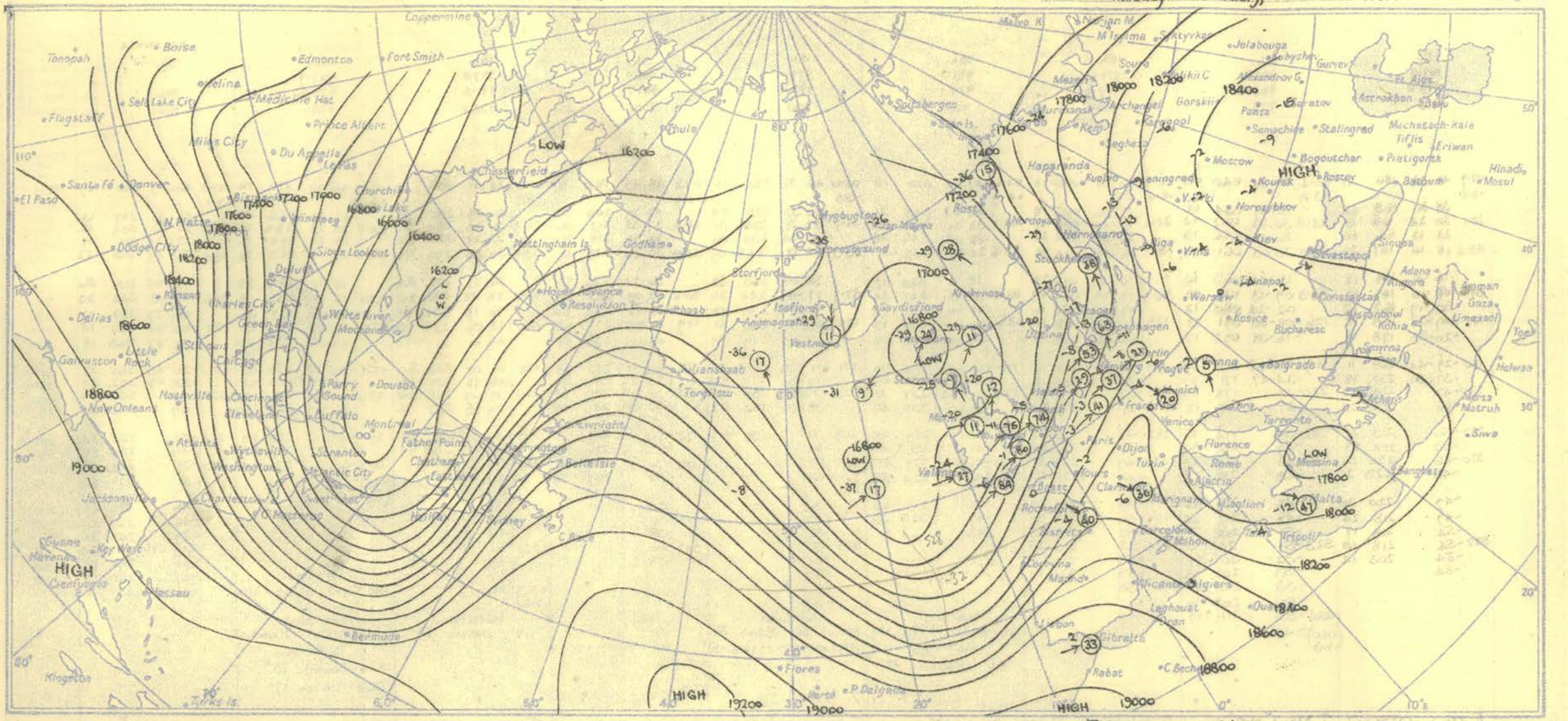
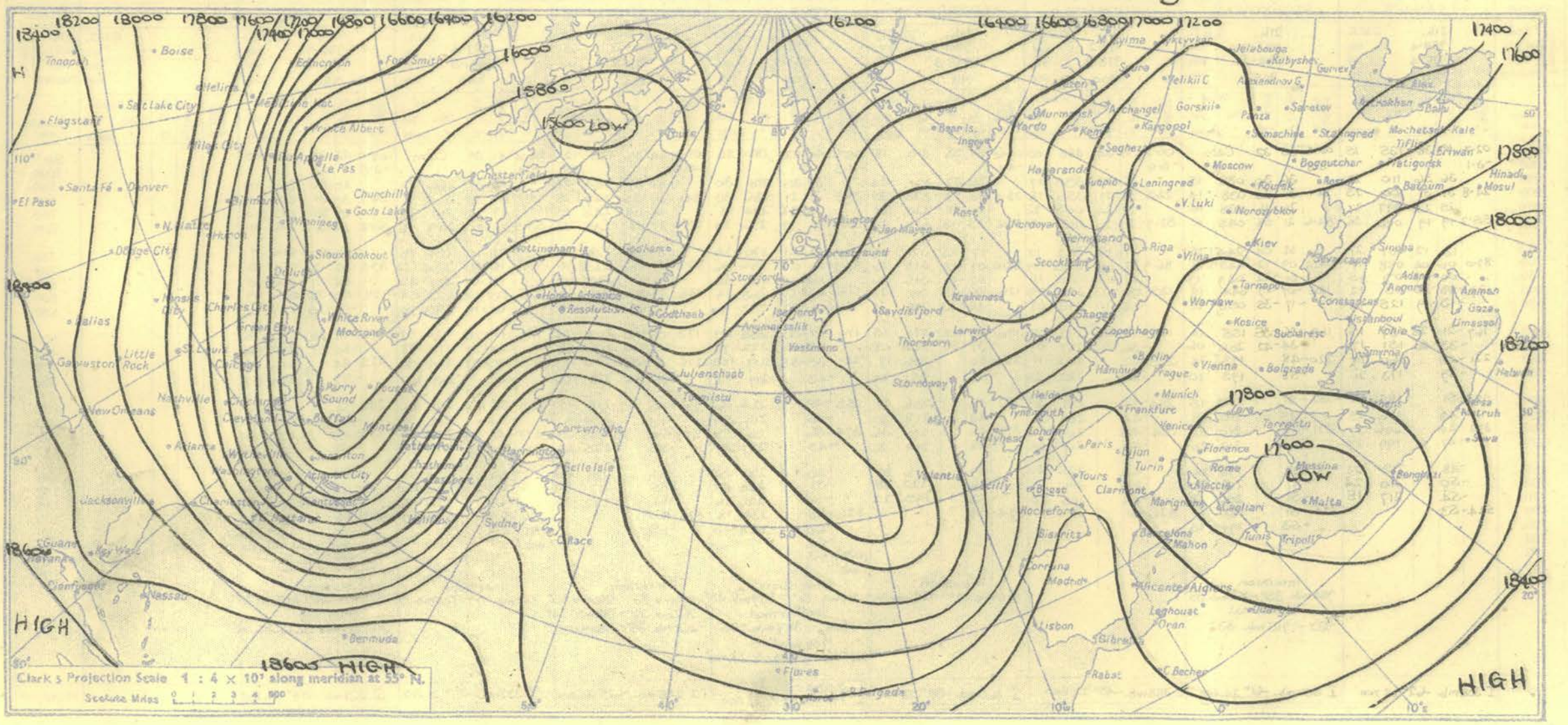
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Thursday 8th February, 1951.



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



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.

Thursday 6th February, 1936.

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

15h. G.M.T.

Station	Pressure	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA	Station
	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
	M.S.L.	989·0 mb	985·6 mb	979·6 mb	981·3 mb	979·9 mb	986·1 mb	987·5 mb	987·9 mb	mb	M.S.L.
	Surf	979·0 mb	984·0 mb	978·7 mb	972·2 mb	977·8 mb	981·7 mb	971·5 mb	977·6 mb	986 mb	Surf
	Freezing	910 mb	928 mb	915 mb	900 mb	900 mb	830 mb	833·0 mb	875 mb	870 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	42	34	180	13	00·4	40	34	040	05	00·2	40	39	060	12	02·6	39	37	020	15	00·6	44	37	220	15	01·2	48	43	180	21	04·4	48	41	250	14	02·9	46	42	270	10	00·3	46	39	320	09	Surf
1000	-3·0					-3·9					-6·0					-4·9					-5·5					-3·9					-3·3					-3·3					-3·5				1000
950		38	30	165	24		35	29	034	12		37	36	062	18		36	33	345	21		40	32	225	24		43	39	209	32		41	39	255	22		42	37	266	18		41	33	307	13	950
900	23·1	30	24	165	20	24·0	30	22	057	12	22·4	31	30	064	19	23·1	32	29	340	25	22·7	32	28	230	31	24·5	37	33	212	36	24·9	36	33	250	25	24·8	35	29	282	16	24·8	35	30	304	16	900
850		23	13	166	20		26	11	066	13		26	25	068	23		28	28	346	28		28	24	235	36		34	30	218	41		33	32	236	30		29	22	292	16		28	24	311	18	850
800	55·4	18	10	167	20	54·5	20	03	061	12	53·0	21	19	069	24	53·8	24	20	347	29	53·3	24	17	243	39	55·6	30	26	223	49	55·9	30	30	223	43	56·6	27	19	293	24	55·5	24	09	315	22	800
750		14	-01	168	18		15	-04	063	10		16	14	072	22		18	11	344	27		24	08	245	38		26	22	226	55		27	27	228	55		18	12	287	28		19	-05	315	26	750
700	89·1	08	-10	167	14	88·3	09	-13	071	10	86·9	12	08	086	09	88·0	13	06	341	24	87·7	17	-05	240	36	90·2	22	19	233	60	90·7	23	22	236	60	89·8	16	17	256	28	89·6	13	-15	303	22	700
650		00	-19	162	12		02	-24	085	12		07	02	180	11		07	-01	339	20		11	-16	230	48		17	12	233	60		20	18	226	61		10	06	237	36		06	-27	287	17	650
600	127	-09	-26	165	13	126	-08	-33	091	12	125	00	-05	188	10	126	00	-10	332	15	126	06	-17	230	51	129	13	05	231	63	130	13	06	228	63	128	06	02	231	51	128	-04	-31	262	15	600
550		-20	-35	178	18		-16	-38	093	12		-10	-20	200	12		-09	-19	305	08		-03	-19	229	57		06	05	233	65		06	01	227	72		-02	-06	231	59		-14	-27	265	18	550
500	170	-29	-44	208	11	169	-25	-44	124	09	169	-20	-31	213	12	170	-20	-32	274	11	171	-11	-22	225	75	175	-05	-11	232	74	175	01	-08	230	80	173	-06	-10	228	84	171	-24	-43	263	27	500
450		-37	-52	237	18		-34	-47	171	07		-30	-39	235	16		-30	-42	252	07		-17	-30	228	103		-15	-22	237	82		-08	-18	231	86		-14	-18	222	73		-33	-49	282	47	450
400	220	-47		224	12	220	-45		178	09	220	-42		316	16	221	-39	-52	237	25	223	-25	-38	230	115	228	-25	-35	240	87	229	-19	-29	228	88	226	-24	-29	219	103	222	-47		282	56	400
350		-60		224	24		-57		177	12		-47		222	44		-43		235	40		-38	-50	233	117		-37	-48	241	95		-29	-38	237	96		-33	-39	227	130		-49		245	35	350
300	282	-56		213	27	282	-54		194	15	283	-48		224	58	285	-40		229	50	288	-52		239	117	292	-50		239	93	295	-44		230	99	291	-48		228	119	284	-52		224	44	300
250		-50		214	28		-49		212	30		-47		235	48		-41		221	41		-60					-65		236	96		-56		230	99		-56		223	119		-41		232	33	250
200	370	-46		222	25	371	-48		218	27	373	-49		233	37	376	-46		229	41	375	-57				378	-70		239	70	382	-59				378	-63		230	105	375	-39		221	26	200
170		-46		223	21		-45		218	27		-49		225	42		-46		224	30		-51					-52		237	56		-49				(175 mb)	-56					-51				170
150		-49		220	20		-48		216	24		-49		229	34		-46		215	40		-53					-54					-51										-46		219	43	150
130		-49		218	20		-48		217	24		-50		213	20		-47		225	35		-52					-57					-56										-46		226	35	130
110		-54		218	17		-51		208	21		-52		215	23		-48					-56					-58					-61										-49		245	24	110
100	522	-54		218	18	523	-51		208	21	524	-55		216	25						525	-57					-60				532	-61									-53		252	20	100
90		-54		203	14		-52		201	19		-55		219	19							-61				527	-60					-59									-57		214	18	90
80		-54					-53		202	25		-58		220	19							-62					-58					-57									-57		215	18	80
70							-53		203	21		-55										-60										-56									-54		231	14	70
60							-52		202	16												-57									(076 mb)														60
						(080 mb)	-53		211	19												-62																								
						(040 mb)	-40															-63																								

Inversion 405 mb. -31° - 375 mb. -38°
Isothermal 840 - 830 mb. 27°

Inversion 800 mb. 24° - 784 mb. 26°
454 mb. -18° - 429 mb. -16°

Isothermal 712 - 685 mb. 23°

Inversion 265 mb. -58° - 250 mb. -56°
Isothermal 840 - 806 mb. 28°
743 - 710 mb. 17°
Max wind:- 230° 174 kts. 327 mb. 27,100'

Tropopause	II 341 mb. -62° 25,400'					I 330 mb. -60° 26,100'					II 390 mb. -45° 22,500					I 350 mb. -43° 25,200'					I 232 mb. -64° 34,300'					I 208 mb. -71° 36,900'					II 233 mb. -61° 35,100'					I 215 mb. -67° 26,200'					I 313 mb. -55° 27,500'				Tropopause

21h. G.M.T.

Station	Pressure	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE		Station
	Time	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	G.M.T.	Time
	M.S.L.	988·4 mb	985·9 mb	979·2 mb	985·0 mb	983·3 mb	985·3 mb	987·4 mb	986·9 mb	mb	M.S.L.
	Surf	978·4 mb	984·3 mb	978·3 mb	975·3 mb	981·2 mb	980·9 mb	971·5 mb	976·4 mb	mb	Surf
	Freezing	910 mb	905 mb	900 mb	911 mb	909 mb	834 mb	880 mb	880 mb	mb	Freezing

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	39	38	135	15	00·4	35	32	Calm		00·2	38	34	330	05	02·6	37	33	310	18	00·6	40	37	280	20	01·2	44	39	195	12	04·4	41	39	Calm		02·9	43	38	360	05						Surf
1000	-3·1					-3·8					-6·0					-4·1					-4·5					-4·0					-3·4					-3·5										1000
950		36	36	110	27		36	30	038	15		36	32	353	17		38	32	321	24		37	35	278	30		41	37	234	27		39	37	266	12		40	36	360	09							950
900	24·8	31	31	100	25	24·1	31	20	038	14	22·3	32	29	355	18	23·9	30	23	320	25	23·5	31	29	286	33	24·1	36	33	249	28	24·7	34	33	264	11	24·7	35	31	004	09							900
850		25	25	097	27		26	11	038	10		27	24	008	20		26	18	320	28		26	24	294	01		34	34	245	25		29	27	261	14		28	25	012	10							850
800	58·3	19	19	090	26	54·6	21	08	045	11	52·9	23	20	002	18	54·4	25	-15	321	30	54·1	21	19	296	29	55·0	27	14	238	25	55·5	23	11	259	16	55·4	24	16	016	11							800
750		13	12	087	27		14	04	044	15		17	16	342	12		17	-13	321	28		15	13	290	34		23	16	228	38		17	10	256	18		19	00	016	11							750
700	89·0	06	04	088	17	88·4	09	-12	042	18	86·9	12	08	333	09	88·0	09	-12	318	25	87·9	10	04	286	36	89·4	21	16	223	55	89·5	16	11	234	22	89·5	15	-17	014	10							700
650		00	-03	091	15		01	-22	039	19		07	03	335	11		02	-18	316	26		04	-08	278	33		15	09	225	65		10	07	219	42		08	-27	010	10							650
600	127	-08	-20	113	12	126	-07	-29	044	18	125	00	-03	323	09	126	-06	-25	311	20	126	-02	-18	268	34	128	09	03	217	60	128	05	00	222	54	128	00	-28	009	09							600
550		-13	-19	125	14		-17	-35	053	14		-08	-11	293	08		-15	-33	298	21		-10	-33	253	37		01	-06	215	68		-01	-10	223	70		-08	-20	227	20							550
500	167	-21	-26	137	15	169	-26	-35	155	01	169	-19	-24	293	08	170	-25	-42	271	15	170	-21	-50	235	49	173	-08	-14	209	74	173	-11	-20	220	87	172	-18	-25	210	28							500
450		-33	-40	151	17		-34	-42	206	06		-30	-36	287	09		-37	-50	266	08		-28	-56	222	71		-18	-24	214	88		-20	-27	213	98		-30	-37	203	30							450
400	221	-45		160	19	220	-48		193	14	220	-42		252	11	220	-50		256	12	221	-35	-58	219	103	226	-30	-38	220	113	225	-32	-37	209	94	223	-44		216	33							400
350		-59		173	21		-58		193	10		-44		222	23		-55		251	29		-43		219	97		-36	-46	218	106		-46		213	102		-52		201	57							350
300	283	-51		185	21	282	-51		202	15	284	-43		218	33	282	-48		236	27	285	-49		224	66	290	-46		218	112	289	-50		218	106	285	-54		214	61							300
250		-49		196	25		-45		210	18		-44		209	35		-43		218	30		-45		219	54		-61		220	91		-56		218	93		-55		221	64							250
200	372	-44		206	27	371	-46		210	21	374	-45		215	30	372	-40		210	36	374	-56		204	58	377	-60		223	63	377	-48		223	65	373	-45		223	64							200
170		-47		199	27		-46		219	20		-48		217	35		-48		212	26		-43		227	39		-55		223	44		-50		222	60		-48		216	56							170
150		-48		213	22		-49		196	24		-44		225	22		-49		216	25		-50		237	32		-54		228	40		-52		229	55		-55		225	54							150
130		-50		210	24		-47		218	20		-50		219	17		-48		222	28		-51		230	34		-55		217	50		-60		230	50		-57		227	54							130
110		-54		217	18		-51		206	17		-52		205	20		-54		193	22		-51		226	26		-61		222	37		-66		226	46		-63		232	51							110
100	524	-53				524	-51		188	10	526	-51				524	-54		193	22	526	-58		239	18	526	-60		238	22	526	-64		238	22	523	-66		229	27							100
90							-53		197	13												-60		244	13		-65				(094 mb)	-63					-70		222	22							90
80																						-62																-68		220	15							80
70																						(078 mb) -63																-65										70
60																																															60

Inversion 984 mb. 35° - 965 mb. 38°
Isothermal 932 - 915 mb. 33°

Inversion 975 mb 37° - 948 mb 38°

Inversion 310 mb. 51° - 259 mb. 43°
Isothermal 408 - 387 mb -35°
Max wind:- 219° 118 kts. 384 mb. 23,000'

Inversion 875 mb. 33° - 850 mb 35°
762 mb. 22° - 738 mb. 24°
365 mb. -38° - 360 mb -36°

Inversion 750 mb. 17° - 735 mb. 19°

Inversion 825 mb. 24° - 807 mb. 25°
Max wind:- 210° 77 kts. 218 mb. 35,300'

Tropopause	I 338 mb. -62° 26,700'					I 356 mb. -61° 24,400'					I 388 mb. -45° 22,600'					I 365 mb. -59° 27,100'					I 310 mb. -51° 27,700' I 199 mb. -56° 37,500'					I 245 mb. -62° 34,400'					I 332 mb. -52° 26,500					I 367 mb. -54° 24,200'										Tropopause

H.M.S.O. Press, MO., Dunstable.

No. 11639. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Friday 9th February, 1951 Page 1.

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

03h. G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE
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.	982·2 mb	988·1 mb	983·4 mb	988·8 mb	986·7 mb	988·3 mb	986·5 mb	989·5 mb
Pressure: Surf	972·0 mb	986·5 mb	982·5 mb	979·7 mb	984·6 mb	983·8 mb	970·4 mb	978·9 mb
Pressure: Freezing	911 mb	909 mb	913 mb	881 mb	922 mb	897 mb	911 mb	900 mb

Pressure mb	LERWICK Height ft./100	LERWICK Temp. °F.	LERWICK Dew °F.	LERWICK Wind Dir. ° Vel. knots	STORNOWAY Height ft./100	STORNOWAY Temp. °F.	STORNOWAY Dew °F.	STORNOWAY Wind Dir. ° Vel. knots	LEUCHARS Height ft./100	LEUCHARS Temp. °F.	LEUCHARS Dew °F.	LEUCHARS Wind Dir. ° Vel. knots	ALDERGROVE Height ft./100	ALDERGROVE Temp. °F.	ALDERGROVE Dew °F.	ALDERGROVE Wind Dir. ° Vel. knots	LIVERPOOL Height ft./100	LIVERPOOL Temp. °F.	LIVERPOOL Dew °F.	LIVERPOOL Wind Dir. ° Vel. knots	DOWNHAM MARKET Height ft./100	DOWNHAM MARKET Temp. °F.	DOWNHAM MARKET Dew °F.	DOWNHAM MARKET Wind Dir. ° Vel. knots	LARKHILL Height ft./100	LARKHILL Temp. °F.	LARKHILL Dew °F.	LARKHILL Wind Dir. ° Vel. knots	CAMBORNE Height ft./100	CAMBORNE Temp. °F.	CAMBORNE Dew °F.	CAMBORNE Wind Dir. ° Vel. knots	Pressure mb
Surf	02·7	37	37		00·4	33	31	Calm	00·2	38	35		02·6	36	34	330 15	00·6	38	34	320 06	01·2	41	39	180 06	04·4	36	35	050 07	02·9	41	35	020 03	Surf
1000	-8·3				-3·2				-4·5				-2·9				-2·3				-3·2				-3·6				-2·8				1000
950		35	34	For		36	31	347 20		35	32			39	36	347 21		36	30	317 12		39	34	208 10		34	33	053 18		38	31	355 09	950
900	23·1	31	31		24·7	32	23	352 18	23·3	30	27		25·2	35	30	341 23	24·3	29	24	316 15	24·9	33	26	203 09	24·3	31	29	028 18	25·2	32	28	350 08	900
850		29	29	winds		26	22	004 17		26	24			28	18	333 22		24	16	314 22		30	22	215 11		29	26	008 21		30	23	332 06	850
800	53·7	25	25		55·3	20	13	009 17	53·9	20	19		56·0	26	05	333 27	54·7	22	01	311 24	55·6	25	16	222 16	55·0	24	21	050 07	56·1	25	15	L.V.	800
750		19	19	See		16	01	359 18		15	14			20	05	332 33		17	-03	305 23		21	13	223 21		18	15	145 07		19	09	324 05	750
700	87·7	12	12		89·1	10	-08	359 18	87·8	09	07		90·2	13	-07	324 30	88·7	12	-08	301 30	89·8	16	11	218 26	89·0	12	07	202 11	90·1	12	01	244 02	700
650		05	04	page		03	-15	352 15		03	00			05	-13	314 31		05	-16	298 27		10	06	218 30		06	01	203 11		07	-12	367 05	650
600	126	-03	-04		127	-07	-24	346 15	126	-04	-09		128	-04	-21	310 26	127	-05	-26	286 17	128	02	-03	215 40	127	-02	-08	207 16	128	-01	-20	029 07	600
550		-11	-12	3.		-18	-30	343 16		-12	-20			-14	-32	310 27		-14	-34	273 22		-05	-15	213 55		-11	-18	223 21		-11	-23	036 09	550
500	170	-21	-22		170	-28	-36	350 08	169	-21	-28		172	-26	-44	304 33	170	-22	-43	274 32	172	-14	-35	209 75	171	-21	-29	231 21	172	-18	-25	028 07	500
450		-33	-34			-37	-43	270 06		-32	-38			-34	-52	290 39		-34	-54	268 33		-25	-43	203 90		-32	-46	246 14		-25	-30	232 05	450
400	219	-46			220	-49		274 06	220	-45			222	-48		285 45	221	-46		235 51	224	-37	-57	201 91	222	-44		227 07	224	-39	-44	187 08	400
350		-57				-61		271 05		-55				-56				-57		219 59		-47		198 91		-54		211 40		-53		144 18	350
300	281	-53			282	-55		210 07	283	-47			284	-55			283	-48		207 49	288	-48		203 93	284	-53		209 63	286	-54		193 31	300
250		-48				-47		187 14		-45				-44				-46		221 54		-50		203 90		-51		204 75		-47		197 42	250
200	370	-50			371	-49		195 17	372	-47			374	-43			372	-50		218 42	377	-45		224 60	373	-45		223 39	376	-44		208 56	200
170		-52				-47		214 13		-48				-48				-45		203 52		-51		219 48		-54		213 50		-41		223 45	170
150		-49				-49		186 21		-49				-48				-46		212 37		-49		211 53		-58		200 51		-41		215 36	150
130		-51				-48		195 15		-51				-48				-56		207 29		-55		207 50		-63		206 34		-46		209 41	130
110		-58				-55		191 13		-54				-52				-60		194 33		-59		205 32		-64		203 21		-51		206 33	110
100	520	-58			523	-53		195 15	524	-52			526	-54			523	-59		194 22	528	-63		205 27	522	-67			529	-52		203 22	100
90		-59				-53		162 10		-57				-54				-61		193 20		-64		206 25	(698 mb)	-68				-55		196 24	90
80		-61				-55		162 15						-58				-63		197 22		-61		210 18						-58		184 33	80
70		-62												-56				-62		213 14		-63		208 15						-61		186 26	70
60																														-59		197 10	60
						Inversion 987mb. 33°- 971mb. 38°								Inversion 780mb. 36°- 946mb. 40° Isothermal 831 - 800mb. 26° 500 - 490 mb. -26°					Inversion 863mb. 24°- 840mb. 25° Isothermal 985 - 970mb. 38°				Inversion 984 mb. 41°- 970mb 42° Isothermal 882 - 843mb. 30° 785 - 760. mb. 22°				Isothermal 907 - 880mb. 31°				(853 mb) Isothermal 680 - 663mb. 09°	
Tropopause	I 36.4mb. -51° 23,800'	I 348mb. -62° 25,000'	II 367mb. -54° 23,900'	II 353mb. -56° 25,000'	I 331mb. -61° 26,200'	I 344mb. -48° 25,700'	II 367mb. -54° 24,000'	I 330mb. -68° 26,500'																								Tropopause

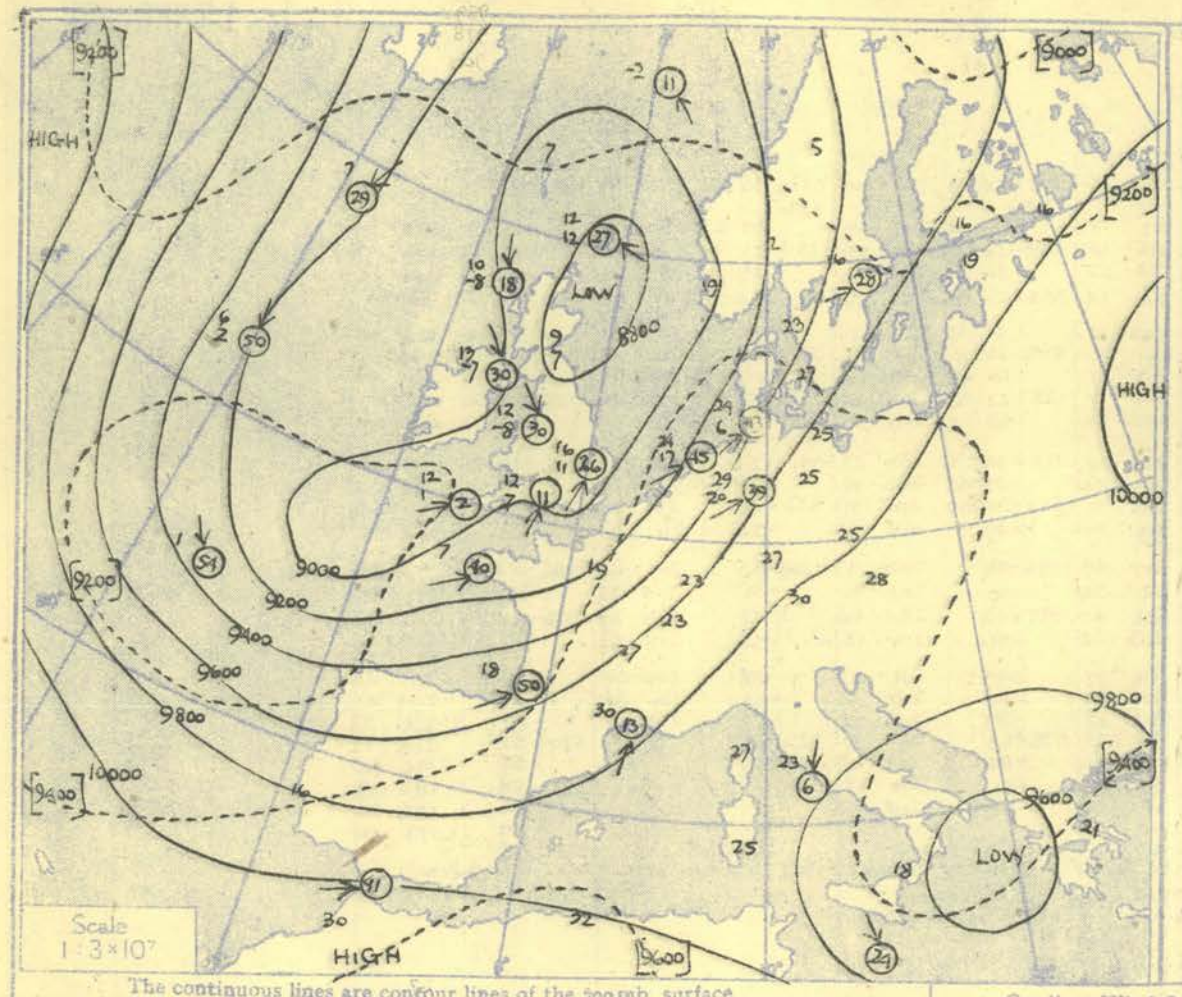
09h. G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE
Pressure: Time	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.
Pressure: M.S.L.	982·7 mb	990·9 mb	988·7 mb	994·9 mb	992·1 mb	992·1 mb	995·3 mb	993·7 mb
Pressure: Surf	972·8 mb	989·3 mb	987·8 mb	985·0 mb	990·0 mb	987·6 mb	979·0 mb	983·1 mb
Pressure: Freezing	900 mb	903 mb	912 mb	900 mb	920 mb	915 mb	929 mb	900 mb

Pressure mb	LERWICK Height ft./100	LERWICK Temp. °F.	LERWICK Dew °F.	LERWICK Wind Dir. ° Vel. knots	STORNOWAY Height ft./100	STORNOWAY Temp. °F.	STORNOWAY Dew °F.	STORNOWAY Wind Dir. ° Vel. knots	LEUCHARS Height ft./100	LEUCHARS Temp. °F.	LEUCHARS Dew °F.	LEUCHARS Wind Dir. ° Vel. knots	ALDERGROVE Height ft./100	ALDERGROVE Temp. °F.	ALDERGROVE Dew °F.	ALDERGROVE Wind Dir. ° Vel. knots	LIVERPOOL Height ft./100	LIVERPOOL Temp. °F.	LIVERPOOL Dew °F.	LIVERPOOL Wind Dir. ° Vel. knots	DOWNHAM MARKET Height ft./100	DOWNHAM MARKET Temp. °F.	DOWNHAM MARKET Dew °F.	DOWNHAM MARKET Wind Dir. ° Vel. knots	LARKHILL Height ft./100	LARKHILL Temp. °F.	LARKHILL Dew °F.	LARKHILL Wind Dir. ° Vel. knots	CAMBORNE Height ft./100	CAMBORNE Temp. °F.	CAMBORNE Dew °F.	CAMBORNE Wind Dir. ° Vel. knots	Pressure mb
Surf	02·7	39	39	090 18	00·4	35	32		00·2	36	33	280 06	02·6	34	33	Calm	00·6	39	36	300 08	01·2	35	32	260 05	04·4	36	35		02·9	38	35	070 03	Surf
1000	-4·7				-2·6				-3·1				-1·4				-2·1				2·1				1·3				-1·6				1000
950		36	36	075 30		37	34			37	30	289 25		37	36	336 12		36	20	287 22		35	31	310 13		34	21			38	32	105 07	950
900	23·3	32	32	078 25	25·3	32	29		24·8	31	26	279 23	26·5	32	29	337 15	25·8	29	25	303 18	25·7	30	26	282 10	26·5	29	23	For	26·4	32	26	095 09	900
850		27	27	073 21		26	23			24	20	332 28		27	23	333 22		26	19	329 16		24	23	263 10		24	20			26	23	092 11	850
800	53·9	23	23	054 19	55·9	19	15		55·2	19	12	341 32	57·2	22	15	333 22	56·4	22	13	360 13	56·3	22	15	273 13	56·9	19	15	winds	57·0	21	16	088 14	800
750		18	18	053 24		12	01			16	08	348 25		18	02	330 20		14	04	013 12		18	04	284 12		15	06			16	07	083 16	750
700	87·9	13	13	058 24	89·5	06	-16		89·1	10	00	339 17	91·2	10	-15	327 22	90·1	08	-17	354 14	90·3	10	-08	286 10	90·7	10	-15	see	90·8	09	-14	080 20	700
650		06	06	058 18		00	-19			01	-12	309 17		01	-27	323 28		02	-26	334 29		03	-19	279 18		03	-18			02	-12	076 18	650
600	126	-03	-03	043 19	127	-08	-26		127	-09	-24	293 19	129	-09	-37	308 32	128	-04	-37	316 33	128	-02	-27	259 11	129	-04	-18	page	129	-07	-17	078 20	600
550		-12	-12	052 19		-16	-31			-16	-25	294 18		-17	-44	309 34		-14	-48	306 34		-11	-36	229 12		-12	-34			-14	-25	079 25	550
500	170	-23	-23	065 15	170	-25	-39		170	-24	-33	286 13	172	-26	-51	296 37	171	-24	-57	286 24	172	-21	-36	217 24	172	-23	-39	3.	172	-24	-34	080 28	500
450		-36	-38	063 12		-35	-47			-34	-43	268 14		-37	-60	282 42		-36	-59	257 22		-33	-45	212 28		-32	-42			-37	-47	077 28	450
400	220	-49		035 13	221	-46		264 12	221	-48		264 12	222	-49		274 39	222	-48		246 23	223	-46		215 30	223	-45			222	-48		082 27	400
350		-50		159 07		-58		253 13		-57		263 28		-56		263 28		-60		228 33		-54		206 56		-54				-60		108 24	350
300	283	-48		175 15	283	-53		219 20	283	-48		220 14	284	-61		220 14	284	-52		220 30	285	-50		208 69	285	-53			284	-55		164 19	300
250		-43		175 16		-47		201 24		-45		228 06		-45		228 06		-48		224 30		-52		208 66		-46				-47		196 34	250
200	373	-46		184 18	372	-42		194 32	373	-42		155 31	373	-47		155 31	373	-46		186 33	374	-49		195 48	375	-44			373	-44		195 27	200
170		-45		189 20		-42		192 26		-43		192 26		-39		214 22		-48		199 49		-47		188 55		-43				-44		183 24	170
150		-49		197 21		-46		206 28		-45		206 28		-44		228 23		-44		205 37		-52		188 59		-50				-47		175 36	150
130		-52		191 19		-46		190 22		-48		190 22						-52		183 22		-55		191 33		-57				-49		185 36	130
110		-50		197 12		-47		196 27		-52		196 27						-59		198 21		-62		193 24		-61				-50		213 30	110
100	524	-53		209 12					525	-52		205 11					524	-58			524	-64		193 20	525	-61			526	-52		220 17	100
90		-56		203 10						-53		144 12					(993 mb)	-55				-64		195 22		-64				-53		187 09	90
80		-57		174 11						-58		140 17										-62		185 12	(063 mb)	-62			(982 mb)	-57			80
70		-58								-54																							70
60																																	60
						Inversion 989 mb. 35°- 956mb 38°				Inversion 988 mb. 36°- 970mb. 39°				Inversion 985mb. 34° - 966mb. 38° 367mb. -57° - 350mb. -56° Max wind 413mb. 274° 49kts.					Isothermal 615 -605mb. -3°				Inversion 388 mb. 38° - 964mb 36°				Isothermal 979 - 965mb. 36°				Isothermal 983 - 950 mb. 38°			
Tropopause	I 379 mb. -53° 23,300'	I 342mb. -60° 25,500'	I 358mb. -59° 24,500'	I 310mb. -62° 27,700'	I 333 mb. -64° 26,200'	II 373mb. -54° 23,800'	I 335mb. -55° 26,100'	II 350mb. -60° 25,000'																								Tropopause

Friday 9th. February 1951.

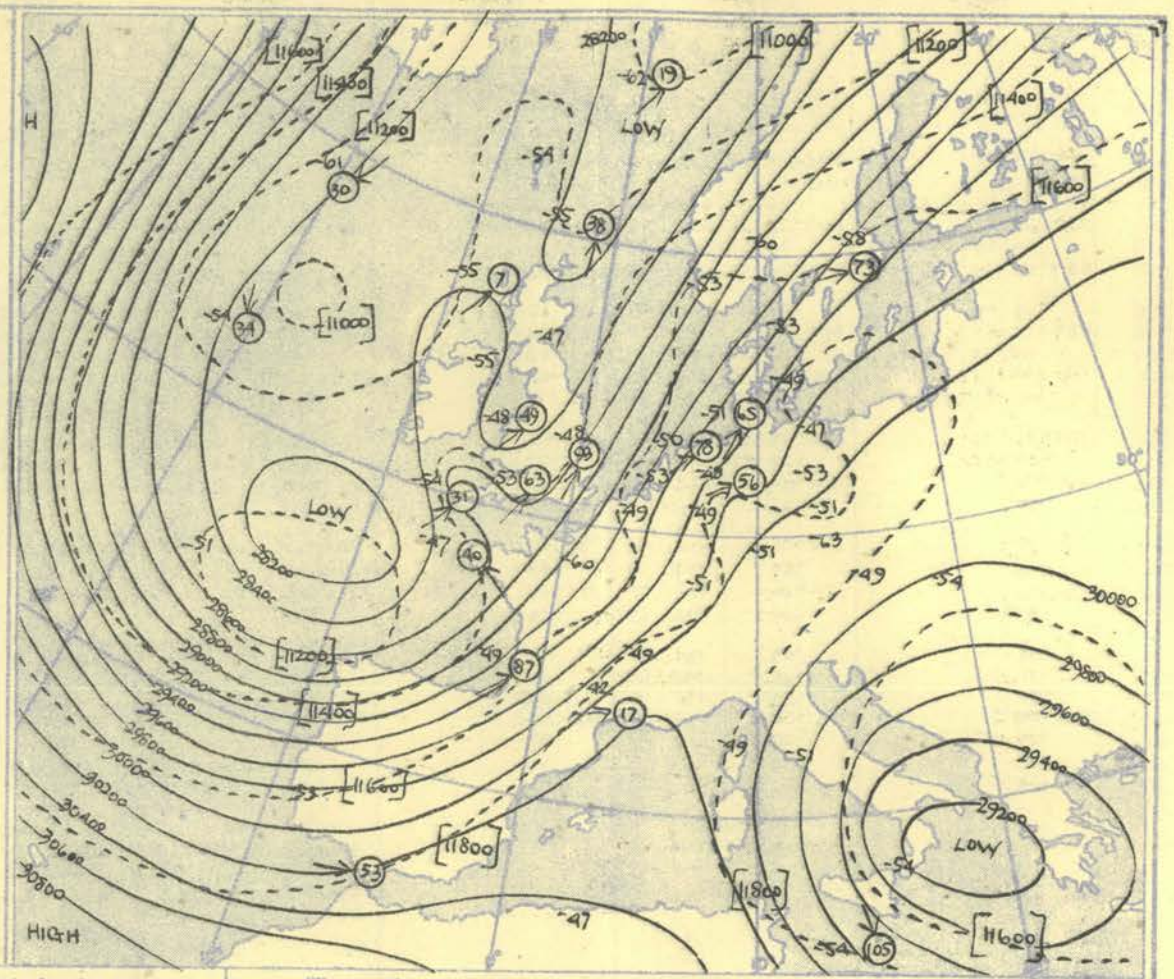
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03 h G.M.T.



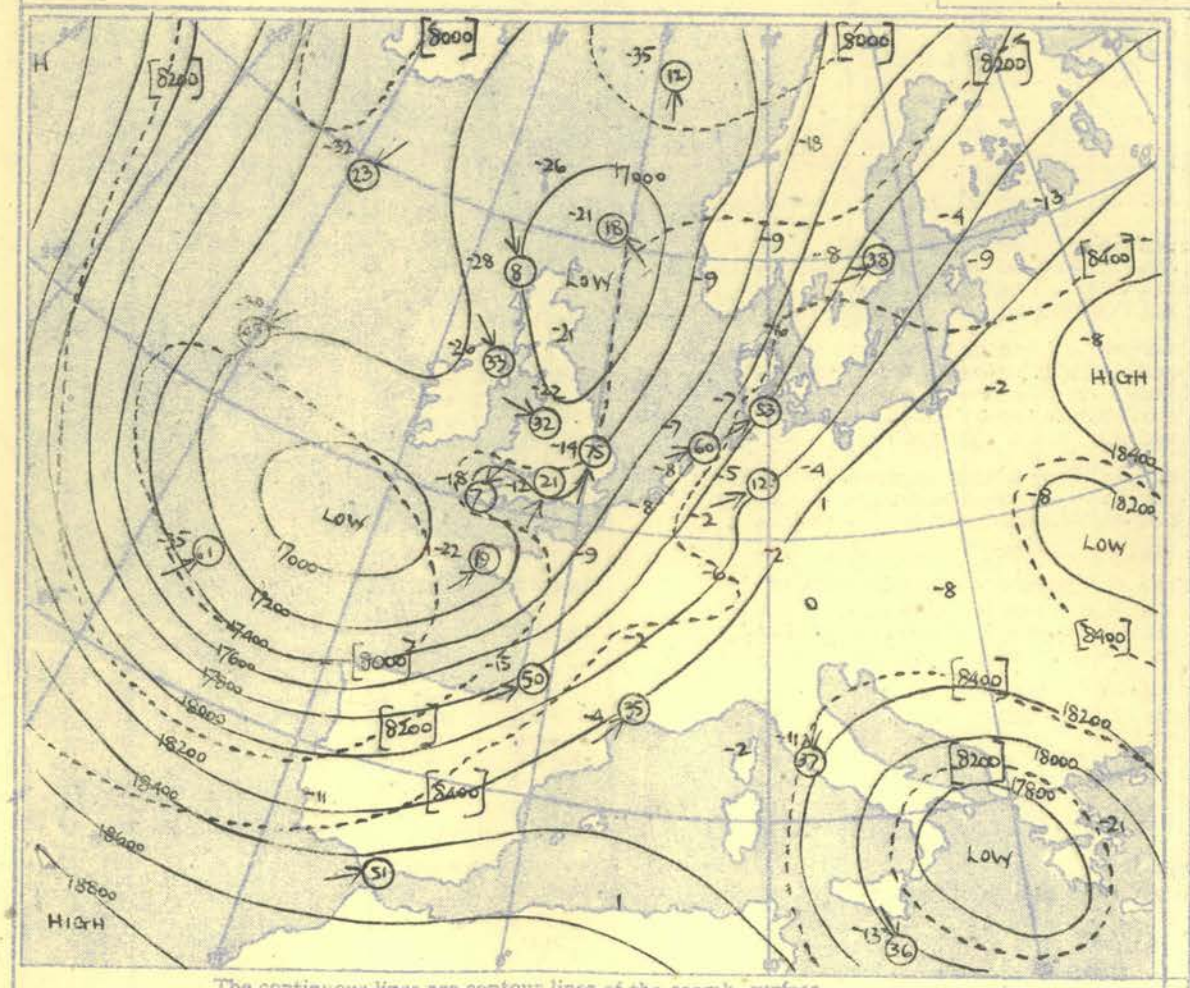
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

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

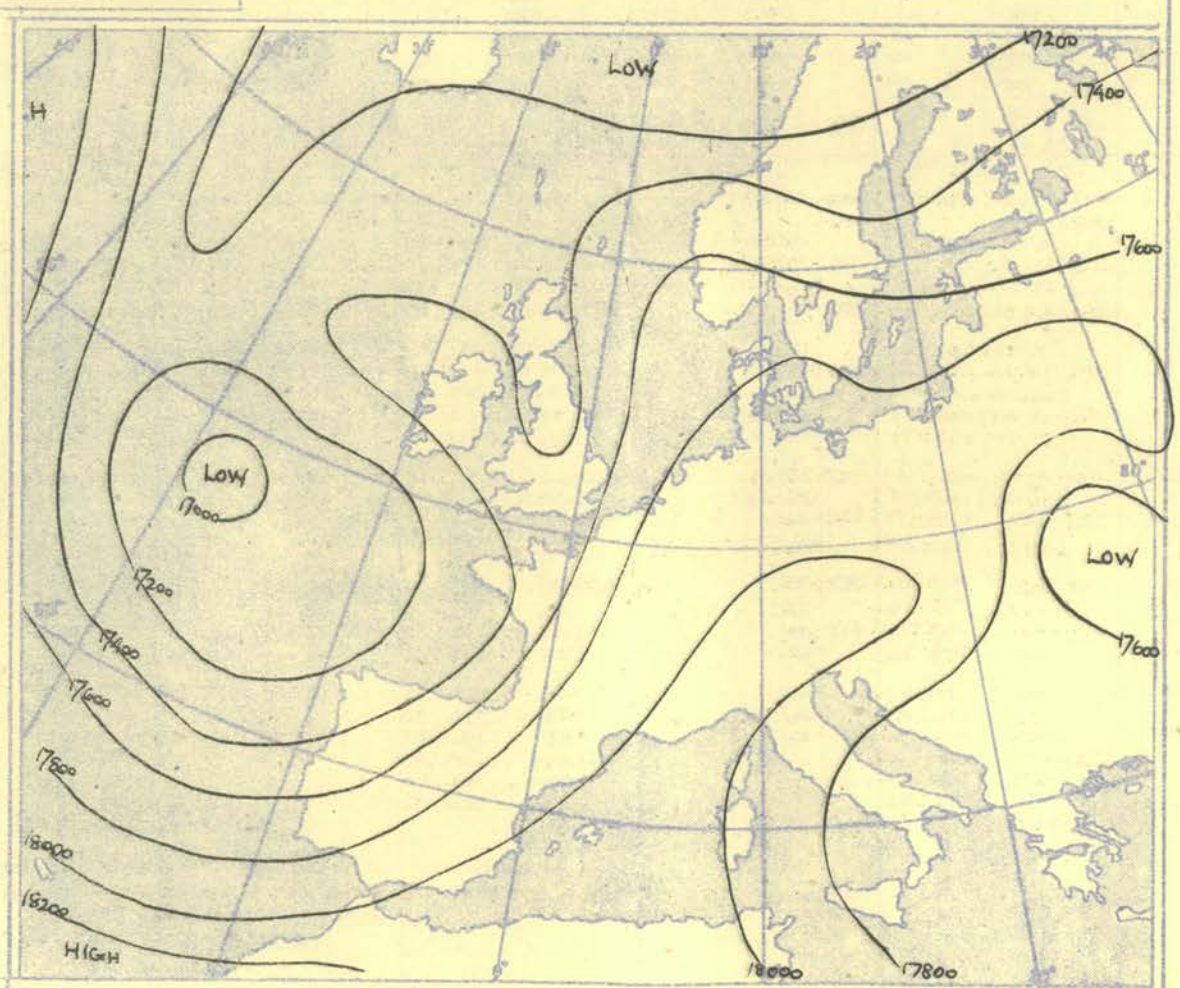
100 60 40 30 20 15 10 knots



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



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



Isopleths of Thickness 500 - 1000mb.

February 9th

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

Place	51·3N 00·4E
Pressure: Time	K 15h
M.S.L.	1001·6 mb
Surf	990·2 mb
Freezing	890 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.
Surf	3·1	43	40
1000	0·4	40	39
950			
900	28·5	33	33
850		26	
800	59·1	21	
750		14	
700	92·9	07	
650		01	
600	131	-08	
550		-19	
500	174	-25	
450		-34	
400	224	-43	
350		-50	
300	288	-51	
250			
200			
170			

Cloud
8/8 Sc
880-815mb.

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

Place	Preston.		Lerwick		Larkhill		Larkhill.		Lerwick.		Shoebury		Leuchars		Lerwick	
Time	03h		03h		09h		15h		15h		10h		15h		21h	
Type			Pilar		Pilar.		Pilar.		Pilar.				Pilar.			
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.	350	06	050	35	Calm		240	10	350	15	230	11	270	13	320	10
1,000	340	20	045	40	200	12	208	17			240	20	275	24	320	11
2,000	340	24	049	40	200	13	215	18			230	21	286	23	320	11
3,000	340	30	060	43	200	13	218	25			230	32	301	21	330	11
4,000			067	33	210	14	220	27			240	36	311	21	330	12
5,000			069	23	210	14	220	31			240	38	307	20	330	12
6,000			076	26	220	16	221	31			240	40	298	19	330	13
8,000			079	25	240	09	220	29			220	39	288	20	330	14
10,000			110	27	290	05	215	26			220	30	287	19	310	13
14,000			109	25	040	09	211	20			210	20	286	30	300	15
18,000			108	18	050	14	112	06			210	40	239	09	290	18
24,000			138	12	150	19	183	25			210	71	236	19	270	15
30,000			180	30	190	55	188	25			200	09	204	22	210	17
40,000			190	20	180	40	181	49			190	48	189	27	190	22
50,000			193	20	210	30	203	27	197	16			184	09	180	28
			(47·000)		180	15	(49·000)						129	10	160	06
					(55·000)								(58·000)		110	12
															(63·000)	

NEPHOSCOPE OBSERVATIONS

Place											
Time Type											
Dir. Vel.											

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

Ship	WEATHER RECORDER					WEATHER RECORDER				
Lat/Long	59·1N 18·9W					59·0N 18·0W				
Pressure: Time G.M.T.	03h					09h				
M.S.L. mb	1000					1005				
Surf mb	1000					1005				
Freezing mb	910					930				
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
Surf		43	35	360	20		42	37	330	23
1000	0					1·3	41	36	335	27
950		37	31	007	23		34	30	344	36
900	28·0	31	22	003	26	29·2	28	24	343	45
850		26	18	003	23		22	20	339	41
800	58·6	20	13	006	24	59·5	17	11	340	33
750		14	04	015	27		12	05	343	33
700	92·4	07	-04	015	29	93·0	05	-01	342	31
650		-02	-12	010	26		-03	-08	331	28
600	130	-11	-18	009	27	131	-11	-23	324	30
550		-21	-28	004	32		-21	-38	327	33
500	173	-32	-40	013	23	173	-31	-47	321	34
450		-43		016	26		-42		336	31
400	222	-51		016	26	223	-50		342	35
350		-59		011	28		-56		348	36
300	284	-61		010	30	285	-57		354	42
250		-55		009	36		-57		358	46
200	372	-48		014	23	372	-58		005	37
170		-52		350	17					
150		-54		325	14					
130		-54		338	15					
110		-53		CALM						
100	522	-53		"						
90		-53		"						
80		-53		"						
70										
60										
Tropopause	I 361 mb - 59° 24,300'					I 343 mb - 57° 25,500'				

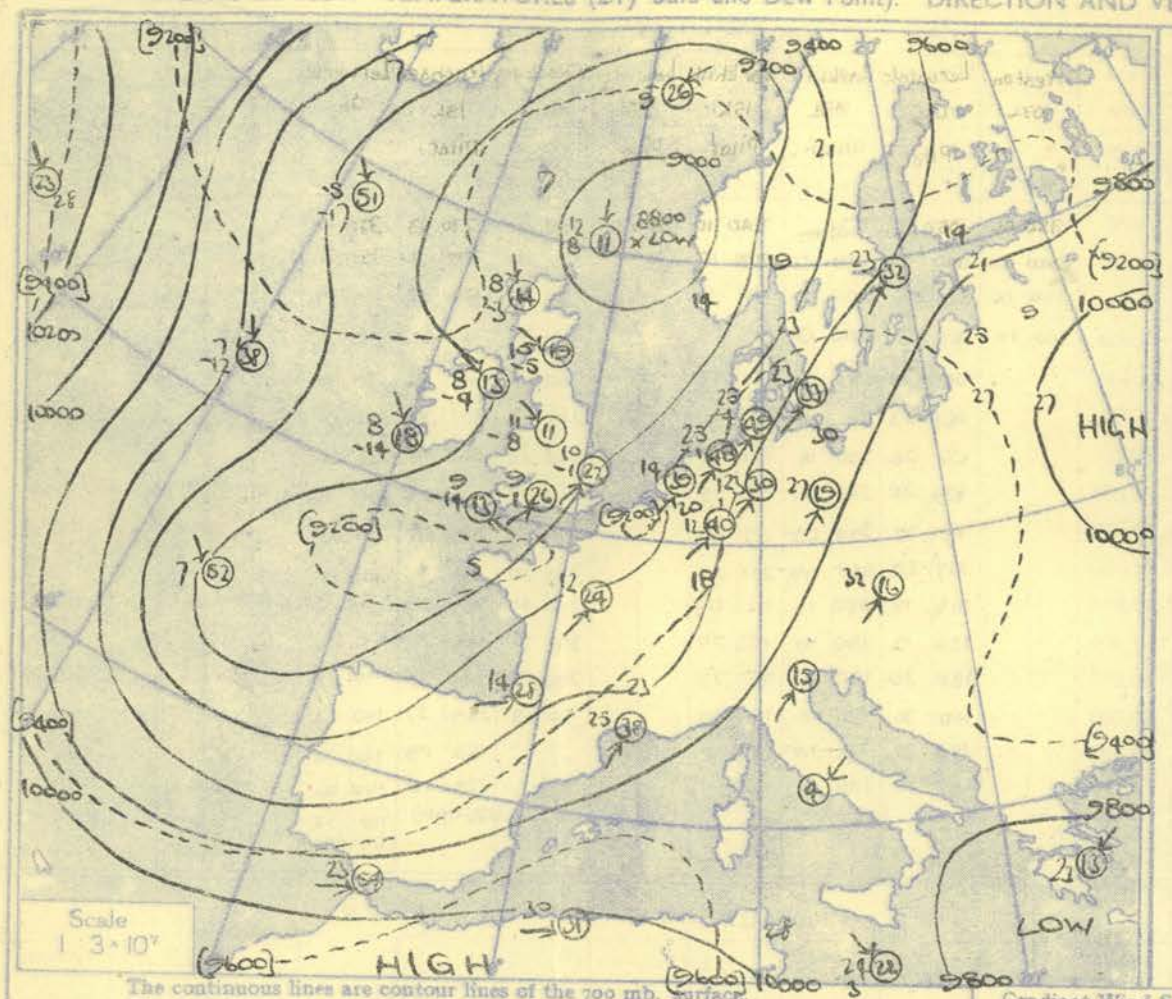
Ship	WEATHER RECORDER					WEATHER RECORDER				
Lat/Long	59·0N 18·9W					59·2N 18·8W				
Pressure: Time G.M.T.	15h					21h				
M.S.L. mb	1009					1012				
Surf mb	1009					1012				
Freezing mb	965					910				
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		42	28	340	34		42	42	350	30
1000	2·4	40	27			3·2	41	40		
950		31	19	338	46		35	31	003	40
900	30·1	25	13	338	51	31·1	28	20	009	40
850		18	06	344	51		21	13	018	42
800	60·2	11	03	354	51	61·4	17	02	023	45
750		03	-05	349	51		11	-12	020	38
700	93·2	-05	-17	347	51	94·8	03	-14	020	36
650		-13	-26	349	46		-04	-24	039	30
600	130	-23	-36	351	46	132	-11	-31	052	30
550		-29	-43	355	42		-17	-38	043	36
500	172	-24	-41	355	63	175	-26	-47	042	45
450		-31	-49	340	72		-32	-57	033	54
400	223	-40	-60	334	66	226	-38	-58	017	71
350		-50		350	58		-45		358	74
300	286	-58		357	54	290	-51		355	78
250		-61		342	57		-55		009	76
200	372	-59				377	-60		357	57
170		-61					-61		013	39
150		-60					-61		012	26
130		-60					-60		016	24
110		-61					-59		017	10
100	520	-62				525	-58		017	09
90		-62					-57			
80		-62								
70		-61								
60		-59								
	(50 mb)	-56								
	Inversion 570 mb -30° _ 510 mb -22°					Inversion 470 mb -23° - 450 mb -32°				
Tropopause	I 271 mb - 64° 30,300'					II 280 mb - 56° 30,500'				

Ship	WEATHER EXPLORER					WEATHER EXPLORER				
Lat/Long	52·6N 20·1W					52·5N 19·9W				
Pressure: Time G.M.T.	03h					09h				
M.S.L. mb	997					1005				
Surf mb	997					1005				
Freezing mb	900					875				
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
Surf		44	34	340	36		47	39	360	28
1000	-9					1·4	46	38		
950		39	30	354	50		41	31	358	54
900	27·2	32	24	001	55	29·6	36	31	360	54
850		25	20	005	56		28	25	003	52
800	57·8	20	15	003	57	60·4	22	19	007	58
750		23	09	360	50		16	09	010	48
700	91·6	06	02	360	50	94·3	10	00	013	57
650		-02	-06	360	50		02	-08	015	40
600	129	-10	-14	348	65	132	-08	-26	018	43
550		-18	-23	357	47		-17	-30	015	45
500	172	-30	-38	025	45	175	-27	-34	008	45
450		-42		016	41		-40	-52	008	42
400	222	-55		003	39	225	-52		017	59
350		-61		014	44		-58		020	60
300	284	-54		348	34	287	-58		013	57
250		-48		328	43		-53		010	53
200	372	-52		333	36	375	-53		013	40
170		-49		358	35		-54		010	27
150		-49		358	15		-51		010	26
130		-49		358	12		-54		020	22
110		-49		358	08		-55		345	15
100	524	-50		358	05	525	-53			
90		-52		358	03					
80	(87 mb)	-53								
70										
60										
Tropopause	I 355 mb - 66° 24,600'					I 353 mb - 60°				

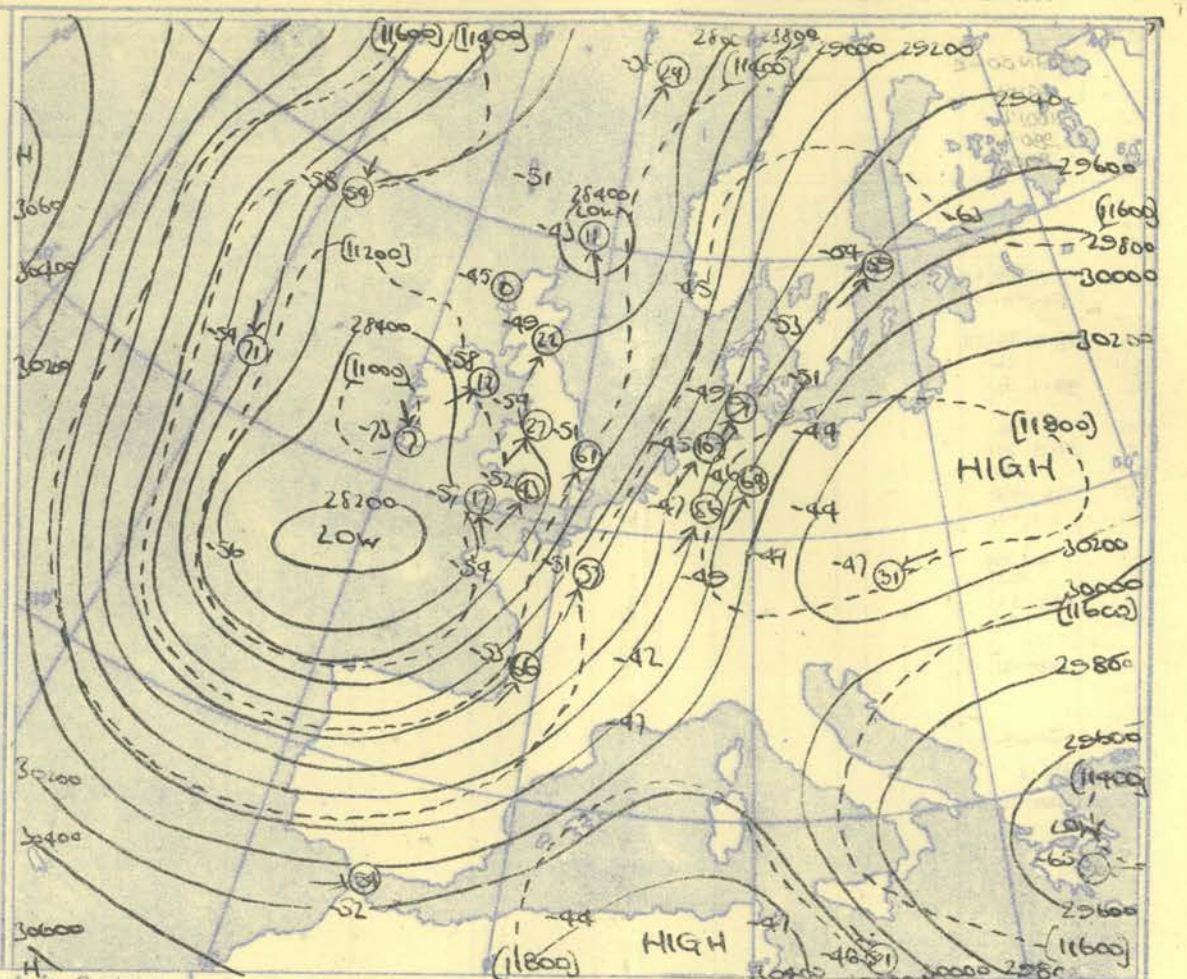
Ship	WEATHER EXPLORER					WEATHER EXPLORER				
Lat/Long	52·0N 20·2W					52·1N 20·0W				
Pressure: Time G.M.T.	15h					21h				
M.S.L. mb	1013					1016				
Surf mb	1013					1016				
Freezing mb	900					920				
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		49	40	340	33		47	36	338	32
1000	3·4	45	37	343	33	4·2	43	34	354	39
950		39	32	358	34		36	31	355	39
900	31·5	32	25	358	31	32·2	29	27	355	40
850		26	21	353	33		23	20	353	40
800	62·1	20	09	352	36	62·5	19	10	353	43
750		15	-03	352	40		12	03	354	41
700	95·9	07	-12	352	38	96·1	05	-16	354	42
650		00	-17	352	44		-03	-24	357	48
600	134	-09	-27	352	41	134	-12	-33	350	41
550		-19	-38	354	32		-21	-42	338	35
500	177	-30	-45	357	34	176	-30	-51	336	37
450		-41		357	38		-34	-54	343	45
400	226	-50		354	40	227	-44		359	47
350		-53		352	58		-50		006	75
300	289	-54				289	-56		007	109
250	(278 mb)	-55					-67		008	103
200						375	-67		006	65
170							-66		001	60
150							-66		360	60
130							-65		359	55
110							-64		358	46
100						521	-64		358	40
90						(97 mb)	-65			
80										
70										
60										
	Isothermal 395 mb - 380 mb -51°					Inversion 382 mb -48° - 375 mb -47°				
Tropopause	I 355 mb - 54° 25,100'					I 228 mb - 70° 34,700'				

February 9th 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.

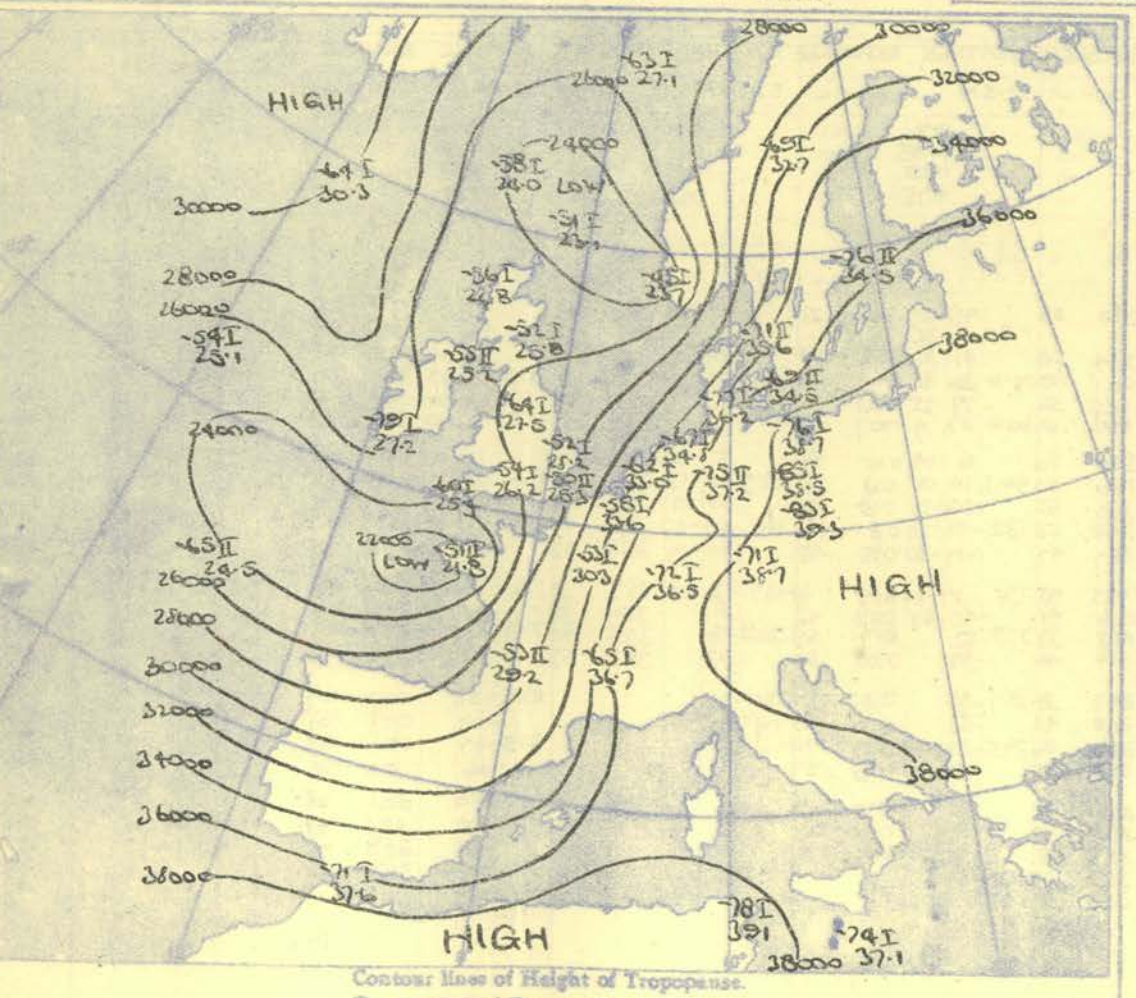


The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000—700 mb



The continuous lines are contour lines of the 300mb. 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.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

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

NOTES ON THE AEROLOGICAL SITUATION.

The cold trough in the Eastern Atlantic persisted and detached cold pools formed in the South, one moving in over Northwest France and the Channel later in the day. A very pronounced warm ridge in the Western Atlantic moved steadily east with a very strong Southerly thermal gradient on its western side.

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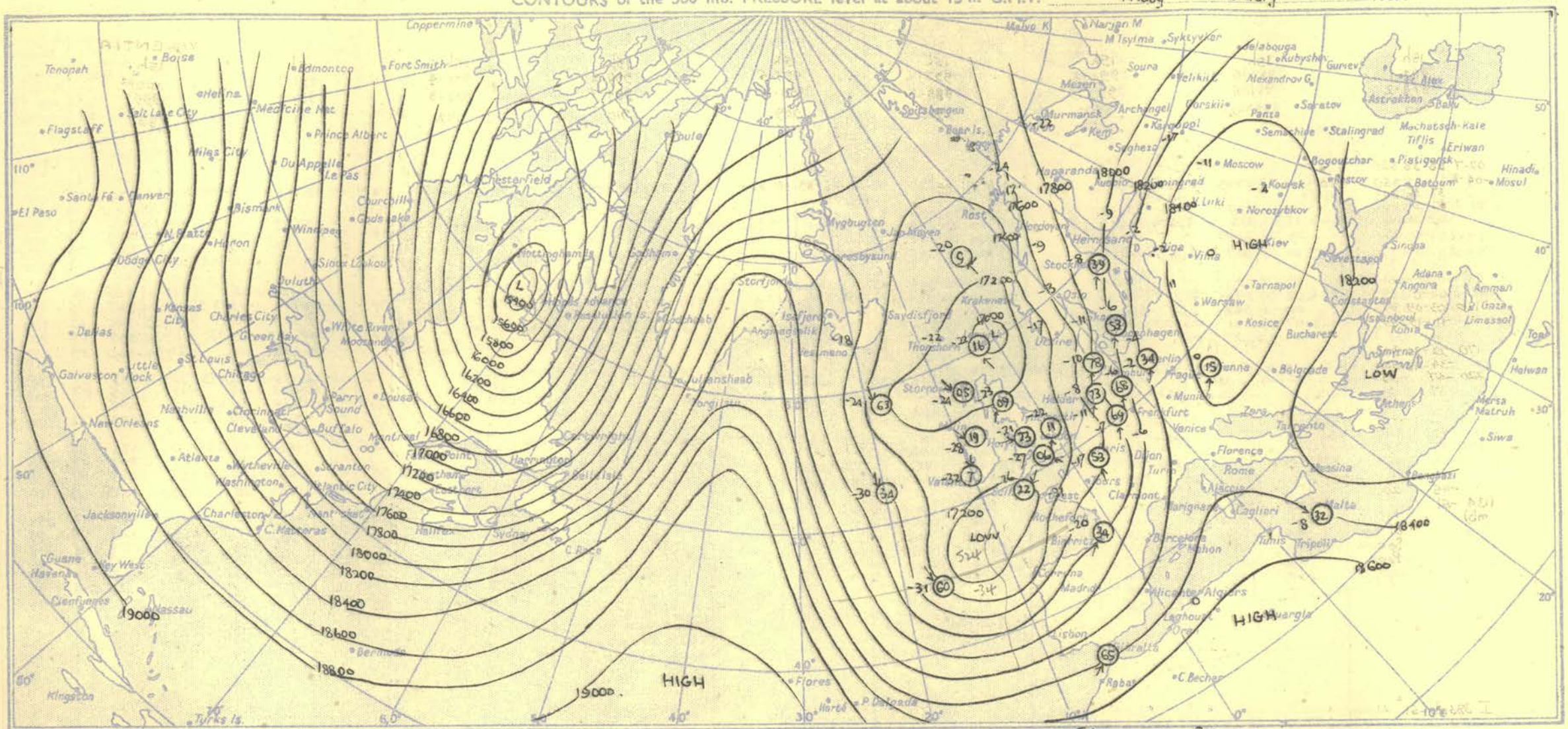
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Friday 9th February 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Friday 9th February. 1951.

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Friday 9th February, 1951.

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

15h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.
Pressure: M.S.L.	984·1 mb	993·4 mb	994·8 mb	997·1 mb	997·5 mb	999·2 mb	998·4 mb	996·1 mb	1008 mb
Pressure: Surf	974·2 mb	991·8 mb	993·9 mb	989·3 mb	996·4 mb	994·7 mb	982·3 mb	985·5 mb	999 mb
Pressure: Freezing	900 mb	893·0 mb	890 mb	915 mb	909 mb	910 mb	912 mb	910 mb	895 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	38	38	360	15	00·4	44	42	325	05	00·2	43	33			02·6	41	34	290	05	00·6	43	38	320	04	01·2	43	39	190	10	4·4	41	39			02·9	43	38	113	10	60·3	47	36	030	10	Surf
1000	-04·3					-01·8					-01·5					-00·3					-00·7					+00·3					+0·4					-01·1					2	47	38			1000
950		37	36	344	26		39	32	335	17		32	30				37	30	304	07		37	29	232	18		37	35				38	35				38	33	154	14		40	33	359	17	950
900	23·7	32	31	006	21	26·3	33	25	338	17	26·6	33	25			27·7	30	23	308	10	27·3	31	27	292	09	27·8	31	26	236	20	25·6	31	28			26·9	31	27	151	15	28·4	33	20	360	20	900
850		27	26	009	21		26	19	339	16		28	18				24	16	307	13		25	21	282	10		25	15	236	20		25	22				26	22	146	15		26	02	357	23	850
800	54·2	21	20	007	15	56·9	20	15	339	15	57·2	24	12			58·3	20	12	306	18	57·8	20	15	264	11	58·3	21	01	235	20	58·1	20	16			57·5	21	14	136	15	59·0	24	01	352	13	800
750		16	15	360	13		14	08	341	14		15	04				15	05	304	15		15	04	267	13		16	02	231	24		15	11	For Winds			16	06	115	12		17	-06	355	18	750
700	88·1	12	08	359	11	90·6	08	-03	345	14	91·1	10	-05			92·0	08	-04	304	13	91·6	11	-18	286	11	92·1	10	-01	223	22	91·8	09	-01			91·3	09	-14	101	1392·9	08	-14	347	15	700
650		05	-01	359	12		00	-16	342	11		04	-14				00	+14	311	11		05	-26	305	13		03	-08	216	20		01	-10	See			01	-20	107	10		-01	-22	341	10	650
600	126	-03	-09	345	15	128	-07	-25	331	08	129	-05	-20			130	-08	-19	323	15	130	-03	-46	325	15	130	-04	-18	209	13	130	-09	-19			129	-07	-24	124	10	131	-11	-30	339	09	600
550		-11	-19	337	14		-15	-32	327	08		-16	-29				-18	-29	318	17		-13	-54	305	19		-17	-29	205	09		-17	-25	Page 3.			-15	-28	093	15		-21	-38	360	09	550
500	170	-22	-31	341	16	172	-24	-38	333	05	172	-23	-35	For Winds		173	-28	-39	315	19	173	-21	-54	285	23	174	-22	-35	200	11	173	-27	-35			172	-26	-35	074	22	173	-32	-46	003	07	500
450		-34	-43	344	14		-30	-46	L and V			-32	-43				+40	-50	308	20		-31	-58	272	17		-32	-41	197	19		-37	-45				-37	-46	078	24		-43		285	07	450
400	220	-47		330	13	222	-46		..		223	-46		See		223	-49		280	28	224	-44		249	17	225	-40	-51	201	54	223	-47				223	-49		074	35	223	-55		298	11	400
350		-47		211	06		-51		..			-52		Page 3.			-55		262	20		-55		217	27		-47		204	54		-53					-59		077	30		-67		298	12	350
300	284	-43		170	11	285	-47		..		286	-49				285	-58		227	12	286	-54		204	27	288	-51		197	61	285	-52				285	-57		156	13	283	-73		352	07	300
250		-42		193	18		-42		..			-51					+52		206	12		-47		188	33		-49		198	60		-46					-52		169	19		-55		040	07	250
200	379	-45		190	18	375	-45		..		376	-38				374	-46		188	19	376	-42		182	34	377	-43				375	-45				373	-45		184	24	370	-52		082	07	200
170		-46		191	26		-41		184	13		-44					-44		174	19	(181	-42					-46					+43					-46		173	28		-53		093	13	170
150		-45		207	24		-44		180	11		-39					-46		160	18	mb)						-48																			150
130	(134	-51					-46		170	17		-48					-46		160	23							-57					-49					-06		187	35		-51		127	12	130
110	mb)			For Rest			-44		165	11		-53					-52		150	16							-61					-51					-07		178	23		-52		129	09	110
100				of Winds		529	-48		160	10	530	-56					+54		150	18						528	-61					-51					-52		177	14		-58		118	15	100
90				See			-52		151	14		-56					-54		162	18											526	-59				525	-55		140	26	520	-63		123	19	90
80				Page 3.			-56		141	16		-56					-55															-59					-55		177	22		-68		145	13	80
70							-48		145	15		-55																				-58					-53		175	17		-69		156	04	70
60												-52																								-64				(071	-60				60
																																				-57				(67					
																Isothermal 350 - 353mb - 55°										Isothermal 853 - 826mb 25° 906 - 390 .. -90°																	Isothermal 800 - 797 mb 24°				
Tropopause	I 383mb -51° 23,100'					I 357 mb - 56° 24,800'					I 341mb - 53° 25,800'					I 310 mb - 61° 27,800'					I 317mb - 64° 27,500'					I 308mb - 52° 28,200'					I 335mb - 59° 26,200'					I 344mb - 60° 25,400'					I 315 mb - 75° 27,200'				Tropopause

21h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	G.M.T.
Pressure: M.S.L.	988·9 mb	998·5 mb	999·6 mb	1000·7 mb	1001·6 mb	1003·3 mb	1003·4 mb	1001·0 mb	mb
Pressure: Surf	978·8 mb	996·9 mb	998·7 mb	991·7 mb	999·5 mb	998·9 mb	987·0 mb	990·3 mb	mb
Pressure: Freezing	893 mb	910 mb	929 mb	929 mb	922 mb	896 mb	908 mb	909 mb	mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	39	38	320	10	00·4	37	34	Calm		00·2	34	30	260	06	02·6	36	34	000	00	00·6	37	34	Calm		01·2	40	37	140	09	4·4	35	33	230	06	02·9	40	36	160	10						Surf
1000	-3 ·4					-00·4					-00·6					00·4					-00·4					00·9					0·9					30·3										1000
950		40	38	328	15		38	33	350	19		35	28	299	12		34	32	262	05		36	30	219	05		38	33	199	29		39	33	205	24		37	31	176	21							950
900	25·1	33	30	330	18	27·6	31	29	359	16	27·8	29	20	295	08	28·2	30	28	258	06	28·4	29	25	228	07	28·8	33	28	209	30	28·9	31	27	210	27	28·3	31	27	186	21						900
850		27	23	342	12		24	20	358	17		29	16	236	09		23	21	259	07		22	18	229	07		27	21	210	29		24	19	211	25		25	21	190	20							850
800	55·6	21	19	344	15	58·0	18	13	341	17	58·3	18	13	195	05	58·7	17	13	264	08	58·6	15	10	266	05	59·4	21	17	210	30	59·4	18	13	211	25	58·9	20	14	188	18						800
750		16	12	344	12		12	08	344	15		10	02	207	05		12	07	282	08		10	01	304	05		14	05	207	31		11	07	214	25		14	09	182	12							750
700	89·4	09	04	340	10	91·6	06	-03	395	13	91·8	06	-13	230	09	92·2	05	-03	284	08	92·0	02	-10	275	07	93·0	07	-02	204	32	92·9	04	00	212	23	92·7	07	01	171	08						700
650		03	-07	326	09		+01	-12	347	12		-02	-23	234	12		-02	-12	262	06		-06	-20	229	10		00	-09	202	30		-04	-10	204	22		-01	-10	154	06							650
600	127	-05	-17	322	10	129	+08	-19	355	10	129	-10	-30	235	13	130	-11	-24	260	08	129	-14	-29	235	14	131	-09	-19	204	25	130	-12	-19	204	16	130	-10	-16	106	04						600
550		-14	-25	324	15		-16	-27	018	10		-18	-30	218	10		-20	-34	274	09		-24	-41	242	16		-19	-27	214	21		-21	-28	209	10		-19	-29	116	06							550
500	171	-29	-33	315	20	172	-25	-34	051	09	172	-28	-36	209	06	173	-30	-43	277	09	172	-33	-49	249	17	174	-29	-36	333	18	173	-30	-38	208	07	173	-30	-36	105	07						500
450		-36	-45	294	21		+37	-44	096	21		-38	-47	193	03		-42		282	09		-46		252	14		-38	-48	207	31		-42		192	07		-41		074	12							450
400	221	-47		288	18	223	-50		086	17	223	-49		220	05	222	-54		229	12	221	-58		242	14	224	-45		195	54	223	-54		106	05	223	-53		071	19							400
350		-50		275	12		-57		087	08		-55		188	14		-58		267	06		-71		208	13		-49		195	53		-57		186	20		-66		067	24							350
300	284	-48		214	18	285	-50		066	03	285	-52		186	16	284	-54		226	06	281	-66		188	22	287	-53		189	51	285	-53		187	30	284	-61		116	08							300
250		-45		180	16		-46		074	07		-49		177	25		-51		130	13		-60		185	25		-48		180	52		-50		182	40		-56		176	15							250
200						375	-42		140	06	374	-46		183	21	373	-45		149	09	367	-55		175	25	376	-48		183	54	373	-51		174	40	372	-50		171	14							200
170							-46		138	09		-47		169	23		-47		147	21		-58		167	31		-44		184	47		+48		174	45		-49		157	22							170
150							-46		173	19		-46		166	32		-46		168	16		-60		178	34		-48		176	34		-47		179	32		-49		174	22							150
130							-50					-50		167	18		-51		152	14		-57		182	31		-53		168	30		-52		172	25		-52		170	18							130
110												-58		170	18		-57		150	12		-58		144	30		-62		162	29		-59		162	27		-55		143	31							110
100											525	-60		167	19	529	-62				516	-60		159	30	526	-65		169	29	524	-60		165	22	523	-56		154	36							100
90												-61					-62					-62		187	26		-61		169	20		-62		160	21		-61		168	41							90
80																						-64		189	18		-63		276	05							-60		177	21							80
70																						-67		172	19											(72 mb)										70
60																						-71		168	22																						60
																						-76		153	21																						
	Inversion 979mb -39° - 950mb 40°					Inversion 997mb 37° 980mb 41°					Inversion 999mb 34° - 978mb 38° Isothermal 752 - 735 mb 10°					Inversion 992 mb - 36° - 978mb 37°					-74 -73 (36 mb) Inversion 999mb 37° - 993mb 43°					Inversion 406 mb 46° - 385mb 44° Isothermal 999 - 975mb 40°					Inversion 987 mb 35° - 980 mb 39° Isothermal 980 - 950 mb 39°										
Tropopause	I 365mb - 51° 24,100'					I 363mb - 60° 24,300'					I 337mb - 58° 26,000'					I 3 mb - 58° 27,400'					I 326mb - 78° 26,400'					I 312mb - 53° 27,900'					I 372mb - 61° 23,800'					I 342 mb - 68° 25,100'										Tropopause

HMSO. Press, MO., Dunstable.

No. 11640. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Saturday 10th February, 1951.

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

03h. G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.	03h. G.M.T.
Pressure: M.S.L.	996·0 mb	1003·0 mb	1003·8 mb	1003·8 mb	1004·0 mb	1006·6 mb	1005·7 mb	1002·6 mb	1004·0 mb
Pressure: Surf	986·0 mb	1001·3 mb	1002·6 mb	994·2 mb	1001·9 mb	1002·1 mb	989·3 mb	991·9 mb	1003 mb
Pressure: Freezing	888 mb	922 mb	918 mb	927 mb	911 mb	916 mb	908 mb	892 mb	930 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	38	38	Calm		00·4	38	36	350	10	00·2	30	29	Calm		02·6	30	29	Calm		00·6	33	31	Calm		01·2	36	34	160	08	04·4	37	35	230	07	02·9	37	34	135	02	00·3	33	30	060	05	Surf
1000	·1·1					0·8	38	36			0·9	30	29			0·0					1·1	34	31			1·8	36	34			1·5					0·8					1·1	34	31	058	05	1000
950		40	36	L.V.			35	31	007	19		36	29	250	06		34	32	Calm			37	30	183	04		37	30	215	24		37	33	195	15		40	32	170	13		34	28	041	08	950
900	27·0	34	29	L.V.		28·7	30	28	008	22	28·7	30	23	236	06	28·8	29	26	Calm		28·9	30	25	196	03	29·7	30	26	214	24	29·5	31	26	203	19	28·9	33	27	178	10	28·9	29	24	034	10	900
850		27	23	L.V.			25	23	015	23		24	16	238	07		24	20	068	03		23	21	188	03			23	21	212	24		26	19	210	21		26	19	180	10		24	20	036	12	850
800	37·6	21	19	L.V.		39·2	19	17	019	21	39·1	17	12	246	06	39·3	18	14	062	04	39·3	17	15	170	04	60·1	17	12	208	24	59·9	20	16	215	20	59·4	19	08	178	08	59·4	20	13	038	11	800
750		16	12	330	08		13	10	027	22		12	04	228	05		12	07	035	04		13	01	192	03			10	01	207	23		12	-01	215	16		14	04	165	06		14	04	036	11	750
700	91·5	11	05	330	08	92·8	06	02	022	17	92·7	05	-06	214	06	92·9	06	01	023	04	92·9	06	-12	229	03	93·6	04	-10	204	21	93·5	06	-11	213	18	93·1	07	-06	157	07	93·1	07	-06	038	10	700
650		06	-03	335	06		-02	-07	017	15		-02	-13	224	09		-03	-10	025	04		00	-18	243	06		-04	-13	201	21		-02	-23	215	18		-01	-09	154	06		00	-12	041	09	650
600	130	00	-11	310	08	130	-10	-15	018	13	130	-09	-21	231	09	130	-11	-21	007	04	131	-10	-28	238	07	131	-12	-23	210	21	131	-10	-30	214	22	131	-07	-14	100	06	131	-08	-18			600
550		-11	-19	304	12		-18	-24	028	15		-18	-29	242	09		-20	-33	015	03		-19	-36	237	10			-22	-32	215	23		-19	-37	218	25		-18	-25	080	06		-17	-26			550
500	173	-21	-31	285	12	173	-28	-35	047	14	173	-28	-39	L.V.		173	-32	-42	025	01	173	-28	-45	236	12	174	-33	-40	218	20	174	-30	-47	222	30	174	-28	-36	095	08	174	-28	-36			500
450		-33	-41	259	12		-39	-45	038	19		-39	-48	L.V.			-44		171	01		-39	-54	225	40		-45		222	17		-42		225	47		-40	-49	100	09		-36	-45			450
400	224	-45		246	13	223	-51		042	24	223	-45		179	07	223	-55		194	05	223	-54		211	07	223	-53		210	25	224	-55		227	52	224	-53		065	11	224	-46				400
350		-49		240	12		-64		051	15		-54		177	12		-61		159	04							-53		191	36		-63		223	31		-61		085	07		-54				350
300	287	-50		198	15	285	-55		083	09	286	-52		176	18	284	-56		125	07	For rest of					285	-55		177	43	285	-60		190	28	285	-60		177	14	287	-59				300
250		-45		193	20		-47		072	09		-49		177	21		-50		088	09							-50		180	51		-55		184	30		-57		182	13	(266 mb)	-53				250
200	377	-43		186	16	374	-46		104	09	376	-42		169	21	373	-49		064	12	winds see page 3.					374	-49		178	43	372	-51		168	37	372	-51		153	17						200
170		-44		180	20		-47		136	13		-45		159	32		-47		112	17							-48		161	36		-47		162	34		-47		162	20						170
150		-48		182	22		-50		130	12		-43		168	41		-51		130	16							-52		153	33		-50		160	29		-47		184	11						150
130		-53		183	15		-56		122	09		-47		169	25		-52		135	18							-60		157	28						(133 mb)	-49									130
110		-55		182	13		-56		115	13		-58		140	16		-56		136	17							-59		162	22																110
100	529	-57		143	12	524	-60		119	19	556	-59		127	17	528	-59		167	18						524	-60		160	12																100
90		-57		130	09		-62		120	16		-58					-61		185	20							-66		135	09																90
80		-60		130	11		-63										-60																												80
70		-59		126	13																																								70
60		-59																																												60
	(CST) mb																																													
	Inversion 986mb. 38°–966mb. 42°					Inversion 1001mb. 38°–992mb. 39°					Inversion 1003mb. 30°–965mb. 38°					Inversion 994mb. 30°–964mb. 36° 384mb. -58°–370mb. -56°					Inversion 1002mb. 38°–983mb. 40° 773mb. 13°–761mb. 14°					Inversion 1002mb. 36°–962mb. 39°					Inversion 989mb. 37°–978mb. 39°					Inversion 992mb. 37°–973mb. 43°					Inversion 1003mb. 33°–977mb. 37°					
Tropopause	I 375mb. -49° 23,800'					I 350mb. -64° 25,200'					I 331mb. -59° 26,500'					I 343mb. -62° 25,500'					N.R.					I 410mb. -54° 21,800'					I 361mb. -66° 24,300'					I 320mb. -63° 27,200'					I 310mb. -61° 27,900'					Tropopause

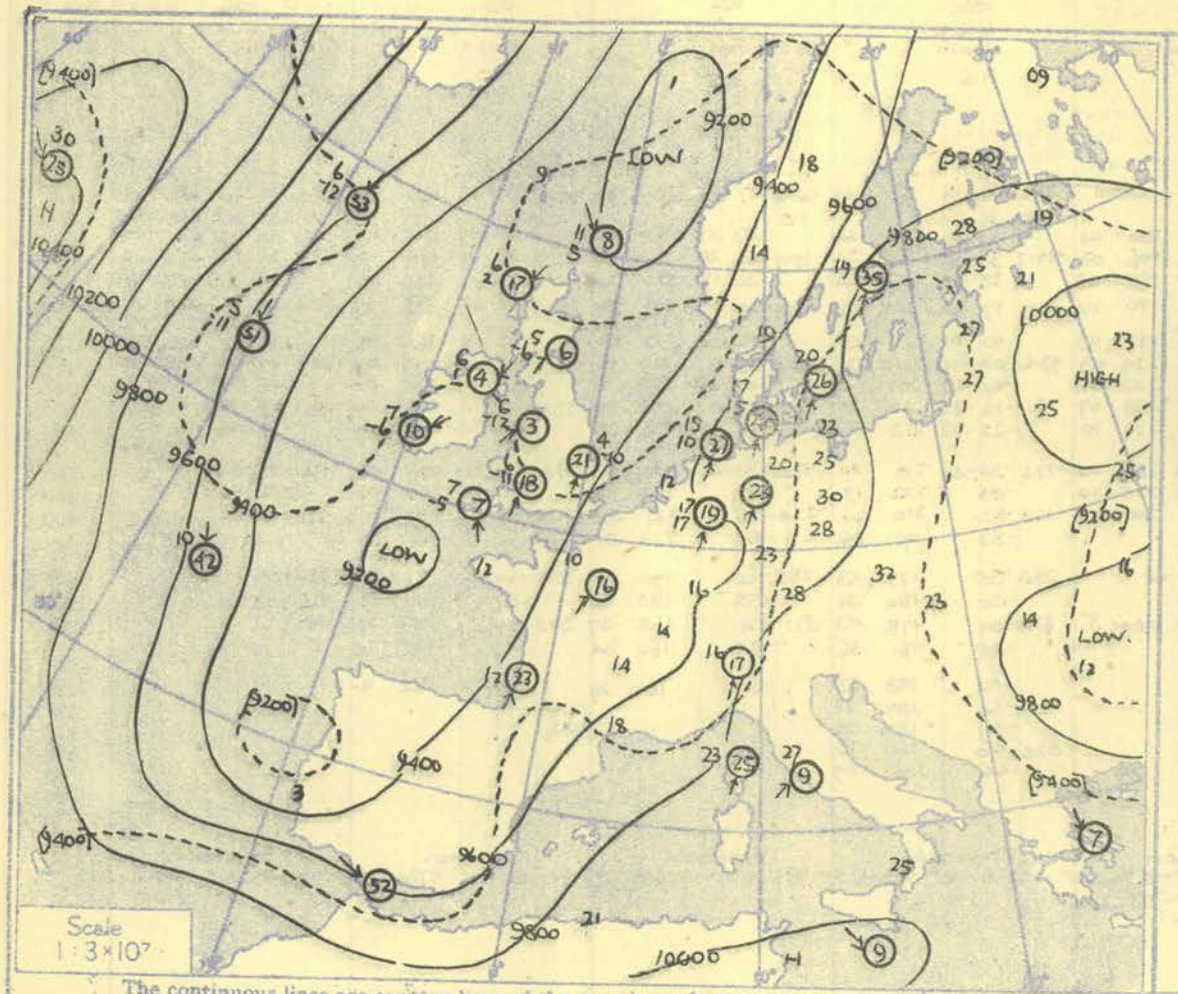
09h. G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE
Pressure: Time	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.	09h. G.M.T.
Pressure: M.S.L.	1003·1 mb	1007·4 mb	1007·1 mb	1007·1 mb	1007·2 mb	1009·6 mb	1007·2 mb	1002·7 mb
Pressure: Surf	992·9 mb	1005·7 mb	1006·2 mb	997·8 mb	1008·3 mb	1008·1 mb	990·7 mb	992·0 mb
Pressure: Freezing	909 mb	915 mb	923 mb	940 mb	921 mb	908 mb	918 mb	895 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	37	37	010	09	00·4	42	38			00·2	31	31			02·6	25	25	Calm		00·6	31	30	Calm		01·2	35	34	140	07	04·4	36	36	150	02	02·9	38	39	090	05	Surf
1000	0·8					1·9	42	38			1·8	32	31			2·1					1·9	32	31	137	03	2·6	36	35			1·9					0·7					1000
950		35	34				36	32				34	30				33	33	085	07		35	29	149	06		36	29	179	16		35	34	150	16		38	34	094	22	950
900	28·6	31	30			29·7	30	23			29·6	30	23			29·8	28	28	084	07	29·7	30	19	126	06	30·5	31	21	182	14	29·6	30	29	165	20	28·7	32	29	094	23	900
850		26	25				24	21				24	17				22	22	070	05		25	14	137	07		26	14	194	12		26	23	167	21		28	21	089	18	850
800	59·1	20	19			60·1	18	16			60·1	18	11			60·2	17	16	063	06	60·1	20	08	163	08	61·0	20	02	197	18	60·1	20	16	160	21	59·4	23	15	078	18	800
750		15	13	140	03		12	09				13	02				11	08	084	06		14	-06	180	09		15	-04	197	20		15	10	160	20		18	10	085	17	750
700	92·9	08	06	130	03	93·7	06	01			93·7	06	-09			93·7	04	-02	070	06	93·9	08	-10	186	08	94·8	08	-03	197	19	93·8	08	04	165	20	93·4	10	00	097	16	700
650		00	02	155	03		-02	-09				-01	-15				-03	-12	050	06		00	-21	190	10		02	-18	213	19		01	-03	180	19		03	-11	114	09	650
600	131	-08	-13	L.V.		131	-10	-32			131	-07	-23			131	-10	-22	070	05	132	-08	-30	187	08	133	-05	-27	217	23	132	-06	-10	186	21	132	-03	-19	167	07	600
550		-17	-26	"			-17	-30				-18	-31				-20	-33	095	08		-17	-38	186	13		-16	-30	210	31		-14	-20	191	24		-13	-29	204	14	550
500	174	-28	-39	"		174	-27	-36			174	-28	-39			174	-32	-44	103	07	175	-27	-46	173	15	176	-26	-37	208	36	175	-24	-31	193	28	175	-23	-38	196	22	500
450		-40	-50	205	03		-37	-48				-40	-55				-43		154	16		-37	-55	159	23		-38	-48	220	36		-37	-44	199	33		-36	-52	184	31	450
400	224	-50		215	10	225	-56				224	-47	-53			224	-54		170	18	225	-49		151	23	226	-50		235	45	225	-49		202	42	225	-48		184	44	400
350		-53		187	10		-62					-53					-59		140	09		-61		148	18		-63		236	44		-63		212	45		-64		181	49	350
300	286	-50		166	12	286	-57				287	-55				285	-57		100	10	286	-57		176	23	287	-58		187	46	286	-65		207	30	236	-69		175	22	300
250		-44		166	15		-50					-48					-50		098	13		-48		177	22		-53		178	39		-54		177	29		-60		167	15	250
200	376	-43		183	22	375	-46				376	-44									375	-44		145	19	376	-45		167	37	373	-48		167	26	373	-54		151	22	200
170		-46		193	23		-46															-44		142	26		-46		162	39		-47		157	20		-52		131	16	170
150		-49		172	23		-45															-43		140	35		-47		157	36		-49		147	24		-52		111	24	150
130		-53		181	14		-52															-45		140	24		-55		158	30		-49		142	25		-53				130
110		-61		182	15		-56															-51		117	11		-58		150	19		-56		146	21	(124 mb)	-54				110
100	527	-60		163	14	526	-57														528	-53		104	17	527	-58		138	13	525	-56		149	16						100
90	(993 mb)	-59					-54															-55		127	20		-58		105	27		-56									90
80							-50															-57		138	16		-58		139	26												80
70							-50															-56		120	16		-56															70
60																						-56																				60
	Inversion 993mb. 37°–984mb. 39° Isothermal 940–924mb. 34°										Inversion 1006mb. 31°–989mb. 35°					Inversion 998mb. 25°–979mb. 36°					Inversion 1005mb. 31°–961mb. 36°					Inversion 1005mb. 35°–978mb. 39°					Isothermal 991–962mb. 36°					Inversion 992mb. 38°–965mb. 39°									
Tropopause	I 380mb. -53° 23,500'					I 341mb. -64° 25,900'					I 330mb. -56° 26,500'					III 382mb. -57° 23,400'					I 328mb. -66° 26,700'					I 320mb. -67° 27,400'					I 312mb. -69° 27,700'					I 308mb. -72° 28,000'									Tropopause

Saturday 10th February 1951.

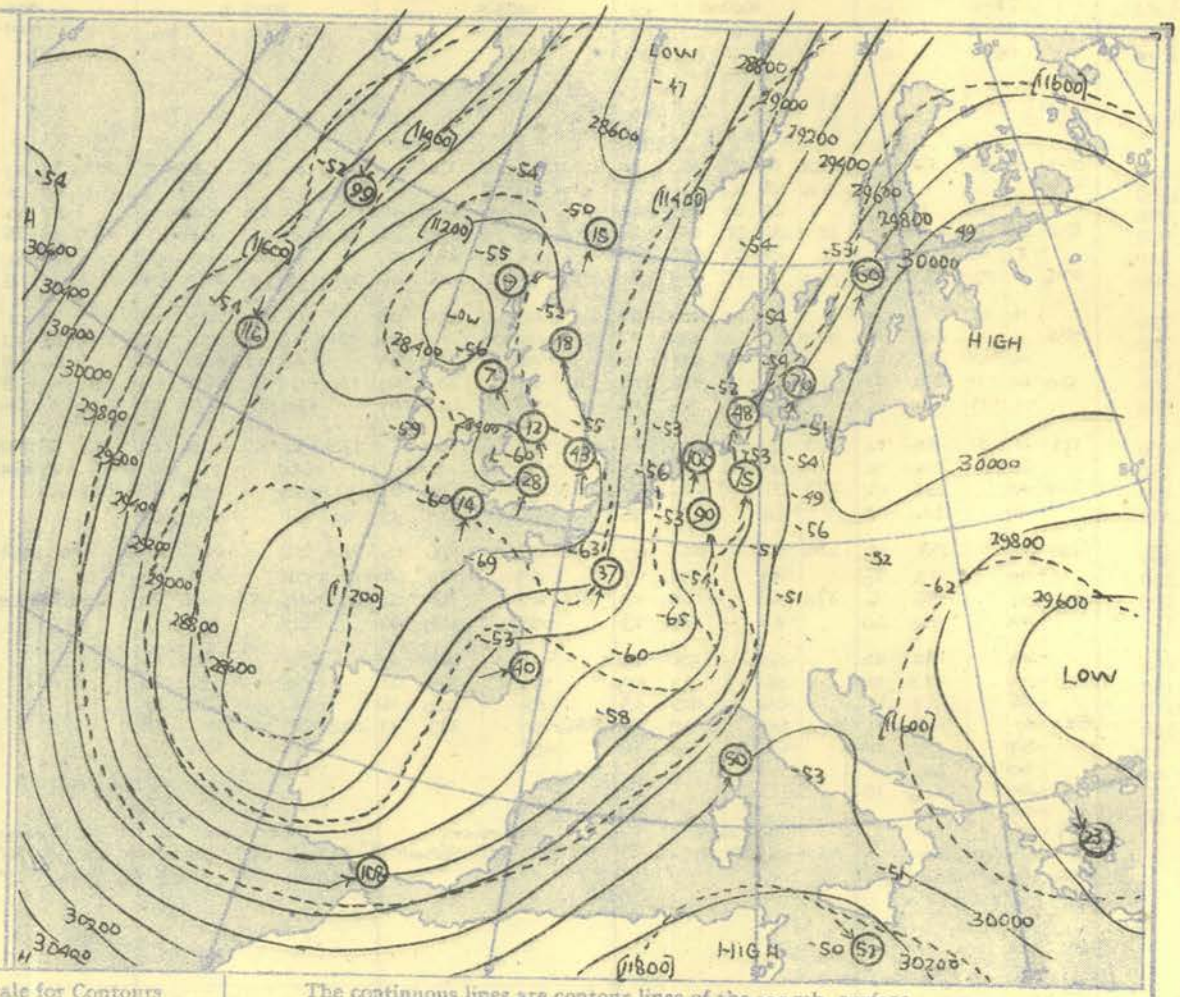
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03 h G.M.T.



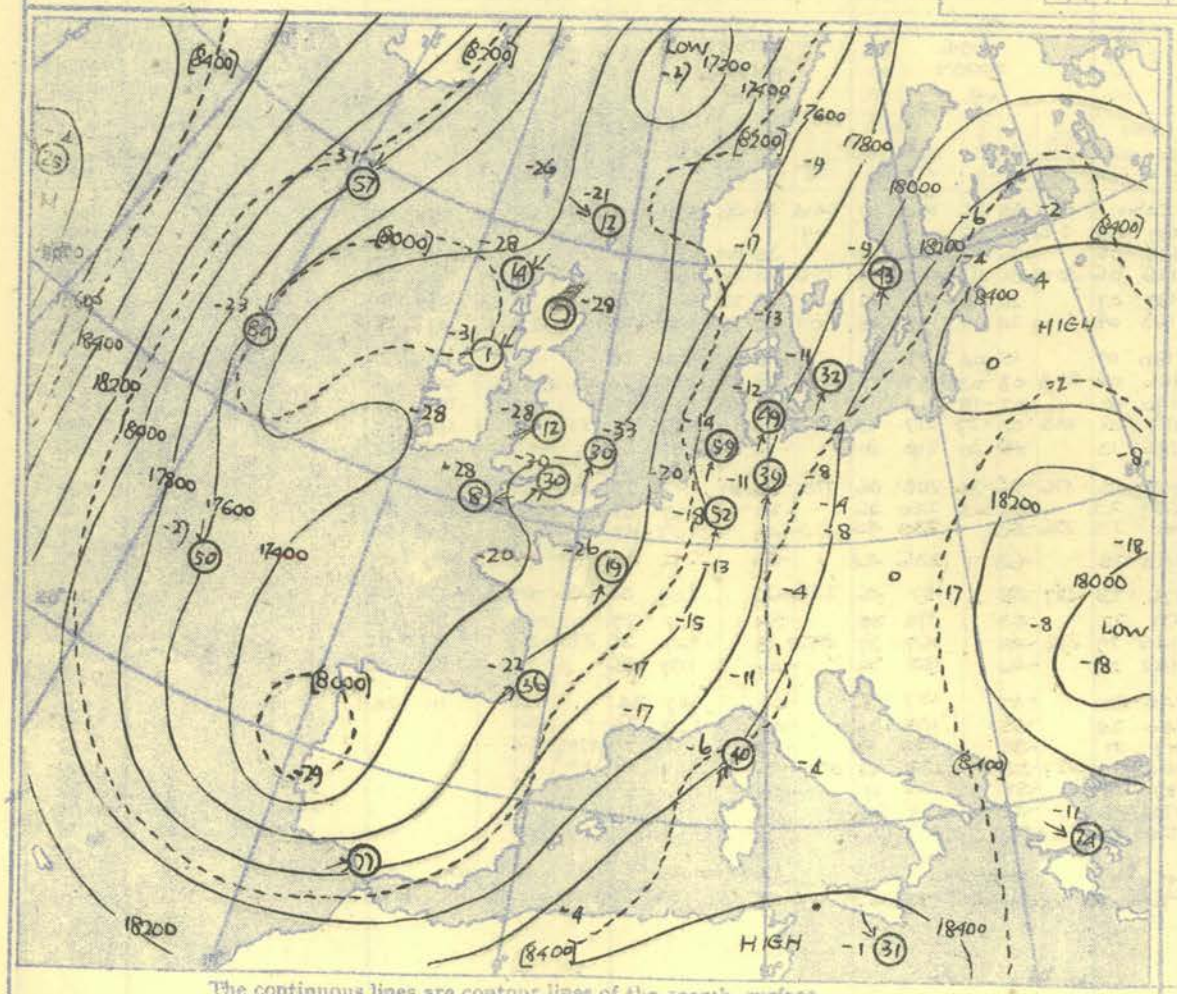
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

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

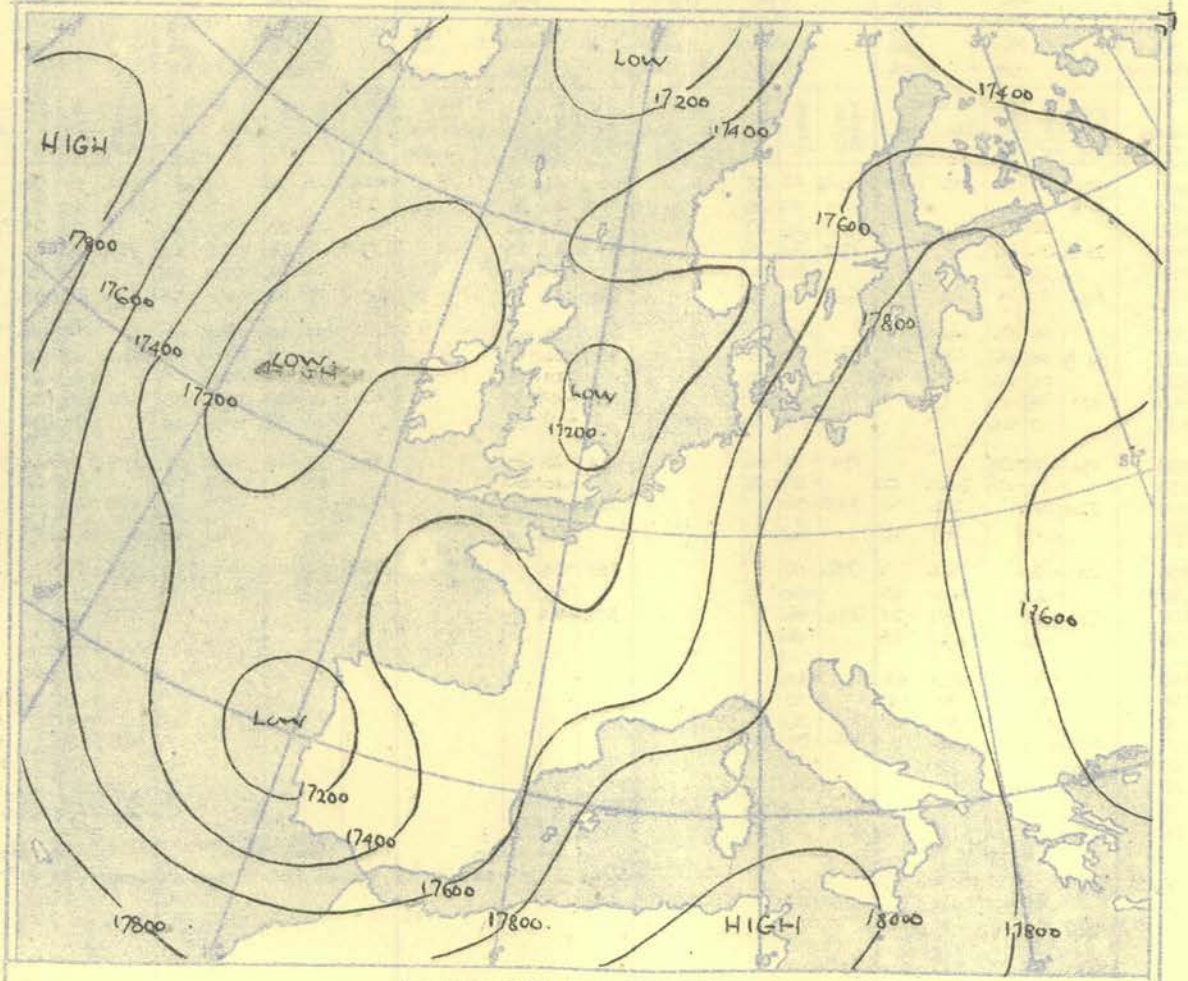
100 80 40 20 10 0 knots



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



Isopleths of Thickness 500-1000mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	48·1N 17·0W			47·6N 12·3W			43·2N 17·0W			39·5N 12·2W			51·3N 00·4E		
Pressure Time	1245h.			1445h.			13h			15h			1417.		
M.S.L.	1004·4 mb			997·9 mb			1007 mb			1007 mb			1009·7 mb		
Surf	1000·8 mb			994·3 mb			1002 mb			996 mb			998·1 mb		
Freezing	920 mb			905 mb			910 mb			870 mb			840 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.
Surf	1·0	44	37		45	39		46	40		51		3·1	42	39
1000	1·3			-0·6			1·8	45		2·0			2·6		
950		37	35		38	37		39	31		45			39	37
900	28·3	29		27·4	31			29	28		37		30·7	34	29
850		22			26			27	27		29			33	22
800	58·6	17		57·8	19			18	18		24		61·7	26	20
750		11			14			12			19			20	16
700	92·1	04		91·6	07		93·9	05		95·2	10		95·9	12	10
650		-04			-01			-04			01			05	
600	129	-14		129	-11			-13			-06		134	-03	
550		-22			-23			-21			-15			-11	
500	172	-31		172	-30		174	-32		174	-29		178	-21	
450														-32	
400													229	-45	
350														-60	
300													290	-71	
250															
200															
170	Cloud.			Cloud.			Cloud.			Cloud.			Cloud.		
	3/8 Cu 950-940mb 2/8 Cb 950-590mb			4/8 Cb 930- NR.			4/8 Sc 900-890mb 5/8 Cs NR. Surf wind N. 34-40kts.			5/8 Cu 930-640mb 2/8 Ac NR 2/8 Cs NR. Surf wind N. 7-10kts.			1/8 Cu 940 930mb 7/8 As 540-350mb		

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

Place	Liverpool		Leuchars		Camborne		W Recorder 59·2N 18·5W		Downham	
Time	03h		09h		15h		21h		21h	
Type	Pilot		Pilot.						Pilot.	
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel
Surf.			260	05	090	25	340	10	100	10
1,000			252	09	100	39	340	10	108	28
2,000			246	10	110	39	340	08	111	29
3,000			235	09	120	40	340	08	111	29
4,000			228	08	120	38	340	10	113	25
5,000			223	09	130	37	340	13	112	24
6,000			225	09	130	36	350	14	113	18
8,000			245	09	140	33	350	20	121	20
10,000			247	06	150	25	360	24	131	21
14,000			232	05	150	31	020	54	161	26
18,000			263	08	150	30	010	66	174	34
24,000	209	07	185	06	150	36	010	72	192	44
30,000	173	12	154	14	150	27	010	72	196	39
40,000			159	28	130 (36,000)	12			140	28
50,000			130	20					134	20
			105 (55,000)	13						

NEPHOSCOPE OBSERVATIONS

Place	
Time Type	
Dir. Vel.	

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

Ship	WEATHER RECORDER					WEATHER RECORDER					WEATHER RECORDER					WEATHER RECORDER				
Lat/Long	59·0N 18·8W					59·1N 18·7W					59·2N 18·7W					59·2N 18·5W				
Pressure Time	03h G.M.T.					09h G.M.T.					15h G.M.T.					21h G.M.T.				
M.S.L.	1017 mb					1021 mb					1023 mb					1024 mb				
Surf	1017 mb					1021 mb					1023 mb					1024 mb				
Freezing	920 mb					930 mb					920 mb					920 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
Surf		45	39	010	30		44	38	360	23		45	35	360	15		45	38	340	10
1000	5·0	42	38	015	37	5·5	42	36	020	36	6·3	42	33	007	21	6·5	42	35		
950		36	29	018	36		35	31	020	30		36	28	010	18		36	27		
900	33·0	29	21	024	34	33·4	28	24	020	30	34·2	29	19	023	17	34·8	29	19		
850		22	13	026	34		22	15	020	36		23	11	027	16		23	10		
800	63·3	15	03	023	35	63·8	19	03	021	35	64·6	21	-01	019	30	64·7	21	-02		
750		14	-03	017	36		12	-03	021	30		14	-12	015	30		15	-11	For	
700	97·0	06	-12	015	33	97·4	05	-14	020	32	98·4	07	-20	014	30	98·5	09	-22		
650		-02	-20	019	31		-04	-26	021	35		00	-29	014	30		03	-29	winds	
600	135	-11	-30	026	36	135	-12	-35	024	45	136	-06	-35	013	37	137	00	-21		
550		-20	-39	021	39		-18	-40	027	62		-05	-29	014	57		-04	-12	see	
500	177	-31	-50	021	57	178	-19	-44	027	84	180	-12	-24	015	66	181	-09	-18		
450		-28	-49	022	71		-23	-46	030	97		-19	-30	016	81		-18	-28	top	
400	228	-35	-57	012	96	230	-31	-52	034	108	233	-31	-42	016	92	233	-28	-38		
350		-43		004	114		-45		014	126		-42		016	93		-39	-50	of	
300	292	-52		002	99	293	-56		011	109	297	-53		016	84	298	-54			
250		-59		008	75		-66		016	24		-69		016	97		-68		page	
200	379	-63		007	80	379	-71		020	84	381	-76		026	64	382	-80			
170		-61		011	69		-63		019	62		-57		033	35		-79			
150		-61		012	41		-63		018	38		-57		028	18		-71			
130		-62		010	30		-64		018	20		-58		080	09		-65			
110		-63		004	24		-63		020	15		-61		088	08		-68			
100	526	-64		351	14	525	-63		022	14	529	-61		095	06	526	-67			
90		-63		350	08		-64		024	13		-59		L&V			-65			
80		-62		360	06		-69		018	12		-57		"			-64			
70		-61		CALM			-64					-55		"		(75 mb)	-63			
60		-61		CALM								-54		"						
		-62										-52		"						
Tropopause	I 213 mb - 64° 36,500'					II 240 mb - 69° 34,000'					II 227 mb - 76° 35,500'					II 200 mb - 80° 38,200'				

Inversion
800 mb 15° - 775 mb 18°
493 " -32° - 450 " -28°

Inversion
535 mb -20° - 481 mb -18°
Isothermal
865 - 850 mb 22°

Inversion
838 mb 21° - 814 mb 23°
600 " -06° - 558 " -04°

Isothermal
875 - 826 mb 23°

Ship	WEATHER EXPLORER					WEATHER EXPLORER					WEATHER EXPLORER					WEATHER EXPLORER				
Lat/Long	52·5N 20·2W					52·5N 20·3W					52·2N 20·6W					52·3N 20·3W				
Pressure Time	03h G.M.T.					09h G.M.T.					15h G.M.T.					21h G.M.T.				
M.S.L.	1015 mb					1014 mb					1017 mb					1018 mb				
Surf	1015 mb					1014 mb					1017 mb					1018 mb				
Freezing	925 mb					900 mb					885 mb					900 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
Surf		45	37	345	35		48	39	340	32		49	37	360	26		47	38	010	24
1000	4·0	42	31	360	38	3·7	46	38	358	36	4·5	47	40	014	46	4·9	45	36	023	39
950		35	22	001	42		39	34	008	43		41	23	016	37		39	28	020	38
900	31·9	28	17	001	41	31·8	32	28	021	39	32·7	34	27	014	42	33·0	32	21	019	39
850		23	12	360	38		25	22	034	43		26	18	014	43		25	12	024	40
800	62·2	17	05	358	38	62·3	21	12	025	46	63·3	21	09	016	42	63·5	20	06	029	37
750		11	-03	357	44		14	04	022	38		16	-02	022	45		14	-03	034	37
700	95·7	05	-11	357	51	96·1	07	-06	017	37	97·1	-01	-18	025	45	97·2	07	-16	030	35
650		-05	-21	358	58		00	-16	020	40		01	-27	023	44		-01	-25	025	33
600	133	-15	-31	002	50	134	-09	-26	021	36	135	-08	-35	022	42	135	-10	-34	018	35
550		-23	-40	003	50		-18	-35	018	37		-17	-39	016	43		-13	-39	023	58
500	176	-23	-42	360	84	177	-27	-43	016	33	178	-19	-42	014	65	178	-18	-47	025	81
450		-27	-48	360	87		-26	-46	015	54		-23	-48	013	85		-25	-49	023	100
400	227	-34	-57	360	108	228	-33	-59	017	99	230	-29	-55	310	109	230	-34	-54	09	127
350		-43		360	136		-41		016	108		-39	-59	314	139		-42		020	117
300	291	-54		360	116	292	-52		015	115	294	-52		315	150	294	-55		018	124
250		-61		360	105		-60		018	112		-65		370	107		-69		016	115
200	(205 mb)	-65				379	-60		015	71	381	-60		015	63	(220 mb)	-72			
170							-62		016	45		-56		012	43					
150							-62		020	33		-56		015	31					
130							-62		020	28		-59		022	23					
110							-60		018	18		-56		038	18					
100						526	-61		019	09	530	-56		045	15					
90							-60		021	12		-52		050	15					
80							-63		025	12		-51		053	13					
70							-60		019	08										
60						(63 mb)	-60													
Tropopause	I 256 mb - 61° 32,500'					I 231 mb - 64° 34,900'					I 250 mb - 68° 33,400'					I 226 mb - 76° 35,500'				

Max wind:-
356 mb 360° 159 Kts

Inversion
550 mb -23° - 513 mb -22°
Isothermal
552 - 550 mb -23°
486 - 465 " -25°

Inversion
473 mb -31° - 447 mb -25°
Max wind:-
255 mb 016° 144 Kts

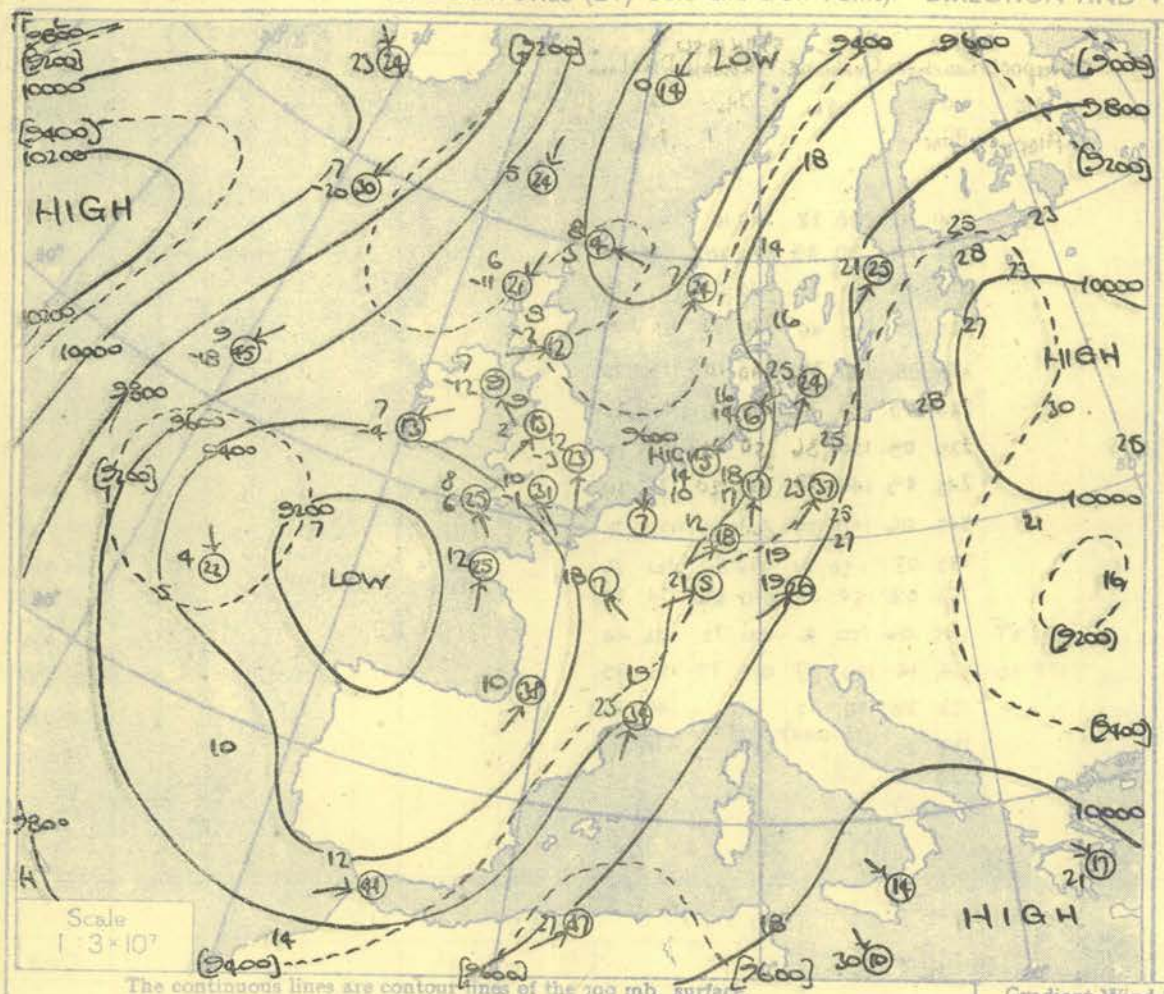
Inversion
514 mb -20° - 492 mb -18°

Inversion
578 mb -14° - 552 mb -13°
515 - 19° - 500 " -18°
Isothermal
552 - 550 mb -13°

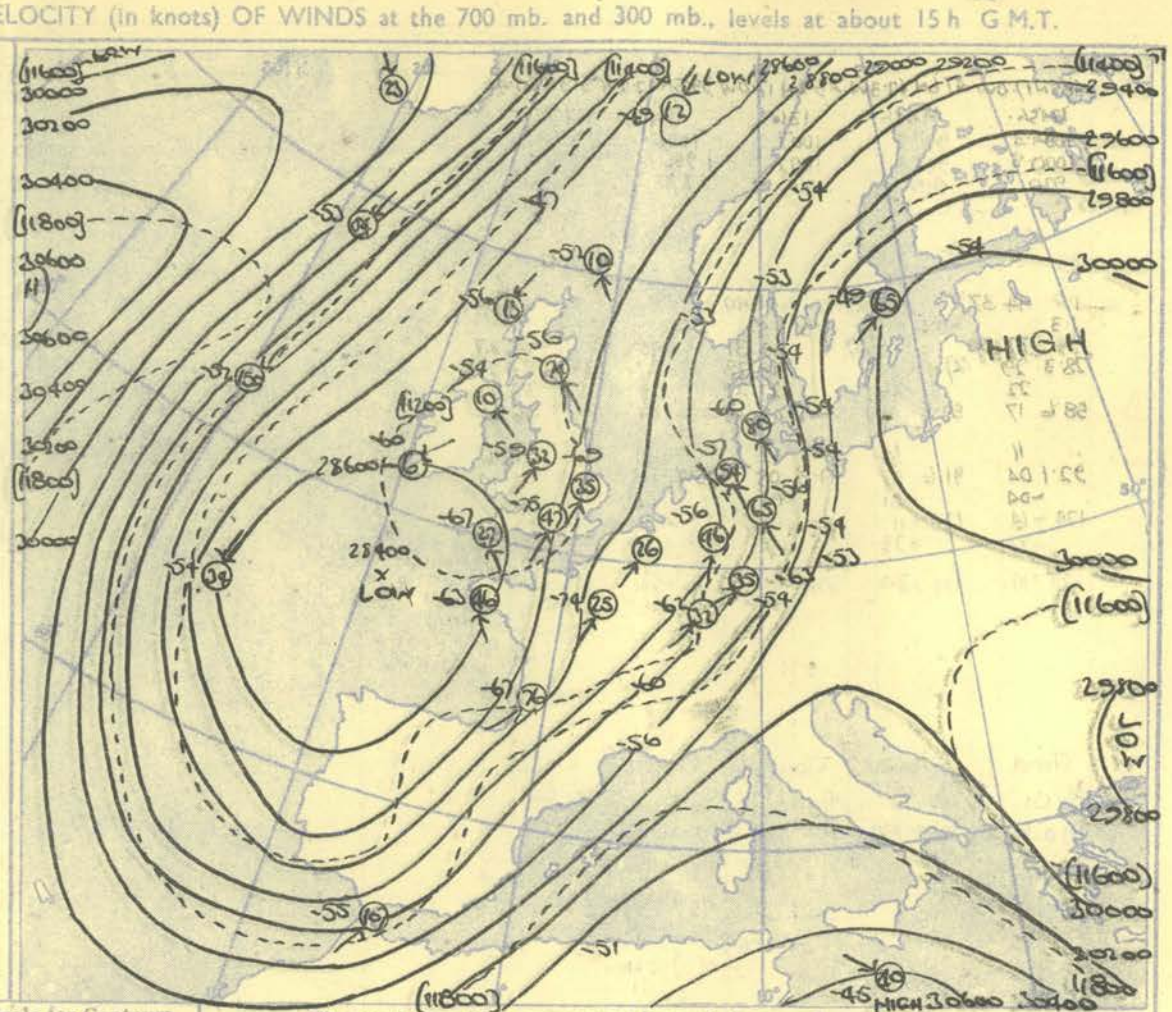
Saturday 10th February

February 10th 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

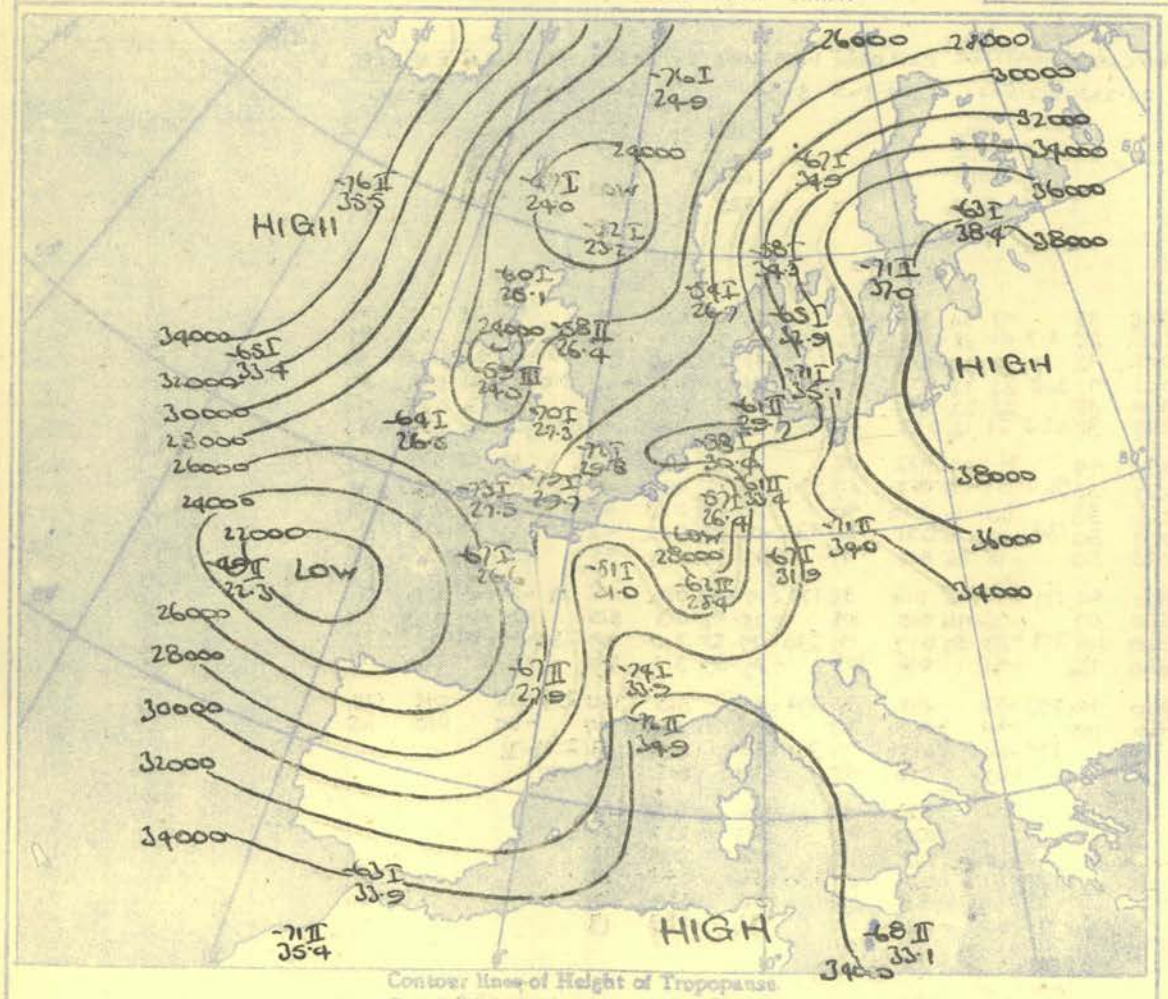


The continuous lines are contour lines of the 300mb. surface
The dotted lines are isopleths of the thickness of the layer 500 - 300 mb.

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.

Changes in thermal pattern very slight and large amplitude meridional oscillation persisted over Atlantic and Europe.

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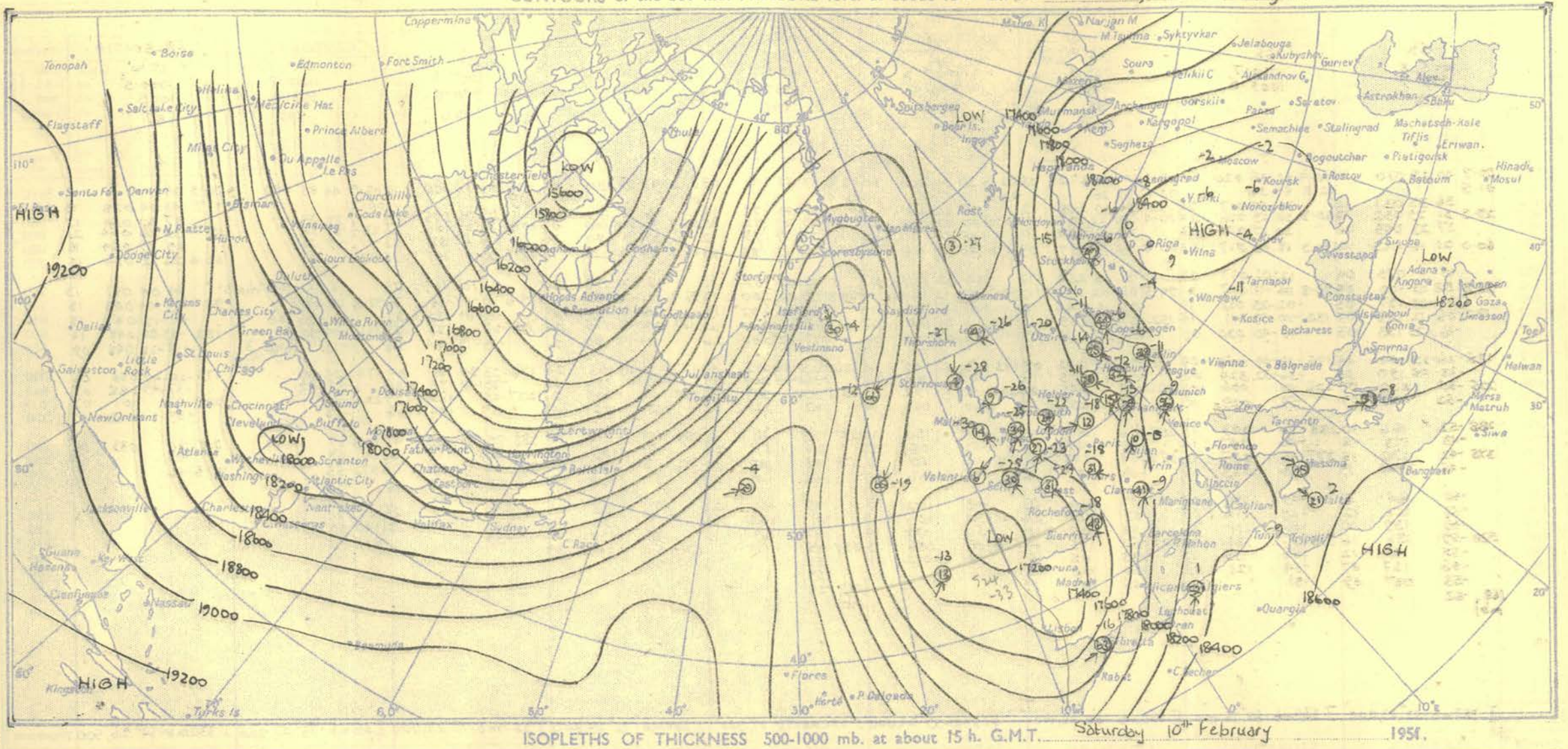
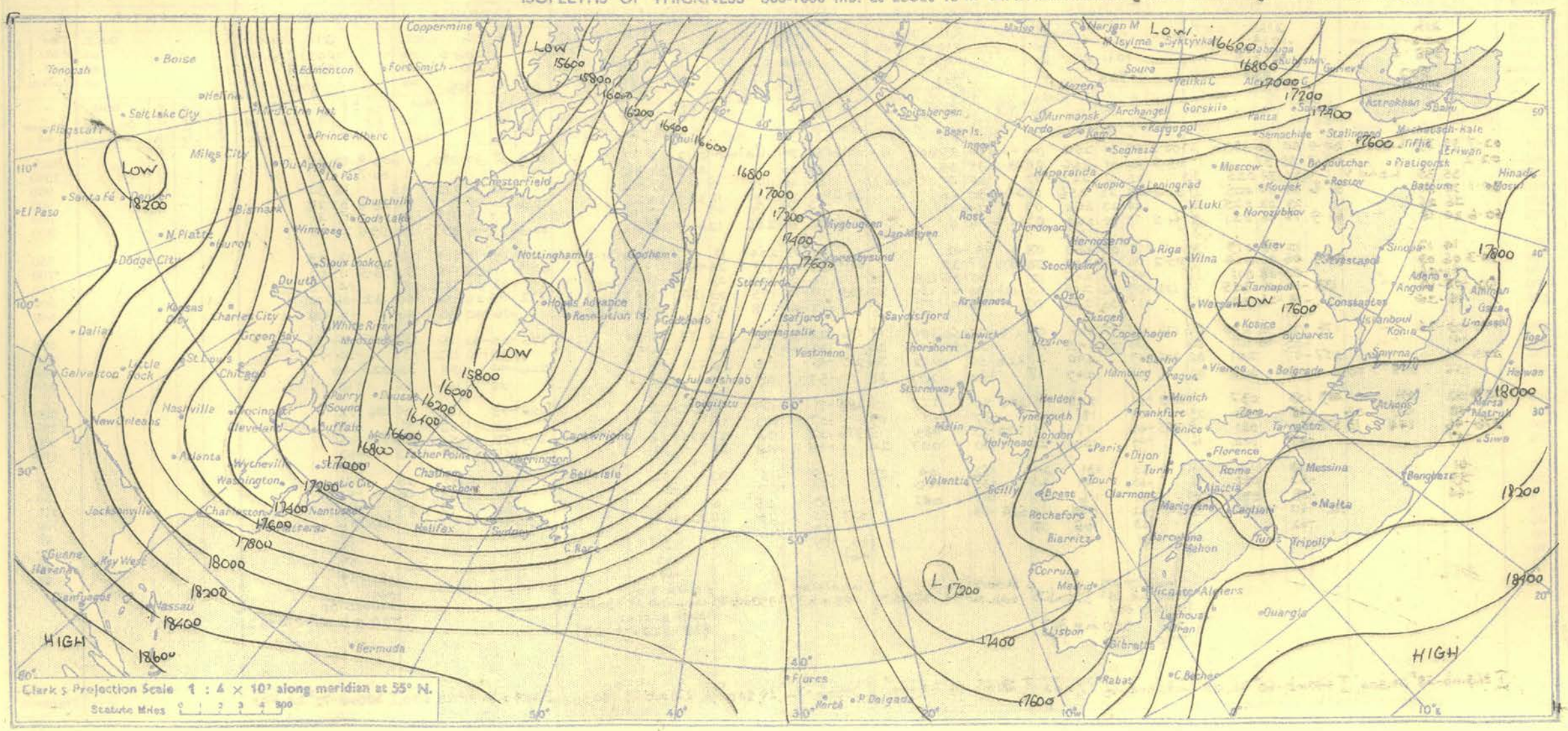
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

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



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



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Saturday 10th February 1951.

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

15h G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Pressure: Time	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.
Pressure: M.S.L.	1005·8 mb	1010·7 mb	1009·3 mb	1009·2 mb	1009·1 mb	1010·2 mb	1007·1 mb	1000·7 mb	1006·3 mb
Pressure: Surf	995·7 mb	1009·0 mb	1008·4 mb	999·8 mb	1007·0 mb	1005·6 mb	990·8 mb	990·0 mb	1005 mb
Pressure: Freezing	913 mb		931 mb	920 mb	898 mb	901 mb	900 mb	895 mb	871 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	40	38	030	11	00·4	42	35	020	10	00·2	40	36	270	08	02·6	39	36	000	00	00·6	43	38	170	05	01·2	43	39	130	07	4·4	41	38	100	10	02·9	44	35	090	15	00·3	44				Surf
1000	01·5					02·8	41	34			02·6	39	36			02·5					02·4					02·7					1·9					00·2					1·7	43	34	028	13	1000
950		36	33	031	14		36	29	017	25		39	30	298	12		36	30	110	06		37	33	170	14		36	31	132	09		39	38	095	18		39	33				37	30	054	17	950
900	29·5	31	29	032	08	30·8	30	23	016	24	30·4	29	22	247	11	30·5	30	22	112	04	30·5	33	29	172	15	30·7	32	24	140	06	30·0	32	22	125	25	28·3	33	30			29·7	33	26	054	21	900
850		27	23	043	06		24	17	017	24		24	19	252	10		25	16	112	04		27	19	173	12		27	15	180	06		28	11	138	23		27	26				29	19	054	18	850
800	60·0	21	16	063	04	61·3	18	08	017	23	60·8	20	12	257	09	61·0	20	11	116	05	61·0	21	12	185	10	61·3	23	10	200	13	60·6	23	01	181	25	59·0	22	21			60·4	22	12	056	15	800
750		15	11	075	09		12	01	017	23		15	05	254	12		14	03	125	07		15	07	187	11		18	02	198	20		17	-06	161	28		16	15	For Winds			14	04	051	13	750
700	93·8	08	03	100	09	94·8	06	-11	017	21	94·5	08	-02	250	12	94·7	07	-12	124	09	94·8	09	02	200	13	95·3	12	-03	182	23	94·6	10	-01	164	31	92·8	08	06			94·1	07	-04	043	13	700
650		01	-04	127	05		-02	-23	012	19		01	-14	245	11		-01	-21	120	08		01	-05	202	19		04	-11	169	27		02	-09	172	32		02	-05	See			-01	-12	041	13	650
600	132	-06	-12	136	05	132	-10	-33	011	15	132	-07	-25	249	11	132	-10	-31	120	07	133	-07	-12	200	22	133	-03	-13	175	24	133	-06	-14	183	31	131	-04	-10			132	-09	-20	048	14	600
550		-16	-23	133	05		-18	-40	030	09		-15	-30	251	09		-20	-42	106	08		-17	-22	201	26		-12	-19	190	21		-13	-19	184	26		-14	Page 3.				-17	-28	048	09	550
500	175	-26	-35	144	04	175	-28	-99	008	09	176	-26	-38	240	09	175	-30	-52	142	14	176	-25	-36	212	34	177	-22	-29	195	24	176	-23	-30	181	27	174	-25	-29			175	-28	-40	055	06	500
450		-38	-48	190	05		-36	-52	324	06		-37	-47	245	16		-41		188	23		-36	-46	209	39		-33	-41	196	32		-33	-41	178	35		-37	-42				-37	-49	086	07	450
400	225	-50		200	09	226	-48		006	03	226	-48		245	22	225	-52		192	30	226	-49		219	47	228	-45		209	37	227	-45		180	39	224	-49				225	-47		101	07	400
350		-52		178	09		-59		029	06		-56		232	13		-60		144	15		-62		223	51		-58		221	43		-59		184	46		-63					-59		062	07	350
300	288	-52		166	10	288	-56		043	13	288	-56		150	14	286	-54		130	10	287	-59		211	32	289	-69		214	35	288	-75		188	47	285	-67				287	-60		033	06	300
250		-43		173	18		-46		047	14		-48		152	13		-52		108	10		-54		171	26		-58		189	39		-60		176	28		-58					-55				250
200	378	-42		190	18	377	-46		087	12	377	-44		148	22	375	-46		110	13	375	-48		147	24	376	-53		157	28	374	-54		159	26	372	-53				375	-06				200
170		-45		180	19		-46		083	15		-43		137	18		-47		106	17		-48		141	22		-51		158	27		-49		148	26		-52									170
150		-50		164	18		-45		125	24		-47		114	18		-48		102	19		-45		151	22		-49		152	29		-50		148	27		-51									150
130		-56		156	12		-50		114	09		-52		110	24		-52		100	13		-51		144	13		-53		150	35		-51		142	22	(140 mb)	-50									130
110		-60		139	10		-56		111	11		-52		115	18		-56		094	14		-57		169	11		-57		138	44		-55														110
100	528	-59		136	16	528	-57		121	14	529	-52		115	14	526	-58		083	13	527	-55				526	-58		143	39																	100
90		-55		140	12		-56		125	17		-55		115	15		-58		082	18		-56					-59																				90
80		-56		127	07		-54		121	09		-60		110	18							-59																									80
70		-53		037	09		-51					-55		109	17							-59																									70
60	(168 mb)	-52																			(079 mb)																											60
Tropopause	I 387mb -52° 23,200'					I 366mb -60° 25,100'					II 336mb -58° 26,400'					373 mb -59° 24,000'					I 322mb -70° 27,300'					I 287mb -72° 29,800'					I 287mb -79° 29,700'					I 315mb -73° 27,500'					I 330mb -64° 26,500'				Tropopause

21h G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Pressure: Time	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	G.M.T.
Pressure: M.S.L.	1008·7 mb	1014·1 mb	1012·7 mb	1011·7 mb	1010·3 mb	1011·0 mb	1006·5 mb	1002·7 mb	mb
Pressure: Surf	998·5 mb	1012·4 mb	1011·8 mb	1002·2 mb	1008·2 mb	1006·4 mb	990·1 mb	992·8 mb	mb
Pressure: Freezing	922 mb	930 mb	925 mb	912 mb	913 mb	885 mb	906 mb	874 mb	mb

Pressure mb	Lerwick Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Stornoway Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Leuchars Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Aldergrove Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Liverpool Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Downham Market Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Larkhill Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Camborne Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Valentia Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	39	39	Calm		00·4	40	38	350	10	00·2	33	31	250	04	02·6	34	33	000	00	00·6	37	34	Calm		01·2	38	37			4·4	37	39	090	16	02·9	43	40								Surf
1000	02·2					03·7	39	37			03·3	34	31	266	08	03·2	35	34			02·7	39	35			02·9	39	38			1·7					00·7										1000
950		35	35	Land V			34	31	025	30		35	31	262	09		35	31	Land V			36	28	101	15		39	32				35	31	092	35		38	34								950
900	30·1	30	30	"		31·6	28	26	025	29	31·2	29	25	256	09	31·1	30	26	"		30·6	30	23	113	11	30·9	34	26			29·6	32	27	100	40	28·8	32	28								900
850		26	25	"			23	22	025	20		24	23	252	09		24	19	"			25	17	169	09		29	15				29	15	098	36		27	21								850
800	60·6	20	18	"		61·9	18	16	021	21	61·5	18	14	262	09	61·6	18	11	"		61·0	20	11	206	12	61·7	25	03			60·3	25	-01	097	32	59·5	21	10								800
750		14	12	"			12	08	019	30		13	03	250	08		13	-02	"			16	03	204	19		17	-05	For Winds			18	-11	103	30		18	03								750
700	94·3	06	03	"		95·5	06	01	014	18	95·2	06	-09	248	08	95·3	07	-23	"		94·9	09	-03	199	24	95·8	11	-10			94·3	11	-23	118	35	93·5	11	-02								700
650		-01	-06	"			-02	-08	011	16		-01	-16	245	10		00	-36	168	05		00	-08	195	28		04	-19	See			03	-30	122	39		04	-12								650
600	132	-08	-10	"		133	-10	-16	355	11	133	-09	-26	245	10	133	-08	-40	180	12	133	-07	-12	185	33	134	-03	-22			132	-05	-34	130	46	132	-06	-30								600
550		-18	-26	"			-18	-26	321	07		-17	-35	244	07		-16	-41	171	13		-12	-21	178	27		-12	-26	Page 3.			-16	-40	136	46		-16	-28								550
500	175	-29	-35	"		176	-26	-38	240	06	176	-27	-45	245	08	176	-27	-50	181	17	176	-22	-31	185	20	177	-23	-34			175	-25	-42	145	37	175	-27	-35								500
450		-41		"			-35	-40	211	06		-38	-55	243	18		-37	-58	200	26		-34	-43	189	23		-34	-43				-33	-45	152	33		-36	-44								450
400	225	-51		"		227	-47		201	08	226	-49		240	27	226	-50		212	35	227	-45		193	32	228	-44				226	-44		154	38	225	-46								400
350		-56		078	05		-58		267	02		-59		249	17		-60		203	38		-57		189	43		-56					-58		166	55		-60								350
300	287	-52		091	04	289	-53		037	13	288	-61		228	11	288	-67		177	15	288	-71		189	48	290	-72				288	-75		160	59	286	-72								300
250		-48		157	06		-48		044	23		-57		181	11		-57		111	09		-57		162	17		-68					-66		162	31		-68								250
200	376	-46		144	13	378	-50		061	18	375	-46		117	15	374	-52		083	15	376	-52		130	21	375	-58				373	-58		154	25	373	-55								200
170		-47					-47		102	16		-49		120	22		-50		087	24		-46		128	23		-53					-55		129	22		-52								170
150		-51					-98		117	16		-53		131	24		-52		104	23		-48		115	20		-52					-54		132	28		-51								150
130		-59					-53		082	12		-55		141	20		-55		100	19		-54		120	21		-54					-56		128	18		-52								130
110		-64					-58		091	23		-61		116	10		-59		082	16		-53		135	16		-62					-60		119	27		-54								110
100						529	-60		090	18	525	-62		078	14	524	-63				527	-55		113	16	524	-61				522	-60				523	-56								100
90							-62					-63		105	23							-59		116	17		-61									-59								90
80												-61										-59					-61									-59								80
70																											-62									-59								70
60																					(083 mb)						-63									-59								60
											Inversion 1012 mb 35° - 990mb 35° Isothermal 990 - 950 mb 35° 790 - 771 .. 17°					Inversion 1002 mb 34° - 967mb 38°					Inversion 1008 mb 37° - 990mb 40°					Inversion 1006 mb 38° - 960mb 40° Isothermal 838 - 820 mb 28°										Inversion 790 mb 20° - 775mb 2° (68 mb)									
Tropopause	I 365mb -58° 24,500'					I 340mb -60° 26,100'					I 324mb -66° 27,000'					I 281mb -68° 30,100'					I 295mb -72° 29,200'					I 278mb -73° 30,500'					I 289mb -79° 29,500'					I 300mb -72° 28,600'									Tropopause

HMSO Press, MO, Dunstable.

No. 11641. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Sunday 11th February, 1951. Page 1.

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

LERWICK

Time 03h. G.M.T. | M.S.L. 1009·7 mb | Surf 999·7 mb | Freezing 930 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	36	36	Calm	
1000	2·6				
950		35	34	182	03
900	30·5	28	27	215	03
850		25	24	260	03
800	60·9	20	15	288	06
750		13	08	301	05
700	94·6	07	01	315	04
650		00	-05	320	03
600	132	-08	-14	310	05
550		-17	-25	305	06
500	175	-28	-37	307	05
450		-40	-47	346	07
400	225	-50		360	09
350		-54		006	10
300	288	-50		017	09
250		-48		041	07
200	377	-45		135	07
170		-49		137	10
150		-52		128	12
130		-56		128	12
110		-58		138	10
100	527	-58		198	12
90					
80					
70					
60					

Inversion 1000mb. 36°–982mb. 39°
Isothermal 880 – 845 mb. 28°

Tropopause I 353mb. -55° 25,200'

STORNOWAY

Time 03h. G.M.T. | M.S.L. 1015·7 mb | Surf 1014·0 mb | Freezing 937 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	37	35	350	05
1000	4·1	39	36		
950		34	30	019	23
900	31·8	27	23	017	20
850		21	18	014	17
800	62·0	15	10	011	14
750		09	00	003	12
700	95·4	03	-10	334	09
650		-05	-20	303	07
600	133	-12	-28	162	05
550		-18	-35	190	05
500	176	-28	-44	173	06
450		-40	-55	153	09
400	226	-53		103	10
350		-64		058	15
300	287	-59		039	30
250		-57		043	25
200	374	-55		061	15
170		-53		100	14
150		-60		086	12
130		-61		089	12
110		-64		108	13
100	522	-66		198	12
90		-67		083	10
80		-68			
70					
60					

Inversion 1015mb. 37°–1000mb. 39°
Isothermal 756 – 743 mb. 09°
584 – 570 mb. -14°

Tropopause I 362mb. -64° 24,800'

LEUCHARS

Time 03h. G.M.T. | M.S.L. 1014·2 mb | Surf 1013·3 mb | Freezing 949 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	29	28	Calm	
1000	3·7	32	29	L.V.	
950		32	29	"	
900	31·4	26	25	"	
850		21	12	"	
800	61·6	17	03	"	
750		13	-04	"	
700	95·2	08	-14	262	05
650		01	-30	254	08
600	133	-06	-39	231	11
550		-14	-46	222	16
500	176	-23	-48	230	17
450		-35	-55	234	23
400	227	-47		225	36
350		-58		222	46
300	288	-68		218	21
250		-58		165	06
200	375	-50		130	14
170		-50		127	17
150		-50		119	14
130		-54			
110		-60			
100	525	-64			

Inversion 1013mb. 29°–785mb. 36°

Tropopause I 300mb. -68° 28,800'

ALDERGROVE

Time 03h. G.M.T. | M.S.L. 1012·7 mb | Surf 1003·1 mb | Freezing 987 – 944 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	30	29	Calm	
1000	3·4	31	30		
950		32	28	070	12
900	31·1	29	20	072	12
850		24	08	077	13
800	61·4	17	-07	079	11
750		13	-05	090	09
700	95·1	08	-07	101	08
650		00	-14	120	06
600	133	-09	-21	131	08
550		-17	-28	139	14
500	176	-25	-38	148	15
450		-37	-53	158	15
400	226	-48		177	30
350		-61		175	40
300	288	-63		145	14
250		-53		083	15
200	375	-51		092	18
170		-51			
150		-53			
130		-56			
110		-58			
100	525	-59			

Inversion 1003mb. 30°–971mb. 33°

Tropopause I 328mb. -68° 26,900'

LIVERPOOL

Time 03h. G.M.T. | M.S.L. 1010·1 mb | Surf 1008·0 mb | Freezing 890 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	35	34	Calm	
1000	2·7	36	34	090	18
950		37	30	103	21
900	30·6	33	26	116	22
850		29	13	105	27
800	61·3	24	06	094	26
750		17	03	084	27
700	95·3	10	-10	090	23
650		03	-16	100	23
600	133	-05	-29	110	27
550		-14	-36	124	32
500	177	-23	-41	135	38
450		-29	-40	158	39
400	228	-42		163	43
350		-58		164	46
300	289	-76		165	45
250		-64		143	22
200	375	-54		141	22
170		-54		134	22
150		-52		108	18
130		-56			
110		-55			
(128) mb					

Inversion 1008mb. 35°–993mb. 37°
468mb. -30°–453mb. -28°
Isothermal 393 – 347 mb. 37°

Tropopause I 298mb. -77° 29,000'

DOWNHAM MARKET

Time 03h. G.M.T. | M.S.L. 1008·4 mb | Surf 1004·0 mb | Freezing 865 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	40	38	080	10
1000	2·3				
950		38	33	107	39
900	30·4	36	27	113	38
850		31	25	122	33
800	61·3	25	20	123	31
750		19	12	122	29
700	93·4	13	08	128	36
650		05	01	128	44
600	134	-02	-04	129	45
550		-09	-11	148	33
500	177	-17	-20	148	36
450		-29	-32	155	38
400	229	-40	-44	164	47
350		-55		176	66
300	291	-71		185	80
250		-66			
200	376	-57			
170		-54			
150		-56			
130		-57			
110		-57			
100	525	-58			
90		-59			
80		-62			

Inversion 950mb. 38°–929mb. 39°

Tropopause II 331mb. -68° 26,600'

LARKHILL

Time 03h. G.M.T. | M.S.L. 1004·3 mb | Surf 988·0 mb | Freezing 907 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	40	38	090	18
1000	1·1				
950		36	33	101	25
900	29·1	31	27	124	26
850		27	24	132	25
800	59·7	21	18	133	25
750		15	12	129	23
700	93·5	09	06	130	27
650		03	00	140	31
600	131	-05	-07	150	31
550		-12	-14	162	39
500	175	-20	-23	143	45
450		-32	-36	146	44
400	226	-47		157	50
350		-62		158	60
300	287	-68		147	57
250		-62		160	30
200	373	-55		146	25
170		-53		146	22
150		-54		146	14
130		-57		111	21

Isothermal 706 – 887 mb. 31°
848 – 830 mb. 27°

Tropopause I 288mb. -71° 27,700'

CAMBORNE

Time 03h. G.M.T. | M.S.L. 1001·7 mb | Surf 991·0 mb | Freezing 900 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	38	37	Calm	
1000	0·4				
950		38	35		
900	28·3	33	28		
850		27	23		
800	59·0	21	19		
750		16	13		
700	92·9	09	05		
650		01	-01		
600	131	-07	-13		
550		-15	-22		
500	174	-24	-33		
450		-38	-44		
400	224	-49			
350		-62			
300	286	-64			
250		-51			
200	373	-57			
170		-56			
150		-54			
130		-54			
110		-54			
100	522	-57			
90		-60			
80		-62			
70		-61			
60					

Isothermal 800 – 785 mb. 21°

Tropopause I 312 mb. -69° 27,700'

[unnamed]

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	00·3	39	34	040	10
1000	2·1	38	33	041	11
950		35	30	035	24
900	30·0	34	24	067	26
850		28	18	072	25
800	60·7	21	12	067	24
750		13	06		
700	94·3	05	01		
650		-03	-09		
600	132	-08	-14		
550		-15	-22		
500	175	-23	-30		
450		-35	-43		
400	226	-50			
350		-61			
300	287	-67			
250		-57			
200	374	-54			
170		-54			
150		-54			
130		-52			
110		-58			
100	524	-61			
90		-58			
80		-61			
70					
60					

Inversion 950mb. 35°–929mb. 37°

Tropopause I 316mb. -70° 27,600'

LERWICK

Time 09h. G.M.T. | M.S.L. 1011·0 mb | Surf 1000·8 mb | Freezing 915 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	38	37	020	10
1000	2·9	38	37		
950		36	32	040	10
900	30·8	30	26	040	10
850		25	22	040	06
800	61·2	20	10	004	05
750		14	04	350	04
700	95·0	08	-01	320	02
650		01	-11	250	03
600	133	-05	-29	262	06
550		-15	-44	290	12
500	176	-24	-49	302	12
450		-37	-57	330	11
400	226	-48		346	12
350		-55		354	12
300	289	-52		360	12
250		-50		037	10
200	377	-51		044	08
170		-54		098	07
150	(163 mb)	-54			
130					
110					
100					
90					
80					
70					
60					

Inversion 1001 mb. 38°–978 mb. 39°

Tropopause I 356mb. -5[illegible]° 26,30[illegible]'

STORNOWAY

Time 09h. G.M.T. | M.S.L. 1016·8 mb | Surf 1015·1 mb | Freezing 925 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	35	34		
1000	4·4	37	35		
950		35	30		
900	32·3	29	24		
850		23	21		
800	62·6	17	10		
750		11	00		
700	96·1	05	-07		
650		-01	-14		
600	134	-07	-23		
550		-14	-31		
500	177	-23	-44		
450		-34	-57		
400	228	-46			
350		-56			
300	290	-65			
250		-57			
200	328	-54			
170		-53			
150		-55			
130		-54			
110		-60			
100					
90					
80					
70					
60					

Inversion 1015mb. 35°–983mb. 39°

Tropopause I 311mb. -66° 28,000'

LEUCHARS

Time 09h. G.M.T. | M.S.L. 1014·9 mb | Surf 1014·0 mb | Freezing 939 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	29	29	Calm	
1000	3·8	31	30		
950		33	28	053	09
900	31·4	27	23	076	10
850		24	17	084	09
800	61·8	20	04	110	05
750		15	-08	139	07
700	95·6	08	-14	142	07
650		02	-21	178	09
600	133	-06	-26	196	14
550		-13	-28	208	18
500	177	-23	-34	203	20
450		-33	-42	196	24
400	228	-44		203	25
350		-56		201	30
300	289	-69		202	24
250		-64		181	09
200	376	-53		095	19
170		-51		087	19
150		-54		084	19
130		-58		081	19
110		-58		077	10
100	525	-58		070	11
90		-59			
80					
70					
60					

Inversion 1014mb. 29°–980mb. 35°
Isothermal 875 – 847 mb. 24°

Tropopause I 305mb. -69° 28,500'

ALDERGROVE

Time 09h. G.M.T. | M.S.L. 1012·4 mb | Surf 1002·7 mb | Freezing 980 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	35	33	070	12
1000	3·3				
950		32	26	074	22
900	31·0	29	18	075	24
850		26	10	076	26
800	61·6	22	12	080	18
750		15	06	087	13
700	95·4	08	-01	095	14
650		02	-10	098	21
600	133	-07	-17	084	21
550		-15	-23	096	24
500	177	-22	-31	123	27
450		-32	-42	135	23
400	227	-46		134	26
350		-59		143	30
300	289	-70		138	28
250		-57		078	12
200	376	-55		078	21
170		-50		070	26
150		-63		073	28
130		-57		087	23
110		-56		109	15
100	525	-58		069	16
90		-60		080	16
80					
70					
60					

Tropopause I 297mb. -70° 28,900'

LIVERPOOL

Time 09h. G.M.T. | M.S.L. 1008·3 mb | Surf 1006·3 mb | Freezing 933 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	37	36	080	25
1000	2·2	39	36	080	39
950		35	33	084	35
900	30·0	29	27	098	38
850		25	23	099	37
800	60·5	20	19	102	35
750		15	13	106	36
700	94·3	09	07	113	31
650		03	00	127	24
600	132	-05	-08	133	23
550		-12	-16	135	27
500	176	-20	-24	142	27
450		-30	-35	148	30
400	227	-41		142	31
350		-55		149	41
300	289	-68		150	56
250		-66		142	27
200	374	-57		122	19
170		-54		098	18
150		-53		095	24
130		-51		096	26
110		-56		109	19
100	524	-60		122	16
90		-56		115	15
80		-56			
70					
60					

Tropopause I 262mb. -72° 31,700'

DOWNHAM MARKET

Time 09h. G.M.T. | M.S.L. 1007·3 mb | Surf 1002·8 mb | Freezing 930 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	40	38	070	15
1000	2·10				
950		34	31	086	29
900	29·8	30	27	100	37
850		28	23	103	32
800	60·4	22	18	099	37
750		16	12	100	37
700	94·3	11	06	096	39
650		06	00	110	40
600	133	00	-06	135	40
550		-09	-16	140	30
500	177	-16	-24	124	27
450		-25	-33	119	30
400	228	-38	-47	122	37
350		-53		117	39
300	292	-67		119	43
250		-70		159	42
200	375	-61		168	25
170		-57		132	22
150		-57		112	25
130		-58		135	27
110		-56		128	27
100	524	-57		135	24
90	(098 mb)	-59		131	16
80		-58			
70					
60					

Tropopause I 267mb. -76° 31,500'

LARKHILL

Time 09h. G.M.T. | M.S.L. 1003·2 mb | Surf 987·0 mb | Freezing 915 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	38	37	110	10
1000	0·4				
950		34	33	082	17
900	28·3	31	29	097	12
850		28	26	081	13
800	58·9	24	22	080	15
750		19	17	092	13
700	93·1	14	11	108	14
650		08	04	118	12
600	131	00	-05	134	10
550		-09	-15	113	10
500	175	-19	-28	117	20
450		-30	-37	116	24
400	226	-44		130	29
350		-57		119	39
300	288	-69		119	44
250		-60		150	31
200	374	-55		146	25
170		-54		127	21
150		-53		120	20
130		-53		124	23
110		-53		133	18
100	524	-56		135	21
90	(098 mb)	-56			
80					
70					
60					

Isothermal 706 – 887 mb. 31°
848 – 830 mb. 27°

Tropopause I 288mb. -71° 27,700'

CAMBORNE

Time 09h. G.M.T. | M.S.L. 1001·7 mb | Surf 991·0 mb | Freezing 900 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	39	37	Calm	
1000	0·4				
950		39	34	127	13
900	28·4	32	27	125	14
850		25	20	132	10
800	58·9	20	12	147	10
750		18	08	136	11
700	92·8	11	-06	136	18
650		03	-14	137	22
600	131	-05	-19	127	18
550		-15	-29	134	24
500	174	-26	-37	146	27
450		-37	-52	154	30
400	224	-48		157	29
350		-61		140	29
300	286	-69		125	28
250		-57		124	24
200	373	-53		126	28
170		-52		102	15
150		-53		097	17
130		-51		099	21
110		-52		117	22
100	524	-53		113	20
90		-54		112	15
80		-55		106	12
70		-56		098	10
60					

Inversion 991mb. 39°–963mb. 41°

[unnamed]

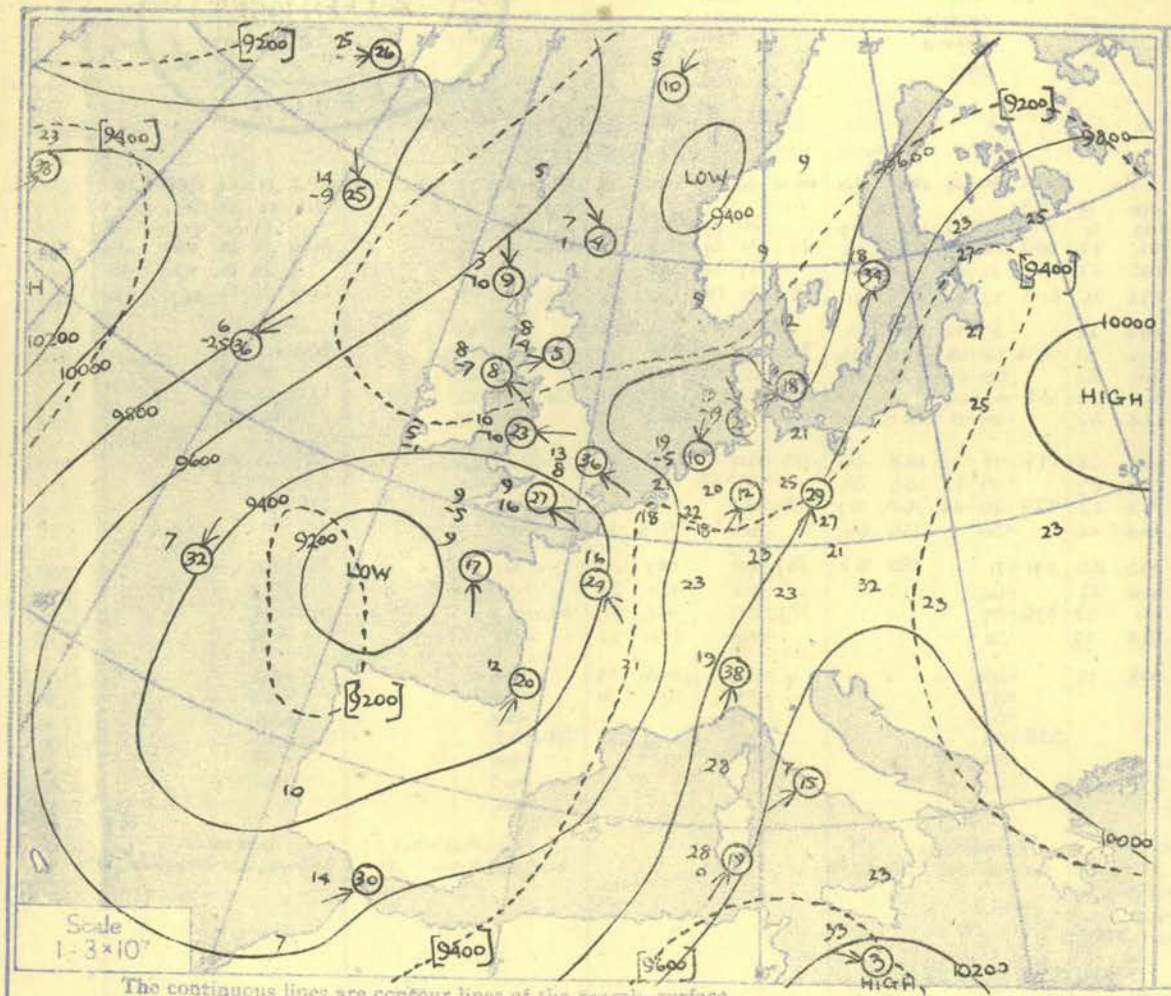
Time G.M.T. | M.S.L. mb | Surf mb | Freezing mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf					
1000					
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 [illegible]

Sunday 11th. February 1951.

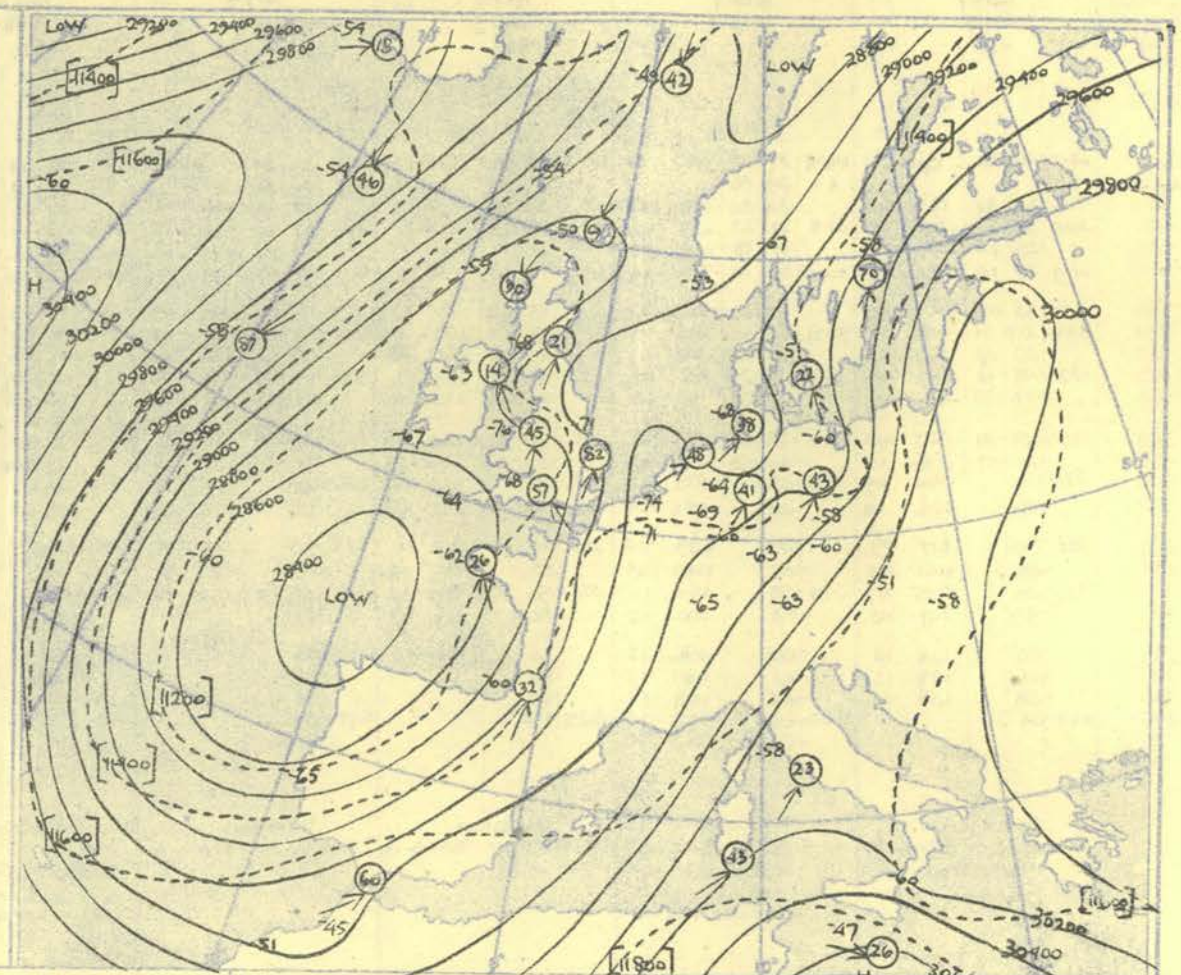
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03 h G.M.T.



