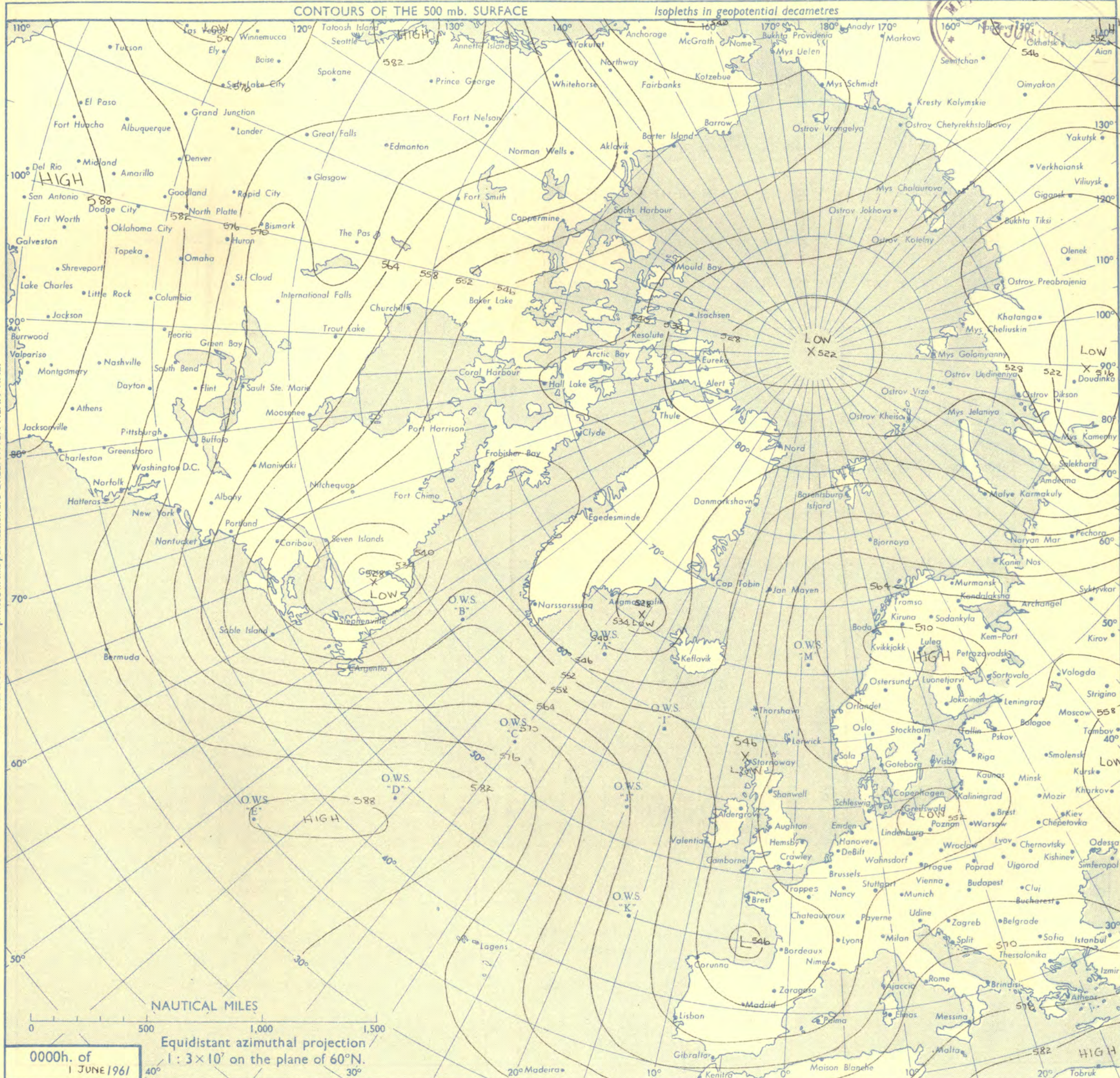


CONTOURS OF THE 500 mb. SURFACE

Isopleths in geopotential decametres

All times of observation printed in this publication are GREENWICH MEAN TIME.





STATION	YYGGgg	SURFACE			1000mb			850mb			700mb			500mb			400mb			300mb			200mb			150mb			100mb			70mb			50mb			30mb						
		gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C							
LERWICK 03005	312335	082	05	05	070	++	++	1398	06	04	2970	02	05	5568	19	26	7194	31	39	9178	45	++	11826	47	13732	46	16413	49	18750	51														
	011130	082	09	08	050	++	++	1384	06	04	2952	02	05	5543	18	26	7173	30	38	9153	46	++	11820	46	13736	44	16429	48	18768	49	20962	51												
STORNOWAY 03026	312330	013	04	03	101	07	02	1420	01	08	2949	07	14	5493	20	29	7114	31	41	9087	46	++	11785	45	13703	46	16396	48	18736	50	20931	50												
	011130	013	11	05	086	09	05	1404	02	03	2936	07	17	5468	24	37	7076	31	46	9055	44	++	11765	44	13682	46	16367	49	18686	52	20369	51												
SHANWELL 03170	312330	005	06	05	081	08	05	1406	01	03	2948	04	07	5528	19	22	7144	31	35	9117	47	++	11761	47	13670	46	16345	50	18671	49														
	011130	005	16	05	067	13	03	1402	01	03	2953	04	16	5536	20	28	7150	32	38	9110	48	++	11760	47	13678	46	16359	50	18679	51	20857	53	24160	50										
ALDERGROVE 03917	312300	077	07	05	093	07	05	1420	02	11	2959	08	27	5517	20	29	7134	32	41	9098	48	++	11767	46	13681	47	16365	48	18697	51	20885	51												
	011130	077	13	08	089	13	08	1420	01	01	2964	04	14	5542	21	32	7157	32	42	9114	49	++	11783	46	13705	46	16392	49	18721	50														
AUGHTON 03322	312330	056	08	03	068	09	04	1401	02	01	2940	03	17	5532	19	26	7153	32	36	9124	47	++	11785	47	13691	46	16387	48	18720	50	20924	51												
	011225	056	13	07	066	13	07	1399	01	03	2953	02	10	5548	19	27	7168	31	40	9136	49	++	11791	45	13712	46	16412	46	18760	50														
HEMSBY 03496	312330	012	09	09	017	09	08	1357	07	05	2924	04	06	5498	21	31	7100	35	43	9034	52	++	11686	47	13592	47																		
	011134	012	11	11	006	++	++	1357	07	05	2933	02	07	5539	17	30	7174	29	43	9161	47	++	11827	43	13759	44																		
CRAWLEY 03774	312330	144	08	04	030	++	++	1359	04	02	2927	01	19	5525	18	25	7156	30	39	9129	48	++	11760	47	13676	45	16354	49	18671	53	20850	51	24169	51										
	011135	144	09	07	033	++	++	1380	04	02	2929	04	09	5520	18	31	7146	30	38	9121	47	++	11765	47	13686	45	16390	46	18729	50														
CAMBORNE 03808	312330	088	11	08	043	++	++	1385	03	02	2932	04	16	5513	19	28	7133	32	41	9088	50	++	11740	47	13650	46	16340	49	18670	51	20863	50												
	011130	088	11	09	075	++	++	1407	03	03	2953	02	16	5532	20	27	7148	32	37	9113	48	++	11774	45	13688	46	16391	47	18724	52														
VALENTIA 03953	312330	014	12	09	101	11	08	1445	02	01	2979	08	10	5530	22	31	7140	33	37	9100	46	++	11770	47	+++++	++	16360	47																
	011130	014	12	08	125	10	06	1450	01	04	2999	05	13	5560	22	35	7170	34	46	9120	50	++	11750	49	+++++	++	16310	51																
Ocean Weather Station 'I'  59°00'N 19°00'W	312300		10	07	104	09	07	1434	05	03	2993	04	11	5560	21	31	7170	34	42	9120	50	++	11770	47	13670	48	16340	49	18680	51	20880	50												
	011200		11	06	083	09	04	1403	03	06	2958	03	13	5530	20	26	7150	31	41	9120	47	++	11780	48	13690	45	16380	48	19720	50														
Ocean Weather Station 'J'  52°30'N 20°00'W	312300		11	06	175	10	04	1502	06	05	3066	04	11	5640	20	32	7260	31	38	9240	46	++	11840	54	13700	52	16320	51	18640	51	20820	51												
	011100		12	10	179	08	05	1525	05	01	3079	06	13	5650	21	28	7260	31	37	9240	45	++	11850	58	13680	54	16280	53																



## PRESSURES AND TEMPERATURES OF SIGNIFICANT LEVELS

Page 3

STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	51 4642+	008	999	739	981 07 05 904 03 02 884 07 05 682 02-05- 513 ++ 23- 461 22- 33- 365 36- 45- 328 40- 50- 240 55- 194 45- 100 49- 070 51-	240	10630	55-
	60 573++	006	996	732	976 06 04 900 05 03 881 07 05 797 04 03 625 ++ 12- 533 16- 19- 512 ++ 22- 500 ++ 27- 488 19- 27- 448 ++ 28- 403 ++ 37- 335 40- 50- 271 50- 249 49- 235 52- 202 46- 150 44- 100 48- 057 51- 032 51-	235	10760	52-
STORNOWAY 03026	02 15600	013	011	861	995 08 03 939 04 01 916 ++ 03- 893 ++ 02- 827 ++ 11- 774 04- 13- 760 ++ 12- 701 07- 14- 580 17- 26- 564 16- 26- 520 ++ 27- 468 22- 33- 341 40- 49- 277 49- 263 46- 127 46- 079 50- 050 50-	277	09620	49-
	02 785++	010	009	882	994 08 04 823 03- 04- 797 02- 03- 744 ++ 11- 685 ++ 18- 672 09- 18- 615 15- 20- 585 ++ 25- 429 29- 44- 411 29- 44- 372 35- 49- 328 41- 29- 45- 140 46- 082 52- 032 53-	290	09300	45-
SHANWELL 03170	02 855++	010	009	836	998 09 04 775 04- 07- 754 02- 08- 732 ++ 10- 705 ++ 06- 684 04- 07- 598 12- 15- 587 12- 15- 565 ++ 17- 511 ++ 21- 342 40- 45- 259 53- 241 53- 207 47- 136 46- 100 50- 087 51- 064 49-	259	10090	53-
	02 31641	008	007	777 756	001 13 03 866 ++ 00 843 00 05- 820 01 10- 777 00 15- 762 00 16- 712 03- 19- 699 04- 15- 682 05- 09- 624 09- 12- 574 ++ 19- 502 19- 27- 354 40- 46- 284 51- 258 54- 223 47- 161 45- 111 47- 100 50- 091 52- 079 50- 030 50-	258	10080	54- 091 16970 52-
ALDERGROVE 03917	01 00902	011	002	798	998 ++ 04 958 ++ 05 943 ++ 02 925 ++ 02 893 04 12- 870 ++ 09- 802 00 16- 750 ++ 18- 736 05- 21- 685 ++ 29- 673 10- 29- 605 12- 23- 565 ++ 23- 520 ++ 26- 475 22- 33- 438 ++ 40- 348 ++ 47- 325 44- 267 52- 256 49- 202 47- 194 44- 175 47- 050 51-	267	09860	52-
	01 685++	011	001	827	984 10 06 905 04 02 827 00 02- 806 00 06- 754 02- 09- 719 03- 13- 681 06- 16- 649 07- 20- 595 10- 23- 467 24- 34- 418 29- 40- 354 ++ 48- 327 45- 271 53- 247 47- 172 43- 146 47- 082 51- 057 49-	271	09800	53- 146 13890 47-
AUGHTON 03322	02 655++	008	001	820	986 10 04 892 04 00 869 03 01- 763 05- 06- 745 03- 11- 739 ++ 14- 722 04- 15- 705 03- 16- 694 ++ 20- 664 04- 15- 553 ++ 25- 517 ++ 24- 340 40- 43- 273 51- 132 45- 101 48- 076 52- 064 48- 046 51-	273	09760	51-
	02 755++	008	001	836 760 728	990 11 05 810 02- 06- 798 02 03- 707 ++ 09- 675 03- 16- 573 11- 21- 525 ++ 23- 436 26- 34- 342 40- 50- 307 48- 261 55- 254 51- 190 44- 104 46- 070 50- 054 49-	261	10060	55-
HEMSBY 03496	51 873++	002	000	751	931 06 04 872 08 05 772 ++ 00 651 ++ 13- 638 ++ 20- 627 10- 21- 608 ++ 21- 571 13- 28- 488 ++ 30- 406 ++ 42- 372 39- 50- 312 51- 288 53- 207 46- 168 46- 115 53-	288	09290	53-
	62 873++	001	999	727	988 10 09 867 08 06 695 02- 04- 672 ++ 08- 632 ++ 09- 600 08- 13- 572 10- 14- 530 14- 26- 495 18- 32- 454 22- 32- 415 27- 35- 394 ++ 48- 373 32- ++ 298 47- 259 53- 202 43- 116 44-	259	10110	53-
CRAWLEY 03774	02 00900	004	986	720	981 08 04 908 04 03 900 ++ 03 881 ++ 05- 855 04 00 841 ++ 06- 832 ++ 07- 822 ++ 11- 788 ++ 09- 735 01 17- 668 ++ 21- 652 ++ 12- 612 08- 13- 597 09- 13- 527 15- 22- 412 28- 38- 341 40- 46- 252 57- 231 50- 186 48- 180 45- 075 53- 030 51-	252	10300	57-
	20 7632+	004	987	757	973 06 04 828 04 02 713 03- 07- 700 ++ 09- 682 ++ 20- 658 05- 19- 565 ++ 22- 471 21- 36- 443 ++ 35- 341 40- 47- 259 55- 246 55- 229 47- 122 44- 099 46- 084 50- 052 51-	259	10030	55- 084 17540 50-
CAMBORNE 03808	02 25770	005	995	796	948 10 01 875 ++ 02- 831 01 04- 815 ++ 09- 778 ++ 15- 723 03- 15- 695 ++ 17- 678 ++ 16- 660 06- 11- 634 ++ 11- 591 ++ 15- 548 14- 21- 445 25- 34- 404 ++ 40- 355 40- 47- 279 54- 253 54- 246 49- 134 44- 115 48- 062 51- 050 50-	279	09540	54- 115 15410 48-
	02 854++	009	999	816	990 10 06 977 08 05 937 06 04 896 ++ 03 877 05 01 833 ++ 07- 741 05- 09- 722 ++ 15- 713 01- 15- 622 ++ 17- 579 14- 18- 561 ++ 18- 541 16- 21- 424 ++ 26- 404 ++ 36- 347 40- 46- 283 52- 250 56- 238 47- 173 45- 105 46- 084 51- 070 52-	250	10290	56- (084 17520 51-)
VALENTIA 03953	05 725++	105	011	788	976 10 07 883 04 03 812 00 04- 788 00 06- 674 11- 13- 639 12- 17- 632 12- 18- 606 14- 23- 571 14- 27- 433 29- 34- 334 42- 269 51- 250 47- 226 49- 222 46- 097 47- 091 49- 070 49-	269	09800	51-
	01 685++	015	014	800	980 08 04 902 02 02- 845 01 05- 811 01 13- 768 02- 10- 734 02- 09- 626 11- 19- 475 24- 37- 338 44- 288 52- 164 49- 117 47- 098 52-	288	09400	52-
Ocean Weather Station 'I' 59°00'N 19°00'W	01 464++	013	013	758	982 07 05 918 04 03 906 05 03 890 05 03 870 05 02- 860 05 01- 844 05 03- 790 02- 08- 768 ++ 01- 750 ++ 15- 730 02- 10- 667 07- 12- 632 ++ 15- 595 ++ 23- 570 ++ 26- 526 18- 26- 502 ++ 31- 423 ++ 40- 358 40- 46- 317 47- 266 54- 209 46- 067 51- 038 48-	266	09800	54-
	01 35600	010	010	882 763	968 06 02 881 00 04- 855 ++ 09- 848 03 06- 818 03 04- 725 ++ 09- 718 03- 11- 706 02- 11- 679 ++ 12- 549 17- 21- 524 17- 23- 463 23- 33- 375 35- 45- 346 40- 48- 270 52- 146 45- 064 50-	270	09800	52-
Ocean Weather Station 'J' 52°30'N 20°00'W	02 785++	021	021	760	992 10 03 881 01 01- 871 05 01 848 06 07- 840 ++ 10- 762 01 04- 733 ++ 09- 568 ++ 21- 500 20- 32- 420 28- 34- 334 40- 46- 301 46- 241 57- 233 56- 222 58- 200 54- 101 51- 061 53-	222	11200	58-
	02 00901	022	022	780	001 08 05 976 11 03 953 11 02- 946 11 01- 880 07 01 682 06- 16- 632 09- 23- 568 14- 27- 523 19- 27- 471 23- 29- 382 34- 40- 209 61- 197 57- 145 53-	209	11600	61-



Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General  
Meteorological Office, Air Ministry, Kingsway, London, W.C.2



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AVERAGE AND EXTREME VALUES 1951-55							
JUNE							
<b>LERWICK</b> (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.							
Press. Level	Average		Extreme Temps.		Wind*		
	Height	Temp.	Max.	Min.	V <sub>R</sub>	V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	22345	-48.1	-42	-55	...	...	(11)
60	19675	-48.1	-41	-55	120	3	8
100	16320	-48.8	-41	-56	244	5	11
150	13660	-48.3	-41	-59	263	10	18
200	11770	-49.8	-39	-67	271	16	27
300	9125	-46.7	-37	-56	271	22	41
400	7160	-32.6	-23	-44	271	18	33
500	5555	-20.8	-11	-31	269	14	26
700	2985	-5.2	3	-14	266	9	19
850	1435	2.8	14	-7	269	6	18
Tropopause		Press. (mb.)	Temp. (°C)		Height (gpm.)		
Average		257	-54.7		10190		
Max.		405	-40		12955		
Min.		172	-68		6890		
<b>LARKHILL/CRAWLEY</b> † (Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.) at 03, 15h.							
Press. Level	Average		Extreme Temps.		Wind*		
	Height	Temp.	Max.	Min.	V <sub>R</sub>	V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	22310	-49.6	-47	-57	106	9	10
60	19675	-51.4	-45	-59	136	3	8
100	16370	-52.6	-46	-61	251	8	13
150	13745	-51.8	-42	-65	265	15	21
200	11890	-54.0	-40	-65	268	20	32
300	9265	-44.7	-36	-54	265	20	39
400	7275	-29.6	-19	-41	265	17	31
500	5640	-17.8	-9	-28	263	15	25
700	3050	-2.1	7	-10	263	11	19
850	1480	5.7	16	-3	264	7	16
Tropopause		Press. (mb.)	Temp. (°C)		Height (gpm.)		
Average		234	-56.8		10950		
Max.		388	-41		13440		
Min.		160	-66		7225		
<b>MALTA</b> (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.							
Press. Level	Average		Extreme Temps.		Wind*		
	Height	Temp.	Max.	Min.	V <sub>R</sub>	V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5	11
60	19670	-60.7	-53	-69	135	4	10
100	16510	-62.9	-57	-71	255	21	24
150	13995	-59.0	-51	-67	265	38	42
200	12185	-56.6	-47	-67	275	42	47
300	9530	-40.1	-33	-46	285	32	38
400	7500	-23.9	-19	-29	285	27	31
500	5835	-11.8	-8	-17	285	24	28
700	3165	7.2	13	-1	290	18	22
850	1535	17.9	27	8	290	9	14
Tropo- pause		Average	Max.	Min.	Max.	Min.	
		Press. Temp.	Press.	Press.	Temp.	Temp.	
Upper		mb. °C	mb.	mb.	°C	°C	
Lower		123 -65.7	...	73	...	-73	
		193 -59.8	266	...	-46	...	
* V <sub>R</sub> = Vector average wind. V <sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h. † Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953. Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.							

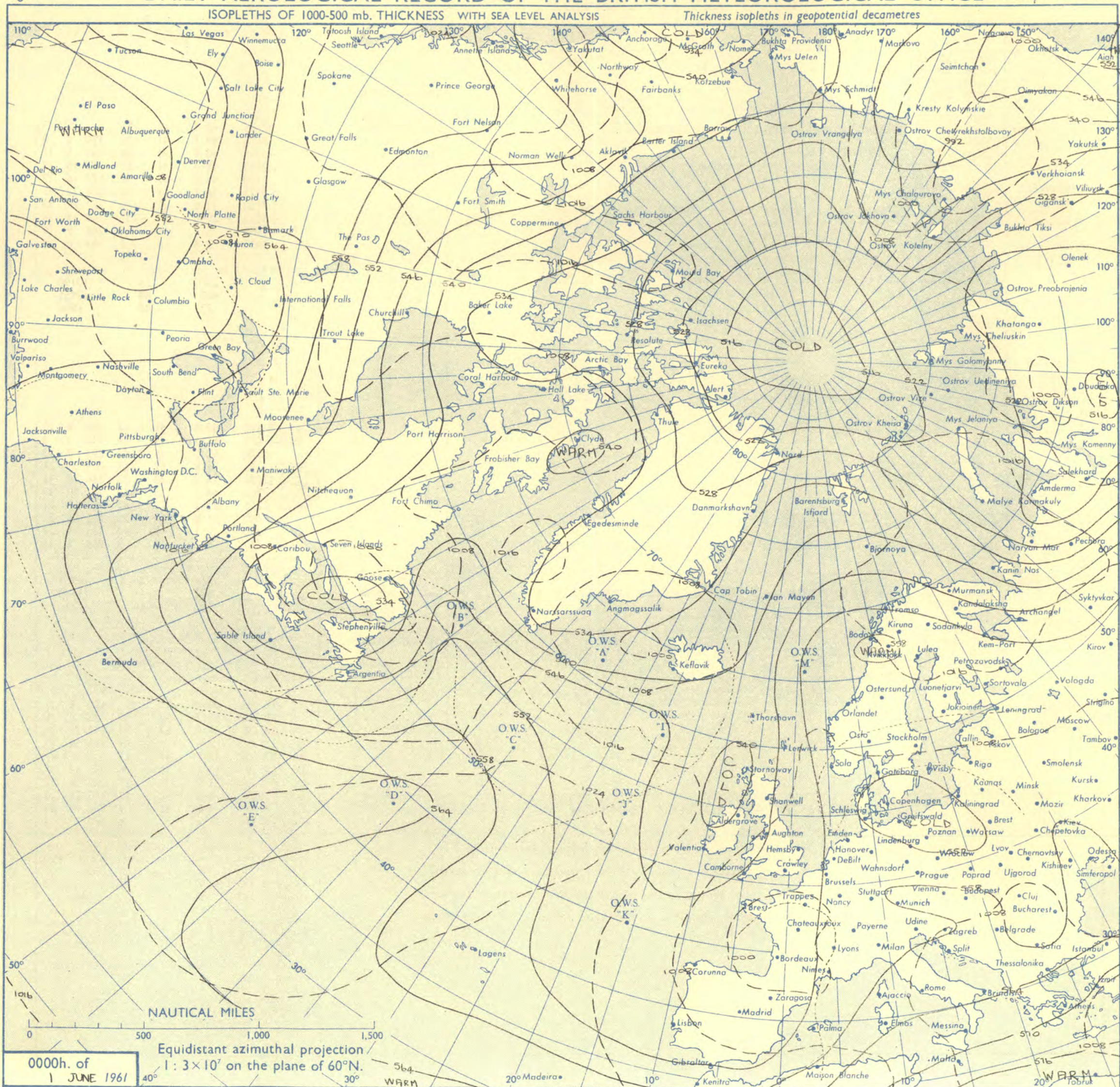
The trough associated with the low near the St. Lawrence is swinging northeastwards into the western Atlantic. The downstream ridge persists though with some weakening as a low moves southeastwards over the Denmark Strait. The blocking high over Scandinavia persists while to the southwest small low centres are circulating around the British Isles in the broad trough which covers western Europe.

\*  $V_R$  = Vector average wind.  $V_S$  = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

† Observations were made at Larkhill (Lat.  $51^{\circ} 12' \text{ N.}$ , Long.  $01^{\circ} 48' \text{ W.}$ ) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.



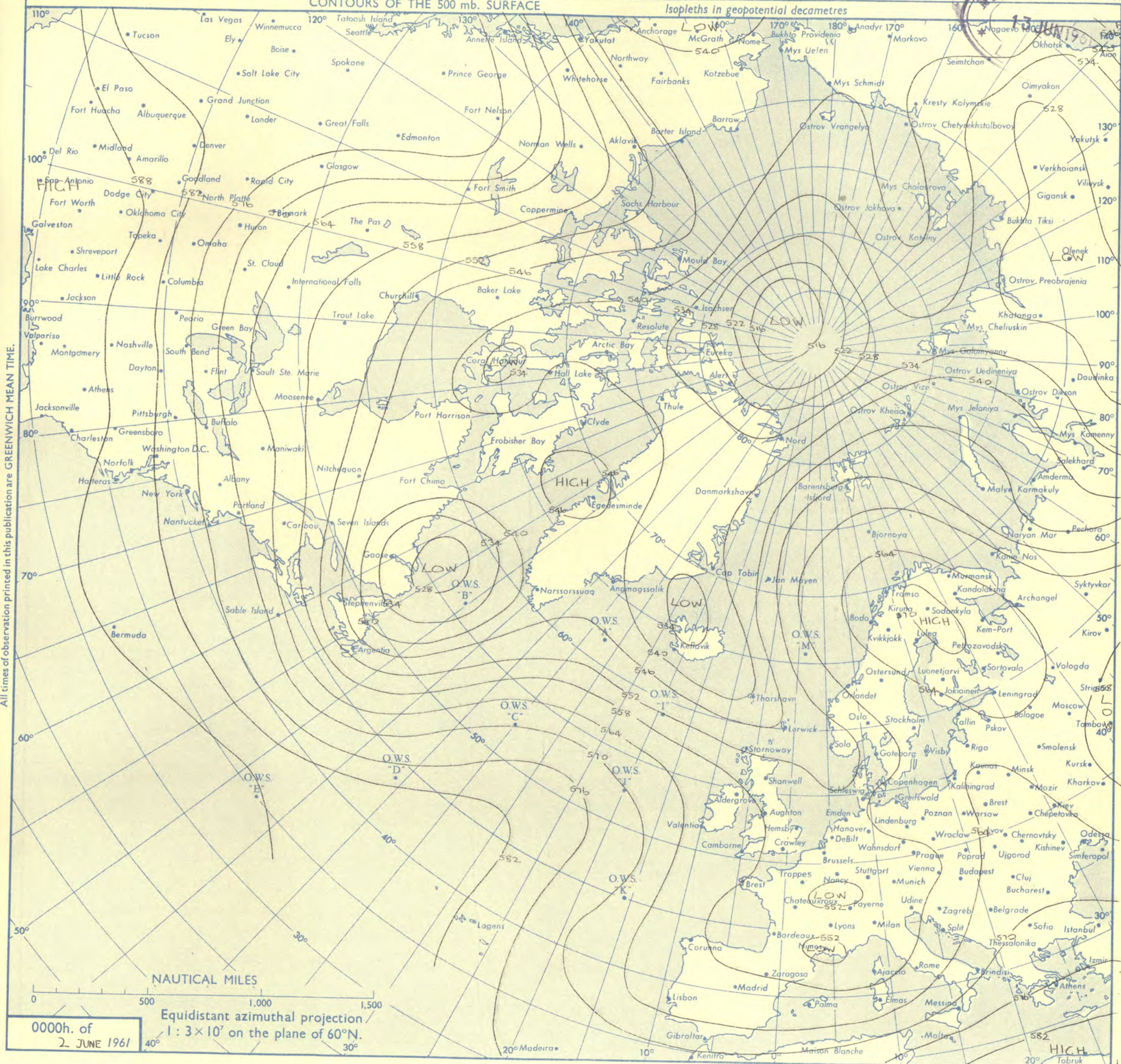




CONTOURS OF THE 500 mb. SURFACE

Isopleths in geopotential decametres

All times of observation printed in this publication are GREENWICH MEAN TIME.



NAUTICAL MILES

0000h. of  
2 JUNE 1961Equidistant azimuthal projection  
1 :  $3 \times 10^7$  on the plane of 60°N.