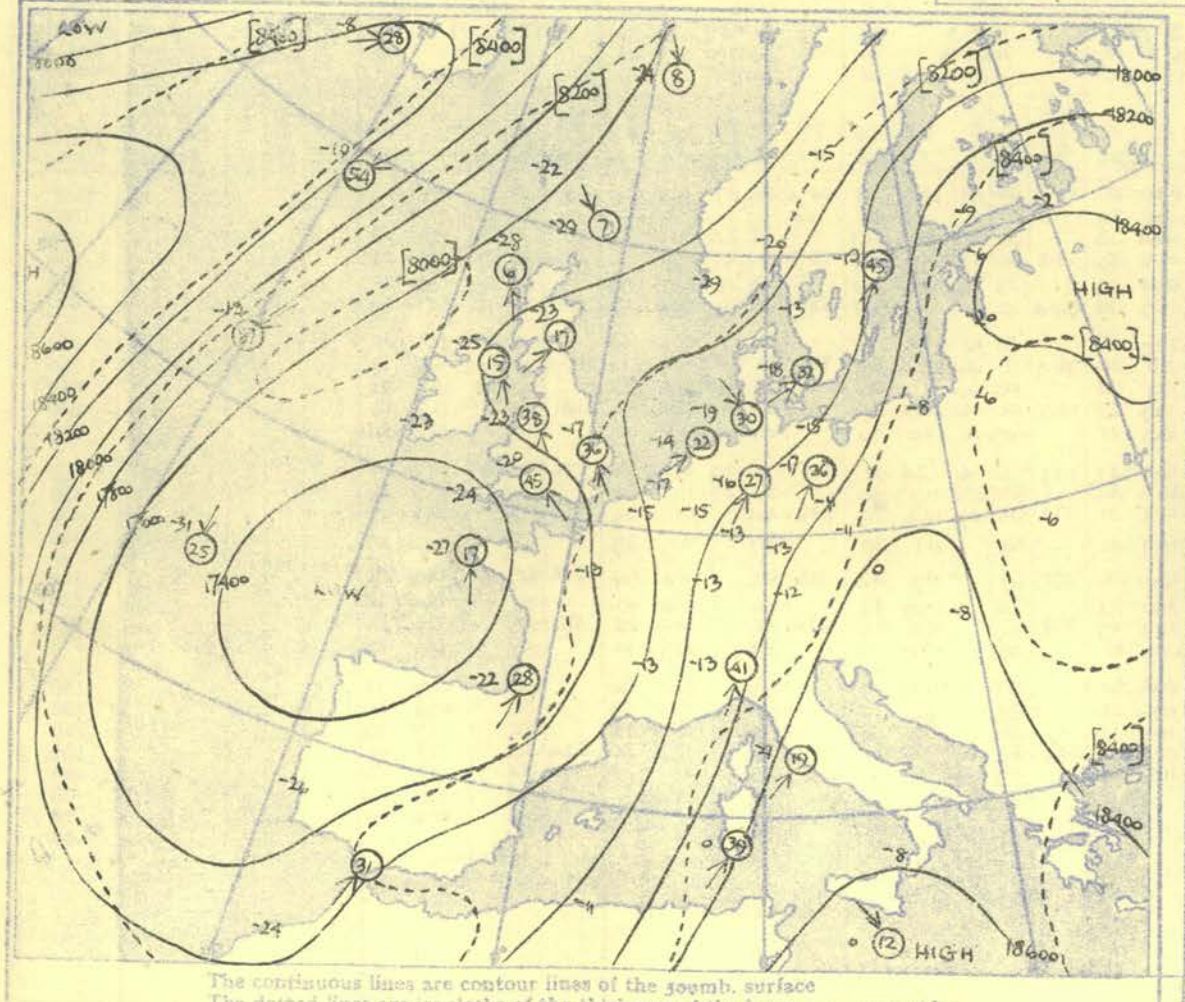
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

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

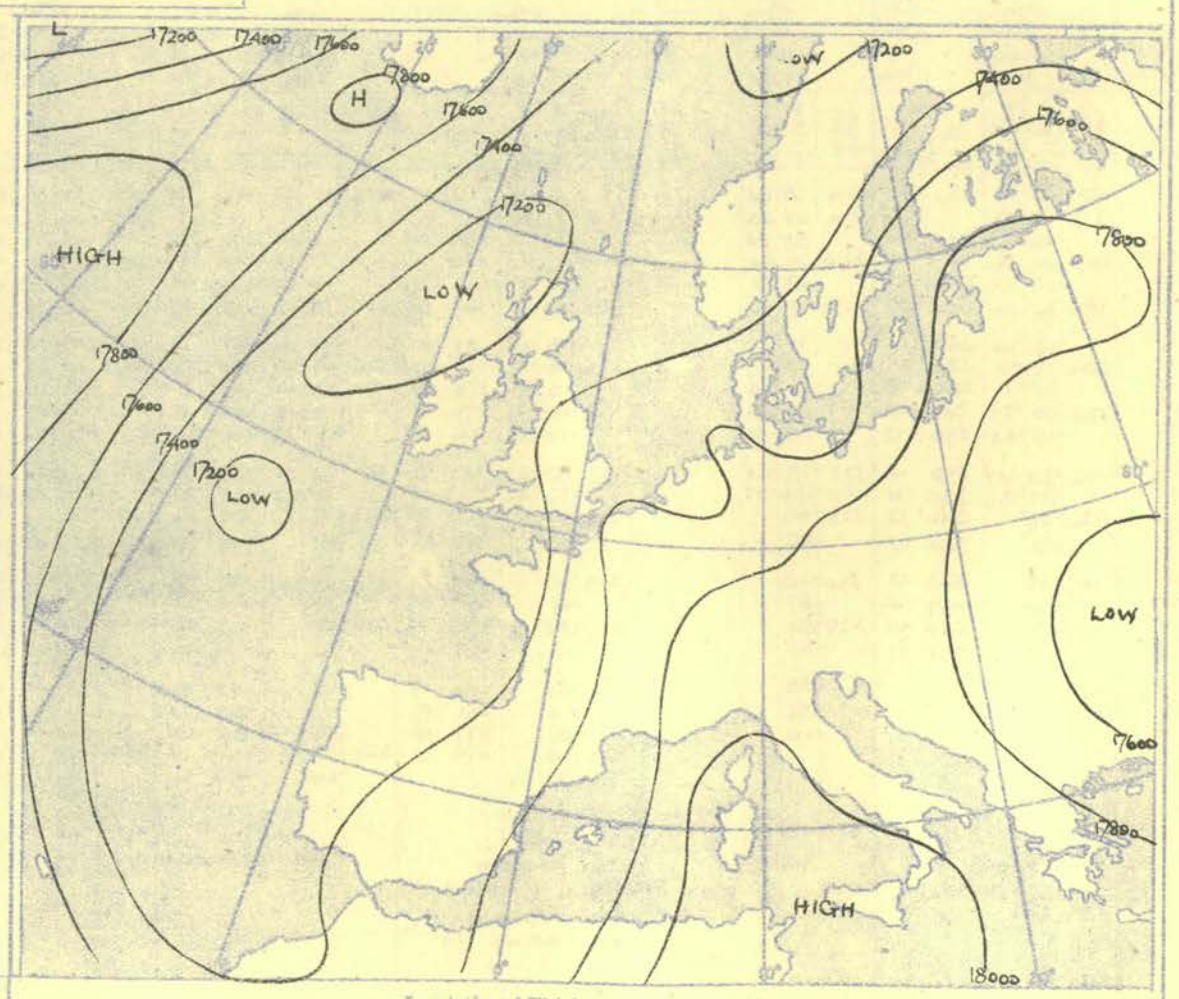
100 80 40 30 20 15 0 knots



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 500mb. 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											
Time	13L	15L											Time
M.S.L.	1009 mb	1002 mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	M.S.L.
Surf	1006 mb	998 mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	mb	Surf
Freezing	890 mb	860 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		49	41		49	43																			Surf
1000	2·6	47		0·5																					1000
950		41	38		42	40																			950
900		33	33		36	36																			900
850		27	27		30	24																			850
800		21			23																				800
750		13			19																				750
700	94·9	06		3·5	10																				700
650		-01			03																				650
600		-08			-07																				600
550		-19			-14																				550
500	175	-30		175	-26																				500
450																									450
400																									400
350																									350
300																									300
250																									250
200																									200
170	Cloud.			Cloud.																					170
	3/8 Cu 870-720mb.			4/8 Cb 880-500mb.																					
	3/8 NS 900-780mb.			2/8 Cu 900-620mb.																					
	4/8 Cb 900-500mb.			3/8 Cu 900-830mb.																					
	Light rime or frost in cloud. 820-770mb.			3/8 Ci About 400mb.																					
	Surf. wind. N.E. 11-16kts.			Mod: rime or frost in cloud. 750-760mb.																					
				Surf. wind. 7-10kts.																					

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

Place	Downham		Firee		Lerwick		Larkhill														Place
Time	15L		15L		21L		21L														Time
Type	Pilot-		Pilot-		Pilot		Pilot-														Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet.
Surf.			040	13	080	04	Calm-														Surf.
1,000			050	22	070	15	212	14													1,000
2,000			060	18	070	15	211	16													2,000
3,000			050	12	070	14	209	18													3,000
4,000			070	11	070	17	207	17													4,000
5,000			060	18	070	17	207	18													5,000
6,000			060	18	070	18	207	18													6,000
8,000			060	16	070	15	209	21													8,000
10,000			080	15	080	09	212	22													10,000
14,000					200	07	213	20													14,000
18,000					240	18	207	19													18,000
24,000					230	34	186	08													24,000
30,000					060	17	165	18													30,000
40,000					110	09	159	15													40,000
50,000	142	11			090	09	124	16													50,000
	130	17			140	07	(49.000)														
	(53.000)				140	05															
					(67.000)																

NEPHOSCOPE OBSERVATIONS

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

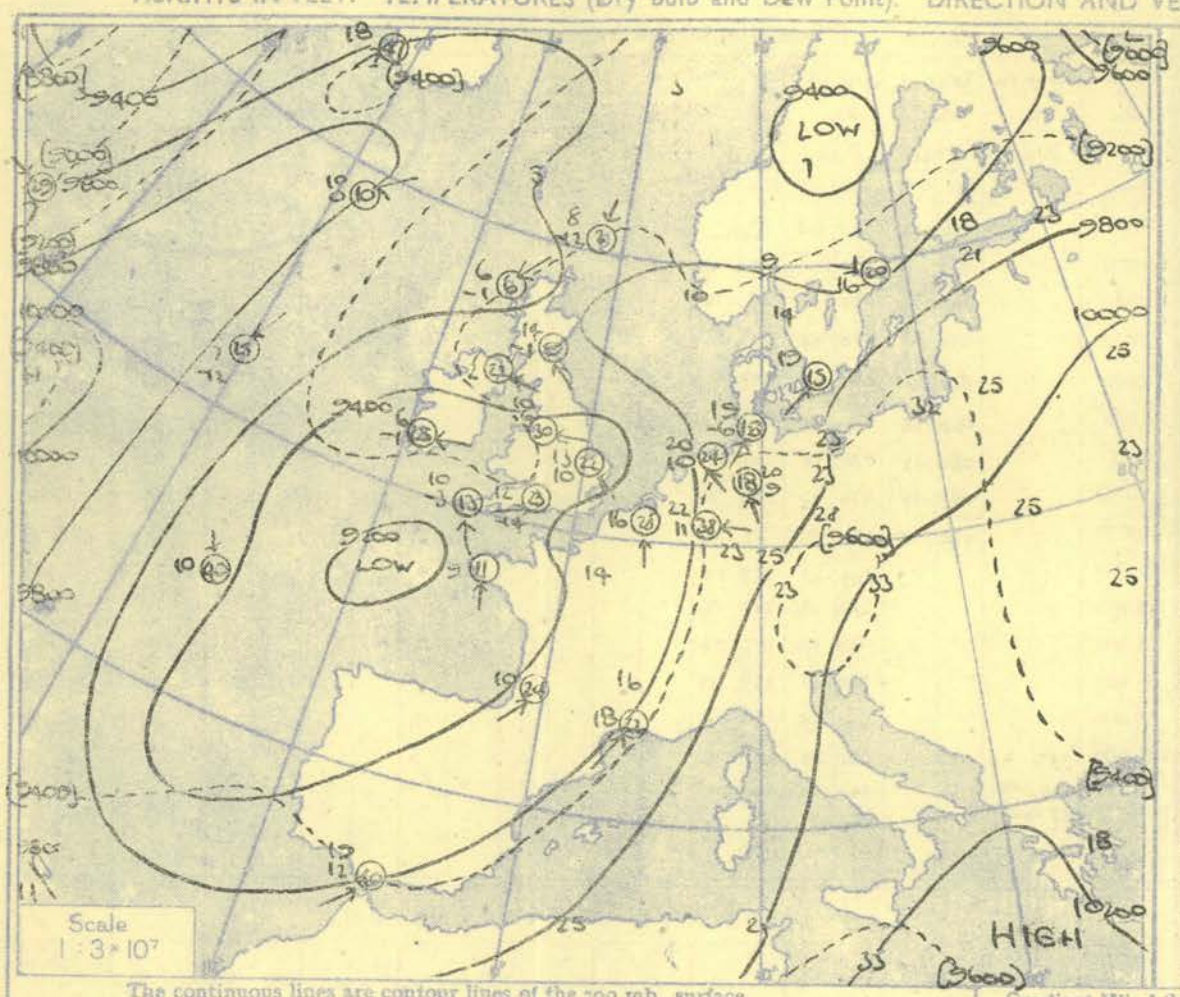
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	WEATHER RECORDER	WEATHER RECORDER.	WEATHER RECORDER.	WEATHER RECORDER.	WEATHER EXPLORER.	WEATHER EXPLORER.	WEATHER EXPLORER.	WEATHER EXPLORER.			Ship
Lat/Long	59·2N 18·3W.	59·0N 19·1W.	59·0N 19·0W.	59·1N 19·1W	52·6N 20·3W	52·6N 20·4W.	52·6N 20·5W.	52·5N 20·5W			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.	1023 mb	1021 mb	1020 mb	1017 mb	1019 mb	1019 mb	1018 mb	1016 mb		mb	M.S.L.
Surf	1023 mb	1021 mb	1020 mb	1017 mb	1019 mb	1019 mb	1018 mb	1016 mb		mb	Surf
Freezing	940 mb	950 mb	940 mb	930 mb	906 mb	890 mb	900 mb	945 mb		mb	Freezing

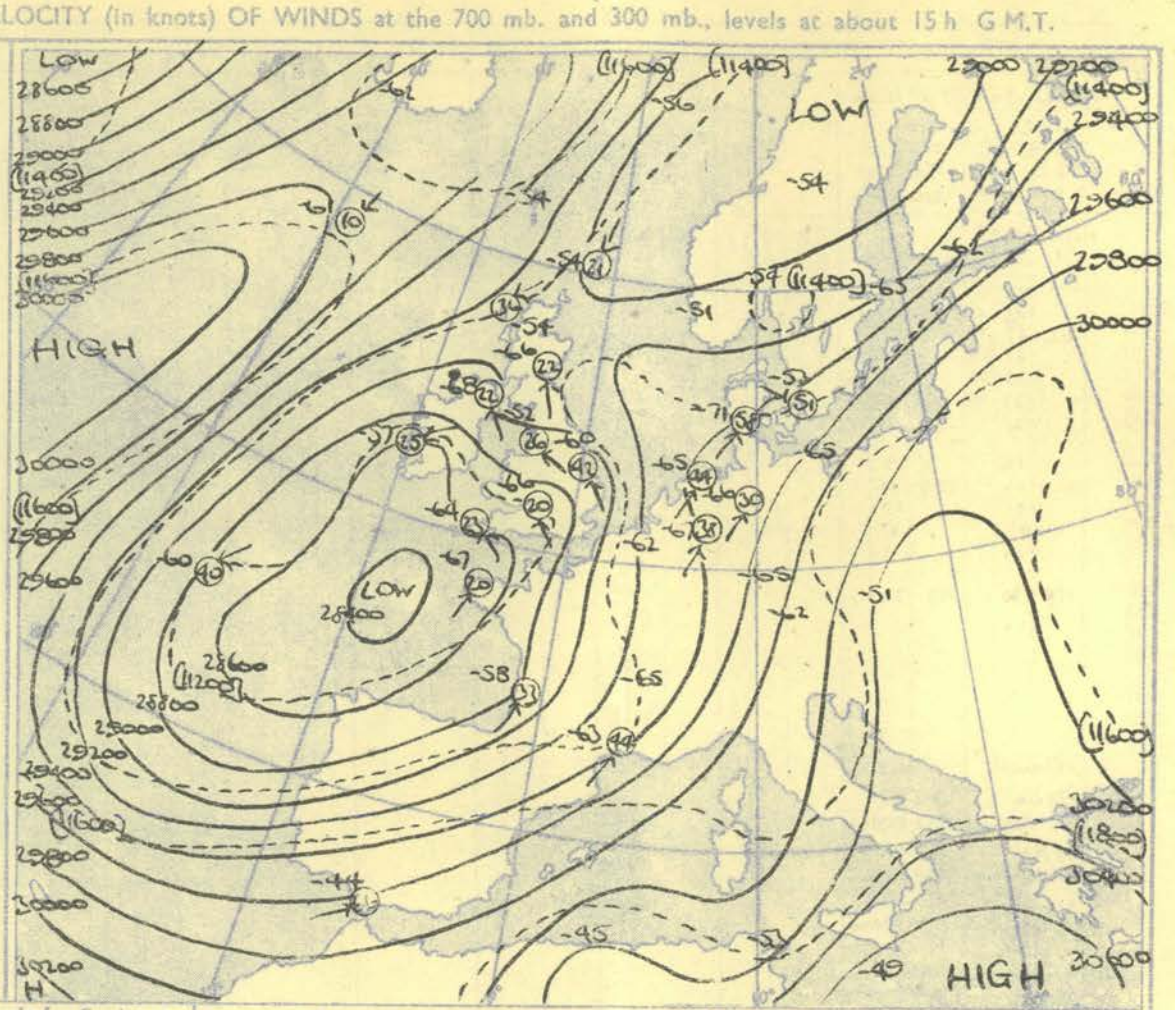
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf		42	35	320	10		42	36	320	03		43	35	200	05		43	36	210	09		48	36	360	25		46	36	010	25		45	38	340	14		45	34	010	11						Surf
1000	5·9	39	31	355	12	5·6	39	33	335	04	3·3	41	32	200	03	4·5	41	35	204	03	5·9	44	31	007	31	5·1	44	29	016	25	4·9	44	38	003	18	4·3	41	31	031	12						1000
950		33	27	358	13		32	29	345	05		34	24	110	04		34	28	20·	05		38	23	019	33		39	25	017	26		39	36	006	19		33	27	044	12						950
900	33·7	27	22	359	13	33·3	24	14	007	07	33·0	27	17	077	07	32·3	26	22	198	07	33·1	32	15	030	34	33·1	33	18	019	24	32·9	32	30	023	21	32·1	26	20	048	10						900
850		25	13	353	12		27	03	018	09		30	+06	056	10		30	-02	168	07		25	08	033	33		26	10	025	24		27	24	030	22		20	15	044	11						850
800	64·2	21	-06	340	14	67·8	24	08	029	16	63·7	30	16	049	09	62·9	27	07	139	08	63·7	21	-01	032	31	63·6	19	-02	027	27	63·6	22	19	021	19	62·2	15	09	034	12						800
750		16	-18	334	18		19	11	023	23		22	10	048	09		20	09	102	14		14	-13	028	35		16	-16	023	26		15	00	014	21		10	00	355	17						750
700	98·1	14	-09	348	25	97·9	17	09	022	29	98·0	10	00	039	10	97·1	11	05	094	17	97·4	06	-25	027	36	97·4	08	-29	018	29	97·4	07	-12	016	25	95·6	05	-14	336	30						700
650		09	-05	006	34		10	04	027	31		15	04	031	16		18	-08	097	17		00	-32	027	40		02	-35	015	36		04	-01	020	33		04	-15	007	35						650
600	137	05	-12	006	36	137	06	-02	025	34	137	09	-07	034	17	136	11	-11	108	14	135	-06	-38	027	54	135	00	-23	015	46	135	03	-03	026	57	134	-01	-07	005	40						600
550		-02	-21	012	44		-01	-11	026	38		01	-23	046	15		02	-18	095	11		-06	-29	027	76		-03	-21	013	66		-03	-13	020	57		-04	-21	012	46						550
500	181	-10	-33	028	57	181	-10	-22	032	38	182	-08	-38	027	22	181	-07	-25	067	18	179	-13	-33	027	87	180	-11	-34	015	74	180	-08	-22	018	65	178	-10	-34	040	57						500
450		-19	-48	028	57		-20	-34	033	35		-20	-45	018	25		-19	-34	052	15		-21	-37	027	93		-16	-43	016	78		-16	-37	019	66		-21	-40	030	63						450
400	234	-29	-54	029	58	233	-32	-48	034	32	234	-37	-53	009	20	233	-31	-43	042	20	231	-31	-48	027	89	232	-26	-52	017	80	233	-29	-46	019	63	230	-34	-50	019	45						400
350		-40	-60	018	56		-45		017	34		-49		014	12		-44		030	21		-44		024	96		-40	-60	020	82		-43		019	62		-48		019	58						350
300	298	-54		015	46	297	-60		001	35	297	-61		006	10	297	-58		030	17	295	-58		021	87	297	-56		013	81		-43				293	-61		013	51						300
250		-68		021	42		-73		013	25		-74		336	12		-72		054	09		-73		015	83		-70		004	84	(348mb)						-72		351	52						250
200	382	-78		016	42	380	-79		025	15	381	-80		312	07	381	-77		calm		379	-74		020	70	381	-76		005	74						37)	-83		318	60						200
170		-78		025	24		-76		090	04		-73		289	05		-66		228	11		-65		024	58		-68		018	40							-69		332	33						170
150		-73		036	18		-68		163	06		-65		192	03		-60		222	15		-65		024	31		-62		019	24							-66		004	19						150
130		-66		076	10		-65		179	05		-64		174	09		-59					-64		024	41		-61		027	19							-65		004	09						130
110		-62		130	09		-62		177	04		-62		187	12		-60					-63		024	13		-64		045	12							-69		004	10						110
100	527	-63		146	09	525	-62		180	03	526	-61		187	16	528	-60				525	-67		024	13	527	-65		104	12						521	-67		004	07						100
90		-65		163	09		-64		181	09		-62		195	18		-60					-68					-61		141	12							-67		004	06						90
80		-65		183	09		-59					-59		186	12		-61				(96mb)															-68									80
70		-65		178	10							-59		189	06		-59																		(84mb)									70
60		-64		195	07							-59					-57																											60
		-64										-54				(65mb)																											
	(53mb) Inversion. 870mb 23° 850mb 25°					Inversion. 882mb 22° - 850mb 27°					-55 (46mb) Inversion. 885mb 24° - 865mb 30° 678 - 8° - 647·· 16					Inversion. 894mb 25° - 856mb 31° 691 ·· 10° - 675·· 18°					Inversion. 600mb -6° - 575mb -3°					Isothermal. 635 - 574mb 0°					Isothermal. 1000mb - 995mb 4° 650·· - 631·· 4° Inversion. 677mb 3° - 650mb 4°					Inversion. 590 mb -2° - 578mb -1° 550 - -4° - 539 - -2°									
	Isothermal. 850 - 840mb 25° 715 - 685·· 14° 600 - 596· 6°					Isothermal. 757 - 710mb 19° 627 - 608· 7°					Isothermal. 865 - 797mb 30°					Isothermal. 675 - 642mb 18°																			Isothermal. 712 - 663mb 5°								
Tropopause	II 210mb -79° 37.200			I 210mb -82° 37.000			I 200mb -80° 38.100			I 207mb -80° 37.400			I 220mb -79° 35.900			I 211mb -77° 37.000			n/a.			I 207mb -85° 37.000																											Tropopause

11TH February 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

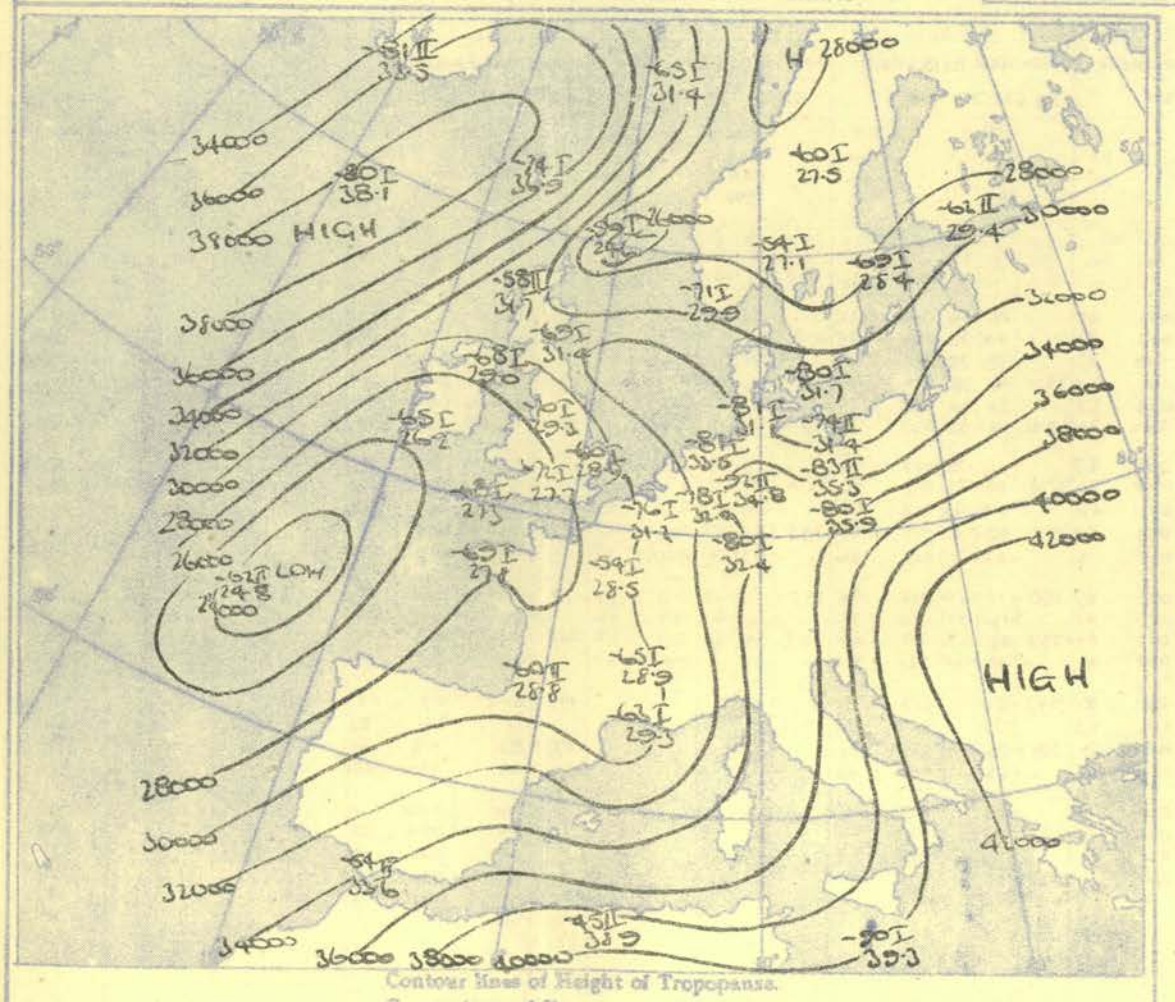


The continuous lines are contour lines of the 300mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

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 most notable feature of thermal pattern has been the rapid warming between 0300 and 1500 G.M.T. over Northwest Africa and adjacent sea areas.

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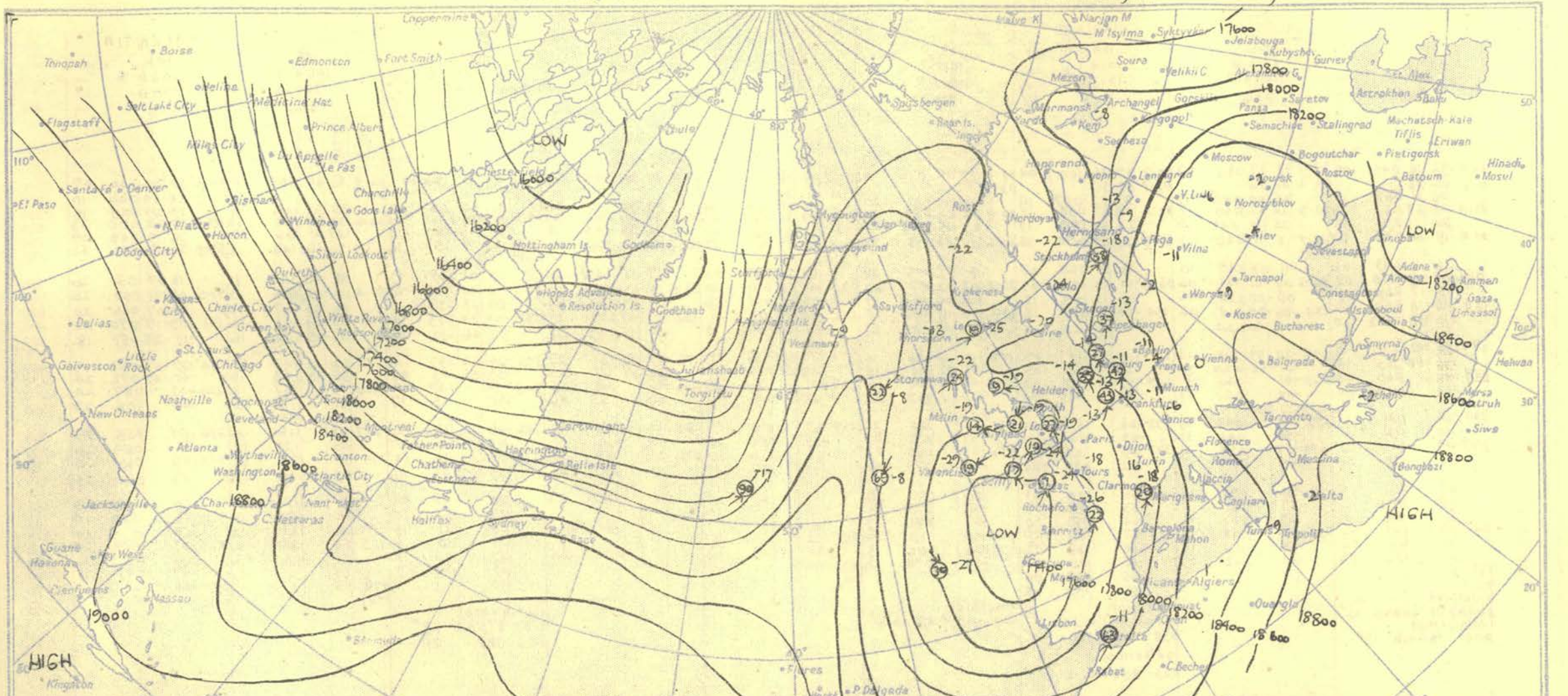
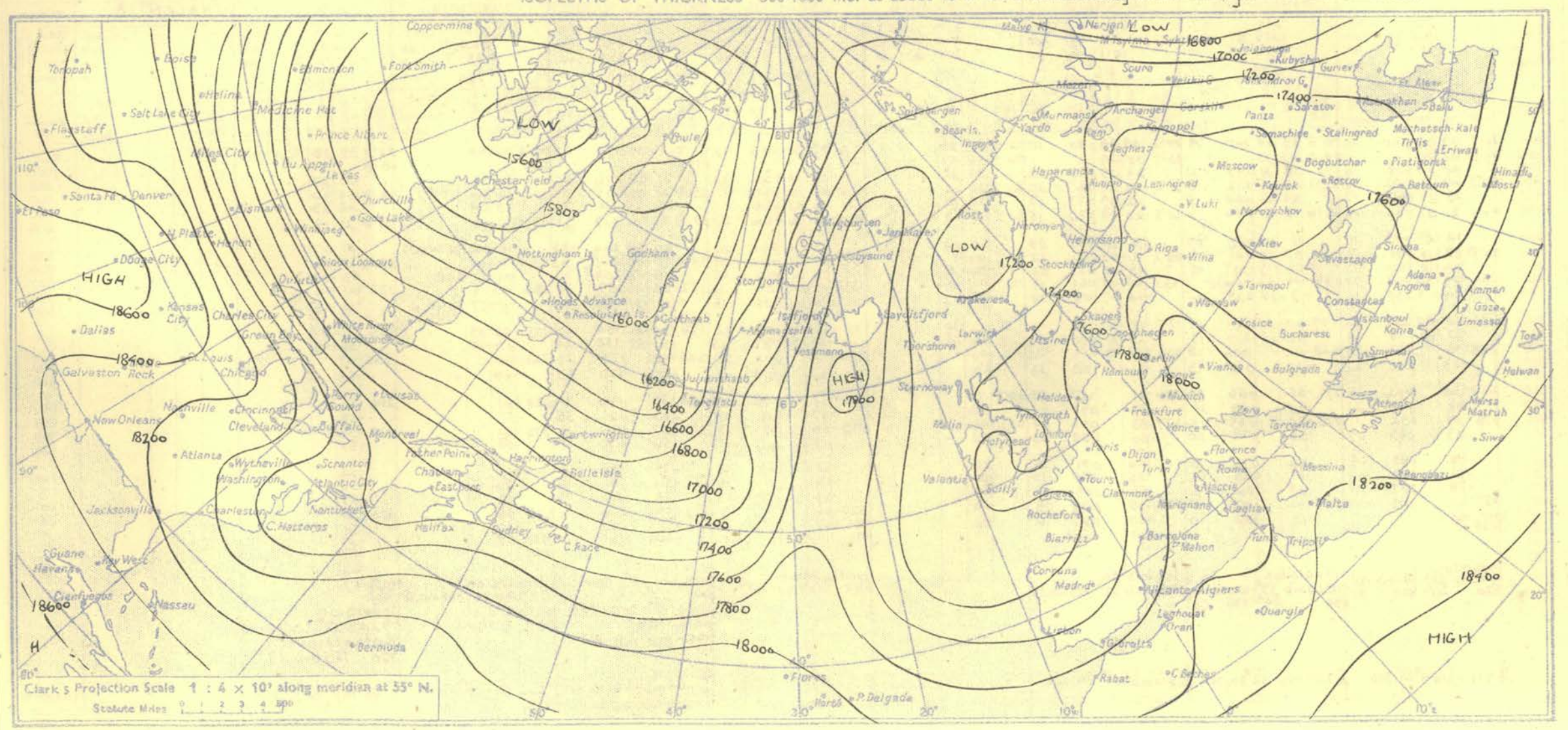
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

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



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



METEOROLOGICAL OFFICE, LONDON. Sunday 11 February. 19[illegible]

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

15h G.M.T. Sunday 11 February

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.	1013·3 mb	1016·6 mb	1014·1 mb	1011·1 mb	1007·2 mb	1003·0 mb	1003·6 mb	1002·2 mb	1006·3 mb
Pressure: Surf	1003·1 mb	1014·9 mb	1013·2 mb	1001·9 mb	1005·1 mb	998·6 mb	987·1 mb	991·6 mb	1005 mb
Pressure: Freezing	925 mb	916 mb	942 mb	933 mb	934 mb	920 mb	969 mb	890 mb	935 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Lerwick					
Surf	02·7	42	38	045	09
1000	03·6	42	38		
950		35	31	048	13
900	31·4	29	27	035	10
850		24	19	055	07
800	61·8	19	14	084	07
750		16	11	083	06
700	95·6	08	-02	005	02
650		03	-17	268	13
600	134	-05	-28	262	15
550		-15	-36	243	20
500	177	-25	-42	244	19
450		-35	-48	255	14
400	227	-46		260	13
350		-53		010	06
300	290	-54		031	21
250		-55		025	17
200	377	-49		040	02
170		-51		139	06
150		-55		090	07
130		-59		095	10
110		-61		158	11
100	527	-58		129	05
90		-58		121	05
80		-57		132	06
70	(073 mb)	-67			
60					

Inversion 664mb 02° - 650mb 03°
Isothermal 800 - 785mb 19°

Tropopause: I 366mb -56° 24,600'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Stornoway					
Surf	00·4	42	37	030	10
1000	04·4	41	36		
950		35	30	040	17
900	32·3	28	22	040	17
850		23	16	041	15
800	62·7	18	11	046	12
750		11	03	049	10
700	96·4	06	-01	041	06
650		00	-20	222	06
600	134	-06	-30	218	06
550		-14	-40	224	11
500	178	-22	-49	218	24
450		-31	-58	220	30
400	228	-41		225	16
350		-48		051	17
300	292	-54		043	36
250		-58		046	31
200	379	-57		059	21
170		-53		091	17
150		-51		096	16
130		-57		081	14
110		-59		077	11
100	528	-56		108	08
90		-58		116	08
80		-61		118	09

Inversion 1005mb 39° - 981mb 40°
825 .. 20° - 800 .. 21°
694 .. 04° - 682 .. 06°

Tropopause: I 266mb -58° 31,700'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Leuchars					
Surf	00·2	39	36	100	04
1000	03·7	38	35		
950		33	32	057	14
900	31·5	28	27	054	17
850		22	20	049	19
800	61·9	21	07	074	15
750		18	05	120	07
700	95·9	14	-01	150	09
650		06	-12	159	18
600	134	-03	-17	159	18
550		-12	-20	123	10
500	178	-19	-27	119	09
450		-28	-38	160	05
400	229	-39	-51	160	13
350		-52		161	24
300	292	-66		169	22
250		-63		112	12
200	377	-55		103	15
170		-52		099	20
150		-55		104	21
130		-53		096	17
110		-54		083	10
100	528	-67		106	20
90		-68		138	17
80		-55		106	06
70		-55		087	05
60		-56		102	28

Inversion 837mb 20° - 823mb 21°
538 .. -15° - 528 .. -14°
Isothermal 823 - 800mb -21°

Tropopause: I 289mb -67° 29,600'
I 270 .. -69° 31,200'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Aldergrove					
Surf	02·6	39	34	076	15
1000	03·1				
950		34	29	081	20
900	30·9	30	24	083	22
850		27	15	087	22
800	61·6	21	13	088	28
750		15	07	094	28
700	95·4	07	02	107	22
650		00	-04	104	19
600	133	-05	-11	086	18
550		-11	-19	082	21
500	177	-19	-29	096	14
450		-31	-42	104	15
400	228	-44		124	15
350		-57		129	22
300	290	-68		134	22
250		-57		071	27
200	376	-54		090	21
170		-50		079	26
150		-50		081	20
130		-54		078	18
110		-57		081	19
100	527	-55		113	14
90		-54		104	13
80		-53		098	12
70	(083 mb)				

Inversion 910mb 29° - 893mb 31°

Tropopause: I 300mb -68° 29,000'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Liverpool					
Surf	00·6	41	36	070	15
1000	01·8	41	36		
950		35	31	066	28
900	29·8	29	26	077	35
850		24	20	081	38
800	60·3	20	17	081	37
750		14	11	083	33
700	94·1	10	06	090	30
650		05	01	095	26
600	132	-03	-07	103	21
550		-11	-14	070	13
500	176	-19	-24	036	21
450		-28	-34	076	30
400	227	-41		101	29
350		-55		100	26
300	289	-69		105	26
250		-59		124	22
200	375	-52		128	20
170		-53		126	21
150		-51		122	20
130		-48		125	18
110		-49		111	17
100	527	-52		113	18
90		-54		124	13
80		-50			
70	(083 mb)				

Tropopause: I 294mb -70° 29,300'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Downham Market					
Surf	01·2	39	38	080	10
1000	01·0				
950		34	32	116	23
900	28·8	31	29	142	22
850		26	23	143	18
800	59·4	24	21	135	20
750		19	16	142	24
700	93·5	13	10	141	22
650		07	03	133	24
600	132	-01	-07	139	25
550		-09	-19	149	27
500	176	-19	-32	161	27
450		-32	-47	167	30
400	226	-45		168	25
350		-53		165	36
300	289	-60		162	42
250		-58		161	31
200	376	-59		155	21
170		-55		157	21
150		-52		142	22

For Rest of Winds See Page 3.

Inversion 873mb 27° - 861mb 29°
358 .. -59° - 334 .. -58°
309 .. -60° - 300 .. -58°
Isothermal 944 - 900mb 81°

Tropopause: I 313mb -72° 27,700'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Larkhill					
Surf	04·4	34	33	Calm	
1000	00·9				
950		31	30	103	02
900	28·5	29	28	220	05
850		27	26	250	13
800	59·1	21	19	251	16
750		19	-01	239	19
700	93·1	12	-14	243	23
650		04	-23	237	19
600	131	-04	-34	233	20
550		-12	-46	232	20
500	175	-24	-52	232	10
450		-33	-55	163	04
400	225	-46		139	10
350		-61		113	17
300	286	-66		133	20
250		-58		160	27
200	373	-58		142	14
170		-53		144	26
150		-55		145	21
130		-55		167	17
110		-58		121	13
100	522	-58		110	14
90		-59		105	16
80		-59		145	19
70		-60			

Isothermal 878 - 875mb 28°
806 - 783 .. 21°

Tropopause: I 322mb -66° 27,200'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Camborne					
Surf	02·9	46	40	090	10
1000	00·7				
950		39	32	125	15
900	28·8	34	29	123	13
850		27	21	135	12
800	59·4	25	16	142	12
750		18	08	142	11
700	93·4	10	-03	153	13
650		06	-13	167	15
600	132	-03	-21	162	16
550		-12	-29	152	16
500	175	-22	-38	147	17
450		-35	-50	143	16
400	226	-48		137	12
350		-61		113	18
300	287	-64		118	23
250		-55		123	14
200	374	-54		122	12
170		-52		128	18
150		-50		115	15
130		-50		083	10
110		-53		121	13
100	525	-53		120	16
90		-53		103	13
80		-53			
70	(075 mb)	-53			

Tropopause: I 320mb -68° 27,300'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Valentia					
Surf	00·3	39	35	040	09
1000	1·7	38	34	040	10
950		33	29	042	18
900	29·4	29	24	050	23
850		25	19	048	29
800	59·9	20	13	052	32
750		13	07	051	26
700	93·5	06	01	053	25
650		00	-07	066	26
600	131	-09	-17	070	23
550		-19	-27	051	18
500	174	-29	-37	053	19
450		-40	-49	072	24
400	224	-52		087	24
350		-64		108	23
300	286	-57		058	25
250		-51		054	26
200	373	-55		065	20
170		-53		062	24
150		-50		053	23
130		-54		048	14
110		-58		045	24
100	524	-53		059	20
90		-53		071	12
80		-57		047	18
70	(074 mb)	-60			

Tropopause: I 333mb -65° 26,200'

21h G.M.T. Sunday 11 February

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Pressure: Time	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	G.M.T.
Pressure: M.S.L.	1016·1 mb	1015·9 mb	1012·0 mb	1010·6 mb	1005·0 mb	1004·6 mb	1005·1 mb	1002·9 mb	mb
Pressure: Surf	1004·9 mb	1019·2 mb	1011·1 mb	1001·2 mb	1002·9 mb	1002·2 mb	988·7 mb	992·2 mb	mb
Pressure: Freezing	922 mb	929 mb	816 mb	928 mb	960 mb	955 mb	884 mb	880 mb	mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Lerwick					
Surf	02·7	39	35	060	10
1000	04·0	35	36		
950		35	30	058	15
900	31·9	29	21	062	16
850		23	21	067	17
800	62·0	21	07	075	13
750		14	-07	075	11
700	96·0	08	-20	091	05
650		04	-18	140	02
600	134	-04	-28	222	04
550		-14	-40	230	11
500	177	-23	-50	232	22
450		-33	-60	235	28
400	228	-43		262	30
350		-53		230	22
300	291	-55		042	13
250		-58		047	21
200	378	-55		052	11
170		-53		069	07
150		-58		083	06
130		-62		094	06
110		-58		097	07
100	527	-61		109	07
90	(092 mb)	-65			
80					
70					
60					

Inversion 1005mb 39° - 981mb 40°
825 .. 20° - 800 .. 21°

Tropopause: I 396mb -54° 25,900'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Stornoway					
Surf	00·9	39	34	360	08
1000	04·2	40	35		
950		35	31	044	21
900	32·1	28	25	052	18
850		24	16	044	15
800	62·6	18	10	044	12
750		11	05	052	09
700	96·1	05	-10	041	06
650		02	-19	007	05
600	134	-06	-29	Calm	
550		-13	-38	329	05
500	177	-20	-44	251	08
450		-32	-55	219	13
400	228	-42		206	18
350		-52		047	13
300	291	-55		056	39
250		-60		049	39
200	378	-55		049	25
170		-55		074	20
150		-56		075	18
130		-61		083	16
110		-59		106	13
100	527	-62		102	10
90		-60		102	10

Inversion 1014mb 39° - 1000mb 40°
694 .. 04° - 682 .. 06°

Tropopause: I 350mb -52° 25,100'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Leuchars					
Surf	00·2	39	34	040	10
1000	03·1	38	34		
950		34	29	055	20
900	30·7	28	24	067	20
850		22	19	073	17
800	61·3	20	09	080	18
750		15	01	071	23
700	95·2	11	-03	061	22
650		03	-03	077	22
600	133	-05	-08	084	27
550		-14	-17	106	29
500	177	-18	-21	120	19
450		-25	-31	098	15
400	228	-39	-42	101	23
350		-53		100	33
300	290	-61		127	25
250		-53		097	22
200	377	-53		095	24
170		-55		088	23
150		-54		091	21
130		-55		079	15
110		-66		109	17
100	526	-59		098	08
90		-59		087	16
80		-60			

Inversion 853mb 32° - 828mb 33°

Tropopause: II 312mb -61° 28,200'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Aldergrove					
Surf	02·6	36	33		
1000	02·9	36	33		
950		34	31		
900	29·0	29	22		
850		24	10		
800	61·1	18	03		
750		10	02		
700	94·5	00	-11		
650		-04	-13		
600	132	-08	-15		
550		-15	-22		
500	175	-22	-30		
450		-32	-41		
400	226	-45			
350		-60			
300	287	-71			
250		-59			
200	373	-56			
170		-54			
150		-56			
130		-60			
110		-60			
100	522	-60			
90		-62			
80					

Tropopause: III 320mb -70° 27,300'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Liverpool					
Surf	00·6	37	36	045	15
1000	01·3				
950		31	28	053	32
900	29·0	27	24	058	29
850		23	22	066	25
800	59·3	18	16	066	20
750		13	10	061	20
700	93·0	07	03	072	21
650		04	00	092	15
600	131	-02	-07	109	12
550		-10	-14	108	13
500	175	-19	-29	085	12
450		-31	-36	060	13
400	226	-44		063	20
350		-55		054	18
300	288	-57		095	15
250		-57		114	20
200	375	-54		119	18
170		-53		100	17
150		-52		107	18
130		-54		110	18
110		-51		117	13
100	526	-56			
90		-57			
80	(098 mb)				

Isothermal 657 - 637mb 04°

Tropopause: I 316mb -59° 27,750

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Downham Market					
Surf	01·2	36	35	190	08
1000	01·3				
950		32	28	216	20
900	29·1	31	26	211	25
850		29	23	211	28
800	59·8	26	16	213	31
750		20	00	214	33
700	94·0	13	-03	209	33
650		05	-13	204	32
600	132	-02	-26	199	30
550		-12	-37	196	30
500	176	-24	-51	194	25
450		-36	-59	188	24
400	226	-48		173	23
350		-58		170	32
300	288	-58		166	34
250		-63		161	35
200	375	-57		151	19
170		-56		150	18
150		-59		131	13
130		-56		131	15
110		-58		129	13
100	523	-59		134	21
90		-58		142	15
80		-60		160	10
70	(088 mb)				

Inversion 989mb 36° - 968mb 38°
Isothermal 930 - 900mb 34°

Tropopause: I 254mb -64° 32,300'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Larkhill					
Surf	04·4	35	33		
1000	01·4				
950		30	34		
900	29·2	34	30		
850		28	24		
800	59·8	21	16		
750		16	08		
700	93·7	11	-01		
650		04	-12		
600	132	-03	-18		
550		-11	-27		
500	175	-22	-39		
450		-33	-50		
400	226	-46			
350		-60			
300	288	-61			
250		-57			
200	375	-53			
170		-53			
150		-55			
130		-54			
110		-54			
100	525	-56			
90		-57			
80		-57			
70	(088 mb)				

For Winds See Page 3.

Inversion 958mb 39° - 950mb 40°
Isothermal 770 - 750mb 17°

Tropopause: I 322mb -66° 27,200'

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Camborne					
Surf	02·9	39	38	Calm	
1000	00·8				
950		40	37		
900	28·9	34	30		
850		28	23		
800	59·6	21	14		
750		17	07		
700	93·4	12	01		
650		03	-08		
600	132	-05	-14		
550		-13	-25		
500	175	-24	-37		
450		-36	-48		
400	225	-49			
350		-63			
300	286	-65			
250		-58			
200	373	-56			
170		-53			
150		-54			
130		-55			
110		-54			
100		-57			
90	523	-56			
80		-58			
70		-57			
60		-57			
50		-62			
40	(056 mb)	-69			

Inversion 992mb 39° - 950mb 40°
Isothermal 770 - 750mb 17°

Tropopause: I 321mb -69° 27,200'

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

Tropopause:

HMSO Press, MO, Dunstable.

No. 1142. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Monday 12th February, 1951. Page 1.

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

03h. G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	03h.	1014·8 mb	1004·6 mb	941 mb
STORNOWAY	03h.	1012·7 mb	1011·1 mb	936 mb
LEUCHARS	03h.	1008·7 mb	1007·8 mb	950 mb
ALDERGROVE	03h.	1007·9 mb	998·8 mb	950 mb
LIVERPOOL	03h.	1003·2 mb	1001·1 mb	950 mb
DOWNHAM MARKET	03h.	1006·5 mb	1002·0 mb	895 mb
LARKHILL	03h.	1004·5 mb	988·1 mb	887 mb
CAMBORNE	03h.	1000·9 mb	990·1 mb	868 mb
VALENTIA	03h.	1006·5 mb	1005 mb	963 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	38	34	080	09	00·5	41	39	050	10	00·2	39	36	070	13	02·6	36	33		
1000	3·9	38	34			3·3	39	34			2·2	38	36			2·3				
950		33	30	075	15		34	31	059	19		32	31	057	25		32	30		
900	31·6	27	24	083	15	31·7	28	23	071	19	30·0	29	27	065	30	30·0	26	24		
850		22	16	087	16		21	18	071	19		24	21	070	34		21	10		
800	61·9	18	07	089	18	61·3	17	06	064	18	60·5	19	16	076	30	60·3	16	08		
750		15	-05	092	17		11	-03	068	15		14	10	083	31		11	04		
700	35·7	11	-10	101	10	94·8	07	-13	090	09	94·3	09	04	088	29	93·8	06	-01		
650		03	-18	103	05		01	-34	130	07		02	-03	090	30		-01	-08		
600	134	-06	-28	100	05	133	-06	-29	138	08	132	-06	-12	087	29	131	-09	-15		
550		-15	-36	116	03		-14	-46	149	08		-13	-20	087	32		-15	-22		
500	177	-24	-44	237	03	176	-23	-52	160	08	176	-21	-29	081	32	175	-22	-39		
450		-34	-53	220	09		-33	-60	155	15		-31	-39	076	31		-34	-43		
400	227	-46		224	18	227	-45		146	18	227	-42		069	32	225	-46			
350		-59		221	20		-57		135	16		-52		105	31		-39			
300	289	-67		087	24	289	-60		068	34	289	-57		108	24	287	-67			
250		-65		065	31		-60		078	31		-62		099	23		-60			
200	378	-58		065	12	376	-55		073	24	376	-60		091	23	373	-57			
170		-60		096	13		-55		085	21		-56		111	21		-55			
150		-63		126	10		-60		080	17		-56		102	19		-57			
130		-64		063	06		-61		078	11		-56		097	25		-57			
110		-64		113	06		-63		080	15		-56		105	25		-59			
100	522	-61		094	05	524	-61		133	14	525	-56		102	21	522	-61			
90		-61		118	02		-58					-56		090	15					
80		-64										-57		085	13					
70												-59		094	15					
60												-60		100	12					
											(050)	-62		075	13					
											(040) mb	-60		126	14					
	Isothermal 1005mb - 982mb. 38°					Isothermal 728 - 705mb. 08°										Isothermal 560 - 538mb. -15°				
Tropopause	I 308mb. -67° 28,800'					II 331mb. -61° 26,800'					I 248mb. -63° 33,000'					II 326mb. -65° 26,900'				

Pressure mb	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	36	33	Calm		01·2	35	34	100	06	04·4	36	36	Calm		02·9	37	36			00·3	39	34		
1000	0·9					1·7					1·2					0·3					1·7	39	34		
950		32	31	188	04		36	35	192	16		39	39	177	14		41	39				35	31		
900	28·5	29	27	205	04	29·6	33	29	205	22	29·2	34	34	178	16	28·4	36	32			29·5	30	24		
850		24	22	160	08		27	20	208	24		28	28	180	21		30	26				26	17		
800	58·9	19	17	148	09	60·2	21	07	205	24	59·9	22	20	193	23	59·2	23	19			60·0	20	08		
750		14	12	141	09		17	05	199	24		16	13	204	24		17	12				13	04		
700	92·6	10	07	171	10	94·1	12	-12	196	25	93·7	09	05	208	25	93·1	11	05			93·7	08	02		
650		03	00	188	10		05	-19	197	27		02	-05	201	23		02	-07				02	-05		
600	131	-04	-08	171	06	132	-04	-24	201	27	132	-05	-15	200	22	131	-04	-10			132	-04	-16		
550		-13	-17	153	06		-14	-29	201	22		-14	-27	207	21		-14	-26				-14	-31		
500	174	-23	-29	157	07	176	-25	-48	203	20	175	-25	-40	210	23	174	-25	-35			175	-24	-40		
450		-35	-42	164	10		-37	-55	211	22		-36	-53	210	28		-37	-42				-35	-48		
400	225	-48		176	13	226	-50		198	27	225	-50		214	29	225	-49				225	-58			
350		-60		187	13		-63		190	22		-64		217	27		-62					-60			
300	286	-57		140	15	287	-63		192	27	286	-68		184	19	286	-70				287	-75			
250		-55		131	18		-57		167	27		-58		169	18		-61					-58			
200	314	-54		106	15	313	-56		171	17	313	-57		172	-57						313	-53			
170		-54		125	21							-57		155	17		-56					-55			
150		-53		125	17	For rest of						-56		151	15		-57					-53			
130		-52		121	14							-54		134	13		-54					-56			
110		-55		116	10	winds see page 3.						-55		150	11		-55					-60			
100	324	-56		105	13						322	-58		152	08	321	-57				322	-61			
90		-57										-61		106	06	(994) mb	-58					-61			
(089) mb		-58										-64									(083) mb	-62			
	Isothermal 913 - 893mb. 29°					Inversion 1002 mb. 35° - 985mb. 37°					Inversion 988mb. 36° - 955mb. 46°					Inversion 990mb. 37° - 974mb. 43°									
Tropopause	I 338mb. -63° 26,300'					I 345mb. -64° 25,700'					I 318mb. -72° 27,400'					I 311mb. -74° 27,800'					I 300mb. -75° 28,700'				

09h. G.M.T.

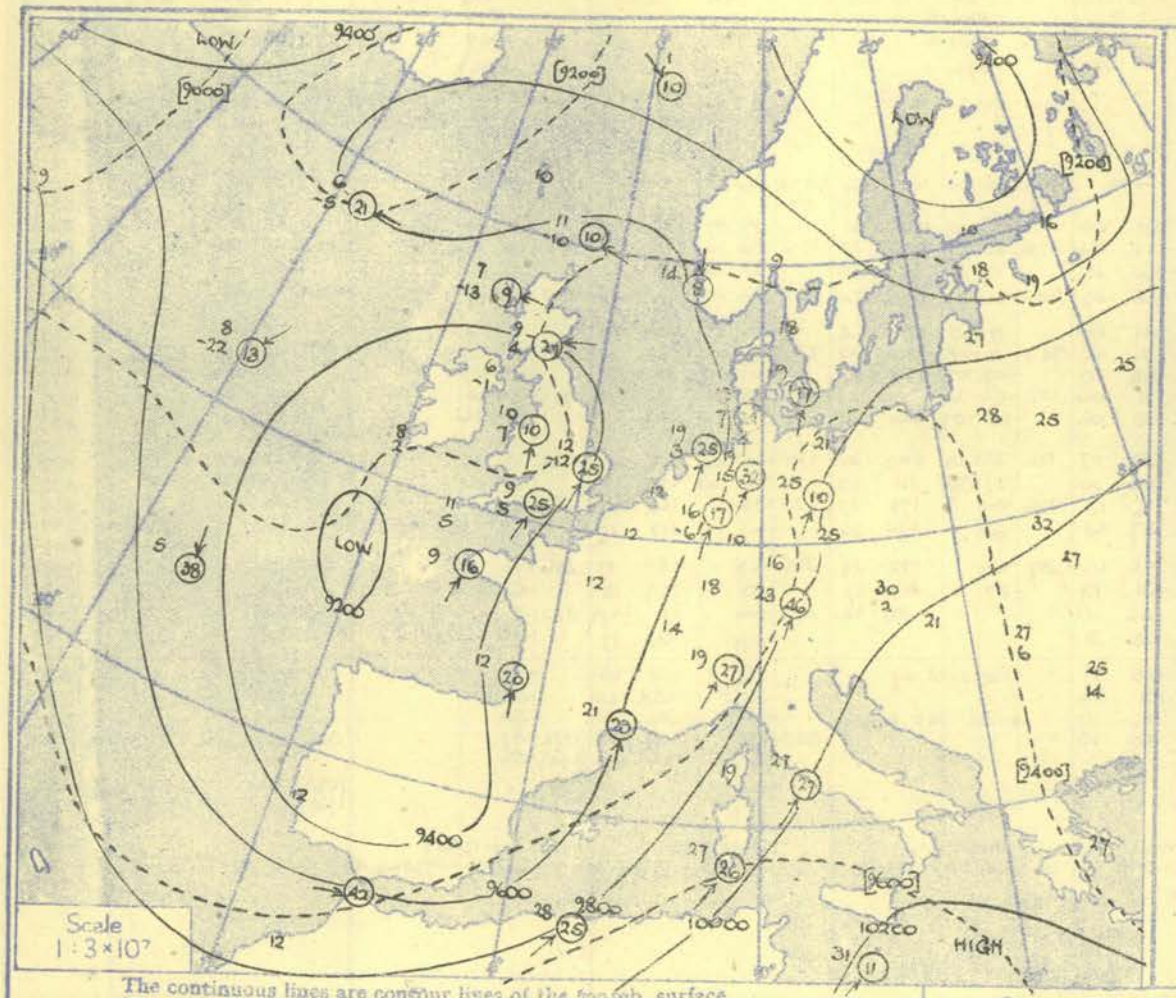
Station	Time	M.S.L.	Surf	Freezing
LERWICK	09h.	1014·5 mb	1004·3 mb	950 mb
STORNOWAY	09h.	1011·6 mb	1009·9 mb	922 mb
LEUCHARS	09h.	1006·9 mb	1006·0 mb	928 mb
ALDERGROVE	09h.	1005·6 mb	996·1 mb	950 mb
LIVERPOOL	09h.	1004·3 mb	1002·2 mb	953 mb
DOWNHAM MARKET	09h.	1006·4 mb	1002·9 mb	887 mb
LARKHILL	09h.	1005·9 mb	989·4 mb	897 mb
CAMBORNE	09h.	1003·5 mb	992·8 mb	869 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	39	37	075	09	00·5	40	37			00·2	40	39	090	20	02·6	36	34	360	12
1000	3·9	37	32			3·1	39	35			1·8					1·6				
950		32	27	077	16		35	31				33	32	083	26		32	30	025	25
900	31·5	26	22	077	18	31·0	29	26			29·7	30	28	088	30	29·3	27	24	036	28
850		18	14	083	17		23	26				24	20	092	32		22	18	039	28
800	61·6	16	02	090	20	61·5	20	12			60·3	21	17	093	32	59·6	16	11	030	22
750		14	-18	083	18		15	02				15	09	100	30		12	06	030	22
700	95·3	10	-23	091	12	95·3	12	-18			94·1	07	01	104	29	93·3	08	01	044	17
650		02	-30	102	11		06	-27				01	-07	120	31		00	-07	052	16
600	133	-04	-38	094	11	133	-03	-24			132	-03	-14	123	33	131	-07	-19	054	15
550		-14	-45	094	11		-12	-20				-14	-25	127	29		-16	-24	034	14
500	177	-22	-51	093	12	177	-20	-27			175	-24	-38	116	30	174	-26	-35	022	15
450		-34	-57	108	09		-30	-36				-36	-51	118	27		-36	-48	034	15
400	227	-43		096	12	228	-41				226	-49		116	27		-	-	045	15
350		-55		076	13		-33					-55		094	21		-	-	038	17
300	290	-66		074	21	291	-63				288	-61		089	36		-60		066	24
250		-67		072	42		-58					-58		103	21		-57		068	11
200	375	-60		081	21	378	-51				375	-56		098	16				088	18
170		-57		076	09		-50					-55		088	22					
150		-60		078	09		-52					-51		098	18					
130		-62		081	11							-51		092	20					
110		-62		093	21							-54		109	21					
100	522	-62		101	15						525	-56		122	18					
90		-63		102	11							-56		122	12					
80		-63										-56								
70																				
60																				
	Isothermal 821 - 782mb. 16°					Isothermal 765 - 735mb. 15°					Inversion 935mb. 31° - 928mb. 32°									
Tropopause	I 263mb. -59° 31,200					I 291mb. -65° 29,700'					II 374mb. -54° 24,000'					N.R.				

Pressure mb	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	35	32	180	05	01·2	37	35	175	08	04·4	36	35	220	08	02·9	41	40	135	05
1000	1·2					2·0	37	36			1·5					0·9				
950		32	29	185	15		35	35	192	20		38	33	208	17		42	38	176	18
900	28·9	27	25	193	15	29·8	33	30	189	22	29·5	32	27	217	17	29·1	34	28	170	14
850		24	19	192	21		28	26	193	22		26	21	220	16		29	23	170	14
800	59·2	19	14	193	19	60·4	21	18	193	22	60·1	21	13	222	15	59·9	22	17	173	15
750		13	08	197	19		15	14	193	24		14	04	217	18		17	10	181	16
700	92·9	08	04	195	21	94·2	09	05	191	24	93·9	08	-02	215	21	93·8	10	02	192	16
650		02	-03	192	20		01	-05	204	24		00	-14	217	21		01	-07	204	18
600	131	-04	-13	182	20	132	-07	-15	202	23	132	-09	-20	214	21	132	-07	-18	213	16
550		-14	-27	180	20		-16	-28	205	20		-17	-33	206	23		-16	-30	218	13
500	174	-25	-42	180	17	175	-26	-35	207	23	175	-28	-45	201	23	175	-26	-39	205	09
450		-36	-54	178	13		-38	-48	218	20		-39	-55	199	24		-38	-49	208	08
400	228	-47		190	10	225	-50		220	22	225	-52		198	21	225	-50		181	04
350		-60		191	09		-64		220	20		-66		197	21		-68		184	03
300	286	-66		152	12	286	-66		186	23	285	-69		203	22	286	-75		185	07
250		-56		134	11		-60		182	22		-58		192	20		-65		174	09
200	374	-56		130	14	373	-58		165	19	371	-58		165	13	371	-59		142	07
170		-51		127	11		-55		165	17		-54		171	16		-56		147	05
150		-53		119	12		-53		163	10		-54		167	12		-56		118	04
130		-52		115	13		-55		145	12		-53		112	12		-56		128	05
110		-53		113	20		-57		152	12		-54		125	13		-56		105	15
100	524	-55		116	14	522	-61		144	12	521	-55		112	11	520	-55		129	10
90		-55		137	11		-61				(098) mb	-56					-55		136	08
80		-56		142	11												-56		123	07
70																	-39		090	09
60																	-62			
	Inversion 865mb. 23° - 835mb. 25° Isothermal 1002 - 983mb. 35°					Inversion 936mb. 33° - 926mb. 35° Isothermal 1003 - 965mb. 37°					Inversion 989mb. 36° - 970mb. 40°					Inversion 993mb. 41° - 970mb. 44°				
Tropopause	I 319mb. -68° 27,300'					I 315mb. -74° 27,600'					I 327mb. -72° 26,800'					I 305mb. -77° 28,300'				

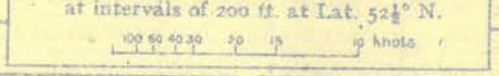
Monday 12th February, 1951.

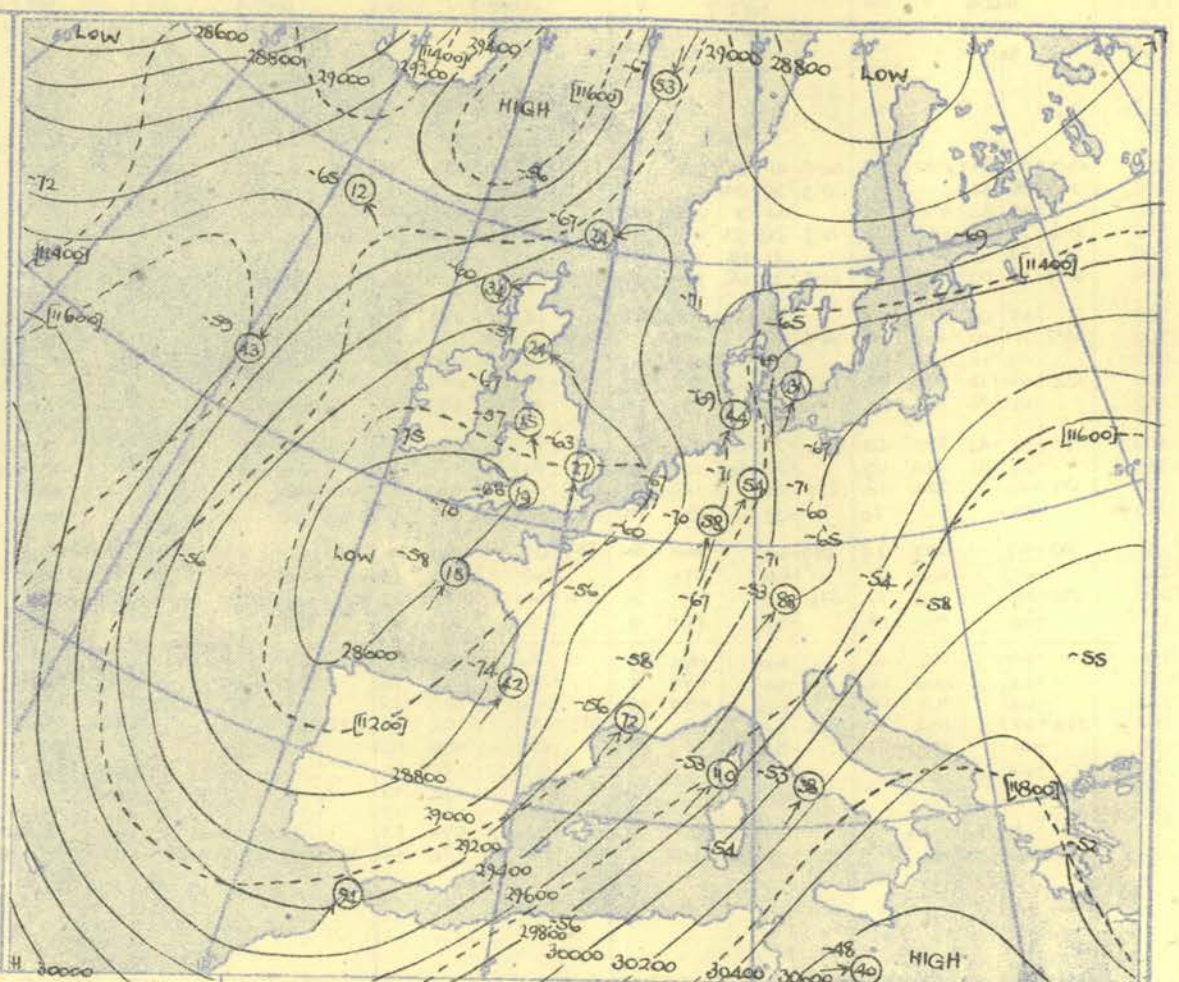
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03h G.M.T.



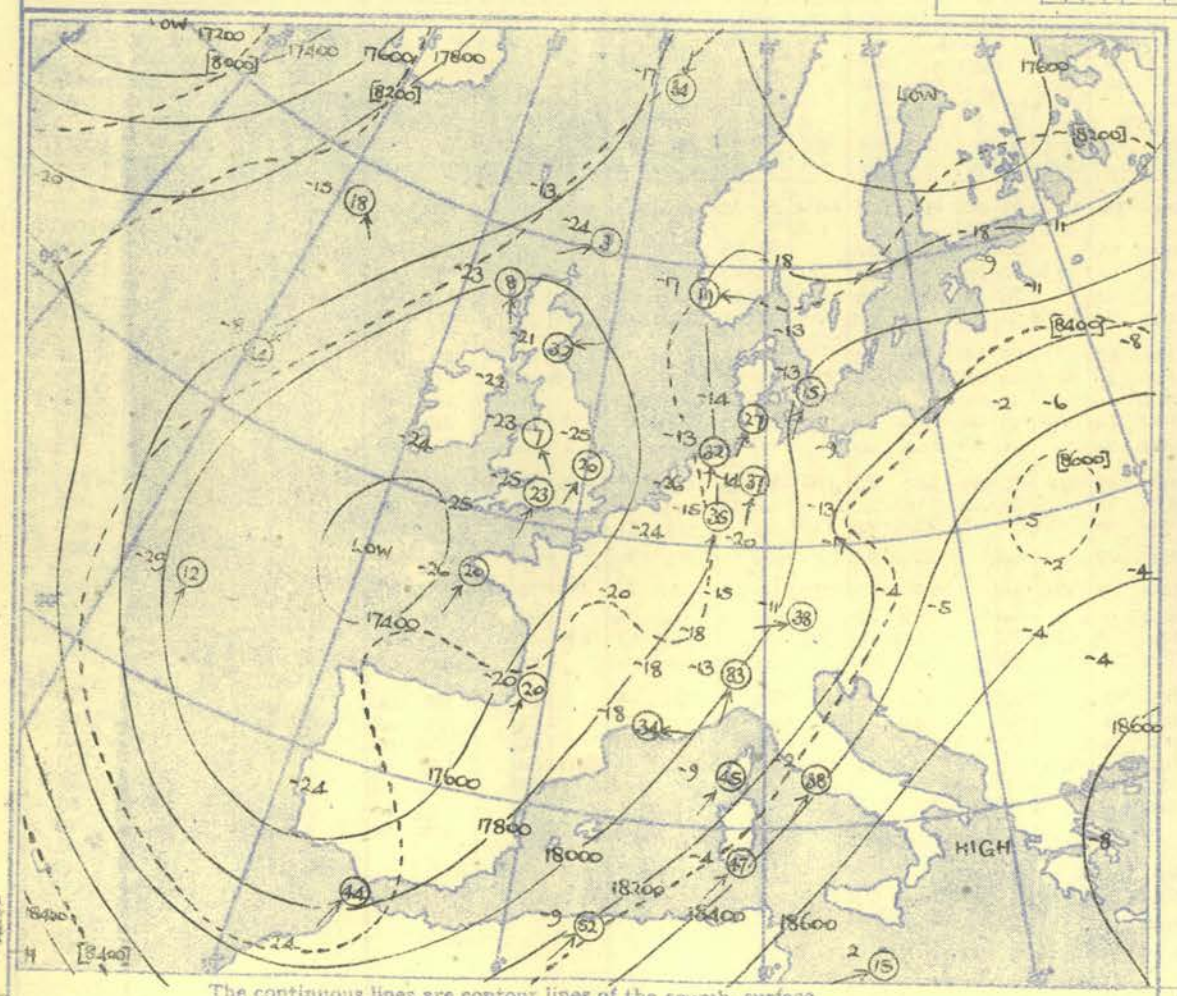
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

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

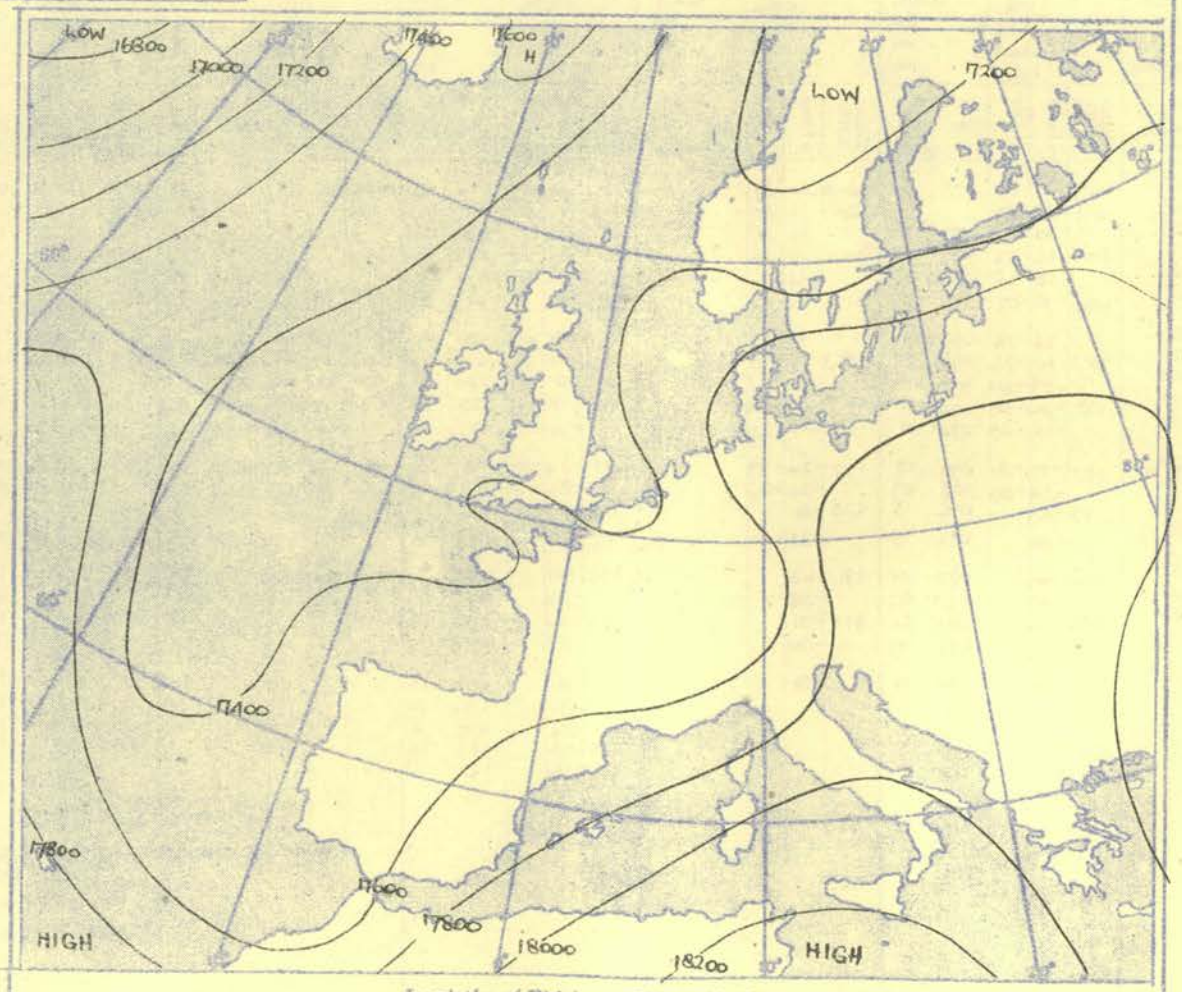




The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 — 300 mb



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



Isopleths of Thickness 500-1000mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	48·1N 17·0W			47·6N 12·3W			51·3N 00·4E		
Time	1245h			1430h			1410h		
Pressure M.S.L.	1016·5 mb			999·8 mb			1008·7 mb		
Pressure Surf	1012·9 mb			996·2 mb			997·3 mb		
Pressure Freezing	900 mb			880 mb			890 mb		
Pressure mb	Height ft./100	°F. Temp.	Dew °F.	Height ft./100	°F. Temp.	Dew °F.	Height ft./100	°F. Temp.	Dew °F.
Surf	01·0	46	40	01·0	46	46	03·1	49	40
1000	04·5			00·0					
950		39	37		39	39			
900	32·6	31	31	28·1	33	33	30·5		
850		24			26				
800	63·1	20		58·7	21		61·2		
750		14			16				
700	96·9	08		92·6	12		95·5		
650		00			03				
600	135	-08		131	-06		134		
550		-18			-15				
500	178	-24		174	-25		177		
450									
400							227		
350									
300							289		
250									
200									
170	Cloud 4Cu. 8 890-670mb 2Cu. 8 890-750-			Cloud 2Cb. 8 950-5xxmb 4 Cu. 8 930-730-			Cloud 5 Cu. 8 930-850mb 1Cs. 8 305-300-		

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

Place	Downham Market		Downham Market		Leuchars	
Time	03h		21h		21h	
Type	Pilar				Pilar	
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.	100	06	100	06		
1,000			150	10		
2,000			150	10		
3,000			140	09		
4,000			150	08		
5,000			160	08		
6,000			170	05		
8,000			170	13		
10,000			180	12		
14,000			200	10		
18,000			210	22		
24,000			220	35		
30,000			210	32	114	13
40,000	160	20	170	18	102	11
50,000			160	10	092	12
			100	25	118	11
			(90,000')		(62,000')	

NEPHOSCOPE OBSERVATIONS

Place	
Time Type	NONE REPORTED.
Dir. Vel.	

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

Ship	Weather Recorder					Weather Recorder				
Lat/Long	59·1°N 19·2°W					59°N 19°W				
Time	02hrs G.M.T.					09hrs G.M.T.				
Pressure M.S.L.	1015 mb					1014 mb				
Pressure Surf	1015 mb					1014 mb				
Pressure Freezing	945 mb					– mb				
Pressure mb	Height ft./100	°F. Temp.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	~	44	31	230	09	~	43	38	170	06
1000	3·9	42	30	191	06	3·7	41	36	188	06
950		32	24	185	07		35	30	184	07
900	31·7	25	19	178	07	31·6	30	23	176	06
850		29	17	161	07		26	16	138	04
800	62·2	23	10	117	12	62·3	16	12	090	03
750		15	07	092	18		18	08	081	07
700	96·0	06	-5	092	21	96·3	09	02	079	13
650		06	-11	105	22		14	06	074	21
600	134	05	-7	111	16	135	08	00	069	23
550		-4	-16	106	18		-3	-12	056	28
500	179	-15	-25	098	18	179	-11	-20	059	27
450		-26	-40	083	19		-22	-32	067	30
400	230	-39	-50	099	19	231	-34	-44	065	26
350		-51		124	18		-48		066	30
300	293	-65		098	12	295	-62		090	21
250		-79		150	09		-77		084	21
200	376	-74		168	09	378	-77		106	05
170		-75		182	09		-70		235	05
150		-76					-64		310	04
130		(163)					-60		056	06
110							-62		184	11
100						524	-62		180	11
90							-63		171	14
80							-63		168	15
70							-62		162	13
60							-62			
	Inversion 890mb 23°-850mb 29° 654mb 3°-639mb 12°					Inversion 890mb 23°-850mb 28° 655mb 3°-635mb 12°				
Tropopause	II 223mb -81° 35300'					II 250 mb -77° 33400'				

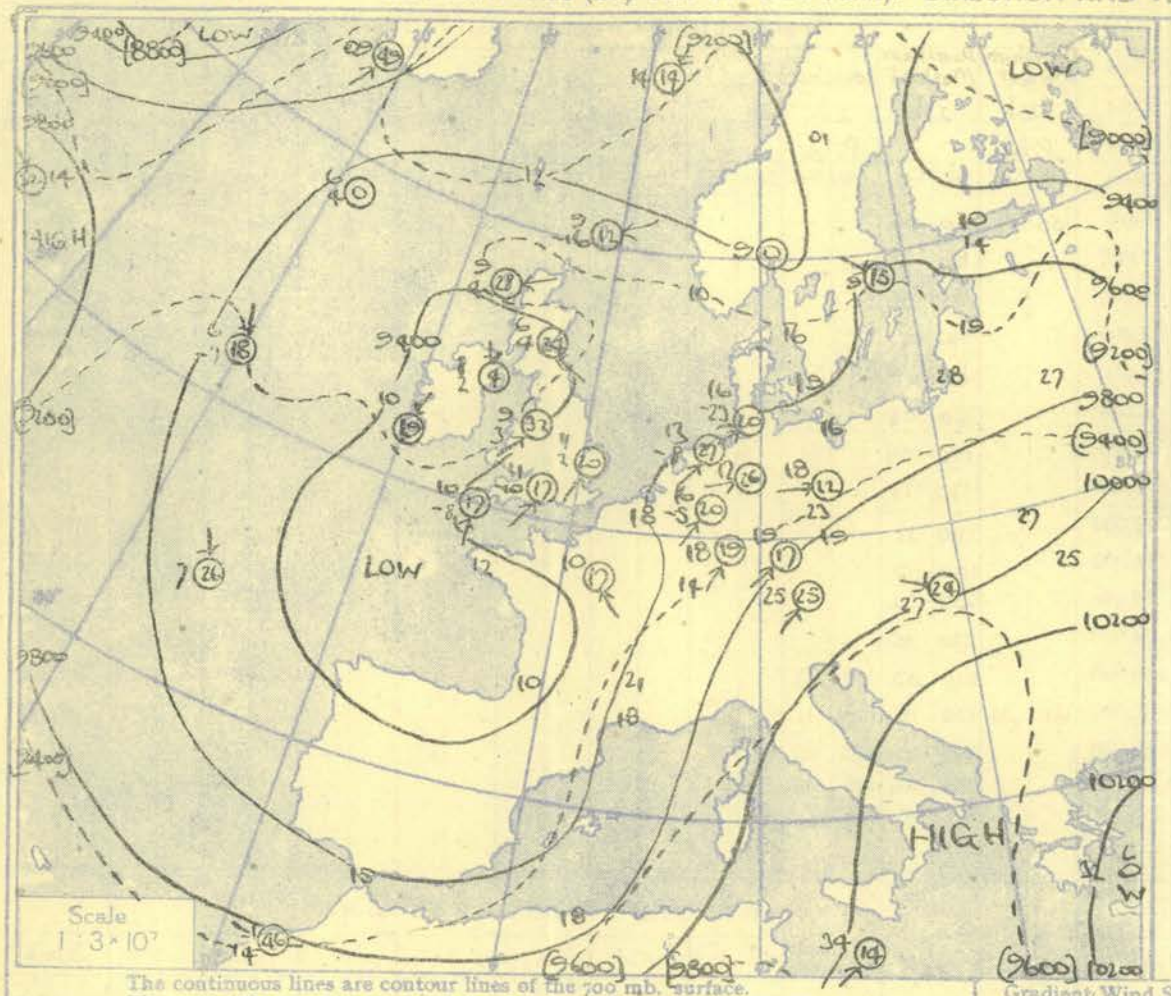
Ship	Weather Recorder					Weather Recorder				
Lat/Long	59·1°N 19°W					59·1°N 19°W				
Time	15hrs G.M.T.					21hrs G.M.T.				
Pressure M.S.L.	1015 mb					1016 mb				
Pressure Surf	1015 mb					1016 mb				
Pressure Freezing	940 mb					960 mb				
Pressure mb	Height ft./100	°F. Temp.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	~	44	40	calm		~	43	39	265	05
1000	4·1	41	37	"		4·2	40	36	263	02
950		34	31	"			30	26	263	04
900	31·8	28	25	"		31·3	25	21	279	04
850		23	21	"			21	16	272	05
800	62·1	18	16	"		62·1	15	10	277	07
750		12	10	"			10	05	357	06
700	95·7	06	04	"		95·6	04	-1	007	11
650		-1	-4	"			-4	-12	349	10
600	133	-6	-12	"		133	-12	-24	266	05
550		-8	-27	"			-12	-31	162	07
500	177	-17	-38	"		176	-22	-41	129	06
450		-26	-47	"			-36	-53	112	06
400	229	-38	-57	"		227	-47		061	06
350		-52		elevation over 80°			-54		081	09
300	291	-64				289	-64			
250		-71					-65			
200	376	-64		231	04	(293)				
170		-58		227	05					
150		-57		222	05					
130		-59		217	07					
110		-62		208	06					
100	524	-54		203	06					
90		-53		198	05					
80		-53		185	06					
70										
60										
	Isothermal 611-600mb -6° Inversion 600mb -6°-564mb -5°					Inversion 605mb -13°-575mb -7°				
Tropopause	I 241 mb -72° 33700'					NR.				

Ship	Weather Explorer					Weather Explorer				
Lat/Long	52·5°N 20·1°W					52·5°N 20·1°W				
Time	03hrs G.M.T.					09hrs G.M.T.				
Pressure M.S.L.	1013 mb					1012 mb				
Pressure Surf	1013 mb					1012 mb				
Pressure Freezing	920 mb					910 mb				
Pressure mb	Height ft./100	°F. Temp.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	~	45	29	360	03	~	45	33	330	07
1000	3·4	43	28	353	09	3·1	43	30	347	10
950		36	23	012	09		37	32	043	06
900	31·2	29	16	020	08	31·1	30	25	026	07
850		22	10	356	07		25	20	004	11
800	61·5	19	01	355	07	61·6	18	15	341	11
750		14	-11	007	09		13	03	318	07
700	95·2	08	-22	024	13	95·3	06	-4	313	08
650		04	-14	014	23		03	-4	300	07
600	133	00	-12	005	31	133	00	-8	006	31
550		02	-22	019	39		-4	-19	006	32
500	178	-8	-33	016	44	178	-10	-24	011	26
450		-19	-43	015	43		-21	-33	357	31
400	230	-31	-54	008	42	230	-33	-44	348	29
350		-48		350	51		-46		348	34
300	294	-63		001	43	293	-61		347	24
250		-69		010	35		-67		352	22
200	378	-72		012	29	378	-66		026	14
170		-62		013	15		-59		354	10
150		-61					-58		337	09
130		(162)					-61		356	06
110							-62		046	03
100						525	-63		003	03
90							-60			
80										
70										
60										
	Inversion 600mb 0°-558mb 3°					Isothermal 777-760mb 14° 693-665mb 5° 650-640mb 3° 558-550mb -4° Inversion 628mb -7°-600mb 0° 550mb -4°-540mb -2°				
Tropopause	I 228 mb -74° 35100'					I 222 mb -75° 35600'				

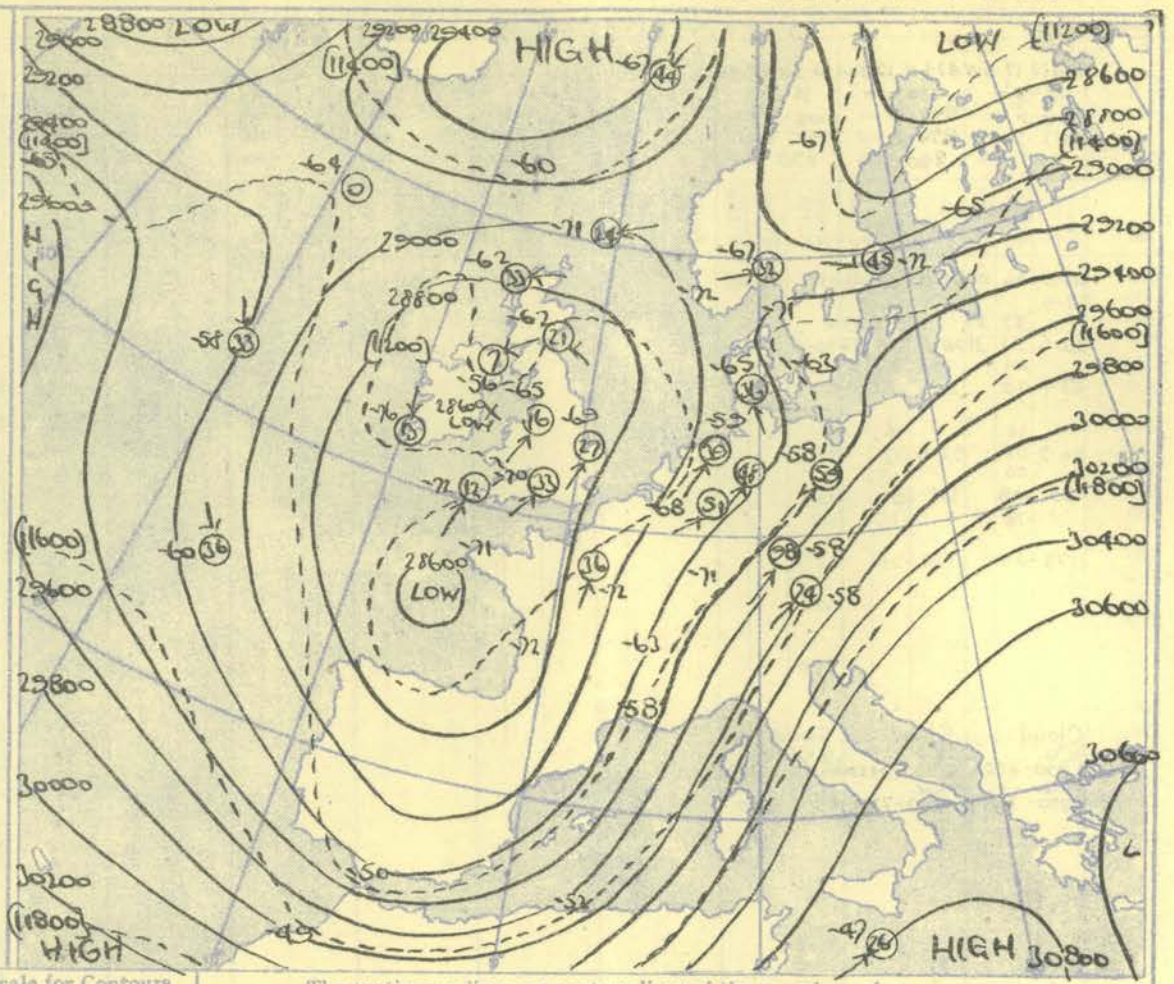
Ship	Weather Explorer					Weather Explorer				
Lat/Long	52·4°N 20·4°W					52·4°N 20·5°W				
Time	15hrs G.M.T.					21hrs G.M.T.				
Pressure M.S.L.	1013 mb					1015 mb				
Pressure Surf	1013 mb					1015 mb				
Pressure Freezing	910 mb					915 mb				
Pressure mb	Height ft./100	°F. Temp.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	~	44	35	320	11	~	44	35	350	18
1000	3·5	43	33	344	14	3·9	43	34	344	19
950		37	24	360	12		36	30	351	16
900	31·5	31	19	017	11	31·9	30	21	353	15
850		24	12	016	10		25	18	343	15
800	61·9	17	07	010	10	62·3	19	12	331	16
750		11	02	354	15		13	06	333	20
700	95·3	06	-7	345	18	95·9	07	00	335	24
650		00	-10	328	25		00	-7	340	25
600	133	-1	-17	338	26	134	00	-7	339	28
550		-6	-24	348	28		-6	-14	338	33
500	177	-14	-27	348	38	178	-15	-24	335	40
450		-24	-37	348	36		-25	-34	337	45
400	229	-35	-48	348	40	230	-35	-46	335	45
350		-47		348	43		-48		329	48
300	393	-58		348	33	293	-61		322	44
250		-65		348	19		-72		320	36
200	378	-66		348	18	377	-64		332	17
170		-56		345	15		-59		333	15
150		-56		348	11		-58		335	08
130		-57		Calm			-58		347	05
110		-56		"			-61		014	04
100	526	-58		"		525	-62		020	03
90		-58		"			-63		038	08
80		-56		"			-61		060	10
70		-57		"		(75)	-60			
60		-52		"						
		-52		"						
	(48)	-48		"						
	Inversion 612mb -4°-600mb -1°					Isothermal 651-590mb 0°				
Tropopause	II 231 mb -65° 34800'					I 248 mb -73 35200'				

February 12th 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

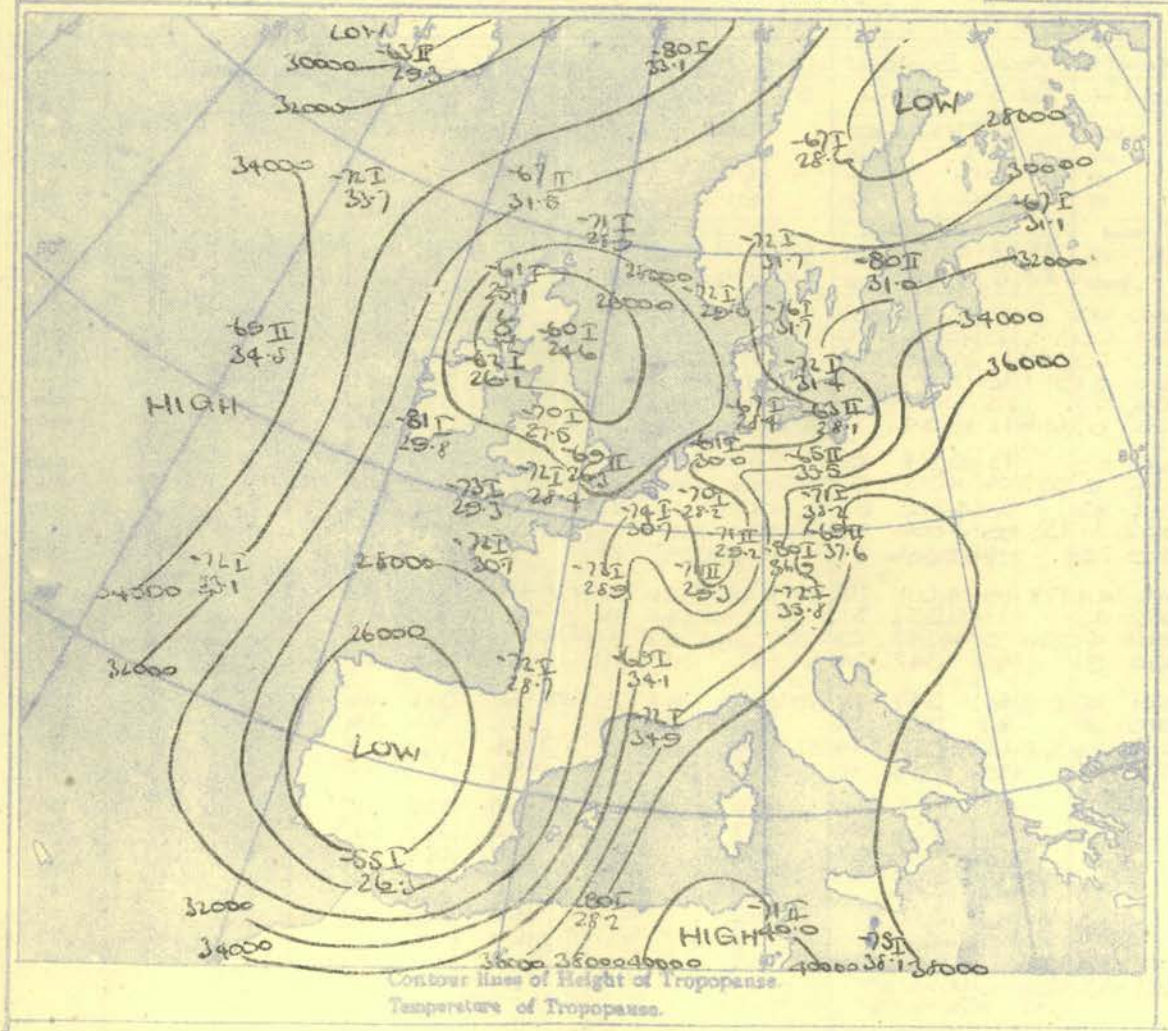


The continuous lines are contour lines of the 300mb. surface
The dotted lines are isopleths of the thickness of the layer 500 - 300 mb.

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.

Marked cooling to West of the British Isles in about longitude 20°W.

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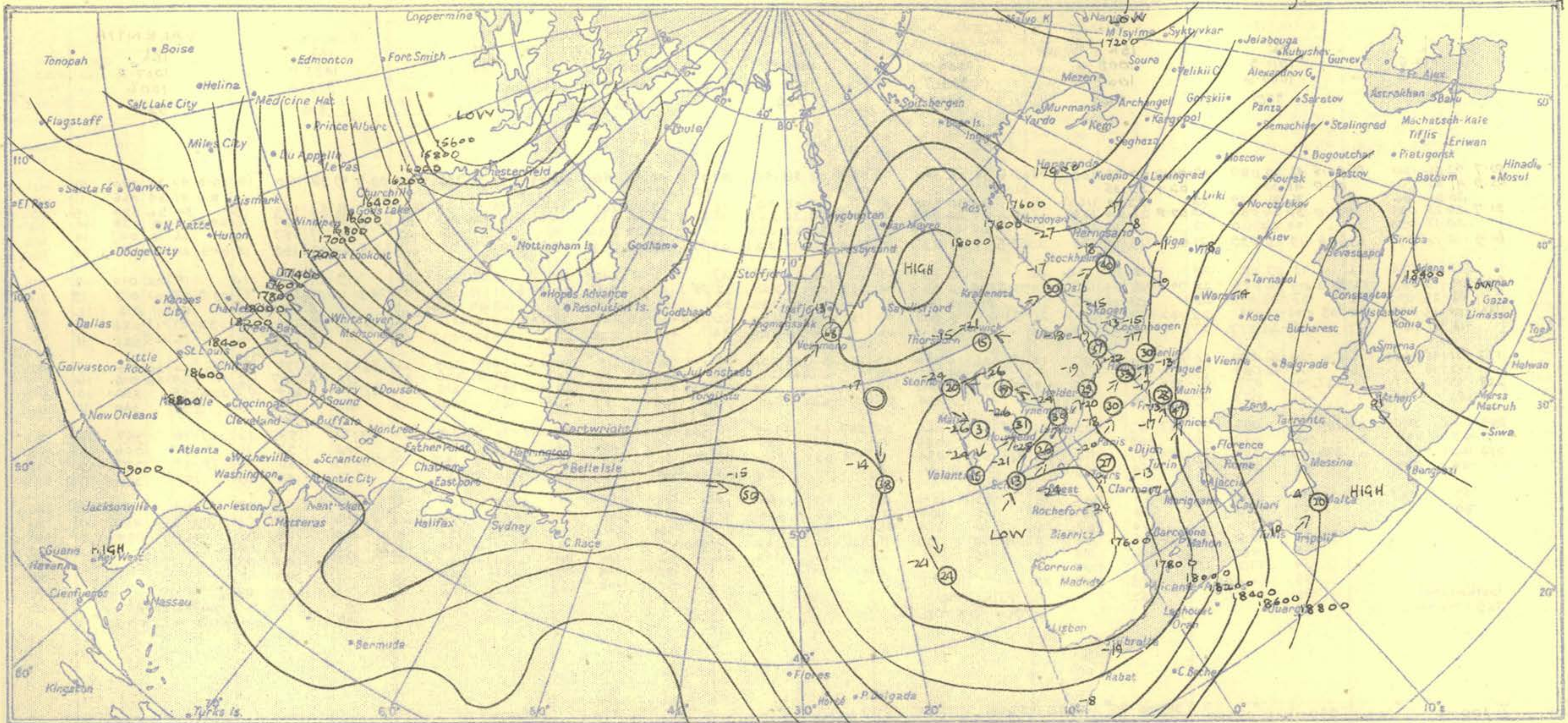
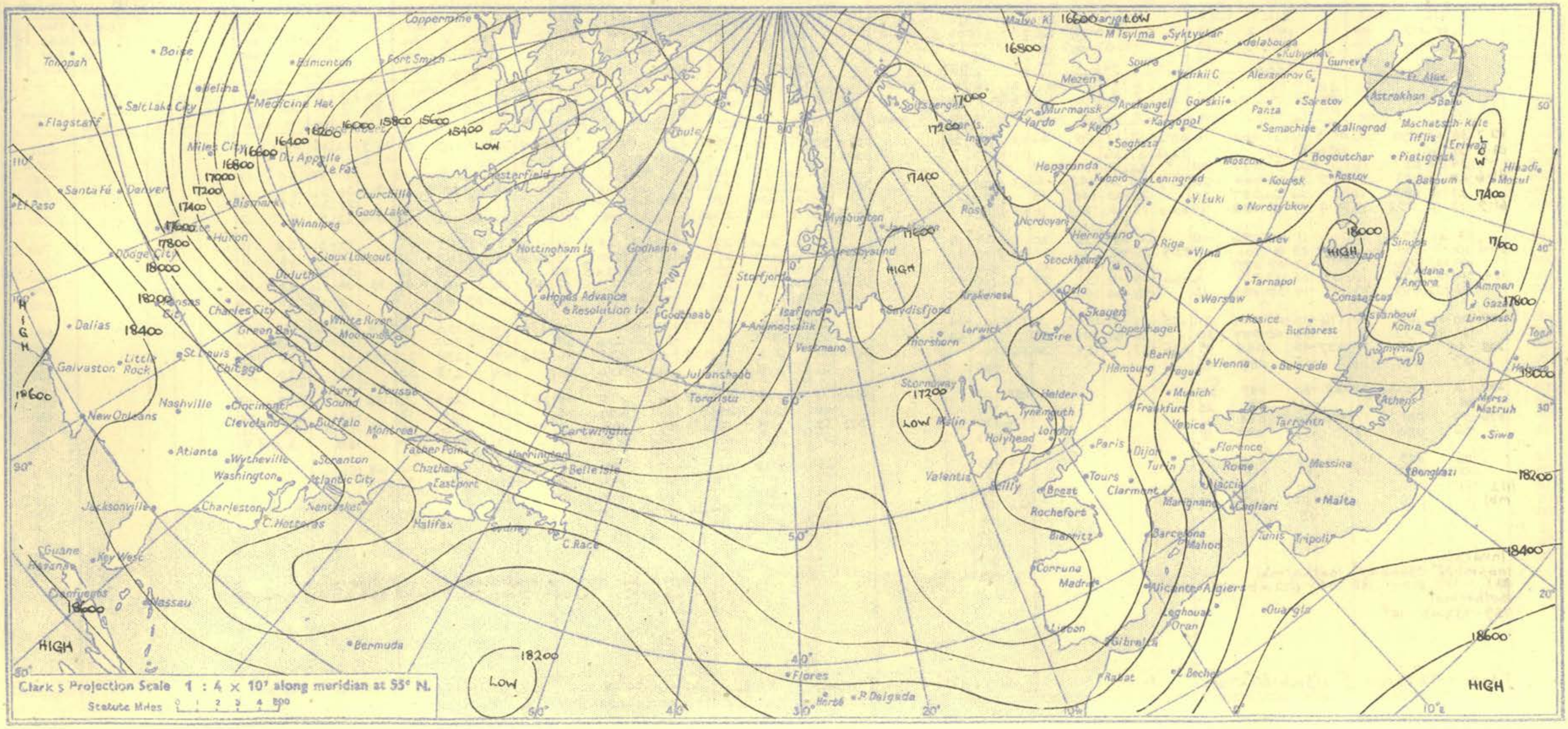
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

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



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Monday 12th February, 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Monday 12th February 1951.

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

15h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.
Pressure: M.S.L.	1014·6 mb	1011·3 mb	1008·0 mb	1004·9 mb	1006·1 mb	1003·3 mb	1006·5 mb	1003·9 mb	1007·4 mb
Pressure: Surf	1004·3 mb	1009·6 mb	1007·1 mb	995·7 mb	1009·0 mb	1007·8 mb	990·4 mb	993·4 mb	1006 mb
Pressure: Freezing	932 mb	920 mb	950 mb	943 mb	926 mb	878 mb	888 mb	868 mb	935 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LERWICK					
Surf	02·7	42	36	120	09
1000	03·9	41	35		
950		35	31	104	13
900	31·7	26	23	098	15
850		20	17	098	14
800	61·9	14	12	090	13
750		10	-04	086	12
700	95·3	09	-15	083	12
650		02	-23	090	14
600	133	-05	-33	090	20
550		-13	-41	081	17
500	177	-21	-45	093	15
450		-32	-48	120	13
400	228	-43		167	12
350		-58		158	17
300	289	-11		080	24
250		-67		080	34
200	374	-60		085	21
170		-58		089	17
150		-59		087	18
130		-60			
110					
100					
90					
80					
70					
60					

Isothermal 759 - 730 mb 10°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
STORNOWAY					
Surf	00·5	42	35	080	10
1000	03·0	41	35		
950		36	31	079	23
900	31·0	30	26	086	23
850		24	20	100	19
800	61·5	19	15	095	21
750		13	09	081	24
700	95·2	09	04	078	28
650		03	-03	077	26
600	133	-04	-13	081	22
550		-13	-24	077	27
500	178	-24	-38	084	20
450		-36	-45	089	33
400	227	-45		077	47
350		-61		073	49
300	289	-62		093	33
250		-64		080	26
200	376	-55		084	32
170		-52		084	17
150		-55		078	17
130		-57		090	15
110		-57		090	10
100	525	-56		105	12
90		-55		148	13
80		-54		170	10
70		-55		L and V	
60		-55		..	
		-54			

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LEUCHARS					
Surf	00·2	40	36	130	08
1000	02·1	39	35		
950		32	28	116	18
900	29·8	26	24	133	17
850		23	20	136	18
800	60·1	19	15	138	20
750		13	10	144	22
700	94·0	06	04	139	24
650		03	-06	132	23
600	132	-03	-17	126	21
550		-14	-31	123	20
500	175	-26	-40	122	19
450		-39	-51	120	18
400	225	-51		122	18
350		-58		120	16
300	287	-62		105	21
250		-58		113	30
200	374	-57		111	27
170		-54		109	27
150		-53		102	16
130		-53		118	14
110		-54		107	06
100	624	-55		103	10
90		-56		108	15
80		-57		138	15
70		-55		083	05
60		-52			

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
ALDERGROVE					
Surf	02·6	38	35	340	05
1000	01·4				
950		33	30	340	09
900	29·2	27	24	348	09
850		24	21	024	07
800	59·5	18	13	032	07
750		15	10	002	06
700	93·3	08	02	345	04
650		01	-06	340	02
600	131	-08	-15	308	02
550		-17	-24	304	02
500	174	-26	-34	294	03
450		-34	-44	180	02
400	225	-47		056	05
350		-60		054	05
300	287	-56		064	07
250		-57		084	13
200	379	-56		084	11
170		-53		091	14
150		-53		094	15
130		-53		108	11
110		-56		124	08
100	524	-58		102	11
90		-58			

Isothermal 780 - 758 mb 16°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LIVERPOOL					
Surf	00·6	42	36	190	09
1000	01·6				
950		35	31	194	15
900	29·5	30	26	227	15
850		24	22	233	17
800	60·0	19	15	221	23
750		16	07	217	27
700	93·8	09	03	220	32
650		02	-10	232	34
600	132	-06	-22	230	35
550		-16	-26	228	34
500	175	-26	-33	224	31
450		-37	-43	219	27
400	226	-48		208	24
350		-60		210	25
300	287	-65		209	16
250		-54		157	13
200	374	-53		140	09
170		-50		136	13
150		-50		150	14
130		-50		133	10
110		-50		141	10
100	525	-50		142	13
90		-51		162	09
80		-51			

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
DOWNHAM MARKET					
Surf	01·2	48	43	160	08
1000	02·1	47	42		
950		39	36	201	11
900	30·3	34	30	215	14
850		29	24	226	14
800	61·1	23	18	222	18
750		18	11	214	20
700	95·1	11	02	211	20
650		03	-08	218	25
600	133	-04	-16	221	27
550		-14	-26	220	27
500	177	-24	-37	213	30
450		-37	-49	207	30
400	227	-51		208	29
350		-65		209	26
300	288	-69		201	27
250		-59		201	23
200	374	-55		187	19
170		-54		170	18
150		-55		164	19
130		-51		161	12
110		-55		140	15
100	524	-56		157	12
90		-56		208	04
80		-58		048	09
70		-60		104	16

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LARKHILL					
Surf	04·4	47	41	170	04
1000	01·8				
950		40	36	158	09
900	30·0	34	26	180	03
850		27	19	195	10
800	60·6	23	10	202	14
750		18	00	205	16
700	94·6	11	-10	208	17
650		03	-19	206	19
600	133	-05	-25	210	23
550		-16	-32	212	23
500	176	-25	-41	209	26
450		-37	-50	220	26
400	226	-49		218	31
350		-61		225	39
300	287	-70		218	33
250		-60		203	23
200	373	-56		187	19
170		-62		182	15
150		-59		167	15
130		-52		174	14
110		-51		197	06
100	624	-54		168	06
90		-54		185	07
80		-56		122	03
70		-55		132	13

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
CAMBORNE					
Surf	02·9	99	38	150	10
1000	01·1				
950		46	34	143	15
900	29·5	38	26	149	16
850		30	17	159	16
800	60·3	24	08	168	15
750		19	-01	177	14
700	94·3	13	-08	181	17
650		06	-16	188	18
600	133	-02	-19	194	14
550		-11	-29	194	16
500	176	-21	-40	198	13
450		-32	-50	207	12
400	227	-44		214	09
350		-58		195	12
300	289	-72		193	12
250		-62		197	10
200	375	-56		180	07
170		-54		183	10
150		-52		157	07
130		-53		130	06
110		-60		166	05
100	525	-51		117	08
90		-52		144	09
80		-53		199	06
70		-53		230	07
60		-55			
		-56			

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
VALENTIA					
Surf	00·3	42	35	070	10
1000	2·0	41	34	066	11
950		34	26	039	15
900	29·8	28	19	028	14
850		26	16	027	14
800	60·3	20	05	026	16
750		14	02	014	18
700	93·9	07	-02	012	19
650		00	-11	012	12
600	132	-07	-17	026	10
550		-15	-25	021	11
500	175	-24	-36	015	15
450		-34	-48	014	16
400	226	-45		352	10
350		-59		340	10
300	287	-76		359	13
250		-60		006	16
200	373	-57		027	12
170		-57		046	11
150		-54		050	12
130		-55		062	11
110		-56		039	10

Isothermal 800 - 872 mb 28°

Tropopause	I 300 mb -71° 28,900	I 350 mb -61° 25,600	I 363 mb -60° 24,600 I 300 " -62° 28,700	I 338 mb -62° 26,100	I 316 mb -70° 27,600
Tropopause	II 334 mb -69° 26,300	I 305 mb -72° 28,400	I 296 mb -73° 29,300	I 283 mb -81° 29,900	

21h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	G.M.T.
Pressure: M.S.L.	1014·7 mb	1011·2 mb	1008·4 mb	1006·5 mb	1008·4 mb	1009·7 mb	1008·6 mb	1006·1 mb	mb
Pressure: Surf	1004·5 mb	1009·5 mb	1007·5 mb	997·2 mb	1006·3 mb	1005·3 mb	992·0 mb	995·4 mb	mb
Pressure: Freezing	931 mb	922 mb	946 mb	938 mb	918 mb	mb	896 mb	874 mb	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LERWICK					
Surf	02·7	38	35	090	09
1000	03·9	39	35		
950		34	30	087	16
900	31·6	28	21	093	14
850		21	16	094	13
800	61·9	17	10	092	12
750		14	01	093	10
700	96·6	10	-11	099	10
650		04	-21	096	14
600	134	-03	-27	098	16
550		-11	-32	099	19
500	177	-20	-35	100	16
450		-31	-40	092	17
400	228	-44		098	17
350		-59		127	18
300	290	-72		090	28
250		-61		094	31
200	376	-56		081	17
170		-66		080	18
150		-56		079	15
130		-58		082	10
110	(112	-61			
100	mb)				
90					
80					
70					
60					

Inversion 1005 mb 38° - 996 mb 40°
821 - 17° 810 " 18°
Isothermal 759 - 733 mb 14°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
STORNOWAY					
Surf	00·5	41	37	060	10
1000	03·0	40	36		
950		35	31	067	24
900	30·9	30	26	084	22
850		24	20	087	20
800	61·4	17	15	088	19
750		11	08	096	18
700	94·9	05	01	101	19
650		02	-09	099	15
600	133	-05	-19	091	16
550		-14	-30	093	16
500	176	-25	-44	086	24
450		-36	-50	087	30
400	227	-45		088	99
350		-55		088	45
300	289	-60		089	30
250		-61		091	28
200	375	-56		084	21
170		-57		072	18
150		-55		075	18
130		-55		066	14
110		-56		106	11
100	525	-57		109	11
90		-58			
80					
70					
60					

Isothermal 704 - 672 mb 05°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LEUCHARS					
Surf	00·2	37	37	150	04
1000	02·2	37	36		
950		32	29	174	09
900	29·9	28	24	146	15
850		23	20	140	18
800	60·3	18	16	137	16
750		12	09	132	20
700	93·9	05	03	124	21
650		-01	-02	118	22
600	132	-09	-11	131	23
550		-18	-24	143	25
500	175	-25	-39	143	28
450		-35	-52	148	26
400	225	-47		159	24

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
ALDERGROVE					
Surf	02·6	37	35		
1000	01·8				
950		33	31		
900	29·6	29	26		
850		24	21		
800	60·1	19	17		
750		14	10		
700	93·9	08	00		
650		04	-07		
600	132	-05	-14		
550		-15	-22		
500	175	-26	-34		
450		-34	-44		
400	226	-44			
350		-55			
300	288	-57			
250		-55			
200	376	-52			
170		-53			
150		-53			
130		-53			
110		-52			
100	526	-51			
90		-54			
80		-56			
70		-66			
60		-67			
		-58			

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LIVERPOOL					
Surf	00·6	38	36	170	05
1000	02·2				
950		35	32	178	10
900	30·1	30	26	200	07
850		23	22	204	18
800	60·5	20	18	211	20
750		13	10	224	22
700	94·2	06	03	219	25
650		-01	-07	218	29
600	132	-08	-20	219	27
550		-17	-27	219	30
500	175	-27	-36	221	29
450		-39	-48	219	28
400	225	-51		218	26
350		-63		218	29
300	286	-73		208	19
250		-60		211	08
200	372	-58		178	10
170		-57		137	07
150		-55		078	06
130		-57		101	14
110		-57		131	11
100		-59		107	06
90		-61		076	13

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
DOWNHAM MARKET					
Surf	01·2	38	37	090	05
1000	02·6	39	37		
950		41	31	079	11
900	30·8	35	27	148	10
850		28	23	143	09
800	61·5	23	17	168	11
750		17	07	178	11
700	95·4	12	-10	190	13
650		04	-23	198	22
600	133	-06	-30	211	12
550		-12	-36	214	27
500	177	-23	-47	213	28
450		-35	-56	215	27
400	227	-47		231	36
350		-61		236	43
300	289	-74		213	44
250		-65		208	24
200	374	-57		199	18
170		-55		172	16
150		-52		169	13
130		-55		169	10
110		-55		168	10
100	524	-54			
90					
80					
70					
60					

Inversion 1005 mb 38° - 971 mb 44°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LARKHILL					
Surf	04·4	36	34	160	03
1000	02·2				
950		39	28	129	13
900	30·1	33	23	141	12
850		27	19	141	12
800	60·7	22	04	145	16
750		17	-09	152	17
700	94·6	10	-17	157	16
650		03	-25	159	14
600	133	-04	-31	181	09
550		-15	-39	193	15
500	176	-26	-48	193	16
450		-37	-57	202	17
400	226	-49		234	20
350		-63		218	33
300	287	-79		209	35
250		-67		198	18
200	371	-61		195	15
170		-59		188	14
150		-55		186	10
130		-58		181	09
110		-61			

Inversion 992 mb 36° - 977 mb 41°

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
CAMBORNE					
Surf	02·9	42	38	090	12
1000	01·6				
950		41	37	140	12
900	29·8	36	26	164	15
850		29	22	158	13
800	60·6	23	11	157	12
750		19	-01	158	11
700	94·5	11	-05	168	11
650		04	-09	179	10
600	133	-04	-16	182	13
550		-12	-27	180	14
500	176	-22	-38	190	09
450		-32	-48	223	06
400	228	-46		233	15
350		-62		220	21
300	288	-74		210	19
250		-63		208	08
200	373	-58		190	03
170		-56		Land V	
150	(158	-56			
130	mb)				
110					
100					
90					
80					
70					
60					

Inversion 995 mb 42° - 990 mb 43°

Tropopause	I 300 mb -72° 29,000'	II 313 mb -60° 27,900'	N.R.	I 320 mb -59° 27,400'	I 313 mb -74° 27,600'
Tropopause	300 mb -74° 28,900'	I 298 mb -80° 28,800'	I 300 mb -74° 28,800'		

HMSO Press, MO, Dunstable.

No. 11643 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Tuesday 13th February 1951. Page 1.

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

Station	LERWICK					STORNOWAY					LEUCHARS				
Pressure Time	03hrs G.M.T.					03hrs G.M.T.					03hrs G.M.T.				
Pressure M.S.L.	1014·6 mb					1010·9 mb					mb				
Pressure Surf	1004·3 mb					1008·2 mb					mb				
Pressure Freezing	950 mb					914 mb					mb				
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	36	33	070	03	0·5	41	37	080	05	0·2	33	32	Calm	
1000	03·8	37	34			02·9	41	37			02·4	34	33		
950		32	28	060	11		36	33	090	21		34	30	183	07
900	31·5	25	22	075	10	30·8	30	29	091	18	30·3	29	25	175	09
850		18	16	095	09		26	22	088	18		24	21	166	10
800	61·6	17	06	112	08	61·4	19	15	082	18	60·8	18	14	164	12
750		13	-4	120	07		12	09	089	18		14	08	169	16
700	95·2	07	-12	117	07	95·0	06	03	096	18	94·5	08	00	177	21
650		02	-17	098	09		02	-6	100	16		00	-6	180	25
600	133	-4	-22	087	12	133	-5	-13	091	17	132	-7	-13	177	27
550		-13	-30	092	13		-15	-23	084	25		-15	-23	161	19
500	177	-21	-32	106	15	176	-25	-34	054	27	178	-23	-35	165	20
450		-33	-42	102	19		-36	-46	107	25		-36	-47	177	23
400	227	-44		092	22	227	-47		107	33	226	-50		177	26
350		-58		080	23		-59		098	43		-64		166	20
300	289	-69		086	39	288	-62		091	39	287	-60		133	18
250		-68		092	30		-61		097	28		-56		130	13
200	374	-59		095	19	376	-59		097	20	375	-56		098	10
170		-56		078	16		-56		081	18		-55		098	10
150		-57		089	14		-55		084	16		-51		124	08
130		-57		090	09		-59		084	18		-55		121	06
110		-60		090	05		-58		084	16		-57			
100	523	-60		090	03	523	-59								
90		-60					-60								
80		(99)													
70															
60															
	Inversion 1004 mb 36°-983 mb 38°					Inversion 704 mb 5°-684 mb 7°									
	Isothermal 839-800 mb 17°														
Tropopause	I 275 mb -72° 30700'					I 331 mb -62° 26700'					I 347 mb -65° 25700'				

Station	ALDERGROVE					LIVERPOOL					DOWNHAM MARKET				
Pressure Time	03hrs G.M.T.					03hrs G.M.T.					03hrs G.M.T.				
Pressure M.S.L.	1007·7 mb					1008·9 mb					1009·6 mb				
Pressure Surf	998·4 mb					1006·8 mb					1005·0 mb				
Pressure Freezing	937 mb					902 mb					880 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	02·6	36	34			0·6	38	36	Calm		01·2	33	33	090	02
1000	02·2					02·4					02·6				
950		34	32				37	34	190	10		41	37	100	12
900	30·0	29	26			30·3	32	29	208	11	30·7	38	24	109	11
850		24	20				27	23	191	14		28	15	119	11
800	60·5	20	14			60·9	21	17	188	14	61·4	24	-01	123	12
750		15	09				15	07	208	14		18	-14	133	11
700	94·3	09	00			94·7	11	-4	214	18	95·4	13	-26	148	09
650		02	-7				04	-16	206	22		05	-43	149	10
600	132	-6	-20			133	-4	-20	219	23	134	-3	-39	154	12
550		-16	-29				-13	-30	220	26		-12	-40	168	11
500	178	-25	-36			176	-22	-36	215	27	177	-23	-46	195	11
450		-35	-48				-36	-47	211	30		-33	-54	200	20
400	226	-48				227	-48		219	29	228	-46		211	24
350		-57					-61		221	28		-60		208	32
300	288	-58				288	-67		221	22	289	-73		211	39
250		-54					-61		157	11		-66		210	27
200	376	-52				374	-55		151	10	374	-59		187	17
170		-53					-53		116	07		-57		182	17
150		-52					-52		131	06		-58		207	13
130		-51					-53		154	08		-56			
110		-52					-56		109	08		-59			
100	526	-55				524	-59		097	08	523	-59			
90		-55					-56		072	07		-59			
80							-58								
70															
60															
											Inversion 1005 mb 33°-971 mb 44°				
	Isothermal 998-970 mb 36°										Isothermal 850-828 mb 28°				
Tropopause	I 333 mb -59° 26600'					II 323 mb -69° 27300'					I 287 mb -74° 29600'				

Station	LARKHILL					CAMBORNE					Valentia				
Pressure Time	03hrs G.M.T.					03hrs G.M.T.					03hrs G.M.T.				
Pressure M.S.L.	1007·9 mb					1006·1 mb					1009·2 mb				
Pressure Surf	991·4 mb					995·4 mb					1008 mb				
Pressure Freezing	863 mb					879 mb					mb				
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·4	34	32	100	05	02·9	39	38	090	03	0·3	31	28		
1000	2·1					01·7						33	29		
950		40	31	090	11		42	31	L.V			35	27		
900	30·2	37	23	091	13	29·9	35	25	L.V		30·2	30	23		
850		30	21	095	12		28	22	L.V			24	17		
800	61·1	22	14	101	15	60·6	22	13	L.V		60·7	19	05		
750		20	00	109	07		19	00	141	05		15	-7		
700	95·3	13	-9	123	07	94·6	11	-11	142	09	94·4	06	-10		
650		06	-6	137	09		02	-17	141	09		-2	-13		
600	133	-2	-9	133	10	133	-6	-19	165	07	132	-12	-19		
550		-11	-17	138	08		-16	-28	180	07		-19	-26		
500	177	-20	-29	140	10	176	-27	-39	170	07	175	-28	-36		
450		-31	-39	161	13		-40	-52	148	07		-37	-47		
400	228	-43		172	17	226	-51		164	10	225	-49			
350		-56		187	22		-64		174	13		-62			
300	290	-66		193	33	286	-78		180	16	286	-67			
250		-61		189	19		-71		190	08		-62			
200	376	-54		182	10	370	-62		183	04	372	-56			
170		-51		165	10		-62		185	03		-58			
150		-52		182	13		-61		180	02		-56			
130		-63		188	12		-62		182	03					
110		-52		178	06		-64								
100	527	-53		188	06		(111)								
90		-55		194	07										
80		-53													
70															
60															
	Inversion 991 mb 34°-938 mb 42° 758 mb 20°-763 mb 22°					Inversion 995 mb 39°-970 mb 45°					Inversion 1009 mb 21°-982 mb 38°				
Tropopause	I 286 mb -68° 30000'					I 300 mb -78° 28600'					I 317 mb -72° 27400'				

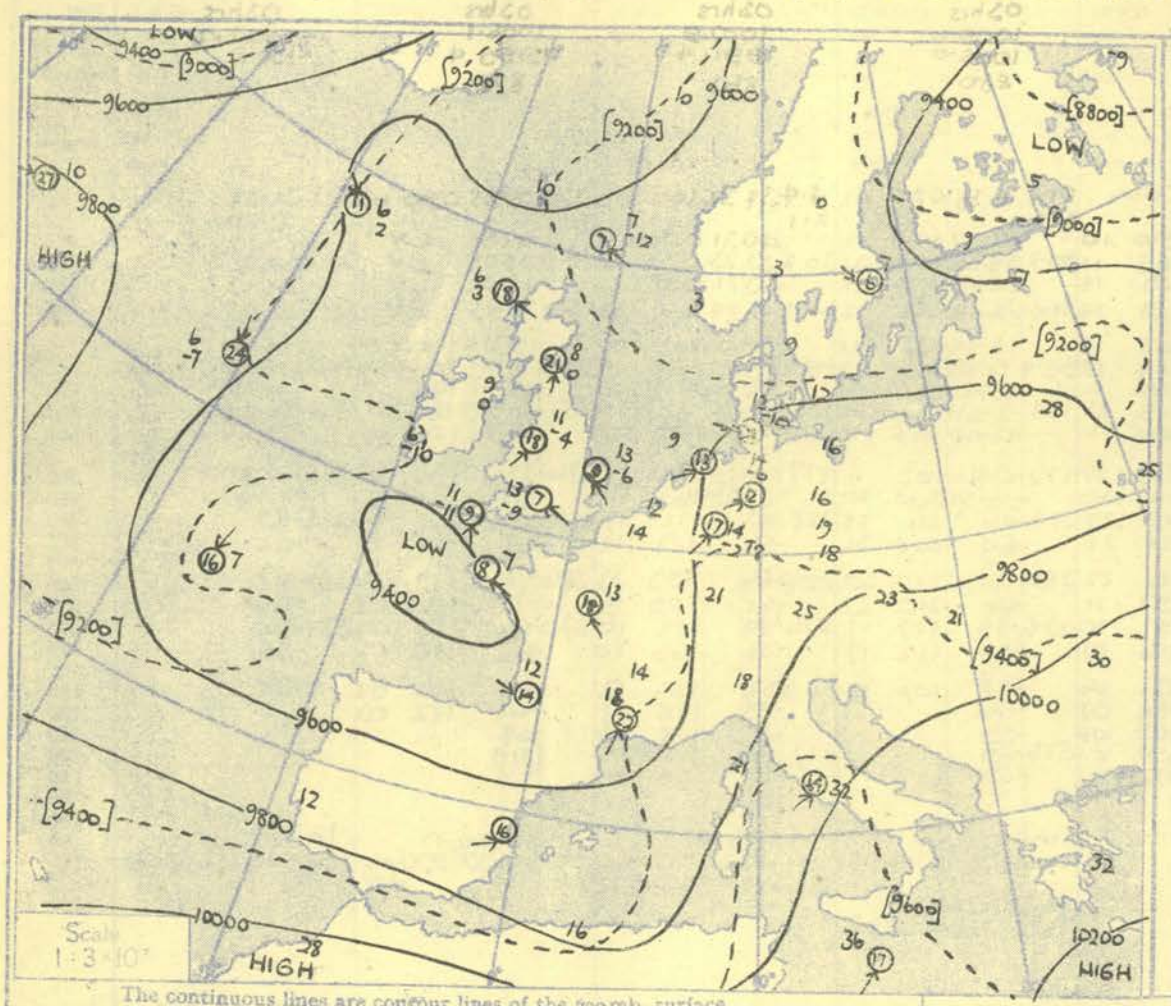
Station	LERWICK					STORNOWAY					LEUCHARS				
Pressure Time	09hrs G.M.T.					09hrs G.M.T.					09hrs G.M.T.				
Pressure M.S.L.	1003·5 mb					1010·7 mb					mb				
Pressure Surf	1013·8 mb					1009·0 mb					mb				
Pressure Freezing	949 mb					930 mb					mb				
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	32	31	Calm		0·5	41	37			0·2	35	34	Calm	
1000	03·6	33	32			02·9	40	37			02·8	35	34	119	11
950		32	28	072	07		33	33				33	30	128	10
900	31·2	26	23	055	07	30·8	29	28			30·5	27	24	145	09
850		21	15	120	05		24	22				23	20	160	12
800	61·4	17	07	L.V		61·3	19	16			60·8	17	13	177	13
750		14	00	L.V			12	08				12	08	189	16
700	95·1	09	-13	L.V		94·9	05	01			94·4	05	01	185	33
650		02	-13	175	08		-2	-5				-1	-8	187	29
600	133	-6	-26	130	08	133	-6	-11			132	-8	-20	186	30
550		-15	-28	100	11		-14	-21				-17	-28	180	27
500	176	-22	-40	080	16	176	-24	-33			175	-27	-38	184	24
450		-33	-51	068	15		-34	-44				-36	-48	188	24
400	227	-44		084	22	226	-46				226	-51		188	25
350		-55		091	46		-55					-60		182	19
300	289	-68		088	50	287	-59				287	-69		171	14
250		-69		088	26		-58					-59		136	08
200	374	-56		088	15	376	-55				373	-57		122	09
170		-55		072	12		-54					-57		097	06
150		-56		060	09		-52					-54		088	10
130		-58		052	06		-54					-55			
110		-60		053	08		-53								
100	523	-58				526	-54								
90							-54								
80							-54								
70							-55								
60															
	Inversion 1003 mb 32°-985 mb 37°														
	Isothermal 877-863 mb 23°														
Tropopause	I 274 mb -73° 30700'					III 319 mb, -59° 27500'					I 295 mb -71° 28800'				

Station	ALDERGROVE					LIVERPOOL					DOWNHAM MARKET				
Pressure Time	09hrs G.M.T.					09hrs G.M.T.					09hrs G.M.T.				
Pressure M.S.L.	1009·3 mb					1009·9 mb					1010·2 mb				
Pressure Surf	999·8 mb					1007·8 mb					1004·6 mb				
Pressure Freezing	960 mb					911 mb					872 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	02·6	36	34	calm		0·6	36	35	calm		01·2	37	35	040	11
1000	02·5					02·6					02·9	38	35		
950		31	29	234	05		37	31	117	10		35	34	080	26
900	30·2	26	23	234	05	30·5	30	25	125	07	30·6	35	29	105	30
850		21	14	227	07		24	20	127	06		29	20	089	21
800	60·5	17	12	226	10	60·9	19	08	153	09	61·4	22	20	095	17
750		11	01	232	13		15	-11	200	10		17	13	099	16
700	94·0	04	-4	245	16	94·7	09	-21	211	14	95·3	11	-1	091	16
650		-4	-11	239	20		03	-23	202	13		04	-12	086	14
600	131	-10	-22	237	21	133	-8	-34	207	14	133	-3	-9	088	13
550		-13	-31	252	18		-19	-46	212	13		-11	-19	114	07
500	175	-24	-45	252	19	176	-25	-52	217	15	177	-20	-30	206	11
450		-36	-57	248	24		-38	-56	221	17		-31	-48	195	27
400	225	-49		245	24	226	-50		210	18	228	-43		191	24
350		-62		248	24		-63		210	22		-57		185	40
300	286	-64		243	19	287	-70		206	23	290	-72		199	42
250		-60		155	03		-61		213	07		-65		192	18
200	373	-59		074	08	373	-56		110	02	374	-57		185	11
170		-57		051	03		-51		123	03		-53		180	13
150		-54		037	08		-51		085	10		-55		152	09
130		-52		046	13		-52		104	11		-53		134	07
110		-54					-53		018	07					
100						524	-55		072	12					
90							-51								
80															
70															
60															
	Inversion 815 mb 16°-800 mb 17°					Inversion 1008 mb 36°-963 mb 38° 809 mb 15°-794 mb 20° 317 mb -72°-301 mb -70°					Inversion 1008 mb 37°-980 mb 43°				
											Isothermal 940-920 mb 38°				
Tropopause	I 343 mb -64° 25800'					I 317 mb -72° 27500' I 287 mb -73° 29700'					I 276 mb -80° 30700'				

Station	LARKHILL					CAMBORNE				
Pressure Time	09hrs G.M.T.					09hrs G.M.T.				
Pressure M.S.L.	1007·7 mb					1007·0 mb				
Pressure Surf	991·0 mb					996·4 mb				
Pressure Freezing	881 mb					850 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
Surf	4·4	32	31	060	10	02·9	38	36		
1000	2·0					01·8				
950		39	36	065	25		40	35		
900	29·9	34	25	065	19	30·0	35	29		
850		28	17	056	14		32	15		
800	60·6	22	15	062	09	60·9	28	02		
750		16	09	094	10		23	02	See p3	
700	94·4	08	03	084	12	95·2	16	-8	for	
650		04	-3	072	10		08	-2	winds,	
600	133	-3	-13	084	09	134	-2	-18		
550		-13	-23	112	06		-12	-26		
500	176	-21	-33	174	13	177	-23	-36		
450		-32	-47	199	22		-33	-44		
400	227	-45		181	25	228	-46			
350		-69		174	31		-58			
300	288	-75		185	30	289	-70			
250		-67		187	11		-63			
200	373	-57		173	08	375	-53			
170		-52		188	08		-53			
150		-54		172	07		-53			
130		-53		146	06		-52			
110		-56		190	04		-59			
100	523	-55		287	07	526	-53			
90		-60					-52			
80	(84)	-59					-56			
70							-56			
60							-58			
						(58)	-55			
	Inversion 991 mb 32°-962 mb 44°									
	Isothermal 691-678 mb 6°					Inversion 996 mb 38°-972 mb 42°				
Tropopause	I 283 mb -81° 30000'					I 296 mb -71° 29200'				

Tuesday 13th February. 1951.

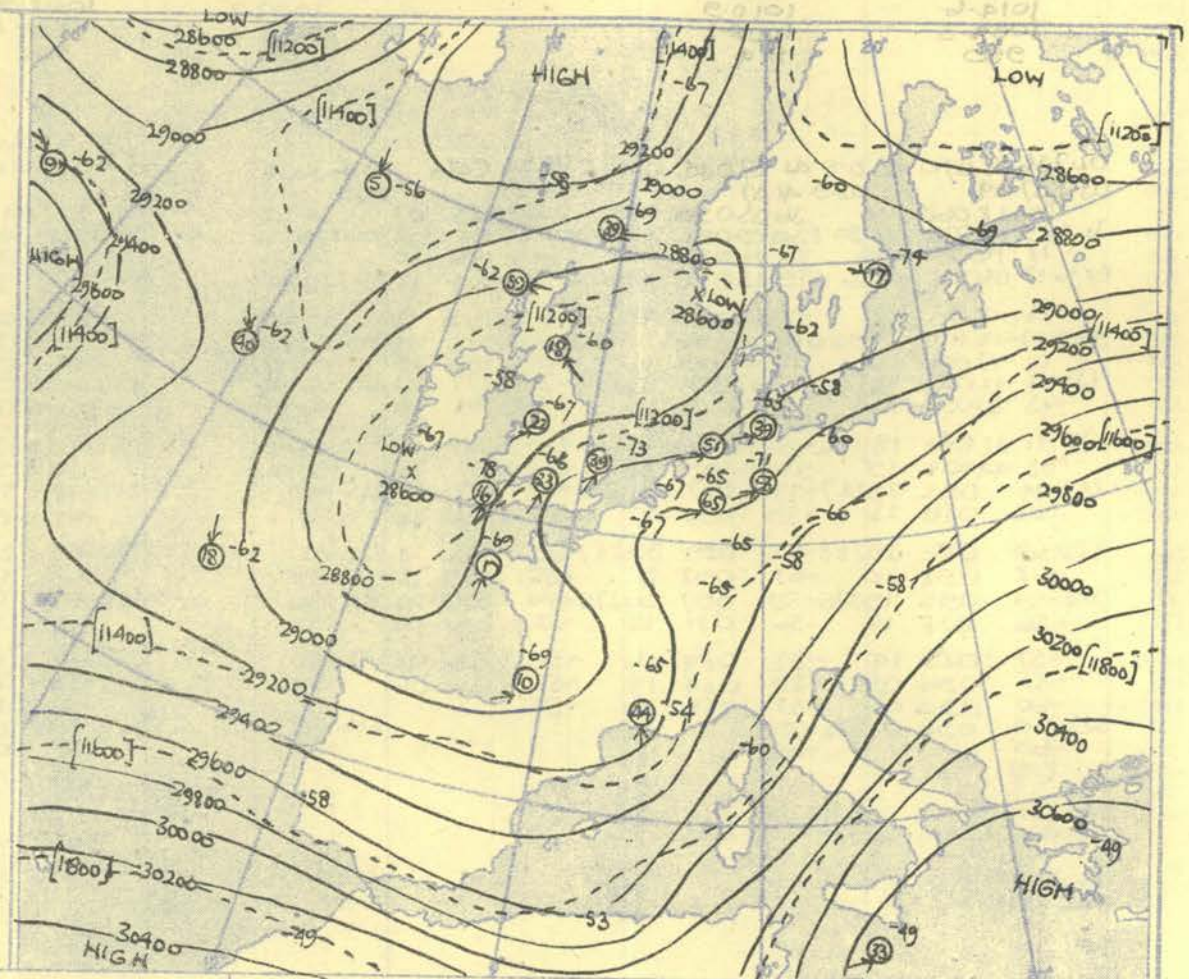
HEIGHTS IN FEET, TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03h G.M.T.



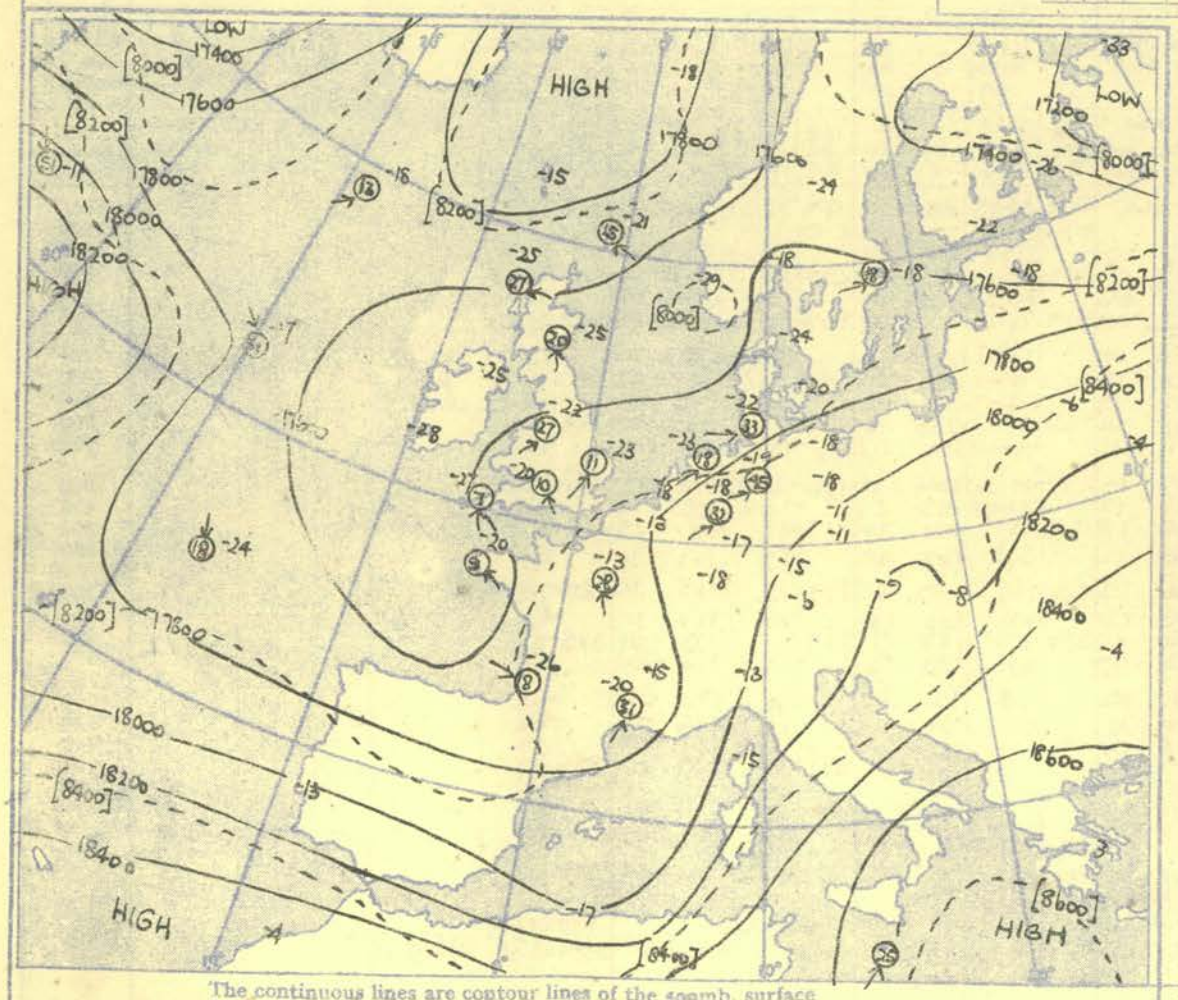
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

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

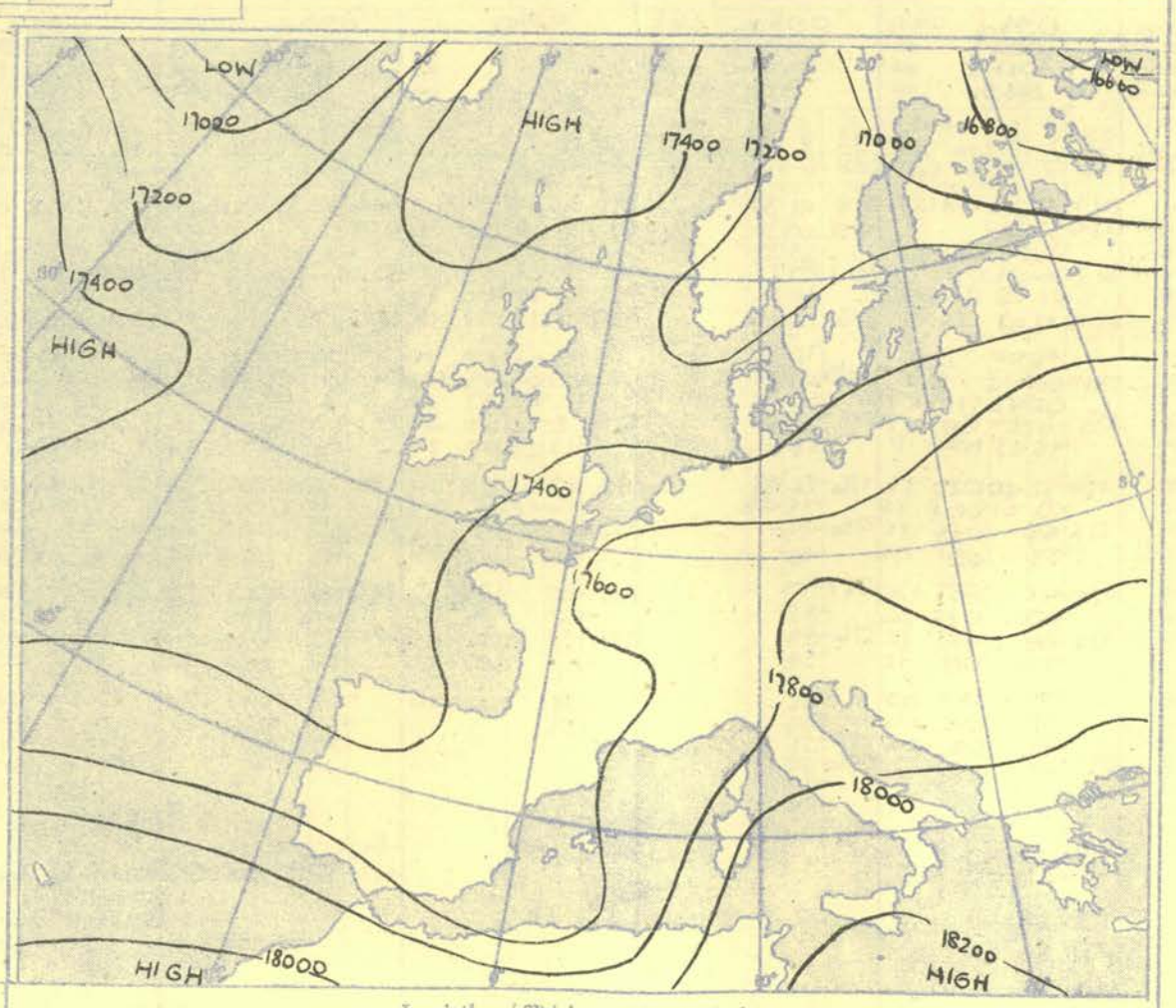
100 60 40 30 20 15 5 knots



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 500mb. surface
The dotted lines are isopleths of the thickness of the layer 700 – 500 mb.



Isopleths of Thickness 500-1000mb.

Tuesday 13th February

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

		43.2N. 17.0W.			39.5N. 12.2W.			51.3N. 00.4E.	
Pressure Time	1245h.			1415h.			1415h.		
Pressure M.S.L.	1017 mb			1015 mb			1005.3 mb		
Pressure Surf	1013 mb			1011 mb			994.4 mb		
Pressure Freezing	880 mb			850 mb			855 mb		
Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Height ft./100	Temp. °F.	Dew °F.	Height ft./100	Temp. °F.	Dew °F.
Surf		51	41		51	42	03.1	42	42
1000	4.5	49		4.0	50				
950		41	34		42	39			
900		34	32		37	-	29.5	36	36
850		28	28		32	32		31	31
800		22			26	26	60.4	27	-
750		15			21				
700	97.2	09		97.6	16		94.7	15	
650		03			07				
600		-01			-01		133	-01	
550		-08			-11				
500	179	-16		180	-23		177	-14	
450									
400							229	-41	
350									
300							290	-73	
250									
200									
170									

43.2N. 17.0W.: Cloud. 4/8 Cu 910 – 700mb. Surf-wind:- N.W. 11-16 kts.

39.5N. 12.2W.: Cloud. 7/8 Sc 820 – 800mb. 4/8 Ac N.R. Surf-wind:- N.W. 4-6 kts.

51.3N. 00.4E.: Cloud. 8/8 St. 985 – 957mb. 8/8 As 935 – 698mb. 4/8 Cs 500 – 305mb. Inversion 980mb. 40° – 959 mb. 43°

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

Place	Wick		Camborne		St. Eval		St. Eval		Wick		Stornoway		Shoeburyness		Stornoway		Camborne				Place
Time	03h.		09h.		09h.		13h.		15h.		15h.		15h.		21h.		[illegible]				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.	090	12	360	02	040	05	020	06	140	04			010	12	Calm		022	10			Surf.
1,000	090	19	010	11	050	10	020	07	150	15			030	24	140	05	016	24			1,000
2,000	110	11	020	08			030	18	150	11			060	28	140	05	017	21			2,000
3,000	110	16	026	07			020	10	170	11			070	24	160	08	017	20			3,000
4,000	100	12	038	06	070	13	050	10	160	12			070	27	170	12	017	20			4,000
5,000	110	16	054	05					170	12			070	27	180	15	016	18			5,000
6,000	100	11	076	07	100	10	010	19	150	11			060	25	180	16	015	17			6,000
8,000			070	10	050	08	010	05					050	18	190	15	011	15			8,000
10,000			064	12	070	13							060	13	210	19	014	15			10,000
14,000			062	10	040	13							050	17	200	28	010	09			14,000
18,000			085	08	060	07							110	12	210	28	009	11			18,000
24,000			132	18	120	11							120	26	200	27	098	09			24,000
30,000			149	11									140	34	200	18	180	07			30,000
40,000			L+V.										210	07	L+V.		308	10			40,000
50,000			above 30,000ft.												040	07	319	06			50,000
											080	03			040 (52,000')	06	327	05			

NEPHOSCOPE OBSERVATIONS

Place	Plymouth									Place
Time Type	09h. Cc									Time Type
Dir. Vel.	060 40									Dir. Vel.

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

Ship	WEATHER RECORDER					WEATHER RECORDER					WEATHER RECORDER					WEATHER RECORDER				
Lat/Long	59.1N. 19.0W.					59.0N. 18.8W.					58.9N. 18.7W.					59.0N. 19.0W.				
Pressure Time	03h. G.M.T.					09h. G.M.T.					15h. G.M.T.					21h. G.M.T.				
Pressure M.S.L.	1015 mb					1014 mb					1015 mb					1015 mb				
Pressure Surf	1015 mb					1014 mb					1015 mb					1015 mb				
Pressure Freezing	mb					mb					960 mb					965 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
Surf		44	43	280	08		40	39	340	24		40	35	315	18		39	31	330	15
1000	4.0	42	39	225	06	3.8	38	38	354	24	3.9	38	32	328	15	3.8	37	30		
950		35	31	240	05		31	31	363	25		31	26	342	16		30	25	338	18
900	31.9	29	25	269	05	31.5	27	27	255	27	31.6	25	20	348	15	31.5	24	20	350	15
850		24	20	317	06		22	22	359	15		20	13	341	11		16	15	348	13
800	62.4	19	16	325	09	61.8	18	18	324	09	61.8	15	09	Calm		61.5	09	08	312	12
750		13	09	323	09		13	08	293	09		09	03	030	09		05	01	294	12
700	96.0	06	02	321	11	95.4	07	02	254	19	95.1	03	-01	031	12	94.6	00	-03	280	10
650		-01	-06	319	12		-01	-15	255	07		-04	-11	041	06		-07	-12	281	11
600	134	-09	-16	313	09	133	-09	-12	256	07	133	-12	-19	034	10	132	-10	-16	293	14
550		-17	-25	307	10		-18	-32	248	07		-20	-27	016	16		-15	-25	300	18
500	177	-18	-29	212	13	176	-22	-29	250	10	175	-26	-40	023	14	175	-22	-36	302	28
450		-28	-44	176	16		-31	-40	250	09		-34	-54	032	11		-33	-46	305	40
400	228	-40	-56	269	08	227	-39	-49	254	18	226	-42		050	13	226	-47		302	67
350		-52		008	05		-53		289	21		-49		077	14	(398 mb)	-47			
300	291	-56		354	05	290	-61		279	14	289	-60		117	15					
250		-66		010	07		-66		281	06		-61		091	17					
200	377	-67									375	-54		073	14					
170		-63										-54		071	09					
150		-58										-54		068	05					
130		-57										-54		064	03					
110		-58										-56		057	04					
100	524	-59									525	-56		057	03					
90		-60										-56		057	03					
80		-60										-56		057	04					
70		-60										-54								
60		-60									(064 mb)	-53								
Tropopause	II 250mb. -66° 33,000'					I 246mb. -66° 33,200'					II 286mb -73° 29,900'					N.R.				

WEATHER RECORDER 03h.: Inversion 550mb. -17° ~ 537mb. -14° Isothermal 537mb ~ 522mb. -14° 350 mb. – 326mb. -52°

WEATHER RECORDER 21h.: Inversion 619mb. -12° ~ 600mb. -10°

Ship	WEATHER EXPLORER					WEATHER EXPLORER					WEATHER EXPLORER					WEATHER EXPLORER										Ship
Lat/Long	52.5N. 20.3W.					52.5N. 20.3W.					52.3N. 19.9W.					52.3N. 19.8W.										Lat/Long
Pressure Time	03h. G.M.T.					09h. G.M.T.					15h. G.M.T.					21h. G.M.T.					G.M.T.					Time
Pressure M.S.L.	1016 mb					1018 mb					1018 mb					1018 mb					mb					M.S.L.
Pressure Surf	1016 mb					1018 mb					1018 mb					1018 mb					mb					Surf
Pressure Freezing	920 mb					900 mb					910 mb					935 mb					mb					Freezing
Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf		44	37	340	14		46	36	320	17		44	38	360	18		44	34	300	13						Surf
1000	4.2	42	36	353	24	4.7	44	35	338	26	4.8	43	37	007	20	5.1	41	34	320	18						1000
950		35	32	353	24		38	31	347	25		36	30	355	21		34	31	331	17						950
900	32.2	30	27	356	23	32.8	32	25	358	23	31.8	30	24	350	23	33.0	28	25	307	10						900
850		24	21	355	22		25	17	011	23		25	18	001	17		23	21	278	07						850
800	62.6	18	16	355	22	63.2	18	08	011	21	63.2	19	07	360	14	63.4	16	13	284	10						800
750		12	06	355	22		14	-03	010	20		12	00	328	12		14	04	280	14						750
700	96.2	06	-07	355	24	97.0	09	-16	004	20	96.9	10	-12	326	15	97.2	10	01	274	16						700
650		00	-24	349	32		03	-21	357	22		03	-20	340	22		04	-01	274	16						650
600	134	-05	-39	347	32	135	-01	-28	349	25	135	-04	-19	340	27	135	00	-04	268	19						600
550		-09	-30	341	40		-20	-31	335	31		-11	-27	336	42		-08	-18	293	28						550
500	177	-17	-41	324	51	179	-19	-36	336	37	179	-19	-36	335	35	179	-15	-24	302	31						500
450		-27	-41	333	47		-27	-39	332	42		-29	-43	329	40		-25	-34	308	36						450
400	229	-39	-50	345	51	230	-37	-47	345	50	230	-41		325	40	231	-36	-45	324	48						400
350		-53		345	39		-50		347	55		-54		330	48		-47		328	72						350
300	292	-62		337	40	293	-64		347	55	292	-68		327	62	294	-61		331	75						300
250		-62		331	28		-71		347	43		-69		337	57		-78		325	73						250
200	378	-57		307	17	378	-60		347	31	317	-59		336	33	375	-64		316	32						200
170		-54		328	12		-56		347	20		-59		336	30		-62		318	25						170
150		-56		338	10		-57		347	16		-58		332	15		-60		318	25						150
130		-57		343	06		-53		347	14		-59		250	19		-59		318	19						130
110							-58		347	16		-59		304	09		-61		318	08						110
100						527	-58		347	09	525	-59		334	06	(106 mb)	-61									100
90							-60					-58		334	05											90
80												-57		334	04											80
70												-55		334	03											70
60											(062 mb)	-53														60
Tropopause	II 285mb. -64° 30,300'					I 260mb. -74° 32,400'					II 300mb. -59° 29,200'					I 240mb. -80° 34,100'										Tropopause

WEATHER EXPLORER 03h.: Isothermal 600mb. ~ 590mb. -5° 303mb. ~ 296mb. -62° 285mb ~ 272 mb. -64°

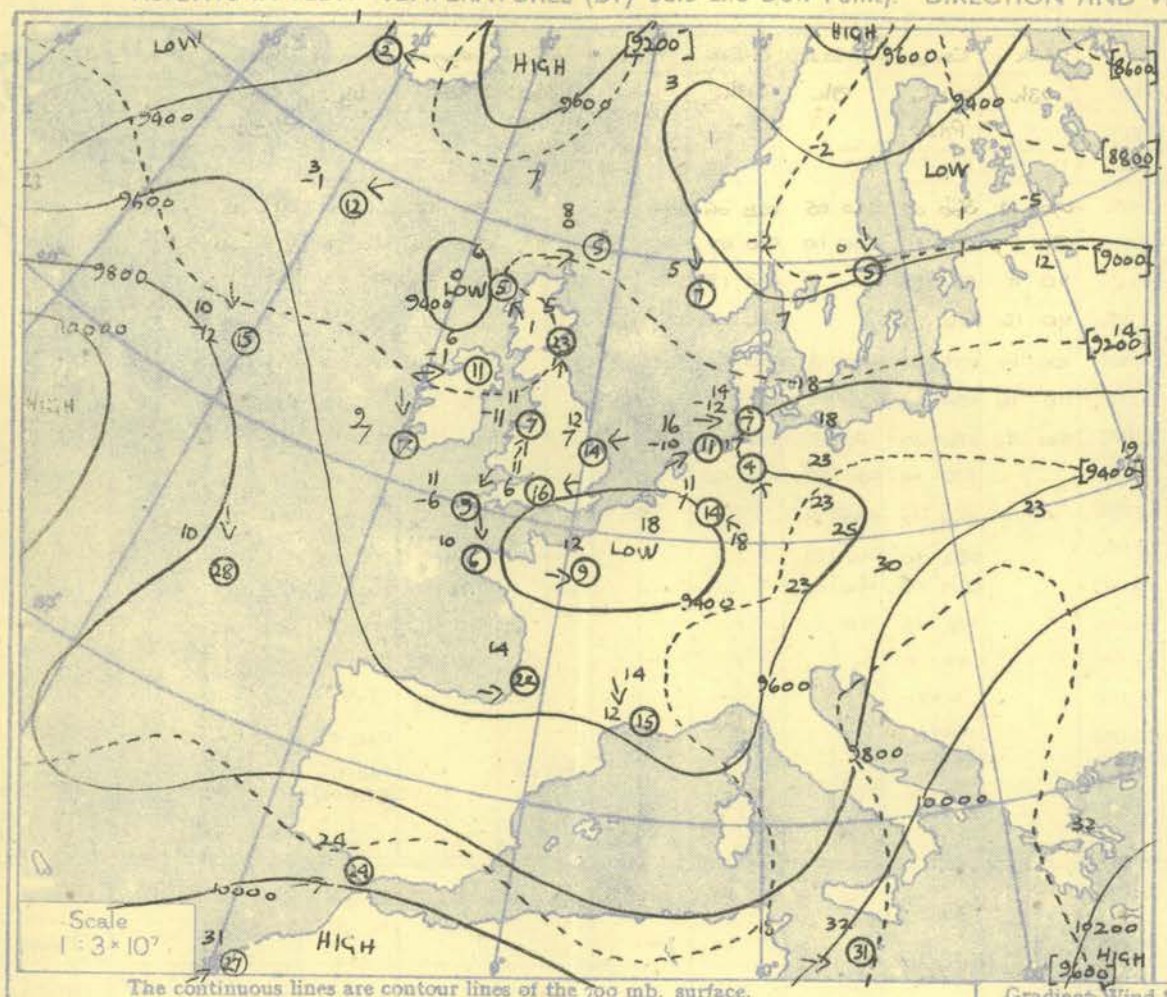
WEATHER EXPLORER 09h.: Inversion 645mb. 1° ~ 632mb. 2°

WEATHER EXPLORER 15h.: Isothermal 731 mb. ~ 696mb. 10°

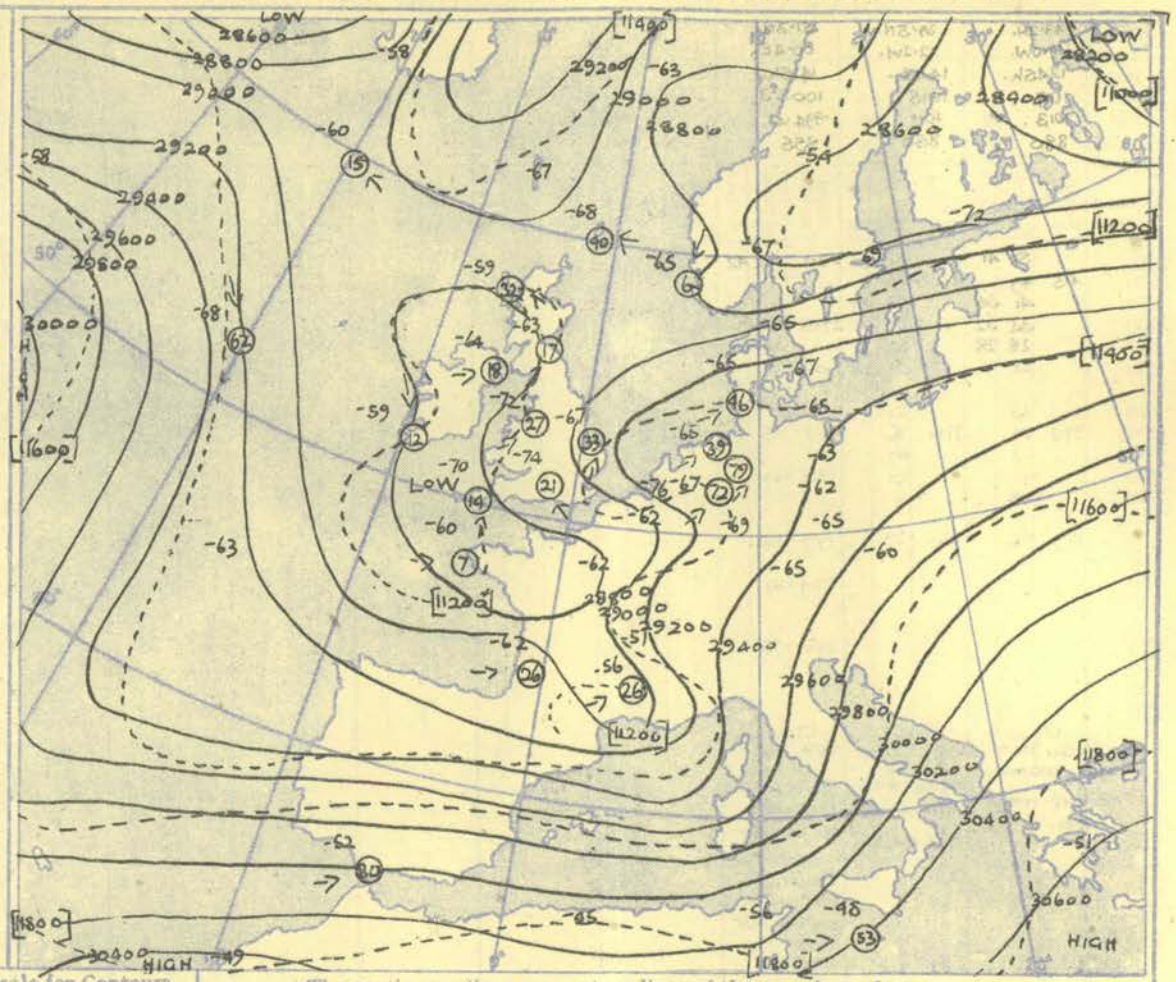
WEATHER EXPLORER 21h.: Isothermal 795 mb. ~ 763mb. 15° 700 mb. ~ 692 mb. 10°

Tuesday 13th February 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

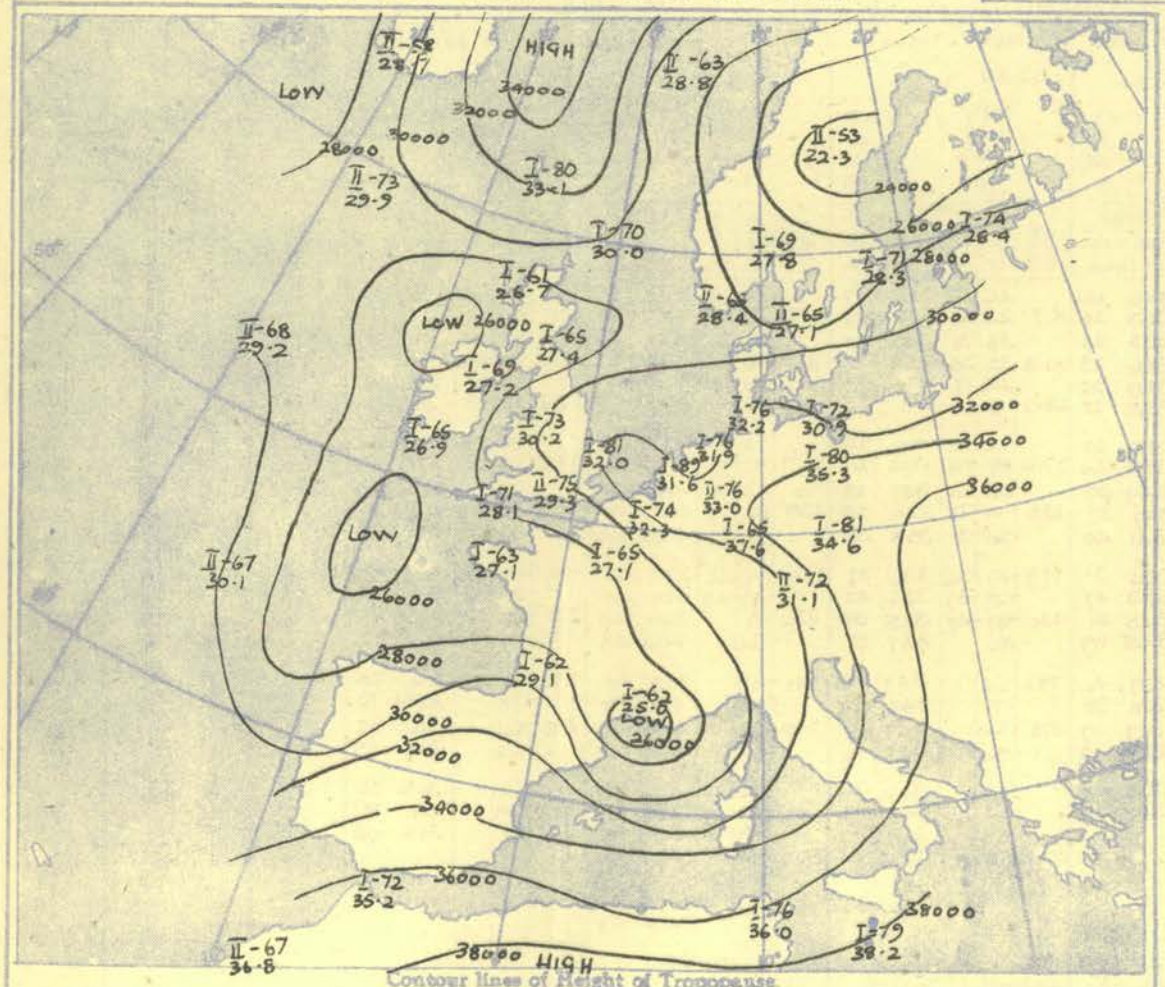


The continuous lines are contour lines of the 300mb. surface
The dotted lines are isopleths of the thickness of the layer 500–300 mb.

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

100 60 40 30 20 15 9 knots

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



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Continued cooling just west of Scotland. Steady eastward movement of the warm air associated with the depression on the western Atlantic.

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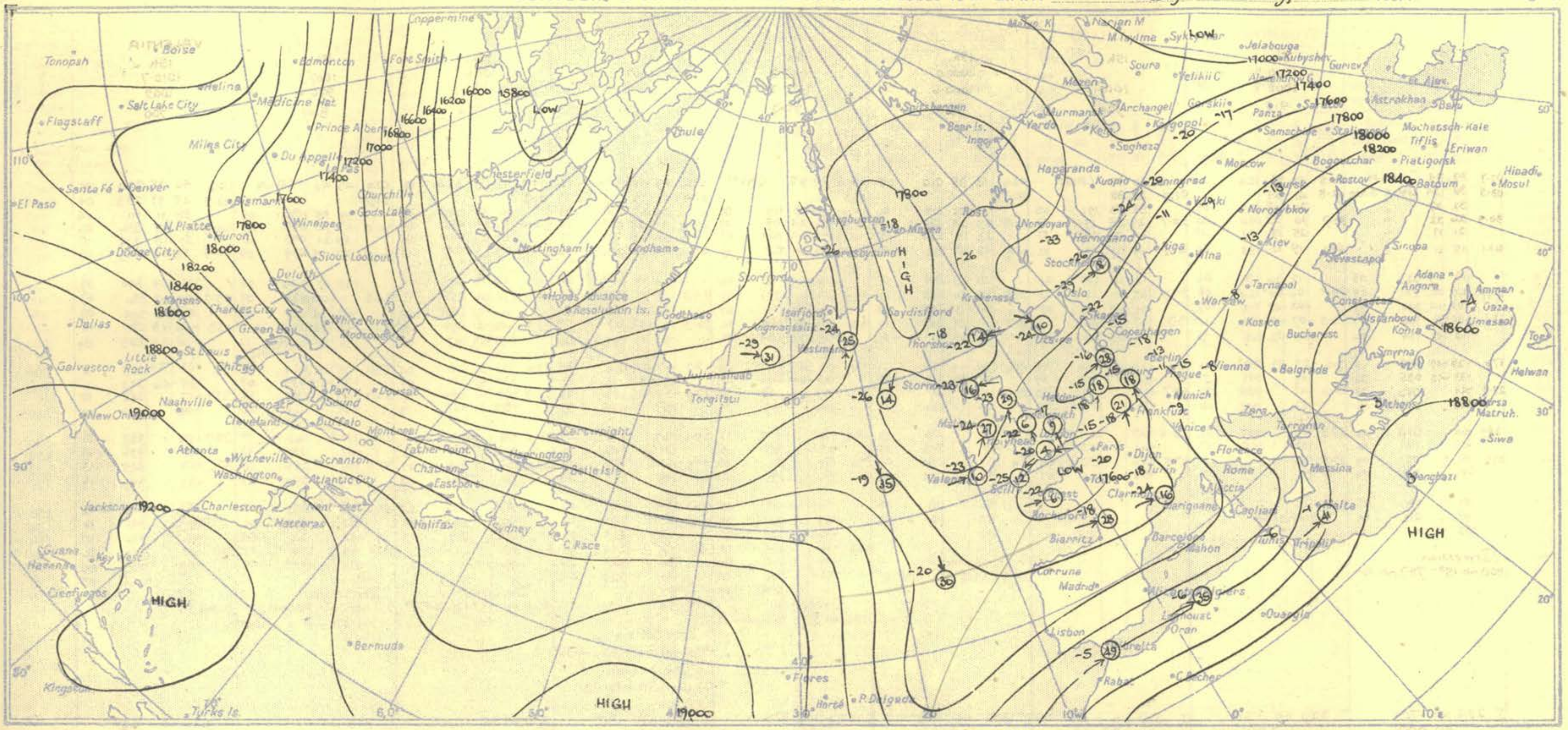
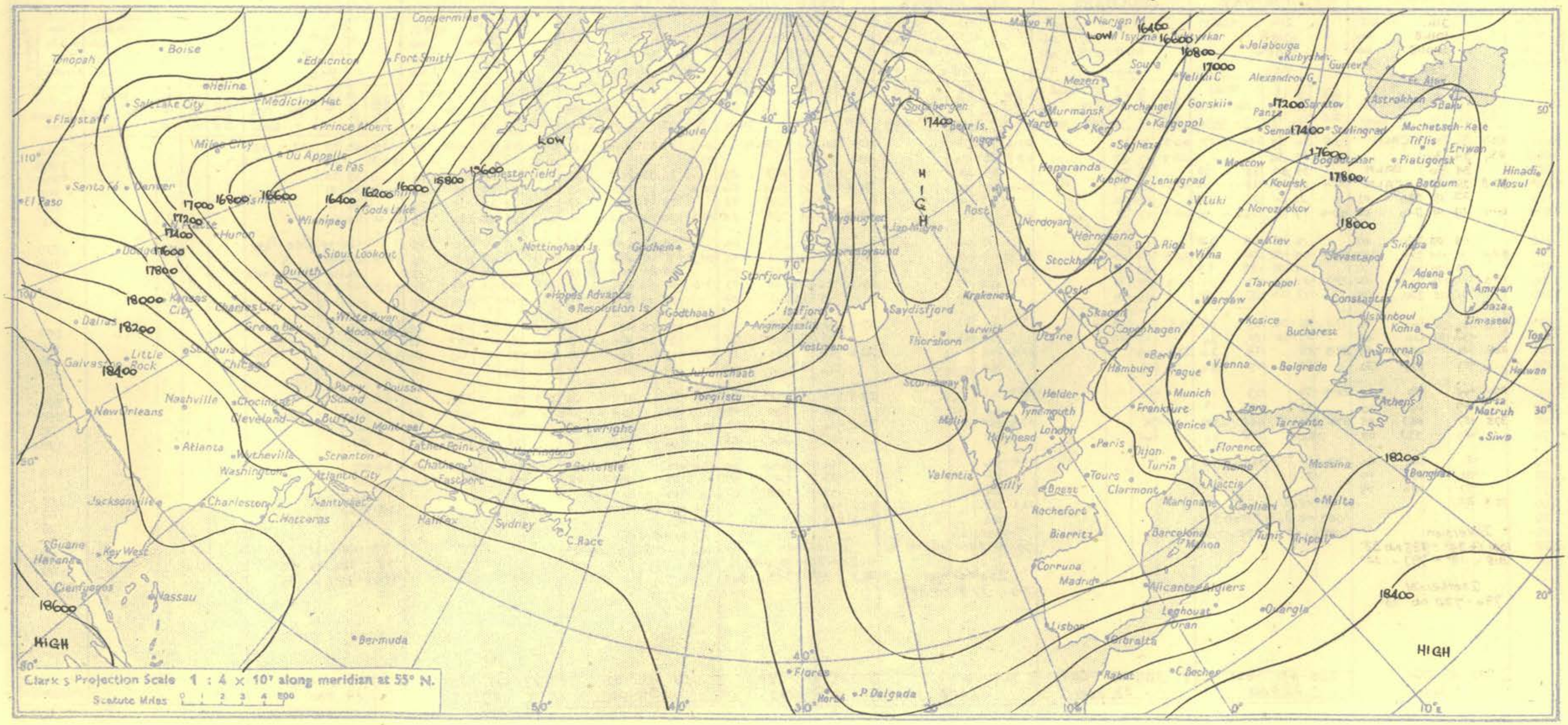
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Tuesday 13th February, 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Tuesday 13th February, 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Tuesday 13th. February 1951.