## HEIGHTS AND TEMPERATURES OF STANDARD ISOBARIC SURFACES

2 June

1961

STATION	YYGGgg	SURFACE	1000mb	850mb	700mb	500mb	400mb	300mb	200mb	150mb	100mb	70mb	50mb	30mb
		gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C	gpm °C	gpm °C	gpm °C	gpm °C
LERWICK 03005	012345	082 06 05 046 ++ ++	1359 01 07-	2907 05- 23-	5482 20- 32-	7092 33- 40-	9052 49- ++	11702 48-	13609 48-	16272 51-	18580 52-	20739 53-		
	021130	082 12 09 053 ++ ++	1379 01- 05-	2916 07- 14-	5469 21- 36-	7078 33- 46-	9039 45- ++	11782 41-	13727 43-	16428 48-	18762 51-	20945 51-	24270 50-	
STORNOWAY 03026	012330	013 09 08 075 09 07	1403 01 00	2949 03- 12-	5520 21- 31-	7131 33- 43-	9087 48- ++	11778 45-	13701 46-	16389 50-	18712 51-			
	021130	013 11 09 074 09 07	1399 00 01-	2937 05- 07-	5502 21- 37-	7104 35- 49-	9052 45- ++	11755 45-	13678 45-	16365 48-	18689 51-	20868 52-		
SHANWELL 03170	012330	005 04 03 075 06 04	1407 02 01-	2967 02- 12-	5550 21- 31-	7156 34- 43-	9108 48- ++	11777 45-	13696 46-	16379 50-				
	021130	005 15 08 094 13 06	1432 01 00	2982 04- 08-	5565 20- 23-	7184 33- 39-	9143 49- ++	11803 46-	13712 46-	16401 48-	18728 52-	20905 51-	24253 48-	
ALDERGROVE 03917	012330	077 11 08 105 10 07	1435 04 01	2995 04- 19-	5576 21- 30-	7185 33- 40-	9137 49- ++	11787 47-	13696 46-	16381 48-	18713 50-			
	021130	077 14 08 118 13 08	1453 03 01	3016 03- 05-	5600 19- 23-	7225 31- 39-	9205 46- ++	11841 52-	13729 47-	16401 49-	18724 51-			
AUGHTON 03322	012330	056 10 08 090 10 08	1427 04 02-	2989 03- 12-	5576 20- 32-	7186 33- 43-	9139 49- ++	11797 46-	13708 47-	16391 49-	18718 51-			
	021130	056 14 09 123 12 07	1455 02 01-	3021 02- 17-	5611 20- 36-	7229 32- 45-	9191 48- ++	11827 49-	13716 48-	16393 49-	18707 53-	20883 51-	24215 49-	
HEMSBY 03496	012330	012 10 09 053 09 07	1386 06 02	2966 02- 07-	5560 19- 28-	7183 31- 43-	9156 48- ++	11774 50-	13677 45-	16360 50-				
	021130	012 12 09 098 10 07	1430 04 02-	2993 01- 09-	5596 18- 31-	7225 30- 43-	9198 47- ++	11822 49-						
CRAWLEY 03774	012340	144 09 08 069 ++ ++	1410 05 04	2977 03- 04-	5568 18- 29-	7194 31- 49-	9169 47- ++	11794 50-	13698 47-	16372 48-	18695 53-			
	021130	144 16 08 105 ++ ++	1449 03 00	3003 02- 16-	5598 19- 33-	7222 31- 43-	9191 48- ++	11819 49-	13723 48-	16387 51-				
CAMBORNE 03808	012330	088 12 07 115 11 07	1453 02 01-	3010 03- 15-	5597 20- 29-	7219 32- 42-	9179 49- ++	11790 50-	13683 49-	16343 49-	18662 53-			
	021130	088 16 10 147 14 08	1484 07 07-	3054 02- 17-	5642 19- 29-	7262 32- 42-	9222 48- ++	11856 51-	13734 49-	16392 48-	18706 54-	20880 52-		
VALENTIA 03953	012330	014 12 09 146 10 08	1477 06 17-	3037 04- 23-	5610 21- 24-	7220 33- 39-	9180 48- ++	11790 51-						
	021130	014 14 10 160 12 09	1497 09 10-	3074 01- 13-	5670 17- 25-	7300 29- 35-	9310 42- ++	11930 58-	+++++ ++	16420 50-				
Ocean Weather Station 'I' 59°00'N 19°00'W	012300		09 08 060 09 07	1383 01 00	2924 06- 07-	5500 20- 24-	7110 33- 41-	9080 46-	++	11740 49-	13640 48-			
	021200		12 08 037 11 07	1363 03 11-	2924 02- 28-	5520 18- 22-	7160 28- 33-	9170 42- ++	11810 60-	13670 51-	16300 52-	18610 52-	20800 51-	
Ocean Weather Station 'J' 52°30'N 20°00'W	012300		12 09 180 10 07	1522 08 07-	3092 02- 19-	5690 15- 19-	7340 26- 32-	9360 42- ++	11990 62-	13780 54-	16400 53-	18700 52-	20880 52-	
	021100		12 11 159 11 09	1498 07 03	3072 00 02-	5700 14- 17-	7360 25- 30-	9390 41- ++	12010 63-	13770 57-	16360 55-	18650 53-		



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	01 15530	006 996 798	983 05 01 937 01 04- 885 00 07- 865 ++ 09- 833 01 07- 769 01- 16- 747 01- 17- 535 ++ 33- 497 21- 32- 448 ++ 34-	351 40- 47- 304 49- 276 53- 257 51- 179 46- 100 51- 057 55- 048 52-		276	09590	53-
	02 784++	006 997 862 798	988 10 06 949 06 04 853 ++ 05- 824 03- 07- 798 00 11- 785 ++ 14- 667 ++ 14- 607 ++ 18- 594 15- 21- 572 ++	27- 546 17- 32- 386 35- 48- 316 46- 246 41- 144 43- 100 48- 063 52- 030 50-		316	08700	46-
STORNOWAY 03026	03 755++	009 008 828	856 ++ 01 830 00 02- 780 04- 05- 769 02- 06- 743 01- 10- 715 ++ 13- 640 ++ 14- 545 17- 25- 535 17- 25- 507	++ 30- 352 40- 50- 289 50- 268 47- 245 48- 237 45- 140 45- 092 51- 51- 056 51-		289	09320	50-
	60 5642+	009 007 840	001 09 07 922 04 03 771 04- 06- 724 05- 07- 707 05- 07- 675 08- 13- 636 ++ 22- 603 11- 24- 556 15- 31- 399 35-	49- 342 44- 330 45- 255 47- 175 45- 098 48- 084 52- 040 51-		330	08410	45-
SHANWELL 03170	01 10930	009 009 727	993 09 05 902 06 02 822 00 03- 804 01 02- 769 03 05- 672 04 16- 618 ++ 18- 566 13- 23- 405 34- 41- 360	40- 49- 308 48- 275 51- 202 45- 120 46- 095 51-		275	09690	51-
	02 48532	011 010 832 768	003 13 06 926 06 03 915 ++ 03 826 01- 02- 810 ++ 01- 795 02 06- 752 ++ 09- 722 04- 10- 709 03- 07- 623 10-	12- 604 09- 12- 580 ++ 17- 530 17- 20- 491 21- 25- 398 ++ 39- 351 40- 45- 279 52- 270 50- 216 49- 210 46-		279	09610	52-
ALDERGROVE 03917	02 855++	013 003 748	872 02 01 832 05 04- 823 ++ 07- 740 ++ 12- 723 ++ 21- 702 ++ 18- 670 06- 21- 650 06- 21- 480 23- 31-	380 37- 44- 282 53- 222 48- 156 46- 091 48- 078 52- 070 50-		282	09570	53-
	03 3567+	014 005 748	960 09 05 861 02 01 835 ++ 00 825 04 01 758 ++ 01- 746 ++ 04- 678 ++ 06- 625 09- 10- 583 10- 14- 492 20-	24- 440 25- 35- 360 36- 44- 267 51- 243 51- 226 54- 154 47- 098 49- 076 52- 062 53-		226	11070	54-
AUGHTON 03322	02 00900	011 004 741	964 ++ 07 872 05 02- 845 ++ 02- 832 ++ 05- 816 02 05- 797 03 06- 763 01 06- 712 02- 10- 677 ++ 16- 627 07-	20- 356 40- 48- 308 48- 273 52- 188 56- 107 47- 085 51- 060 51-		272	09740	52-
	02 525++	015 008 723	992 11 06 948 ++ 05 905 ++ 01 856 01 00 830 05 07- 798 05 16- 730 ++ 14- 627 08- 23- 572 11- 26- 351 40-	++ 260 54- 176 49- 105 48- 073 53- 030 49-		260	10120	54-
HEMSBY 03496	02 854++	006 005 720	999 ++ 07 971 08 06 953 09 06 920 ++ 02 863 02 00 850 06 02 835 08 01 810 ++ 02- 784 ++ 01- 649 06- 11-	632 05- 12- 537 ++ 21- 498 19- 28- 409 ++ 42- 348 39- 50- 257 56- 196 50- 192 47- 146 45- 093 52-		257	10160	56-
	02 854++	012 010 792 707	992 09 06 925 05 04 900 ++ 03- 873 05 05- 808 ++ 02- 792 00 06- 781 02 05- 748 00 06- 724 01 09- 677 ++	11- 632 ++ 16- 611 ++ 20- 486 ++ 32- 397 30- 43- 347 39- 50- 246 58- 216 50- 196 48-		246	10500	58-
CRAWLEY 03774	21 862++	008 991 742	947 09 06 812 04 03 583 ++ 13- 553 ++ 23- 536 ++ 28- 506 ++ 31- 490 ++ 29- 458 22- 38- 407 30- 48- 290	48- 238 57- 219 50- 203 50- 182 45- 066 54-		238	10650	57-
	03 586++	012 995 757	985 14 07 895 ++ 03 861 03 00 819 01 04- 777 ++ 07- 740 ++ 15- 702 02- 16- 627 06- 23- 350 39- 50- 305	47- 251 56- 185 46- 141 49- 119 47- 095 52- 081 51-		251	10350	56-
CAMBORNE 03808	01 20970	014 003 752	917 07 04 843 02 01- 830 03 03- 780 02 10- 620 08- 20- 527 16- 28- 497 20- 29- 468 22- 32- 350 40- 49- 248	59- 240 53- 171 47- 065 53-		248	10380	59-
	02 48500	018 007 727	990 12 07 890 04 02 859 07 06- 832 ++ 13- 819 06 13- 758 ++ 20- 665 ++ 18- 632 07- 21- 578 12- 23- 556	13- 23- 458 24- 34- 351 40- 50- 262 54- 236 51- 100 48- 079 54- 040 50- 035 52-		262	10110	54-
VALENTIA 03953	02 68500	018 016 758	900 03 02 866 05 16- 852 06 16- 677 05 25- 539 16- 20- 446 28- 30- 417 30- 36- 263 55- 239 57-	200 51- 155 50-		239	10600	57-
	02 785++	019 018 710	018 14 10 990 11 08 887 03 01 858 09 10- 753 04 14- 574 12- 22- 476 20- 29- 395 30- 36- 302 42- 234 56-	196 58- 178 52- 159 53- 132 50- 100 50-		196	12000	58-
Ocean Weather Station 'I' 59°00'N 19°00'W	63 664++	007 007 837	985 ++ 06 923 04 03 664 08- 09- 649 08- 10- 483 ++ 26- 458 25- 32- 344 40- 49- 309 46- 240 51- 172 47-	107 50-		240	10500	51-
	01 5853+	004 004 745	004 12 08 982 08 06 889 02 00 871 ++ 01 868 04 00 854 ++ 10- 779 02 20- 726 01- 27- 689 02- 25- 672 03-	18- 604 09- 13- 590 09- 18- 524 16- 23- 511 ++ 21- 479 ++ 22- 452 22- 27- 396 29- 34- 312 40- 46- 228 55-		201	11800	60-
Ocean Weather Station 'J' 52°30'N 20°00'W	03 754++	022 022 729	013 11 08 986 09 07 933 ++ 03 920 05 01 908 10 01 901 ++ 01- 855 08 07- 680 03- 23- 603 11- 20- 579 ++	17- 545 12- 16- 503 15- 19- 385 28- 34- 371 ++ 35- 353 ++ 40- 309 40- 47- 191 64- 168 61- 148 53- 091 52-		191	12200	64-
	60 6642+	019 019 701	019 12 11 964 08 06 893 07 04 863 08 04 818 ++ 01- 752 ++ 01 642 03- 04- 427 21- 26- 305 40- 45- 187 67-	166 66- 153 57- 070 53-		187	12400	67-



STATION	YYGGgg	Type	Surface	1000mb	900m	850mb 1500m	750mb 2100m	700mb 3000m	600mb 4200m	500mb 5400m	400mb 7200m	300mb 9000m	250mb 10500m	200mb 12000m	150mb 14100m	100mb 15900m	70mb 18300m	50mb 20700m	30mb 23700m	20mb 26400m	10mb 30900m			
LERWICK 03005	012345	T	290 15	+++ ++	300 24	280 24	240 20	240 18	220 21	170 36	160 43	150 55	160 35	160 20	190 11	110 11	100 07	120 07	090 15					
	020531	P	250 12	+++ ++	260 25	260 25	260 15	240 23	230 21	220 25	180 35	170 32	170 25	150 18	190 07	140 06	130 10	100 12						
	021130	T	250 20	+++ ++	260 19	250 21	250 27	250 34	240 35	230 35	210 35	200 34	210 19	200 15	190 12	000 00	110 09	140 07						
	021730	P	180 12	+++ ++	220 17	240 18	240 25	240 31	240 30	240 37	250 38	260 34	260 27	240 12	230 06									
STORNOWAY 03026	012330	T	240 11	+++ ++	250 21	270 20	270 27	280 30	270 41	280 33	280 28	290 24	280 20	210 10	170 08	130 15	100 10	130 10						
	020555	P	250 14	+++ ++	260 22	270 32	260 32	260 26	270 37	270 42	270 48	280 46	270 26	260 23	200 06	150 12	110 09							
	021130	T	240 14	+++ ++	240 21	240 22	250 28	260 35	280 45	280 51	280 51	300 62	290 49	290 18	240 09	120 08	140 07							
	021730	P	220 12	+++ ++	240 28	250 33	260 42	260 45	270 49	290 55	300 68	310 88	320 85	300 35	280 09	210 07								
SHANWELL 03170	012330	T	000 00	+++ ++	300 14	300 14	320 15	320 15	300 16	290 18	270 14	190 18	220 10	190 07	150 08	110 03	110 06	100 11	090 12	P100 10				
	020530	P	190 03	+++ ++	300 18	290 18	280 16	290 15	290 25	260 16	290 22	320 33	290 10	260 06	090 03									
	021130	T	260 15	+++ ++	260 14	260 15	250 21	250 22	280 22	280 24	280 31	280 36	290 29	270 16	210 05							170 03	080 06	120 13
	021730	P	270 16	+++ ++	260 20	280 22	290 30	280 23	280 27	280 31	310 44	330 81	330 65	300 27	300 05							120 03	130 05	060 09
ALDERGROVE 03917	012330	T	300 07	+++ ++	320 19	320 21	320 20	320 22	300 19	300 24	300 19	310 32	310 22	310 14	120 02	130 07	110 05	040 06						
	020530	P	240 09	+++ ++	290 14	290 16	300 16	290 18	300 21	310 27	340 36	340 38	330 36	310 15	020 05	120 04								
	021130	T	270 09	+++ ++	280 18	280 18	320 22	320 23	300 27	300 26	310 35	340 62	340 68	330 41	290 04	330 02						100 05		
	021730	P	240 10	+++ ++	280 14	280 20	270 22	290 19	310 21	310 22	330 42	330 55	350 86	340 46	330 11	340 03						090 06		
AUGHTON 03322	012330	T	300 11	+++ ++	330 15	320 14	340 18	340 20	350 19	350 25	310 16	270 15	270 08	320 02	140 03	140 05	100 11	090 17	P100 12					
	020530	P	290 10	+++ ++	330 19	330 17	340 14	350 15	330 19	300 17	320 19	300 14	290 09	340 08	280 02	150 04	080 05	090 16						
	021130	T	280 11	+++ ++	310 17	320 16	320 12	310 09	310 17	330 18	350 25	350 31	340 31	330 13	320 05	030 01	110 05	100 12						
	021730	P	270 11	+++ ++	320 12	340 17	340 20	310 20	300 16	310 18	330 30	350 62	360 73	350 24	360 08	080 02	080 04	110 07						
HEMSBY 03496	012330	T	360 12	+++ ++	350 25	350 23	340 13	330 11	330 07	330 03	220 16	200 30	190 12	180 07	060 03	120 12	090 08							
	020530	P	360 13	+++ ++	350 22	010 30	360 20	350 16	340 16	320 08	230 15	210 24	230 19	130 01	090 04	080 05								
	021130	T	010 18	+++ ++	010 24	360 26	360 21	360 19	350 12	320 07	230 16	210 18	180 15											
	021742	P	360 10	+++ ++	340 25	350 21	360 18	360 20	360 21	350 20	260 18	240 23	250 13	330 11	060 05	020 04						080 08		
CRAWLEY 03774	012340	T	350 07	+++ ++	010 23	360 16	020 12	040 12	030 13	010 11	190 05	170 23	150 21	120 06	050 06	110 06	070 04	P100 16	070 12	070 14	110 25			
	020530	P	350 06	+++ ++	010 27	010 25	350 19	350 16	350 11	010 14	130 04	180 18	190 09	340 05	050 05	120 05	080 07	090 07						
	021110	P	340 10	+++ ++	360 15	360 23	360 24	360 22	010 20	010 12	270 07	190 10	150 07	030 06	350 09	070 05	100 08	080 14	070 08	120 16				
	021730	P	340 08	+++ ++	360 10	360 13	360 16	360 19	340 21	350 21	310 17	250 20	310 11	350 15	030 09	030 03	060 08	080 04	080 13	060 08				
CAMBORNE 03808	012330	T	330 15	+++ ++	360 29	360 26	010 22	010 23	360 22	350 24	020 21	350 13	360 09	020 16	010 06	090 07	100 11	100 15						
	020530	P	350 14	+++ ++	350 23	340 26	350 25	010 24	360 22	350 25	350 23	350 24	360 19	010 13	020 07	060 07								
	021130	T	340 15	+++ ++	340 19	340 25	340 19	350 18	360 13	010 22	020 17	010 33	010 46	020 25	020 11	060 09								
	021730	P	290 08	+++ ++	310 11	320 23	330 22	340 18	350 20	350 26	360 24	020 53	020 76	010 37	360 09	070 12								
VALENTIA 03953	012330	T	340 07	340 12	+++ ++	340 31	+++ ++	330 29	+++ ++	350 34	340 33	360 53	+++ ++	350 32	+++ ++	080 05								
	021130	T	300 11	300 13	+++ ++	300 24	+++ ++	300 24	+++ ++	280 16	350 33	360 71	+++ ++	360 67										
Ocean Weather Station 'I' 59°00'N 19°00'W	012300	T	270 13	+++ ++	260 34	250 21	270 33	270 37	280 58	280 70	280 67	300 86	300 71	310 48	280 25	290 25	170 07	120 11						
	020600	P	270 10	+++ ++	260 09	270 19	270 28	270 43	270 57	280 51	280 73	290 80	300 93	310 96	300 91									
	021200	T	280 04	+++ ++	260 04	280 18	280 34	280 37	280 37	270 51	280 63	280 77	280 91	290 63	280 21							260 08		
	021800	P	225 10	+++ ++	220 14	240 19	250 25	250 28	260 35	270 38	260 44	240 61	260 76	260 78	260 32							260 20		
Ocean Weather Station 'J' 52°30'N 20°00'W	012300	T	260 18	+++ ++	260 30	260 32	260 30	260 29	270 26	280 29	320 46	330 73	340 82	330 87	340 32	320 10	140 04	140 06						
	020500	P	270 10	+++ ++	270 25	270 27	270 33	280 30	280 32	300 37	330 45	320 58	340 64	330 22										
	021100	T	260 23	+++ ++	250 30	260 29	280 29	300 23	310 31	300 29	290 34	310 40	310 41	300 45	340 20	300 02								
	021700	P	225 20	+++ ++	250 28	250 26	250 26	250 29	250 33	250 27	250 32	260 44	270 47	270 33	260 07	000 00	000 00	060 13				080 13		
LARKHILL 03743	020550	P	330 09	+++ ++	010 18	350 18	340 17	350 15	360 18	010 16	360 08	200 13	200 12	340 06	130 04	110 05	070 08	090 05						
	021030	P	340 12	+++ ++	350 17	350 17	350 18	010 19	010 23	350 15	300 10	220 22	260 05	010 09	320 06	060 06	110 10							

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m °C °C	950mb m °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb m °C °C	700mb m °C °C	650mb m °C °C	600mb m °C °C	550mb m °C °C	500mb m °C °C
021209	53.5°N 25.3°W	014 007 681	061 09 09	116 09 09	09 09	988 08 08	1460 08 01	1957 07 02	05 18	3042 02 06	03 11	4261 08 13	09 09	5666 15 20
Cloud :— 7/8Sc. 400 to 4000ft; 8/8As. 12000 to 13000ft; 8/8As. 15000 to 18000ft; 3/8Ac. at 19000ft; 6/8Ci. 20,000ft to TNG. Inversion Levels :— Isothermal Levels :— 1007mb to 950mb 9°C.														
YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m °C °C	950mb m °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb m °C °C	700mb m °C °C	650mb m °C °C	600mb m °C °C	550mb m °C °C	500mb m °C °C
Cloud :— Inversion Levels :— Isothermal Levels :—														
RATES OF SUBSCRIPTION: Single copy 5d. or post free 7d. One calendar month 13/-; one quarter 35/-; one year 125/-. For special arrangements for supply to schools and colleges see Form 2452.												Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General Meteorological Office, Air Ministry, Kingsway, London, W.C.2		



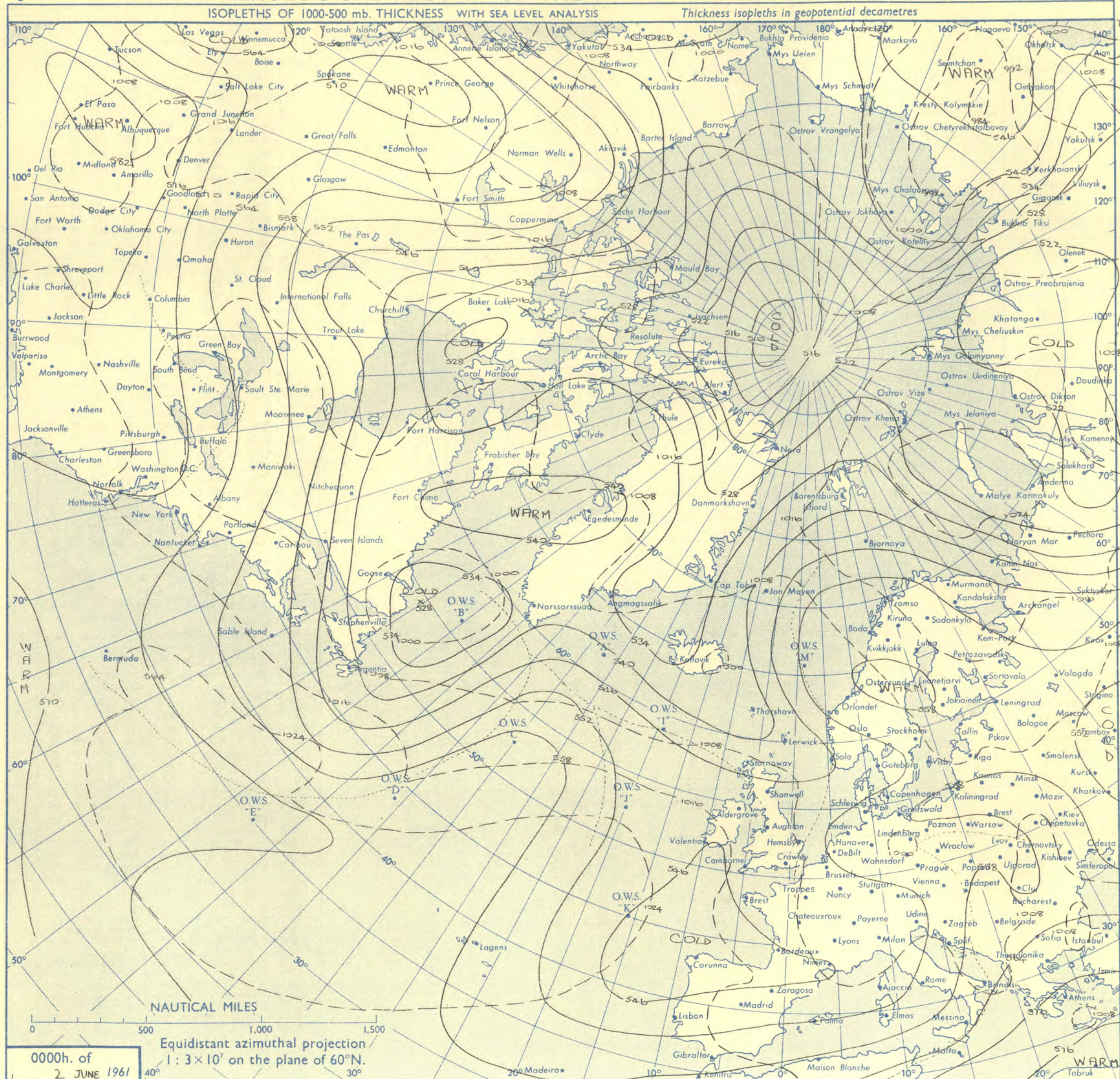
STATION		MAX. WIND
LERWICK 03005	035mb 090 17	
STORNOWAY 03026	061mb 120 13 09960/1 13690/5 14190/5 221mb 290 32 045mb 120 11 17400m 170 09 06950/0 10420/1 11320/1	300 65 08300m 310 96 09760m
SHANWELL 03170	358mb 210 14 103mb 100 13 09430/1 173mb 270 09 P27900m 040 10 27100/5 22500m 110 08 10940/1	330 86 09240m
ALDERGROVE 03917	074mb 090 07 1075/1 1131/1 1185/5 342mb 330 42 178mb 340 22 11420m 350 68 23200m 060 12 06620/0 09980/0 11630/1 12500/7	340 70 10630m 350 94 10590m
AUGHTON 03322	P28800m 080 12 22800m 080 17 06440/0 07910/0 09260/0 11130/1 11480/1	360 75 10920m
HEMSBY 03496	440mb 250 14 207mb 320 05 20400m 080 13 06770/5 10790/2	
CRAWLEY 03774	P21600m 130 10 1005003 23450/5 24520/2 28800m 090 25 33000m 110 12 34500m 120 11 27300m 090 13 06680/5 07530/5 10300/2 10780/2	
CAMBORNE 03808	074mb 070 05 19200m 080 08 038mb 100 12 08100m 010 33 16800m 090 12 08620/0 09420/0 11580/1 11990/1	020 80 10510m
VALENTIA 03953	900mb 340 21 677mb 330 27 538mb 340 26 446mb 340 35 263mb 350 54 155mb 360 22 753mb 300 21 574mb 290 20 476mb 300 15 234mb 360 82 159mb 360 26 132mb 360 16	350 82 11180m
Ocean Weather Station 'J' 59°00'N 19°00'W	643mb 280 49 120mb 280 12 14700m 290 46 17400m 290 10 04420/0 09700/0 11350/0 12300/2 14550/1 186mb 290 42 13400/1 13900/1 18700/5	300 87 08810m 300 112 09940m 280 93 10670m 260 86 11400m
Ocean Weather Station 'J' 52°30'N 20°00'W	456mb 300 39 170mb 340 57 080mb 140 02 044mb 140 12 11400m 320 39 12600m 330 19 11980/1 12520/0 170mb 340 34 080mb 120 03 073mb 120 03 12900m 260 18 10200/0	320 93 11650m 340 70 10380m
LARKHILL 03743	07680/8 10930/8 19810m 090 09 07120/5 10330/4	

## NOTES ON THE AEROLOGICAL SITUATION

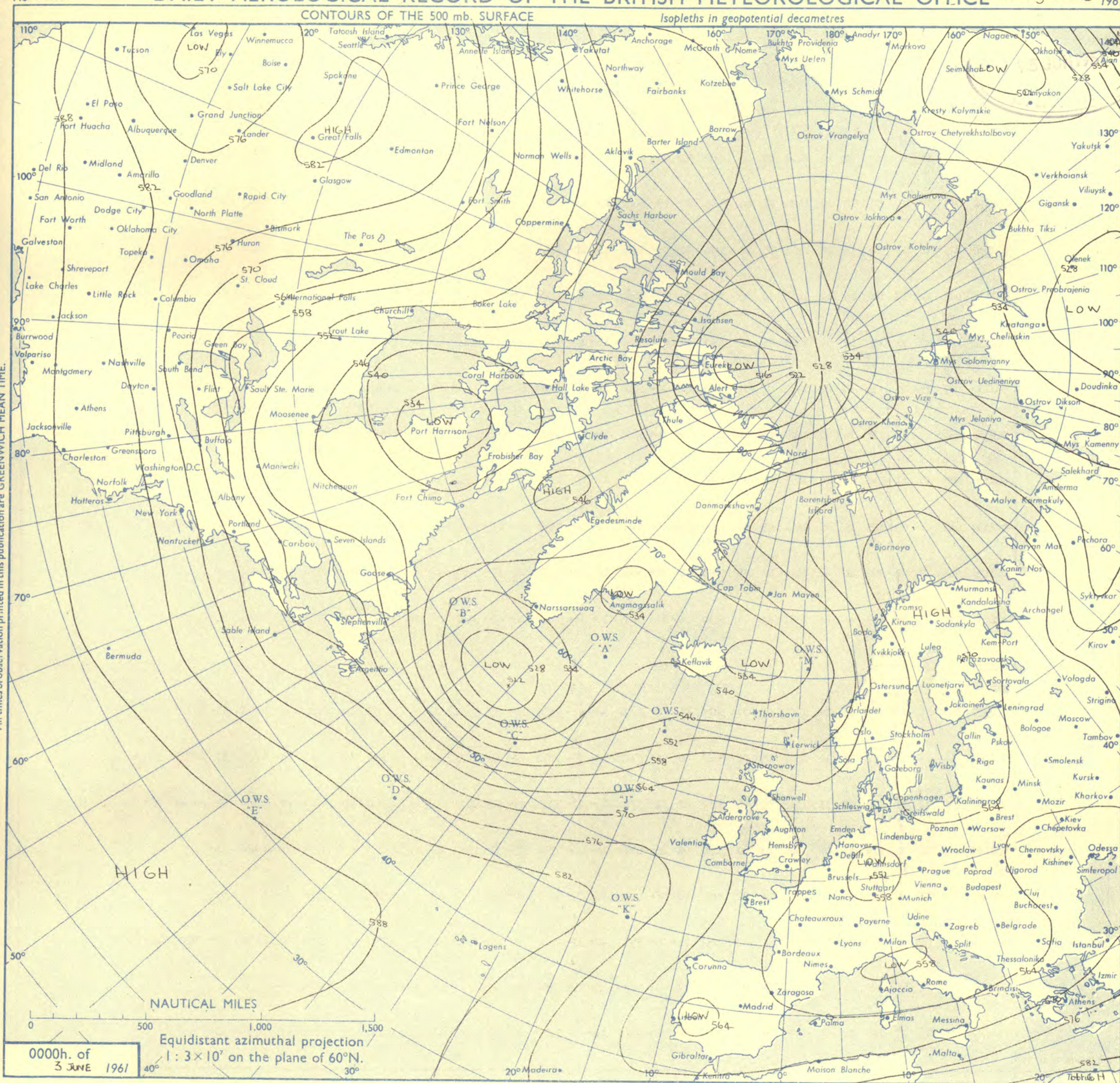
The trough from the St. Lawrence has maintained its intensity and its progress, together with the downstream ridge. Further downstream, in the region from Ireland to Madeira, unseasonably cold air is very persistent. A block is maintained over Europe, with a warm high remaining centred in such a high latitude as to make the temperatures actually higher over Lapland than over Spain.

AVERAGE AND EXTREME VALUES 1951-55							
JUNE							
<b>LERWICK</b> (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.							
Press. Level	Average		Extreme Temps.			Wind*	
	Height	Temp.	Max.	Min.	V <sub>R</sub>	V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	22345	-48.1	-42	-55	...	...	(11)
60	19675	-48.1	-41	-55	120	3	8
100	16320	-48.8	-41	-56	244	5	11
150	13660	-48.3	-41	-59	263	10	18
200	11770	-49.8	-39	-67	271	16	27
300	9125	-46.7	-37	-56	271	22	41
400	7160	-32.6	-23	-44	271	18	33
500	5555	-20.8	-11	-31	269	14	26
700	2985	-5.2	3	-14	266	9	19
850	1435	2.8	14	-7	269	6	18
Tropopause		Press. (mb.)	Temp. (°C)	Height (gpm.)			
Average		257	-54.7	10190			
Max.		405	-40	12955			
Min.		172	-68	6890			
<b>LARKHILL/CRAWLEY</b> † at 03, 15h. (Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.)							
Press. Level	Average		Extreme Temps.			Wind*	
	Height	Temp.	Max.	Min.	V <sub>R</sub>	V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	22310	-49.6	-47	-57	106	9	10
60	19675	-51.4	-45	-59	136	3	8
100	16370	-52.6	-46	-61	251	8	13
150	13745	-51.8	-42	-65	265	15	21
200	11890	-54.0	-40	-65	268	20	32
300	9265	-44.7	-36	-54	265	20	39
400	7275	-29.6	-19	-41	265	17	31
500	5640	-17.8	-9	-28	263	15	25
700	3050	-2.1	7	-10	263	11	19
850	1480	5.7	16	-3	264	7	16
Tropopause		Press. (mb.)	Temp. (°C)	Height (gpm.)			
Average		234	-56.8	10950			
Max.		388	-41	13440			
Min.		160	-66	7225			
<b>MALTA</b> (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.							
Press. Level	Average		Extreme Temps.			Wind*	
	Height	Temp.	Max.	Min.	V <sub>R</sub>	V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5	11
60	19670	-60.7	-53	-69	135	4	10
100	16510	-62.9	-57	-71	255	21	24
150	13995	-59.0	-51	-67	265	38	42
200	12185	-56.6	-47	-67	275	42	47
300	9530	-40.1	-33	-46	285	32	38
400	7500	-23.9	-19	-29	285	27	31
500	5835	-11.8	-8	-17	285	24	28
700	3165	7.2	13	-1	290	18	22
850	1535	17.9	27	8	290	9	14
Tropo- pause		Average Press.	Max. Press.	Min. Press.	Max. Temp.	Min. Temp.	
Upper		mb.	°C	mb.	mb.	°C	°C
Lower		123	-65.7	...	73	...	-73
		193	-59.8	266	...	-46	...
* V <sub>R</sub> = Vector average wind. V <sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.							
† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.							
Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.							











STATION	YYGGgg	SURFACE			1000mb			850mb			700mb			500mb			400mb			300mb			200mb			150mb			100mb			70mb			50mb			30mb		
		gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C			
LERWICK 03005	022330	082	09	09	057	++	++	1388	02	01	2930	07	08	5499	19	42	7126	30	42	9111	43	++	11823	44	13751	45	16441	49	18781	49										
	031130	082	12	11	075	++	++	1415	06	03	2987	01	06	5603	16	25	7246	29	38	9242	44	++	11872	50	13779	46	16456	49	18785	50										
STORNOWAY 03026	022330	013	11	11	066	11	10	1409	05	03	2980	02	04	5590	15	18	7230	28	33	9231	43	++	11876	57	13738	50	16396	50												
	031130	013	14	11	076	13	10	1422	08	04	2996	02	08	5609	15	23	7257	27	33	9267	42	++	11898	56	13774	49	16423	50	18748	52										
SHANWELL 03170	022330	005	12	09	097	11	08	1437	05	02	3014	00	06	5628	17	22	7272	27	32	9278	43	++	11916	59	13777	49	16432	51												
	031130	005	17	12	110	14	10	1463	10	06	3047	00	03	5664	15	18	7316	27	36	9325	43	++	11941	58																
ALDERGROVE 03917	022330	077	13	10	126	12	09	1466	06	05	3041	01	05	5666	16	19	7307	27	31	9319	42	++	11943	61	13779	50	16421	52	18728	52										
	031130	077	15	10	139	13	09	1482	07	01	3065	00	03	5688	15	25	7335	28	41	9340	43	++	11961	58	13790	51	16432	51	18733	53	20912	50								
AUGHTON 03322	022330	056	12	09	138	12	08	1478	04	01	3046	02	10	5656	16	24	7295	28	34	9295	43	++	11933	59	13771	52	16410	50	18719	54	20883	53	24185	52						
	031130	056	15	11	153	12	08	1499	06	02	3073	00	05	5695	16	20	7337	28	33	9340	43	++	11967	59	13784	53	16425	51	18731	53										
HEMSBY 03496	022330	012	07	07	123	10	06	1461	03	00	3025	01	14	5624	19	29	7245	32	41	9216	45	++	11870	51	13747	50	16406	52	18709	53	20887	51								
	031130	012	17	09	142	14	06	1490	06	01	3063	01	10	5661	18	33	7293	29	37	9284	46	++	11914	56	13758	52														
CRAWLEY 03774	022330	144	12	08	137	++	++	1481	03	00	3050	01	18	5645	19	26	7263	32	42	9237	46	++	11881	52	13755	51	16401	51	18700	54										
	031130	144	17	07	149	17	07	1499	05	00	3070	00	09	5680	17	29	7320	28	36	9325	43	++	11962	59	13804	53	16435	53	18732	55	20884	54	24174	53						
CAMBORNE 03808	022330	088	11	10	159	11	10	1501	09	07	3079	01	09	5694	16	24	7334	28	36	9332	44	++	11958	60	13801	52	16429	51	18726	54										
	031130	088	15	11	177	13	10	1517	05	02	3088	00	06	5717	15	18	7362	27	31	9378	42	++	12015	60	13809	54	16432	51	18727	54	20895	51								
VALENTIA 03953	030000	014	12	11	168	12	11	1512	05	04	3087	00	01	5720	14	17	7380	26	28	9400	41	++	12050	61	++++	++	16450	52	++++	53										
	031130	014	14	12	170	11	08	1508	08	00	3092	02	25	5720	15	25	7370	27	37	9390	42	++	12010	60	++++	++	16430	53												
Ocean Weather Station 'I'  59°00'N 19°00'W	030000		11	10	003	++	++	1334	04	02	2897	03	06	5490	18	36	7130	30	46	9120	45	++	11780	44	13700	47	16360	50												
	031100		09	07	008	++	++	1312	00	02	2852	06	09	5420	22	31	7020	35	44	3980	43	++	11730	40	13700	44	16370	49	18720	49	20920	50								
Ocean Weather Station 'J'  52°30'N 20°00'W	022300		12	11	129	11	10	1472	08	06	3063	02	09	5700	13	25	7350	25	36	9370	41	++	12000	59	13810	53														
	031100		12	07	147	11	07	1476	01	08	3016	04	17	5610	19	22	7230	30	33	9210	45	++	11840	51	13720	48	16350	55												



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	62 871++	007	997	814	990 09 08 689 ++ 09- 676 09- 13- 650 ++ 28- 630 09- 29- 460 23- 45- 335 40- 49- 311 44- 296 43- 234 47- 198 44- 100 49- 070 49-	311	08880	44-
	60 784++	009	999	715	984 09 07 906 06 03 861 06 03 710 00 05- 675 ++ 08- 542 ++ 17- 505 16- 24- 485 ++ 30- 466 19- 33- 405 28- 38- 368 ++ 41- 321 40- 47- 260 52- 232 56- 214 55- 191 47- 151 46- 100 49- 080 51- 053 49-	232	10950	56-
STORNOWAY 03026	61 664++	008	006	730	854 05 03 829 05 03 668 04- 06- 521 13- 16- 427 25- 28- 380 ++ 36- 316 40- 45- 286 45- 196 58- 184 52- 145 49- 077 52-	196	12000	58-
	20 563++	009	007	735	994 12 10 881 06 05 845 08 03 825 ++ 02- 814 ++ 01- 796 ++ 04- 745 01 04- 705 ++ 10- 696 02- 07- 679 02- 10- 675 ++ 09- 670 ++ 11- 646 ++ 09- 599 ++ 11- 552 12- 16- 536 12- 17- 490 16- 25- 442 ++ 27- 314 40- 46- 210 59- 165 48- 133 52- 125 48- 115 50- 070 52-	210	11590	59-
SHANWELL 03170	02 855++	012	011	697	892 06 03 850 ++ 02 815 04 02- 781 05 08- 740 ++ 04- 710 01 05- 645 ++ 11- 537 14- 19- 436 22- 28- 336 37- 43- 298 44- 196 60- 186 54- 162 49- 100 51- 086 50-	196	12060	60-
	02 3157+	013	013	705	000 14 10 924 08 06 892 07 05 852 10 06 808 06 04 747 03 00 618 07- 09- 523 ++ 15- 495 ++ 18- 465 18- 21- 394 ++ 37- 316 40- 47- 249 54- 220 59- 182 57-	(220)	11330	59-
ALDERGROVE 03917	03 855++	015	006	688	903 06 04 853 06 05 760 01 00 751 03 01 719 02 04- 593 07- 12- 455 ++ 24- 430 24- 27- 344 34- 39- 312 ++ 46- 224 57- 196 62- 181 55- 147 50- 070 52-	196	12080	62-
	02 786++	016	007	700	003 13 09 888 ++ 03 877 04 00 856 07 00 841 ++ 02 837 ++ 00 821 07 03 801 05 03 793 ++ 03 778 05 03 721 02 00 681 02- 04- 660 02- 12- 635 ++ 13- 607 ++ 19- 583 08- 24- 552 10- 21- 538 ++ 19- 511 ++ 22- 403 27- 40- 322 ++ 50- 247 53- 211 58- 171 57- 150 51- 062 53- 052 50- 046 52-	211	11620	58-
AUGHTON 03322	02 855++	017	010	732	998 13 09 985 ++ 06- 857 03 00 841 06 02 781 ++ 02- 734 00 03- 722 ++ 10- 673 03- 10- 646 06- 13- 613 07- 14- 589 08- 22- 516 14- 25- 502 ++ 24- 476 19- 32- 433 24- 30- 320 40- 46- 199 59- 188 59- 184 56- 168 53- 089 50- 075 55- 030 52-	199	11960	59- 075 18290 55-
	02 58531	019	012	703	000 12 08 944 09 07 880 06 02 857 07 03 785 03 00 764 04 01- 712 ++ 05- 678 02- 05- 658 03- 06- 612 ++ 11- 553 10- 15- 431 ++ 27- 320 40- 45- 244 54- 185 62- 169 56- 135 50- 082 53- 055 52-	185	12460	62-
HEMSBY 03496	02 00900	015	013	720	004 10 08 990 10 03 947 09 05 919 ++ 01 904 ++ 02 836 02 01- 814 04 04- 762 03 13- 662 ++ 16- 609 08- 25- 530 15- 29- 470 22- 30- 343 40- 49- 238 52- 224 49- 216 51- 131 47- 096 53- 050 51-	238	10710	52-
	02 00901	017	015	720	005 14 06 917 09 03 860 ++ 02 831 ++ 00 819 ++ 07- 737 ++ 140 719 ++ 08- 699 01- 10- 629 07- 16- 599 ++ 22- 478 20- 36- 448 ++ 33- 384 31- 38- 329 40- 46- 279 49- 192 57- 168 53- 118 51-	192	12180	57-
CRAWLEY 03774	02 657++	017	999	713	983 12 07 940 ++ 04 906 08 03 835 ++ 01- 831 02 02- 805 ++ 07- 783 04 10- 658 ++ 21- 640 06- 19- 594 ++ 29- 533 15- 24- 514 ++ 26- 440 ++ 33- 418 ++ 40- 363 37- 49- 276 49- 223 54- 167 50- 136 52- 113 49- 077 54- 067 53-	223	11180	54-
	02 51500	018	001	701	975 14 05 924 09 03 867 05 02 822 05 01- 778 ++ 02- 717 01 08- 600 09- 16- 552 11- 23- 483 20- 32- 444 22- 31- 317 ++ 46- 282 47- 235 51- 206 59- 172 53- 139 53- 122 50- 088 53- 068 55- 030 53-	206	11780	59-
CAMBORNE 03808	02 35430	019	009	708	979 10 08 968 11 05 928 ++ 06 871 05 02 852 ++ 15- 850 09 07- 830 08 01 768 05 08- 705 ++ 08- 673 03- 1 11- 664 ++ 11- 655 ++ 13- 640 ++ 13- 601 06- 16- 539 12- 22- 482 19- 26- 466 ++ 29- 379 ++ 39- 322 40- 46- 205 60- 198 60- 170 52- 102 51- 089 54- 058 54-	205	11780	60-
	02 6843+	021	011	692	993 11 08 963 ++ 08 891 05 03 876 07 02 807 03 01 792 ++ 01 777 04 02- 741 02 02- 693 00 06- 670 01- 10- 610 ++ 15- 544 11- 15- 476 18- 21- 406 27- 30- 395 27- 31- 308 40- 45- 299 42- 295 41- 287 44- 233 54- 220 55- 185 64- 148 54- 099 51- 095 53- 081 54- 036 52-	185	12490	64- 095 16750 53-
VALENTIA 03953	02 854++	020	018	700	924 08 07 843 05 04 732 03 02 674 02- 03- 652 02- 04- 541 11- 14- 491 14- 17- 404 26- 28- 342 33- 37- 255 49- 182 65- 133 52-	182	12500	65-
	01 785++	020	019	660	003 11 08 911 05 02 885 04 01- 855 08 00 799 05 12- 778 07 15- 684 02 25- 635 02- 29- 575 08- 31- 244 53- 187 61- 159 57- 151 54- 079 53- 061 57- 043 56-	187	12500	61-
Ocean Weather Station 'I' 59°00'N 19°00'W	61 663++	000	000	747	958 08 06 764 01 02- 697 03- 06- 640 09- 12- 630 08- 11- 615 ++ 11- 593 09- 17- 574 ++ 21- 550 13- 21- 524 ++ 32- 454 22- 45- 416 ++ 50- 365 35- 44- 326 40- 50- 254 52- 213 50- 207 44- 141 47- 134 50- 082 50-	254	10200	52- 134 14400 50-
	61 573++	999	999	865	976 06 04 873 00 02- 791 02- 05- 766 02- 05- 652 09- 13- 589 13- 19- 536 ++ 23- 483 24- 34- 446 ++ 40- 365 40- 48- 340 42- 276 43- 181 38- 119 49- 036 49-	340	08100	42- 119 15200 49-
Ocean Weather Station 'J' 52°30'N 20°00'W	02 856++	015	015	672	867 04 04 832 09 04 809 08 03 770 06 05- 740 04 04- 701 ++ 09- 679 ++ 06- 648 01- 06- 588 ++ 09- 552 11- 13- 533 10- 16- 526 ++ 21- 460 18- 31- 307 40- 48- 235 55- 181 62- 170 60- 153 53- 108 56-	181	12600	62-
	02 11532	018	018	830	933 04 03 906 05 04- 850 01 08- 791 02- 07- 767 03- 13- 753 02- 16- 610 08- 23- 580 10- 17- 542 ++ 22- 510 18- 21- 472 22- 24- 414 29- 31- 371 33- 36- 334 40- 43- 239 56- 158 48- 103 54- 076 52-	239	10700	56-







STATION		MAX. WIND
LERWICK 03005	073mb 100 03 23400m 070 06 11400m 280 53 09900/0 11300/1 11700/1 060mb 110 07 12050/1	290 80 09300m 290 66 10120m
STORNOWAY 03026	086mb 140 07 20600m 170 07 07980/1 13390/1 080mb 210 03 16300m 180 09 12320/1	300 72 10880m 250 65 09310m
SHANWELL 03170	171mb 320 17 11680/1 12100/1 28100m 090 11 13150/5 13690/5	330 70 10950m
ALDERGROVE 03917	175mb 340 20 080mb 100 08 22800m 080 11 12670/1 15150/8 171mb 250 18 126mb 180 11 12750m 240 25	
AUGHTON 03322	177mb 360 31 032mb 100 14 22500m 080 14 12810/1 164mb 300 04 060mb 080 12 21600m 070 03 12740/1	360 74 11000m
HEMSBY 03496	053mb 100 09 22500m 070 15 08100m 020 49 11100m 020 59 07010/0 09010/0 10440/1 11030/1 12020/1 178mb 020 18 124mb 050 06 12360m 020 18 22400m 070 14 11850/1	020 81 10240m
CRAWLEY 03774	340mb 010 42 P24600m 070 17 08700/0 11100/1 11570/1 12130/1 12600/1 22200m 120 10 07810/0 09350/0 12280/1 27900m 070 10 12400/1	020 68 09440m 030 80 10690m
CAMBORNE 03808	183mb 020 35 063mb 080 08 08290m 010 30 12970m 020 29 21300m 080 11 12530/1 26100m 090 09	020 82 11330m
VALENTIA 03953	924mb 290 12 732mb 310 22 652mb 320 17 541mb 330 21 133mb 010 06 911mb 260 17 575mb 250 24 244mb 260 34 151mb 230 12 079mb 130 06 043mb 090 05	
Ocean Weather Station 'I' 59°00'N 19°00'W	254mb 230 84 220mb 230 62 175mb 240 30 134mb 250 17 087mb 230 10 21600m 140 08 172mb 200 31 040mb 130 10	220 107 08960m
Ocean Weather Station 'J' 52°30'N 20°00'W	181mb 240 58 162mb 220 39 108mb 250 11 P17700m 210 05 12600m 240 28 170mb 230 35 076mb 180 10 10200m 270 94 10800m 260 67 18900m 160 07 10610/1	240 65 12090m 230 70 09200m 220 79 08520m 260 99 10340m
LARKHILL 03743		

## NOTES ON THE AEROLOGICAL SITUATION

On the European side there is little change, while the trough which recently left the St. Lawrence is now progressing across the Atlantic together with a westerly jet stream approaching the British Isles. The warm ridge immediately downstream is accordingly coming into the British Isles in association with the warm sector of a depression; but the westerlies still tend to fan out over the east of this country in association with the block over Europe.

AVERAGE AND EXTREME VALUES 1951-55							
JUNE							
<b>LERWICK</b> (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.							
Press. Level	Average		Extreme Temps.		Wind*		
	Height	Temp.	Max.	Min.	V <sub>R</sub>	V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	22345	-48.1	-42	-55	...	...	(11)
60	19675	-48.1	-41	-55	120	3	8
100	16320	-48.8	-41	-56	244	5	11
150	13660	-48.3	-41	-59	263	10	18
200	11770	-49.8	-39	-67	271	16	27
300	9125	-46.7	-37	-56	271	22	41
400	7160	-32.6	-23	-44	271	18	33
500	5555	-20.8	-11	-31	269	14	26
700	2985	-5.2	3	-14	266	9	19
850	1435	2.8	14	-7	269	6	18
Tropopause		Press. (mb.)	Temp. (°C)		Height (gpm.)		
Average		257	-54.7		10190		
Max.		405	-40		12955		
Min.		172	-68		6890		
<b>LARKHILL/CRAWLEY</b> † (Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.) at 03, 15h.							
Press. Level	Average		Extreme Temps.		Wind*		
	Height	Temp.	Max.	Min.	V <sub>R</sub>	V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	22310	-49.6	-47	-57	106	9	10
60	19675	-51.4	-45	-59	136	3	8
100	16370	-52.6	-46	-61	251	8	13
150	13745	-51.8	-42	-65	265	15	21
200	11890	-54.0	-40	-65	268	20	32
300	9265	-44.7	-36	-54	265	20	39
400	7275	-29.6	-19	-41	265	17	31
500	5640	-17.8	-9	-28	263	15	25
700	3050	-2.1	7	-10	263	11	19
850	1480	5.7	16	-3	264	7	16
Tropopause		Press. (mb.)	Temp. (°C)		Height (gpm.)		
Average		234	-56.8		10950		
Max.		388	-41		13440		
Min.		160	-66		7225		
<b>MALTA</b> (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.							
Press. Level	Average		Extreme Temps.		Wind*		
	Height	Temp.	Max.	Min.	V <sub>R</sub>	V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5	11
60	19670	-60.7	-53	-69	135	4	10
100	16510	-62.9	-57	-71	255	21	24
150	13995	-59.0	-51	-67	265	38	42
200	12185	-56.6	-47	-67	275	42	47
300	9530	-40.1	-33	-46	285	32	38
400	7500	-23.9	-19	-29	285	27	31
500	5835	-11.8	-8	-17	285	24	28
700	3165	7.2	13	-1	290	18	22
850	1535	17.9	27	8	290	9	14
Tropopause		Average	Max.	Min.	Max.	Min.	
		Press. Temp.	Press.	Press.	Temp.	Temp.	
Upper		mb. °C	mb.	mb.	°C	°C	
Lower		123 -65.7	...	73	...	-73	
		193 -59.8	266	...	-46	...	

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

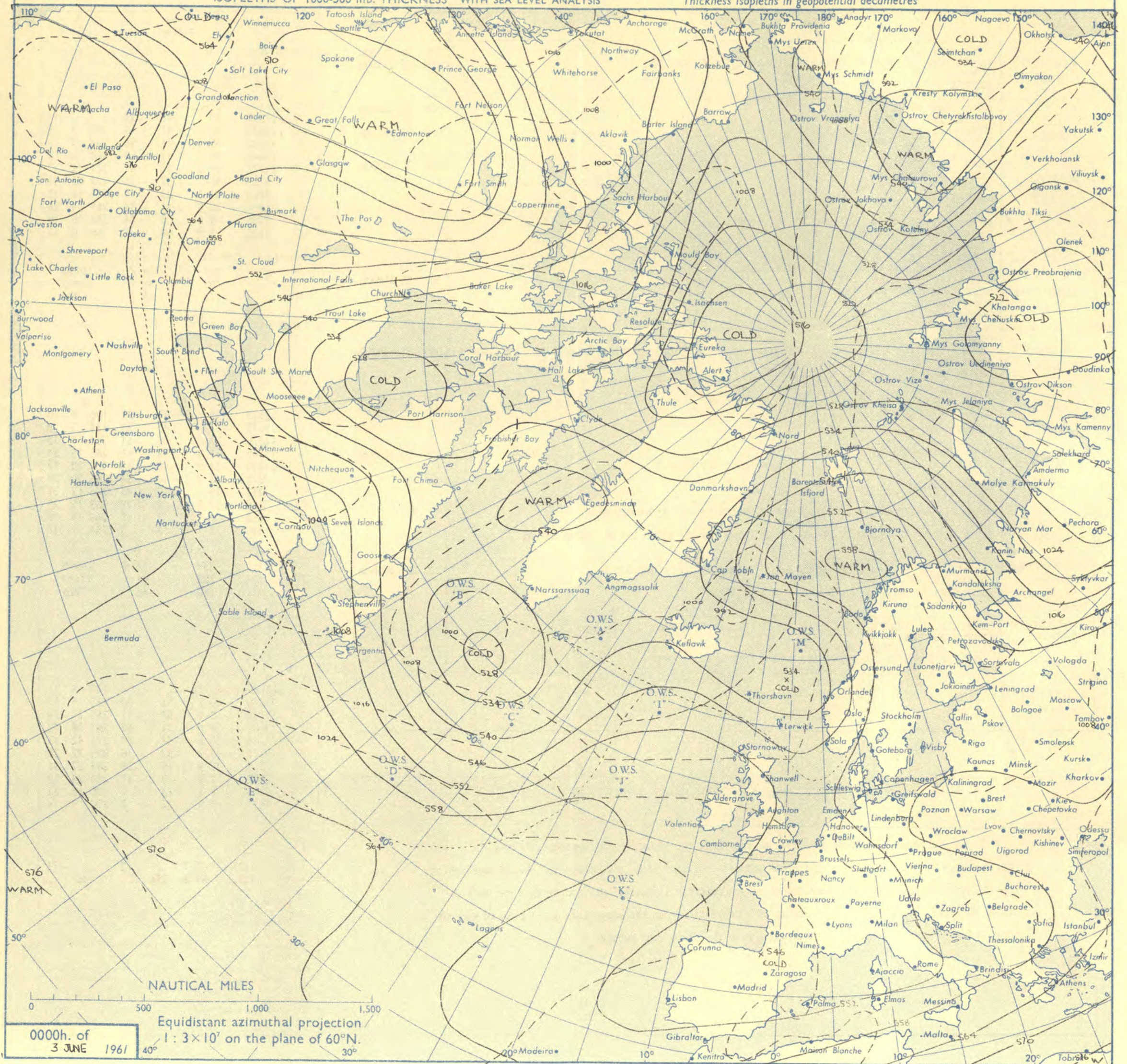
† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.



ISOPLETHS OF 1000-500 mb. THICKNESS WITH SEA LEVEL ANALYSIS

Thickness isopleths in geopotential decametres

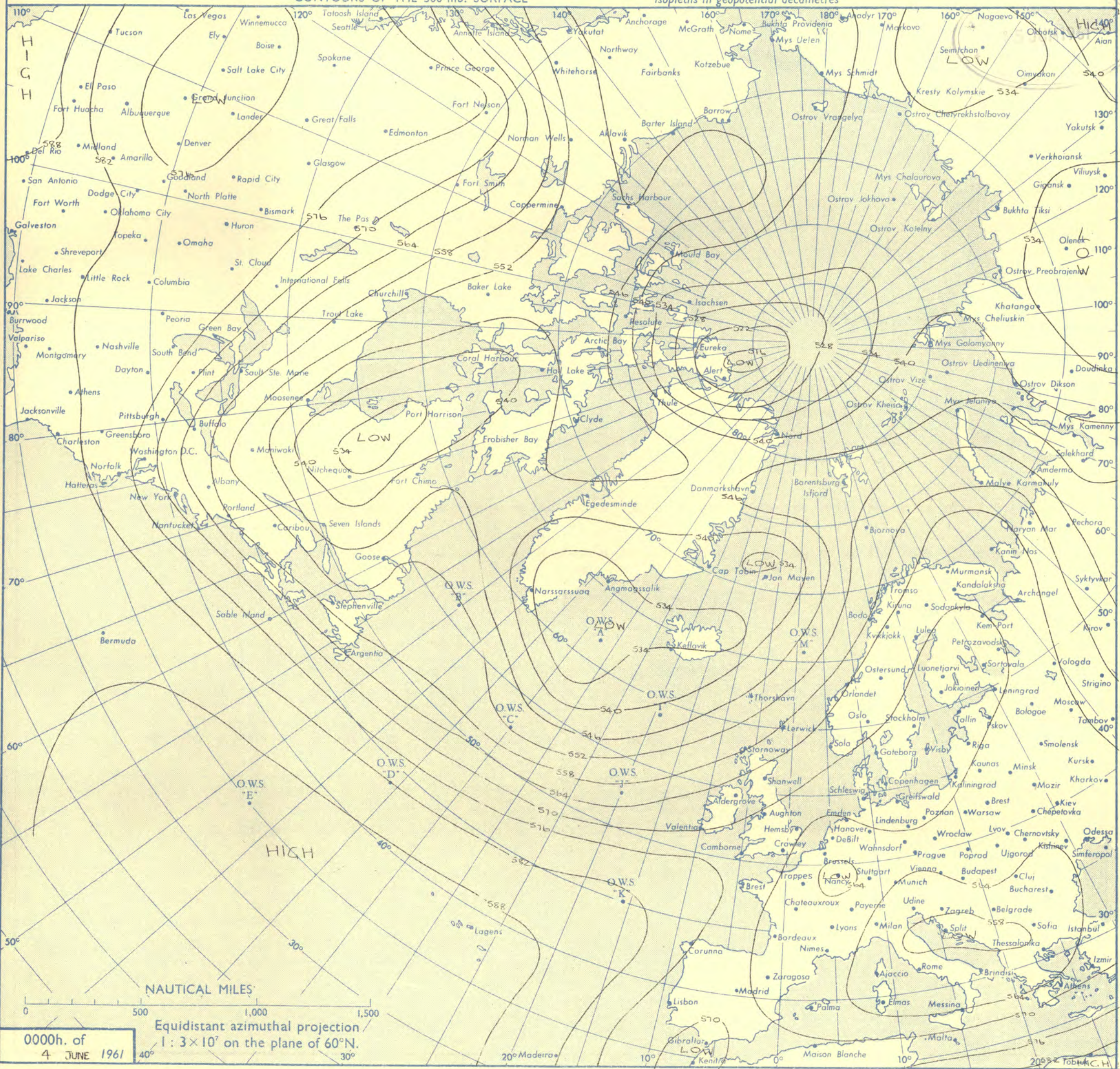




CONTOURS OF THE 500 mb. SURFACE

Isopleths in geopotential decametres

All times of observation printed in this publication are GREENWICH MEAN TIME.