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

LERWICK

Pressure — Time 15h. G.M.T. | M.S.L. 1013·1 mb | Surf 1002·9 mb | Freezing 950 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	39	34	CALM	
1000	03·5	38	34	Lvv < 5kts	
950		32	27	"	
900	30·9	26	22	"	
850		21	17	"	
800	61·1	15	11	"	
750		13	09	223	05
700	94·7	08	00	232	05
650		02	-14	244	05
600	133	-05	-32	308	03
550		-13	-42	174	06
500	176	-22	-49	095	14
450		-33	-45	085	22
400	22·7	-44		086	29
350		-56		074	41
300	289	-68		080	40
250		-63		081	16
200	375	-51		087	09
170		-51		067	06
150		-52		031	05
130		-53		012	04
110		-55			
100					
90					
80					
70					
60					

Inversion 800 mb 15° - 787 mb 16°

Tropopause: I 284 mb -70° 30,000'

STORNOWAY

Pressure — Time 15h. G.M.T. | M.S.L. 1010·5 mb | Surf 1008·8 mb | Freezing 913 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·5	42	35	120	05
1000	02·8	41	34		
950		36	29	139	05
900	30·7	30	23	140	04
850		25	18	139	05
800	61·2	19	12	138	05
750		12	06	131	06
700	94·8	06	00	120	05
650		-02	-08	112	07
600	133	-07	-13	122	10
550		-14	-22	112	15
500	17·6	-23	-33	092	16
450		-35		095	27
400	22·6	-47		090	34
350		-57		095	41
300	28·8	-69		097	32
250		-56		105	18
200	37·5	-33			
170					
150					
130					
110					
100					
90					
80					
70					
60					

Isothermal 640 - 617 mb -4°

Tropopause: I 329 mb -61° 26,700'

LEUCHARS

Pressure — Time 15h. G.M.T. | M.S.L. 1010·0 mb | Surf mb | Freezing 920 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	40	38	CALM	
1000	02·9	39	38		
950		34	33	192	08
900	30·7	29	25	191	13
850		24	21	191	17
800	61·2	19	17	184	22
750		12	10	182	21
700	94·9	05	01	188	23
650		-01	-07	195	27
600	133	-07	-15	201	26
550		-14	-25	204	28
500	17·6	-23	-36	209	29
450		-34	-47	209	39
400	22·7	-46		214	32
350		-58		218	29
300	28·8	-63		204	17
250		-61		153	11
200	37·5	-56		133	03
170		-56		104	07

Tropopause: I 319 mb -65° 27,400

ALDERGROVE

Pressure — Time 15h. G.M.T. | M.S.L. 1009·9 mb | Surf 1000·6 mb | Freezing 939 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	40	35	210	05
1000	02·7				
950		33	29	214	06
900	30·5	28	24	220	06
850		23	18	224	08
800	60·9	18	13	232	09
750		13	03	234	11
700	94·5	06	-01	248	17
650		00	-13	248	19
600	13·2	-07	-28	240	17
550		-15	-37	237	22
500	17·6	-24	-44	224	27
450		-35	-52	218	28
400	22·6	-47		221	30
350		-60		226	34
300	28·7	-64		223	18
250		-59		242	05
200	37·4	-55		050	06
170		-55		050	05
150	43·6	-52		102	03
130		-52		030	05
110		-53			
100					
90					
80					
70					
60					

Inversion 782 mb 15° - 773 mb 16°

Tropopause: I 322 mb -69° 27,200'

LIVERPOOL

Pressure — Time 15h. G.M.T. | M.S.L. 1009·3 mb | Surf 1007·2 mb | Freezing 900 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	40	38	CALM	
1000	02·5				
950		39	32	114	09
900	30·4	32	24	103	09
850		27	14	099	07
800	61·0	22	04	128	06
750		16	-04	157	06
700	94·9	11	-11	183	07
650		05	-20	172	07
600	13·3	-03	-25	189	06
550		-12	-32	189	07
500	17·7	-22	-44	171	06
450		-33	-53	197	10
400	22·7	-45		203	16
350		-59		199	34
300	28·9	-72		200	27
250		-65		195	10
200	37·4	-59		151	02
170		-56		195	02
150		-56		147	05
130		-55		230	04
110		-56		228	08
100	52·3	-58		225	10
90		-59		100	06
80		-58		330	04
70		-61		035	09

Inversion 986 mb 39° - 956 mb 40°

Tropopause: I 282 mb -73° 30,200'

DOWNHAM MARKET

Pressure — Time 15h. G.M.T. | M.S.L. 1007·0 mb | Surf 1002·5 mb | Freezing 870 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	43	40	040	12
1000	01·9	42	39		
950		36	33	067	18
900	29·9	35	28	073	18
850		30	25	072	17
800	60·8	24	20	071	16
750		18	15	069	15
700	94·8	12	07	081	14
650		06	00	104	12
600	13·3	01	-03	127	09
550		-08	-17	162	06
500	17·7	-17	-25	186	09
450		-26	-33	175	18
400	22·8	-38	-45	182	25
350		-51		184	30
300	29·1	-67		173	33
250		-74		180	19
200	37·5	-62		193	12
170		-55		182	08
150	43·7	-54		171	08
130		-53		182	05
110		-53		215	03
100	52·5	-54		244	05
90		-54		263	05
80		-55		360	06
70		-55			
60	63·8	-54			

Inversion 950 mb 36° - 939 mb 38°
Isothermal 626 - 610 mb 02°

Tropopause: I 262 mb -81° 32,000'

LARKHILL

Pressure — Time 15h. G.M.T. | M.S.L. 1006·5 mb | Surf 990·1 mb | Freezing 874 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	37	36	050	12
1000	01·7				
950		36	35	042	15
900	29·7	34	32	052	14
850		29	25	046	14
800	60·5	23	18	047	14
750		18	12	045	16
700	94·5	11	06	058	16
650		06	-03	088	08
600	13·3	-02	-21	098	06
550		-10	-33	107	05
500	17·6	-20	-38	112	04
450		-30	-43	141	07
400	22·7	-43		146	12
350		-59		148	19
300	28·9	-74		141	21
250		-62		168	12
200	37·5	-54		218	07
170		-51		185	04
150		-49		222	04
130		-50		248	05
110		-50		215	09
100	52·6	-56			
90		-56			
80					
70					
60					

Inversion 973 mb 35° - 958 mb 37°

Tropopause: II 294 mb -75° 29,300'

CAMBORNE

Pressure — Time 15h G.M.T. | M.S.L. 1007·3 mb | Surf 996·6 mb | Freezing 869 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	45	40	CALM	
1000	01·9				
950		39	35	076	06
900	30·0	37	30	049	09
850		29	21	043	10
800	60·8	23	19	039	08
750		18	07	034	05
700	94·8	11	-06	026	09
650		03	-16	021	10
600	13·3	-05	-20	034	13
550		-15	-22	054	12
500	17·6	-25	-32	064	12
450		-35	-41	093	07
400	23·7	-49		125	14
350		-61		160	26
300	28·8	-70		163	14
250		-62		197	03
200	37·4	-55		285	10
170		-53		292	07
150	43·6	-55		298	07
130		-54		304	06
110		-52		315	03
100	52·4	-54		338	01
90		-55		338	02
80		-56			
70					
60					

Inversion 921 mb 36° - 900 mb 37°
493 " -27° - 486 " -26°

Tropopause: I 310 mb -71° 28,100'

VALENTIA

Pressure — Time 15h G.M.T. | M.S.L. 1010·7 mb | Surf 1009 mb | Freezing 900 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	46	38	280	04
1000	02·9	45	37	283	04
950		38	31	311	04
900	30·8	32	25	336	06
850		27	18	338	07
800	61·4	22	08	343	07
750		16	-04	340	07
700	95·2	09	-07	330	07
650		01	-13	298	09
600	13·3	-06	-18	289	10
550		-14	-26	283	09
500	17·7	-23	-34	268	10
450		-35	-46	290	11
400	22·7	-47		248	10
350		-59		270	08
300	28·9	-59		327	12
250		-57		336	14
200	37·6	-53		345	15
170		-52		353	13
150		-52		349	12
130		-53		341	10
110		-51		316	07
100	52·7	-52		344	06
90		-53		035	06
80		-53		065	05
70		-53		CALM	
60	63·4	-54			

Tropopause: I 328 mb -65° 26,900'

LERWICK

Pressure — Time 21h. G.M.T. | M.S.L. 1011·8 mb | Surf 1001·5 mb | Freezing 934 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	34	31	CALM	
1000	03·1	34	31		
950		34	30	CALM	
900	30·8	28	25	CALM	
850		22	18	230	02
800	61·1	19	14	240	06
750		14	08	251	08
700	94·9	11	04	233	09
650		03	-09	280	08
600	13·3	-04	-16	260	06
550		-11	-25	230	04
500	17·6	-21	-32	140	06
450		-30	-37	120	09
400	22·8	-42		093	14
350		-53		078	22
300	29·0	-64		079	24
250		-69		083	10
200	32·5	-57		053	05
170		-50		353	08
150		-51		018	06
130		-55		022	04
110		-51		036	05
100	22·5	-37			
90					
80					
70					
60					

Inversion 1001 mb 34° - 985 mb 38°
815 " -18° - 797 " -20°
Isothermal 736 - 720 mb 13°

Tropopause: I 272 mb -70° 31,100'

STORNOWAY

Pressure — Time 21h. G.M.T. | M.S.L. 1010·3 mb | Surf 1008·6 mb | Freezing 940 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·5	36	34	340	03
1000	02·7	37	34		
950		33	29	138	03
900	30·4	27	23	128	03
850		22	20	126	04
800	60·6	17	15	126	04
750		12	08	125	04
700	94·2	04	-02	126	04
650		-04	-09	128	07
600	13·2	-09	-17	127	11
550		-17	-26	125	14
500	17·5	-26	-36	125	20
450		-37	-50	129	24
400	22·5	-48		128	26
350		-53		115	24
300	28·7	-59		123	18
250		-57		097	13
200	37·5	-51		048	08
170		-52		048	10
150	43·7	-54		048	10
130		-55			
110					
100					
90					
80					
70					
60					

Inversion 1009 mb 36° - 995 mb 38°
648 " -5° - 630 " -4°

Tropopause: I 285 mb -60° 29,800'

LEUCHARS

Pressure — Time 21h. G.M.T. | M.S.L. 1010·0 mb | Surf mb | Freezing 950 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	38	38		
1000	02·9	37	37		
950		32	32		
900	30·5	27	27		
850		22	22		
800	60·7	17	17		
750		12	12		
700	94·3	04	03		
650		-02	-08		
600	13·2	-07	-19		
550		-16	-28		
500	17·5	-26	-38		
450		-37	-47		
400	22·5	-49			
350		-65			
300		-62			
250		-67			
200		-75			
170		-64			
150					
130					
110					
100					
90					
80					
70					
60					

Tropopause: I 309 mb -69° 28,000'

ALDERGROVE

Pressure — Time 21h. G.M.T. | M.S.L. 1010·6 mb | Surf 1000·8 mb | Freezing 924 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	34	33		
1000	02·8	34	29		
950		35	29		
900	30·6	29	22		
850		23	16		
800	60·9	17	10		
750		12	00		
700	94·5	07	00		
650		00	-09		
600	13·2	-08	-19		
550		-17	-30		
500	17·5	-27	-42		
450		-37	-53		
400	22·6	-48			
350		-60			
300	28·7	-65			
250		-60			
200	37·3	-57			
170		-57			
150	43·5	-56			
130		-54			
110		-56			
100	52·3	-58			
90		-60			
80					
70					
60					

Inversion 1001 mb 39° - 980 mb 36°
Isothermal 790 - 778 mb 16°

Tropopause: I 325 mb -65° 27,000'

LIVERPOOL

Pressure — Time 21h. G.M.T. | M.S.L. 1010·0 mb | Surf 1007·9 mb | Freezing 908 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	30	30	CALM	
1000	02·6	33	33		
950		36	33	053	09
900	30·4	31	25	044	06
850		25	16	007	03
800	60·9	21	09	088	04
750		16	-06	096	06
700	94·7	10	-19	102	05
650		04	-26	102	05
600	13·3	-06	-27	144	03
550		-15	-33	163	07
500	17·6	-24	-43	163	07
450		-37	-53	215	08
400	22·6	-48		205	07
350		-60		194	28
300	28·8	-74		190	32
250		-68		235	08
200	37·2	-61		192	05
170		-56		245	03
150		-54		246	05
130		-55		049	07
110		-57		038	07
100	52·1	-58			
90	(98 mb)	-58			
80					
70					
60					

Inversion 1008 mb 30° - 990 mb 36°
962 " 35° - 942 " 36°

Tropopause: I 285 mb -78° 29,800'

DOWNHAM MARKET

Pressure — Time 21h. G.M.T. | M.S.L. 1007·7 mb | Surf 1003·3 mb | Freezing 924 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	39	38	045	12
1000	02·1				
950		34	33	068	22
900	30·0	30	27	068	23
850		28	15	066	23
800	60·5	20	10	052	26
750		14	08	048	26
700	94·3	11	06	050	23
650		05	00	065	18
600	13·3	-01	-06	074	15
550		-08	-14	074	14
500	17·6	-19	-25	087	14
450		-31	-38	100	17
400	22·7	-43		107	17
350		-57		116	21
300	28·9	-74		125	25
250		-73		164	12
200	37·3	-61		212	06
170		-60		206	06
150	43·4	-56		157	05
130		-56		232	05
110		-59		LVV	
100	52·1	-60		"	
90		-62		"	
80					
70					
60					

Inversion 900 mb 30° - 880 mb 31°
760 " 13° - 735 " 15°

Tropopause: I 269 mb -82° 30,100'

LARKHILL

Pressure — Time 21h. G.M.T. | M.S.L. 1006·7 mb | Surf 990·4 mb | Freezing 915·0 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	38	37	045	15
1000	01·8				
950		34	32	039	23
900	29·7	31	29	037	23
850		28	26	025	16
800	60·5	23	22	026	13
750		17	15	026	15
700	94·5	11	07	018	16
650		04	02	019	15
600	13·3	-04	-16	038	11
550		-10	-17	046	08
500	17·6	-19	-26	080	09
450		-30	-40	087	08
400	22·8	-42		100	06
350		-56		131	11
300	28·9	-71		139	11
250		-62		226	04
200	37·5	-57		264	03
170		-53		256	04
150		-53		235	06
130		-53		240	05
110		-57			
100					
90					
80					
70					
60					

Tropopause: I 278 mb -78° 30,500'

CAMBORNE

Pressure — Time 21h. G.M.T. | M.S.L. 1008·7 mb | Surf 997·9 mb | Freezing 900 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	43	39	022	05
1000	02·3				
950		38	30		
900	30·4	32	21		
850		25	15		
800	61·0	20	06		
750		16	-10	See Page 3 for Winds	
700	94·8	09	-09		
650		02	-16		
600	13·3	-05	-18		
550		-16	-24		
500	17·6	-25	-33		
450		-34	-46		
400	22·7	-46			
350		-59			
300	28·8	-73			
250		-62			
200	37·4	-58			
170		-57			
150	43·6	-55			
130		-54			
110		-56			
100	52·3	-58			
90		-60			
80					
70					
60					

Isothermal 998 - 986 mb 43°
950 - 939 " 38°

Tropopause: I 297 mb -74° 28,800'

H.M.S.O. Press, M.O., Dunstable.

No. 11644. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Wednesday 14th February, 1951. Page 1.

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

03h. G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	03h.	1010·6 mb	1000·3 mb	932 mb
STORNOWAY	03h.	1009·4 mb	1007·7 mb	932 mb
LEUCHARS	03h.	1010·6 mb	1009·7 mb	925 mb
ALDERGROVE	03h.	1010·1 mb	1000·6 mb	935 mb
LIVERPOOL	03h.	1010·1 mb	1008·0 mb	958 mb
DOWNHAM MARKET	03h.	1007·0 mb	1002·5 mb	949 mb
LARKHILL	03h.	1007·1 mb	990·7 mb	940 mb
CAMBORNE	03h.	1009·0 mb	998·2 mb	892 mb
VALENTIA	03h.	1010 mb	1009 mb	895 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
Surf	02·7	36	33	340	02	004	34	33	340	03	00·2	36	35	Calm		02·6	33	31		
1000	2·8	36	33			2·6	36	34			2·7	36	35			2·8				
950		34	33	205	04		34	32	183	08		34	31	188	12		33	29		
900	30·6	28	24	215	05	30·4	28	25	183	07	30·6	20	26	178	11	30·6	28	23		
850		23	21	232	09		23	21	183	06		24	20	178	10		23	19		
800	60·9	18	14	242	14	60·7	16	14	186	06	61·1	18	14	150	09	61·9	18	11		
750		10	08	233	17		10	06	174	06		12	07	133	09		12	05		
700	34·5	07	03	228	17	94·2	04	-01	159	06	94·7	06	01	204	15	94·0	08	-07		
650		00	-05	222	14		-04	-08	174	07		02	-10	205	21		00	-21		
600	132	-07	-14	220	14	132	-11	-18	178	12	130	-05	-18	202	24	132	-09	-30		
550		-15	-25	223	07		-20	-31	166	16		-13	-28	199	27		-17	-37		
500	175	-23	-36	192	09	175	-28	-42	148	21	176	-22	-41	195	28	175	-26	-45		
450		-34	-43	187	08		-38	-53	145	22		-33	-52	193	31		-37	-55		
400	226	-44		123	11	225	-50		140	18	227	-46		193	32	225	-49			
350		-56		102	12		-54		138	18		-58		197	42		-61			
300	288	-68		091	11	287	-57		120	15	288	-71		200	41	287	-63			
250		-72		092	04		-55		097	06		-64		154	13		-61			
200	373	-60		307	02	374	-54		035	10	374	-55		037	03	373	-59			
170		-58		310	04		-53		035	11		-54		053	04		-54			
150		-56		350	04		-52		039	11		-52					-54			
130		-57		014	05		-52		062	11	(142 mb)	-51					-54			
110		-60		010	05		-52		043	09							-57			
100	521	-59																		
90																				
80																				
70																				
60																				

Inversion 1000mb. 36°–987mb. 37° 730mb. 07°–710mb. 08°

Inversion 1008mb. 34°–993mb. 39°

Inversion 1010mb. 36°–980mb. 37°

Pressure mb	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
Surf	00·6	26	26	Calm		01·2	38	37	020	15	04·4	37	36	030	10	02·9	41	39	Calm	
1000	2·6	30	29			1·9					1·7					2·4				
950		31	28	103	10		32	31	043	32		33	32	017	18		37	37	327	10
900	30·3	29	25	117	09	29·6	29	23	049	33	29·6	28	26	020	25	30·4	33	19	362	11
850		26	13	104	05		24	17	055	33		23	20	023	29		27	11	004	13
800	60·8	20	06	095	05	60·0	18	13	062	32	59·9	18	15	020	27	61·0	23	-01	001	15
750		14	00	058	05		11	09	068	32		16	12	006	18		18	-08	353	13
700	94·5	10	-15	016	05	93·6	09	07	083	24	93·7	11	07	346	16	94·9	10	-05	345	11
650		01	-37	327	07		05	01	095	16		04	-03	347	13		02	-13	333	11
600	132	-07	-47	052	03	132	-03	-08	085	13	132	-03	-10	339	12	133	-06	-12	334	12
550		-16	-47	004	02		-12	-19	071	13		-12	-19	346	11		-14	-26	338	13
500	176	-26	-50	169	08	175	-22	-31	072	16	175	-21	-28	348	07	176	-24	-42	347	10
450		-35	-58	175	12		-34	-44	074	18		-31	-39	001	04		-35	-53	001	08
400	226	-47		169	16	226	-46		071	22	226	-44		022	05	227	-47		034	05
350		-61		179	23		-59		072	27		-58		026	07		-61		117	09
300	287	-76		179	18	287	-70		074	23	288	-73		051	04	288	-74		L.V.	
250		-65		218	05		-66		143	09		-63		271	03		-61		311	10
200	372	-58		319	05	372	-61		170	03	373	-57		254	07	374	-61		292	13
170	(172 mb)	-56					-58		238	06		-57		281	11		-59		310	12
150							-57		238	03		-55		270	08		-58			
130							-56		258	06		-56		291	05	(145 mb)	-57			
110							-58		292	03		-56		284	07					
100						521	-61		026	03	522	-58		294	05					
90							-62		043	03		-59		260	08					
80												-59		260	11					
70											(075 mb)	-59								
60																				

Inversion 1008mb. 26°–992mb. 35° 918 mb. 29°–908mb. 30°

Isothermal 940 – 918mb. 31°

Inversion 770mb. 15°–750mb. 16°

Inversion 920mb. 38°–905mb. 34° Isothermal 998 – 980mb. 41°

Inversion 1009mb. 33°–980mb. 42°

	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Tropopause	I 270mb. -75° 31,000′	II 287mb. -54° 23,100′	I 290mb. -74° 29,500′	I 345mb. -62° 25,800′ I 287mb. -65° 29,600′	I 287mb. -80° 29,500′	I 282mb. -72° 30,000′	I 288mb. -77° 29,500′	I 303mb. -75° 28,600′	II 290mb. -66° 28,100′
Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	

09h. G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	09h.	1010·2 mb	999·9 mb	926 mb
STORNOWAY	09h.	1009·4 mb	1007·7 mb	943 mb
LEUCHARS	09h.	1011·0 mb	1010·1 mb	942 mb
ALDERGROVE	09h.	1009·8 mb	1000·9 mb	934 mb
LIVERPOOL	09h.	1010·0 mb	1007·9 mb	950 mb
DOWNHAM MARKET	09h.	1007·0 mb	1002·6 mb	968 mb
LARKHILL	09h.	1007·8 mb	991·3 mb	950 mb
CAMBORNE	09h.	1009·9 mb	999·0 mb	920 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
Surf	02·7	36	35	Calm		00·4	32	30			00·2	38	32	Calm		02·6	31	29	Calm	
1000	2·7	36	35	Calm		2·4	34	31			2·8	38	31			2·8	34	31	L.V.	
950		35	32	199	11		33	29				33	29	148	07					
900	30·5	29	26	212	12	30·2	26	23			30·5	27	24	149	07	30·6	28	25	"	
850		22	20	220	15		20	15				21	20	151	08		23	16	"	
800	609	18	13	219	15	60·5	16	10			60·8	16	12	151	07	61·0	15	10	"	
750		12	04	207	14		10	05				10	06	181	07		12	05	"	
700	34·4	03	-01	205	13	94·0	04	-06			94·2	04	-04	202	11	94·5	06	-02	"	
650		01	-05	216	13		-04	-13				01	-13	193	15		-02	-11	"	
600	132	-04	-16	222	15	131	-11	-23			132	-07	-19	183	19					
550		-12	-34	222	19		-20	-32				-17	-32	177	23		-18	-28	236	08
500	176	-22	-44	222	26	174	-29	-41			175	-26	-40	183	19	174	-27	-38	234	11
450		-34	-55	219	25		-40	-56				-36	-53	188	27		-37	-48	214	11
400	226	-46		197	17	224	-51				226	-45		184	39	225	-48		197	22
350		-57		166	11		-55					-59		181	47		-60		177	28
300	288	-66		136	12	286	-55				287	-74		182	33	287	-63		190	26
250		-64		197	04		-57					-64		181	06		-56		318	06
200	374	-55		331	03	374	-50				373	-56		043	04	373	-55		326	15
170		-49		331	03		-52					-53		028	05		-56		360	13
150		-49		316	05		-55					-52		021	04		-58		013	10
130		-53		350	05		-54					-54		040	06		-52		012	06
110		-56		013	09		-54					-60					-54		334	06
100	524	-56		020	09	524	-55				522	-57				523	-56		047	07
90		-57					-55										-56		038	09
80							-55										-57		032	04
70							-55										-58		040	09
60							-55										-58		055	14

Inversion 1008mb. 36°–984mb. 39° Isothermal 689 – 650mb. 01°

Inversion 1008 mb. 32°–989mb. 38°

Inversion 1010mb. 33°–960mb. 34° Isothermal 711 – 670mb. 04°

Inversion 1001 mb. 31°–965mb. 35° 894 mb. 27°–882mb. 28° 770 mb. 10°–750mb. 12°

Pressure mb	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
Surf	00·6	32	30	Calm		01·2	37	35	360	13	04·4	38	34	020	12	02·9	38	35	Calm	
1000	26					2·0					2·1					2·6				
950		32	29	103	04		31	28	036	23		32	30	012	22		36	33	354	09
900	30·3	25	22	126	04	29·7	27	24	040	25	29·8	28	27	027	24	30·5	30	26	348	09
850		21	18	131	02		22	19	040	23		23	21	027	25		27	17	338	09
800	60·3	18	07	009	03	59·9	17	14	049	19	60·2	18	15	011	20	484	22	10	328	09
750		12	-01	061	05		13	10	062	15		13	10	347	18		17	04	324	10
700	94·1	08	-12	064	06	93·5	07	04	024	06	93·8	08	02	358	24	95·0	10	-01	313	11
650		-02	-22	020	08		03	-02	068	13		01	-03	351	24		02	-05	311	12
600	132	-09	-27	344	07	131	-05	-11	053	15	132	-07	-12	346	18	133	-06	-13	270	07
550		-17	-35	347	06		-15	-22	059	16		-15	-20	359	18		-15	-25	280	09
500	175	-26	-41	044	02	175	-24	-32	082	14	175	-24	-29	342	14	176	-24	-37	280	12
450		-35	-47	123	05		-35	-44	079	21		-35	-40	336	12		-36	-46	265	11
400	225	-46		131	15	225	-47		082	19	225	-46		341	09	227	-47		258	10
350		-60		098	15		-60		082	22		-60		329	14		-60		198	08
300	286	-74		158	20	287	-60		093	13	287	-69		311	11	288	-70		255	06
250		-62		294	01		-59		166	07		-60		282	06		-64		309	14
200	372	-56		312	07	374	-56		245	05	373	-54		280	10	3 4	-50		307	17
170		-55		317	06		-51		252	05		-54		268	09		-58		301	15
150		-54		301	19		-51		265	06		-53		284	06		-57		313	10
130		-54		081	17							-52		360	02		-56		317	09
110		-54		005	08							-53		273	10		-58		297	13
100	522	-54		339	12						523	-54		310	11	522	-59		340	12
90		-56									(095 mb)	-54					-59		328	09
80																	-62			
70																(071 mb)	-67			
60																				

Inversion 1008mb. 32°–988mb. 37°

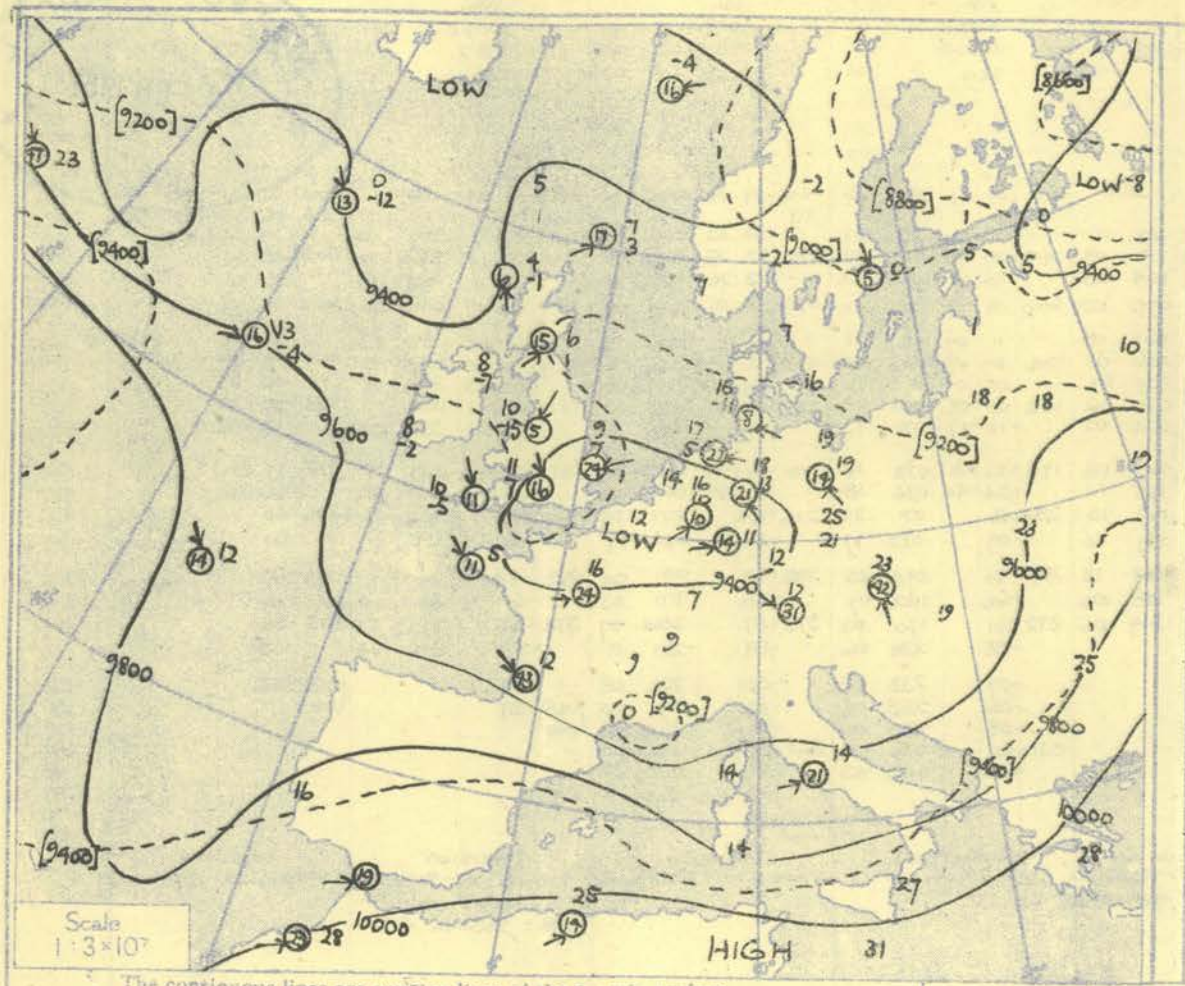
Inversion 675mb. 08°–662mb. 04°

Isothermal 999 – 972mb. 38°

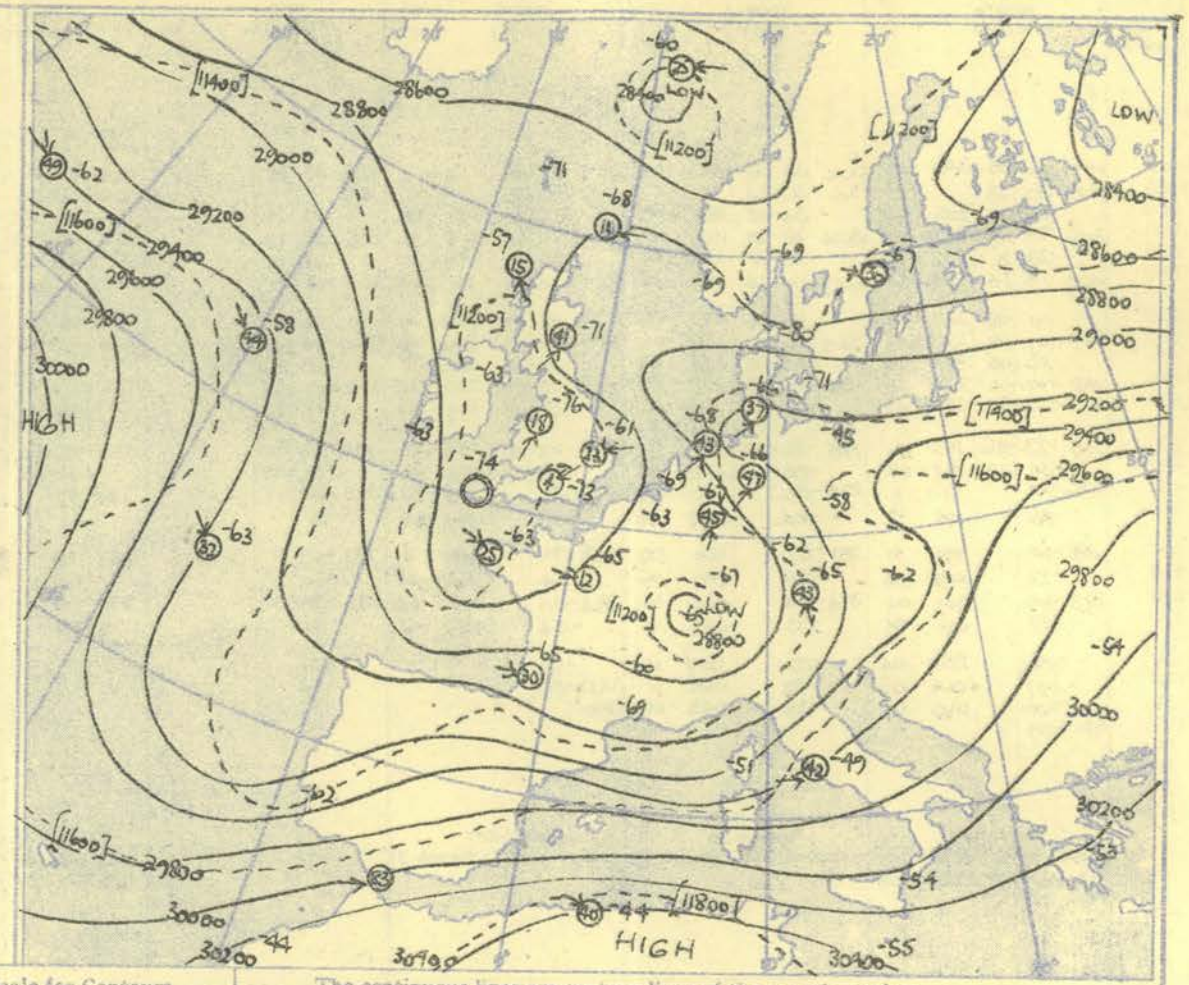
	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Tropopause	I 271mb. -70° 30,900′	I 305mb. -56° 24,600′	I 293mb. -76° 29,200′	I 322mb. -67° 27,200′	I 284mb. -78° 29,800′	I 337mb. -63° 26,100′	I 310mb. -73° 27,900′	I 297mb. -71° 27,000′	
Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	

Wednesday 14th February 1951.

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



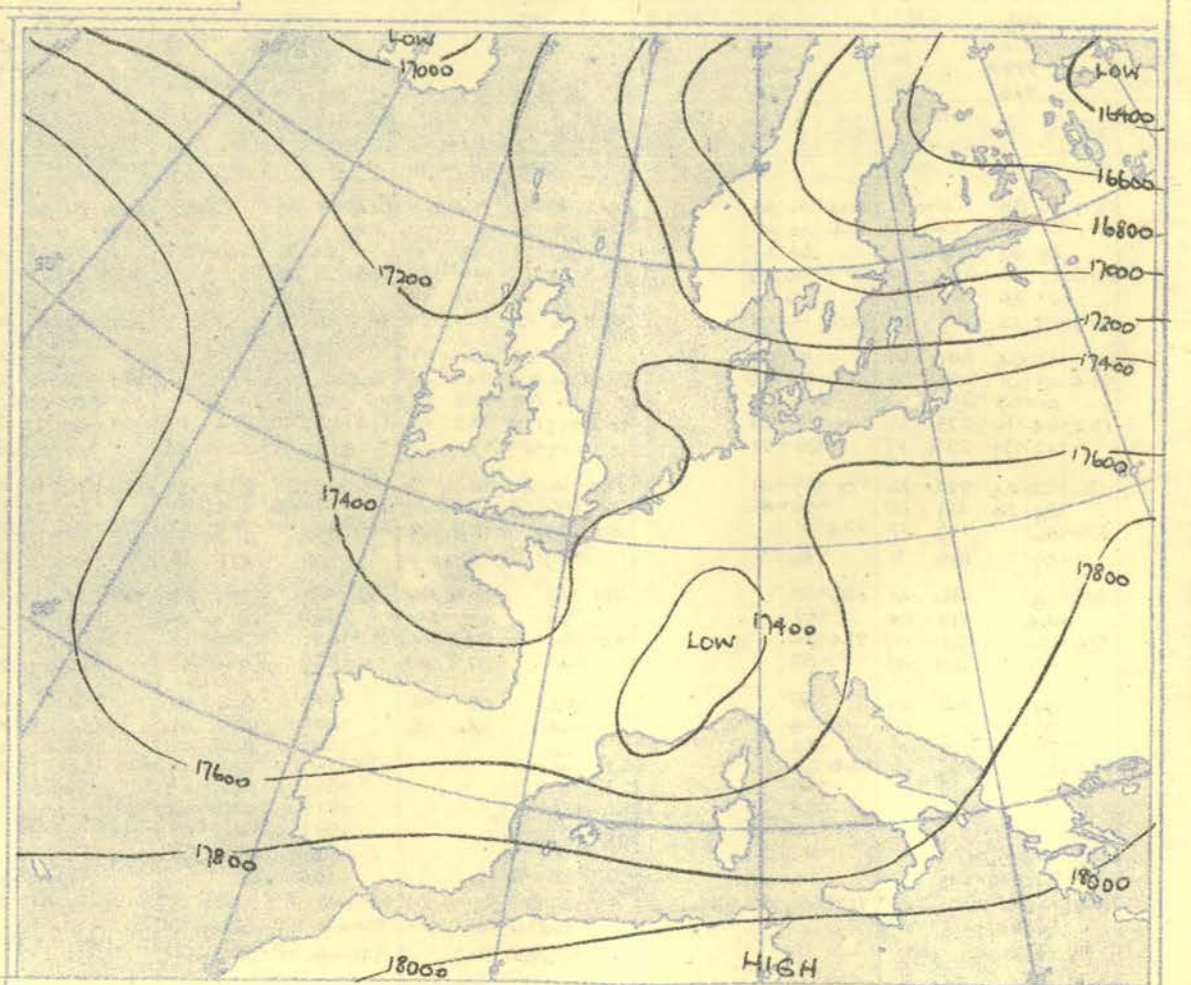
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.



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

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

The continuous lines are contour lines of the 500mb. 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

	49·8N. 17·0W.			52·2N. 13·5W.			43·2N. 17·0W.			39·5N. 12·2W.		
Pressure Time	14h.			1530			1230h.			1415h.		
M.S.L.	1008·8 mb			1007·4 mb			1017 mb			1015 mb		
Surf	1005·2 mb			1008·8 mb			1012 mb			1012 mb		
Freezing	890 mb			910 mb			890 mb			860 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.
Surf	01·0	45	39	01·0	44	40		49	40		51	41
1000	2·3			3·0			4·7			4·3		
950		39	37		37	37		41	34		43	37
900	30·4	32	30	31·0	29	29		33	29		37	
850		26			25			26	26		30	
800	61·0	21		61·4	19			22			25	
750		19			13			18			19	
700	93·0	13		95·2	07		97·5	12		97·6	18	
650		10			02			09			14	
600	134	02		133	-02			03			08	
550		-05			-05			-05			-06	
500	178	-18		177	-17		180	-14		180	-17	
450												
400												
350												
300												
250												
200												
170												
	Cloud. 4/8 Cu 940 - 840mb. 8/8 Ac 780 - 740mb. 4/8 Ac 590 - 530mb. 6/8 Cs 3xx - 3xxmb.			Cloud. 4/8 Cu 930 - 820mb. 7/8 As 630 - 4xxmb.			Cloud. 2/8 Cu 930 - 900mb. 1/8 Cu 930 - 810mb. 5/8 Sc 860 - 850mb. 3/8 As 520 - 500mb. Surf. wind:- N.W. 7-10Kts.			Cloud. 5/8 Cu 900 - 850mb. Surf. wind:- N.E. 7-10Kts.		

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

Place	Lossiemouth		Ronaldsway		Shoeburyness		Lerwick		Wick		St. Eval	
Time	09h.		09h.		11h.		15h.		15h.		21h.	
Type							Radar					
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.	160	08	120	08	350	13	220	15	170	15		
1,000	140	12	110	08	010	21	215	21	170	13	310	04
2,000	200	09	090	13	030	17	207	19	170	15	310	05
3,000	200	07	080	11	030	11	204	18			300	04
4,000	200	05			020	11	204	17			240	02
5,000	200	12			360	09	208	19			290	03
6,000	190	18			340	06	207	21				
8,000	180	22			290	09	199	23				
10,000					200	09	201	23				
14,000					290	07	205	25				
18,000					280	13	206	23				
24,000							226	35				
30,000					240	07	225	23				
40,000					270	13	285	06				
50,000					210	05	L.V.					
							296 (57,000')	07				

NEPHOSCOPE OBSERVATIONS

Place	Valentia
Time Type	15h. Ci.
Dir. Vel.	340 80

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

Ship	Weather Explorer	Weather Explorer	Weather Explorer	Weather Explorer	Weather Recorder	Weather Recorder	Weather Recorder	Weather Recorder
Lat/Long	52·2N 19·6W	52·3N 19·8W	52·3N 19·8W	52·3N 20·2W	59·1N 18·9W	59·0N 18·9W	59·0N 19·1W	59·1N 19W
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.
M.S.L.	1015 mb	1010 mb	1005 mb	999 mb	1014 mb	1012 mb	1011 mb	1010 mb
Surf	1015 mb	1010 mb	1005 mb	999 mb	1014 mb	1012 mb	1011 mb	1010 mb
Freezing	925 mb	905 mb	870 mb	865, 835 mb	965 mb	950 mb	930 mb	935 mb

Weather Explorer

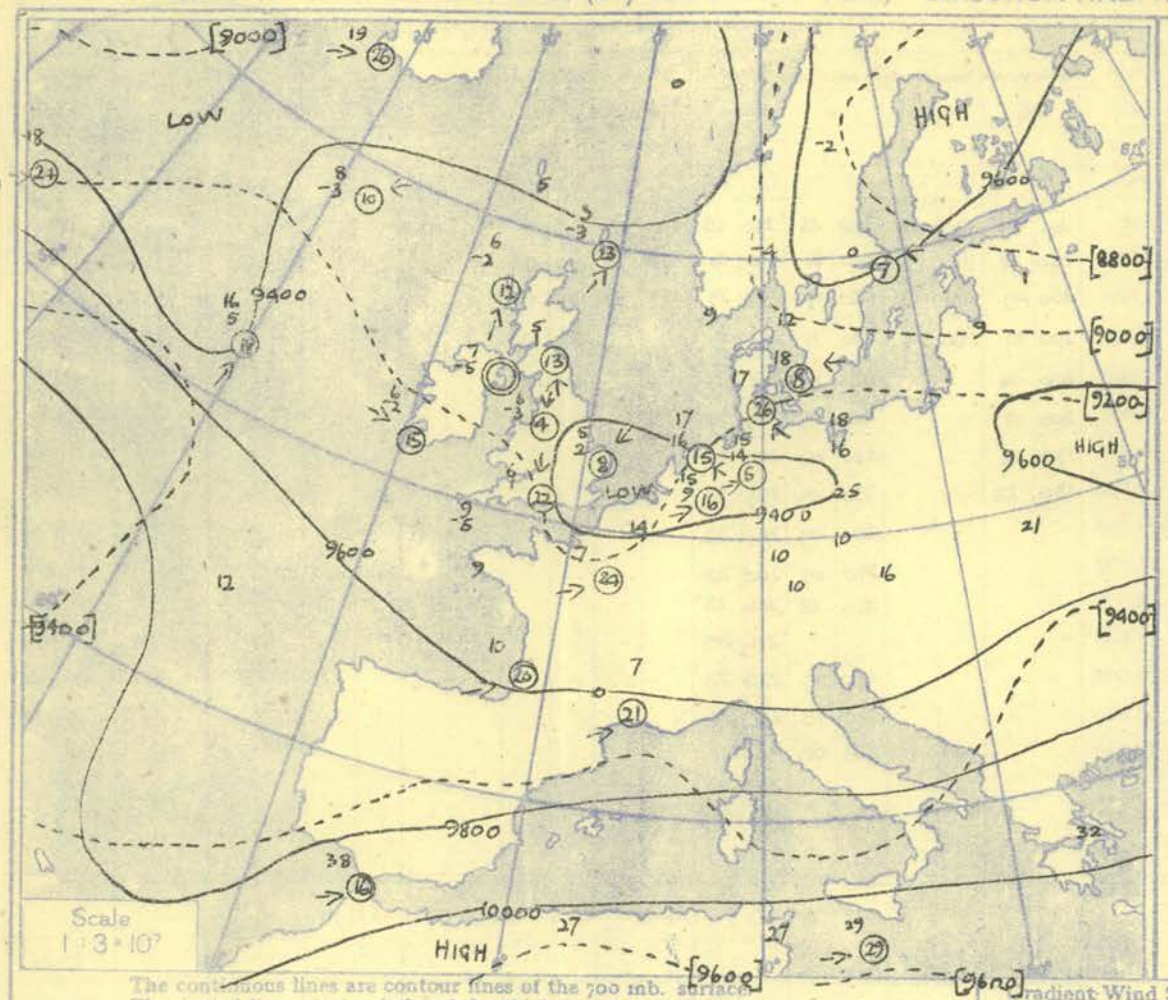
Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		43	33	Calm			41	36	195	07		44	39	140	25		48	42	080	07
1000	3·9	42	31	227	09	2·6	40	35	223	09	1·2	44	38			·3				
950		36	23	227	08		36	32	215	10		40	30	154	30		42	33	095	26
900	31·8	28	13	245	02	30·5	31	28	211	09	29·4	34	24	161	29	28·0	35	26	114	05
850		22	07	251	12		26	22	203	09		31	21	179	29		32	22	144	06
800	62·2	21	00	252	15	61·1	21	17	210	15	60·2	28	18	194	22	59·0	27	11	147	07
750		15	-02	250	16		19	14	231	20		21	11	193	19		21	08	147	07
700	96·0	13	-04	258	16	95·1	15	10	232	19	94·5	16	05	183	18	93·0	14	01	125	09
650		10	-09	269	24		10	04	252	17		08	-05	179	20		07	-02	099	11
600	135	03	-15	280	12	134	03	-04	240	18	133	00	-19	193	15	132	01	-15	116	07
550		-04	-21	286	14		-05	-13	246	17		-09	-31	216	16		-07	-27	135	07
500	179	-11	-26	296	20	178	-15	-24	266	23	177	-18	-33	239	28	176	-16	-39	140	07
450		-21	-36	310	31		-26	-35	248	22		-28	-43	248	31		-28	-53	Lev < 5	
400	231	-31	-46	323	54	229	-39	-49	251	28	228	-40		264	29	227	-39	-59	Target	
350		-44		325	58		-52		241	35		-51		265	23		-49		above max	
300	295	-68		305	44	292	-65		243	39	291	-56		266	20	290	-57		Elevation	
250		-74		298	46		-67		273	23		-58		287	20		-69		319	42
200	379	-66		298	31	377	-56		309	21	378	-56		306	35	377	-57		321	31
170		-61		298	18		-57		309	19		-55		319	37		-58		318	22
150		-60		298	15		-57		324	23		-55		327	33		-60		307	28
130		-59		298	15		-58		323	21		-57		329	20		-61		302	38
110		-60		298	12		-58		323	10		-66		331	12		-63		319	18
100	527	-61		298	12		-57				527	54		327	16	525	-64		320	09
90		-61		298	09		-68				(092	-53					-64			
80		-62		298	07						mb)					(086	-64			
70		-62		298	03											mb)				
60	(068	-63																		
	mb)																			
	Inversion 839mb 20° - 822mb 24° Isothermal 700 - 670 mb 13°										Isothermal 1005 - 1000mb 44°					Inversion 855mb 31° - 844mb 33°				
Tropopause	I 241mb -78° 34,000					I 288 mb -68° 30,100					I 283 mb -59° 30,400					I 270mb -60° 31,200				

Weather Recorder

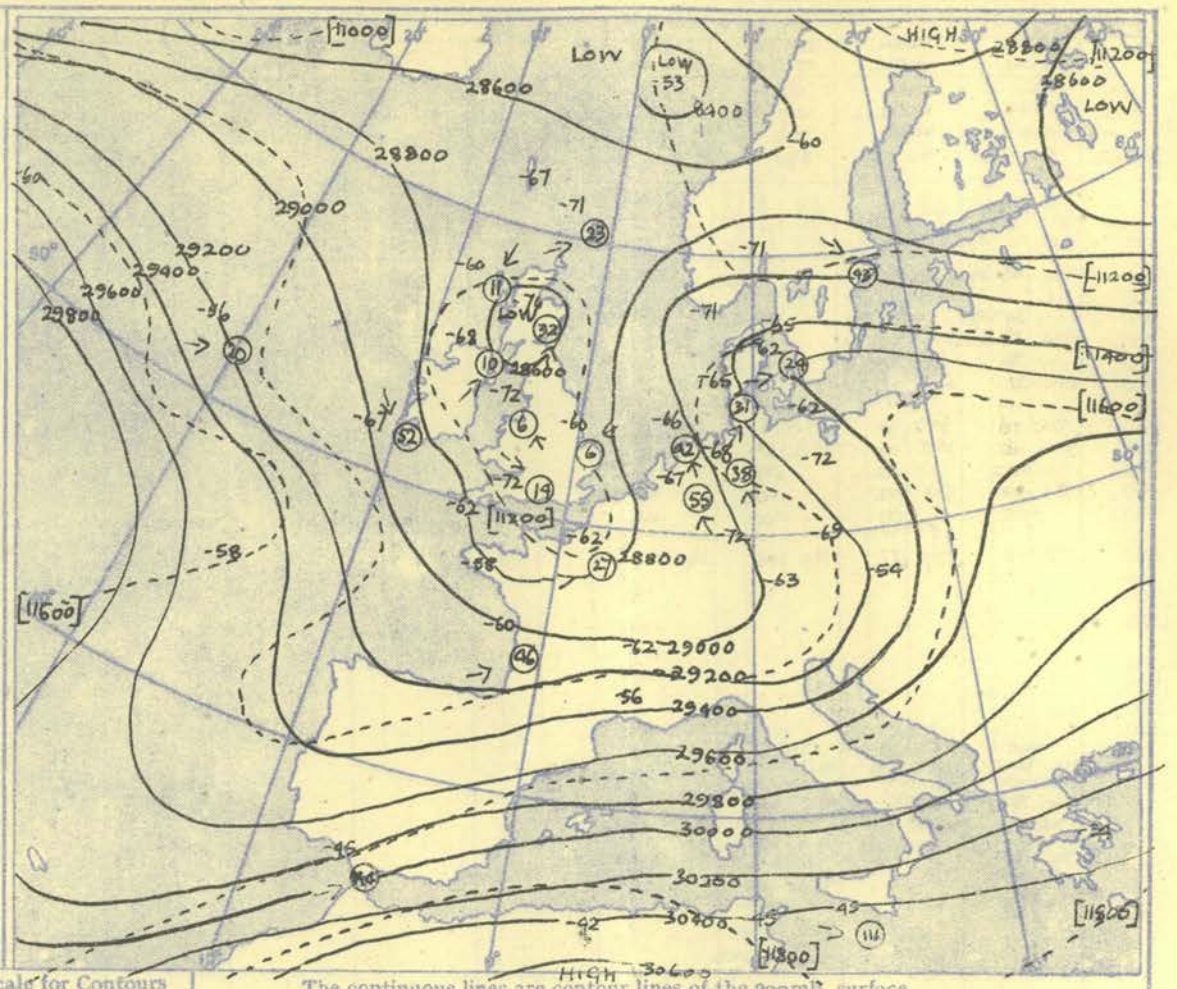
Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		39	31	350	08		39	28	260	08		44	32	040	08		52	29	060	10
1000	3·6	37	30	318	06	3·1	38	27			3·1	42	31	006	06	2·7	40	28	060	10
950		30	25	315	07		32	22	018	08		35	26	025	06		34	24	069	12
900	31·1	22	18	315	09	30·7	26	16	018	09	31·0	28	15	036	08	30·5	27	19	065	11
850		15	11	314	12		20	08	013	10		24	08	040	09		22	-03	061	11
800	60·9	11	00	314	17	60·9	16	-01	008	12	61·3	18	06	046	10	60·7	15	-06	050	06
750		06	-06	314	17		10	-03	002	12		10	02	050	09		09	-12	079	03
700	94·1	00	-12	337	13	94·3	03	-07	007	15	94·8	08	-03	040	10	94·2	07	-21	Calm	
650		-05	-19	337	13		00	-20	002	13		03	-12	004	08		00	-25	345	07
600	131	-08	-31	312	12	132	-04	-28	326	18	133	-04	-16	326	10	132	-07	-22	314	15
550		-11	-32	303	18		-09	-23	316	27		-11	-20	309	15		-13	-26	285	18
500	175	-20	-38	304	21	176	-16	-27	326	18	176	-19	-27	304	19	175	-19	-30	295	21
450		-31	-44	311	23		-27	-36	300	24		-30	-37	302	20		-31	-43	322	21
400	226	-41				227	-38	-47	290	25	227	-42		288	22	226	-43		315	23
350							-52		290	33	(380	-47					-56		323	36
300						290	-63		286	34	mb)					288	-68		327	39
250							-74		299	24							-64		329	17
200																374	-57		299	15
170																	-56		285	19
150																	-54		295	19
130																	-59		312	14
110																	-61		320	06
100																523	-61		322	07
90						(206	-61										-58			
80						mb)														
70																				
60																				
	Isothermal 850 mb - 833mb 15°					Isothermal 677 - 661mb 01°					Inversion 726mb 6° - 700mb 8°					Inversion 750mb 9° - 724mb 10° Isothermal 762 - 750mb 9°				
Tropopause	N.R.					I 257mb -76° 32,300					N.R.					I 290mb -70° 29,600				

Wednesday 19th February 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

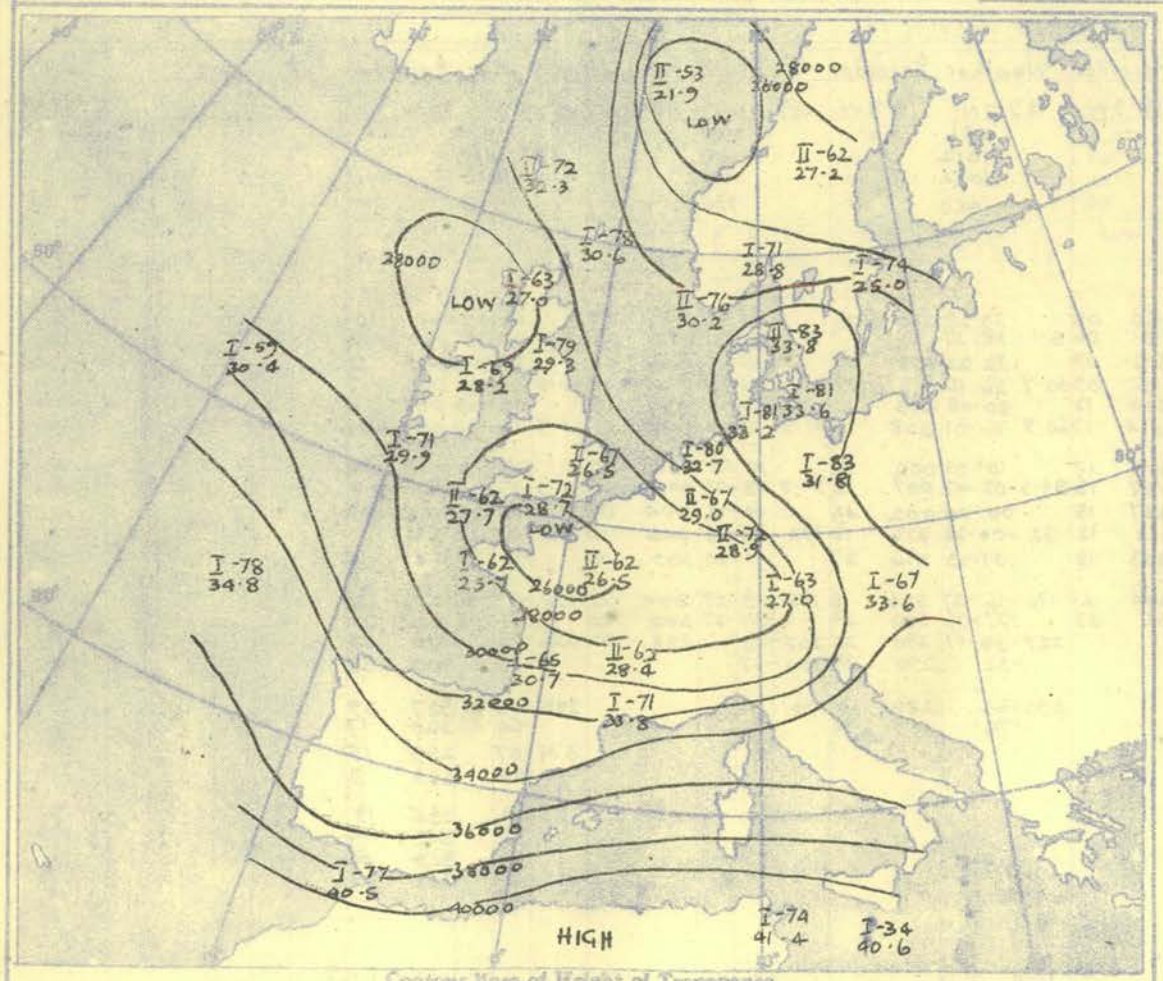


The continuous lines are contour lines of the 300mb. surface
The dotted lines are isopleths of the thickness of the layer 500–300 mb.

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.

Cold trough moved east to cover the British Isles with a small cold pool over Scotland. Warm air moved slowly east over the Central Atlantic in association with depression.

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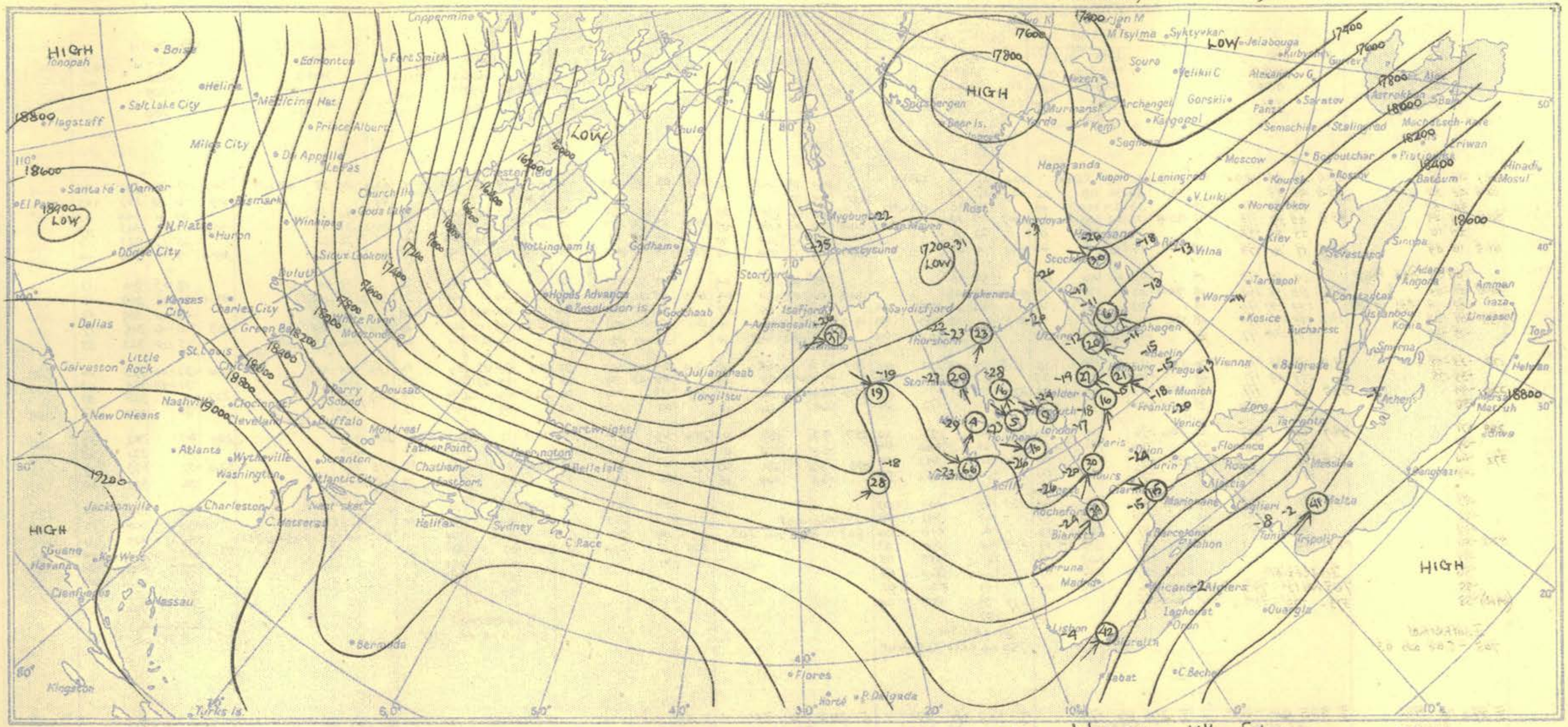
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Wednesday 14th. February 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Wednesday 14th February 1951.

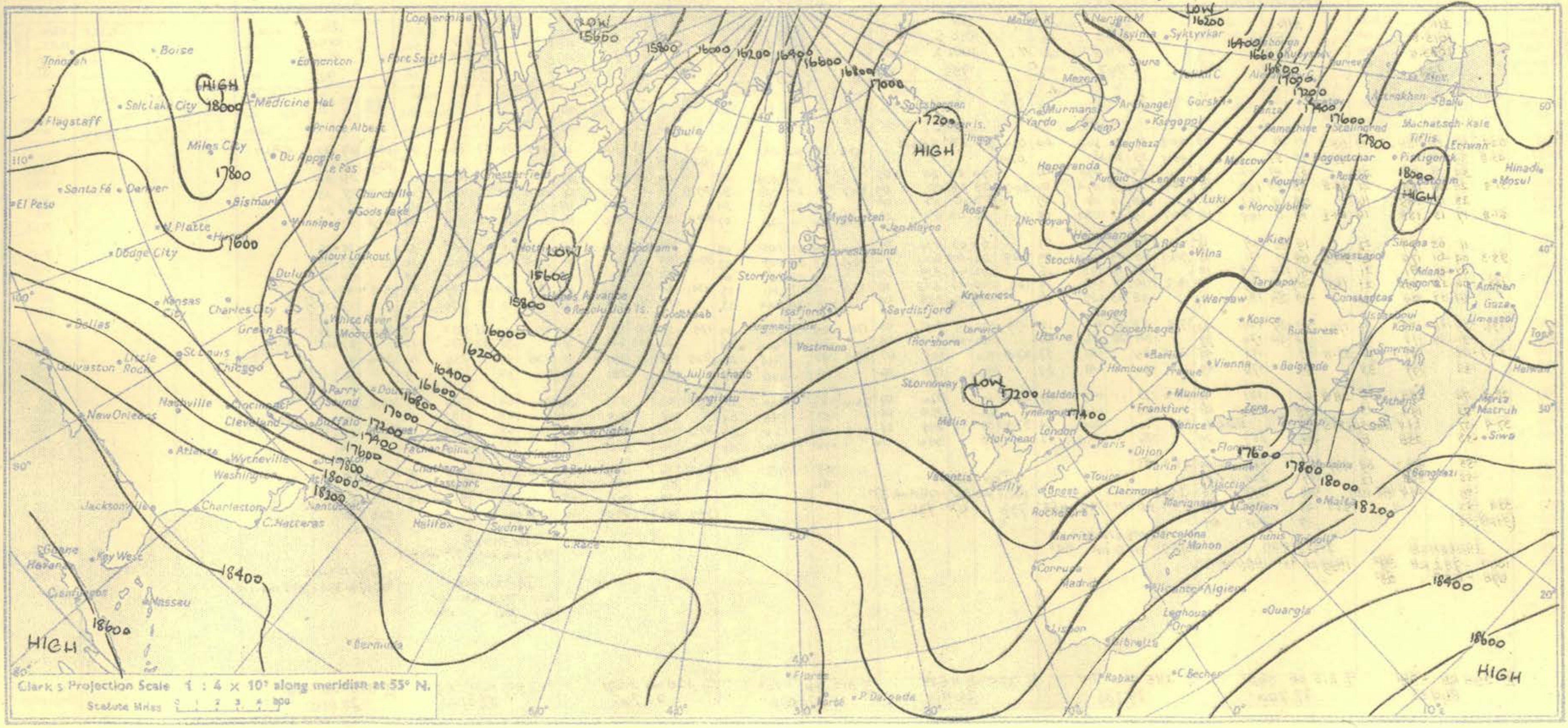


Fig 6. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Wednesday 14th. February 1951.

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

15h. G.M.T.

Station	Pressure: Time	M.S.L.	Surf	Freezing	Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LERWICK	15h.	1011·5 mb	1001·2 mb	938 mb	Surf	02·7	40	37		
					1000	02·9	40	36		
					950		34	33		
					900	30·7	29	29		
					850		23	16		
					800	61·5	16	09		
					750		09	03	See Page 3 for Winds	
					700	94·9	03	-03		
					650		01	-19		
					600	132	-07	-24		
					550		-15	-35		
					500	175	-23	-42		
					450		-33	-53		
					400	226	-44			
					350		-58			
					300	288	-71			
					250		-69			
					200	372	-60			
					170		-55			
					150		-53			
					130		-55			
					110		-58			
					100	52·2	-56			
					90		-57			
					80		-56			
					70		-55			
					60	(64mb)	-55			
						Isothermal 705 - 668 mb 03°				
	Tropopause					I 274 mb -78° 30600'				
STORNOWAY	15h.	1009·8 mb	1008·1 mb	936 mb	Surf	00·4	41	34	180	08
					1000	02·6	40	33		
					950		34	30	171	10
					900	30·5	28	25	173	12
					850		23	21	183	11
					800	60·9	17	16	178	19
					750		14	14	173	14
					700	94·7	06	-02	168	12
					650		-01	-07	170	14
					600	13·2	-10	-16	174	18
					550		-17	-24	172	20
					500	17·5	-27	-35	170	20
					450		-38	-45	171	23
					400	22·5	-50		177	27
					350		-57		006	59
					300	28·7	-60		007	11
					250		-59		341	06
					200	31·4	-52		L+V	
					170		-51		348	05
					150	137	-51		338	06
					130		-54		345	05
					110		-54		351	06
					100	52·5	-54			
						Inversion 765 mb 12° - 750 mb 14°				
						373 " -45° - 364 " -46°				
	Tropopause					I 325 mb -63° 27,000'				
LEUCHARS	15h.	1011·7 mb	1010·8 mb	945 mb	Surf	00·2	42	38	CALM	
					1000	03·1	40	36	119	06
					950		33	29	140	09
					900	30·8	25	22	165	08
					850		20	18	142	09
					800	61·0	15	10	115	06
					750		07	02	146	06
					700	94·4	05	01	171	13
					650		-03	-10	163	14
					600	132	-11	-16	162	13
					550		-19	-23	163	16
					500	17·5	-28	-32	159	16
					450		-37	-42	157	25
					400	225	-47		161	29
					350		-61		163	39
					300	286	-76		169	32
					250		-66		171	06
					200	37·1	-57		091	04
					170		-55		095	06
					150	43·3	-52		030	04
					130		-52		360	03
					110		-57		343	05
					100	52·1	-57		348	07
					90		-58		007	07
					80		-59		037	07
					70		-56		033	05
					60	(62mb)	-55			
	Tropopause					I 290 mb -79° 29,300'				
ALDERGROVE	15h.	1010·4 mb	1001·1 mb	940 mb	Surf	02·6	41	34	CALM	
					1000	02·9	41	34		
					950		34	30	CALM	
					900	30·7	28	23	"	
					850		22	14	"	
					800	61·1	16	09	"	
					750		08	03	"	
					700	94·6	07	-05	"	
					650		-01	-14	235	04
					600	13·2	-11	-25	227	04
					550		-18	-36	224	04
					500	17·5	-29	-45	222	04
					450		-40	-53	221	05
					400	225	-50		195	07
					350		-60		172	21
					300	286	-68		197	10
					250		-65		300	04
					200	372	-61		342	09
					170		-64		342	09
					150	433	-67		337	09
					130		-67		342	08
					110		-66		010	06
					100	51·8	-63		010	03
					90		-61		355	02
					80		-60		360	02
					70		-57		001	02
					60	627	-55		008	04
						Inversion 750 mb 08° - 735 mb 11°				
	Tropopause					I 305 mb -69° 28,200'				
LIVERPOOL	15h.	1009·9 mb	1008 mb	932 mb	Surf		40	35	030	05
					1000	02·7	39	33		
					950		34	26	029	08
					900	30·5	28	23	043	05
					850		23	19	104	03
					800	66·1	19	12	074	02
					750		13	05	030	04
					700	94·5	06	-03	003	04
					650		-01	-06	010	07
					600	13·2	-10	-14	360	10
					550		-15	-22	348	10
					500	17·5	-23		358	05
					450		-34	-43	103	04
					400	22·6	-46		124	10
					350		-60		116	13
					300	287	-72		137	06
					250		-59		354	01
					200	37·3	-56		331	05
					170		-52		006	03
						Isothermal 827 - 804 mb 20°				
	Tropopause					I 305 mb -73° 28,300'				
DOWNHAM MARKET	15h.	1007·3 mb	1002·7 mb	955 mb	Surf	01·2	38	37	345	11
					1000	01·9				
					950		31	30	352	15
					900	29·6	25	24	357	18
					850		20	19	011	18
					800	59·8	15	13	017	13
					750		10	07	022	10
					700	93·3	05	02	021	08
					650		01	-02	016	06
					600	13·1	-06	-10	003	05
					550		-14	-17	331	07
					500	17·4	-24	-29	323	09
					450		-35	-43	338	08
					400	22·5	-48		346	09
					350		-61		353	07
					300	28·6	-60		033	06
					250		-62		195	06
					200	37·3	-57		191	07
					170		-56		263	07
					150		-53		285	06
					130		-54		283	05
					110		-54		290	06
					100	52·2	-58		290	06
							-59			
	Tropopause					I 332 mb -67° 26,500'				
LARKHILL	15h.	1008·6 mb	992·3 mb	941 mb	Surf	4·4	39	34	030	10
					1000	2·3				
					950		33	29	002	18
					900	30·1	27	24	359	20
					850		23	19	356	21
					800	60·4	17	12	345	18
					750		10	06	340	19
					700	93·9	06	01	340	22
					650		00	-08	335	24
					600	13·2	-08	-15	325	21
					550		-16	-23	319	21
					500	17·5	-26	-33	316	16
					450		-35	-43	298	14
					400	22·5	-46		294	14
					350		-59		281	13
					300	28·1	-72		313	14
					250		-60		283	14
					200	31·3	-56		273	08
					170		-55		277	14
					150	435	-53		285	10
					130		-53		296	10
					110		-56		297	10
					100	52·3	-57		337	06
					90		-58		254	05
					80		-57		289	11
					70		-53			
						Isothermal 590 - 574 mb -10°				
	Tropopause					I 300 mb -72° 28,700'				
CAMBORNE	15h.	1011·2 mb	999·5 mb	911 mb	Surf	02·9	45	35	CALM	
					1000	02·7				
					950		40	33		
					900	30·7	31	27		
					850		23	21		
					800	61·3	22	12		
					750		17	04		
					700	95·2	09	-05		
					650		01	-13		
					600	13·3	-08	-20		
					550		-16	-27		
					500	17·6	-24	-41		
					450		-34	-50		
					400	22·7	-48			
					350		-56			
					300	28·8	-62			
					250		-59			
					200	375	-53			
					170	(165mb)	-53			
						Inversion 812 mb 20° - 793 mb 22°				
	Tropopause					II 315 mb -62° 27,700'				
VALENTIA	15h.	1010 mb	1009 mb	900 mb	Surf	00·3	47	38	275	05
					1000	2·7	46	38	287	05
					950		39	31	344	05
					900	30·8	32	32	343	09
					850		25	13	323	10
					800	61·4	19	06	314	10
					750		13	03	310	13
					700	95·0	06	-02	309	15
					650		-02	-10	309	17
					600	13·3	-10	-16	315	17
					550		-15	-28	322	25
					500	17·6	-22	-40	325	66
					450		-31	-48	324	43
					400	22·7	-41		325	49
					350		-53		322	54
					300	28·9	-67		322	52
					250		-61		321	23
					200	37·5	-52		323	19
					170		-56		322	20
					150		-54		321	12
					130		-54		308	12
					110		-56		279	11
					100	52·5	-57		271	10
					90		-57		004	04
					80		-57		022	05
					70		-57		022	06
					60		-57		004	07
						Isothermal 570 - 550 mb -15°				
	Tropopause					I 286 mb -71° 29,900'				

21h. G.M.T.

Station	Pressure: Time	M.S.L.	Surf	Freezing	Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
LERWICK	21h.	1013·8 mb	1003·6 mb	934 mb	Surf	02·7	39	36	180	21
					1000	03·8	39	36		
					950		34	32	179	24
					900	31·5	28	26	173	21
					850		23	18	185	16
					800	61·8	17	13	183	16
					750		11	05	174	22
					700	95·3	04	-01	176	23
					650		02	-17	191	21
					600	133	-06	-28	205	21
					550		-14	-27	195	21
					500	176	-23	-30	185	21
					450		-31	-37	173	27
					400	22·7	-42		185	31
					350		-55		197	33
					300	28·9	-70		200	35
					250		-73		194	13
					200	37·4	-57		L+V less 05/13	
					170		-53		250	07
					150		-53		315	09
					130		-55		350	12
					110		-56		L+V less 05/13	
					100	52·4	-56		"	
					90	(92mb)	-58			
					80					
					70		Isothermal			
					60		1009 - 982 mb 39°			
							690 - 658 " 03°			
	Tropopause					I 260 mb -80° 31,900'				
STORNOWAY	21h.	1009·0 mb	1010·7 mb	918 mb	Surf	00·4	42	31	160	05
					1000	02·8	43	32		
					950		37	27	162	13
					900	30·8	30	23	169	13
					850		24	19	167	13
					800	61·2	19	11	160	14
					750		15	06	167	12
					700	94·9	08	01	171	15
					650		-01	-10	174	18
					600	133	-09	-19	174	15
					550		-18	-26	181	14
					500	176	-27	-37	180	22
					450		-38	-50	170	33
					400	22·6	-47		173	45
					350		-58		176	49
					300	28·8	-61		181	19
					250		-58		266	03
					200	37·5	-53		CALM	
					170		-52		357	29
					150	437	-56		328	09
					130		-57		329	03
					110		-58		322	10
					100	524	-59		017	12
					90		-59		010	09
						Inversion 1009 mb 42° - 1000 mb 43°				
	Tropopause					I 315 mb -65° 27,700'				
LEUCHARS	21h.	1012·2 mb	1011·3 mb	967 mb	Surf	00·2	37	37	160	09
					1000	03·1	35	34		
					950		30	28	094	06
					900	30·6	25	24	094	06
					850		19	19	091	07
					800	60·7	14	13	089	08
					750		08	04	091	09
					700	94·1	04	-04	093	09
					650		-04	-10	108	15
					600	13·2	-10	-15	123	19
					550		-18	-23	139	18
					500	17·4	-28	-32	116	18
					450		-34	-38	126	22
					400	22·5	-46		141	27
					350		-60		141	39
					300	28·6	-73		145	40
					250		-65		146	06
					200	37·1	-60		004	04
					170		-56		349	12
					150	43·3	-55			
						Inversion 744 mb 07° - 729 mb 08°				
						Isothermal 467 - 450 mb -34°				
	Tropopause					I 285 mb -75° 29,700'				
ALDERGROVE	21h.	1010·5 mb	1001·2 mb	932 mb	Surf	02·6	36	33	CALM	
					1000	02·9				
					950		34	28	180	05
					900	30·7	28	23	137	04
					850		23	16	117	04
					800	61·1	16	08	114	03
					750		08	03	090	02
					700	94·7	06	-04	006	02
					650		-02	-14	339	03
					600	13·2	-10	-27	343	05
					550		-19	-36	328	04
					500	17·5	-29	-44	215	03
					450		-40	-55	214	04
					400	22·5	-50		181	07
					350		-60		170	06
					300	28·7	-61		320	09
					250		-61		328	14
					200	37·3	-57		348	13
					170		-58		346	16
						Inversion 1001 mb 36° - 984 mb 37° 738 " 07° - 720 " 10°				
	Tropopause					II 335 mb -62° 26,400'				
LIVERPOOL	21h.	1010·1 mb	1008·0 mb	955 mb	Surf	00·6	37	36	090	05
					1000	02·7	36	35		
					950		31	30	029	07
					900	30·3	27	24	328	03
					850		21	19	353	04
					800	60·5	16	14	011	07
					750		09	07	005	08
					700	93·9	03	00	007	08
					650		-04	-08	353	09
					600	13·1	-12	-17	341	13
					550		-18	-24	344	13
					500	174	-25	-31	327	09
					450		-34	-42	006	04
					400	22·5	-49		344	03
					350		-62		010	05
					300	28·6	-65		009	04
					250		-57		328	04
					200	37·3	-55		316	09
					170		-55		329	07
					150		-53		315	03
					130		-56			
						Inversion 1001 mb 36° - 984 mb 37° 738 " 07° - 720 " 10°				
	Tropopause					I 312 mb -70° 27,800'				
DOWNHAM MARKET	21h.	1008·3 mb	1003·7 mb	971 mb	Surf	01·2	35	34	300	10
					1000	02·9	35	34		
					950		30	29	351	07
					900	29·8	24	21	350	06
					850		20	19	349	07
					800	60·1	15	13	350	09
					750		10	06	349	19
					700	93·5	04	-02	339	21
					650		-01	-09	331	18
					600	131	-08	-18	283	11
					550		-16	-26	271	12
					500	174	-25	-37	277	15
					450		-36	-48	286	12
					400	22·5	-48		292	11
					350		-62		281	10
					300	28·6	-62		233	06
					250		-62		210	05
					200	37·2	-59		238	05
					170		-57		276	03
					150	43·4	-56		299	05
					130		-57		313	03
					110		-58		316	03
					100	52·1	-59		282	06
							-59			
	Tropopause					I 328 mb -67° 26,700'				
LARKHILL	21h.	1009·9 mb	993·4 mb	931 mb	Surf	4·4	36	33	360	04
					1000	2·6				
					950		34	29	325	10
					900	30·4	28	25	329	13
					850		22	18	327	14
					800	60·7	16	12	320	12
					750		11	06	307	13
					700	94·2	06	-02	305	16
					650		-01	-11	302	19
					600	13·2	-09	-20	299	12
					550		-17	-31	270	13
					500	17·5	-27	-42	252	15
					450		-38	-54	236	13
					400	22·5	-49		236	16
					350		-62		221	19
					300	28·6	-64		266	11
					250		-58		283	11
					200	37·3	-55		307	11
					170		-57		297	10
					150	43·5	-54		302	10
					130		-55		298	10
					110		-59		311	14
					100	52·2	-61			
						Inversion 993 mb 36° - 977 mb 37°				
						Isothermal 807 - 793 mb 16° 717 - 700 " 06°				
	Tropopause					I 322 mb -68° 27,200'				
CAMBORNE	21h.	1010·9 mb	1000·1 mb	923 mb	Surf	02·9	39	35	CALM	
					1000	02·9				
					950		36	30		
					900	30·8	29	25		
					850		24	20		
					800	61·3	20	14		
					750		14	06		
					700	95·1	07	-01		
					650		-01	-08		
					600	13·3	-09	-16		
					550		-19	-27		
					500	17·6	-30	-38		
					450		-37	-48		
					400	22·6	-47			
					350		-52			
					300	28·8	-60			
					250		-59			
					200	375	-55			
					170		-56			
					150	437	-56			
					130		-57			
					110		-58			
					100	524	-60			
					90	(97mb)	-61			
						Inversion 1000 mb 39° - 995 mb 41°				
	Tropopause					I 310 mb -60° 28,000'				
	Tropopause									

H.M.S.O. Press, M.O., Dunstable.

No. 11645 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Thursday 15th February 1951. Page 1.

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.	1015·7 mb	1011·3 mb	1012·1 mb	1010·7 mb	1010·2 mb	1009·0 mb	1010·4 mb	1010·8 mb	1009·[illegible] mb
Pressure: Surf	1005·3 mb	1009·6 mb	1011·2 mb	1001·2 mb	1008·1 mb	1004·4 mb	993·4 mb	1000·0 mb	1008·[illegible] mb
Pressure: Freezing	350 mb	887 mb	979 mb	948 mb	965 mb	980 mb	928 mb	895 mb	[illegible] mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	37	36	165	18
1000	04·1	37	35		
950		32	30	160	24
900	31·7	26	24	160	23
850		20	18	159	25
800	61·8	14	12	159	23
750		08	07	158	17
700	95·3	07	−2	149	19
650		02	−20	151	17
600	120	−7	−28	163	17
550		−17	−32	155	23
500	176	−25	−34	165	28
450		−32	−40	170	36
400	227	−43		174	43
350		−57		178	43
300	288	−72		120	33
250		−76		187	25
200	372	−61		210	06
170		−55		L. Y	
150		−55		"	
130		−55		"	
110		−61			
100					
90					
80					
70					
60					

Inversion 240 mb 7° – 225 mb 8°

Isothermal 225 – 214 mb 8°

Tropopause	II 266 mb −52° 31300′	I 310 mb −68° 28000′	I 300 mb −74° 28566′	I 360 mb −57° 24800′	II 334 mb −64° 26300′	I 315 mb −69° 27600′	I 302 mb −68° 28500	I 255 mb −70° 32500′	II 300 mb −70° 28900′

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·4	40	33	160	05
1000	030	39	32		
950		34	27	154	06
900	30·8	28	19	156	07
850		22	16	152	09
800	61·1	16	14	148	09
750		11	05	139	09
700	94·6	05	−6	122	10
650		−1	−13	128	12
600	132	−8	−21	133	11
550		−17	−31	148	15
500	175	−27	−41	155	22
450		−35	−47	159	23
400	226	−45		161	26
350		−58		160	29
300	287	−66		156	19
250		−61		144	03
200	374	−56		316	04
170		−53		278	05
150		−54		334	07
130		−57		317	05
110		−60		306	04
100	523	−59		324	07
90		−59		311	04
80		−59			
70					
60					

Inversion 1000 mb 33° – 995 mb 36° (76) −56

743 mb 8° – 730 mb 10°

Isothermal 995 – 980 mb 36°

Inversion 1008 mb 34° – 998 mb 35°

Inversion 994 mb 34° – 980 mb 36°

Isothermal 722 – 705 mb 5°

Inversion 1000 mb 38° – 980 mb 41°

Tropopause	I 260 mb −80° 31700′	I 307 mb −70° 28700′	I 304 mb −69° 28200′	I 364 mb −68° 24000′	I 330 mb −62° 26600′	I 322 mb −65° 27000′	I 291 mb −63° 29500′	I 281 mb −75° 35200′	

09hrs G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	
Pressure: Time	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	G.M.T.
Pressure: M.S.L.	1015·4 mb	1010·7 mb	1010·2 mb	1009·5 mb	1009·2 mb	1009·3 mb	1010·5 mb	1009·3 mb	mb
Pressure: Surf	1005·1 mb	1009·0 mb	1009·3 mb	1000·2 mb	1007·1 mb	1004·7 mb	993·8 mb	998·5 mb	mb
Pressure: Freezing	962 mb	837 mb	970 mb	Surface, 968 mb	964 mb	985 mb	930 mb	900 mb	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	36	35	150	22
1000	04·1	36	35		
950		31	30	143	29
900	31·6	24	24	144	27
850		19	19	152	22
800	61·6	13	11	156	18
750		10	02	143	18
700	95·0	05	−11	136	20
650		00	−19	128	23
600	133	−8	−23	130	27
550		−14	−22	143	25
500	176	−12	−28	155	28
450		−30	−35	155	34
400	227	−42		164	39
350		−58		163	40
300	283	−62		167	42
250		−75		174	36
200	373	−61		169	07
170		−53		292	03
150		−54		246	03
130		−55		044	04
110		−57		256	03
100	523	−58		256	03
90		−58		L. Y	
80		−56			
70					
60					

Inversion 770 mb 8° – 750 mb 10°

Isothermal 862 – 846 mb 18°

Inversion 1009 mb 36° – 1000 mb 39°

Inversion 1002 mb 29° – 968 mb 32°

Inversion 1007 mb 33° – 983 mb 36°

757 mb 10° – 735 mb 11°

Isothermal 910 – 900 mb 24°

Inversion 994 mb 33° – 970 mb 35°

750 mb 8° – 740 mb 8°

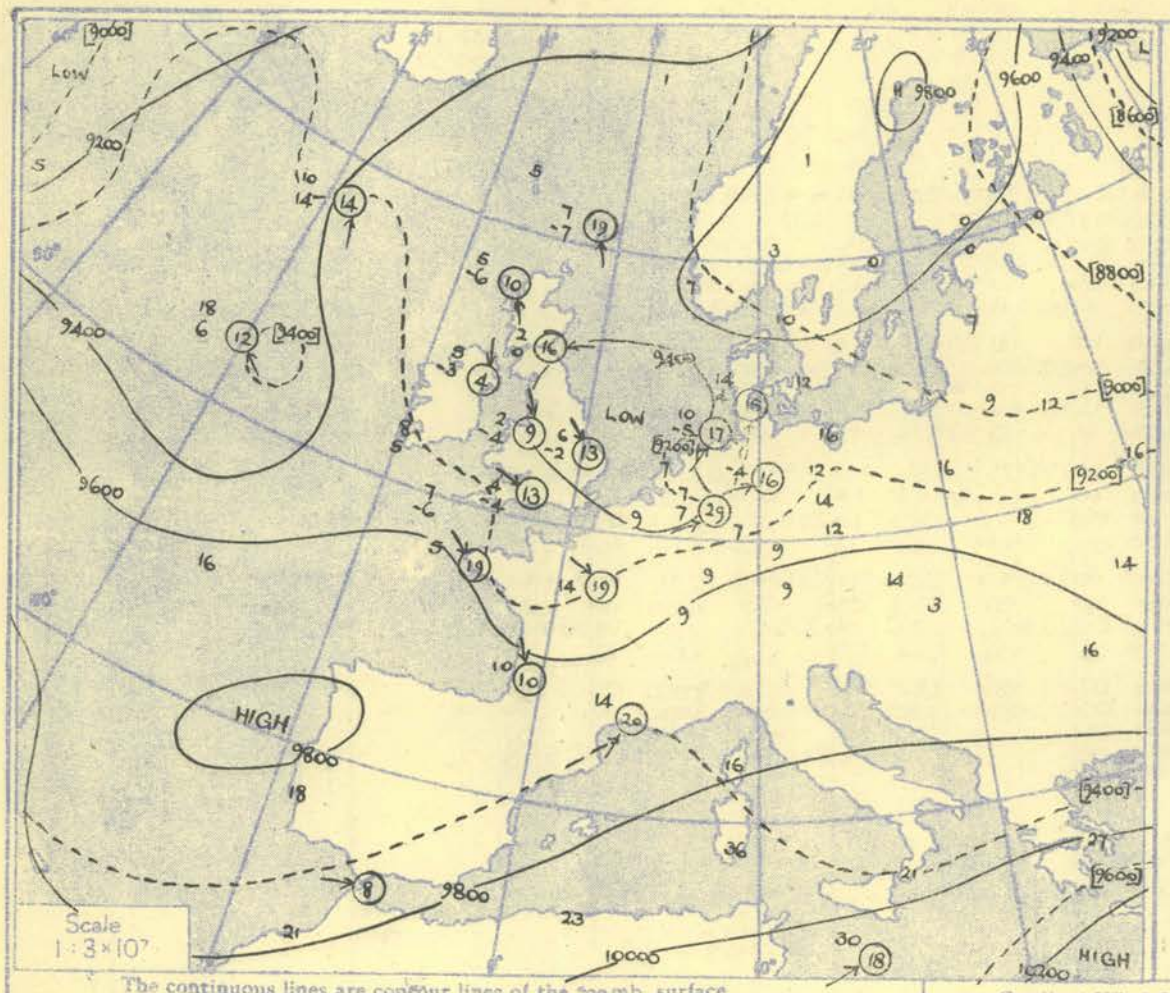
Inversion 999 mb 37° – 990 mb 40°

584 mb 42° – 571 mb 41°

Tropopause	I 260 mb −80° 31700′	I 307 mb −70° 28700′	I 304 mb −69° 28200′	I 364 mb −68° 24000′	I 330 mb −62° 26600′	I 322 mb −65° 27000′	I 291 mb −63° 29500′	I 281 mb −75° 35200′	Tropopause

Thursday 15th February, 1951.

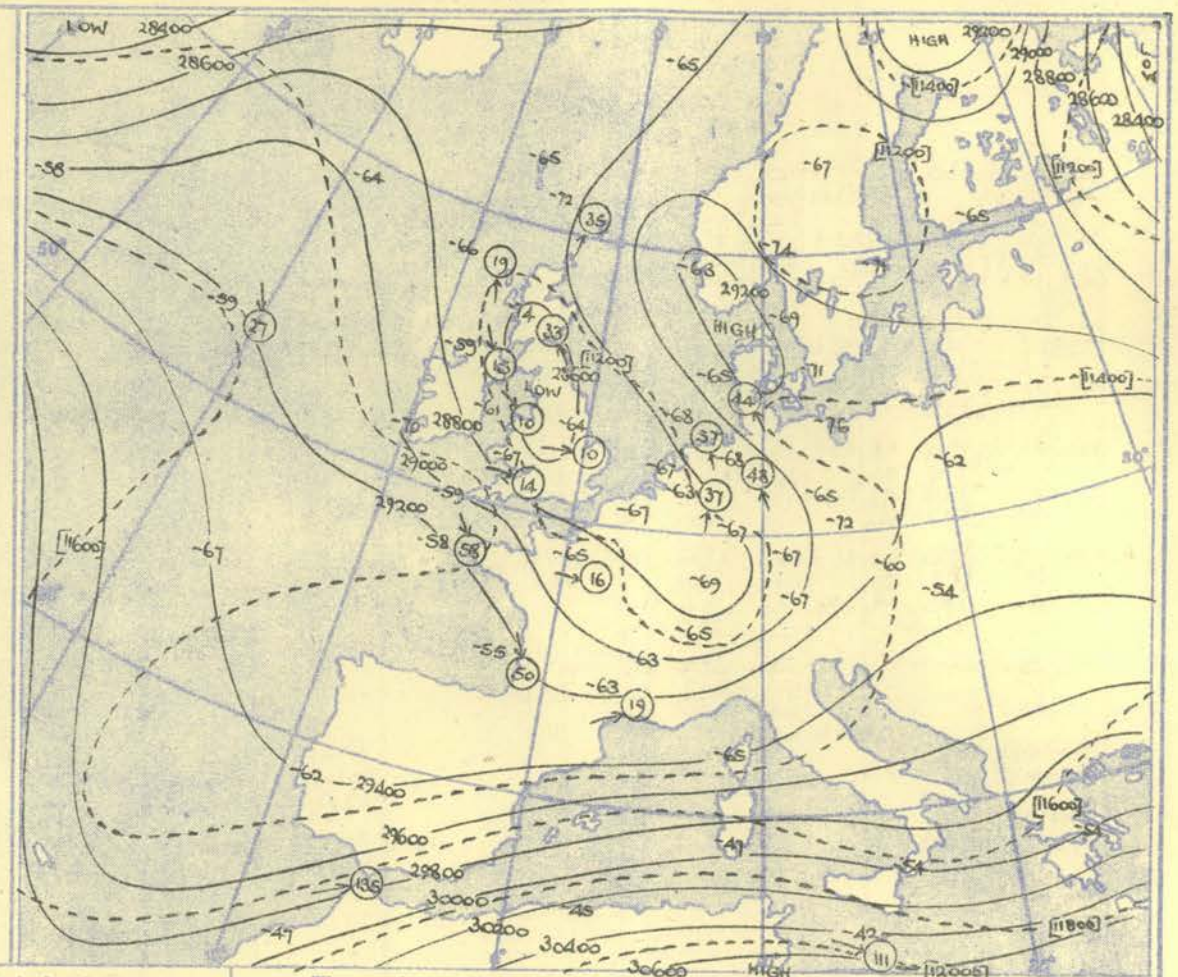
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03 h G.M.T.



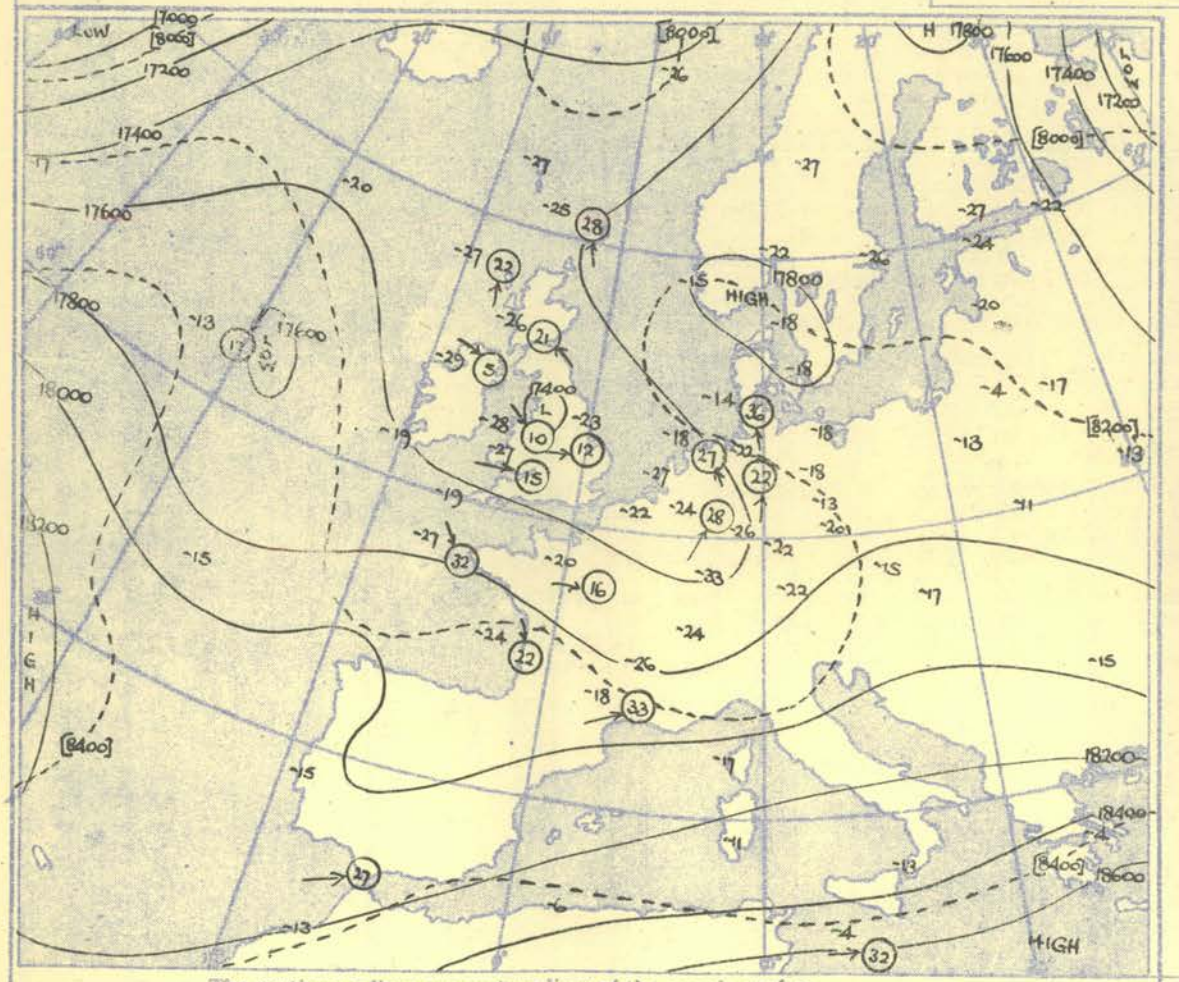
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000 — 700 mb.

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

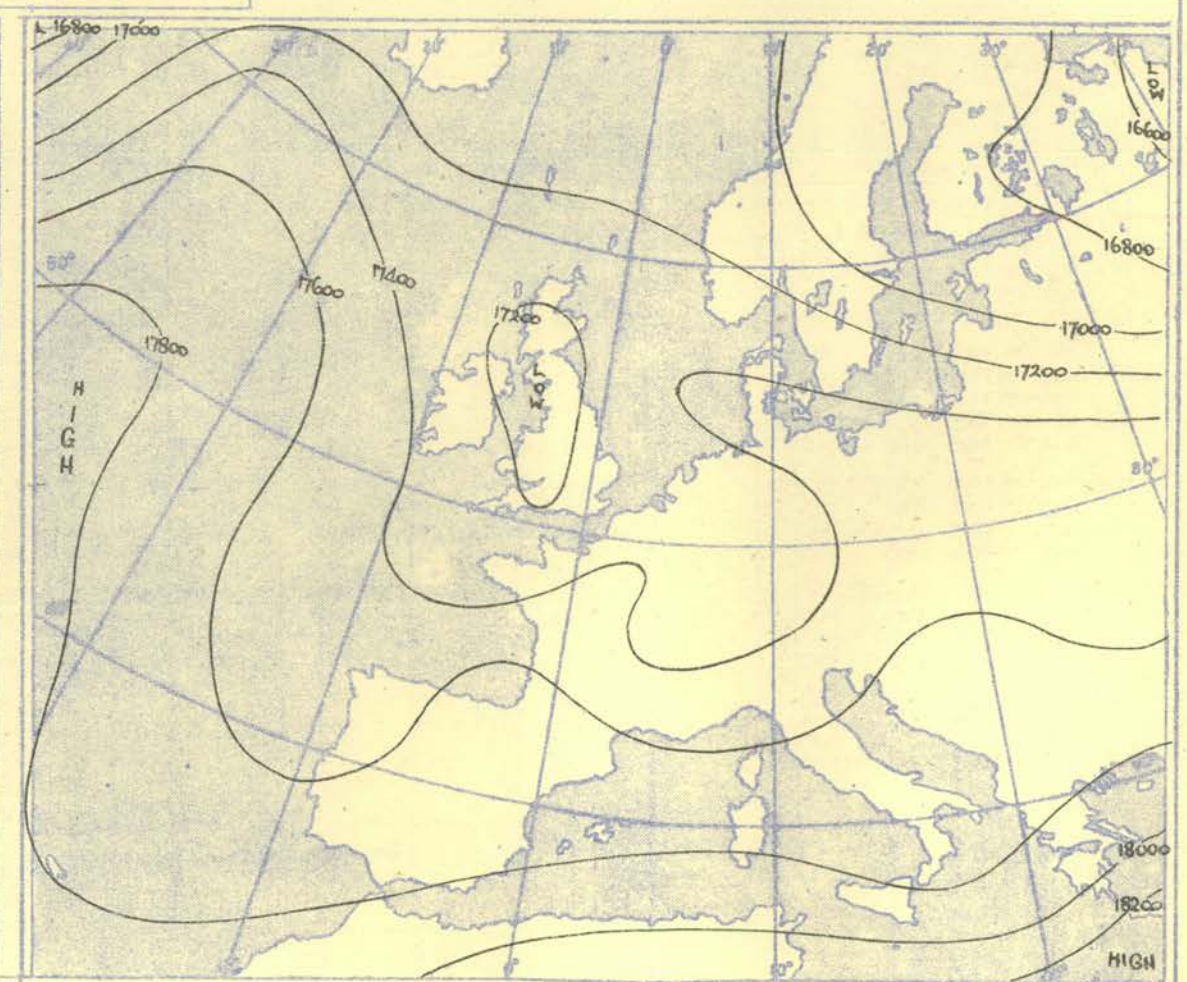
100 60 40 30 20 15 10 knots



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



The continuous lines are contour lines of the 500mb. 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

Position	51·3°N 0·4°E
Time	1414 hrs
Pressure M.S.L.	1011·4 mb
Pressure Surf	999·8 mb
Pressure Freezing	930 mb

Pressure mb	Height ft./100	°F. Temp.	°F. Dew
Surf	3·1	39	36
1000	3·1	39	36
950		33	31
900	30·9	30	27
850		25	–
800	61·3	17	–
750		11	–
700	94·8	5	–
650		-2	–
600	132	-12	–
550		-22	–
500	175	-30	–
450		-39	–
400	225	-48	–
350		-60	–
300	286	-71	–
250			
200			
170			

Cloud
8/8 Sc 965-880
7/8 As 630-600

Inversion
981 mb 36°
964 mb 37°

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

Place	St Eval		St Eval		Lerwick		Downham Market		Leuchars		Aldergrove	
Time	09hrs		15hrs		15hrs		16hrs		21hrs		21hrs	
Type							Pilot		Pilot		Pilot	
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.	130	05	170	09	135	24	Calm		Calm		120	10
1,000	180	13	170	08	142	35	228	13	L.V.		128	18
2,000	200	07	190	14	140	33	232	13	"		138	18
3,000	230	08	180	19	137	30	238	12	"		146	18
4,000	210	07	200	12	134	24	245	12	"		149	20
5,000			210	12	132	21	247	11	"		158	18
6,000	250	07	210	15	123	18	251	13	"		186	13
8,000	290	07			112	22	250	14	"		216	15
10,000	290	21			107	23	238	16	216	03	210	15
14,000	250	21			132	32	259	19	190	04	256	12
18,000	290	30			141	27	246	18	281	07	272	17
24,000	290	21			141	41	265	22	332	04	264	30
30,000	280	40			144	34	281	27	248	08	266	24
40,000					169	07	257	13	317	09	276	12
50,000					277	05			282	04	179	03
									328 (54000')	05	(45000')	

NEPHOSCOPE OBSERVATIONS

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

Ship	Weather Recorder					Weather Recorder				
Lat/Long	59·1N 19·1W					59·1N 19·3W				
Time G.M.T.	03h					09h				
M.S.L. mb	1008					1004				
Surf mb	1008					1004				
Freezing mb	910					918				
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
Surf		42	35	080	10		43	41	120	17
1000	2·2	41	34			09	43	40	120	17
950		35	29	095	13		37	35	116	19
900	30·1	30	24	103	14	28·9	30	29	119	19
850		24	17	138	15		23	22	129	20
800	60·6	19	11	130	12	59·3	19	15	136	19
750		12	03	141	09		13	08	138	18
700	94·3	10	-14	131	14	93·0	08	02	133	18
650		03	-14	115	06		03	-06	129	12
600	132	-04	-16	Calm		131	-03	-11	130	09
550		-13	-24	275	12		-12	-20	127	07
500	176	-20	-31			175	-19	-29	105	09
450		-28	-41	Radar			-28	-37	073	09
400	227	-39	-54	Elevation		226	-40	-49	053	09
350		-51		above 70°			-51		025	03
300	290	-64				288	-65		183	12
250		-70		307	17					
200	375	-56		364	14	273	-73			
170		-63		354	12					
150		-54		285	16					
130	132	-54								
110										
100										
90										
80										
70										
60										
Notes	Isothermal 731-700mb 10°					Isothermal 700-685 mb 8°				
Tropopause	I 261mb -75° 31,900'					N.R.				

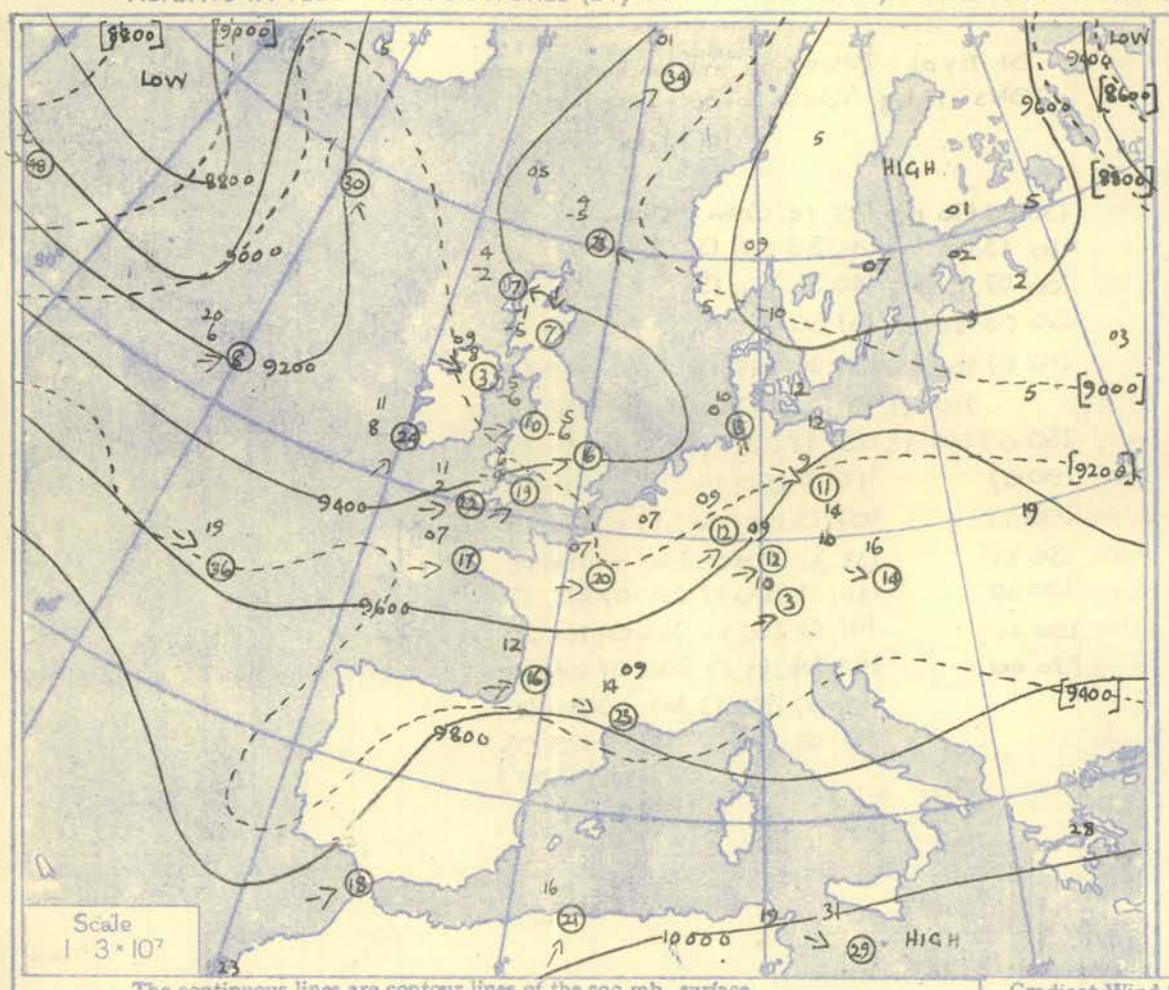
Ship	Weather Recorder					Weather Recorder				
Lat/Long	59·1N 19·3W					59·0 N 18·9W				
Time G.M.T.	15h					21h				
M.S.L. mb	1000					995				
Surf mb	1000					995				
Freezing mb	905									
Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots
Surf		44	42	120	20		44	41	120	12
1000	01	43	41			-1·3				
950		37	34	138	22		37	33	133	30
900	28·1	31	27	131	28	26·8	31	26	132	30
850		25	21	135	30		25	17	133	30
800	58·6	19	15	137	29	57·3	19	07	134	30
750		13	09	135	33		14	07	137	26
700	92·3	07	01	136	30	91·1	07	-04	141	26
650		04	-18	145	16		03	-20	141	21
600	130	-04	-31	161	16	129	-05	-30	148	11
550		-12	-38	177	18		-14	-34	144	09
500	174	-19	-53	153	24	172	-21	-47	144	15
450		-28	-56	123	17		-33	-60	153	18
400	225	-38	-68	102	16	223	-46			
350		-50		138	12					
300	288	-65		180	11					
250		-74		210	11					
200	373	-58		222	12					
170		-56		253	18					
150		-56		260	12					
130	(140 mb)	-57								
110										
100										
90										
80										
70										
60										
Notes	Inversion 700 mb 7°- 680mb 8°					Isothermal 545-525 mb -15°				
Tropopause	II 260 mb -77° 31,900'					N.R.				

Ship	Weather Explorer					Weather Explorer				
Lat/Long	62·3N 20·3W					52·3N 20·3W				
Time G.M.T.	03h					09h				
M.S.L. mb	997					995				
Surf mb	997					995				
Freezing mb	815					847				
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
Surf		47	42	Calm			46	42	290	04
1000	-9					-1·3				
950		43	35	160	03		41	30	Elevation	
900	27·4	38	31	151	09	26·9	35	26	over	
850		34	25	128	08		33	20		
800	58·5	30	16	118	17	57·9	21	11	70°	
750		23	10	115	15		22	05		
700	93·0	18	06	115	12	92·2	18	-09		
650		12	-06	090	10		12	-14		
600	132	05	-18	074	10	131	04	-22	097	23
550		-03	-32	025	15		-08	-37	075	06
500	176	-13	-49	005	17	175	-14	-55	348	12
450		-20	-60	329	39		-24	-57	323	22
400	228	-31	-58	324	43	227	-35	-58	309	27
350		-46		311	47		-49		296	30
300	292	-59		308	27	290	-65		304	35
250		-61		317	40		-64		292	52
200	379	-54		316	28	376	-56		296	41
170		-54		300	28		-56		282	29
150		-58		291	30		-58		293	15
130		-57		298	30		-64		313	14
110		-61		323	30		-63		316	17
100	527	-59		323	15	523	-64		313	19
90		-61		323	08		-63		316	17
80							-66		328	15
70										
60										
Notes						Isothermal 892-850mb 34°				
Tropopause	I 289mb -63° 30,000'					I 269 mb -75° 31,300'				

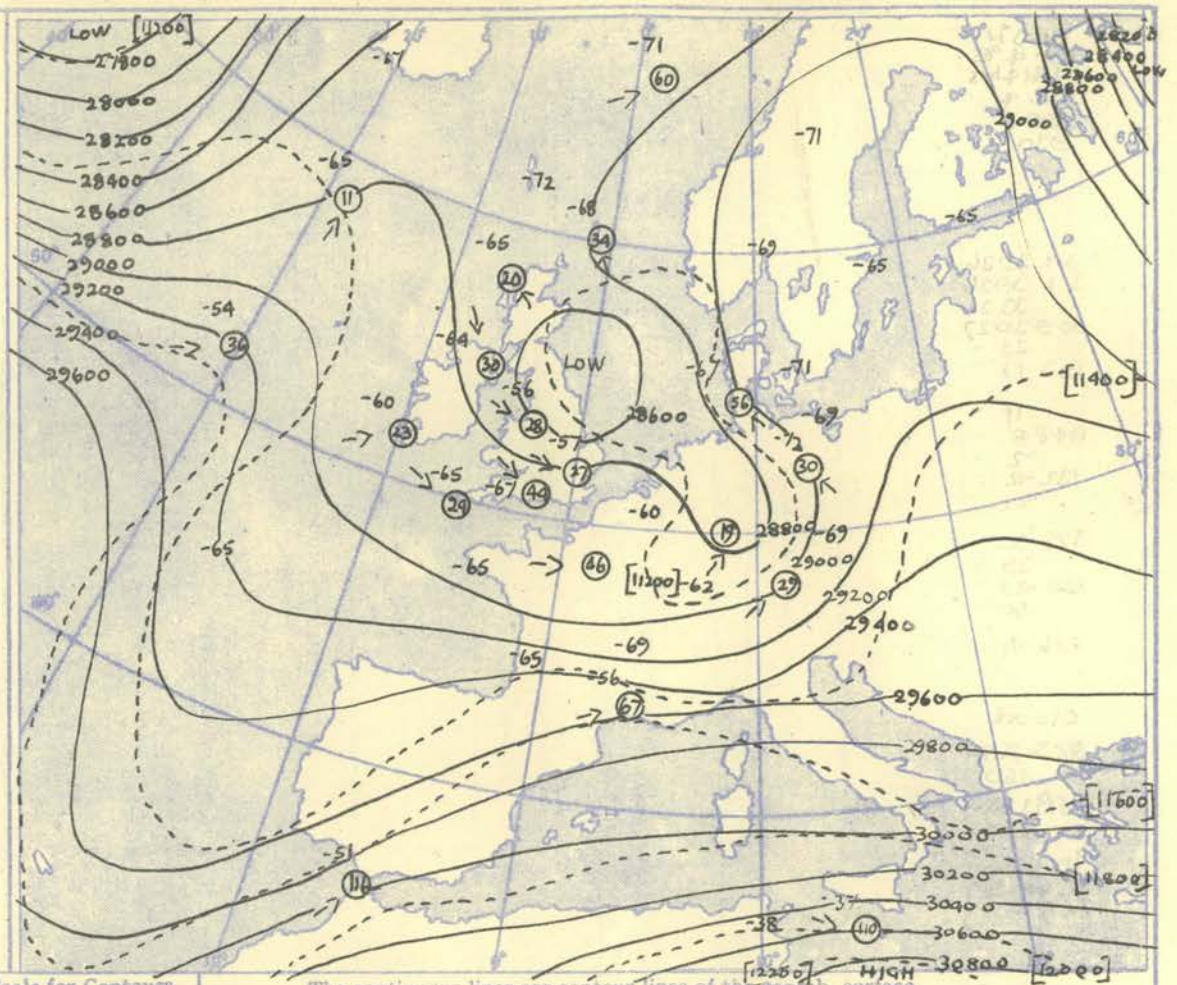
Ship	Weather Explorer					Weather Explorer				
Lat/Long	52·5N 21·0W					52·6N 21·0W				
Time G.M.T.	15h					21h				
M.S.L. mb	994					995				
Surf mb	994					995				
Freezing mb	810									
Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots
Surf		47	41	260	09		42	37	285	25
1000	-1·6					-1·5				
950		43	41	270	03		39	35	298	33
900	26·8	40	35	268	06	26·6	34	31	292	29
850		38	28	259	07		28	26	288	27
800	58·1	31	21	199	09	57·4	25	22	279	20
750		26	15	183	09		21	14	274	19
700	92·6	20	06	225	08	91·7	20	-05	257	21
650		14	-02	216	08		13	-04	239	26
600	132	07	-11	283	08	131	03	-08	241	25
550		-02	-16	303	12		-06	-12	262	35
500	176	-12	-25	298	30	175	-15	-23	267	42
450		-29	-36	282	44		-27	-36	271	40
400	228	-34	-45	272	22	226	-35	-49	273	43
350		-47		248	20		-46		275	61
300	291	-54		260	36	290	-58		281	74
250		-59		276	53		-69		288	69
200	379	-51		306	52	376	-58		288	42
170		-52		311	35		-54		278	36
150		-51		312	22		-57		277	30
130		-54		310	19		-59		275	25
110		-53		283	15		-63		258	22
100	529	-57		283	15	525	-61		245	19
90		-55		283	16		-62		245	16
80		-55		283	10		-61		246	10
70		-52		283	04					
60	(064 mb)	-52								
Notes	Inversion 333mb -52°- 320mb -50; Isothermal 927-910mb 41°					Inversion 750 mb 21°- 721mb 22°; 450 .. -27°- 446 .. -26°				
Tropopause	I 274 mb -59° 31,100'					I 250mb -64° 32,900'				

Thursday 15th February 1951.

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



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

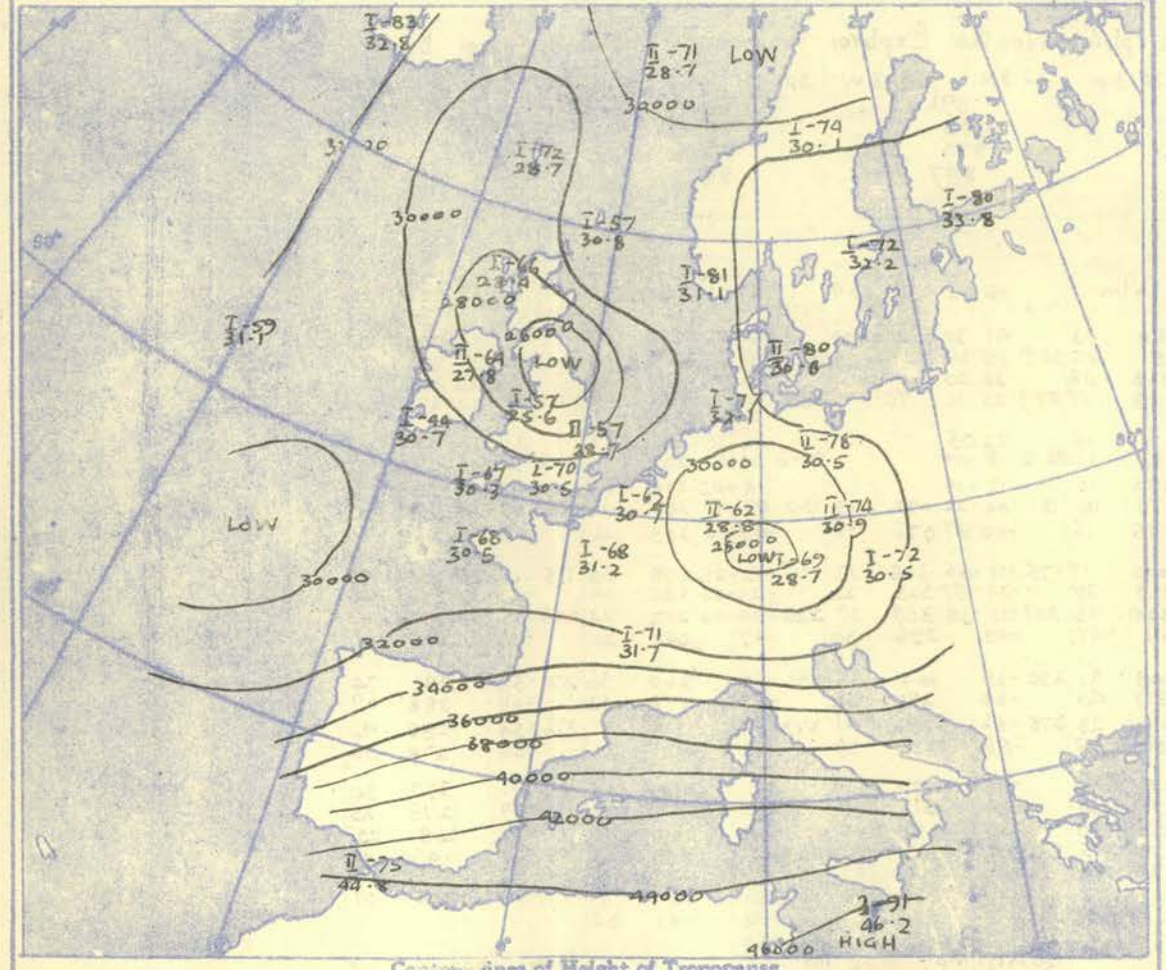


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500–300 mb.

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

100 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.

Cold trough over Britain moved very slowly eastwards. Cooling by advection southwestwards across Atlantic from Davis Straits caused formation of pronounced cold trough.

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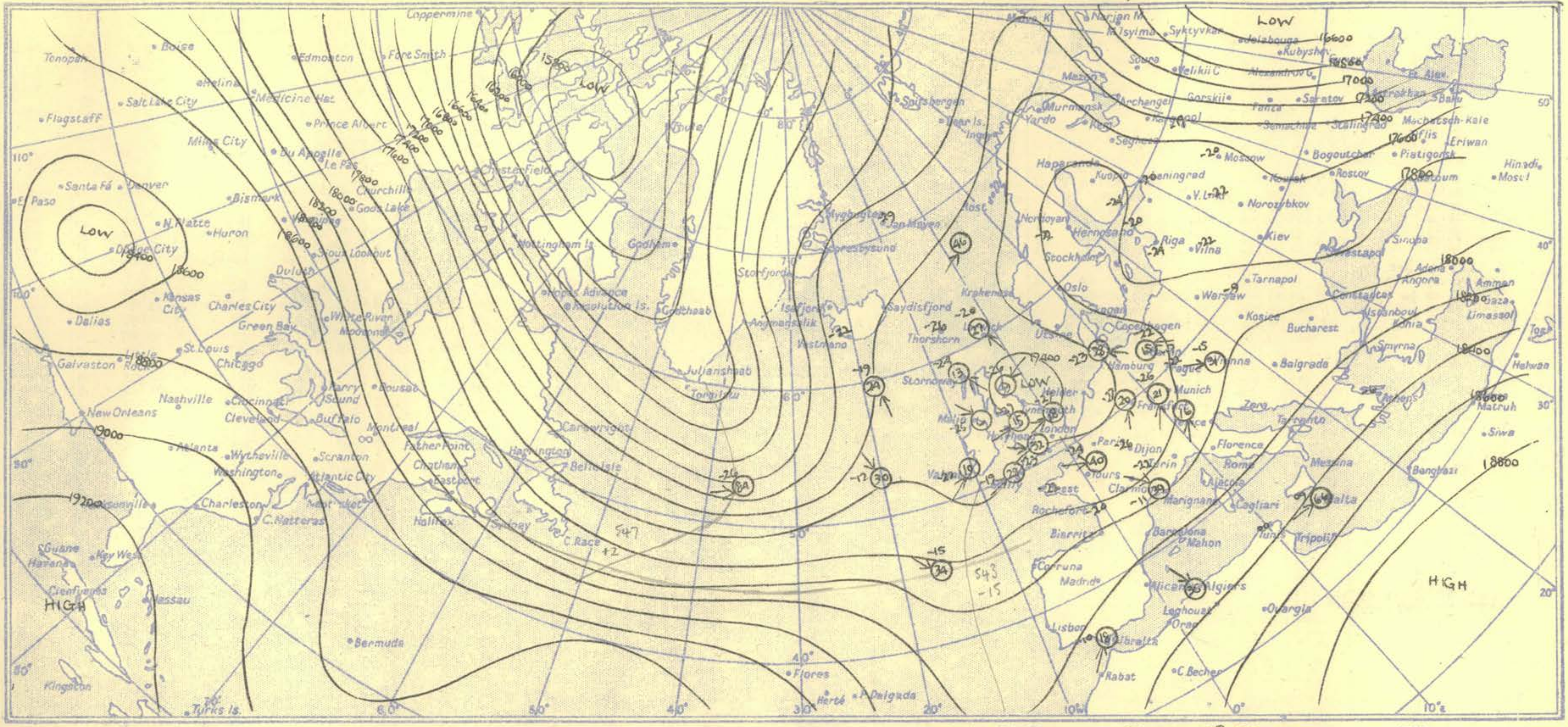
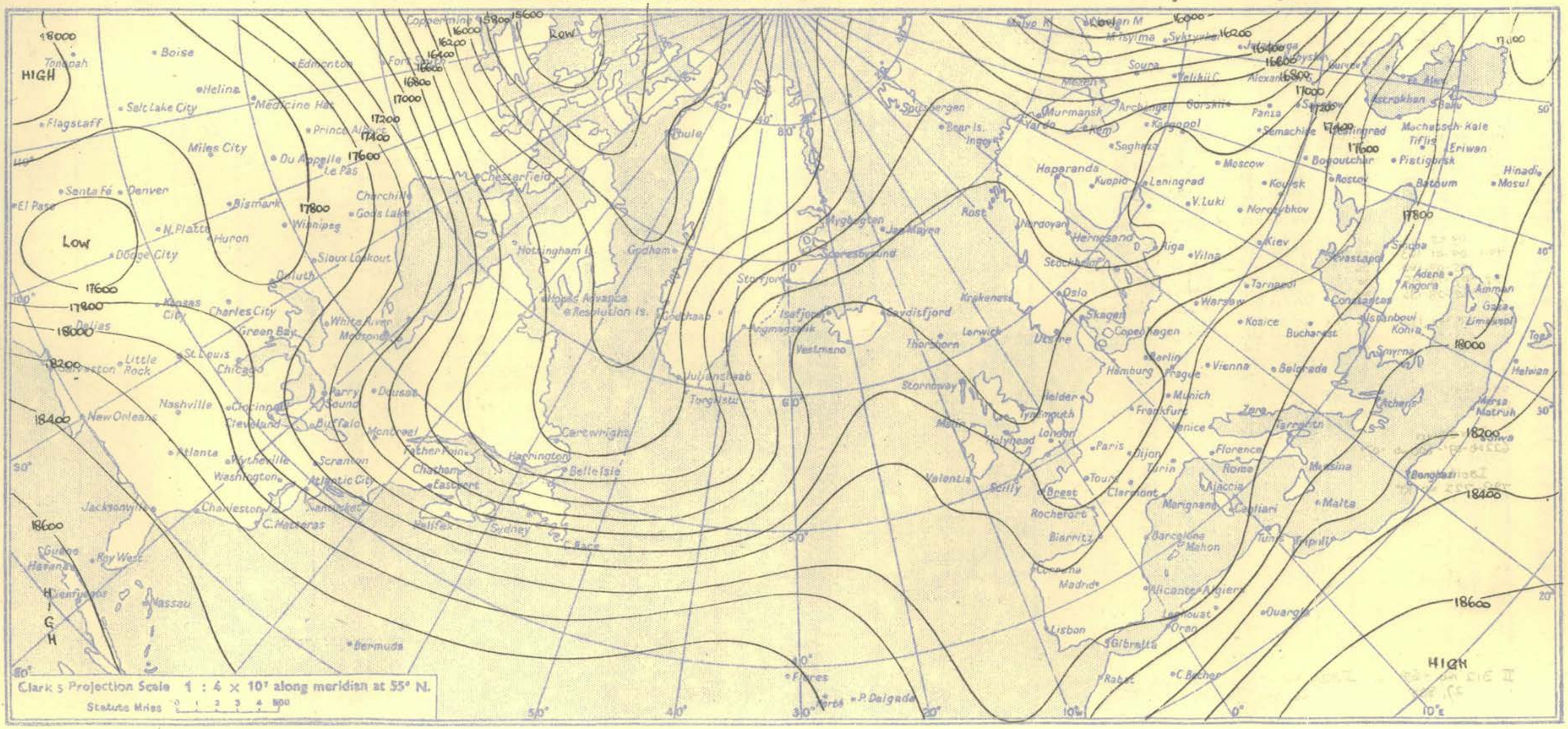
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

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



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



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Thursday 15th. February 1951.

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

15h. G.M.T.

Station	Time	M.S.L.	Surf Pressing	Tropopause
LERWICK	15h.	1015·3 mb	1000 mb	I 273 mb -75° 30,800'
STORNOWAY	15h.	1009·8 mb	936 mb	I 305 mb -66° 28,400'
LEUCHARS	15h	1008·8 mb	963 mb	I 333 mb -69° 26,300'
ALDERGROVE	15h.	1007·8 mb	998·4 mb 937 mb	II 213 mb -64° 27,800'
LIVERPOOL	15h.	1008·5 mb	1006·4 mb 940 mb	I 343 mb -57° 25,800'
DOWNHAM MARKET	15h.	1009·8 mb	1005·4 mb 953 mb	II 300 mb -57° 28,700'
LARKHILL	15h.	1009·5 mb	993·3 mb 921 mb	I 278 mb -70° 30,500'
CAMBORNE	15h.	1007·6 mb	997·0 mb 883 mb	I 280 mb -67° 30,300'
VALENTIA	15h	1000 mb	998 mb 895 mb	I 274 mb -64° 30,700'

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	33	31		
1000	04·0	32	30		
950		25	22		
900	31·2	20	18		
850		15	13		
800	61·0	09	06		
750		07	03	See Page 3 for Winds	
700	94·2	04	-05		
650		-02	-08		
600	13·2	-08	-13		
550		-11	-15		
500	17·5	-20	-25		
450		-30	-36		
400	22·6	-42			
350		-55			
300	28·8	-68			
250		-74			
200	37·3	-59			
170		-53			
150		-53			
130		-57			
110		-57			
100	52·2	-57			
90	(92nb)	-57			
80					
70					
60					

Inversion 796 mb 08° -774 mb 10° 580 " +11° -567 " -10°

Pressure mb	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	40	34	140	03
1000	02·6	39	32		
950		34	27	107	07
900	30·4	28	25	106	09
850		21	18	122	09
800	60·6	14	10	140	09
750		11	06	128	08
700	94·0	04	-02	081	07
650		-03	-09	086	09
600	13·2	-09	-15	108	13
550		-16	-22	124	11
500	17·5	-24	-31	105	13
450		-33	-40	146	15
400	22·6	-44		136	22
350		-55		137	25
300	28·7	-65		140	20
250		-59		137	07
200	37·4	-53		L+V	
170		-50		L+V	
150	43·7	-50		255	06
130		-53		263	05
110		-57		263	05
100	52·5	-57		273	04
90		-55		273	03
80		-52		282	05
70		-53		L+V	
60	635	-53		L+V	
		-52		L+V	

Pressure mb	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	39	37	110	02
1000	02·3	38	35		
950		30	29	076	09
900	29·9	25	23	076	16
850		19	17	076	12
800	60·1	13	08	078	08
750		06	01	079	06
700	93·3	-01	-05	086	07
650		-08	-12	029	05
600	13·0	-14	-17	030	07
550		-20	-23	049	06
500	17·3	-26	-31	082	09
450		-39	-46	093	08
400	22·3	-52		093	10
350		-65		093	09
300	28·4	-64		115	09
250		-62		L+V	
200	37·0	-56		"	
170		-57		005	05
150	43·2	-58		L+V	
130		-62		"	
110		-62		"	
100	51·8	-61		"	
90					
80					
70					
60					

Pressure mb	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	39	33	170	10
1000	02·2				
950		34	28	142	07
900	30·0	27	22	151	05
850		22	16	184	09
800	60·4	15	08	178	09
750		13	00	198	06
700	94·0	07	-08	271	03
650		-01	-17	308	04
600	13·2	-10	-28	284	06
550		-16	-35	292	09
500	17·5	-25	-45	303	06
450		-34	-54	322	10
400	22·5	-44		330	27
350		-55		326	35
300	28·7	-64		316	30
250		-62		314	17
200	37·4	-54		299	10
170		-53		326	10
150	43·6	-56		288	06
130		-55		302	09
110		-57		302	08
100	52·3	-58		300	02
90		-58		300	02
80		-58		300	03
70		-54		312	06
60					

Inversion 584 mb 13° - 578 mb 11°

Pressure mb	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	40	36	170	04
1000	02·3	39	35	174	09
950		33	30	172	08
900	30·1	28	24	207	08
850		22	18	263	09
800	60·3	17	10	254	11
750		11	05	254	10
700	93·9	05	-06	261	10
650		-02	-14	274	15
600	13·1	-10	-22	270	18
550		-19	-30	287	14
500	17·9	-27	-38	261	15
450		-37	-47	254	12
400	22·5	-47		288	19
350		-56		301	28
300	28·7	-56		286	28
250		-55		296	18
200	37·5	-50		299	12
170		-53		279	11
150		-50		297	09
130		-53		279	09
110		-56		309	07
100	52·5	-58		287	07
90		-56		287	05
80		-53			
70					
60					

Pressure mb	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	39	35		
1000	02·6				
950		31	30		
900	30·4	30	22		
850		23	16		
800	60·7	16	11		
750		11	02	See Page 3 for Winds	
700	94·2	05	-06		
650		00	-16		
600	13·2	-09	-27		
550		-17	-34		
500	17·5	-27	-43		
450		-36	-51		
400	22·5	-47			
350		-56			
300	28·7	-57			
250		-56			
200	37·5	-54			
170		-54			
150	43·7	-51			
130		-52			
110		-54			
100	52·5	-56			
90		-58			
80		-56			
70		-56			
60		-56			

Inversion 336 mb -57° - 318 mb -55°

Isothermal 940 - 900 mb 30°

Pressure mb	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	43	33	230	07
1000	02·6				
950		36	28	229	09
900	30·5	29	23	211	08
850		24	13	217	06
800	60·9	19	09	256	09
750		12	05	242	15
700	94·5	06	-04	248	19
650		-01	-14	266	15
600	13·2	-09	-22	273	16
550		-16	-31	265	28
500	17·5	-23	-40	273	32
450		-32	-48	285	39
400	22·6	-42		278	44
350		-53		284	40
300	28·8	-67		282	44
250		-63		279	24
200	37·4	-54		286	24
170		-53		274	19
150		-56		281	18
130		-55		286	15
100		-58		290	15

Pressure mb	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	47	38	180	10
1000	02·1				
950		41	32	192	16
900	30·3	34	25	203	14
850		28	18	211	14
800	61·6	24	09	220	16
750		18	05	244	19
700	95·0	11	02	251	22
650		02	-07	264	25
600	13·3	-05	-14	271	24
550		-11	-21	260	29
500	17·7	-19	-34	257	28
450		-30	-47	270	26
400	22·8	-43		274	24
350		-57		271	25
300	29·0	-65		280	24
250		-65		282	27
200	37·5	-59		275	16
170		-56		290	15
150		-57		284	12
130		-57		293	15
100	(120nb)	-57			

Pressure mb	VALENTIA Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	45	40	140	18
1000					
950		40	37	139	29
900	28·2	34	33	144	34
850		28	28	152	34
800	59·0	23	23	160	33
750		17	16	175	28
700	92·9	11	08	181	24
650		04	00	196	13
600	13·1	-03	-09	207	16
550		-11	-15	212	25
500	17·8	-22	-26	214	19
450		-32	-36	220	15
400	22·5	-45		223	19
350		-56		230	19
300	28·7	-60		251	23
250		-58		271	24
200	37·4	-55		274	23
170		-53		277	19
150		-56		303	14
130		-57		305	18
110		-59		301	08
100	523	-59		284	06
90		-59		275	08
80		-59			
70					
60					

21h. G.M.T.

Station	Time	M.S.L.	Surf Pressing	Tropopause
LERWICK	21h.	1013·9 mb	1003·6 mb 984 mb	II 312 mb -69° 27,800'
STORNOWAY	21h.	1007·3 mb	1005·6 mb 939 mb	I 329 mb -61° 26,500'
LEUCHARS	21h.	1007·4 mb	1006·5 mb 957 mb	I 318 mb -67° 27,300'
ALDERGROVE	21h.	1005·3 mb	995·6 mb 933 mb	II 319 mb -63° 27,400'
LIVERPOOL	21h.	1007·3 mb	1005·2 mb 923 mb	I 285 mb -70° 29,700'
DOWNHAM MARKET	21h.	1010·4 mb	1005·7 mb 920 mb	I 300 mb -66° 28,800'
LARKHILL	21h.	1009·3 mb	992·8 mb 909 mb	I 263 mb -66° 31,700'
CAMBORNE	21h.	1004·0 mb	993·4 mb 865 mb	I 268 mb -75° 31,400'

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	34	33	120	24
1000	03·6	33	31		
950		27	26	130	30
900	31·0	21	20	134	30
850		15	14	136	31
800	60·8	11	09	129	29
750		09	05	163	22
700	94·1	04	-01	163	25
650		-05	-09	163	26
600	13·2	-07	-13	145	30
550		-14	-28	136	35
500	17·5	-25	-39	133	38
450		-35	-47	135	41
400	22·5	-47		136	53
350		-61		135	61
300	28·6	-69		135	49
250	(263nb)	-70			
200					
170					
150					
130					
110					
100					
90					
80					
70					
60					

Inversion 622 mb -09° - 600 mb -07°

Isothermal 789 - 722 mb 10°

Pressure mb	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	39	31	140	08
1000	02·0	39	31		
950		34	27	143	13
900	29·8	26	21	152	11
850		20	15	154	10
800	60·0	14	08	146	11
750		08	02	139	11
700	92·3	01	-05	141	09
650		-03	-10	139	09
600	13·0	-09	-17	130	08
550		-17	-25	121	08
500	17·3	-25	-33	137	08
450		-34	-42	162	07
400	22·3	-46		153	09
350		-58		156	09
300	28·5	-60		170	06
250		-57		190	08
200	37·2	-56		224	06
170		-56			
150					
130					
110					
100					
90					
80					
70					
60					

Pressure mb	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	35	33		
1000	01·9	34	32		
950		31	29		
900	30·0	25	22		
850		19	16		
800	59·7	15	10		
750		11	02	See Page 3 for Winds	
700	98·1	04	-05		
650		-09	-11		
600	13·1	-11	-19		
550		-16	-25		
500	17·4	-23	-31		
450		-34	-43		
400	22·4	-47			
350		-59			
300	28·6	-63			
250		-60			
200	37·3	-55			
170		-52			
150	48·5	-56			
130		-57			
110		-58			
100	52·2	-58			
90		-59			
80					
70					
60					

Pressure mb	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	35	33		
1000	01·4				
950		34	30		
900	29·2	28	23		
850		21	16		
800	59·6	18	08		
750		14	01	See Page 3 for Winds	
700	93·3	08	-10		
650		-01	-20		
600	13·1	-09	-28		
550		-15	-36		
500	17·4	-22	-44		
450		-31	-44		
400	22·5	-43			
350		-55			
300	28·7	-65			
250		-63			
200	37·3	-55			
170		-54			
150	43·6	-56			
130		-58			
110					
100					
90					
80					
70					
60					

Inversion 996 mb 35° - 964 mb 36°

Isothermal 850 - 821 mb 21°

Pressure mb	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	35	32	CALM	
1000	02·0	35	32		
950		34	30	170	16
900	29·7	29	24	184	12
850		23	16	198	12
800	60·0	16	11	221	14
750		13	03	220	12
700	93·5	06	-00	228	16
650		-01	-13	235	17
600	13·1	-09	-22	257	17
550		-17	-31	269	17
500	17·4	-24	-40	290	25
450		-32	-47	281	35
400	22·5	-44		284	37
350		-55		282	41
300	28·7	-68		288	45
250		-65		285	21
200	37·3	-56		285	20
170		-54		294	17
150		-57		311	16
130		-59		308	09
110		-59		261	06
100	521	-61		251	07
90		-63		247	06
80		-62		329	08
70		-64			
60					

Inversion 1005 mb 35° - 980 mb 37°

Pressure mb	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	33	32	100	04
1000	02·7				
950		35	34	210	11
900	30·6	30	26	208	10
850		24	15	207	08
800	61·1	18	09	209	08
750		10	04	236	11
700	94·6	07	-07	244	14
650		00	-19	235	15
600	13·2	-10	-26	238	15
550		-19	-33	244	18
500	17·5	-27	-42	269	25
450		-34	-52	283	38
400	22·6	-43		285	48
350		-54		285	51
300	28·8	-66		289	51
250		-64		276	22
200	37·4	-59		273	16
170		-57		287	12
150	43·6	-55		294	13
130		-57		283	11
110		-60		283	09
100					
90					
80					
70					
60					

Inversion 1006 mb 33° - 984 mb 38°
737 " 08° - 718 " 09°

Pressure mb	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	36	34	200	05
1000	02·4				
950		37	35	194	13
900	30·2	31	28	194	13
850		25	23	198	13
800	60·7	20	16	214	16
750		14	01	230	16
700	94·4	06	-04	245	13
650		00	-12	259	15
600	13·2	-07	-19	265	22
550		-13	-17	273	27
500	17·6	-22	-26	275	27
450		-31	-40	274	33
400	22·7	-42		272	36
350		-54		272	33
300	28·9	-64		278	35
250		-61		283	28
200	37·5	-52			
170					
150					
130					
110					
100					
90					
80					
70					
60					

Inversion 993 mb 36° - 965 mb 38°

Pressure mb	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	45	43	160	10
1000	01·1				
950		42	39		
900	29·4	36	30		
850		31	27		
800	60·3	26	21		
750		21	15		
700	94·5	14	08		
650		07	-01		
600	13·3	01	-09		
550		-07	-14		
500	17·7	-17	-25		
450		-28	-37		
400	22·8	-40	-50		
350		-54			
300	29·1	-64			
250		-72			
200	37·5	-61			
170		-61			
150		-62			
130		-63			
110		-64			
100	52·2	-64			
90		-68			
80		-68			
70		-68			
60					

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No. 1646 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Friday 16th February 1951. Page 1.

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

LERWICK

Pressure — Time 03h G.M.T.; M.S.L. 1010·6 mb; Surf 1000·3 mb; Freezing 980 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·7	35	35		
1000	2·7	35	35		
950		28	28		
900	30·2	23	23		
850		19	18		
800	60·2	15	13		
750		08	04		
700	93·6	02	-01		
650		-06	-10		
600	131	-15	-20		
550		-21	-28		
500	173	-30	-38		
450		-40	-48		
400	227	-51			
350		-63			
300	285	-62			
250		-60			
200	511	-54			
170		-53			
150		-54			
130		-59			
110		-59			
100	521	-60			
90					
80					
70					
60					

For winds see page 3.

Inversion 589 mb -18° - 580 mb -17°

Tropopause I 329 mb -65° 26·600

STORNOWAY

Pressure — Time 03h G.M.T.; M.S.L. 1005·1 mb; Surf 1003·7 mb; Freezing 962 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·9	36	31	125	05
1000	1·3	36	30		
950		30	26	155	08
900	28·9	23	20	147	07
850		17	14	146	08
800	58·9	13	05	148	10
750		07	-01	165	11
700	92·1	01	-06	167	08
650		-05	-11	158	07
600	129	-11	-18	174	08
550		-19	-24	176	09
500	172	-29	-34	198	13
450		-39	-48	203	13
400	222	-50		232	12
350		-61		263	11
300	284	-63		239	13
250		-57		206	06
200	371	-53		242	09
170		-55		214	03
150		-56		223	13
130		-60		231	11
110		-61		255	05
100	519	-61		233	04
90		-60		Calm	
80		-60		Calm	
70		-60			
60					

Isothermal. 840 - 830 mb 16°

Tropopause I 335 mb -65° 26·200

LEUCHARS

Pressure — Time 03h G.M.T.; M.S.L. 1007·2 mb; Surf 1006·3 mb; Freezing 970 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·2	31	30	Calm	
1000	1·9	32	31		
950		30	27	176	10
900	29·5	24	19	182	11
850		17	16	187	12
800	59·5	15	10	200	15
750		09	01	204	14
700	92·9	02	-06	207	14
650		-05	-14	218	14
600	130	-12	-21	236	12
550		-20	-31	238	13
500	173	-29	-40	237	14
450		-41		246	16
400	223	-53		261	21
350		-64		271	22
300	284	-63		264	14
250		-57		264	09
200	371	-56		278	08
170		-58		266	09
150		-62		287	08
130		-62		320	05
110					
100					
90					
80					
70					
60					

Inversion 1006 mb 31° - 990 mb 34°
Isothermal. 840 - 808 mb 16°

Tropopause I 345 mb -65° 25·500

ALDERGROVE

Pressure — Time 03h G.M.T.; M.S.L. 1002·0 mb; Surf 993·1 mb; Freezing 914 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·6	36	34	120	12
1000	0·8				
950		36	32	126	27
900	28·7	30	26	136	27
850		25	18	145	19
800	59·3	20	05	156	16
750		13	02	165	15
700	93·0	07	01	173	16
650		00	-05	200	15
600	131	-06	-11	238	21
550		-14	-18	238	26
500	174	-24	-29	234	24
450		-36	-43	232	27
400	224	-48		228	21
350		-61		238	20
300	286	-68		243	24
250		-64		255	20
200	371	-58		274	14
170		-59		267	15
150		-61		302	10
130		-62		271	11
110		-63		270	09
100	519	-64		296	08
90					
80					
70					
60					

Inversion. 993 mb 36° - 974 mb 37°

Tropopause I 295 mb -69° 28·900

LIVERPOOL

Pressure — Time 03h G.M.T.; M.S.L. 1005·3 mb; Surf 1003·2 mb; Freezing 912 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·6	34	32	140	12
1000	1·4				
950		34	30	147	27
900	29·2	31	26	155	27
850		27	22	165	25
800	59·8	23	15	183	24
750		15	04	193	20
700	93·6	08	-03	199	18
650		02	-07	225	18
600	132	-04	-10	243	24
550		-11	-17	250	33
500	175	-20	-27	249	36
450		-32	-39	247	35
400	226	-46		249	33
350		-57		257	34
300	288	-65		258	37
250		-64		268	27
200	374	-55		272	16
170		-57		285	6
150		-57		292	14
130		-57		280	15
110		-61		296	05
100	526	-60		300	05
90		-62			
80		-63			
70	(85 mb)				
60					

Isothermal. 1003 - 950 mb 34°

Tropopause I 265 mb -71° 31·400

DOWNHAM MARKET

Pressure — Time 03h G.M.T.; M.S.L. 1010·0 mb; Surf 1005·2 mb; Freezing 932 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	1·2	33	32	125	06
1000	2·6				
950		33	33	164	15
900	30·4	29	26	182	17
850		25	13	211	19
800	61·0	20	03	228	18
750		14	-04	235	16
700	94·7	07	-15	250	15
650		-01	-18	263	18
600	131	-09	-20	272	24
550		-13	-21	279	33
500	176	-23	-30	281	40
450		-33	-42	283	39
400	226	-45		279	38
350		-56		277	39
300	288	-67		282	44
250		-68		279	32
200	374	-59		270	18
170		-58		290	20
150		-59		290	12
130					
110					
100					
90					
80					
70					
60					

Inversion 1015 mb 33° - 978 mb 34°

Tropopause I 279 mb -69° 30·300

LARKHILL

Pressure — Time 03h G.M.T.; M.S.L. 1006·8 mb; Surf 990·4 mb; Freezing 900 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·4	41	41	170	10
1000	1·8				
950		38	37	174	25
900	29·9	32	31	179	29
850		27	26	187	30
800	60·4	23	21	203	30
750		17	15	212	33
700	94·4	10	05	218	35
650		03	-02	218	28
600	132	-05	-10	219	29
550		-13	-18	228	26
500	176	-22	-28	247	34
450		-32	-39	252	40
400	227	-44		254	46
350		-56		304	48
300	288	-67		276	51
250		-74		273	29
200	373	-63		265	20
170		-61		281	18
150		-62		289	18
130		-64		281	17
110		-64		275	12
100	519	-66		274	10
90		-68		290	07
80		-67		317	05
70		-66			
60	(65 mb)	-65			

Tropopause I 265 mb -77° 31·400

CAMBORNE

Pressure — Time 03h G.M.T.; M.S.L. 999·5 mb; Surf 988·5 mb; Freezing 850 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·9	45	45	180	20
1000	-0·1				
950		42	41		
900	28·2	39	38		
850		32	32		
800	59·1	28	27		
750		21	20		
700	93·4	15	14		
650		09	07		
600	132	01	-01		
550		-08	-11		
500	176	-18	-21		
450		-29	-33		
400	227	-39	-44		
350		-54			
300	289	-69			
250		-79			
200	373	-66			
170		-66			
150		-68			
130		-68			
110		-68			
100	518	-68			
90		-68			
80		-69			
70					
60	(85 mb)				

Tropopause I 258 mb -82° 32·000

VALENTIA

Pressure — Time 03h G.M.T.; M.S.L. 995·2 mb; Surf 994 mb; Freezing 865 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·3	43	41	180	06
1000	-1·3				
950		42	38	255	14
900	26·9	36	32	256	14
850		30	26	263	15
800	57·8	25	19	267	15
750		19	11		
700	91·8	13	03		
650		06	-12		
600	130	-01	-24		
550		-07	-36		
500	174	-17	-50		
450		-27	-59		
400	226	-36			
350		-48			
300	289	-58			
250		-63			
200	379	-54			
170		-56			
150		-58			
130		-60			
110		-61			
100	523	-62			
90		-62			
80		-63			
70		-64			
60	(75 mb)				

Isothermal. 321 - 307 mb -56°

Tropopause

LERWICK

Pressure — Time 09h G.M.T.; M.S.L. 1008·4 mb; Surf 998·2 mb; Freezing 954 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·7	38	36	140	29
1000	2·2				
950		31	28	140	39
900	29·8	25	24	195	41
850		19	18	149	40
800	59·9	14	10	151	36
750		08	04	151	34
700	93·2	01	-04	149	34
650		-05	-12	168	32
600	130	-13	-17	160	32
550		-19	-29	157	34
500	173	-27	-43	154	38
450		-38	-53	152	39
400	223	-49		149	39
350		-62		145	39
300	284	-67		152	33
250		-63		151	18
200	370	-57		189	12
170		-55		235	05
150		-55		270	08
130		-58		210	04
110		-58		171	05
100	519	-58		195	05
90		-58		209	09
80		-58		235	05
70		-54			
60	(7 mb)	-58			

Inversion 620 mb -49° 600 mb -13°

Tropopause I 326 mb -68° 28·600

STORNOWAY

Pressure — Time 09h G.M.T.; M.S.L. 1002·3 mb; Surf 1000·6 mb; Freezing 950 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·4	37	26		
1000	0·6	37	26		
950		32	20		
900	28·2	25	16		
850		21	09		
800	58·4	18	02		
750		12	-03		
700	92·0	06	-13		
650		00	-27		
600	130	-07	-36		
550		-15	-38		
500	173	-24	-42		
450		-36	-50		
400	223	-47			
350		-58			
300	285	-61			
250		-57			
200	373	-50			
170		-51			
150		-54			
130		-53			
110		-56			
100	523	-56			
90		-56			
80		-54			
70		-55			
60		-54			

Inversion 1021 mb 37° - 993 mb 38°

Tropopause I 316 mb -62° 27·400

LEUCHARS

Pressure — Time 09h G.M.T.; M.S.L. 1005·9 mb; Surf 1005·0 mb; Freezing 961 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·2	34	33	180	10
1000	1·8				
950		31	29	160	21
900	29·9	28	26	154	25
850		24	20	155	24
800	60·0	17	12	158	22
750		12	09	167	21
700	93·5	08	06	188	17
650		01	-03	211	15
600	132	-05	-11	222	18
550		-10	-16	235	21
500	175	-19	-24	241	21
450		-28	-33	243	28
400	226	-39	-45	248	25
350		-51		286	24
300	289	-65		238	20
250		-59		251	21
200	376	-52		258	23
170		-50		261	11
150		-50		264	08
130		-50		276	07
110		-52		269	07
100	527	-54		271	09
90		-54		286	06
80		-54		278	04
70		-54		286	05
60					

Isothermal 769 mb - 729 mb -12°

Tropopause I 300 mb -65° 28·900

ALDERGROVE

Pressure — Time 09h G.M.T.; M.S.L. 998·3 mb; Surf 988·6 mb; Freezing 921 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·6	38	37		
1000	0·5				
950		35	34	117	21
900	27·4	30	26	122	23
850		27	22	136	23
800	58·1	23	19	155	18
750		18	12	177	20
700	92·0	13	06	187	15
650		05	-03	192	10
600	130	-03	-10	203	14
550		-11	-21	216	15
500	174	-21	-34	218	22
450		-32	-46	236	17
400	225	-41		280	15
350		-51		295	25
300	287	-64		285	25
250		-63		275	23
200	374	-54		270	23
170		-56		275	20
150		-55		281	15
130		-57		274	12
110		-59		272	09
100	523	-59		290	11
90		-59		252	10
80					
70					
60					

Isothermal 993 mb 38° - 974 mb 38°

Tropopause I 282 mb -66° 30·000

LIVERPOOL

Pressure — Time 09h G.M.T.; M.S.L. 998·9 mb; Surf 996·8 mb; Freezing 895 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·6	38	36	140	20
1000	-0·3				
950		34	33	153	38
900	27·6	32	31	164	41
850		30	29	188	37
800	58·4	27	26	215	29
750		21	19	227	22
700	92·6	15	13	220	20
650		09	05	213	21
600	131	01	-04	206	21
550		-08	-14	206	23
500	175	-18	-24	202	24
450		-29	-35	203	24
400	226	-41		216	37
350		-52		218	45
300	289	-64		233	40
250		-63		256	25
200	375	-56		280	21
170		-55		280	14
150		-56		273	08
130		-60		282	07
110		-59		286	07
100	523	-59		285	10
90		-60			
80					
70					
60					

Tropopause I 282 mb -69° 30·200

DOWNHAM MARKET

Pressure — Time 09h G.M.T.; M.S.L. 1006·3 mb; Surf 1001·7 mb; Freezing 885 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	1·2	39	38	135	12
1000	1·6				
950		36	35	164	32
900	29·5	33	32	177	34
850		28	27	180	34
800	60·2	23	21	180	34
750		20	18	193	36
700	94·3	13	09	201	36
650		08	03	203	32
600	133	01	-05	207	34
550		-06	-13	230	37
500	177	-13	-20	237	39
450		-24	-32	236	40
400	229	-35	-44	240	40
350		-48		236	39
300	292	-60		260	37
250		-67		267	40
200	377	-56		283	21
170		-51		281	20
150		-53		287	15
130		-53		302	12
110		-53		304	10
100	528	-53		294	10
90		-52		278	10
80		-55		260	12
70					
60					

Tropopause I 255 mb -68° 30·500

LARKHILL

Pressure — Time 09h G.M.T.; M.S.L. 1001·2 mb; Surf 985·1 mb; Freezing 878 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·4	43	43	220	27
1000	0·3				
950		39	38	194	37
900	28·5	34	33	202	45
850		30	28	213	46
800	59·3	26	23	224	41
750		21	18	229	36
700	93·5	15	11	228	35
650		08	02	220	35
600	132	00	-07	218	34
550		-08	-17	214	38
500	176	-17	-27	214	41
450		-25	-35	227	39
400	227	-36	-46	233	37
350		-51		226	36
300	290	-65		238	33
250		-65		256	22
200					
170					
150					
130					
110					
100					
90					
80					
70					
60					

Tropopause I 268 mb -72° 31·400

CAMBORNE

Pressure — Time 09h G.M.T.; M.S.L. 1000·0 mb; Surf 989·3 mb; Freezing 874 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·9	43	42	203	08
1000	0·0				
950		41	40	251	25
900	28·2	35	32	246	24
850		30	25	267	27
800	59·1	25	20	261	29
750		18	14	259	32
700	93·0	13	08	255	34
650		05	-13	253	31
600	131	00	-25	252	31
550		-07	-36	260	30
500	175	-15	-46	266	32
450		-26	-57	260	30
400	227	-38	-58	268	34
350		-51		274	30
300	290	-63		293	38
250		-68		300	39
200	375	-60		288	29
170		-61		300	27
150		-62		295	20
130		-61		302	27
110		-60		287	17
100	523	-61		294	27
90		-63		299	11
80		-65			
70					
60	(84 mb)				

Inversion 989 mb 43° - 976 mb 44°

Tropopause I 311 mb -62° 27·800

VALENTIA

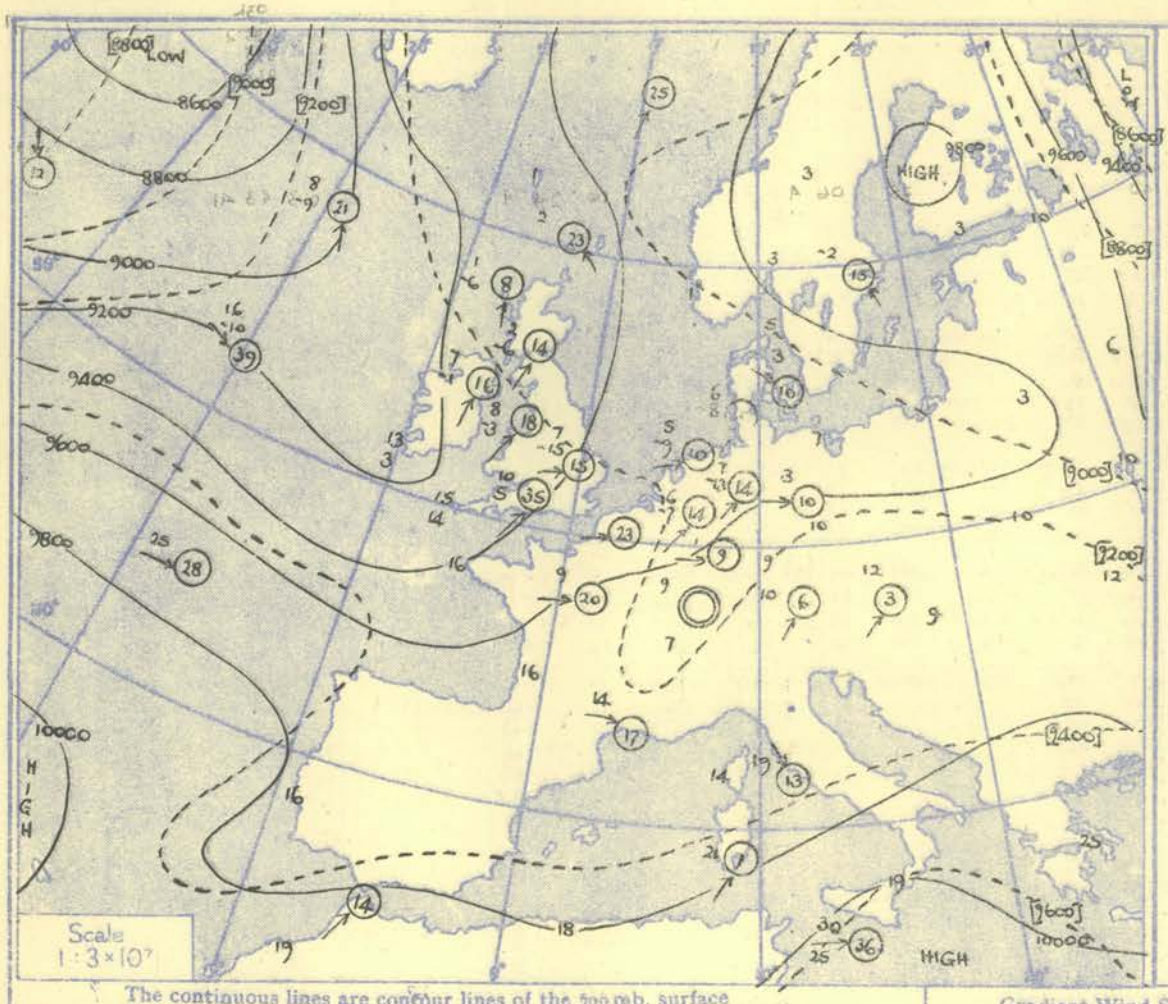
Pressure — Time G.M.T. mb; M.S.L. mb; Surf mb; Freezing mb

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					

Tropopause

Friday 16th February 1951.

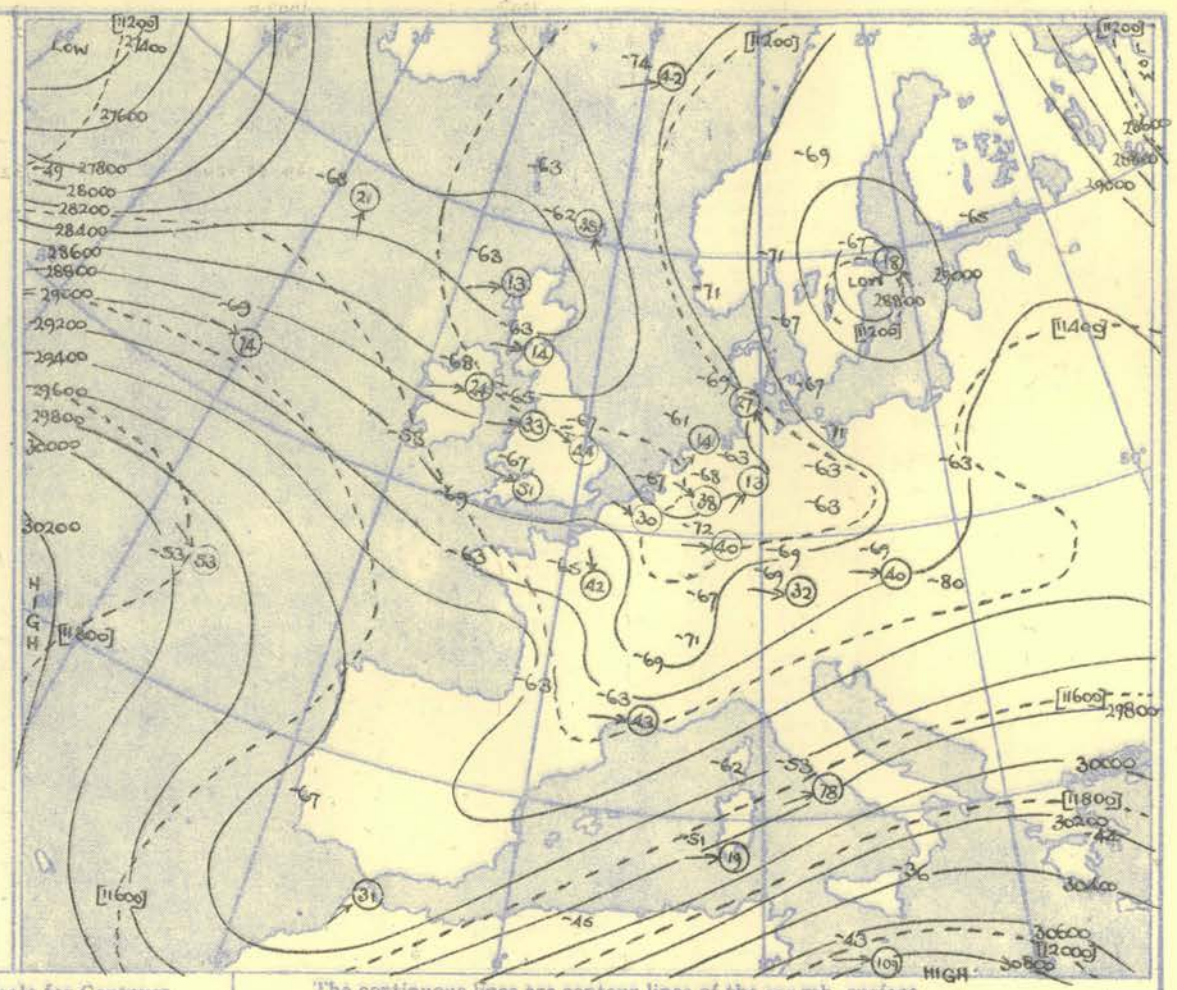
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03 h G.M.T.



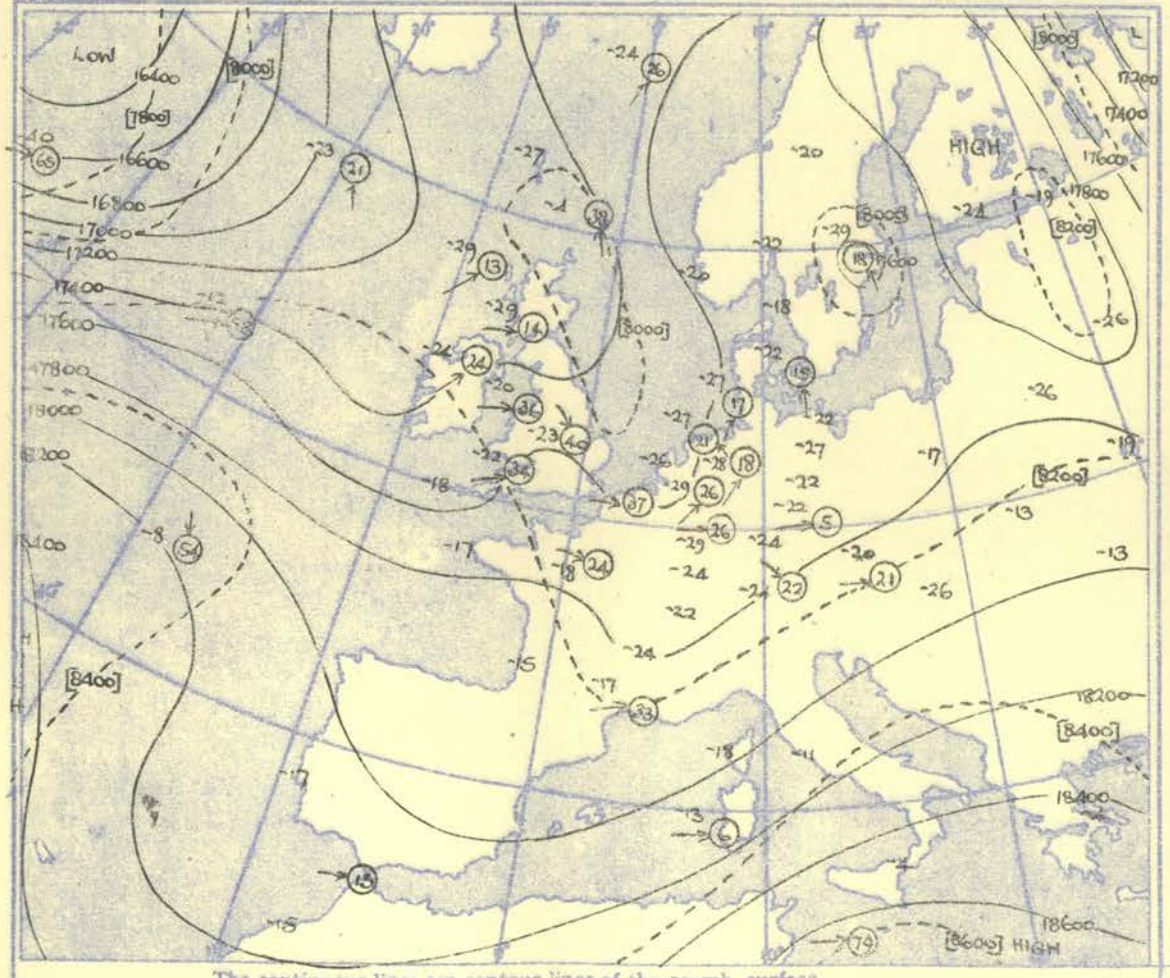
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000 – 700 mb.