NAUTICAL MILES

Equidistant azimuthal projection  
1:3 x 10<sup>7</sup> on the plane of 60°N.0000h. of  
4 JUNE 1961

20882 T06M.C.H.



STATION	YYGGgg	SURFACE			1000mb			850mb			700mb			500mb			400mb			300mb			200mb		150mb		100mb		70mb		50mb		30mb					
		gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C						
LERWICK 03005	032339	082	10	10	099	10	09	1440	04	01-	3002	01-	21-	5607	19-	25-	7239	28-	34-	9235	45-	++	11845	54-	13723	49-	16383	50-	18699	52-	20874	52-						
	041130	082	12	08	150	10	06	1473	00	08-	3023	04-	18-	5597	22-	38-	7197	35-	49-	9142	50-	++	11705	57-	13549	54-	16152	56-										
STORNOWAY 03026	032330	013	09	07	125	09	07	1448	00	05-	2997	04-	13-	5588	18-	27-	7217	30-	36-	9206	44-	++	11832	52-	13724	48-	16381	51-	18703	52-	20879	52-						
	041130	013	14	09	140	11	06	1469	01	03-	3017	04-	17-	5617	18-	31-	7245	30-	38-	9237	44-	++	11855	53-	13744	47-	16405	50-	18735	51-	20909	53-						
SHANWELL 03170	032330	005	12	09	137	13	09	1483	04	00	3061	00	05-	5669	17-	29-	7303	29-	36-	9286	47-	++	11872	57-	13739	50-	16368	53-										
	041130	005	17	08	161	14	06	1503	03	01	3066	02-	13-	5668	18-	33-	7294	31-	46-	9274	45-	++	11893	51-	13772	50-	16429	50-	18746	53-	20925	50-	24274	49-				
ALDERGROVE 03917	032330	077	12	11	159	11	09	1493	03	01	3049	01-	30-	5652	18-	24-	7290	29-	35-	9288	44-	++	11891	60-	13730	52-	16356	51-	18656	55-								
	041130	077	16	07	161	14	05	1499	01	01-	3060	00	31-	5679	17-	37-	7321	27-	35-	9326	42-	++	11937	58-	13803	50-	16458	50-	18779	53-	20959	51-						
AUGHTON 03322	032330	056	12	11	162	13	10	1509	03	02	3092	02	29-	5714	16-	22-	7354	28-	39-	9355	44-	++	11970	59-	13800	52-	16440	51-	18746	54-	20913	52-						
	041130	056	16	12	174	13	10	1519	04	03	3085	02-	03-	5688	18-	30-	7321	29-	44-	9306	46-	++	11913	56-	13767	51-	16409	52-	18720	51-	20926	47-						
HEMSBY 03496	032330	012	10	09	156	15	08	1513	07	05	3090	00	06-	5707	16-	28-	7344	29-	40-	9341	43-	++	11998	54-	13848	51-	16491	50-	18802	53-								
	041130	012	17	09	171	14	07	1528	07	02	3107	01	11-	5726	16-	22-	7366	30-	40-	9347	46-	++	11948	56-	13804	50-	16441	52-	18741	54-	20924	52-						
CRAWLEY 03774	032330	144	15	11	161	15	10	1521	06	04	3093	02-	09-	5684	18-	21-	7310	30-	33-	9304	43-	++	11941	57-	13780	54-												
	041130	144	19	12	172	18	11	1536	06	03	3107	02-	08-	5715	16-	30-	7353	29-	42-	9345	44-	++	11986	54-	13839	51-	16484	51-	18788	53-	20972	50-	24316	48-				
CAMBORNE 03808	032345	088	12	11	184	11	09	1528	09	03-	3116	02	20-	5746	16-	20-	7384	29-	33-	9382	44-	++	11989	60-	13816	52-	16450	52-	18740	54-	20910	52-	24218	51-				
	041130	088	15	13	189	13	11	1533	06	04	3109	01	05-	5723	15-	42-	7368	27-	42-	9373	43-	++	11995	58-	13858	51-	16494	51-	18806	53-								
VALENTIA 03953	032330	014	12	11	179	11	10	1523	04	02	3088	01-	21-	5690	18-	21-	7320	30-	45-	9320	43-	++	11960	57-	++++	++	16450	52-										
	041200	014	14	09	174	11	06	1510	06	13-	3081	02-	08-	5700	15-	19-	7350	27-	31-	9350	44-	++	11940	61-	++++	++	16420	52-										
Ocean Weather Station 'I'	040000		11	07	032	10	06	1363	01	02-	2897	08-	13-	5440	25-	31-	7020	39-	43-	8960	41-	++	11730	40-	13700	42-	16410	46-	18770	49-								
	041100		09	04	065	++	++	1254	02-	05-	2768	12-	16-	5250	30-	38-	6810	37-	48-	8810	36-	++	11610	40-	13560	43-	16280	46-	18640	49-	20840	50-	24160	53-				
Ocean Weather Station 'J'	032300		12	09	139	11	06	1479	04	04-	3029	04-	09-	5620	18-	20-	7260	28-	32-	9260	43-	++	11880	54-	13750	50-	16390	51-										
	041200		12	12	065	12	11	1412	05	01	2977	02-	07-	5580	18-	36-	7210	30-	46-	9200	43-	++	11850	47-	1375	47-	16430	48-										
59°00'N 19°00'W																																						
52°30'N 20°00'W																																						



## PRESSURES AND TEMPERATURES OF SIGNIFICANT LEVELS

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STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE			TROPOPAUSE mb m °C
		MSL	Surf.	0°C level	
LERWICK 03005	02 4557+	012 002 725	982 11 09 915 ++ 03 887 ++ 01- 809 02 01- 799 ++ 01- 779 02 07- 764 ++ 15- 742 ++ 18- 641 05- 25- 617 05- 209 11550 58-	25- 560 ++ 23- 530 ++ 26- 497 19- 25- 433 ++ 30- 404 28- 34- 326 40- 46- 258 54- 209 58- 200 54- 185 54-	
	02 42401	018 008 855 770	993 09 05 971 ++ 05 903 ++ 03- 883 ++ 03- 855 00 08- 757 00 11- 640 08- 26- 614 09- 28- 400 35- 49- 275 54- 241 62- 223 62- 172 52- 100 56- 085 58-		241 10540 62-
STORNOWAY 03026	02 12531	015 014 853 775	994 09 07 903 ++ 01 849 ++ 05- 842 01- 07- 822 ++ 11- 807 01 07- 736 03- 11- 669 05- 16- 574 11- 27- 526 ++ 30- 491 ++ 27- 402 30- 36- 326 40- 46- 224 57- 189 49- 124 49- 047 52-		224 11110 57-
	03 22631	017 015 825 778	012 12 07 979 ++ 05 948 ++ 01 861 01 02- 843 ++ 04- 822 ++ 07- 778 00 08- 691 04- 19- 672 03- 20- 518 16- 32- 408 29- 37- 396 30- 38- 323 40- 47- 229 58- 168 47- 094 49- 063 53- 042 53-		229 11000 58-
SHANWELL 03170	02 656++	016 016 693	004 13 09 911 ++ 04 879 06 01 858 ++ 01 846 04 02- 828 07 13- 805 06 14- 795 ++ 02- 770 04 01- 725 ++ 02- 691 00 05- 576 ++ 14- 565 13- 17- 557 ++ 17- 528 14- 32- 520 ++ 28- 457 ++ 31- 439 ++ 30- 418 26- 33- 334 40- 45- 272 52- 209 61- 189 52- 159 50- 100 53- 088 53-		209 11580 61-
	02 685++	019 018 730	000 14 06 921 07 04 847 03 01 824 05 04- 795 ++ 10- 769 ++ 09- 725 ++ 13- 675 04- 14- 601 07- 23- 369 35- 49- 224 58- 200 51- 100 50- 068 54- 046 49- 030 49-		224 11170 58-
ALDERGROVE 03917	05 655++	019 010 793 763 725	995 ++ 09 959 08 06 837 ++ 00 780 01- 04- 772 ++ 04- 759 00 16- 750 ++ 23- 725 00 26- 608 07- 37- 590 ++ 35- 508 18- 25- 495 ++ 23- 486 18- 24- 458 ++ 30- 438 ++ 30- 322 ++ 46- 231 58- 217 60- 194 59- 168 52- 095 52- 060 55- 053 54-		217 11380 60-
	02 58501	019 010 700	999 14 05 975 ++ 05 902 ++ 01 850 01 01- 821 03 08- 785 01 13- 705 ++ 31- 677 00 31- 502 17- 39- 494 17- 35- 428 ++ 31- 315 ++ 46- 296 43- 209 62- 173 50- 131 50- 115 48- 107 50- 033 53-		209 11660 62-
AUGHTON 03322	02 25500	020 013 680	007 13 11 000 13 10 972 13 09 943 ++ 07 927 ++ 04 847 03 02 831 07 02 799 07 17- 790 07 17- 736 05 26- 624 ++ 31- 608 06- 14- 587 08- 25- 555 10 30- 534 ++ 29- 507 15- 21- 493 17- 22- 474 20- 28- 449 21- 34- 321 40- 49- 246 54- 203 60- 142 51- 113 50- 066 54- 050 62-		203 11860 60-
	02 755++	021 014 749	003 13 09 962 10 08 942 ++ 06 866 05 03 705 02- 03- 673 ++ 07- 653 05- 17- 618 07- 16- 522 15- 23- 480 20- 34- 332 40- ++ 227 59- 169 51- 105 50- 076 52- 042 47-		227 11120 59-
HEMSBY 03496	02 00900	019 017 703	009 ++ 06 000 15 08 908 ++ 07 838 06 04 814 06 06- 799 ++ 01- 787 05 06- 759 03 00 733 ++ 02- 727 ++ 05- 701 00 06- 680 ++ 10- 597 ++ 15- 578 09- 18- 541 ++ 21- 519 14- 27- 371 33- 43- 318 40- 50- 241 51- 205 54- 114 49- 055 54-		205 11830 54-
	02 11500	020 019 687	993 14 07 903 10 06 884 09 05 870 08 02 809 04 02 791 05 00 712 ++ 08- 692 01- 13- 660 ++ 20- 642 04- 18- 608 05- 14- 570 09- 14- 514 ++ 20- 446 22- 32- 336 40- 48- 244 57- 236 55- 222 58- 145 50- 107 52- 071 54- 064 51- 047 52-		244 10700 57-
CRAWLEY 03774	02 855++	019 002 728	990 16 08 898 ++ 07 828 04 03 787 04 03- 755 ++ 04- 742 ++ 10- 667 06- 10- 598 10- 14- 560 ++ 15- 533 ++ 18- 451 ++ 26- 336 39- 42- 229 55- 193 58- 156 52- 146 55- 126 50-		193 12160 58-
	02 785++	020 003 718	991 17 10 941 ++ 09 822 04 01 763 01 02- 744 02 01 683 03- 10- 560 10- 21- 513 ++ 29- 346 37- 49- 323 41- 256 50- 236 56- 226 53- 185 55- 113 50- 075 54- 038 49- 034 51- 030 48-		236 10930 56-
CAMBORNE 03808	02 364++	022 012 674	004 ++ 10 949 08 06 906 07 05 897 ++ 05 879 09 02 833 09 07- 707 03 19- 686 ++ 21- 653 ++ 07- 606 05- 09- 531 14- 17- 514 14- 17- 411 28- 32- 371 32- 38- 323 40- 46- 247 55- 193 61- 157 52- 097 52- 082 55- 030 51-		193 12220 61-
	02 860++	022 012 689	993 12 11 849 06 04 824 06 04 791 03 01 750 03 00 734 03 03- 722 ++ 08- 686 ++ 05- 661 ++ 17- 639 04- 17- 627 ++ 14- 614 ++ 16- 603 ++ 14- 586 09- 19- 570 10- 28- 502 15- 42- 462 ++ 50- 314 40- 50- 240 55- 201 58- 192 52- 071 53- 052 51-		201 11970 58-
VALENTIA 03953	03 864++	022 020 710	990 11 10 814 03 03- 792 03 16- 747 03 20- 646 05- 18- 615 07- 12- 510 17- 20- 462 22- 25- 437 25- 37- 355 36- 49- 234 53- 203 58- 185 52- 084 52-		203 11900 58-
	03 72502	021 019 730	001 11 06 904 04 00 877 06 08- 812 05 14- 784 04 16- 683 03- 08- 67 03- 07- 616 06- 10- 558 12- 15- 548 11- 15- 493 15- 19- 346 35- 40- 250 55- 204 63- 176 53- 162 54- 151 49- 134 52- 107 52- 074 54-		204 11800 63-
Ocean Weather Station 'I' 59°00'N 19°00'W	15 5846+	004 004 837	982 ++ 05 965 ++ 06 932 ++ 01 806 ++ 03- 799 02- 04- 793 01- 03- 775 02- 07- 726 06- 10- 710 01- 13- 693 08- 13- 612 12- 22- 532 21- 27- 391 40- 15- 348 45- 217 38- 163 40- 130 46- 060 49-		348 10800 45- 130 14700 46-
	80 634++	992 992 887	971 06 01 893 00 03- 828 ++ 05- 717 ++ 15- 690 ++ 15- 670 14- 20- 547 ++ 36- 450 36- 44- 392 37- 49- 328 34- 49- 123 45- 030 53-		450 16000 36-
Ocean Weather Station 'J' 52°30'N 20°00'W	03 61635	017 017 770	975 09 03 949 09 04- 883 06 05- 831 ++ 05- 817 01 07- 792 01 08- 728 ++ 18- 693 ++ 07- 614 ++ 11- 578 ++ 14- 526 15- 17- 319 40- 44- 228 57- 223 60- 193 51- 156 50- 114 52- 081 52-		213 11500 60-
	61 7732+	008 008 739	979 11 09 872 ++ 02 668 ++ 09- 620 07- 13- 560 ++ 20- 544 14- 31- 516 17- 39- 497 18- 38- 412 29- 44- 319 40- ++ 237 56- 198 47- 100 48-		237 10700 56-



STATION	YYGGgg	Type	Surface	1000mb	900m	850mb 1500m	750mb 2100m	700mb 3000m	600mb 4200m	500mb 5400m	400mb 7200m	300mb 9000m	250mb 10500m	200mb 12000m	150mb 14100m	100mb 15900m	70mb 18300m	50mb 20700m	30mb 23700m	20mb 26400m	10mb 30900m
LERWICK 03005	032330	P	220 25	+++ ++	240 36	220 32	210 34	220 40	220 50	220 44	210 48	210 52	220 52	210 38	210 19	200 14	140 06				
	040530	P	240 16	+++ ++	260 16	240 20	230 26	220 31	220 37	210 44	210 58	210 62	210 63	210 40	200 19	180 16	190 12				
	041130	T	230 12	+++ ++	240 10	240 11	220 25	220 22	220 19	230 27	220 50	200 70	200 71	210 40	200 20	210 16					
	041730	P	150 12	+++ ++	180 13	200 13	200 18	200 28	210 25	210 28	220 34	230 34	230 29	210 29	210 15	180 16	190 16	080 09	090 14	090 17	
STORNOWAY 03026	032330	T	250 12	+++ ++	260 25	250 27	250 29	250 33	230 41	220 44	220 47	210 66	210 66	210 49	240 15	200 17	140 04	140 09			
	040530	P	210 10	+++ ++	230 17	240 18	240 20	240 20	240 23	250 32	230 38	220 41	220 51	230 33	220 18	170 10	200 10				
	041130	T	180 15	+++ ++	200 23	190 24	190 30	200 32	210 36	220 37	220 39	240 41	250 46	210 31	210 25	200 16	180 08	170 10			
	041730	P	190 17	+++ ++	200 36	210 39	210 39	220 34	220 42	220 47	220 50	220 53	230 63	220 34	210 25	210 12	180 10	170 05	070 04		
SHANWELL 03170	032330	T	230 06	+++ ++	260 23	240 24	220 24	210 26	210 31	220 30	220 35	220 35	220 35	220 25	210 10	200 06					
	040530	P	250 08	+++ ++	290 07	280 10	270 16	230 19	220 24	210 37	200 40	200 46	200 43	210 29	220 14	180 10	190 08				
	041158	P	060 15	+++ ++	220 09	220 12	230 16	220 26	230 16	250 16	260 17	310 26	290 28	220 20	210 17	190 10	140 09				
	041730	P	160 15	+++ ++	230 14	220 20	220 23	220 23	210 21	220 30	230 27	250 26	260 32	230 25	220 13	200 09	170 10	060 04			
ALDERGROVE 03917	032330	T	250 01	+++ ++	250 15	230 14	250 19	250 26	240 24	230 36	220 46	210 42	220 44	220 31	240 16	190 09	230 05				
	040530	P	200 02	+++ ++	260 04	250 07	230 16	230 16	260 21	280 23	280 32	290 33	290 42	260 28	240 13	220 08	190 09				
	041130	T	220 05	+++ ++	200 11	230 14	240 20	240 22	220 21	230 19	260 26	270 35	270 35	250 25	240 17	210 11	200 09	100 07			
	041730	P	180 13	+++ ++	210 18	220 17	230 28	220 25	220 24	230 32	240 30	230 33	230 36	230 30	230 18	200 13	190 08	110 07			
AUGHTON 03322	032330	T	000 00	+++ ++	300 12	260 11	260 11	250 08	260 13	290 11	300 08	270 12	270 16	280 15	190 08	220 07	090 09				
	040530	P	000 00	+++ ++	260 07	280 08	280 09	260 17	240 17	220 18	210 18	200 21	200 25	240 24	250 06	190 04					
	041130	T	220 03	+++ ++	200 04	210 06	220 15	240 25	210 16	230 14	330 11	320 28	330 31	230 07	240 09	170 03	110 08	110 10			
	041730	P	230 07	+++ ++	210 09	210 14	210 20	220 19	210 12	230 14	270 10	280 12	290 12	230 18	230 05	220 07	130 07				
HEMSBY 03496	032330	T	000 00	+++ ++	350 10	360 15	040 11	040 14	070 30	070 22	080 27	040 33	020 47	030 31	190 02	130 03	110 08				
	040530	P	000 00	+++ ++	010 09	010 09	040 08	050 14	110 16	110 17	120 23	150 24	090 14	080 08	170 04	070 07					
	041130	T	090 06	+++ ++	030 04	030 05	090 04	120 08	140 11	150 13	170 21	170 29	170 20	190 07	170 06	010 11	120 10	070 14			
	041730	P	100 06	+++ ++	350 05	290 05	160 08	160 17	160 07	170 09	180 13	190 22	200 21	190 07	130 06						
CRAWLEY 03774	032330	T	000 00	+++ ++	330 11	350 07	360 12	010 12	020 16	010 30	360 41	360 54	360 44	360 34	350 07						
	040530	P	000 00	+++ ++	340 05	310 09	310 14	360 14	030 17	030 24	010 28	360 48	350 43	020 20	350 07	060 09	080 09	040 07			
	041110	P	360 03	+++ ++	020 01	310 01	350 05	020 11	030 15	090 11	140 35	130 22	060 13	010 12	010 04	080 07	090 06	100 11			
	041730	P	000 00	+++ ++	310 02	030 04	360 05	100 04	080 07	130 10	150 18	190 19	160 12	050 07	060 03	000 00	030 03	080 10	090 05		
CAMBORNE 03808	040110	P	270 05	+++ ++	300 13	300 09	310 09	320 09	310 08	300 15	300 25	300 24	300 24	290 29							
	040530	P	270 04	+++ ++	310 12	340 16	330 16	310 11	280 13	280 19	300 30	310 34	330 39	300 28	290 06	050 04	050 05				
	041130	T	280 13	+++ ++	280 09	300 13	270 07	280 12	280 10	330 14	340 23	330 20	310 18	310 16	310 09						
	041810	P	280 08	+++ ++	260 11	260 14	270 05	290 09	310 10	310 16	340 13	340 19	330 24	330 19	310 06	350 03	020 03	050 06			
VALENTIA 03953	032330	T	000 00	260 04	+++ ++	260 20	+++ ++	260 34	+++ ++	240 42	250 49	260 63	+++ ++	290 56							
	041200	T	220 10	220 12	+++ ++	240 20	+++ ++	250 26	+++ ++	260 29	270 37	260 34	270 41	270 33	+++ ++	200 10					
Ocean Weather Station 'I' 59°00'N 19°00'W	040000	T	210 21	+++ ++	210 28	230 35	230 37	230 38	240 43	230 49	230 46	230 45	220 34	220 32	210 20	170 20	150 10				
	040500	P	180 30	+++ ++	180 60	190 52	200 49	190 47	190 41	200 52	210 70	210 71	220 51	240 31	210 32	200 22	170 14	190 09			
	041100	T	200 32	+++ ++	240 36	240 32	240 27	240 27	230 27	210 32	190 37	200 38	210 31	210 22	200 24	190 11	180 08	110 11			
	041800	P	270 40	+++ ++	240 45	240 43	240 42	250 45	240 43	240 44	240 43	260 42	240 27	230 20	210 17	200 07	150 07				
Ocean Weather Station 'J' 52°30'N 20°00'W	032300	T	190 22	+++ ++	210 35	210 37	220 38	220 42	240 46	240 55	260 65	270 72	250 68	250 62	250 33	250 16					
	040500	P	225 30	+++ ++	230 51	240 51	250 63	240 54	250 53	240 56	240 64	240 83	240 89	240 76							
	041200	T	230 28	+++ ++	240 40	240 38	240 41	240 47	250 58	250 60	240 58	230 48	250 56	250 48	240 36	240 20					
	041800	P	045 10	+++ ++	230 32	230 28	230 33	230 34	230 45												
LARKHILL 03743																					

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m	950mb °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
Cloud :— Inversion Levels :— Isothermal Levels :—														
YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m	950mb °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
Cloud :— Inversion Levels :— Isothermal Levels :—														
RATES OF SUBSCRIPTION: Single copy 5d. or post free 7d. One calendar month 13/-; one quarter 35/-; one year 125/-. For special arrangements for supply to schools and colleges see Form 2452.											Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General Meteorological Office, Air Ministry, Kingsway, London, W.C.2			



## UPPER WINDS AT ADDITIONAL LEVELS

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STATION		MAX. WIND
LERWICK 03005	20400m 210 03 12450/1 16700/5 12010/1 088mb 190 16 27600m 120 15	200 65 0974cm 200 77 1'200m
STORNOWAY 03026	175mb 230 33 050mb 140 09 11860/1 045mb 170 08 25200m 110 13 10240/1 11700/1 21060/5	200 69 09670m 230 70 10100m
SHANWELL 03170	092mb 150 02 19400m 130 08 02280/5 12210/1 08100m 280 23 20100m 120 07 10860/5 19400/7	
ALDERGROVE 03917	172mb 230 24 060mb 080 05 20400m 070 05 09650/0 10700/1 12300/1 038mb 090 07 01730/0	
AUGHTON 03322	054mb 110 07 17100m 010 03 443mb 280 14 223mb 290 22 044mb 120 11 19500m 110 03 11250/5	
HEMSBY 03496	354mb 070 30 058mb 080 09 16900m 110 07 10010/5	
CRAWLEY 03774	134mb 340 07 23400m 080 16 02430/2 21900m 100 06 04890/2 05310/2 08930/1 10350/5	
CAMBORNE 03808	12900m 300 14 12270/1 12300/1 15320/2 124mb 330 03 22200m 100 14	
VALENTIA 03953	747mb 260 24 615mb 250 37 462mb 240 48 355mb 270 57 234mb 280 56 904mb 230 17 784mb 250 23 151mb 250 12 134mb 240 16 107mb 250 11 074mb 230 26	260 63 12600m
Ocean Weather Station 'I' 59°00'N 19°00'W	134mb 190 22 21600m 220 08 01460/1 05270/0 06360/0 031mb 150 10 19800m 130 07	210 78 06910m
Ocean Weather Station 'J' 52°30'N 20°00'W	180mb 250 49 081mb 250 10 557mb 250 62 04800m 230 36	270 80 09870m 240 90 10680m 250 62 04750m
LARKHILL 03743		

## NOTES ON THE AEROLOGICAL SITUATION

The low east of Hudson's Bay and the trough extending southwards are moving east slowly while the downstream ridge is slowly increasing in amplitude. The low between southeast Greenland and Iceland is moving east slowly while the trough extension off east Greenland moves north. A westerly jet stream extends from east of the Great Lakes across middle latitudes of the Atlantic towards the British Isles. The blocking pattern over Europe is maintained with little change.

## AVERAGE AND EXTREME VALUES 1951-55

JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22345	-48.1	-42	-55	...	...
60	19675	-48.1	-41	-55	120	3 (11) 8
100	16320	-48.8	-41	-56	244	5 11
150	13660	-48.3	-41	-59	263	10 18
200	11770	-49.8	-39	-67	271	16 27
300	9125	-46.7	-37	-56	271	22 41
400	7160	-32.6	-23	-44	271	18 33
500	5555	-20.8	-11	-31	269	14 26
700	2985	-5.2	3	-14	266	9 19
850	1435	2.8	14	-7	269	6 18

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	257	-54.7	10190
Max.	405	-40	12955
Min.	172	-68	6890

LARKHILL/CRAWLEY† at 03, 15h.  
(Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.)

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22310	-49.6	-47	-57	106	9 10
60	19675	-51.4	-45	-59	136	3 8
100	16370	-52.6	-46	-61	251	8 13
150	13745	-51.8	-42	-65	265	15 21
200	11890	-54.0	-40	-65	268	20 32
300	9265	-44.7	-36	-54	265	20 39
400	7275	-29.6	-19	-41	265	17 31
500	5640	-17.8	-9	-28	263	15 25
700	3050	-2.1	7	-10	263	11 19
850	1480	5.7	16	-3	264	7 16

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	234	-56.8	10950
Max.	388	-41	13440
Min.	160	-66	7225

MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5 11
60	19670	-60.7	-53	-69	135	4 10
100	16510	-62.9	-57	-71	255	21 24
150	13995	-59.0	-51	-67	265	38 42
200	12185	-56.6	-47	-67	275	42 47
300	9530	-40.1	-33	-46	285	32 38
400	7500	-23.9	-19	-29	285	27 31
500	5835	-11.8	-8	-17	285	24 28
700	3165	7.2	13	-1	290	18 22
850	1535	17.9	27	8	290	9 14

Tropopause	Average Press.	Average Temp.	Max. Press.	Min. Press.	Max. Temp.	Min. Temp.
Upper	mb.	°C	mb.	mb.	°C	°C
Lower	123	-65.7	...	73	...	-73
	193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

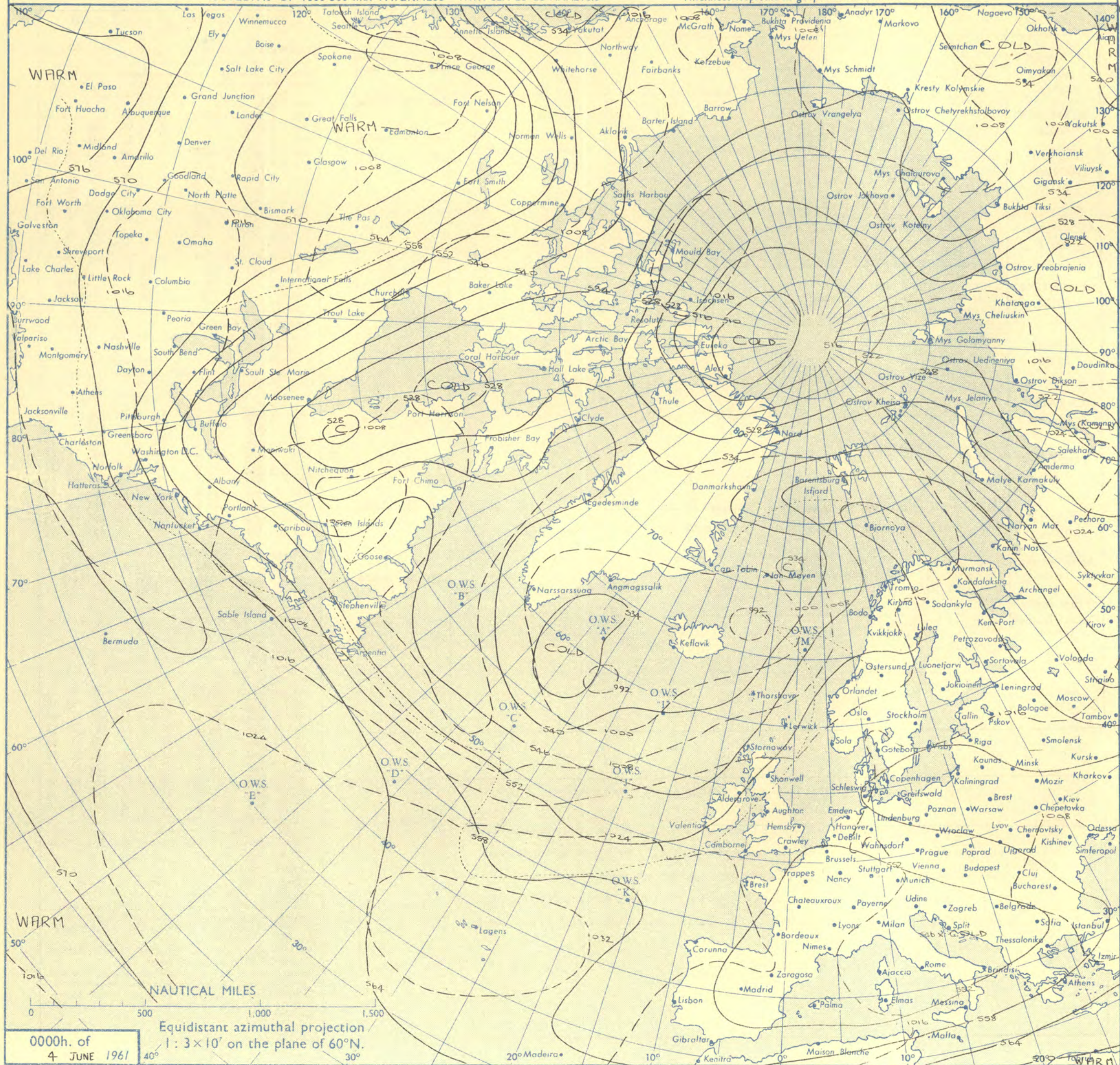
† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.



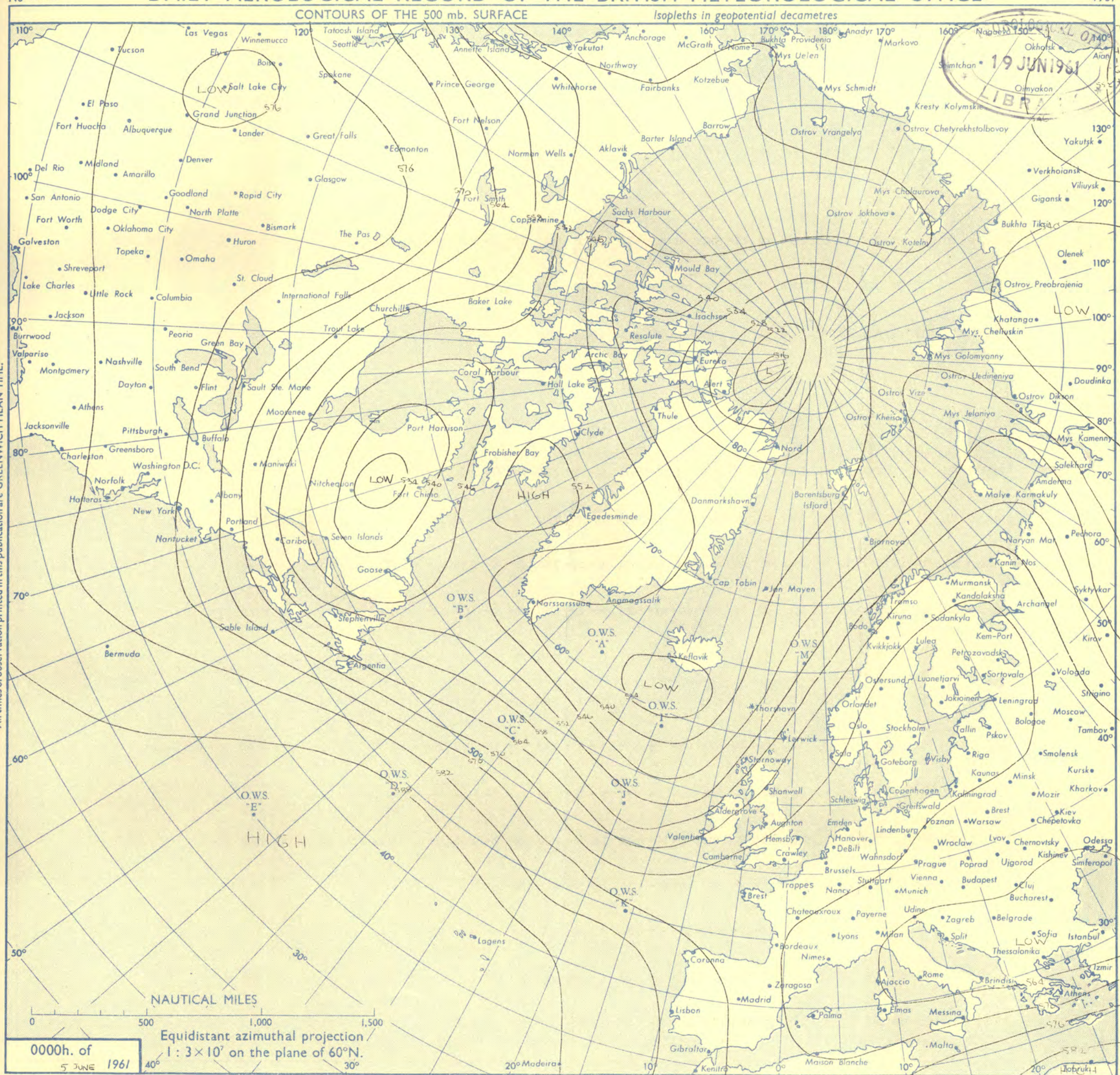
ISOPLETHS OF 1000-500 mb. THICKNESS WITH SEA LEVEL ANALYSIS

Thickness isopleths in geopotential decametres





All times of observation printed in this publication are GREENWICH MEAN TIME.





STATION	YYGGgg	SURFACE			1000mb			850mb			700mb			500mb			400mb			300mb			200mb			150mb			100mb			70mb			50mb			30mb		
		gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C			
LERWICK 03005	042330	082	09	09	131	09	07	1465	03	01	3016	02	15	5623	17	23	7259	29	34	9251	45	++	11868	50	13765	47	16444	49	18780	50	20983	49								
	051130	082	13	10	115	11	09	1460	04	01	3018	03	05	5620	17	21	7255	29	38	9235	47	++	11841	52	13730	47	16403	49	18733	52	20917	52								
STORNOWAY 03026	042330	013	12	08	105	10	07	1438	04	03	2995	03	05	5581	19	29	7202	30	41	9187	46	++	11805	51																
	051130	013	12	12	095	11	10	1434	04	03	3000	01	07	5593	16	23	7231	29	38	9225	45	++	11849	49	13747	48	16425	48	18765	50	20960	50								
SHANWELL 03170	042330	005	10	07	138	13	08	1484	06	01	3052	00	12	5672	16	22	7312	28	32	9308	45	++	11902	57	13772	50	16422	51	18734	52	20916	51								
	051130	005	16	11	124	13	08	1468	05	03	3027	02	04	5625	18	24	7261	28	38	9247	46	++	11836	53	13708	50	16363	50	18682	53	20865	50	24229	48						
ALDERGROVE 03917	042330	077	11	08	136	10	08	1474	04	03	3032	02	04	5636	17	20	7273	29	34	9259	45	++	11849	55	13719	50	16356	52												
	051145	077	15	10	125	14	10	1468	05	03	3032	02	04	5636	17	20	7275	27	32	9275	44	++	11883	52	13774	47	16447	48	18789	49	20999	48								
AUGHTON 03322	042330	056	13	11	160	13	09	1507	05	03	3074	01	24	5688	15	35	7335	27	42	9335	45	++	11930	58	13785	51	16425	52	18726	53	20898	52								
	051130	056	18	12	147	14	06	1493	07	06	3061	02	05	5671	16	20	7314	28	33	9314	44	++	11913	61	13756	53	16397	51	18701	55	20869	52	24162	54						
HEMSBY 03496	042330	012	11	10	168	13	09	1527	08	05	3108	01	02	5731	15	22	7377	28	36	9372	45	++	11966	59	13803	52	16437	52												
	051130	012	15	11	157	14	07	1521	09	02	3102	01	03	5721	16	27	7362	29	40	9352	45	++	11950	59	13785	52	16417	52	18715	54	20873	53								
CRAWLEY 03774	042330	144	12	11	168	13	12	1528	06	04	3098	01	07	5723	16	22	7366	28	34	9362	45	++	11959	58	13786	53	16405	53	18692	55	20851	53	24147	52						
	051130	144	20	12	155	19	11	1520	07	04	3097	01	06	5717	15	24	7359	29	36	9349	45	++	11954	57	13801	52	16433	53	18717	55	20883	53	24193	52						
CAMBORNE 03808	042330	088	12	11	175	12	10	1519	08	08	3101	01	10	5727	16	19	7374	27	33	9379	44	++	11984	59	13829	51	16467	52	18765	54	20932	53	24259	53						
	051130	088	16	11	155	14	09	1497	06	01	3064	01	05	5673	17	19	7313	28	33	9315	44	++	11923	54	13788	51	16423	51	18722	54										
VALENTIA 03953	042330	014	13	11	143	12	10	1494	04	01	3048	02	03	5660	16	19	7300	27	31	9300	45	++	11910	53	++++	++	16410	51												
	051133	014	13	12	115	12	11	1457	04	03	3018	02	04	5620	17	28	7260	28	35	9260	44	++	11900	50	++++	++	16470	49												
Ocean Weather Station 'I'  59°00'N 19°00'W	050000		09	07	029	++	++	1295	01	04	2822	09	13	5350	25	32	6930	38	45	8870	41	++	11620	42																
	051200		09	06	043	09	06	1359	02	04	2879	10	18	5410	24	35	7000	34	43	8970	45	++	11720	40																
Ocean Weather Station 'J'  52°30'N 20°00'W	042300		11	07	073	10	07	1405	05	01	2967	03	06	5560	20	35	7170	32	47	9140	45	++	11830	46	13730	48	16390	52												
	051100		12	04	146	09	02	1465	02	06	3019	01	21	5610	19	32	7240	29	40	9240	43	++	11890	54	13740	51	16370	55												



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	47 9+0++	016	006	777	995 ++ 06 960 07 05 949 08 06 898 07 02 823 02 02- 755 ++ 12- 710 ++ 16- 643 04- 17- 607 ++ 21- 563 ++ 19- 529 24- 20- 327 40- 46- 237 58- 222 59- 214 52- 179 47- 100 49- 053 50- 040 48-	222	11200	59-
	02 3864+	014	004	768	994 10 08 948 10 06 866 05 03 736 02- 04- 667 04- 08- 506 ++ 20- 472 20- 27- 385 ++ 41- 337 40- 50- 246 56- 228 58- 187 49- 153 47- 100 49- 061 53- 036 49- 030 52-	228	11000	58-
STORNOWAY 03026	02 7552+	013	011	770	923 05 03 889 05 03 689 04- 06- 620 10- 13- 603 09- 13- 564 ++ 19- 559 14- 21- 540 14- 27- 475 ++ 32- 439 26- 37- 403 29- 41- 332 40- 47- 240 56- 170 47-	240	10650	56-
	02 573++	012	010	724	995 11 10 793 02 00 762 02 02- 746 ++ 06- 689 ++ 12- 636 07- 12- 615 07- 12- 565 ++ 16- 545 ++ 23- 525 15- 27- 502 ++ 24- 474 19- 28- 394 29- 38- 326 40- 46- 228 58- 210 51- 184 47- 137 49- 127 46- 063 51- 044 49-	228	11000	58-
SHANWELL 03170	02 555++	017	016	700	009 14 10 002 ++ 08 954 ++ 07 900 08 02 861 05 01 842 06 03- 811 ++ 09- 774 02 11- 735 ++ 15- 712 01 10- 685 01- 13- 657 03- 09- 535 13- 16- 513 14- 19- 402 28- 32- 325 40- 45- 214 62- 183 51- 119 49- 100 51- 039 51-	214	11470	62-
	02 785++	016	015	761	008 14 09 913 06 04 869 04 02 845 05 02 831 ++ 01- 790 01 02- 719 02- 06- 699 02- 08- 666 05- 11- 649 0 04- 12- 545 14- 19- 483 19- 25- 456 ++ 31- 419 25- 35- 332 40- 50- 258 56- 229 61- 218 60- 204 53- 149 49- 100 50- 060 53- 044 48- 030 48-	229	10970	61-
ALDERGROVE 03917	60 5567+	016	007	783	007 11 08 986 09 06 965 10 08 930 ++ 06 783 00 01- 677 03- 05- 504 16- 19- 413 ++ 43- 328 ++ 45- 222 61- 213 61- 185 51- 095 52-	222	11210	61-
	02 5557+	015	006	738	983 12 09 918 ++ 06 901 ++ 07 867 05 03 780 01 01- 758 01 02- 525 14- 17- 442 23- 28- 410 26- 31- 322 ++ 46- 229 60- 215 55- 180 48- 050 48-	229	11010	60-
AUGHTON 03322	02 4563+	019	013	711	000 13 09 902 ++ 06 807 02 01 791 05 10- 788 ++ 17- 756 ++ 24- 728 ++ 20- 665 03- 30- 547 ++ 43- 530 ++ 34- 485 16- 39- 341 37- 50- 241 57- 211 62- 187 53- 108 50- 096 53- 035 51-	211	11610	62-
	02 45532	018	011	732	007 15 08 998 ++ 05 894 06 05 852 07 04- 848 ++ 07- 824 05 05- 800 05 07- 793 05 09- 773 03 03- 733 00 03- 636 06- 08- 544 12- 17- 416 ++ 29- 388 ++ 34- 323 40- 45- 217 61- 202 62- 191 55- 141 51- 088 51- 069 55- 052 52- 030 54-	202	11860	62-
HEMSBY 03496	02 8097+	020	019	709	014 13 11 010 13 09 944 13 09 895 ++ 05 858 ++ 06 795 ++ 01 770 ++ 02 745 03 01 687 02- 03- 669 02- 03- 641 05- 06- 628 ++ 06- 590 07- 10- 492 16- 23- 326 40- 47- 230 59- 214 51- 143 50- 076 55-	214	11550	61-
	02 856++	019	017	721	001 14 08 970 14 00 945 ++ 10 930 ++ 06 900 11 08 870 10 07 850 ++ 02 840 ++ 04 821 08 04 793 ++ 00 739 ++ 01- 694 02- 04- 680 01- 05- 668 ++ 09- 620 06- 12- 600 ++ 16- 568 ++ 16- 541 ++ 24- 523 ++ 27- 498 ++ 25- 460 20- 32- 410 28- 37- 395 ++ 42- 334 39- 50- 234 57- 214 60- 155 52- 106 51- 067 55- 050 53-	214	11510	60-
CRAWLEY 03774	02 555++	020	003	748	985 15 13 932 12 10 885 ++ 05 830 05 03 748 00 02- 685 01- 08- 678 ++ 10- 607 05- 17- 575 ++ 19- 541 ++ 16- 458 21- 27- 333 39- 46- 220 61- 153 53- 064 55- 030 52-	220	11350	61-
	02 52500	013	001	693	990 17 10 905 ++ 09 830 05 02 776 03 01 760 ++ 05- 709 01- 07- 606 08- 13- 585 08- 16- 545 11- 17- 475 ++ 28- 394 30- 36- 330 ++ 46- 275 50- 225 59- 159 53- 116 50- 099 54- 030 52-	225 099	11200 16500	59- 54-
CAMBORNE 03808	01 35472	021	010	683	991 12 10 971 11 07 880 05 03 851 ++ 07- 842 09 07- 815 ++ 11- 682 ++ 09- 642 ++ 13- 613 05- 10- 574 10- 13- 559 10- 13- 479 ++ 20- 450 20- 25- 399 27- 33- 319 40- 46- 210 62- 189 56- 162 51- 113 51- 088 54- 030 50-	210	11670	62-
	02 5853+	018	008	721	993 13 08 922 07 05 893 ++ 02 812 05 06- 800 ++ 09- 788 ++ 04- 658 03- 06- 453 ++ 24- 404 ++ 32- 358 33- 39- 319 40- 46- 217 61- 200 54- 170 51- 095 50- 086 54- 064 54-	217 086	11360 17400	61- 54-
VALENTIA 03953	21 6542+	017	016	790	928 11 06 759 03- 04- 721 02- 03- 629 05- 06- 517 15- 17- 477 17- 22- 352 34- 39- 241 55- 179 50- 095 51- 064 52-	241	10700	59-
	61 874++	014	013	760	905 06 04 786 02 00 689 04- 07- 666 03- 07- 600 09- 15- 438 23- 34- 337 35- 44- 278 49- 250 54- 205 51- 191 47- 167 49- 093 50- 056 50- 048 44-	250	10500	54-
Ocean Weather Station 'I' 59°00'N 19°00'W	25 634++	997	997	860	979 08 04 926 ++ 01 911 ++ 01- 835 ++ 04- 818 03- 06- 804 03- 07- 746 ++ 14- 717 ++ 12- 592 16- 21- 474 ++ 36- 389 40- 47- 349 46- 301 41- 163 42-	349	07800	46-
	25 784++	005	005	882	986 07 03 950 ++ 02 723 10- 13- 695 10- 20- 685 10- 21- 630 14- 30- 595 16- 21- 544 20- 26- 520 ++ 31- 496 24- 36- 467 27- 36- 448 29- 40- 410 34- 42- 353 40- 50- 340 42- 299 45- 267 42- 156 41-	299	09000	45-
Ocean Weather Station 'J' 52°30'N 20°00'W	21 68500	009	009	739	902 03 03 870 06 11- 851 05 01- 800 01 01 767 02 07- 754 ++ 12- 720 ++ 04- 682 ++ 09- 659 05- 18- 589 10- 25- 428 29- 43- 343 40- 274 48- 191 45- 100 52- 082 51-	274	09700	48-
	02 785++	018	018	873 720	005 09 01 926 ++ 01- 915 03 03- 888 ++ 06- 825 03- 10- 810 02 0- 791 ++ 13- 703 01- 21- 638 05- 28- 568 ++ 34- 521 17- 31- 440 ++ 33- 418 27- 38- 320 40- 50- 278 46- 254 48- 221 55- 210 56- 184 52- 143 51- 111 53- 086 53-	210	11000	50-







## UPPER WINDS AT ADDITIONAL LEVELS

Page 5

STATION		MAX. WIND
LERWICK 03005	046mb 080 07 20100m 170 06 11700/1	210 63 10370m 210 69 09940m
STORNOWAY 03026	22700m 120 09 09360/0 10720/1 18980/5 16900m 200 14 09530/0 10580/1 11010/1	200 75 10110m 190 69 10100m 210 68 09800m 190 77 10380m
SHANWELL 03170	042mb 060 05 12060/1 P25200m 080 17 17700m 210 18 12390/1	
ALDERGROVE 03917	173mb 220 24 20200m 060 08 054mb 110 03	210 51 11000m 220 52 11150m
AUGHTON 03322	038mb 080 10 19500m 080 06 12240/2 P27300m 050 08	
HEMSBY 03496	083mb 110 06 11250m 210 16 15140m 170 03 058mb 080 08 11770/5	
CRAWLEY 03774	P26400m 080 07 21900m 090 16 22500m 060 07	
CAMBORNE 03808	035mb 090 10 073mb 030 06 30000m 050 14	
VALENTIA 03953	920mb 220 33 629mb 240 34 352mb 240 46 241mb 240 46 179mb 240 27 064mb 230 09 906mb 190 27 600mb 220 16 278mb 190 58 250mb 200 47 167mb 250 19 048mb 070 02	
Ocean Weather Station 'I' 59°00'N 19°00'W	170mb 240 22 P14700m 220 20 17700m 210 12 15300m 210 13 16800m 170 11 170mb 240 19 25200m 100 21 17740/9	260 62 07690m 220 72 08690m
Ocean Weather Station 'J' 52°30'N 20°00'W	085mb 260 03 19500m 240 13 176mb 290 52 08100m 300 88 11100m 290 75 13500m 290 45	300 111 09290m 300 111 10300m
LARKHILL 03743	20420m 080 13 12750/1	

## NOTES ON THE AEROLOGICAL SITUATION

The low over Labrador and the trough southwards across Nova Scotia are moving slowly east, distorting the strong westerly flow over middle latitudes of the Atlantic. The low south of Iceland is also moving slowly east, but the trough westwards from this centre persists, and a small high has developed over the Davis Strait. A trough extending southward from the Iceland low is moving steadily east and southeast causing some weakening in the ridge over Biscay and the English Channel. The blocking pattern over Europe persists with little change.

AVERAGE AND EXTREME VALUES 1951-55  
JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.

Press. Level	Average Height	Average Temp.	Extreme Max.	Extreme Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22345	-48.1	-42	-55	...	(11)
60	19675	-48.1	-41	-55	120	3 8
100	16320	-48.8	-41	-56	244	5 11
150	13660	-48.3	-41	-59	263	10 18
200	11770	-49.8	-39	-67	271	16 27
300	9125	-46.7	-37	-56	271	22 41
400	7160	-32.6	-23	-44	271	18 33
500	5555	-20.8	-11	-31	269	14 26
700	2985	-5.2	3	-14	266	9 19
850	1435	2.8	14	-7	269	6 18

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	257	-54.7	10190
Max.	405	-40	12955
Min.	172	-68	6890

LARKHILL/CRAWLEY† at 03, 15h.  
(Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.)

Press. Level	Average Height	Average Temp.	Extreme Max.	Extreme Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22310	-49.6	-47	-57	106	9 10
60	19675	-51.4	-45	-59	136	3 8
100	16370	-52.6	-46	-61	251	8 13
150	13745	-51.8	-42	-65	265	15 21
200	11890	-54.0	-40	-65	268	20 32
300	9265	-44.7	-36	-54	265	20 39
400	7275	-29.6	-19	-41	265	17 31
500	5640	-17.8	-9	-28	263	15 25
700	3050	-2.1	7	-10	263	11 19
850	1480	5.7	16	-3	264	7 16

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	234	-56.8	10950
Max.	388	-41	13440
Min.	160	-66	7225

MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.

Press. Level	Average Height	Average Temp.	Extreme Max.	Extreme Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5 11
60	19670	-60.7	-53	-69	135	4 10
100	16510	-62.9	-57	-71	255	21 24
150	13995	-59.0	-51	-67	265	38 42
200	12185	-56.6	-47	-67	275	42 47
300	9530	-40.1	-33	-46	285	32 38
400	7500	-23.9	-19	-29	285	27 31
500	5835	-11.8	-8	-17	285	24 28
700	3165	7.2	13	-1	290	18 22
850	1535	17.9	27	8	290	9 14

Tropo- pause	Average Press.	Average Temp.	Max. Press.	Min. Press.	Max. Temp.	Min. Temp.
Upper	mb.	°C	mb.	mb.	°C	°C
Lower	123	-65.7	...	73	...	-73
	193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

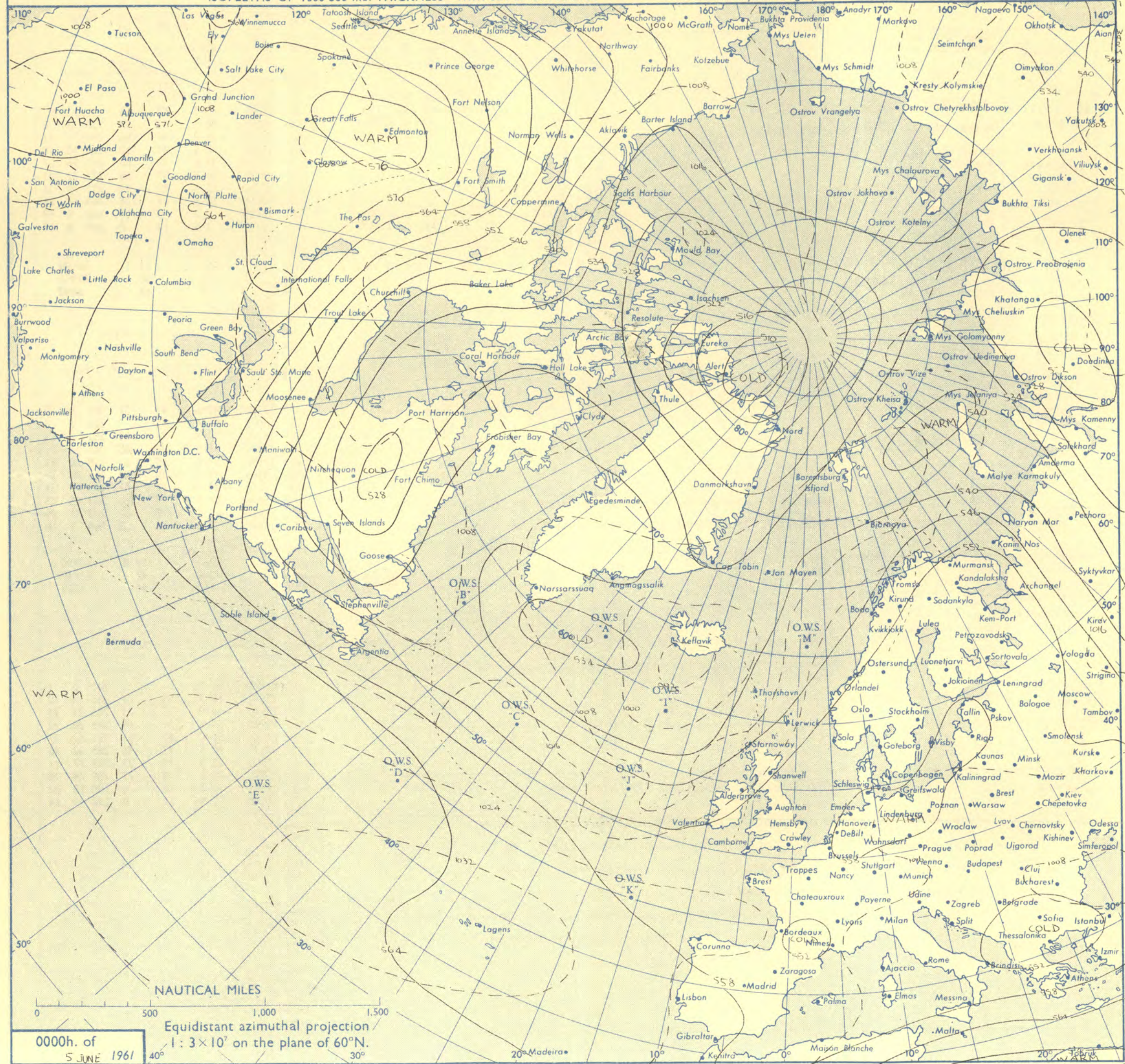
† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.

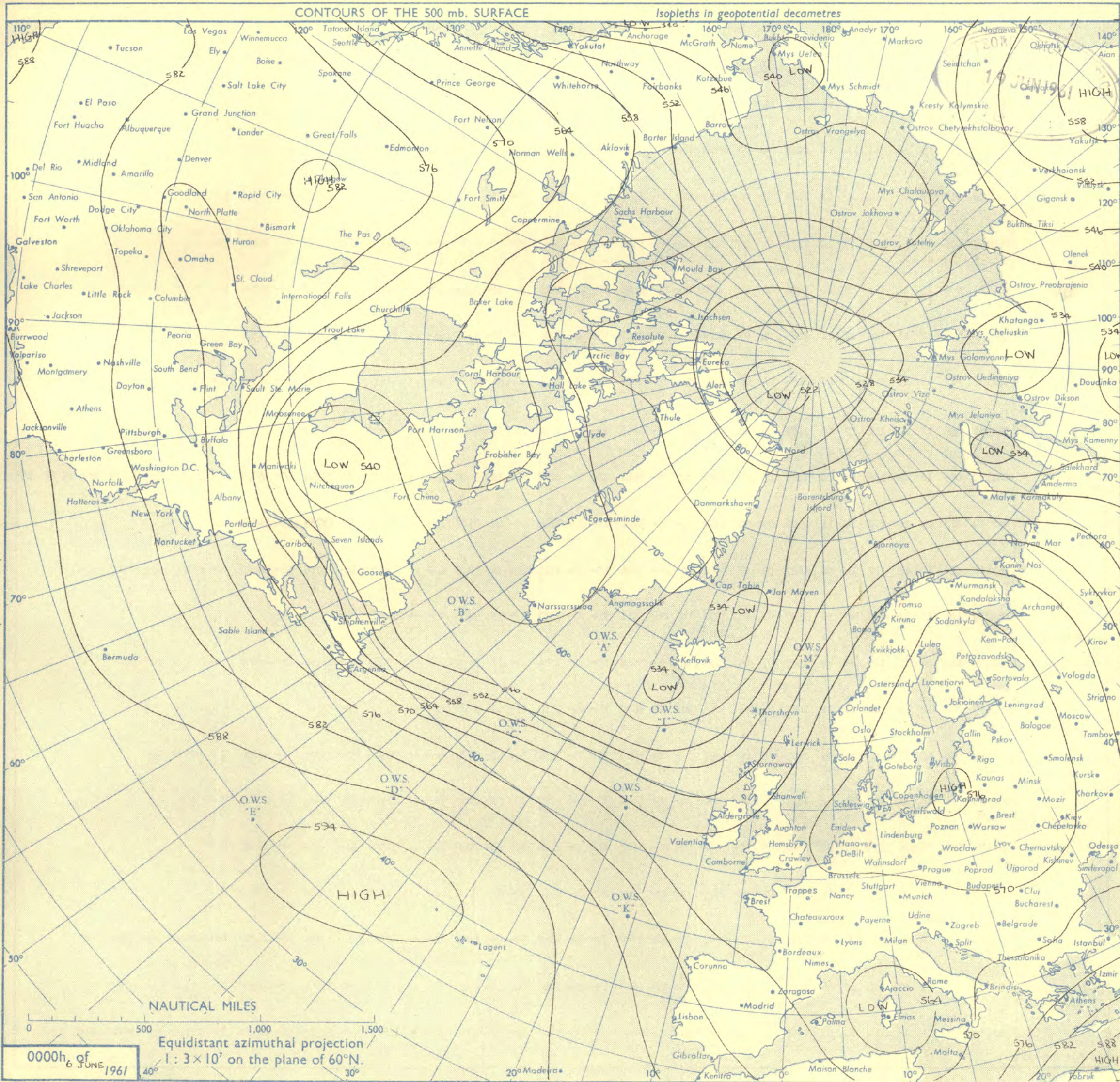


ISOPLETHS OF 1000-500 mb. THICKNESS WITH SEA LEVEL ANALYSIS

Thickness isopleths in geopotential decametres

0000h. of  
5 JUNE 1961Equidistant azimuthal projection  
1:3 x 10^7 on the plane of 60°N.