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

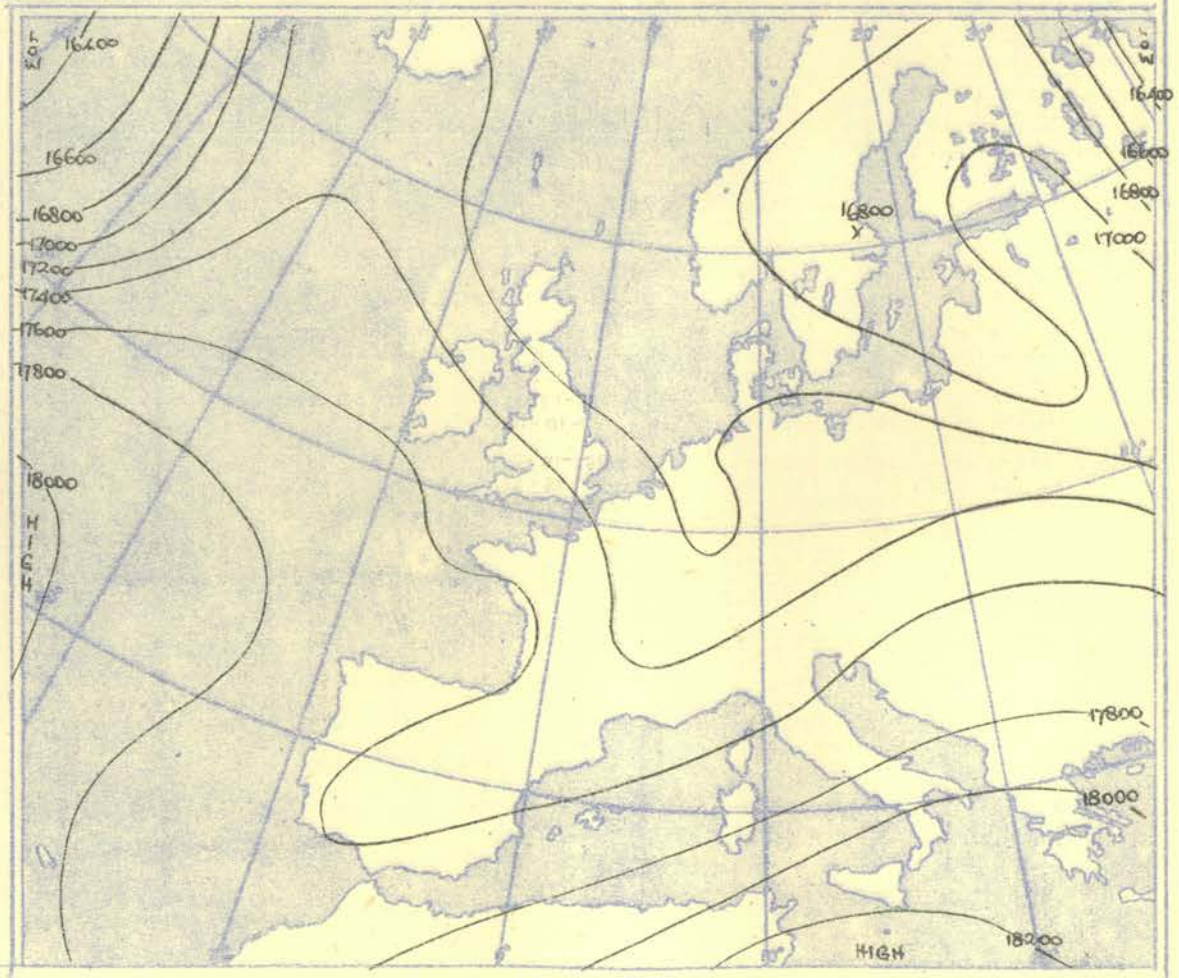
100 80 40 30 20 15 10 knots



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 500mb. surface
The dotted lines are isopleths of the thickness of the layer 700 – 500 mb.



Isopleths of Thickness 500 - 1000mb.

February 16th 1951. Page 3

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

Position	43.2°N 17°W			39.5°N 12.2°W			51.3°N 0.4°E			49.8°N 17.0°W		
Time	12hrs			14hrs			15hrs			?		
Pressure M.S.L. (mb)	1013			1019			1004.3			1004		
Pressure Surf (mb)	1000			1016			993			1000		
Pressure Freezing (mb)	735			765			860			815		
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.
Surf	—	54	52	—	55	53	03.1	44	43	—	37	36
1000	3.6	52	—	5.3	53		02.9				39	—
950		47	47		48	39		39	39		43	42
900		42	42		42	40	31.0	35	34		39	34
850		38	38		38	32		31	—		35	33
800		38	21		36	36	61.8	27	—		31	23
750		33	21		30	—		23	—			
700	98.8	29	19	100	23	—	96.1	15	—			
650		21	—		21	—		09	—			
600		14	—		10	—	135	00	—			
550		05	—		01	—		-10	—			
500	184	00	—	185	-2	—	178	-17	—			
450								-27	—			
400							230	-39	—			
350								-51	—			
300							290	-62	—			

Col. 1: Surface wind S.W. 17-22 kts. Cloud. 8/8 Ns 970-910 mb. 4/8 Cs HR. Isothermal 850-800 mb 38°.

Col. 2: Surface Wind SSW. 7-10 kts. Cloud 1/8 Cu 960-900. 8/8 StCu 960-930 mb. 2/8 Ci HR.

Col. 3: Cloud. 8/8 Ns 960-650 mb. 8/8 As 620-600 mb. 8/8 Cs 930-920. Isothermal 975-958 mb 39°.

Col. 4: Surface wind SW. 17-22 kts. Cloud 6/8 StCu 950-920 mb.

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

Place	Lerwick		Lerwick		Lympne		Aldergrove		Leuchars	
Time	03hrs		21hrs		10hrs		14hrs		21hrs	
Type	Radar wind		Radar wind				Pilot		Pilot	
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.	125	37	135	31	180	15	Calm.		140	07
1,000	136	35	135	45	180	34	054	16	124	15
2,000	136	40	135	44	200	46	056	10	132	15
3,000	135	43	135	42	200	52	056	12	144	15
4,000	137	35	141	40	200	31	057	09	149	15
5,000	140	33	145	38			056	10	158	14
6,000	145	33	152	35			056	10	170	13
8,000	145	27	160	26			055	14	192	12
10,000	138	22	165	21			054	16	230	14
14,000	147	28	174	21			062	20	236	20
18,000	141	38	185	15			080	27	252	23
24,000	152	28	190	18			094	34	251	27
30,000	146	35	203	15			085	32	252	25
40,000	171	08	229	12			082	24	261	27
50,000			226 (48000')	09					270 (44000')	15

NEPHOSCOPE OBSERVATIONS

Place								
Time Type								
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				
Lat/Long	52.5N 19.9W					52.5N 19.8W					52.3N 19.8W					52.5N 20.0W				
Time G.M.T.	03h					09h					15h					21h				
M.S.L. mb	996					995					994					993				
Surf mb	996					995					994					993				
Freezing mb	890					920														
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
Surf		44	32	250	18		41	33	260	12		43	22	300	26		39	30	300	20
1000	-1.1					-1.2					-1.6					-1.8				
950		40	23	268	28		36	30	270	17		37	16	304	28		34	27	287	33
900	27.1	33	20	264	28	26.7	29	25	266	17	26.3	30	14	306	30	26.0	26	20	279	32
850		26	13	253	27		25	21	239	20		23	10	308	36		19	12	278	36
800	57.7	24	06	255	28	57.1	20	17	227	28	56.6	17	-01	304	34	56.1	12	03	279	36
750		21	-07	266	31		15	11	223	32		11	00	291	24		05	-09	280	36
700	92.0	16	-10	278	39	90.9	11	07	205	40	90.2	07	-02	254	24	89.2	-03	-31	276	34
650		08	-14	274	40		07	03	207	38		02	-07	237	36		-11	-25	269	33
600	131	01	-18	266	50	129	00	-04	222	51	128	-06	-16	238	39	126	-19	-36	263	39
550		-06	-24	264	55		09	-13	230	55		-09	-32	234	46		-28	-46	208	48
500	175	-12	-42	265	58	173	-18	-23	230	66	172	-16	-43	232	60	168	-38	-52	252	59
450		-24	-57	267	64		-24	-32	236	81		-24	-57	247	76		-35	-55	255	92
400	227	-34	-57	266	65	225	-34	-44	239	78	223	-36	-59	262	88	219	-36	-59	254	126
350		-46		266	63		-45		256	97		-46		269	95		-45		250	114
300	290	-69		266	74	288	-55		269	119	287	-49		253	92	282	-46		255	92
250		-56		266	73		-62		276	111		-50		247	97		-47		257	77
200	377	-57		266	51	375	-55		281	51	376	-50		253	67	371	-50		251	60
170		-55		266	37		-53		251	45		-50		255	60		-53		255	47
150		-53		266	37		-56		251	48		-50		255	56		-55		255	45
130		-57		266	30		-60		251	43		-54		254	36		-62		258	39
110		-59		266	28		-58		251	32		-54		255	35					
100	526	-60		266	23	524	-58		251	26	527	-56		255	33					
90	(094	-61					-59		251	29		-57		256	31					
80	mb)						-62		251	30		-58		255	26					
70							-63		251	16										
60																				
Tropopause	II 294 mb -61° 29,400'					I 247 mb -63° 33,000'					I 287 mb -52° 29,700'					II 359 mb -45° 31,600'				

Weather Explorer 03h: Inversion 560 mb -7° - 532 mb -5°. Isothermal 996 - 980 mb 44°.

Weather Explorer 15h: Inversion 541 mb -8° - 571 mb -6°.

Weather Explorer 21h: Inversion 496 mb -39° - 480 mb -36°; 459 .. -36° - 420 .. -32°. Isothermal 480 - 459 mb -36°; 359 - 350 .. -45°.

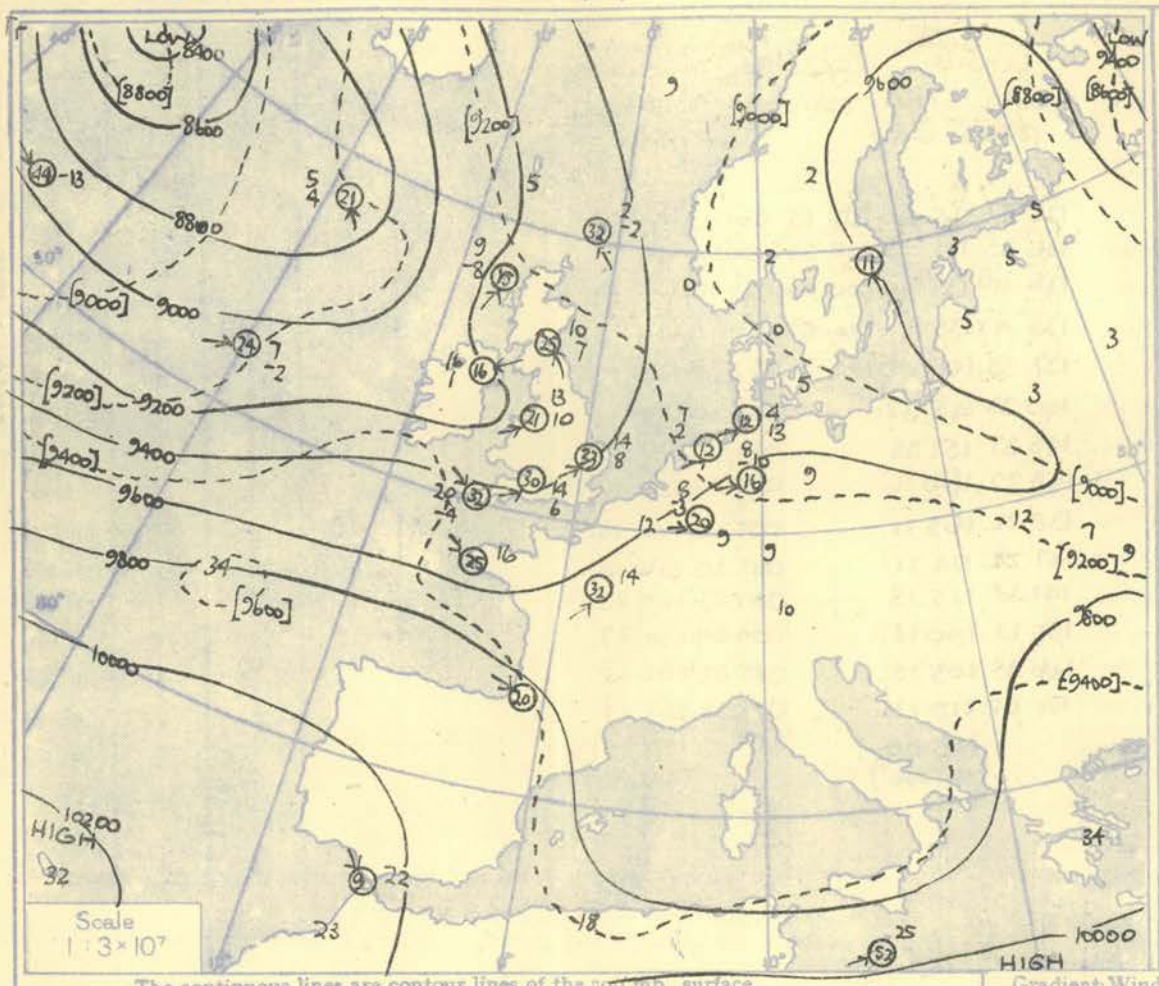
Ship	Weather Recorder					Weather Recorder					Weather Recorder					Weather Recorder				
Lat/Long	59.1N 19W					59N 18.8W					59.1N 18.8W					59.3N 18.9W				
Time G.M.T.	03h					09h					15h					21h				
M.S.L. mb	989					982					980					978				
Surf mb	989					982					980					978				
Freezing mb	900					910														
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
Surf		43	42	130	23		39	39	180	18		39	36	170	18		38	38	180	25
1000	-2.9					-9.9					-5.3					-5.9				
950		38	37	127	28		36	35	174	24		35	34	189	22		35	35	170	21
900	25.2	32	30	134	30	23.1	30	27	158	27	22.6	29	27	191	18	22.0	29	29	169	34
850		26	23	140	26		28	24	142	42		25	25	190	19		23	21	170	35
800	55.8	20	16	139	25	53.7	24	19	132	43	53.1	19	19	170	19	52.3	17	15	176	33
750		13	03	138	22		19	12	130	40		12	12	162	22		11	09	173	31
700	89.5	08	-09	140	21	87.8	13	07	128	39	86.8	05	04	167	21	85.8	03	-10	171	30
650		06	-21	147	22		06	-02	128	36		-03	-08	158	22		-05	-16	172	25
600	128	-03	-20	158	22	126	-01	-10	126	37	124	-11	-15	171	18	123	-13	-25	165	26
550		-13	-25	174	22		-10	-20	132	32		-20	-24	167	21		-22	-37	150	25
500	171	-23	-30	168	21	170	-20	-31	135	36	167	-25	-38	148	33	166	-31	-46	147	22
450		-34	-42	164	23		-32	-44	143	38		-33	-47	156	30		-41		148	28
400	222	-44		160	22	221	-45		152	39	218	-44		157	31	216	-46		143	29
350		-55		154	21		-58		149	40		-53		168	26		-51		163	34
300	283	-68		155	21	283	-61		148	35	280	-58		157	24	278	-52		164	34
250		-61		187	22	(256	-64					-54		157	29		-44		160	30
200	370	-52		209	30	mb)					368	-52		201	30	367	-47		184	30
170		-54		201	29							-49		219	28		-47		216	36
150		-53		208	24							-50					-47		223	35
130		-56		223	21												-50		212	27
110		-57		206	16												-51		175	18
100	519	-57		189	17											519	-56		171	17
90		-57		191	16												-52		174	14
80		-57		223	18															
70	(075 mb)	-57																		
60																				
Tropopause	I 288 mb -72° 29,200'					II 315 mb -61° 27,200'					I 322 mb -59° 26,500'					I 310 mb -53° 27,100'				

Weather Recorder 09h: Isothermal 900 - 875 mb 30°.

Weather Recorder 21h: Isothermal 350 - 335 mb -51°.

Friday 16th February. 1950.

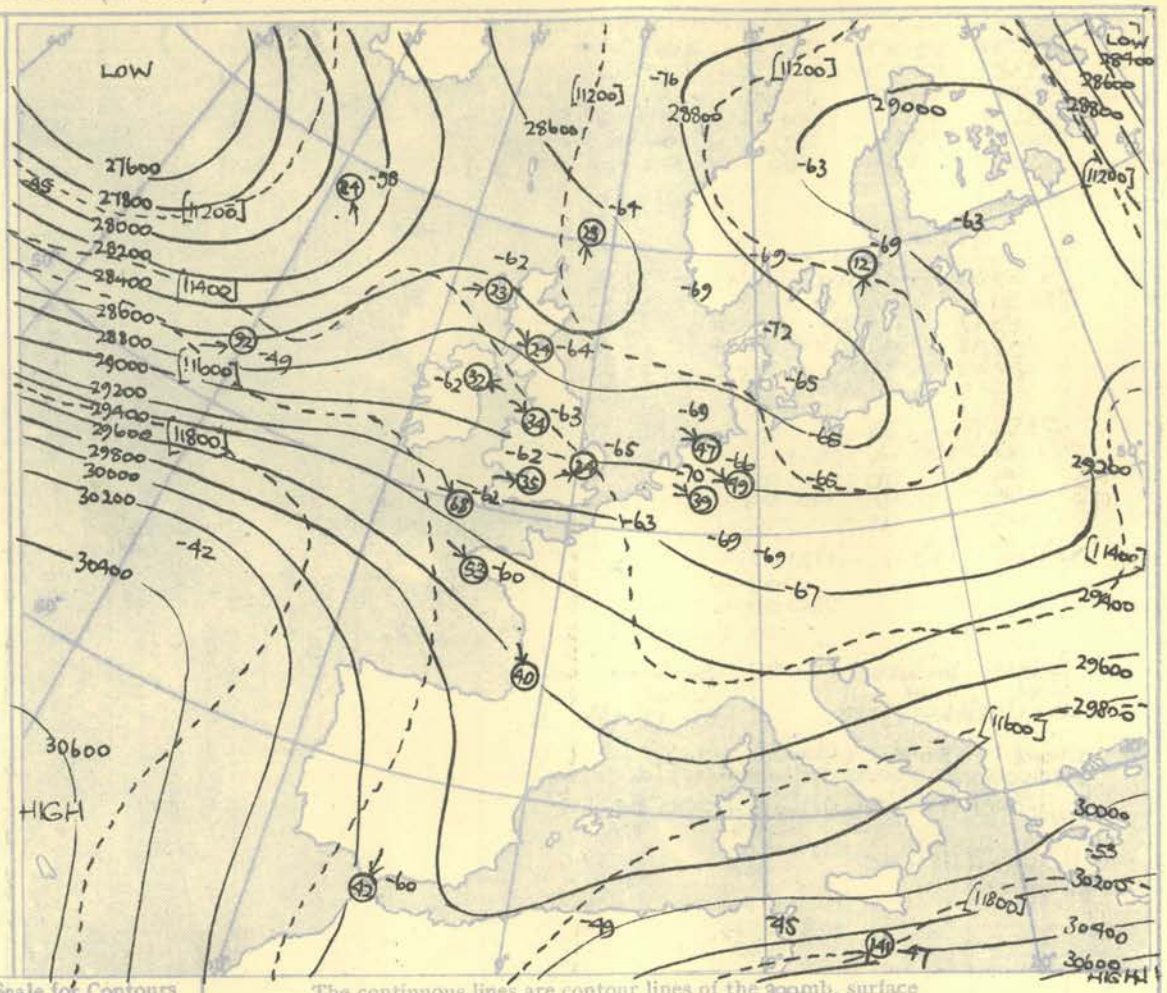
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h G.M.T.



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

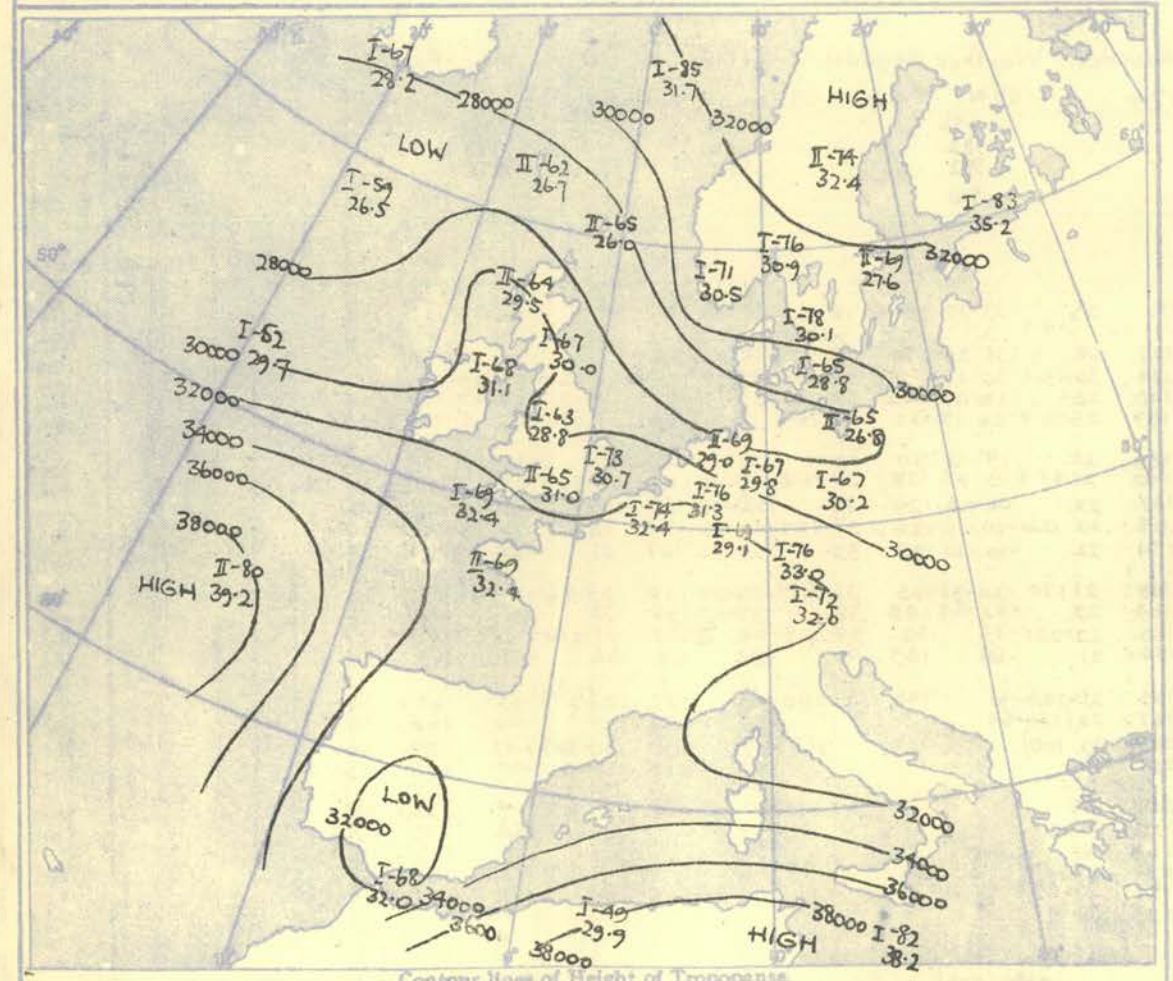
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

100 60 40 30 20 15 10 knots



The continuous lines are contour lines of the 300mb. 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.

Warming continued over the United Kingdom and to the North, the cold trough over West Europe moving eastwards. Advection of cold air behind the Atlantic depression led to the formation of a cold pool to the South of Greenland.

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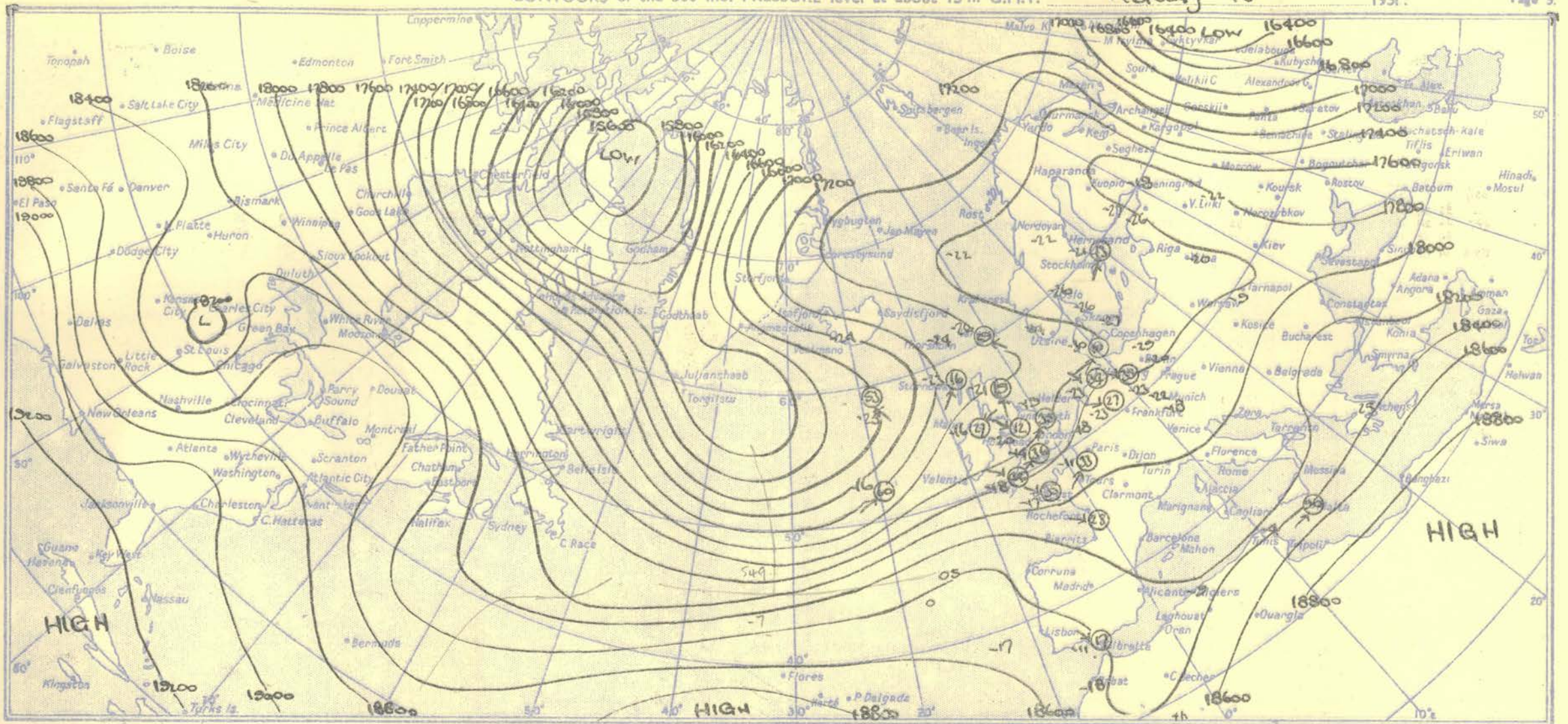
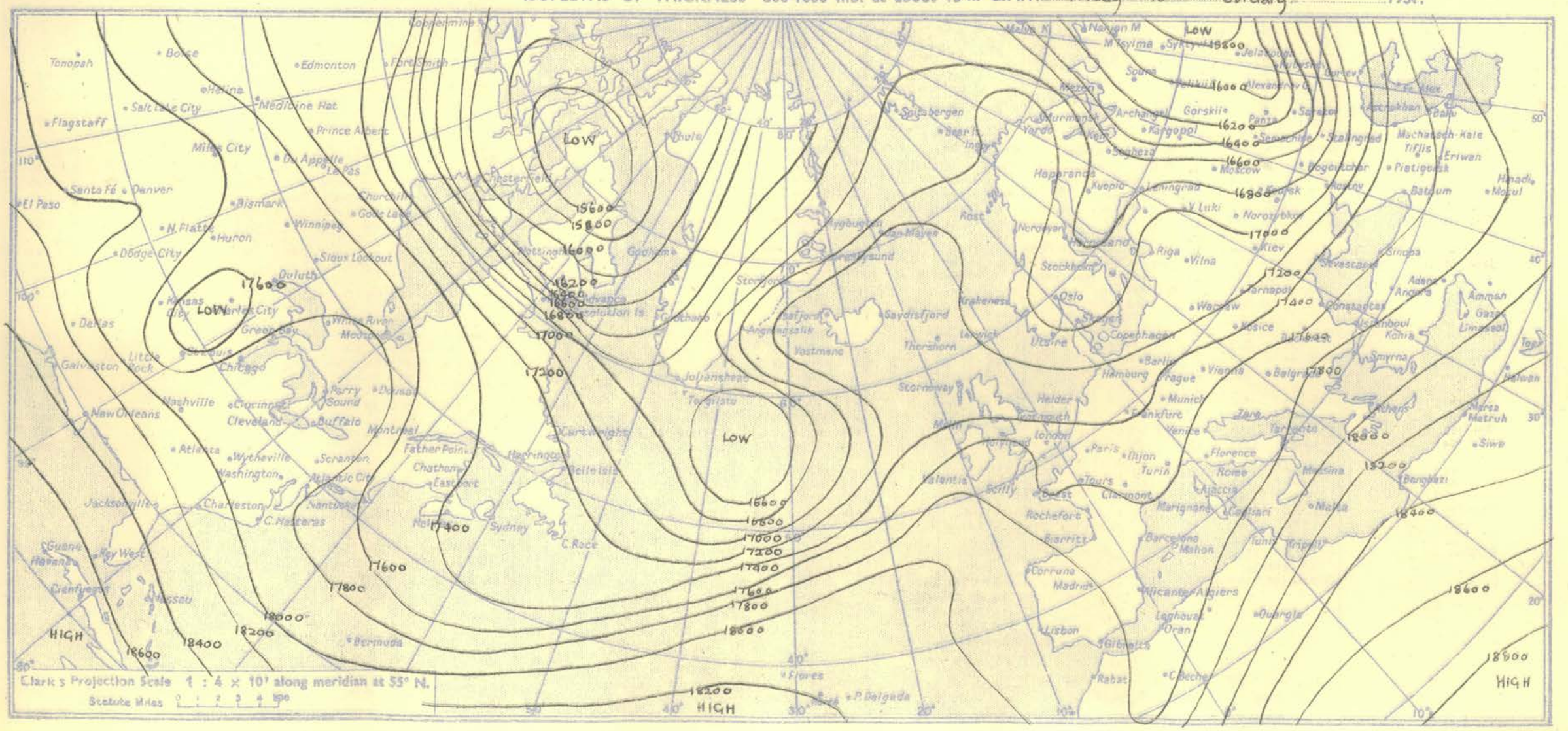
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. February 16th 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Friday 16th February 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Friday 16th. February 1951.

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

15h. G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia	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.	1008.0 mb	1000.0 mb	1001.9 mb	996.6 mb	997.4 mb	1001.7 mb	1001.3 mb	1002.2 mb	mb	Pressure M.S.L.
Pressure: Surf	997.8 mb	998.3 mb	1001.0 mb	987.3 mb	995.4 mb	997.2 mb	985.3 mb	991.7 mb	mb	Surf
Pressure: Freezing	950 mb	922 mb	921 mb	912 mb	876 mb	858 mb	850 mb	846 mb	mb	Freezing

Pressure mb	Lerwick Height ft./100	Lerwick °Temp. °F.	Lerwick Dew °F.	Lerwick Wind Dir. °	Lerwick Wind Vel. knots	Stornoway Height ft./100	Stornoway °Temp. °F.	Stornoway Dew °F.	Stornoway Wind Dir. °	Stornoway Wind Vel. knots	Leuchars Height ft./100	Leuchars °Temp. °F.	Leuchars Dew °F.	Leuchars Wind Dir. °	Leuchars Wind Vel. knots	Aldergrove Height ft./100	Aldergrove °Temp. °F.	Aldergrove Dew °F.	Aldergrove Wind Dir. °	Aldergrove Wind Vel. knots
Surf	02.7	38	37	150	25	00.4	41	32	120	08	00.2	41	38	120	18	02.6	40	38		
1000	02.1					00.0					00.4					-00.8				
950		32	29	147	36		34	25	125	15		35	34	121	30		36	33		
900	29.7	26	24	159	32	27.9	30	20	132	15	28.3	30	29	129	31	27.1	31	28		
850		20	18	157	31		25	17	169	15		24	23	137	31		28	24		
800	69.8	14	12	155	32	58.5	20	09	181	19	58.8	20	19	142	29	57.9	26	19		
750		09	03	156	33		15	-03	178	17		15	13	141	26		21	10		
700	93.1	02	-02	160	32	92.3	09	-08	181	15	92.6	10	07	153	25	92.2	16	01		
650		-04	-10	165	26		02	-22	196	14		03	00	159	22		11	-10		
600	13.1	-11	-18	158	22	13.0	-04	-28	192	15	13.1	-03	-07	151	17	13.1	03	-20		
550		-18	-25	155	25		-13	-28	204	16		-11	-18	161	17		-06	-29		
500	17.3	-24	-39	166	29	17.4	-23	-36	208	16	17.4	-21	-28	184	19	17.5	-16	-36		
450		-37	-52	166	23		-33	-47	238	15		-33	-40	204	16		-26	-46		
400	22.4	-50		163	20	22.4	-42		271	14	22.5	-44		225	18	22.6	-36	-59		
350		-61		165	19		-52		259	22		-55		258	17		-48			
300	28.5	-64		179	23	28.7	-62		260	23	28.7	-69		286	24	29.0	-62			
250		-62		177	10		-57		249	17		-60		256	21		-64			
200	37.1	-55		209	11	37.4	-51		229	18	37.3	-57		260	18	37.5	-57			
170		-55		230	07		-49		205	18		-55		268	14		-53			
150		-55		227	08	43.7	-50		245	16	43.5	-54		265	12	43.8	-55			
130		-59		226	10		-52		253	15		-56		255	16		-57			
110		-59		243	09		-54		238	10		-59		280	15		-59			
100	52.0	-59		238	09	52.4	-54		248	11	52.3	-58		283	11	52.5	-59			
90		-58		230	05		-54		248	10		-57		278	05		-60			
80		-56					-53		216	06		-56		232	04		-58			
70							-51		228	08		-56					-58			
60						63.5	-50		150	03						63.4	-57			
							-49													

Isothermal 610 - 600 mb -04°; 289 - 276 " -64°

Isothermal 850 - 830 mb 28°; 450 - 440 " -26°

See Page 3 for Winds

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
Surf	00.6	46	43	220	07	01.2	44	42	155	25	04.4	46	43	250	09	02.9	51	46	247	10
1000	-00.7					00.5					00.4					00.6				
950		41	39	223	14		40	38	193	37		44	39	247	25		45	39	247	25
900	27.5	35	34	233	15	28.6	36	34	220	35	28.7	38	32	249	31	29.0	37	30	256	24
850		30	29	243	17		31	28	221	34		32	27	250	31		35	26	260	26
800	58.4	25	24	246	20	59.5	26	22	231	30	59.7	27	21	249	28	60.0	28	22	261	30
750		17	16	250	18		20	16	230	29		21	13	248	28		23	13	265	31
700	92.5	13	10	253	21	93.6	14	08	232	33	93.9	14	06	251	30	94.4	20	-04	279	32
650		07	01	256	18		06	01	234	33		07	00	266	32		12	-05	278	33
600	13.1	-02	-07	268	14	13.2	00	-04	247	33	13.2	03	-13	275	38	13.3	03	-08	276	36
550		-11	-17	283	14		-09	-14	212	32		-04	-28	266	40		-07	-16	276	38
500	17.4	-20	-28	284	12	17.6	-19	-27	214	35	17.7	-14	-39	255	36	17.7	-18	-27	285	44
450		-29	-38	287	15		-26	-34	217	36		-25	-51	249	35		-26	-46	297	51
400	22.6	-37	-48	294	24	22.7	-38	-47	216	39	22.8	-36	-60	256	35	22.9	-36	-57	295	51
350		-50		293	25		-51		238	36		-49		259	32		-48		295	51
300	28.8	-63		280	34	29.0	-65		249	34	29.1	-62		270	35	29.2	-62		213	68
250		-64		277	26		-68		270	29		-63		282	36		-68		296	55
200	37.5	-57		276	22	37.5	-57		271	29	37.7	-59		288	30	37.7	-64		284	34
170		-57		276	23		-57		282	21		-57		282	28		-59		294	33
150	43.7	-58		282	25	43.7	-57		283	14	43.9	-58		295	24		-61		296	28
130		-60		287	20		-58		281	18		-60		294	22		-62		288	27
110		-58		291	18		-59		286	15		-60		297	12		-64		295	23
100	52.3	-59		292	16	52.4	-58		292	19	52.5	-60		299	12	52.4	-67		306	15
90		-59		287	13		-61		310	10		-60		312	10		-64		282	14
80		-60		293	10		-61					-62					-63		284	09
70		-62		299	05							Inversion				(76mb)	-63			
60	(52mb)	-59		298	03		Isothermal					617 mb 03° - 605 mb 04°					Isothermal			
		-56					938 - 917 mb 38°										728 - 700 mb 20°			

Inversion 300 mb 63° - 283 mb 6°

No Radio-sonde Ascent

Tropopause	II 337 mb -65° 26,000'	I 276 mb -64° 29,500'	I 281 mb -67° 30,000'	I 270 mb -68° 31,100'	I 300 mb -63° 28840'; I 262 mb -65° 31,800'	I 274 mb -73° 30,700'	I 275 mb -65° 31,000'	I 268 mb -69° 32,400'		Tropopause

21h. G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne		Station
Pressure: Time	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	G.M.T.	Time
Pressure: M.S.L.	1005.2 mb	995.9 mb	996.5 mb	994.7 mb	999.1 mb	1002.3 mb	1003.5 mb	1003.9 mb	mb	Pressure M.S.L.
Pressure: Surf	995.1 mb	994.2 mb	995.6 mb	985.4 mb	997.0 mb	997.8 mb	987.3 mb	993.3 mb	mb	Surf
Pressure: Freezing	953 mb	912 mb	918 mb	875 mb	874 mb	865 mb	860 mb	842 mb	mb	Freezing

Pressure mb	Lerwick Height ft./100	Lerwick °Temp. °F.	Lerwick Dew °F.	Lerwick Wind Dir. °	Lerwick Wind Vel. knots	Stornoway Height ft./100	Stornoway °Temp. °F.	Stornoway Dew °F.	Stornoway Wind Dir. °	Stornoway Wind Vel. knots	Leuchars Height ft./100	Leuchars °Temp. °F.	Leuchars Dew °F.	Leuchars Wind Dir. °	Leuchars Wind Vel. knots	Aldergrove Height ft./100	Aldergrove °Temp. °F.	Aldergrove Dew °F.	Aldergrove Wind Dir. °	Aldergrove Wind Vel. knots
Surf	02.7	33	31			00.4	40	33	120	10	00.2	40	40	140	07	02.6	41	38		
1000	01.4					01.2					51.0					-01.3				
950		31	31				36	29	134	25		35	34				40	37		
900	29.0	27	27			26.8	31	27	135	24	26.9	30	30			26.8	36	33		
850		21	21				25	21	136	25		26	26				30	27		
900	59.2	16	16			57.4	20	16	134	28	57.5	23	23			57.7	25	22		
750		09	09	See Page 3 for Winds			17	11	130	28		15	14	See Page 3 for Winds			21	13		
700	92.6	02	-08			91.3	11	05	136	27	91.4	13	05			91.9	16	-08		
650		-06	-20				05	00	158	25		07	-12				09	-09		
600	13.0	-12	-32			13.0	-02	-19	179	22	13.0	-01	-22			13.1	03	-11		
550		-16	-33				-11	-29	203	18		-10	-30				-06	-16		
500	17.3	-26	-36			17.3	-21	-33	206	16	17.3	-20	-41			17.5	-15	-25		
450		-37	-46				-32	-41	204	20		-30	-50				-27	-36		
400	22.3	-50				22.4	-44		200	25	22.5	-40	-60			22.6	-38	-47		
350		-60					-53		202	27		-52					-52			
300	28.5	-65				28.6	-61		215	28	28.7	-67				28.9	-64			
250		-64					-66		218	22		-65					-69			
200	37.1	-53				37.2	-55		226	22	37.3	-56				37.5	-59			
170		-54					-52		238	22		-56					-56			
150		-57				43.5	-54		238	19	43.5	-57				43.7	-59			
130		-59					-54		233	17		-59					-59			
110		-59					-56		235	17		-62					-59			
100	52.0	-59				52.2	-57		241	18						52.3	-61			
90		-59					-58		246	15							-64			
80		-60					-58		246	12							-64			
70	(70mb)	-60					-58		244	11							-65			
60							Inversion										-65			
							787 mb 18° - 777 mb 20°										Inversion			
																	760 mb 20° - 750 mb 21°			
																	Isothermal			
																	985 - 960 mb 41°			
																	930 - 910 " 37°			

See Page 3 for Winds

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
Surf	00.6	43	38	190	06	01.2	43	42	195	10	04.4	40	39	240	08	02.9	45	43	225	12
1000	50.3					00.9					00.9					01.1				
950		39	35	218	13		42	39	237	25		42	41	244	21		44	41	226	30
900	27.9	33	30	254	19	29.1	36	32	256	25	29.2	37	36	251	24	29.4	39	37	240	30
850		29	26	256	20		30	25	252	24		31	30	252	25		34	28	253	30
800	58.8	29	24	252	21	59.9	22	21	247	22	60.1	25	24	252	26	60.4	27	19	253	30
750		22	12	249	22		21	13	248	23		22	16	255	28		25	11	248	30
700	93.1	18	03	244	24	94.0	15	-02	263	25	94.4	20	04	263	28	95.0	19	14	249	33
650		12	-10	246	27		09	-04	276	27		11	-02	263	27		14	08	251	36
600	13.2	03	-14	253	27	13.3	01	-12	280	28	13.3	02	-11	268	30	13.4	07	01	252	37
550		-04	-25	279	29		-09	-25	286	33		-03	-25	287	37		-01	-12	255	46
500	17.6	-13	-34	277	42	17.6	-14	-34	285	36	17.7	-13	-26	288	44	17.8	-09	-25	257	46
450		-25	-40	276	42		-23	-47	284	37		-25	-32	286	45		-21	-31	270	46
400	22.8	-37	-50	280	49	22.8	-34	-57	286	38	22.9	-38	-46	292	47	23.1	-33	-42	287	58
350		-53		278	57		-46		289	38		-50		302	70		-45		293	77
300	29.0	-63		279	66	29.2	-59		287	39	29.2	-61		303	96	29.4	-60		295	98
250		-65		284	43		-65		283	40		-71		297	59		-74		294	100
200	37.5	-59		271	33	37.8	-59		287	34	37.6	-65		287	43	37.9	-66		306	58
170		-55		280	29		-56		289	23		-60		288	27		-65		288	46
150	43.7	-57		283	24	43.9	-56		289	22	43.8	-60		291	26	43.9	-65		283	35
130		-60		280	19		-57		290	20		-64		291	23		-65		290	37
110		-58		284	17		-60		294	14		-64		309	15		-68		292	42
100	52.4	-59		275	15	52.6	-61		293	15	52.3	-65		298	12	52.4	-69		290	40
90		-61					Isothermal					65					-69			
80							792 - 750 mb 21°					Inversion				(89mb)	-69			
70												987 mb 40° - 965 mb 43°					Inversion			
60												Isothermal					993 mb 45° - 974 mb 46°			
												765 - 723 mb 22°					800 " 27° - 790 " 30°			
												600 - 594 " 02°								
												278 - 265 " -67°								

Inversion 832 mb 27° - 800 mb 29°

Isothermal 578 - 564 mb -02°

Tropopause	I 305 mb -65° 28,000'	I 254 mb -67° 32,000'	I 261 mb -69° 31,700'	I 300 mb -64° 28,900'	I 274 mb -66° 31,000'; I 245 mb -67° 33,300'	II 274 mb -65° 31,100'	II 288 mb -73° 34,000'	I 237 mb -75° 34,300'		Tropopause

H.M.S.O. Press, MO, Dunstable

No. 11647. DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Saturday 17th February 1951

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

LERWICK — 03h G.M.T. — M.S.L. 998·4 mb — Surf 988·3 mb — Freezing 950 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·7	38	37		
1000	-0·5				
950		32	32		
900	27·1	26	26		
850		22	22		
800	57·3	17	16		
750		13	12	For	
700	91·0	08	06		
650		02	00	winds	
600	129	-05	-09		
550		-13	-19	See	
500	172	-23	-29	page	
450		-34	-41		
400	223	-44		3.	
350		-54			
300	285	-63			
250		-60			
200	371	-55			
170		-52			
150		-53			
130		-57			
110		-59			
100	521	-58			
90		-57			
80		-57			
70		-57			
60					

Tropopause: I 277 mb -67° 30.200

STORNOWAY — 03h G.M.T. — M.S.L. 987·2 mb — Surf 985·6 mb — Freezing 898 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·4	41	35	120	12
1000	3·5				
950		38	32	117	21
900	24·5	33	29	142	27
850		27	22	151	17
800	55·2	20	16	147	23
750		20	16	147	25
700	89·3	16	03	149	25
650		08	-07	152	25
600	128	00	-12	160	23
550		-08	-18	165	22
500	172	-18	-29	169	23
450		-30	-42	164	16
400	223	-43		209	25
350		-57		215	37
300	285	-65		203	29
250		-59		216	29
200	371	-52		232	26

Inversion. 792 mb 19° – 765 mb 22°

Tropopause: I 310 mb -68° 27.700

LEUCHARS — 03h G.M.T. — M.S.L. 991·5 mb — Surf 990·6 mb — Freezing 888 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·2	37	36	130	04
1000	-0·2				
950		36	33	192	20
900	25·6	33	33	193	23
850		28	28	193	26
800	56·4	23	23	192	28
750		17	17	192	30
700	90·3	09	07	190	32
650		05	-07	189	31
600	129	01	-08	192	32
550		-08	-17	196	33
500	172	-18	-26	223	29
450		-29	-37	230	31
400	224	-41		234	42
350		-57		231	48
300	286	-64		241	43
250		-60		249	36
200	372	-52		252	29
170		-55		255	23
150		-57		256	23
130		-58		256	18
110		-60			

Inversion. 333 mb -62° – 321 mb -61°

Tropopause: I 295 mb -65° 29.000

ALDERGROVE — 03h G.M.T. — M.S.L. 985·9 mb — Surf 977·2 mb — Freezing 873 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·6	41	39		
1000	-3·6				
950		39	37		
900	24·6	35	33		
850		30	28		
800	55·4	24	21		
750		18	11		
700	89·0	12	02		
650		09	-07		
600	128	02	-20		
550		-05	-31		
500	172	-13	-41		
450		-24	-48		
400	224	-34	-57		
350		-45			
300	288	-56			
250		-57			
200	375	-52			
170		-53			
150		-53			
130		-58			
110		-57			
100	524	-59			
90		-62			
80		-62			

Isothermal. 674 mb -09° – 660 mb -09°

Tropopause: II 290 mb -57° 29.500

LIVERPOOL — 03h G.M.T. — M.S.L. 994·4 mb — Surf 992·3 mb — Freezing 853 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·6	43	40	170	15
1000	-1·5				
950		39	38	189	31
900	26·6	34	34	206	39
850		32	32	216	51
800	57·5	28	28	222	52
750		23	23	233	52
700	91·9	18	16	241	45
650		12	08	245	44
600	131	05	00	246	44
550		-03	-09	246	42
500	175	-13	-20	230	50
450		-24	-32	239	54
400	227	-37	-46	237	55
350		-45			
300	(69 mb)				

Tropopause: Nil

DOWNHAM MARKET — 03h G.M.T. — M.S.L. 1001·6 mb — Surf 997·2 mb — Freezing 857 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	1·2	42	40	170	14
1000	0·0				
950		41	40	222	27
900	28·6	36	30	231	29
850		31	27	236	32
800	59·5	26	18	241	33
750		23	09	235	29
700	93·8	16	08	233	32
650		11	06	247	37
600	133	05	-01	252	38
550		-08	-05	252	41
500	177	-11	-18	253	44
450		-22	-30	258	47
400	229	-34	-42	265	61
350		-49		270	62
300	292	-62		275	78
250		-70		284	74
200	377	-66		279	43
170		-60		283	37
150		-62			
130		-62			
110		-64			
100	523	-64			
90		-64			

Tropopause: I 233 mb -72° 34.400

LARKHILL — 03h G.M.T. — M.S.L. 1002·1 mb — Surf 986·1 mb — Freezing 850 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·4	45	44	230	15
1000	0·6				
950		42	41	219	32
900	28·9	37	36	223	40
850		32	30	229	41
800	59·8	26	24	234	40
750		19	16	231	36
700	94·0	17	15	238	43
650		11	09	254	44
600	133	06	03	258	43
550		-02	-05	259	49
500	177	-12	-15	263	54
450		-24	-27	267	55
400	229	-35	-39	280	75
350		-47		283	87
300	292	-64		292	98
250		-72		288	80
200	376	-64		283	46
170		-62		283	34

Isothermal. 733 – 700 mb 17°

Tropopause: I 280 mb -72° 30.600

CAMBORNE — 03h G.M.T. — M.S.L. 1000·3 mb — Surf 989·8 mb — Freezing 800 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·9	45	48	203	20
1000	0·1				
950		46	45	225	40
900	28·6	41	39	235	42
850		37	34	241	42
800	59·9	32	28	250	45
750		28	24	257	44
700	94·7	21	17	254	46
650		15	10	254	50
600	134	09	04	258	50
550		01	-06	265	58
500	179	-08	-16	271	66
450		-17	-26	270	66
400	231	-27	-37	284	89
350		-39	-49	274	84
300	296	-55		291	46
250		-71		267	39
200	380	-81			
170		-68			
150		-67			
130		-67			
110		-67			
100	524	-70			
90		-70			
80		-71			
70		-71			
	(77 mb)				

Tropopause: II 223 mb -80° 35.700

VALENTIA — 03h G.M.T. — M.S.L. 996·2 mb — Surf 995 mb — Freezing 915 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·3	41	37		
1000	-10				
950		36	31		
900	27·0	31	27		
850		24	21		
800	57·4	18	13		
750		11	04		
700	90·9	04	-05		
650		-05	-16		
600	128	-11	-25		
550		-08	-25		
500	172	-15	-36		
450		-23	-35		
400	224	-33	-41		
350		-44			
300	288	-55			
250		-57			
200	375	-59			
170		-55			
150		-58			
130		-61			
110		-73			

Inversion. 600 mb 11° – 565 mb -6°

Tropopause: I 278 mb -58° 30.400

LERWICK — 09h G.M.T. — M.S.L. 988·1 mb — Surf 978·1 mb — Freezing 910 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·7	39	39		
1000	-3·2				
950		36	36		
900	24·7	31	30		
850		26	25		
800	55·2	20	19		
750		15	13	For	
700	89·0	09	03		
650		02	-03	winds	
600	127	-06	-15		
550		-14	-29	See	
500	170	-23	-36	page	
450		-34	-44		
400	221	-46		3.	
350		-58			
300	282	-65			
250		-59			
200	369	-52			
170		-53			
150		-55			
130		-57			
110		-56			
100	519	-56			
90		-56			
80		-56			

Tropopause: I 321 mb -65° 36.800

STORNOWAY — 09h G.M.T. — M.S.L. 973·2 mb — Surf 971·6 mb — Freezing 902 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·4	41	37		
1000	7·3				
950		39	35		
900	20·8	32	28		
850		26	25		
800	51·3	21	18		
750		18	08		
700	85·3	12	-05		
650		05	-20		
600	123	-03	-34		
550		-10	-33		
500	167	-19	-34		
450		-28	-40		
400	219	-37	-51		
350		-45			
300	282	-48			
250		-47			
200	372	-45			
170		-43			
150		-50			
130		-50			
110		-50			
100	524	-50			
90		-50			
80		-48			
70		-52			

Tropopause: I 315 mb -52° 27.000

LEUCHARS — 09h G.M.T. — M.S.L. 984·5 mb — Surf 983·6 mb — Freezing 933 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·2	37	32	230	15
1000	-0·4				
950		34	29	225	39
900	23·6	29	25	233	40
850		22	19	240	41
800	53·9	18	14	240	39
750		11	07	235	32
700	87·0	03	-06	222	35
650		-03	-17	214	42
600	125	-10	-29	206	47
550		-11	-36	207	48
500	168	-16	-43	190	46
450		-27	-53	185	51
400	220	-39	-59	190	40
350		-49		200	45
300	283	-56		213	51
250		-46		236	37
200	371	-49		231	33
170		-54		240	30
150		-58		259	26

Isothermal. 590 – 525 mb -11°

Tropopause: I 313 mb -57° 27.400

ALDERGROVE — 09h G.M.T. — M.S.L. 987·6 mb — Surf 978·5 mb — Freezing 957 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·6	34	30	230	18
1000	-2·9				
950		31	26	235	33
900	24·8	27	19	245	39
850		22	13	252	40
800	55·0	14	05	254	42
750		08	00	251	46
700	83·0	02	-06	250	51
650		-06	-15	248	54
600	126	-13	-23	246	57
550		-17	-33	247	64
500	169	-22	-45	243	64
450		-28	-52	242	58
400	220	-38	-58	243	49
350		-45		239	53
300	284	-46		233	60
250		-41		239	66
200	374	-40			
170		-47			
150		-50			
130		-55			
110		-53			
100	525	-52			
90		-56			

Isothermal. 568 – 545 mb -17°; 493 – 471 – -23°

Tropopause: II 336 mb -46° 26.200

LIVERPOOL — 09h G.M.T. — M.S.L. 993·8 mb — Surf 991·7 mb — Freezing 910 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·6	40	31	240	15
1000	-1·7				
950		37	30	252	27
900	26·2	31	24	265	34
850		25	14	270	34
800	56·7	19	04	267	34
750		13	05	257	36
700	90·3	06	00	257	44
650		02	-12	247	55
600	128	-01	-20	243	57
550		-03	-28	247	75
500	172	-13	-27	243	87
450		-20	-27	242	107
400	225	-32	-38	240	105
350		-46		240	112
300	288	-59		246	110
250		-57			
200	375	-54			
170		-58			
150		-61			
130		-58			
110		-55			
100	524	-61			
90		-60			
80		-62			
70		-58			

Inversion. 665 mb 01° – 650 mb 02°; 500 -13° – 487 -12°

Isothermal. 992 – 977 mb 40°

Tropopause: I 290 mb -60° 29.500

DOWNHAM MARKET — 09h G.M.T. — Surf 992·0 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	1·2	44	42	200	16
1000	-1·0				
950		41	40	244	33
900	27·3	37	36	234	38
850		31	29	226	46
800	58·3	27	25	221	46
750		24	21	233	39
700	93·0	20	17	231	36
650		13	09	230	51
600	132	06	01	230	57
550		-01	-06	242	62
500	176	-11	-18	250	61
450		-21	-28	255	74
400	228	-34	-41	256	74
350		-49		254	79
300	291	-64			
250		-75			
200	376	-65			
170		-59			

Isothermal. 963 – 950 mb 41°; 850 – 833 31°; 780 – 750 24°

Tropopause: I 250 mb -75° 32.300

LARKHILL — 09h G.M.T. — M.S.L. 999·1 mb — Surf 983·0 mb — Freezing 898 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·4	39	38		
1000	-0·2				
950		36	31		
900	27·7	32	29		
850		31	29		
800	58·5	29	29	For	
750		24	24		
700	93·0	20	18	winds	
650		13	09		
600	132	07	02	See	
550		-01	-07	page	
500	177	-10	-16	3.	
450		-20	-27		
400	229	-31	-38		
350		-45			
300	292	-61			
250		-78			
200	375	-78			
170		-68			
150		-65			
130		-69			
110		-69			
100	520	-69			
90		-71			
80		-69			

Inversion. 868 mb 30° – 850 mb 31°

Tropopause: I 219 mb -85° 35.700

CAMBORNE — 09h G.M.T. — M.S.L. 1000·5 mb — Surf 989·8 mb — Freezing 915 mb

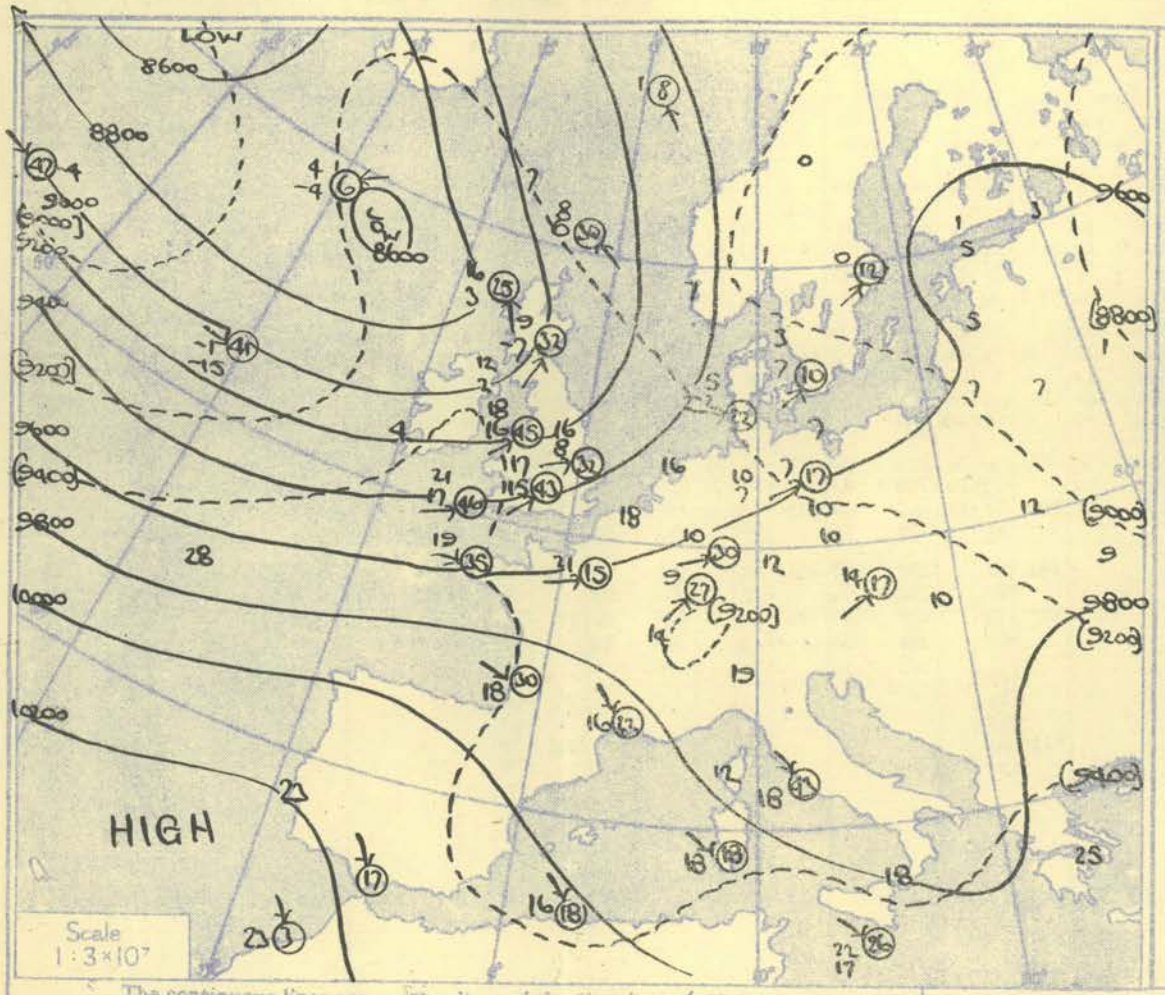
Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		40	38	270	06
1000	0·2				
950		36	33	264	21
900	28·1	30	27	276	22
850		26	26	272	29
800	58·7	23	19	267	33
750		19	13	262	39
700	92·8	15	10	251	42
650		11	06	240	57
600	132	06	01	233	74
550		-01	-07	241	79
500	176	-08	-15	249	87
450		-19	-27	250	83
400	229	-31	-40	249	90
350		-46		247	107
300	292	-61		250	109
250		-77			
200	375	-70			
170		-63			
150		-63			
130		-68			
110		-69			
100	521	-68			
90		-68			
	(92 mb)				

Isothermal. 550 – 540 mb -01°

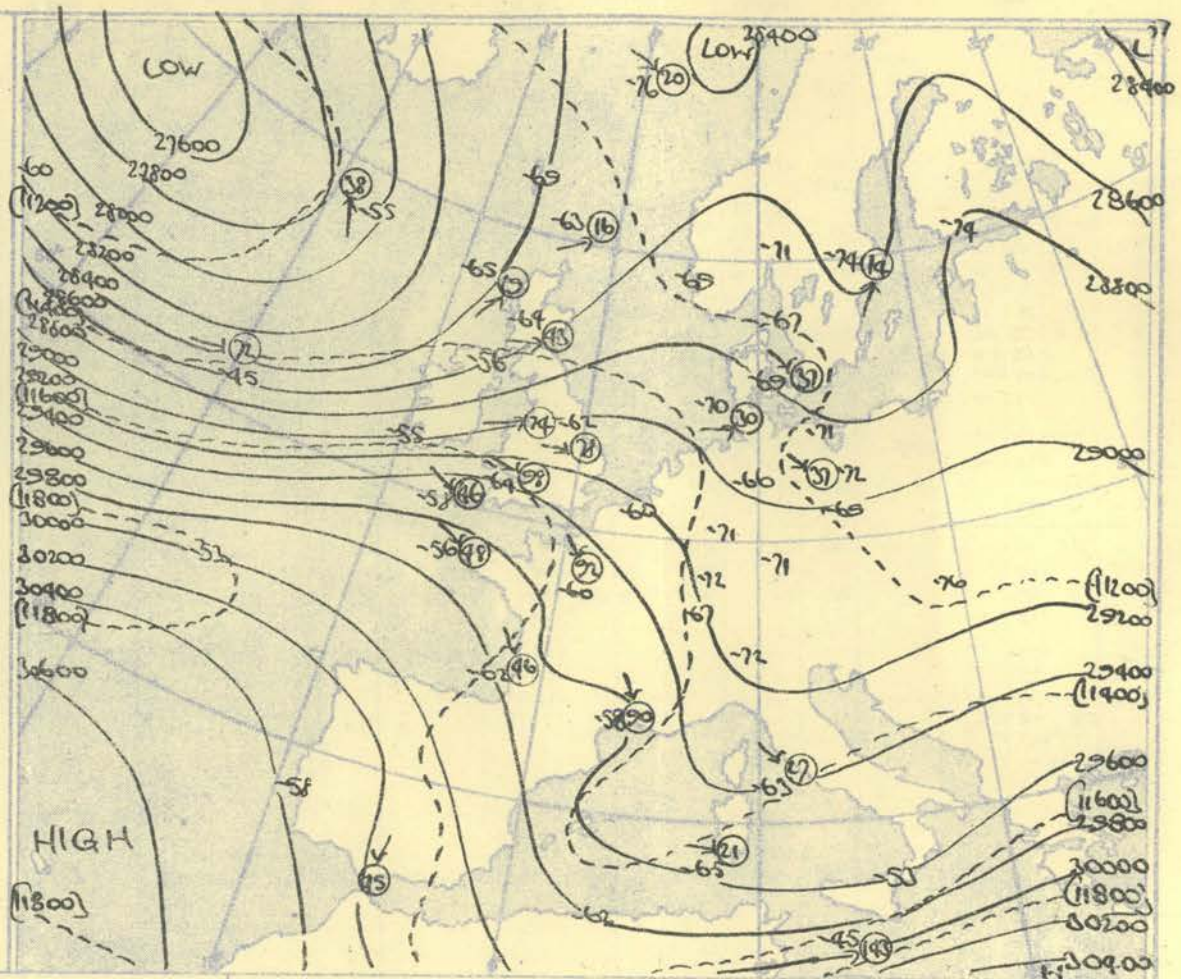
Tropopause: I 235 mb -82° 34.200

February 17th 1951.

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



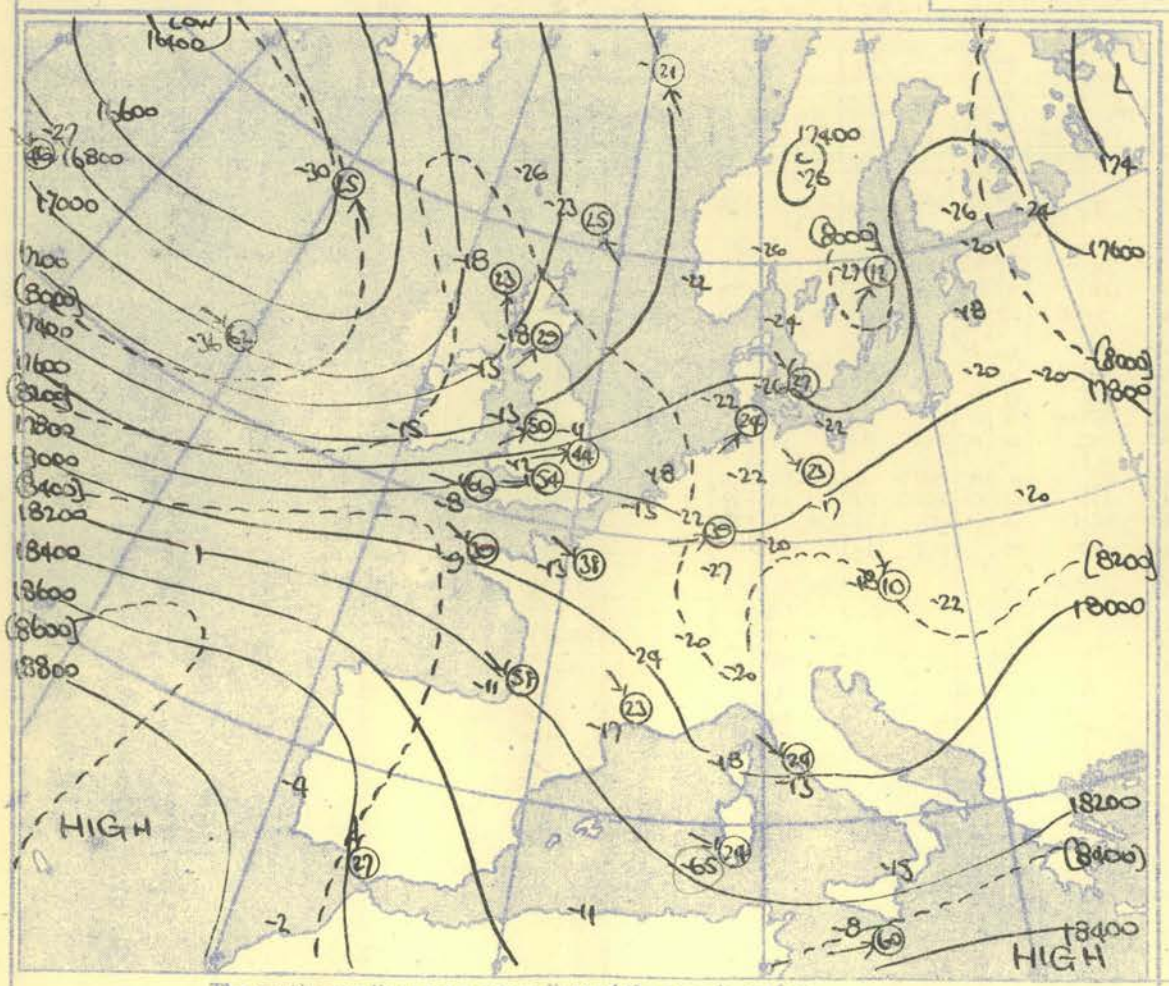
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000 – 700 mb.



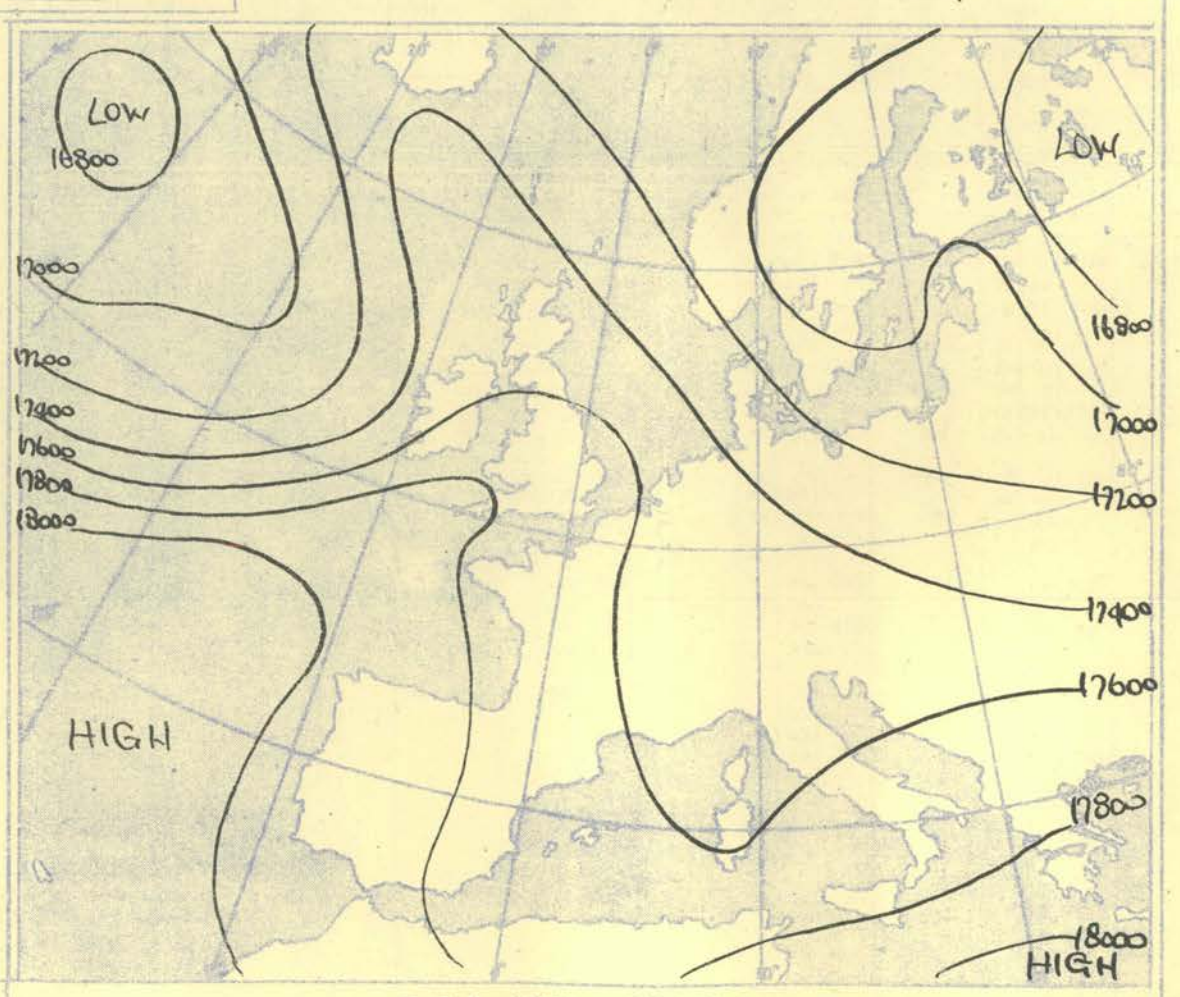
The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb

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

100 60 40 30 20 15 10 knots



The continuous lines are contour lines of the 500mb. 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			39·5N 12·2W			51·3N 00·4E		
Pressure Time	1245L			1415L			1416L		
Pressure M.S.L.	1018 mb			1024 mb			997·8 mb		
Pressure Surf	1015 mb			1021 mb			986 mb		
Pressure Freezing	720 mb			715 mb			890 mb		
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.
Surf		47	47		59	59	3·1	38	37
1000	5·0	45	45	6·7	56		0·1		
950		43	43		51	51		33	30
900		40	40		48	48	27·9	33	27
850		39	39		48	48		27	27
800		37	37		43		58·6	25	
750		35	35		36			22	21
700	100	29	28	103	30		92·9	17	15
650		21			23			09	05
600		16			17		131	02	-01
550		08			09			-05	
500	185	-04		188	-01		176	-19	
450								-30	
400							227	-37	
350								-49	
300							290	-61	
250									
200									
170									

43·2N 17·0W	39·5N 12·2W	51·3N 00·4E
Cloud 8/8 Cu 990-670mb 4/8 Ac 510-490mb Surf wind S. 1-3Kts	Cloud. 8/8 Cu 1000-890mb 2/8 Ci NR. Surf wind S. 3-7Kts.	Cloud. 6/8 St 950-940mb. 6/8 Ns 920-530mb. 1/8 Cs NR. Inversion 934 mb 32°- 900 .. 33°

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

Place	Liverpool		Lerwick		Larkhill		Lerwick		Larkhill		Lerwick		Aldergrove		Valentia.	
Time	03L		03L		03L		09L		1030L		15L		15L		15L	
Type	Pilar		Radar.		Pilar		Radar		Pilar.		Radar		Pilar		Pilar.	
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.			130	34			130	41	310	12	140	38			270	28
1,000			131	51			131	51	288	18	134	50			270	40
2,000			132	51			138	54	269	18	136	44			280	50
3,000			134	51			141	54	263	18	139	36			280	56
4,000			137	49			142	52	256	22	142	35			280	58
5,000			139	45			144	48	253	27	149	33			290	58
6,000			138	40			149	45	250	32	151	32			290	54
8,000			136	36			151	39	241	39	144	36			290	52
10,000			133	30			153	35	236	46	138	41			290	58
14,000			140	30			160	28	233	72	138	52			280	60
18,000			139	25			180	27	247	80	133	49			280	64
24,000	236	61	211	18			190	27	242	89	129	47			270	77
30,000	258	74	221	16			203	19	252	115	155	25	245	42		
40,000	261	75					218	17	265	41	210	18	250	30		
50,000	(34.000)				300	22	252	11	270	35	226	22	228	16		
					300	10			281	41	237	06	219	12		
					(58.000)				(53.000)				208	18		
													(62.000)			

NEPHOSCOPE OBSERVATIONS

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

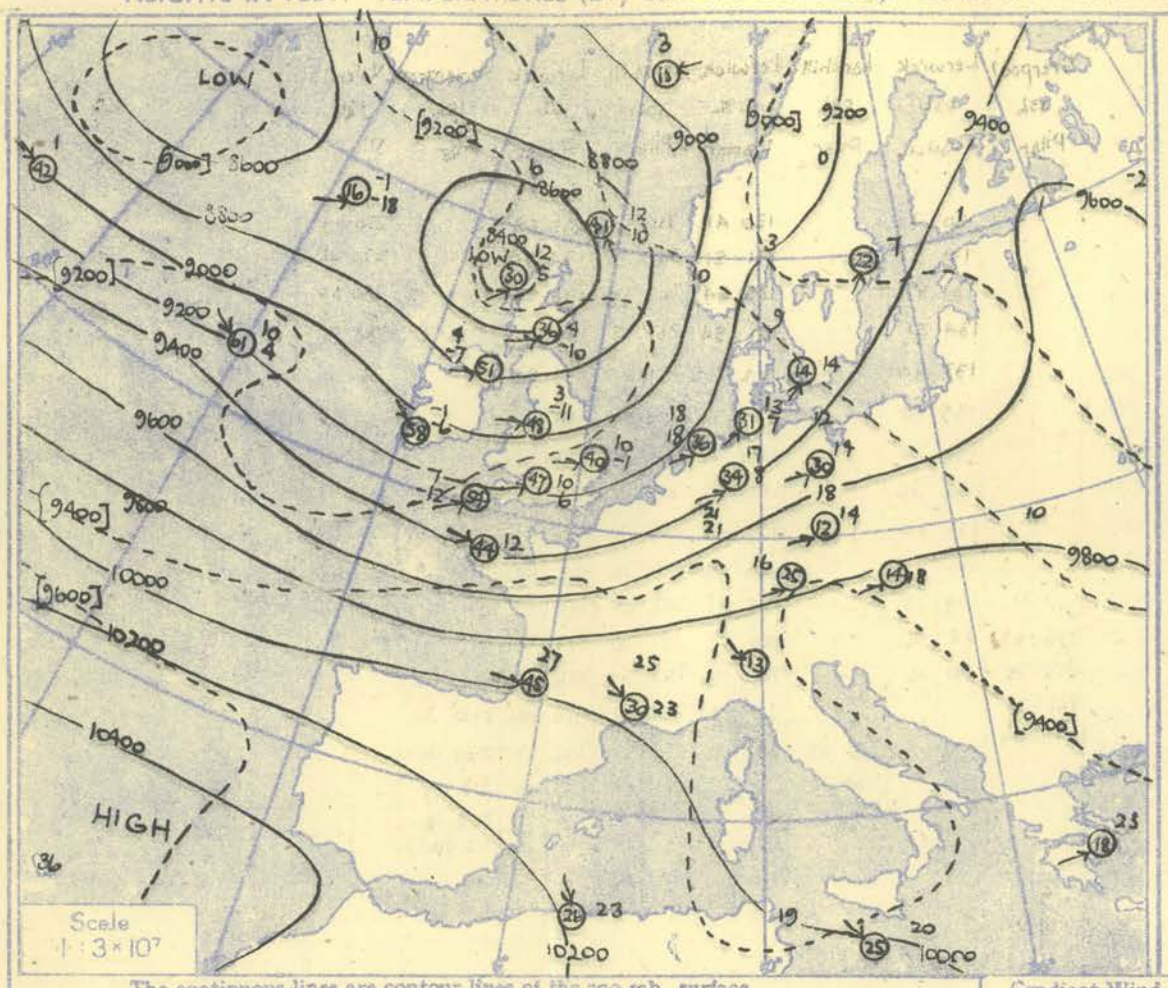
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	WEATHER EXPLORER.					WEATHER EXPLORER					WEATHER EXPLORER					WEATHER EXPLORER				
Lat/Long	52·7N 20·0W					52·6N 19·6W					52·4N 19·7W					52·5N 20·2W				
Pressure Time	03L G.M.T.					09L G.M.T.					15L G.M.T.					21L G.M.T.				
Pressure M.S.L.	996 mb					999 mb					999 mb					996 mb				
Pressure Surf	996 mb					999 mb					999 mb					996 mb				
Pressure Freezing	925 mb					965 mb					885 mb					880 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
Surf		39	24	270	32		39	31	285	28		44	28	252	27		44	34	250	27
1000	-1·2					-4					-3					-1·1				
950		35	24	270	36		30	23	268	31		42	28	255	39		42	32	260	45
900	26·7	28	21	269	35	27·3	24	17	264	33	27·9	33	22	249	40	27·1	35	30	260	43
850		20	16	267	33		17	10	263	36		28	14	252	47		21	23	260	43
800	56·9	14	04	267	38	57·4	10	04	267	41	58·6	24	07	259	53	57·9	20	12	260	49
750		07	-09	270	41		03	-03	275	44		19	01	270	54		15	05	260	51
700	90·2	-01	-15	273	41	90·4	-03	-20	285	41	92·6	10	-04	277	61	91·6	09	00	260	38
650		-09	-20	275	43		-12	-19	284	40		02	-12	276	68		02	-07	260	51
600	127	-18	-25	278	43	127	-21	-29	280	44	131	-08	-21	268	57	121	-06	-16	260	48
550		-26	-33	275	50		-31	-39	280	44		-16	-27	270	58		-14	-22	260	54
500	169	-36	-43	273	62	169	-41		286	50	174	-24	-35	270	61	173	-23	-31	260	61
450		-39	-49	272	58		-41		293	65		-32	-44	280	60		-34	-41	260	60
400	219	-42		272	69	219	-47		288	72	225	-41		284	57	224	-42		260	66
350		-45		259	70		-53		279	70		-51		282	58		-51		268	78
300	283	-45		247	72	281	-53		266	66	287	-55		280	55	286	-58		271	83
250		-45		234	86	(294 mb)	-53					-46		260	69		-55		282	75
200	373	-43		239	70						376	-47		271	64	374	-49		275	54
170		-44		241	58							-45		271	39		-51		266	54
150		-47		248	53						(168 mb)	-44					-51		266	52
130		-52		254	50												-51		266	53
110		-53		257	43												-54		264	45
100	525	-50		257	24											525	-55		266	51
90	(95 mb)	-53														(96 mb)	-56			
80																				
70																				
60																				
	Inversion 465 mb -40°- 450 mb -39°					Inversion 456 mb -43°- 441 mb -40° Isothermal 485 - 456 mb -43°					Inversion 999 mb 44°- 987 mb 45°					Isothermal 433 - 418 mb -39°				
Tropopause	I 422 mb - 43° 20,700′					I 339 mb - 54° 25,400′					I 308 mb - 58° 28,100′					I 278 mb - 61° 30,300′				

Ship	WEATHER RECORDER					WEATHER RECORDER					WEATHER RECORDER					WEATHER RECORDER				
Lat/Long	59·2N 18·7W					59·2N 19·0W					59·2N 19·3W					59·1N 19·2W				
Pressure Time	03L G.M.T.					09L G.M.T.					15L G.M.T.					21L G.M.T.				
Pressure M.S.L.	978 mb					982 mb					984 mb					983 mb				
Pressure Surf	978 mb					982 mb					984 mb					983 mb				
Pressure Freezing	910 mb					945 mb					935 mb					945 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
Surf		41	36	340	12		38	27	285	30		38	24	270	20		38	29	240	12
1000	-5·9					-4·9					-4·3					-4·7				
950		37	31	360	10		33	21	301	36		34	22	257	18		33	24	233	10
900	22·1	31	24	004	14	22·9	25	14	304	33	23·3	27	15	252	20	23·0	25	15	235	11
850		25	17	009	11		18	08	302	38		19	10	252	23		17	05	244	13
800	52·6	18	09	020	09	53·0	10	02	303	39	53·4	10	01	261	20	53·0	12	-05	249	12
750		11	02	034	06		03	-06	314	29		05	-07	261	18		07	-14	251	20
700	86·1	04	-04	045	06	86·0	-02	-11	333	31	86·4	-01	-18	237	16	86·2	01	-20	252	19
650		-04	-12	074	08		-09	-18	359	10		-06	-28	193	15		-07	-28	247	24
600	123	-12	-21	047	12	123	-19	-27	358	06	124	-11	-26	149	18	123	-15	-35	239	17
550		-21	-32	114	17		-29	-38	136	08		-18	-29	114	23		-19	-38	135	32
500	166	-30	-41	130	25	165	-37	-47	136	31	167	-26	-37	130	32	166	-29	-47	136	40
450		-39	-50	144	30		-46		131	42		-36	-46	136	38		-39	-56	130	46
400	216	-48		152	34	214	-58		193	51	217	-47		136	49	216	-50		139	51
350		-58		160	36		-72		155	54		-59		130	54		-58		143	44
300	278	-55		163	38	275	-60		over max. elevation		279	-63		144	29	278	-61		165	20
250		-45		172	24		-55					-53		146	15		-55		208	10
200	367	-46		184	22	362	-53				367	-48		163	10	365	-54		246	17
170		-47		190	31		-53		220	28		-45		181	09		-53		254	21
150		-48		195	29		-54		226	24		-47		190	10		-51		238	13
130		-48		212	22		-56		222	28		-49		201	15		-51		224	10
110		-49				(115 mb)	-57					-42		213	30		-52		251	25
100											519	-47		228	26	516	-53		258	9
90												-50		224	20		-53		225	11
80												-50		215	12		-53		164	14
70												-50		214	30		-54		209	18
60												-53					-54		232	15
																	-55		251	15
																(45 mb)	-55			
Tropopause	II 350 mb - 68° 24,400′					I 350 mb - 72° 24,000′					I 310 mb - 67° 27,100′					II 345 mb - 59° 24,600′				

Saturday 4 February 1951.

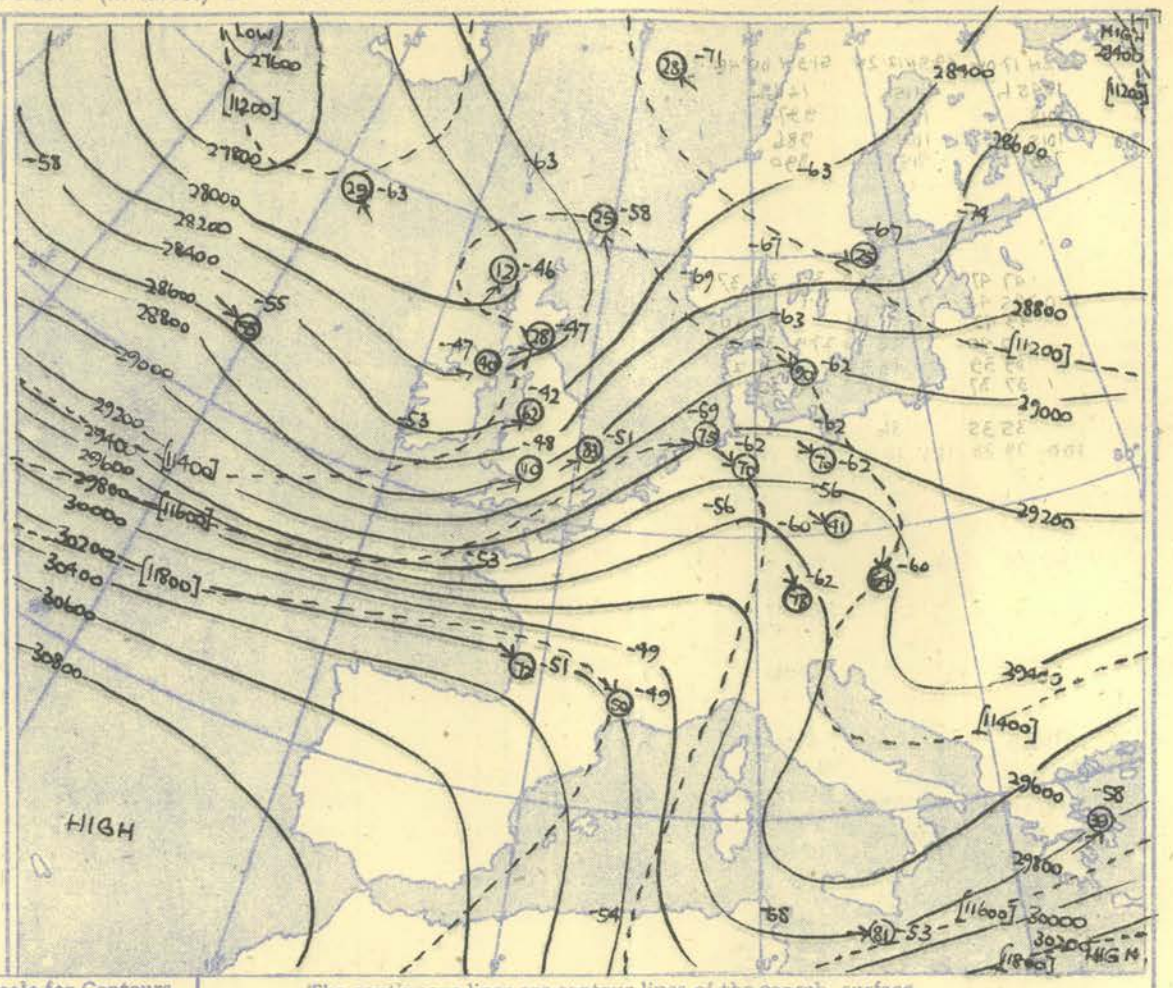
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h G.M.T.



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

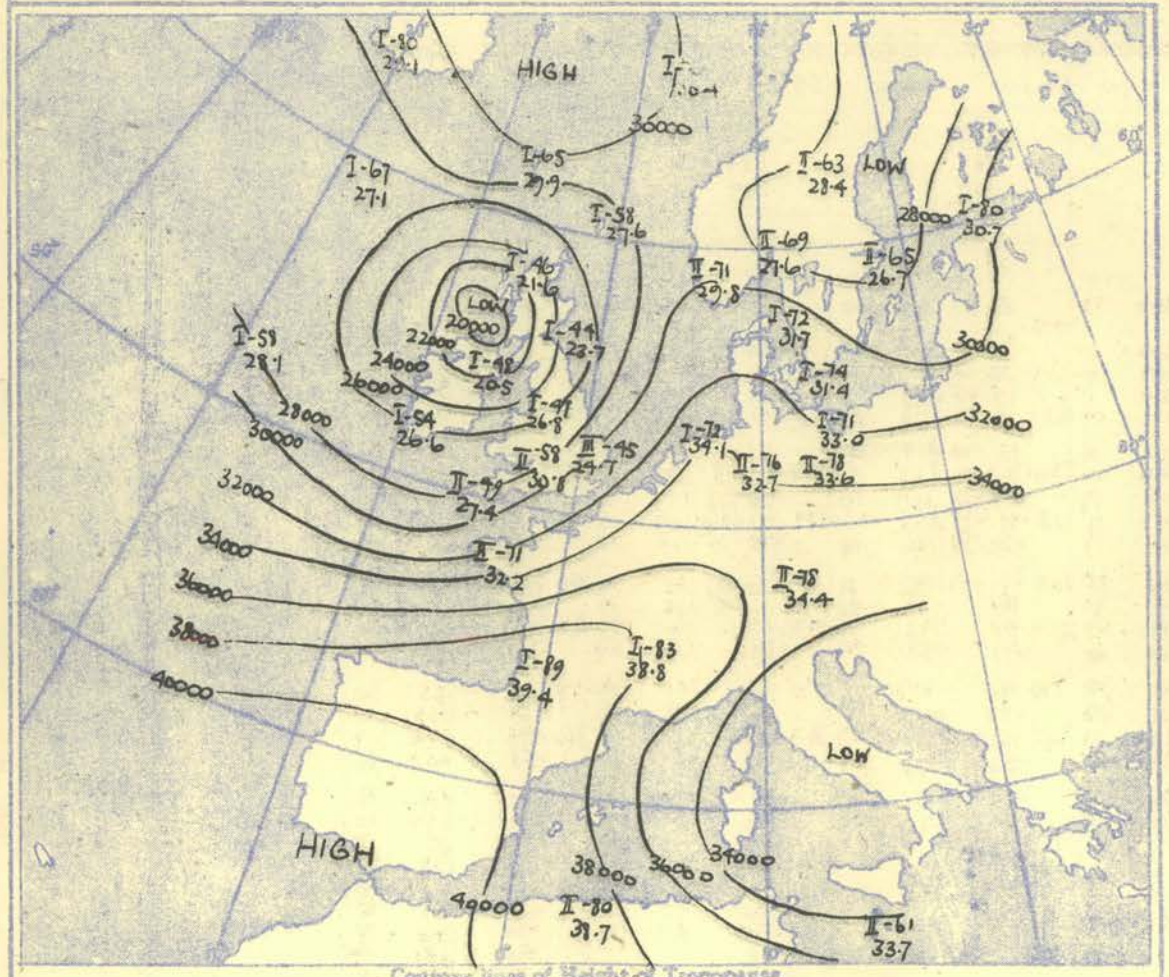
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

100 80 40 20 10 5 0 knots



The continuous lines are contour lines of the 300mb. 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 over the British Isles moved quickly eastwards, while very cold air moved across the Atlantic from the Davis Straits into the British Isles in the afternoon. A well marked thermal jet stream from north of the Azores to the South of England weakened somewhat during the day.

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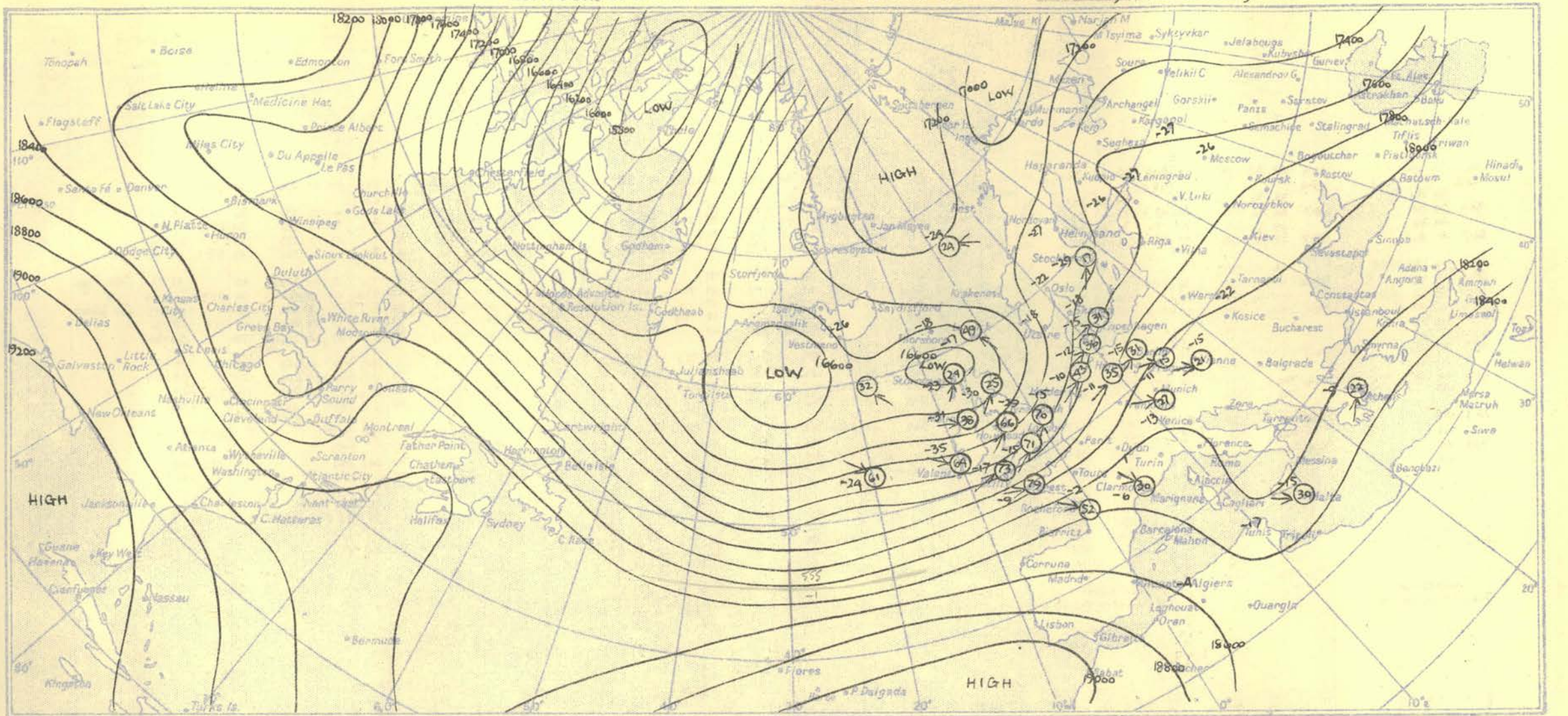
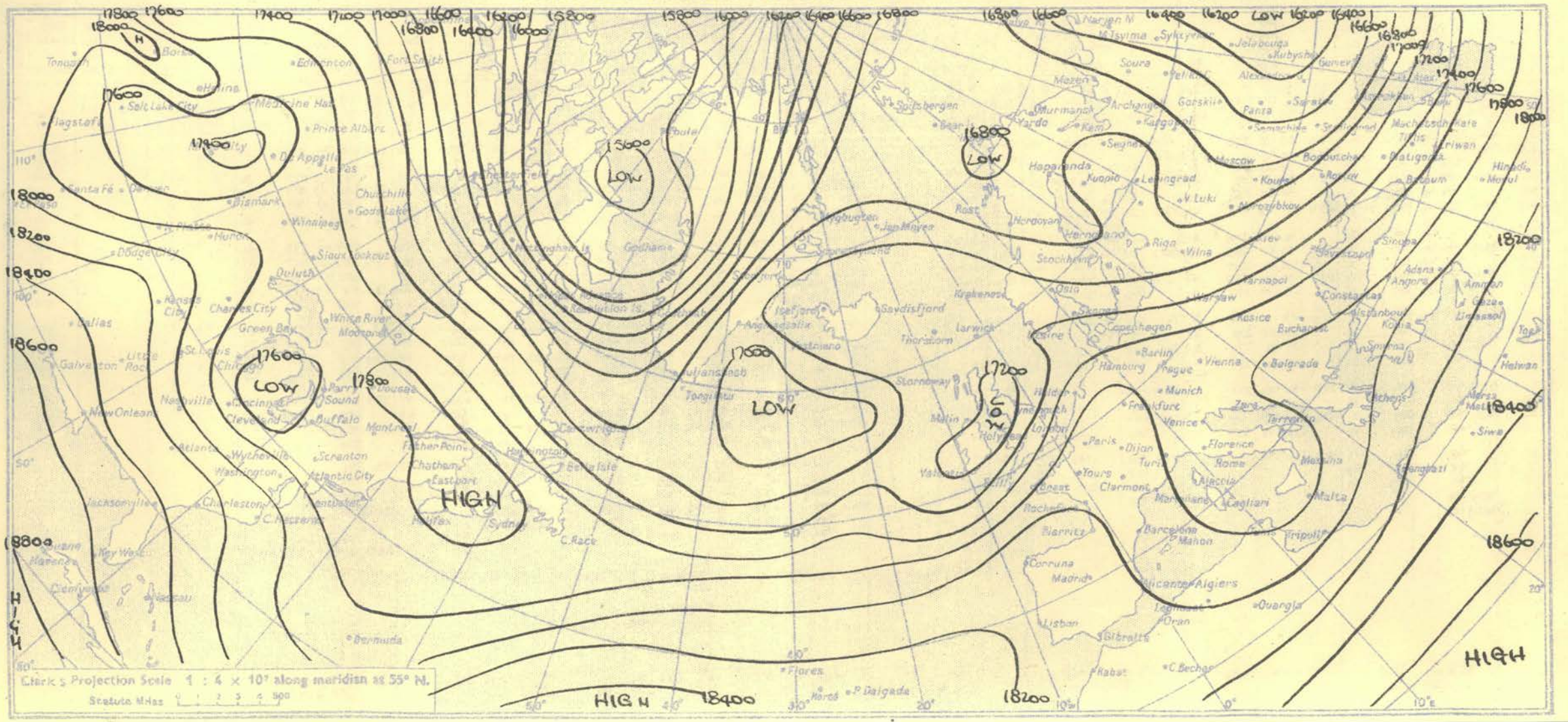
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Saturday 17th. February 1951



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. February 17th 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Saturday 17th. February 1951.

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

15h. G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Pressure: Time	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h. G.M.T.
Pressure: M.S.L.	978·7 mb	965·5 mb	982·3 mb	986·7 mb	992·2 mb	994·5 mb	997·4 mb	1001·6 mb	1000 mb
Pressure: Surf	968·8 mb	963·9 mb	981·4 mb	978·0 mb	990·1 mb	990·0 mb	981·3 mb	990·9 mb	999 mb
Pressure: Freezing	914	885	939	932	924	896	900	893	935

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Lerwick					
Surf	02·7	38	38		
1000	-05·7				
950		36	36		
900	22·2	30	30		
850		26	26		
800	52·7	21	21		
750		16	15		
700	86·6	12	10		
650		06	02		
600	12·5	00	-03		
550		-07	-11		
500	16·9	-17	-20		
450		-27	-31		
400	22·0	-38	-43		
350		-50			
300	28·3	-58			
250		-48			
200	37·2	-44			
170		-45			
150		-47			
130		-50			
110		-48			
100	52·4	-50			
90	(93 mb)	-52			
80					
70					
60					
Stornoway					
Surf	00·4	40	38	190	25
1000	09·4				
950		38	35		
900	18·7	34	32	194	31
850		29	26	202	30
800	49·5	23	19	200	30
750		18	14	202	31
700	83·5	12	05	208	30
650		05	-02	203	30
600	12·2	-04	-11	195	27
550		-12	-24	187	24
500	16·5	-23	-37	191	24
450		-35	-47	171	26
400	21·6	-46		161	27
350		-41		156	17
300	28·0	-46		177	12
250		-45		180	15
200	36·9	-45		201	26
170		-42		199	15
150	43·3	-48		222	24
130		-49		231	22
110		-51		219	16
100	52·2	-52		212	21
90		-49		213	21
80		-48		223	16
70		-48		216	18
60					
Leuchars					
Surf	00·2	40	30	240	27
1000	-18·0				
950		34	25	228	36
900	22·7	28	21	229	39
850		21	16	236	41
800	53·0	14	09	240	46
750		08	03	247	39
700	86·3	04	-16	244	36
650		-04	-13	246	28
600	12·4	-11	-26	248	25
550		-22	-33	241	25
500	16·6	-30	-43	241	25
450		-34	-51	236	31
400	21·7	-37	-57	212	41
350		-42		230	34
300	28·1	-47		227	28
250		-46		225	33
200	37·1	-40		229	36
170		-45		214	24
150	43·5	-52		227	28
130		-51		252	24
110		-54		230	24
100	52·3	-54		235	19
90		-56		247	14
80		-55			
70					
60					
Aldergrove					
Surf	02·6	37	31	230	30
1000	-03·3				
950		34	28	243	41
900	24·5	28	23	250	45
850		22	17	253	46
800	55·0	17	11	268	50
750		11	03	270	54
700	08·9	04	-07	266	51
650		-03	-12	264	46
600	12·6	-11	-26	270	42
550		-20	-33	275	39
500	16·9	-31	-46	274	38
450		-42		269	36
400	21·9	-46		253	34
350		-48		242	40
300	28·2	-47		248	40
Liverpool					
Surf	00·6	39	30	250	20
1000	-02·1				
950		35	28	261	33
900	25·8	29	24	267	38
850		22	18	268	42
800	56·1	15	07	269	42
750		09	-03	267	42
700	89·5	03	-11	258	48
650		-01	-12	242	57
600	12·7	-10	-15	228	58
550		-20	-23	225	63
500	17·0	-29	-33	224	66
450		-36	-41	231	66
400	22·1	-43		243	66
350		-41		244	60
300	28·4	-42		241	62
250		-42		245	57
200	37·5	-43		249	39
170		-49		243	36
150		-54		241	38
130		-51		247	35
110		-54		246	21
100	52·6	-58		239	26
90		-57		239	24
80		-56			
Downham Market					
Surf	01·2	40	38	210	11
1000	-01·5				
950		37	31	249	21
900	26·5	33	22	263	21
850		27	11	266	22
800	57·1	22	09	265	23
750		17	02	265	32
700	91·0	10	00	266	40
650		03	-09	263	51
600	12·9	-02	-17	247	56
550		-04	-24	234	68
500	17·3	-15	-37	230	70
450		-25	-36	226	71
400	22·5	-35	-44	226	69
350		-46		233	86
300	28·9	-51		233	83
250		-54		244	75
200	37·6	-53		247	47
170		-54		252	51
150	43·9	-56		254	48
130		-56		260	30
110		-57		260	24
100	52·6	-58		259	23
90		-57		239	24
80		-55			
70		-57			
60		-56			
Larkhill					
Surf	04·4	41	38	270	10
1000	-0·7				
950		37	35	246	29
900	27·3	22	30	252	27
850		28	25	259	32
800	57·9	23	21	261	39
750		16	12	260	45
700	91·8	10	06	260	47
650		04	-06	260	50
600	13·0	02	-11	255	62
550		-06	-29	249	69
500	17·4	-15	-39	243	71
450		-26	-52	246	73
400	22·6	-37	-60	248	84
350		-46		248	96
300	28·9	-52		250	110
250		-55		245	88
200	37·7	-58		251	68
170		-57		255	55
150	43·9	-56		257	43
130		-58		259	39
110		-59		251	33
100	52·5	-58		242	32
90		-60		247	32
80		-63		262	25
Camborne					
Surf	02·9	44	31	270	25
1000	00·4				
950		40	26	279	36
900	28·6	33	22	282	34
850		25	17	283	39
800	59·0	18	05	285	42
750		13	-04	276	45
700	92·6	07	-12	264	54
650		05	-18	262	61
600	13·1	01	-27	260	68
550		-07	-34	261	75
500	17·5	-17	-42	262	73
450		-28	-53	262	88
400	22·6	-37	-60	262	106
350		-45		263	127
300	29·0	-50			
250		-59			
200	24·2	-61			
Valentia					
Surf	00·3	40	34		
1000					
950		34	28		
900	27·9	27	22		
850		21	16		
800	58·1	14	08		
750		01	02		
700	91·3	-01	-06		
650		-09	-13		
600	12·8	-18	-21		
550		-26	-30		
500	17·1	-35	-39		
450		-38	-44		
400	22·1	-44			
350		-50			
300	28·3	-53			
250		-44			
200	37·2	-49			
170		-54			
150	(151 mb)	-54			
130					
110					
100					
90					
80					
70					
60					

See Page 5 for Winds

See Page 3 for Winds

For remainder of Winds See Page 3

Isothermal 756 -749 mb 16°

Inversion 752 mb 07° - 732 mb 09°

Isothermal 484 - 465 mb -32°

Inversion 600 mb -02° - 587 mb -01°

Isothermal 704 - 687 mb 10°
334 - 333 " -48°

Inversion 625 mb -01° - 605 mb 03°

Inversion 680 mb 04° - 635 mb 05°

Inversion 363 mb -50° - 355 mb -49°

Tropopause	I 310 mb -58° 27,600'	I 400 mb -46° 21,600'	I 365 mb -44° 23,700'	I 427 mb -48° 20,400'	I 384 mb -45° 22,900' I 323 mb -47° 26,800'	III 361 mb -45° 29,700'	I 275 mb -58° 30 800'	II 321 mb -49° 27,400'	I 324 mb -54° 26,600'

21h. G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	
Pressure: Time	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	G.M.T.
Pressure: M.S.L.	975·1 mb	965·6 mb	978·7 mb	990·3 mb	994·1 mb	997·1 mb	1002·1 mb	1006·6 mb	mb
Pressure: Surf	965·2 mb	964·0 mb	977·8 mb	981·2 mb	992·1 mb	992·6 mb	985·7 mb	995·9 mb	mb
Pressure: Freezing	920	888	929	957	941	939	960	916	mb

Pressure mb	Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Lerwick					
Surf	03·7	38	33	170	26
1000	-06·7				
950		36	31	152	33
900	21·1	30	25	148	34
850		23	18	144	33
800	51·4	17	10	148	30
750		11	05	155	28
700	84·9	04	00	157	27
650		-04	-10	160	26
600	12·2	-12	-19	168	15
550		-20	-27	157	16
500	16·5	-25	-40	145	18
450		-32	-50	143	30
400	21·6	-41		136	28
350		-48		141	31
300	27·9	-48		154	25
250		-46		162	13
200	36·9	-45		183	21
170		-45		209	18
150		-49		221	12
130		-51		235	13
110		-51		229	12
100	52·0	-52			
90	(94 mb)	-53			
80					
70					
60					
Stornoway					
Surf	00·4	39	37	250	15
1000	09·3				
950		38	35	263	39
900	18·7	34	31	271	42
850		28	25	280	40
800	49·4	21	17	287	40
750		16	14	284	38
700	83·2	10	08	285	37
650		02	00	285	35
600	12·1	-04	-06	280	35
550		-11	-14	277	34
500	16·5	-18	-21	276	36
450		-23	-28	275	28
400	21·7	-27	-36	276	27
350		-29	-43	284	18
300	28·3	-30	-46	278	12
250		-30	-48	225	17
200	37·6	-30	-48	195	11
170		-30	-48	223	14
150	44·2	-30	-51		
Leuchars					
Surf	00·2	38	32	200	30
1000	56·1				
950		35	30	267	51
900	22·1	29	23	268	64
850		25	17	269	69
800	52·5	20	09	267	69
750		13	04	271	69
700	86·2	05	-02	278	69
650		-07	-07	282	66
600	12·4	-08	-13	285	40
550		-16	-20	278	29
500	16·7	-26	-31	279	28
450		-38	-44	293	27
400	21·7	-52		295	31
350		-58		265	20
300	27·9	-46		242	36
250		-42		244	20
200	37·0	-47		239	30
170		-46		258	24
150	43·3	-45		246	19
130		-53		243	18
110		-52		227	20
100	52·1	-52			
Aldergrove					
Surf	02·6	34	31		
1000	02·4				
950		31	29		
900	25·3	26	26		
850		20	20		
800	55·5	13	12		
750		09	04		
700	88·9	02	-11		
650		-05	-20		
600	12·6	-14	-27		
550		-21	-36		
500	16·9	-30	-44		
450		-40	-52		
400	21·9	-52			
350		-53			
300	28·1	-46			
250		-46			
200	37·1	-45			
150		-46			
130	43·4	-47			
120		-50			
110		-54			
100	52·3	-57			
90		-53			
80		-53			
Liverpool					
Surf	00·6	38	32	268	28
1000	-01·6				
950		33	29	268	44
900	26·2	28	24	270	46
850		22	21	276	45
800	56·4	15	14	283	46
750		10	08	286	44
700	89·8	03	00	286	44
650		-06	-12	287	40
600	12·7	-14	-20	291	40
550		-23	-29	290	37
500	16·9	-32	-38	299	33
450		-43		311	30
400	21·9	-51		287	35
350		-49		273	50
300	28·2	-49		269	48
250		-49		261	48
200	37·1	-48		255	47
170		-51		257	47
150		-52		255	39
130		-53		277	26
110		-56		252	20
100	52·1	-59		248	21
90		-60		267	18
80		-61			
Downham Market					
Surf	01·2	35	32	220	15
1000	-00·8				
950		34	28	246	39
900	26·9	29	20	259	44
850		23	10	262	44
800	57·2	16	02	259	43
750		09	-01	256	38
700	90·6	02	-07	254	37
650		-07	-17	253	44
600	12·8	-15	-23	251	49
550		-25	-32	244	47
500	17·0	-34	-40	239	58
450		-37	-48	242	66
400	22·0	-44		247	63
350		-47		246	74
300	28·3	-52		251	62
250		-51		248	57
200	37·2	-50		240	56
170		-51		235	42
150	43·5	-53		243	43
130		-54		252	35
110		-64		271	24
100	52·2	-64		246	30
90		-64		230	33
80		-61			
Larkhill					
Surf	04·4	34	31	270	15
1000	0·6				
950		31	27	270	33
900	28·2	21	22	278	42
850		22	13	281	46
800	58·5	15	01	280	46
750		08	-09	278	46
700	91·8	00	-14	273	46
650		-09	-25	271	49
600	12·9	-17	-31	270	55
550		-20	-39	268	68
500	17·2	-26	-46	264	76
450		-35	-55	262	81
400	22·2	-45		260	88
350		-50		262	91
300	28·5	-51		262	91
250		-47		262	66
200	37·3	-52		258	63
170		-54		258	56
150	43·6	-56		256	48
Camborne					
Surf	02·9	41	34	280	25
1000	01·8				
950		37	29	277	36
900	29·7	30	23	279	40
850		23	17	281	40
800	60·1	15	10	285	42
750		09	00	288	42
700	93·5	02	-07	287	47
650		05	-14	286	48
600	13·1	-13	-25	283	50
550		-18	-31	277	61
500	17·4	-26	-35	274	69
450		-35	-44	266	84
400	22·4	-45		259	93
350		-53		266	102
300	28·7	-55		262	108
250		-55		269	97
200	37·4	-55			
170		-60			
150	43·6	-61			
130		-60			
110		-59			
100	(105 mb)	-60			

Isothermal 597 - 570 mb -18°
404 - 386 " -45°

Inversion 993 mb 35° - 972 mb 36°
486 " -36° - 470 " -34°

Isothermal 404 - 390 mb -44°

Inversion 605 mb -13° - 585 mb -12°

Tropopause	I 358 mb -50° 24,000'	II 320 mb -30°	I 359 mb -62° 24,000'	I 357 mb -55° 24,300'	I 416 mb -52° 21,800'	I 296 mb -53° 28,600'	II 404 mb -45° 21,800' II 338 mb -51° 25,800'	II 365 mb -53° 24,900'	

HMSO. Press, MD., Dunstable

No. 1164's **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Sunday 18th February 1951. Page 1.

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

03Z

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	03Z G.M.T.	03Z G.M.T.	03Z G.M.T.	03Z G.M.T.	03Z G.M.T.	03Z G.M.T.	03Z G.M.T.	03Z G.M.T.	03Z G.M.T.
M.S.L.	970·7 mb	970·6 mb	980·3 mb	991·8 mb	996·2 mb	1000·2 mb	1004·6 mb	1007·8 mb	999·3 mb
Surf	959·9 mb	969·0 mb	979·4 mb	982·4 mb	994·1 mb	995·5 mb	988·2 mb	957·6 mb	998 mb
Freezing	921 mb	900 mb	939 mb	956 mb	930 mb	953 mb	925 mb	932 mb	890 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	36	36	130	22	0·4	39	36	260	18	0·2	36	30	270	28	2·6	34	30			0·6	38	29	250	25	1·2	34	31	220	14	4·4	33	31	250	17	2·9	40	35	280	10	0·3	38	07			Surf
1000	-8·2					7·7					-5·3					-2·1					-1·1					0·0					1·3					2·1					-2					1000
950		35	35	109	31		37					33	26	254	51		32	28				34	24	253	39		32	28	253	37		35	31	252	36		34	28	248	43		39	33			950
900	19·7	30	30	113	36	20·2	32		273	34	22·5	28	18	257	55	25·9	28	24			26·8	28	23	264	47	27·7	28	24	271	48	29·1	29	26	262	39	29·9	29	24	256	40	28·0	33	29			900
850		24	24	114	37		27		281	33		23	09	268	63		23	18				22	14	268	49		21	16	276	50		24	20	269	48		23	17	258	41		27	24			850
800	50·1	19	17	116	32	50·8	21		289	33	52·8	19	06	276	63	55·8	16	13			57·0	16	06	270	49	57·9	14	09	277	48	59·5	18	09	273	46	60·3	18	11	264	43	58·6	22	17			800
750		14	11	120	27		18		286	36		14	-11	275	63		11	05				09	00	272	50		09	00	277	48		13	00	279	46		13	07	269	44		16	12			750
700	83·8	06	01	123	28	84·6	09		289	45	86·6	09	-10	270	61	89·3	04	-11			90·4	03	-11	274	48	91·3	02	-10	280	50	93·1	06	-06	282	52	93·9	07	00	272	46	92·5	10	05			700
650		-01	-07	127	24		02		293	45		03	-11	271	49		-05	-19				-05	-20	280	49		-06	-22	285	51		-03	-15	287	52		-01	-08	277	50		03	00			650
600	121	-07	-13	138	21	123	-06		284	48	125	-04	-13	274	42	127	-13	-26			128	-12	-27	283	52	129	-15	-30	284	54	131	-12	-21	293	54	132	-09	-18	279	48	131	-05	-08			600
550		-16	-20	170	17		-15		277	46		-14	-24	273	38		-22	-33				-21	-35	282	52		-24	-36	284	63		-20	-28	289	63		-20	-30	282	46		-14	-17			550
500	165	-27	-32	178	18	166	-25				168	-24	-34	271	33	169	-29	-43			170	-32	-44	283	59	171	-34	-45	284	56	173	-29	-37	291	63	174	-29	-42	289	54	174	-25	-29			500
450		-37	-43	176	19		-34					-35	-44	281	21		-37	-55				-43		284	72		-44		283	58		-36	-45	287	63		-40	-56	290	63		-35	-40			450
400	215	-44		167	16	216	-44				218	-49		301	23	219	-49				220	-50		289	76	220	-51		277	66	224	-46		281	64	224	-50		289	68	224	-45				400
350		-46		161	13		-56					-58		276	18		-58					-51		286	67		-52		275	72		-57		273	54		-54					-52				350
300	278	-48		148	13	279	-52				280	-65		266	17	281	-59				283	-48		282	49	283	-53		276	55	286	-55		273	65	286	-55				287	-60				300
250		-45		186	16		-52		284	18		-42		262	25		-53					-50		272	38		-55		267	57		-51		272	63		-52					-57				250
200	368	-46		190	13	367	-48		241	13	369	-49		251	24	369	-52				372	-47		263	49	370	-55		267	54	374	-55		266	63	374	-55				374	-53				200
170		-48		190	16		-47		246	15		-48		249	24		-50					-47		256	42		-53		268	38		-55		266	58		-57					-55				170
150		-51					-47		247	14		-47		245	17		-51					-48		280	27		-55		268	39				271	46		-56					-56				150
130		-51					-48		234	12		-50		245	21		-53					-53		294	30		-57		268	41		-54		258	35		-59					-58				130
110	(142mb)											-52										-57					-59					-59		274	40		-60					-57				110
100											520	-53									(112mb)									523	-62		276	28	(113mb)					523	-57				100
90																															-63		275	24											90
80																															-62		276	27											80
70																																													70
60																																													60
Tropopause	I 406mb -44° 22·100					I 350mb -56° 29·600					I 310mb -68° 27·300					I 315mb -63° 27·200					I 378mb -52° 23·300					I 263mb -57° 31·100					I 326mb -59° 26·700					I 365mb -56° 24·300					II 313mb -16° 27·700					Tropopause

Isothermal 994 - 981 mb 38°

Inversion. 875 mb -55° - 335 mb -51°
Isothermal. 317 - 300 mb -53°

Inversion 988 mb 33° - 962 mb 36°

Inversion 957 mb 35° - 940 mb 36°

Isothermal. 828 - 800 mb 21°, 640 - 613 mb -3°

Isothermal. 928 - 898 mb 32°, 805 - 793 - 20°, 782 - 770 - 18°

Inversion 882 mb 27° - 850 mb 28°
Isothermal. 993 - 975 mb 40°, 365 - 341 - -55°

Inversion. 919 mb 31° - 908 mb 32°, 417 - -45° - 407 - -44°

Isothermal. 375 mb - 340 mb -50°

Isothermal. 995 - 980 mb 44°, 344 - 321 - -58°

09Z

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Pressure: Time	09Z G.M.T.	09Z G.M.T.	09Z G.M.T.	09Z G.M.T.	09Z G.M.T.	09Z G.M.T.	09Z G.M.T.	09Z G.M.T.	G.M.T.
M.S.L.	966·3 mb	976·1 mb	982·1 mb	990·8 mb	994·9 mb	999·9 mb	1004·3 mb	1006·1 mb	mb
Surf	956·5 mb	974·5 mb	981·2 mb	981·5 mb	992·8 mb	995·4 mb	987·9 mb	995·4 mb	mb
Freezing	900 mb	918 mb	927 mb	898 mb	918 mb	908 mb	900 mb	892 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						Pressure mb
Surf	2·7	35	35	270	02	4·0	38	36			0·2	36	32	250	26	2·6	37	34			0·6	40	35	250	20	1·2	36	34	210	23	4·4	37	36	275	22	2·9	44	37	275	20						Surf
1000	-3·0					6·5					-4·8					+2·4					-1·4					0·0					1·1					1·6										1000
950		35	35				36	35				34	30	254	43		35	32				37	32	286	33		34	33	242	42		36	34	246	42		40	34	237	39						950
900	18·9	32	31	229	08	21·4	30	30			22·9	29	25	263	54	25·6	32	28			26·6	29	24	257	40	27·8	31	27	260	47	29·1	32	30	265	50	29·8	33	28	247	40						900
850		27	26	232	06		24	23				24	19	271	57		26	19				28	19	262	44		26	21	267	49		28	26	259	53		26	21	250	41						850
800	49·4	21	19	234	04	51·9	19	18			53·3	21	15	277	55	56·2	20	13			57·0	20	10	267	43	58·9	23	15	269	48	59·8	22	19	258	53	60·4	20	12	255	42						800
750		15	11	232	03		13	11				13	07	278	53		15	05				12	02	271	44		17	08	272	46		17	13	259	49		15	05	259	44						750
700	83·2	08	00	235	04	85·6	07	04			87·1	07	00	274	51	90·0	03	-04			90·6	05	-06	274	47	92·4	09	-01	271	44	93·8	10	06	259	50	94·2	09	-01	259	44						700
650		00	-07	251	04		00	-03				-01	-09	271	44		00	-10				-03	-11	276	51		00	-06	273	44		03	-02	261	49		02	-07	262	39						650
600	121	-09	-16	251	05	123	-08	-11			125	-06	-18	270	26	128	-07	-18			128	-11	-20	276	59	130	-08	-15	275	48	132	-04	-08	263	51	132	-06	-15	272	37						600
550		-17	-25	238	05		-17	-20				-15	-25	245	18		-17	-28				-20	-30	274	62		-17	-22	279	57		-14	-20	265	55		-19	-24	275	36						550
500	164	-27	-36	224	04	166	-27	-31			168	-26	-35	238	22	171	-27	-36			171	-31	-41	273	62	173	-27	-33	275	61	175	-24	-31	267	59	175	-25	-34	267	54						500
450		-37	-48	225	05		-38	-42				-38	-46	238	24		-39	-49				-41		273	64		-37	-43	274	60		-34	-41	276	57		-33	-41	267	56						450
400	214	-41		230	11	217	-49				218	-49		254	25	221	-49				221	-50		277	66	224	-45		277	62	226	-45	-57	281	60	226	-45		264	62						400
350		-46		225	10		-54					-60		264	25		-55					-55		284	69		-55		281	57		-50		279	64		-57		268	59						350
300	278	-50		211	14	279	-60				280	-65		266	40	283	-59				283	-60		283	62	286	-63		282	64	288	-58		274	61	288	-62		271	60						300
250		-46		196	10		-52					-56		278	32		-60					-54		279	45		-57		271	62		-65		273	62		-67		272	63						250
200	367	-46		182	16	366	-49				367	-53		256	26	370	-58				370	-58		274	41	373	-48		275	46	375	-55		276	56	374	-55		266	57						200
170		-46		195	19		-50					-53		263	27							-54		268	47		-51		278	42		-57		274	49		-59		268	52						170
150		-46		178	09		-48					-50		264	16							-51		276	40		-53		276	39		-57		268	47		-61		271	51						150
130		-52		215	10		-46					-51		236	12							-49		281	29		-51		274	33		-55		271	40		-63		270	40						130
110		-51		239	12		-52															-57					-52					-56		275	29		-61										110
100	519	-51		241	12	518	-51															-58				524	-54				524	-59		274	29	(112mb)										100
90		-50					-51															-59					-57					-57		274	30											90
80	(93mb)						-51																				-56					-58		275	30											80
70																											-52																		70
60																																													60
Tropopause	II 430mb -41° 19·800					I 310mb -62° 27·200					I 314mb -68° 26·700					II 323mb -59° 26,700					II 365mb -55° 24·100, I 307 - -61° 27·800					I 294mb -64° 29·000					I 254mb -67° 32·300					I 257mb -70° 32·100										Tropopause

Inversion 957 mb 35° - 940 mb 36°

Isothermal. 828 - 800 mb 21°, 640 - 613 - -3°

Isothermal. 928 - 898 mb 32°, 805 - 793 - 20°, 782 - 770 - 18°

Inversion. 882 mb 27° - 850 mb 28°
Isothermal. 993 - 975 mb 40°, 365 - 341 - -55°

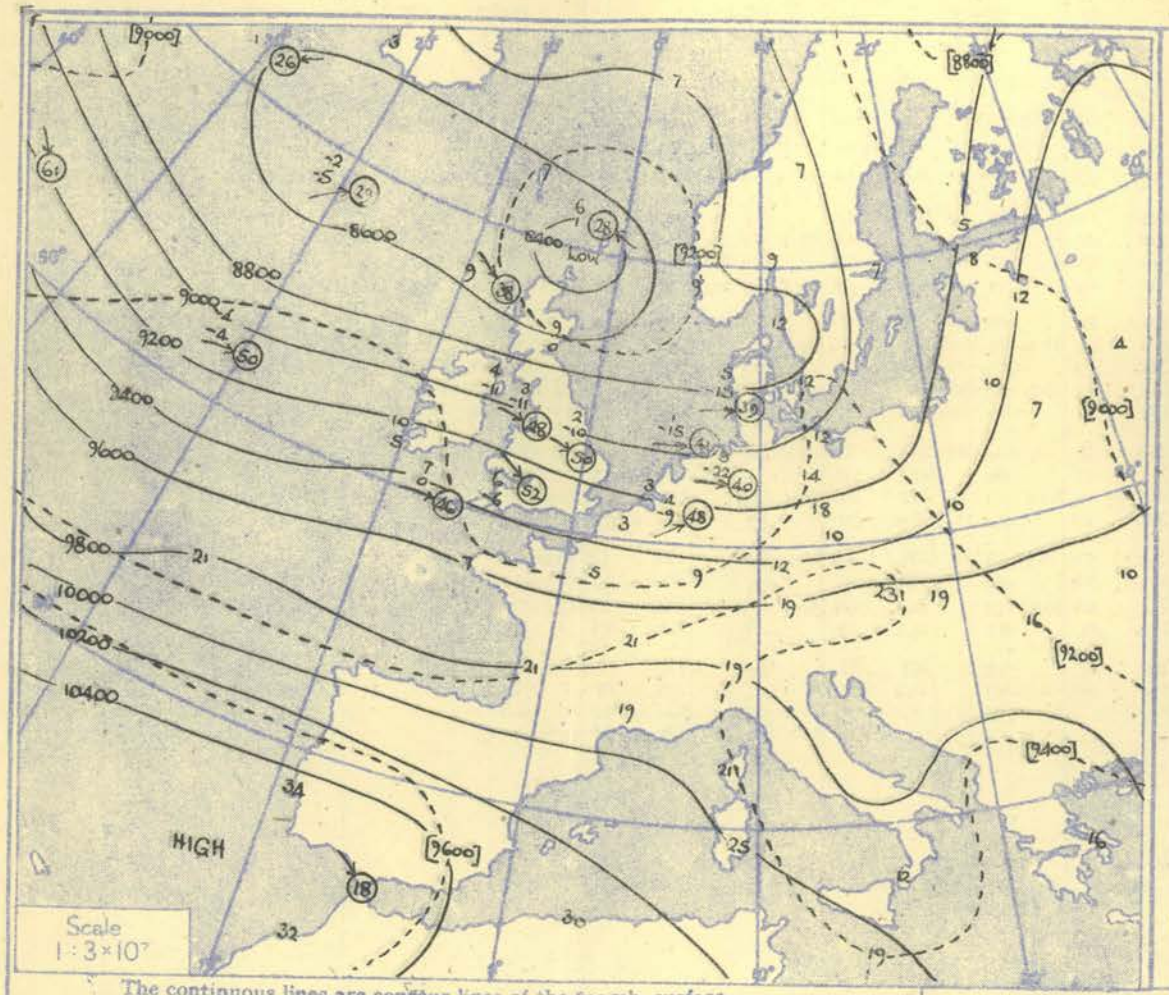
Inversion. 919 mb 31° - 908 mb 32°, 417 - -45° - 407 - -44°

Isothermal. 375 mb - 340 mb -50°

Isothermal. 995 - 980 mb 44°, 344 - 321 - -58°

Sunday 18th February, 1951.

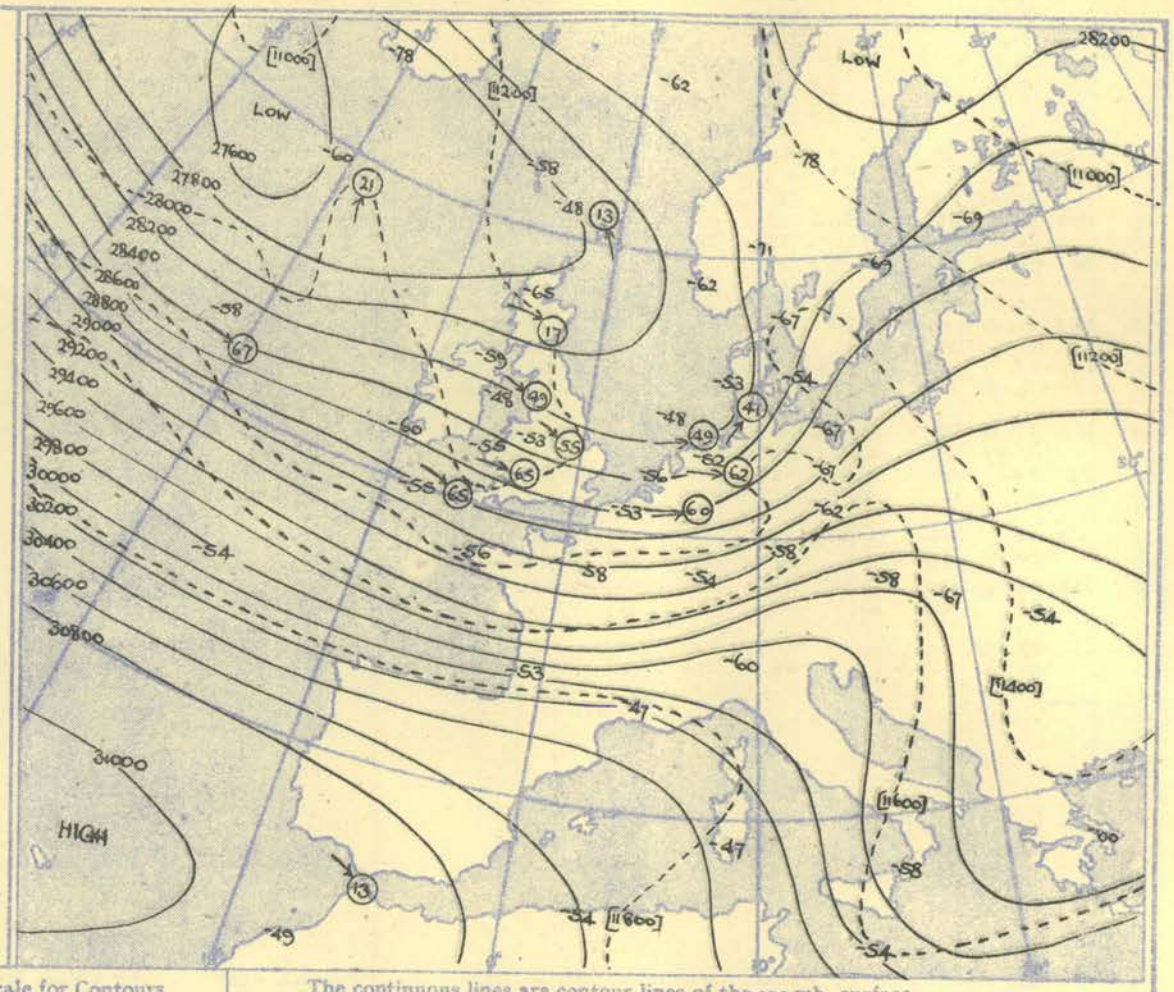
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03 h G.M.T.



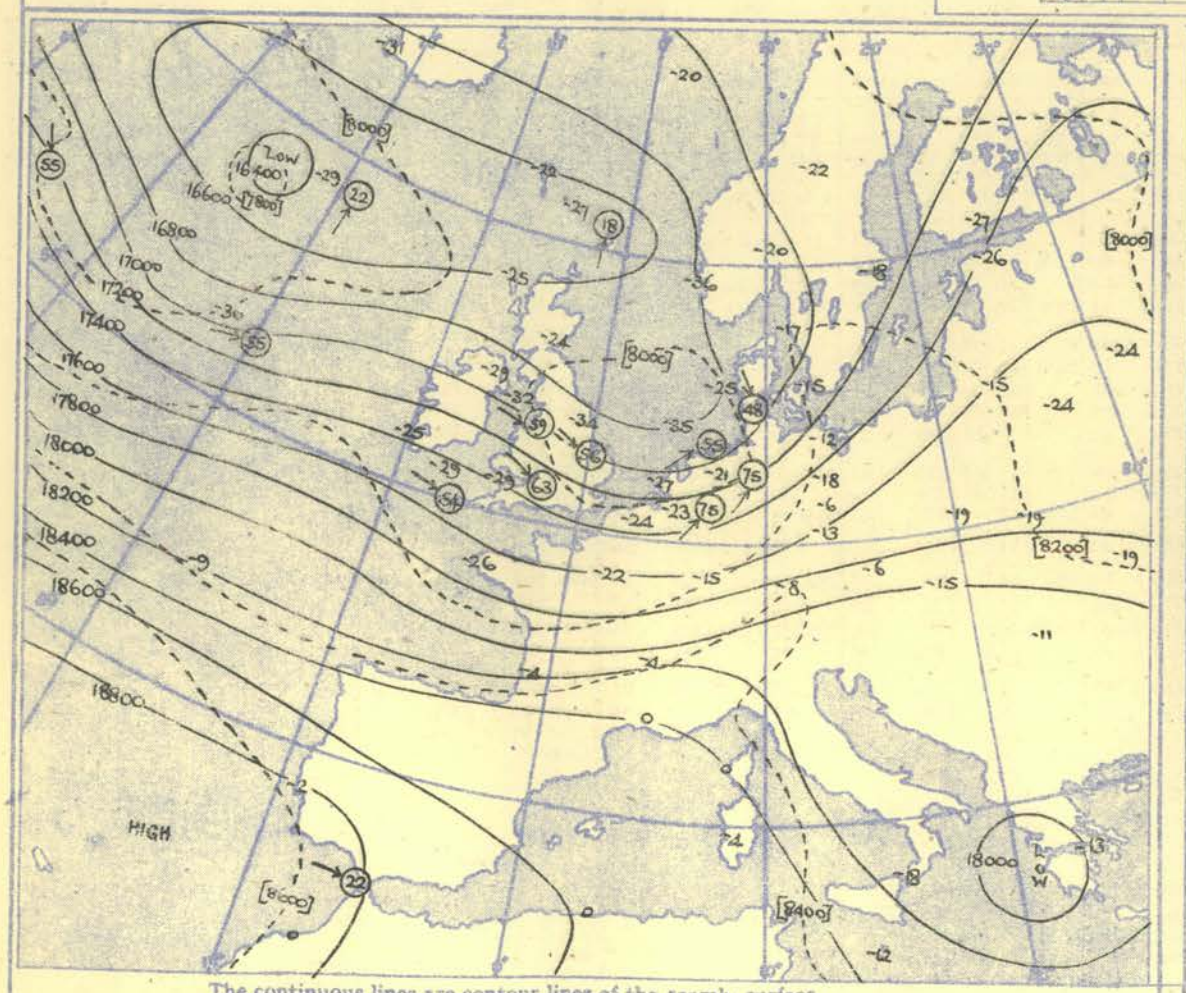
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

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

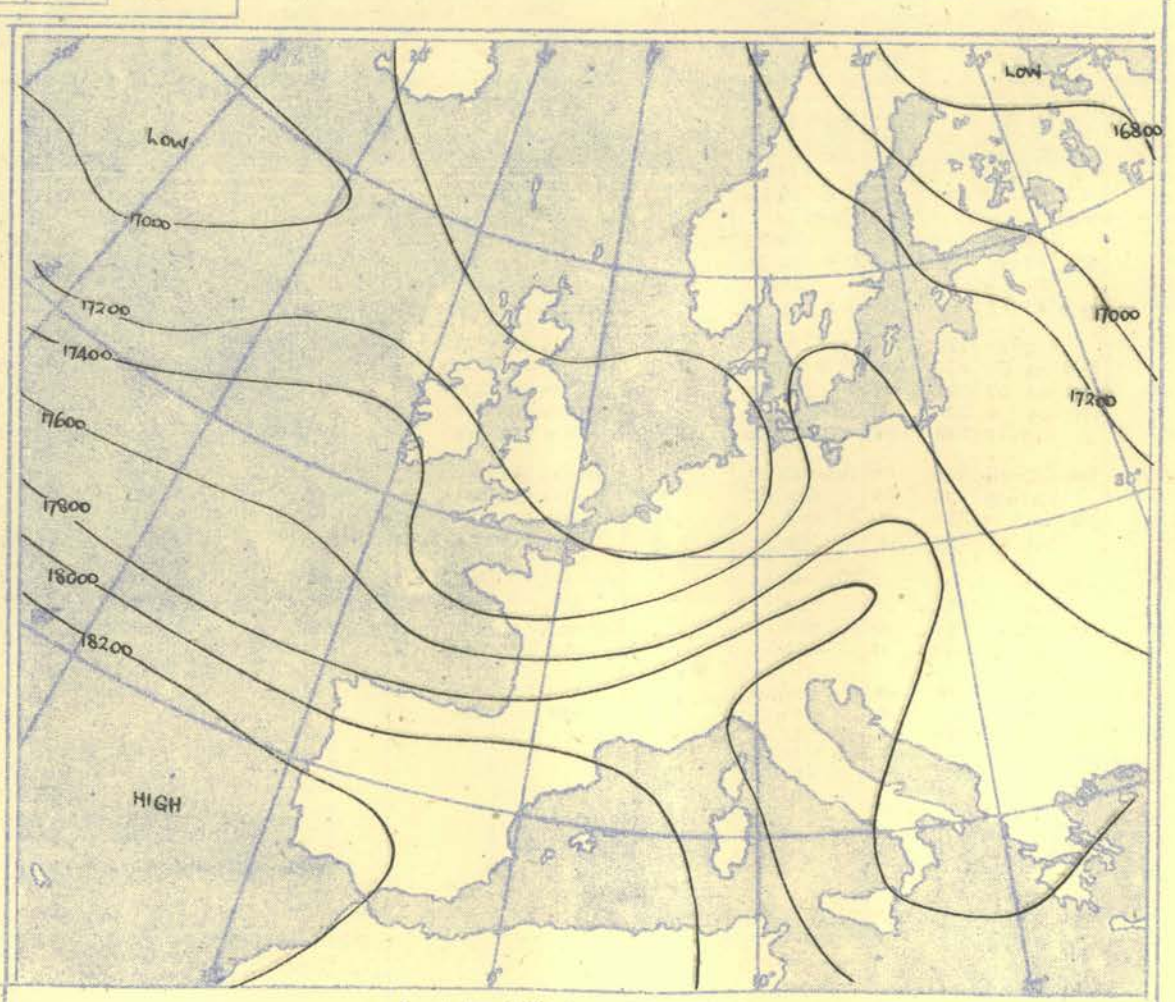
100 50 40 30 20 15 10 knots



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



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



Isopleths of Thickness 500 - 1000mb.

Sunday 18th February 1951

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	48.1N 17.0W			47.8N 12.2W		
Pressure Time	12L			14L		
Pressure M.S.L.	1002 mb			999 mb		
Pressure Surf	998 mb			995 mb		
Pressure Freezing	880 mb			850 mb		
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.
Surf		49	43		49	45
1000	5			-3		
950		41	40		42	42
900		34	30		33	33
850		29	29		32	
800		26	26		26	
750		16			19	
700	93.5	14	14	93.0	15	15
650		02			05	
600		-06			-03	
550		-15			-13	
500	175	-20		175	-22	
450						
400						
350						
300						
250						
200						
170						
	Cloud. 4/8 Cu 930-850mb. 3/8 Cb 930-480mb 4/8 Ac 620-580mb Mod: rime or frost in cld. 850-480mb Surf wind. W. 11-16kts			Cloud. 2/8 Cb 930-480mb. 4/8 Ns. 930-700mb. 3/8 Ac 600-560.. Surf wind. W 17-22kts.		

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

Place	Aldergrove	
Time	21	
Type	Pilar	
Feet	Dir.	Vel.
Surf.	240	10
1,000	248	19
2,000	250	21
3,000	254	24
4,000	268	28
5,000	263	30
6,000	269	30
8,000	260	29
10,000	260	32
14,000	256	36
18,000	251	35
24,000	249	38
30,000	255	40
40,000	271	29
50,000	267 (42,000)	29

NEPHOSCOPE OBSERVATIONS

Place	
Time Type	
Dir. Vel.	

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

Ship	WEATHER RECORDER					WEATHER RECORDER				
Lat/Long	59.1N 19.0W					59.1N 18.9W				
Pressure Time	03L G.M.T.					09L G.M.T.				
Pressure M.S.L.	980 mb					978 mb				
Pressure Surf	980 mb					978 mb				
Pressure Freezing	940 mb					950 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
Surf		38	30	250	18		38	35	240	04
1000	-5.3					-5.8				
950		34	28	241	15		32	29	230	04
900	22.5	26	23	235	15	22.0	26	23	217	06
850		19	17	236	15		20	19	213	09
800	52.6	12	07	225	18	52.2	13	08	208	10
750		05	-02	225	24		06	-09	212	09
700	85.7	-02	-05	236	29	85.4	00	-12	208	09
650		-10	-13	233	34		-08	-18	207	10
600	123	-18	-30	232	31	123	-16	-26	204	15
550		-27	-40	223	18		-25	-36	192	19
500	165	-29	-46	180	22	165	-31	-45	163	19
450		-36	-54	149	25		-39	-56	123	21
400	215	-46		131	30	215	-46		134	29
350		-59		143	27		-52		164	22
300	277	-60		172	21	277	-54		196	12
250		-54		174	10		-49		258	07
200	365	-52		263	09	366	-48		287	08
170		-53		257	19		-48		287	13
150		-51		261	17		-48		258	17
130		-53		271	16		-50		272	19
110							-52		268	16
100						518	-54		281	14
90							-50			
80										
70										
60										
	Inversion 550mb -27° 533mb -26°									
Tropopause	I 336 mb - 63° 25,200'					I 310 mb - 57° 27,000'				

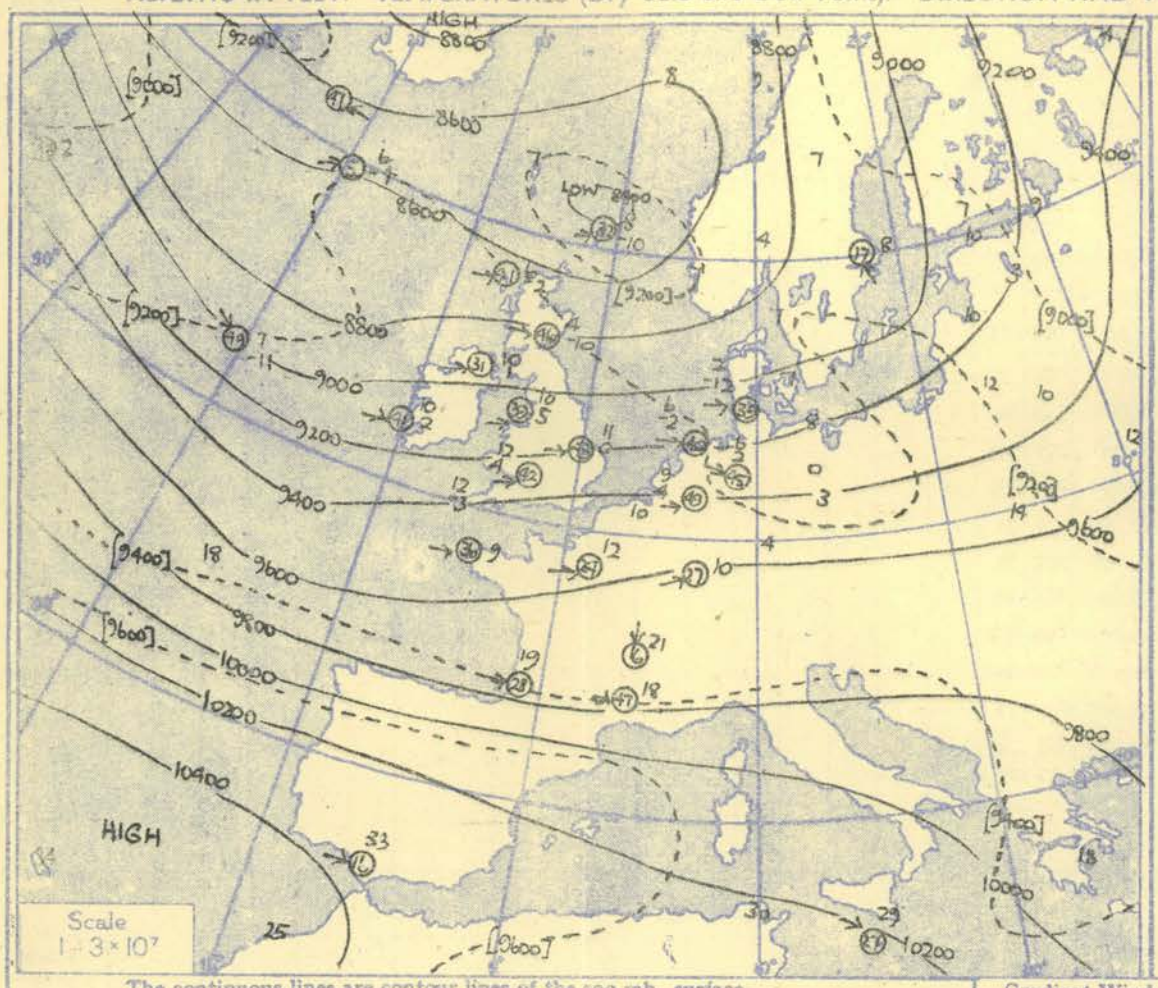
Ship	WEATHER RECORDER					WEATHER RECORDER				
Lat/Long	59.1N 18.9W					59.0N 19.2W				
Pressure Time	15h G.M.T.					21L G.M.T.				
Pressure M.S.L.	977 mb					979 mb				
Pressure Surf	977 mb					979 mb				
Pressure Freezing	910 mb					930 mb				
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		41	38	CALM			39	33	310	10
1000	-6.1					-5.8				
950		37	34	275	03		35	29	293	11
900	21.8	30	27	280	05	22.1	28	21	281	12
850		23	21	233	03		20	12	276	13
800	52.1	17	13	231	04	52.3	14	04	271	13
750		12	03	255	05		09	-04	266	13
700	85.7	06	-04	251	05	85.7	03	-14	257	12
650		-03	-12	249	05		-04	-23	249	10
600	123	-11	-24	249	06	123	-13	-29	243	10
550		-20	-37	258	07		-23	-37	226	09
500	166	-19	-46	265	09	165	-34	-48	170	03
450		-36	-54	193	04		-41		086	16
400	216	-43		133	16	215	-48			
350		-50		128	24		-54			
300	279	-51		121	27	278	-54			
250		-49		222	14		-49			
200	368	-46		283	25	366	-47			
170		-43		278	26		-47			
150		-44		265	22		-50			
130		-44		255	19		-51			
110		-44		261	24		-52			
100	522	-46		266	20	518	-53			
90		-47		259	17		-53			
80		-48		257	20		-54			
70		-48		245	20					
60		-47		245	23					
	(55 mb)	-46								
	Inversion 442mb -37° - 433 mb -36°					Isothermal 470 - 450 mb -41°				
Tropopause	I 345 mb - 51° 24,800'					I 322 mb - 56° 26,200'				

Ship	WEATHER EXPLORER					WEATHER EXPLORER				
Lat/Long	52.6N 18.0W					52.6N 19.6W				
Pressure Time	03L G.M.T.					09L G.M.T.				
Pressure M.S.L.	994 mb					992 mb				
Pressure Surf	994 mb					992 mb				
Pressure Freezing	900 mb					910 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
Surf		44	34	240	24		43	33	260	21
1000	-1.7					-2.2				
950		32	27	253	31		37	26	274	43
900	26.4	32	23	256	40	25.9	30	20	275	43
850		26	18	259	44		21	13	272	35
800	570	20	09	260	46	56.1	16	09	266	33
750		13	04	259	50		11	00	275	32
700	90.6	04	-04	258	50	89.6	04	-12	275	34
650		-02	-14	257	49		-03	-20	272	39
600	128	-10	-20	253	51	127	-10	-29	272	42
550		-19	-29	249	52		-18	-39	272	46
500	171	-30	-41	245	55	170	-26	-50	272	45
450		-37	-49	250	62		-34	-57	272	46
400	221	-43		256	69	221	-42		265	53
350		-51		268	82		-52		259	55
300	284	-58		266	67	283	-58		250	65
250		-54		267	58		-50		260	65
200	372	-49		269	48	372	-49		261	59
170		-51		266	49		-51		268	52
150		-55		271	50		-52		280	54
130		-56		277	47		-54		287	51
110		-58		278	39		-58		283	50
100	521	-58		288	38	522	-57		283	40
90							-60		290	29
80										
70										
60										
	Inversion 962 mb 32° - 950mb 37°					Inversion 357mb -53° - 342 mb -51°				
Tropopause	I 290 mb - 59°					II 314 mb - 58° 27,300'				

Ship	WEATHER EXPLORER					WEATHER EXPLORER				
Lat/Long	52.5N 19.5W					52.5N 19.9W				
Pressure Time	15h G.M.T.					21L G.M.T.				
Pressure M.S.L.	991 mb					993 mb				
Pressure Surf	991 mb					993 mb				
Pressure Freezing	905 mb					920 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
Surf		42	36	280	26		39	37	285	28
1000	-2.3					-1.9				
950		38	23	280	42		37	22	292	46
900	25.7	31	16	280	42	26.0	29	14	292	52
850		25	10	280	41		25	11	298	47
800	56.2	19	04	282	43	56.4	19	05	295	46
750		14	-01	291	47		14	00	279	46
700	89.9	07	-11	295	49	90.1	07	-09	268	44
650		00	-17	292	49		00	-16	283	41
600	128	-19	-25	287	49	128	-08	-23	286	44
550		-18	-35	286	50		-18	-33	261	36
500	171	-28	-50	286	49	171	-25	-41	283	51
450		-38	-58	286	47		-32	-52	285	61
400	221	-44		285	49	222	-42		285	66
350		-50		275	56		-48		285	73
300	284	-49		267	62	285	-48		285	67
250		-49		270	58		-45		285	63
200	373	-45		282	54	375	-43		285	60
170		-46		282	56		-44			
150		-50		282	53		-48			
130		-51		282	43		-50			
110	(111 mb)	-53				(125 mb)	-50			
100										
90										
80										
70										
60										
	Isothermal 454 - 450 mb -38°					Isothermal 993 - 972 mb 39°				
Tropopause	I 328 mb - 52° 26,700'					I 310 mb - 50° 27,800'				

Sunday 18th February 1951.

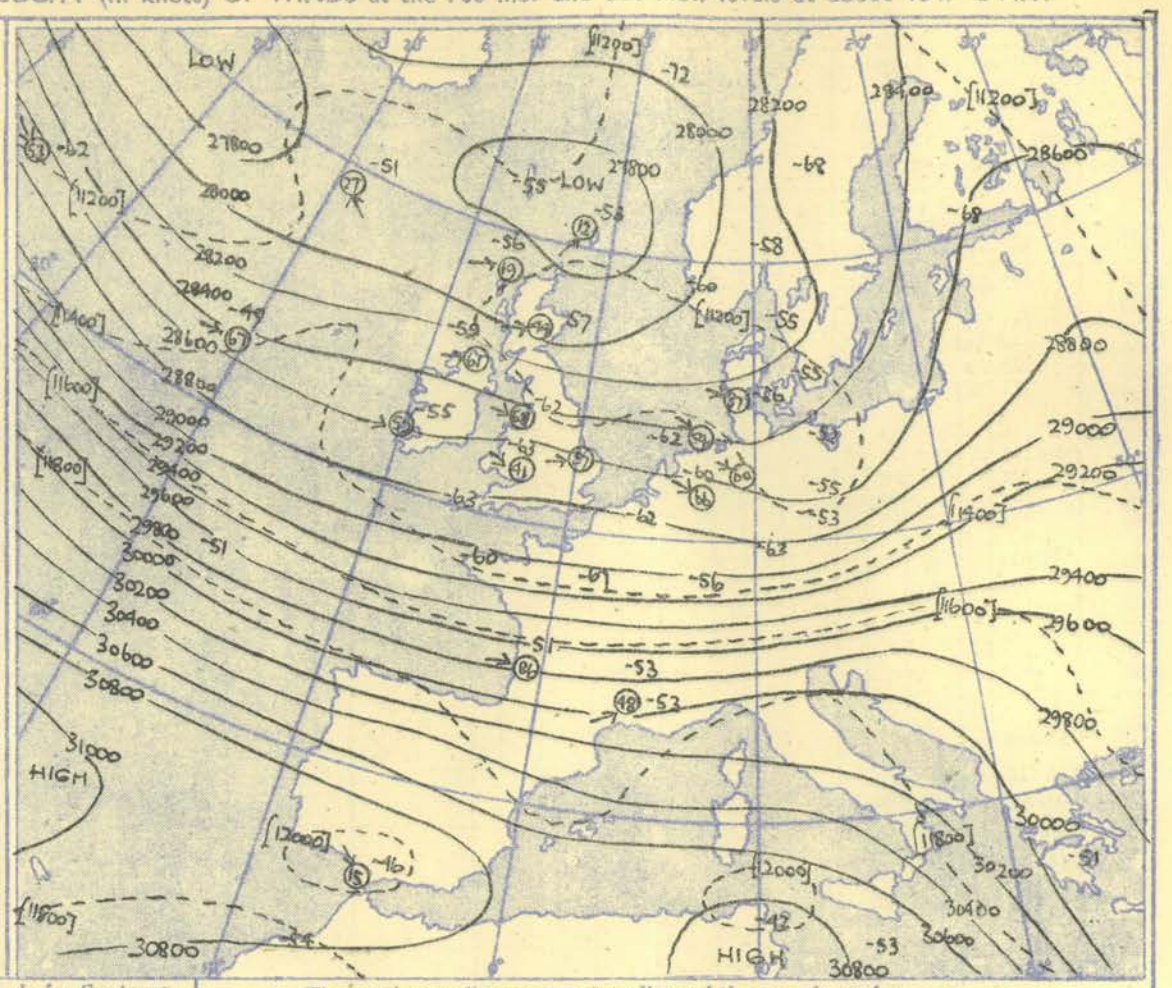
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15h G.M.T.



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

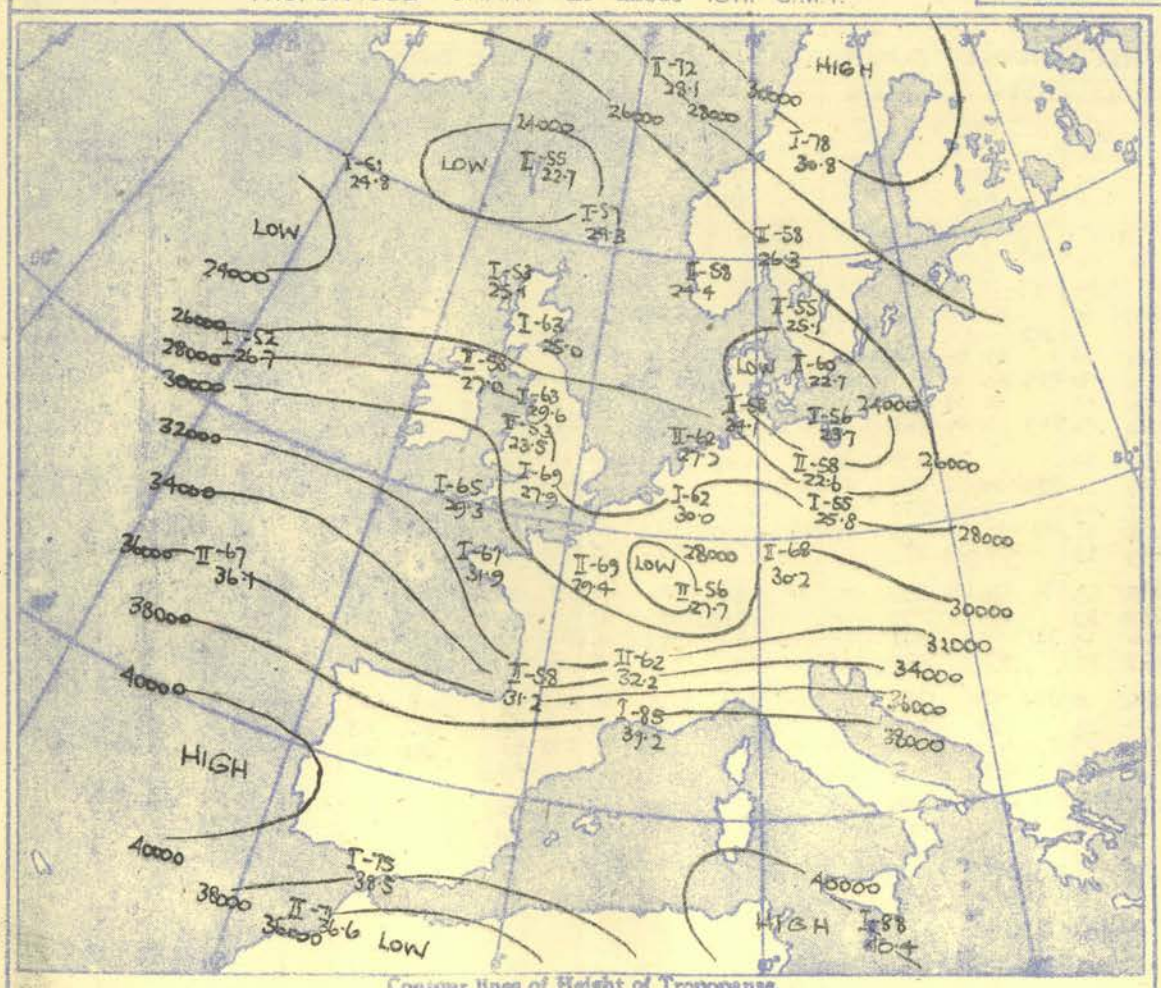
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.

100 60 40 30 20 15 10 knots



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

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



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

A weak thermal ridge crossed the British Isles during the day but the main thermal gradient was between 40° and 60°N across the Atlantic with slack gradients further north. A well marked cold trough extended down the West Greenland coast.

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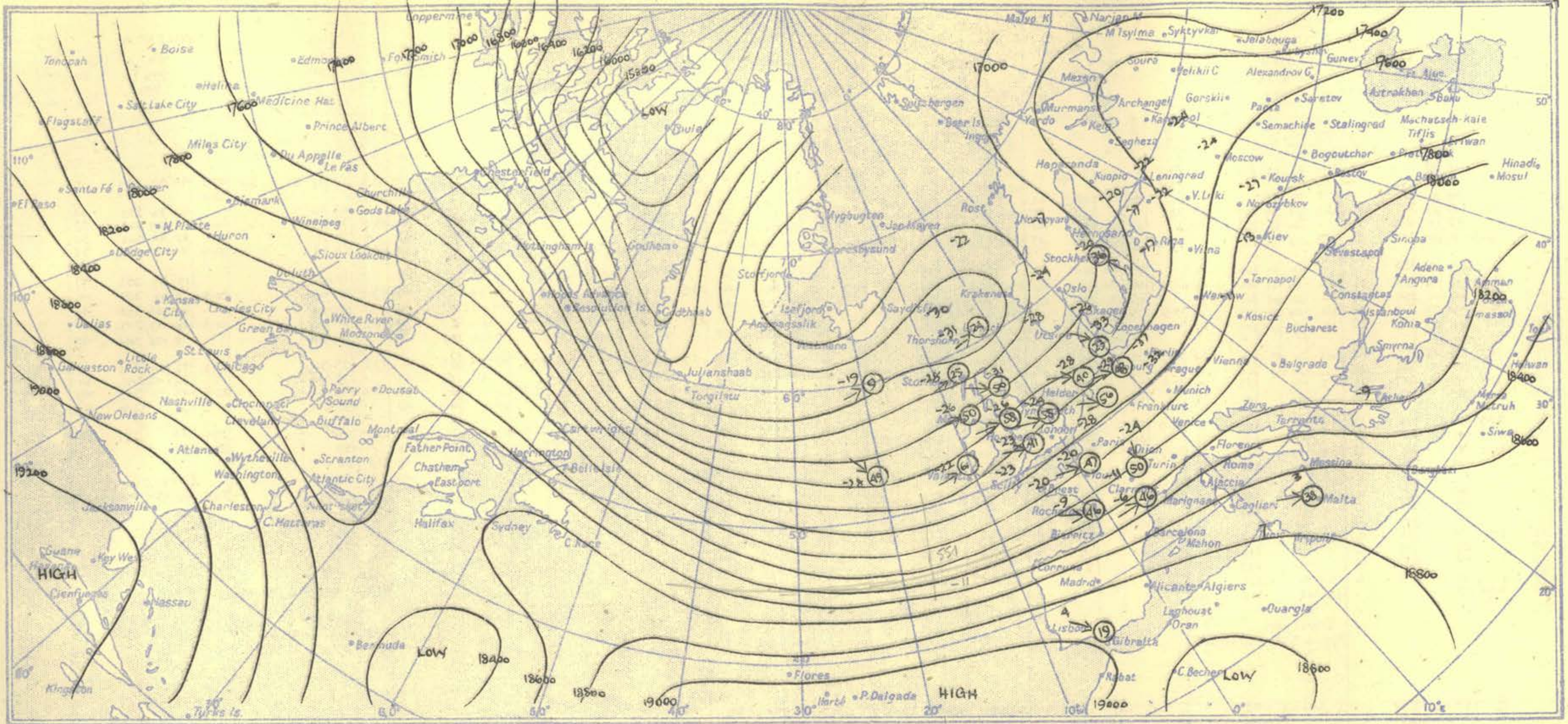
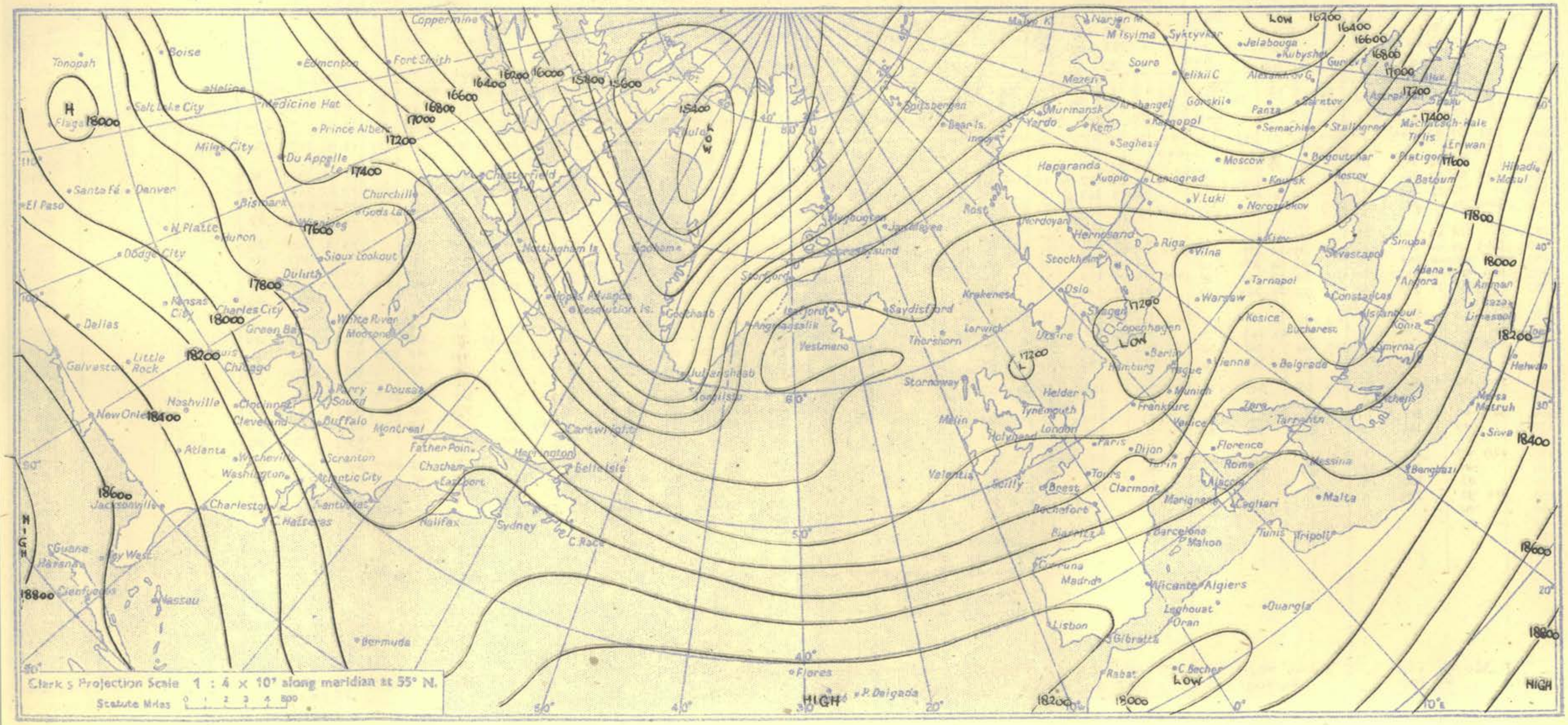
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Sunday 18th. February 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Sunday 18th. February, 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Sunday 18th February 1951.

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

15h. G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Pressure: Time	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h. G.M.T.	15h G.M.T.	15h G.M.T.	15h. G.M.T.	15h G.M.T.	15h. G.M.T.
Pressure: M.S.L.	969·3 mb	978·6 mb	984·3 mb	988·8 mb	992·7 mb	999·0 mb	1000·9 mb	1000·9 mb	992·7 mb
Pressure: Surf	959·5 mb	977·2 mb	983·4 mb	979·5 mb	990·6 mb	994·6 mb	985·2 mb	990·4 mb	991 mb
Pressure: Freezing	903 mb	892 mb	913 mb	908 mb	888 mb	897 mb	867 mb	880 mb	895 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Lerwick					
Surf	02·7	40	33	260	24
1000	08·3				
950		39	32		
900	19·7	31	27	257	31
850		26	19	259	39
800	50·3	21	04	258	36
750		15	-03	255	33
700	84·1	08	-10	253	32
650		00	-21	254	31
600	12·2	-09	-28	261	38
550		-20	-33	261	33
500	16·5	-31	-42	252	24
450		-38	-52	244	26
400	21·5	-49		247	22
350		-57		233	20
300	27·7	-53		218	12
250		-49		214	10
200	36·5	-50		201	15
170		-47		206	12
150		-50		187	11
130		-52		217	17
110		-53		227	09
100	51·7	-54		220	12
90		-52		218	12
80		-54		238	14
70		-55		240	16
60	(64 mb)	-55			
Tropopause	I 350 mb -57° 24,300'				
Stornoway					
Surf	00·4	37	34	270	15
1000	05·7				
950		38	32		
900	22·3	33	24	267	38
850		26	18	263	43
800	52·8	18	13	262	42
750		12	04	263	41
700	86·4	06	-02	266	41
650		01	-04	263	32
600	12·4	-08	-15	263	24
550		-17	-21	259	22
500	16·7	-28	-33	246	25
450		-38	-43	260	19
400	21·7	-46		253	19
350		-56		249	19
300	28·0	-56		251	19
250		-48		254	25
200	36·8	-47		261	20
170		-45		256	18
150	43·2	-45		246	23
130		-42		230	20
110		-48		221	20
100	52·2	-47		228	19
90		-45		228	16
80		-46		243	15
70		-45		232	13
60	63·5	-43		218	16
		-41			
Tropopause	I 341 mb -57° 25,100'				
Leuchars					
Surf	00·2	43	34	250	21
1000	04·3				
950		35	28	249	34
900	23·7	31	21	260	37
850		26	13	264	40
800	54·2	19	05	264	43
750		11	-03	264	44
700	87·7	04	-10	264	46
650		-04	-18	264	46
600	12·5	-12	-26	265	45
550		-21	-36	268	47
500	16·8	-31	-46	269	50
450		-42		269	48
400	21·8	-52		261	38
350		-61		256	41
300	27·9	-57		261	44
250		-49		266	35
200	36·7	-53		267	32
170		-49		263	29
150	43·0	-48		264	25
130		-49		259	22
110		-48		254	19
100	51·9	-49		257	18
90		-48		258	20
Tropopause	I 343 mb -63° 25,000'				
Aldergrove					
Surf	02·6	40	35	220	15
1000	03·0				
950		37	33	234	34
900	25·0	31	26	239	34
850		28	20	247	31
800	55·8	22	13	248	29
750		15	09	248	30
700	89·6	10	01	249	31
650		01	-07	248	42
600	12·8	-08	-13	245	47
550		-18	-25	243	50
500	17·1	-26	-34	249	50
450		-35	-45	252	50
400	22·1	-43		256	56
350		-50		260	65
300	28·4	-59		261	61
250		-56		264	50
200	37·2	-48		264	41
170		-46		274	31
150	43·5	-48		265	29
130		-54		257	36
110		-47		267	27
100	52·4	-46		274	22
90		-47		255	24
Isothermal 415 - 403 mb -42°					
385 - 363 " -47°					
Tropopause	II 320 mb -58° 27,000'				
Liverpool					
Surf	00·6	45	38	230	15
1000	02·0				
950		37	33	240	25
900	20·2	33	29	247	25
850		27	24	245	30
800	56·9	22	19	240	33
750		16	13	243	34
700	90·7	10	05	246	39
650		01	-05	254	46
600	12·9	-06	-13	258	51
550		-16	-23	253	55
500	17·2	-26	-33	257	58
450		-37	-44	250	59
400	23·2	-49		256	62
350		-53		269	74
300	28·4	-62		270	68
250		-52		268	46
200	37·2	-50		273	35
170		-50		265	43
150		-47		270	40
130		-47		279	30
110		-45		262	24
100	52·4	-43		241	28
90		-44		255	24
80		-44		273	20
70		-45			
60		-42			
(55 mb)		-49			
Inversion 380 mb -53° - 358 mb -52°					
Tropopause	I 380 mb -53° 23,500' I 287 mb -63° 29,600'				
Downham Market					
Surf	01·2	43	40	225	30
1000	00·3				
950	00·2				
900		37	33	240	45
850	27·8	32	26	249	49
800		28	20	253	50
750	58·5	23	09	257	45
700		18	04	255	43
650	92·5	11	00	255	43
600		04	-05	257	45
550	13·1	-04	-11	253	39
500		-13	-21	252	42
450	17·4	-24	-35	259	55
400		-37	-46	263	56
350	22·5	-46		265	57
300		-49		261	57
Inversion 375 mb -50° - 350 mb -49°					
Tropopause	N.R.				
Larkhill					
Surf	04·4	45	38	250	18
1000	00·2				
950		42	33	230	33
900	28·5	35	28	238	42
850		29	22	242	45
800	59·2	25	13	242	46
750		19	06	241	45
700	93·3	12	04	245	42
650		04	-03	253	41
600	13·1	-04	-11	253	39
550		-13	-21	252	42
500	17·5	-23	-32	253	41
450		-37	-46	259	44
400	22·5	-45		258	45
350		-60		268	43
300	28·7	-63		275	41
250		-57		269	55
200	37·4	-52		273	48
150		-54		270	45
100		-52		275	41
90		-52		279	32
Isothermal 831 - 815 mb 26°					
431 - 411 " -42°					
Tropopause	I 311 mb -69° 27,900'				
Camborne					
Surf	02·9	48	42	203	20
1000	00·2				
950		42	36		
900	28·5	35	29		
850		28	21		
800	59·3	24	04		
750		19	00		
700	93·3	12	-03		
650		05	-09		
600	13·2	-04	-16		
550		-12	-24		
500	17·5	-23	-36		
450		-35	-49		
400	22·6	-42			
350		-50			
300	28·8	-63			
250		-55			
(289 mb)		-57			
200	37·5	-52			
150		-54			
100	43·8	-56			
90		-59			
80		-56			
70		-56			
60					
Inversion 412 mb -44° - 400 mb -42°					
Isothermal 675 - 665 mb 8°					
400 - 378 mb -42°					
Tropopause	I 292 mb -65° 29,300'				
Valentia					
Surf	00·3	44	38	230	11
1000	02·0				
950		40	36	252	24
900	26·2	33	29	262	28
850		27	24	260	30
800	56·9	22	18	259	34
750		17	09	258	47
700	90·8	10	02	257	41
650		02	-06	250	44
600	12·9	-06	-13	242	48
550		-15	-22	244	59
500	17·2	-22	-29	241	61
450		-34	-42	241	61
400	22·3	-43		243	49
350		-51		249	48
300	28·6	-55		251	52
250	(289 mb)	-57			
Inversion 335 mb -54° - 324 mb -52°					
Tropopause	N.R.				