STATION	YYGGgg	SURFACE			1000mb			850mb			700mb			500mb			400mb			300mb			200mb			150mb			100mb			70mb			50mb			30mb		
		gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C			
LERWICK 03005	052330	082	09	09	109	10	10	1452	04	03	3011	03	06	5601	19	22	7221	31	35	9197	47	++	11793	51	13679	48	16346	50	18666	51										
	061130	082	11	11	088	11	11	1426	04	03	2978	04	05	5564	18	22	7195	30	34	9171	47	++	11798	49	13699	47	16386	48	18727	50										
STORNOWAY 03026	052330	013	09	08	104	08	06	1439	04	03	2998	04	05	5574	19	26	7197	30	36	9181	46	++	11823	48	13730	47	16419	46												
	061130	013	12	06	104	10	01	1428	01	06	2955	07	26	5507	23	31	7101	35	45	9046	49	++	11729	46	13648	46	16334	47												
SHANWELL 03170	060050	005	13	11	128	13	10	1477	05	03	3042	02	05	5654	16	20	7294	29	33	9286	46	++	11889	53	13765	49	16420	50												
	061130	005	15	12	113	13	10	1454	04	03	3010	04	06	5586	20	26	7210	31	36	9188	46	++	11808	50	13697	49	16350	50	18672	51	20864	50								
ALDERGROVE 03917	052330	077	12	11	124	12	11	1465	04	03	3019	04	07	5607	18	22	7236	30	36	9221	46	++	11831	54	13690	51	16324	52												
	061130	077	12	09	129	11	08	1458	04	00	3006	03	15	5587	19	34	7204	32	48	9160	49	++	11815	48	13718	48	16389	48	18719	52										
AUGHTON 03322	052330	056	11	10	141	12	09	1489	05	03	3056	00	12	5665	16	27	7304	29	38	9298	45	++	11902	54	13773	50	16421	51	18727	53	20908	52								
	061130	056	18	09	136	15	08	1481	05	03	3046	02	06	5642	18	26	7270	31	39	9250	46	++	11865	52	13744	50	16399	51	18716	52	20919	48	24317	44						
HEMSBY 03496	052330	012	10	10	137	14	11	1506	09	00	3086	01	12	5701	17	27	7344	28	45	9339	45	++	11919	60	13755	52	16383	53												
	061130	012	17	12	117	14	06	1482	09	07	3062	01	02	5684	15	23	7325	29	34	9315	45	++	11906	55	13778	50	16428	52	18745	49	20947	48								
CRAWLEY 03774	052330	144	13	11	142	++	++	1507	08	06	3092	00	06	5711	15	22	7359	27	39	9365	43	++	11969	57																
	061203	144	20	12	123	++	++	1489	07	05	3070	00	08	5688	15	25	7336	28	37	9334	44	++	11943	56	13799	51	16440	52	18735	54										
CAMBORNE 03808	052330	088	12	11	147	13	11	1497	05	03	3060	01	06	5672	16	24	7310	29	40	9295	46	++	11898	50	13766	52	16393	52	18683	55										
	061130	088	16	11	150	13	09	1495	05	02	3057	02	06	5660	17	29	7288	30	43	9274	46	++	11916	53	13775	51	16408	52	18705	54										
VALENTIA 03953	052330		13	12	128	12	12	1481	06	05	3050	04	05	5640	19	38	7270	30	39	9250	46	++	11920	50	++++	++	16440	51												
	061130	014	14	06	153	13	04	1500	05	12	3060	03	09	5660	16	32	7300	30	44	9280	46	++	11900	51	++++	++	16390	52												
Ocean Weather Station 'I' 59°00'N 19°00'W	052300		09	05	054	08	05	1372	02	04	2889	11	15	5390	26	29	6960	38	42	8920	40	++	11680	41	13630	43	16330	47												
	061200		10	04	058	09	04	1373	03	05	2883	12	16	5380	29	34	6940	38	45	8900	42	++	11660	41	13600	45	16300	47	18640	49	20850	50								
Ocean Weather Station 'J' 52°30'N 20°00'W	052300		11	07	162	10	04	1485	03	03	3046	03	07	5660	17	25	7290	30	34	9280	44	++	11900	58	13730	53	16330	55	18600	55	20760	55								
	061100		11	10	112	10	07	1456	07	01	3025	01	22	5640	16	28	7280	29	37	9270	44	++	11900	53	13790	50	16410	53	18710	53	20890	53								



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	02 3547+	013 003	789	968 11 09 892 06 04 775 01- 02- 749 00 03- 617 09- 11- 579 11- 15- 506 ++ 21- 337 40- 44- 228 61- 207 52- 157 48- 100 50- 056 52-		228	10960	61-
	63 871++	011 001	800	980 09 09 937 08 08 792 00 01- 768 00 01- 722 03- 04- 585 ++ 12- 516 17- 21- 470 21- 24- 370 35- 39- 339 40- 45- 245 58- 219 50- 167 47- 114 46- 100 48- 093 47- 083 50- 064 50-		245	10500	58-
STORNOWAY 03026		012 011	767	969 07 06 934 08 07 698 04- 05- 612 ++ 13- 540 ++ 23- 492 20- 26- 332 40- 46- 256 54- 176 46- 100 46-		256	10200	54-
	25 785++	013 011	860	995 10 02 901 03 01- 786 ++ 09- 776 06- 11- 754 05- 17- 750 ++ 20- 686 07- 28- 670 ++ 25- 630 ++ 29- 600 ++ 19- 592 ++ 22- 572 ++ 20- 553 17- 23- 475 ++ 34- 440 ++ 36- 412 ++ 42- 366 40- 48- 300 49- 286 50- 256 46- 094 47-		286	09370	50-
SHANWELL 03170	60 855++	015 015	740	010 14 12 865 06 04 573 09- 13- 374 32- 37- 329 40- 46- 238 58- 230 59- 187 51- 139 49- 125 51- 109 49- 100 50- 093 52- 084 51-		230 (093)	11010 16910	59- 52-
	02 754++	013 013	771	006 ++ 11 963 10 08 850 04 03 803 02 00 607 11- 14- 534 17- 21- 495 ++ 26- 473 22- 27- 337 40- 45- 251 56- 236 57- 226 53- 170 48- 100 50- 060 52- 048 50-		236	10740	57-
ALDERGROVE 03917	61 5647+	015 006	782	990 ++ 09 852 04 03 822 03 00 776 00 01- 581 11- 15- 550 ++ 17- 413 28- 34- 332 ++ 46- 289 48- 233 59- 213 54- 096 51-		233	10850	59-
	01 684++	015 006	794	991 09 06 963 ++ 05 943 ++ 03 875 02 01 862 ++ 02 855 04 01 845 ++ 03- 815 ++ 03- 777 02- 04- 762 01- 05- 744 ++ 08- 735 ++ 06- 695 04- 18- 647 06- 29- 603 ++ 33- 575 ++ 20- 528 18- 29- 506 18- 31- 402 ++ 48- 318 46- 287 51- 261 52- 243 48- 102 48- 069 52- 062 49-		261	10050	52-
AUGHTON 03322	02 15500	017 010	709	993 12 09 970 12 08 802 02 00 794 02 00 779 02 04- 767 03 09- 743 ++ 06- 720 ++ 13- 633 06- 14- 615 ++ 18- 552 ++ 27- 513 15- 25- 418 ++ 34- 323 40- 47- 247 56- 221 60- 193 51- 108 50- 069 53- 050 52-		221	11280	60-
	03 21532	016 009	740	990 13 08 907 07 05 829 03 01 805 03 00 742 00 02- 717 01- 04- 638 ++ 10- 622 ++ 16- 594 09- 19- 517 18- 24- 498 18- 27- 420 ++ 34- 412 ++ 37- 335 40- 48- 274 51- 236 57- 179 49- 070 52- 045 46- 039 47- 036 43- 033 47- 030 44-		236	10770	57-
HEMSBY 03496	02 00900	017 015	708	991 16 12 977 ++ 08 965 ++ 08 956 ++ 05 939 15 07 924 14 05 868 ++ 05 852 ++ 01- 830 ++ 06 808 06 00 788 ++ 01- 777 04 01 757 ++ 04- 732 02 16- 702 ++ 11- 659 03- 26- 638 ++ 12- 567 ++ 16- 545 11- 25- 511 15- 29- 491 ++ 25- 479 ++ 31- 452 ++ 39- 352 35- 50- 248 57- 215 63- 174 54- 134 51- 086 55-		215	11480	63-
	03 0097+	014 012	710	000 14 06 979 ++ 01 970 15 05 948 14 09 898 ++ 06 884 ++ 08 799 05 03 754 ++ 02- 704 ++ 01- 661 ++ 06- 612 06- 17- 600 ++ 12- 542 12- 15- 532 12- 16- 498 ++ 26- 444 ++ 27- 328 40- 45- 229 60- 214 62- 201 55- 160 48- 092 53- 042 46-		214	11490	62-
CRAWLEY 03774	02 00900	017 000	694	986 16 09 938 ++ 06 885 ++ 08 843 ++ 06 824 06 04 803 ++ 00 789 ++ 01 772 05 01- 738 ++ 02- 668 ++ 10- 610 ++ 12- 598 08- 13- 556 ++ 21- 543 11- 22- 493 ++ 23- 457 ++ 32- 384 29- 40- 318 40- 48- 245 56- 215 61- 197 55- 177 54-		(215)	11500	61-
	02 485++	015 997	701	983 17 10 913 11 09 843 07 05 792 ++ 03 734 02 06- 711 ++ 08- 625 ++ 09- 607 ++ 17- 486 16- 27- 414 ++ 34- 355 ++ 45- 320 ++ 48- 305 43- 221 60- 189 54- 134 50- 094 53- 056 53-		221	11320	60-
CAMBORNE 03808	02 6097+	018 007	765	995 13 11 943 11 06 870 ++ 03 780 00 01- 758 ++ 01- 725 ++ 10- 695 ++ 06- 662 03- 06- 567 11- 13- 553 11- 17- 545 ++ 23- 512 15- 23- 475 19- 27- 364 35- 45- 333 40- 47- 244 58- 230 59- 200 50- 179 52- 111 51- 063 55-		230	11000	59-
	01 24532	018 007	760	002 13 09 979 ++ 10 908 ++ 04 843 04 01 819 04 01 766 00 02- 705 02- 06- 679 ++ 10- 665 ++ 08- 642 ++ 18- 627 06- 19- 620 07- 17- 595 ++ 23- 546 12- 28- 495 18- 30- 424 27- 40- 347 37- 49- 302 45- 255 52- 206 52- 195 54- 176 52- 111 51- 069 54- 060 52-		255	10350	52-
VALENTIA 03953	58 862++	016 014	750	752 01 00 692 04- 05- 650 05- 06- 568 12- 29- 480 20- 40- 415 29- 39- 357 36- 45- 300 46- 269 49- 088 52-		269	10000	49-
	03 68501	018 017	755	858 05 11- 683 04- 10- 581 09- 21- 514 15- 31- 309 45- 248 56- 198 51- 113 54- 092 51-		248	10600	56-
Ocean Weather Station 'I' 59°00'N 19°00'W	03 2257+	007 007	885	971 06 04 923 ++ 01- 861 02- 04- 757 07- 12- 715 10- 14- 677 13- 18- 547 24- 27- 529 24- 27- 418 37- 39- 375 40- 45- 336 43- 288 40- 079 49-		336	08100	43-
	25 22531	007 007	888	985 06 01 932 02 01- 857 02- 04- 750 09- 14- 661 16- 20- 609 18- 22- 525 ++ 29- 504 ++ 34- 456 35- 38- 429 36- 41- 371 40- 46- 351 42- 269 40- 109 48- 102 47- 043 51-		351	07800	42-
Ocean Weather Station 'J' 52°30'N 20°00'W	02 784++	019 019	879 760	012 ++ 05 867 01- 04- 845 04 03- 837 04 05- 797 ++ 02- 735 ++ 03- 693 03- 07- 655 ++ 09- 647 06- 12- 629 05- 15- 583 ++ 22- 486 19- 26- 441 23- 28- 404 29- 34- 322 40- 44- 239 49- 205 59- 144 52- 132 55- 049 55-		203	11700	59-
	02 455++	014 014	750	995 ++ 06 988 09 06 927 05 03 902 11 02 899 ++ 01- 743 00 05- 714 00 16- 705 ++ 23- 653 ++ 16- 609 ++ 24- 547 11- 28- 510 15- 27- 400 29- 37- 377 ++ 41- 326 40- 48- 260 50- 233 54- 141 49- 112 53- 042 52-		233	11000	54-



STATION	YYGGgg	Type	Surface	1000mb	900m	850mb 1500m	750mb 2100m	700mb 3000m	600mb 4200m	500mb 5400m	400mb 7200m	300mb 9000m	250mb 10500m	200mb 12000m	150mb 14100m	100mb 15900m	70mb 18300m	50mb 20700m	30mb 23700m	20mb 26400m	10mb 30900m
LERWICK 03005	052330	T	200 09	+++ ++	200 26	210 28	210 33	210 38	210 42	200 48	210 46	210 52	200 57	210 35	200 22	180 10	200 02				
	060530	P	180 11	+++ ++	210 24	200 30	200 29	200 21	200 42	200 49	190 53	200 59	200 64	200 44	200 24	200 19					
	061130	T	210 13	+++ ++	210 23	210 22	230 15	220 16	200 30	200 49	200 62	200 69	200 73	210 39	200 28	190 13	170 15				
	061730	P	240 12	+++ ++	250 15	240 20	210 30	210 40	210 37	200 45	200 51	200 87	200 59	200 37	210 26	200 18	190 09				
STORNOWAY 03026	052330	T	310 07	+++ ++	220 18	220 25	220 27	220 28	220 31	210 42	200 63	200 81	200 64	210 39	210 23						
	060530	P	160 06	+++ ++	250 09	230 19	210 29	210 35	220 37	210 37	200 51	200 62	200 50	210 30	210 20						
	061130	T	250 12	+++ ++	230 17	230 19	230 22	220 30	220 33	220 29	210 42	200 56	210 47	220 34	220 22	210 14					
	061730	P	220 13	+++ ++	230 15	230 18	230 18	230 21	230 30	220 34	220 39	220 40	230 38	230 26	230 20	210 14	270 05				
SHANWELL 03170	060050	T	250 06	+++ ++	200 17	190 20	190 28	190 30	200 34	200 33	200 41	200 48	200 47	220 32	200 19	190 09					
	060550	P	250 08	+++ ++	220 21	210 29	210 35	200 38	200 39	200 41	200 49	200 52	200 56	210 31	210 16	190 11					
	061130	T	220 10	+++ ++	240 16	230 18	220 15	230 21	210 32	210 37	200 53	200 63	200 67	210 38	210 21	210 11	170 09	090 05			
	061730	P	250 10	+++ ++	260 12	250 12	220 23	220 27	220 31	230 31	210 43	200 56	210 48	230 26	220 20	210 16	290 05				
ALDERGROVE 03917	052330	T	180 08	+++ ++	220 15	220 11	240 05	220 10	230 11	200 34	190 48	200 58	200 62	220 33	220 18	230 14					
	060530	P	220 07	+++ ++	270 12	240 14	240 20	240 19	230 19	230 28	210 35	200 58	200 52	230 25	250 19	210 12	030 03				
	061130	T	320 01	+++ ++	300 08	230 19	220 26	230 22	230 25	240 31	240 29	230 30	230 36	250 27	250 16	220 07	160 06				
	061730	P	290 03	+++ ++	260 09	230 05	240 17	240 27	230 32	250 39	240 42	250 43	240 36	260 25	260 20	240 12	290 04	190 03			
AUGHTON 03322	052330	T	300 02	+++ ++	240 05	190 16	200 23	200 20	190 25	200 32	190 34	200 31	190 31	200 24	240 13	160 09	200 02				
	060530	P	330 02	+++ ++	250 10	220 13	210 16	200 22	200 22	200 31	200 37	190 35	200 36	210 21	230 13						
	061130	T	260 09	+++ ++	260 12	260 11	250 11	230 16	210 25	200 35	200 45	200 45	200 43	230 27	240 13	160 05	090 05	120 06	P090 15		
	061730	P	260 12	+++ ++	250 12	250 11	260 12	240 13	250 18	250 23	250 24	210 35	220 29	260 18	260 14	240 11	340 03	150 04			
HEMSBY 03496	052330	T	000 00	+++ ++	100 06	110 07	130 06	120 06	180 09	160 13	160 22	170 20	180 25	180 20	140 05	090 04					
	060530	P	000 00	+++ ++	030 05	110 04	130 07	130 07	140 11	150 18	160 24	180 25	180 27	210 12	220 04	190 05	070 11				
	061130	T	020 08	+++ ++	030 08	340 09	260 03	150 09	180 10	170 19	160 20	140 22	160 24	190 19	240 07	120 09	080 02	100 12			
	061730	P	350 10	+++ ++	340 11	300 10	290 07	260 05	220 08	210 16	200 20	190 26	180 27	230 16	240 06	240 05	060 06	140 05			
CRAWLEY 03774	052330	T	240 03	+++ ++	190 02	130 11	160 12	180 12	190 06	140 11	140 13	170 19	150 26	170 20							
	060530	P	000 00	+++ ++	260 01	190 04	190 05	110 04	120 06	160 09	180 09	170 15	170 23	170 06	000 00	290 01	050 06				
	061110	P	330 07	+++ ++	320 07	250 01	150 04	150 06	190 08	230 09	200 09	180 15	180 18	190 14	290 08	130 02	320 05	080 12	100 19	090 12	120 29
	061730	P	300 07	+++ ++	320 13	320 04	190 04	240 10	230 11	230 15	220 16	200 20	190 22	240 10	280 06	310 06					
CAMBORNE 03808	052330	T	170 08	+++ ++	230 09	220 12	210 16	190 17	190 15	180 24	180 29	180 21	180 24	270 11	280 11	310 01	010 04				
	060530	P	000 00	+++ ++	220 12	220 12	240 11	210 09	190 14	210 19	200 22	200 20	220 18	300 18	300 08	300 08	040 05	030 04	100 11	080 16	
	061130	T	280 12	+++ ++	270 08	280 09	280 08	280 08	250 12	260 17	260 14	290 16	260 18	300 22	300 18	320 07	000 00				
	061730	P	290 10	+++ ++	260 11	280 12	270 11	260 08	290 15	310 20	290 21	310 34	320 48	310 28	300 16	310 10	350 06	140 06	080 12	090 12	
VALENTIA 03953	052330	T	170 05	190 07	+++ ++	230 08	+++ ++	250 11	+++ ++	270 15	240 20	220 24	+++ ++	300 29	+++ ++	280 13					
	061130	T	290 09	290 09	+++ ++	280 12	+++ ++	260 18	+++ ++	280 24	290 35	300 61	+++ ++	300 34	+++ ++	290 07					
Ocean Weather Station 'I' 59°00'N 19°00'W	052300	T	280 11	+++ ++	260 17	260 19	250 25	260 24	250 31	250 42	250 42	260 43	260 40	270 30	260 22	260 16					
	060600	P	270 10	+++ ++	270 16	270 17	270 14	270 17	260 20	260 26	270 46	270 41	260 34	260 28	270 20	270 12	210 06	090 05			
	061200	T	280 09	+++ ++	270 11	270 13	270 17	260 17	270 15	270 21	280 18	280 32	270 28	260 29	260 18	230 11	220 06	180 03			
	061800	P	270 10	+++ ++	280 13	280 14	270 17	270 17	270 18	280 21	290 32	290 37	270 36	270 22							
Ocean Weather Station 'J' 52°30'N 20°00'W	052300	T	240 13	+++ ++	250 20	260 24	270 31	260 33	280 50	280 65	280 77	290103	290 98	280 82	280 48	290 19	310 08				
	060600	P	180 20	+++ ++	220 29	260 31	260 32	260 36	280 51	280 51	270 69	280 85	280 90	270 38	270 17						
	061100	T	280 25	+++ ++	280 31	280 35	280 45	280 47	280 50	280 54	270 67	270 90	270 87	270 71	270 33	270 17	270 06	090 03			
	061700	P	270 20	+++ ++	280 30	280 35	280 40	270 46	260 51	260 56	260 79	270 92	260 87	260 60	260 24	260 13					
LARKHILL 03743	060610	P	280 04	+++ ++	350 04	170 11	180 12	180 12	180 14	180 15	200 15	190 20	190 22	210 08	260 03	310 04	070 07	060 12			
	061030	P	330 07	+++ ++	310 08	290 02	180 06	190 13	180 18	200 17	200 19	200 24	190 27	220 11	280 12	160 03	130 02	100 09			

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m °C °C	950mb m °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
061126	48.2°N 18.0°W	022 014 688	061 11 11	177	12 12	1055 11 09	1530 09 08	2036 08 05	05 05	3808 01 01	04- 04-	4343 07- 07-	12- 13-	5736 15- 17-
Cloud :— 7/8st. 500 to 1500ft; 4/8ci. 25000ft. to TNG. Inversion Levels :— 968mb to 950mb 9°C. to 12°C.														
Isothermal Levels :—														
YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m °C °C	950mb m °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
061238	45.9°N 13.2°W	022 014 686	061 12 06	177	06 05	1045 05 05	1512 07 05	2012 05 02	04 04-	3054 01 08-	02- 08-	4316 07- 17-	11- 17-	5712 16- 19-
Cloud :— 3/8sc. 2000 to 4000ft; 7/8sc. at 7000ft; 1/8ci. at 25000ft; Inversion Levels :— 900mb to 850mb 5°C. to 7½°C.														
Isothermal Levels :—														
RATES OF SUBSCRIPTION: Single copy 5d. or post free 7d. One calendar month 13/-; one quarter 35/-; one year 125/-. For special arrangements for supply to schools and colleges see Form 2452.												Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General Meteorological Office, Air Ministry, Kingsway, London, W.C.2		



STATION		MAX. WIND
LERWICK 03005	060mb 110 16 16800m 170 12 08750/0 10000/1 10250/1	200 68 09850m 200 79 09350m 190 99 09900m
STORNOWAY 03026	104mb 200 15 10520/1 19500m 320 04 17650/2	200 82 09320m 200 65 09850m
SHANWELL 03170	088mb 180 06 17100m 190 08 11380/1 20000m 090 11 11000/1	190 76 09980m 200 64 09450m
ALDERGROVE 03917	218mb 210 45 01320/5 10320/1 10830/1 22800m 100 08	200 63 10240m 200 64 09550m
AUGHTON 03322	053mb 030 08 15300m 230 12 11400/1 P25800m 100 14 21900m 070 08 10760/1 11660/1	
HEMSBY 03496	178mb 200 09 13000m 120 08 045mb 080 12 21700m 100 04	
CRAWLEY 03774	19200m 100 09 28800m 080 15 33000m 130 16 36000m 110 25 17700m 020 04 11300/1 11750/2 12220/2	
CAMBORNE 03808	11490/2 18080/2 065mb 000 00 28200m 130 06 11370/1 12250/0 12600/1	
VALENTIA 03953	752mb 240 10 650mb 250 11 568mb 270 14 357mb 230 21 269mb 270 28 088mb 280 12 683mb 260 20 581mb 280 30 514mb 280 26 248mb 300 70 113mb 290 14 092m 290 01	300 70 10200m
Ocean Weather Station 'I' 59°00'N 19°00'W	087mb 260 13 16500m 250 08 21600m 090 05 12600m 280 24	
Ocean Weather Station 'J' 52°30'N 20°00'W	120mb 290 32 053mb 290 07 1100m 270 63 11400m 270 45 10800/1 11250/1 353mb 270 75 177mb 270 51 060mb 270 06 045mb 090 05 12600m 260 42 16800m 270 08	280 108 11440m 270 109 10130m 270 88 09720m 270 94 09770m
LARKHILL 03743	01028/8 12260/4 12260/4	

## NOTES ON THE AEROLOGICAL SITUATION

The low east of Hudson Bay has remained almost stationary, while the downstream ridge near the Canadian east coast is increasing in amplitude. The complex low with small centres southwest and east of Iceland is moving slowly northeast. The trough extending southwards from the Iceland low to southwest Ireland is moving slowly east and relaxing. Over Europe the blocking pattern persists with little change.

AVERAGE AND EXTREME VALUES 1951-55  
JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22345	-48.1	-42	-55	...	...
60	19675	-48.1	-41	-55	120	3
100	16320	-48.8	-41	-56	244	5
150	13660	-48.3	-41	-59	263	10
200	11770	-49.8	-39	-67	271	16
300	9125	-46.7	-37	-56	271	22
400	7160	-32.6	-23	-44	271	18
500	5555	-20.8	-11	-31	269	14
700	2985	-5.2	3	-14	266	9
850	1435	2.8	14	-7	269	6

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	257	-54.7	10190
Max.	405	-40	12955
Min.	172	-68	6890

LARKHILL/CRAWLEY† at 03, 15h.  
(Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N.,  
Long. 00° 13' W.)

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22310	-49.6	-47	-57	106	9
60	19675	-51.4	-45	-59	136	3
100	16370	-52.6	-46	-61	251	8
150	13745	-51.8	-42	-65	265	15
200	11890	-54.0	-40	-65	268	20
300	9265	-44.7	-36	-54	265	20
400	7275	-29.6	-19	-41	265	17
500	5640	-17.8	-9	-28	263	15
700	3050	-2.1	7	-10	263	11
850	1480	5.7	16	-3	264	7

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	234	-56.8	10950
Max.	388	-41	13440
Min.	160	-66	7225

MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5
60	19670	-60.7	-53	-69	135	4
100	16510	-62.9	-57	-71	255	21
150	13995	-59.0	-51	-67	265	38
200	12185	-56.6	-47	-67	275	42
300	9530	-40.1	-33	-46	285	32
400	7500	-23.9	-19	-29	285	27
500	5835	-11.8	-8	-17	285	24
700	3165	7.2	13	-1	290	18
850	1535	17.9	27	8	290	9

Tropopause	Average Press.	Average Temp.	Max. Press.	Min. Press.	Max. Temp.	Min. Temp.
Upper	mb. 123	-65.7	mb. ...	mb. 73	°C ...	°C -73
Lower	193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

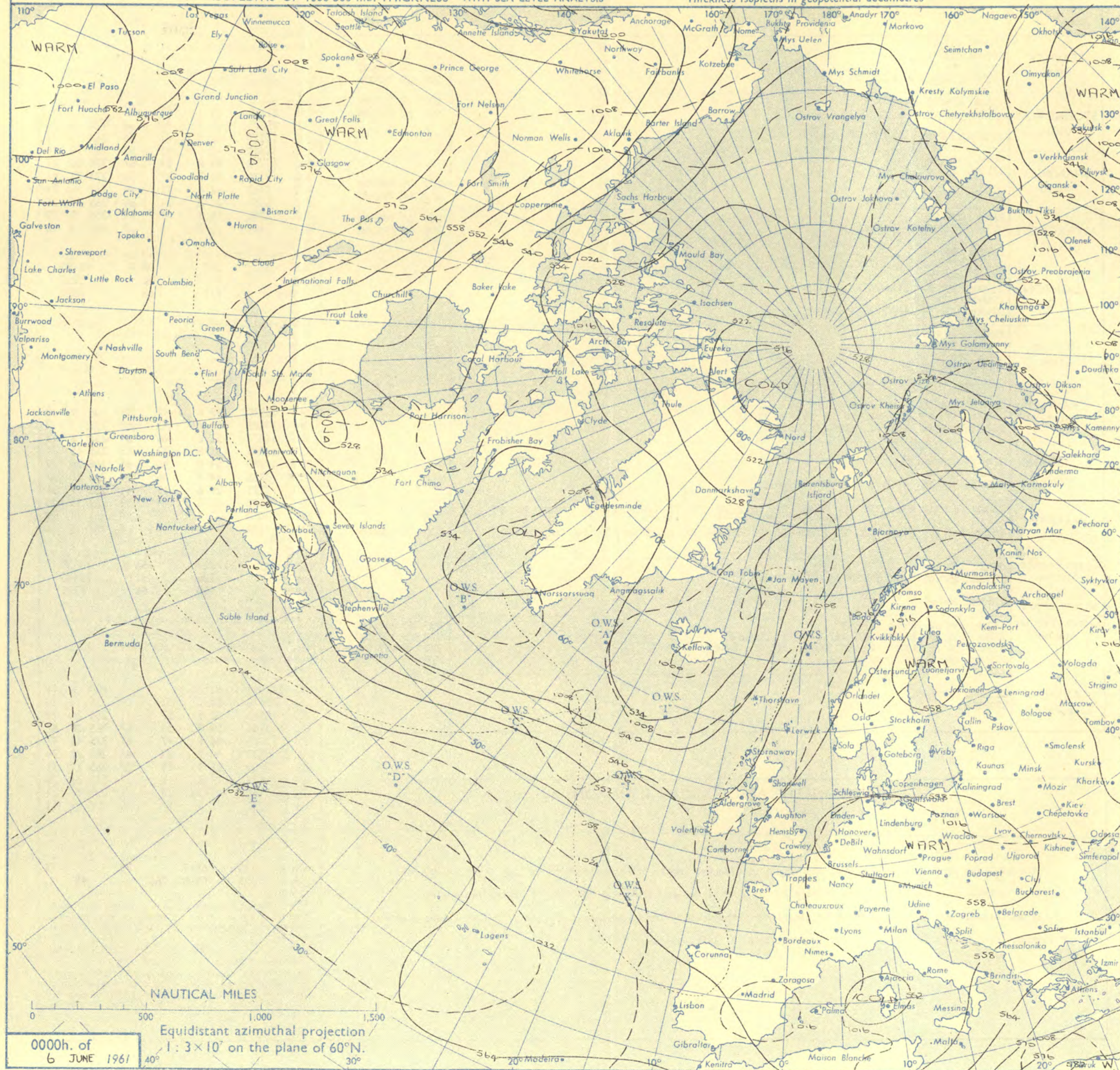
† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.