21h. G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Pressure: Time	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	21h. G.M.T.	G.M.T.
Pressure: M.S.L.	971·1 mb	978·5 mb	983·4 mb	986·6 mb	989·9 mb	994·6 mb	996·5 mb	995·5 mb	mb
Pressure: Surf	964·2 mb	976·9 mb	982·5 mb	977·2 mb	987·8 mb	990·2 mb	980·4 mb	984·9 mb	mb
Pressure: Freezing	900 mb	914 mb	922 mb	925 mb	882 mb	895 mb	860 mb	868 mb	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Lerwick					
Surf	02·7	37	32	240	24
1000	07·8				
950		36	31	240	33
900	20·1	32	27	241	34
850		26	23	239	32
800	50·6	20	17	240	32
750		14	09	240	33
700	84·3	07	-04	240	32
650		+01	-10	238	30
600	12·2	-09	-18	237	30
550		+17	-27	237	32
500	16·5	-26	-40	235	35
450		-35	-51	238	34
400	21·5	-49		241	36
350		-55		241	25
300	27·8	-54		219	16
250		-49		227	13
200	36·6	-49		201	11
170		-49		205	13
150	42·9	-47		223	13
130		-49		225	08
110		-52		226	18
100	51·8	-52		234	19
90		-54			
80					
70					
60					
Tropopause	I 360 mb -56° 23,700'				
Stornoway					
Surf	00·4	36	32	225	10
1000	05·8				
950		36	32	261	20
900	22·1	30	24	260	20
850		24	18	261	23
800	52·5	18	11	260	22
750		12	04	260	24
700	86·1	05	-05	259	24
650		-02	-14	259	24
600	12·4	-10	-23	262	27
550		-20	-29	262	23
500	16·7	-29	-38	257	18
450		-39	-49	263	12
400	21·7	-49		253	16
350		-57		253	20
300	27·9	-58		249	23
250		-51		256	24
200	36·7	-51		266	26
170		-51		256	24
150	43·0	-50		258	26
130		-49		259	20
Tropopause	I 318 mb -61° 26,500'				
Leuchars					
Surf	00·2	36	34	250	06
1000	04·5				
950		35	34	244	29
900	23·4	30	29	257	29
850		24	23	263	27
800	53·9	18	15	260	30
750		13	07	247	34
700	87·5	05	-01	250	32
650		-04	-13	253	29
600	12·5	-12	-19	250	30
550		-22	-27	249	33
500	16·7	-31	-36	249	35
450		-40	-46	251	36
400	21·7	-48		250	36
350		-57		254	51
300	27·9	-62		259	50
250		-52		257	35
200	36·7	-53		260	27
170		-53		255	31
150	42·9	-52		271	29
130		-52		269	20
110		-56		249	21
100	51·7	-55			
Tropopause	I 310 mb -63° 27,300'				
Aldergrove					
Surf	02·6	35	33		
1000	03·5				
950		35	32		
900	24·3	29	25		
850		24	16		
800	54·8	18	05		
750		12	-01	See Page 3 for Winds	
700	880	05	-08		
650		-02	-17		
600	12·6	-10	-23		
550		-20	-31		
500	16·9	-29	-42		
450		-36	-54		
400	21·9	-43			
350		-55			
300	28·1	-59			
250		-52			
200	36·9	-44			
170		-50			
150		-54			
130		-54			
110		-53			
100		-55			
90	52·0	-56			
80		-55			
Inversion 977 mb 35° - 964 mb 36°					
334 " -58° - 320 " -57°					
Isothermal 510 - 497 mb -29°					
Tropopause	I 277 mb -64° 29,100'				
Liverpool					
Surf	00·6	42	37	230	08
1000	02·8				
950		40	33	241	21
900	25·4	35	28	250	24
850		27	22	255	24
800	56·1	20	18	256	26
750		14	09	251	30
700	89·9	08	02	246	39
650		02	-04	250	35
600	12·8	-06	-13	247	36
550		-14	-21	244	42
500	17·1	-24	-32	250	48
450		-36	-45	255	57
400	22·1	-47		252	63
350		-57		248	51
300	28·3	-60		248	54
250		-52		258	39
200	37·1	-56		263	39
170		-55		271	36
150		-56		268	39
130		-52		270	50
110		-52		265	38
100	52·1	-55		256	30
90		-58		264	22
(85 mb)		-57			
Inversion 988 mb 42° - 983 mb 43°					
355 " -58° - 316 " -56°					
Tropopause	I 355 mb -58° 24,700' I 276 mb -63° 30,200'				
Downham Market					
Surf	01·2	43	39	190	20
1000	01·4				
950		39	35	216	37
900	26·5	33	30	230	44
850		26	24	240	41
800	57·1	21	20	242	37
750		16	15	244	42
700	91·0	10	06	250	39
650		03	-02	248	43
600	12·9	-05	-12	252	48
550		-15	-22	252	47
500	17·2	-25	-32	245	43
450		-37	-44	255	43
400	22·2	-50		249	49
350		-54		239	44
300	28·4	-66		241	51
250		-62		254	45
200	37·0	-56		258	39
150		-54		267	41
100	43·2	-57		273	31
90		-59		277	36
80		-60		257	33
70	51·9	-60		265	30
60		-60		307	12
Inversion 380 mb -64° - 362 mb -52°					
Tropopause	I 280 mb -72° 29,700'				
Larkhill					
Surf	04·4	40	39	270	15
1000	00·9				
950		39	38	223	29
900	27·2	35	33	229	33
850		31	29	248	37
800	58·1	25	24	252	40
750		19	15	249	41
700	93·2	13	11	242	41
650		06	03	240	40
600	13·1	-03	-06	244	40
550		-11	-15	243	42
500	17·4	-21	-27	245	44
450		-33	-38	247	48
400	22·5	-47		246	48
350		-58		251	48
300	28·7	-61		251	48
250		-62		258	48
200	37·3	-55		266	50
150		-54		270	45
100	43·5	-56		276	45
90		-58		278	48
80		-60		277	37
70	52·2	-60			
Tropopause	I 311 mb -69° 27,900'				
Camborne					
Surf	02·9	42	41	225	06
1000	01·2				
950		39	38	245	35
900	27·0	33	37	249	34
850		30	29	248	35
800	57·9	26	23	247	37
750		19	15	245	39
700	92·0	12	08	243	40
650		05	00	237	39
600	13·0	-03	-09	238	35
550		-12	-18	241	42
500	17·4	-20	-26	244	45
450		-29	-35	244	48
400	22·5	-45		249	44
350		-57		256	60
300	28·7	-59		265	58
250		-58		263	57
200	37·4	-52		270	54
150		-53		272	50
100	43·7	-54		271	39
90		-56		276	36
80		-62		278	39
70	52·3	-63		282	38
60		-64			
Tropopause	I 292 mb -65° 29,300'				
Valentia					
Surf					
1000					
950					
900					
850					
800					
750					
700					
650					
600					
550					
500					
450					
400					
350					
300					
250					
200					
170					
150					
130					
110					
100					
90					
80					
70					
60					
Tropopause	N.R.				

H.M.S.O. Press, M.O., Dunstable.

No. 11649 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Monday 19th February 1951. 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.	971·3 mb	978·2 mb	981·6 mb		988·3 mb	990·2 mb	991·9 mb	995·9 mb	993·A mb
Pressure: Surf	961·4 mb	976·6 mb	982·S mb	976·4 mb	986·2 mb	985·8 mb	975·9 mb	985·3 mb	992 mb
Pressure: Freezing	905 mb	912 mb	941 mb	930 mb	910 mb	879 mb	886 mb	890 mb	980 mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·7	37	35	220	26
1000	-7·8				
950		37	34	233	41
900	20·1	31	30	233	42
850		25	22	233	42
800	50·5	20	15	234	38
750		14	06	235	33
700	84·3	07	-02	237	29
650		00	-04	241	26
600	122	-09	-16	248	23
550		-18	-25	254	18
500	165	-28	-36	261	18
450		-40	-50	258	19
400	215	-48		242	24
350		-58		224	22
300	277	-54		227	17
250		-52		226	14
200	380	-48		228	14
170		-47		225	10
150		-47		225	10
130		-50		209	20
110		-49		240	06
100	517	-52		207	13
90		-55			
80		(93 mb)			
70					
60					

Isothermal. 961 - 950 mb 37°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·4	34	30	230	05
1000	-5·8				
950		36	30		
900	22·0	30	25	236	15
850		24	20	237	15
800	52·4	18	13	239	16
750		12	03	236	15
700	86·0	05	-09	240	17
650		-02	-18	250	19
600	124	-11	-30	255	20
550		-20	-41	255	20
500	166	-29	-45	253	21
450		-40	-57	251	20
400	216	-53		240	22
350		-58		233	24
300	278	-56		235	19
250		-50		252	21
200	366	-49		258	21
170		-46		261	23
150		-52		261	20
130		-53		267	24
110		-52		243	20
100	518	-51		238	27
90		-53		274	14
80		-51		248	14
70		-55			
60					

Inversion. 977 mb 34° - 955 mb 37°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·2	35	33	240	09
1000	-4·7				
950		33	30	256	31
900	23·1	28	25	254	31
850		23	19	254	33
800	53·5	19	14	254	33
750		14	04	256	31
700	87·2	07	-04	256	26
650		02	-16	257	21
600	125	-11	-27	262	21
550		-20	-30	273	21
500	168	-31	-41	275	21
450		-40	-51	267	20
400	218	-49		249	29
350		-57		239	39
300	279	-64		239	42
250		-58		246	39
200	366	-55		260	26
170		-53		253	31
150		-51		253	29
130		-54		264	27
110		-56		275	29
100	516	-57		277	25
90		-57		265	18
80		-54			
70		-58			
60					

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·6	33	30	240	15
1000	-3·7				
950		33	30	240	24
900	24·1	29	25	250	28
850		23	16	258	34
800	54·4	17	06	260	37
750		12	-02	259	37
700	87·9	04	-08	256	36
650		03	-17	256	37
600	125	-12	-27	260	36
550		-23	-40	260	38
500	168	-34	-49	249	40
450		-24		242	45
400	218	-51		226	36
350		-59		233	37
300	279	-56		255	33
250		-48		258	42
200	369	-47		268	21
170		-56		262	26
150		-56		265	40
130		-40		279	33
110		-47		290	12
100	520	-58			

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·6	39	36	260	10
1000	-3·2				
950		37	34	262	24
900	24·7	31	28	273	21
850		25	20	277	23
800	55·2	19	13	271	25
750		14	-08	272	28
700	88·9	07	-11	271	29
650		01	-20	267	29
600	127	-09	-29	263	26
550		-18	-35	254	27
500	170	-28	-42	246	26
450		-38	-53	238	46
400	220	-47		235	48
350		-57		243	44
300	282	-56		252	37
250		-54		263	35
200	370	-50		261	41
150		-54		275	42
130		-56			

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	1·2	41	35	190	15
1000	-2·6				
950		38	36	220	28
900	25·4	34	32	226	34
850		29	28	236	34
800	56·1	24	21	241	26
750		19	15	244	21
700	90·2	13	08	240	28
650		05	01	238	33
600	128	-03	-11	232	33
550		-13	-22	240	39
500	172	-23	-33	239	39
450		-35	-45	235	57
400	222	-47		230	55
350		-59		233	62
300	284	-62		251	51
250		-60		261	32
200	371	-53		260	40
150		-53		261	40
130		-54		273	38
110		-57		273	40
100		-61		270	36
90	520	-60		276	32
80		-56		279	24
70		-59		263	18
60		-62		258	18

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·4	40	39	260	08
1000	-2·1				
950		38	36	278	21
900	25·9	33	29	275	25
850		29	26	276	22
800	56·6	23	20	279	25
750		17	13	276	27
700	90·6	12	08	266	22
650		05	01	268	22
600	129	-04	-09	257	26
550		-14	-20	245	36
500	172	-24	-31	241	40
450		-35	-43	225	52
400	223	-47		218	54
350		-57		228	49
300	285	-59		247	47
250		-56		261	42
200	372	-52		266	42
150		-51		268	43
130		-56		272	44
110		-59		269	36
100		-60			
90	(120 mb)				

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·9	41	33	270	15
1000	-1·1				
950		39	35	275	29
900	27·0	33	29	277	31
850		28	24	282	32
800	57·7	20	15	286	32
750		12	06	291	31
700	91·3	05	-03	290	31
650		-01	-12	282	40
600	129	-12	-28	277	44
550		-20	-40	274	42
500	171	-31	-48	268	42
450		-41		272	42
400	221	-49		275	41
350		-56		277	45
300	283	-60		279	51
250		-52		272	55
200	371	-54		275	51
150		-58		277	43
130		-62			
110		-63			
100		-66			
90	518	-66			
80		-66			

Inversion. 985 mb 41° - 978 mb 43° 662 - 2° - 650 - 1°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·3	44	29	275	17
1000	-18				
950		42	26	271	14
900	26·4	35	21	271	14
850		28	18	274	16
800	57·0	20	10		
750		12	-02		
700	90·6	06	-17		
650		-02	-12		
600	128	-10	-26		
550		-21	-34		
500	171	-32	-43		
450		-41			
400	221	-46			
350		-53			
300	283	-54			
250		-49			
200	372	-55			
150		-50			
130		-54			
110					
100					
90					
80					
70					
60					

Tropopause	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
	I 328 mb -61° 25·700	I 344 mb -59° 24·800	I 268 mb -67° 30·300	I 344 mb -60° 25·000	I 336 mb -59° 25·700 II 283 -58° 29·400	II 328 mb -64° 26·500	I 328 mb -60° 26·500	II 317 mb -59° 27·200	II 340 mb -55° 25·500

09Z G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Pressure: Time	09Z	09Z	09Z	09Z	09Z	09Z	09Z	09Z	G.M.T.
Pressure: M.S.L.	973·8 mb	978·2 mb	980·8 mb		989·3 mb	991·8 mb	996·0 mb	999·8 mb	mb
Pressure: Surf	963·9 mb	976·6 mb	981·7 mb	975·2 mb	987·2 mb	987·2 mb	979·7 mb	988·8 mb	mb
Pressure: Freezing	928 mb	883 mb	941 mb	930 mb	928 mb	912 mb	923 mb	890 mb	mb

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·7	37	37	240	20
1000	-7·1				
950		37	37	249	35
900	20·8	30	29	249	21
850		26	23	251	16
800	51·3	21	18	253	13
750		15	09	255	12
700	85·0	08	00	255	10
650		00	-07	255	11
600	123	-09	-15	252	11
550		-18	-25	243	10
500	166	-29	-38	250	13
450		-41		257	14
400	215	-55		261	13
350		-63		228	15
300	277	-60		228	17
250		-54		213	18
200	364	-50		239	13
170		-51		227	17
150		-50		247	14
130		-49		224	12
110		-50		226	13
100		-52			
90		(103 mb)			
80					
70					
60					

Inversion. 385 mb -60° - 365 mb -59°

Isothermal. 964 - 950 mb - 37°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·4	31	29		
1000	-5·8				
950		39	34		
900	22·2	35	26		
850		27	19		
800	52·8	21	09		
750		16	02		
700	86·6	07	-09		
650		00	-16		
600	124	-08	-27		
550		-16	-42		
500	167	-26	-58		
450		-36	-69		
400	218	-48			
350					
300					
250					
200					
170					
150					
130					
110					
100					
90					
80					
70					
60					

Inversion. 977 mb 31° - 956 mb 40°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·2	36	31	240	10
1000	-4·9				
950		33	29	238	22
900	22·9	28	25	237	27
850		22	20	237	29
800	53·2	16	13	246	30
750		10	06	249	30
700	86·7	05	00	245	30
650		-04	-11	238	28
600	124	-13	-22	230	27
550		-21	-32	231	23
500	167	-33	-44	233	24
450		-45		230	24
400	216	-57		220	24
350		-57		219	25
300	278	-52		240	27
250		-51		261	26
200	366	-50		258	29
170		-48		273	22
150		-49		269	24
130		-52		265	24
110		-54		264	24
100	517	-53		263	24
90		-52		269	21
80		-53		276	19
70		-57			
60					

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·6	35	31	240	35
1000	-4·1				
950		33	30	265	42
900	23·7	30	27	271	43
850		26	22	279	48
800	54·3	19	15	283	50
750		11	06	285	52
700	87·8	04	-04	287	51
650		-02	-13	285	48
600	125	-09	-20	278	48
550		-18	-31	277	43
500	168	-29	-43	273	39
450		-41		267	42
400	218	-52		270	44
350		-51		276	42
300	280	-51		277	39
250		-48		268	42
200	370	-42		273	32
150		-46		279	25
130		-51		268	29
110		-52		261	36
100		-50		269	25

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·6	38	31	240	15
1000	-2·8				
950		34	28	246	30
900	24·8	29	24	257	35
850		24	19	260	37
800	55·3	19	15	262	37
750		11	05	264	37
700	88·8	05	-04	266	38
650		-02	-13	267	38
600	126	-11	-23	267	40
550		-21	-33	271	43
500	169	-31	-43	273	47
450		-42		272	54
400	219	-54		271	54
350		-51		271	37
300	281	-52		268	32
250		-48		268	42
200	370	-46		267	38
150		-49		267	33
130		-49		267	30
110		-50		274	29
100		-51		269	27
90	522	-53		274	28
80		-53		276	24
70		-52			
60					

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	1·2	36	34	230	10
1000	-2·1				
950		35	31	273	29
900	25·7	31	24	283	30
850		26	18	287	30
800	56·2	21	13	286	30
750		15	02	277	27
700	90·0	06	-07	274	28
650		-02	-15	271	30
600	128	-09	-26	269	33
550		-20	-37	268	37
500	170	-29	-43	247	29
450		-38	-53	239	36
400	220	-48		243	35
350		-56		240	38
300	282	-61		244	38
250		-52		259	36
200	370	-48		262	35
150		-48		270	31
130		-53		262	34
110		-53		263	31
100		-55		263	25
90	521	-56		264	26
80		-57		266	29
70		-57		280	27
60		-56			

Isothermal. 367 - 350 mb -56°

Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·4	37	34	275	08
1000	-1·1				
950		34	30	268	31
900	26·6	30	24	276	40
850		26	16	277	41
800	57·1	19	07	275	36
750		12	01	276	34
700	90·7	06	-12	283	39
650		-04	-29	283	45
600	128	-14	-38	283	44
550		-24	-48	279	42
500	171	-33	-56	274	41
450		-43		274	41
400	220	-51		275	46
350		-60		281	46
300	281	-61		276	51
250		-54		268	45
200	369	-53		275	45
150		-53		274	43
130		-55		268	37
110		-59		276	33
100					
90					

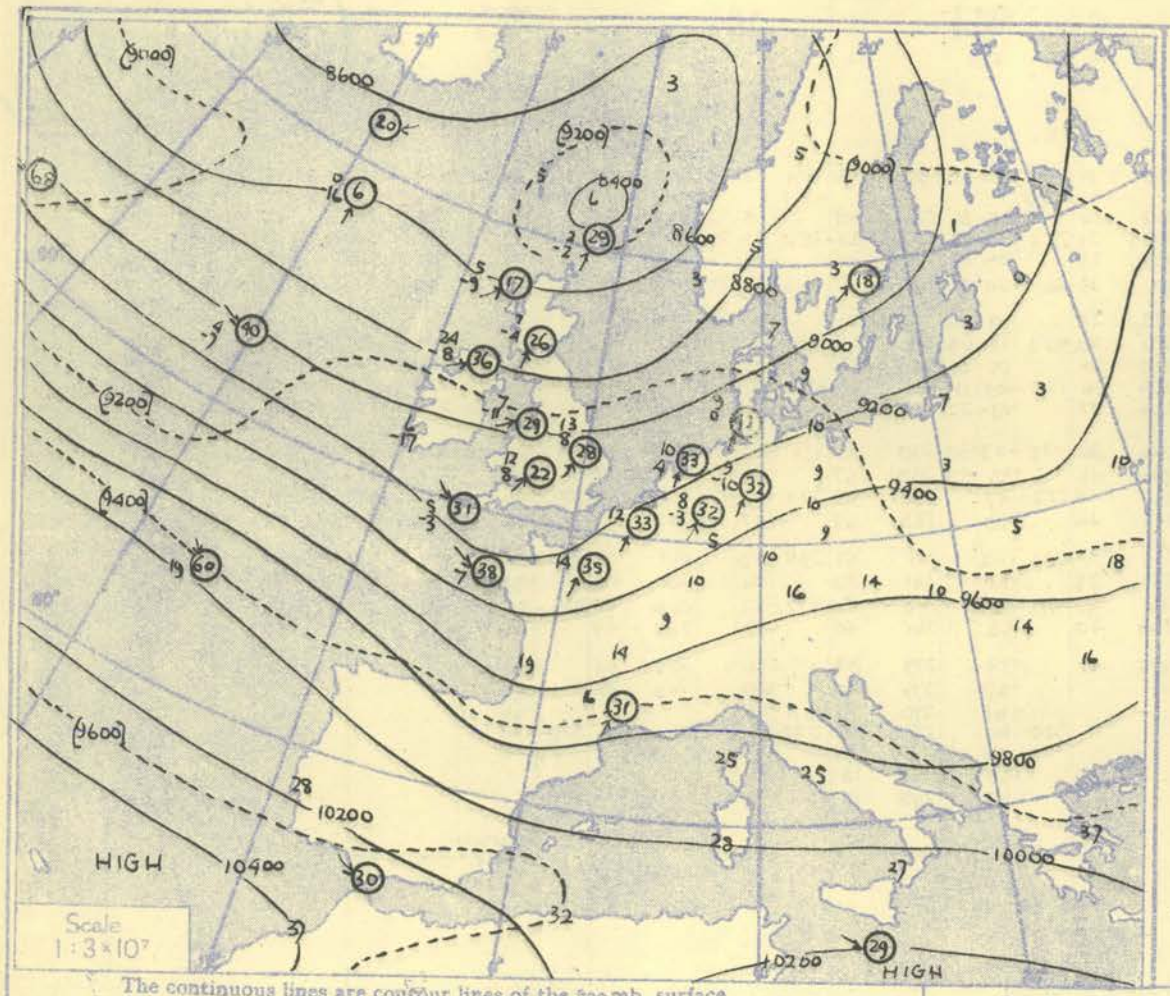
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·9	43	36		
1000	-0·2				
950		40	32		
900	28·0	34	27		
850		27	17		
800	58·6	21	08	See	
750		14	03		
700	92·3	07	-03	page	
650		-01	-10		
600	130	-10	-19	3	
550		-18	-27	for	
500	173	-28	-38		
450		-36	-48	winds	
400	223	-45			
350		-56			
300	285	-58			
250		-54			
200	373	-51			
150		-51			
130		-54			
110		-58			
100					
90	(137 mb)				
80					
70					
60					

Inversion. 989 mb 48° - 982 mb 49°

Tropopause	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
	II 350 mb -63° 24·300	[illegible]	I 386 mb -60° 22·200	II 388 mb -55° 22·500	I 385 mb -56° 22·700	I 317 mb -62° 27·200	I 313 mb -63° 27·200	II 342 mb -58° 25·900	[illegible]

Monday 19th February. 1951.

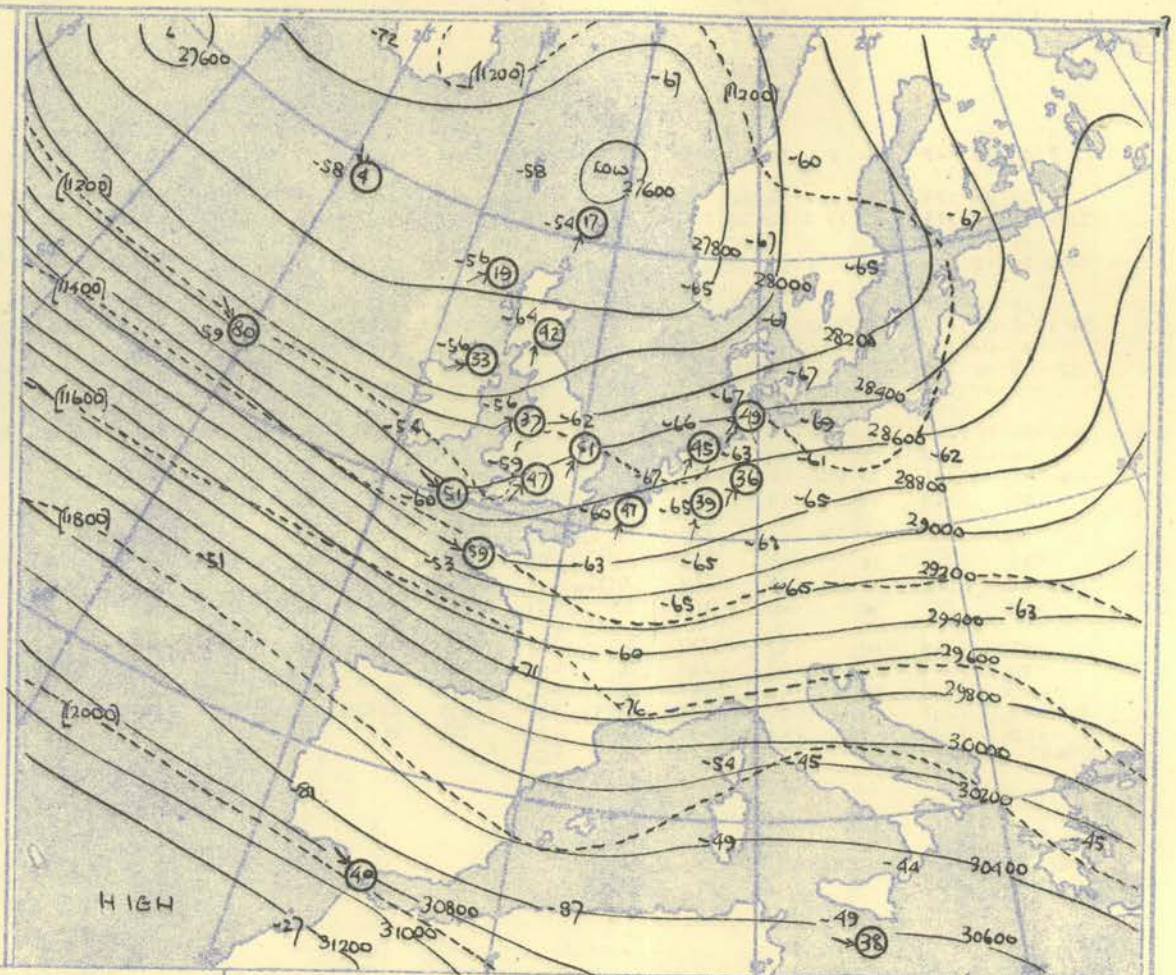
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03 h G.M.T.



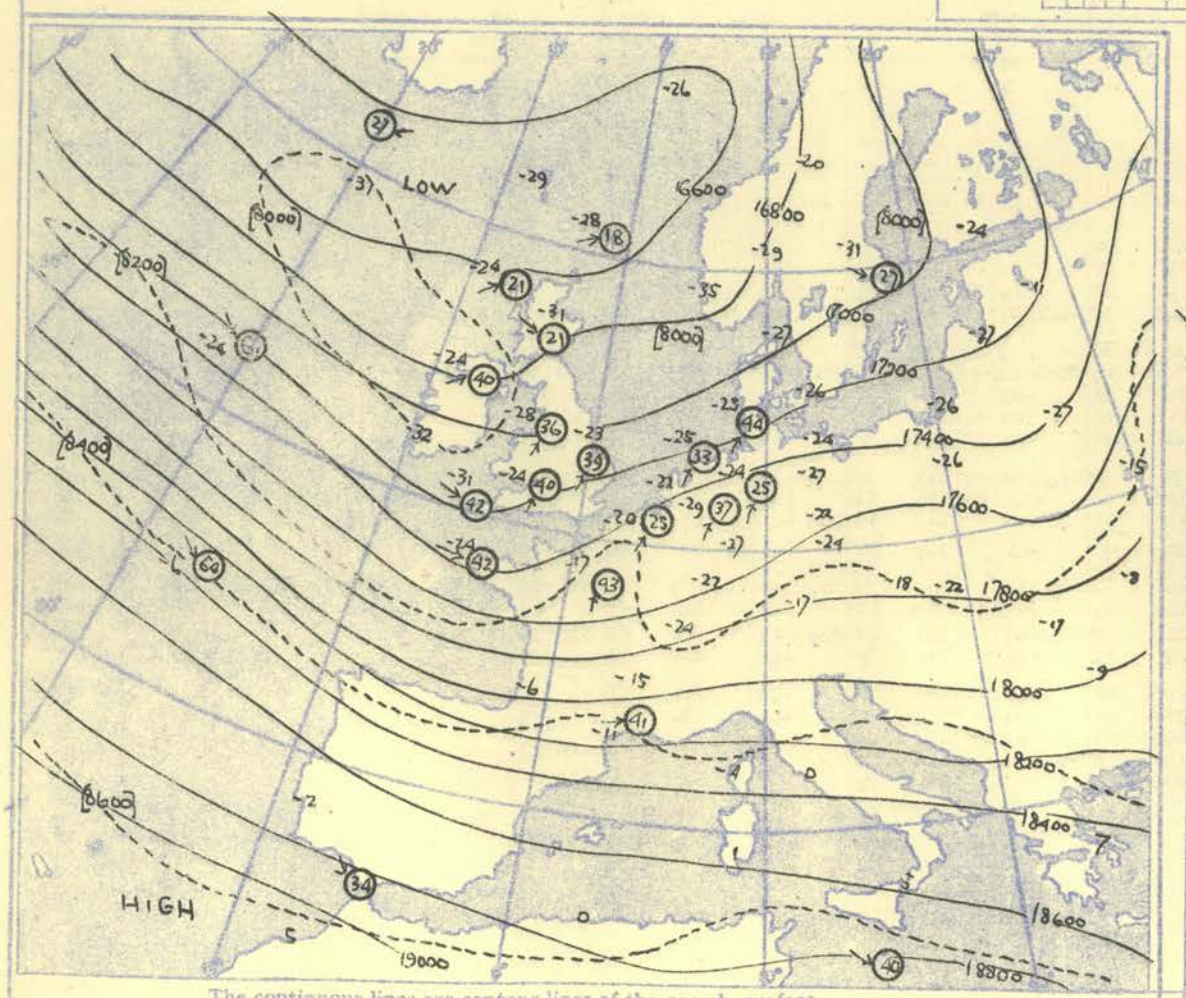
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

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

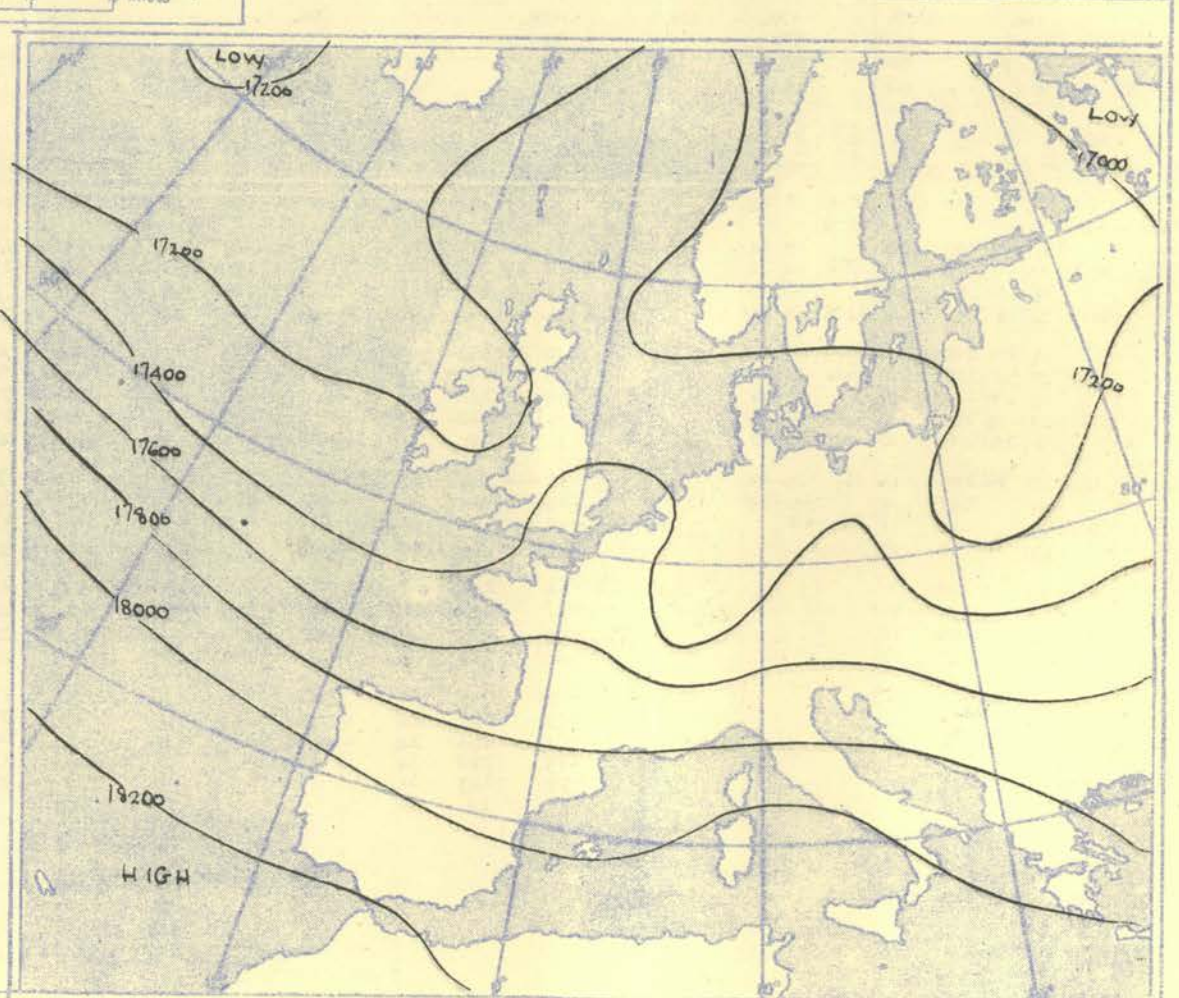
100 60 40 30 20 15 0 knots



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.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	39·2 N 12·2W			43·2 N 17·0W			51·3 N 00·4 E.		
Time	14·30h			13h.			1425h.		
Pressure M.S.L.	1019 mb			1013 mb			997 mb		
Pressure Surf	1022 mb			1016 mb			986 mb		
Pressure Freezing	710 mb			850 mb			885 mb		
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.
Surf		53	51		52	49	03·1	46	32
1000	61	49	48	4·5	50		00·0		
950		48	48		44	42		43	23
900		46	46		37	37	28·2	34	20
850		43	43		32	32		27	11
800		39	38		31	23	58·9	19	04
750		34	31		29	25		13	-01
700	10·2	31		98·7	24	20	92·6	06	-16
650		23			18	12		-01	-31
600		16			08		13·0	-10	
550		07			03			-21	
500	187	-03		183	-06		173	-28	
450	Cloud			Cloud				-39	
400	4/8 Sc			6/8 Sc			223	-49	
350	680-670 mb			940-820 mb				-61	
	4/8 Ac			7/8 As					
300	620-610 mb			500-490 mb			285	-58	
250	7/8 Ac NR			Surface			Cloud		
200	Surface			Wind S'wly			4/8 Cu		
170	Wind S'wly			11-17 Kts			850-710 mb		
	7-11 Kts						Inversion 350 mb -61°- 300 .. -58°		

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

Place	Camborne		Shoeburyness		Tiree		Lerwick	
Time	09h.		09h.		15h.		21h.	
Type								
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.	250	30	240	13	280	13	230	10
1,000	260	36	270	27	270	22	230	24
2,000	270	37	280	34	270	24	230	19
3,000	270	38	290	34	270	23	230	17
4,000	270	38	290	36	280	27	230	16
5,000	270	38	290	38			230	15
6,000	280	36	280	39			230	14
8,000	280	39	280	35	280	30	220	12
10,000	280	39	270	34	280	26	210	12
14,000	280	41	270	36			200	09
18,000	290	45	260	32			140	11
24,000	290	60	260	38			150	11
30,000	280	62	260	41			230	12
40,000	280	53	270	31			240	18
50,000	280	33	270	32			240	23
60,000	280 (53,000')	24					240	18
70,000							210	17
80,000							180	06

NEPHOSCOPE OBSERVATIONS

Place	
Time Type	
Dir. Vel.	

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

Ship	WEATHER EXPLORER					WEATHER EXPLORER				
Lat/Long	52·7N 20·2W					52·8N 20·5W				
Time G.M.T.	03h					09h				
Pressure M.S.L. mb	996					994				
Pressure Surf mb	996					994				
Pressure Freezing mb	950					900				
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
Surf		40	31	280	31		43	32	260	26
1000	-1·0					-1·7				
950		32	28	293	44		38	30	261	30
900	26·8	27	23	293	49	26·4	32	27	267	33
850		22	14	286	48		24	19	266	36
800	57·0	15	07	282	47	56·8	17	12	264	39
750		10	05	275	42		11	06	263	40
700	90·5	04	-07	273	40	90·0	04	-07	262	42
650		-01	-11	279	40		-03	-20	258	46
600	128	-07	-26	280	49	128	-06	-26	255	50
550		-15	-33	295	56		-14	-30	260	56
500	171	-24	-40	288	61	171	-23	-39	262	60
450		-35	-47	286	72		-33	-48	261	65
400	222	-46		275	75	222	-44		262	73
350		-58		277	73		-55		262	78
300	284	-59		283	80	284	-61		262	90
250		-52		283	83		-54		263	77
200	371	-52		283	60	372	-49		263	65
170		-51		283	60		-50		264	51
150		-55		283	54		-57		264	45
130		-59		283	45		-60		262	44
110		-59		283	41		-56		260	31
100	521	-61		283	38	521	-58		258	23
90		-62		283	37		-61			
80		-62		283	42					
70										
60										
Tropopause	I 339 mb -62° 25,600'					I 300 mb -61° 28,400'				

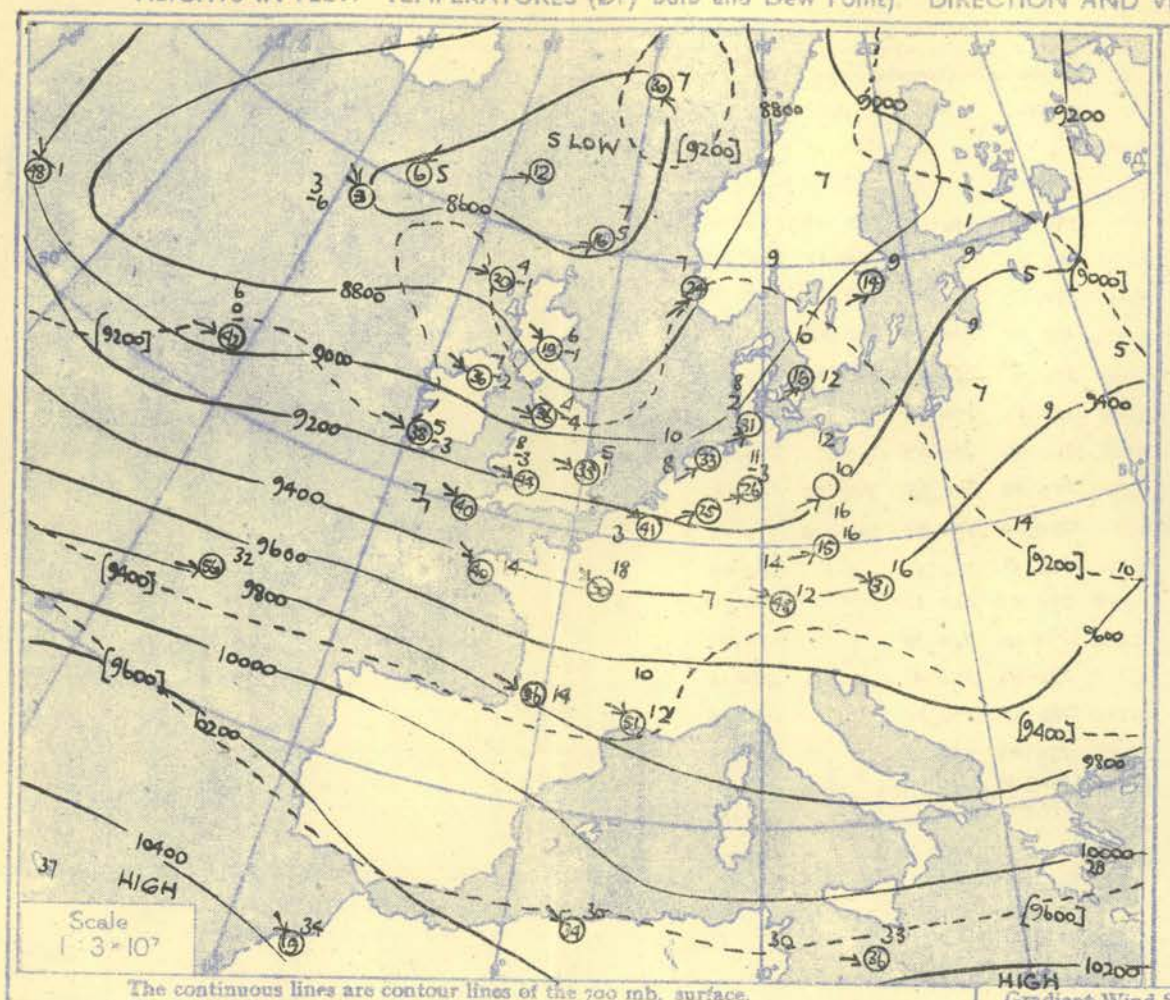
Ship	WEATHER EXPLORER					WEATHER EXPLORER				
Lat/Long	52·8N 20·5W					52·9N 20·2W				
Time G.M.T.	15h					21h				
Pressure M.S.L. mb	989					986				
Pressure Surf mb	989					986				
Pressure Freezing mb	920					925				
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		39	31	270	23		37	30	255	13
1000	-2·9					-3·7				
950		36	30	283	27		35	27	280	24
900	25·1	30	26	263	22	24·2	29	20	274	28
850		25	21	258	28		23	14	270	31
800	55·5	20	15	250	33	54·6	16	08	262	30
750		13	09	256	33		08	-02	252	31
700	89·2	06	00	248	42	87·9	02	-09	253	27
650		00	-08	242	57		-06	-15	245	27
600	127	-06	-13	224	63	125	-15	-26	254	39
550		-17	-24	232	56		-22	-34	257	42
500	170	-25	-32	238	62	168	-29	-45	258	44
450		-35	-48	244	61		-37	-56	249	22
400	221	-43		244	83	218	-45		260	55
350		-52		244	81		-49		258	52
300	283	-58		256	86	281	-47		258	63
250		-50		266	74		-45		262	53
200	371	-49		280	70	371	-47		262	53
170		-51		252	48	(198 mb)	-47			
150		-51		262	50					
130		-51		256	45					
110		-55		259	40					
100	522	-56		270	34					
90		-58		283	36					
80		-58		278	31					
70		-55		255	30					
60		-52		255	32					
	(56 mb)	-53								
	Inversion 989 mb 39° 980 mb 40° Isothermal 410 - 388 mb -43°									
Tropopause	I 330 mb -59° 26,300'					I 325 mb -51° 26,300'				

Ship	WEATHER RECORDER					WEATHER RECORDER				
Lat/Long	59·0N 19·1W					59·0N 18·9W				
Time G.M.T.	03h					09h				
Pressure M.S.L. mb	979					979				
Pressure Surf mb	979					979				
Pressure Freezing mb	930					920				
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
Surf		39	28	260	09		40	28	280	13
1000	-5·5					-5·7				
950		35	27	258	06		36	34	288	18
900	22·3	27	19	266	06	22·2	29	19	287	13
850		20	12	268	07		22	14	287	13
800	52·6	14	03	267	09	52·5	14	04	293	12
750		07	-12	261	07		09	-08	296	14
700	85·9	00	-16	195	06	85·8	03	-19	CALM	
650		-07	-28	164	08		-04	-27	079	06
600	123	-15	-37	133	08	123	-12	-32	071	10
550		-24	-45	unknown			-20	-34		
500	165	-31	-52			166	-30	-42		
450		-40	-57	radar			-40	-51		
400	215	-49				216	-50		065	18
350		-60		100	15		-63		133	06
300	277	-58		351	04	277	-59		294	15
250		-52		318	12		-53			
200	365	-51				365	-47			
170		-50		elevation						
150		-51		above		(178 mb)	-45			
130		-51		70 deg.						
110		-55								
100	516	-55		251	06					
90										
80										
70										
60										
Tropopause	II 345 mb -61° 24,600'					I 350 mb -63° 24,300'				

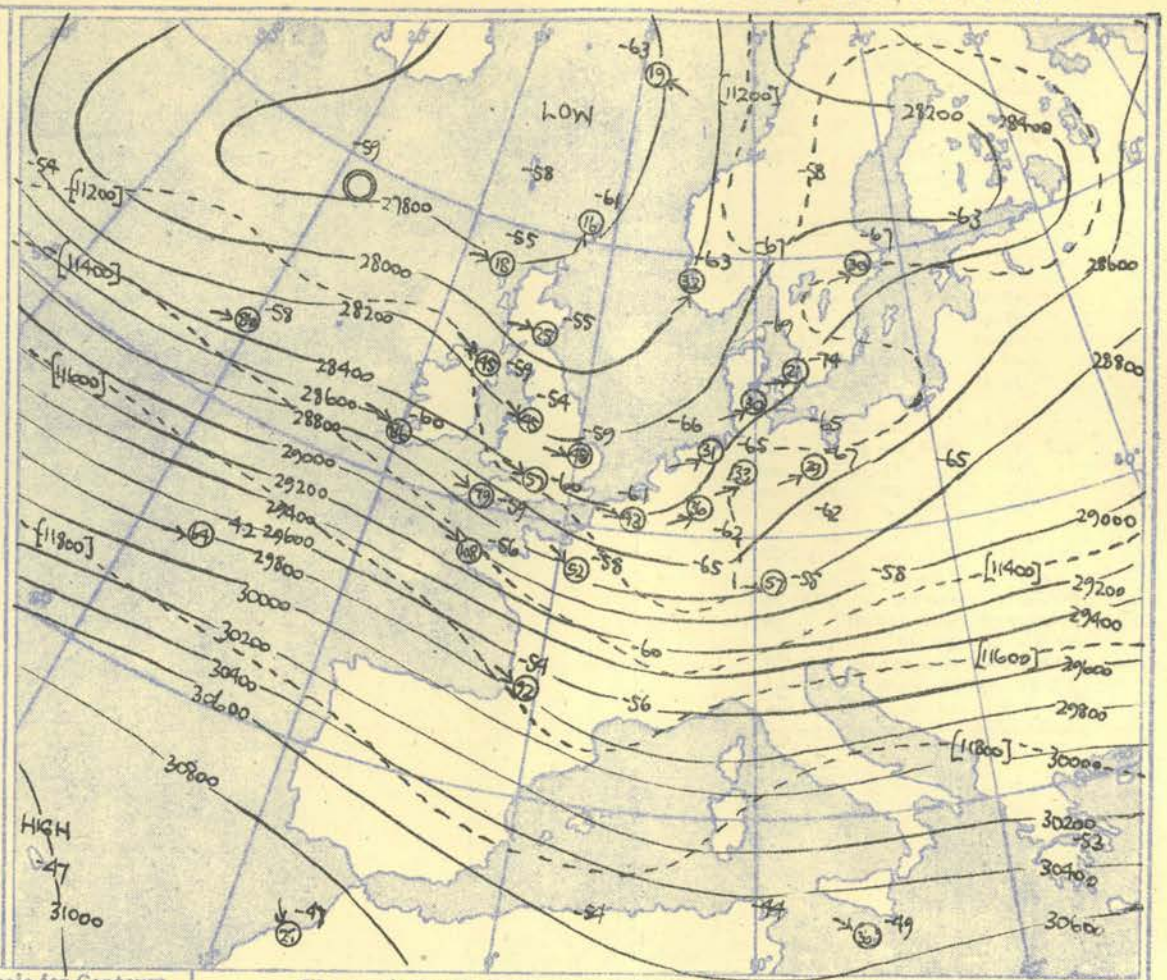
Ship	WEATHER RECORDER					WEATHER RECORDER				
Lat/Long	59·0N 18·7W					59·0N 19·0W				
Time G.M.T.	15h					21h				
Pressure M.S.L. mb	979					978				
Pressure Surf mb	979					978				
Pressure Freezing mb	920					935				
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		40	37	280	12		37	31	270	10
1000	-5·7					-5·9				
950		36	32	279	12		34	33	024	07
900	22·3	28	23	288	14	21·9	28	26	036	10
850		20	12	299	13		23	20	050	13
800	52·5	18	-02	304	09	52·3	18	14	056	13
750		11	00	307	03		12	08	056	13
700	86·0	03	-06	309	03	85·9	04	01	056	15
650		-05	-14	CALM			-05	-11	051	15
600	123	-13	-22	063	11	123	-13	-20	054	17
550		-22	-32	057	15		-22	-31	051	13
500	166	-31	-42	057	16	166	-32	-43	055	19
450		-42		065	20		-43		056	24
400	216	-52		059	12	215	-50		052	22
350		-61		024	05	(365 mb)	-47			
300	277	-59		CALM						
250		-55								
200	365	-52								
170		-50								
150		-50								
130		-48								
110		-52								
100										
90										
80										
70										
60										
	Inversion 829 mb 18° 811 mb 19°									
Tropopause	II 357 mb -61° 23,900'					I 400 mb -50° 21,500'				

Monday 19th February 1951.

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



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

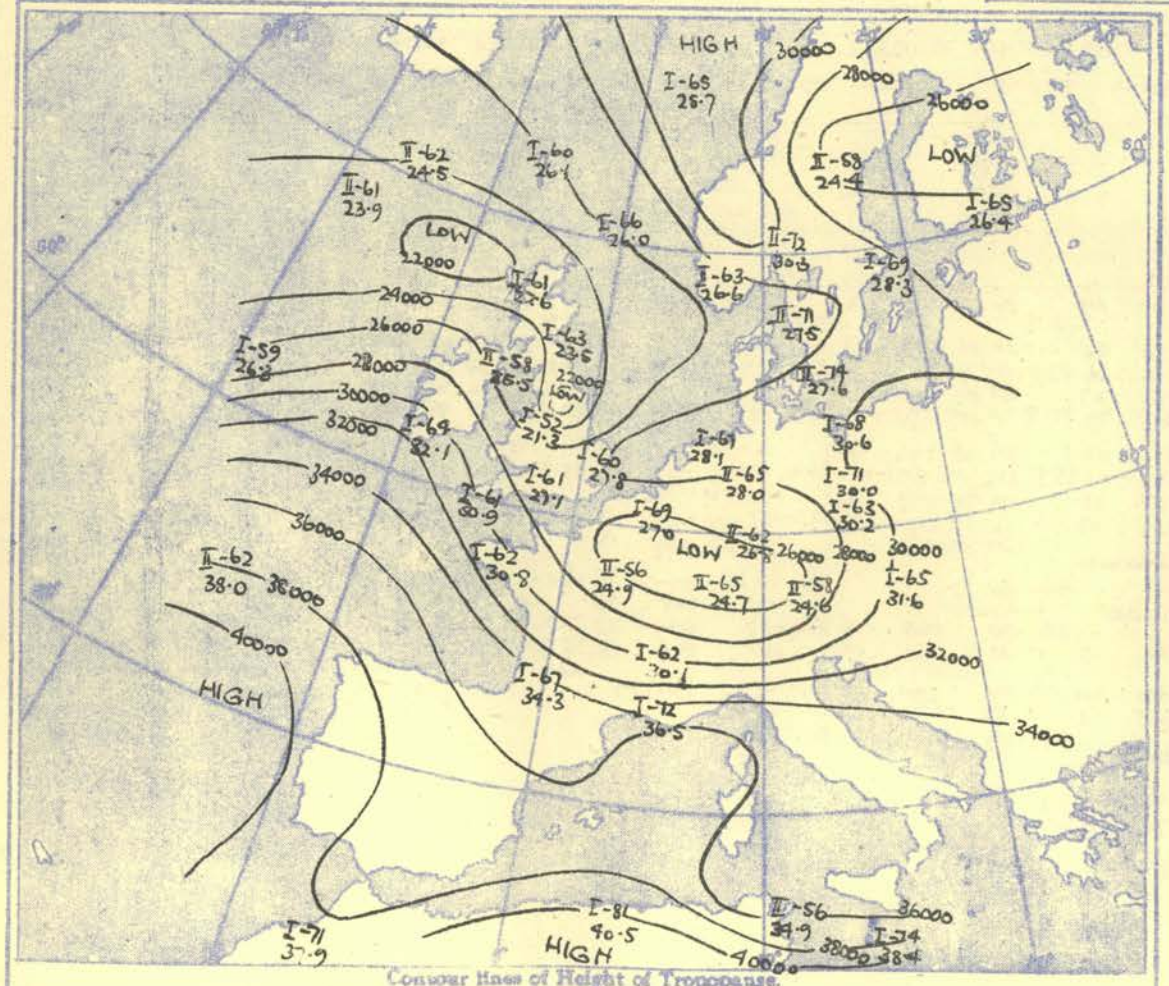


The continuous lines are contour lines of the 300mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

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

100 80 60 40 30 20 15 10 knots

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



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Little general change.

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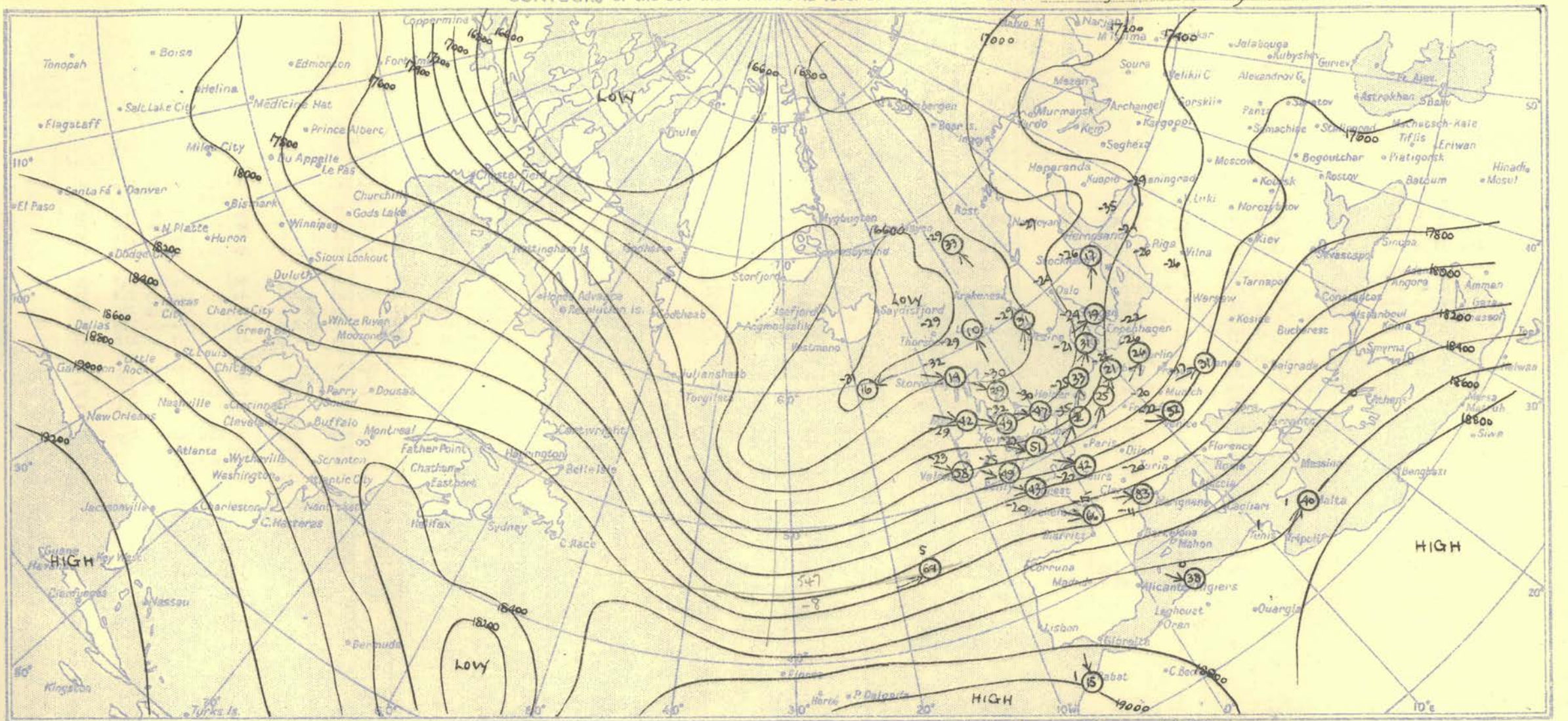
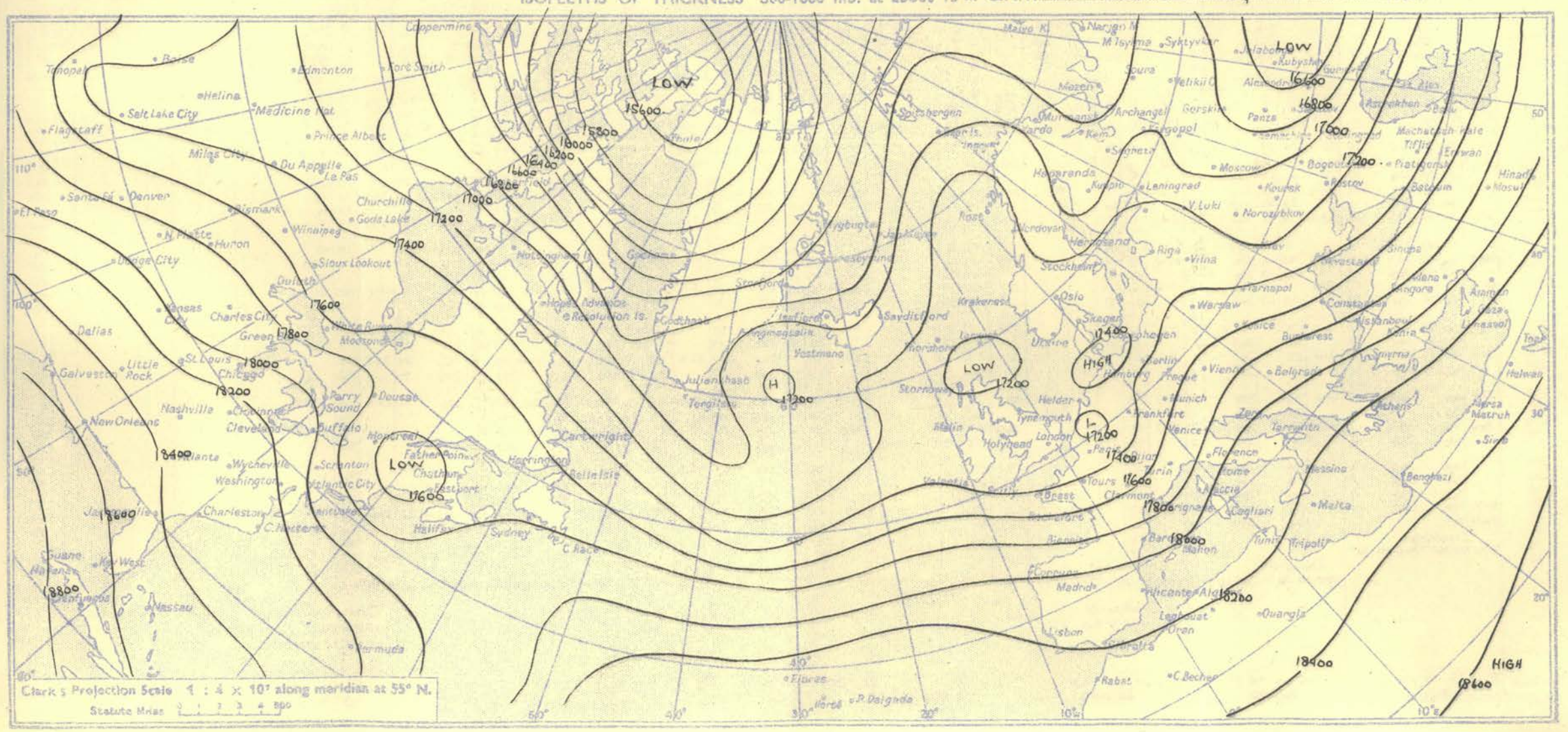
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Monday 19th. February 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Monday 19th February. 1951.



Page 5.

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Monday 19th. February 1951.

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

LERWICK

Pressure	Time	15h. G.M.T.
	M.S.L.	978·0 mb
	Surf	968·0 mb
	Freezing	926 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	34	34	CALM	
1000	-05·9				
950		33	32	242	12
900	21·7	31	30	240	14
850		25	24	230	12
800	52·2	19	18	231	13
750		13	12	236	15
700	85·8	07	05	245	16
650		-01	-04	246	10
600	12·4	-10	-13	222	06
550		-18	-21	187	08
500	16·6	-29	-32	173	10
450		-39	-45	158	12
400	21·6	-52		159	12
350		-62		194	15
300	27·7	-61		198	16
250		-55		228	15
200	36·5	-52		236	20
170		-49		244	21
150		-50		253	18
130		-51		247	16
110		-50		228	20
100	51·6	-51		224	18
90		-51		225	16
80		-52			
70					
60					

Tropopause: I 324 mb -66° 26,000'

STORNOWAY

Pressure	Time	15h. G.M.T.
	M.S.L.	980·8 mb
	Surf	979·2 mb
	Freezing	918 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	40	36	230	05
1000	-05·2				
950		36	32	257	18
900	22·7	30	26	264	20
850		24	21	267	23
800	53·1	18	16	273	20
750		11	08	272	18
700	86·6	04	-01	272	20
650		-04	-13	271	21
600	12·4	-12	-19	274	21
550		-22	-27	279	16
500	16·9	-32	-37	276	14
450		-43		272	12
400	21·6	-55		306	13
350		-59		275	11
300	27·8	-55		264	18
250		-51		268	19
200	36·7	-47		269	22
170		-48		269	25
150	42·9	-49		262	25
130		-49		251	21
110		-51		256	25
100	51·8	-50		260	22
90		-50		241	21
80		-51		236	21
70		-52			
60					

Tropopause: I 380 mb -61° 22,600'

LEUCHARS

Pressure	Time	15h. G.M.T.
	M.S.L.	981·0 mb
	Surf	981·9 mb
	Freezing	930 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	39	35		
1000	-04·9				
950		35	34		
900	23·0	29	29		
850		24	24		
800	53·5	19	15		
750		11	09		
700	87·0	06	-01		
650		-01	-07		
600	12·3	-09	-18		
550		-18	-42		
500	16·8	-30			
450		-42			
400	21·7	-54			
350		-55			
300	27·9	-55			
250		-50			
200	36·8	-49			
170		-50			
150		-53			
130		-54			
110		-51			
100	51·8	-52			

Isothermal 848 -828 mb 23°

Tropopause: I 367 mb -63° 23500

ALDERGROVE

Pressure	Time	15h. G.M.T.
	M.S.L.	989·1 mb
	Surf	980·3 mb
	Freezing	920 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	39	33	250	18
1000	-02·7				
950		35	30	260	22
900	25·2	29	25	268	27
850		25	19	267	33
800	55·7	19	13	272	31
750		11	06	270	35
700	89·3	07	-02	276	36
650		-02	-11	284	40
600	12·7	-10	-18	283	39
550		-19	-28	278	44
500	17·0	-29	-39	282	42
450		-40	-50	284	45
400	22·0	-49		292	54
350		-57		283	48
300	28·2	-59		283	45
250		-52		277	47
200	37·0	-48		270	43
170		-47			
150	43·3	-48			
130		-49			
110		-51			
100	52·2	-50			
90		-54			
80		-54			
70		-51			
60	63·3	-51			

Isothermal 718 -708 mb 08°

Tropopause: II 340 mb -58° 25,500'

LIVERPOOL

Pressure	Time	15h. G.M.T.
	M.S.L.	991·5 mb
	Surf	989·4 mb
	Freezing	910 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	44	35	260	18
1000	-02·3				
950		38	31	259	21
900	25·8	30	26	247	35
850		24	18	271	34
800	56·2	18	09	266	34
750		11	02	265	34
700	89·7	04	-04	274	36
650		-03	-10	276	38
600	12·7	-11	-18	277	39
550		-21	-28	279	46
500	17·0	-32	-39	282	49
450		-43		285	48
400	21·9	-51		287	61
350		-57		282	70
300	28·1	-54		282	45
250		-55		278	42
200	36·9	-49		277	37
150		-49		272	35
130		-49		275	34
110		-52		281	33
100		-49		272	21
90	52·1	-54		263	19
80		-52		252	27
70		-49		243	25
60		-48			

Inversion 412 mb -52° - 398 mb -51°

Tropopause: I 412 mb -52° 21,300'

DOWNHAM MARKET

Pressure	Time	15h. G.M.T.
	M.S.L.	994·2 mb
	Surf	989·4 mb
	Freezing	896 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	42	41	230	20
1000	-01·6				
950		40	36	246	22
900	26·5	33	32	248	29
850		27	27	252	46
800	57·2	20	20	253	46
750		13	11	260	36
700	09·1	05	01	271	35
650		-03	-12	272	39
600	12·8	-12	-19	268	37
550		-21	-28	268	39
500	17·1	-30	-37	268	47
450		-42		266	49
400	22·1	-51		273	58
350		-55		273	63
300	28·3	-59		271	90
250		-51		276	38
200	37·1	-51		267	33
150		-51		269	39
130	43·4	-51		269	40
110		-52		279	32

Isothermal 404 -389 mb -51°

Tropopause: I 306 mb -60° 27,800'

LARKHILL

Pressure	Time	15h. G.M.T.
	M.S.L.	981·3 mb
	Surf	997·3 mb
	Freezing	892 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·4	43	35	300	17
1000	-01·0				
950		39	31	268	25
900	27·5	33	27	266	27
850		26	22	266	34
800	58·0	19	11	268	38
750		13	03	275	42
700	91·7	08	-03	275	44
650		-01	-11	272	47
600	13·0	-09	-23	272	49
550		-18	-34	273	47
500	17·3	-27	-39	276	51
450		-37	-46	276	53
400	22·3	-48		273	49
350		-57		279	47
300	28·5	-60		280	57
250		-50		279	56
200	37·3	-51		278	44
150		-49		276	42
130	43·6	-51		276	45
110		-56		278	41
100		-53		270	32
90	52·3	-52		269	31
80		-57		277	33
70		-57		277	29
60		-31		268	22

Tropopause: I 320 mb -61° 27,100'

CAMBORNE

Pressure	Time	15h. G.M.T.
	M.S.L.	1002·1 mb
	Surf	991·3 mb
	Freezing	905 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	40	37	293	18
1000	00·5				
950		37	33	276	30
900	28·5	31	27	275	35
850		25	19	276	37
800	59·0	19	02	278	38
750		14	-03	276	38
700	92·7	07	-07	276	40
650		00	-09	274	42
600	13·1	-07	-17	269	41
550		-16	-26	270	43
500	17·4	-25	-44	281	49
450		-34	-55	284	57
400	22·4	-44		284	60
350		-50		294	78
300	28·7	-59		293	79
250		-57		284	67
200	37·4	-52		282	54
150		-51		283	49
130		-53		283	43
110		-56			
100		-57			
90	52·4	-57			
80		-56			
70		-56			
60		-56			

Tropopause: I 270 mb - 61° 30,900'

VALENTIA

Pressure	Time	15h. G.M.T.
	M.S.L.	997·9 mb
	Surf	997 mb
	Freezing	900 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	46	34	260	11
1000	-0·5				
950		39	26	265	23
900	27·7	32	20	266	27
850		24	17	262	27
800	58·1	17	12	264	31
750		12	09	267	38
700	91·7	05	-03	268	38
650		-02	-18	276	37
600	12·9	-10	-30	280	43
550		-17	-43	278	49
500	17·3	-23	-44	275	58
450		-31	-45	277	66
400	22·3	-41		277	76
350		-51		283	77
300	28·6	-60		279	86
250		-63			
200	37·2	-55			
150		-51			
130		-53			
110		-57			
100		-57			
90	52·2	-55			
80		-55			
70	(84mb)	-58			
60					

Isothermal 791 -782 mb 16°

Tropopause: I 255 mb -64° 32,100'

LERWICK

Pressure	Time	21h. G.M.T.
	M.S.L.	980·4 mb
	Surf	970·4 mb
	Freezing	908 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	36	34	230	10
1000	-05·3				
950		37	34	228	21
900	22·7	31	27	230	19
850		24	20	232	19
800	53·1	19	14	233	16
750		13	07	234	15
700	86·8	06	-02	237	12
650		-02	-10	236	13
600	12·4	-11	-19	220	12
550		-20	-28	191	08
500	16·7	-30	-38	167	10
450		-42		140	13
400	21·7	-53		148	10
350		-62		187	11
300	27·8	-60		208	12
250		-55		233	15
200	36·6	-50		247	19
170		-50		242	18
150		-50		240	21
130		-52		245	18
110		-53		230	21
100	51·7	-53		237	15
(92mb)		-53			
90					
80					
70					
60					

Inversion 970 mb 36° - 966 mb 38°

Tropopause: I 325 mb -66° 26,1[illegible]

STORNOWAY

Pressure	Time	21h. G.M.T.
	M.S.L.	982·0 mb
	Surf	980·4 mb
	Freezing	920 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	38	34	[illegible]	05
1000	-04·8				
950		36	34	224	21
900	23·0	30	28	230	22
850		23	21	253	24
800	53·4	16	15	252	28
750		11	06	259	24
700	86·9	05	-01	275	20
650		-02	-07	271	21
600	12·5	-11	-19	269	19
550		-20	-28	262	23
500	16·7	-31	-39	264	28
450		-41		267	30
400	21·7	-52		261	30
350		-57		281	24
300	27·9	-62		275	21
250		-53		268	21
200	36·6	-52		260	27
170		-52		258	22
150	42·9	-54		256	24
130		-50		259	26
110		-54		255	21
100	51·7	-54		250	25
90		-54		249	24
80		-56			
70					
60					

Inversion 980 mb 36° - 963 mb 37°

Tropopause: I 316 mb -64° 26,800'

LEUCHARS

Pressure	Time	21h. G.M.T.
	M.S.L.	985·7 mb
	Surf	986·6 mb
	Freezing	939 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	35	33		
1000	-03·6				
950		33	31		
900	24·0	29	27		
850		24	20		
800	54·4	18	12		
750		12	04		
700	88·0	05	-01		
650		-02	-04		
600	12·6	-11	-14		
550		-21	-27		
500	16·8	-32	-38		
450		-43			
400	21·8	-54			
350		-61			
300	27·9	-59			
250		-56			
200	36·7	-52			
150		-51			
130		-52			
110		-53			
100		-57			
90	51·7	-57			
80		-56			
70		-58			
60		-59			

Inversion 409 mb - 55° - 398 mb - 54°

Isothermal 986 - 963 mb 35°

Tropopause: II 344 mb -62° 25,000'

ALDERGROVE

Pressure	Time	21h. G.M.T.
	M.S.L.	991·5 mb
	Surf	982·1 mb
	Freezing	917 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	35	30		
1000	-02·2				
950		33	27		
900	25·6	30	22		
850		24	16		
800	56·1	19	07		
750		12	-02		
700	89·7	07	-16		
650		-01	-24		
600	12·7	-08	-25		
550		-18	-34		
500	17·0	-25	-39		
450		-36	-47		
400	22·1	-47			
350		-56			
300	28·3	-67			
250		-61			
200	36·9	-53			
150		-50			
130	43·1	-53			
110		-62			
100		-59			
90	51·8	-56			
80		-58			
70		-62			
60					

Tropopause: II 291 mb -70° 28,800'

LIVERPOOL

Pressure	Time	21h. G.M.T.
	M.S.L.	994·7 mb
	Surf	992·6 mb
	Freezing	911 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	40	33	260	20
1000	-01·4				
950		37	30	266	30
900	26·5	31	24	278	33
850		24	17	283	33
800	56·9	17	10	283	31
750		10	06	279	30
700	90·3	03	00	272	27
650		-03	-09	271	23
600	12·8	-10	-23	273	35
550		-18	-40	278	38
500	17·1	-28	-46	281	39
450		-38	-54	282	45
400	22·1	-48		283	60
350		-58		287	69
300	28·3	-66		283	75
250		-59		285	49
200	36·9	-58		270	40
150		-56		275	38
130		-58		274	42
110		-57		272	39
100		-62		282	32
90	51·7	-63		266	30
80		-62		259	32
70		-61			
60		-61			
		-61			

Tropopause: I 307 mb -67° 27,800'

DOWNHAM MARKET

Pressure	Time	21h. G.M.T.
	M.S.L.	997·0 mb
	Surf	992·5 mb
	Freezing	923 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	37	34	220	10
1000	-00·8				
950		35	28	258	36
900	26·3	29	25	269	39
850		24	17	272	40
800	57·3	20	16	27	37
750		14	05	269	35
700	91·1	07	-02	268	33
650		-01	-11	266	33
600	12·9	-09	-24	270	36
550		-18	-35	278	35
500	17·2	-27	-43	279	35
450		-37	-51	286	45
400	22·2	-47		282	50
350		-56		288	61
300	28·4	-65		290	65
250		-57		281	54
200	37·1	-54		281	39
150		-55		277	37
130	43·3	-56		278	38
110		-59		278	43
100		-58		275	22
90	52·0	-59		263	24
80		-60		253	30
70		-58			
60					

Inversion 993 mb 37° - 975 mb 38°

Tropopause: I 300 mb -65° 28,400'

LARKHILL

Pressure	Time	21h. G.M.T.
	M.S.L.	984·4 mb
	Surf	1000·8 mb
	Freezing	918 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·4	35	33	270	15
1000	00·2				
950		34	32	262	27
900	28·1	26	21	267	29
850		24	19	275	31
800	58·6	18	09	276	35
750		03	-03	274	36
700	92·3	06	-11	272	37
650		-01	-21	271	39
600	13·0	-09	-30	268	42
550		-15	-36	272	46
500	17·3	-22	-44	279	53
450		-31	-48	282	54
400	22·4	-42		287	69
350		-57		286	77
300	28·6	-67		286	72
250		-64			
200	37·2	-54			
150		-56			
130	43·6	-60			

Inversion 984 mb 35° - 970 mb 38°

Tropopause: I 279 mb -70° 30,000'

CAMBORNE

Pressure	Time	21h. G.M.T.
	M.S.L.	1002·9 mb
	Surf	992·2 mb
	Freezing	892 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	40	37	270	10
1000	00·8				
950		39	35		
900	28·9	33	29		
850		25	20		
800	59·4	19	11		
750		14	01		
700	93·2	08	-08		
650		02	-30		
600	13·1	-05	-32		
550		-12	-38		
500	17·3	-22	-31		
450		-32	-40		
400	22·5	-42			
350		-52			
300	28·8	-68			
250		-74			
200	37·2	-63			
150		-60			
130		-61			
110		-63			
100		-67			
90	51·9	-67			
80		-64			
70		-66			
60		-67			
		-67			
	(55mb)	-67			

Inversion 992 mb 40° - 970 mb 41°

Tropopause: II 260 mb -74° 31,700'

HMSO. Press, MO., Dunstable.

No. 11650. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Tuesday 20th February 1931 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.	982·1 mb	982·8 mb	987·8 mb	987·5 mb	994·1 mb	998·8 mb	1000·3 mb	997·5 mb	986·3 mb
Pressure: Surf	972·1 mb	981·2 mb	986·9 mb	977·9 mb	992·0 mb	994·2 mb	983·7 mb	987·0 mb	984 mb
Pressure: Freezing	923 mb	928 mb	943· mb	930 mb	911 mb	907 mb	889 mb	868· mb	908 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	027	33	33	290	07	004	35	32	230	05	002	37	34	240	09	026	36	36		
1000	-4·8					-9·6					-3·3					-3·3				
950		33	32	230	19		35	32	218	17		35	32	256	31		34	30		
900	22·9	30	28	227	20	23·2	29	26	240	20	24·9	27	26	254	31	24·5	30	26		
850		24	19	226	20		22	18	246	25		24	20	254	33		28	20		
800	53·3	18	11	226	20	53·5	17	13	246	26	54·8	17	10	254	33	58·0	19	15		
750		11	04	222	20		11	06	244	26		11	03	256	31		15	12		
700	86·8	05	-01	213	14	87·0	04	-04	240	21	88·3	04	-04	256	26	88·8	09	05		
650		-03	-13	201	10		-03	-13	240	20		-05	-14	257	21		03	-01		
600	124	-13	-19	208	10	125	-12	-24	254	19	126	-14	-22	263	21	127	-04	-12		
550		-23	-28	219	08		-22	-38	244	20		-22	-36	273	21		-13	-25		
500	167	-34	-40	215	08	167	-31	-45	245	22	168	-31	-38	275	24	170	-25	-38		
450		-45		193	07		-41		248	27		-43		267	20		-35	-52		
400	216	-54		113	08	217	-51		252	32	218	-56		249	29	221	-48			
350		-62		147	07		-61		254	33		-64		239	89		-58			
300	278	-58		225	13	278	-62		252	27	279	-67		239	42	282	-62			
250		-52		250	17		-56		251	25		-54		246	39		-56			
200	366	-51		233	20	366	-60		252	25	366	-54		260	26	370	-48			
170		-51		244	22		-54		238	25		-54		253	31					
150		-51		237	19		-56		256	25		-53		258	29					
130		-54		240	19		-56		247	27		-59		264	27					
110		-54		231	22		-53		267	23		-60		275	29					
100	516	-55		225	22	515	-55		254	20		-60		272	25					
90		-54					-58		235	19				265	18					
80							-59		235	22										
70							-59		224	24										
60							-55		242	27										
	Isothermal 972 - 932 mb 33°					Inversion 981 mb 35° - 961 mb 36°					Inversion 900 mb 27° - 889 mb 29°									
Tropopause	I 355 mb - 62° 24,200'					I 306 mb - 65° 27,400'					I 302 mb - 68° 27,700'					II 356 mb - 58° 24,600'				

Pressure mb	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA. Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	006	38	32	210	12	012	34	33	190	09	044	34	33	240	08	029	45	41	225	20	003	40	35		
1000	-1·6					-0·3					0·1					-0·6					-3·9				
950		35	29	219	22		36	33	246	25		38	34	227	27		42	38				37	33		
900	26·8	31	25	236	30	27·5	31	23	257	24	27·9	33	27	235	31	21·7	36	33			24·1	32	28		
850		25	18	239	36		25	20	261	22		28	18	240	31		30	26				27	19		
800	56·9	20	12	239	30	57·9	20	06	256	21	58·5	22	11	245	33	58·6	26	15			54·8	22	09		
750		14	01	239	33		15	-02	256	27		15	-04	251	33		21	05				15	01		
700	90·7	03	-10	242	33	91·7	08	-11	261	29	92·3	11	-12	257	29	92·8	13	-08			88·6	07	-02		
650		01	-15	244	32		01	-15	270	32		06	-19	273	30		07	-18				00	-04		
600	128	-07	-22	252	26	130	-06	-20	278	37	131	-01	-23	280	36	131	00	-28			126	-07	-15		
550		-16	-27	261	31		-13	-28	285	46		-12	-28	280	41		-09	-39				-16	-27		
500	172	-25	-33	262	43	173	-23	-38	291	50	174	-20	-36	275	51	175	-18	-50			169	-29	-37		
450		-35	-44	266	51		-34	-47	290	58		-31	-47	276	55		-28	-56				-37	-49		
400	222	-46		267	74	224	-44		281	64	225	-42		274	71	226	-39	-58			220	-46			
350		-58		271	83		-52		284	73		-52		274	84		-50					-53			
300	284	-64		278	76	286	-63		281	82	288	-63		275	94	289	-63				282	-56			
250		-67		266	56		-71		276	72		-71		271	83		-74					-52			
200	370	-60		268	44	372	-55		285	90	373	-60		269	51	373	-63				370	-51			
170		-60		265	47		-56		271	85		-86		274	49		-62					-50			
150							-59		274	31		-56		272	42		-60					-55			
130							-60		278	35		-61		264	27		-65					-60			
110							-63		276	42							-67					-64			
100						520	-61		258	30						520	-67				(104 mb)	-61			
90							-64		257	20						(92 mb)	-67								
80							-66		259	27															
70																									
60																									
	Isothermal 355 - 343 mb -88°					Inversion 994 mb 34° - 972 mb 36° Isothermal 940 - 920 mb 36°					Inversion 984 mb 34° - 960 mb 39° Isothermal 763 - 746 mb 15° 714 - 700 " 11°										Inversion 978 mb 45° - 973 mb 46°				
Tropopause	I 288 mb - 65° 29,200' I 242 " - 67° 33,000'					I 250 mb - 71° 32,400'					I 256 mb - 72° 32,200'					II 241 mb - 76°					I 315 mb - 58° 27,200'				

09h G.M.T.

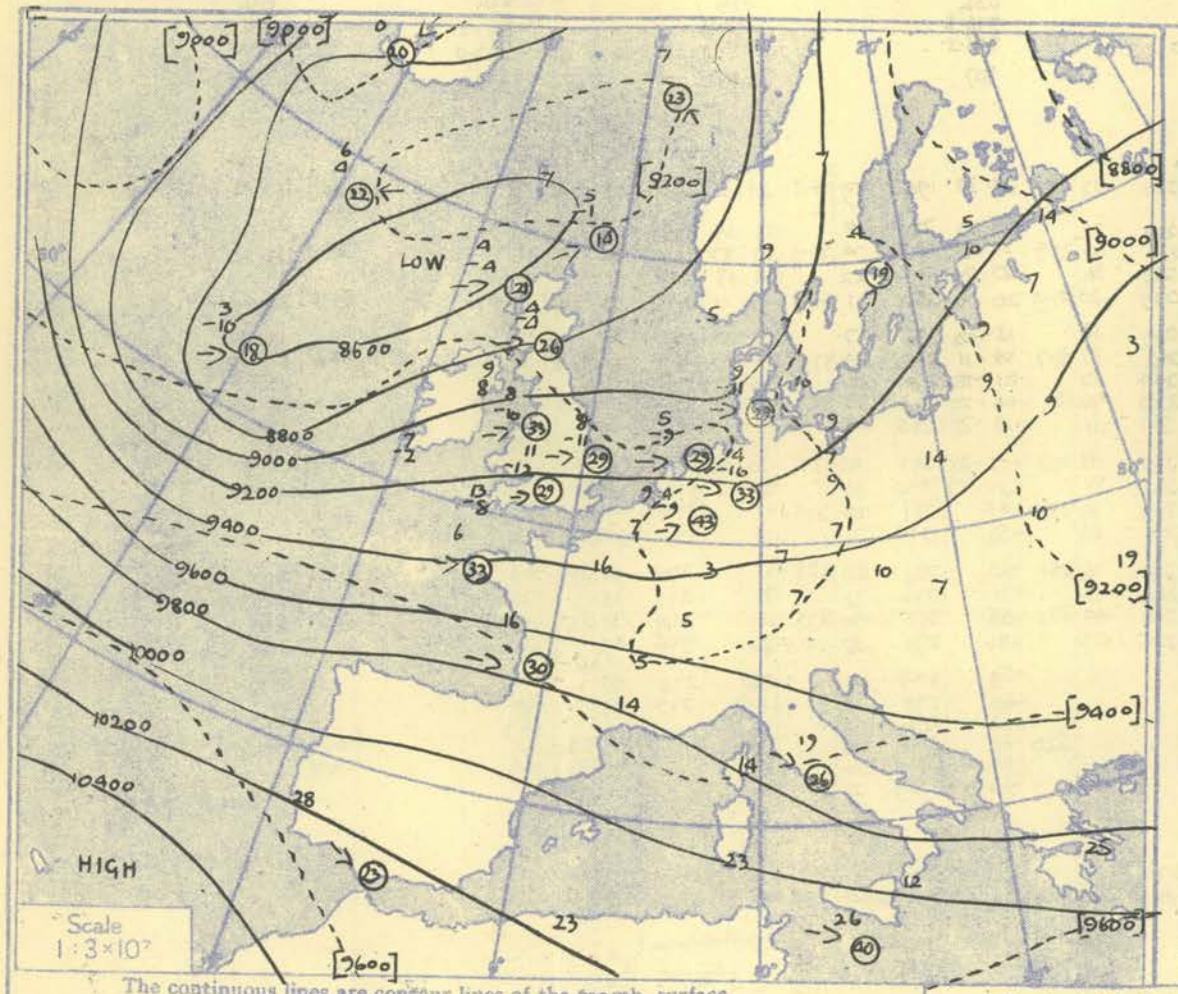
Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Pressure: Time	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	09h G.M.T.	G.M.T.
Pressure: M.S.L.	981·8 mb	979·9 mb	982·3 mb	980·6 mb	982·8 mb	991·6 mb	990·5 mb	988·3 mb	mb
Pressure: Surf	971·8 mb	978·3 mb	981·4 mb	971·5 mb	980·7 mb	987·2 mb	974·6 mb	977·8 mb	mb
Pressure: Freezing	921 mb	910 mb	935 mb	948 mb	888 mb	874· mb	860 mb	850 mb	mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	027	34	33	205	09	004	37	34			002	37	36	150	15	026	35	33	260	08
1000	-4·9					-5·4					-8·0					-5·1				
950		36	33	200	21		37	34				34	33	142	23		32	29	260	15
900	22·8	29	24	200	16	22·5	31	28			23·0	29	29	152	46	22·7	30	25	260	18
850		28	18	205	16		29	20				23	23	158	24		27	08	263	20
800	53·1	18	11	215	15	52·9	19	15			53·5	20	20	189	22	53·2	20	10	237	24
750		12	01	209	16		14	09				15	14	210	23		13	-01	231	25
700	86·7	04	-10	191	15	86·6	07	00			87·4	09	08	231	20	86·9	08	-10	232	29
650		-04	-19	204	16		01	-16				01	00	236	22		01	-18	236	33
600	124	-13	-26	203	10	124	-07	-20			125	-08	-16	215	25	125	-08	-24	234	36
550		-23	-36	192	10		-17	-27				-16	-19	210	29		-18	-31	232	34
500	167	-33	-45	199	12	167	-28	-35			168	-26	-31	214	39	168	-29	-41	242	44
450		-44		201	13		-39					-37	-43	216	53		-38	-49	239	46
400	216	-53		179	06	217	-50				219	-49		225	54	218	-48		225	44
350		-60		236	09		-60					-61		219	60		-57		228	41
300	277	-61		241	15	279	61				280	-65		235	39	280	-57		239	43
250		-55		241	16		-54					-57		247	32		-48		247	42
200	365	-52		243	20	367	-51				367	-51		246	23	370	-40		235	31
170		-52		285	17		-50					-51		252	23		-54		248	37
150		-53		231	21		-51					-51					-53		247	38
130		-54		226	24		-52										-50		247	36
110		-52		224	22		-51										-50			
100	515	-54		230	30	518	-52									520	-60			
90		-55					-53										-57			
80							-55													
70																				
60																				
	Inversion 972 mb 34° - 964 mb 37° 359 " -60° - 353 " -59°					Inversion 978 mb 37° - 964 mb 39° 342 - 62° - 330 " -59°										Isothermal 932 - 888 mb 30°				
Tropopause	I 324 mb - 63° 26,200'					I 312 mb - 63° 27,000'					II 330 mb - 65° 25,800'					I 332 mb - 60° 25,900'				

Pressure mb	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	006	37	36	180	08	012	39	35	180	15	044	44	41	220	22	029	45	45	208	12
1000	-4·6					-2·2					-2·5					-3·2				
950		34	33	194	20		39	34	191	86		42	40	195	36		43	43	227	33
900	23·3	33	31	230	25	25·9	36	30	217	37	25·8	34	32	207	44	25·2	38	37	242	35
850		30	27	254	29		29	25	222	39		29	28	218	54		32	29	244	40
800	54·1	26	22	252	33	56·7	23	21	222	39	56·7	25	25	222	52	56·2	25	21	246	42
750		20	15	244	33		17	09	221	37		18	18	226	48		20	16	252	42
700	88·3	14	09	236	37	90·6	11	-05	224	28	90·8	12	10	233	47	90·0	14	10	250	51
650		08	02	233	45		06	-16	227	43		06	03	241	47		08	02	242	59
600	127	00	-04	227	46	129	-02	-16	232	43	129	-01	-05	246	49	129	00	-04	229	60
550		-09	-16	223	49		-10	-18	241	41		-08	-14	251	55		-11	-18	226	69
500	170	-20	-31	224	54	173	-19	-30	247	42	173	-17	-25	251	59	172	-21	-29	230	64
450		-31	-39	228	58		-30	-37	251	41		-29	-38	253	66		-33	-41	238	76
400	221	-43		225	57	224	-43		256	49	227	-38	-45	253	79	223	-41		241	93
350		-55		216	55		-53		259	78		-47		252	90		-69		246	107
300	284	-61				286	-62		261	93	287	-62		252	98	286	-64		247	105
250		-60					-66		261	75		-70		257	87	(237 mb)	-62		256	96
200	310	-55				372	-61		258	45	373	-57		260	57					
170		-54					-56		261	48		-55		258	50					
150		-50					-51		270	38		-56		264	42					
130		-51					-58		273	32		-60		269	42					
110		-59					-58		270	30		-58		268	30					
100	520	-60				520	-57		265	29	521	-55								
90		-57					-57		260	20										
80							-57		260	19										
70																				
60																				
	Isothermal 936 - 880 mb 33°					Inversion 987 mb 39° - 931 mb 40° Max wind:- 298 mb 28,900' 261° 105 kts										Inversion 978 mb 45° - 973 mb 46°				
Tropopause	II 322 mb - 62° 26,800'					I 250 mb - 66° 32,400'					II 263 mb - 70° 31,500'					II 290 mb - 66° 29,200'				

Tuesday 20th February. 1951.

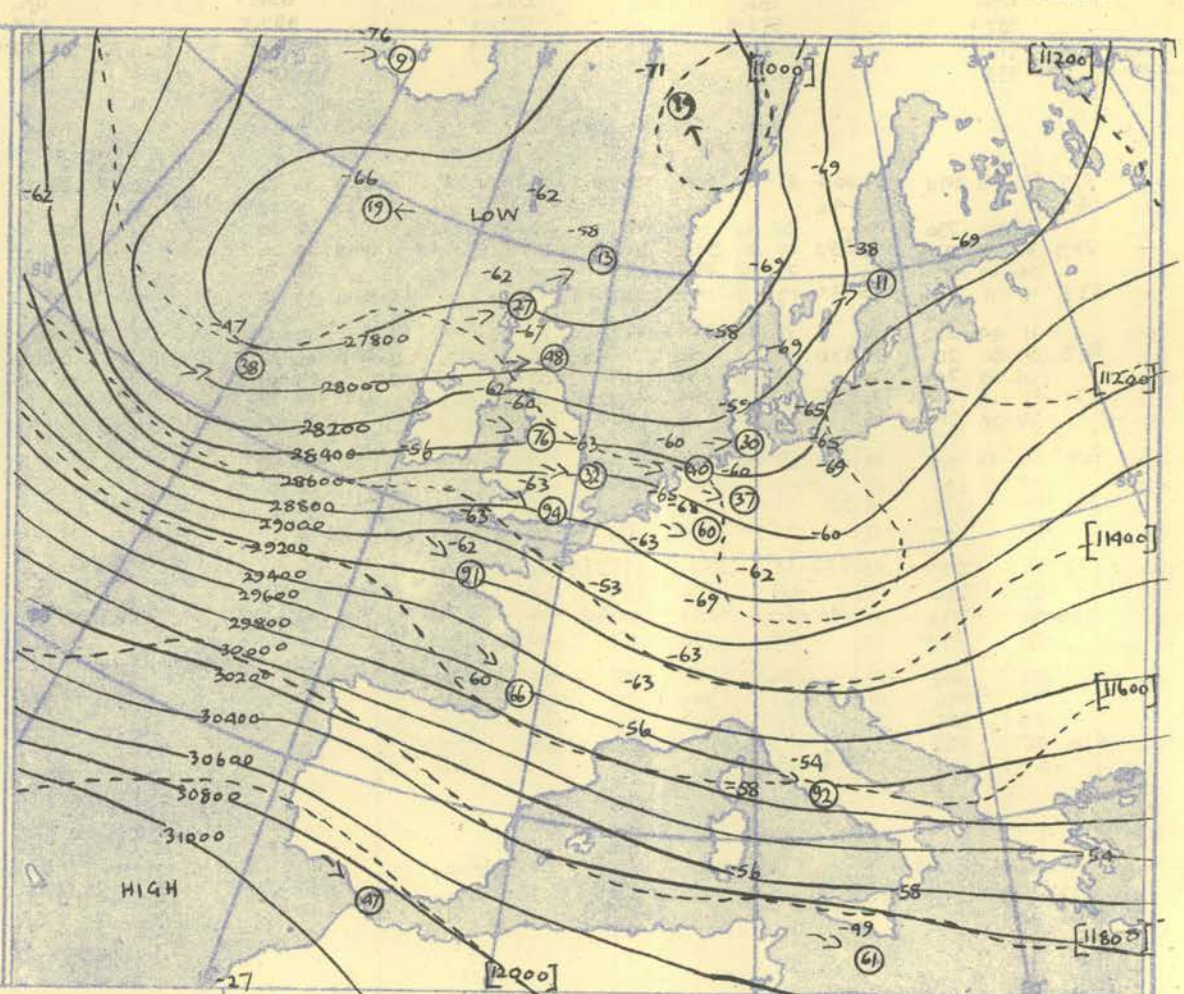
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03 h G.M.T.



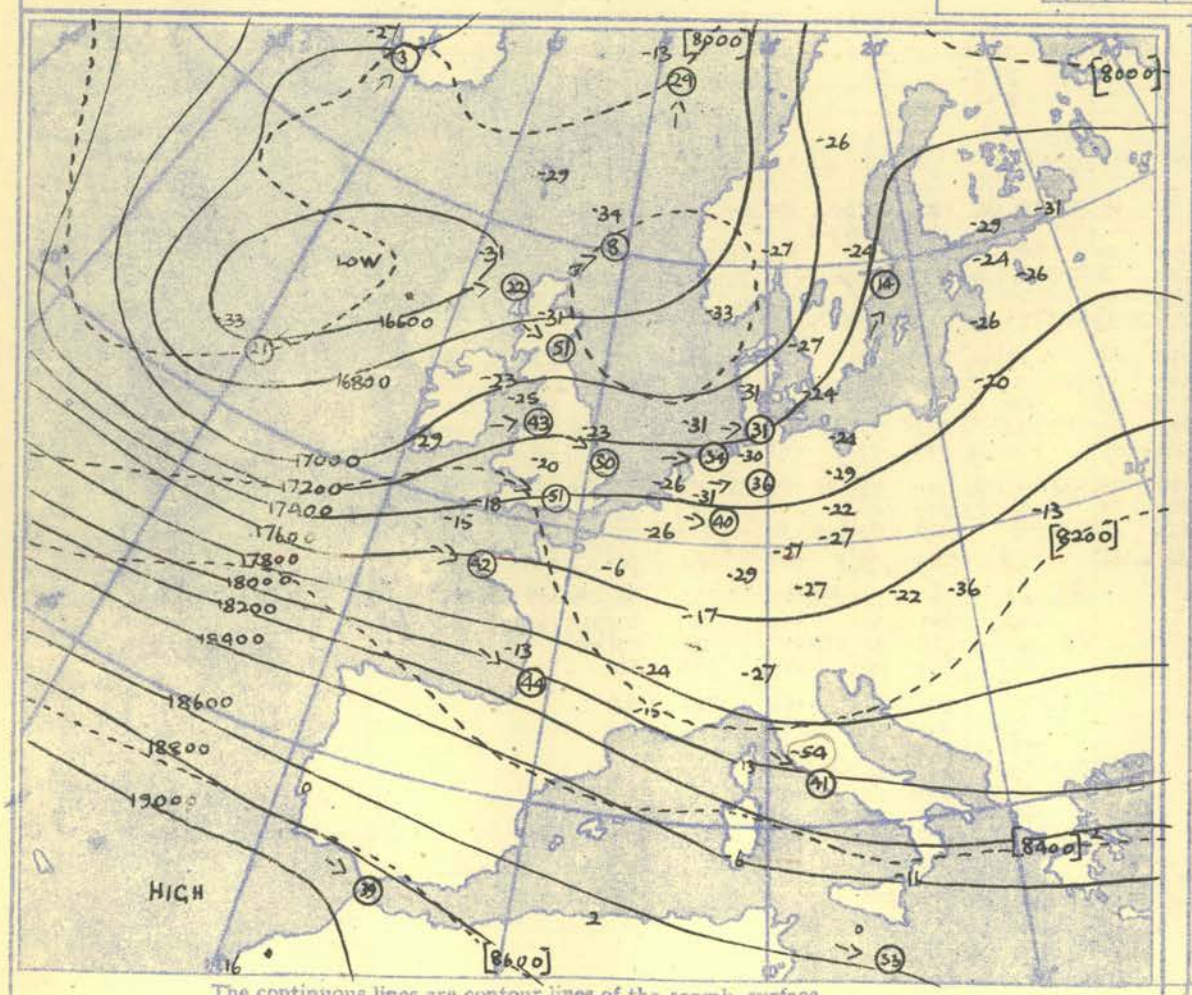
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

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

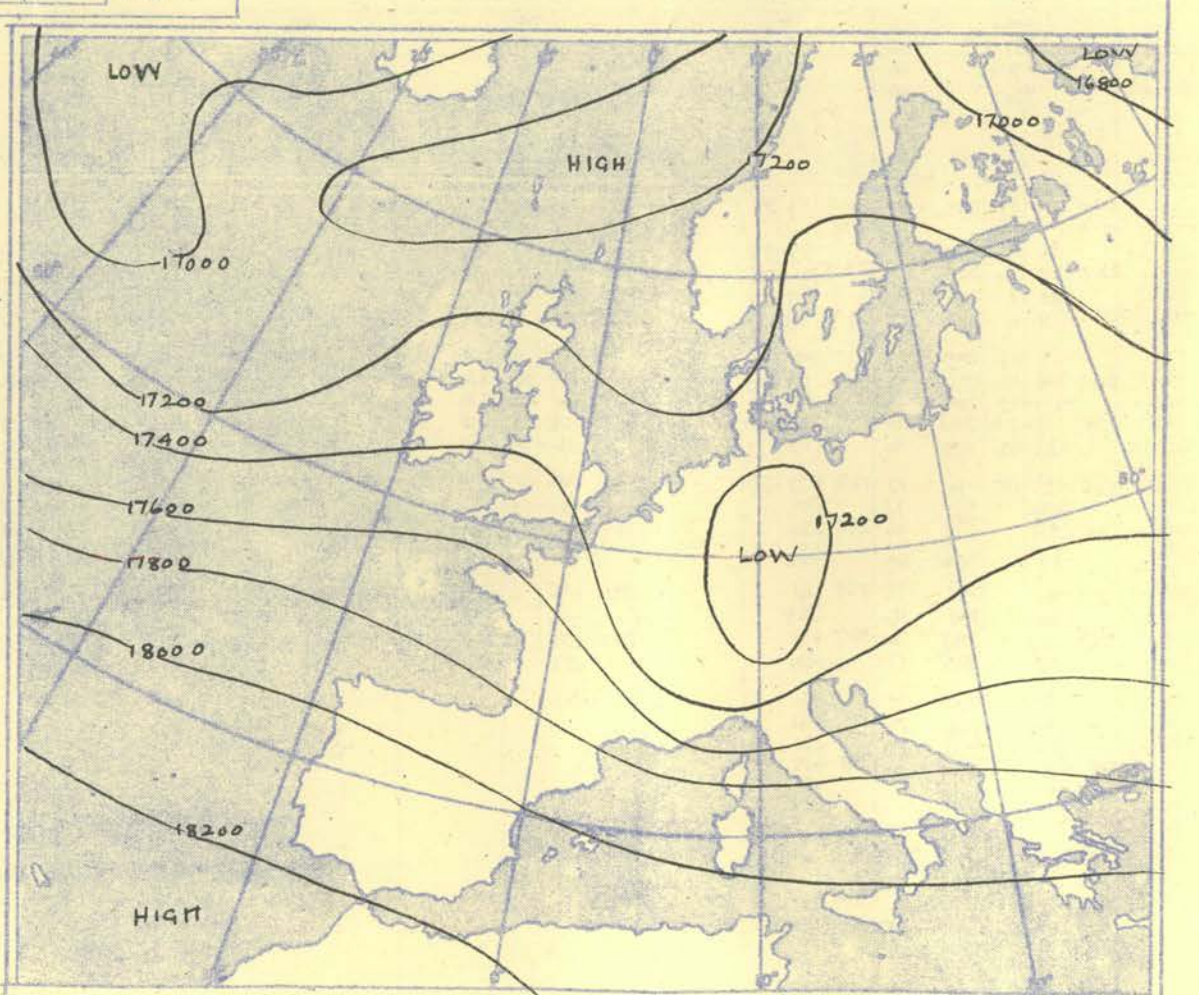
100 50 40 30 20 15 10 knots



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



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



Isopleths of Thickness 500-1000mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	48·1N 17·0W			47·4N 12·2W			51·3N 00·4E		
Time	12h			1315h			1415h		
Pressure M.S.L.	990·7 mb			985·6 mb			990 mb		
Pressure Surf	983·5 mb			982·0 mb			979 mb		
Pressure Freezing	930 mb			890 mb			900 mb		
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.
Surf	02·0	35	31	01·0	45	41	03·1	46	31
1000	-2·6			-3·9			-2·5		
950		33	29		43	40			
900	25·1	30	27	24·3	34	33	25·6	32	28
850		22	20		26	26		25	
800	55·5	17		54·9	20		56·1	17	
750		11			13			13	
700	88·9	08		88·6	07		89·7	04	
650		-11			-02			-03	
600	126·	-16		126	-09		127	-11	
550		-26			-13			-21	
500	168	-38		170	-22		170	-30	
450								-42	
400							220	-55	
350								-60	
300							281	-64	
250									
200									
170									
	cloud:-			Cloud:-			cloud:-		
	5/8 Cu 930-860 mb			7/8 Cu 920-860 mb			7/8 Cu 840-790 mb		
	4/8 Cb 930-4xx mb			3/8 Cb 920-650 mb			1/8 As 650-630 mb		

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

Place	Weather Explorer 52·9N 20·0W		Bally Kelly		Shoeburyness		Leuchars		Downham Market	
Time	03h		09h		10h		21h		22h	
Type							PILAR			
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.			200	12	180	25	260	07	200	09
1,000			240	24	200	40	270	14	250	26
2,000			250	26	200	43	273	14	250	24
3,000			250	31	210	45	278	15	260	23
4,000			240	22	210	47	281	15	260	21
5,000			250	31	210	49	282	15	250	24
6,000			250	34	220	49	271	07	260	25
8,000					220	49	311	03	250	30
10,000					230	40	227	02	250	30
14,000					240	42	184	14	240	36
18,000					250	48	156	12	240	46
24,000					250	68	200	17	230	55
30,000	300	74			260	105	216	19	240	44
40,000	(34,000')				250	45	234	23	240	39
50,000							240	31	240	31
							245	23	250	19
							(53,000)		210	06
									130	10

NEPHOSCOPE OBSERVATIONS

Place	
Time Type	NONE REPORTED.
Dir. Vel.	

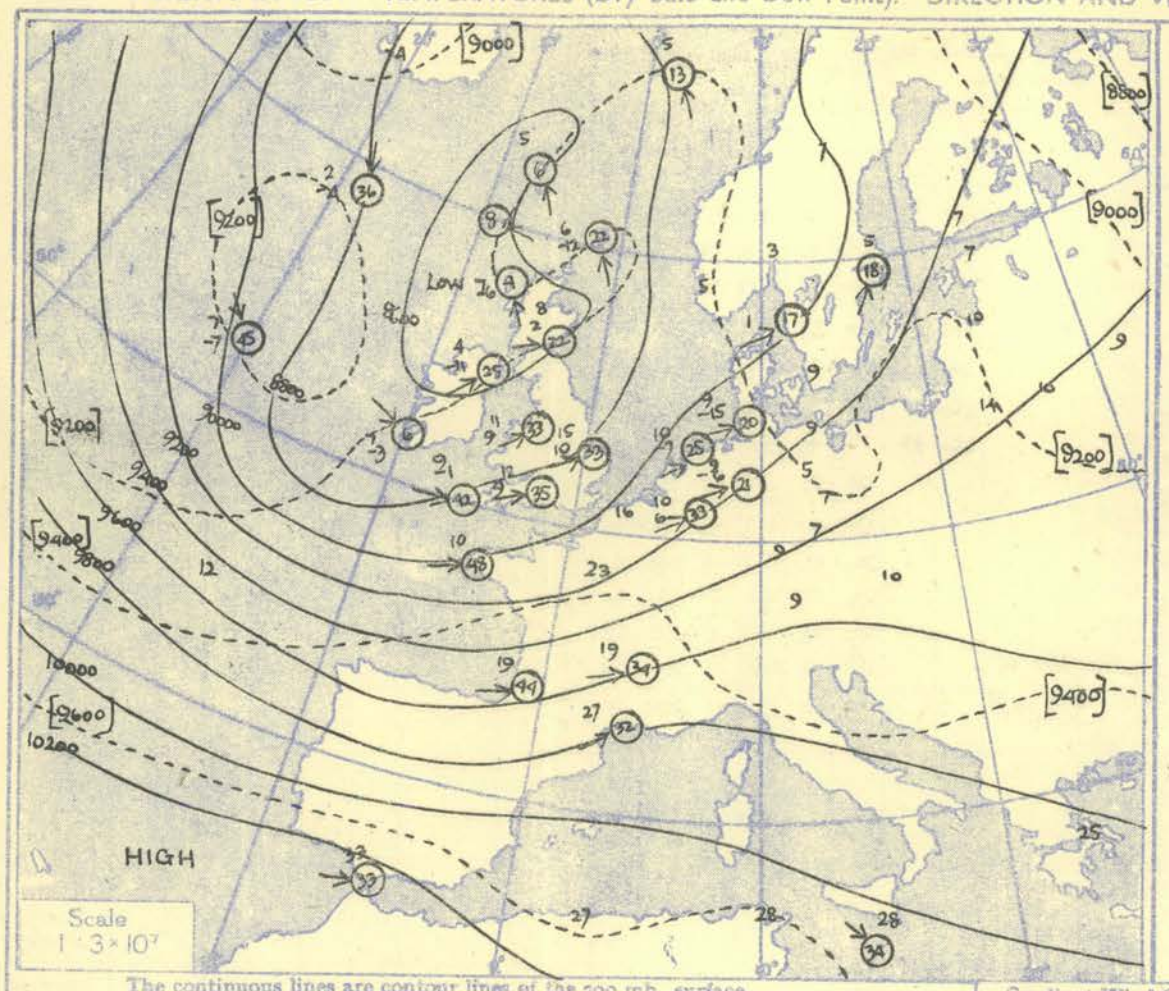
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	WEATHER EXPLORER					WEATHER EXPLORER					WEATHER EXPLORER					WEATHER EXPLORER				
Lat/Long	52·9N 20·0W.					52·8N 20·0W					52·6N. 20·0W					52·7N 20·1W				
Time	03h.				G.M.T.	09h.				G.M.T.	15h.				G.M.T.	21h.				G.M.T.
Pressure M.S.L.	981				mb	985				mb	987				mb	993				mb
Pressure Surf	981				mb	985				mb	987				mb	993				mb
Pressure Freezing	950				mb	925				mb	890				mb					mb
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		35	33	150	06		40	25	340	23		44	37	315	33		45	32	295	26
1000	-4·9					-4·2					-3·6					-20				
950		32	24	157	12		36	23	349	33		41	26	324	54		39	29	309	36
900	227	27	18	178	12	23·7	28	19	342	30	246	33	21	324	58	261	32	26	310	37
850		21	11	195	15		20	14	331	31		27	14	322	53		25	21	312	35
800	529	16	05	201	17	53·9	15	07	326	31	551	19	08	322	52	566	19	12	321	34
750		10	-02	198	17		08	-06	332	24		14	00	322	51		14	03	336	27
700	863	03	-10	213	18	872	01	-09	331	24	888	07	-07	319	45	902	06	-06	338	26
650		-04	-17	236	23		-04	-24	322	25		-01	-13	318	44		-01	-16	330	24
600	124	-14	-28	243	26	125	-13	-29	312	27	127	-09	-22	321	49	127	-10	-24	323	18
550		-23	-38	212	21		-23	-40	298	30		-19	-36	318	48		-19	-32	321	17
500	166	-33	-48	212	25	167	-35	-52	312	34	169	-30	-44	316	45	171	-30	-42	321	18
450		-45		212	29		-44		330	42		-41		319	50		-41		321	22
400	215	-51		212	36	217	-50		345	42	219	-53		315	44	221	-52		321	27
350		-48		212	40		-51		353	35		-59		318	44		-65		321	33
300	279	-47		218	38	279	-47		331	30	281	-58		320	39	281	-66		321	42
250		-48		269	47		-47		290	33		-52		322	41		-57		321	54
200	(225mb)	-46				369	-46		271	40	369	-49		325	37	368	-57		321	43
170							-47		277	52		-50		295	39					
150							-49		288	33		-51		282	44					
130							-53		279	36		-53		285	44					
110							-52		275	38		-54		298	47					
100						520	-56		271	39	520	-55		289	39					
90							-55		260	32		-55		270	38					
80							-56		259	36		-56		263	34					
70							-54		258	27		-55		263	33					
60												-54		257	36					
												-51								
											Isothermal 789 -775 mb 17°									
Tropopause	I 419 mb -52° 20300'					I 397 mb -51° 21,800'					II 367 mb -59° 23,900'					I 397 mb -51° 21,800'				

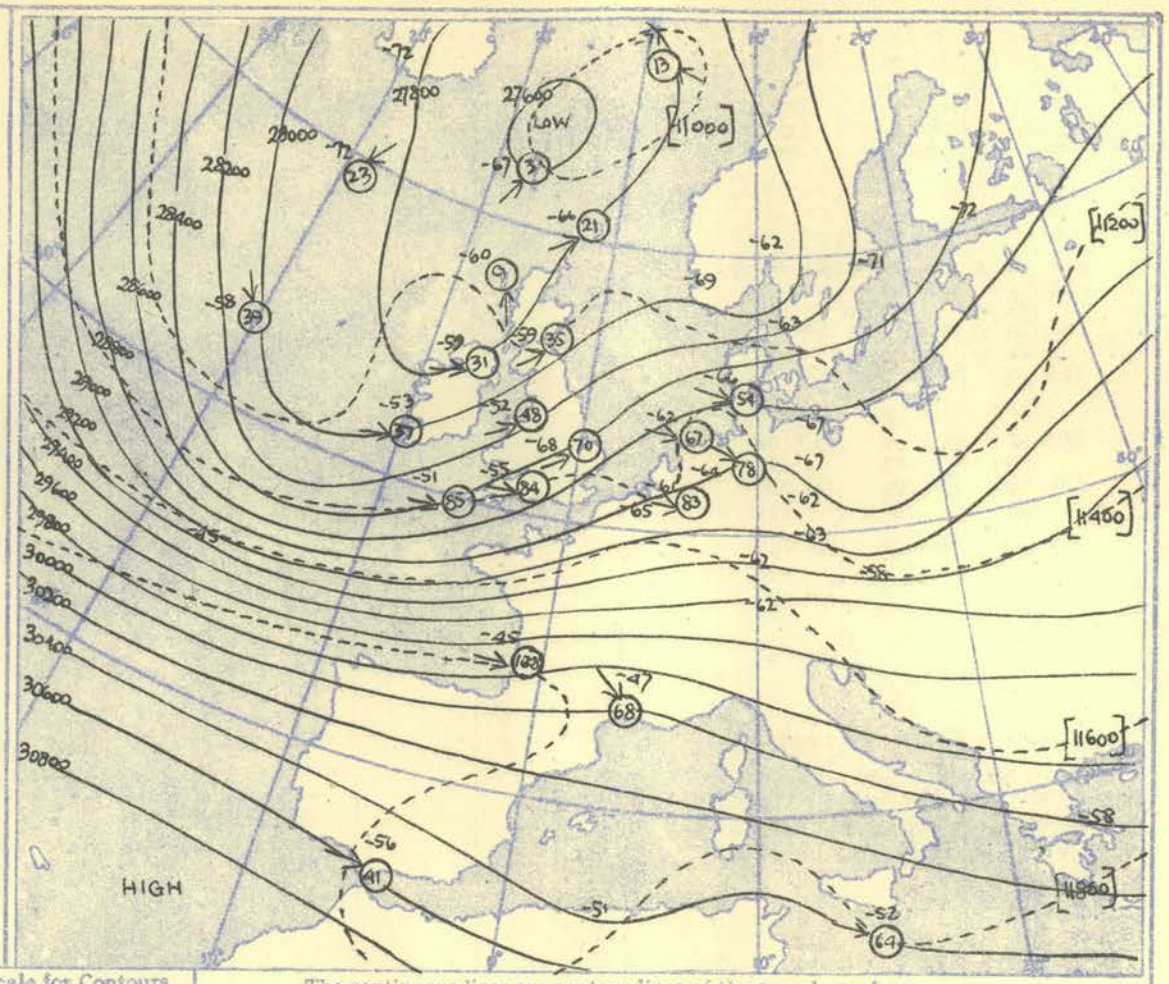
Ship	WEATHER RECORDER					WEATHER RECORDER					WEATHER RECORDER					WEATHER RECORDER				
Lat/Long	58·9N. 18·9W.					59·1N 18·8W					59·1N 18·7W					59·2N 18·8W				
Time	03h.				G.M.T.	09h.				G.M.T.	15h.				G.M.T.	21h.				G.M.T.
Pressure M.S.L.	979				mb	982				mb	986				mb	987				mb
Pressure Surf	979				mb	982				mb	986				mb	987				mb
Pressure Freezing	905				mb	900				mb	930				mb					mb
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		41	41	065	20		40	40	040	25		41	33	010	22		37	31	320	16
1000	-5·8					-4·9					-3·7					-3·4				
950		37	37	051	20		37	28	043	36		35	30	008	21		32	25	319	18
900	22·2	31	31	053	25	232	32	30	042	36	242	28	25	002	22	243	26	21	318	21
850		24	24	055	24		27	26	037	31		21	21	360	24		19	15	314	21
800	527	20	20	066	21	538	20	19	033	27	545	14	14	001	30	544	12	10	310	19
750		13	13	071	23		15	08	039	26		08	05	358	33		06	05	313	19
700	863	06	04	065	22	875	05	-08	040	27	878	02	-04	351	36	876	02	-04	314	21
650		-02	-05	052	21		00	-07	038	24		-04	-12	342	38		-03	-13	305	24
600	124	-11	-16	045	21	125	-08	18	022	13	125	-11	-19	325	32	125	-10	-21	296	27
550		-21	-28	044	23		-17	-27	014	15		-17	-27	325	25		-18	-29	291	18
500	167	-33	-40	042	21	168	-26	-35	012	26	168	-26	-40	352	14	168	-25	-36	261	18
450		-43		048	21		-36	-43	029	20		-37	-49	007	15		-36	-47	246	22
400	216	-53		065	39	219	-46		054	28	218	-49		011	16	219	-47		243	24
350		-63		074	42		-58		050	36		-62		021	17		-60		256	16
300	277	-66		073	19	280	-72		037	32	280	-72		028	23	280	-74		266	13
250		-61		055	06		-64		064	16		-68		006	21		-68		276	17
200	(232mb)	-60				366	-56		287	12	364	-61		346	20	365	-58		306	27
170							-53		298	24		-58		336	30		-58		316	31
150							-50		290	33		-57		330	23		-60		301	33
130							-52		252	27		-56		326	33		-62		290	33
110							-55		249	26		-58		274	36		-63		287	34
100						516	-56		258	27	513	-58		279	30	512	-64		276	34
90							-57		262	40		-58		287	27		-64		279	35
80						(83mb)	-57				(82mb)	-58					-63			
70																				
60																				
Tropopause	I 330 mb -67° 25,600'					I 288 mb -75° 28,900'					I 277 mb -77° 29,700'					I 288 mb -75° 28,900'				

Tuesday 20th. February 1951.

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



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

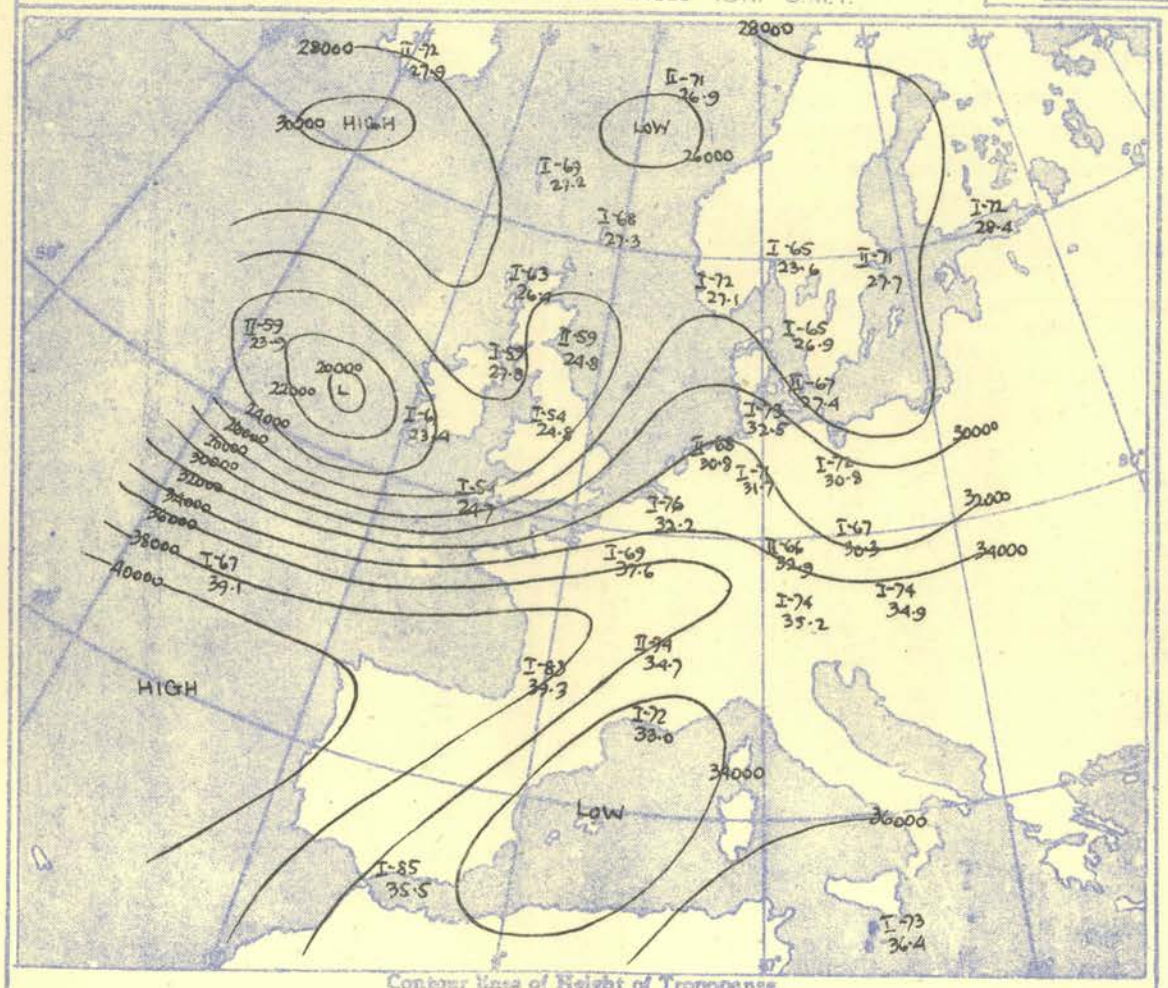


The continuous lines are contour lines of the 300mb. surface
The dotted lines are isopleths of the thickness of the layer 500–300 mb.

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 most marked feature is the considerable warm ridge that formed between longitudes 10° W and 5°E. ahead of a fairly sharp surface polar trough. A certain amount of dynamical warming took place in West Atlantic

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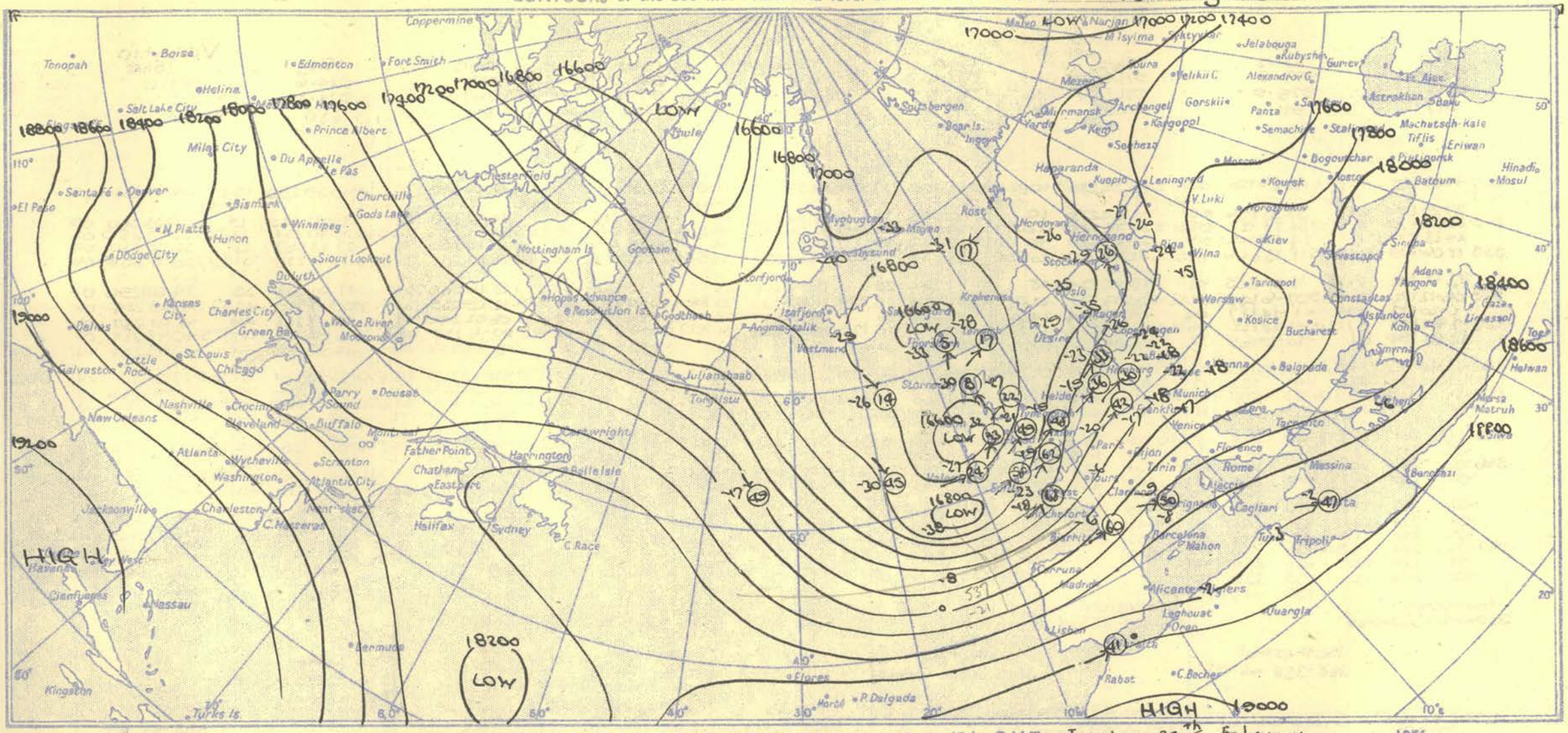
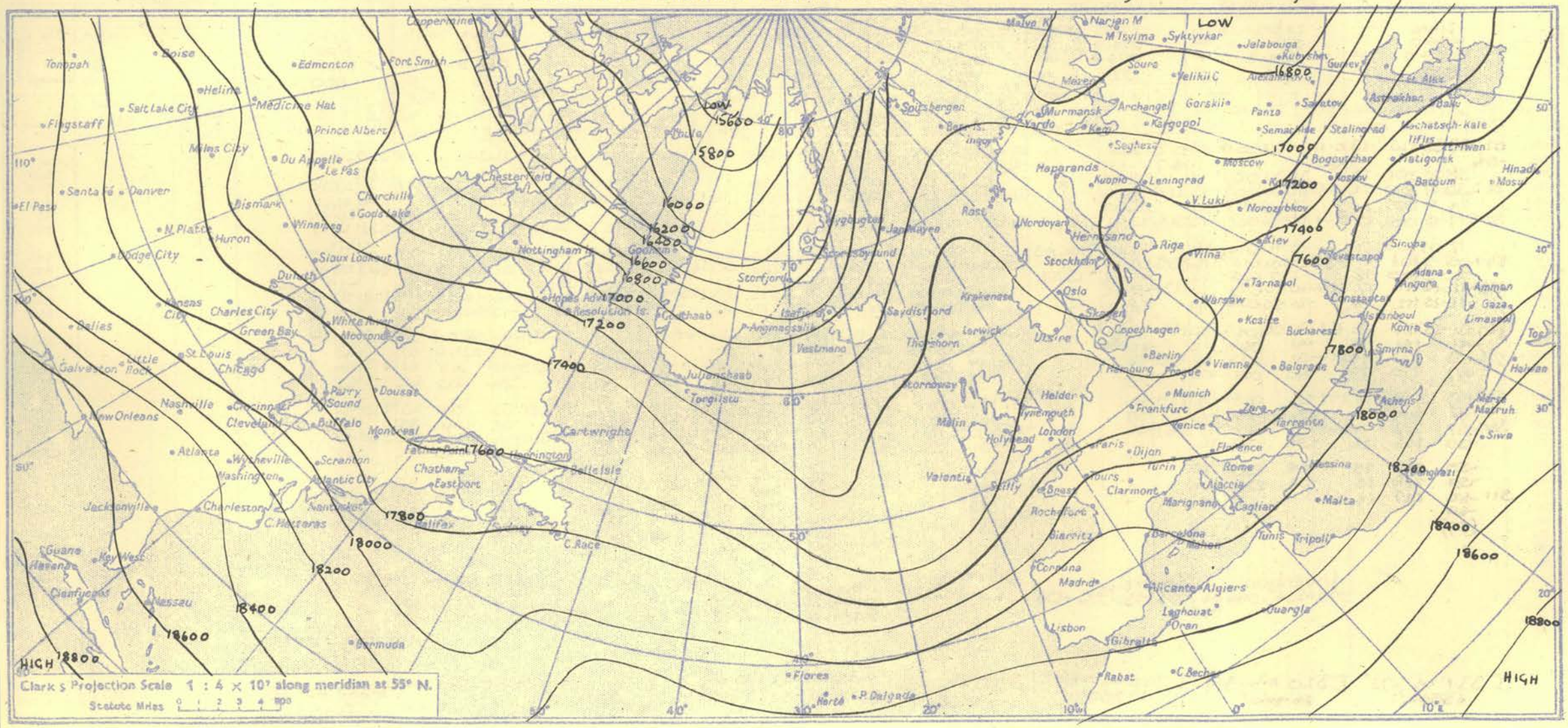
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. February 20th 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Tuesday 20th February 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. 20th February 1951.

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

15 hrs G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	Valentia
Pressure: Time	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.
Pressure: M.S.L.	981.4 mb	977.5 mb	977.6 mb	978.4 mb	978.7 mb	982.3 mb	982.1 mb	984.6 mb	981.0 mb
Pressure: Surf	971.2 mb	975.9 mb	976.7 mb	968.6 mb	976.6 mb	977.8 mb	961.3 mb	974.2 mb	979 mb
Pressure: Freezing	217 mb	211 mb	220 mb	217 mb	900 mb	866 mb	885 mb	880 mb	890 mb

Pressure mb	Lerwick Height ft./100	Lerwick °Temp. °F.	Lerwick Dew °F.	Lerwick Wind Dir. °	Lerwick Wind Vel. knots	Stornoway Height ft./100	Stornoway °Temp. °F.	Stornoway Dew °F.	Stornoway Wind Dir. °	Stornoway Wind Vel. knots	Leuchars Height ft./100	Leuchars °Temp. °F.	Leuchars Dew °F.	Leuchars Wind Dir. °	Leuchars Wind Vel. knots	Aldergrove Height ft./100	Aldergrove °Temp. °F.	Aldergrove Dew °F.	Aldergrove Wind Dir. °	Aldergrove Wind Vel. knots	Liverpool Height ft./100	Liverpool °Temp. °F.	Liverpool Dew °F.	Liverpool Wind Dir. °	Liverpool Wind Vel. knots	Downham Market Height ft./100	Downham Market °Temp. °F.	Downham Market Dew °F.	Downham Market Wind Dir. °	Downham Market Wind Vel. knots	Larkhill Height ft./100	Larkhill °Temp. °F.	Larkhill Dew °F.	Larkhill Wind Dir. °	Larkhill Wind Vel. knots	Camborne Height ft./100	Camborne °Temp. °F.	Camborne Dew °F.	Camborne Wind Dir. °	Camborne Wind Vel. knots	Valentia Height ft./100	Valentia °Temp. °F.	Valentia Dew °F.	Valentia Wind Dir. °	Valentia Wind Vel. knots	Pressure mb
Surf	02.7	40	33	180	13	0.4	40	36	120	05	0.2	38	36	280	10	02.6	39	33	250	12	0.6	41	39	270	12	01.2	45	42	180	12	4.4	42	40	270	07	02.9	45	39	250	15	0.3	44	37	330	05	Surf
1000	+5.1					-6.1					-6.1					-5.3					-5.8					-4.8					-4.6					-4.1					-5.2					1000
950		37	29	186	21		37	33	156	05		36	34	273	10		37	30	245	18		38	36	270	18		41	35	215	30		40	38	236	21		46	41	249	19		40	33	360	09	950
900	22.9	30	28	179	21	21.9	31	28	128	05	21.8	31	28	280	12	22.1	30	24	241	21	22.3	35	31	270	18	23.4	33	31	215	30	23.5	33	31	255	24	24.5	37	30	258	24	23.1	33	27	350	03	900
850		24	18	177	18		24	19	102	06		29	23	291	14		23	15	243	26		28	28	270	15		30	29	246	27		29	25	250	24		27	18	267	28		36	20	330	09	850
800	53.6	18	06	179	18	52.3	18	13	066	05	52.6	22	19	287	20	52.5	18	06	259	23	53.0	24	24	238	18	54.3	24	23	224	30	54.2	23	20	241	28	55.0	23	11	278	31	53.7	20	11	306	06	800
750		13	-2	182	16		12	06	055	01		15	12	234	18		11	-7	232	25		18	17	228	25		19	15	236	38		18	16	240	30		17	02	274	35		14	05	296	07	750
700	86.9	06	-12	173	22	85.9	07	-6	149	04	86.4	08	02	237	22	86.0	04	-11	220	25	87.1	11	09	230	23	88.4	15	10	235	33	88.2	12	09	239	35	88.9	09	-1	270	42	87.2	07	-3	284	06	700
650		-1	-20	177	09		-1	-14	187	04		01	-13	234	24		-5	-17	214	26		04	01	227	28		08	04	222	39		06	02	240	37		02	-8	268	46		-1	-11	247	06	650
600	12.5	-7	-30	198	07	12.4	-11	-18	222	06	12.4	-7	-28	231	21	12.3	-13	-24	220	25	12.5	-4	-7	209	31	12.7	00	-4	217	44	12.7	00	-6	237	45	12.7	-6	-16	266	47	12.8	-10	-18	234	07	600
550		-18	-24	198	08		-20	-23	169	08		-16	-34	235	17		-21	-36	216	31		-13	-17	222	40		-3	-13	218	48		-3	-14	233	56		-14	-25	266	54		-17	-23	241	14	550
500	16.8	-28	-44	233	17	16.6	-30	-39	165	05	16.7	-27	-43	235	22	16.6	-32	-44	204	33	16.9	-21	-26	230	49	17.1	-19	-24	219	48	17.0	-19	-29	229	62	17.0	-25	-35	261	58	16.8	-27	-31	253	24	500
450		-39	-52	235	23		-41		153	07		-38	-62	232	17		-43		215	27		-31	-36	220	63		-29	-35	217	65		-29	-39	222	63		-34	-47	266	66		-37	-42	242	29	450
400	21.8	-52		230	28	21.6	-53		110	08	21.8	-46		212	21	21.6	-45		235	26	22.0	-42		217	69	22.2	-42		217	62	22.1	-41		217	68	22.1	-44		259	70	21.9	-51		236	33	400
350		-61		227	24		-59		146	08		-57		206	26		-54		233	27		-54		224	60		-55		217	67		-53		221	72		-54		265	74		-56		238	26	350
300	27.9	-66		221	21	27.8	-60		165	09	28.0	-59		221	36	27.8	-59		240	31	28.2	-52		228	48	28.4	-48		227	70	28.4	-55		240	84	28.3	-51		254	85	28.0	-53		250	39	300
250		-55		211	21		-56		212	16		-51		225	30		-51		229	33		-48		232	45		-53		247	91		-57		244	72		-51		251	78		-49		256	38	250
200	36.6	-52		230	20	36.5	-51		218	20	36.8	-51		213	28	36.6	-49		232	27	37.1	-48		243	42	37.1	-51		248	48	33.1	-53		262	54	37.2	-52		266	60	36.9	-49		258	44	200
170		-51		219	21		-50		224	24		-52		234	31		-50		240	34		-48		242	36		-53		251	39		-53		253	48		-53		262	53		-47		254	42	170
150		-52		233	21		-50		234	28		-49		237	33		-51		244	31		-48		244	42							-55		252	44		-52		262	49		-47		258	40	150
130		-51		228	21		-51		240	26		-49		256	25		-54		244	26		-49		243	36							-56		251	41		-55		262	48		-49		260	35	130
110		-52		222	21		-53		228	22		-53					-57		240	25		-50		244	31							-57		251	39		-55					-51		256	38	110
100	51.7	-52		217	25	51.6	-53		226	25		(110)					-52					-51		247	29							52.1	-57													100
90		-54		219	24		-51		234	24						51.7	-53		242	32	52.3	-52																									90
80		-52		224	22		-52		239	30							-52					-53																									80
70							-50		215	20												-55																									70
60																						-54																									60
	Inversion 259 mb -61 - 353 mb -60°										Inversion 876 mb 29 - 865 mb 30°											-55																									
						Isothermal 368 - 358 mb -58°										Isothermal 443 - 430 mb -44°					(48) -49																									
																																				Isothermal 974 - 950 mb 45° 667 - 665 mb 4°										
Tropopause	I 308 mb -68° 27300'					I 319 mb -63° 26400'					I 410 mb -48° 21100' II 345 mb -59° 25000'					I 300 mb -59° 27800'					I 350 mb -54° 24800'					I 303 mb -70° 28000'					I 315 mb -58° 23300'					I 355 mb -54° 24700'					I 368 mb -61° 23400'					Tropopause

21 hrs G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne
Pressure: Time	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.
Pressure: M.S.L.	979.0 mb	976.4 mb	974.9 mb	974.8 mb	978.2 mb	979.4 mb	981.9 mb	980.1 mb
Pressure: Surf	969.0 mb	974.8 mb	974.0 mb	965.3 mb	976.1 mb	975.0 mb	968.9 mb	969.6 mb
Pressure: Freezing	922 mb	913 mb	921 mb	939 mb	913 mb	900 mb	886 mb	900 mb

Pressure mb	Lerwick Height ft./100	Lerwick °Temp. °F.	Lerwick Dew °F.	Lerwick Wind Dir. °	Lerwick Wind Vel. knots	Stornoway Height ft./100	Stornoway °Temp. °F.	Stornoway Dew °F.	Stornoway Wind Dir. °	Stornoway Wind Vel. knots	Leuchars Height ft./100	Leuchars °Temp. °F.	Leuchars Dew °F.	Leuchars Wind Dir. °	Leuchars Wind Vel. knots	Aldergrove Height ft./100	Aldergrove °Temp. °F.	Aldergrove Dew °F.	Aldergrove Wind Dir. °	Aldergrove Wind Vel. knots	Liverpool Height ft./100	Liverpool °Temp. °F.	Liverpool Dew °F.	Liverpool Wind Dir. °	Liverpool Wind Vel. knots	Downham Market Height ft./100	Downham Market °Temp. °F.	Downham Market Dew °F.	Downham Market Wind Dir. °	Downham Market Wind Vel. knots	Larkhill Height ft./100	Larkhill °Temp. °F.	Larkhill Dew °F.	Larkhill Wind Dir. °	Larkhill Wind Vel. knots	Camborne Height ft./100	Camborne °Temp. °F.	Camborne Dew °F.	Camborne Wind Dir. °	Camborne Wind Vel. knots	Pressure mb
Surf	02.7	37	35	120	13	0.4	34	32	350	03	0.2	32	31			02.6	35	33	280	12	0.6	37	34	260	10	01.2	36	37	220	11	4.4	36	34	220	08	02.9	38	37			Surf
1000	-5.6					-6.3					-6.7					-6.7					-5.8					-5.5					-4.8					-3.2					1000
950		35	32	101	22		36	32	007	14		33	30				33	30	303	20		37	34	266	17		37	33	260	33		37	33	233	18		37	36			950
900	22.2	30	27	100	22	21.6	30	26	007	13	21.0	30	26			21.1	29	26	298	19	22.1	30	24	272	16	22.8	32	23	266	33	23.2	34	30	229	21	27.6	32	29			900
850		24	21	087	21		24	20	007	12		26	21				24	20	300	22		24	19	279	22		26	18	262	33		27	25	218	25		25	21			850
800	52.5	17	13	089	22	52.1	18	16	008	15	51.6	20	13			51.6	18	13	297	22	52.6	19	06	273	25	53.1	20	09	257	35	53.9	21	18	235	25	53.1	19	17			800
750		12	07	102	22		13	10	014	15		13	02				12	00	306	21		16	03	264	30		14	-3	254	36		14	10	235	27		13	09			750
700	86.1	05	-3	108	21	85.7	06	02	018	16	85.3	07	-10			85.2	04	-11	304	27	86.4	10	-10	268	30	86.9	09	-18	258	36	87.7	08	02	239	30	86.7	06	01			700
650		-3	-9	109	18		-2	-7	025	13		-1	-4				-1	-18	302	29		02	-19	279	27		01	-33	260	33		01	-7	244	34		-1	-7			650
600	12.3	-11	-16	111	17	12.3	-10	-15	021	15	12.3	-9	-12			12.3	-10	-23	302	30	12.4	-7	-24	272	29	12.5	-9	-39	261	41	12.6	-6	-14	236	45	12.4	-10	-17			600
550		-21	-25	112	16		-20	-28	036	19		-18	-20				-20	-33	282	36		-17	-32	271	33		-18	-47	255	48		-15	-30	231	51		-20	-26			550
500	16.7	-31	-35	121	16	16.6	-30	-36	049	20	16.6	-27	-31			16.6	-28	-48	300	26	16.7	-26	-41	272	33	16.8	-26	-54	254	57	16.9	-24	-43	227	54	16.7	-31	-36			500
450		-41		141	18		-41		066	12		-40	-42				-39	-59	306	20		-36	-52	267	41		-38	-58	252	63		-35	-47	226	57		-43				450
400	21.6	-53		153	24	21.6	-52		078	07	21.6	-45				21.6	-46		284	21	21.8	-41		256	32	21.8	-48		249	61	21.9	-49		228	61	21.7	-50				400
350		-67		170	27		-60		031	03		-54					-54		277	24		-51		263	39		-58		241	53		-56		233	62		-55				350
300	27.7	-65		186	18	27.7	-62		028	04	27.9	-61				27.8	-52		266	21	28.1	-53		228	27	28.1	-56		237	50	28.1	-53		236	63	27.9	-54				300
250		-58		200	16		-56		236	06		-58					-60		280	20		-50		236	36		-57		238	50		-58		241	55		-55				250
200	36.2	-57		213	21	36.5	-53		247	18	36.7	-46				36.6	-50		260	24	37.0	-47		240	38	36.7	-54		240	38	37.0	-52		240	54	36.6	-55				200
170		-59		208	22		-54		230	16							-51		250	26		-47		240	36		-55		243	41		-50		249	52		-55				170
150		-59		207	25		-54		230	18							-49		238	31		-48		243	39		-57		245	37		-55		247	36		-58				150
130		-59		226	25		-54		235	21							-51					-49		248	30		-58		249	28		-55		250	41		-55				130
110	51.1	-62		227	24												-53					-50		241	33		-63		246	28		-56		261	32		-61				110
100		-60															-55					-52		238	38	51.6	-64		236	30		-60		262	31	51.5	-66				100
90		(57)															-58					-51		242	23		-64		246	27		-64									90
80																						-53		248	24																	80
70																																												70
60																																												60
						Inversion 375 - 334 - 356 mb 37°					Inversion 374 mb 32 - 333 mb 33°											Inversion 376 mb 37 - 359 mb 38° 348 mb 51 - 321 mb 45°										Inversion 366 mb 36 - 357 mb 39° 360 mb 56° - 336 mb - 52°											
Tropopause	I 331 mb -73° 25500'					I 320 mb -64° 26400'					I 300 mb -61° 27850'					I 322 mb -56° 26400'					I 348 mb -51° 24900' I 297 mb -54° 28300'					I 350 mb -58° 24700'					I 360 mb -58° 23900' I 316 mb -56° 26600'					I 385 mb -60° 22400'					Tropopause

H.M.S.O. Press, M.O., Dunstable.

No. 11651 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Wednesday 21st February 1951.

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

LERWICK

Pressure	03L	G.M.T.
Time		
M.S.L.	972·8	mb
Surf	9627	mb
Freezing	900	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·7	36	36	080	33
1000	-7·4				
950		35	35	067	33
900	20·5	32	32	088	33
850		27	27	108	36
800	51·3	21	20	110	27
750		16	14	116	25
700	85·1	10	06	126	24
650		02	-04	127	21
600	123	-06	-15	131	18
550		-16	-27	128	18
500	166	-26	-36	102	21
450		-37	-46	087	25
400	216	-50		101	26
350		-61		149	24
300	278	-67		155	19
250		-61		161	17
200	364	-57		204	19
170		-57		204	18
150		-57		210	23
130		-56		222	24
110		-57			
100	(120mb)				
90					
80					
70					
60					

Inversion. 976 mb 35° - 960 mb 37°

Tropopause: I 300 mb -67° 27,800'

STORNOWAY

Pressure	03L	G.M.T.
Time		
M.S.L.	977·4	mb
Surf	975·8	mb
Freezing	919	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·4	35	33	340	03
1000	-5·8				
950		36	32	356	21
900	22·1	30	27	016	29
850		25	22	020	21
800	52·5	19	17	024	17
750		14	11	022	15
700	86·2	07	04	025	16
650		-01	-04	025	16
600	124	-10	-13	023	16
550		-18	-22	023	19
500	167	-30	-33	036	20
450		-41		045	15
400	216	-52		039	14
350		-60		072	10
300	278	-61		332	08
250		-56		315	07
200	365	-54		253	09
170		-53		251	17
150		-53		254	14
130		-56		247	22
110		-54		250	20
100	515	-54		220	21
90		-55		230	21
80					
70					
60					

Inversion. 978 mb 35° - 944 mb 38°

Tropopause: II 336 mb -63° 25,300'

LEUCHARS

Pressure	03L	G.M.T.
Time		
M.S.L.	974·7	mb
Surf	973·8	mb
Freezing	921	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·2	32	30	240	10
1000	-6·8				
950		33	30	289	15
900	20·8	30	25	308	15
850		27	20	310	12
800	51·4	21	11	297	12
750		15	02	293	12
700	85·2	09	-08	298	08
650		02	-09	004	05
600	123	-08	-14	007	04
550		-17	-24	358	03
500	166	-28	-34	037	05
450		-40	-47	111	05
400	216	-46		134	09
350		-53		130	08
300	278	-61		212	06
250		-54		262	12
200	366	-51		235	14
170		-52		232	19
150		-52		236	27
130		-52		234	25
110		-54		238	25
100	517	-55			
90					
80					
70					
60					

Inversion. 974 mb 32° - 939 mb 33°

Tropopause: I 298 mb -62° 27,900'

ALDERGROVE

Pressure	03L	G.M.T.
Time		
M.S.L.	979·2	mb
Surf	969·3	mb
Freezing	940	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·6	34	32	270	10
1000	-5·7				
950		33	29	299	19
900	22·1	30	23	307	20
850		24	18	316	22
800	52·6	18	14	318	24
750		14	06	321	25
700	86·3	08	-03	323	28
650		00	-18	325	27
600	124	-09	-20	325	30
550		-19	-28	320	31
500	167	-30	-38	317	35
450		-40	-49	317	39
400	217	-52		321	34
350		-59		320	23
300	279	-64		301	19
250		-55		298	21
200	366	-54		282	18
170		-54		274	21
150		-54		268	21
130		-55		258	20
110		-60		264	26
100	515	-60			
90		-60			
80					
70					
60					

Isothermal. 820- 785 mb 18°

Tropopause: I 330 mb -63° 25,800'

LIVERPOOL

Pressure	03L	G.M.T.
Time		
M.S.L.	977·1	mb
Surf	975·0	mb
Freezing	911	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·6	38	34	250	18
1000	-6·2				
950		37	33	255	27
900	21·9	31	29	271	31
850		24	22	274	33
800	52·3	18	15	278	34
750		11	04	278	35
700	85·7	04	-13	277	38
650		-04	-24	276	38
600	123	-12	-32	272	42
550		-21	-39	267	45
500	166	-31	-49	265	47
450		-42		261	44
400	216	-50		257	34
350		-57		259	29
300	278	-57		261	25
250		-51		245	24
200	366	-50		264	30
170		-50		238	23
150		-52		239	30
130		-54		254	30
110		-55		251	27
100	516	-55		251	23
90		-58		246	23
80		-60		245	25
70		-60			
60					

Inversion. 975 mb 38°- 969 mb 39°

Tropopause: II 365 mb -56° 23,500'; I 213 " -58° 26,800'

DOWNHAM MARKET

Pressure	03L	G.M.T.
Time		
M.S.L.	978·9	mb
Surf	974·2	mb
Freezing	900	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	1·2	34	31	200	06
1000	-5·7				
950		36	31	277	17
900	22·1	32	24	267	15
850		26	18	249	16
800	52·6	21	09	247	14
750		16	-24	266	13
700	86·5	09	-29	278	16
650		00	-33	274	16
600	124	-09	-27	251	24
550		-16	-26	224	24
500	167	-26	-34	223	29
450		-39	-47	217	30
400	217	-52		217	31
350		-64		220	32
300	279	-58		236	29
250		-52		238	37
200	367	-50		234	35
170		-50		240	37
150		-51		242	35
130		-53		241	29
110		-51		250	29
100	517	-58		248	29
90		-59		254	27
80					
70					
60					

Inversion. 974 mb 34°- 944 mb 37°

Tropopause: I 355 mb -65° 24,300'

LARKHILL

Pressure	03L	G.M.T.
Time		
M.S.L.	980·3	mb
Surf	969·2	mb
Freezing	922	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·4	33	32	310	09
1000	-5·2				
950		33	31	314	22
900	22·6	30	25	316	22
850		25	12	318	22
800	53·2	20	-01	319	22
750		14	-09	321	24
700	86·9	06	-15	319	24
650		-02	-11	305	21
600	125	-09	-13	297	21
550		-18	-21	280	20
500	167	-28	-35	283	21
450		-40	-49	264	17
400	217	-53		255	17
350		-62		265	23
300	280	-53		254	31
250		-51		251	37
200	363	-50		253	41
170		-52		249	41
150		-52		259	38
130		-54		262	36
110		-56		253	31
100		-57			
90	(106mb)				
80					
70					
60					

Inversion. 964 mb 33° - 940 mb 34°

Tropopause: I 373 mb -61° 23,200'

CAMBORNE

Pressure	03L	G.M.T.
Time		
M.S.L.	987·4	mb
Surf	976·8	mb
Freezing	900	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·9	40	29	290	15
1000	-3·4				
950		38	27		
900	24·6	32	22		
850		24	09		
800	55·1	20	-09		
750		12	-17		
700	88·7	05	-25		
650		-02	-21		
600	126	-10	-23		
550		-19	-30		
500	169	-28	-40		
450		-42			
400	219	-55			
350		-66			
300	280	-58			
250		-53			
200	368	-52			
170		-53			
150		-54			
130		-57			
110		-60			
100	517	-60			
90		-62			
80		-63			
70		-65			
60		-65			

Tropopause: I 350 mb -66° 24,600'

VALENTIA

Pressure	03	G.M.T.
Time		
M.S.L.	987·6	mb
Surf	986	mb
Freezing	890	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·3	41	36		
1000	-3·4				
950		39	35		
900	24·7	33	29		
850		27	23		
800	55·0	23	19		
750		17	09		
700	88·9	11	-03		
650		03	-11		
600	127	-06	-18		
550		-16	-28		
500	170	-27	-41		
450		-39	-51		
400	220	-53			
350		-64			
300	287	-64			
250		-58			
200		-56			
170	(226mb)				
150					
130					
110					
100					
90					
80					
70					
60					

Tropopause: I 359 mb -65° 24,100'

LERWICK

Pressure	09L	G.M.T.
Time		
M.S.L.	974·9	mb
Surf	965·0	mb
Freezing	922	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·7	37	36	090	25
1000	-6·8				
950		35	35	086	30
900	20·9	30	30	089	32
850		25	24	093	34
800	51·3	20	19	104	24
750		15	13	093	21
700	85·1	10	06	054	25
650		05	+02	054	29
600	123	-04	-10	065	27
550		-13	-18	071	22
500	167	-23	-27	076	17
450		-33	-38	112	22
400	217	-45		120	34
350		-59		125	42
300	279	-72		139	33
250		-61		165	10
200	365	-58		186	12
170		-56		204	14
150		-55		212	17
130		-54		215	18
110		-56		224	19
100	514	-57			
90					
80					
70					
60					

Tropopause: I 281 mb -78° 29,200'

STORNOWAY

Pressure	09L	G.M.T.
Time		
M.S.L.	979·4	mb
Surf	977·8	mb
Freezing	900	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·4	35	34		
1000	-5·5				
950		37	33		
900	22·5	32	27		
850		26	22		
800	53·0	19	17		
750		13	09		
700	86·6	07	00		
650		00	-10		
600	124	-08	-18		
550		-17	-27		
500	167	-27	-38		
450		-38	-48		
400	218	-50			
350		-61			
300	279	-64			
250		-59			
200	366	-54			
170		-53			
150		-51			
130		-53			
110		-56			
100	516	-56			
90		-55			
80		-54			
70		-52			
60					

Inversion. 978 mb 35° - 944 mb 38°

Tropopause: I 309 mb -65° 27,200'

LEUCHARS

Pressure	09L	G.M.T.
Time		
M.S.L.	976·4	mb
Surf	975·5	mb
Freezing	915	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·2	34	30	250	14
1000	-6·4				
950		33	30	312	21
900	21·4	30	25	322	19
850		24	21	337	22
800	51·9	19	17	335	26
750		14	12	335	24
700	85·6	07	04	332	20
650		00	-03	336	20
600	123	-09	-13	337	21
550		-18	-23	335	22
500	166	-28	-34	343	23
450		-40	-46	356	22
400	216	-51		346	25
350		-56		343	13
300	278	-62		353	12
250		-57		282	12
200	365	-54		268	12
170		-53		246	13
150		-53		270	14
130		-52			
110					
100					
90					
80					
70					
60					

Isothermal. 954- 920 mb 33°

Tropopause: I 317 mb -62° 26,700'

ALDERGROVE

Pressure	09L	G.M.T.
Time		
M.S.L.	982·6	mb
Surf	973·9	mb
Freezing	932	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·6	35	34	300	10
1000	-4·5				
950		33	31	309	27
900	23·4	31	29	308	27
850		26	24	311	28
800	53·9	20	18	314	31
750		15	13	317	31
700	87·7	07	02	325	33
650		01	-08	325	31
600	126	-06	-16	333	31
550		-16	-27	336	31
500	169	-27	-39	327	31
450		-39	-50	323	36
400	219	-46		330	39
350		-57		326	37
300	281	-59		318	31
250		-53		310	24
200	369	-49		291	26
170		-48		290	26
150		-49		288	27
130		-50		298	30
110		-50		285	37
100	522	-54		274	30
90					
80					
70					
60					

Isothermal. 932- 888 mb 30°

Tropopause: I 332 mb -60° 25,500'

LIVERPOOL

Pressure	09L	G.M.T.
Time		
M.S.L.	981·6	mb
Surf	979·5	mb
Freezing	910	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·6	38	33	260	15
1000	-4·9				
950		37	30	269	27
900	23·0	31	26	286	26
850		24	20	293	25
800	53·4	18	14	297	27
750		11	06	295	30
700	87·0	05	-02	295	35
650		-02	-09	297	40
600	126	-11	-18	297	38
550		-20	-27	299	36
500	167	-31	-39	305	36
450		-41		305	37
400	217	-48		303	36
350		-55		305	30
300	279	-57		296	28
250		-48		279	18
200	368	-50		280	33
170		-46		277	26
150		-42		274	22
130		-47		277	19
110		-49		270	30
100	520	-50		266	33
90		-49		265	21
80		-47		264	18
70					
60					

Isothermal. 979 - 955 mb 38°

Tropopause: I 321 mb -57° 26,500'

DOWNHAM MARKET

Pressure	09L	G.M.T.
Time		
M.S.L.	983·6	mb
Surf	977·9	mb
Freezing	932	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	1·2	35	31	225	13
1000	-4·7				
950		35	31	251	31
900	23·0	29	25	281	36
850		23	18	289	45
800	53·3	17	10	289	44
750		12	-01	289	39
700	86·9	06	-09	282	43
650		-02	-18	280	43
600	125	-14	-30	275	43
550		-26	-39	272	45
500	167	-38	-50	270	44
450		-51		267	40
400	215	-65		263	45
350		-71		272	35
300	278	-73		266	25
250		-65		251	28
200					
170					
150					
130					
110					
100					
90					
80					
70					
60					

Inversion. 355 mb -72° 340 mb -69°

Isothermal. 978 - 950 mb 35°

Tropopause: I 305 mb -74° 27,100'

LARKHILL

Pressure	09L	G.M.T.
Time		
M.S.L.	987·0	mb
Surf	970·8	mb
Freezing	918	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·4	38	31	270	07
1000	-3·4				
950		35	32	258	24
900	24·3	30	26	274	31
850		23	18	279	39
800	54·6	16	14	281	40
750		13	05	284	36
700	88·3	07	-07	282	34
650		00	-14	270	35
600	126	-09	-24	266	32
550		-19	-33	260	29
500	169	-30	-43	256	30
450		-41		254	32
400	219	-52		262	30
350		-64		269	33
300	280	-57		280	39
250		-53		272	36
200	368	-49		273	36
170		-49		264	36
150		-50		273	36
130		-52		274	33
110		-53		265	27
100	519	-53		260	24
90					
80					
70					
60					

Inversion. 971 mb 33° - 950 mb 35°

Tropopause: I 344 mb -66° 25,400'

CAMBORNE

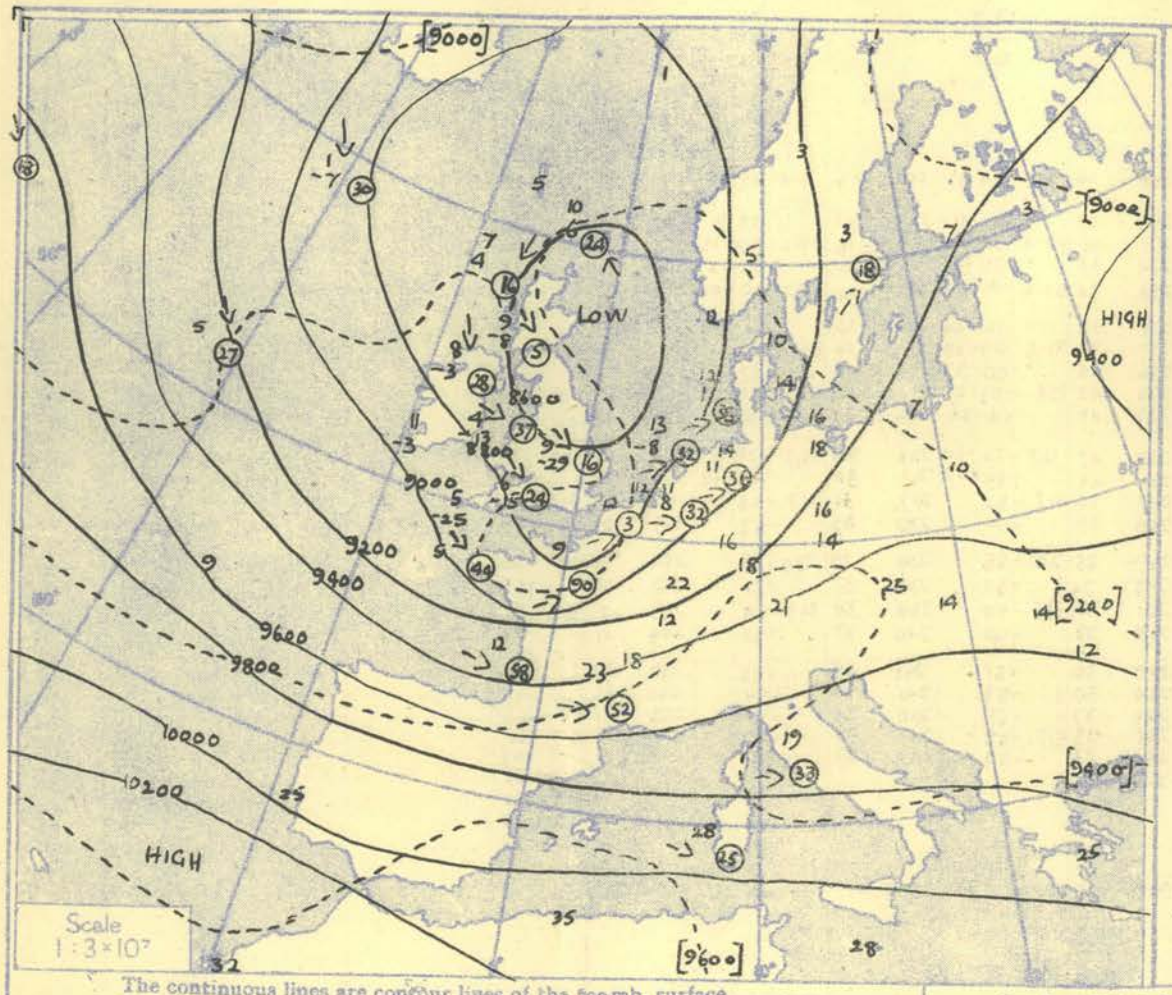
Pressure	09L	G.M.T.
Time		
M.S.L.	991·5	mb
Surf	980·9	mb
Freezing	905	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	2·9	40	37	260	18
1000	-2·3				
950		37	30	264	30
900	25·7	31	23	275	27
850		24	11	291	24
800	56·2	17	-01	294	26
750		10	-08	297	35
700	89·7	04	-16	304	35
650		-04	-23	30)	32
600	(27)	-12	-32	312	31
550		-21	-43	315	31
500	170	-33	-54	315	31
450		-43		327	40
400	219	-52		322	45
350		-58		308	45
300	281	-60		296	42
250		-56		293	40
200	368	-52		283	48
170		-54		286	45
150		-55		284	48
130		-54		284	40
110		-53		289	39
100	518	-58		285	36
90		-62		282	34
80		-62			
70	(84 mb)				
60					

Tropopause: II 357 mb -58° 24,300'

Wednesday 21st February. 1951.

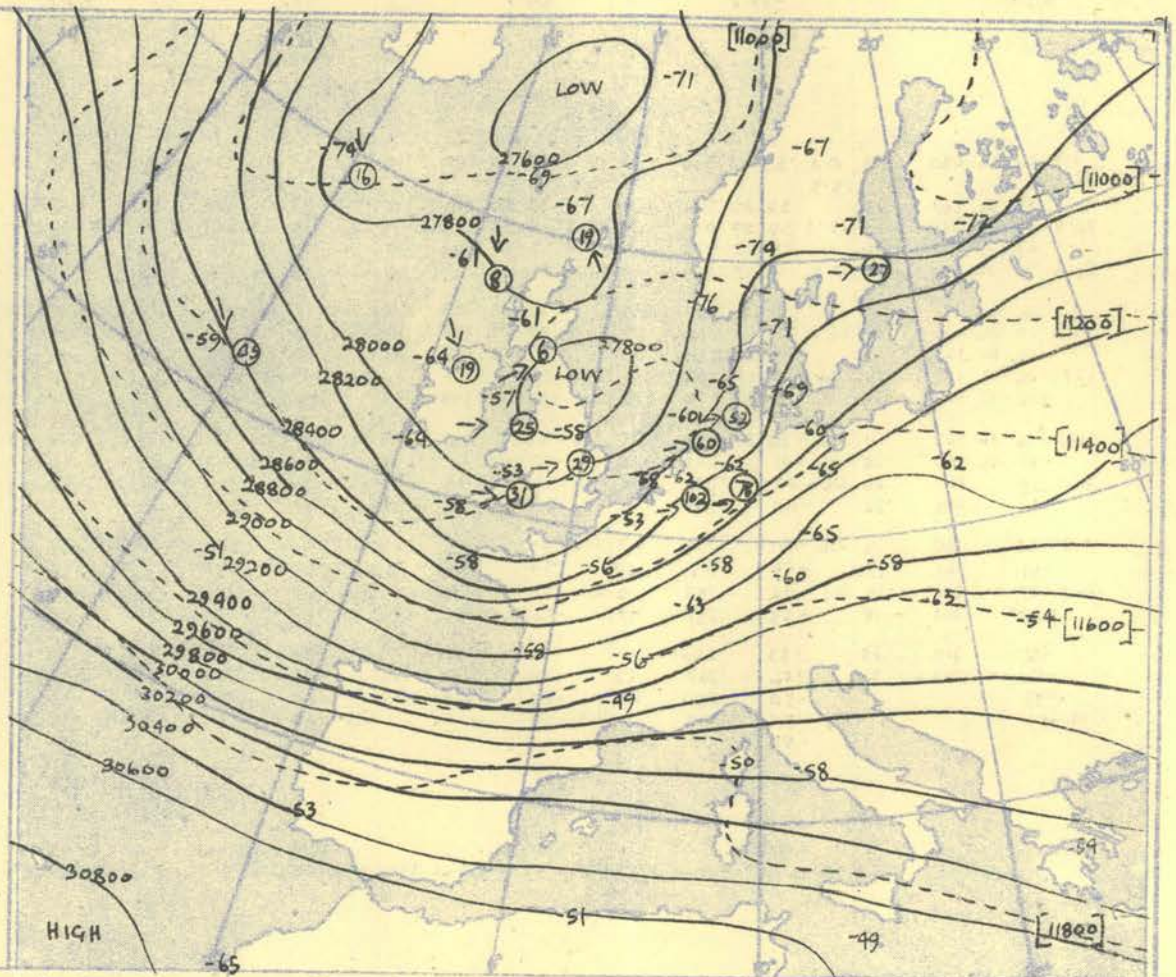
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03h G.M.T.



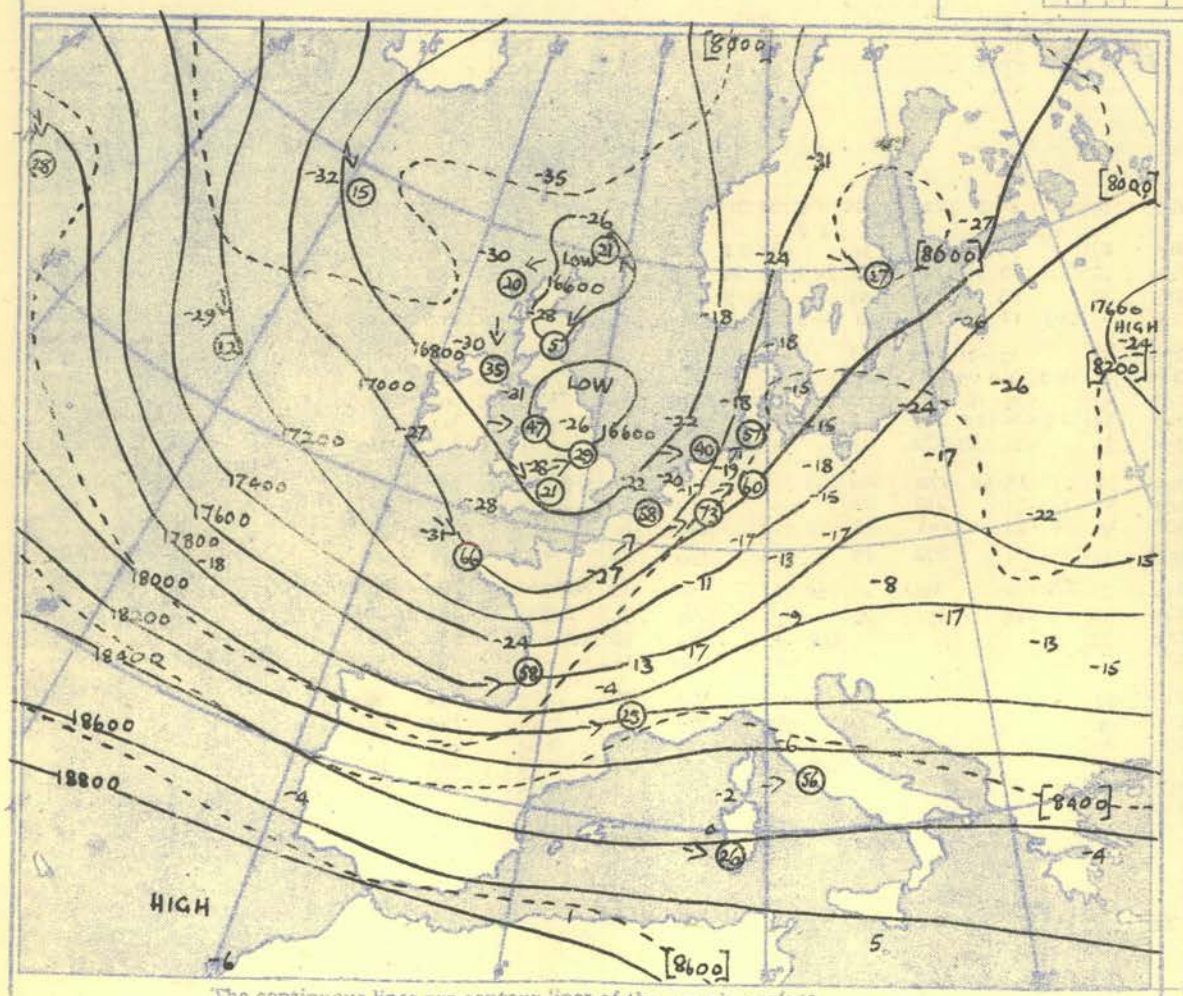
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000 — 700 mb.

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

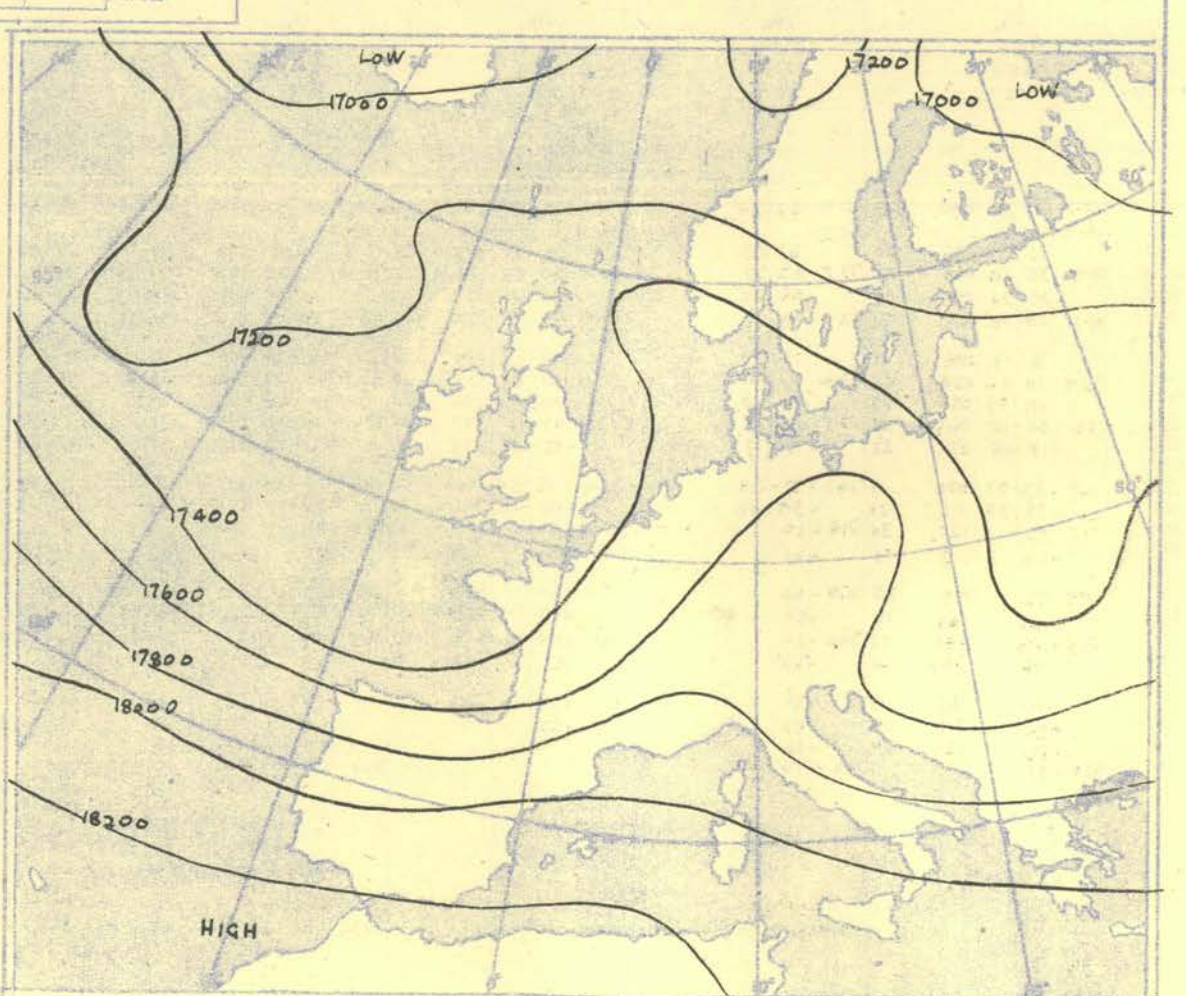
100 60 40 30 20 15 0 knots



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 500mb. 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

NON REPORTED.