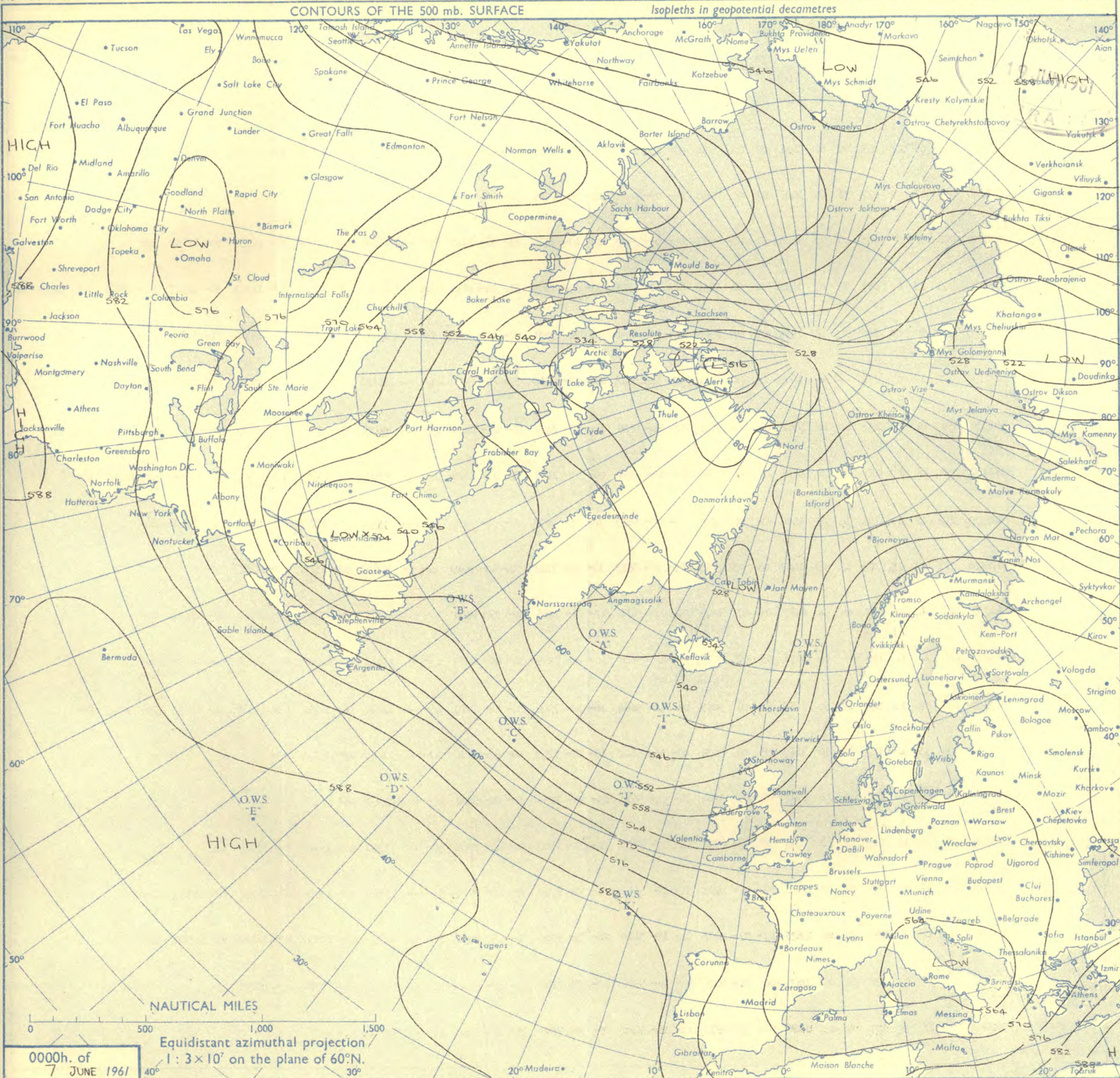


ISOPLETHS OF 1000-500 mb. THICKNESS WITH SEA LEVEL ANALYSIS

Thickness isopleths in geopotential decametres













STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	02 15670	011	001	841	996 08 06 978 08 05 944 ++ 01 780 04- 08- 741 05- 11- 723 05- 14- 707 ++ 19- 668 07- 17- 647 ++ 13- 573 16- 19- 556 16- 19- 547 ++ 21- 507 22- 25- 473 ++ 33- 462 25- 34- 363 38- 44- 265 53- 243 47- 100 48- 053 51- 030 49-	265	09900	53+
	02 12500	010	000	846	987 09 03 965 ++ 03 881 ++ 03- 850 ++ 04- 755 06- 11- 740 04- 12- 706 ++ 15- 680 ++ 13- 603 13- 18- 466 27- 32- 438 29- 34- 362 40- 46- 306 50- 291 51- 220 44- 100 48- 060 51- 040 49-	291	09230	51+
STORNOWAY 03026	01 28541	012	010	852	881 ++ 01- 840 01- 02- 822 01- 03- 785 ++ 06- 700 09- 13- 682 08- 13- 659 09- 18- 631 ++ 17- 494 ++ 29- 441 31- 35- 409 34- 40- 365 40- 45- 296 50- 233 43- 094 48- 071 51- 050 50-	296	09100	50+
	61 11576	009	008	840	995 10 05 946 ++ 01 875 02 00 700 06- 09- 536 ++ 23- 521 22- 27- 476 25- 35- 367 40- 46- 307 50- 279 53- 238 44- 199 43-	279	09500	53+
SHANWELL 03170	02 755++	013	012	839 762	994 10 03 834 00 03- 816 01- 05- 803 01 15- 786 01 16- 760 ++ 16- 745 ++ 07- 728 02- 05- 669 ++ 08- 652 ++ 11- 596 13- 14- 586 12- 21- 580 ++ 26- 498 ++ 47- 470 ++ 37- 452 ++ 31- 435 ++ 33- 418 ++ 38- 399 31- 35- 348 40- 46- 268 54- 238 48- 100 50- 087 52- 055 51-	268	09680	54+
	02 5567+	010	009	823	999 11 06 875 03 02 804 01- 03- 782 01- 05- 766 ++ 07- 700 ++ 10- 683 ++ 13- 632 ++ 18- 602 ++ 17- 587 ++ 23- 561 17- 28- 548 16- 30- 535 ++ 33- 444 ++ 37- 417 ++ 42- 364 40- 47- 285 53- 268 53- 239 46- 215 45- 100 50- 071 52- 030 46-	285	09390	53+
ALDERGROVE 03917	01 3563+	013	003	792	982 11 04 882 ++ 01 864 ++ 01- 840 ++ 02- 821 00 07- 813 01 04- 806 ++ 01- 730 ++ 07- 675 ++ 14- 650 ++ 15- 640 10- 19- 613 10- 29- 497 22- 31- 470 23- 30- 420 ++ 34- 392 ++ 40- 378 ++ 40- 355 38- 45- 307 46- 270 51- 220 46- 060 53-	270	09820	51+
	25 684+2	008	999	811	980 11 08 822 ++ 01- 803 ++ 03- 760 ++ 04- 720 06- 08- 685 07- 12- 654 07- 20- 612 09- 25- 430 30- 44- 305 50- 214 42- 175 42- 142 47- 110 50- 062 51-	305	08940	50+
AUGHTON 03322	02 40932	015	008	788	40- 47- 235 56- 212 49- 103 50- 078 53- 030 50-	235	10840	56+
	02 5253+	011	005	781	000 15 06 904 07 02 827 ++ 02 796 01 04- 777 ++ 04- 754 ++ 08- 737 03- 09- 690 ++ 12- 687 08- 13- 666 07- 21- 636 08- 22- 607 ++ 18- 576 15- 21- 562 16- 21- 538 ++ 30- 511 19- 32- 373 39- 50- 304 51- 268 52- 208 45- 187 48- 069 54- 035 49-	304	09010	51+
HEMSBY 03496	02 00902	013	011	726	008 14 11 000 ++ 05 990 ++ 10 976 16 09 841 ++ 05 771 02 00 754 03 01- 702 ++ 03- 696 03- 07- 684 03- 12- 669 ++ 11- 650 ++ 18- 635 ++ 14- 608 ++ 20- 563 10- 22- 439 23- 31- 410 ++ 36- 322 40- 48- 231 58- 211 60- 197 55- 160 51- 110 50- 085 54- 057 55-	211	11550	60+
	02 7857+	013	011	770	992 13 09 919 ++ 08 888 ++ 05 812 03 02 696 06- 08- 674 03- 11- 636 ++ 21- 582 10- 30- 541 ++ 25- 478 20- 36- 395 31- 40- 344 39- 50- 310 45- 236 57- 205 51- 095 52-	236	10790	57+
CRAWLEY 03774	02 11500	015	997	737	976 13 09 965 14 10 936 13 08 828 ++ 01 816 ++ 01- 774 01 01- 710 ++ 09- 679 ++ 13- 655 ++ 11- 642 ++ 15- 606 07- 19- 552 ++ 25- 539 ++ 24- 472 20- 32- 336 ++ 49- 316 44- 236 58- 135 50- 103 54- 072 55- 065 52- Pressure suspect above 100mb	236	10800	58+
	02 3854+	014	997	781 732	985 15 09 891 07 05 852 ++ 02 760 02- 03- 737 00 09- 730 ++ 12- 670 ++ 12- 654 04- 18- 649 ++ 20- 633 ++ 15- 593 11- 19- 582 10- 22- 555 ++ 22- 457 22- 33- 344 40- 47- 243 57- 174 49- 158 51- 106 52- 056 55-	243	10600	57+
CAMBORNE 03808	02 655++	017	007	720	947 08 06 885 06 04 864 ++ 02 821 02 00 806 06 08 782 ++ 11- 694 02- 12- 677 01- 15- 621 06- 14- 603 ++ 21- 589 08- 23- 566 ++ 26- 549 12- 23- 543 ++ 22- 534 13- 25- 497 16- 32- 343 39- 50- 242 58- 222 60- 185 53- 092 54- 076 57- 040 53-	222	11210	60+
	51 872++	015	005	753	983 10 09 738 01- 02- 725 03- 04- 701 ++ 15- 695 02- 13- 648 ++ 16- 600 09- 23- 570 ++ 25- 554 ++ 22- 541 ++ 25- 503 ++ 26- 485 ++ 34- 472 21- 35- 338 40- 50- 292 49- 240 55- 198 49- 107 52-	240	10680	55+
VALENTIA 03953	58 863++	014	013	770	833 04 02 814 04 01- 777 01 05 719 04- 05- 672 04- 23- 635 06- 19- 571 11- 19- 502 20- 25- 487 20- 32- 355 38- 46- 275 51- 247 53- 200 48- 137 49-	247	10600	53+
	03 72409	014	012	850	932 06 04 891 04 01 830 01- 03- 790 00 06- 751 01- 15- 718 02- 15- 617 10- 23- 524 22- 31- 433 30- 44- 373 40- 285 50- 265 51- 204 46- 170 49- 115 53- 095 53- 083 51-	285	09400	50+
Ocean Weather Station 'I' 59°00'N 19°00'W	15 22530	008	008	893	982 06 01 931 ++ 00 783 07- 09- 747 ++ 15- 719 10- 17- 671 ++ 20- 641 15- 23- 623 14- 26- 377 40- 50- 286 55- 278 55- 263 50- 233 45- 202 43- 162 44- 108 50- 070 50-	286	09200	55+
	02 32500	008	008	898	986 06 01 909 01 02- 809 05- 09- 795 ++ 13- 645 ++ 23- 635 15- 23- 604 ++ 22- 572 21- 24- 542 21- 29- 505 ++ 35- 495 25- 35- 481 ++ 35- 388 38- 47- 285 56- 273 56- 254 48- 197 42- 107 49- 068 50-	285	09300	55+
Ocean Weather Station 'J' 52°30'N 20°00'W	25 756++	016	016	852 768	000 10 06 971 08 06 850 00 01- 831 02 03- 820 ++ 07- 768 00 15- 728 02- 18- 674 05- 22- 525 19- 36- 482 25- 40- 460 27- 41- 305 51- 201 46- 181 50- 162 49- 116 53- 077 53-	305	09000	51+
	02 38502	015	015	866	994 09 04 934 04 01 901 ++ 02- 826 03- 06- 800 02- 10- 708 ++ 16- 688 13- 19- 679 12- 19- 625 17- 28- 576 18- 22- 404 38- 43- 329 42- 170 42-	329	08400	42+



STATION	YYGGgg	Type	Surface	1000mb	900m	850mb 1500m	750mb 2100m	700mb 3000m	600mb 4200m	500mb 5400m	400mb 7200m	300mb 9000m	250mb 10500m	200mb 12000m	150mb 14100m	100mb 15900m	70mb 18300m	50mb 20700m	30mb 23700m	20mb 26400m	10mb 30900m
LERWICK 03005	062330	T	220 08	+++ ++	250 12	250 14	220 25	200 35	200 37	200 54	200 55	200 71	210 59	210 40	210 25	200 14	200 09	130 09	090 10		
	070530	P	240 16	+++ ++	230 11	220 09	250 14	230 20	220 29	210 37	200 54	200 68	210 46	210 38	210 21	210 16	150 08	110 09			
	071130	T	240 10	+++ ++	230 09	220 11	220 08	240 15	220 20	220 27	210 38	210 47	200 44	210 31	220 27	200 16	170 10	110 08			
	071730	P	160 09	+++ ++	090 01	240 01	220 07	190 10	190 11	190 16	200 25	200 35	200 37	200 27	210 16	210 12	160 09	120 08	110 14		
STORNOWAY 03026	062330	T	190 10	+++ ++	230 16	220 16	240 14	240 21	240 34	240 39	220 48	220 53	220 37	220 30	230 27	230 13	150 07				
	070535	P	180 11	+++ ++	200 09	200 06	220 08	220 20	230 19	220 22	230 30	230 32	230 30	220 23	230 17	230 13	230 02	110 13	100 15		
	071145	No winds reported																			
	071730	P	040 10	+++ ++	120 08	150 09	140 12	150 12	200 11	190 11	180 15	170 18	210 20	230 18	230 15	230 11	190 04				
SHANWELL 03170	062330	T	240 06	+++ ++	260 14	260 16	230 19	230 20	220 29	220 45	220 40	210 53	210 42	230 29	240 22	220 10	170 09				
	070530	P	000 00	+++ ++	260 14	250 15	240 13	220 20	220 25	230 32	220 41	210 45	210 38	220 26	240 15	210 11	350 02				
	071130	T	120 08	+++ ++	210 13	210 18	220 21	210 22	220 21	210 31	210 28	200 34	200 35	220 27	230 23	220 10	180 07	130 06	110 15	P090 19	
	071730	P	110 08	+++ ++	190 12	210 13	200 19	200 16	210 18	220 24	190 28	200 38	210 28	220 23	220 10	190 14	130 05	120 09	090 14		
ALDERGROVE 03917	062330	T	130 07	+++ ++	220 12	230 18	250 17	240 20	250 24	250 34	230 44	220 50	230 41	250 32	250 22	260 13	220 05				
	070530	P	180 10	+++ ++	220 23	220 23	210 20	210 24	230 26	240 32	240 28	250 33	240 35	230 22	250 18						
	071130	T	200 14	+++ ++	240 16	260 19	260 18	260 22	250 26	250 29	240 33	230 39	230 28	230 30	250 19	220 05	150 06				
	071730	P	260 10	+++ ++	270 16	270 15	260 16	230 25	220 22	210 30	220 32	220 34	230 28	230 21	230 15						
AUGHTON 03322	062330	T	000 00	+++ ++	260 09	240 15	230 17	240 15	240 27	230 30	230 32	230 34	230 32	250 24	260 15	270 03	170 03	100 02	110 15		
	070530	P	110 05	+++ ++	220 16	240 16	240 17	240 21	240 27	230 31	220 39	230 44	230 39	240 23	270 16	260 10					
	071130	T	210 05	+++ ++	220 08	240 12	240 20	250 24	250 32	240 37	230 38	220 38	220 38	240 27	240 17	230 08	P180 04	110 03			
	071730	P	260 10	+++ ++	250 21	250 19	240 18	230 25	240 28	230 33	240 52	240 51	230 37	220 21	240 11	250 08	140 02	090 05			
HEMSBY 03496	062330	T	000 00	+++ ++	350 10	330 09	240 09	190 08	200 12	220 18	220 26	200 33	190 35	200 27	250 06	200 07	160 06				
	070530	P	000 00	+++ ++	320 09	290 09	240 14	220 20	230 20	230 17	230 16	210 35	200 40	230 18	250 09	230 06					
	071130	T	100 06	+++ ++	270 09	260 14	230 16	240 17	240 19	230 24	210 29	220 34	210 38	220 21	250 10	200 09	P150 07				
	071730	P	160 07	+++ ++	230 11	240 17	240 20	240 17	230 20	240 31	230 39	210 47	210 41	230 21	250 12	230 06	190 04				
CRAWLEY 03774	062335	T	300 06	+++ ++	330 08	280 05	210 11	230 12	240 14	240 16	230 22	220 31	210 34	250 14	290 09	290 05	P110 03	080 10			
	070530	P	270 07	+++ ++	300 06	260 11	260 14	250 12	250 16	260 16	260 18	260 20	250 19	260 18	300 05						
	071110	P	270 10	+++ ++	260 10	230 07	240 09	250 14	270 17	250 27	230 30	240 25	230 31	250 20	250 13	230 06	240 04	190 02	100 07	090 12	130 20
	071738	P	260 04	+++ ++	260 11	260 10	260 14	250 19	260 26	260 32	250 39	260 37	250 34	250 28	260 10	250 08					
CAMBORNE 03808	062330	T	270 05	+++ ++	250 09	260 10	280 14	280 16	270 15	280 26	290 28	300 36	300 41	290 35	300 17	280 07	290 02	040 05			
	070530	P	230 04	+++ ++	260 14	270 17	270 17	280 23	270 25	270 28	270 35	270 47	270 61	280 36	270 14	310 07	020 01				
	071130	T	200 12	+++ ++	250 19	260 19	260 22	270 24	260 34	260 39	270 22	280 63	280 53	270 36	270 19						
	071730	P	270 11	+++ ++	270 18	240 18	250 21	250 24	260 33	260 46	260 52	280 69	280 68	260 42	270 15	250 10	250 04				
VALENTIA 03953	070000	T	200 09	200 13	+++ ++	250 21	+++ ++	260 39	+++ ++	270 48	260 63	270 71									
	071130	T	290 10	290 11	+++ ++	270 23	+++ ++	270 31	+++ ++	250 47	260 72	260 97	+++ ++	270 43							
Ocean Weather Station 'I' 59°00'N 19°00'W	062300	T	240 10	+++ ++	260 06	270 13	260 15	270 17	270 11	270 16	290 17	300 29	290 22	250 21	260 19	250 08					
	070600	P	270 10	+++ ++	270 09	270 10	270 10	270 12	280 12	270 06	030 02	200 06	280 09	270 16	270 16	260 10	270 06				
	071200	T	300 08	+++ ++	290 03	290 07	290 09	290 09	300 12	280 04	330 04	330 09	310 23	270 10	270 06	280 10	140 04	P100 03			
	071700	P	270 10	+++ ++	300 09	300 11	300 08	290 10	300 16	320 14	280 14	280 19	280 20	300 15	270 14	280 11	330 05	080 04	090 09	060 19	
Ocean Weather Station 'J' 52°30'N 20°00'W	062300	T	290 20	+++ ++	280 20	290 22	280 33	280 40	270 43	270 43	270 71	260 83	270 71	270 47	260 32	270 15					
	070600	P	270 30	+++ ++	290 27	290 25	290 33	280 43	270 57	270 64	280 90	270 91	270 67	260 31	270 23	270 12					
	071100	T	260 22	+++ ++	270 27	260 28	270 30	280 34	270 42	270 54	260 69	270 73	270 58	270 44							
	071700	P	270 20	+++ ++	280 30	280 29	290 27	300 28	300 38	310 55	310 60	310 48	290 44	270 39	280 17	280 13	330 03	250 03	160 07		
LARKHILL 03743	070545	P	270 03	+++ ++	270 08	260 11	260 13	240 14	260 19	250 22	250 23	250 29	260 31	260 25	280 08	300 02	360 02				
	070830	T	280 07	+++ ++	250 13	230 13	270 17	250 15	260 22	240 25	250 26	240 33	250 39	260 31	270 08	260 05	000 00	120 05			

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m °C °C	950mb m °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb m °C °C	700mb m °C °C	650mb m °C °C	600mb m °C °C	550mb m °C °C	500mb m °C °C
Cloud :— Inversion Levels :—  Isothermal Levels :—														
YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m °C °C	950mb m °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb m °C °C	700mb m °C °C	650mb m °C °C	600mb m °C °C	550mb m °C °C	500mb m °C °C
Cloud :— Inversion Levels :—  Isothermal Levels :—														
RATES OF SUBSCRIPTION: Single copy 5d. or post free 7d. One calendar month 13/-; one quarter 35/-; one year 125/-. For special arrangements for supply to schools and colleges see Form 2452.												Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General Meteorological Office, Air Ministry, Kingsway, London, W.C.2		

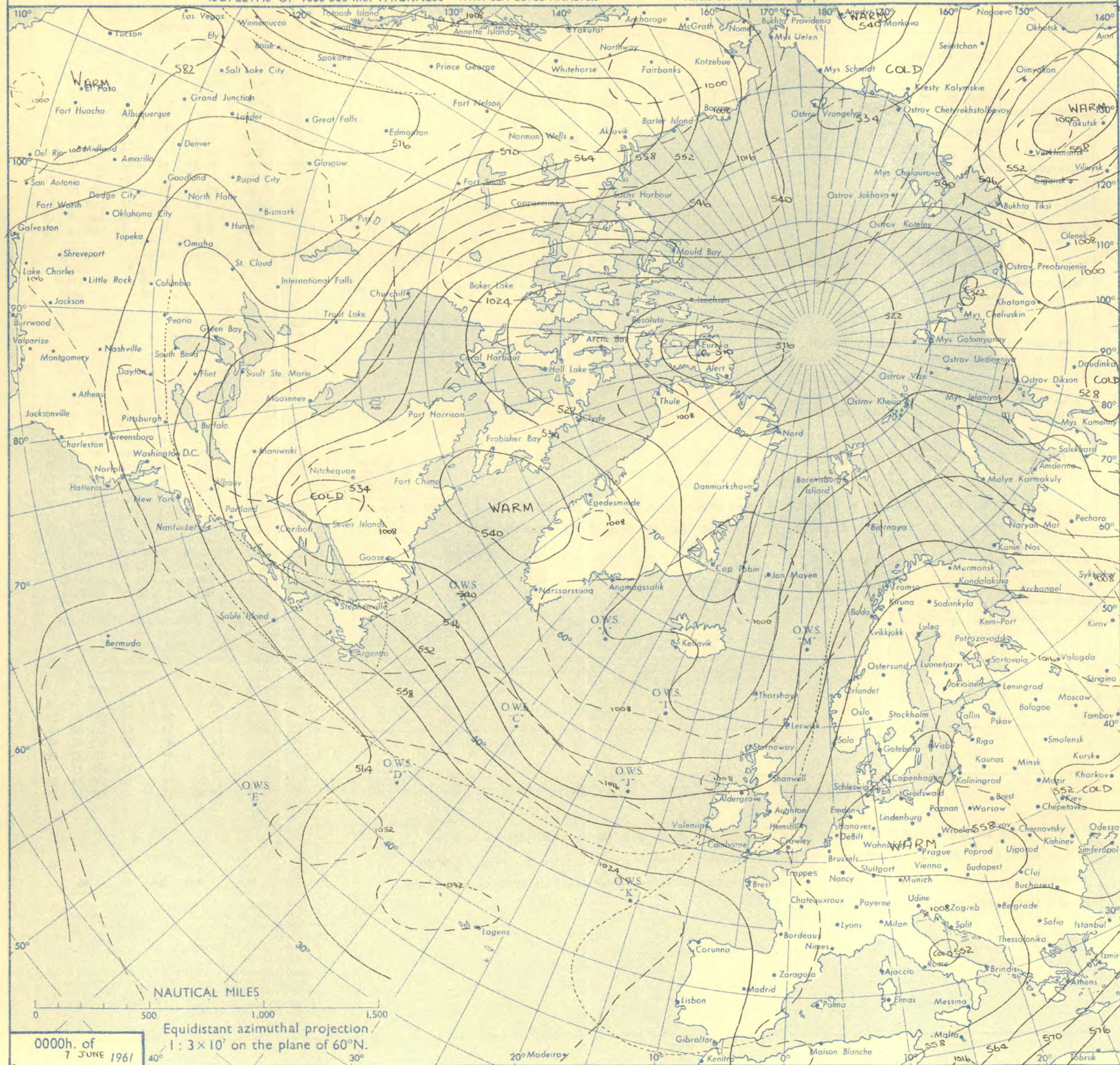






ISOPLETHS OF 1000-500 mb. THICKNESS WITH SEA LEVEL ANALYSIS

Thickness isopleths in geopotential decametres

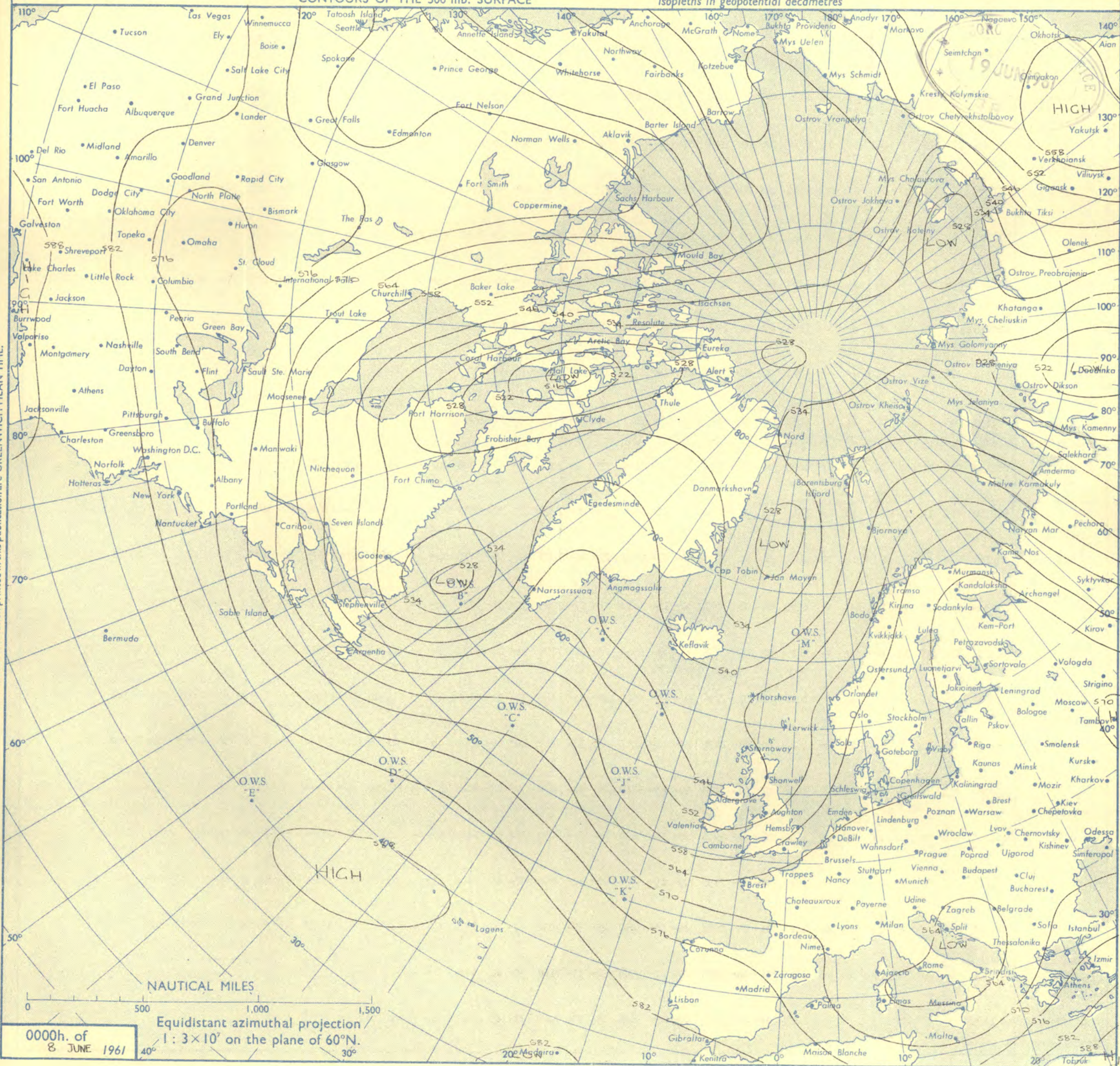




CONTOURS OF THE 500 mb. SURFACE

Isopleths in geopotential decametres

All times of observation printed in this publication are GREENWICH MEAN TIME.





STATION	YYGGgg	SURFACE			1000mb			850mb			700mb			500mb			400mb			300mb			200mb		150mb		100mb		70mb		50mb		30mb	
		gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C		
LERWICK 03005	072330	082	09	08	080	++	++	1408	01	03-	2944	07-	10-	5484	24-	32-	7074	36-	41-	9004	52-	++	11678	45-	13598	46-	16268	49-	18596	52-				
	081130	082	12	08	075	++	++	1399	01	06-	2937	07-	12-	5472	25-	33-	7061	37-	43-	8983	53-	++	11694	41-	13638	45-	16340	45-	18718	46-				
STORNOWAY 03026	072345	013	10	09	045	10	08	1382	02	00	2926	07-	10-	5460	25-	29-	7042	37-	42-	8965	51-	++	11679	41-	13624	44-	16306	48-	18645	50-	20840	50-		
	081135	013	13	08	053	11	05	1380	01-	04-	2910	08-	22-	5436	27-	39-	7001	40-	++	8919	46-	++	11659	41-	13604	44-	16281	49-	18627	49-				
SHANWELL 03170	072330	005	11	10	055	11	08	1390	03	00	2933	07-	11-	5459	26-	31-	7032	39-	45-	8961	43-	++	11681	42-	13614	46-	16278	50-						
	081130	005	15	06	050	14	05	1388	01	03-	2919	09-	17-	5438	27-	33-	7003	40-	46-	8932	45-	++	11668	43-	13605	45-	16281	50-	18603	51-	20800	50-	24170	45-
ALDERGROVE 03917	080015	077	09	06	070	++	++	1393	00	01-	2923	09-	13-	5445	26-	30-	7018	39-	42-	8935	43-	++	11655	44-	13581	47-	16240	52-	18550	53-	20721	52-		
	081130	077	12	06	065	++	++	1392	00	02-	2918	09-	14-	5436	27-	35-	7002	42-	++	8918	46-	++	11649	44-	13586	44-	16259	52-	18568	53-	20737	53-		
AUGHTON 03322	072330	056	1	09	079	11	09	1422	04	01-	2971	05-	14-	5527	22-	25-	7133	33-	38-	9088	47-	++	11781	43-	13714	46-	16384	50-	18713	51-	20914	49-	24263	49-
	081130	056	14	08	074	12	07	1403	01	03-	2933	09-	16-	5449	27-	32-	7015	39-	48-	8968	41-	++	11725	42-	13671	43-	16365	48-	18705	49-	20925	47-		
HEMSBY 03496	072330	012	12	11	086	16	12	1445	05	02	3007	03-	11-	5588	20-	26-	7200	33-	37-	9157	43-	++	11783	48-	13669	50-	16304	52-						
	081130	012	15	11	073	14	10	1421	04	02	2970	04-	09-	5547	21-	26-	7163	32-	36-	9130	47-	++	11774	47-	13675	48-	16330	51-	18634	53-	20795	53-	24088	53-
CRAWLEY 03774	072330	144	12	11	105	++	++	1455	06	04	3021	02-	14-	5613	18-	27-	7245	30-	37-	9231	46-	++	11860	50-	13746	50-	16389	51-	18697	52-				
	081255	144	15	13	089	++	++	1435	04	00	2984	++	++	5543	22-	31-	7144	34-	46-	9086	51-	++	11763	45-	13672	48-	16325	51-	18634	52-	20819	51-		
CAMBORNE 03808	072330	088	12	10	113	12	10	1448	02	01	2996	06-	15-	5570	20-	23-	7186	31-	33-	9156	43-	++	11780	50-	13658	51-	16284	54-	18574	55-	20727	54-	24014	52-
	081130	088	14	09	114	13	08	1444	00	03-	2971	09-	14-	5487	28-	36-	7047	40-	49-	8989	44-	++	11705	45-	13620	48-	16276	51-	18583	54-	20760	51-		
VALENTIA 03953	072330	014	12	09	106	11	09	1438	01	01-	2978	09-	13-	5510	26-	29-	7080	39-	42-	9040	30-	++	11810	42-	++++	++	16450	48-						
	081130	014	14	10	117	12	08	1441	01-	04-	2965	09-	14-	5490	25-	31-	7070	36-	43-	8990	52-	++	11680	45-	++++	++	16260	51-						
Ocean Weather Station 'I'  59°00'N 19°00'W	080001		09	05	090	09	04	1410	02-	05-	2930	09-	15-	5460	24-	30-	7050	36-	40-	8980	51-	++	11660	43-	13600	45-	16290	49-	18630	49-				
	081100		12	05	103	09	04	1419	03-	05-	2931	12-	16-	5450	25-	36-	7030	37-	47-	8970	47-	++	11660	45-	13580	47-	16240	50-	18560	51-				
Ocean Weather Station 'J'  52°30'N 20°00'W	072300		11	06	143	10	05	1465	01-	04-	3003	07-	17-	5550	24-	33-	7140	35-	42-	9080	50-	++	11740	47-										
	081100		12	07	159	09	04	1479	01-	04-	3029	03-	19-	5620	19-	35-	7240	31-	45-	9220	46-	++	11830	54-	13690	51-								