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

Place	St Eval.	Shoebury	W. Recorder 59·1N 19·0W											
Time	09h.	11h.	15h.											
Type														
Feet	Dir. Vel.	Dir. Vel.	Dir. Vel.											
Surf.	270 13	250 18	300 30											Surf.
1,000	270 25	260 30	320 37											1,000
2,000	270 38	270 31	320 39											2,000
3,000	260 28	280 32	330 40											3,000
4,000	270 23	280 30	330 40											4,000
5,000	270 29	270 36	330 38											5,000
6,000		270 36	330 34											6,000
8,000		270 35	330 30											8,000
10,000		280 41	330 29											10,000
14,000		260 45	340 22											14,000
18,000		270 44	340 21											18,000
24,000		260 42	330 26											24,000
30,000		270 31	320 33											30,000
40,000		250 32	300 35											40,000
50,000		260 34	300 40											50,000
		280 31 (57·000)	(48·000)											

NEPHOSCOPE OBSERVATIONS

Place	
Time Type	NON REPORTED.
Dir. Vel.	

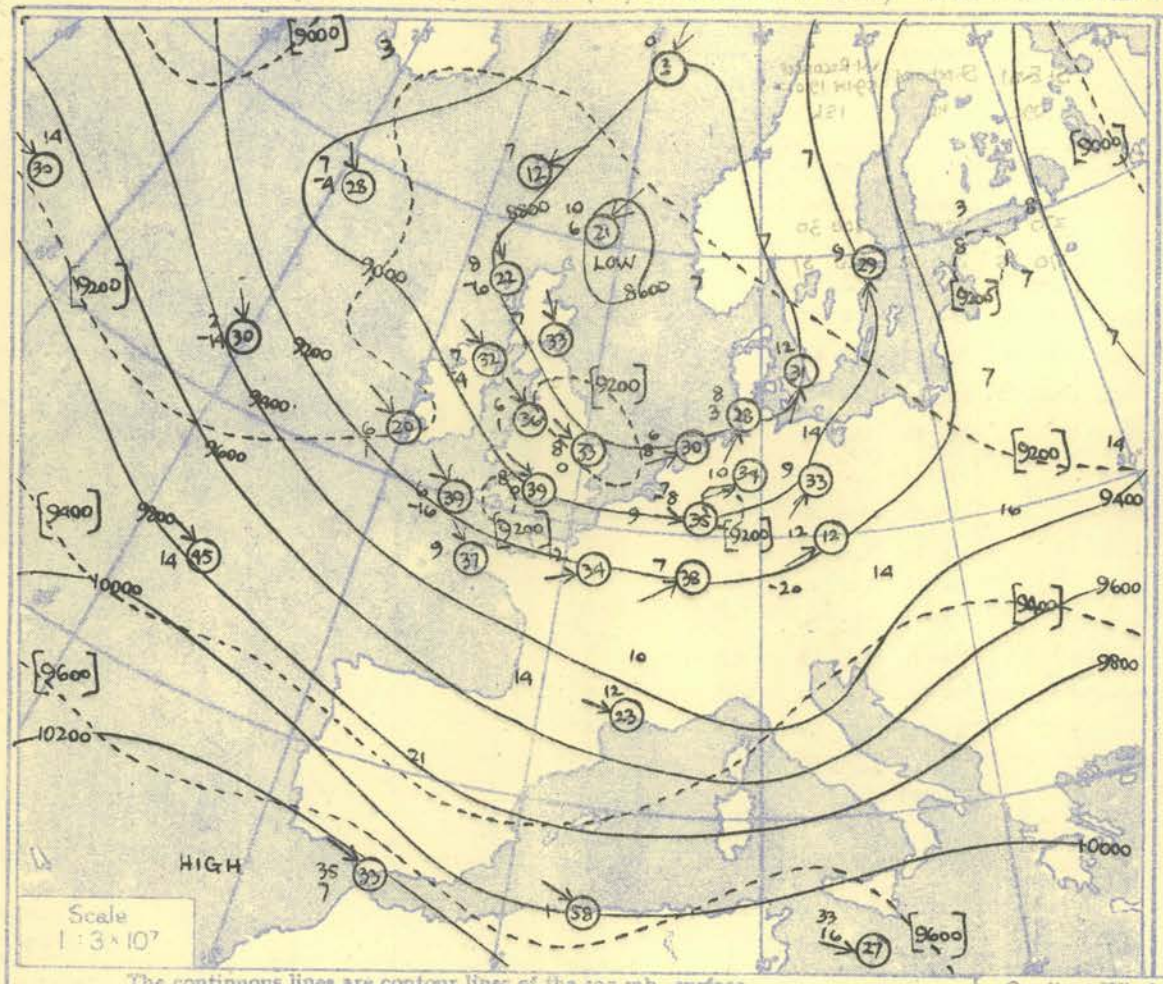
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	WEATHER RECORDER	WEATHER RECORDER	WEATHER RECORDER	WEATHER RECORDER	WEATHER EXPLORER	WEATHER EXPLORER	WEATHER EXPLORER	WEATHER EXPLORER
Lat/Long	59·1 N 18·9 W.	59·1 N 18·9W	59·1 N 19·0W	59·2 N. 19·3W	52·6N 20·0W	52·5N 20·0W	52·3 N 19·9W	52·5N 20·0W
Time	03h. G.M.T.	09h. G.M.T.	15h. G.M.T.	21h. G.M.T.	03h. G.M.T.	09h. G.M.T.	15h G.M.T.	21h. G.M.T.
Pressure M.S.L.	988 mb	989 mb	993·3 mb	994·3 mb	996 mb	1002 mb	1007 mb	1009 mb
Pressure Surf	988 mb	989 mb	992 mb	994 mb	996 mb	1002 mb	1007 mb	1009 mb
Pressure Freezing	945 mb	930 mb	950 mb	920 mb	900 mb	920 mb	930 mb	920 mb

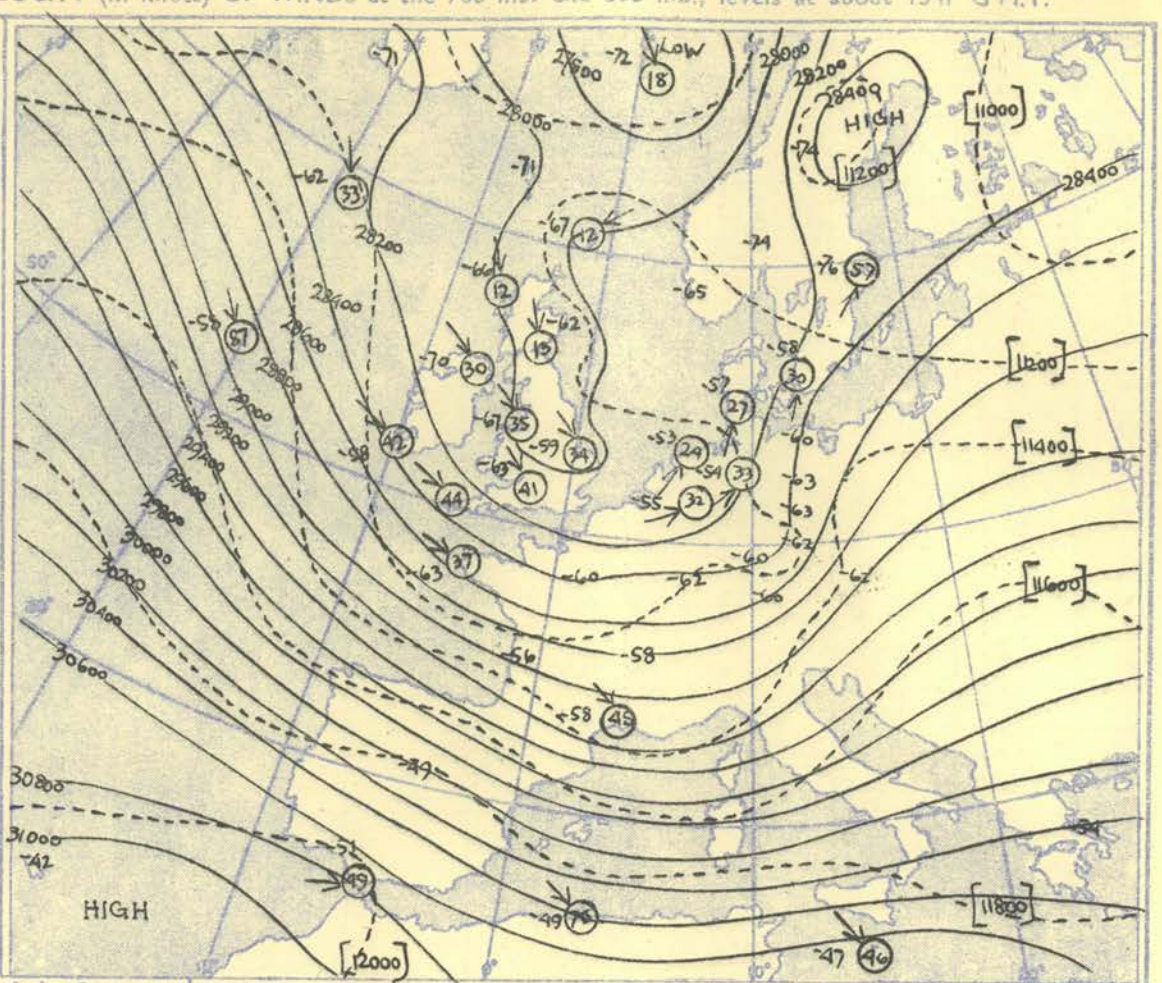
Pressure mb	Height ft./100	°C.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°C.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°C.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°C.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°C.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°C.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf		37	34	310	25		38	35	320	33		39	36	300	30		41	31	310	28		43	36	330	34		40	32	290	20	Surf
1000	-3·2					-3·1					-2·0					-1·7					-1·0				7	40	32			1000
950		32	28	329	35		34	32	332	33		32	29				35	30	318	38		37	30	340	43		36	20	310	32	950
900	24·5	26	21	330	55	24·7	27	26	335	35		27	23			26·2	30	23	321	38	27·0	32	25	348	40	28·5	30	12	316	30	900
850		20	13	329	39		21	20	337	44		22	18				24	18	325	36		27	19	344	39		23	08	314	29	850
800	54·6	14	08	332	46	54·9	15	14	339	44		17	12			56·6	18	11	331	21	57·5	20	11	344	32	58·8	16	03	312	29	800
750		08	01	333	43		08	07	340	35		10	05	See Page 3 for Winds			13	03	340	21		13	00	338	26		09	-03	312	29	750
700	87·9	01	-07	329	30	88·1	02	00	338	27		07	-04			90·3	07	-02	338	23	91·2	05		323	27	92·2	02	-08	310	28	700
650		-06	-15	333	35		-06	+08	332	28		-02	-14				01	-14	337	20		-02		313	25		-07	-17	305	29	650
600	135	-12	-27	336	20	125	-15	-17	332	24		-10	-23			128	-09	-29	336	18	129	-10		296	22	129	-14	-28	298	30	600
550		-23	-42	336	16		-21	-25	335	23		-18	-32				-19	-37	346	25		-19		291	21		-24	-43	294	30	550
500	168	-32	-50	332	15	168	-29	-34	335	20		-27	-41			171	-30	-47	353	27	172	-29		309	12	172	-31	-53	293	33	500
450		-42		320	13		-38	-44	335	18		-36	-52				-39	-36	355	25		-40		309	16		-38	-58	295	42	450
400	217	-55		293	10	218	-46		345	19		-49				221	-50		335	29	221	-51		295	16	222	-45		300	51	400
350		-71		293	11		-55		346	15		-57					-58		327	36		-59		288	31		-54		296	49	350
300	277	-74		313	16	280	-64		346	15		-62				283	-64		311	50	283	-59		289	45	284	-53		303	53	300
250		-68		321	18		-61					-60					-63		316	38		-54		305	38		-48		302	55	250
200	(225mb)	-67				366	-58									368	-60		320	32	371	-53		298	52	373	-50		302	57	200
170							-59				Inversion 750 mb 10° - 740 mb 11°						-60					-53		293	57		-52		302	53	170
150	Isothermal						-58															-57		310	51		-55		302	56	150
130	655 - 644 mb -06°						-57															-58		302	48		-58		302	54	130
110							-60															-61		290	47		-58		294	44	110
100						515	-62														519	-62		293	46	523	-60		292	42	100
90							-61															-63		307	40		-64		301	39	90
80							-59															-64		297	51		-62		284	36	80
70																						-65		261	47		-60				70
60																										(63mb)	-60				60
																												Isothermal 1002 - 984 mb 40°				
																													Isothermal 456 - 450 mb -31°			
																													Inversion 720 mb 05° - 693 mb 06°			
Tropopause	II 344 mb -73° 24,700'	I 290 mb -65° 28,700'	I 315 mb -63° 27,100'	I 283 mb -67° 29,500'	I 333 mb -63° 26,000'	I 328 mb -58° 26,400'	I 278 mb -63° 30,500'	II 291 mb -67° 29,600'	Tropopause

Wednesday 21st February 1951.

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



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

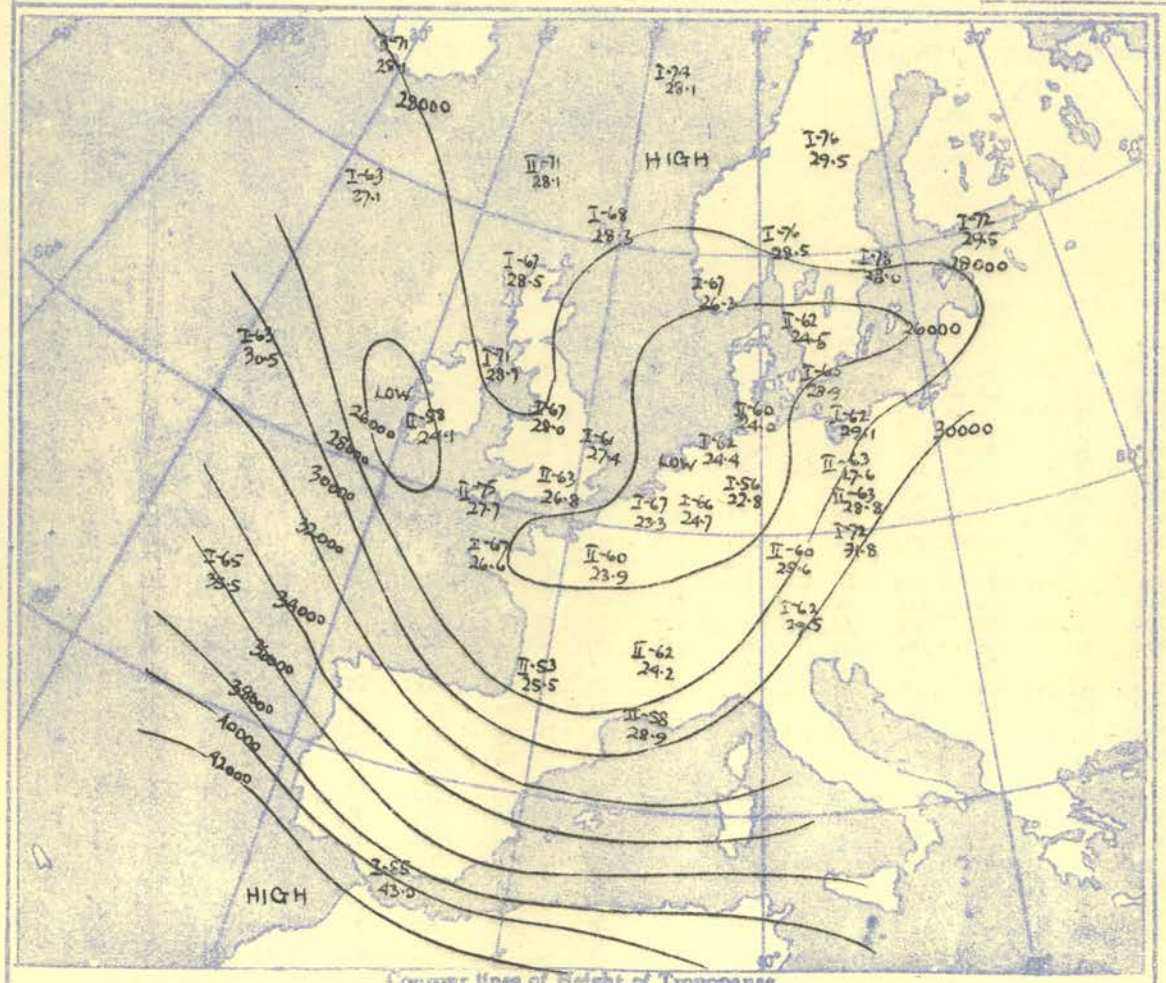


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500–300 mb.

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

400 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.

Further warming, probably mainly dynamical, took place in West and Central Atlantic. Little significant change otherwise.

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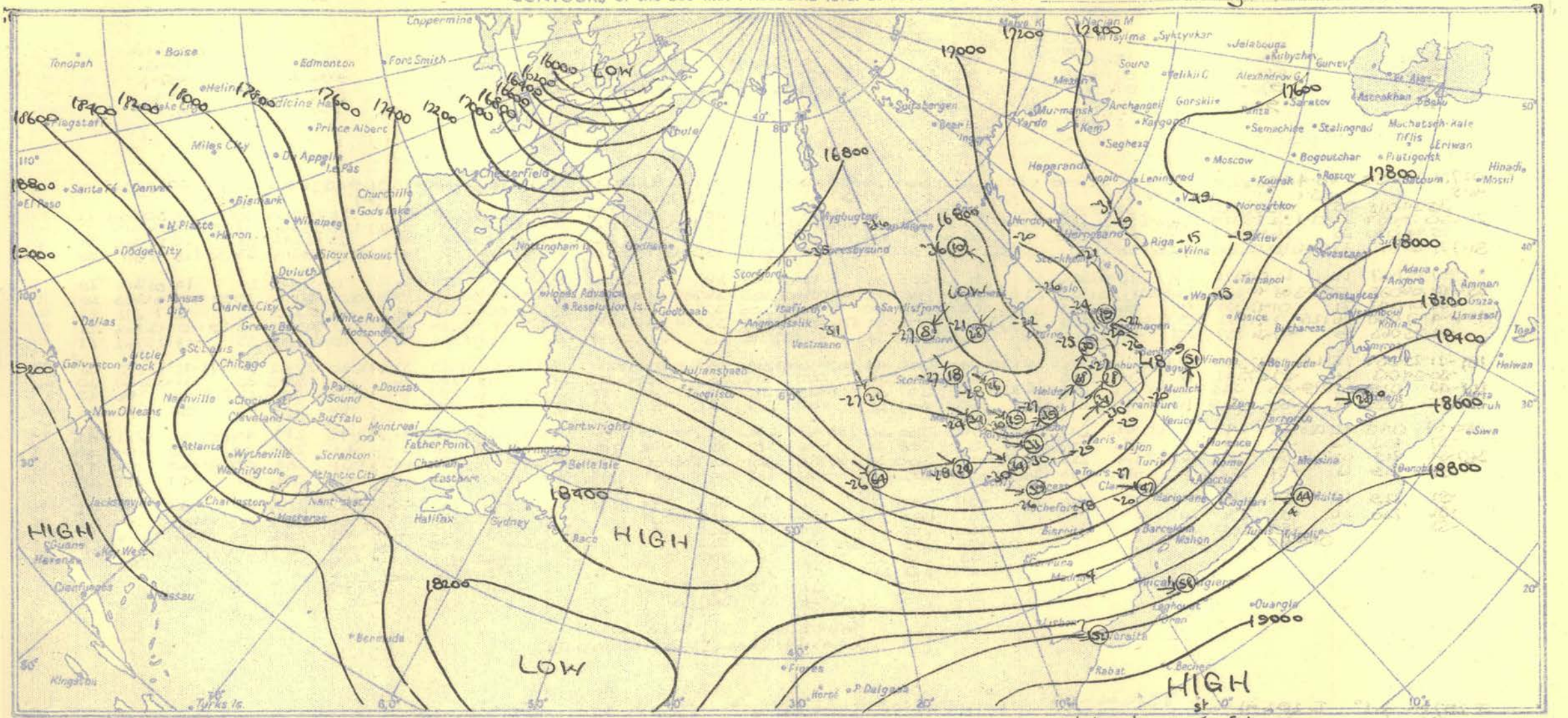
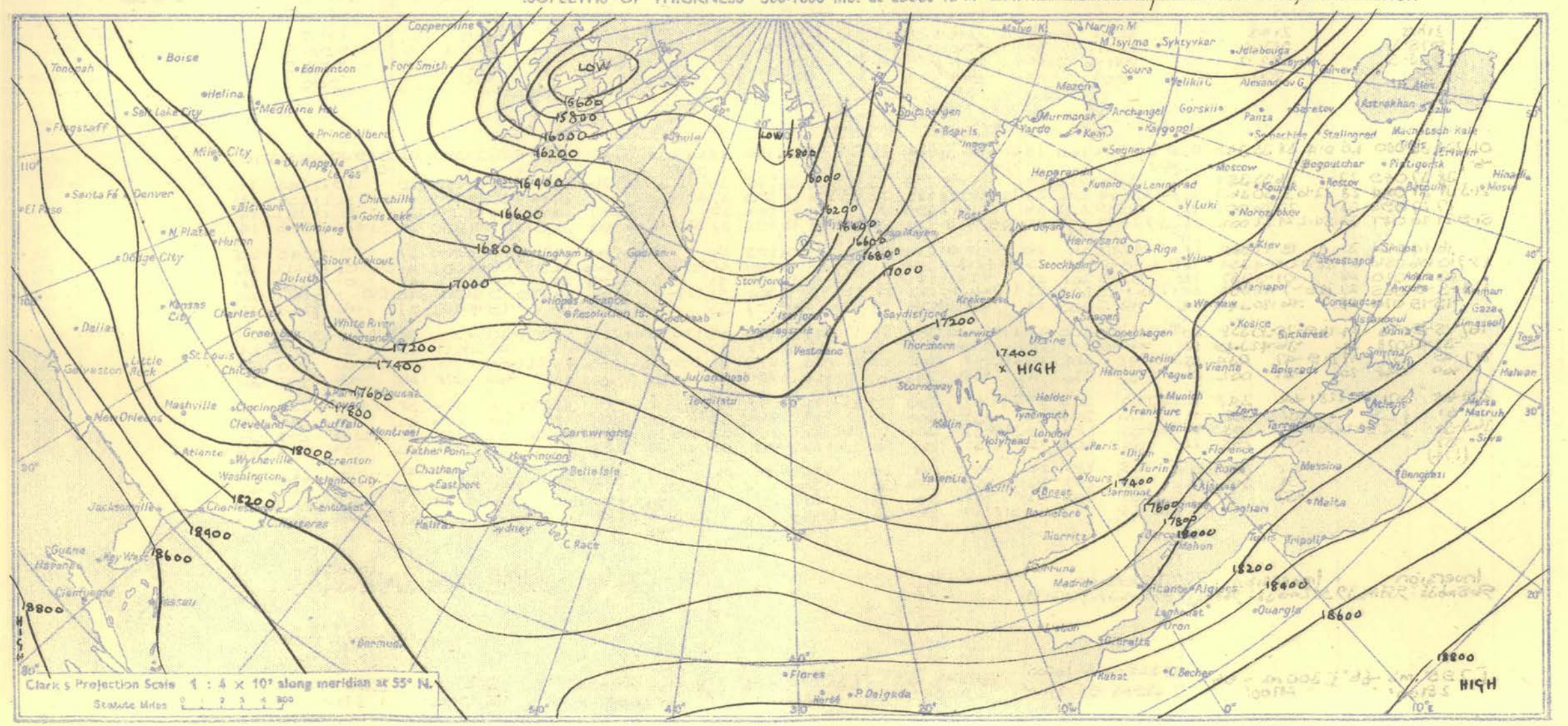
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. 21st February 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Wednesday 21st February 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. February 21st 1951.

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

15hrs G.M.T.

Station	Pressure	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	Valentia
	Time	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.
	M.S.L.	975.7 mb	981.5 mb	978.8 mb	987.4 mb	986.6 mb	986.4 mb	990.4 mb	996.4 mb	998.2 mb
	Surf	965.8 mb	978.9 mb	977.9 mb	978.2 mb	984.5 mb	981.9 mb	974.5 mb	985.9 mb	996 mb
	Freezing	915 mb	900 mb	893 mb	900 mb	913 mb	906 mb	895 mb	928 mb	920 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Valentia Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	027	36	35	050	28	040	45	36	320	12	002	41	32	290	17	026	40	31	320	20	006	43	37	280	20	012	42	36	280	18	044	42	34	300	15	029	46	36	315	20	017	40	35	330	05	Surf
1000	-6.5					-5.1					-5.8					-3.3					-3.7					-3.7					2.6					-5.7					-0.6					1000
950		35	34	038	25		40	32	329	24		38	29	286	30		38	29	290	32		37	33	289	30		38	33	253	31		39	29	271	24		38	29	304	29		35	30	300	12	950
900	21.2	30	29	064	33	23.1	32	28	324	24	23.2	33	26	294	37	24.7	32	25	296	34	24.3	30	26	287	33	24.2	31	28	267	30	25.5	33	27	281	26	27.1	29	23	309	28	27.2	30	26	310	23	900
850		25	24	070	35		26	19	327	29		25	21	308	41		25	16	297	34		24	20	287	31		25	21	273	31		27	23	286	27		23	18	312	33		25	18	310	32	850
800	51.7	21	20	072	32	53.6	19	12	330	25	53.8	20	16	321	40	55.2	17	05	298	33	54.7	18	13	301	35	54.6	18	15	278	31	56.1	20	19	291	31	57.4	19	09	314	36	55.7	18	11	311	35	800
750		17	15	047	22		13	04	328	27		15	07	324	38		11	05	298	33		12	07	303	36		13	09	288	33		14	10	292	36		12	-5	314	38		14	08	312	29	750
700	85.6	10	06	035	21	87.3	08	-10	332	22	87.6	07	01	325	33	88.8	07	-4	298	32	88.3	06	01	305	36	88.3	06	00	285	33	89.6	08	00	291	39	91.0	06	-16	312	39	91.4	06	01	303	20	700
650		03	01	047	21		01	-13	333	21		00	-4	319	35		00	-17	298	30		-1	-11	305	37		-1	-11	284	35		00	-10	288	41		-1	-22	303	37		-2	-7	272	22	650
600	124	-4	-7	060	26	125	-7	-21	332	19	125	-8	-13	315	34	127	-7	-32	290	31	126	-9	-20	307	35	126	-9	-21	282	35	128	-8	-16	286	38	129	-9	-32	305	35	129	-9	-12	264	21	600
550		-12	15	063	29		-17	-31	337	20		-18	-22	312	29		-15	-37	296	34		-20	-32	311	30		-18	-30	278	38		-18	-28	285	35		-19	-41	294	33		-18	-25	262	28	550
500	161	-21	-25	052	28	168	-27	-32	340	18	168	-28	-33	313	26	170	-24	-44	300	44	169	-30	-41	313	29	169	-27	-38	271	39	171	-30	-43	283	33	172	-30		292	34	172	-28	-37	253	33	500
450		-30	-39	013	21		-37	-47	342	16		-39	-48	313	25		-38	-52	308	30		-42		316	33		-39	-49	275	38		-41		292	36		-43		295	35		-38	-56	247	30	450
400	218	-43		029	26	219	-50		343	19	218	-51		315	26	220	-47		307	30	218	-53		315	37	219	-50		277	38	220	-50		297	46	221	-54		291	33	222	-49		246	49	400
350		-55		058	24		-60		349	16		-57		327	18		-60		307	28		-61		317	35		-57		287	37		-60		293	47		-66		285	35		-58		272	36	350
300	280	-67		045	12	280	-66		343	12	280	-62		321	13	282	-70		300	30	280	-67		296	35	281	-55		291	34	282	-63		298	41	282	-72		287	44	282	-58		281	42	300
250		-57		603	06		-61		312	12		-56		293	13		-57		298	21		-56		289	33		-54		280	31		-55		283	40		-61		289	37		-50		294	46	250
200	367	-54		215	09	366	-56		287	17	367	-54		283	15	369	-45		300	35	367	-52		301	31	369	-50		275	29	369	-50		283	44	368	-58		288	45	371	-49		290	48	200
170		-53		229	13		-54		287	16		-50		278	20		-50		292	30		-51		285	30		-47		278	26		-50		284	44		-56		284	51		-47		293	49	170
150		-52		229	17		-54		287	16		-52		267	20		-51		290	28		-51		283	33		-46		271	29		-49		283	40		-55		286	50		-47		292	48	150
130		-52		230	22		-55		270	20							-51		294	36		-50		291	28		-50					-51		276	30		-61		284	40		-49		296	58	130
110		-53					-59		260	23							-52		280	27		-52		272	30							-55		275	35		-65		295	40		-51		284	38	110
100						516	-60									520	-56		275	28	518	-54		275	33						520	-53		273	32	513	-64		296	41	523	-53		286	37	100
90																	-55		285	35		-55		262	30							-56		278	34		-64								90
80																	-49		273	28		-58		273	27							-65		276	33		-64								80
70																						-58		275	25							-57					(83)								70
60																						-54		267	30																				60
																					(56)	-47																							

Inversion 294 mb -64 - 326 mb -65°

Inversion 390 mb -52 - 364 mb -31°

Tropopause	I 297 mb -68° 28300'					I 292 mb -67° 28500'					II 380 mb -57° 22400' I 321 mb -63° 26500'					I 293 mb -71° 28700'					I 300 mb -67° 27900'					I 308 mb -61° 27400'					II 320 mb -65° 26800'					I 301 mb -75° 27100'					II 862 mb -58° 24100'					Tropopause
Station	LERWICK					STORNOWAY					LEUCHARS					ALDERGROVE					LIVERPOOL					DOWNHAM MARKET					LARKHILL					CAMBORNE										Station
Time	21hrs G.M.T.					21hrs G.M.T.					21hrs G.M.T.					21hrs G.M.T.					21hrs G.M.T.					21hrs G.M.T.					21hrs G.M.T.					21hrs G.M.T.					G.M.T.					Time
M.S.L.	975.3 mb					983.8 mb					982.5 mb					990.2 mb					990.4 mb					991.3 mb					995.4 mb					998.6 mb					mb					M.S.L.
Surf	965.5 mb					982.2 mb					981.6 mb					988.1 mb					988.3 mb					986.6 mb					979.1 mb					987.9 mb					mb					Surf
Freezing	902 mb					900 mb					907 mb					915 mb					903 mb					920 mb					910 mb					900 mb					mb					Freezing

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	027	38	38	080	20	004	38	35	345	05	002	37	32	260	15	026	35	31	260	15	006	39	36	270	18	012	38	35	245	13	044	37	32	280	10	029	40	33	250	10						Surf
1000	+6.7					-4.4					+4.8					-2.4					-2.6					-2.4					+4.2					-0.4										1000
950		38	37	065	27		36	33	354	21		37	31	282	29		33	29	279	27		37	33	285	31		35	32	286	34		36	31	285	29		39	32	292	21						950
900	21.3	31	31	084	28	22.6	32	30	360	21	23.2	34	24	292	33	25.4	30	25	285	28	25.3	31	28	290	32	25.4	30	27	297	36	26.7	31	25	292	30	27.1	32	27	254	18						900
850		27	27	095	33		27	26	001	22		25	19	305	36		24	18	294	33		24	21	292	35		24	21	287	35		24	18	294	30		28	22	262	19						850
800	51.9	21	20	087	33	54.2	21	22	002	18	53.7	21	14	315	30	55.9	18	11	291	33	55.7	18	12	298	37	55.8	18	16	293	33	57.1	18	11	300	30	58.4	22	15	255	14						800
750		16	14	064	31		13	13	365	18		17	08	311	26		11	01	291	31		12	03	295	36		12	03	294	34		12	00	306	37		15	09	245	20						750
700	85.7	10	06	056	27	88.0	08	04	354	18	87.6	10	00	306	25	89.4	04	-11	290	32	89.3	05	-11	296	40	89.4	05	-2	294	32	90.7	08	-11	307	41	92.2	08	00	242	22						700
650		03	-1	070	26		01	-3	357	18		02	-8	303	24		-2	-21	286	31		-1	-25	300	43		-3	-13	293	30		-2	-23	312	42		01	-9	259	21						650
600	124	-5	-9	065	27	126	-7	+12	354	20	125	-7	+15	305	23	127	-11	-30	283	28	127	-8	-32	301	53	127	-11	-21	291	28	129	-9	-32	312	40	130	-7	+8	246	20						600
550		-15	-19	070	28		-16	+20	344	20		-16	-23	305	24		-19	-39	276	24		-17	-35	297	53		-21	-32	289	31		-19	-40	307	37		-16	-28	247	21						550
500	167	-25	-29	076	29	169	-25	-30	338	20	169	-27	-34	300	24	170	-26	-47	264	18	170	-27	-48	285	45	170	-31	-44	294	38	171	-30	-51	301	37	173	-27	-39	248	27						500
450		-32	-42	078	29		-36	-42	345	18		-40	-47	311	23		-36	-57	220	09		-38	-58	283	37		-41		300	42		-40	-55	281	33		-38	-52	252	24						450
400	217	-48		071	17	219	-47		034	15	219	-48		334	14	220	-48		165	06	220	-50		280	31	219	-52		302	43	221	-51		278	32	223	-53		260	28						400
350		-60		094	20		-58		002	06		-55		320	11		-56		243	07		-61		291	24		-64		303	44		-65		278	36		-66		272	36						350
300	279	-65		071	08	281	-66		348	12	280	-63		313	17	282	-67		293	19	281	-74		298	21	280	-72		301	38	282	-74		286	38	284	-63		282	42						300
250		-61					-58		308	13		-56		307	16		-58		300	27		-64		289	30		-64		286	28		-58		286	42		-55		288	40						250
200	365	-58				368	-57		295	16	367	-55		288	19	369	-53		301	28	367	-56		297	30	366	-54		280	31	369	-52		282	38	372	-53		290	54						200
170		-58					-55		295	22		-54		300	19		-55		284	31		-52		285	31		-51		285	30		-54		287	43		-54		294	66						170
		(174)																																												
150							-52		295	21		-55		289	24		-57		283	30		-54		291	33		-57		280	33		-56		287	42		-56		283	56						150
130							-54		302	25		-56		297	26		-58		296	39		-56					-55		282	28		-56		291	40		-58		285	47						130
110							-57					-58		299	22		-58		296	33		-55					-60		282	34		-56		285	37		-61		278	38						110
100											516	-55				518	-59		299	33		(125)				-60		288	22	518	-55		291	33	520	-62										100
90																	-59										-61		282	21		-65														90
80																																															80
70																																															70
60																																															60

Inversion 965 mb 38° - 938 mb 39°

Inversion 982 mb 38° - 968 mb 39°

Inversion 982 mb 37° - 962 mb 38°

Inversion 975 mb 37° - 963 mb 38°

Inversion 988 mb 40° - 974 mb 42°

Tropopause	I 295 mb -66° 28100'					I 300 mb -66° 28100'					II 328 mb -62° 26000' I 289 mb -55° 28700'					I 290 mb -69° 29000'					I 300 mb -74° 28100'					II 306 mb -72° 28000'					I 305 mb -74° 27300'					I 350 mb -66° 28200'										Tropopause

HMSO Press, MO, Dunstable.

No. 11652. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Thursday 22nd February 1951

Page 1

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

03h G.M.T.

Station	Time	M.S.L.	Surf	Freezing	Tropopause
LERWICK	03h	981·0 mb	971·1 mb	925 mb	I 325 mb - 68° 26,100'
STORNOWAY	03h	986·4 mb	984·8 mb	910 mb	I 293 mb - 73° 28,500'
LEUCHARS	03h	984·5 mb	983·6 mb	910 mb	I 307 mb - 69° 27,500'
ALDERGROVE	03h	991·2 mb	988·3 mb	960 mb	I 300 mb - 70° 28,200'
LIVERPOOL	03h	992·6 mb	990·5 mb	922 mb	I 307 mb - 68° 27,600'
DOWNHAM MARKET	03h	994·5 mb	989·9 mb	921 mb	I 325 mb - 68° 26,400'
LARKHILL	03h	997·0 mb	980·7 mb	909 mb	I 322 mb - 68° 26,800'
CAMBORNE	03h	1000·4 mb	989·7 mb	916 mb	I 345 mb - 67° 25,400'
VALENTIA	03h	1002·7 mb	1001 mb	930 mb	I 307 mb - 60° 28,000'

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	38	38	110	23	00·4	38	35	300	05	00·2	38	32	270	15
1000	-5·1					-3·7					-4·4				
950		36	32	094	33		38	34	337	24		35	30	282	28
900	22·7	29	27	093	33	24·3	30	29	343	23	23·6	31	27	293	30
850		24	21	094	37		24	23	348	23		26	23	309	24
800	53·1	19	17	098	33	54·8	19	17	349	24	54·1	22	19	315	26
750		12	09	094	29		14	09	344	25		15	11	323	27
700	86·8	07	03	091	26	88·5	08	01	338	26	87·9	08	04	323	20
650		-02	-07	086	26		01	-06	333	27		01	-03	316	16
600	12·4	-10	-16	084	25	126	+09	-18	336	28	126	-07	-11	318	17
550		-19	-25	108	21		-18	-28	343	27		-17	+20	332	21
500	16·7	-28	-36	101	19	16·9	-27	-36	359	24	16·9	-27	-31	330	22
450		-39	-48	071	14		-39	-46	348	19		-38	-43	327	24
400	21·7	-52		051	15	21·9	-50		337	13	21·9	-48		336	14
350		-65		060	12		-64		320	10		-60		331	06
300	27·8	-66		023	09	28·0	-72		316	17	28·0	-68		316	16
250		-62		L I V			-67		320	16		-64		307	17
200	36·4	-60		286	08	36·6	-57		300	19	36·6	-56		303	21
170		-59		267	09		-57		290	21		-56		299	24
150		-60		269	12		-59		288	25		-56		289	28
130		-60		258	15		-59		278	20					
110	(118 mb)	-61													
100															
90															
80															
70															
60															

Inversion 985 mb 38° 966 mb 40°

Isothermal 363 - 345 mb - 62°

Inversion 990 mb 34° - 957 mb 35°

Inversion 980 mb 35° - 966 mb 38°

Isothermal 737 - 729 mb 07°

Pressure mb	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	33	30	270	15	00·6	39	35	270	20	01·2	34	30	210	09
1000	-2·1					-2·0					-1·5				
950		31	27	288	21		35	31	270	35		34	28	271	28
900	25·6	29	25	292	19	25·9	29	25	280	28	26·4	30	22	281	28
850		23	16	300	24		23	19	281	30		23	15	281	30
800	56·1	18	09	303	25	56·4	18	10	283	32	56·8	20	05	281	32
750		12	00	306	24		12	00	282	29		14	-09	279	35
700	89·7	05	-11	311	21	89·9	05	-09	278	27	90·6	07	-14	275	35
650		+03	-23	319	18		-04	-16	266	31		-02	-22	270	34
600	13·7	+10	-31	330	14	12·7	-12	-23	256	36	12·8	+10	-24	270	35
550		-19	-39	333	13		-21	-33	252	40		-20	-35	275	36
500	17·0	-28	-47	338	15	17·0	-32	-43	251	48	17·1	-30	-46	272	39
450		-39	-57	342	16		-43		250	43		-42		275	44
400	22·0	-51		342	17	22·0	-55		249	30	22·1	-54		279	36
350		-61		347	18		-62		267	20		-66		270	33
300	28·2	-70		330	22	28·1	-67		284	23	28·1	-68		280	25
250		-60		304	30		-58		295	29		-63		277	29
200	36·8	-58		306	33	36·7	-56		288	33	36·8	-54		290	34
170							-54		294	36		-51		288	29
150							-56		298	29		-55		289	30
130							-55		290	22		-58		287	32
110							-60		285	36		-57		282	35
100						91·6	-61		300	33	51·7	-59		285	31
90							-62		302	27		-62		283	30
80							-64		302	27					
70							(75 mb) -65								
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	35	32	280	10	02·9	41	32	293	15	00·3	41	32	310	22
1000	-0·8					0·1					8	41	34	309	24
950		37	32	264	18		36	28	294	32		34	25	306	33
900	27·1	31	27	260	15	28·1	30	23	301	32	28·6	28	21	304	40
850		25	22	255	20		23	16	305	33		23	15		
800	57·5	19	15	252	25	58·5	18	11	305	35	58·9	16	09		
750		13	10	243	26		11	04	303	37		08	-01		
700	91·2	07	03	245	26	92·1	05	-11	304	36	92·2	03	-11		
650		06	-03	257	29		-03	-18	306	36		-03	-15		
600	12·9	+08	-11	253	28	13·0	-11	-25	299	32	13·0	-11	-25		
650		-17	-21	242	27		-20	-31	284	30		-21	-37		
500	17·2	-28	-33	248	31	17·3	-29	-39	265	27	17·2	-32	-47		
450		-40	-46	249	35		-40		241	26		-38	-53		
400	22·2	-52		246	36	22·2	-51		274	28	22·3	-44			
350		-64		253	37		-57		291	41		-54			
300	28·3	-64		271	40	28·4	-55		297	57	28·5	-59			
250		-56					-56		299	56		-56			
200						37·2	-56		294	61	22·5 mb	-55			
170							-57		293	61					
150							-58		295	56					
130							-59		294	54					
110							-61		293	46					
100						52·0	-63		293	36					
90							-66		300	40					
80						57 mb	-67								
70															
60															

For rest of winds see page 3.

Inversion 980 mb 35° - 966 mb 38°

Isothermal 737 - 729 mb 07°

Tropopause	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
	I 325 mb - 68° 26,100'	I 293 mb - 73° 28,500'	I 307 mb - 69° 27,500'	I 300 mb - 70° 28,200'	I 307 mb - 68° 27,600'	I 325 mb - 68° 26,400'	I 322 mb - 68° 26,800'	I 345 mb - 67° 25,400'	I 307 mb - 60° 28,000'

09h G.M.T.

Station	Time	M.S.L.	Surf	Freezing	Tropopause
LERWICK	09h	986·7 mb	976·8 mb	910 mb	II 310 mb - 67° 27,400'
STORNOWAY	09h	990·0 mb	988·4 mb	908 mb	I 297 mb - 75° 28,300'
LEUCHARS	09h	986·5 mb	985·6 mb	897 mb	I 309 mb - 70° 27,600'
ALDERGROVE	09h	995·4 mb	988·9 mb	916 mb	I 317 mb - 68° 27,100'
LIVERPOOL	09h	993·9 mb	991·8 mb	938 mb	I 313 mb - 68° 27,300'
DOWNHAM MARKET	09h	995·6 mb	991·0 mb	934 mb	I 305 mb - 65° 27,800'
LARKHILL	09h	998·7 mb	982·2 mb	943 mb	I 375 mb - 60° 23,300'
CAMBORNE	09h	1004·2 mb	993·5 mb	912 mb	II 310 mb - 58° 27,900'
VALENTIA		mb	mb	mb	

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	39	34	080	15	00·4	40	37			00·2	37	33	250	15
1000	-3·6					-2·7					-3·6				
950		38	32	074	22		37	33				38	33	298	28
900	24·4	31	26	079	26	25·2	31	28			24·2	32	27	311	30
850		24	14	084	26		25	22				28	23	320	32
800	54·8	19	11	086	22	55·7	19	15			54·9	23	16	325	30
750		12	07	083	21		13	09				17	10	321	27
700	88·5	08	-07	072	19	89·3	06	02			88·8	10	04	315	27
650		01	-10	078	15		-02	-05				02	-06	320	26
600	12·6	-07	-14	080	18	12·7	-11	-19			12·7	-06	-19	322	24
550		-17	-25	078	17		-20	-27				-14	-22	325	26
500	16·9	-28	-35	062	15	17·0	-31	-36			17·0	-26	-34	319	24
450		-37	-46	077	15		-43					-36	-42	308	27
400	22·0	-49		085	13	21·9	-52				22·0	-48		316	24
350		-61		088	10		-63					-59		320	21
300	28·1	-67		073	07	28·0	-74				28·2	-68		306	16
250		-60		323	06		-62					-62		306	24
200	22·5 mb	-56				36·6	-59				36·8	-55		308	21
170							-61								
150															
130															
110															
100															
90															
80															
70															
60															

Esothermal 977 - 956 mb 39°
731 - 716 " 10°

Inversion 986 mb 37° - 961 mb 39°

Inversion 986 mb 35° - 958 mb 36°

Pressure mb	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	35	23	280	15	00·6	37	35	260	15	01·2	34	31	215	09
1000	-1·2					-1·6					-1·2				
950		35	31	287	25		33	32	276	27		33	28	269	24
900	26·7	30	27	303	25	26·1	28	28	284	29	26·6	28	21	271	26
850		25	22	316	30		23	23	286	29		22	15	268	23
800	51·2	19	17	315	31	56·4	17	16	293	27	57·0	11	07	259	24
750		13	08	313	29		10	06	306	27		11	-02	256	25
700	80·9	06	-01	315	30	89·9	04	-01	317	25	90·5	05	-13	259	30
650		-01	-14	312	28		-04	-13	312	29		-03	-19	255	29
600	12·7	-10	-22	307	27	12·7	-12	-21	237	21	12·8	-10	-28	242	33
550		-20	-30	304	25		-21	-31	332	19		-17	-30	233	37
500	17·1	-28	-39	314	18	17·0	-30	-41	330	18	17·1	-28	-38	286	41
450		-37	-49	312	19		-40	-53	325	24		-39	-48	239	48
400	22·2	-49		300	25	22·0	-50		321	28	22·1	-52		240	39
350		-62		290	23		-68		321	30		-61		284	22
300	28·3	-64		298	26	28·1	-64		321	29	28·2	-64		282	20
250		-59		309	36		-59		296	27		-57		290	32
200	36·9	-54		302	38	36·8	-54		300	34	36·9	-55		291	30
170		-52		305	33		-52		301	33		-53		292	31
150		-56		296	57		-57		307	30		-52		293	36
130		-57		298	45		-50		298	37		-53		290	30
110							-55		301	35		-55		286	32
100						51·8	-57		297	30	51·9	-56		287	24
90						(94 mb) -59								290	23
80															
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	04·4	33	31	280	10	02·9	40	36	270	15					
1000	-0·4					1·2									
950		33	31	284	29		37	32	295	30					
900	27·2	27	25	287	35	29·2	30	25	307	33					
850		22	19	288	36		24	15	308	37					
800	57·5	17	13	290	36	59·7	18	08	308	38					
750		11	05	292	36		11	02	307	35					
700	91·0	04	-07	290	34	93·2	05	-06	308	36					
650		-04	-17	285	30		-03	-15	309	37					
600	12·8	-13	-27	281	30	13·1	-11	-25	308	36					
550		-23	-38	279	28		-21	-36	306	39					
500	17·1	-35	-48	282	28	17·3	-30	-45	308	45					
450		-47		280	29		-35	-52	309	57					
400	22·0	-55		279	29	22·4	-42		309	71					
350		-55		292	39		-52		309	71					
300	28·2	-59		291	36	28·7	-58		308	66					
250		-57		293	50		-55		305	63					
200	36·9	-54		297	47	37·4	-54		301	65					
170		-55		294	46		-54		305	56					
150		-57		292	47		-57		307	48					
130		-57		290	45		-59		306	54					
110		-59		302	40		-60								
100		-62		300	31	52·3	-60								
90		-65					-63								
80							-64								
70															
60															

Inversion 991 mb 34° - 975 mb 35°
335 " - 63° - 323 " - 62°

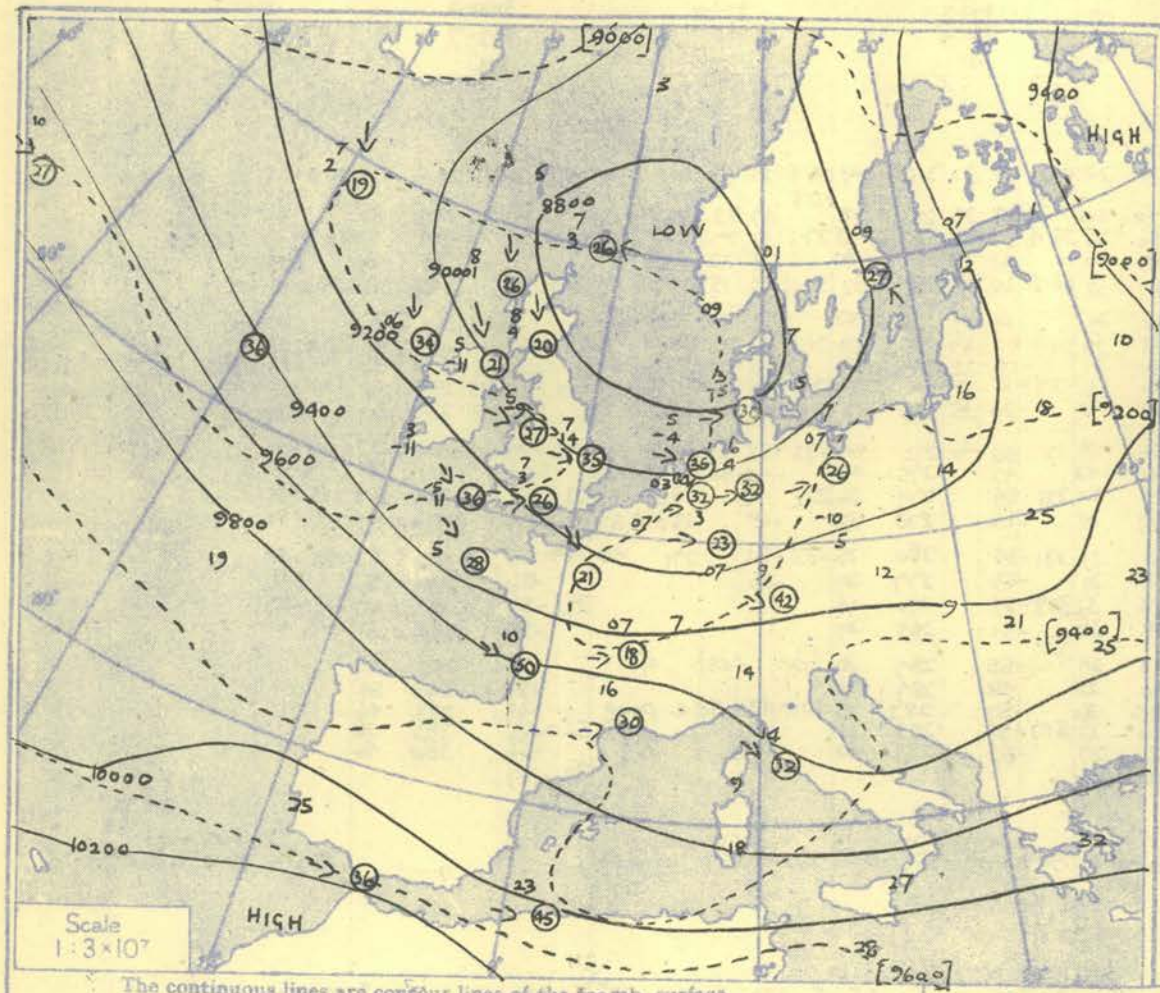
Inversion 982 mb 33° - 968 mb 34°

Inversion 993 mb 40° - 980 mb 42°

Tropopause	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
	II 310 mb - 67° 27,400'	I 297 mb - 75° 28,300'	I 309 mb - 70° 27,600'	I 317 mb - 68° 27,100'	I 313 mb - 68° 27,300'	I 305 mb - 65° 27,800'	I 375 mb - 60° 23,300'	II 310 mb - 58° 27,900'	

Thursday 22nd February 1951.

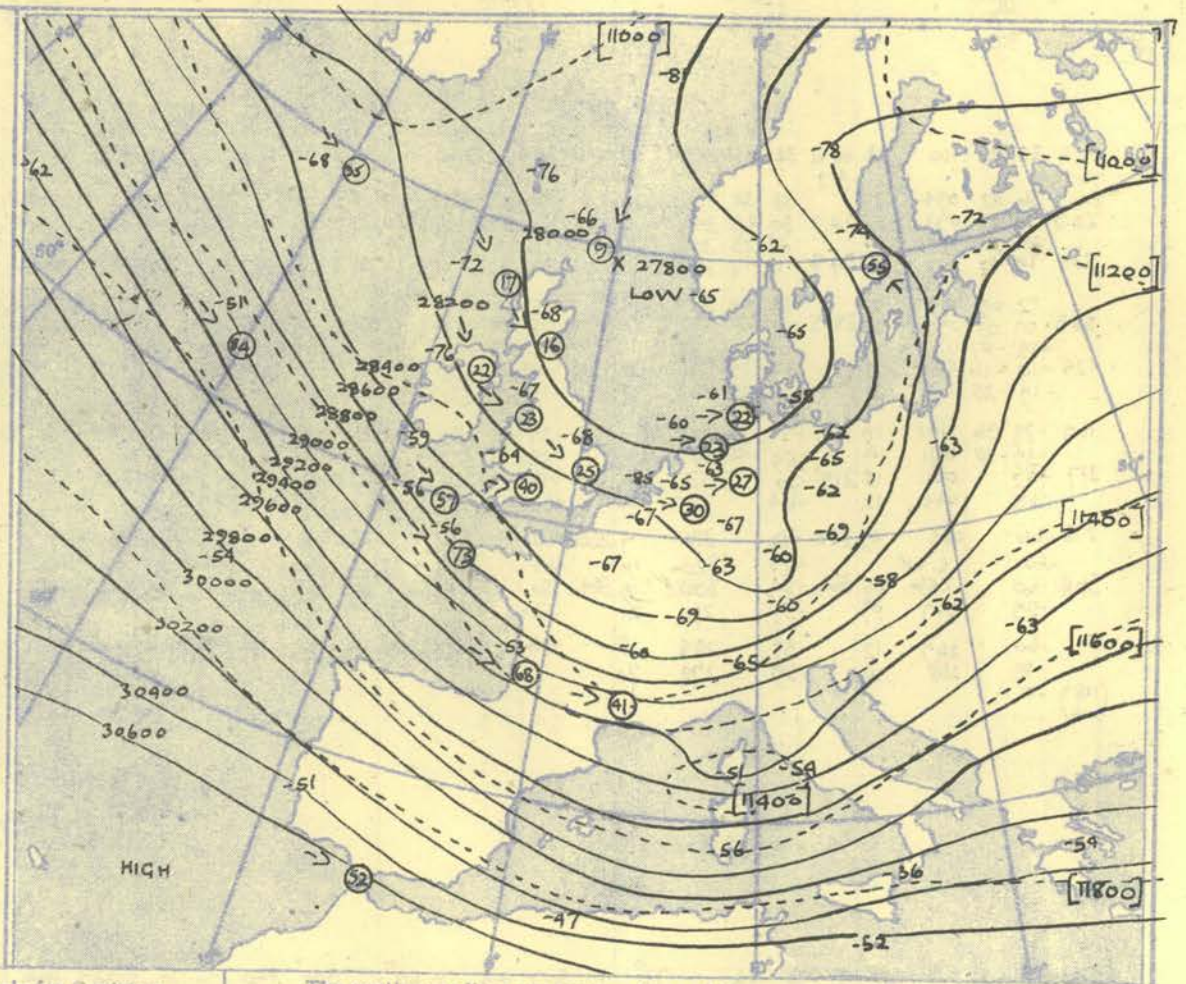
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03 h G.M.T.



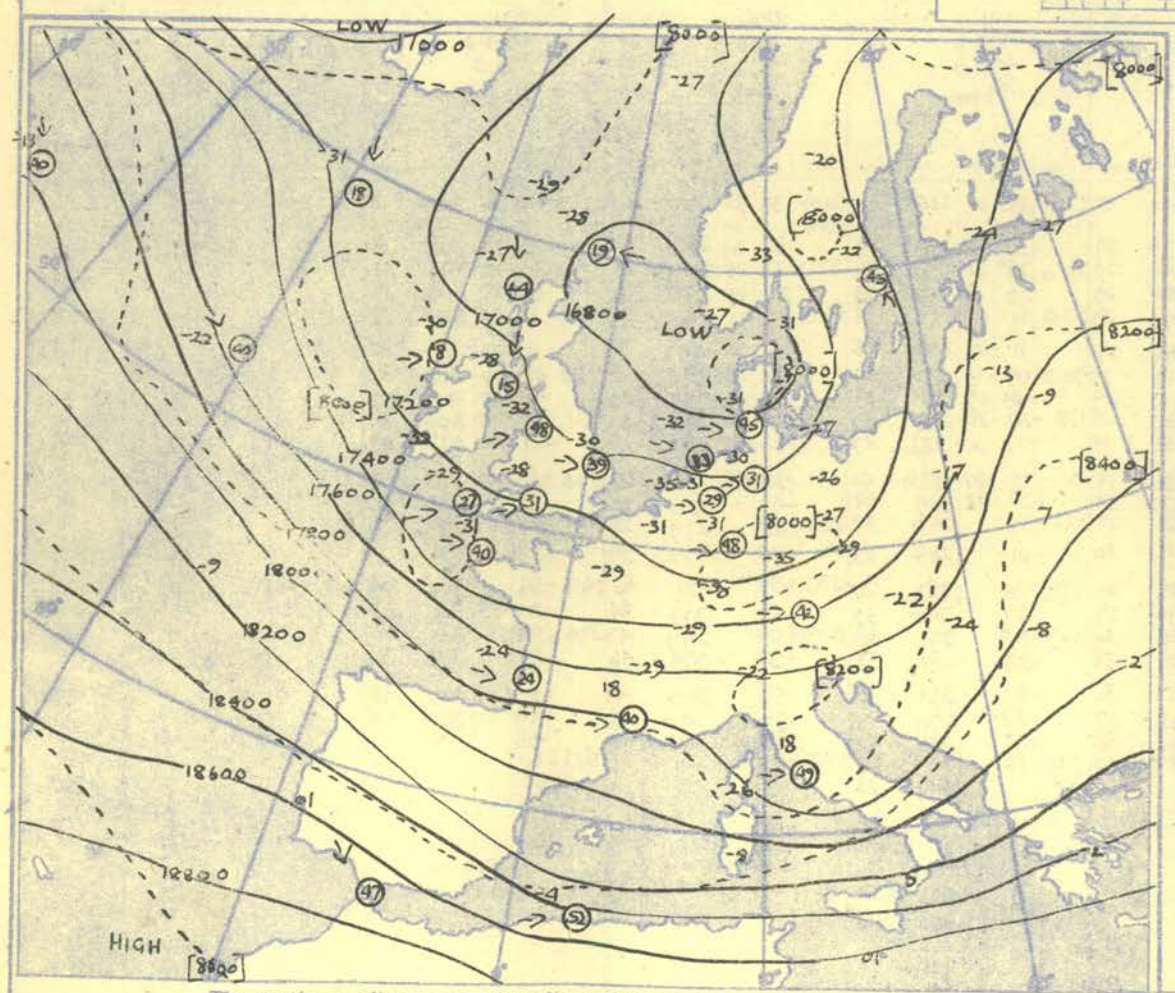
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000 – 700 mb.

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

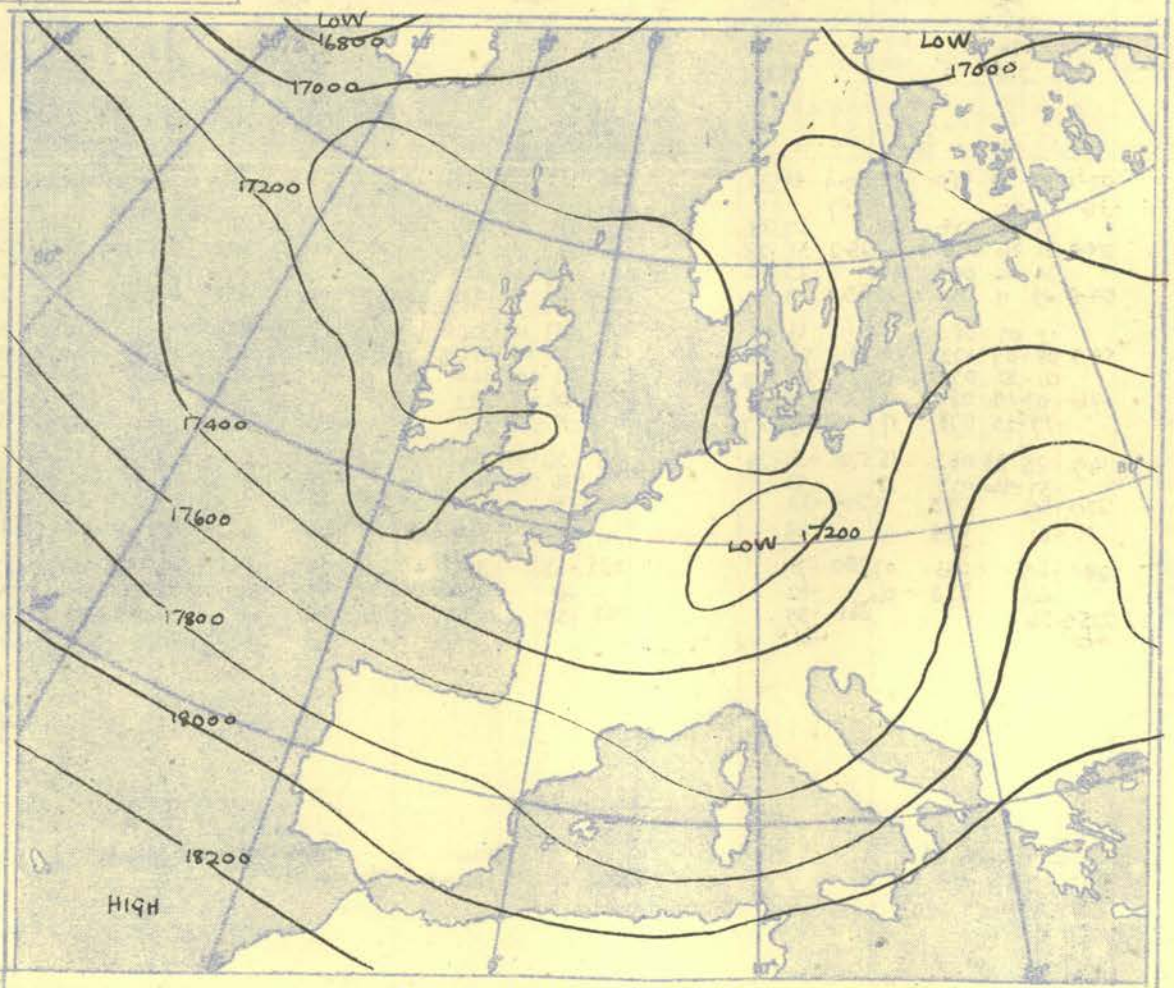
100 60 40 30 20 15 0 knots



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 - 1000 mb.

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
Position	48·1N. 17·0W.			46·0N. 15·0W.			43·2N. 17·0W.			51·3N. 00·4E.		
Time	12h.			15h.			15h.			1415h.		
M.S.L.	1015 mb			1013 mb			1017 mb			1000 mb		
Surf	1012 mb			1010 mb			1013 mb			989 mb		
Freezing	920 mb			920 mb			800 mb			910 mb		
Surf		46	34		43	38		47	47	03·1	42	32
1000	4·2	44		3·7	42		4·5	46	46	0·1		
950		37	32		36	34		43	43		38	31
900		30	25		29			41	41	28·1	31	31
850		23	20		26			37	37		29	
800		19	13		20			32	32	58·7	20	
750		17	04		15			29	29		09	
700	96·5	12	08	95·9	09		99·0	24		92·2	04	
650		11	05		03			20			-04	
600		06			05			12		130	-13	
550		-01			-02			02			-19	
500	180	-11		179	-11		183	-04		173	-28	
450											-39	
400										223	-40	
350											-58	
300										285	-65	
250												
200												
170												

Column 1: Surf. wind:- N·W'ly. 11-16Kts. Cloud. 5/8 Cu 960-900mb. 2/8 Cu 960-T.N.R. 4/8 Sc 830-800mb.

Column 2: Surf wind:- N·W'ly 11-16Kts. Cloud. 4/8 Cu 940-840mb. 2/8 Cu 940-700mb. 2/8 Sc 820-810mb. Isothermal 670-650mb. 3° Inversion 650mb 3°-600mb 5°

Column 3: Surf. wind:- E'ly 11-16kts. Cloud. 8/8 Ns 1000-580mb. 8/8 As 540-T.N.R.

Column 4: Cloud. 7/8 Cu 890-760mb.

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

Place	Larkhill		Shoeburyness		Weather Explorer 52·5N. 19·8W.		Liverpool		Leuchars	
Time	03h.		10h.		15h.		15h.		16h.	
Type	Pilar						Pilar		Pilar	
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.			250	08	280	13			300	30
1,000			270	20	280	18			301	26
2,000			280	24	280	19			308	29
3,000			290	21	280	18			317	28
4,000			280	21	280	19			328	32
5,000			280	21	280	17			332	32
6,000			280	24	280	17			336	31
8,000			280	26	290	22			328	30
10,000			270	25	290	23			323	28
14,000			260	32	290	31			317	27
18,000			230	35	290	38			302	27
24,000			260	25	290	42	309	31	307	22
30,000	286	42	280	32	280	43	301	37	308	22
40,000	289	42	290	28	290	61	301	41	305	31
50,000	290	37	(39,000')		280	52	290	33	287	27
	280	30			270	36	(48,000')		283	27
	(52,000')				250	33	(60,000')		(53,000')	
					(64,000')					

NEPHOSCOPE OBSERVATIONS

Place										
Time Type										
Dir. Vel.										

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

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
Ship	WEATHER RECORDER					WEATHER RECORDER				
Lat/Long	59·3N. 19·8W.					59·0N. 18·9W.				
Time G.M.T.	03h.					09h.				
M.S.L. mb	996					999				
Surf mb	996					999				
Freezing mb	910					930				
Surf		42	39	310	33		41	39	300	30
1000	-1·2					-1				
950		36	35	316	44		34	30	310	32
900	26·8	30	30	319	38	27·7	28	23	317	29
850		25	23	331	33		24	19	312	20
800	57·3	19	18	331	30	58·0	17	13	321	16
750		13	12	331	23		12	07	326	16
700	91·0	07	02	338	19	91·6	06	00	327	13
650		00	-07	359	17		00	-11	324	12
600	129	-09	-28	353	18	129	-10	-22	319	12
550		-20	-30	339	19		-19	-34	307	15
500	171	-31	-42	345	18	172	-29	-45	300	15
450		-43		341	19		-39	-55	301	22
400	221	-50		330	25	222	-49		305	36
350		-59		313	31		-58		307	54
300	283	-68		301	35	284	-69		307	54
250		-64		307	35		-65		311	51
200	368	-59		298	40	369	-64		299	41
170		-60		297	39		-64		300	44
150		-62		296	36		-64		302	43
130		-64		283	36		-65		290	42
110		-66		276	38		-67		272	46
100	515	-67		277	40	516	-68		267	51
90	(093 mb)	-68					-68		296	47
80							-68			
70										
60										
Remarks						Isothermal 795 - 781mb. 16°				
Tropopause	I 305mb. -69° 28,300'					I 270mb. -71° 30,700'				

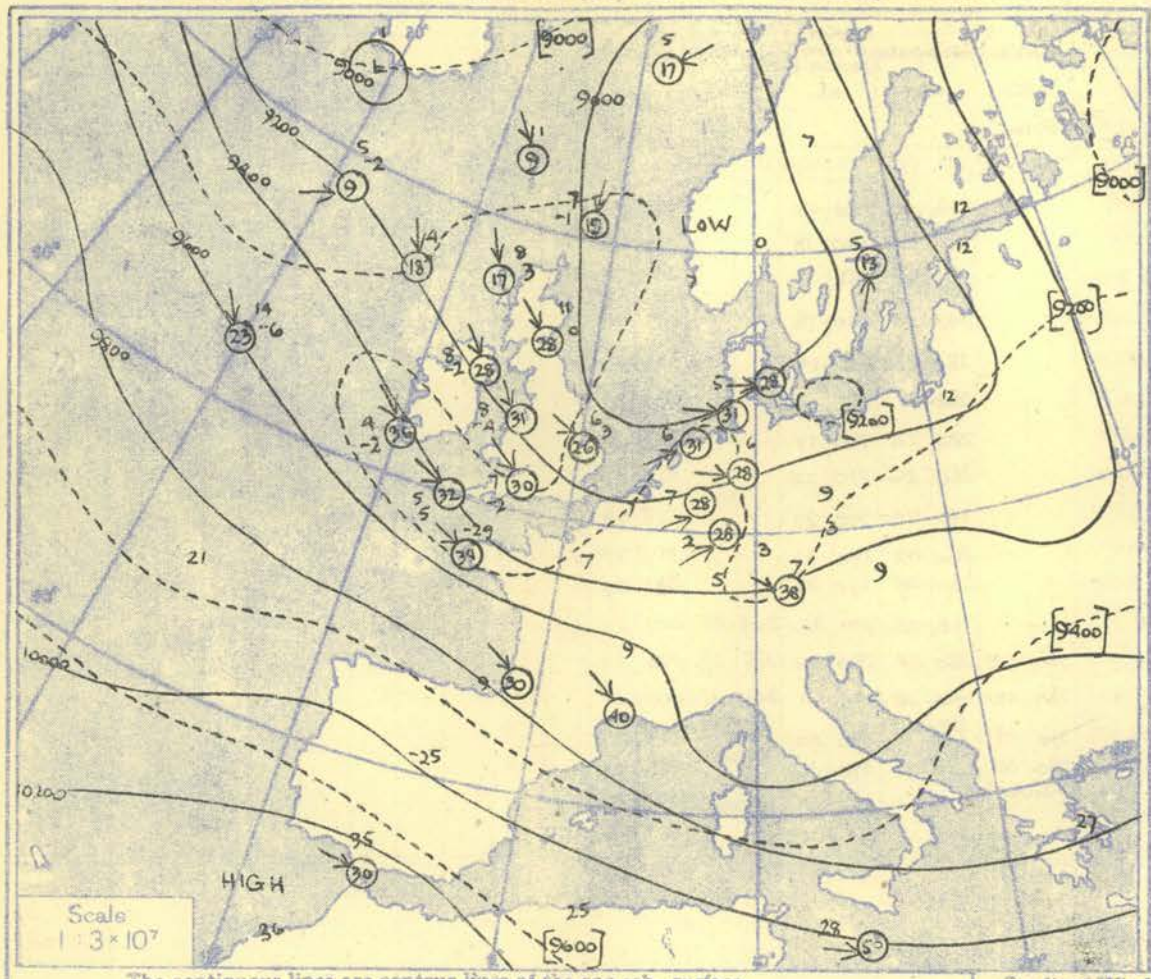
Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots
Ship	WEATHER RECORDER					WEATHER RECORDER				
Lat/Long	59·0N. 19·0W.					59·0N. 18·9W.				
Time G.M.T.	15h.					21h.				
M.S.L. mb	1002					1003				
Surf mb	1002					1003				
Freezing mb	930					960				
Surf		41	34	300	23		37	34	310	23
1000	6	41	34	300	23	0·8	37	34	310	23
950		34	33	296	22		31	28	308	13
900	28·5	28	25	295	15	28·4	26	22	300	15
850		21	18	286	11		20	16	295	14
800	58·7	14	14	262	09	58·5	14	11	292	13
750		10	08	249	08		07	04	288	14
700	92·1	05	-02	237	09	91·7	00	-03	274	15
650		-01	-11	245	11		-05	-08	257	17
600	130	-09	-19	262	16	129	-11	-14	250	16
550		-18	-27	263	17		-20	-25	248	16
500	173	-26	-34	269	12	172	-28	-34	245	16
450		-36	-43	275	18		-37	-45	263	24
400	223	-48		291	30	222	-46		286	39
350		-56		287	36		-55		289	46
300	285	-69		281	39	284	-65		287	42
250							-65		282	47
200						369	-61		282	43
170							-61		279	36
150							-61		280	40
130							-63		282	41
110							-67		283	39
100						516	-70		285	40
90							-70		285	42
80							-70		282	42
70							-70		282	42
60							-70			
Remarks	Isothermal 1002 - 1000mb. 41°									
Tropopause	N.R.					I 264mb. -71° 31,200'				

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
Ship	WEATHER EXPLORER					WEATHER EXPLORER				
Lat/Long	52·6N. 20·0W.					52·6N. 19·8W.				
Time G.M.T.	03h.					09h.				
M.S.L. mb	1011					1011				
Surf mb	1011					1011				
Freezing mb	920					910				
Surf		41	31	280	22		41	35	270	16
1000	2·9	40	33	288	27	3·1	43	35	305	21
950		35	26	291	28		37	29	305	21
900	30·8	29	19	294	29	31·1	31	25	305	21
850		22	12	290	28		25	19	305	20
800	61·0	15	03	285	31	61·5	18	09	305	26
750		11	-03	284	34		12	-02	305	24
700	94·5	05	-08	290	36	95·2	11	-06	305	24
650		-02	-14	292	35		06	-17	301	27
600	132	-07	-19	290	38	133	00	-29	313	33
550		-13	-29	289	42		-08	-41	317	37
500	175	-22	-36	289	40	177	-14	-47	317	50
450		-34	-49	289	40		-23	-53	309	59
400	226	-41		289	57	229	-34	-57	306	69
350		-44		289	64		-45		306	70
300	290	-51		291	84	293	-60		306	81
250		-56		297	75		-73		306	68
200	377	-57		295	71	377	-68		306	60
170		-56		292	69		-60		306	55
150		-57		293	62		-61		306	50
130		-58		295	55		-63		306	44
110		-62		296	50		-64		275	39
100	525	-64		299	43	524	-63		304	42
90		-64		295	39		-65		304	37
80		-65		293	41		-68		304	25
70		-66		292	44	(075 mb)	-69			
60		-67		292	36					
	(050)	-68		292	32					
	(040 mb)	-68								
Remarks						Inversion 1011mb. 41°-1000mb. 43° 730mb 10°-710mb. 12°				
Tropopause	II 262mb. -56° 31,900'					I 280mb. -73° 33,200'				

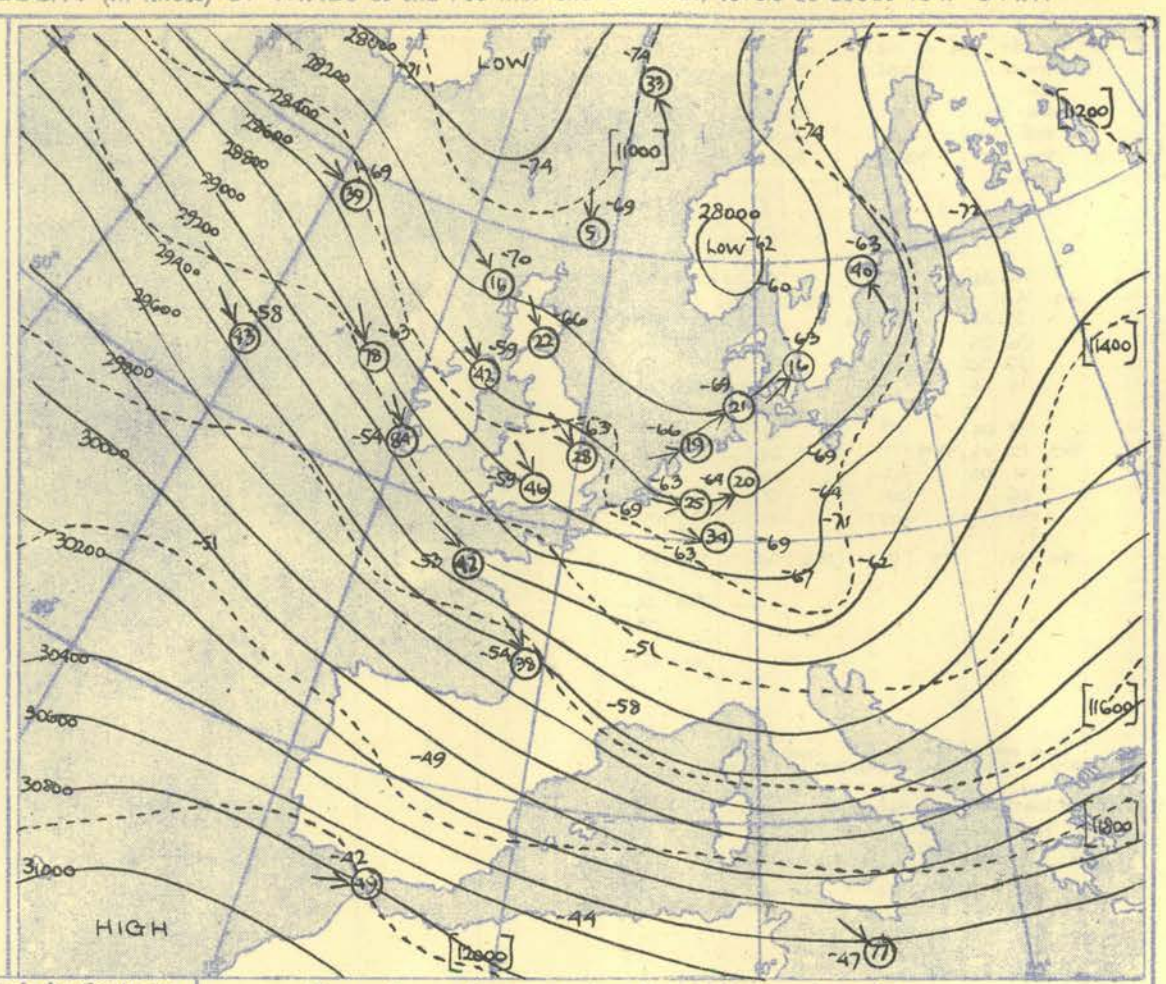
Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	°F. Dew	Wind Dir. °	Wind Vel. knots
Ship	WEATHER EXPLORER					WEATHER EXPLORER				
Lat/Long	52·5N. 19·8W.					52·4N. 19·6W.				
Time G.M.T.	15h.					21h.				
M.S.L. mb	1012					1012				
Surf mb	1012					1012				
Freezing mb	910					900				
Surf		45	34				45	34	280	18
1000	3·2	43	34			3·3	46	31	291	25
950		37	32				39	23	295	28
900	31·2	30	26			31·3	32	18	293	27
850		26	22	For			25	15	283	23
800	61·8	22	12			61·8	22	05	279	24
750		18	02	winds			19	-04	275	27
700	95·8	14	-06			95·9	14	-13	272	30
650		08	-16	see			07	-26	277	31
600	134	01	-30			134	01	-19	285	32
550		-07	-30	top			-05	-20	283	38
500	178	-17	-35	of		179	-14	-31	291	39
450		-23	-32				-24	-42	294	48
400	230	-34	-42	page		230	-35	-54	295	49
350		-47					-49		284	48
300	293	-58				293	-63		279	51
250		-69					-69		280	51
200	379	-66				378	-64		285	52
170		-62					-62		285	53
150		-61					-63		285	47
130		-60					-63		285	41
110		-65					-63		285	39
100	525	-66				525	-67		285	37
90		-67					-70		279	33
80		-66				(087 mb)	-72			
70		-69								
60		-68								
	(050)	-66								
	(047 mb)	-65								
Remarks						Inversion 1012mb. 45°-997mb. 46° 821mb. 21°-813mb. 23°				
Tropopause	I 247mb. -70° 33,500'					I 256mb. -70° 32,800'				

Thursday 22nd. February 1951.

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



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

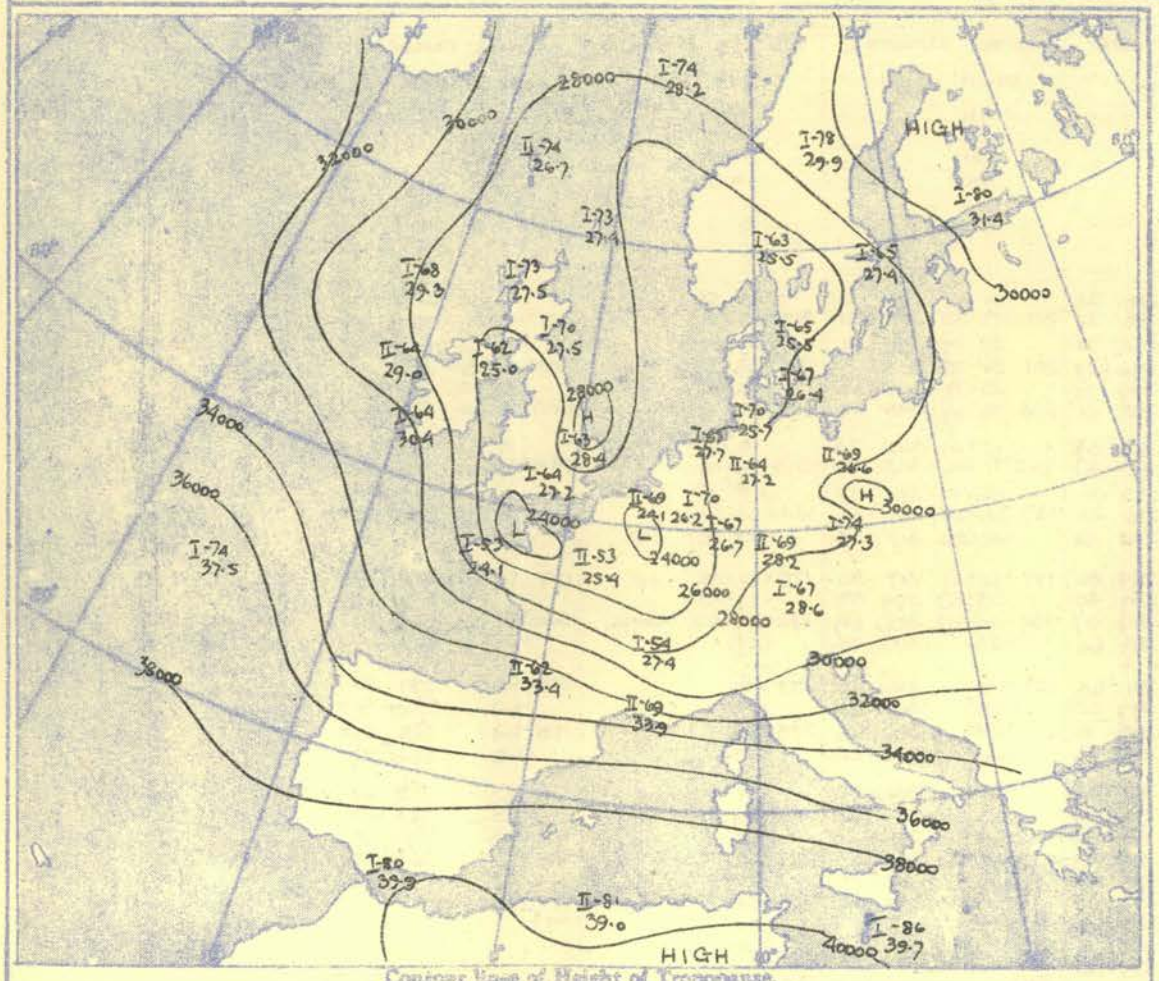


The continuous lines are contour lines of the 300mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb.

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

60 50 40 30 20 15 10 knots

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



Contours lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Warmer air from central Atlantic spread eastwards transfering the axis of the cold trough from 15° W to about 0° W. Steady cooling has occurred between Iceland and Greenland.

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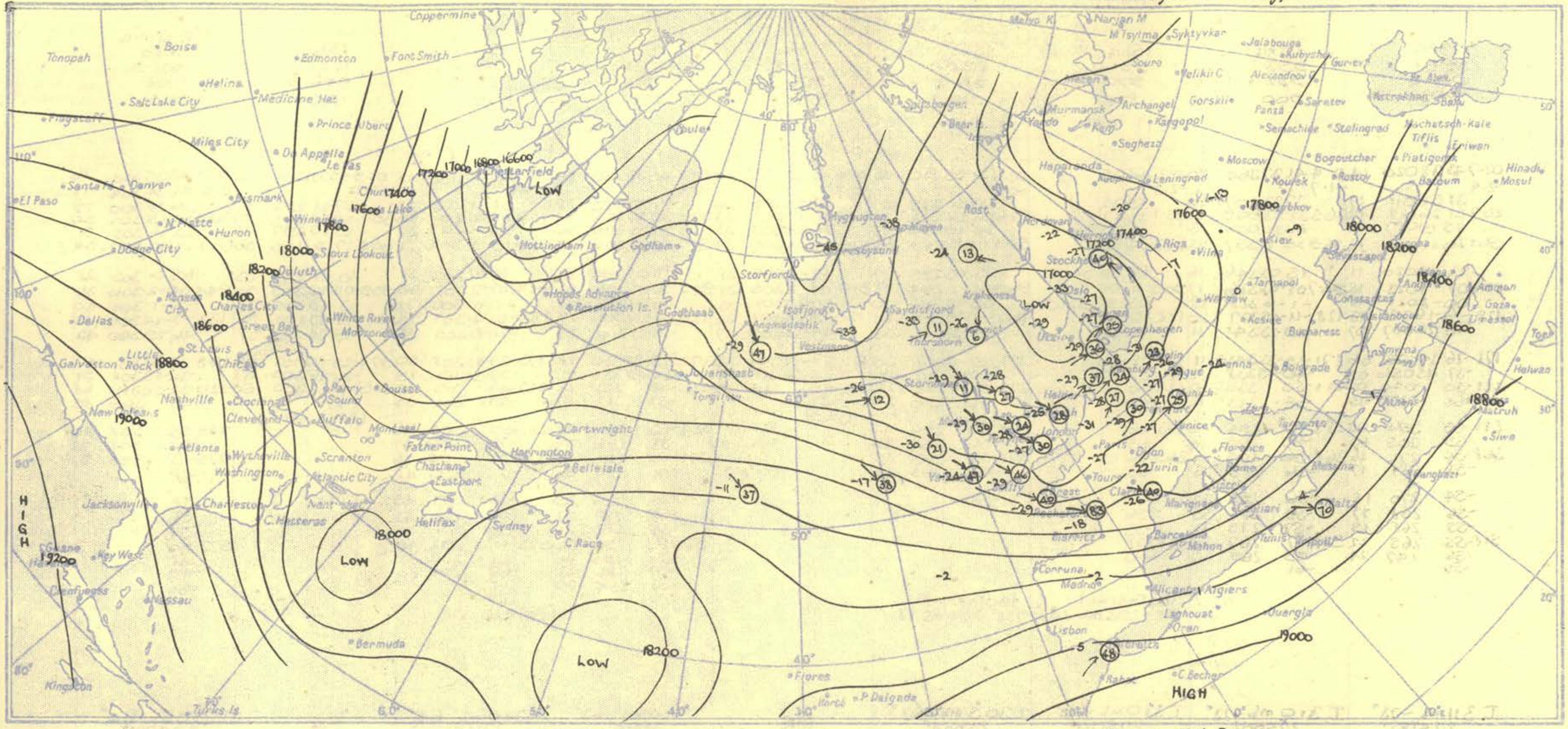
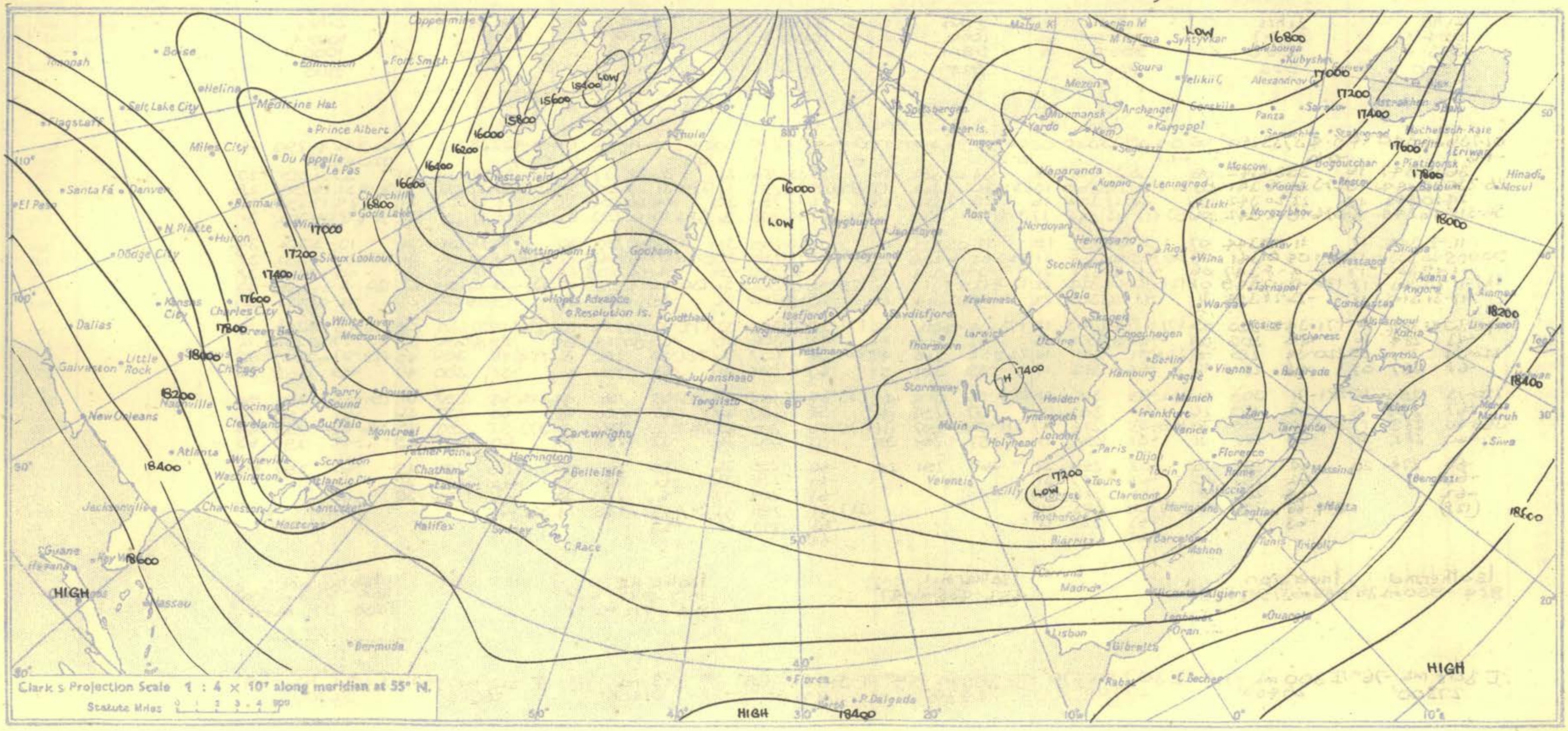
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Thursday 22nd February, 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Thursday 22nd February, 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. February 22nd 1951.

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

15 hrs G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	Valentia
Pressure: Time	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.	15hrs G.M.T.
Pressure: M.S.L.	991.1 mb	993.7 mb	991.0 mb	998.0 mb	997.8 mb	997.6 mb	1001.5 mb	1007.6 mb	1008.3 mb
Pressure: Surf	981.2 mb	982.1 mb	990.1 mb	988.8 mb	995.7 mb	993.1 mb	988.4 mb	996.9 mb	1008 mb
Pressure: Freezing	903 mb	900 mb	878 mb	912 mb	907 mb	916 mb	899 mb	912 mb	915 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	43	38	020	14	0·4	41	37	360	10	0·2	44	35			02·6	41	35	270	10	0·6	43	39	270	20	01·3	42	37	230	19	04·4	42	35	310	18	02·9	45	35	300	12	0·3	43	35	320	16	Surf
1000	-2.4					-1·7					-2·5					-0·5					-0·7					-0·6					0·4					02·0					2·4	42	34	304	18	1000
950		38	32	011	17		37	33	002	14		39	32				37	31	275	20		37	33	284	30		37	33	270	28		38	31	285	28		37	28	293	30		36	29	300	28	950
900	25·7	31	26	012	12	26·3	32	28	005	12	25·7	32	27			27·6	31	26	288	21	27·3	31	27	302	33	27·2	30	27	284	27	28·4	32	25	291	30	30·1	30	27	292	27	30·4	30	25	302	30	900
850		25	19	017	10		26	20	002	13		28	20			24	19	290	27			26	19	307	33		25	22	300	24		26	20	297	33		23	18	297	28		23	16	305	31	850
800	56·1	20	11	020	12	56·9	20	11	357	13	56·3	24	16			58·1	19	13	285	26	57·9	20	11	304	34	57·6	19	17	305	24	58·9	19	15	302	32	60·4	17	06	295	30	60·7	17	10	307	35	800
750		13	05	020	11		15	05	346	16		18	09	See p 3 for winds			15	05	295	27		14	03	305	33		13	08	296	24		14	07	302	31		10	-3	297	33		10	01	309	38	750
700	83·8	07	-10	023	15	80·7	08	03	336	17	80·3	11	00			81·9	08	-2	294	28	81·7	08	-4	305	31	81·3	06	03	291	26	82·6	07	-2	307	30	83·9	05	-10	300	32	84·1	06	-2	306	36	700
650		00	-8	021	18		-1	-6	328	18		05	-3				02	-12	296	30		00	-15	307	33		00	-11	298	28		-1	-10	305	32		-3	-15	300	30		-1	-1	304	40	650
600	12·8	-6	-16	013	13	12·8	-11	-15	337	20	12·8	-6	-17			13·0	-3	-23	300	31	13·0	-3	-24	307	32	12·9	-6	-24	316	27	13·0	-10	-21	301	32	13·4	-12	-27	292	33	13·2	-7	-22	300	45	600
550		-16	-26	007	07		-19	-23	341	11		-16	-24				-19	-37	302	30		-15	-34	302	27		-15	-28	314	27		-20	-31	300	33		-19	-38	293	37		-16	-29	300	43	550
500	17·1	-26	-34	035	06	17·1	-23	-33	341	11	17·1	-28	-36			17·3	-29	-46	307	30	17·2	-28	-44	301	24	17·2	-25	-39	330	28	17·3	-27	-45	308	30	17·4	-29	-50	303	46	17·5	-24	-37	301	47	500
450		-37	-45	056	09		-40	-48	338	12		-37	-45				-40	-57	302	22		-31	-54	311	23		-31	-49	334	23		-37	-55	313	29		-36	-56	300	47		-32	-48	308	51	450
400	22·1	-50		040	07	22·1	-50		335	10	22·2	-50				22·2	-52		288	22	22·2	-49		316	26	22·3	-49		323	22	22·3	-47		313	30	22·5	-44		300	60	22·6	-37	-50	311	68	400
350		-64		023	05		-64		323	12		-61					-62		290	30		(-57)					-67		312	27		-53		302	32		-46					-47		309	80	350
																					(365)																(339)									
300	28·2	-69		356	05	28·2	-70		294	16	28·3	-66				28·4	-59		296	42				For reminder of winds see p 3.		28·4	-63		306	28	28·5	-59		305	46						28·9	-59		308	89	300
250		-59		305	10		-60		305	24		-65					-56		304	39							-55		296	36		-54		296	47							-62		304	75	250
200	36·8	-54		272	16	36·8	-56		305	24	36·3	-56				37·1	-52		290	35						37·2	-52		291	40	37·3	-51		295	46						37·5	-63		298	87	200
170		-53		281	17		-56		285	33		-53					-53		295	29							-51		291	40		-52		293	48							-61				170
150		-54		270	18		-56		293	32		-60					-54										-54		291	39		-55		293	46											150
130		-56		268	22		-58		284	30		-56															-59		287	37		-57		292	43							-58				130
110		-55		268	19		-57		278	32		-53															-54		288	31		-53		288	38							-58				110
100	51·8	-55		265	22	51·7	-57		267	30	51·8	-52														52·2	-56		290	30	52·3	-60		292	40						52·3	-60				100
90		-56		247	24		-59		263	30		-60															-56		294	31		-58		290	33							-61				90
80		-56					-61																				-57		286	33		-60		292	30							-60				80
70																											-58		284	30		-61										-61				70
60																																-61													60
											Isothermal 811-793 mb 24°					Isothermal 788-774 mb 18°															(50)	-66													
Tropopause	I 311 mb -78° 27400'					I 310 mb -78° 27500'					I 310 mb -70° 27500'					I 305 mb -62° 25000'					NR					I 300 mb -63° 28400'					I 320 mb -64° 27200'					NR					I 280 mb -64° 30400'					Tropopause

21 hrs G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	
Pressure: Time	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	21hrs G.M.T.	G.M.T.
Pressure: M.S.L.	994·0 mb	997·1 mb	995·9 mb	1000 mb	1000·8 mb	1001·0 mb	1005·2 mb	1010·8 mb	mb
Pressure: Surf	983·3 mb	986·0 mb	995·0 mb	991·1 mb	998·4 mb	996·5 mb	988·9 mb	1000·0 mb	mb
Pressure: Freezing	920 mb	928 mb	924 mb	925 mb	926 mb	917 mb	918 mb	900 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	01·7	36	34	340	14	0·4	37	35	280	05	0·2	39	35	330	08	02·6	37	34	300	12	0·6	41	38	270	20	01·2	38	34	235	08	04·4	38	35	310	13	02·9	42	41	293	15							Surf
1000	-1·6					-0·6					-1·1					0·2					0·2					0·3					01·4					02·3	42	41								1000
950		36	32	347	16		38	34	345	06		35	31	001	15		34	30	332	16		35	33	286	31		36	32	277	33		38	32	284	31		39	31	289	27							950
900	26·2	30	25	344	15	27·3	29	28	341	05	26·8	29	26	360	18	28·1	30	25	332	13	28·0	29	26	292	31	28·1	31	27	292	35	29·3	30	27	293	33	30·9	32	26	293	28							900
850		24	20	343	15		22	20	342	06		24	18	356	16		25	17	332	15		22	21	292	30		24	20	292	33		24	22	295	31		24	17	298	30							850
800	56·5	18	16	344	16	57·6	16	12	342	06	57·2	18	13	348	17	58·6	19	12	330	18	58·3	17	14	295	31	58·5	17	12	293	32	59·7	18	17	297	32	61·9	18	06	302	31							800
750		11	-2	344	17		11	09	344	07		11	08	332	19		12	05	322	16		13	03	299	31		13	00	293	30		15	11	296	31		13	-3	301	34							750
700	30·0	05	-20	333	17	31·1	04	01	341	05	30·7	05	01	328	21	32·3	05	-6	306	18	31·8	05	-2	295	30	32·1	07	-6	286	27	33·4	08	00	294	31	36·0	06	-11	302	38							700
650		-1	-43	330	17		-4	-8	342	06		-1	-5	321	21		-3	-14	314	17		-3	-10	293	29		-2	-14	280	24		00	-8	294	30		00	-13	302	38							650
600	12·8	-11	-25	323	18	12·9	-13	-17	343	08	12·8	-10	-14	324	22	13·0	-12	-24	315	22	12·9	-11	-19	300	31	13·0	-12	-24	273	27	13·1	-3	-16	259	28	13·3	-6	-24	303	43							600
550		-16	-31	310	18		-23	-28	342	11		-18	-26	309	22		-22	-35	314	24		-20	-29	298	32		-20	-31	281	30		-19	-26	293	24		-12	-44	303	47							550
500	17·0	-30	-41	304	16	17·1	-34	-39	330	05	17·1	-28	-40	305	19	17·3	-34	-44	312	22	17·2	-30	-38	300	33	17·2	-30	-40	286	33	17·4	-29	-37	289	24	17·6	-19	-34	309	51							500
450		-43		284	16		-46		305	09		-40	-50	322	15		-41		310	28		-42		306	30		-35	-50	284	30		-39	-48	292	37		-27	-59	307	72							450
400	22·0	-54		271	09	22·0	-54		285	15	22·1	-51		331	16	22·2	-52		310	47	22·2	-54		297	26	22·2	-50		282	33	22·4	-46		300	45	22·8	-37	-60	307	78							400
350		-68		267	08		-65		296	16		-62		315	17		-59		307	51		-60		294	31		-63		275	22		-58		300	47		-49		305	80							350
300	28·0	-75		250	10	28·1	-71		303	21	28·2	-69		311	18	28·4	-56		302	42	28·3	-64		302	44	28·3	-60		291	42	28·6	-64		298	51	29·1	-59		301	90							300
250		-67		257	15		-63		299	26		-61		303	32		-57		258	41		-58		297	47		-63		301	40		-60		297	56		-63		293	71							250
200	36·5	-60		285	17	36·7	-60		295	30	36·9	-53		278	27	37·1	-56		257	38	37·0	-56		302	39	36·9	-59		297	41	37·3	-58		293	48	37·6	-63		299	64							200
170		-60		282	20		-60		285	31		-57		298	25		-57		291	39		-57		303	36		-55		295	37		-60		288	43		-62		297	63							170
150		-60		274	20		-60		291	30		-58		292	31		-60		291	26		-60		299	36		-59		295	35		-59		291	45		-60		297	60							150
130		-62					-62		293	30		-62		287	31							-61		295	36		-61		292	37		-62		282	31		-61										130
110		-62					-64		288	28		-58		286	30							-63		292	37		-62		293	33		-66		288	36		-62										110
100		(128)				31·4	-66		271	28	31·7	-60		283	26						31·7	-64		291	33	31·7	-63		285	24	32·0	-68					(124)										100
90							-65					-63		283	18							-63		277	28		-65																		90
80												-65										-64																								80
70																																															70
60																																															60
	Isothermal 984 - 960 mb 26°					Inversion 956 mb 37 - 982 mb 38°										Isothermal 452 - 435 mb -47°										Isothermal 997 - 975 mb 38° 800 - 772 mb 17°										Isothermal 650 - 663 mb 00° 1000 - 972 mb -42°															
Tropopause	I 308 mb -76° 27300'					I 300 mb -71° 26400'					I 307 mb -70° 27700'					II 355 mb -59° 24700'					I 315 mb -65° 27200'					I 315 mb -71° 27400'					I 328 mb -69° 26600'					I 254 mb -64° 32700'											Tropopause

HMSO Press, MO, Dunstable

No. 11653 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Friday 23rd Feb. 1951. Page 1.

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

METEOROLOGICAL OFFICE — Received Valentia 5 - MAR 1951

03 hrs 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.	G.M.T.
M.S.L.	996·4 mb	1000·3 mb	1000·0 mb	1004·5 mb	1002·9 mb	1003·7 mb	1003·9 mb	1012·4 mb	1010·7 mb
Surf	986·2 mb	998·6 mb	999·1 mb	995·1 mb	1000·8 mb	999·2 mb	991·4 mb	1001·6 mb	1010 mb
Freezing	920 mb	943 mb	921 mb	928 mb	912 mb	923 mb	938 mb	900 mb	915 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	35	29	305	08	0·4	36	34	260	05	0·2	37	32	290	07	02·6	35	33	270	10	0·6	39	36	280	12	01·2	37	35	225	10	4·4	37	33	290	13	02·9	42	31	270	15	0·3	39	36	190	07	Surf
1000	-01·0					0·1					-0·0					01·3					0·8										2·1					03·3	42	31			2·9	39	35	205	08	1000
950		35	27	301	20		33	32	012	15		36	27	301	06		34	30	289	20		36	31	293	20		35	32	271	20		33	30	277	31		38	29	279	24		36	33	265	14	950
900	26·9	29	24	301	18	27·8	29	27	355	15	27·9	30	23	308	09	29·1	29	24	309	25	28·7	31	27	309	22		30	30	282	33	29·8	28	25	282	33	31·4	32	24	284	24	30·9	30	27	269	17	900
850		20	14	298	18		24	22	355	18		23	18	310	11		23	19	309	28		25	21	309	22		26	25	291	32		24	17	278	32		26	16	293	26		24	20				850
800	57·1	18	03	290	18	58·2	18	14	341	19	58·3	16	13	311	13	59·4	18	14	301	20	59·2	20	13	309	22		20	18	293	30	60·3	21	09	278	29	61·9	21	07	295	28	61·3	20	15			800
750		12	-8	284	17		12	03	326	22		05	03	334	16		12	09	306	22		14	07	309	21		13	09	292	29		14	03	278	25		14	03	296	32		14	09				750
700	30·6	05	-15	287	18	31·8	06	01	331	18	31·7	05	-11	318	15	32·0	06	-7	304	21	32·9	08	02	312	22		07	00	288	25	34·0	06	-6	285	27	35·7	09	-5	292	33	35·0	05	-6				700
650		-2	-23	295	18		-1	-4	318	15		-3	-17	324	18		-1	-20	307	21		00	-12	314	22		-2	-9	285	27		-2	-16	297	32		05	-18	290	36		01	-17				650
600	12·8	-9	-28	299	24	12·9	-9	-11	304	12	12·9	-11	-22	323	15	13·1	-10	-31	311	24	13·1	-9	-18	310	23		-11	-19	283	30	13·2	-10	-26	298	31	13·4	-7	-27	291	40	13·3	-5	-29				600
550		-17	-37	299	28		-18	-24	289	12		-20	-30	325	18		-20	-38	308	24		-19	-27	300	24		-21	-30	287	33		-19	-35	292	32		-9	-32	290	44		-12	-32				550
500	17·1	-30	-48	299	22	17·2	-29	-35	277	12	17·2	-30	-40	326	16	17·3	-30	-46	307	28	17·4	-29	-40	307	22		-31	-40	289	34	17·4	-30	-43	294	42	17·8	-18	-34	291	46	17·7	-21	-30				500
450		-43		300	15		-39	-45	282	09		-41		310	14		-42		305	39		-40	-51	311	25		-43		287	35		-39	-52	296	54		-27	-37	291	56		-31	-43				450
400	22·1	-56		300	03	22·2	-50		291	21	22·2	-51		303	17	22·3	-48		302	40	22·4	-48		308	34		-54		288	35	22·8	-45		295	73	22·9	-36	-48	293	58	22·7	-41					400
350		-65		298	14		-58		300	24		-63		294	18		-57		298	46		-56		303	60		-58		295	44		-55		296	83		-46		291	66		-52					350
300	28·1	-72		289	13	28·4	-67		304	34	28·3	-67		303	26	28·5	-68		297	48	28·6	-62		300	55		-62		296	42	28·7	-62		298	81	29·3	-58		291	73	29·0	-63					300
250		-61		294	17		-67		298	28		-60		308	31		-62		296	45		-58		299	52		-62		295	47		-64		293	73		-63		291	66		-67					250
200	34·7	-68		284	19	36·9	-69		291	26	36·9	-59				37·1	-60		293	41	37·3	-55		296	37		-56		291	40	37·2	-59		294	45	37·8	-63		291	60	37·5	-64					200
170		-56		283	21		-69		292	25							-53		283	39		-60		288	32		-58		290	38		-58		288	36		-62		274	49		-63					170
150		-59					-69		291	27							-59		281	33		-61		287	39		-58		286	33		-62		283	42		-62		277	53		(174)					150
130		(153)					-69		285	27							-63		282	31		-58		287	40		-60		285	37		-63		277	47		-64		286	48							130
110							-70		283	29												-59		283	34		-63		287	33		-62		293	36		-61		289	45							110
100						51·3	-71		282	30											52·1	-61					-64		286	33	52·0	-62		287	36	52·5	-61		288	43							100
90							-72		278	30												-61										-66		283	35		-60		289	40							90
80							-73		275	29												(57)										-69		288	35		-60		289	43							80
70							-73		276	33																						-68		280	41		-61		290	41							70
60							-73		278	36																											-69										60
	Inversion 986mb 35°-962mb 36°										Isothermal 999-962mb 37°					Isothermal 993-955mb 35° 450-435mb 42°					Isothermal 1001-982mb 39°					Inversion 385mb 56°-368mb 54° 300mb 62°-278mb 55°																					Inversion 1000mb 39°-988mb 40°				
	Isothermal 836-805mb 19°																										Isothermal 993-972mb 37°					Isothermal 900-889mb 28°					Isothermal 1002-979mb 42°										Isothermal 1010-1000mb 39°				
Tropopause	I 300 mb -72° 28100'					I 270 mb -71° 30500'					I 325 mb -69° 26400'					I 290 mb -69° 29200'					I 294 mb -69° 29000'					I 250 mb -62° 32300'					I 306 mb -68° 28300'					I 230 mb -73° 34400'					I 263 mb -68° 31800'					Tropopause

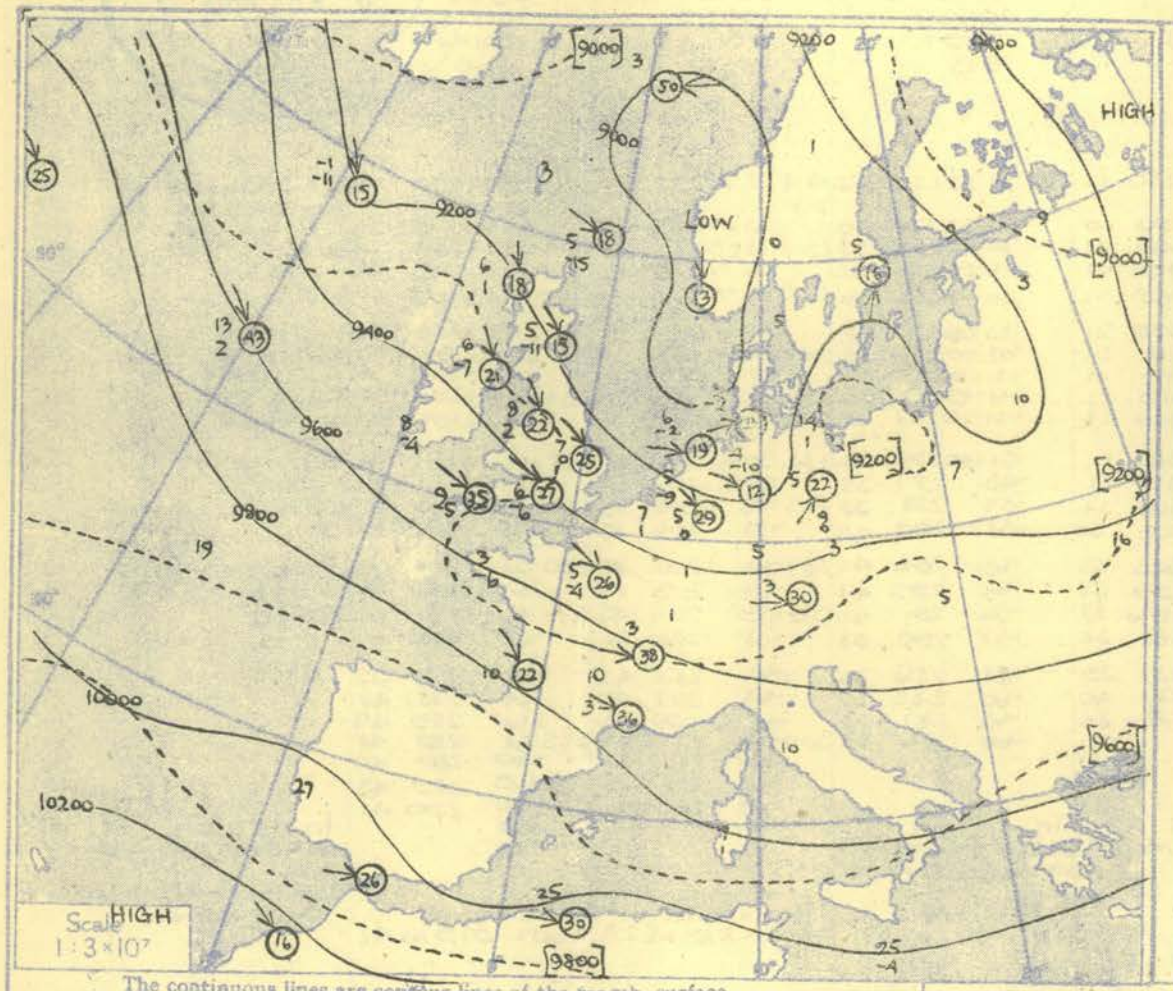
09 hrs G.M.T.

Station	Lerwick	Stornoway	Leuchars	Aldergrove	Liverpool	Downham Market	Larkhill	Camborne	
Pressure: Time	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	09hrs G.M.T.	G.M.T.
M.S.L.	997·1 mb	1001·5 mb	1002·0 mb	1008·7 mb	1006·2 mb	1006·9 mb	1010·0 mb	1012·5 mb	mb
Surf	987·0 mb	999·8 mb	1001·1 mb	996·0 mb	1004·1 mb	1002·2 mb	993·6 mb	1001·7 mb	mb
Freezing	929 mb	923 mb	926 mb	924 mb	914 mb	924 mb	920 mb	923 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						Pressure mb
Surf	02·7	35	29	295	08	04	33	33			0·2	32	32	260	10	02·6	35	33			0·6	40	37	260	15	01·2	37	34	220	10	4·4	37	34	270	12	02·3	38	35	230	08						Surf
1000	0·8					0·4	35	33			0·4	32	32			0·5					01·7					01·8	36	33			2·6					03·3	35	35								1000
950		35	27	274	18		35	32				34	32	279	13		34	33				35	32	281	20		35	31	292	26		35	31	290	23		35	28	263	18							950
900	27·1	28	23	278	18	28·2	30	27			28·3	29	27	285	14	29·3	30	28			29·6	29	25	287	22	29·6	30	25	303	25	30·5	30	22	294	25	31·2	29	24	263	14						900
850		21	15	278	18		24	21				23	22	294	11		24	21				22	16	299	22		22	18	306	24		24	18	296	28		23	17	273	18							850
800	57·3	14	08	272	19	58·6	18	14			58·7	16	15	294	11	59·8	18	15			59·9	17	09	302	21	59·9	18	11	301	22	60·9	20	08	301	23	61·6	15	10	276	23						800
750		09	-7	275	23		11	05				12	10	290	09		12	06				13	-2	287	22		13	00	303	24		14	01	296	24		13	05	289	18							750
700	30·6	04	-22	262	28	32·1	05	00			32·3	06	02	291	11	33·0	04	-9			33·5	05	-11	297	20	33·5	07	-8	303	24	34·6	08	-9	290	25	35·3	09	00	274	24						700
650		-1	-28	264	31		-3	-9				-2	-07	297	14		-3	-17				-3	-21	300	21		-2	-17	301	25		00	-24	291	27		03	-11	273	26							650
600	12·8	-13	-34	256	30	13·0	-11	-20			12·0	-10	-14	300	15	13·1	-9	-21			13·1	-12	-20	292	22	13·1	-10	-26	297	18	13·2	-7	-32	294	28	13·3	-4	-27	274	30						600
550		-23	-43	256	32		-20	-30				-20	-23	301	14		-19	-29				-21	-37	294	27		-20	-36	295	27		-15	-35	296	34		-14	-28	277	32							550
500	17·1	-33	-50	255	33	17·2	-30	-42			17·3	-31	-35	298	14	17·4	-31	-40			17·4	-30	-44	294	32	17·4	-29	-45	300	28	17·6	-24		295	40	17·7	-21	-36	284	38						500
450		-48		262	37		-40	-51				-41		298	21		-42					-41		299	37		-38	-53	311	31		-35		291	57		-30	-42	282	46							450
400	22·0	-55		253	21	22·2	-49				22·2	-43		297	27	22·4	-60				22·4	-43		298	37	22·4	-48		304	39	22·6	-44		291	63	22·8	-41		282	50							400
350		-63		248	20		-59					-60		294	27		-63					-58		293	47		-54		303	56		-53		290	66		-53		282	57							350
300	28·1	-66		264	16	28·4	-67				28·4	-65		297	31	28·5	-69				28·5	-63		288	47	28·6	-64		300	52	28·9	-63		284	70	29·0	-66		278	64							300
250		-64		274	19		-60					-60		291	32		-67					-64		291	47		-62		292	56		-63		289	59		-70		277	60							250
200	36·7	-58		276	21	37·0	-56							291	25	37·0	-62				37·0	-61		284	40	37·2	-58		288	45	37·4	-59		283	48	37·5	-66		291	57							200
170		-58		273	20		-53							292	28		-58					+61		285	48		+56		286	39		-56		288	37		-62		294	53							170
150		-60		269	21		-56										-62										-57		288	35		-58		289	40		-62		289	49							150
130		-61		276	24		-57										-64										-56		290	32		-59		283	39		-61		300	54							130
110		-60		267	27		-58										-63										-59		279	33		-59		270	36		-63		329	42							110
100		-59				51·9	-59										-63				52·1	-59		283	34		-59		286	33	52·3	-62		281	30	52·2	-65		321	31							100
90							-59															-59		286	33		-62		278	24		-63		293	22		-68		318	48							90
80							-60																														-68		308	45							80
70							-61																														-70										70
60	Inversion 987mb 35°-969mb 37°					Inversion 1000mb 35°-981mb 37°					Inversion 1001mb 32°-975mb 35°					Inversion 965mb 34°-955mb 35°										Inversion 825mb 18°-810mb 20°					Inversion 954mb 31°-940mb 38°					Inversion 1002mb 39°-994mb 41°										60
	Isothermal 35f-335mb -63°																														Isothermal 850-824mb 24°															
Tropopause	I 312 mb -67° 27300'					I 284 mb -70° 29500'					II 326 mb -67° 28400'					II 310 mb -69° 27700'					I 298 mb -70° 28600'					I 287 mb -66° 28500'					I 304 mb -64° 28500'					II 284 mb -70° 30000'										Tropopause

Friday 23rd. February 1951.

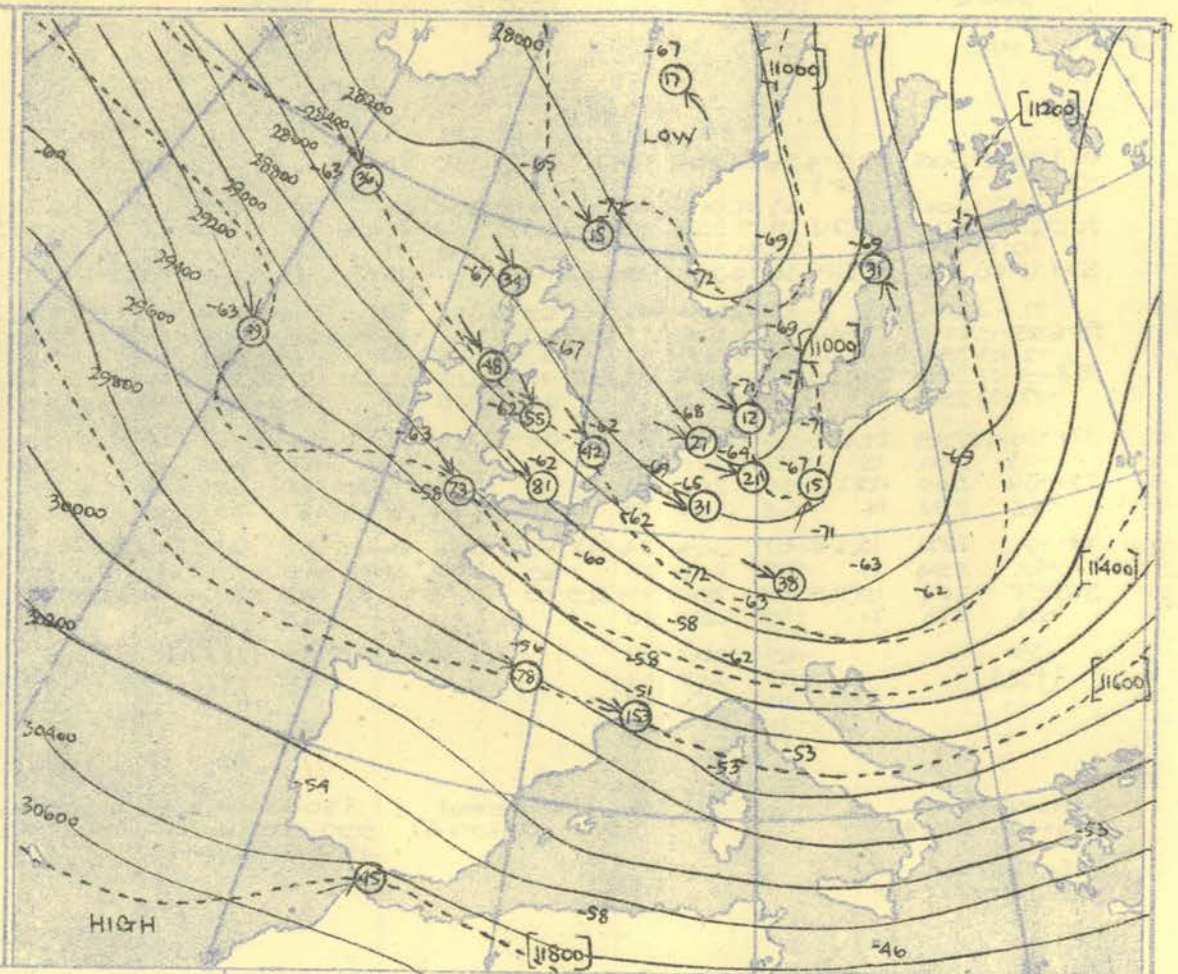
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03 h G.M.T.



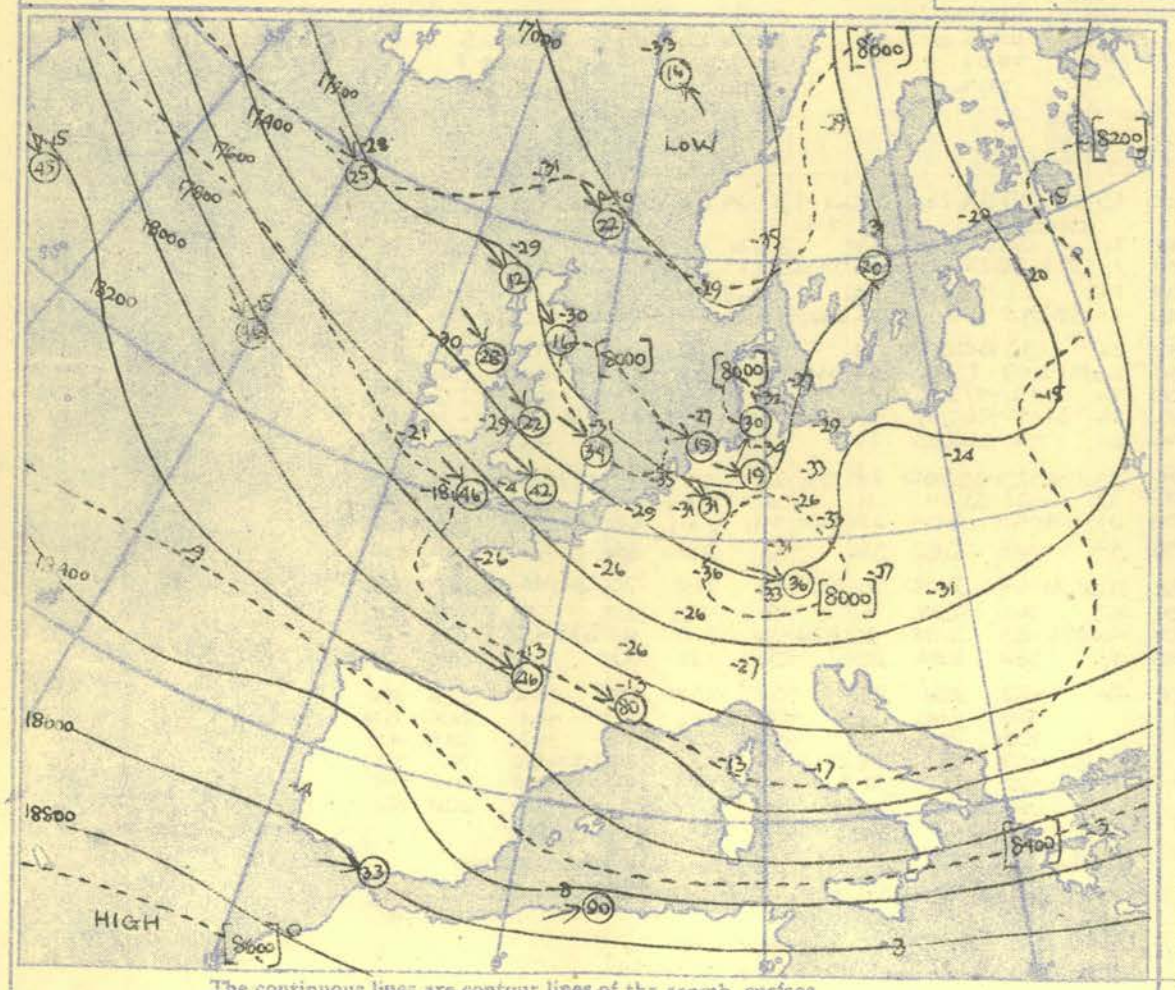
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000 — 700 mb.

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

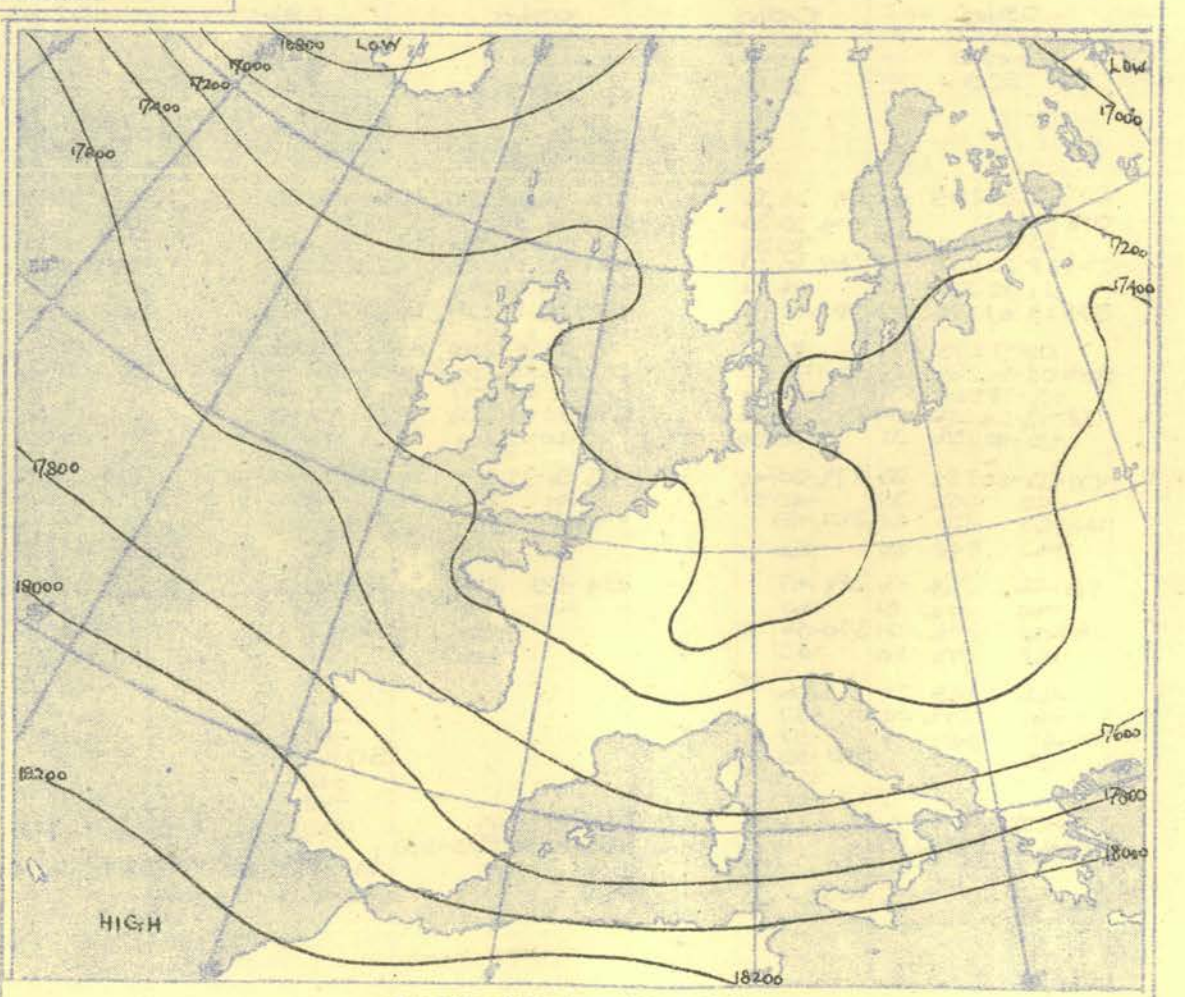
100 60 40 30 20 15 10 knots



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



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



Isopleths of Thickness 500 - 1000mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	53·2N 17·1W	59·5N 12·2W	51·3N 00·4E
Pressure Time	13L	15L	1410L
Pressure M.S.L.	1020 mb	1015 mb	1010 mb
Pressure Surf	1018 mb	1013 mb	990 mb
Pressure Freezing	900 mb	750 mb	900 mb

Pressure mb	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew	Height ft./100	°F. Temp.	°F. Dew
Surf		51	45		57	56	3·1	45	32
1000	5·4	48		4·1	54		2·8		
950		41	31		53	49			
900		32	31		47	45	30·9	31	22
850		26	26		42	42		25	17
800		28	19		37	37	61·4	19	07
750		28	23		32			13	04
700	99·1	24	20	99·6	27		95·1	07	-05
650		02			23			01	-06
600		09			13		133	-09	
550		01			07			-17	
500	183	-09		185	-02		176	-27	
450								-33	
400							227	-41	
350								-54	
300							289	-63	
250									
200									
170									

cloud:- 6/St Cu 890-850 mb. Inversion 850mb 26° 800 - 28°. Isothermal 800-750mb 28°. Surface wind N 11-16 Kts

cloud:- 6/St 980-970 mb. 3/8 St 920-910 mb. 8/8 St 990-760 mb. 3/8 Ci approx 8300mb. Surface wind W 11-16 Kts

cloud:- 3/8 Cu 886-859 mb. 7/8 Sc 847-772mb

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

Place	Leuchars		Liverpool		Learning		Shoeburyness		Leuchars		Liverpool		Ronaldsway		Lerwick		Place
Time	09L		09L		0930L		10L		15L		15L		1945L		21L		Time
Type			PILAR								PILAR						Type
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Feet.
Surf					270	13	260	11	280	09	270	12	260	17	290	08	Surf
1,000					290	14	280	21	265	14	271	18	240	19	310	11	1,000
2,000					300	18	290	20	278	16	270	18	250	27	310	10	2,000
3,000					300	19	300	17	281	16	269	18	240	27	310	07	3,000
4,000					310	16	300	15	284	15	269	18	230	19	310	09	4,000
5,000							300	16	286	16	266	19	250	12	310	09	5,000
6,000					310	25	300	17	280	17	266	20	250	19	310	08	6,000
8,000					300	32	290	23	285	18	265	18			310	08	8,000
10,000					300	26	290	24	284	19	261	16			310	11	10,000
14,000					300	32	300	33	292	20	263	22			330	13	14,000
18,000					(12,000')		300	43	289	21	273	29			300	10	18,000
24,000							290	56	279	26	284	41			310	13	24,000
30,000							290	64	283	34	285	47			290	17	30,000
40,000	290	27					290	36	289	28	285	34			270	23	40,000
50,000	290	31	279	32			280	32	288	29	278	29			270	29	50,000
	(47,000')		282	23			260	48	(46,000')						250	33	60,000
			(52,000')				54,000'								(65,000')		70,000
															240	43	
															240	40	
															(75,000')		80,000
															230	51	

NEPHOSCOPE OBSERVATIONS

Place	St. Eval									
Time Type	09L Ac									
Dir. Vel.	280 36									

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

Ship	WEATHER RECORDER	WEATHER RECORDER	WEATHER RECORDER	WEATHER OBSERVER	WEATHER EXPLORER	WEATHER EXPLORER	WEATHER EXPLORER	WEATHER EXPLORER		Ship
Lat/Long	58·9N 18·8W	58·9N 18·9W	58·6N 18·1W	58·4N 17·5W	52·3N 19·5W.	52·6N 19·6W	52·7N 19·7W	52·7N 17·9W		Lat/Long
Pressure Time	03L G.M.T.	09L G.M.T.	15L G.M.T.	21L G.M.T.	03L G.M.T.	09L G.M.T.	15L G.M.T.	21L G.M.T.	G.M.T.	Time
Pressure M.S.L.	1004 mb	1003 mb	1005 mb	1006 mb	1012 mb	1012 mb	1014 mb	1012 mb	mb	M.S.L.
Pressure Surf	1004 mb	1003 mb	1005 mb	1006 mb	1012 mb	1012 mb	1014 mb	1012 mb	mb	Surf
Pressure Freezing	950 mb	950 mb	955 mb	935 mb	905 mb	920 mb	950 mb	935 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		38	33	290	20		38	35	300	15	39	38	340	18		40	35	040	22		44	39	297	20		44	33	310	23		38	32	330	20		44	35	310	32						Surf
1000	1·0	38	33			9	37	34	302	15	1·3	38	39			1·7	39	33			3·2	43	39			3·1	42	32	310	29	3·7	39	35	316	40	3·1	42	34	306	30						1000
950		32	28	295	18		32	30	304	15		31	26	348	14		34	27	017	22		38	37	290	28		36	28	310	27		32	30	315	40		34	28	309	31						950
900	28·7	26	22	295	13	28·6	26	25	304	11	29·0	24	19	350	12	29·5	28	18	024	19	31·3	31	31	285	29	31·0	29	21	310	26	31·5	27	26	313	39	30·9	26	21	312	36						900
850		19	14	302	13		20	19	301	09		19	14	348	12		28	12	030	18		25	25	287	29		22	14	308	25		22	21	307	34		21	17	314	38						850
800	58·9	12	07	306	16	58·8	14	11	301	09	59·8	13	08	348	12	59·7	16	06	037	16	61·8	19	17	288	28	61·3	15	07	310	25	61·8	17	14	306	32	61·2	17	06	321	36						800
750		06	00	306	16		07	02	299	09		06	-02	346	12		10	01	045	17		15	13	289	32		11	00	313	26		10	05	309	28		10	01	223	36						750
700	92·0	01	-11	303	15	92·1	00	-07	297	10	92·4	00	-10	350	15	93·1	03	-05	048	16	95·7	13	02	291	43	94·9	10	-11	313	33	95·3	06	01	316	35	94·7	02	-04	326	38						700
650		-07	-18	294	15		-08	-13	294	08		-08	-15	044	10	(675 mb)	00					10	-12	290	49		05	-16	307	35		06	-27	318	43		-05	-12	322	43						650
600	129	-14	-27	288	16	129	-16	-21	306	09	129	-17	-27	076	13						134	05	-24	290	49	133	-02	-29	300	33	133	-01	-33	315	40	132	-08	-21	317	47						600
550		-20	-36	288	21		-22	-31	323	11		-25	-33	077	15							-06	-31	290	44		-11	-30	296	33		-09	-43	314	42		-14	-40	318	58						550
500	172	-28	-49	288	25	172	-30	-40	328	15	172	-33	-43	082	12						179	-15	-35	295	46	177	-22	-35	292	35	177	-18	-51	316	52	175	-24	-52	321	59						500
450		-37	-58	293	30		-39	-49	318	18		-41		098	08							-26	-45	305	51		-31	-42	290	43		-28	-59	315	57		-34	-57	319	63						450
400	222	-46		285	33	222	-49		308	21	222	-49		010	06						230	-38	-56	310	48	227	-44		285	51	229	-41		320	58	226	-43		317	63						400
350		-58		276	34		-59		304	22		-59		329	07							-50		310	60		-59		273	55		-49		317	52		-53		317	63						350
300	284	-63		290	36	283	-63		286	27	283	-59		325	16						293	-63		320	49	289	-72		271	56	291	-62		314	53	288	-64		320	43						300
250		-58		292	44		-59		283	32		-58		317	28							-67		300	46		-74		284	56		-61		313	60		-71		316	74						250
200	371	-56		288	38	370	-57		294	36	(209 mb)	-58									378	-66		297	48	373	-69		290	50	378	-56		316	46	374	-60		317	63						200
170		-59		282	33		-60		293	36												-61		294	39		-68		288	49		-55		314	42		-60									170
150		-60					-58		292	37												-60		296	39		-66		288	42		-57		313	34		-61									150
130	(145 mb)	-60					-64		295	35												-64		295	37		-70		288	42		-58		312	33		-65									130
110							-69		292	33												-66		296	33		-72		287	41		-62		311	32	(114 mb)	-67									110
100						517	-71		285	37											524	-68		294	42	517	-72		287	41															100
90							-73		283	39												-68		290	31		-73		287	38															90
80							-74		282	46												-70		287	33		-74		287	32															80
70							-73		282	40											(78 mb)	-71				(77 mb)	-75																			70
60						(50mb)	-74		279	41																																					60
						(40 ..)	-76		276	41																																					
Tropopause	I 300 mb - 63° 28,900'					I 320 mb - 65° 26,900'					I 332 mb - 61° 26,100'					NR.					II 268 mb - 67° 31,900'					II 292 mb - 73° 29,400'					I 289 mb - 64° 29,900'					II 313 mb - 65° 27,800'										Tropopause

Inversion 771 mb 14° 750 mb 15°. Isothermal 713 - 690 mb 13°

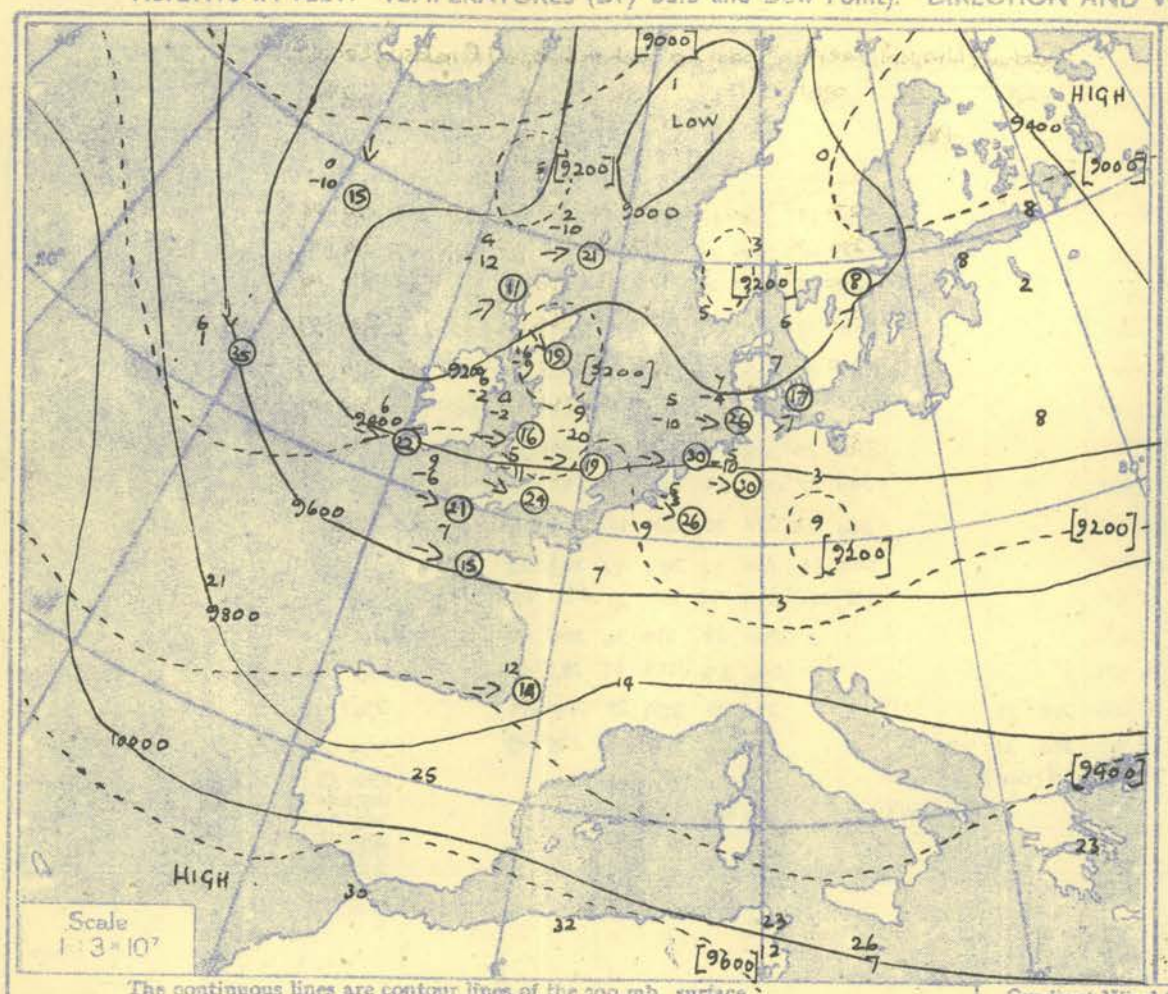
Inversion 753 mb 10° 730 mb 12°

Inversion 1014 mb 38° 1010 mb 46°. Isothermal 800 - 794 mb 17°. 700 - 648 mb 06°

Inversion 626 mb -09° - 590 mb -07°

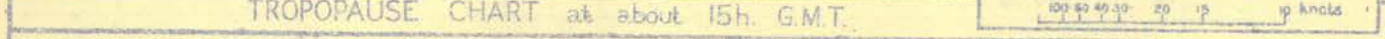
Friday 23rd February 1951.

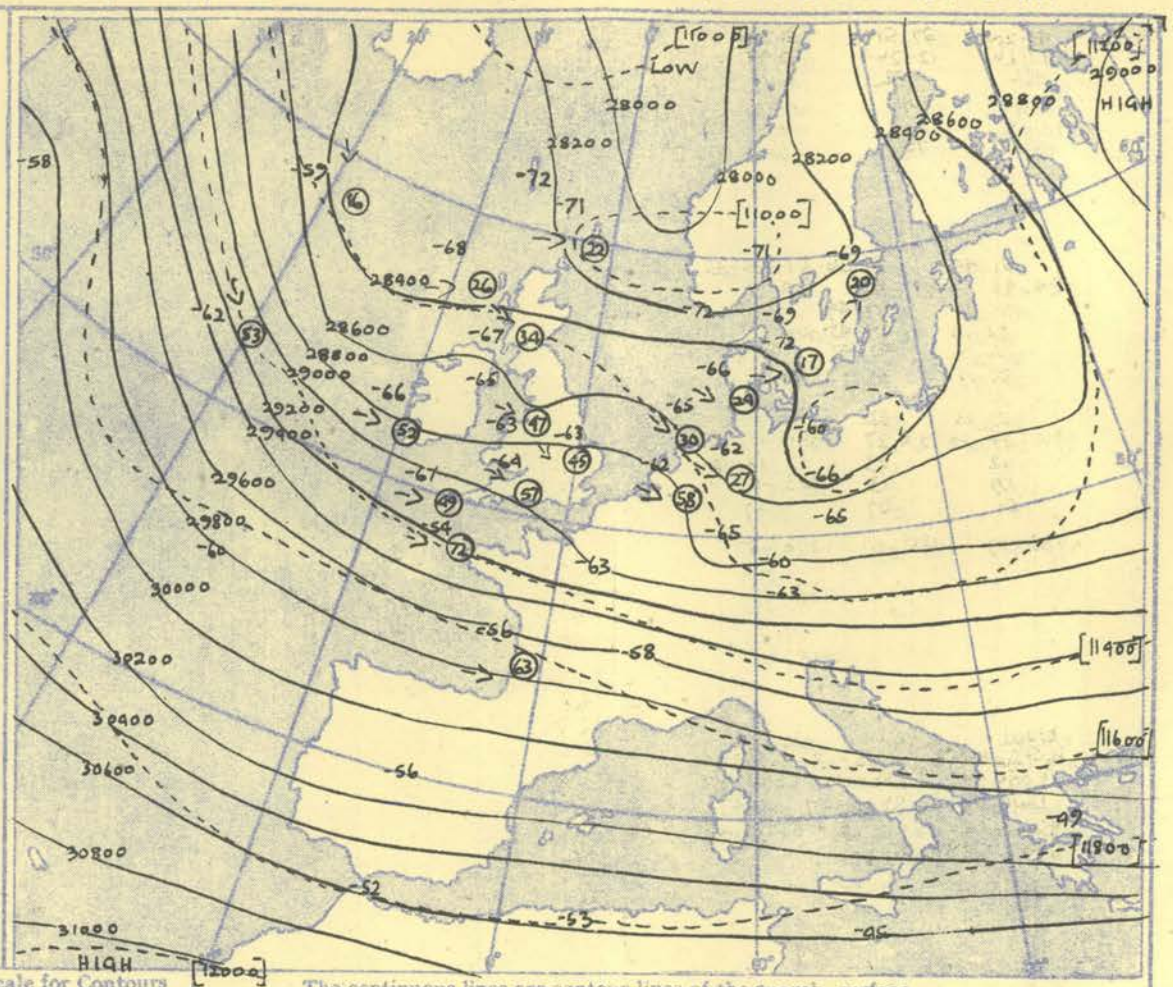
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb. and 300 mb., levels at about 15 h G.M.T.



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

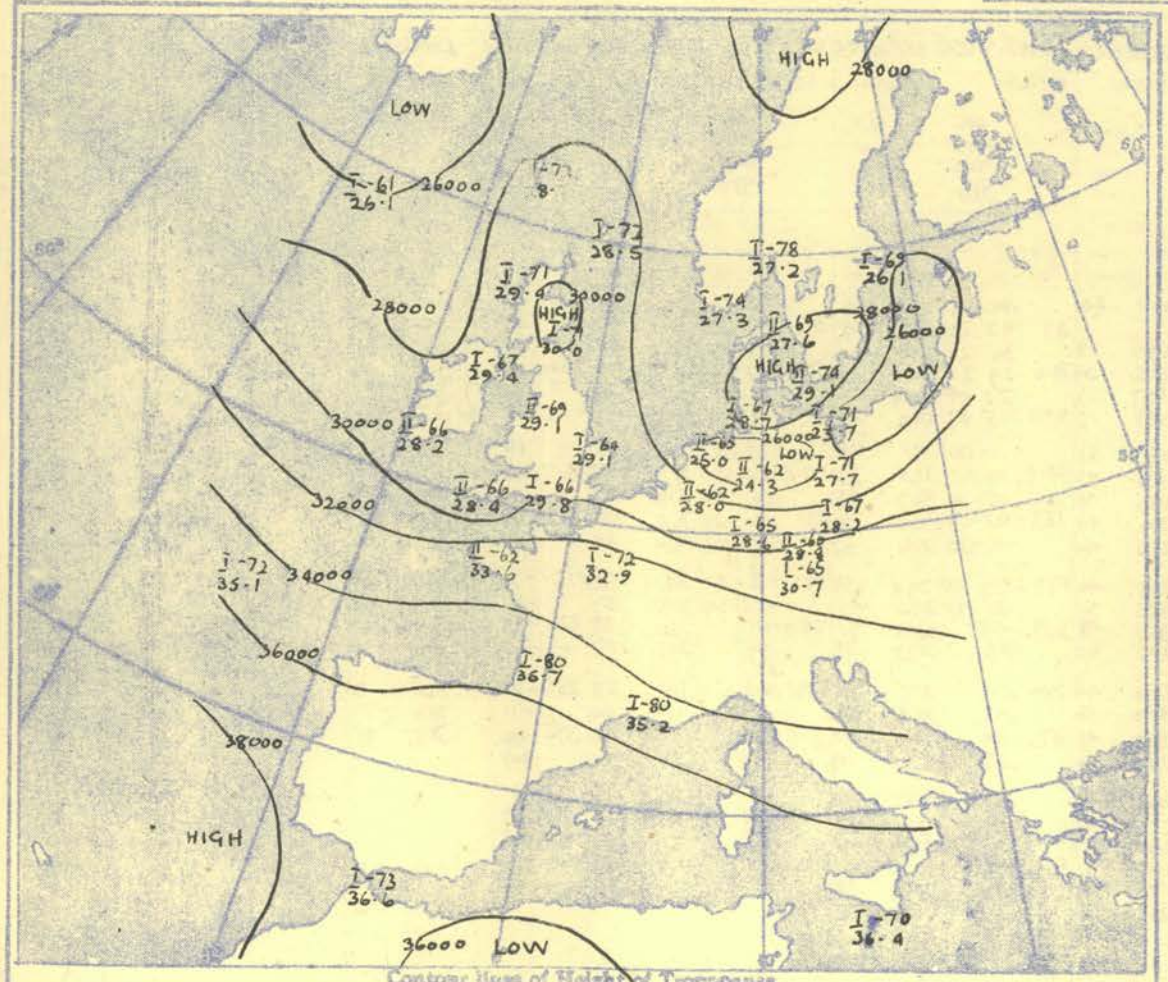
Gradient Wind Scale for Contours at intervals of 200 ft. at Lat. 52½° N.





The continuous lines are contour lines of the 300mb. 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 minor warm ridge crossed the British Isles and a new cold trough formed in the Atlantic south of Iceland.

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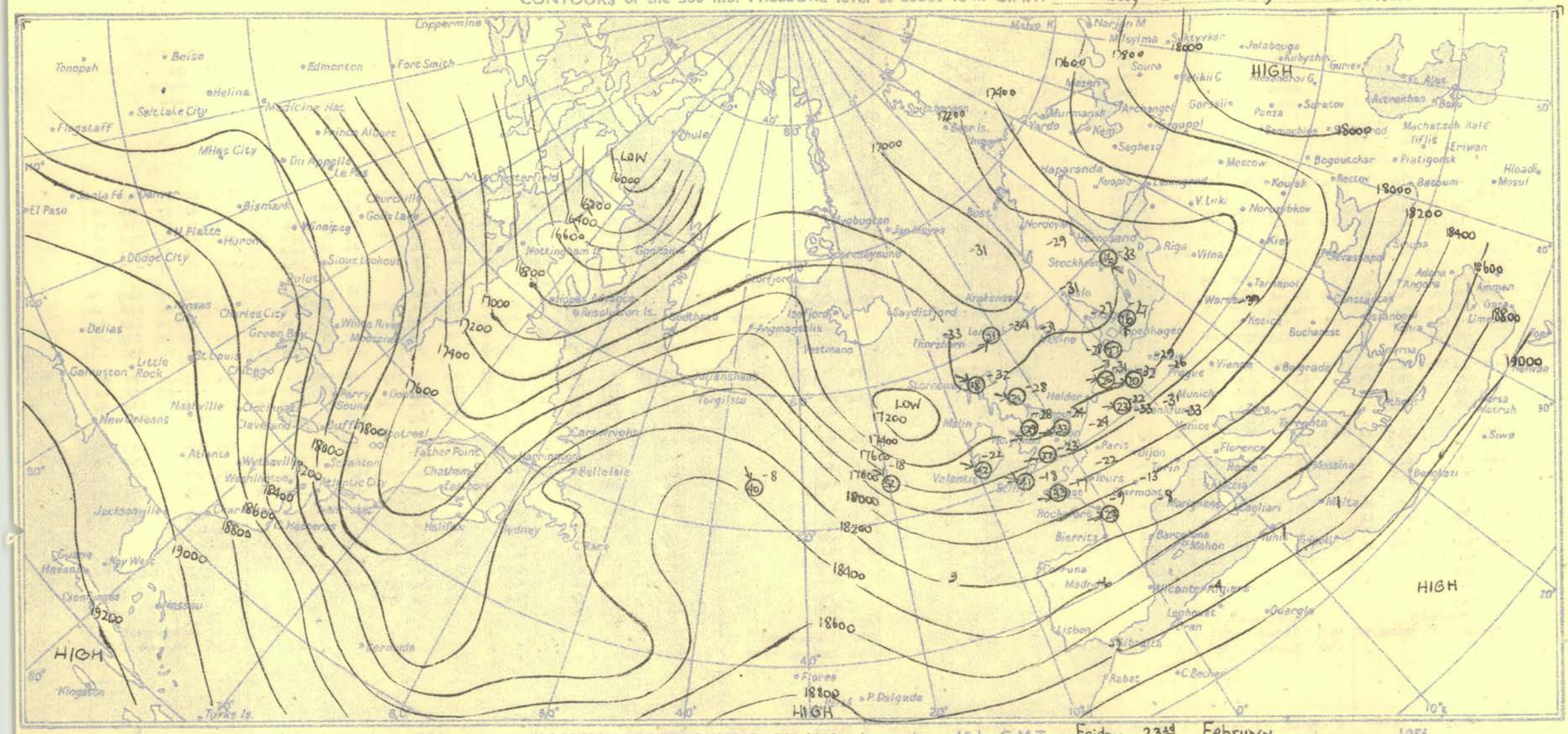
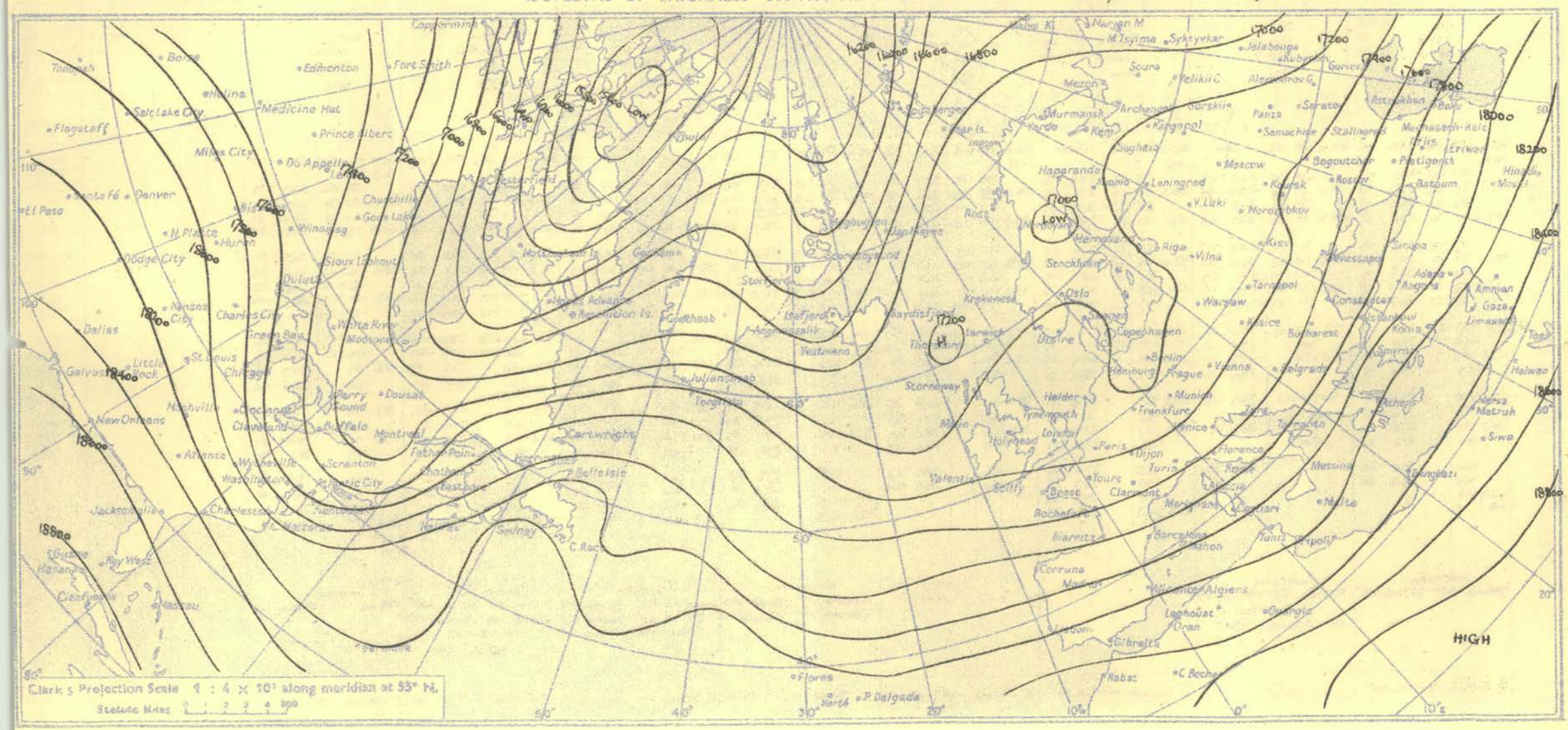
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Friday 23rd February. 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Friday 23rd February 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Friday 23rd February, 1951.

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

LERWICK

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	997·7 mb	987·6 mb	930 mb
	21h. G.M.T.	997·7 mb	987·6 mb	943 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	41	33	270	12
1000	0·8				
950		35	27	249	21
900	27·2	29	21	253	18
850		22	13	258	16
800	57·5	16	07	262	18
750		10	00	263	21
700	90·9	02	−10	264	21
650		−06	−24	266	21
600	128	−17	−30	260	22
550		−25	−38	257	21
500					
450	170	−34	−50	260	21
400		−46		262	19
350	220	−58		262	22
300		−62		273	23
250	280	−71		268	22
200		−63		273	19
170	366	−59		267	22
150		−60		265	24
130		−60		272	28
110		−59		270	24
100		−65		268	27
90	513	−65		256	27
80		−62			
70		−65			
60		−65			

Inversion
764 mb. −63° − 746 mb. −67°

Tropopause: I 294 mb. −72° 28,500′

STORNOWAY

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1001·1 mb	999·4 mb	928 mb
	21h. G.M.T.	1001·4 mb	999·7 mb	921 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	42	40	180	04
1000	0·2				
950		36	29	280	09
900	28·2	29	21	280	10
850		22	14	277	08
800	58·5	17	05	266	08
750		11	−02	244	09
700	92·0	04	−12	232	11
650		−04	−14	227	10
600	129	−12	−22	223	11
550		−21	−33	259	15
500					
450	172	−32	−46	276	18
400		−43		276	20
350	221	−54		265	19
300		−61		278	23
250	283	−68		269	26
200		−59		280	23
170	369	−54		277	30
150		−57		289	26
130		−60		276	30
110		−59		286	27
100		−62		280	27
90	517	−63		262	25
80		−64		272	34
70		−64			
60					

Isothermal
402 − 385 mb. −54°
312 − 300 mb. −68°

Tropopause: I 285 mb. −71° 29,400′

LEUCHARS

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1001·4 mb	1002·3 mb	920 mb
	21h. G.M.T.	1001·7 mb	1002·6 mb	920 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	46	33		
1000	0·6	45	32		
950		37	27		
900	28·7	30	25		
850		24	14		
800	59·1	19	05		
750		12	−02		
700	92·7	06	−09		
650		−02	−18		
600	130	−09	−25		
550		−17	−32		
500					
450	173	−28	−42		
400		−38	−50		
350	223	−48			
300		−56			
250	285	−67			
200		−61			
170	371	−56			
150		−55			
130		−59			
110		−62			
100	520	−59			
90		−61			
80		−63			
70					
60					

Tropopause: I 280 mb. −71° 30,000′

ALDERGROVE

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1005·2 mb	995·6 mb	920 mb
	21h. G.M.T.	1004·0 mb	994·7 mb	938 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	39	35		
1000	1·4				
950		34	31		
900	29·2	29	26		
850		23	19		
800	59·6	18	13		
750		12	06		
700	93·2	06	−02		
650		00	−09		
600	131	−09	−19		
550		−17	−28		
500					
450	174	−25	−39		
400		−33	−51		
350	225	−44			
300		−55			
250	287	−65			
200		−62			
170	373	−59			
150		−58			
130		−57			
110		−59			
100		−61			
90	521	−62			
80		−62			
70		−63			
60					

Tropopause: I 288 mb. −67° 29,400′

LIVERPOOL

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1005·9 mb	1003·8 mb	912 mb
	21h. G.M.T.	1005·1 mb	1003·0 mb	910 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	43	37		
1000	1·6				
950	2·1	37	30		
900	29·5	30	25		
850		24	20		
800	59·9	18	14		
750		11	06		
700	93·4	04	−02		
650		−03	−10		
600	131	−11	−18		
550		−20	−25		
500					
450	174	−28	−36		
400		−36	−48		
350	224	−45			
300		−57			
250	286	−67			
200		−63			
170	371	−61			
150		−60			
130		−61			
110		−61			
100		−62			
90	519	−62			
80		−64			
70		−66			
60		−67			
(55 mb)		−66			

For winds see page 3.

Isothermal
520 − 505 mb. −27°

Tropopause: II 293 mb. −69° 29,100′

DOWNHAM MARKET

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1007·7 mb	1003·3 mb	910 mb
	21h. G.M.T.	1007·5 mb	1003·0 mb	908 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	45	36	260	14
1000	2·1	44	35		
950		37	30	271	18
900	30·2	31	25	268	19
850		24	15	267	21
800	60·6	18	11	276	20
750		14	00	276	21
700	94·3	09	−20	270	19
650		01	−23	273	22
600	132	−06	−27	275	26
550		−14	−31	280	28
500					
450	175	−24	−36	285	23
400		−35	−46	279	34
350	226	−42		281	37
300		−52		280	45
250	289	−63		283	45
200		−62		284	47
170	375	−60		281	45
150		−54		283	37
130		−55		281	31
110		−57		281	34
100		−57		281	42
90		−56		279	42
80		−56		277	42
70		−56		274	38
60		−59		273	28
		−61		278	28

Tropopause: I 296 mb. −64° 29,100′

LARKHILL

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1009·9 mb	999·7 mb	911 mb
	21h. G.M.T.	1008·5 mb	992·2 mb	895 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	44	32	270	15
1000	2·6				
950		38	28	271	10
900	30·7	30	22	257	14
850		25	17	258	16
800	61·1	20	16	260	17
750		11	−01	272	20
700	94·7	05	−11	279	24
650		00	−24	267	28
600	133	−06	−31	270	29
550		−14	−31	270	33
500					
450	176	−23	−43	275	37
400		−30	−57	275	51
350	227	−41		280	56
300		−52		280	60
250	289	−64		281	57
200		−65		282	50
170	375	−62		274	46
150		−56		280	43
130		−58		270	39
110		−59		272	37
100		−60		281	35
90	523	−62		272	29
80		−65		275	31
70		−65		273	34
60		−64		280	24

Tropopause: I 287 mb. −66° 29,800′

CAMBORNE

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1011·0 mb	1000·4 mb	890 mb
	21h. G.M.T.	1008·6 mb	997·9 mb	906 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	47	38	270	08
1000	3·0	47	38		
950		40	30	249	15
900	31·1	33	26	243	14
850		26	22	244	15
800	61·7	20	15	254	20
750		13	04	269	20
700	95·5	09	−06	274	21
650		04	−22	274	25
600	133	−04	−31	279	32
550		−09	−44	281	37
500					
450	177	−18	−54	282	41
400		−28	−56	277	43
350	228	−42		278	47
300		−53		278	51
250	291	−67		274	49
200		−68		273	53
170	376	−65		280	43
150		−58		277	38
130		−59		276	41
110		−61		276	35
100		−63		275	36
90	523	−65		277	36
80		−67			
70		−68			
60					
(85 mb)					

Tropopause: II 306 mb. −66° 28,400′

VALENTIA

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1007·8 mb	1006 mb	910 mb
	21h. G.M.T.			mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	44	39	280	08
1000	2·1	43	37	280	08
950		37	31	278	17
900	30·1	30	26	278	19
850		24	22	277	22
800	60·5	19	17	276	26
750		13	09	269	24
700	94·1	06	00	273	22
650		03	−14	279	27
600	132	−05	−30	278	39
550		−13	−36	275	39
500					
450	176	−22	−37	277	42
400		−31	−43	273	48
350	227	−43		273	57
300		−65		271	24
250	288	−66		277	52
200		−62		271	48
170	374	−57		278	42
150		−57		281	47
130		−58		282	43
110	(134 mb)	−61			
100					
90					
80					
70					
60					

Isothermal
690 − 666 mb. 5°

Tropopause: II 309 mb. −66° 28,200′

LERWICK

Pressure	Time	M.S.L.	Surf	Freezing
	21h. G.M.T.	997·7 mb	987·7 mb	943 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	34	34	245	06
1000	0·6				
950		33	33	250	13
900	27·1	27	26	259	13
850		22	22	266	17
800	57·3	17	16	272	15
750		10	08	276	15
700	90·7	04	01	275	14
650		−04	−08	268	16
600	128	−12	−18	265	18
550		−22	−27	267	18
500					
450	171	−33	−42	292	13
400		−44		288	11
350	220	−56		269	13
300		−63		289	17
250	281	−70		270	18
200		−59		276	18
170	367	−59		270	22
150		−60		272	24
130		−61		272	24
110		−62		262	26
100	(114 mb)	−64			
90					
80					
70					
60					

Inversion
988 mb. 34° − 973 mb. 35°

Tropopause: II 307 mb. −70° 27,700′

STORNOWAY

Pressure	Time	M.S.L.	Surf	Freezing
	21h. G.M.T.	1001·4 mb	999·7 mb	921 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·4	35	32	Calm	
1000	0·3				
950		35	30	343	06
900	28·2	29	20	340	07
850		23	18	338	07
800	58·6	18	08	347	08
750		11	−03	342	07
700	92·2	04	−08	320	05
650		−03	−10	310	09
600	130	−13	−20	319	10
550		−21	−29	319	12
500					
450	172	−32	−41	305	14
400		−44		284	12
350	222	−54		288	15
300				286	16
250	Continued as pilar			283	12
200				282	21
170					
150				273	27
130					
110					
100					
90					
80					
70					
60					

Inversion
1000 mb. 35° − 982 mb. 39°
Isothermal
411 − 400 mb. −54°

N.R.

LEUCHARS

Pressure	Time	M.S.L.	Surf	Freezing
	21h. G.M.T.	1001·7 mb	1002·6 mb	920 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	39	36	Calm	
1000	0·6				
950		35	32	246	16
900	28·5	30	27	251	16
850		26	23	251	15
800	59·1	22	18	247	10
750		15	12	246	07
700	93·0	08	04	248	08
650		00	−03	251	10
600	131	−08	−13	239	12
550		−17	−23	217	09
500					
450	174	−28	−34	212	09
400		−39	−45	214	12
350	224	−48		252	16
300		−57		262	21
250	285	−65		274	21
200		−62		271	28
170	372	−57		281	24
150		−53		274	21
130		−55		274	26
110		−58		282	28
100		−62		282	23
90	520	−63		285	22
80		−62			
70					
60					

Tropopause: I 290 mb. −66° 29,300′

ALDERGROVE

Pressure	Time	M.S.L.	Surf	Freezing
	21h. G.M.T.	1004·0 mb	994·7 mb	938 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	36	34	200	05
1000	1·2				
950		34	29	237	07
900	29·0	28	24	262	08
850		22	19	282	09
800	59·2	16	14	279	13
750		12	07	271	14
700	92·8	05	−03	267	13
650		−03	−12	263	10
600	130	−11	−21	267	10
550		−19	−29	265	10
500					
450	173	−28	−45	262	15
400		−36	−57	275	24
350	224	−46		275	36
300		−56		277	40
250	286	−65		268	37
200		−62		271	35
170	372	−57		280	30
150		−57		275	33
130		−56		285	27
110		−61		289	24
100					
90					
80					
70					
60					

Tropopause: II 302 mb. −65° 28,500′

LIVERPOOL

Pressure	Time	M.S.L.	Surf	Freezing
	21h. G.M.T.	1005·1 mb	1003·0 mb	910 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	39	35	210	05
1000	1·3				
950		36	33	219	09
900	29·2	31	28	234	10
850		24	23	254	12
800	59·6	18	17	267	15
750		12	09	264	19
700	93·2	06	−02	262	21
650		−01	−08	263	22
600	131	−11	−17	260	22
550		−16	−33	261	27
500					
450	174	−24	−52	267	32
400		−34	−57	272	36
350	224	−45		274	39
300		−57		274	42
250	286	−66		269	46
200		−60		270	37
170	372	−59		279	35
150		−57		276	35
130		−58		278	32
110		−61		284	31
100		−62		275	25
90	520	−63			
80					
70					
60					

Inversion
1003 mb. 39° − 981 mb. 40°
580 mb. −15° − 563 mb. −14°

Tropopause: II 310 mb. −66° 27,900′

DOWNHAM MARKET

Pressure	Time	M.S.L.	Surf	Freezing
	21h. G.M.T.	1007·5 mb	1003·0 mb	908 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	39	34	160	06
1000	2·0				
950		38	31	248	14
900	29·9	31	25	251	15
850		24	20	255	16
800	60·3	16	10	263	16
750		10	05	273	17
700	93·8	06	00	283	19
650		−02	−14	278	23
600	131	−09	−18	279	25
550		−19	−25	278	26
500					
450	174	−26	−38	273	30
400		−34	−52	278	37
350	225	−45		280	40
300		−59		281	45
250	286	−70		277	51
200		−64		277	46
170	371	−64		279	37
150		−62		276	35
130		−64		277	33
110		−64		279	30
100		−66		281	32
90	518	−68			
80					
70					
60					

Inversion
1003 mb. 39° − 970 mb. 40°
710 mb. 04° − 700 mb. 06°
518 mb. −26° − 509 mb. −25°

Tropopause: I 272 mb. −72° 30,600′

LARKHILL

Pressure	Time	M.S.L.	Surf	Freezing
	21h. G.M.T.	1008·5 mb	992·2 mb	895 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	37	34	195	07
1000	2·3				
950		39	32	234	12
900	30·3	33	28	249	13
850		27	23	250	15
800	60·8	20	17	244	17
750		15	08	245	20
700	94·6	09	02	261	20
650		01	−07	268	21
600	133	−08	−15	267	26
550		−11	−27	277	34
500					
450	176	−19	−38	280	38
400		−30	−42	278	45
350	227	−43		282	49
300		−56		279	49
250	289	−68		271	46
200		−68		270	33
170	374	−63		272	42
150		−63		273	37
130		−62		276	41
110		−61		280	33
100		−64		280	29
90	521	−66		275	31
80		−68		270	30
70					
60					

Inversion
992 mb. 37° − 965 mb. 40°
600 mb. −08° − 575 mb. −07°
Isothermal
777 − 762 mb. 07°

Tropopause: I 303 mb. −71° 28,600′

CAMBORNE

Pressure	Time	M.S.L.	Surf	Freezing
	21h. G.M.T.	1008·6 mb	997·9 mb	906 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	41	39	190	05
1000	2·3				
950		38	35	253	21
900	30·3	32	29	256	21
850		25	21	260	21
800	60·8	19	15	263	21
750		13	08	263	21
700	94·6	06	−13	263	23
650		02	−14	265	24
600	133	−01	−37	267	26
550		−12	−31	271	31
500					
450	176	−24	−32	265	38
400		−36	−42	266	39
350	226	−49		267	44
300		−63		264	46
250	287	−78		262	45
200		−76		265	49
170	370	−71		268	41
150		−69		281	39
130		−67		282	36
110		−70		281	36
100		−73		281	31
90	514	−75		277	31
80	(095 mb)	−77			
70					
60					

Inversion
998 mb. 41° − 981 mb. 42°

Tropopause: I 300 mb. −78° 28,700′

HMSO Press, MO., Dunstable.

No. 11654

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Saturday 24th February 1951.

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

LERWICK

Pressure: Time 03hrs G.M.T. | M.S.L. 999.6 mb | Surf 989.4 mb | Freezing 942

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	027	33	33	340	07
1000	-02				
950		33	30	350	10
900	27-5	28	25	350	15
850		23	20	350	16
800	577	16	14	348	16
750		11	08	340	16
700	912	03	00	343	19
650		-5	-8	356	16
600	129	-14	-17	357	15
550		-23	-29	345	14
500	171	-35	-43	347	15
450		-47		336	12
400	220	-58		318	10
350		-65		294	14
300	280	-70		286	14
250		-64		276	18
200	366	-61		266	24
170		-61		263	26
150		-62		267	27
130		-63		262	27
110		-64		264	26
100		-66			
90					
80					
70					
60					

Inversion 989 mb 33°-975 mb 35°

Tropopause: II 315 mb -70° 27000'

STORNOWAY

Pressure: Time 03hrs G.M.T. | M.S.L. 1003.1 mb | Surf 1001.4 mb | Freezing 933

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0.4	33	30	290	04
1000	0.8	34	31		
950		34	30	357	13
900	286	28	25	360	10
850		21	20	353	10
800	589	17	15	352	12
750		10	06	004	11
700	923	03	-3	022	10
650		-5	-12	030	14
600	130	-14	-21	028	17
550		-24	-32	031	17
500	172	-35	-46	033	21
450		-46		018	16
400	221	-55		359	12
350		-62		323	11
300	282	-70		310	10
250		-63		297	8
200	368	-57		285	24
170		-59			
150					
130					
110					
100					
90					
80					
70					
60					

Inversion 1001 mb 33°-964 mb 38°

Tropopause: II 312 mb -70° 27400'

LEUCHARS

Pressure: Time 03hrs G.M.T. | M.S.L. 1002.7 mb | Surf 1001.8 mb | Freezing 921

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0.2	32	30	260	07
1000	0.6	33	30		
950		35	32	281	12
900	284	26	26	298	09
850		24	20	295	08
800	589	19	14	L.V	
750		13	09	L.V	
700	925	06	01	L.V	
650		-2	-8	L.V	
600	130	-10	-16	L.V	
550		-18	-24	L.V	
500	173	-30	-38	L.V	
450		-38	-47	L.V	
400	223	-49		278	12
350		-59		274	22
300	284	-67		276	27
250		-64		268	25
200	370	-58		275	24
170		-57		280	21
150		-55		282	21
130		-58		278	24
110		-60		270	22
100	519	-61		274	25
90					
80					
70					
60					

Inversion 1002 mb 32°-987 mb 36°

Tropopause: I 296 mb -68° 28600'

ALDERGROVE

Pressure: Time 03hrs G.M.T. | M.S.L. 1003.7 mb | Surf 994.5 mb | Freezing 942, 964 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	026	29	29	calm	
1000	01.1				
950		33	33	340	03
900	287	27	27	315	04
850		21	21	282	03
800	590	15	14	263	04
750		09	05	264	04
700	920	01	-6	272	03
650		-6	-11	280	04
600	130	-15	-20	246	03
550		-26	-31	241	07
500	172	-33	-41	243	11
450		-40	-51	239	23
400	222	-48		236	25
350		-58		242	24
300	284	-67		253	24
250		-60		277	23
200	370	-51		284	25
170		-57		287	23
150		-60		282	26
130		-63		283	30
110					
100					
90					
80					
70					
60					

Inversion 995 mb 29°-950 mb 20°

Tropopause: II 318 mb -66° 27100'

LIVERPOOL

Pressure: Time 03hrs G.M.T. | M.S.L. 1003.3 mb | Surf 1001.3 mb | Freezing 920

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0.6	33	34		
1000	0.9				
950		35	32		
900	287	30	28		
850		24	22		
800	591	18	17		
750		12	11		
700	927	06	02		
650		-3	-8		
600	130	-10	-18		
550		-16	-38		
500	173	-24	-53		
450		-35	-60		
400	224	-43			
350		-57			
300	286	-69			
250		-65			
200	372	-58			
170		-58			
150		-59			
130		-60			
110		-62			
100		-64			
90	520	-65			
80		-67			
70		-67			
60		(84)			

See p3 for winds

Inversion 1001 mb 35°-973 mb 37°
608 mb 41°-523 mb -9°

Tropopause: I 297 mb -70° 28500'

DOWNHAM MARKET

Pressure: Time 03hrs G.M.T. | M.S.L. 1006.3 mb | Surf 1001.8 mb | Freezing 922

Pressure mb	Height ft./100	Temp. °F.	Dew °F	Wind Dir. °	Wind Vel. knots
Surf	01.2	35	33	180	10
1000	01.7				
950	01.3				
900		36	31	240	14
850	295	29	26	236	18
800		24	23	228	21
750	599	18	15	228	23
700		12	08	233	20
650	933	05	01	239	21
600		-2	-6	248	26
550	131	-11	-16	256	28
500		-18	-28	260	32
450	174	-25	-38	267	37
400		-34	-46	268	43
350	225	-44		263	44
300		-57		265	48
250	286	-69		267	48
200		-67		268	40
170	372	-61		267	33
150		-60		271	32
130		-60		271	29
110		-62		270	28
100		-64		272	25
90	519	-65			
80		-67			
70		-67			
60		(84)			

Inversion 1002 mb 35°-965 mb 38°

Isothermal 560 - 550 mb 18°

Tropopause: I 266 mb -74° 31100'

LARKHILL

Pressure: Time 03hrs G.M.T. | M.S.L. 1006.2 mb | Surf 989.7 mb | Freezing 900

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4.4	37	36	210	09
1000	01.3				
950		37	35	232	14
900	294	32	30	241	18
850		26	24	242	19
800	599	20	18	242	19
750		14	12	236	23
700	931	08	01	233	24
650		01	-5	238	26
600	132	-5	-15	246	26
550		-13	-22	250	34
500	175	-19	-26	253	37
450		-30	-37	254	40
400	226	-43		251	43
350		-55		250	44
300	288	-59		253	43
250		-68		254	37
200	373	-60		264	31
170		-57		264	33
150		-59		266	30
130		-61		269	32
110		-64		272	34
100	521	-65		276	32
90		-66		271	31
80					
70					
60					

Inversion 990 mb 37°-973 mb 38°

Tropopause: I 271 mb -72° 31000'

CAMBORNE

Pressure: Time 03hrs G.M.T. | M.S.L. 1005.9 mb | Surf 995.1 mb | Freezing 913

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.9	40	39	240	5
1000	01.6				
950		36	35	240	18
900	295	31	29	231	15
850		26	23	255	16
800	601	21	19	265	18
750		15	11	264	18
700	932	10	06	257	19
650		02	-2	255	24
600	132	-6	-11	257	27
550		-14	-20	258	24
500	175	-22	-29	253	32
450		-33	-40	253	37
400	226	-43		254	33
350		-55		245	48
300	288	-67		250	40
250		-68		266	39
200	373	-60		271	33
170		-60		277	34
150		-60		282	29
130		-62		280	32
110		-67		267	31
100	520	-67			
90					
80					
70					
60					

Tropopause: I 270 mb -71° 30900'

Valentia

Pressure: Time 03hrs G.M.T. | M.S.L. 1005.8 mb | Surf 1004 mb | Freezing 935

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0.3	35	32	320	26
1000	1.5	36	32	314	02
950		34	28	315	11
900	293	27	23	324	16
850		19	14	314	17
800	593	12	07	316	15
750		05	01		
700	924	-1	-8		
650		-7	-13		
600	130	-17	-23		
550		-27	-34		
500	172	-37	-46		
450		-41			
400	222	-49			
350		-48			
300	283	-59			
250		-59			
200	371	-57			
170		-58			
150		-60			
130		-61			
110					
100					
90					
80					
70					
60					

Inversion 500 mb 37°-490 mb 38°

Tropopause: II 368 mb -58° 24100'

LERWICK

Pressure: Time 09hrs G.M.T. | M.S.L. 1003.3 mb | Surf 993.1 mb | Freezing

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	027	35	24	010	13
1000	0.9				
950		34	31	001	28
900	286	28	25	001	25
850		23	19	359	22
800	589	18	13	359	20
750		11	05	360	16
700	924	05	-3	356	19
650		-4	-13	355	21
600	130	-13	-20	359	21
550		-21	-28	356	19
500	173	-32	-39	344	18
450		-44		337	15
400	222	-55		346	20
350		-68		348	22
300	282	-73		321	16
250		-66		287	17
200	367	-61		273	18
170		-59			
150		(190)			
130					
110					
100					
90					
80					
70					
60					

Inversion 993 mb 35°-981 mb 37°

Tropopause: II 324 mb -73° 26600'

STORNOWAY

Pressure: Time 09hrs G.M.T. | M.S.L. 1001.8 mb | Surf 1005.9 mb | Freezing 942

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0.4	39	36		
1000	02.0	38	35		
950		33	33		
900	298	27	27		
850		21	21		
800	601	15	15		
750		08	07		
700	930	01	-1		
650		-6	-9		
600	131	-15	-18		
550		-25	-29		
500	173	-35	-39		
450		-46			
400	222	-56			
350		-69			
300	282	-72			
250		-66			
200	368	-60			
170		-61			
150		-62			
130					
110		-61			
100		-62			
90					
80					
70					
60					

Tropopause: I 328 mb -74° 26300'

LEUCHARS

Pressure: Time 09hrs G.M.T. | M.S.L. 1004.8 mb | Surf 1003.5 mb | Freezing 948

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0.2	30	30	240	06
1000	01.2	31	31		
950		32	30	043	11
900	288	27	23	040	10
850		22	18	020	09
800	590	16	15	014	08
750		11	09	015	07
700	925	05	01	029	07
650		-3	-8	036	10
600	130	-10	-16	036	11
550		-19	-26	042	10
500	173	-31	-39	052	12
450		-43		358	09
400	223	-49		284	12
350		-58		267	22
300	284	-69		271	24
250		-65		270	19
200	370	-57		280	17
170		-58		273	19
150		-57		274	23
130		-59		271	27
110		-59		274	22
100	518	-60		277	23
90		-60		277	20
80		-61			
70					
60					

Inversion 1004 mb 30°-975 mb 35°
454 mb 43°-445 mb 42°

Tropopause: I 288 mb -70° 29100'

ALDERGROVE

Pressure: Time 09hrs G.M.T. | M.S.L. 1004.7 mb | Surf 995.8 mb | Freezing 950

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	026	32	30	calm	
1000	01.5				
950		32	29	038	09
900	292	26	21	036	13
850		20	13	036	18
800	594	14	08	031	14
750		08	00	027	11
700	932	00	-8	029	13
650		-9	-18	034	17
600	130	-16	-25	042	12
550		-27	-36	046	14
500	172	-35	-50	067	10
450		-42		172	07
400	221	-52		197	12
350		-63		242	10
300	282	-68		254	10
250		-55		290	15
200	369	-58		292	22
170		-58		285	27
150		-61		285	27
130		-61		288	27
110					
100					
90					
80					
70					
60					

Inversion 996 mb 32°-975 mb 34°

Isothermal 900 - 885 mb 26°
456 - 450 mb -42°

Tropopause: III 327 mb -67° 26400'

LIVERPOOL

Pressure: Time 09hrs G.M.T. | M.S.L. 1003.0 mb | Surf 1000.5 mb | Freezing 943

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0.6	35	34	calm	
1000	0.8	35	34		
950		33	30	316	05
900	286	27	26	317	03
850		24	18	269	02
800	590	16	13	246	02
750		11	00	241	02
700	923	04	-6	232	04
650		-4	-15	225	04
600	130	-11	-22	219	09
550		-17	-48	234	15
500	173	-25	-58	240	20
450		-35	-58	232	15
400	223	-47		233	20
350		-59		236	26
300	285	-67		241	23
250		-65		246	26
200	371	-55		283	20
170		-55		282	21
150		-58		278	18
130		-58		279	28
110		-59			
100		(120)			
90					
80					
70					
60					

Inversion 1001 mb 35°-983 mb 37°

Tropopause: I 281 mb -79° 29800'

DOWNHAM MARKET

Pressure: Time 09hrs G.M.T. | M.S.L. 1004.3 mb | Surf 999.7 mb | Freezing 911

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01.2	37	36	150	05
1000	01.1				
950		35	33	207	09
900	290	31	28	230	13
850		26	23	227	18
800	596	20	16	222	17
750		14	10	218	16
700	933	07	01	224	12
650		-1	-12	233	16
600	131	-8	-18	233	18
550		-16	-26	236	20
500	174	-23	-32	242	23
450		-34	-43	243	29
400	225	-45		242	35
350		-57		242	39
300	287	-68		246	37
250		-68		254	31
200	372	-61		256	29
170		-59		261	28
150		-58		261	26
130		-59		271	23
110		-61		273	21
100	520	-61		273	24
90		-61			
80					
70					
60					

Isothermal 1000 - 971 mb 37°

Tropopause: I 277 mb -71° 30300'

LARKHILL

Pressure: Time 09hrs G.M.T. | M.S.L. 1003.9 mb | Surf 987.5 mb | Freezing 915

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4.4	36	35	180	03
1000	01.0				
950		36	35	213	06
900	295	31	30	222	07
850		26	24	230	12
800	597	21	18	240	15
750		15	12	243	17
700	933	09	04	241	19
650		02	-4	235	22
600	131	-6	-12	232	22
550		-15	-21	236	24
500	174	-23	-29	238	25
450		-32	-40	237	31
400	225	-43		238	33
350		-57		241	33
300	287	-66		246	32
250		-69		242	30
200	374	-64		261	28
170		-60		261	25
150		-58		266	27
130		-61		271	29
110		-62		280	25
100	519	-63		274	27
90		-65		272	25
80		-66			
70					
60					

Isothermal 987 mb 36°-962 mb 37°

Tropopause: II 307 mb -73° 27000'

CAMBORNE

Pressure: Time 09hrs G.M.T. | M.S.L. 1003.6 mb | Surf 992.9 mb | Freezing 912

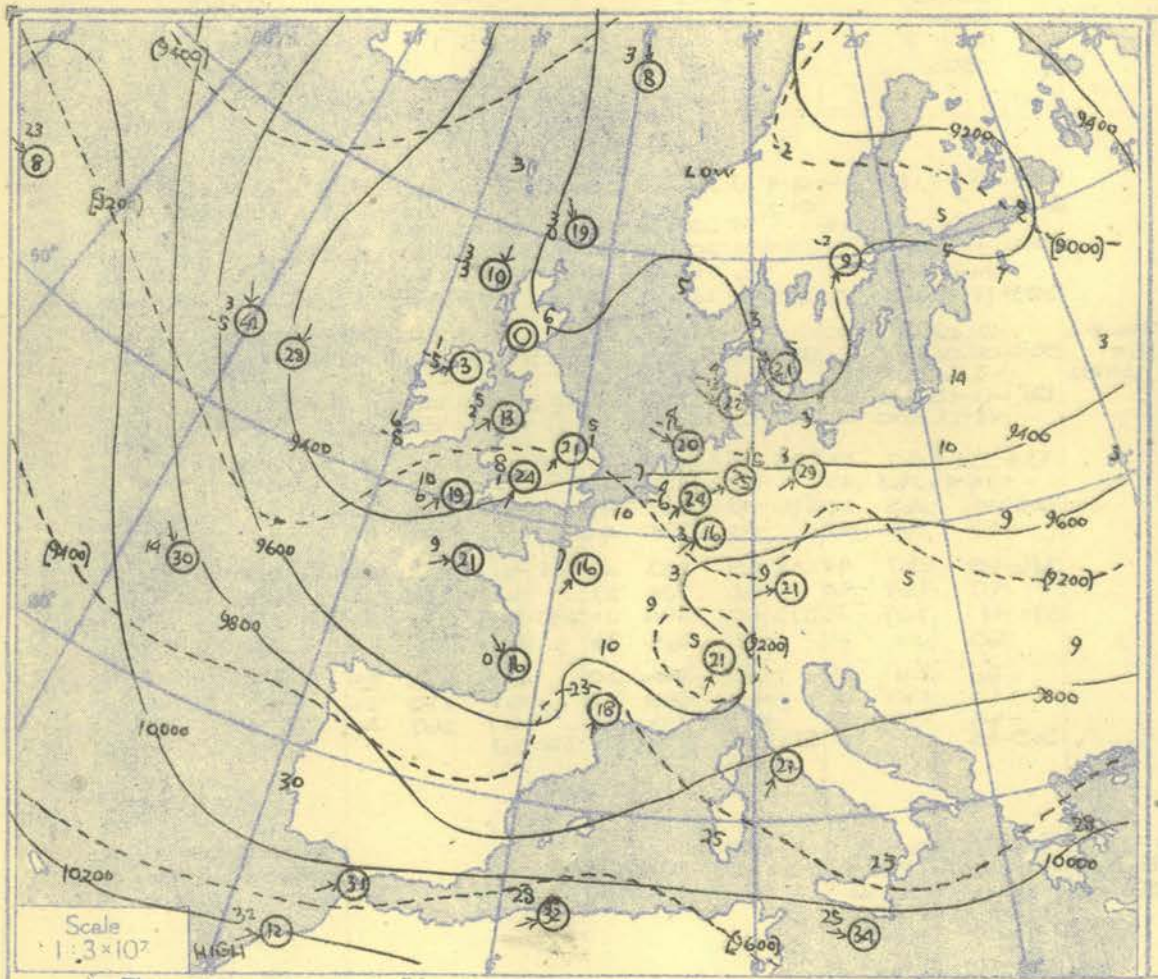
Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02.9	38	35	270	05
1000	01.0				
950		37	34	290	11
900	293	31	28	302	11
850		26	21	297	12
800	595	21	14	287	16
750		14	09	269	17
700	932	06	-1	245	16
650		-4	-8	234	18
600	131	-7	-12	235	18
550		-14	-37	236	19
500	174	-23	-48	235	29
450		-31	-52	232	32
400	225	-42		236	33
350		-54		236	36
300	287	-64		238	36
250		-60		257	27
200	374	-54		283	26
170		-54		281	28
150		-53		283	30
130		-57		288	28
110		-57		297	23
100	523	-61		297	22
90		-64			
80					
70					
60					

Inversion 993 mb 36°-980 mb 40°

Tropopause: I 280 mb -66° 29200'

Saturday 24th February 1951.

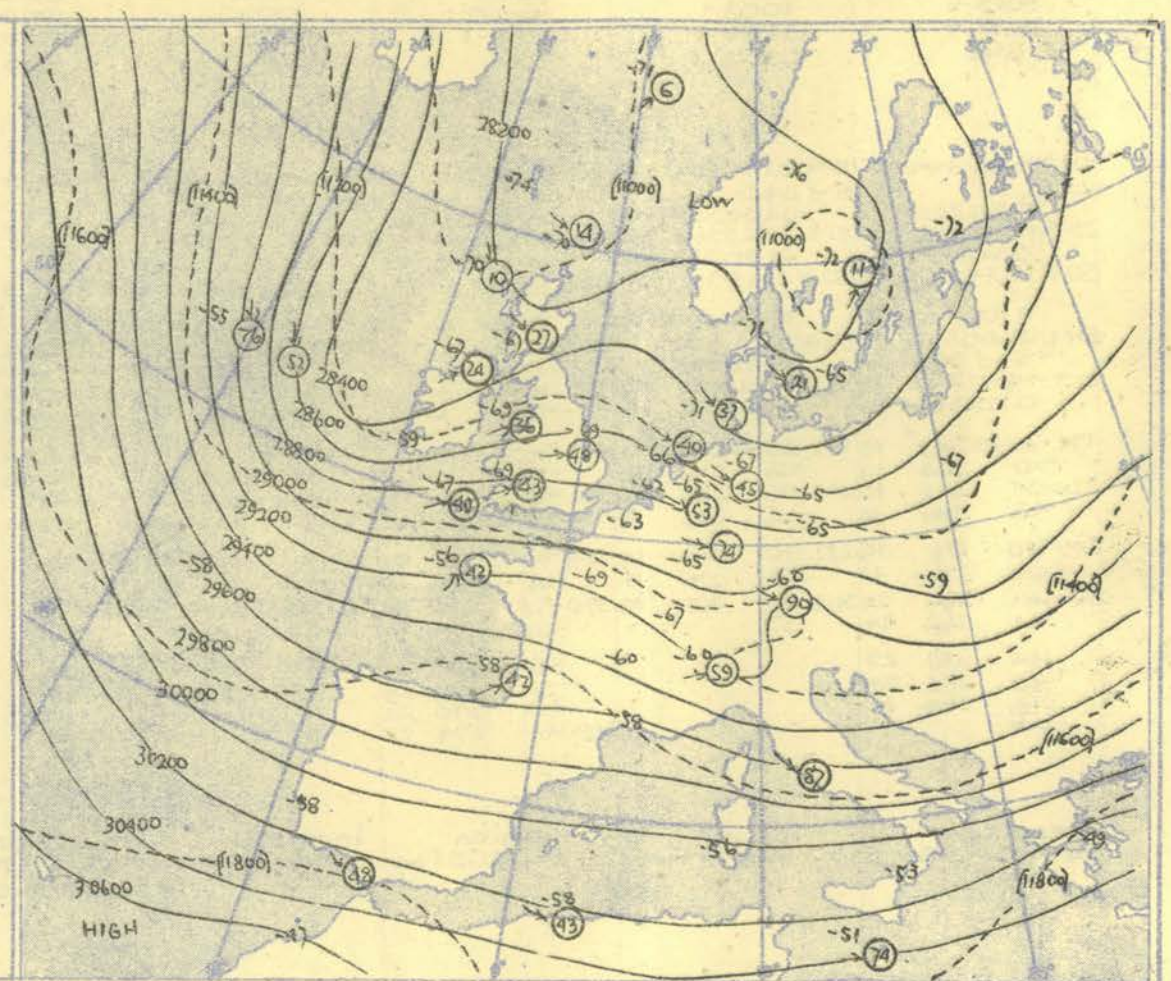
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03 h G.M.T.



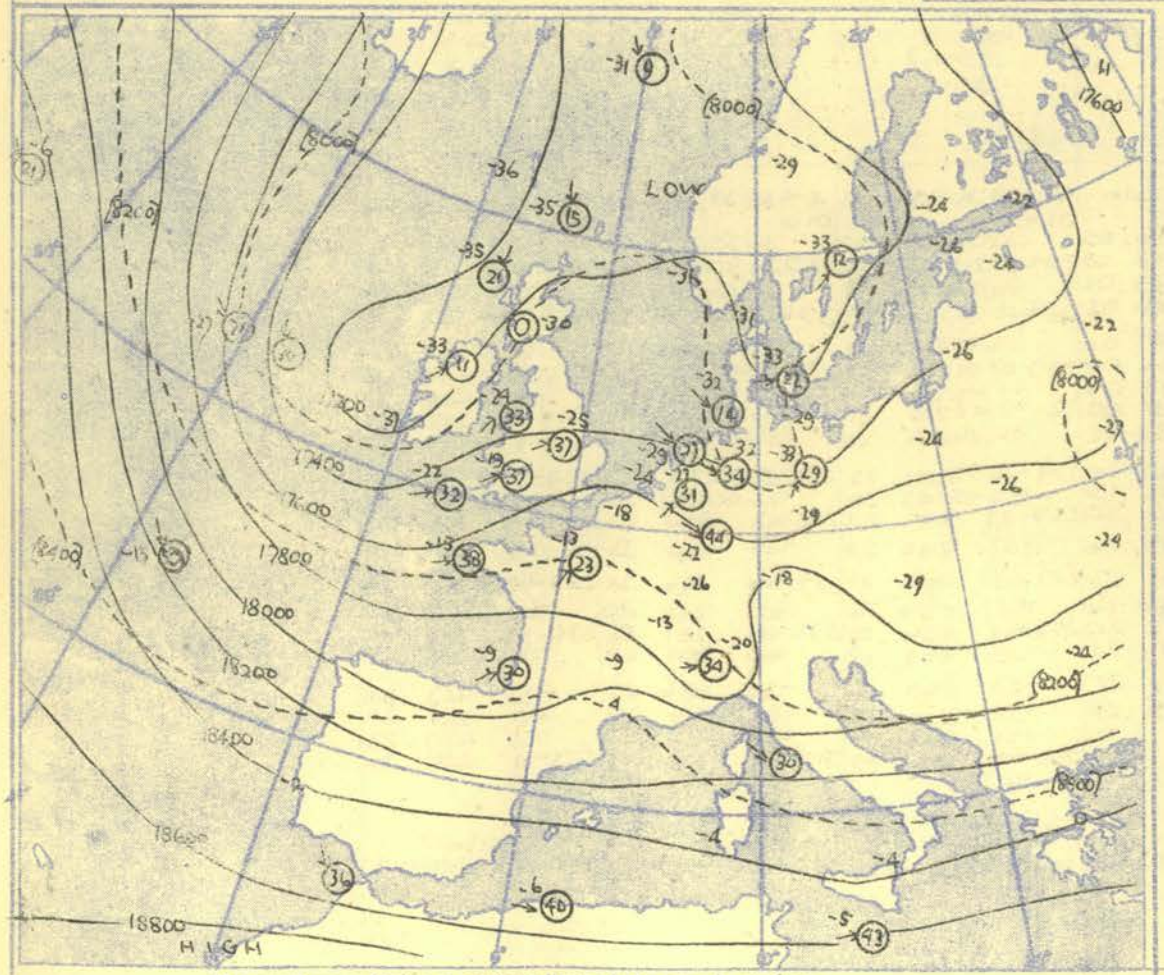
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

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

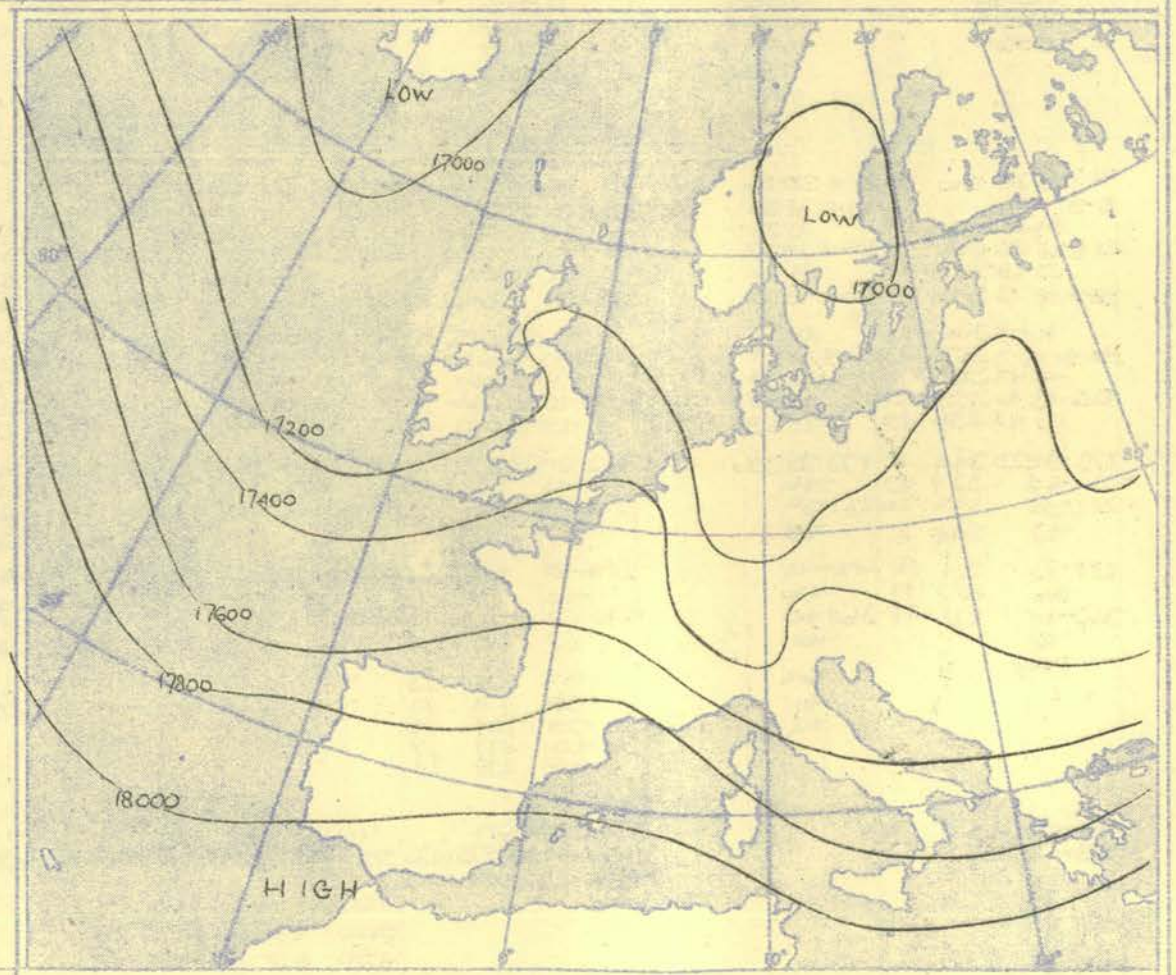
100 60 40 30 20 15 10 knots



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



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



Isopleths of Thickness 500 - 1000mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	48·0N 17·0W			47·7N 12·3W			51·3N 00·4E		
Pressure: Time	12h			14h			14h		
M.S.L.	1019 mb			1010 mb			1004·2 mb		
Surf	1015 mb			1006 mb			993·1 mb		
Freezing	920 mb			940 mb			905 mb		
Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Height ft./100	Temp. °F.	Dew °F.	Height ft./100	Temp. °F.	Dew °F.
Surf		46	37		42	38	03·1	43	42
1000	5·0	44		2·6	41		2·7		
950		37	35		33	33			
900		27			28		29·4	31	24
850		22			20			27	22
800		17			16		60·1	23	22
750		10			11				
700	96·6	03		94·1	04		94·0	10	
650		-03			-04				
600		-07			-12		132	-05	
550		-11			-23				
500	178	-21		174	-35		175	-24	
450									
400							226	-45	
350									
300							288	-69	
250									
200									
170									

48·0N 17·0W — cloud:- 4/8 Cb 950-640 mb; 4/8 Cu 950-710 mb; 3/8 Sc 940-930 mb. Surface wind NW 34-40 kts

47·7N 12·3W — cloud:- 4/8 Cb 950-490 mb; 4/8 Cu 950-840 mb

51·3N 00·4E — cloud:- 7/8 Sh 960-911 mb; 6/8 As 812-435 mb

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

Place	Liverpool		W. Observer 57·9N 16·7W		W. Observer 57·7N 16·3W		Ronaldsway		Pembroke Dock		Aldergrove		Leuchars		Ronaldsway	
Time	03h		03h		09h		09h		09h		15h		15h		15h	
Type	PILAR										PILAR		PILAR			
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.	230	10	040	10	020	26	020	07	080	02	010	15	020	10	040	16
1,000	227	09	010	31	030	24	040	10	090	07	011	15	023	12	020	16
2,000	209	07	010	32	030	25	030	10	050	07	008	15	022	11	010	16
3,000	209	07	010	30	030	24	030	13	030	10	004	17	039	15	020	20
4,000	201	08	010	30	020	23	010	13	030	07	001	17	014	11	020	20
5,000	220	09	010	28	010	24	010	10	350	07	003	17	014	13	020	14
6,000	227	11	010	24	010	28			320	03	009	17	023	15	020	12
8,000	244	12	010	25	010	25			230	05	018	19	025	16	030	17
10,000	237	13	010	28	010	28			260	07	027	19	025	16		
14,000	230	18	360	30	010	34					031	21	029	12		
18,000	255	33	350	30	010	36					040	18	023	12		
24,000	258	31	340	39	010	58					188	12	269	18		
30,000	256	36	340	52	010	59					309	10	281	18		
40,000	270	32	330	42	(26,000')						290	24	284	23		
50,000	275	23									287	29	273	23		
	272	36											(48,000')			
	(57,000')															

NEPHOSCOPE OBSERVATIONS

Place	
Time Type	NONE REPORTED.
Dir. Vel.	

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

WEATHER OBSERVER — 57·6 N 16·2 W — Time 15h. G.M.T.; M.S.L. 1021 mb; Surf 1021 mb; Freezing 940 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		43	41	007	10
1000	5·6	40	29	349	11
950		33	23	341	10
900	33·4	26	17	334	09
850		22	12	335	13
800	63·8	17	05	338	20
750		11	-03	336	18
700	97·4	00	-11	334	20
650		-05	-19	330	22
600	135	-11	-26	329	27
550		-16	-41	330	37
500	178	-24	-47	331	46
450		-36	-56	330	54
400	229	-44		335	74
350		-53		339	101
300	291	-63		345	115
250		-68		347	109
200	376	-62		351	60
170		-62		353	46
150		-61		352	44
130		-61		346	35
110		-64		343	28
100	533	-66		343	36
90		-65		342	36
80	(83mb)	-63			

Isothermal 875-842 mb 22°; 605-580 " -11°

Tropopause: II 298 mb -63° 29,200'

WEATHER OBSERVER — 57·6 N 16·2 W. — Time 21h. G.M.T.; M.S.L. 1022 mb; Surf 1022 mb; Freezing 950 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		42	37	290	11
1000	5·7	39	35	275	15
950		32	29	270	14
900	334	26	25	269	15
850		21	20	268	14
800	635	15	14	261	12
750		09	07	269	11
700	96·9	03	01	272	16
650		-03	-17	288	20
600	134	-07	-11	309	36
550		-14	-26	312	42
500	178	-21	-30	331	54
450		-29	-37	332	60
400	229	-38	-47	352	74
350		-50		353	92
300	292	-64		334	93
250		-75		341	11
200	375	-76			

Isothermal 660-645 mb -03°

Tropopause: I 225 mb -80° 35,100'

WEATHER WATCHER — 52·7 N 18·3W — Time 03h. G.M.T.; M.S.L. 1012 mb; Surf 1012 mb; Freezing 930 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		43	35	330	30
1000	3·3	41	34	330	31
950		34	31	334	32
900	31·1	27	24	335	34
850		21	18	340	36
800	61·3	16	08	341	39
750		09	03	342	40
700	94·6	03	-05	345	42
650		-05	-11	342	44
600	132	-14	-16	336	45
550		-22	-27	333	59
500	175	-27	-38	331	71
450		-31	-48	330	96
400	225	-40	-57	333	88
350		-50		341	75
300	288	-55		338	76
250		-55		335	84
200	376	-55		343	70
170		-56		350	54
150	438	-58		338	52
130		-58		337	57
110		-62		336	51
100	524	-64		336	41
90		-67			
80		-69			

Tropopause: II 309 mb -55° 28,200'

WEATHER WATCHER — 52·9 N 18·7W — Time 09h. G.M.T.; M.S.L. 1017 mb; Surf 1017 mb; Freezing 920 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		46	39	340	30
1000	4·5	44	37	335	26
950		36	30	341	31
900	32·4	29	26	347	36
850		23	22	354	36
800	62·9	19	10	008	37
750		12	03	010	36
700	96·5	05	-05	017	31
650		-03	-15	019	27
600	134	-11	-26	008	29
550		-19	-36	002	36
500	177	-25	-45	357	54
450		-31	-54	352	76
400	228	-41		351	82
350		-51		353	88
300	291	-58		355	95
250		-62		351	78
200	377	-62		352	66
170		-62		353	54

Inversion 493 mb -26° - 483 mb -25°

Tropopause: II 272 mb -62° 31,200'

WEATHER WATCHER — 52·9 N 18·8W — Time 15h. G.M.T.; M.S.L. 1023 mb; Surf 1023 mb; Freezing 920 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		47	43	348	21
1000	6·1	44	40	351	22
950		36	33	356	23
900	34·0	29	26	358	23
850		23	16	360	23
800	64·3	19	01	001	25
750		11	-10	001	27
700	97·8	03	-19	359	28
650		-05	-26	358	28
600	135	-09	-32	355	31
550		-15	-36	353	47
500	179	-23	-41	351	53
450		-30	-46	351	70
400	230	-38	-53	349	83
350		-51		351	93
300	292	-64		351	105
250		-78		346	114
200	375	-80		343	99
170		-75		334	89
150		-71		318	71
130		-72		313	71
110		-72		101	79
100		-72			
90		-75			
80		-75			
70		-77			
60		-81			
		-81			
	(43mb)	-81			

Tropopause: I 213 mb -85° 36,200'

WEATHER WATCHER — 52·7 N 19·7W — Time 21h. G.M.T.; M.S.L. 1027 mb; Surf 1027 mb; Freezing 920 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		46	41	335	15
1000	7·2	43	37	343	15
950		36	32	352	15
900	35·1	29	25	355	16
850		25	18	005	18
800	65·6	19	09	008	18
750		13	00	352	18
700	99·4	11	-06	343	25
650		07	-08	338	36
600	138	03	-11	335	48
550		-05	-17	339	52
500	182	-11	-23	346	49
450		-19	-32	350	56
400	234	-31	-43	352	69
350		-45		353	70
300	298	-59		351	90
250		-72		344	84
200	382	-82		345	72
170		-76		345	60
150		-75		347	56
130		-73		347	47
110		-73		346	35
100	524	-74		344	37
90		-75		346	36
80		-76			

Isothermal 872-850 mb 25°; 530-517 " -08°

Tropopause: II 214 mb -82° 36,700'

WEATHER EXPLORER — 54·3 N 19·9W — Time 21h. G.M.T.; M.S.L. 1022 mb; Surf 1022 mb; Freezing 930 mb

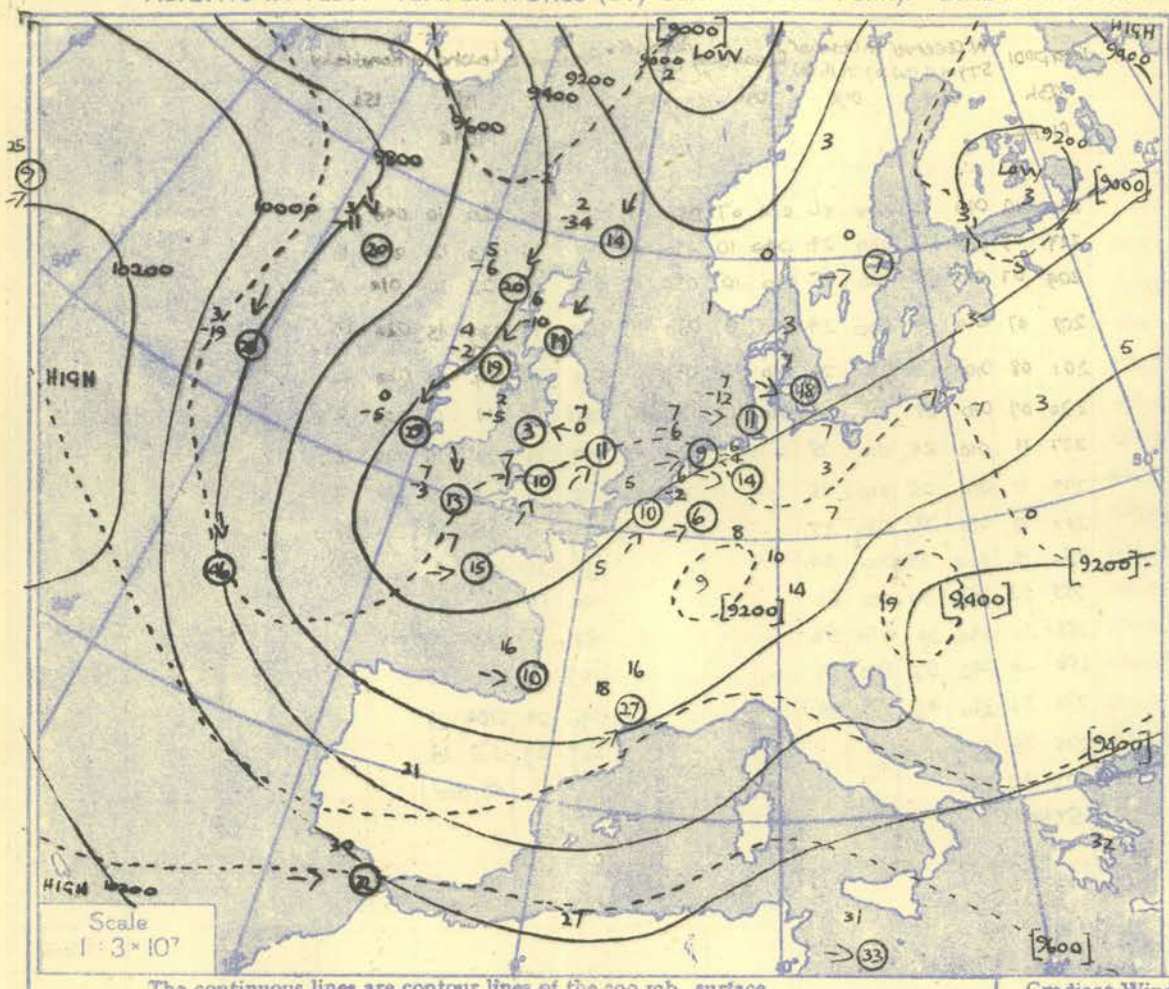
Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		45	32	360	19
1000	5·8	42	30	006	24
950		35	25	006	22
900	33·7	28	21	005	21
850		20	14	007	22
800	63·9	19	02	004	24
750		11	-11	351	25
700	97·4	02	-20	337	28
650		-06	-24	338	32
600	135	-10	-31	345	39
550		-19	-39	350	44
500	178	-26	-45	360	56
450		-33	-51	014	73
400	228	-42		017	82
350		-54		013	102
300	291	-66		360	114
250		-77		013	104
200	374	-70		004	58
170		-68		355	42
150		-70		340	38
130		-70		310	36
110		-73		328	44
100	518	-74		328	37
90		-74		316	32

Inversion 831 mb 18° - 800 mb 19°

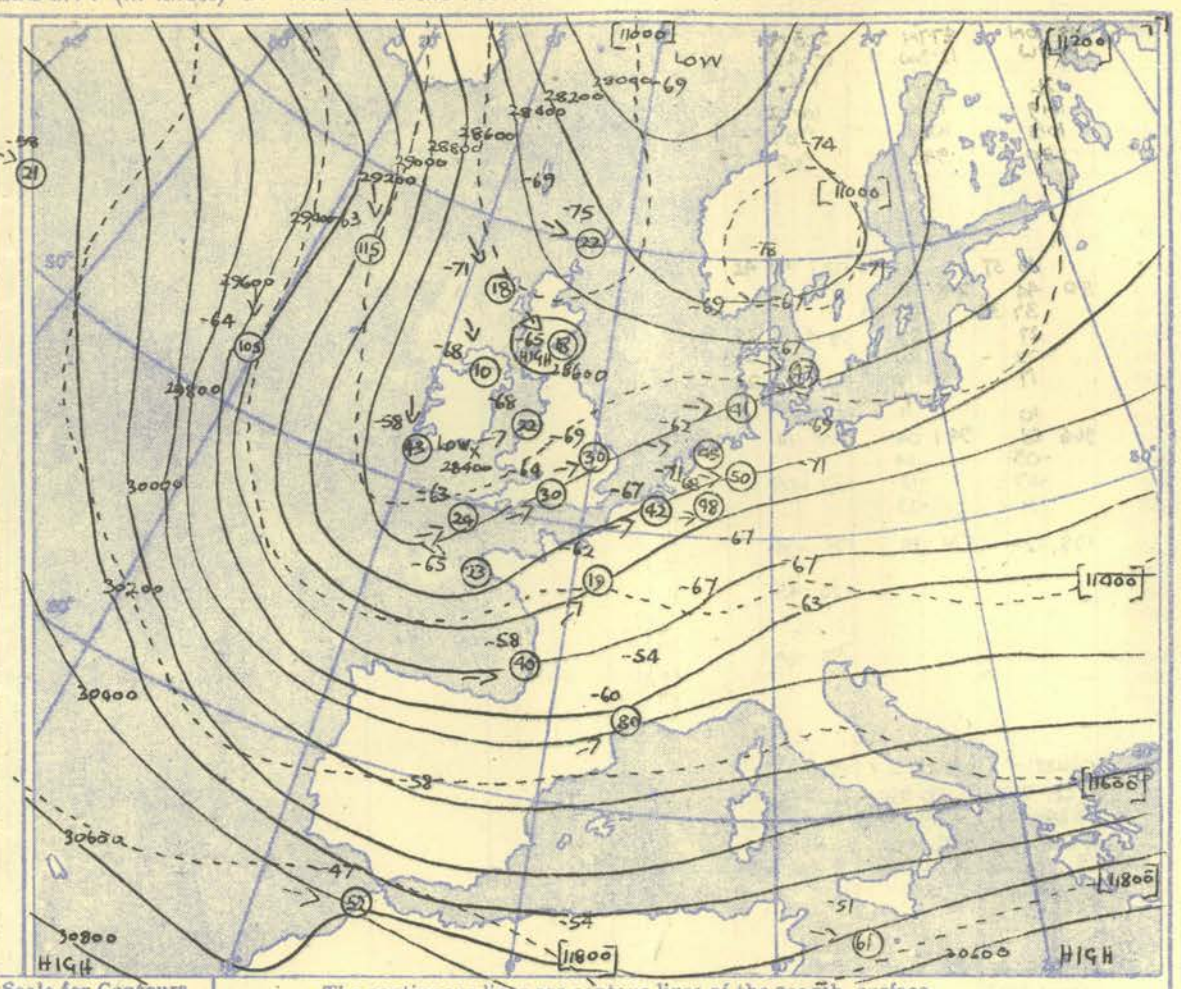
Tropopause: I 245 mb -79° 33,400'

Saturday 24th February 1951.

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



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

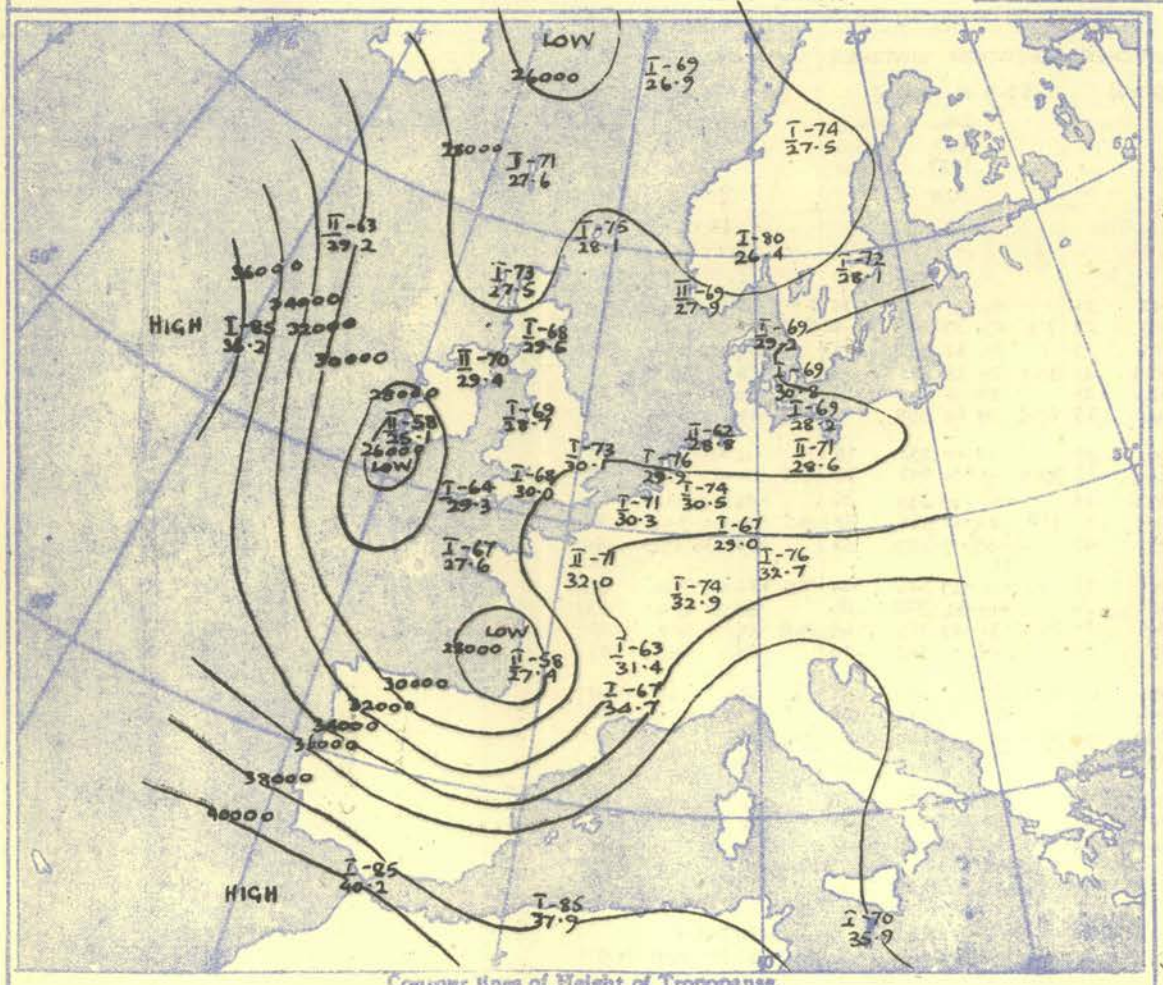


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 - 300 mb.

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

100 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.

A warm ridge south of Greenland moved east. This coupled with cooling over the Bay of Biscay and slight warming over eastern Europe sharpened a cold trough which moved slowly east over Ireland during the day.

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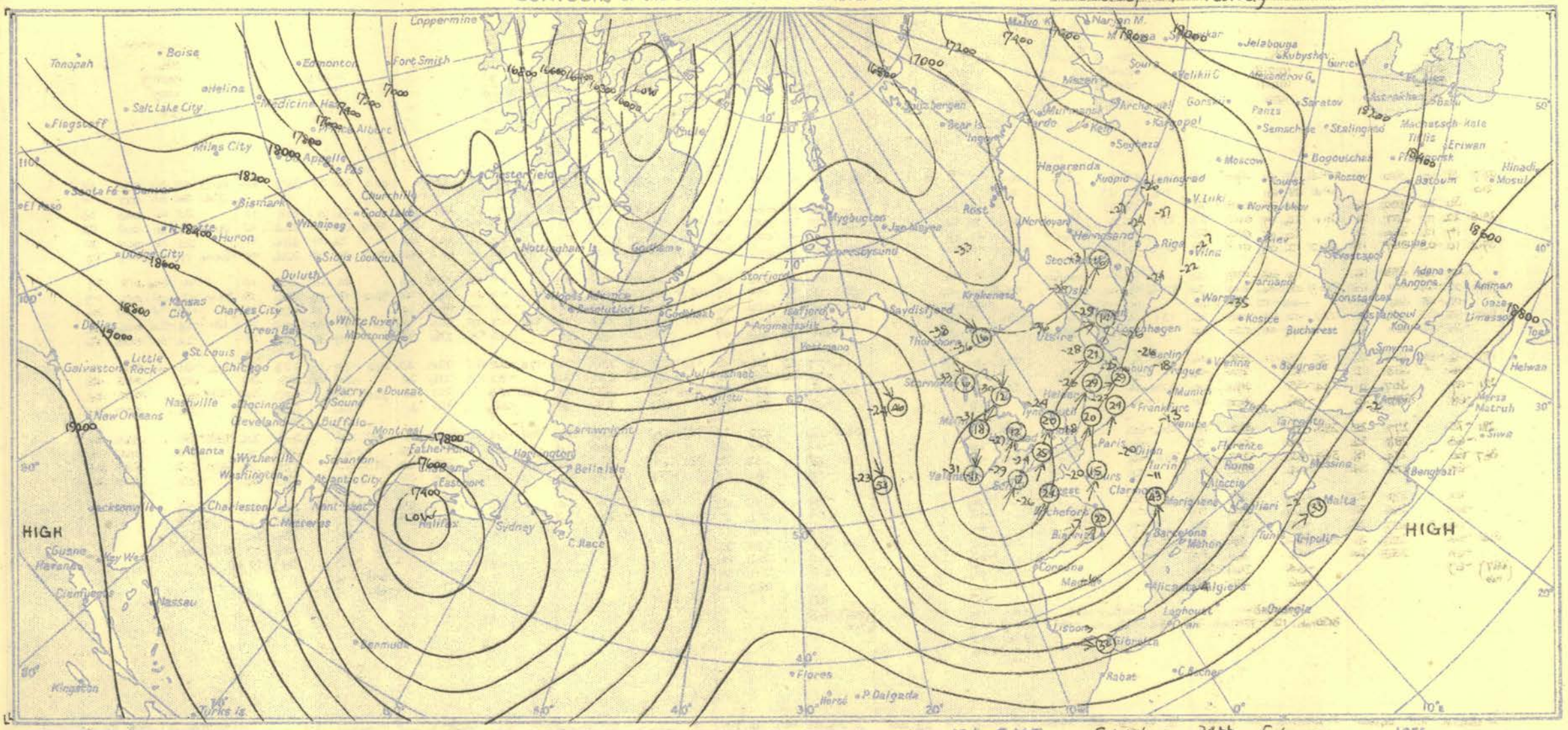
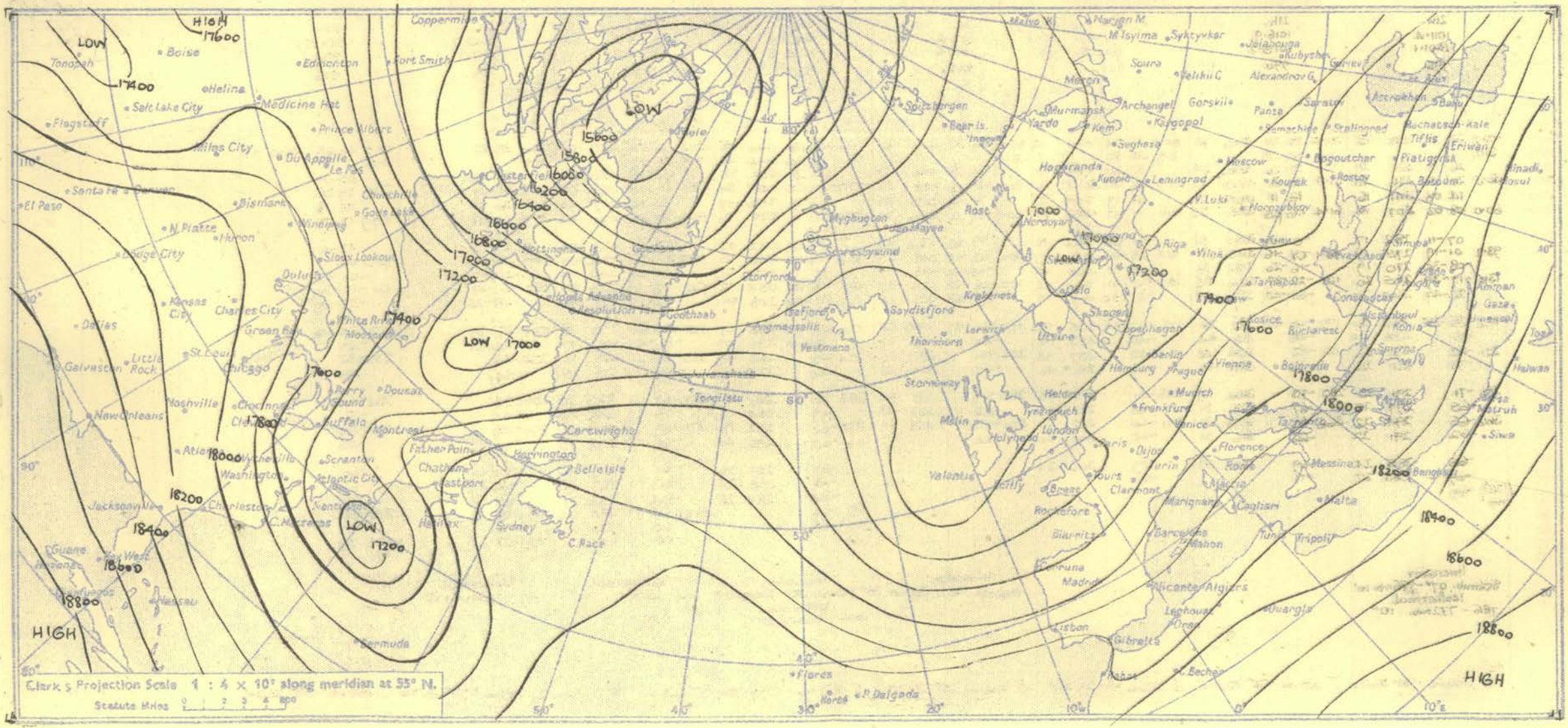
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Saturday 24th. February 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Saturday 24th February 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Saturday 24th February, 1951.

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

15h. G.M.T.

Station	Pressure: Time	M.S.L.	Surf	Freezing	Tropopause
LERWICK	15h.	1007·6 mb	997·4 mb	967 mb	I 300mb. -75° 28,100′
STORNOWAY	15h.	1012·8 mb	1011·1 mb	950 mb	I 305mb. -73° 27,500′
LEUCHARS	15h.	1006·9 mb	1006·0 mb	928 mb	I 287mb. -68° 29,800′
ALDERGROVE	15h.	1007·3 mb	998·1 mb	932 mb	II 279mb. -70° 29,400′
LIVERPOOL	15h.	1004·3 mb	1002·2 mb	930 mb	I 296mb. -69° 28,700′
DOWNHAM MARKET	15h.	1003·9 mb	999·3 mb	913 mb	I 280mb. -73° 30,100′
LARKHILL	15h.	1002·7 mb	986·3 mb	900 mb	I 283mb. -68° 30,000′
CAMBORNE	15h.	1003·4 mb	992·7 mb	915 mb	I 290mb. -64° 29,300′
VALENTIA	15h.	1008·9 mb	1007 mb	930 mb	II 350mb. -58° 25,100′

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	37	30	350	16	00·4	39	31	360	18	00·2	43	34			02·6	42	33	010	15	00·6	41	37	030	06	01·2	43	40	070	05	04·4	43	38	Calm		02·9	40	37	337	03	00·3	45	36	030	12	Surf
1000	2·0					3·4	38	31			1·8	42	33			2·1					1·2					1·1					0·7					0·9					2·4	44	35	027	13	1000
950		30	24	352	20		32	26	008	28		35	27				35	30				35	31	039	08		36	32	277	02		38	32	102	03		36	31	318	12		35	26	040	20	950
900	29·5	22	17	357	21	31·1	26	19	013	23	27·7	28	21			30·0	28	24			29·1	28	25	045	06	29·0	30	27	243	03	28·8	32	27	120	03	28·8	30	25	334	12	30·4	28	20	003	23	900
850		17	12	360	21		20	15	016	25		22	15	For			22	18				22	18	057	05		24	22	217	07		26	21	147	04		24	19	336	11		23	16	004	25	850
800	57·4	10	-03	367	18	61·2	12	09	018	18	60·0	17	09			60·2	16	12			59·4	15	13	092	04	59·5	21	17	207	09	59·4	20	14	184	05	59·3	19	14	336	10	60·6	17	10	007	27	800
750		07	-24	358	16		12	06	017	20		12	01	winds			11	06				09	06	128	04		14	08	205	09		14	07	189	08		14	04	329	10		10	34	012	27	750
700	926	02	-34	001	14	94·7	05	-06	010	20	93·6	06	-10			94·0	04	-02			92·5	02	-05	079	03	93·3	07	00	215	11	93·3	07	-01	190	10	93·0	07	-03	330	13	94·0	03	-05	011	29	700
650		-06	-48	357	11		-04	-22	001	21		01	-19	see			-04	-13				-05	-17	054	06		00	-06	225	13		00	-07	193	15		-02	-14	328	12		-05	-14	007	30	650
600	130	-15	-55	342	12	132	-12	-31	015	16	131	-09	-29			131	-12	-21			130	-13	-31	292	02	131	-08	-15	233	20	131	-07	-13	205	21	131	-10	-20	303	12	131	-14	-24	006	34	600
550		-25	-58	331	16		-22	-41	031	14		-19	-40	page			-21	-31				-19	-45	213	07		-16	-22	232	22		-15	-21	216	24		-19	-32	283	11		-24	-30	005	36	550
500	172	-36	-59	334	16	175	-33	-51	350	06	174	-30	-52			174	-31	-43			173	-27	-57	240	12	174	-28	-33	233	20	174	-24	-33	220	25	173	-29	-38	228	13	174	-31	-41	010	41	500
450		-46		333	12		-43		275	04		-40	-60	3.			-37	-54				-37	-60	226	15		-33	-44	236	25		-32	-61	216	12		-34	-48	201	30		-43		003	48	450
400	221	-57		307	11	224	-55		294	10	224	-45				224	-48				223	-49		224	24	225	-43		237	28	225	-43		217	23	224	-44		203	34	223	-51		005	44	400
350		-68		277	20		-66		300	21		-56					-59					-58	226	29		-57		231	28		-56		213	30		-56		204	33		-58		002	44	350
300	281	-75		277	22	285	-71		308	18	286	-65				285	-68				284	-68		228	22	287	-69		233	30	287	-64		217	30	286	-63		216	24	285	-58		355	43	300
250		-68		288	22		-70		324	18		-60					-64					-62	255	18		-68		240	24		-62		231	25		-62		259	16		-54		343	39	250
200	367	-60		274	18	369	-62		310	25	373	-54				371	-61				370	-58		282	20	372	-61		257	22	373	-55		263	22	373	-53		275	24	373	-54		335	35	200
170		-61		272	24		-64		303	21		-54					-59					-57	279	24		-57		259	25		-54		268	25		-57		282	25		-58		322	36	170
150		-61		272	22		-62		299	25		-55					-60					-58	275	23		-56		271	24		-49		263	25		-56		291	24		-58		318	17	150
130		-62		266	23		-60		301	25		-57					-62					-59	276	23		-59		276	24		-57		269	25		-57		281	24		-58				130
110		-65		257	26		-63		298	25		-58					-61					-59	275	22												-61		280	30		-61				110
100	514	-66		253	31	516	-64		288	18	522	-58				518	-62				519	-60		273	24										521	-62		279	27	521	-65				100
90		-68		255	34		-62		269	24		-58					-63					-62	285	26												-63		292	27						90
80	(087) mb	-69					-64		268	45							-63					-64	281	25											(084) mb	-64									80
70							-66		270	28							-64					-62	267	24																					70
60																	-65					-63																							60
							Inversion 800mb. 12°-770mb. 15°					Isothermal 444-420mb. -42°					(050) -66 (040) -66 (030) -67 (020) mb -68					(054) mb -65																											

21h. G.M.T.

Station	Pressure: Time	M.S.L.	Surf	Freezing	Tropopause
LERWICK	21h.	1011·4 mb	1001·1 mb	995 mb	II 343mb. -74° 25,300′
STORNOWAY	21h.	1016·9 mb	1015·2 mb	990 mb	I 307mb. -74° 27,300′
LEUCHARS	21h.	1011·4 mb	1010·5 mb	942 mb	II 303mb. -71° 28,400′
ALDERGROVE	21h.	1012·5 mb	1002·6 mb	934 mb	I 304mb. -70° 27,900′
LIVERPOOL	21h.	1007·9 mb	1005·8 mb	980 mb	I 277mb. -75° 30,200′
DOWNHAM MARKET	21h.	1005·2 mb	1000·7 mb	913 mb	I 262mb. -78° 31,300′
LARKHILL	21h.	1003·7 mb	987·3 mb	916 mb	I 295mb. -73° 28,800′
CAMBORNE	21h.	1005·3 mb	994·6 mb	926 mb	II 350mb. -58° 25,300′

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	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	02·7	38	30	360	15	00·4	35	30	360	15	00·2	36	34	030	12	02·6	36	32	010	10	00·6	37	35	040	08	01·2	38	37	025	07	04·4	35	35			02·9	39	35	360	08						Surf
1000	3·0					4·4	33	28			2·3	35	32			3·1					2·0	37	34	040	16	1·4	38	37			0·9					1·5										1000
950		26	18	338	21		27	20	350	24		33	30	024	31		34	28	016	23		34	28	042	15		36	35	34.5	06		35	34				35	31								950
900	30·3	20	13	336	18	31·8	20	15	353	22	30·7	28	24	032	30	30·7	27	19	022	24	29·7	29	24	048	20	29·3	31	27	360	05	28·8	30	21			29·4	29	25								900
850		14	08	341	16		18	11	005	22		23	19	044	23		21	14	025	22		23	19	046	17		26	20	037	08		26	25				22	18								850
800	60·0	08	02	307	16	61·4	06	ps	356	23	61·1	17	12	053	21	60·9	15	10	026	22	60·0	16	11	039	13	59·3	21	15	070	05	59·4	20	18			59·7	17	09								800
750		07	-11	282	17		-01	-07	342	21		10	05	044	18		09	03	023	23		09	04	042	12		14	11	153	07		13	08				12	-01								750
700	93·2	01	-19	275	19	94·1	-08	-16	306	22	94·5	02	-04	031	17	94·0	02	-08	018	25	93·4	04	-07	040	15	93·7	08	01	194	07	93·1	06	-06			93·3	05	-17								700
650		-08	-30	270	13		-16	-20	294	21		-05	-12	030	14		-06	-20	013	27		-05	-13	049	21		01	-07	230	10		-02	-11				-03	-27								650
600	130	-17	-39	265	20	131	-22	-27	260	25	132	-11	-21	030	12	132	-14	-28	014	27	131	-12	-28	054	12	132	-07	-13	228	10	131	-11	-17			131	-12	-30								600
550		-26	-47	260	20		-30	-42	268	25		-21	-30	019	07		-23	-38	015	25		-17	-40	208	06		-17	-22	228	16		-18	-25				-23	-39								550
500	172	-38	-58	254	20	172	-40	-63	312	30	175	-32	-42	355	08	174	-34	-49	005	27	174	-26	-50	223	07	175	-25	-31	227	18	174	-29	-29			173	-34	-48								500
450		-51		258	24		-48		327	44		-44		353	12		-44		005	27		-37	-60	231	09		-36	-45	226	17		-40	-53				-45									450
400	221	-62		260	26	221	-57		334	48	224	-52		337	13	224	-51		353	16	224	-47		230	09	225	-45		228	15	224	-50				223	-52								400
350		-73		271	25		-66		338	46		-62		280	16		-61		320	13		-60		226	16		-59		229	15		-67					-58									350
300	281	-71		291	23	282	-73		334	37	285	-71		287	18	285	-69		338	22	285	-70		246	14	287	-67		225	20	285	-72				284	-60								300
250		-65		297	22		-67		328	31		-63		292	19		-65		333	25		-67		284	12		-75		238	20		-65					-56									250
200	366	-65		294	22	366	-66		328	31	371	-60		312	20	370	-62		338	29	370	-60		292	18	371	-63		270	17	370	-59				371	-58								200
170		-62		291	22		-66		316	32		-62		310	20		-62					-62		290	20		-61		273	20		-60					-58									170
150		-65		285	24		-69		308	28		-59		306	22									289	22		-61		267	20		-62														150
130		-69		283	27		-71					-61												285	23		-63		263	26		-64					-60									130
110	(125) mb	-69																						284	28		-64		273	29		-67					-63									110
100																					517	-64				518	-64		274	24	517	-68				-65									100
90																					(035) mb	-64					-65		271	24		-70													90
80																											-66		272	24	(083) mb	-73				(085) mb	-70								80
70																																													70
60																																													60
							Inversion 806mb. 07°-786mb. 10° Isothermal 786-772mb. 10°										Inversion 1003mb. 36°-980mb. 38°					Inversion 974mb. 08°-730mb. 09° Isothermal 1006-980mb. 37°					Isothermal 313-300mb. -67°					Isothermal 987-950mb. 35°																

HMSO Press, M.O., Dunstable.

No. 11655 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Sunday 25th February 1951

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

03 hrs G.M.T.

Station	Time	M.S.L.	Surf.	Freezing	Tropopause
LERWICK	03hrs	1013·8 mb	1003·4 mb	1003 mb	I 308 mb −71° 27500′
STORNOWAY	03hrs	1017·9 mb	1016·3 mb	993 mb	I 318 mb −70° 27500′
LEUCHARS	03hrs	1014·8 mb	1013·9 mb	965 mb	I 300 mb −67° 28500′
ALDERGROVE	03hrs	1016·9 mb	1006·7 mb	963 mb	II 312 mb −65° 27800′
LIVERPOOL	03hrs	1011·1 mb	1005·0 mb	960 mb	I 285 mb −71° 29700′
DOWNHAM MARKET	03hrs	1008·0 mb	1003·6 mb	950 mb	I 268 mb −78° 30800′
LARKHILL	03hrs	1006·3 mb	989·8 mb	950 mb	I 302 mb −72° 28400′
CAMBORNE	03hrs	1009·2 mb	998·4 mb	993 mb	I 310 mb −62° 27800′
Valentia	03hrs	1019 mb	1019 mb		I 240 mb −78° 34000′

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	31	20	340	11	0·5	30	25	350	05	0·2	35	30	010	08
1000	036	31	19			04·7	32	27			03·8	34	29		
950		25	11	331	17		27	23	344	13		30	27	013	20
900	308	19	08	331	18	32·2	20	16	340	15	31·5	24	19	023	22
850		11	03	330	18		14	05	340	15		18	15	025	15
800	604	06	−2	327	17	62·1	08	02	333	12	61·6	11	09	351	10
750		06	−15	293	17		01	−7	329	14		06	03	304	09
700	304	−2	−18	285	16	94·5	−4	−14	354	18	94·8	00	−3	272	17
650		−10	−28	272	23		−10	−20	002	27		−8	−11	268	12
600	130	−19	−34	257	33	132	−16	−27	355	30	132	−16	−22	267	09
550		−28	−44	254	38		−23	−34	350	31		−24	−32	256	12
500	172	−39	−56	261	33	174	−32	−43	348	34	174	−35	−44	269	14
450		−48		295	25		−41		344	38		−45		293	18
400	221	−55		332	35	224	−51		347	47	224	−52		328	30
350		−66		328	35		−62		346	64		−60		336	33
300	282	−71		324	31	285	−69		344	59	285	−67		334	32
250		−62		310	27		−70		338	52		−59		330	29
200	368	−60		306	28	369	−64		327	37	371	−61		321	25
170		−62		295	26		−64		312	33		−59		316	26
150		−66		297	24		−68		312	30		−64		316	27
130		−70		299	27		−70		310	27		−66		301	23
110		−70		285	30										
100	513	−71													
90															
80															
70															
60															
	Inversion 873 mb 5°–781 mb 8° Isothermal 437–425 mb −50°					Inversion 1016 mb 30°–999 mb 32° 723 mb −3°–714 mb −2°									

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	026	34	31	360	08	0·6	33	32	010	05	01·2	36	34		
1000	043					02·9	36	34	016	15	02·1	36	35		
950		30	18	357	27		31	28	016	17		32	31		
900	320	25	13	358	25	30·5	28	24	014	17	29·8	29	26		
850		19	13	356	20		22	18	010	16		23	22		
800	619	11	09	351	10	62·1	14	09	360	15	60·8	15	13	018	15
750		07	−8	360	17		12	07	018	16		12	08		
700	948	00	−31	004	18	95·0	00	−31	004	18	94·2	04	−7	011	15
650		−8	−40	338	18		−7	−40	338	18		−4	−16	021	13
600	132	−16	−22	267	09	133	−14	−47	334	20	131	−13	−25	025	15
550		−24	−32	256	12		−23	−56	341	26		−21	−36	347	11
500	174	−33	−44	269	14	175	−30	−57	344	24	174	−28	−45	294	05
450		−43		293	18		−39		350	33		−37	−54	287	12
400	225	−48		352	45	225	−48		352	45	224	−48		273	13
350		−58		352	47		−58		352	47		−60		279	13
300	287	−65		353	50	287	−65		353	50	286	−69		299	14
250		−68		353	39		−68		353	39		−69		326	20
200	372	−60		345	34	371	−62		316	24	370	−63			
170		−62		342	30		−62		318	22		−64			
150		−63		334	28		−62		313	22		−64			
130		−68					−63		307	23		−64			
110							−66		271	25		−67			
100						518	−66		284	30	516	−67			
90												−65			
80															
70															
60															
	Isothermal 1007–988 mb 34°					Inversion 1005 mb 33°–1000 mb 36° 779 mb 11°–750 mb −12°					Isothermal 1004–980 mb 36°				

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	36	34	010	18	02·9	40	36	040	12	0·3	42	31	010	15
1000	1·7					02·8					5·3	40	30	010	19
950		32	30				34	30				34	25	010	28
900	29·4	29	27			30·2	28	24			33·1	27	19	007	36
850		25	22				21	16				20	12		
800	59·8	20	18			60·5	15	10			62·5	18	01		
750		14	12				11	04				13	−16		
700	93·6	08	04			94·1	04	−5			97·0	05	−22		
650		01	−4				−4	−11				−5	−31		
600	131	−7	−12			132	−12	−19			135	−8	−34		
550		−17	−21				−23	−30				−15	−42		
500	175	−28	−33			174	−34	−43			178	−23	−52		
450		−39	−44				−45					−31	−58		
400	225	−45				223	−50				229	−39			
350		−61					−57					−53			
300	256	−71				283	−60				291	−65			
250		−63					−60					−76			
200	371	−59				372	−59				315	−71			
170		−61					−59					−65			
150		−62					−60								
130		−63					−62								
110		−66					−65								
100		(114)				319	−65								
90							−70								
80							−70								
70							−70								
60															
						Isothermal 800–780 mb 15°					Isothermal 850–814 mb 20°				

09 hrs G.M.T.

Station	Time	M.S.L.	Surf.	Freezing	Tropopause
LERWICK	09hrs	1014·3 mb	1003·9 mb	1004 mb	I 296 mb −75° 28500′
STORNOWAY	09hrs	1017·1 mb	1015·4 mb	995 mb	I 256 mb −74° 31800′
LEUCHARS	09hrs	1017·2 mb	1016·2 mb	994 mb	II 271 mb −68° 30600′
ALDERGROVE	09hrs	1019·4 mb	1010·4 mb		I 261 mb −76° 31800′
LIVERPOOL	09hrs	1015·3 mb	1013·2 mb	963 mb	I 270 mb −71° 30900′
DOWNHAM MARKET	09hrs	1010·7 mb	1006·4 mb	933 mb	I 280 mb −70° 30000′
LARKHILL	09hrs	1010·8 mb	994·3 mb	960 mb	I 285 mb −71° 29700′
CAMBORNE	09hrs	1015·3 mb	1004·5 mb	948 mb	NR.

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	28	25	310	06	0·5	31	28			0·2	33	28	340	08
1000	037	29	25			04·4	32	29			04·5	32	27		
950		24	19	302	08		27	19				28	22	335	08
900	309	18	13	306	09	31·8	21	15			32·0	21	17	332	07
850		12	06	314	09		15	11				16	12	332	06
800	605	05	00	303	08	61·6	09	06			61·9	10	05	332	04
750		01	−3	283	08		02	00				02	−3	333	03
700	933	−4	−9	283	05	94·6	00	−4			93·8	−4	−9	334	03
650		−11	−19	319	08		−5	−15				−10	−16	336	05
600	130	−18	−28	315	12	132	−13	−26			131	−15	−22	342	10
550		−26	−45	317	20		−22	−32				−26	−29	350	24
500	172	−33	−52	317	21	175	−29	−38			174	−27	−38	354	29
450		−45		322	27		−37	−45				−37	−46	345	32
400	222	−55		322	31	225	−47				224	−43		346	39
350		−65		318	30		−55					−51		343	51
300	282	−74		314	32	287	−61				286	−64		348	48
250		−63		313	33		−63					−68		335	47
200	367	−64		297	27	371	−57				371	−63		322	33
170		−64					−63					−64		322	28
		(180)													
150							−64					−62		310	28
130							−65					−62		306	31
110							−69					−64		307	27
100						517	−71				518	−66		303	24
90							−69					−67		299	27
80												−69		306	20
70												−72			
60															
	Inversion 1004 mb 28°–988 mb 30° 769 mb 0°–745 mb 1°					Inversion 1015 mb 31°–1000 mb 33°					Isothermal 713–690 mb −4°				

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	024	33	30			0·6	35	32	010	10	01·2	37	36	340	14
1000	053	33	29			04·3	34	31	010	24	02·9				
950		29	24				31	28	010	21		33	30	012	24
900	328	23	17			31·9	27	24	005	22	30·6	28	24	018	23
850		16	12	332	07		20	19	009	23		24	17	022	15
800	619	10	05	332	04	62·1	14	14	004	22	61·0	19	09	008	12
750		02	−3	333	03		08	07	003	21		12	06	333	10
700	934	−4	−9	334	03	95·0	01	00	012	16	94·6	03	−1	287	06
650		−10	−16	336	05		−5	−9	347	12		−1	−6	275	06
600	131	−15	−22	342	10	133	−13	−19	331	13	132	−8	−13	252	09
550		−26	−29	350	24		−22	−29	331	16		−17	−24	248	16
500	174	−27	−38	354	29	177	−25	−37	347	21	178	−25	−37	347	21
450		−37	−46	345	32		−33	−43	344	26		−38	−46	344	26
400	224	−43		346	39	227	−44		338	26	226	−48		328	26
350		−51		343	51		−51		346	32		−58		346	32
300	286	−64		348	48	290	−66		350	38	287	−67		350	38
250		−68		335	47		−75		345	44		−69		345	44
200	371	−63		322	33	374	−69		343	30	372	−60		343	30
170		−64		322	28		−65		336	27		−64		336	27
150		−62		310	28		−65		325	27		−63		325	27
130		−62		306	31		−67		322	24		−62		322	24
110		−64		307	27		−66					−67			
100	518	−66		303	24	519	−65								
90		−67		299	27										
80		−69		306	20										
70		−72													
60															
	Isothermal 1010–990 mb 33° 922–908 mb 27°										Isothermal 900–876 mb 28°				

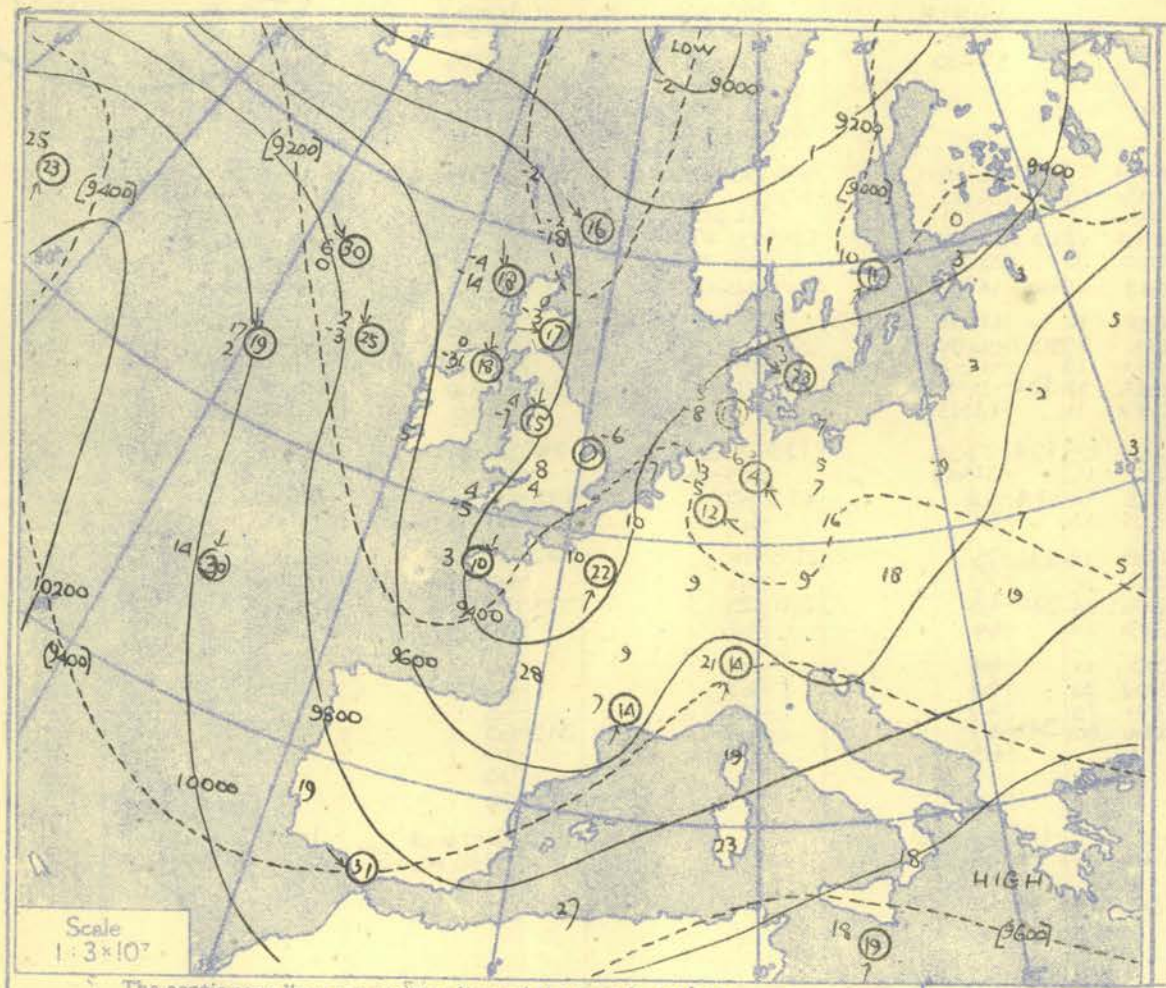
Pressure mb	LARKHILL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Valentia Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·8	36	33	020	18	02·9	40	33	360	20					
1000	2·8					04·1	36	32							
950		31	28				33	27							
900	30·5	27	23			31·9	25	19							
850		22	18				17	14							
800	60·8	15	12			62·0	14	07							
750		12	08				11	00							
700	94·6	06	03			95·4	04	−14							
650		−1	−6	275	06		−3	−24							
600	132	−8	−13	252	09	133	−11	−31							
550		−17	−24	248	16		−18	−39							
500	178	−27	−34	258	22	176	−27	−48							
450		−38	−46	261	23		−37	−51							
400	225	−45		243	21	276	−46								
350		−60		274	14		−57								
300	287	−67		279	13	287	−65								
250		−63		315	17		−66								
200	372	−59		311	20	372	−62								
170		−59		311	17		−61								
150		−57		305	18		−60								
130		−62		280	18		−63								
110		−62		290	24		−66								
100	519	−63		280	26										
90		−63		285	23										
80		−64													
70		(83)													
60															
	Isothermal 850–822 mb 22°														

See p3 for winds

See p3 for winds

Sunday 25th February 1951.

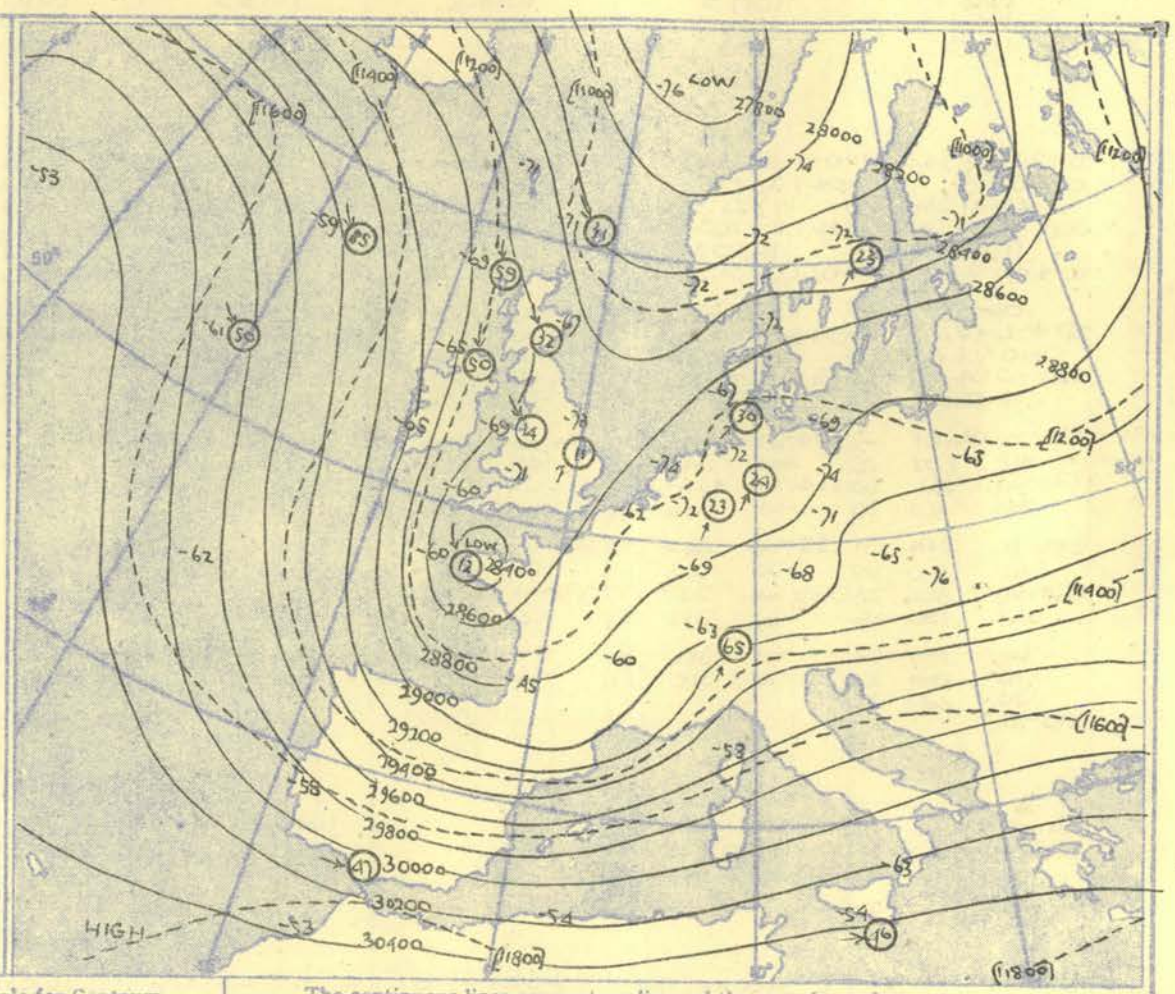
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03 h G.M.T.



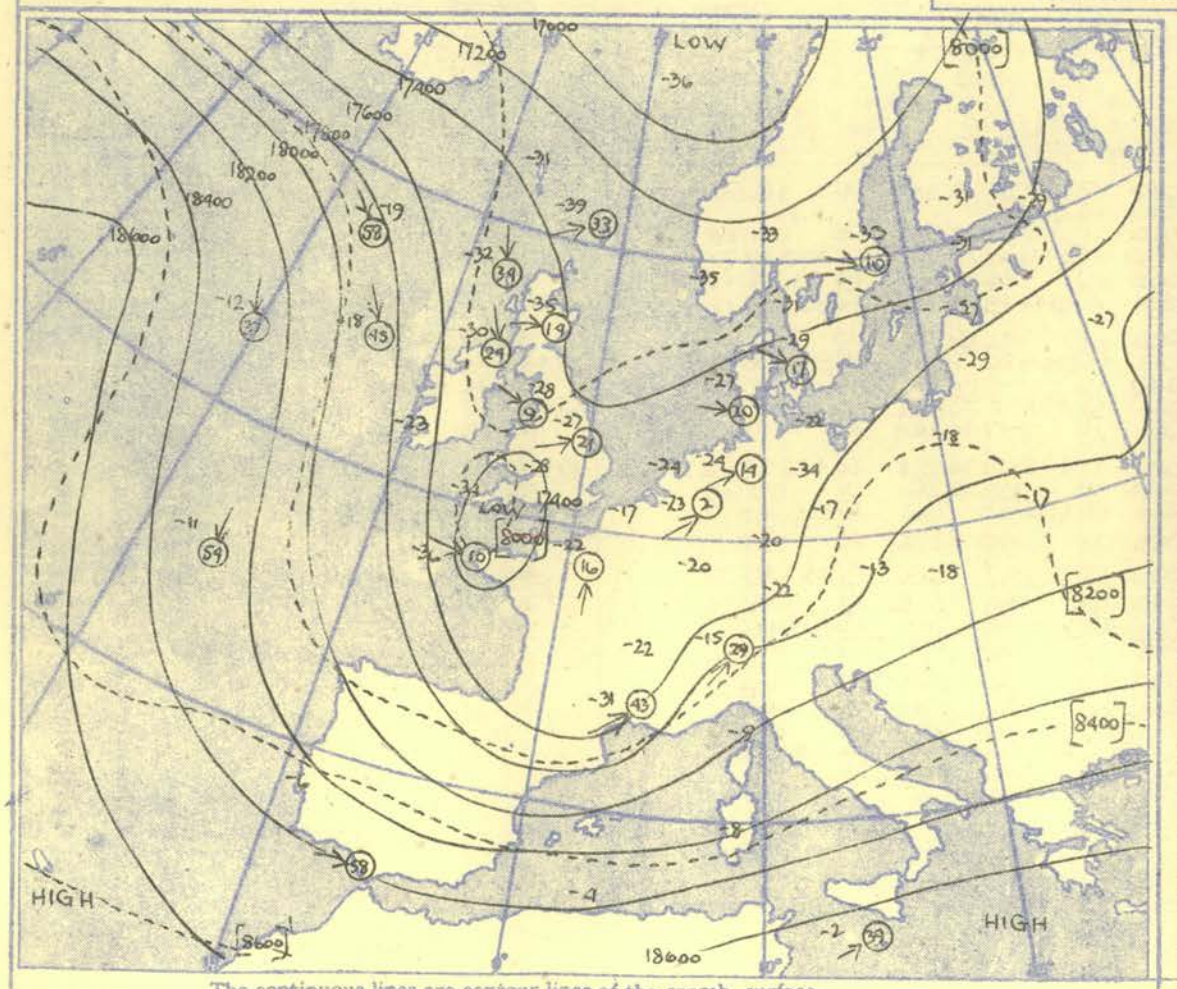
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

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

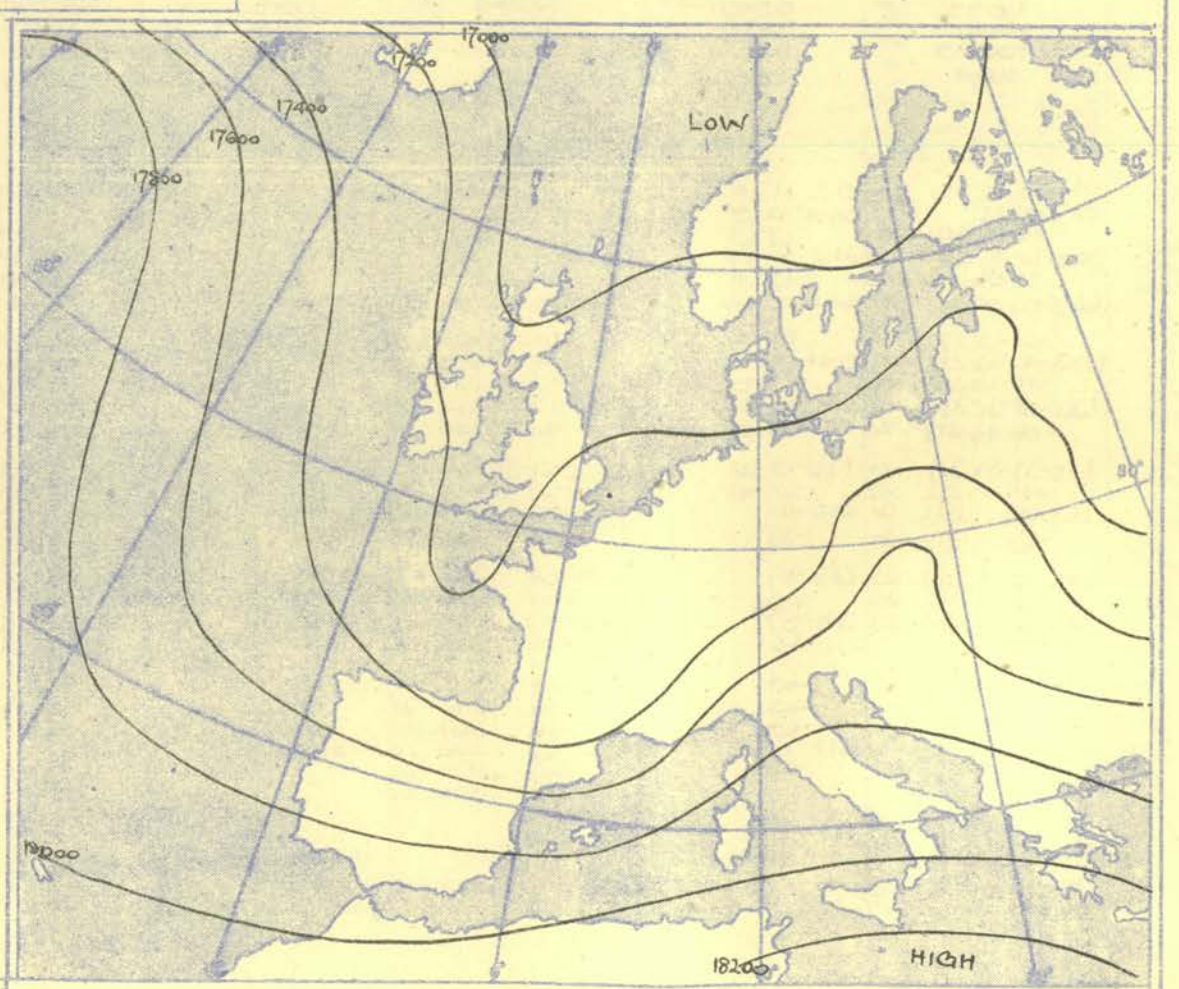
100 60 40 30 20 15 10 knots



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



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



Isopleths of Thickness 500 - 1000mb.

February 25th 1951.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	41·2°N 05·3°E			38·5°N 05°E		
Pressure Time	1400hrs			1600 hrs		
M.S.L.	1008 mb			1013 mb		
Surf	1005 mb			1011 mb		
Freezing	805 mb			835 mb		
Pressure mb	Height ft./100	°F. Temp.	Dew °F.	Height ft./100	°F. Temp.	Dew °F.
Surf	—	57	53	—	55	39
1000	2·4	56	-	3·7	54	-
950		51	47		47	34
900		46	35		40	26
850		39	32		34	-
800		32	-		27	-
750		24	-		20	-
700	97·1	18	-	97·4	13	-
650		11	-		06	-
600		07	-		04	-
550		00	-		-4	-
500	181	-7	-	180	-8	-
450						
400						
350						
300	Cloud			Cloud.		
250	7/8Cu 940-680			2/8Sc 920-900		
200						
170						
	Surface wind, W 17-21 kts			Surface wind W 11-16 kts		

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

Place	Downham Market		Lerwick		Camborne		Aldergrove		Ronaldsway		Weather Observer 57·3N 15·3W		Weather Watcher 52·5N 20W	
Time	03hrs		09hrs		09hrs		09hrs		1415hrs		21hrs		21hrs	
Type	Pilot		Pilot		Pilot		Pilot							
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.	355	07			360	20	Calm		300	11	290	28	270	18
1,000	018	07			006	24	008	10	300	08	290	32	260	19
2,000	024	08			015	36	348	17	310	17	290	36	270	22
3,000	031	09			018	36	341	21	320	20	290	35	270	22
4,000	034	15			014	38	334	23	320	19	290	35	270	22
5,000	040	10			010	39	334	24	320	17	300	35	270	21
6,000	042	07			008	36	334	26	330	15	300	38	280	26
8,000	173	02			007	37	337	29	330	26	300	43	300	33
10,000	Calm				012	35	340	33			300	46	300	38
14,000	219	11			015	21	335	33			300	63	310	43
18,000	259	21			006	25	337	35			300	60	310	51
24,000	213	13			004	43	346	73			300	93	250	69
30,000	244	11			006	59	345	94			310	75	320	82
40,000	263	21	288	19	341	34	336	37			330	63		
50,000	269 (46000')	18	276	35	330	25	313 (47000')	34			(38000')			

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				
Lat/Long	57·4N 16·2W					57·3 16·2 W					57·3N 16 W				
Pressure Time	03h G.M.T.					09h G.M.T.					15h G.M.T.				
M.S.L.	1022 mb					1019 mb					1016 mb				
Surf	1022 mb					1019 mb					1016 mb				
Freezing	960 mb					930 mb					915 mb				
Pressure mb	Height ft./100	°F. Temp.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		40	30	330	21		43	38	280	30		45	38	290	28
1000	5·8	37	23	318	18	4·9	41	37	261	36	4·3	43	36	284	42
950		31	19	320	24		34	31	265	36		36	30	290	40
900	33·4	24	17	318	24	32·8	27	26	277	39	32·3	30	26	301	39
850		18	13	315	21		22	19	283	42		24	17	300	44
800	63·4	14	06	316	22	63·1	16	16	287	35	62·7	20	12	298	38
750		11	02	314	27		11	09	292	33		16	09	297	44
700	96·9	06	00	314	30	96·6	08	-01	303	38	96·5	10	05	296	48
650		04	-09	315	40		05	-06	307	42		03	-01	296	50
600	135	-03	-16	316	48	135	-01	-10	308	46	135	-03	-08	297	56
550		-14	-25	315	50		-09	-14	314	56		-09	-14	298	51
500	179	-19	-25	313	58	179	-16	-19	313	74	179	-14	-20	300	60
450		-25	-31	311	69		-25	-28	316	63		-24	-30	305	74
400	230	-33	-39	319	75	230	-34	-37	309	70	230	-35	-41	307	81
350		-45		323	79		-48		312	81		-47		307	77
300	194	-59		325	85	393	-61		309	89	293	-62		306	80
250		-73		329	91							-74		307	84
200	277	-83		333	88						377	-79		311	84
170		-76		338	60							-70		314	63
150		-72		339	47							-71		315	57
130		-71		334	37							-72		315	53
110	520	-74		330	33							-71		315	47
100		-75		326	30						520	-68		315	39
90		-77		325	30							-70		314	18
80		-78		325	30							-71		314	38
70												-72		313	27
60												-75		313	15
Tropopause	II 203mb-83° 37,400'					N.R.					I 205mb-81° 37,200'				

Ship	Weather Observer					Weather Watcher					Weather Watcher				
Lat/Long	57·3N 16·3W					52·7N 19·9W					52·9 N 20·0W				
Pressure Time	21h G.M.T.					03h G.M.T.					09h G.M.T.				
M.S.L.	1013 mb					1029 mb					1029 mb				
Surf	1013 mb					1029 mb					1029 mb				
Freezing	890 mb					930 mb					940 mb				
Pressure mb	Height ft./100	°F. Temp.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		44	40				45	42	300	15		44	40	299	15
1000	3·7	43	37			7·8	41	38	319	12	7·9	40	34	299	15
950		38	29				34	32	315	13		33	26	300	14
900	31·7	33	24			35·6	28	26	311	16	35·7	26	20	302	14
850		27	19				23	20	305	17		25	09	303	14
800	62·3	22	14			66·1	23	02	305	17	66·2	26	10	306	18
750		16	08	For Winds			19	-01	309	17		22	-03	308	21
700	96·3	16	06			10·0	17	02	319	19	10·1	17	-13	311	23
650		09	00	See			12	-05	334	30		12	-21	319	23
600	135	02	-07			139	06	-14	344	34	139	06	-30	316	27
550		-05	-14	Page 3.			-03	-29	344	34		-03	-27	322	32
500	179	-11	-26			183	-14	-34	345	37	184	-13	-32	329	38
450		-19	-35				-22	-44	345	56		-19	-44	336	43
400	231	-31	-46			235	-32	-52	341	40	236	-31	-51	341	41
350		-42					-45		339	47		-45		349	44
300	295	-67				300	-61		335	50	299	-60		350	53
250		-69					-75		333	49		-74		346	52
200	379	-82				382	-83		329	55	383	-82		346	57
170		-74					-78		328	61		-76		344	52
150							-73		330	56		-73		337	48
130							-75		327	47		-75		335	48
110							-79		324	42		-78		328	51
100						524	-77		322	36	524	-76		310	47
90							-79					-76		308	44
80												-76		312	39
70												-79		321	32
60															
Tropopause	II 200mb-82° 37,900'					I 204mb-84° 37,800'					I 259mb-75° 33,100'				

Ship	Weather Watcher					Weather Watcher					Weather Explorer				
Lat/Long	52·5N 20W					52·4 N 19·8W					54·6N 12·8W				
Pressure Time	15h G.M.T.					21h G.M.T.					03h G.M.T.				
M.S.L.	1030 mb					1028 mb					mb				
Surf	1030 mb					1028 mb					mb				
Freezing	950 mb					925 mb					mb				
Pressure mb	Height ft./100	°F. Temp.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°F. Temp.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		43	32	270	12		45	36				44	34	358	06
1000	8·1	39	32	275	12	7·3	42	34			6·0	42	32	295	15
950		32	28	278	15		35	30				35	24	333	13
900	35·9	26	23	281	16	35·2	30	27			33·9	28	18	352	13
850		26	15	287	19		34	24				23	17	332	14
800	66·4	27	06	293	23	66·2	30	09			64·2	18	08	328	11
750		24	00	303	27		26	-03	For Winds			11	03	330	20
700	10·1	21	-08	309	30	10·1	23	-08			97·7	02	-03	336	25
650		16	-18	316	33		15	00	See			-01	-19	324	32
600	140	08	-22	322	39	140	09	01			135	-04	-21	330	37
550		-02	-29	324	39		02	-03	Page 3.			-11	-23	332	54
500	184	-12	-37	320	39	185	-07	-13			179	-18	-28	330	45
450		-22	-42	315	52		-17	-24				-27	-35	333	57
400	237	-33	-47	317	48	237	-29	-36			231	-35	-43	338	64
350		-47		313	52		-41								
300	300	-61		315	54	301	-55								
250		-76		320	63		-75								
200	382	-85		321	66	385	-90								
170		-82		322	56		-83								
150		-77		323	52		-82								
130		-78		321	50		-80								
110		-81		315	47		-79								
100	523	-82		315	45	(108 mb)	-79								
90		-82		322	45										
80		-82		330	42										
70		-82		326	32										
60		-81													
(1055 mb)		-81													
Tropopause	I 207mb-89° 37,600'					I 190mb-92° 39,500'					N.R.				

Weather Observer 57·4N 16·2W, 03h:
Inversion
816 mb 13° - 800mb 14°
Isothermal
800 - 772mb 14°
673 - 635 - 4°
547 - 528 .. -15°

Weather Observer 57·3 16·2 W, 09h:
Inversion
700mb 12° - 685mb 9°

Weather Observer 57·3N 16·3W, 21h:
Inversion
750mb 16° - 730mb 18°
Isothermal
730 - 718 mb 18°
520 - 509 .. -9°

Weather Watcher 52·7N 19·9W, 03h:
Inversion
825 mb 22° - 808mb 24°
755 - 18° - 740 - 20°

Weather Watcher 52·9 N 20·0W, 09h:
Inversion
880mb 23° - 800mb 26°
765 .. 19° - 750 .. 22°

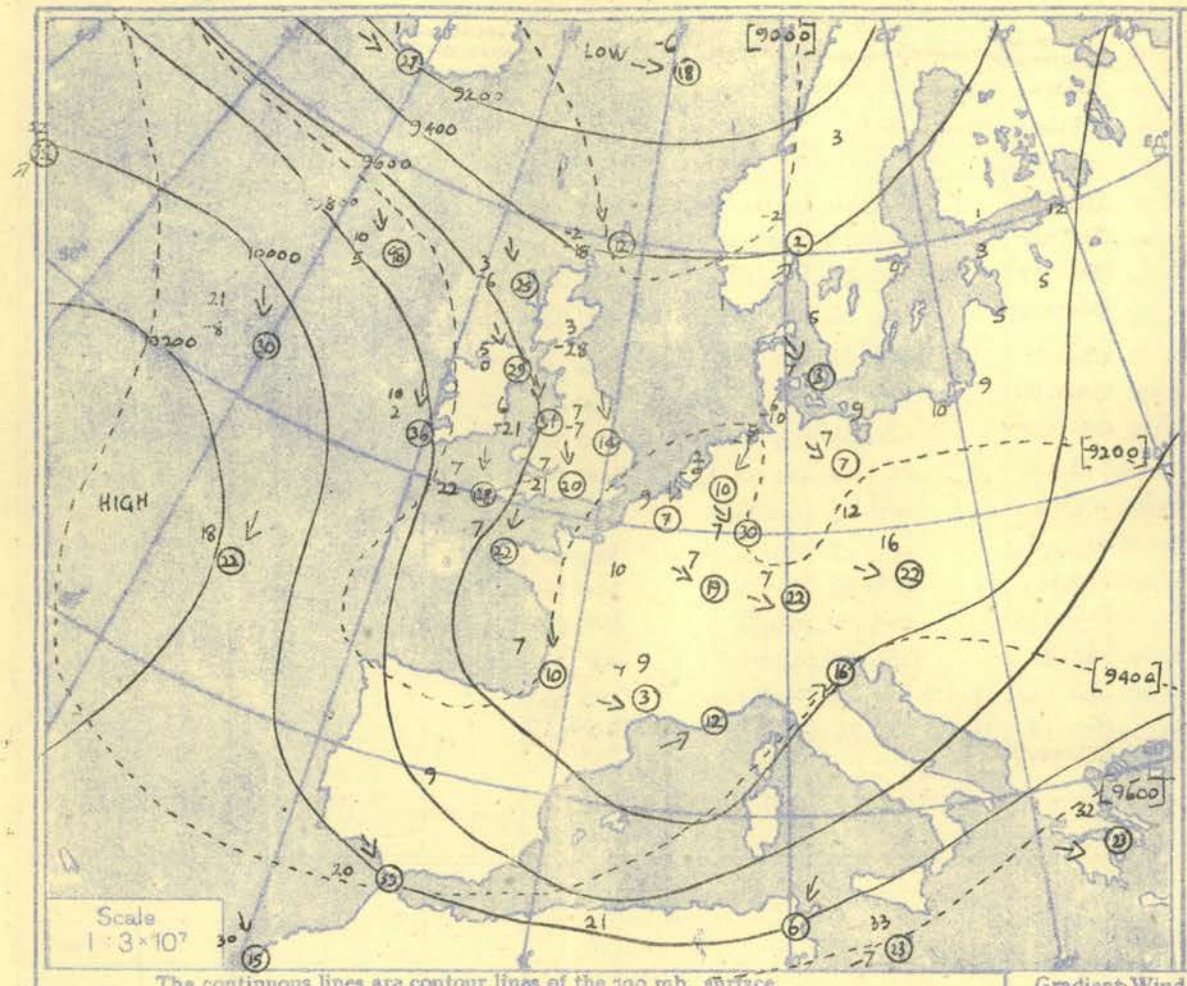
Weather Watcher 52·5N 20W, 15h:
Inversion
817mb 26° - 800mb 27°
Isothermal
800 - 817mb 26°

Weather Watcher 52·4 N 19·8W, 21h:
Inversion
904mb 29° - 850mb 34°
Isothermal
800 - 785mb 30°

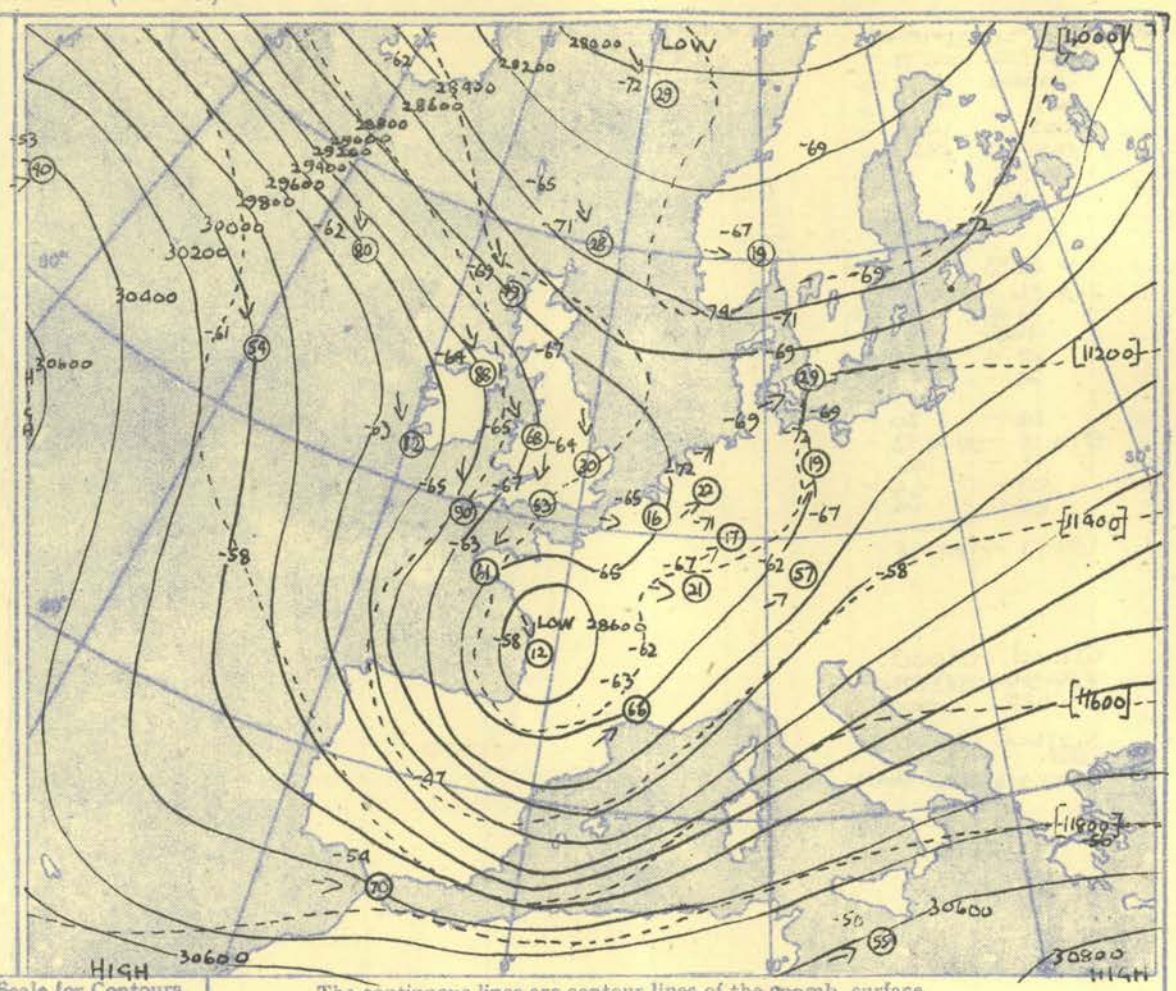
Weather Explorer 54·6N 12·8W, 03h:
Isothermal
454 - 444mb -27°

Sunday 25th February 1951.

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



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

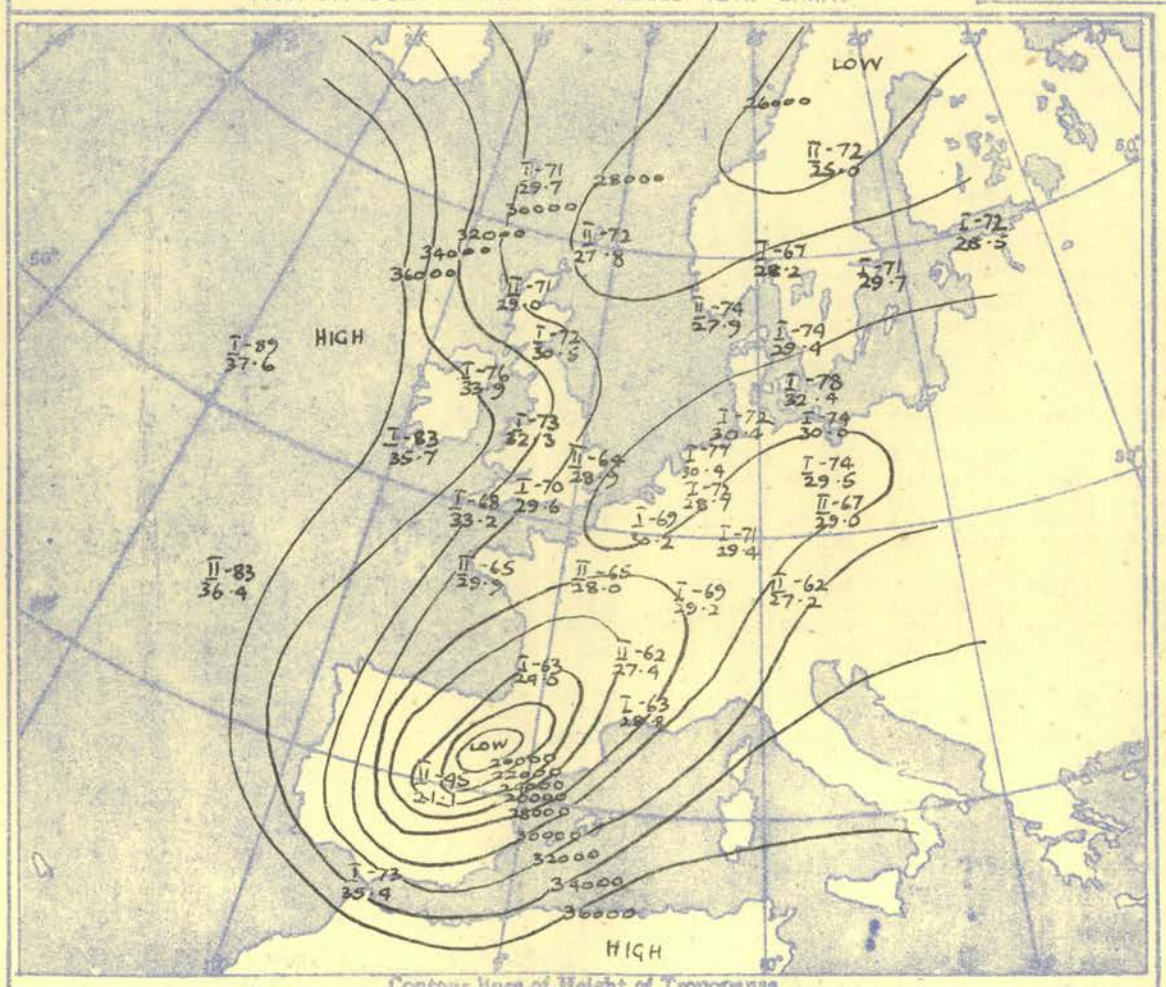


The continuous lines are contour lines of the 300mb. surface
The dotted lines are isopleths of the thickness of the layer 500–300 mb.

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

100 80 40 30 20 10 0 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 over Ireland moved slowly east over the British Isles.

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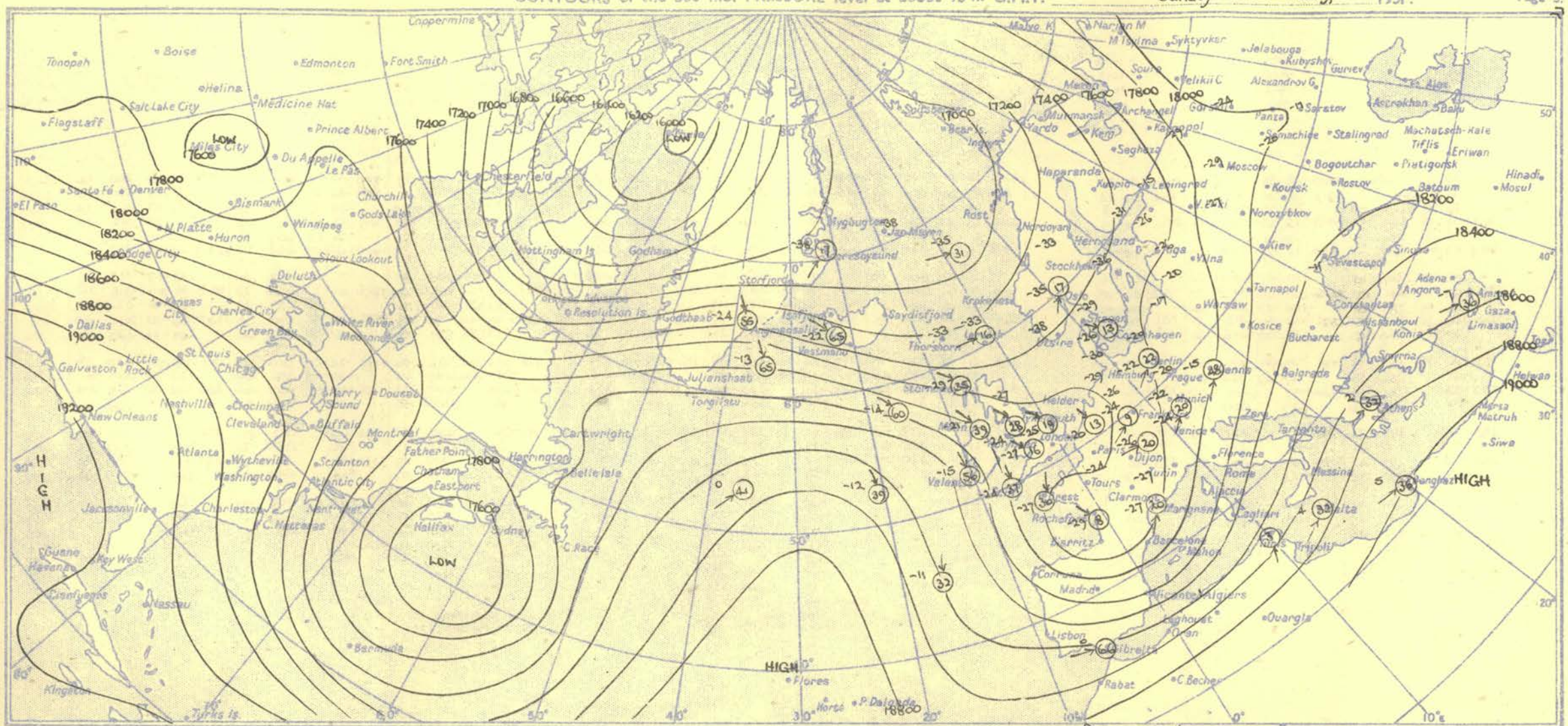
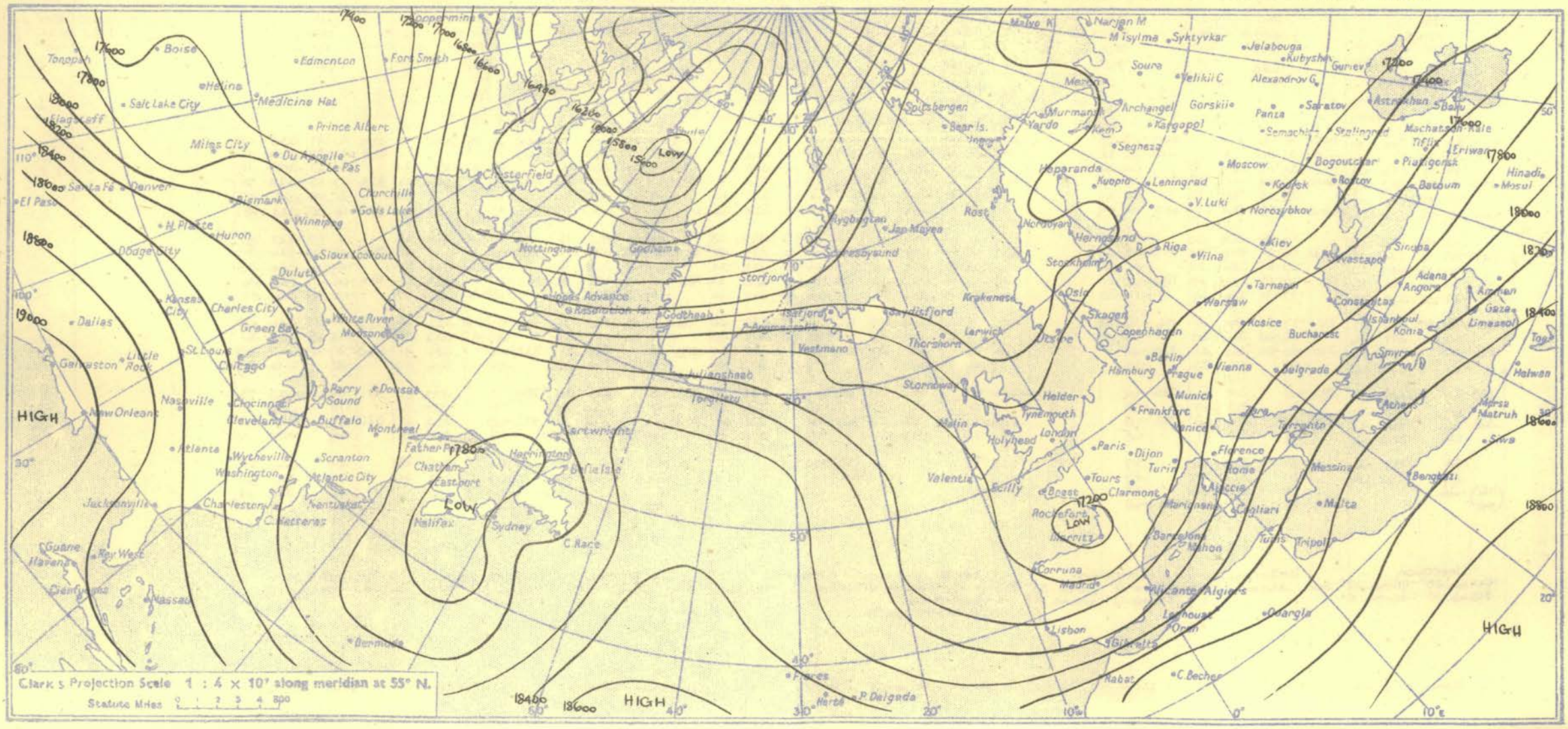
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Sunday 25th February, 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Sunday 25th February 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Sunday 25th February, 1951.

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

15h. G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	15h.	1013·7 mb	1003·4 mb	993 mb
STORNOWAY	15h.	1014·2 mb	1012·5 mb	970 mb
LEUCHARS	15h.	1017·0 mb	1016·1 mb	958 mb
ALDERGROVE	15h.	1018·6 mb	1009·1 mb	970 mb
LIVERPOOL	15h.	1017·8 mb	1015·2 mb	959 mb
DOWNHAM MARKET	15h.	1018·3 mb	1008·8 mb	920 mb
LARKHILL	15h.	1015·0 mb	998·6 mb	942 mb
CAMBORNE	15h.	1018·9 mb	1008·1 mb	936 mb
VALENTIA	15h.	1023·1 mb	1022 mb	920 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	34	26	Calm		00·5	38	33	215	15	00·2	41	26		
1000	3·6	33	26			3·7	36	31			4·4	39	24		
950		26	23	246	04		30	26	216	19		31	18		
900	30·8	19	18	269	12	31·3	25	22	244	18	32·0	23	14		
850		12	12	265	10		20	17	261	18		17	12		
800	60·4	07	06	247	12	61·4	13	07	274	18	62·0	14	-01		
750		02	-01	267	10		07	01	288	20		07	-16		
700	93·3	-02	-18	281	12	94·6	03	-06	315	25	95·3	03	-28		
650		-09	-29	276	13		-04	-13	320	28		-03	-42		
600	130	-16	-36	265	12	132	-13	-20	318	31	137	-09	-48		
550		-25	-35	269	15		-24	-30	316	31		-18	-58		
500	173	-33	-38	261	16	174	-29	-35	310	35	176	-27	-50		
450		-42		256	15		-37	-47	313	34		-34	-49		
400	222	-54		261	18	224	-47		311	35	226	-46			
350		-64		280	20		-59		320	39		-55			
300	283	-71		297	28	286	-69		324	49	288	-67			
250		-72		308	31		-71		317	50		-67			
200	367	-68		297	32	370	-67		314	46	373	-62			
170		-69		295	34		-65		311	45		-63			
150		-66		290	32		-66		314	42		-61			
130		-66		278	29		-68		307	33		-63			
110		-68		275	35							-67			
100	512	-69		276	38						519	-69			
90		-70		278	39							-76			
80		-73		278	36							-70			
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	02·6	38	31	220	09	00·6	41	33	310	10	01·2	41	35	330	11
1000	5·0	37	30	230	09	4·6	39	31	310	15	3·6	40	34		
950		29	24	244	16		31	23	330	18		35	30	349	17
900	32·6	25	22	257	19	32·3	25	18	325	13	31·5	29	28	348	15
850		21	17	271	17		19	10	310	12		24	20	350	15
800	62·8	16	12	284	36	62·4	13	03	316	14	62·0	20	15	348	15
750		11	07	300	30		08	-09	322	22		14	04	345	13
700	96·3	05	00	305	29	95·7	06	-21	333	31	95·7	07	-07	340	14
650		-03	-08	306	29		-01	-31	329	29		02	-16	328	13
600	134	-09	-15	320	28	133	-08	-38	325	27	133	-10	-28	309	13
550		-14	-21	321	36		-16	-45	324	28		-17	-37	285	18
500	177	-21	-28	322	39	177	-24	-49	324	38	176	-25	-48	297	19
450		-27	-34	322	48		-34	-52	324	35		-36	-59	315	19
400	229	-36	-43	328	64	227	-44		325	45	227	-46		323	24
350		-47		330	79		-51		336	58		-56		301	30
300	292	-61		340	88	290	-65		334	68	289	-64		329	30
250		-74		325	66		-72		333	60		-65		326	29
200	376	-66		320	57	374	-67		324	43	375	-60		311	21
170		-64					-59		314	31		-59		310	26
150		-63					-60		310	31		-59		312	24
130		-63					-65		294	28		-57		295	22
110		-68					-63		294	26					
100	522	-68				521	-63		288	27					
90		-70					-67		280	27					
80							-67		275	28					
70							-71		264	26					
60						(064 mb)	-68								

Inversion 745mb. 07° - 719mb. 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	04·4	40	33	020	19	02·9	43	33	360	25	00·3	47	40	280	14
1000	3·9					5·0	42	33			6·2	43	37	291	18
950		33	28	007	24		34	25	358	29		37	32	309	24
900	31·7	26	22	011	24	32·9	27	19	001	29	34·2	29	25	312	43
850		22	16	012	21		21	08	359	29		24	21	314	25
800	62·0	19	04	011	17	63·1	16	-02	357	28	64·8	19	15	310	29
750		14	-09	358	15		11	-12	347	30		13	07	314	29
700	95·7	07	-21	343	20	96·6	07	-22	348	28	98·5	10	02	318	36
650		02	-38	331	16		01	-33	357	27		05	-10	324	42
600	133	-09	-44	293	16	134	-07	-42	010	30	137	00	-21	329	45
550		-18	-52	299	16		-15	-52	005	30		-07	-26	335	56
500	176	-27	-60	326	16	178	-24	-57	001	37	181	-15	-31	340	56
450		-37	-60	349	24		-32	-57	356	54		-23	-37	338	61
400	227	-48		351	33	228	-39	-59	359	66	233	-34	-45	338	64
350		-58		356	48		-51		359	83		-50		336	70
300	288	-67		355	53	291	-65		002	91	295	-63		337	82
250		-68		345	37		-76		356	76		-77		337	86
200	373	-64		332	29	375	-68		353	46	379	-73		333	62
170		-62		323	27		-66		342	32		-69		329	56
150		-65		324	24		-66		314	37		-69			
130		-66		315	29		-66		318	27		-69			
110		-65		289	20		-70		344	17		-67			
100	519	-70		270	20	520	-74								
90		-68		279	24		-73								
80		-68		273	25		-71								
70		-70					-72								
60						(065 mb)	-73								

Isothermal 877 - 850mb. 22°

Station	Tropopause
LERWICK	II 306mb. -72° 27,800'
STORNOWAY	II 294mb. -71° 29,000'
LEUCHARS	I 277mb. -72° 30,500'
ALDERGROVE	I 238mb. -76° 33,900'
LIVERPOOL	I 255mb. -73° 32,300'
DOWNHAM MARKET	II 300mb. -64° 28,900'
LARKHILL	I 288mb. -70° 29,600'
CAMBORNE	I 245mb. -77° 33,200'
VALENTIA	I 222mb. -83° 35,700'

21h. G.M.T.

Station	Time	M.S.L.	Surf	Freezing
LERWICK	21h.	1011·8 mb	1001·4 mb	981 mb
STORNOWAY	21h.	1009·6 mb	1007·9 mb	950 mb
LEUCHARS	21h.	1015·1 mb	1014·2 mb	970 mb
ALDERGROVE	21h.	1017·6 mb	1008·1 mb	949 mb
LIVERPOOL	21h.	1017·9 mb	1015·8 mb	975 mb
DOWNHAM MARKET	21h.	1015·3 mb	1010·8 mb	965 mb
LARKHILL	21h.	1017·7 mb	1001·1 mb	954 mb
CAMBORNE	21h.	1021·9 mb	1011·0 mb	940 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	30	28	200	01	00·5	38	36	210	10	00·2	32	27		
1000	3·1	30	27			2·5	37	35			4·0	32	27		
950		28	19	226	09		32	31	247	16		30	24		
900	30·5	21	14	252	07	30·0	26	24	274	18	31·7	23	17		
850		14	09	252	07		23	19	286	18		20	15		
900	60·3	12	05	280	06	60·4	18	14	284	19	61·9	15	09		
750		05	-04	263	09		12	08	284	23		08	03		
700	93·3	-03	-12	274	12	94·0	05	01	285	24	95·3	03	-01		
650		-09	-19	293	13		-03	-05	284	25		-01	-12		
600	130	-16	-21	315	16	132	-10	-13	279	27	133	-08	-21		
550		-24	-35	329	19		-19	-21	281	27		-19	-30		
500	173	-33	-45	333	19	175	-27	-30	299	31	176	-26	-39		
450		-43		327	26		-32	-40	311	39		-34	-49		
400	222	-52		328	43	225	-40	-50	314	48	226	-44			
350		-61		328	46		-50		316	55		-55			
300	283	-69		347	47	288	-65		319	61	286	-66			
250		-69		313	36		-71		323	69		-65			
200	368	-66		316	33	372	-71		326	60	373	-65			
170		-68		305	34		-69		328	51		-65			
150		-68		297	36		-71		324	46		-67			
130		-67		292	36		-71		323	49		-67			
110		-66					-73		314	40		-66			
100	(116 mb)					516	-73				519	-63			
90															
80															
70															
60															

Inversion 1001mb. 30° - 981mb. 32° 815mb. 10° - 800mb. 12°

Isothermal 500 - 485mb. -27°

Inversion 1014mb. 32° - 976mb. 33° 670mb. -2° - 650mb. -1°

Pressure mb	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	36	33	270	05	00·6	33	30	Calm		01·2	35	33	310	12
1000	4·7	36	33	285	08	4·7	35	30	324	06	4·0	34	32	345	25
950		32	28	288	12		29	30	325	07		30	27	352	23
900	32·4	27	23	293	16	32·2	23	16	321	11	31·7	25	20	351	23
850		21	17	294	22		17	12	321	15		19	15	348	20
900	62·7	17	13	298	25	62·2	12	-01	324	24	61·9	15	07	355	18
750		11	06	310	27		08	-03	328	28		09	02	353	18
700	96·3	06	01	319	27	95·4	01	-02	327	28	98·3	01	-05	337	10
650		-02	-08	324	30		-06	-10	328	24		-07	-14	324	11
600	134	-10	-16	325	33	133	-12	-16	330	24	133	-10	-32	322	18
550		-18	-26	332	36		-20	-24	322	26		-16	-45	325	27
500	177	-23	-33	334	44	176	-28	-32	326	30	176	-26	-48	322	26
450		-33	-43	330	48		-37	-41	332	36		-37	-55	321	24
400	228	-42		331	57	226	-48		332	44	226	-46		327	27
350		-54		331	73		-58		333	54		-57		329	33
300	290	-63		333	82	287	-67		333	59	288	-68		327	35
250		-72		338	79		-71		335	59		-67		330	32
200	314	-70		326	54	372	-65		331	40	373	-63		318	31
170		-70		327	56		-69		325	39		-64			
150		-70				(153 mb)	-70					-62			
130												-64			
110												-66			
100											519	-69			
90															
80															
70															
60															

Inversion 523mb. -22° - 512mb. -21° 335 - 822mb. 20°

Inversion 1016mb. 33° - 1000mb. 35°

Isothermal 620 - 582mb. -10°

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	04·2	35	28	330	11	02·9	40	29	330	05
1000	4·7					5·8	40	29	309	16
950		31	21	351	24		34	23	318	19
900	32·3	26	18	345	18	33·6	27	13	324	21
850		20	15	337	14		21	08	326	26
900	62·5	13	07	333	13	63·8	16	05	324	28
750		11	-04	341	27		11	02	323	30
700	95·9	04	-11	345	35	97·3	05	-05	326	31
650		-02	-20	329	27		-01	-12	330	33
600	133	-10	-44	328	24	135	-06	-17	335	36
550		-18	-30	323	22		-13	-25	336	43
500	176	-27	-34	322	29	178	-21	-32	340	48
450		-37	-43	332	36		-28	-38	342	61
400	227	-46		336	41	230	-37	-49	345	65
350		-55		336	53		-51		346	67
300	289	-71		337	60	292	-66		343	78
250		-71		337	54		-78		346	78
200	373	-65		332	29	376	-73		336	61
170		-63		312	28		-67		330	40
150		-65		306	28		-65		325	31
130		-69		307	30		-71		336	26
110	(113 mb)	-70					-78		333	24
100						520	-76		337	22
90							-78		327	22
80						(083 mb)	-79			
70										
60										

Inversion 1001mb. 35° - 991mb. 36° 776mb. 11° - 755mb. 12°

Isothermal 1011 - 994mb. 40°

Station	Tropopause
LERWICK	II 295mb. -70° 28,600'
STORNOWAY	I 234mb. -72° 34,000'
LEUCHARS	I 272mb. -70° 30,700'
ALDERGROVE	I 246mb. -73° 36,200'
LIVERPOOL	I 255mb. -72° 32,100'
DOWNHAM MARKET	I 284mb. -72° 29,800'
LARKHILL	I 274mb. -75° 30,700'
CAMBORNE	I 233mb. -81° 34,400'

HMSO Press, MO., Dunstable.

No. 11656

DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.

Monday 26th February 1951. Page 1.

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

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	Valentia
Pressure: Time	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.	1008·3 mb	1006·3 mb	1010·4 mb	1014·5 mb	1016·0 mb	1016·6 mb	1018·3 mb	1020·9 mb	1021·3 mb
Pressure: Surf	998·0 mb	1006·6 mb	1009·5 mb	1006·3 mb	1013·9 mb	1011·8 mb	1001·4 mb	1010·0 mb	1020 mb
Pressure: Freezing	578 mb	905 mb	972 mb	935 mb	973 mb	968 mb	950 mb	937 mb	910 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	33	29	200	11
1000	02·1				
950		25	22	186	19
900	29·6	23	19	176	18
850		16	13	176	18
800	59·3	14	-2	178	11
750		08	-5	261	04
700	92·9	03	-17	255	08
650		-6	-29	258	10
600	130	-14	-28	300	15
550		-24	-33	307	21
500	173	-31	-42	308	21
450		-41		301	15
400	222	-52		303	22
350		-60		303	26
300	283	-73		307	28
250		-71		313	34
200	367	-65		314	34
170		-68		308	36
150		-68		307	40
130		-71		305	38
110		-72		304	31
100	512	-73		300	33
90		-74		296	33
80		-73		294	34
70		-75		293	32
60		-76			
		(65)			

Inversion 895 mb 15° - 880 mb 17°

Tropopause: I 282 mb -76° 29500'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·4	36	32	240	05
1000	2·1	37	33		
950		37	30	288	16
900	30·1	31	27	296	17
850		24	21	299	20
800	60·6	17	16	295	24
750		10	08	302	28
700	94·0	02	-4	311	30
650		-3	-7	293	36
600	132	-12	-16	291	39
550		-21	-25	307	38
500	174	-27	-31	307	39
450		-38	-42	300	38
400	224	-51		299	42
350		-61		299	48
300	286	-64		313	54
250		-68		323	59
200	371	-68		317	51
170		-70		313	52
150		-70		310	43
130		-71		312	43
110		-73		327	30
100					
90					
80					
70					
60					

Inversion 1007 mb 36° - 981 mb 40°

Tropopause: I 330 mb -65° 26500'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	33	32		
1000	02·2	33	32		
950		33	29		
900	29·5	28	23		
850		25	17		
800	60·3	18	10		
750		11	03		
700	93·8	04	00		
650		-3	-7		
600	131	-10	-14		
550		-15	-24		
500	174	-25	-35		
450		-36	-43		
400	224	-47			
350		-57			
300	286	-63			
250		-64			
200	372	-64			
170		-63			
150		-64			
130		-68			
110		-66			
100	517	-65			
90		-72			
80					
70					
60					

Isothermal 880 mb - 788 mb 18°

Inversion 1008 mb 33° - 975 mb 36° 886 mb 27° - 875 mb 28°

Tropopause: II 325 mb -63° 27200'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	36	35	260	08
1000	04·3				
950		33	29	282	21
900	32·1	29	24	292	24
850		24	19	286	21
800	62·6	19	14	288	26
750		13	07	292	27
700	96·4	06	-2	303	30
650		-1	-8	300	32
600	134	-9	-19	309	27
550		-19	-29	308	25
500	177	-22	-40	314	44
450		-32	-50	322	48
400	228	-44		320	56
350		-53		314	77
300	290	-64		322	84
250		-74		321	75
200	374	-75		324	57
170		-74		321	52
150		-73		312	54
130		-75			
110					
100					
90					
80					
70					
60					

Inversion 930 mb 23° - 922 mb 26°

Max wind 292 mb 314° 87 kts

Tropopause: I 216 mb -79° 35500'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	24	33	180	030
1000	04·2	33	29	204	09
950		30	27	264	09
900	31·8	28	24	277	14
850		19	12	299	16
800	61·9	10	03	322	22
750		-1	-10	331	21
700	96·3	-3	-10	331	22
650		-5	-17	333	27
600	133	-13	-25	341	30
550		-22	-33	345	30
500	175	-28	-41	341	33
450		-37	-56	337	35
400	226	-47		333	45
350		-59		336	60
300	287	-67		337	74
250		-72		345	70
200	371	-71		334	48
170		-70		319	40
150		-71		324	37
130		-71		316	30
110		-71		304	27
100	513	-71		298	33
90		-71		298	27
80		-72			
70		-73			
60		(76)			

Isothermal 514 - 454 mb -28°

Tropopause: I 255 mb -74° 33800'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	32	30	250	05
1000	04·3	33	30		
950		32	25	317	13
900	31·9	24	17	324	12
850		15	12	313	11
800	61·9	12	06	278	09
750		08	-4	273	10
700	95·2	02	-21	318	13
650		-4	-45	328	16
600	133	-9	-32	330	18
550		-20	-24	337	22
500	178	-28	-42	335	24
450		-38	-56	327	25
400	226	-48		343	24
350		-60		340	33
300	290	-64		343	39
250		-68		346	68
200	378	-65		331	41
170		-66		318	33
150		-67		312	28
130		-69		310	30
110		-69		287	25
100		-68			
90					
80					
70					
60					

Inversion 1012 mb 32° - 980 mb 34°

Tropopause: I 278 mb -70° 30100'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·4	29	26	245	03
1000	4·7				
950		32	25	317	13
900	32·3	27	20	316	13
850		22	17	319	18
800	62·6	15	12	322	17
750		11	07	326	11
700	95·0	04	00	322	13
650		-3	-5	319	15
600	133	-5	-12	310	24
550		-15	-20	329	28
500	177	-23	-30	337	35
450		-30	-39	339	43
400	228	-43		341	51
350		-55		341	59
300	290	-64		343	72
250		-68		346	68
200	378	-65		331	41
170		-66		318	33
150		-67		314	33
130		-64		308	25
110		-68			
100					
90					
80					
70					
60					

(114)

Inversion 1001 mb 29° - 961 mb 33°

Tropopause: II 258 mb -68° 32000'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	41	37	340	08
1000	05·8	41	37	323	21
950		35	31	327	22
900	33·4	28	24	331	23
850		24	21	332	28
800	63·9	17	13	330	28
750		11	08	332	30
700	97·4	06	-3	338	34
650		00	-11	339	35
600	135	-5	-12	338	35
550		-11	-18	338	51
500	179	-21	-29	340	50
450		-28	-36	339	63
400	230	-38	-46	339	64
350		-50		341	72
300	293	-63		346	60
250		-74		343	80
200	376	-76		348	57
170		-80			
150		(243)			

Isothermal 1010 - 990 mb 41° 768 - 750 mb 11°

Tropopause: I 213 mb -80° 36300'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	44	38		
1000	5·8	42	36		
950		37	32		
900	33·8	31	27		
850		27	18		
800	64·4	22	08		
750		20	-5		
700	98·8	13	-13		
650		07	-14		
600	137	03	-9		
550		-2	-9		
500	181	-9	-14		
450		-20	-26		
400	234	-29	-38		
350		-40	-52		
300	298	-55			
250		-66			
200	383	-61			
170		-65			
150		-77			
130		-75			
110		-75			
100		(128)			
90					
80					
70					
60					

Inversion 800 mb 22° - 785 mb 24°

Isothermal 433 - 420 mb -24°

Tropopause: II 195 mb -84° 38800'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	26	21	180	14
1000	01·5				
950		33	29	173	20
900	29·1	26	23	176	17
850		21	17	188	14
800	59·3	17	12	197	14
750		11	06	202	14
700	92·8	03	-1	217	10
650		-4	-7	230	10
600	130	-12	-16	237	10
550		-22	-27	238	12
500	173	-32	-38	247	11
450		-39	-47	274	14
400	223	-45		291	16
350		-62		299	21
300	284	-71		303	30
250		-64		318	36
200	369	-64		325	35
170		-63		324	36
150		-68		324	34
130		-68			
110		(133)			

Tropopause: I 252 mb -72° 29000'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	0·4	36	33		
1000	1·8	36	33		
950		34	31		
900	29·6	29	28		
850		24	23		
800	60·1	15	17		
750		18	09		
700	93·7	06	01		
650		-1	-6		
600	131	-9	-13		
550		-17	-22		
500	174	-24	-29		
450		-34	-41		
400	223	-44			
350		-50			
300	288	-55			
250		-58			
200	374	-62			
170		-64			
150		-65			
130		-64			
110					
100					
90					
80					
70					
60					

Tropopause: I 265 mb -55° 31400'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	39	36	270	15
1000	03·4	35	36		
950		35	33	295	23
900	31·2	30	29	303	27
850		25	23	313	30
800	61·6	20	17	312	31
750		15	10	315	30
700	95·3	07	02	309	31
650		-1	-8	305	31
600	133	-9	-21	312	32
550		-16	-32	323	41
500	176	-23	-33	327	49
450		-33	-60	328	72
400	227	-43		330	57
350		-46		331	101
300	290	-60		327	76
250		-72		325	93
200	378	-70		330	61

Max wind. 326 mb 339° 107 kts

Isothermal 367 - 340 mb -52°

Tropopause: I 238 mb -65° 33800'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	29	26	205	06
1000	04·1	30	25	236	15
950		25	18	252	15
900	31·5	24	16	277	14
850		20	11	250	14
800	61·6	16	03	301	14
750		11	-7	325	18
700	95·2	06	-11	328	22
650		00	-20	329	21
600	133	-10	-27	335	20
550		-20	-34	339	23
500	176	-30	-41	331	25
450		-36	-50	320	28
400	226	-43		329	32
350		-57		324	36
300	288	-67		324	36
250		-65		330	48
200	373	-64		331	38
170		-64		329	34
150		-66		322	34
130		-66		311	25
110		-66		316	32
100	515	-63		308	27
90		-62		289	21
80					
70					
60					

Inversion 1011 mb 29° - 982 mb 32°

Tropopause: I 295 mb -68° 29100'

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	4·4	32	31	230	03
1000	4·8				
950		33	29	303	13
900	32·2	27	22	310	16
850		22	18	316	20
800	62·5	17	12	320	24
750		17	09	320	25
700	96·3	06	-1	326	26
650		-1	-10	335	24
600	134	-5	-15	341	25
550		-18	-28	333	28
500	177	-25	-36	328	35
450		-33	-43	332	37
400	227	-43		328	48
350		-51		334	69
300	290	-60		337	84
250		-70			
200					
170					
150					
130					
110					
100					
90					
80					
70					
60					

Inversion 1001 mb 32° - 944 mb 33°

MR.

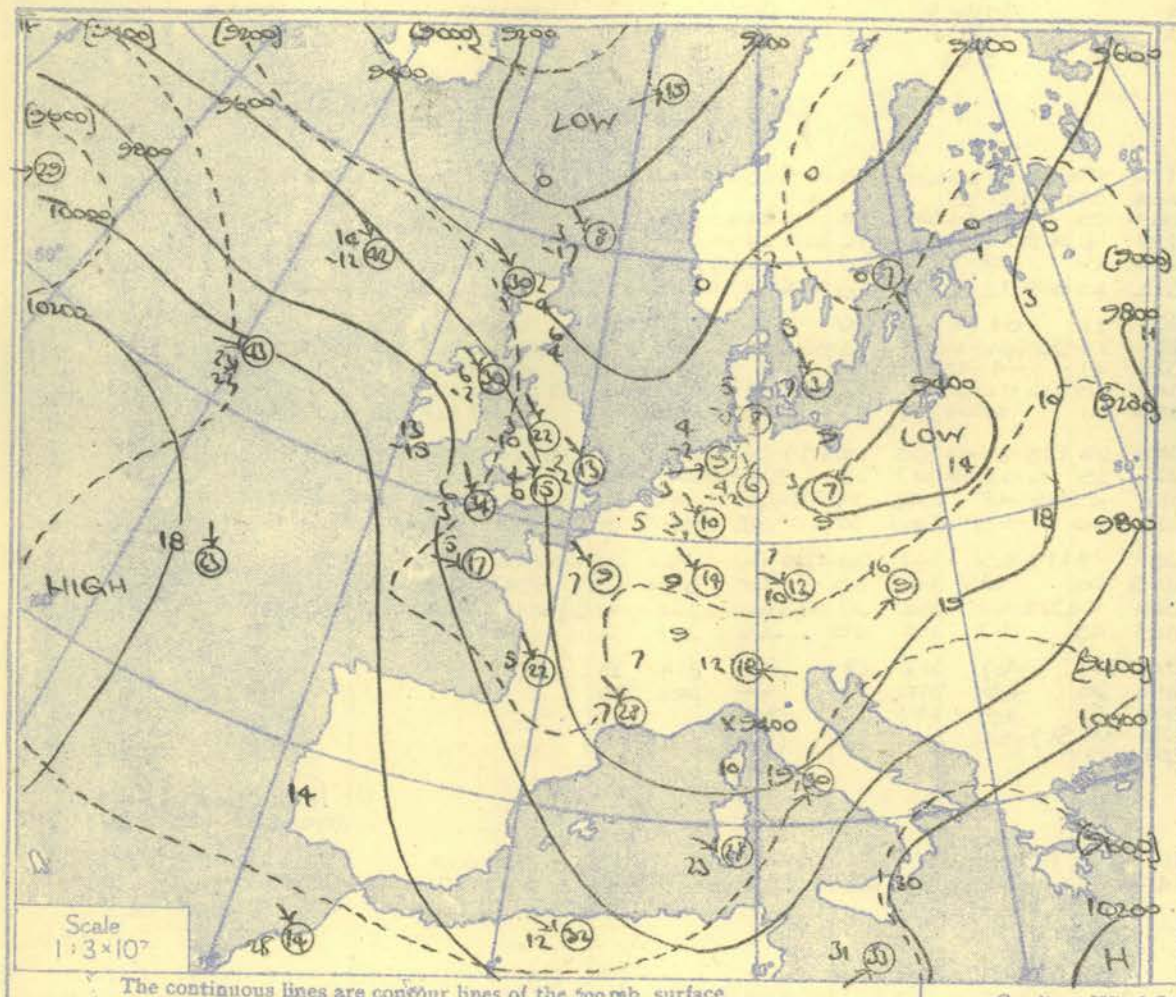
Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·5	43	39	315	10
1000	05·3	42	38	300	15
950		36	33	300	19
900	33·3	31	27	303	21
850		25	21	311	22
800	63·8	20	16	317	25
750		14	09	322	30
700	97·5	08	03	327	31
650		01	-4	326	36
600	135	-4	-10	327	39
550		-11	-18	334	47
500	179	-18	-29	335	53
450		-26	-37	336	60
400	231	-32	-44	341	72
350		-43		343	80
300	294	-56		343	77
250		-73		342	81
200	378	-78		342	60
170		-71		349	57
150		-70		351	56
130		-70		340	64
110		-72			
100		-73			
90		(101)			
80					
70					
60					

Max wind. 347 mb 26200' 344° 56 kts

Tropopause: I 214 mb -83° 36300'

February 26th 1951.

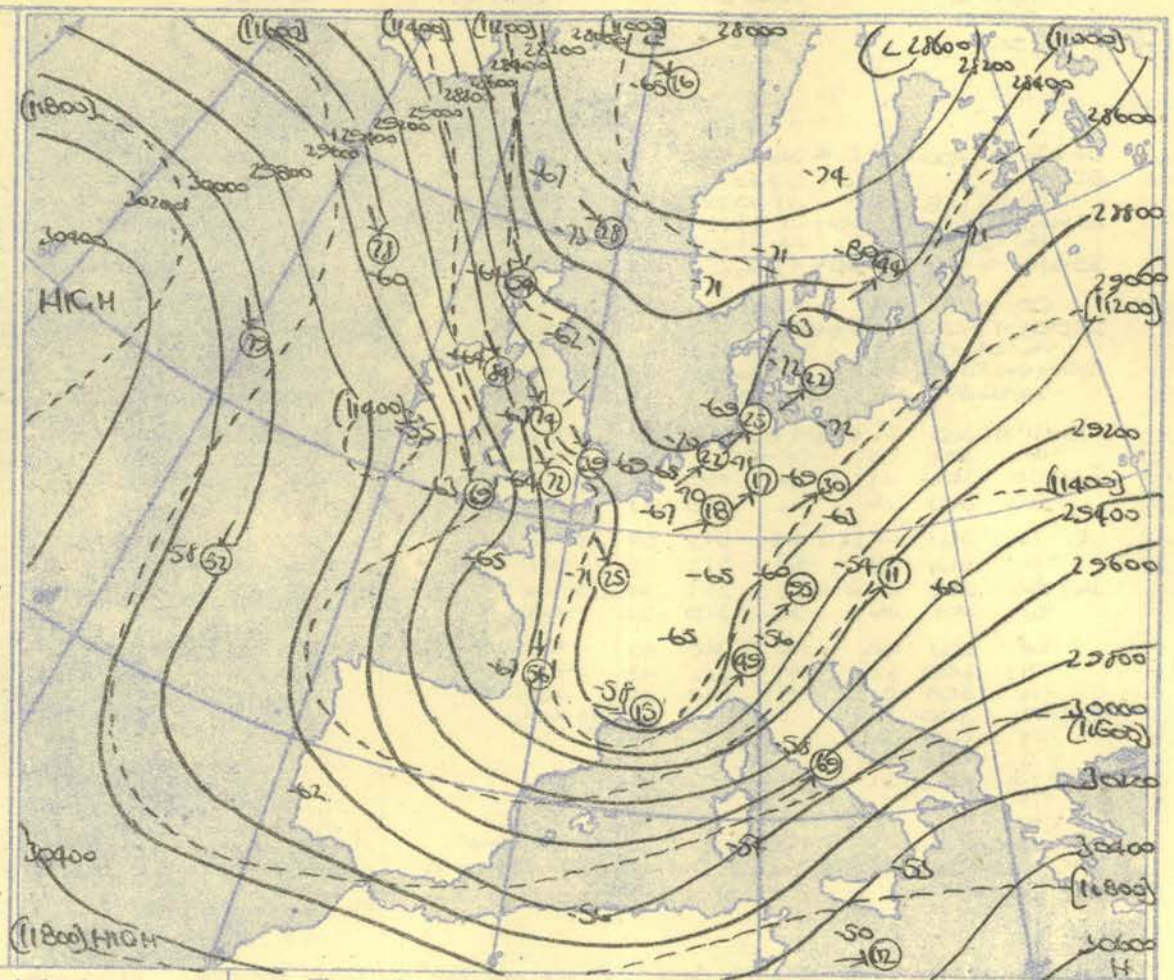
HEIGHTS IN FEET. TEMPERATURES (Dry bulb and Dew Point). DIRECTION AND VELOCITY (in knots) OF WINDS at the 700 mb., 500 mb., and 300 mb., levels at about 03 h G.M.T.



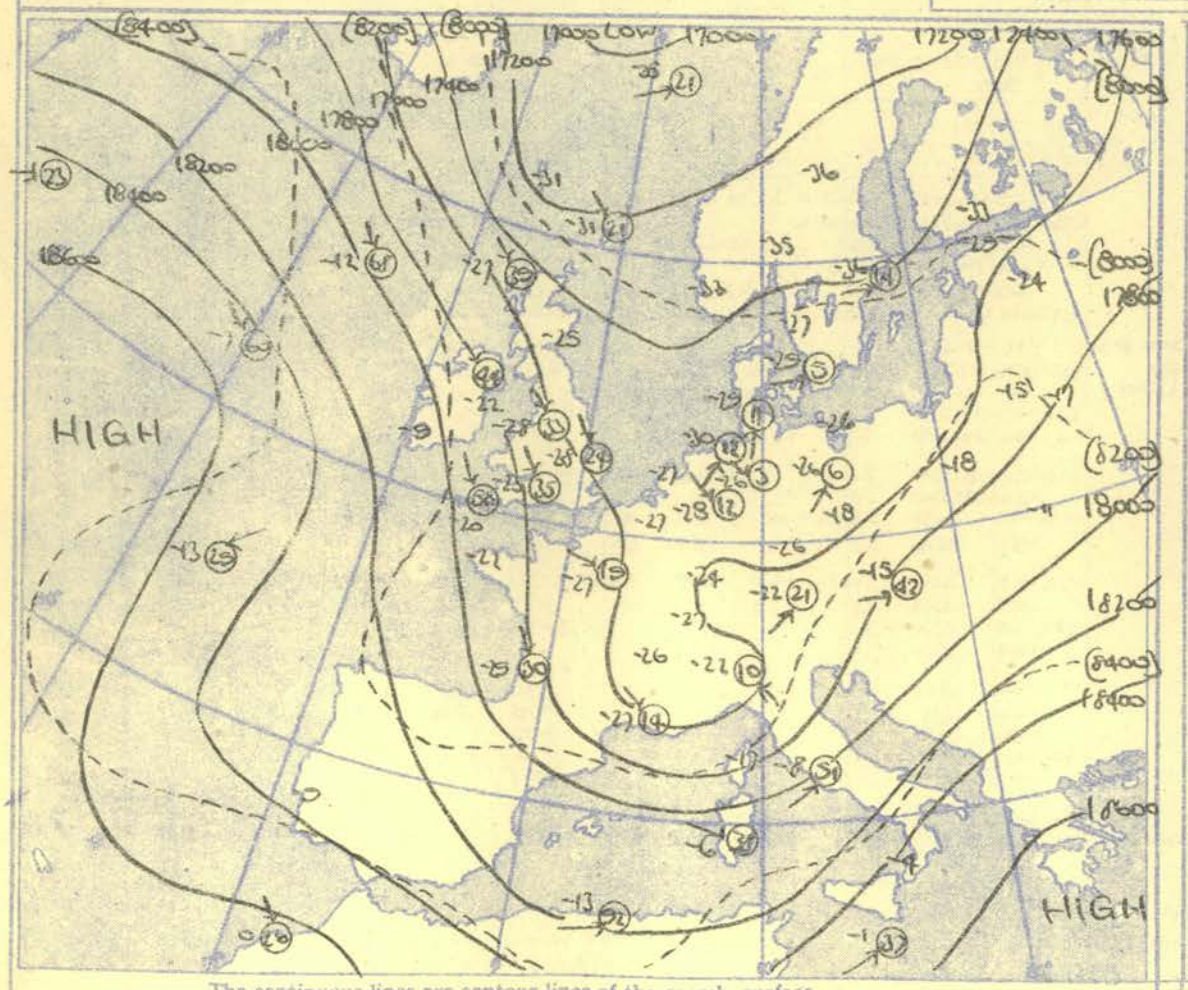
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

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

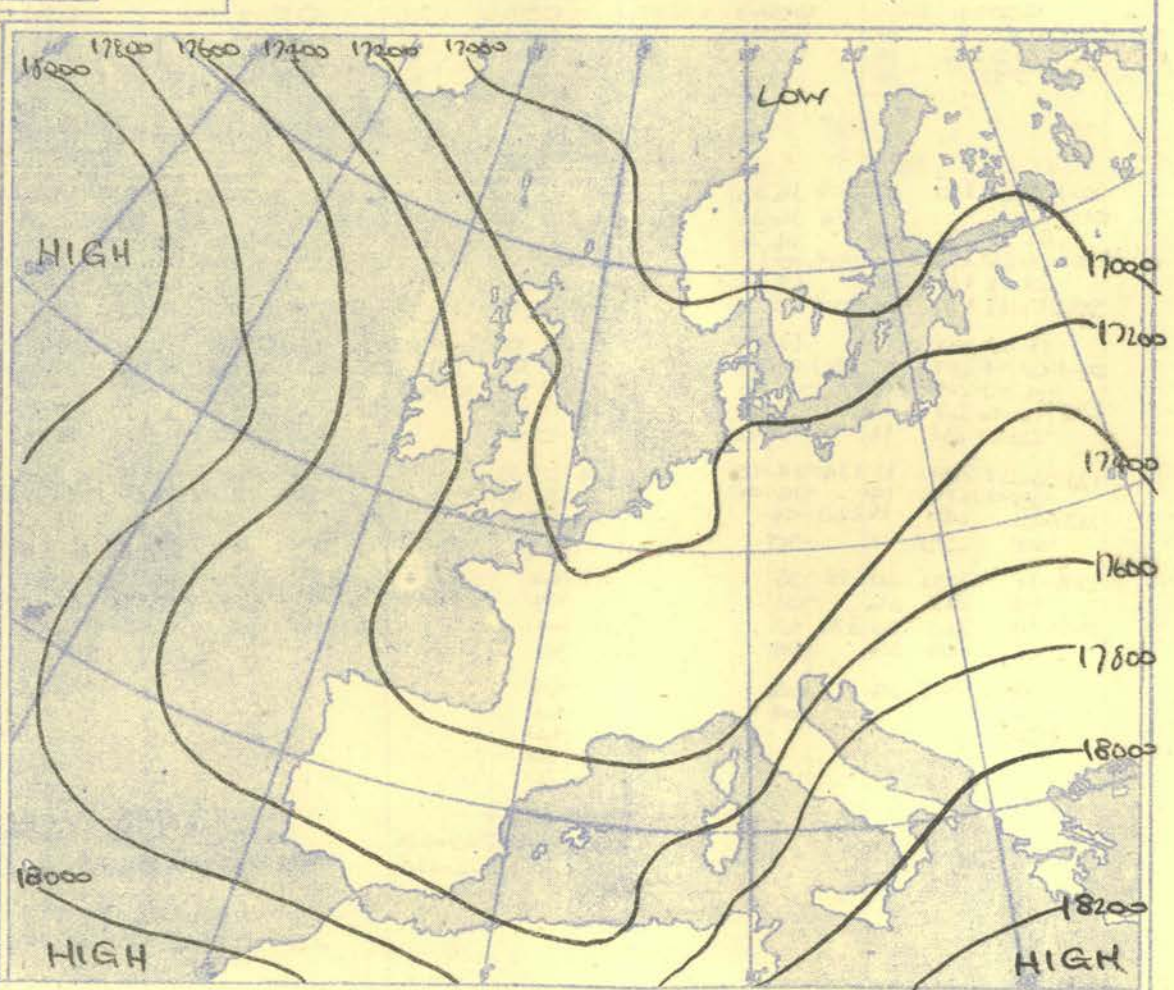
100 60 40 30 20 15 10 knots



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



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



Isopleths of Thickness 500 - 1000mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	48·1N. 17·0W.			47·6N. 12·3W.			43·2N. 17·0W.			37·5N. 12·2W.			51·3N. 00·4E.												
Pressure Time	1230h.			14h.			13h.			15h.			1443												Time
Pressure M.S.L.	1026 mb			1021·5 mb			1036 mb			1033 mb			1001·8 mb			mb			mb			mb			M.S.L.
Pressure Surf	1022 mb			1017·8 mb			1032 mb			1029 mb			1013·4 mb			mb			mb			mb			Surf
Pressure Freezing	785 mb			905 mb			910 mb			880 & 790 mb			895 mb			mb			mb			mb			Freezing
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Height ft./100	°Temp. °F.	Dew °F.	Pressure mb
Surf	01·0	51	45	01·0	43	43		51	41		52	46	03·1	41	35										Surf
1000	7·0	47	43	5·7	43	43	9·5	46	39	8·8	49	44	3·6												1000
950		41	41		35	35		39	37		42	41													950
900	35·2	34	34	33·6	30	30		31	31		34	34	31·5	31	27										900
850		37	21		31	31		29	29		27			26											850
800	66·4	33	33	64·4	28			31	33		33		62·0	21											800
750		26	26		24			30	22		27														750
700	101	23		98·9	20		103	26	21	103	25		95·5	07											700
650		18			15			18																	650
600	140	10		138	08			11					133	-08											600
550		02			00			04																	550
500	185	-08		183	-09		188	-06					176	-27											500
450																									450
400													226	-49											400
350																									350
300													288	-63											300
250																									250
200																									200
170																									170
	Cloud. 1/8 St. 960-950mb. 3/8 Sc 780-750mb 6/8 Sc 930-900mb 3/8 Ci Inversion 900mb. 34°-840mb. 39°			Cloud. 5/8 St. 960-940mb. 8/8 Ns 890-760mb. 7/8 Ci			Cloud. 8/8 Sc 890-850mb. 1/8 Ci N.R. Surf. wind:- N.W. 7-10kts.			Cloud. 5/8 Sc 890-840mb. Surf. wind:- N.E. 7-10kts			Cloud 8/8 Sc 953-625mb 7/8 Thin As 625-410mb. Inversion 969 mb. 34°-950 mb. 35°												

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

Place	Leeming		Leuchars		Liverpool		Shoeburyness		Stornoway		Castle Archdale		Downham Market								Place
Time	0330h.		09h.		09h.		09h.		15h.		15h.		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.	150	05	270	08	270	15	230	05	280	05	280	08	270	03							Surf.
1,000	220	12	279	15	278	22	270	13	335	19	330	23	301	12							1,000
2,000	250	19	286	12	282	29	280	13	336	19	330	24	310	13							2,000
3,000	260	19	313	09	287	22	280	12	335	20	330	31	317	13							3,000
4,000	280	11	327	07	291	21	300	11	334	18	330	31	325	14							4,000
5,000			315	08	294	22	310	12	338	19	330	36	334	15							5,000
6,000	280	12	314	09	294	22	300	14	334	20	310	28	338	15							6,000
8,000	290	19	302	15	294	22	310	16	327	24			339	12							8,000
10,000	300	15	302	18	296	23	330	25	328	28			335	10							10,000
14,000			312	21	310	24	350	26	339	40			326	11							14,000
18,000			296	27	308	28	330	23	342	70			277	13							18,000
24,000			320	24	329	57	330	32	345	103			330	19							24,000
30,000			329	52	333	85	320	43	340	82			342	42							30,000
40,000			333	43	332	42	330	32	339	51			340	42							40,000
50,000			322	39	336	30	320	27	349	51			332	33							50,000
			(45,000')		(49,000')		(45,000')		025	36			(48,000')								
									(56,000')												

NEPHOSCOPE OBSERVATIONS

Place											Place
Time Type					None reported.						Time Type
Dir. Vel.											Dir. Vel.

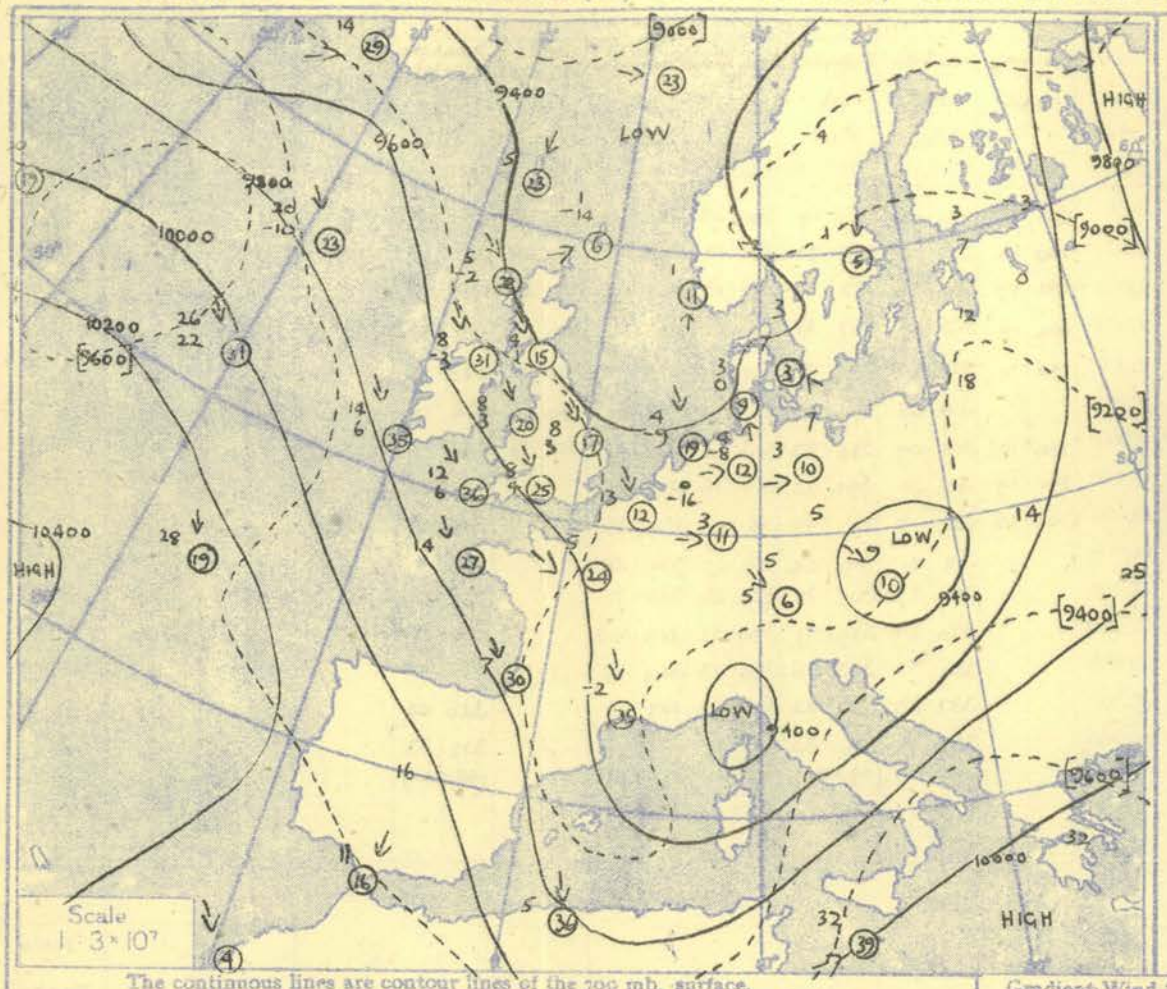
RADIO-SOUNDINGS OF TEMPERATURE, HUMIDITY AND WIND (Heights above M.S.L.) FROM SHIPS.

Ship	Weather Observer					Weather Observer					Weather Observer					Weather Observer				
Lat/Long	57·4 N 16·0 W					57·7 N 16·7 W					57·9 N 17·5 W					57·4 N 18·5 W				
Pressure Time	03h G.M.T.					09h G.M.T.					15h G.M.T.					21h G.M.T.				
Pressure M.S.L.	1013 mb					1013 mb					1016 mb					1016 mb				
Pressure Surf	1013 mb					1013 mb					1016 mb					1016 mb				
Pressure Freezing	900 mb					925 mb					940 mb					940 & 800 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
Surf		45	38	295	25		34	33	345	16		43	30	320	05		44	34	180	17
1000	3·4	44	38	295	27	3·5	42	30	325	13	4·2	41	29	333	06	4·1	42	34	177	27
950		37	30	296	30		35	25	324	17		33	25	331	06		34	30	181	24
900	31·5	32	23	295	31	31·4	28	23	322	18	32·0	29	20	296	08	32·1	33	24	216	20
850		25	19	296	32		27	06	318	22		29	03	290	10		35	15	252	16
800	62·1	19	14	297	33	61·9	26	-05	313	22	62·7	27	-02	276	15	63·1	32	22	271	17
750		15	03	298	36		24	-11	312	23		25	-06	303	20		27	23	287	21
700	95·9	14	-12	301	42	96·2	19	-26	316	27	97·2	20	-10	310	23	97·9	24	19	287	20
650		10	-19	302	56		12	-51	317	30		16	-14	315	33		18	10	274	22
600	135	05	-27	307	60	135	06	-31	318	37	136	08	-19	309	46	137	11	00	268	25
550		-01	-38	310	62		-01	-33	318	39		00	-24	316	43		02	-06	269	24
500	179	-12	-42	311	68	180	-09	-39	315	63	181	09	-29	331	41	182	-06	-11	277	26
450		-22	-50	313	69		-20	-49	316	60		-21	-40	331	54		-15	-19	295	24
400	231	-32	-59	315	77	232	-30	-57	317	62	233	-34	-52	334	60	235	-27	-31	305	31
350		-45		317	78		-42		318	63		-48		332	60		-40	-45	286	36
300	295	-60		322	78	296	-58		320	66	296	-64		319	72	299	-56		285	51
250		-76		322	70		-72		321	68		-78		319	62		-73		294	56
200	378	-80		321	83	380	-78		322	66	379	-83		325	61	283	-86		299	61
170		-77		320	73		-78		322	65		-76		312	54		-80		311	52
150		-78		318	64		-71		322	57		-74		314	32		-79		313	46
130		-80		316	54		-72		321	49		-75		304	36		-77		314	46
110		-81		314	49		-74		320	47		-76		320	47		-76		318	40
100	518	-82		314	47						521	-76		316	32	523	-76			
90		-81		315	50							-77		318	33					
80		-81		314	47							-87		334	37					
70											(073 mb)	-78								
60																				
						Inversion 878 mb 25°-806mb 27° 777 .. 22°-765 .. 24° Isothermal 765-760 mb 24° 622-610 .. 8° 585-572 .. 3°					Inversion 917mb 28°-892mb 30° Isothermal 892-886mb 30° 813-776 .. 27°					Inversion 924mb 30°-905mb 33° 875 .. 33°-855 .. 35° Isothermal 905-875 mb 33° 855-850 .. 35° 800-793 .. 32°				
Tropopause	I 226mb -84° 35,200					I 215mb -80° 36,500					I 224mb -85° 35,500					I 203mb -87° 37,900'				

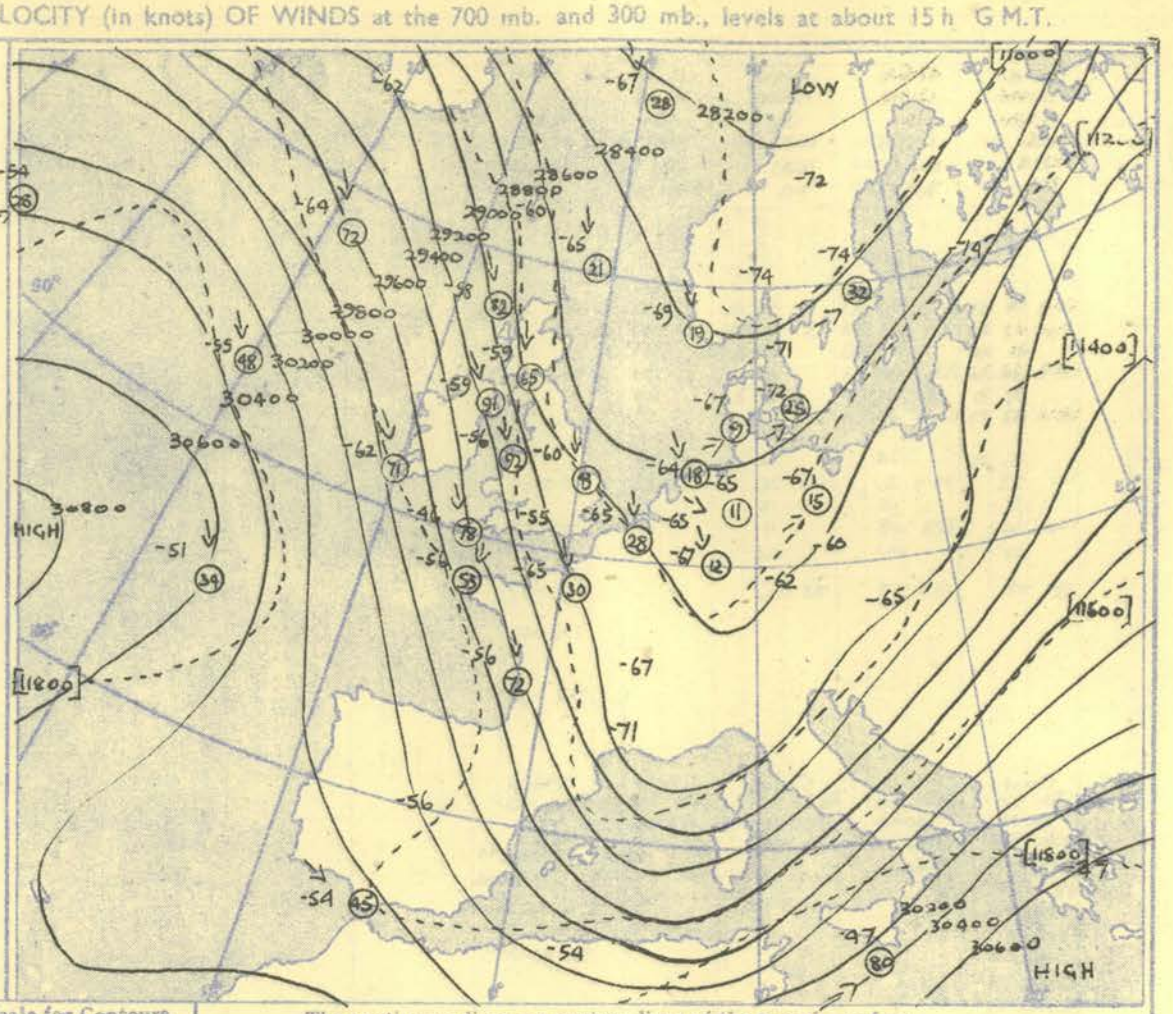
Ship	Weather Watcher					Weather Watcher					Weather Watcher					Weather Watcher										Ship
Lat/Long	52·4 N 19·8 W					52·5 N 19·6 W					52·4 N 19·9 W					52·4 N 19·7 W										Lat/Long
Pressure Time	03h G.M.T.					09h G.M.T.					15h G.M.T.					21h G.M.T.					G.M.T.					Time
Pressure M.S.L.	1024 mb					1017 mb					1017 mb					1019 mb					mb					M.S.L.
Pressure Surf	1024 mb					1017 mb					1017 mb					1019 mb					mb					Surf
Pressure Freezing	820 mb					770 mb					730 mb					730 mb					mb					Freezing
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf		47	42	220	20		51	49	270	27		50	50	290	22		50	48	285	15						Surf
1000	6·6	44	40	222	24	4·5	50	46	268	36	4·7	50	50	290	25	5·2	50	49	289	17						1000
950		38	36	226	27		48	41	280	40		53	53	299	33		52	51	296	20						950
900	34·6	35	33	228	29	33·2	46	40	294	39	33·5	49	49	305	31	34·0	48	45	296	21						900
850		33	32	231	34		42	35	299	42		45	44	308	30		44	40	291	22						850
800	65·5	31	30	220	37	64·8	36	26	300	48	65·3	41	40	309	35	65·7	39	33	294	29						800
750		28	27	250	42		30	19	298	50		35	26	309	36		34	27	299	29						750
700	10·0	23	22	256	47	99·7	24	15	293	41	10·1	26	22	306	31	10·1	29	22	306	29						700
650		17	15	273	94		19	11	291	39		25	-10	313	33		23	15	310	29						650
600	139	11	08	286	44	139	14	04	298	39	140	18	-08	325	42	142	16	-14	299	25						600
550		02	-02	301	55		07	-02	302	40		-11	-18	332	42		-07	-26	299	23						550
500	184	-07	-12	307	60	184	-02	-16	308	43	186	01	-31	327	41	186	-02	-26	299	27						500
450		-17	-23	308	67		-14	-29	315	45		-10	-40	329	43		-11	-41	299	26						450
400	237	-30	-36	329	82	237	-29	-44	311	46	239	-22	-50	332	56	239	-25	-46	299	31						400
350		-45		335	83		-43		319	52		-37	-60	332	55		-39	-58	299	36						350
300	301	-59		334	79	301	-59		325	50	304	-55		328	48	303	-56		299	34						300
250							-75		333	43		-73		320	56		-74		299	40						250
200						384	-86		325	54	387	-88		321	55	387	-80		322	38						200
170							-81		343	54		-78		322	51		-75		322	36						170
150							-81		340	55		-79		326	45		-76		325	34						150
130							-82		332	47		-78		326	31	(134 mb)	-78									130
110							-83		330	48		-78		326	35											110
100						524	-82		335	45	528	-79		325	31											100
90							-78		339	42		-79		326	28											90
80							-79					-75														80
70						(070 mb)	-79				(078 mb)	-75														70
60																										60
	Inversion 837 mb 32°-830mb 33°					Isothermal 630-612 mb 16°					Inversion 969mb 49°-950mb 53° 695 .. 26°-674 .. 29° Isothermal 1017-1000mb 50° 700-695 .. 26°					Inversion 990mb 50°-950mb 52° Isothermal 1019-990 mb 50°										
Tropopause	N.R.					I 204 mb -87° 37,900'					I 205mb -89° 38,300'					I 213mb -81° 37,600'										Tropopause

Monday 26 February 1951.

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



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

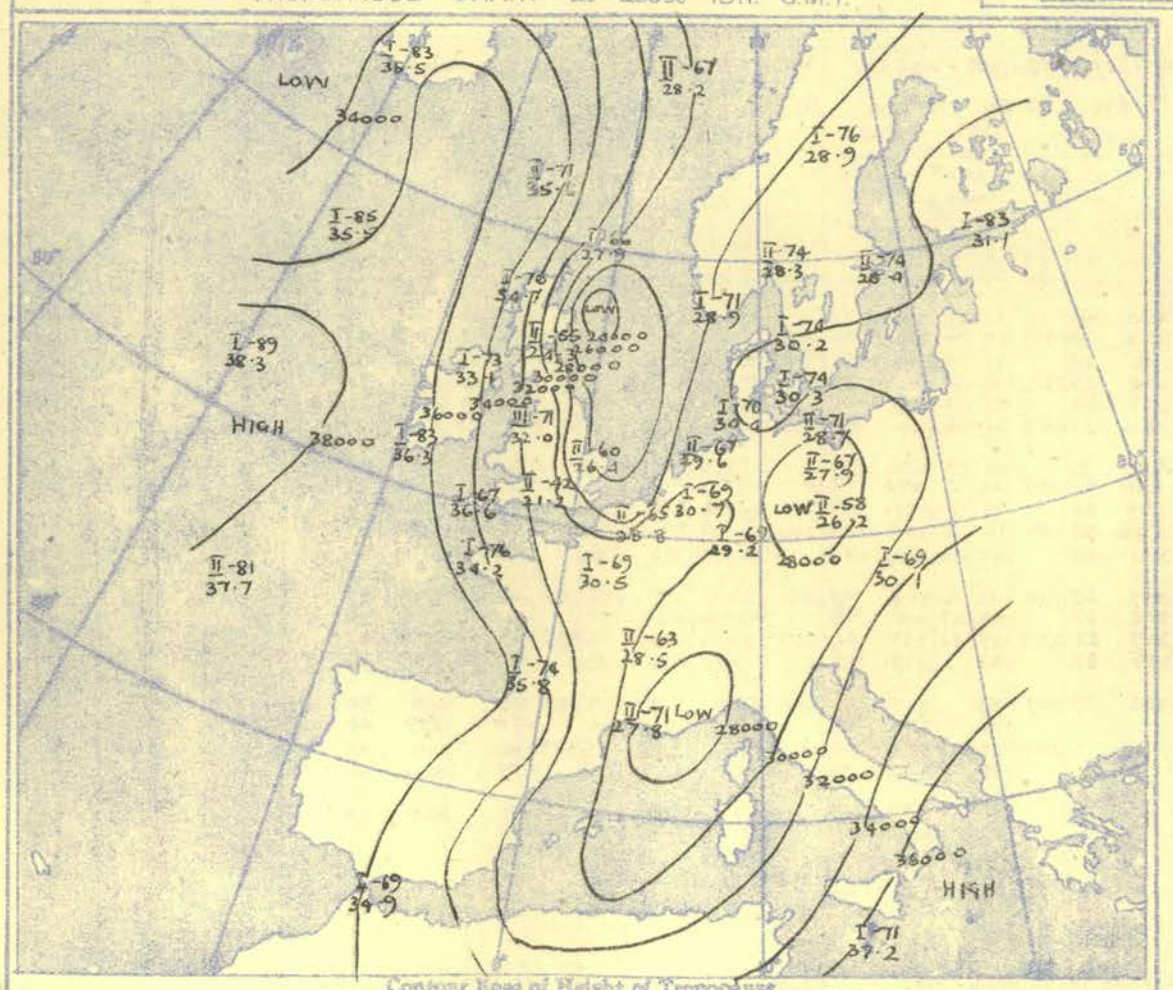


The continuous lines are contour lines of the 300mb. surface
The dotted lines are isopleths of the thickness of the layer 500–300 mb.

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 over the British Isles moved eastwards across the North Sea establishing a northwest thermal over the U. K. Pronounced warming by advection over the eastern half of the Atlantic resulted in a broad warm ridge covering most of the North Atlantic.

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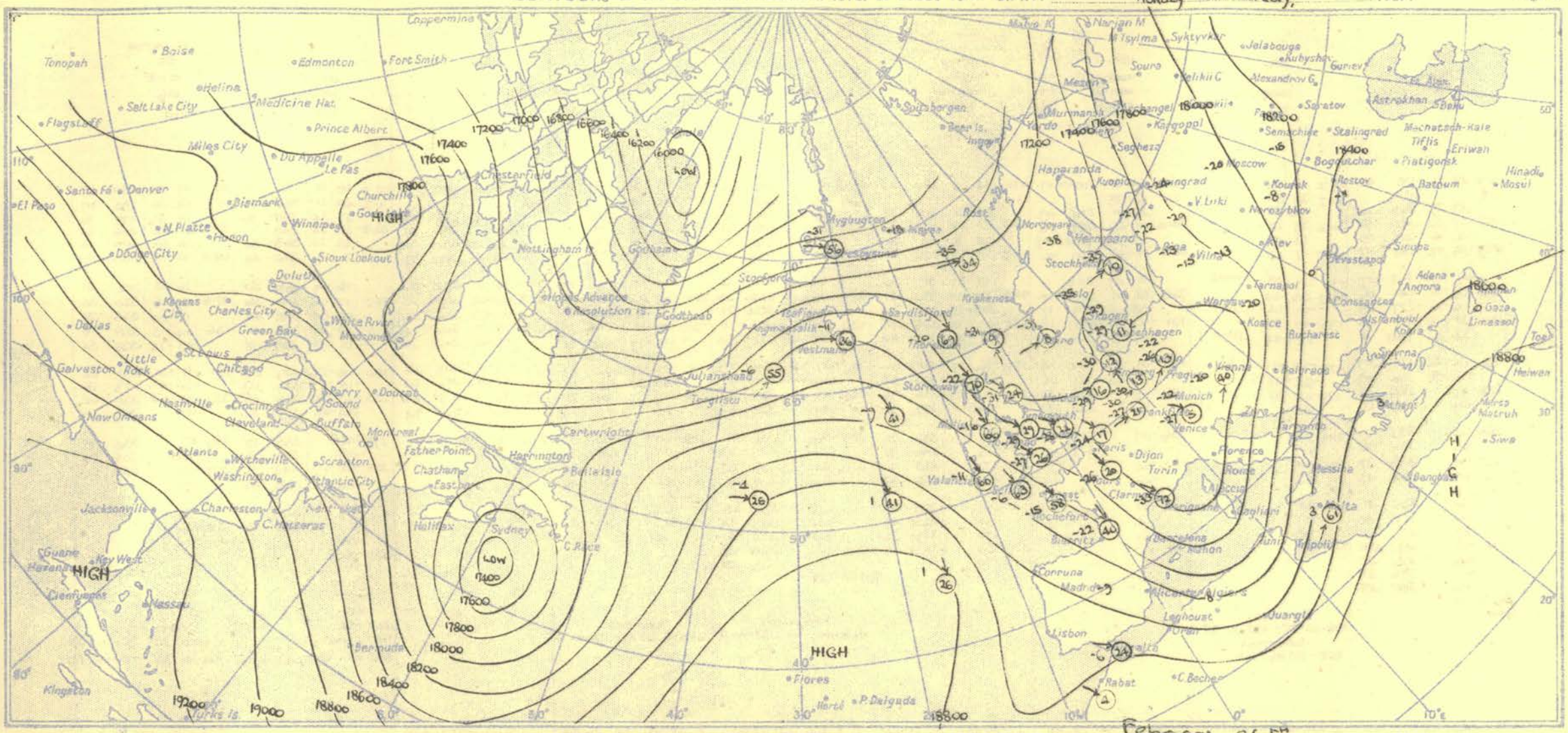
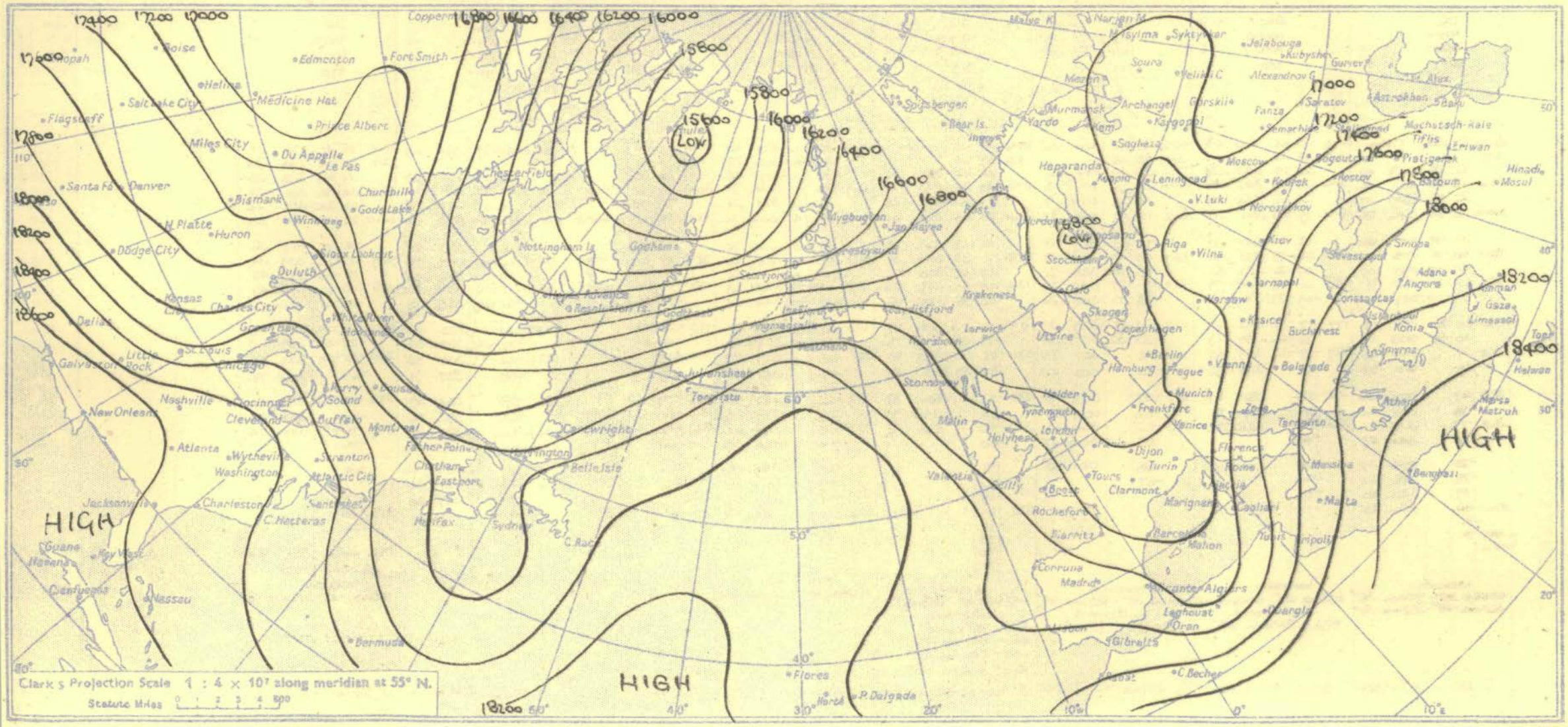
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
NELSON K. JOHNSON, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Monday 26th February, 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. February 26th 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Monday 26th February, 1951.

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

LERWICK

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1006·7 mb	996·6 mb	942 mb
	21h. G.M.T.	1010·5 mb	1000·2 mb	942 mb

Pressure mb	15h. Height ft./100	15h. °Temp. °F.	15h. Dew °F.	15h. Wind Dir. °	15h. Wind Vel. knots	21h. Height ft./100	21h. °Temp. °F.	21h. Dew °F.	21h. Wind Dir. °	21h. Wind Vel. knots
Surf	02·7	39	35	110	05	02·7	35	34	Calm	
1000	1·8					2·7				
950		33	29	267	03		33	28	048	04
900	29·6	27	23	285	03	30·4	26	22	057	06
850		21	16	291	05		22	18	059	07
800	57·7	16	07	287	07	60·6	16	06	046	06
750		09	+06	267	07		11	+09	041	05
700	93·0	01	+14	241	06	94·1	03	+11	076	07
650		+06	+20	227	05		−05	+17	090	10
600	130	+13	+26	211	06	131	−15	+26	073	11
550		−23	+36	180	11		−22	+35	047	11
500	173	+31	+43	177	09	174	+31	+45	010	19
450		+38	+51	270	07		+40	+55	003	17
400	223	+47		286	10	224	+52		360	33
350		+59		312	13		+59		010	82
300	284	+65		333	21	285	+75		007	102
250		+62		339	36		+76		001	84
200	370	+65		335	37	369	+77		350	62
170		+65		324	42		+75		344	57
150		+66		325	41		+75		346	57
130		+64		321	45		+78		348	52
110		+67		329	42		+79		340	45
100	516	+67		327	35	510	+80		336	45
90		+68		326	33		+81			
80		+70		326	33	(988 mb)	+81			
70		+71		318	35					
60	(961 mb)	+71								

Tropopause: I 307 mb. −66° 27,900′

STORNOWAY

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1010·2 mb	1008·5 mb	935 mb
	21h. G.M.T.	1012·2 mb	1010·7 mb	950 mb

Pressure mb	15h. Height ft./100	15h. °Temp. °F.	15h. Dew °F.	15h. Wind Dir. °	15h. Wind Vel. knots	21h. Height ft./100	21h. °Temp. °F.	21h. Dew °F.	21h. Wind Dir. °	21h. Wind Vel. knots
Surf	00·4	40	36			00·4	38	34	320	08
1000	2·7	39	34			3·3	37	33		
950		34	28				32	29	343	28
900	30·4	28	23			31·0	28	25	348	26
850		22	17				25	06	349	25
800	60·7	17	12			61·4	19	−03	350	25
750		11	03				12	−10	349	31
700	94·2	05	−02			95·0	06	−18	351	40
650		−01	−14				07	−21	352	51
600	132	−09	−32			133	00	−28	349	39
550		−18	−42				−09	−32	349	54
500	175	−22	−47			177	−17	−37	352	64
450		−28	−56				−26	−46	359	69
400	226	−38	−58			229	−37	−56	359	83
350		−45					−45		358	90
300	299	−58				292	−58		351	89
250		−67					−71		348	93
200	375	−65				376	−76		345	74
170		−68					−66			
150		−64					−66			
130		−69					−70			
110		−65					−71			
100	520	−70								

For winds see page 3.

Inversion
Surface-22°-487mb.-21°
Isothermal
822-812mb. 19°

Tropopause: I 230 mb. −70° 34,700′

LEUCHARS

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1008·2 mb	1007·2 mb	919 mb
	21h. G.M.T.	1012·2 mb	1011·3 mb	929 mb

Pressure mb	15h. Height ft./100	15h. °Temp. °F.	15h. Dew °F.	15h. Wind Dir. °	15h. Wind Vel. knots	21h. Height ft./100	21h. °Temp. °F.	21h. Dew °F.	21h. Wind Dir. °	21h. Wind Vel. knots
Surf	00·2	44	31	210	07	00·2	38	35	340	06
1000	2·1	43	38			3·2	38	36		
950		36	31	270	09		35	29	019	06
900	30·0	29	26	299	08	30·9	29	25	019	08
850		23	22	304	07		22	21	010	11
800	60·3	17	15	309	06	61·2	15	10	005	17
750		11	09	308	10		12	02	357	18
700	93·8	04	01	304	15	94·7	05	−10	354	18
650		−03	−06	309	17		−03	−18	348	20
600	131	−10	−13	313	18	132	−11	−27	340	22
550		−19	−22	315	20		−18	−35	348	26
500	174	−31	−35	320	24	175	−24	−43	359	39
450		−39	−43	321	26		−33	−52	357	51
400	224	−48		328	31	226	−42		357	75
350		−56		330	42		−45		002	103
300	286	−59		346	65	289	−57		003	115
250		−60		339	60		−66		002	99
200	373	−64				375	−63		360	68
170		−66					−65		360	47
150		−67					−68		001	48
130		−64					−67			
110		−69								
100	518	−62								

Inversion
Surface-38°-1011mb.-39°
Isothermal
780-760mb. 14°

Tropopause: II 367 mb. −55° 24,300′

ALDERGROVE

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1011·1 mb	1002·0 mb	907 mb
	21h. G.M.T.	1013·5 mb	1003·9 mb	919 mb

Pressure mb	15h. Height ft./100	15h. °Temp. °F.	15h. Dew °F.	15h. Wind Dir. °	15h. Wind Vel. knots	21h. Height ft./100	21h. °Temp. °F.	21h. Dew °F.	21h. Wind Dir. °	21h. Wind Vel. knots
Surf	02·6	44	38	280	20	02·6	39	36	Calm	
1000	3·1					3·6	39	35		
950		38	31	315	23		35	32	358	16
900	31·2	31	24	327	25	31·5	30	26	033	22
850		25	18	331	26		24	16	001	28
800	61·8	20	13	320	28	62·0	20	03	360	31
750		13	07	317	30		15	−13	358	29
700	95·5	08	−03	320	31	95·8	11	−33	356	39
650		03	−23	322	34		10	−48	350	54
600	134	−05	−34	334	51	134	05	−50	347	63
550		−10	−40	332	54		−04	−58	349	66
500	177	−16	−47	341	66	179	−12	−53	350	69
450		−26	−58	333	72		−22	−55	350	78
400	229	−36	−59	335	76	231	−28	−56	347	83
350		−46		337	92		−39	−59	350	82
300	292	−59		336	91	295	−52		351	87
250		−73		340	91		−64		350	93
200	377	−73		333	71	380	−80		348	90
170		−69		335	62		−80			
150		−70		333	64		−71			
130		−68		325	49		−72			
110		−70		339	36		−68			
100	521	−70		353	48	523	−69			
90		−70					−73			
80							−78			
70							−80			
60							−77			

Inversion
693mb. 10°-683mb. 12°
Isothermal
760-738mb. 15°
683-670mb. 12°
657-640mb. 10°
416-400mb. -28°

Tropopause: I 250 mb. −73° 33,100′

LIVERPOOL

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1010·2 mb	1008·1 mb	921 mb
	21h. G.M.T.	1010·1 mb	1008·1 mb	917 mb

Pressure mb	15h. Height ft./100	15h. °Temp. °F.	15h. Dew °F.	15h. Wind Dir. °	15h. Wind Vel. knots	21h. Height ft./100	21h. °Temp. °F.	21h. Dew °F.	21h. Wind Dir. °	21h. Wind Vel. knots
Surf	00·6	42	40	300	15	00·6	40	37	300	15
1000	2·7	40	37	308	21	2·7	41	38	308	27
950		35	32	315	23		36	33	327	24
900	30·7	30	28	316	23	30·7	30	27	336	21
850		25	22	313	22		24	20	331	21
800	61·2	20	18	312	22	61·2	19	14	332	20
750		14	11	314	21		13	06	334	20
700	95·0	08	03	314	20	94·9	06	−02	338	23
650		00	−08	304	21		−02	−08	342	20
600	130	−08	−17	302	21	132	−09	−18	344	23
550		−17	−28	312	25		−18	−30	344	24
500	176	−27	−38	316	29	175	−27	−43	346	32
450		−36	−50	325	37		−35	−52	344	48
400	226	−42		332	57	226	−40	−58	349	75
350		−47		337	89		−46		349	98
300	289	−56		338	92	289	−54		349	93
250		−61		343	73		−62		347	89
200	376	−61		332	52	375	−63		344	62
170		−62		337	50		−65		348	58
150		−63		336	45		−67		349	56
130		−64		333	44		−69		342	46
110		−63		322	31		−71		347	37
100	522	−66		320	38	520	−71		341	48
90		−66		323	44		−71			
80	(787 mb)	−65					−72			

Inversion
408mb.-43°-387mb.-41°

Tropopause: II 263mb. -61° 32,000′

DOWNHAM MARKET

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1011·8 mb	1007·3 mb	960 mb
	21h. G.M.T.	1009·3 mb	1004·9 mb	935 mb

Pressure mb	15h. Height ft./100	15h. °Temp. °F.	15h. Dew °F.	15h. Wind Dir. °	15h. Wind Vel. knots	21h. Height ft./100	21h. °Temp. °F.	21h. Dew °F.	21h. Wind Dir. °	21h. Wind Vel. knots
Surf	01·2	37	35	205	13	01·2	38	38		
1000	3·1	36	34			2·5				
950		31	30	240	18		33	32		
900	30·8	29	29	247	17	30·3	29	28	For	
850		25	25	252	17		24	22		
800	61·2	20	18	261	17	60·7	19	17	winds	
750		14	10	271	17		13	09		
700	95·0	08	03	279	17	94·4	07	01	see	
650		00	−04	284	18		−01	−08		
600	133	−08	−15	294	19	132	+10	+18	page	
550		−18	−27	304	21		−20	−30		
500	176	−28	−39	304	22	175	−30	−39	3.	
450		−40	−50	313	23		−40	−49		
400	226	−49		305	21	225	−49			
350		−58		311	22		−59			
300	288	−60		327	43	286	−59			
250		−59		335	40		−60			
200	374	−60		327	44	373	−60			
170		−61		331	40		−63			
150		−63		328	34		−64			
130		−63		319	32					

Inversion
384mb.-54°-375mb.-53°

Tropopause: II 335mb. -60° 26,400′

LARKHILL

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1013·5 mb	997·1 mb	900 mb
	21h. G.M.T.	1011·2 mb	994·9 mb	910 mb

Pressure mb	15h. Height ft./100	15h. °Temp. °F.	15h. Dew °F.	15h. Wind Dir. °	15h. Wind Vel. knots	21h. Height ft./100	21h. °Temp. °F.	21h. Dew °F.	21h. Wind Dir. °	21h. Wind Vel. knots
Surf	04·4	40	39	240	14	04·4	40	37	290	05
1000	3·6					2·9				
950		36	36	273	16		37	32	322	22
900	31·5	32	31	286	21	30·9	31	27	333	22
850		26	25	300	24		24	21	337	22
800	62·0	20	18	303	25	61·3	18	11	338	21
750		14	11	302	25		13	05	333	22
700	95·8	08	04	305	25	95·0	06	−01	327	26
650		01	−03	306	26		−02	−08	326	24
600	134	−07	−11	306	24	133	−11	−18	322	24
550		−17	−21	307	23		−21	−29	325	28
500	177	−27	−32	308	26	175	−29	−40	333	36
450		−37	−41	312	35		−37	−48	332	57
400	227	−42		327	66	226	−44		332	73
350		−45		331	94		−50		337	91
300	290	−55				286	−58		334	89
250							−63		336	76
200						374	−66		337	61
170							−68		340	48
150							−67		334	45
130							−69		337	40
110							−73		337	30
100						519	−73			

Tropopause: II 428 mb. -42° 21,200′

CAMBORNE

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1017·3 mb	1006·6 mb	909 mb
	21h. G.M.T.	1015·5 mb	1004·7 mb	875 mb

Pressure mb	15h. Height ft./100	15h. °Temp. °F.	15h. Dew °F.	15h. Wind Dir. °	15h. Wind Vel. knots	21h. Height ft./100	21h. °Temp. °F.	21h. Dew °F.	21h. Wind Dir. °	21h. Wind Vel. knots
Surf	02·9	46	42	293	15	02·9	45	41	270	10
1000	4·7	45	41	286	30	4·1	44	40	298	24
950		37	34	295	26		39	36	308	25
900	32·8	31	28	303	27	32·3	34	30	313	23
850		25	22	308	30		29	24	318	24
800	63·3	20	17	302	42	63·0	22	17	320	33
750		16	09	308	33		14	09	317	36
700	97·2	12	06	310	36	96·9	15	−23	329	36
650		05	00	318	45		10	−38	335	48
600	135	−02	−08	324	46	135	03	−40	336	49
550		−01	−15	332	58		−06	−41	335	52
500	180	−06	−22	329	63	180	−13	−44	338	58
450		−15	−27	329	63		−22	−51	339	63
400	233	−23	−32	335	68	232	−32	−59	339	70
350		−34	−42	337	76		−43		340	78
300	298	−46		335	78	295	−58		342	81
250		−58		338	75		−74		355	83
200	385	−65		343	71	379	−76		341	74
170		−60		338	58		−66			
150		−51		336	46		−71			
130		−57		342	46		−66			
110		−59				(132 mb)	−76			
100	533	−60					−72			
90		−61					−73			
80		−60				523	−73			
70		−59					−74			
60		−60								
	(850 mb)	−62								

Inversion
585mb. 05°-543mb. 02°

Max wind: 356° 96kts
33,000′ 252mb.
Inversion
750mb. 14°-712mb. 16°

Tropopause: I 218mb. -67° 36,600′

VALENTIA

Pressure	Time	M.S.L.	Surf	Freezing
	15h. G.M.T.	1017·8 mb	1016 mb	910 mb

Pressure mb	15h. Height ft./100	15h. °Temp. °F.	15h. Dew °F.	15h. Wind Dir. °	15h. Wind Vel. knots
Surf	00·3	47	38	280	07
1000	4·8	44	36	283	09
950		38	31	299	16
900	32·8	31	25	306	23
850		26	20	306	20
800	63·4	25	18	305	20
750		20	12	312	31
700	97·5	14	06	320	35
650		11	00	325	38
600	136	04	−13	325	46
550		−03	−24	326	51
500	181	−11	−32	327	60
450		−21	−42	328	66
400	233	−33	−54	330	66
350		−47		330	68
300	296	−62		330	71
250		−75		336	67
200	379	−81		336	60
170		−73			
150		−71			
130	(132 mb)	−76			
110					
100					
90					
80					
70					
60					

Inversion
834mb. 24°-800mb. 25°
708mb. 13°-683mb. 14°

Tropopause: I 216mb. -83° 36,300′

Tropopause: II 257 mb. -76° 31,800′

Tropopause: I 213mb. -82° 36,500′

Tropopause: III 407mb. -42° 22,300′

Tropopause: I 180mb. -85° 40,200′

Tropopause: I 220mb. -65° 35,600′

Tropopause: II 355mb. -59° 25,000′

Tropopause: III 300mb. -58° 28,700′

Tropopause: II 235mb. -79° 34,600′

H.M.S.O. Press, M.O., Dunstable.

No. 11657 **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Tuesday 27th February 1951. Page 1.

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

03h G.M.T.

Station	Time	M.S.L.	Surf	Freezing	Pressure
LERWICK	03h	1014·8 mb	1004·5 mb		950 mb
STORNOWAY	03h	1015·9 mb	1014·2 mb		935 mb
LEUCHARS	03h	1015·3 mb	1014·4 mb		963 mb
ALDERGROVE	03h	1016·9 mb	1007·3 mb		950 mb
LIVERPOOL	03h	1013·4 mb	1011·3 mb		930 mb
DOWNHAM MARKET	03h	1010·8 mb.	1006·4 mb		958 mb
LARKHILL	03h	1011·4 mb	994·9 mb		925 mb
CAMBORNE	03h	1016·1 mb	1004·3 mb		915 mb
VALENTIA	03h	1019·3 mb	1018 mb		925 – 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
Surface	02·7	34	33	Calm		0·5	36	33	350	03	00·2	35	31			02·6	35	31	Land V		00·6	36	35	Calm		01·2	37	35	360	07	04·4	37	34	330	12	02·9	33	37	315	15	00·3	37	34			Surface
1000	03·9	35	34			04·2	40	35			04·0	36	30			04·5	35	31			03·5	38	36	028	15	02·9	36	33			03·0					04·8	42	36			5·2	38	35			1000
950		32	31	173	07		34	30	014	15		31	30				32	27	012	18		34	31	024	17		31	29	028	15		35	31	352	25		37	31	340	34		36	30			950
900	31·5	26	25	171	09	32·0	28	22	022	24	31·6	27	23			32·2	27	20	010	17	31·3	29	26	017	18	30·6	26	24	041	19	30·8	29	25	358	24	32·0	31	26	336	25	32·8	28	25			900
850		22	21	163	09		24	14	028	09		21	19				23	11	004	18		23	16	011	16		25	21	040	20		24	19	353	21		24	20	353	28		37	18			850
800	61·7	14	13	146	04	62·4	19	04	018	13	61·8	15	12			62·6	20	00	352	22	61·6	16	11	009	17	61·0	19	11	036	21	61·1	18	13	348	20	62·5	23	07	335	33	63·8	35	06			800
750		10	01	012	06		12	08	011	21		11	06	For Winds			18	19	354	36		12	07	008	18							10	04	351	21		21	19	339	39		29	13			750
700	95·1	05	18	021	09	96·0	05	23	002	22	95·2	05	01			96·6	17	27	358	46	95·1	06	04	009	20	94·6	05	01	035	17	94·6	04	03	353	23	96·7	15	32	347	46	98·7	22	23			700
650		00	28	034	14		02	33	355	30		00	10	See			12	21	355	53		01	13	008	21		02	11	035	16		03	10	357	23		11	35	349	52		16	28			650
600	133	08	39	019	20	134	02	28	350	39	133	01	18			135	06	25	353	58	133	08	27	010	31	132	10	19	026	14	132	11	19	002	22	135	03	41	342	59	138	08	32			600
550		13	39	005	31		08	29	346	43		07	26	Page 3.			02	33	360	60		12	35	004	44		20	29	014	13		19	29	360	27		06	46	340	62		01	39			550
500	176	19	38	004	51	178	12	30	350	48	177	16	34			180	11	41	001	63	176	20	45	007	64	175	30	41	007	13	175	28	38	356	31	179	12	47	341	69	183	07	44			500
450		26	45	005	66		20	34	349	58		24	43				21	50	007	73		30	55	002	82		41		005	22		36	47	353	55		25	56	348	66		18	61			450
400	228	37	54	002	79	230	32	44	351	63	229	33	50			232	33	60	002	76	227	37	60	009	100	225	51		002	29	225	44		350	67	231	32	59	342	73	235	32				400
350		48		358	87		46		354	74		44					46		002	78		42		006	107		57		008	39		46		352	99		44		344	73		45				350
300	291	61		358	92	294	59		356	73	293	55				295	61		350	81	291	55		004	102	287	60		359	51	288	56		351	105	295	57		348	76	300	60				300
250		73		356	86		75		346	68		68					75		348	75		70		355	94		58		359	53		65		350	87		70		342	74		75				250
200	374	78		355	63	377	82		339	57	377	80				379	75		347	60	376	66		354	64	373	63		355	60	374	69		348	57	379	83		349	81	382	87				200
170		75		345	48		78		342	52		69					77		354	58		68					63		355	45		68		347	48		74		346	57		82				170
150		75		344	49		75		338	42		69					76		346	49		67					67		349	45		68		345	45		74		349	43		79				150
130	(134	70					71		335	39		68					73		340	44		71										71		345	45		74		348	45		75				130
110	mb)						67		336	36		69					74					73										73		349	60		75					81				110
100						520	68		331	37											102	74									518	73		349	45	521	76				522	84				100
90							70		333	45											mb)											75		334	21		77					80				90
80							72		343	42																						79		329	31		79									80
70							74		344	34																						77		331	33		82									70
60	Inversion 005 mb 34° – 989 mb 36° 595 .. –09° – 582 .. –08° 520 .. –18° – 515 .. –17° Isothermal 690 – 670 mb 03°					Inversion 1014 mb 36° – 1000 mb 40° Isothermal 910 – 887 mb 28° 659 – 600 .. –2°					Inversion 1014 mb 35° – 1000 mb 36° Isothermal 666 – 605 mb 00°					Inversion 750 mb 18° – 719 mb 19° 795 .. 19° – 789 .. 20° Isothermal 840 – 839 mb 76° Max Wind 300 mb 351 87°					Inversion 1011 mb 36° – 998 mb 38° Isothermal 765 – 747 mb 12° 578 – 550 .. –12°					Inversion 900 mb 26° – 884 mb 28°					Inversion 361 mb 47° – 350 46° Isothermal 415 – 400 mb – 44°					Inversion 828 mb 21° – 780 mb 21°					Inversion 1018 mb 37° – 980 mb 40° 882 .. 25° – 850 – 37°					60
Tropopause	I 214 mb – 81° 36,000'					II 215 mb – 82° 36,200'					I 200 mb – 80° 37,700'					III 246 mb – 76° 33,700'					I 241 mb – 73° 33,600'					I 377 mb – 57° 23,700'					II 290 mb – 67° 33,500'					I 206 mb – 85° 37,400'					II 222 mb – 85° 36,000'					Tropopause

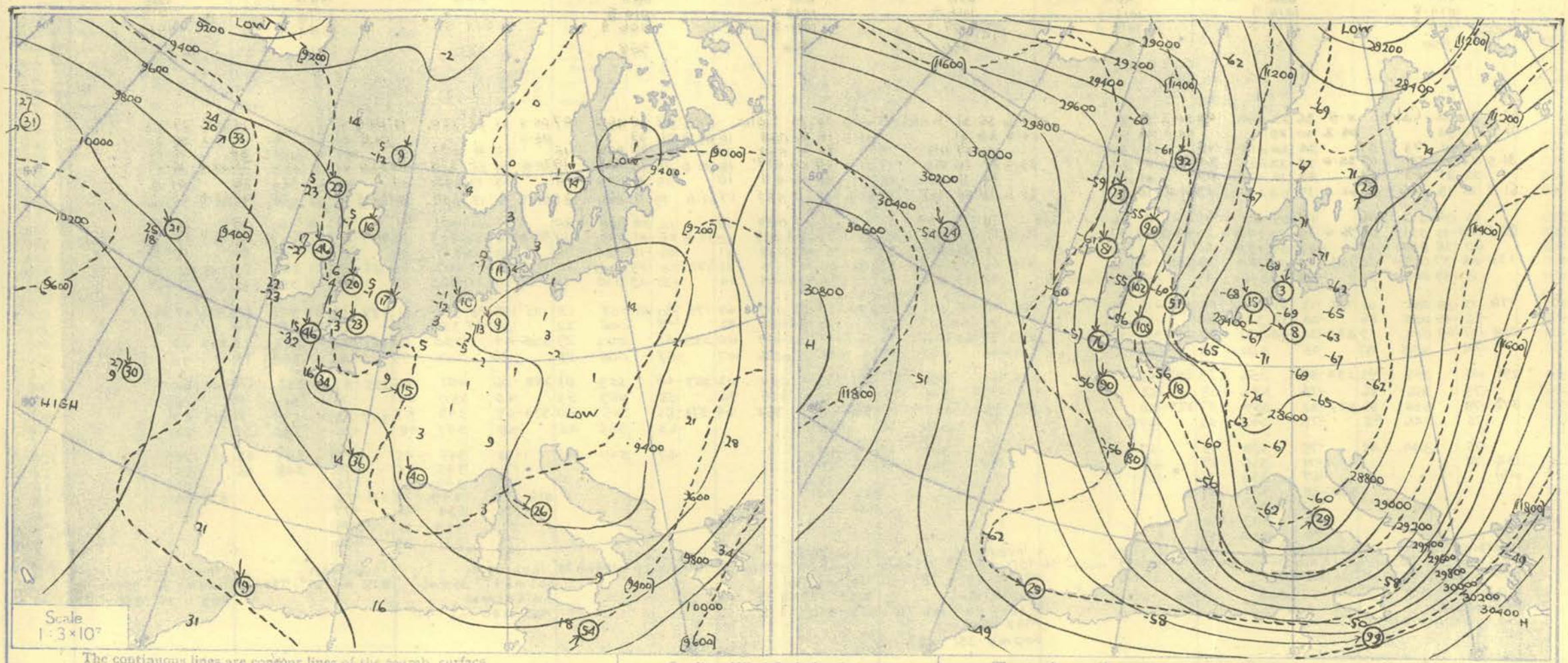
09h G.M.T.

Station	Time	M.S.L.	Surf	Freezing	Pressure
LERWICK	09h	1016·6 mb	1006·3 mb		945 mb
STORNOWAY	09h	1017·7 mb	1016·0 mb		940 mb
LEUCHARS	09h	1019·1 mb	1018·2 mb		959 mb
ALDERGROVE	09h	1019·8 mb	1010·3 mb		930 mb
LIVERPOOL	09h	1018·1 mb	1016·0 mb		938 mb
DOWNHAM MARKET	09h	1015·2 mb	1010·2 mb		930 mb
LARKHILL	09h	1015·3 mb	998·7 mb		965 mb
CAMBORNE	09h	1017·9 mb	1007·0 mb		922 mb
VALENTIA		G.M.T. mb	mb		mb

Pressure mb	LERWICK Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	ALDERGROVE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	DOWNHAM MARKET Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LARKHILL Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surface	02·7	39	36	180	19	0·5	37	33			00·2	30	29	Calm		02·6	31		Calm		00·6	00	30	Calm		01·2	36	39	010	06	04·4	36	31	030	12	02·9	42	37	360	12						Surface
1000	04·3	39	36			04·7	39	35			04·8	35	32	Land V		05·3	33				04·7	36	35	063	09	04·0	37	36			04·0					09·7	42	37								1000
950		33	30	186	19		39	28				31	26	..			34					33	29	045	08		34	30	035	20							36	31	006	22							950
900	32·0	28	24	188	15	32·4	27	23			32·4	26	23	..		33·1	29		359	09	32·5	29	20	031	09	31·8	28	24	038	19	31·5	23	21	032	28	32·7	29	24	010	23						900
850		23	15	192	07		26	15				23	14	..			24		346	10		23	18	025	09		22	17	037	17		22	14	029	28		26	17	006	25							850
800	62·3	19	02	242	03	62·8	25	06			62·7	19	01	..		63·5	23		345	13	62·8	17	11	034	10	62·0	17	09	033	15	61·7	17	08	029	27	63·3	23	00	005	30						800
750		14	–10	299	02		22	–01				13	–07	..			24		352	21		12	01	026	13		12	–02	021	22		11	02	037	24		21	–19	356	40							750
700	96·1	09	–20	336	02	97·1	18	–01			96·4	11	–18	033	18	97·9	20		356	23	96·4	05	–12	022	15	95·6	06	–12	008	25	95·2	04	–06	033	24	97·5	21	–25	359	51						700
650		03	–27	317	11		11	–06				09	–28	020	33		15		357	31		04	–24	017	56		–04	–21	005	25		–03	–12	025	22		12	–27	003	57							650
600	134	00	–20	346	22	136	05	–12			135	05	–23	013	42	137	09		348	37	135	01	–40	012	63	133	–12	–30	010	23	133	–12	–21	022	25	136	09	–25	002	69						600
550		–06°	–15	331	35		–03	–15				–04	–25				01		346	40		–02	–57	004	76		–17	–39	010	25		–16	–27	020	44		01	–32	004	73							550
500	178	–13	–20	343	41	180	–10	–16			179	–15	–30			182	–09		346	43	179	–12	–53	012	88	176	–29	45	010	34	176	–24	–37	019	61	181	–10	–41	006	74						500
450		–24	–29	343	45		–20	–24				–29					–19		346	45		–23	–56	011	81		–33	–54	012	40		–30	–43	010	91		–20	–48	001	74							450
400	230	–35	–40	344	51	232	–33	–37			231	–38				234	–30		344	48	231	–34	–57	011	85	227	–44		012	50	227	–35	–49	011	108	234	–30	–55	004	88						400
350		–47		343	55		–45										–44		340	54		–46		009	93		–50		017	83		–48		009	108		–43		358	87							350
300	293	–61		345	56	296	–57									298	–59		348	54	294	–59		007	88	290	–55		013	106	290	–60		009	103	297	–58		355	85							300
250		–77		346	60		–74										–75		347	59		–73		001	87		–64		011	98		–67		006	97		–73		001	79							250
200	276	–82				380	–80									381	–80		348	64	378	–77		002	68	376	–62		011	66	375	–69		369	61	381	–80		001	65							200
170		–72					–73										–70		348	46		–70		009	51		–64		002	50		–65		356	51		–73										170
150		–70																																													150
130	(135	–70					–72										–68		339	35		–69		007	48		–64		360	48		–67		005	40		–72										130
110	mb)						–73										–67		340	26		–63					–66		005	46		–66		354	41		–69										110
100																	–66		346	24		–66					867		004	46		–69		356	40		–71										100
90																											–67		002	49	520	–70		356	39	525	–75									90
80																	–70		348	16	523	–70					–67		357	41		Inversion					–76										80
70																	–72					–71					–67		352	36		873 mb 21° – 843 mb 23°					–75										70
60	Isothermal 1006 – 1000 mb 39°					Inversion 1016 mb 37° – 1000 mb 39° 884 .. 25° – 850 .. 26° 819 .. 23° – 800 .. 25°					Inversion 1019 mb 38° – 1000 mb 35° 726 .. 10° – 690 – 12° Isothermal 1000 – 982 mb 35°					Inversion 1010 mb 31° – 980 mb 37° Isothermal 676 – 673 mb 17°					Inversion 1016 mb 30° – 1000 mb 36° 663 .. 03° – 624 – 05° Isothermal 693 – 663 mb 03° 587 – 556 .. –01°					Inversion 1011 mb 36° – 980 mb 38° Isothermal 360 – 342 mb – 50°					Isothermal 906 – 891 mb 23° 477 – 453 .. –19°					Inversion 861 mb 25° – 842 mb 27° 770 .. 20° – 750 .. 21° Isothermal 1007 – 990 mb 42° 750 – 700 .. 21° 250 – 240 .. –73°					60
Tropopause	I 226 mb – 83° 35,000'					I 230 mb – 81° 35,000'					N.R.					II 220 mb – 84° 36,200'					I 210 mb – 79° 36,900'					I 235 mb – 66° 39,200'					I 260 mb – 69° 32,000'					I 200 mb – 80° 38,100'					Tropopause

Tuesday 27th February 1951.

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

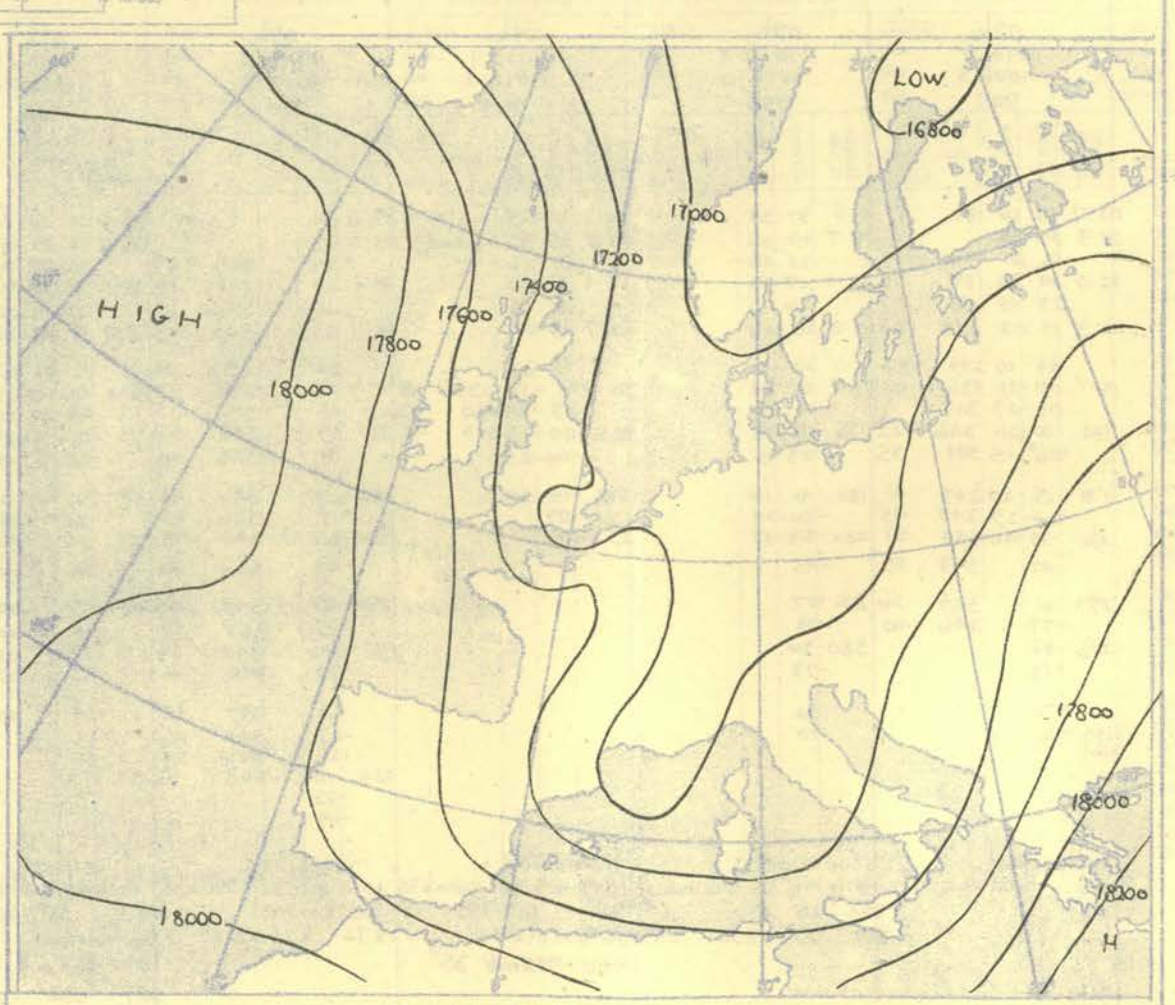


The continuous lines are contour lines of the 700mb. surface
The dotted lines are isopleths of the thickness of the layer 1000—700 mb.

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 500mb. surface
The dotted lines are isopleths of the thickness of the layer 700-500 mb.



Isopleths of Thickness 500-1000mb.

Tuesday 27th February

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

51·17°N 0·24°E

Pressure: Time — ; M.S.L. 1018·5 mb; Surf 1007·0 mb; Freezing 940 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.
Surf	03·1	43	36
1000	04·9		
950			
900	32·6	28	-
850		22	-
800	65·1	16	-
750			
700	95·5	03	-
650			
600	136	-9	-
550			
500	179	-18	-
450			
400	231	-34	
350			
300	295	-54	-
250			
200			
170			

cloud
4/8 Cu 952-920
2/8 Cu 952-760

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

Place	Ronaldsway		Leuchars		Ronaldsway		Shoeburyness		Weather Watcher 52·3N 19·7W		Stornoway		Ronaldsway		Lerwick	
Time	0215hrs		0230hrs		0845hrs		10hrs		10hrs		14hrs		20hrs		21hrs	
Type			Pilot								Pilot				Pilot	
Feet	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.	Dir.	Vel.
Surf.	Calm		310	04	Calm		010	12	300	10	260	12	350	03	200	16
1,000	010	15	312	06	050	04	040	26	320	11	214	20	260	06	208	27
2,000	010	17	312	05	050	05	050	25	320	11	214	21	290	03	208	26
3,000	360	13	328	07	040	12	050	25	330	15	231	21	250	07	216	24
4,000	360	20	003	07	040	12	050	25	330	16	242	22	230	08	220	25
5,000	360	21	012	07	350	05	050	22	340	17	256	24	250	10	228	27
6,000	010	18	012	06	350	08	050	18	340	18	261	21	280	09	234	26
8,000	010	25	010	09			030	19	330	14	275	21	300	17	262	21
10,000			021	16			020	22	330	12	257	24	290	18	254	23
14,000			013	52			010	19	330	13	293	30	300	16	295	31
18,000			015	81			010	27	330	16	316	34	(12000')		313	37
24,000			014	93			010	57	330	18	333	44			323	50
30,000			006	90			010	100	320	23	322	46			331	37
40,000			352	42			010	80	300	21	312	37			330	32
50,000			016 (45000')	45			(37000')		340	28	312	30			323	30
									350 (54000')	25						

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				
Lat/Long	52·8°N 19·8°W					52·3°N 19·6°W				
Time G.M.T.	03hrs					09hrs				
M.S.L. mb	1018·					1017				
Surf mb	1018					1017				
Freezing mb	755					760				
Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots
Surf	—	50	50	260	12	—	49	49	290	11
1000	4·9	50	50	265	12	4·6	48	48		
950		51	51	271	15		46	46		
900	33·8	49	49	283	17	33·1	43	43		
850		44	44	286	17		41	41		
800	65·5	38	36	278	17	64·7	37	37		
750		31	30	276	17		31	31		
700	101	25	18	283	21	99·8	25	22		
650		20	02	291	24		17	16		
600	140	14	00	295	24	139	13	12		
550		06	-10	297	29		06	01		
500	185	-2	-8	295	27	184	-3	-17		
450		-13	-19	300	27		-15	-23		
400	238	-25	-29	310	25	237	-28	-33		
350		-39	-44	310	26		-41			
300	303	-54		302	24	301	-57			
250		-72		292	30		-70			
200	386	-88		294	33	385	-86			
170		-75		294	30		-72			
150		-76		294	29		-72			
130		-79		294	29		-76			
110		-81		296	24		-77			
100	527	-79		301	18	527	-78			
90		-81		319	18		-75			
80		-81					-77			
70		-81					-74			
60		(29)					-74 (64)			

Weather Watcher 03hrs: Isothermal 1018-982 mb 50°. Inversion 982 mb 50°-950 mb 51°, 676 mb 21°-665 mb 22°. Tropopause I 196 mb -89°, 39100'.

Weather Watcher 09hrs: Isothermal 639-618 mb 16°. Tropopause I 195 mb -84° 38000'.

Ship	Weather Watcher					Weather Watcher				
Lat/Long	52·5°N 19·6°W					52·4°N 19·9°W				
Time G.M.T.	15hrs					21hrs				
M.S.L. mb	1019					1021				
Surf mb	1019					1021				
Freezing mb	725					655				
Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots
Surf	—	49	49	323	14	—	46	44	315	07
1000	5·2	50	50	332	12	5·6	48	47	290	05
950		52	52	346	12		49	46	290	05
900	33·9	47	46	351	14	34·3	48	40	301	03
850		41	40	345	16		44	27	309	06
800	65·5	37	33	339	16	65·5	40	21	310	10
750		34	25	336	18		38	09	313	08
700	101	29	20	337	12	101	33	10	312	11
650		21	13	341	16		24	06	306	09
600	140	13	02	340	17	141	17	-4	304	08
550		05	-4	337	18		09	-5	307	09
500	185	-5	-12	329	16	187	00	-19	306	14
450		-16	-24	319	20		-11	-30	310	22
400	238	-28	-37	319	23	240	-24	-44	320	19
350		-43		297	21		-36	-56	345	26
300	302	-58		286	27	304	-53		321	36
250		-71		286	30		-71		318	44
200	386	-78		313	34	389	-82		313	39
170		-71		308	34		-74		298	33
150		-70		313	33		-71		310	29
130		-75		316	33		-74		308	30
110		-74		316	30		-74		313	30
100	529	-75		315	27	531	-76		314	29
90		-78		316	25		-80		325	25
80		-78		314	23		-79		322	21
70		-78		309	23		-79		316	18
60		-74		304	12		-78			
		-78				(58)	-77			

Weather Watcher 15hrs: Inversion 1019 mb 49°-950 mb 52°. Tropopause I 210 mb -82° 37500'.

Weather Watcher 21hrs: Inversion 1021 mb 46°-985 mb 49°, 871 mb 39°-800 mb 40°. Isothermal 985-950 mb 49°, 800-792 mb 40°. Tropopause II 217 mb -81°, 37400'.

Ship	Weather Observer					Weather Observer				
Lat/Long	58·7°N 18·8°W					59·0°N 18·7°W				
Time G.M.T.	03hrs					09hrs				
M.S.L. mb	1010					1008				
Surf mb	1010					1008				
Freezing mb	755					725				
Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots
Surf	—	46	46	203	26	—	45	43	285	24
1000	2·6	45	44	185	33	2·2	44	43	276	29
950		42	39	194	34		40	40	274	30
900	30·9	38	35	207	33	30·4	38	38	274	33
850		36	33	221	31		44	31	277	39
800	62·2	36	31	240	26	62·0	40	22	277	44
750		31	25	253	28		36	-10	283	44
700	97·2	24	20	266	33	97·1	28	01	286	48
650		22	01	274	39		21	-4	286	48
600	137	13	-26	280	48	137	13	-13	288	48
550		05	-40	284	48		06	-23	287	52
500	182	-5	-57	284	46	182	-3	-36	289	58
450		-16	-57	282	55		-16	-42	289	65
400	235	-29	-56	280	51	235	-30	-44	291	60
350		-40	-60	280	45		-65		286	57
300		-52 (310)				298	-61		291	66
250							-75		291	56
200						381	-74		295	46
170							-71		293	45
150							-70		291	46
130							-71		292	38
110							-72		293	33
100						525	-72		294	33
90							-71		293	36
80							-65		294	36
70							-67			
60							-67 (68)			

Weather Observer 03hrs: Inversion 900 mb 38°-890 mb 39°, 850 mb 36°-815 mb 37°. Tropopause NR.

Weather Observer 09hrs: Inversion 912 mb 36°-863 mb 45°. Tropopause I 222 mb -81°, 36000'.

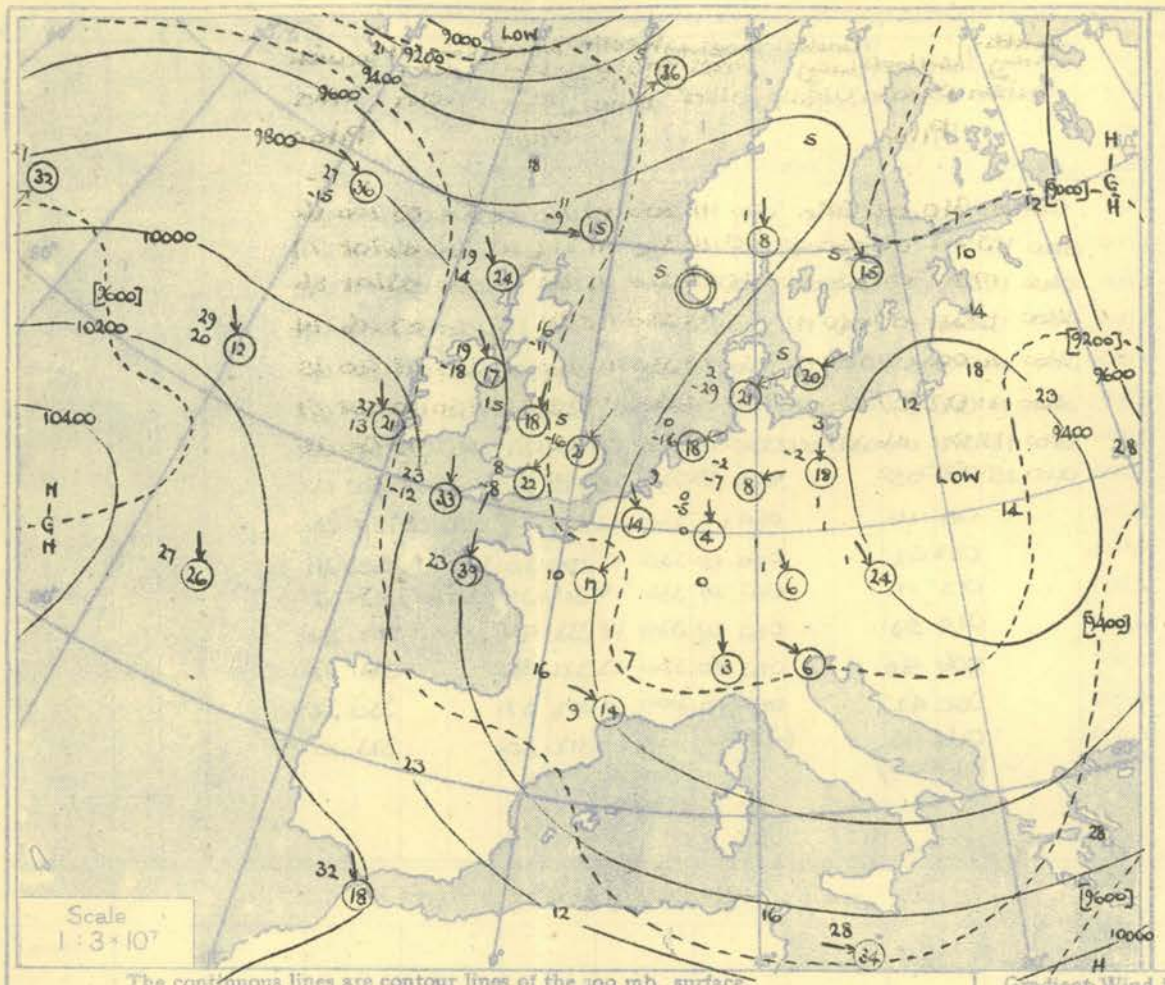
Ship	Weather Observer					Weather Observer				
Lat/Long	59°N 18·8°W					59°N 19°W				
Time G.M.T.	15hrs					21hrs				
M.S.L. mb	1011					1013				
Surf mb	1011					1013				
Freezing mb	740					750				
Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Vel. knots
Surf	—	45	43	290	25	—	45	42	270	20
1000	3·0	44	40	266	29	3·5	44	38	247	22
950		39	35	271	26		41	35	254	24
900	31·3	46	26	275	30	31·5	43	29	268	24
850		43	-1	277	36		39	24	274	27
800	62·9	39	-5	288	42	63·3	34	06	275	29
750		34	-9	284	45		32	11	274	31
700	98·1	27	-15	293	36	98·2	26	06	273	35
650		19	-25	290	36		20	-3	274	37
600	137	13	-33	284	45	137	14	-6	273	36
550		05	-40	284	47		07	-8	273	32
500	183	-3	-46	284	52	183	-4	-17	270	32
450		-17	-32	284	45		-12	-24	269	36
400	235	-27	-35	284	55	236	-24	-35	267	43
350		-41		289	62		-39	-45	265	50
300	300	-57		284	63	300	-56		264	58
250		-73		284	62		-74		265	61
200	384	-79		284	54	384	-82		268	50
170		-67		289	45		-71		270	48
150		-67		284	42		-71		275	48
130		-67		284	46		-73		279	51
110		-68		289	42		-74		284	46
100	528	-67		284	30	527	-73		286	42
90		-66		284	30		-74		286	46
80		-66		284	30		-75		285	43
70		-67		284	30		-75		285	38
60		-68 (64)								

Weather Observer 15hrs: Inversion 935 mb 38°-900 mb 46°. Isothermal 900-883 mb 46°. Tropopause II 234 mb -80° 35100'.

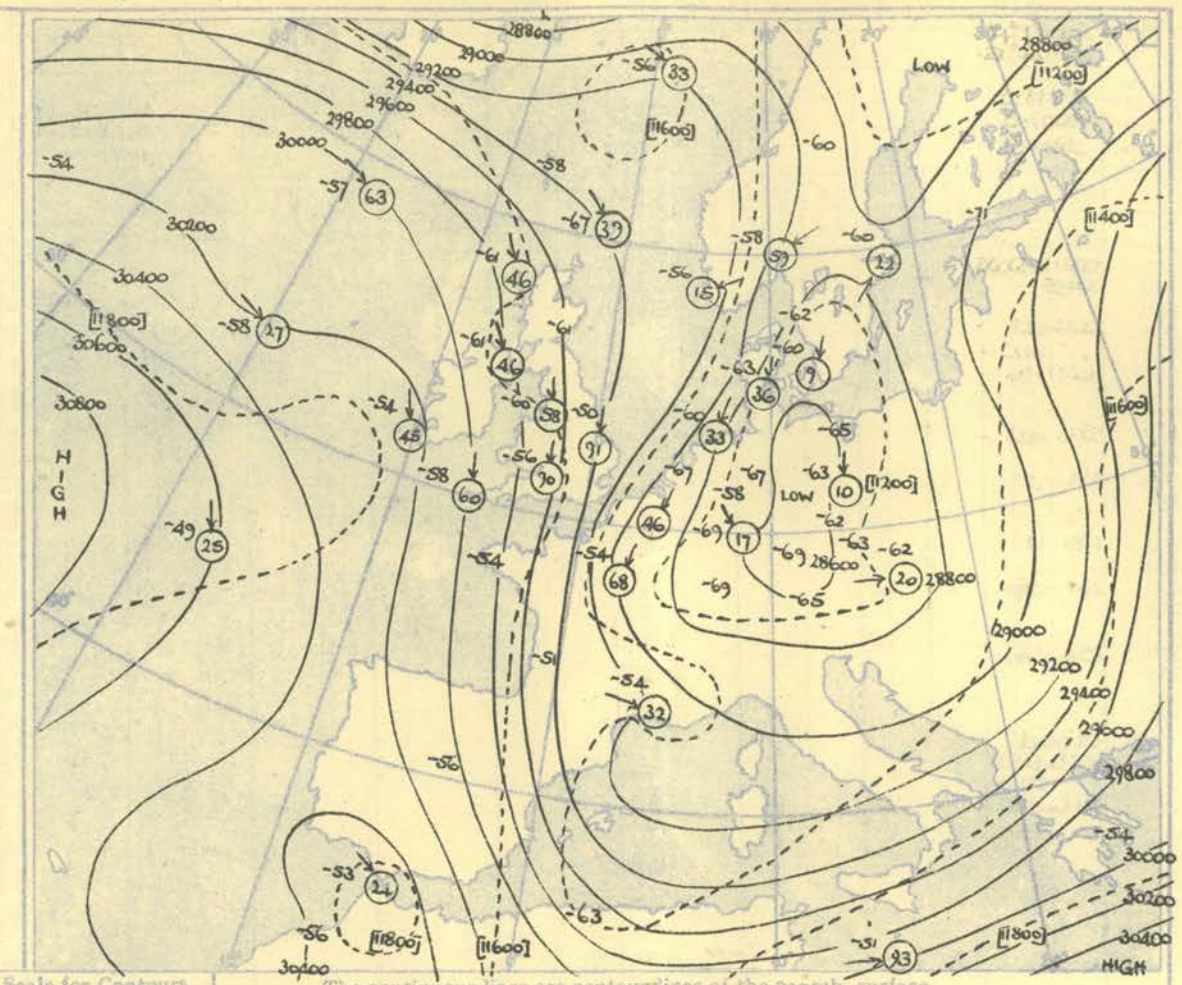
Weather Observer 21hrs: Inversion 953 mb 40°-942 mb 46°, 773 mb 32°-763 mb 33°. Isothermal 942-915 mb 46°. Tropopause II 232 mb -81° 35500'.

Tuesday 27th February, 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

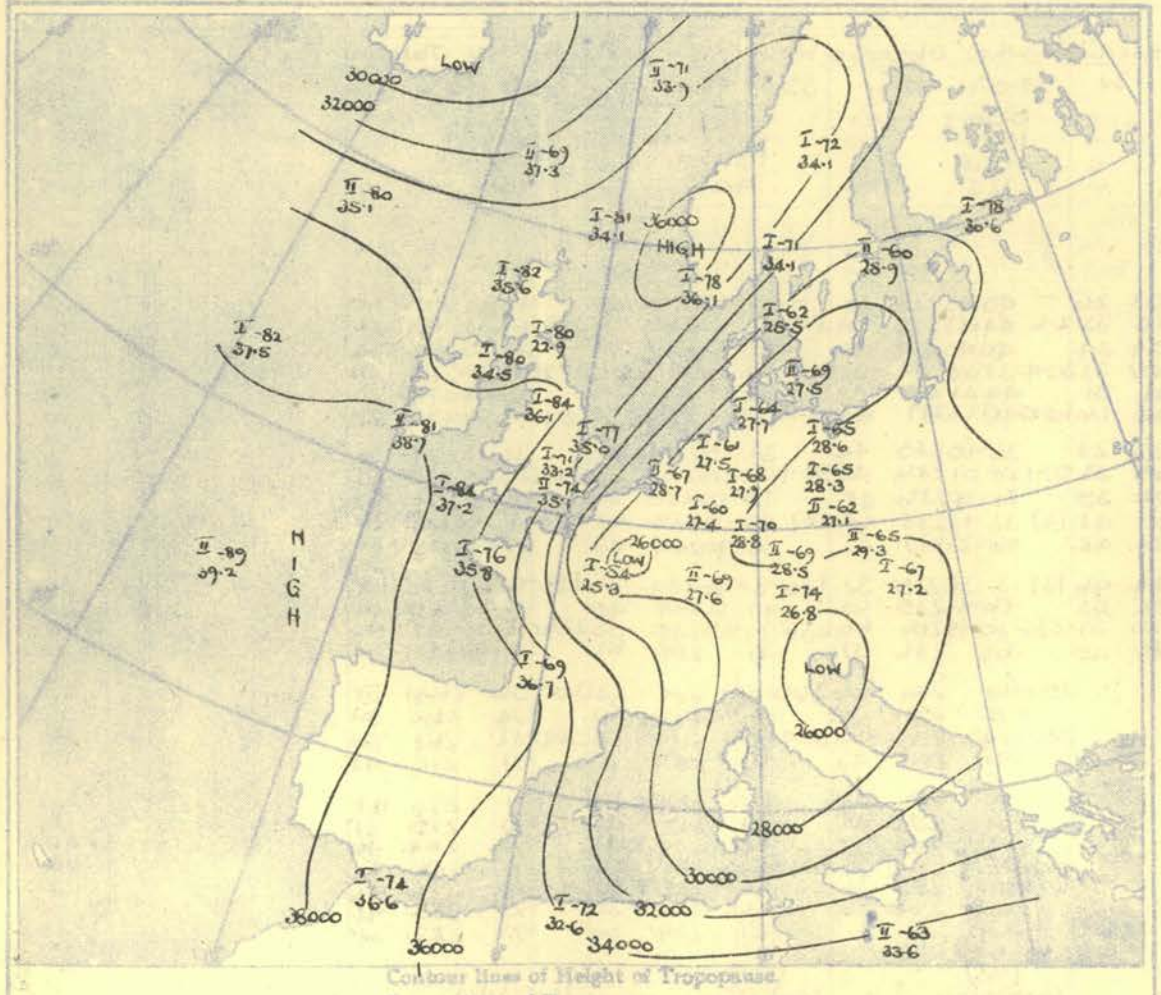


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500–300 mb.

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 15h. G.M.T.



Contour lines of Height of Tropopause.
Temperature of Tropopause.

NOTES ON THE AEROLOGICAL SITUATION.

Further warming by advection occurred northeastward from Iceland, with thermal gradients remaining strong south of Greenland. Cold trough over Europe moved little during the day.

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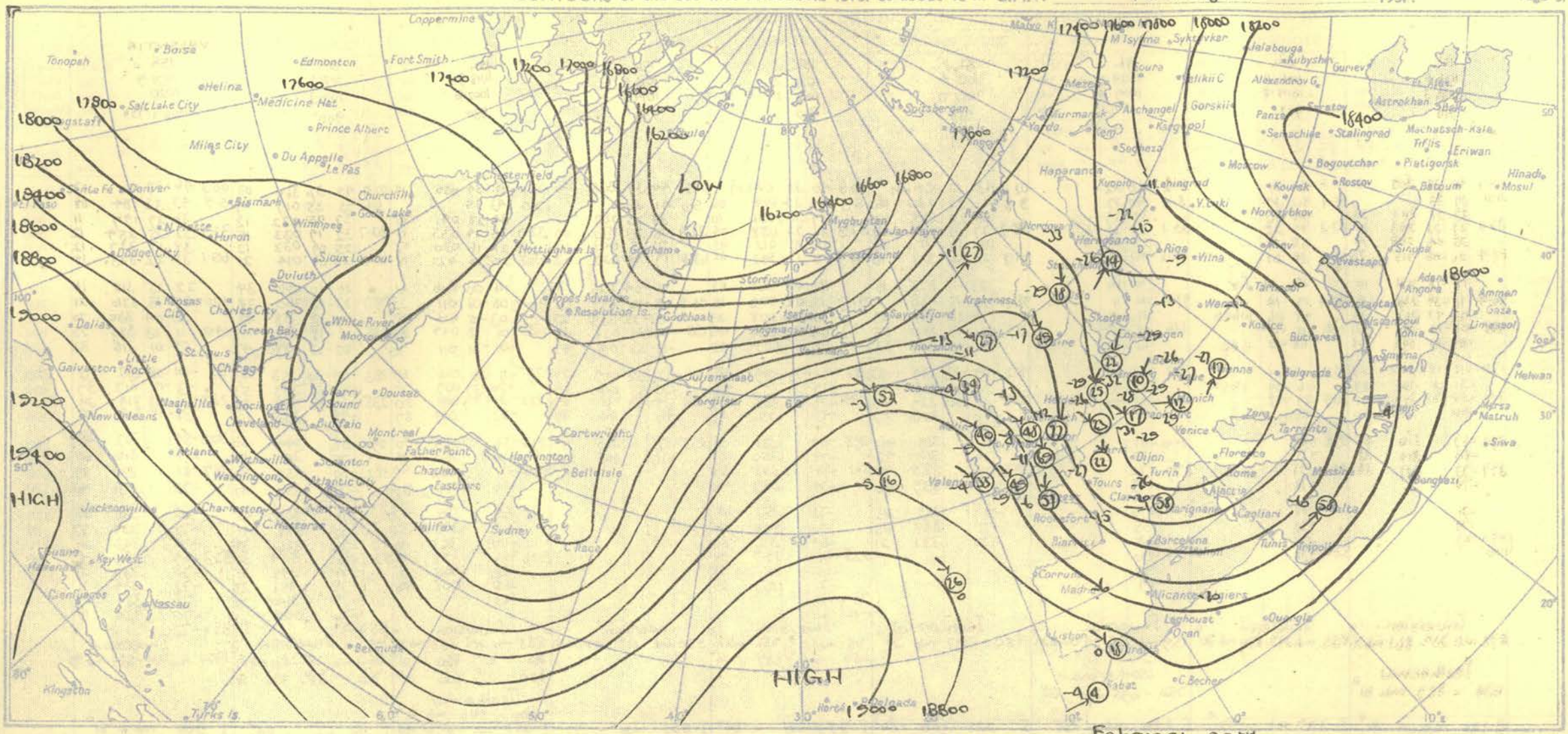
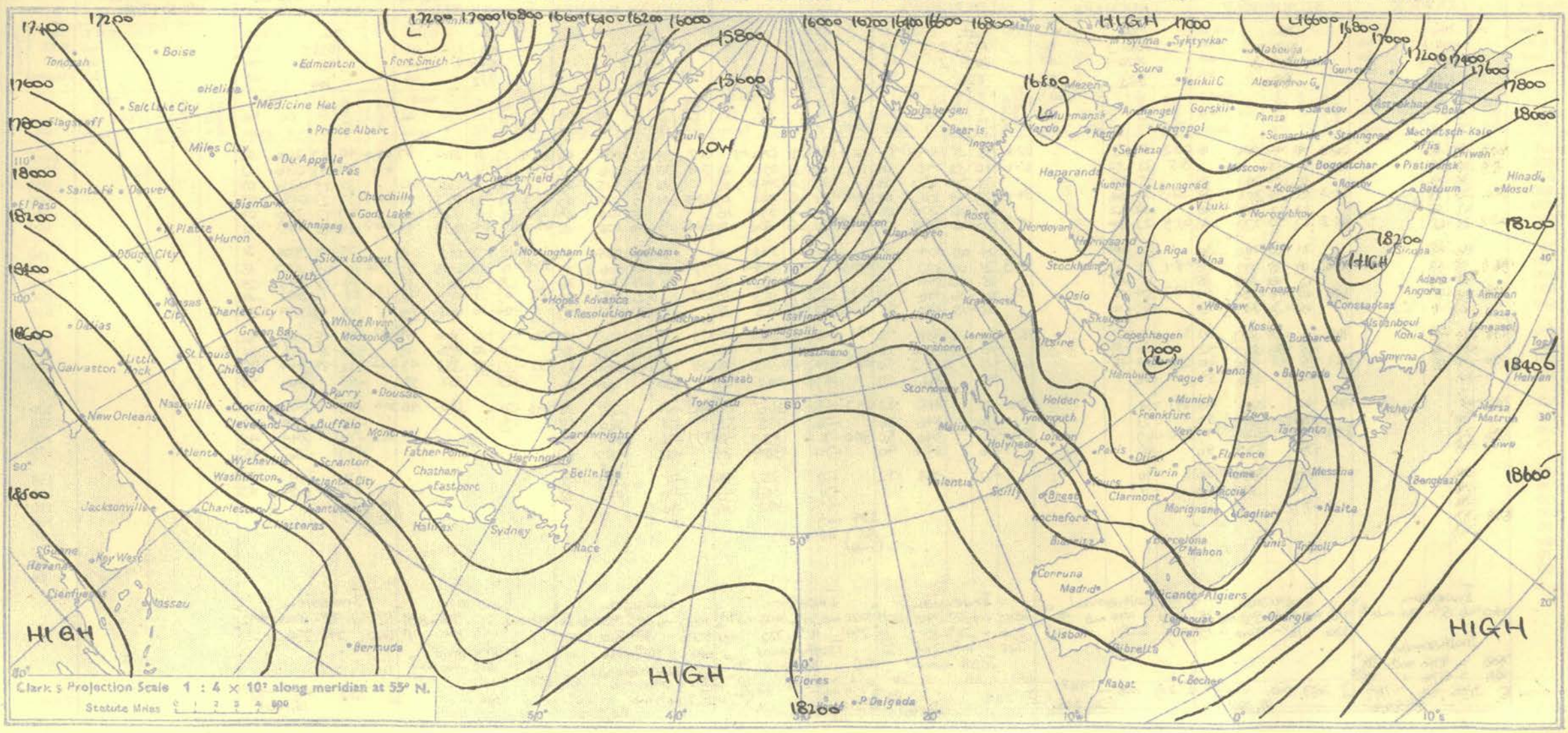
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. February 27th 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. February 27th 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Tuesday 27th February. 1951.

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

LERWICK

Pressure	Time	15h G.M.T.
	M.S.L.	1016·6 mb
	Surf	1006·3 mb
	Freezing	940 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	40	34	205	16
1000	4·4	39	33		
950		33	28	202	23
900	32·0	27	23	203	21
850		25	04	208	19
800	62·4	21	-06	215	20
750		17	-18	221	19
700	96·4	11	-34	239	15
650		03	-43	261	16
600	135	01	-10	281	21
550		-04	-09	298	28
500	179	-11	-18	302	27
450		-21	-31	300	27
400	231	-34	-43	307	31
350		-50		304	36
300	294	-67		310	39
250		-80		314	38
200	377	-73		327	35
170		-70			
150		-71			
130		-70			
110	(118 mb)	-67			
100					
90					
80					
70					
60					

Inversion 878 mb 20° - 861 mb 26°

Isothermal 634 - 587 mb 01°

Tropopause I 288 mb - 81° 37,100'

STORNOWAY

Pressure	Time	15h G.M.T.
	M.S.L.	1016·5 mb
	Surf	1014·8 mb
	Freezing	923 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·5	42	37		
1000	4·4	40	34		
950		35	30		
900	32·3	29	25		
850		25	18		
800	63·0	28	01		
750		24	14		
700	97·4	19	14		
650		15	06		
600	136	10	-12		
550		05	-08		
500	182	-04	-17		
450		-16	-29		
400	234	-29	-43		
350		-45			
300	298	-61			
250		-75			
200	381	-77			
170		-73			
150		-72			
130		-72			
110		-73			
100	524	-74			
90					
80					
70					
60					

for winds see page 3.

Inversion 855 mb 24° - 820 mb 30°

Tropopause I 227 mb - 82° 35,600'

LEUCHARS

Pressure	Time	15h G.M.T.
	M.S.L.	1020·2 mb
	Surf	1019·4 mb
	Freezing	mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	46	32		
1000	5·4	40	27		
950		33	23		
900	33·1	26	14		
850		22	09		
800	63·3	20	03		
750		16	-06		
700	97·0	16	+11		
650		11	-19		
600	136	05	-16		
550		-02	-18		
500	180	-13	-25		
450		-22	-33		
400	232	-32	-44		
350		-46			
300	296	-61			
250		-78			
200	379	-72			
170		-69			
150		-70			
130		-65			
110		-65			
100	524	-66			
90		-69			
80		-69			
70					
60					

Inversion 859 mb 20° - 840 mb 24°

Isothermal 750 - 695 mb 16°

Tropopause I 229 mb -85° 35,000'

ALDERGROVE

Pressure	Time	15h G.M.T.
	M.S.L.	1021·4 mb
	Surf	1012·0 mb
	Freezing	938 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	43	32	CALM	
1000	5·8	41	28	230	06
950		34	20	255	07
900	33·7	27	19	267	09
850		28	16	281	07
800	64·2	23	-04	321	16
750		23	-18	325	15
700	98·0	19	-18	325	17
650		13	-26	330	23
600	137	06	-17	330	25
550		-01	-12	337	33
500	182	-09	-23	339	40
450		-20	-31	333	40
400	234	-32	-50	329	39
350		-46		326	47
300	298	-61		319	46
250		-76		319	42
200	381	-78		335	44
170		-72		339	40
150		-71		339	39
130		-71		338	35
110		-70		331	21
100					
90					
80					
70					
60					

Isothermal 850 - 747 mb 28°

Tropopause I 238 mb -80° 34,500'

LIVERPOOL

Pressure	Time	15h G.M.T.
	M.S.L.	1020·2 mb
	Surf	1018·2 mb
	Freezing	910 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	46	35	CALM	
1000	5·3	44	34	014	06
950		37	30	031	10
900	33·3	31	28	058	09
850		25	18	012	03
800	63·9	20	12	342	03
750		16	06	360	08
700	97·7	15	02	002	18
650		12	-04	008	20
600	137	09	-07	006	46
550		02	-11	002	45
500	181	-08	-12	359	48
450		-17	-28	357	48
400	234	-28	-39	356	54
350		-43		353	57
300	298	-57		351	58
250		-74		350	61
200	381	-78		355	54
170		-74		357	46
150		-72		352	38
130		-70		348	41
110		-67		352	30
100	525	-66		347	28
		-68		351	28
		-71		351	29
	(73 mb)	-74			

Inversion 718 mb 14° - 685 mb 16° 650 - 12° - 627 - 13°

Tropopause I 223 mb - 84° 36,100'

DOWNHAM MARKET

Pressure	Time	15h G.M.T.
	M.S.L.	1018·8 mb
	Surf	1014·2 mb
	Freezing	932 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	44	39	335	10
1000	5·0	41	36		
950		34	25	022	08
900	32·9	28	23	030	09
850		22	15	043	10
800	63·3	17	06	038	12
750		12	-04	026	18
700	96·8	05	-16	027	21
650		-01	-25	025	27
600	135	-07	-39	020	35
550		-13	-52	018	42
500	178	-12	-52	019	77
450		-23	-53	016	84
400	230	-34	-57	013	84
350		-46		010	87
300	293	-58		005	91
250		-73		008	87

Inversion 530 mb -13° - 504 mb 41°

Tropopause I 228 mb - 77° 35,000'

LARKHILL

Pressure	Time	15h G.M.T.
	M.S.L.	1018·9 mb
	Surf	1002·6 mb
	Freezing	930 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	43	34	050	14
1000	5·0	43	34		
950		34	28	041	15
900	32·9	28	24	035	15
850		21	16	030	17
800	63·2	20	10	022	18
750		14	00	016	21
700	96·9	08	-08	011	22
650		03	-15	013	35
600	135	01	-18	014	52
550		-01	-21	011	70
500	179	-11	-30	010	69
450		-20	-37	009	75
400	232	-31	-47	008	80
350		-42		009	87
300	295	-56		003	90
250		-70		360	79
200	380	-71		002	59
170		-66		002	49
150		-65		354	47
130		-63		348	36
110		-66		353	46
100	526	-66		358	41
		-66		005	28
		-65		008	26
		-63			

Inversion 853 mb 21° 838 mb 22° 665 " 02° - 650 " 03° 620 " 00° - 600 " 01°

Isothermal 600 - 560 mb 01°

Tropopause I 252 mb -71° 33,300' R 229 " -74° 35,100'

CAMBORNE

Pressure	Time	15h G.M.T.
	M.S.L.	1021·1 mb
	Surf	1010·3 mb
	Freezing	900 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	45	37	360	08
1000	5·6	43	35	017	09
950		37	25	022	12
900	33·7	32	19	033	15
850		25	09	032	12
800	64·3	24	01	014	21
750		26	-10	002	34
700	98·7	23	-12	360	33
650		19	-15	358	43
600	138	11	-18	358	48
550		02	-23	357	47
500	183	-09	-30	353	49
450		-18	-38	348	53
400	235	-30	-46	348	55
350		-44		345	62
300	299	-58		349	60
250		-75		347	66
200	382	-80		354	57
170		-75		352	47
150		-74		354	45
130		-72		348	41
110		-70		336	34
100	525	-71		344	30
		-74		348	29
		-75		351	25
		-75		360	22
		-76		008	27
	(55 mb)	-77			

Inversion 850 mb 25° - 831 mb 27° 790 " 22° - 750 " 26°

Tropopause I 210 mb - 84° 37,200'

VALENTIA

Pressure	Time	15h G.M.T.
	M.S.L.	1021·9 mb
	Surf	1020 mb
	Freezing	900 1750 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·3	46	37	180	07
1000	5·9	43	33	184	08
950		36	29	197	11
900	33·9	32	25	284	12
850		28	17	327	12
800	65·1	36	22	323	14
750		32	25	318	16
700	100	27	13	326	21
650		20	04	330	20
600	140	11	03	320	25
550		05	01	315	33
500	185	-04	-08	313	32
450		-13	-17	317	37
400	238	-23	-28	319	39
350		-38	-44	328	43
300	302	-54		327	45
250		-71		316	50
200	387	-81		330	39
170		-72		336	40
150		-69		335	38
130		-72		334	37
110		-71		343	29
100	523	-69		340	26
		-70		337	21
		-72		334	21
		-73		334	24
		-70		334	19
	(55 mb)	-72			

Inversion 884 mb 31° - 834 mb 39°

Tropopause I 200 mb - 81° 30,700'

LERWICK

Pressure	Time	21h G.M.T.
	M.S.L.	1015·1 mb
	Surf	1009·9 mb
	Freezing	948 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	38	35		
1000	3·9	38	34		
950		33	29		
900	31·6	28	18		
850		21	06		
800	62·1	23	-08		
750		16	05		
700	96·1	15	13		
650		08	04		
600	134	00	-07		
550		-07	-11		
500	178	-19	-23		
450		-28	-34		
400	230	-39	-48		
350		-50			
300	292	-63			
250		-74			
200	376	-75			
170		-75			
150		-76			
130		-76			
110		-76			
100	518	-77			
90		-77			
80					
70					
60					

Inversion 740 mb 15° 724 mb 18°

Isothermal 900 - 870 mb 28° 481 - 470 " -23°

Tropopause I 234 mb -78° 34,500'

STORNOWAY

Pressure	Time	21h G.M.T.
	M.S.L.	1016·0 mb
	Surf	1014·3 mb
	Freezing	850 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·5	43	40	210	18
1000	2·2	41	38		
950		36	34	241	29
900	32·3	35	34	251	33
850		32	32	267	30
800	63·3	27	27	278	30
750		21	20	290	30
700	97·6	19	13	299	33
650		12	-01	308	35
600	136	08	-14	321	41
550		00	-21	324	42
500	181	-11	-28	327	42
450		-23	-36	327	42
400	233	-35	-48	330	60
350		-48		330	54
300	296	-62		331	63
250		-77		334	57
200	379	-79		329	47
170		-74		324	40
150		-72		320	30
130		-74		326	30
110		-77			
100					
90					
80					
70					
60					

Inversion 918 mb 34° - 893 mb 35° 720 " 18° - 700 " 19°

Tropopause I 237 mb - 82° 34,500'

LEUCHARS

Pressure	Time	21h G.M.T.
	M.S.L.	1021·2 mb
	Surf	1020·3 mb
	Freezing	923 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·2	38	33		
1000	5·5	38	33		
950		35	29		
900	33·5	29	24		
850		24	12		
800	63·9	22	04		
750		21	09		
700	98·1	17	07		
650		11	02		
600	137	04	01		
550		-03	-10		
500	181	-10	-22		
450		-20	-33		
400	233	-34	-46		
350		-46			
300	297	-62			
250		-73			
200	380	-69			
170		-68			
150		-70			
130		-71			
110					
100					
90					
80					
70					
60					

Isothermal 1020 - 994 mb 38° 829 - 791 " 22°

Tropopause I 219 mb - 79° 26,200'

ALDERGROVE

Pressure	Time	21h G.M.T.
	M.S.L.	1022·3 mb
	Surf	1018·2 mb
	Freezing	826 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	38	31	CALM	
1000	6·1	40	32	298	04
950		35	24	252	07
900	34·0	27	19	262	05
850		28	16	270	06
800	64·7	30	-05	284	11
750		24	08	304	22
700	99·2	21	09	332	28
650		18	-02	346	24
600	138	10	-06	346	34
550		03	-15	337	45
500	183	-06	-26	338	42
450		-16	-31	340	48
400	236	-28	-37	342	50
350		-48		346	52
300	300	-58		348	52
250		-76		346	60
200	383	-80		340	50
170		-76		342	40
150		-72		343	42
130					
110					
100					
90					
80					
70					
60					

Inversion 1013 mb 38° - 995 mb 41° 870 " 26° - 827 " 32° 725 " 19° - 703 " 22°

Isothermal 693 - 66 mb 20°

Tropopause I 224 mb - 84° 5,900'

LIVERPOOL

Pressure	Time	21h G.M.T.
	M.S.L.	1022·9 mb
	Surf	1020·8 mb
	Freezing	911 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	00·6	36	34	CALM	
1000	6·0	42	38	090	06
950		37	29	240	03
900	34·0	31	23	263	07
850		24	19	270	10
800	64·4	20	10	300	08
750		20	01	346	14
700	98·5	19	-16	354	23
650		12	-19	356	25
600	137	06	-11	353	30
550		-02	-12	355	38
500	181	-12	-16	360	34
450		-21	-28	351	42
400	233	-34	-44	355	48
350		-47		002	54
300	297	-63		360	56
250		-76		355	52
200	380	-71		353	45
170		-70		354	39
150		-72		353	44
130		-71		353	43
110		-67		342	30
100	524	-65			
	(95 mb)	68			

Inversion 1021 mb 36° - 1005 mb 43° 774 " 18° - 722 " 22°

Isothermal 815 - 790 mb 20° 653 - 635 " 12°

Tropopause I 239 mb -79° 34,400' I 218 " -79° 36,200'

DOWNHAM MARKET

Pressure	Time	21h G.M.T.
	M.S.L.	1022·5 mb
	Surf	1017·4 mb
	Freezing	950 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	01·2	34	32	055	06
1000	5·8	35	32	016	12
950		32	25	015	09
900	33·4	26	19	012	07
850		19	15	010	06
800	63·5	17	06	008	15
750		11	-11	004	24
700	97·1	06	-23	006	29
650		01	-34	004	26
600	135	01	-33	005	40
550		-06	-27	011	49
500	179	-15	-26	008	84
450		-25	-33	007	55
400	231	-36	-44	003	62
350		-50		007	56
300	293	-65		358	58
250		-78		360	58
200	377	-76		006	51
170		-73		357	42
150		-71		349	39
130		-70		003	28
110		-70			
100					
90					
80					
70					
60					

Inversion 1017 mb 34° 995 mb 36° 827 " 16° - 800 " 17° 614 " -01° - 600 " 01°

Isothermal 250 - 240 mb -78°

Tropopause I 224 mb - 80° 35,300'

LARKHILL

Pressure	Time	21h G.M.T.
	M.S.L.	1023·1 mb
	Surf	1006·4 mb
	Freezing	932 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	04·4	37	31	360	07
1000	6·0	37	31		
950		34	27	021	10
900	33·9	28	21	025	10
850		21	14	025	10
800	64·1	19	05	024	13
750		13	-05	018	16
700	97·8	11	-13	008	22
650		07	-21	003	35
600	136	03	-21	003	42
550		-04	-16	003	44
500	180	-13	-21	360	44
450		-24	-30	356	45
400	232	-33	-38	353	48
350		-45		351	49
300	296	-59		350	46
250		-73			

NR.

CAMBORNE

Pressure	Time	21h G.M.T.
	M.S.L.	1023·9 mb
	Surf	1013·0 mb
	Freezing	900 mb

Pressure mb	Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·9	40	37	360	02
1000	6·3	42	38	036	12
950		38	29	036	08
900	34·4	32	23	018	07
850		27	12	340	06
800	65·0	24	02	349	12
750		25	-08	354	21
700	99·4	19	-09	352	18
650		14	-12	347	23
600	138	08	-11	342	31
550		00	-09	354	35
500	183	-09	-15	357	42
450		-20	-28	353	43
400	235	-32	-44	344	45
350		-45		346	45
300	299	-63		340	39
250		-77		338	45
200	382	-76		349	45
170		-77		350	45
150		-76		349	45
130		-74		065	45
110					
100	(119 mb)	-73			
90					
80					
70					
60					

Inversion 1013 mb 40° - 1000 mb 42° 800 " 24° - 750 " 25°

Tropopause I 238 mb -82° 35,100'

HMSO Press, MO, Dunstable.

No. 11658. **DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON.** Wednesday 28th February 1951. Page 1.

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

03Z

Station	Time	M.S.L.	Surf	Freezing
LERWICK	03Z G.M.T.	1014·3 mb	1004·1 mb	890 mb
STORNOWAY	03Z G.M.T.	1017·5 mb	1015·8 mb	770 mb
LEUCHARS	03Z G.M.T.	1021·3 mb	1020·4 mb	860 mb
ALDERGROVE	03Z G.M.T.	1022·3 mb	1013·2 mb	826 mb
LIVERPOOL	03Z G.M.T.	1024·1 mb	1022·0 mb	942 mb
DOWNHAM MARKET	03Z G.M.T.	1024·8 mb	1020·0 mb	950 mb
LARKHILL	03Z G.M.T.	1025·7 mb	1008·7 mb	930 mb
CAMBORNE	03Z G.M.T.	1025·8 mb	1014·7 mb	918 mb
VALENTIA	03Z G.M.T.	1023·4 mb	1023 mb	720 mb

Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. Vel.	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	39	39	200	22	0·4	42	40	260	03	0·2	39	36		2·6	38	31	Calm		0·6	32	30	Calm		1·2	33	32	Calm		4·4	31	29	Calm		2·9	37	35	000	00	0·3	44	40	170	13	Surf
1000	3·8	39	39	·		4·6	43	40			5·6	38	34		6·1	40	32	248	04	6·3	36	29	236	06	6·4	34	32	339	05	6·6	34	31			6·8	43	37	180	08	6·7	42	38	171	13	1000
950		34	34	229	27		39	38	279	14		35	30			35	24	252	04		33	28	262	08		32	27	341	06		34	26	005	05		36	30	205	09		41	38	167	11	950
900	31·7	33	33	234	27	32·7	34	33	282	14	33·4	30	27		34·0	27	19	262	05	34·1	28	23	256	12	34·1	28	20	345	07	34·3	28	20	346	06	34·8	30	24	264	06	34·6	40	38	161	08	900
850		29	28	244	27		35	24	300	13		31	28			28	16	270	06		27	15	306	08		20	17	347	13		21	13	347	07		27	11	325	09		39	36			850
800	62·4	25	25	253	24	63·8	33	18	307	15	64·1	27	24		64·7	30	05	284	11	64·4	23	02	345	15	64·3	19	00	351	16	64·6	19	05	338	11	65·4	27	04	346	12	66·0	34	29			800
750		23	21	279	20		31	07	325	18		20	18			24	08	304	22		21	09	349	20		13	10	355	18		15	05	340	14		23	12	352	18		35	21			750
700	96·8	22	15	324	25	98·7	25	01	333	22	98·3	15	12		99·2	21	09	332	28	98·6	16	08	351	25	98·1	10	23	359	18	98·5	14	15	359	19	99·8	19	05	355	20	100	29	04			700
650		17	05	330	31		16	07	321	22		14	04			18	02	346	24		08	02	354	28		06	19	002	27		08	21	358	25		14	06	357	26		22	06			650
600	136	10	05	334	36	138	07	15	316	23	137	08	03		138	10	06	346	34	137	04	01	358	33	136	01	13	001	34	137	02	22	356	33	139	07	01	355	30	140	15	13			600
550		00	18	338	38		02	19	321	24		01	14			03	15	337	47		05	12	004	36		05	11	359	37		06	20	356	37		00	09	359	36		07	21			550
500	181	09	20	343	38	182	11	25	330	29	182	08	25		183	06	26	338	42	181	14	21	010	42	180	15	20	001	41	181	13	23	360	42	183	09	21	360	39	185	03	31			500
450		19	31	351	42		20	36	327	28		19	34			16	31	340	48		23	32	005	50		24	33	006	48		24	35	360	45		19	25	359	65		15	43			450
400	233	30	42	355	42	235	32	48	323	34	234	31	37		236	28	37	342	50	233	35	45	001	51	232	36	45	008	51	233	36	46	357	46	236	30	38	001	51	238	27	53			400
350		44		353	48		45		336	39		42				43		346	52		47		001	59		50		007	51		50		359	48		45		001	48		41				350
300	297	57		349	47	298	60		339	39	298	58			300	58		348	52	296	61		002	63	295	66		002	51	295	66		357	55	299	60		360	59	302	56				300
250		71		344	42		76		342	41		72				76		346	60		63		005	60		72		007	46		73		359	52		76		002	59		71				250
200	381	87		331	33	381	87		339	40	382	84			383	80		340	50	380	73		337	42	379	70		360	42	379	70		354	45	383	85				386	79				200
170		73		326	29							79				76		342	40		69		355	37		71		358	47		70		353	44		72					71				170
150		72		321	33							77									71		354	35		69		353	39		68		356	41		74					70				150
130		72		321	33						(165mb)										71		355	37							70		358	39		75					70				130
110		73		321	25																72		357	30							72		342	29		75					72				110
100	523	73																		524	73		346	30						523	70		342	22	525	76				524	74				100
90																					71		343	24							71		339	17		76					74				90
80																					72		332	27							72				(97mb)				(94mb)					80
70																					71									(82mb)													70
60																																													60
	Isothermal. 767 mb - 707 mb 23°					Inversion 1016 mb 42° - 1003 mb 44° 875 · 32° · 840 · · 36°					Inversion 897 mb 30° - 860 mb 32° 710 · 14° · 679 · · 17°				Inversion 1013 mb 38° - 995 mb 41° 870 · 26° · 827 · · 32° 725 · 19° · 703 · · 22° Isothermal 693 - 663 mb 20°					Inversion 1022 mb 32° - 998 mb 38° 834 · · 21° · 785 · · 24° 630 · · 08° · 628 · · 09° 286 · · -78° · 225 · · -74°					Inversion 1020 mb 33° - 986 mb 35° 830 · · 17° · · 811 · · 20° Isothermal. 270 - 255 mb -71°					Inversion 1009 mb 31° - 995 mb 38° 514 · · -14° · 495 · · -13° 287 · · -76° · 225 · · -74° Isothermal. 845 - 818 mb 20° 724 - 691 · · 14°					Inversion 1015 mb 37° - 1000 mb 43° Isothermal. 850 - 800 mb 27°					Inversion 977 mb 41° - 963 mb 42° 918 · · 39° · 883 · · 42° 774 · · 32° · 750 · · 35°					
Tropopause	I 207 mb -84° 37·300					I 207 mb -89° 37·400					I 203 mb -84° 37·800				I 224 mb -94° 35·200					I 236 mb -78° 34·600 I 216 · -76° 36·500					I 221 mb -77° 35·900					I 237 mb -76° 34·500					I 202 mb -85° 38·100					I 222 mb -80° 36·400					Tropopause

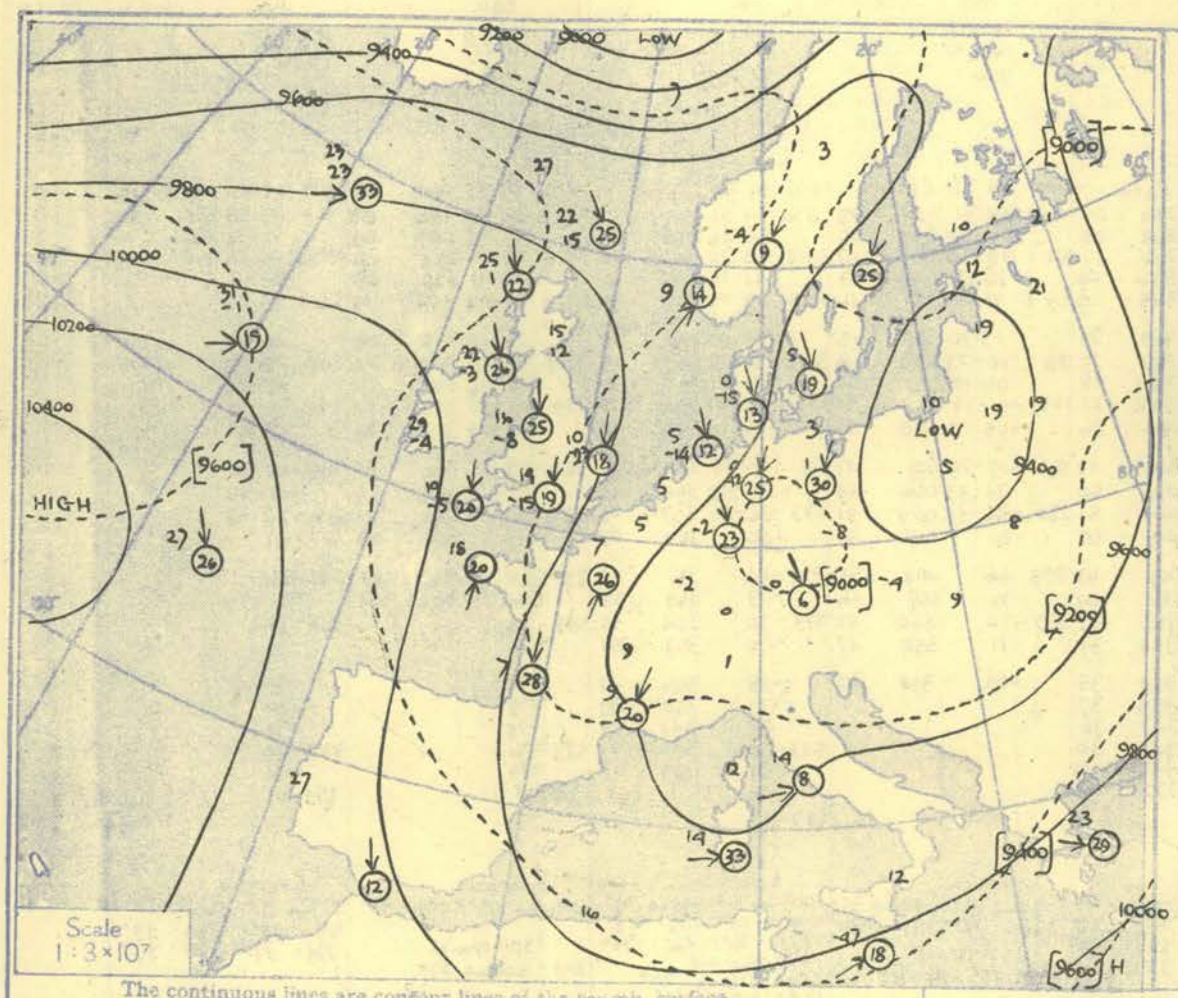
09Z

Station	Time	M.S.L.	Surf	Freezing
LERWICK	09Z G.M.T.	1016·7 mb	1006·4 mb	811 mb
STORNOWAY	09Z G.M.T.	1020·0 mb	1018·3 mb	768 mb
LEUCHARS	09Z G.M.T.	1022·5 mb	1021·6 mb	850 mb
ALDERGROVE	09Z G.M.T.	1024·1 mb	1015·0 mb	823, 868, 775 mb
LIVERPOOL	09Z G.M.T.	1025·9 mb	1023·8 mb	840 mb
DOWNHAM MARKET	09Z G.M.T.	1026·7 mb	1021·9 mb	943 mb
LARKHILL	09Z G.M.T.	1027·2 mb	1010·7 mb	931 mb
CAMBORNE	09Z G.M.T.	1027·9 mb	1016·7 mb	910 mb
	G.M.T.	mb	mb	mb

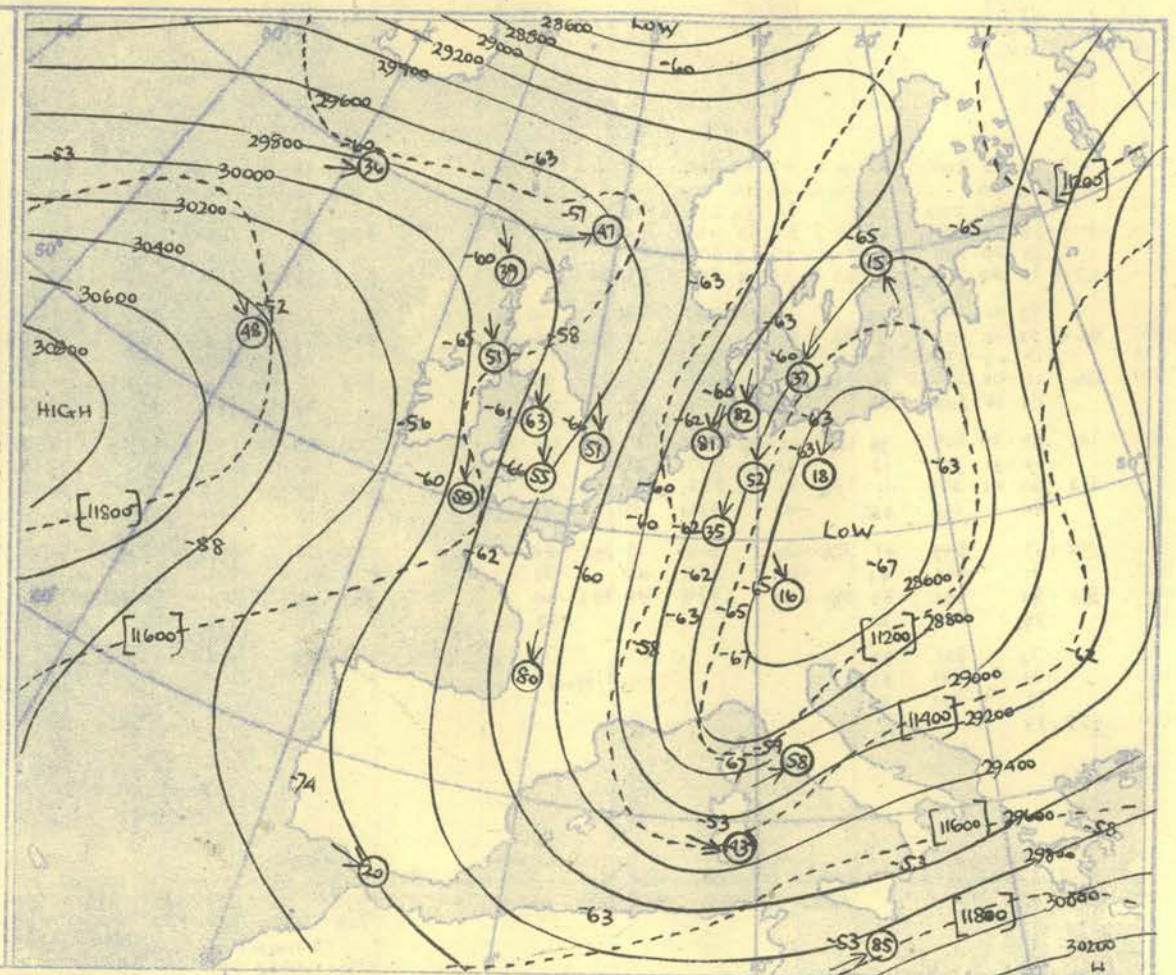
Pressure mb	LERWICK Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	Temp. °F.	Dew °F.	Wind Dir. Vel.	LEUCHARS Height ft./100	Temp. °F.	Dew °F.	Wind Dir. Vel.	ALDERGROVE Height ft./100	Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	LIVERPOOL Height ft./100	Temp. °F.	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		Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Pressure mb
Surf	2·7	42	42	240	07	0·4	42	41			0·2	39	37		2·6	39	32	250	05	0·6	33	31	Calm		1·2	31	31	Calm		4·4	31	30	Calm		2·9	39	37	Calm						Surf
1000	4·4	42	42			5·3	42	41			5·9	39	36		6·6	39	32	300	05	6·8	38	36	270	09	6·9	35	33	267	07	7·0	36	34			4·6	42	36							1000
950		38	37	278	16		39	38				38	34			39	33	306	05		33	30	287	09		33	29	291	08		34	29	296	05		35	31								950
900	32·5	33	31	278	15	33·4	37	32			34·0	38	32		34·7	36	31	310	05	34·6	31	27	287	10	34·7	27	22	333	09	34·9	28	24	308	05	35·1	31	17							900
850		33	27	298	16		39	23				32	27			30	25	310	06		34	25	333	06		21	17	342	12		21	18	326	06		29	01								850
800	63·6	33	19	307	19	64·8	35	17			65·0	28	18		65·7	35	10	320	12	65·5	27	18	008	17	64·9	18	08	345	12	65·2	18	06	353	10	65·8	28	22							800
750		30	16	300	21		30	02				30	18			29	01	337	12		20	14	014	23		13	13	355	13		18	11	001	21		23	12	For							750
700	98·4	23	09	300	22	99·8	28	22			99·7	24	09		101	23	00	002	15	99·7	16	07	010	34	98·6	10	29	002	14	99·1	14	02	360	27	100	22	09							700
650		17	03	303	24		20	20				18	01			16	07	002	18		14	02	008	40		04	16	358	25		08	05	357	29		16	03	winds							650
600	138	09	03	311	25	139	11	17			139	12	05		140	08	16	356	25	139	08	11	013	46	137	03	02	001	33	138	01	09	359	31	139	08	11							600
550		03	10	313	25		02	18				02	13			01	16	356	29		02	18	013	44		05	10	360	37		05	08	006	39		01	20	see							550
500	192	05	25	316	29	184	05	21			184	08	25		184	09	26	002	30	183	11	29	007	44	181	15	22	005	39	182	14	22	003	42	184	09	23	page						500
450		18	38	317	30		17	31				17	34			19	38	352	33		21	40	017	45		25	33	005	40		26	36	005	43		17	38								450
400	235	30	49	325	30	237	30	43			236	30	49		237	30	51	360	38	235	33	50	005	56	233	36	43	002	44	232	38	48	006	50	236	30	46	3.						400
350		45		337	29		43					42				45		350	46		45		008	54		46		021	47		49		012	59		44								350
300	299	59		336	32	301	58				300	59			300	60		348	53	299	61		017	51	296	58		032	55	296	62		012	64	300	59								300
250		76		340	38		75					60				78		348	52		75		019	52		71		026	51		72		008	53		71								250
200	382	86		324	32	384	84				(297mb)									382	77		356	40	380	73		015	49	381	68		006	42	384	77								200
170		75		320	33		79														67		002	39		72		014	40		70		006	38		71								170
150		71		321	33		72														70		004	36		70		007	42		67		002	39		74								150
130		74		314	28		70														71		359	38		68		006	41		72		358	40										130
110		74		317	30		72														72		359	30		72		012	33		74												110
100	524	72				526	75													526	72		359	34	524	72		010	34															100
90							74														71		357	29		72		001	31															90
80							72														70																							80
70																																													70
60																																													60
	Inversion. 850 mb 33° - 824 mb 35° 563 · 02° · 550 · · 03° Isothermal 900 - 850 mb 39°					Inversion 1018 mb 42° - 1007 mb 43° 913 · 36° · 866 · · 40° 728 · 28° · 714 · 30°					Inversion 924 mb 36° - 900 mb 38° 812 · 28° · 758 · 30°				Inversion. 835 mb 28° - 811 mb 36° Isothermal 1015 - 950 mb 39°					Inversion 1024 mb 38° - 1000 mb 38° 914 · 28° · 862 · 36° 714 · 15° · 680 · 17°					Inversion. 1022 mb 31° - 990 mb 37° 837 · 19° · 824 · 20° 650 · 04° · 638 · 05°					Inversion 1010 mb 31° - 994 mb 40° Isothermal. 810 - 734 mb 18°					Inversion 1017 mb 39° - 1005 mb 43° 890 · 29° · 875 · 30° 847 · 28° · 815 · 30° 723 · 20° · 690 · 23°					
Tropopause	I 209 mb -88° 37·300					I 205 mb -85° 38·400					MR				I 214 mb -87° 37·000					I 225 mb -83° 35·800					I 208 mb -77° 37·200					I 235 mb -76° 34·800					I 223 mb -78° 36·200									Tropopause

Wednesday 28th. February 1951.

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



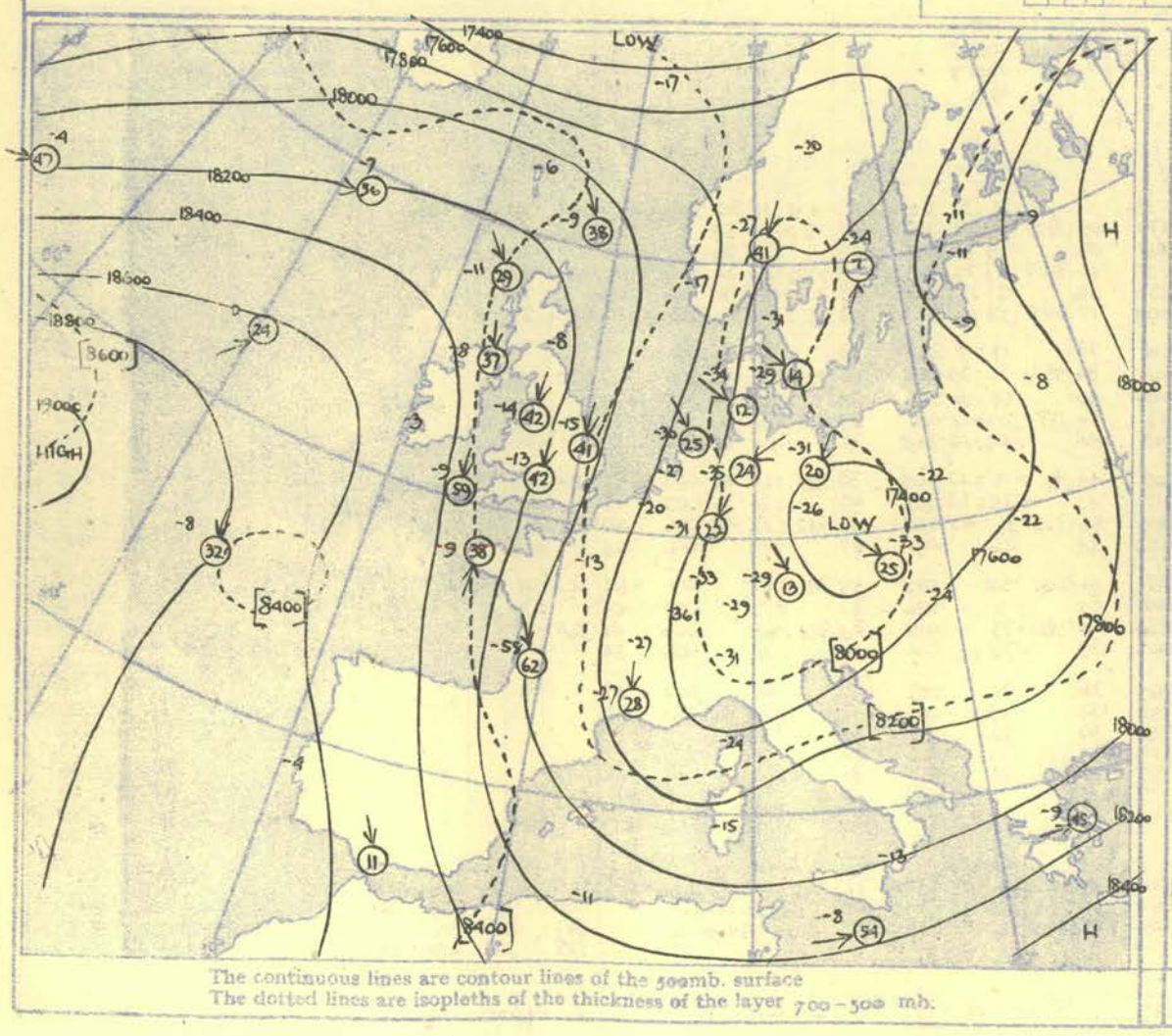
The continuous lines are contour lines of the 700 mb. surface
The dotted lines are isopleths of the thickness of the layer 1000 – 700 mb.



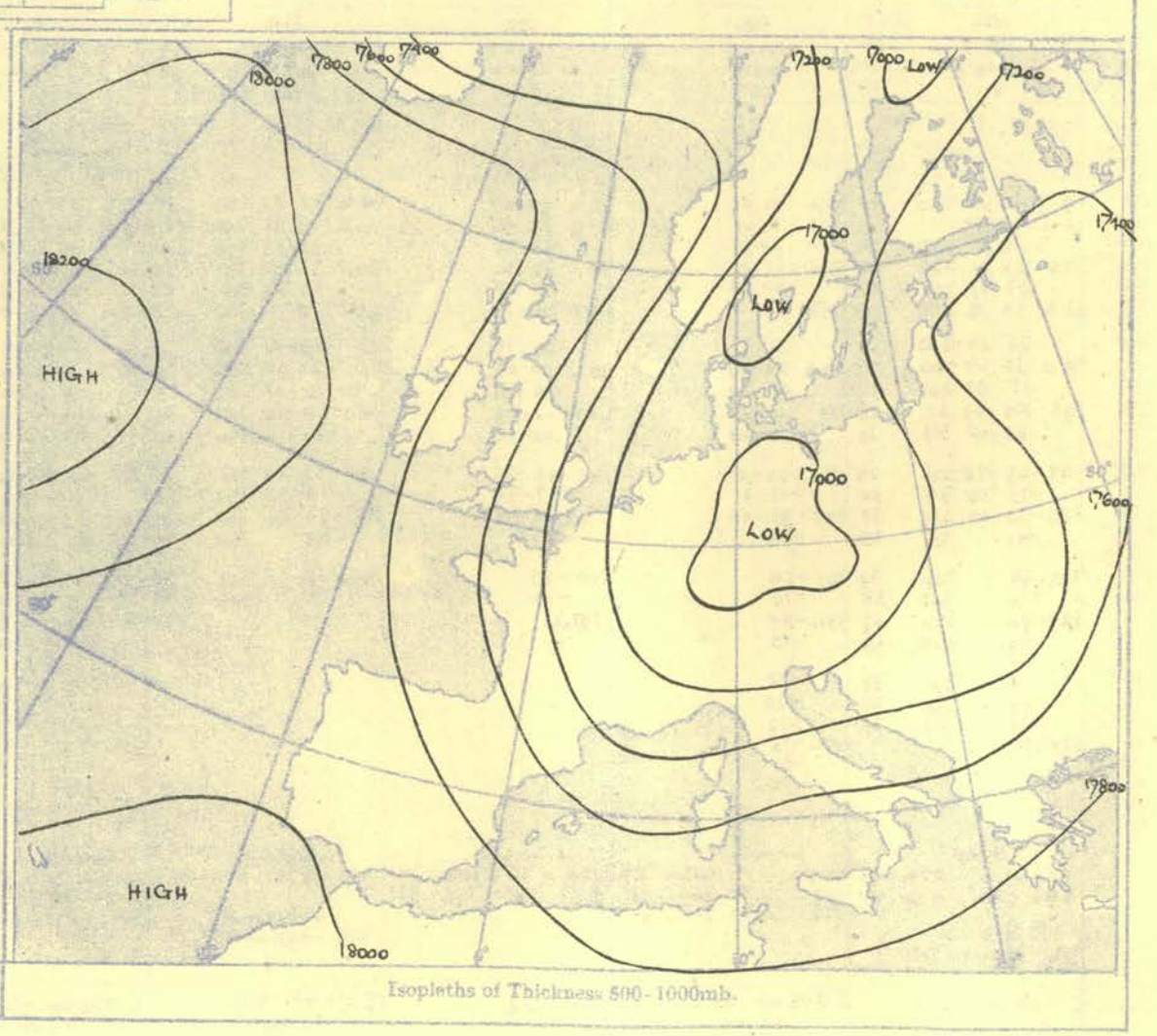
The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 – 300 mb

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

100 60 40 30 20 15 10 knots



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



Isopleths of Thickness 500 - 1000mb.

AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

	48.1N 17.0W			47.6N 12.3W			43.2N 17.0W			39.5N 12.2W			51°17N 00°24W												
Pressure Time	1215h			14h			13h			1430h			1429h												Time
M.S.L.	1022.6 mb			1021.7 mb			1030 mb			1023 mb			1027.3 mb			mb			mb			mb			M.S.L.
Surf	1019.0 mb			1018.1 mb			1020 mb			1020 mb			1015.6 mb			mb			mb			mb			Surf
Freezing	725 mb			730. mb			765 mb			730 mb			940 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	1.0	53	50	1.0	49	48		54	54		49		3.1	44	33										Surf
1000	6.1	51	50	5.9	48	47	8.1	51	51	6.4	49	49	7.2												1000
950		50	50		49	43		47	47		47	25													950
900	34.8	47	47	34.5	42	42		43	43		47	29	349	27	26										900
850		44	41		41	37		42	42		41	26													850
800	66.5	37	37	66.1	37	34		35	35		40	29	65.1	17	08										800
750		34	34		33	27		30	28		34														750
700	102	27	27	101	27	27	103	26		102	27		98.8	09											700
650		22	22		24	24		19			21														650
600	141	15		141	15	-35		14			12		137	01											600
550		-07			07	-45		05			02														550
500	187	-05		187	-06	-41	188	-04		186	-08		181	-13											500
450																									450
400													233	-35											400
350																									350
300													297	-62											300
250																									250
200																									200
170																									170

48.1N 17.0W:
Cloud.
8/8 St
1020-900mb
8/8 As
790-720mb
6/8 As
570-550mb
7/8 Cs
480-NR.

47.6N 12.3W:
Cloud.
3/8 St
1000-1000mb
7/8 Sc
890-850mb
3/8 Cs
480-480mb
Inversion
1000mb 48°-
950- 49°

43.2N 17.0W:
Cloud.
2/8 St
1000-890mb
7/8 St.Cu.
900-810mb
5/8 At Cu
720-710mb
Surf wind.
N.W 11-16kts

39.5N 12.2W:
Cloud.
7/8 St Cu.
970-950mb
2/8 At Cu.
580-540mb
Inversion
950mb 45°-
900- 47°

51°17N 00°24W:
Cloud.
8/8 Sc
870-800mb.

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

Place	Camborne		Shoebury		Collinstown.		Lymphe.		Larkhill		Lerwick										Place
Time	09h		10h		15h		16h		21h		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.	Calm		Calm		130	06	150	02	Calm		260	10									Surf.
1,000	251	03	340	07	200	05	180	05	290	04	250	24									1,000
2,000	245	04	350	08	240	09	280	04	290	08	250	20									2,000
3,000	248	04	360	09	350	07	330	07	290	09	240	17									3,000
4,000	250	04	010	12	270	11	340	12	300	10	230	11									4,000
5,000	303	05	010	15	250	08	350	20	330	10	230	11									5,000
6,000	330	10	010	16	300	04	360	19	010	13	240	12									6,000
8,000	355	16	360	18	340	07	030	15	030	21	240	15									8,000
10,000	004	25	360	17	340	11	010	18	030	24	240	18									10,000
14,000	007	32	010	30	010	14			030	34	240	21									14,000
18,000	001	39	010	35					030	42	260	16									18,000
24,000	004	49	010	37					020	44	250	16									24,000
30,000	002	53	020	51					020	50	260	05									30,000
40,000	356	45	010	47					360	45	310	21									40,000
50,000	356	37	010	37					360	48	330	30									50,000
	(45.000)		010	30					360	35	340	27									
			(53.000)						(54.000)		(55.000)										

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				
Lat/Long	59N 19.1W					59.2N 19.2W				
Pressure Time	03h G.M.T.					09h G.M.T.				
M.S.L.	1013 mb					1009 mb				
Surf	1012 mb					1009 mb				
Freezing	790 mb					750 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
Surf		46	44	190	18		45	45	190	28
1000	3.5	45	42	201	20	2.5	44	42	188	22
950		48	24	212	24		50	-18	195	33
900	31.9	44	22	230	25	310	47	-06	200	33
850		37	21	234	27		40	34	209	31
800	63.1	33	30	243	29	62.4	36	29	210	33
750		28	28	261	30		33	21	210	36
700	97.9	23	23	264	33	97.4	25	09	210	35
650		17	17	263	30		21	06	207	36
600	137	10	09	258	37	137	12	-01	208	32
550		03	-01	259	34		06	-02	209	27
500	182	-09	-11	254	36	182	-02	-07	210	29
450		-18	-22	249	36		-12	-18	210	30
400	234	-31	-36	257	39	235	-23	-30	210	33
350		-44		253	31	(395	-25			
300	298	-60		257	36	mb)				
250		-76								
200	(223	-81								
170	mb)									
150										
130										
110										
100										
90										
80										
70										
60										
Tropopause	N.R.					N.R				

59N 19.1W, 03h:
Inversion
990 mb 44°- 970mb 48°
Isothermal
970- 929mb 48°
824- 808 .. 34°

59.2N 19.2W, 09h:
Inversion
985mb 43°- 962mb 51°
Isothermal
790- 762mb 35°

Ship	Weather observer					Weather Observer				
Lat/Long	59.0N 19.2W					59.0N 19.2W				
Pressure Time	15h G.M.T.					21h G.M.T.				
M.S.L.	1004 mb					1001 mb				
Surf	1004 mb					1001 mb				
Freezing	740 mb					mb				
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots
Surf		48	46	200	28		48	48	218	28
1000	1.1	48	47			0.2				
950		46	46	202	37		45	45	228	41
900	29.7	46	46	210	38	28.7	44	44	233	43
850		43	40	220	44		40	40	234	42
800	61.3	38	34	227	45	60.0	36	29	233	39
750		33	29	227	40		29	21	232	44
700	96.5	28	21	228	42	94.9	25	11	231	49
650		21	14	230	42		18	-04	232	45
600	136	16	05	225	41	134	10	-15	231	44
550		08	-04	222	43		05	-25	231	52
500	182	-01	-19	230	45	179	-06	-41	231	52
450		-11	-27	229	48		-15	-56	232	53
400	235	-23	-40	227	38	232	-27	-59	236	57
350		-36	-51	231	36					
300	300	-50		234	45					
250		-65		227	44					
200	385	-70		228	38					
170		-65		234	34					
150		-65		252	36					
130		-65		273	40					
110		-64		267	36					
100	531	-65		254	35					
90		-66		249	31					
80		-68		263	31					
70		-68		275	39					
60		-68		280	22					
	(053	-68								
	mb)									
Tropopause	II 229 mb-69° 35,800'					N.R.				

59.0N 19.2W, 15h:
Isothermal
975-888 mb 46°

59.0N 19.2W, 21h:
Isothermal
712- 695 mb 25°
550- 546 .. 5°

Ship	Weather Watcher					Weather Watcher				
Lat/Long	52.4N 19.8W					52.6N 19.8W				
Pressure Time	03h G.M.T.					09h G.M.T.				
M.S.L.	1021 mb					1019 mb				
Surf	1021 mb					1019 mb				
Freezing	710 mb					710 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
Surf		45	45	170	08		49	49	190	15
1000	5.4	47	46	177	06	5.0	50	50	192	17
950		51	47	180	10		52	52	198	18
900	34.1	49	26	190	10	33.8	50	50	204	18
850		48	14	208	09		46	45	214	19
800	66.0	40	25	226	14	65.7	41	40	223	21
750		36	14	236	16		38	34	229	21
700	10.1	31	-01	250	19	10.1	31	29	238	20
650		25	-16	246	19		23	21	245	22
600	141	18	-22	229	21	141	17	04	260	25
550		10	-23	227	23		09	-09	271	25
500	187	00	-21	219	24	186	00	-20	287	31
450		-10	-19	222	22		-12	-28	266	57
400	240	-23	-32	238	19	240	-23	-40	279	51
350		-35	-49	253	30		-37	-54	291	49
300	305	-52		275	48	304	-54		301	60
250	(252	-69					-72		305	67
200	mb)					388	-85		309	51
170							-77		309	41
150							-76		309	39
130							-75		311	35
110							-74		302	30
100						530	-76		290	27
90							-78		284	24
80							-80		284	21
70							-82		284	15
60						(062	-81			
						mb)				
Tropopause	N.R.					I 209 mb-87° 37,900'				

52.4N 19.8W, 03h:
Inversion
1021 mb 45°- 975mb 51°
Isothermal
975 - 939 mb 51°
918 - 890 .. 49°
860 - 850 .. 48°

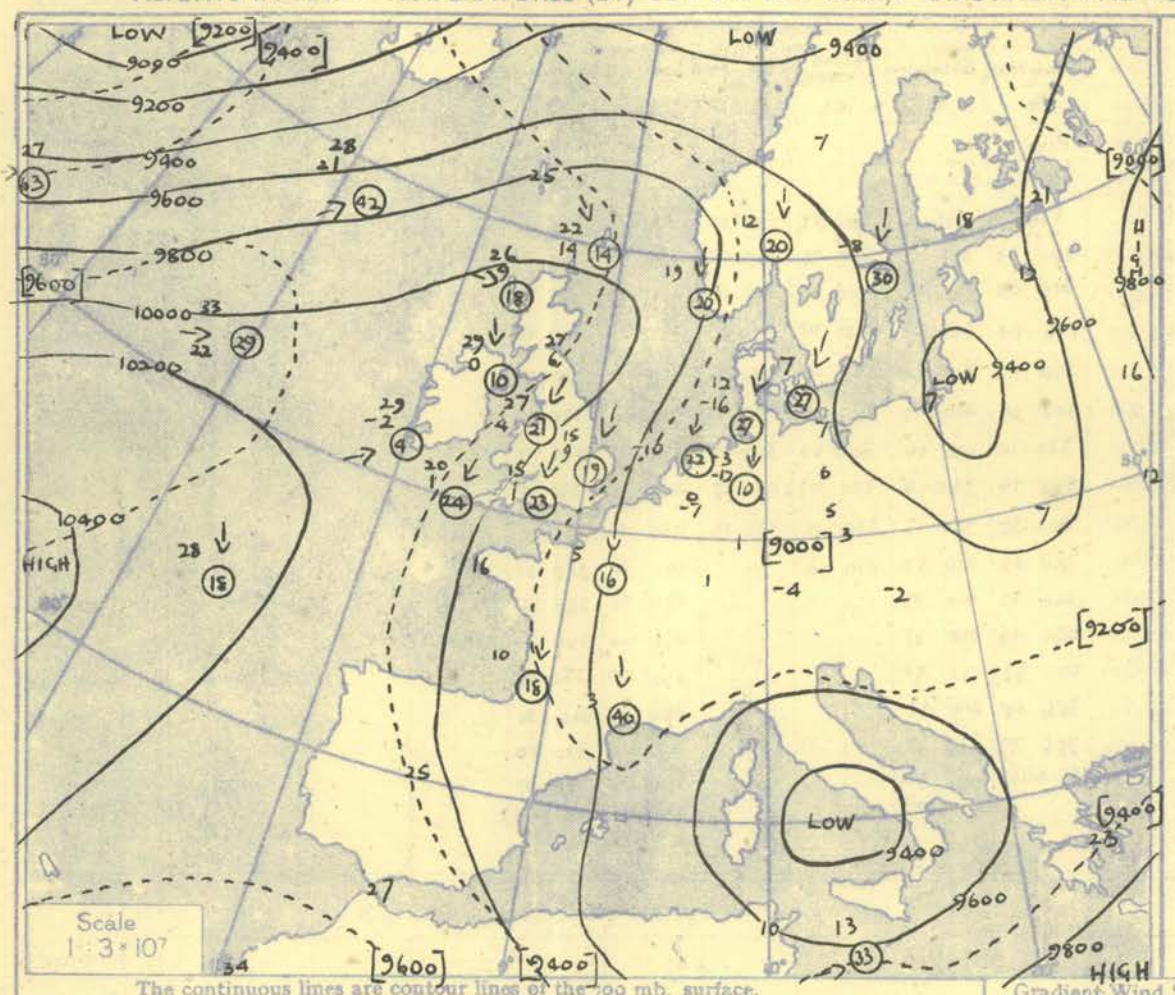
52.6N 19.8W, 09h:
Inversion
1019 mb 49°- 950 mb 52°

Ship	Weather Watcher					Weather Watcher									
Lat/Long	52.5N 19.3W					52.6N 19.7W									
Pressure Time	15h G.M.T.					21h G.M.T.					G.M.T.				
M.S.L.	1017 mb					1016 mb					mb				
Surf	1017 mb					1016 mb					mb				
Freezing	690 mb					mb					mb				
Pressure mb	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	Dew °F.	Wind Dir. °	Wind Vel. knots	Height ft./100	°Temp. °F.	°F.	Wind Dir. °	Wind Vel. knots
Surf		60	50	230	15		51	50	250	18					
1000	4.6	60	50	230	15	4.2	51	60	252	18					
950		51	51	233	17		52	62	257	21					
900	33.4	53	46	240	19	33.0	49	48	269	27					
850		49	40	246	19		45	43	286	28					
800	65.4	43	28	251	20	64.8	39	35	287	25					
750		41	26	257	24		33	31	293	25					
700	10.1	33	22	263	29	10.0	30	28	288	30					
650		24	17	265	33		24	21	283	35					
600	141	17	10	265	34	140	18	14	265	38					
550		12	06	265	42		10	05	254	36					
500	187	04	-07	266	51	186	02	-04	258	38					
450		-07	-18	262	41		-10	-18	265	40					
400	241	-18	-29	270	39	239	-21	-30	261	43					
350		-33	-43	278	42		-35	-45	253	47					
300	306	-50		282	45	304	-53		254	51					
250		-67		282	57		-71		242	49					
200	391	-81		300	80	388	-81		261	42					
170		-68		286	42		-76		284	42					
150		-68		272	29		-74		295	39					
130		-68		279	23		-75		299	35					
110		-72		291	22		-77								
100	534	-71		287	20	530	-79								
90		-71		276	17		-80								
80		-74		289	15		-81								
70		-72		227	15										
60		-72		325	14										
Tropopause	I 180 mb-84° 41,200'					II 206mb-81° 38,300'									

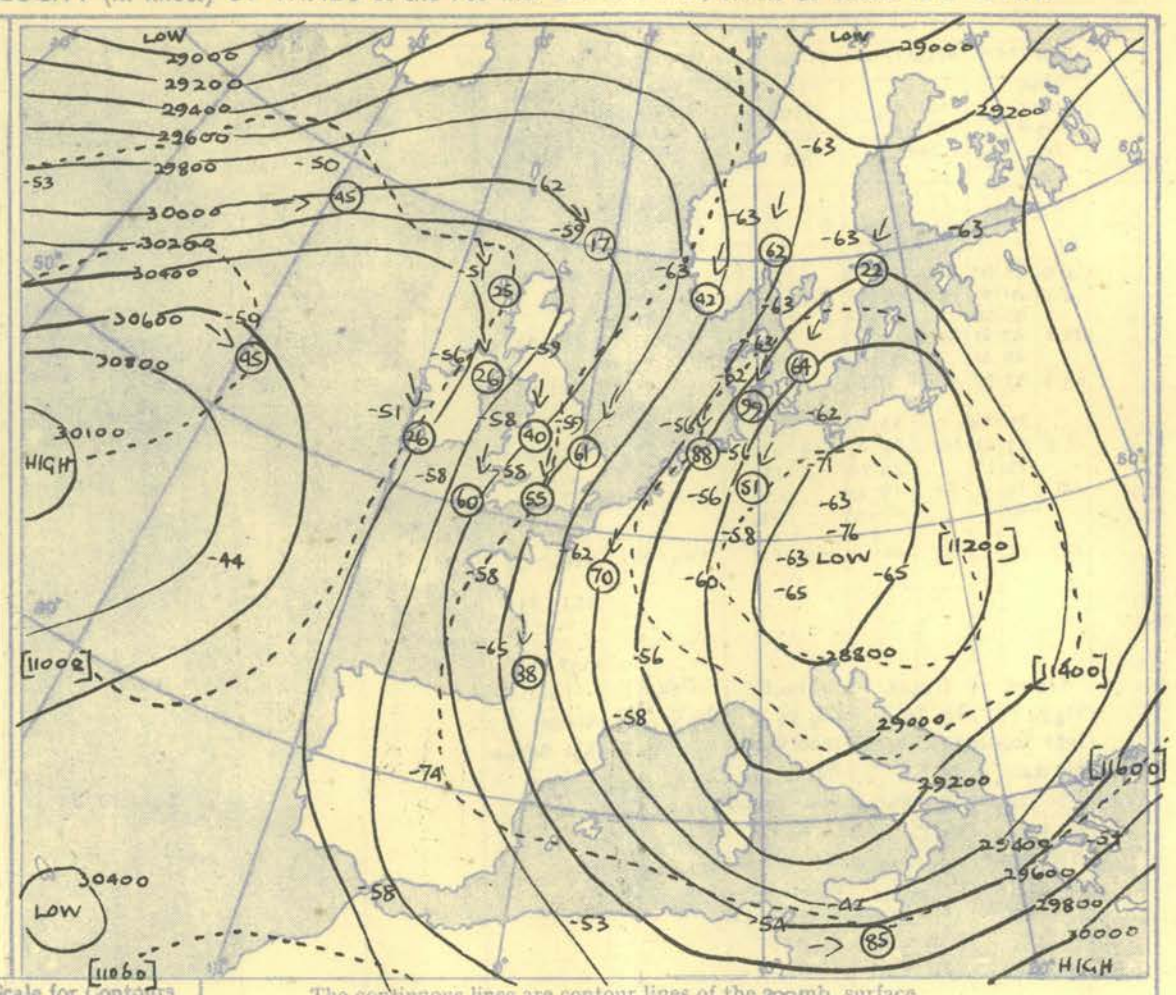
52.5N 19.3W, 15h:
Inversion
950 mb 51°- 921mb 55°
566 .. 11°- 555 .. 13°
Isothermal
1017- 1000 mb 50°
783 - 760 .. 41°

Wednesday 28th February, 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

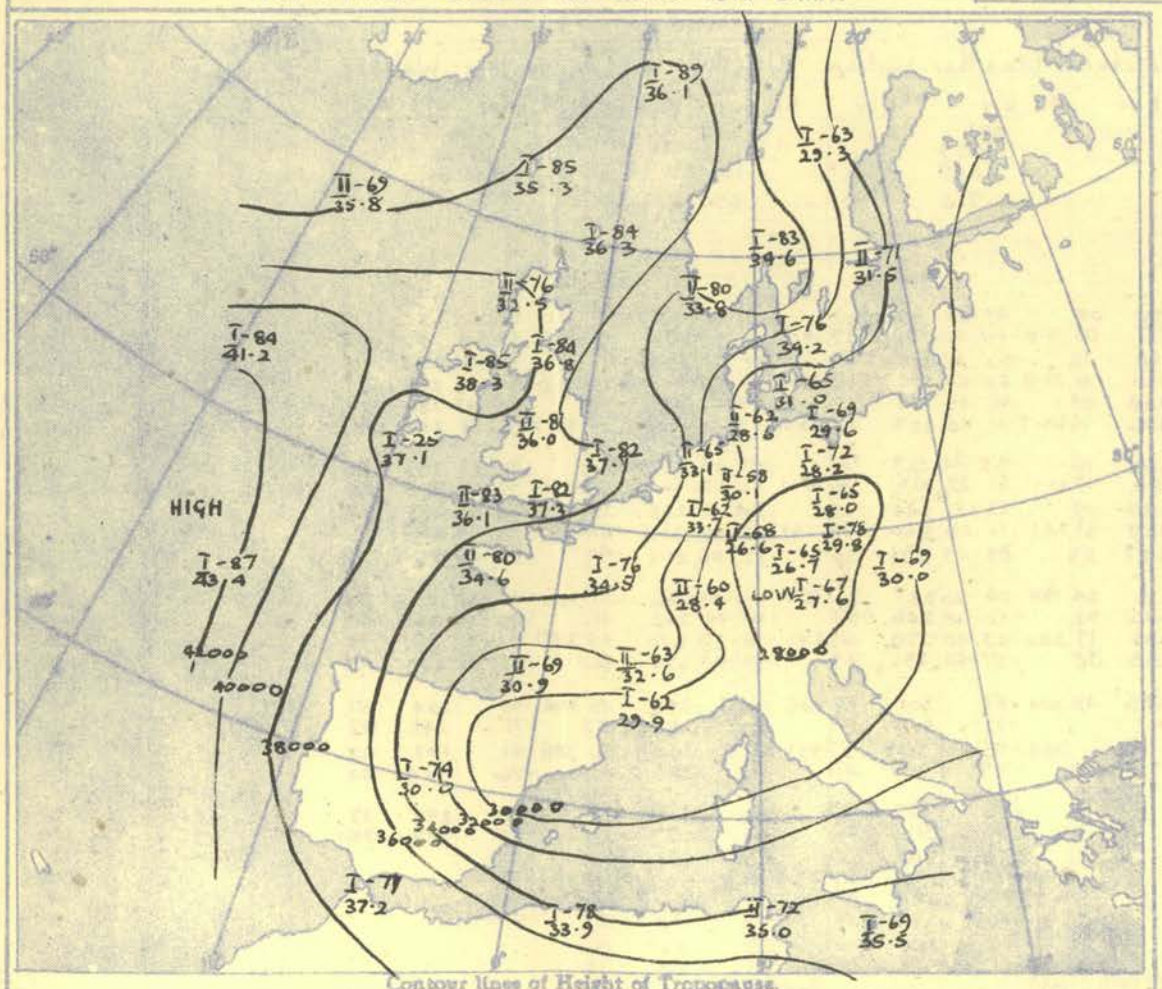


The continuous lines are contour lines of the 300 mb. surface
The dotted lines are isopleths of the thickness of the layer 500 - 300 mb.

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.

Pronounced cooling occurred southwards from Davis Straits in the rear of the depression south of Greenland; otherwise little material change.

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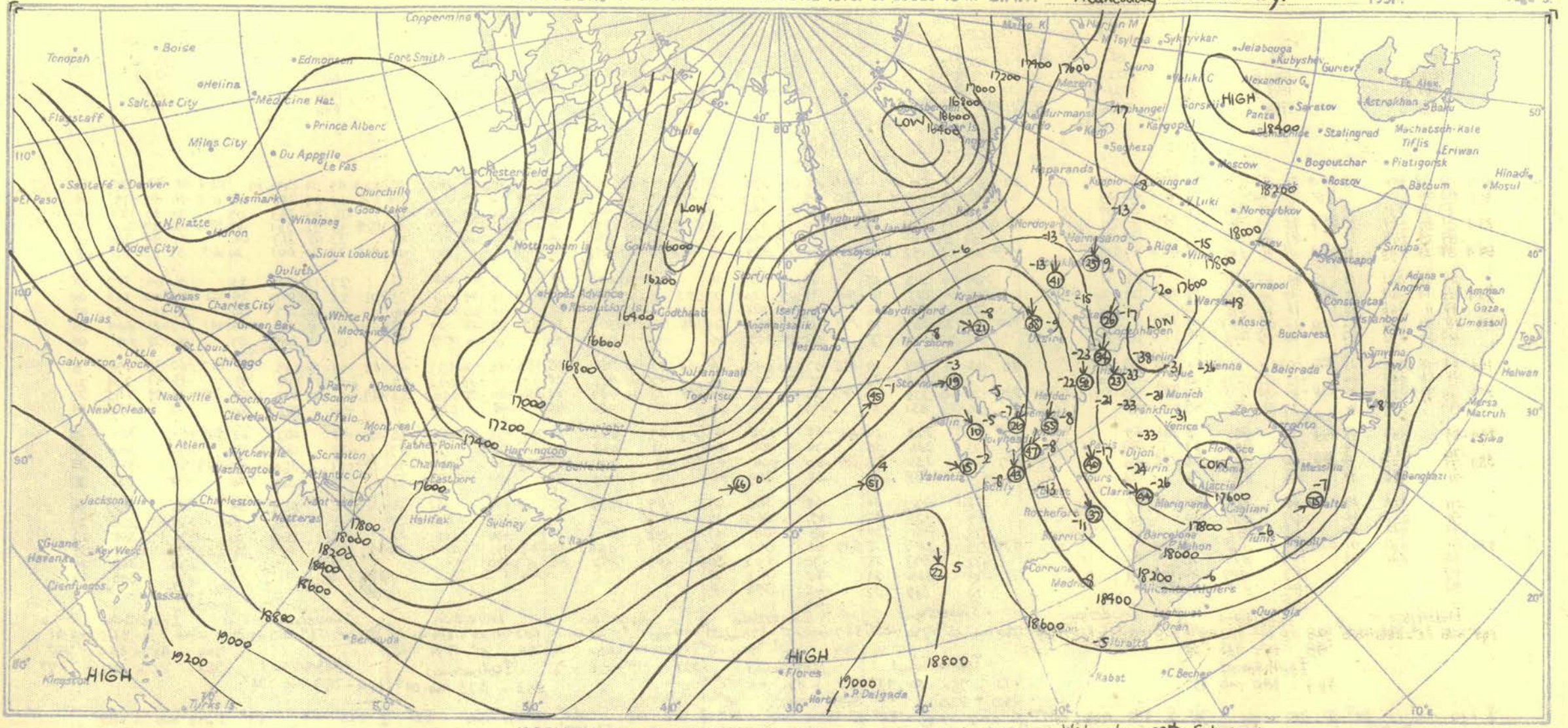
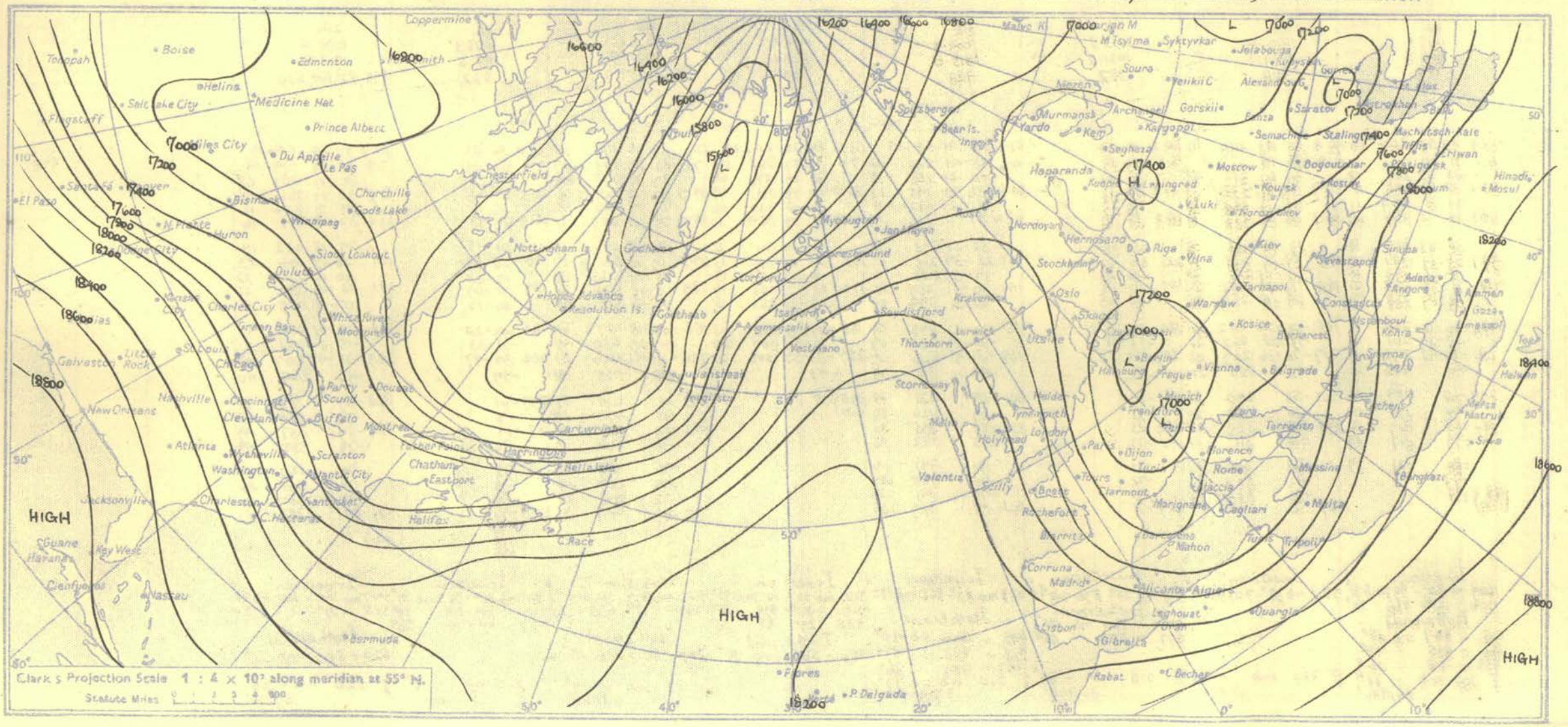
Meteorological Office, Air Ministry, Kingsway, London, W.C.2
Nelson K. Johnson, K.C.B., D.Sc., Director.

CONTOURS of the 500 mb. PRESSURE level at about 15 h. G.M.T. Wednesday 28th February. 1951.



ISOPLETHS OF THICKNESS 500-1000 mb. at about 15 h. G.M.T. Wednesday 28th. February 1951.



DAILY AEROLOGICAL RECORD OF THE METEOROLOGICAL OFFICE, LONDON. Wednesday 28th February 1951.

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

15h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.	15h G.M.T.
Pressure: M.S.L.	1018·9 mb	1020·5 mb	1022·6 mb	1024·2 mb	1025·9 mb	1028·9 mb	1026·7 mb	1027·8 mb	1025·3 mb
Pressure: Surf	1008·8 mb	1018·8 mb	1021·7 mb	1014·8 mb	1023·7 mb	1021·3 mb	1010·3 mb	1016·9 mb	1024 mb
Pressure: Freezing	781 mb	769 mb	740 mb	845 , 739 mb	829 mb	911 mb	905 mb	820 mb	720 mb

Pressure mb	LERWICK Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	STORNOWAY Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	LEUCHARS Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·7	45	42	260	09	00·4	46	42	230	05	00·2	51	42		
1000	5·1	43	40			5·5	43	40	230	15	6·1	46	39		
950		37	36	271	11		39	34	235	15		39	34		
900	33·1	33	30	287	10	33·8	35	29	236	15	34·3	37	31		
850		37	24	290	11		41	23	239	13		38	26		
800	64·4	34	23	293	14	65·3	35	11	228	15	65·6	37	15		
750		29	20	301	14		30	07	251	16		33	11		
700	99·1	22	14	304	14	100	26	09	274	18	101	27	06		
650		17	11	298	19		18	09	278	20		19	-01		
600	138	10	05	293	22	140	12	04	267	19	140	11	-06		
550		02	-06	293	22		05	-03	262	18		03	-23		
500	183	-08	-15	302	21	185	-03	-11	270	19	185	-08	-38		
450		-18	-26	303	20		-12	-22	276	18		-16	-50		
400	236	-30	-39	300	20	238	-24	-34	275	20	238	-30	-57		
350		-45		296	16		-37	-48	279	23		-43			
300	299	-59		302	17	303	-51		296	25	301	-59			
250		-76		318	14		-69		304	27		-77			
200	383	-78		325	28	388	-76		308	29	385	-80			
170		-71		326	28		-66		315	26		-72			
150		-71		328	34		-65		327	29		-69			
130		-71		322	32		-64		323	30		-68			
110		-72		322	30		-65		312	30		-71			
100	526	-71		321	41	533	-66		316	32	528	-71			
90		-65		321	34		-67		322	29		-71			
80		-67					-67		307	26	(86 mb)				
70		-68					-66		318	89					
60							-65								
	Inversion 895 mb 22°-866 mb 38°					Inversion 940 mb 39°-900 mb 35° 740 " 29°-725 " 30° Isothermal 967 - 940 mb 39°					Inversion 930 mb 37°-825 mb 39°				
Tropopause	I 220 mb - 84° 36,300'					II 212 mb - 76° 37,500'					I 216 mb - 84° 36,800'				

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	LARKHILL Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	CAMBORNE Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots	VALENTIA Height ft./100	°Temp. °F.	°Dew °F.	Wind Dir. °	Wind Vel. knots
Surf	02·6	49	40	CALM		00·6	48	34	270	05	01·2	44	38	190	08	04·4	47	34	280	03	02·9	47	36	CALM		02·3	48	43	180	13
1000	6·6	48	39	L. V.		7·0	44	32	277	09	6·9	41	35			7·1	46	34	260	04	7·4	44	34	285	07	6·8	45	41	179	14
950		43	34	212	06		36	27	284	09		37	31	270	08		39	29	265	06		36	29	283	07		39	37	186	13
900	35·0	38	29	226	06	34·9	30	24	322	06	34·9	31	26	298	09	35·2	31	22	275	09	35·4	30	26	221	07	35·0	40	37	201	10
850		33	28	255	10		32	27	046	09		23	19	305	10		23	16	308	10		33	08	317	06		41	34	289	09
800	66·0	28	03	292	12	65·7	30	23	352	06	68·3	18	10	342	08	65·7	23	11	354	10	66·3	28	20	001	20	66·5	37	33	271	08
750		34	00	313	09		27	17	007	16		18	-03	003	12		21	02	008	17		27	12	006	23		36	04	252	05
700	101	29	00	331	10	100	27	04	020	27	99·2	15	09	013	19	99·9	15	04	016	23	101	22	01	010	24	102	29	-02	229	04
650		22	-08	334	15		19	-04	028	30		11	03	010	31		11	00	025	26		17	-04	012	30		24	-16	205	02
600	140	14	-20	327	14	140	10	-08	032	29	138	05	-08	018	37	139	05	-08	030	33	140	11	-10	013	33	141	17	-21	244	05
550		05	-27	340	13		03	-19	039	24		-01	-12	029	45		01	-16	029	41		01	-19	009	37		08	-28	309	09
500	186	-05	-21	353	10	185	-07	-30	042	26	183	-08	-20	031	55	183	-08	-26	033	47	185	-08	-28	009	43	187	-02	-35	294	15
450		-12	-32	354	12		-18	-41	041	26		-19	-31	032	58		-19	-38	042	53		-17	-37	018	49		-13	-41	294	21
400	239	-25	-40	338	15	237	-30	-51	021	29	235	-33	-46	037	63	236	-36	-48	040	53	237	-30	-48	010	49	240	-23	-44	295	21
350		-39	-53	331	21		-43		016	33		-47		036	62		-44		027	51		-43		005	50		-35		299	24
300	304	-56		328	26	301	-58		008	40	298	-59		022	61	299	-58		019	55	301	-58		002	62	305	-51		310	26
250		-73		336	33		-74		002	40		-73		013	59		-73		020	57		-75		007	57		-70		311	31
200	887	-84		336	32	384	-80		004	41	382	-78		007	95	383	-78		010	96	384	-81		360	45	389	-83		321	38
170		-78		388	31		-68		351	36		-70		005	39		-70		359	37		-74		360	40		-79		331	38
150		-72		339	31		-68		360	33		-69		005	35		-70		358	35		-73		359	39		-71		339	36
130		-69		338	32		-69		360	32		-69		003	36		-71		003	35		-73		356	34		-74		350	29
110		-72		341	34		-68		001	27		-72		009	31		-70		005	32		-73		360	30		-71		348	27
100	530	-72		342	28	529	-68		348	26	526	-71		359	29	527	-70		004	27	527	-72		004	28	532	-73		348	28
90		-72		343	28		-70		002	30		-69		348	30	(25 mb)	-70					-74					-74		346	29
80		-73		336	29		-68		352	23											(85 mb)	-75					-77		345	27
70		-73		339	32		-68		345	21																(76 mb)	-76			
60							-67																							
	Inversion 780 mb 25°-770 mb 36° Isothermal 973 - 950 mb 43° 540 - 530 " 02°					Inversion 887 mb 29°-870 mb 34° 760 " -27°-740 " -28° Isothermal 850 - 829 mb 32° 564 - 548 " 08°					Inversion 800 mb 18°-763 mb 20° 720 " 14°-680 " 16° 228 " -79°-225 -78°					Inversion 842 mb 22°-814 mb 24° 788 " 21°-774 " 23° Isothermal 593 - 573 mb 04°					Inversion 882 mb 28°-857 mb 34° Isothermal 800 - 759 mb 28°					Inversion 950 mb 39°-923 mb 41° 900 " 40°-850 " 41° 783 " 35°-757 " 37°				
Tropopause	I 202 mb - 85° 38,300'					II 224 mb - 81° 36,000'					I 212 mb - 82° 37,100'					I 211 mb - 82° 37,300'					I 225 mb - 83° 36,100'					I 217 mb - 85° 37,100'				

21h G.M.T.

Station	LERWICK	STORNOWAY	LEUCHARS	ALDERGROVE	LIVERPOOL	DOWNHAM MARKET	LARKHILL	CAMBORNE	VALENTIA
Pressure: Time	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	21h G.M.T.	G.M.T.
Pressure: M.S.L.	1019·6 mb	1019·0 mb	1022·8 mb	1024·4 mb	1026·7 mb	1026·6 mb	1028·3 mb	1028·4 mb	mb
Pressure: Surf	1009·3 mb	1011·4 mb	1021·9 mb	1015·0 mb	1024·6 mb	1021·9 mb	1011·5 mb	1017·4 mb	mb
Pressure: Freezing	787 mb	750 mb	752 mb	740 mb	764 mb	914 mb	922 mb	895, 877, 800, 820 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	02·7	40	40	220	09	00·4	45	43	200	10	00·2	41	40			02·6	45	41	CALM		00·6	36	34	CALM		01·2	37	34	170	05	04·4	36	33			02·9	39	34	CALM						
1000	5·1	41	41			5·4	44	41			5·8	40	39			6·6	45	41	232	12	7·0	41	37	268	06	7·0	42	37	243	07	7·4	38	34			7·5	43	37	250	06					
950		38	35	228	15		39	30	212	23		38	37				40	38	238	12		36	29	276	06		37	31	275	09		35	30				38	31	257	08					
900	33·1	35	28	248	11	33·7	46	31	229	24	33·8	38	32			34·8	36	35	245	12	35·0	34	28	311	07	34·9	30	25	301	06	35·3	29	26			35·6	33	29	286	07					
850		40	18	267	11		43	17	233	21		40	22				41	10	232	11		30	28	330	06		27	14	332	05		26	10				34	21	354	12					
800	64·3	34	12	266	09	65·3	38	08	238	18	65·2	35	16			66·0	37	-11	228	09	65·9	31	19	354	10	65·4	25	14	009	11	65·9	27	13			66·6	32	25	014	16					
750		28	-02	249	10		32	-05	243	20		32	09				33	-31	238	10		30	04	011	12		22	15	021	19		21	13				29	15	023	19					
700	99·1	25	-37	241	11	100	27	-09	248	22	100	26	01			101	28	-34	268	09	101	24	00	019	13	99·7	19	10	031	27	100	20	04			101	26	09	024	22					
650		18	06	253	15		19	-01	258	24		20	-03				19	-39	282	11		16	-05	004	15		15	-03	035	33		15	-03				20	00	029	22					
600	138	11	-05	258	21	140	12	-14	262	25	139	10	-03			141	10	-41	289	13	140	08	-12	003	16	139	08	-18	028	38	139	08	-09			141	13	-07	032	22					
550		03	-07	258	21		04	-15	262	28		04	-05				00	-31	294	09		02	-22	351	15		01	-15	018	44		00	-17				07	-18	039	18					
500	188	-06	-18	255	17	185	-06	-30	262	21	184	-04	-15			185	-09	-27	298	09	185	-07	-34	015	13	183	-07	-18	027	51	184	-09	-25			186	-04	-28	040	17					
450		-18	-29	261	16		-18	-28	262	26		-17	-28				-26	-39	298	07		-19	-44	007	29		-19	-29	030	49		-21	-33				-15	-37	021	21					
400	236	-30	-43	270	17	237	-28	-36	267	22	231	-29	-37			238	-31	-41	306	15	237	-33	-55	003	21	236	-31	-41	026	51	236	-34	-47			239	-28	-49	007	27					
350		-46		270	18		-42		286	24		-42					-44		330	19		-48					-45		024	48		-49					-42		004	40					
300	299	-60		264	12	301	-58		290	22	301	-59				301	-59		328	24	325 mb	-55				299	-61		024	57	299	-61				303	-59		352	45					
250		-76		285	07		-76		285	24		-73					-77		326	26							-75		022	55		-75					-76		359	55					
200	382	-84		317	18	384	-78		309	25	384	-83				384	-83		355	30						382	-82		013	53	381	-84				386	-87		351	49					
170		-79		317	23		-75		311	21		-77					-75		342	30							-72		006	39		-76					-79		355	44					
150		-80		321	27		-73		305	27		-73					-74		341	26							-70		008	40		-75					-74		002	41					
130		-77					-72		322	31		-72					-74		338	34							-74		007	41		-73					-74		005	36					
110	(128 mb)	-77					-74		322	32		-73					-75		341	36							-72		006	35		-76					-75		357	31					
100						527	-73				527	-71				526	-78		337	36						525	-72		007	36	523	-76				527	-76		358	23					
90																											-75					-76												
80																																-75				(92 mb)	-77							
70																																												
60																																												
	Inversion 1009 mb 40°-997 mb 41° 900 " 35°-866 " 40° Isothermal 915 - 897 mb 35° 866 - 845 " 40° 334 - 718 " 26°					Inversion 932 mb 38°-903 mb 76°					Inversion 919 mb 35°-876 mb 43° Isothermal 781 - 760 mb 33° 577 - 555 " 05°					Inversion 863 mb 33°-858 mb 42° Isothermal 1015 - 1000 mb 45° 923 - 903 " 37° 797 - 787 " 36°					Inversion 1035 mb 36°-1017 mb 42° 919 " 32°-890 " 35° 838 " 29°-765 " 32° Isothermal 580 - 564 mb 09°					Inversion 1022 mb 37°-1000 mb 42° 910 " 18°-695 " 20° Isothermal 830 - 800 mb 25°					Inversion 1011 mb 36°-985 mb 39° 869 " 25°-815 " 29° 732 " 19°-700 " 20° Isothermal 820 - 800 mb 32°					Inversion 1017 mb 30°-1000 mb 43° 885 " 31°-858 " 35° Isothermal 820 - 800 mb 32°				
Tropopause	I 209 mb - 88° 37,400'					II 232 mb - 83° 35,500'					II 218 mb - 83° 36,700'					I 214 mb - 77° 37,000'					NR.					I 211 mb - 86° 37,300'					I 212 mb - 88° 37,000'					I 226 mb - 85° 36,200'				

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