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	02 7567+	010 000 830	976 07 04 953 ++ 01 856 01 03- 830 ++ 02- 625 ++ 16- 592 16- 20- 525 20- 29- 450 ++ 35- 375 40- 46- 297	53- 226 45- 100 49- 054 50-		297	09080	53-
	02 5843+	009 999 821	994 09 04 904 03 02- 860 ++ 06- 827 00 07- 620 14- 19- 565 18- 24- 503 ++ 33- 456 29- 35- 376 40- 46- 302	53- 250 44- 204 40- 124 47- 100 45- 055 46-		302	08930	53-
STORNOWAY 03026	21 864++	005 004 810	001 ++ 08 856 03 01 719 05- 08- 692 ++ 10- 648 ++ 19- 583 ++ 24- 506 ++ 29- 381 40- 45- 309 51- 267 45-	205 41- 111 49- 034 49-		309	08760	51-
	01 685++	006 005 859	994 10 03 966 ++ 00 834 02- 04- 819 00 06- 782 ++ 12- 747 06- 12- 730 ++ 12- 706 08- 22- 662 ++ 24- 636	++ 29- 620 14- 33- 575 ++ 37- 482 ++ 40- 420 38- 49- 400 40- 351 48- 320 48- 264 43- 205 40- 150 44- 115		351	07860	48-
SHANWELL 03170	02 7097+	007 006 810	998 11 06 909 07 02 790 01- 04- 665 10- 14- 602 16- 22- 390 40- 46- 323 48- 196 42- 117 50- 100 50- 073	51- Pressure doubtful above 100mb.		323	08460	48-
	02 51531	006 005 830	982 12 03 873 03 00 837 ++ 05- 807 02- 06- 776 03- 09- 712 ++ 16- 650 13- 19- 620 15- 21- 401 40- 46-	357 45- 333 44- 312 46- 226 41- 174 43- 114 50- 100 50- 086 52- 044 49- 030 45- Pressure doubtful above 050mb.		357	07780	45-
ALDERGROVE 03917	03 35601	008 999 856	955 ++ 03 912 03 01 810 ++ 04- 772 ++ 07- 750 ++ 08- 745 ++ 11- 705 ++ 12- 679 ++ 20- 666 ++ 20- 567 ++	32- 523 ++ 29- 500 26- 30- 430 ++ 37- 396 ++ 43- 377 43- 325 49- 225 43- 132 47- 105 53- 050 52-		325	08400	49-
	15 684++	008 999 853	983 10 04 903 03 00 775 05- 07- 726 07- 12- 653 ++ 20- 521 25- 34- 402 ++ 47- 371 45- 334 48- 253 42- 164	43- 096 52- 045 52-		334	08200	48-
AUGHTON 03322	02 3457+	009 003 794	974 11 08 917 ++ 02 895 06 03 840 03 03- 751 03- 06- 730 05- 11- 718 03- 12- 580 16- 20- 553 16- 20- 438	28- 33- 356 40- 45- 325 45- 268 49- 215 43- 167 43- 120 49- 094 50- 030 49-		268	09820	49-
	02 625++	009 002 837	998 11 06 916 04 01 800 ++ 07- 788 ++ 10- 770 04- 10- 680 10- 18- 626 14- 18- 577 19- 24- 535 ++ 30- 487	++ 34- 445 34- 42- 393 40- 48- 344 42- 277 40- 137 44- 121 48- 103 47- 077 50- 051 46- 047 49- 041 46-		383	07310	41-
HEMSBY 03496	02 00900	010 009 763	999 16 11 980 15 08 837 05 03 750 01- 02- 713 04- 07- 697 03- 13- 682 ++ 16- 658 06- 14- 633 08- 18- 603	++ 15- 584 12- 20- 581 ++ 22- 512 ++ 26- 492 21- 26- 408 ++ 36- 354 40- 44- 283 52- 250 56- 203 48- 092		250	10333	56-
	21 4151+	009 007 800	772 02- 04- 754 02- 08- 717 ++ 07- 688 05- 11- 633 ++ 13- 600 11- 20- 557 ++ 20- 513 20- 25- 464 24- 29-	345 40- 44- 265 52- 244 54- 205 47- 133 48- 117 51- 053 55- 030 53- Pressure suspect above 070mb.		244	10480	54-
CRAWLEY 03774	02 874++	013 995 768	982 ++ 09 939 ++ 07 883 08 06 856 07 05 796 ++ 03- 768 00 04- 712 01- 11- 689 ++ 16- 585 ++ 19- 547 ++	31- 489 ++ 26- 439 24- 31- 329 ++ 46- 298 46- 239 56- 189 49- 063 52-		239	10700	56-
	25 43463	011 993 ++	990 ++ 08 980 12 07 963 11 06 940 ++ 03 829 ++ 01- 806 01 03- 571 15- 18- 546 18 21- 494 ++ 34- 443 28-	39- 395 35- 47- 289 52- 215 44- 117 51- 078 53- 040 51-		289	09310	52-
CAMBORNE 03808	02 655++	014 003 814	987 ++ 07 788 02- 03- 752 01- 07- 715 ++ 13- 659 10- 16- 622 09- 13- 342 40- 43- 281 51- 250 55- 235 55-	223 51- 125 51- 072 55- 030 52-		250	10340	55-
	02 32600	014 003 852	988 11 05 965 ++ 05 909 04 01 827 02- 04- 715 08- 13- 589 18- 26- 511 27- 35- 398 40- 49- 357 43- 180 45-	111 51- 070 54- 033 48-		357	07820	43-
VALENTIA 03953	01 52500	013 011 830	997 11 09 879 03 02 764 03- 07- 608 16- 19- 531 22- 25- 379 41- 218 40- 196 42- 145 42- 106 48- 067 48-	058 51- 053 51-		379	07500	41-
	03 63500	014 012 865	922 04 02 733 08- 13- 663 11- 16- 636 14- 19- 480 27- 33- 455 31- 37- 400 36- 43- 295 53- 262 46- 177 43-	116 50- 065 53-		295	09100	53-
Ocean Weather Station 'I' 59°00'N 19°00'W	25 42401	011 011 880	838 ++ 06- 786 06- 10- 771 06- 11- 749 ++ 16- 724 07- 12- 690 ++ 17- 626 ++ 19- 579 ++ 21- 530 ++ 28- 456	29- 34- 427 ++ 36- 374 40- 44- 298 51- 201 43- 089 49- 060 50-		298	09000	51-
	02 48530	014 014 890	992 08 03 958 ++ 02 913 ++ 02- 854 02- 04- 842 ++ 05- 820 ++ 09- 730 10- 13- 673 13- 19- 653 16- 18- 641 14-	21- 611 16- 27- 503 25- 36- 377 40- 50- 324 48- 175 45- 085 52- 063 51-		324	08400	48-
Ocean Weather Station 'J' 52°30'N 20°00'W	15 38500	017 017 876 807	003 ++ 05 866 01- 04- 849 01- 04- 825 01 07- 771 ++ 13- 701 07- 17- 679 08- 18- 562 17- 26- 365 40- 47-	283 54- 250 48- 217 47- 180 49-		283	09400	54-
	15 48502	019 019 872 781	994 09 04 936 04 00 851 01- 03- 832 ++ 15- 827 02 10- 809 ++ 09- 724 03- 15- 701 03- 18- 670 ++ 23- 525	16- 34- 335 40- 234 58- 161 50- 111 53-		234	10800	58-



AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YGGgg	POSITION	PRESSURE MSL Surf. 0°C level			SURFACE m °C °C		1000mb m	950mb °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
081313	49.9°N 28.1°W	018	010	691	061	11 05	1146	11 02	1024 11 02	1497 09 15	1996 06 17	04 21	3078 01 20	05 20	4298 07 27	12 24	5694 16 22
Cloud :— 8/8St. 600 to 1600ft; 2/8Sc. 2000 to 2500ft; 1/8Ac. 14000 to 16000ft; 1/8Ac. at 18000ft; 3/8Cs. 25000ft. to TNG.																	
Inversion																	
Levels :— 965mb to 950mb. 10°C. to 11°C.																	
Isothermal																	
Levels :— 950mb to 900mb 11°C.																	
YGGgg	POSITION	PRESSURE MSL Surf. 0°C level			SURFACE m °C °C		1000mb m	950mb °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
Cloud :—																	
Inversion																	
Levels :—																	
Isothermal																	
Levels :—																	
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For special arrangements for supply to schools and colleges see Form 2452.														Meteorological Office, Air Ministry, Kingsway, London, W.C.2			



STATION		MAX. WIND
LERWICK 03005	060mb 150 06 060mb 130 08 26100m 070 14 08050/0 10200/1	
STORNOWAY 03026	038mb 080 12 08880/2 060mb 110 07 25700m 090 14	
SHANWELL 03170	P17200m 180 08	
ALDERGROVE 03917	19800m 150 07 08200m 200 13 04350/5 06150/5 17330/8 20400m 070 04	
AUGHTON 03322	P25500m 090 21 036mb 110 14 08300/5	210 64 08540m
HEMSBY 03496	17810m 190 10 10290/1 11520/1 220mb 200 50 P23100m 030 05 02580/5 04310/0 08660/0 09000/1 09470/1 09810/1	220 63 08930m 200 76 09630m 190 88 08830m
CRAWLEY 03774	22500m 100 12 10720/1 21600m 150 05 20100m 140 08 05360/0 05810/0	230 67 09960m 210 64 08680m 210 70 07810m
CAMBORNE 03808	216mb 250 51 034mb 090 07 20100m 000 00 09220/1 P24000m 100 09 19800m 210 04	250 83 10340m 230 69 08660m
VALENTIA 03953	764mb 290 18 608mb 290 26 145mb 270 20 067mb 320 03 058mb 070 04 053mb 090 04 922mb 310 20 733mb 300 29 636mb 300 27 262mb 320 37 177mb 290 17 065mb 280 06	
Ocean Weather Station 'J' 59°00'N 19°00'W	12900m 310 18 17400m 310 05 347mb 300 30 181mb 320 21 080mb 190 06 07800m 310 75 18300m 130 05 19800m 130 05	320 104 08400m
Ocean Weather Station 'J' 52°30'N 20°00'W	16800m 310 08 00950/1 12000/7 175mb 320 40 115mb 320 15 07100m 310 69 12600m 310 45 23400m 000 00	320 73 09410m 320 88 09870m 310 90 11070m
LARKHILL 03743	13850/1 17370m 220 08 10450/1	210 82 09050m 220 70 07520m

## NOTES ON THE AEROLOGICAL SITUATION

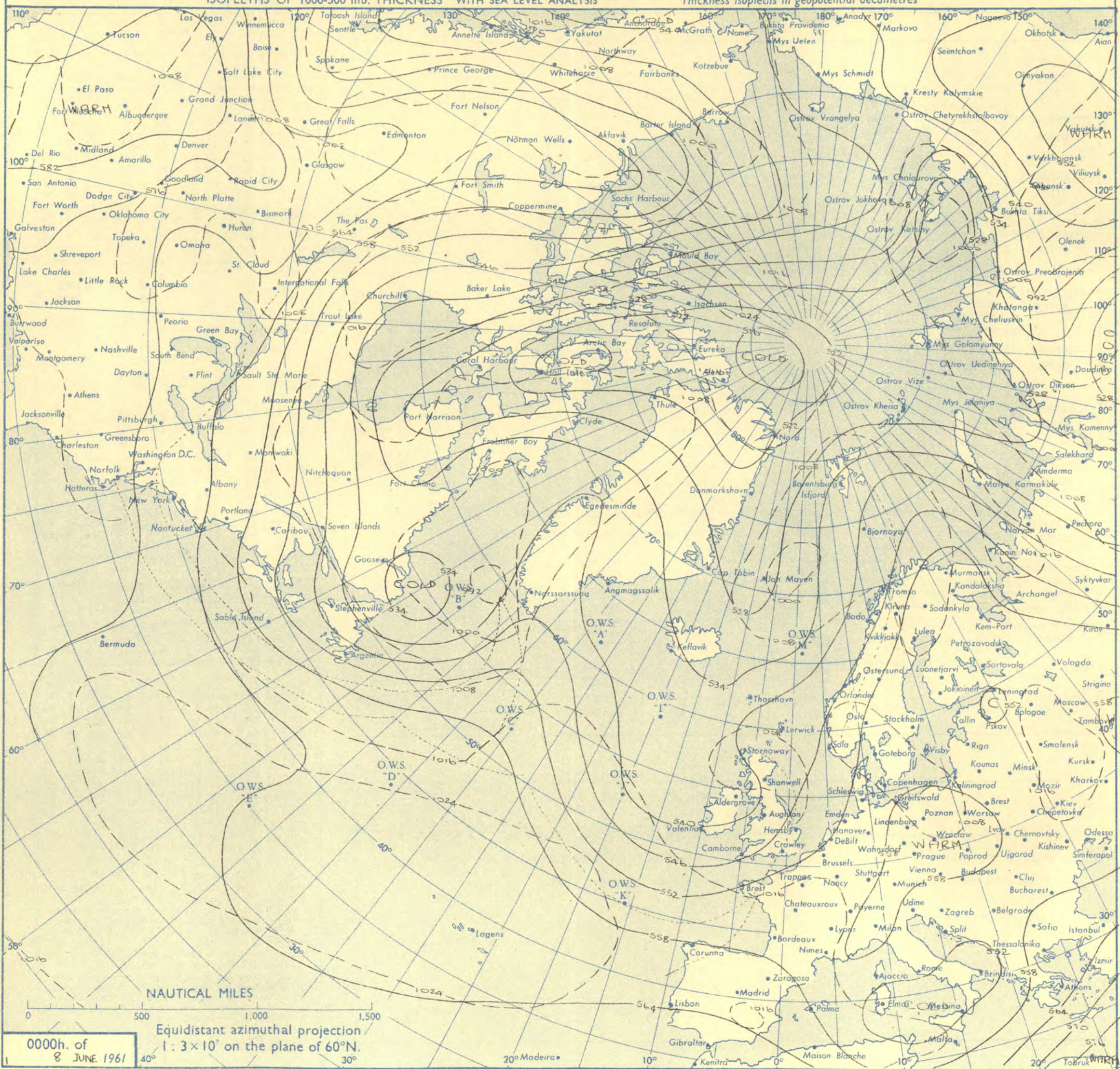
The ridge over western Canada is moving east while the low near Baffin Island moves south. The low which was over Labrador 24 hours ago has moved northeast and deepened. The trough near eastern Greenland yesterday has extended south and is moving towards the east with the weakening of the block over Russia.

AVERAGE AND EXTREME VALUES 1951-55									
JUNE									
LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.									
Press. Level	Average		Extreme Temps.			Wind*			
	Height	Temp.	Max.	Min.		V <sub>R</sub>	V <sub>S</sub>		
mb.	gpm.	°C	°C	°C		°	Kt.	Kt.	
40	22345	-48.1	-42	-55		120	...	...	(11)
60	19675	-48.1	-41	-55		120	3	8	
100	16320	-48.8	-41	-56		244	5	11	
150	13660	-48.3	-41	-59		263	10	18	
200	11770	-49.8	-39	-67		271	16	27	
300	9125	-46.7	-37	-56		271	22	4	
400	7160	-32.6	-23	-44		271	18	33	
500	5555	-20.8	-11	-31		269	14	26	
700	2985	-5.2	3	-14		266	9	19	
850	1435	2.8	14	-7		269	6	18	
Tropopause		Press. (mb.)	Temp. (°C)			Height (gpm.)			
Average		257	-54.7			10190			
Max.		405	-40			12955			
Min.		172	-68			6890			
LARKHILL/CRAWLEY† at 03, 15h.									
(Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.)									
Press. Level	Average		Extreme Temps.			Wind*			
	Height	Temp.	Max.	Min.		V <sub>R</sub>	V <sub>S</sub>		
mb.	gpm.	°C	°C	°C		°	Kt.	Kt.	
40	22310	-49.6	-47	-57		106	9	10	
60	19675	-51.4	-45	-59		136	3	8	
100	16370	-52.6	-46	-61		251	8	13	
150	13745	-51.8	-42	-65		265	15	21	
200	11890	-54.0	-40	-65		268	20	32	
300	9265	-44.7	-36	-54		265	20	39	
400	7275	-29.6	-19	-41		265	17	31	
500	5640	-17.8	-9	-28		263	15	25	
700	3050	-2.1	7	-10		263	11	19	
850	1480	5.7	16	-3		264	7	16	
Tropopause		Press. (mb.)	Temp. (°C)			Height (gpm.)			
Average		234	-56.8			10950			
Max.		388	-41			13440			
Min.		160	-66			7225			
MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.									
Press. Level	Average		Extreme Temps.			Wind*			
	Height	Temp.	Max.	Min.		V <sub>R</sub>	V <sub>S</sub>		
mb.	gpm.	°C	°C	°C		°	Kt.	Kt.	
40	(22185)	(-60.7)	...	...		120	5	11	
60	19670	-60.7	-53	-69		135	4	10	
100	16510	-62.9	-57	-71		255	21	24	
150	13995	-59.0	-51	-67		265	38	42	
200	12185	-56.6	-47	-67		275	42	47	
300	9530	-40.1	-33	-46		285	32	38	
400	7500	-23.9	-19	-29		285	27	31	
500	5835	-11.8	-8	-17		285	24	28	
700	3165	7.2	13	-1		290	18	22	
850	1535	17.9	27	8		290	9	14	
Tropopause		Average Press.	Average Temp.	Max. Press.	Min. Press.	Max. Temp.	Min. Temp.		
Upper		mb.	°C	mb.	mb.	°C	°C		
Lower		123	-65.7	...	73	...	-73		
		193	-59.8	266	...	-46	...		
* V <sub>R</sub> = Vector average wind. V <sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.									
† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.									
Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.									



ISOPLETHS OF 1000-500 mb. THICKNESS WITH SEA LEVEL ANALYSIS

Thickness isopleths in geopotential decametres

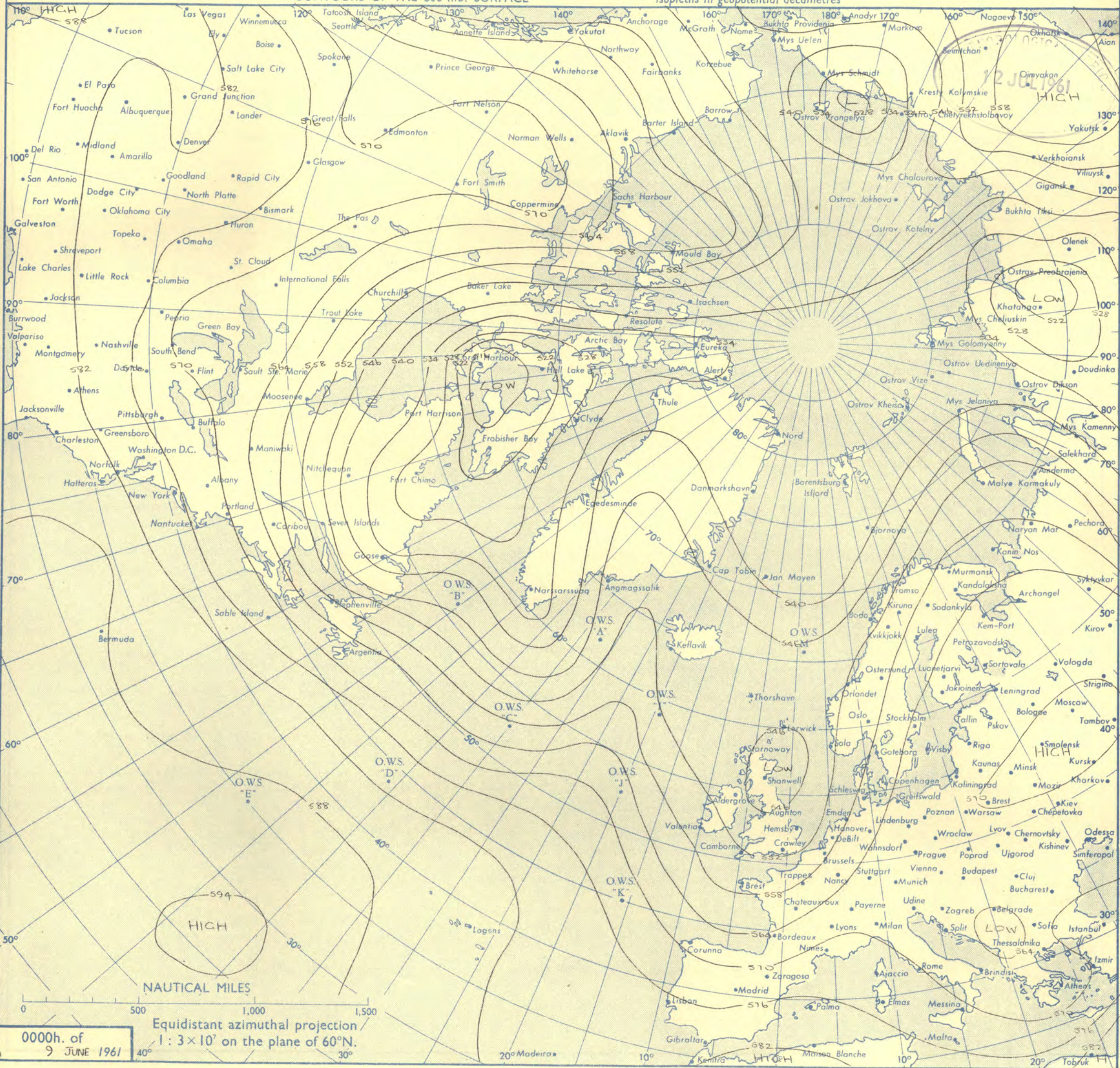




CONTOURS OF THE 500 mb. SURFACE

Isopleths in geopotential decametres

All times of observation printed in this publication are GREENWICH MEAN TIME.





STATION	YYGGgg	SURFACE			1000mb			850mb			700mb			500mb			400mb			300mb			200mb			150mb			100mb			70mb			50mb			30mb		
		gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C			
LERWICK 03005	082333	082	09	08	067	++	++	1390	00	02-	2926	07-	08-	5461	26-	31-	7041	37-	46-	8973	50-	++	11677	42-	13614	45-	18632	50-												
	091135	082	09	09	032	++	++	1359	02	02-	2901	07-	12-	5446	23-	37-	7041	36-	45-	8995	44-	++	11761	40-	13720	43-	16432	46-	18798	47-	21034	47-								
STORNOWAY 03026	082330	013	10	09	062	09	07	1391	01	00	2928	08-	10-	5446	27-	32-	7011	40-	46-	8920	47-	++	11644	43-	13575	45-	16241	50-	18560	51-										
	091130	013	12	08	085	10	05	1407	01-	03-	2935	08-	13-	5443	29-	37-	6992	43-	++	8908	44-	++	11632	45-	13535	49-	16190	49-												
SHANWELL 03170	082330	005	10	09	042	10	08	1371	01	00	2902	09-	11-	5423	26-	29-	6994	39-	43-	8925	42-	++	11683	41-	13625	44-	16303	50-	18637	50-										
	091130	005	14	08	051	13	08	1390	02	01-	2931	07-	11-	5479	24-	33-	7071	36-	43-	9031	41-	++	11804	40-	13762	42-	16479	46-	18842	48-	21057	48-								
ALDERGROVE 03917	082330	077	09	06	076	++	++	1404	01	01-	2941	09-	12-	5469	26-	31-	7047	38-	45-	8976	47-	++	11706	42-	13640	45-	16317	51-	18640	52-	20817	51-								
	091130	077	13	06	093	13	06	1420	00	02-	2953	07-	14-	5491	24-	37-	7082	35-	48-	9048	47-	++	11713	46-	13621	47-	16272	52-	20772	50-										
AUGHTON 03322	082330	056	10	08	077	10	08	1405	01	04-	2936	08-	17-	5458	27-	40-	7023	40-	++	8943	46-	++	11680	43-	13612	45-	16282	50-	18597	52-										
	091130	056	13	07	105	11	05	1432	00	03-	2964	08-	13-	5497	25-	35-	7079	38-	48-	9018	46-	++	11739	42-	13671	45-	16350	48-	18687	50-	20899	48-								
HEMSBY 03496	082330	012	09	07	083	11	07	1424	03	02-	2964	07-	18-	5489	27-	38-	7072	34-	46-	9020	47-	++	11731	43-	13655	46-	16321	51-	18640	52-	20819	51-								
	091130	012	14	07	101	13	05	1437	02	00	2980	06-	11-	5530	24-	40-	7121	36-	46-	9057	50-	++	11769	43-	13707	44-	16400	48-	18742	49-	20948	49-								
CRAWLEY 03774	082330	144	09	06	106	++	++	1441	02	03-	2979	07-	17-	5513	25-	36-	7097	36-	46-	9028	50-	++	11733	44-	13654	46-	16313	51-	18629	52-										
	091130	144	14	06	116	++	++	1454	01	00	2987	08-	10-	5524	24-	43-	7119	35-	+++	9056	49-	++	11775	43-	13707	46-	16381	49-												
CAMBORNE 03808	082330	088	12	09	122	11	08	1454	01	01-	2989	07-	16-	5523	25-	30-	7105	37-	43-	9033	49-	++	11731	44-	13649	48-	16301	51-	18612	52-	20791	52-	24133	46-						
	091150	088	15	11	139	13	09	1471	01	01-	3003	07-	14-	5558	22-	36-	7180	29-	43-	9170	45-	++	11810	49-	13697	49-	16331	53-	18625	54-	20785	53-								
VALENTIA 03953	082344	014	11	09	135	10	08	1461	01-	03-	2987	07-	16-	5550	21-	39-	7160	31-	48-	9150	43-	++	11810	47-																
	091200	014	14	09	132	10	06	1459	00	03-	2998	05-	18-	5590	17	23-	7220	28-	32-	9230	44-	++	11830	57-	+++++	++	16300	54-												
Ocean Weather Station 'I'  59°00'N 19°00'W	090000		10	06	113	09	05	1434	01-	03-	2956	08-	18-	5510	20-	37-	7140	30-	46-	9130	45-	++	11760	50-	13660	48-	16320	50-												
	091200		12	07	095	11	07	1417	01-	03-	2942	06-	17-	5510	20-	25-	7130	32-	34-	9110	46-	++	11700	55-	13580	49-	16230	52-	18530	54-										
Ocean Weather Station 'J'  52°30'N 20°00'W	082300		12	09	144	10	08	1478	06	00	3046	03-	05-	5660	15-	18-	7310	26-	31-	9320	43-	++	11920	62-	13750	55-	16350	54-												
	091100		12	12	062	12	12	1415	07	06	2984	02-	02-	5600	15-	17-	7250	27-	30-	9260	42-	++	11900	53-	13780	51-	16420	50-												



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	61 7632+	008 998 858	861 00 02- 722 05- 06- 518 ++ 26- 472 ++ 36- 435 33- 42- 375 40- 49- 311 49- 286 50- 232 43- 202 42- 100	49-		311	08720	49-
	50 860++	004 994 817	981 07 05 671 08- 13- 616 ++ 17- 591 ++ 24- 549 ++ 32- 515 21- 34- 394 ++ 46- 379 39- 49- 339 43- 304 44- 274 40- 179 40- 151 44- 100 46- 050 47-			339	08180	43-
STORNOWAY 03026	25 884++	008 006 826	664 11- 14- 549 ++ 26- 485 ++ 35- 400 40- 46- 332 50- 269 43- 217 42- 099 50- 060 51-			332	08260	50-
	01 42630	010 009 862	994 10 05 888 ++ 01 869 ++ 03- 823 03- 06- 806 02- 09- 780 ++ 14- 757 ++ 14- 736 ++ 12- 686 09- 13- 557 ++ 28- 486 ++ 40- 419 40- 47- 374 47- 222 42- 190 47- 146 50- 088 48- Pressure suspect above 200mb.			374 190	07430 11960	47- 47-
SHANWELL 03170	21 755++	005 005 840	999 10 08 894 ++ 00 848 01 00 516 ++ 28- 486 28- 32- 397 40- 44- 351 48- 275 41- 170 42- 116 49- 100 50- 054 49-			351 116	07860 15340	48- 49-
	80 635++	006 006 818	995 12 07 888 ++ 03 853 02 01- 724 06- 09- 620 12- 17- 512 ++ 31- 370 40- 47- 353 42- 337 42- 248 39- 100 46- 037 48- Pressure doubtful above 070mb			353	07910	42-
ALDERGROVE 03917	02 364++	009 000 823	902 04 02 760 04- 07- 694 09- 12- 674 10- 13- 584 17- 22- 503 26- 31- 479 ++ 34- 379 40- 46- 356 44- 311 49- 275 43- 159 44- 102 51- 065 53- 048 51-			311	08710	49-
	03 785++	011 002 849	987 10 04 865 01 01- 808 03- 04- 752 ++ 06- 712 06- 12- 657 11- 19- 619 14- 22- 598 14- 25- 560 ++ 31- 395 36- 49- 372 36- 49- 275 51- 267 49- 250 51- 204 46- 164 46- 102 52- 050 50-			275 102	09610 16150	51- 52-
AUGHTON 03322	25 825++	009 003 838	983 ++ 06 938 ++ 04 854 01 04- 796 03- 06- 742 05- 12- 654 ++ 23- 622 ++ 24- 598 ++ 30- 547 21- 37- 400 40- 342 49- 251 41- 075 52- 053 51-			342 128	08060 14670	49- 49-
	02 52500	013 006 852	002 11 05 930 ++ 03 869 ++ 03- 844 01- 04- 838 01- 04- 810 01- 11- 753 04- 19- 734 05- 13- 696 ++ 13- 646 12- 21- 615 13- 26- 554 ++ 26- 504 24- 34- 379 40- 49- 332 46- 197 42- 110 49- 032 48-			332	08350	46-
HEMSBY 03496	02 00900	010 008 806	997 12 05 738 05- 10- 712 ++ 18- 687 08- 20- 648 ++ 21- 483 29- 41- 419 32- 45- 363 40- 44- 329 45- 307 47- 199 43- 110 50- 061 53- 052 50 040 52-			307 110	08880 15700	47- 50-
	03 785++	012 010 823	997 12 05 915 ++ 03 799 02- 03- 768 ++ 04- 698 ++ 11- 684 07- 17- 678 ++ 18- 655 09- 18- 572 ++ 31- 485 ++ 40- 370 40- 50- 294 51- 252 43- 167 42- 088 49- 035 50-			294	09200	51-
CRAWLEY 03774	02 00900	013 995 812	990 ++ 05 956 10 06 936 ++ 03 878 04 01- 816 ++ 04- 751 ++ 13- 667 ++ 22- 374 40- 50- 317 49- 293 50- 264 44- 153 46- 115 51- 060 51- pressure suspect above 150mb			317	08660	49-
	15 7853+	014 997 830	990 ++ 00 980 12 00 841 01 00 808 ++ 03- 778 ++ 08- 765 05- 08- 733 ++ 07- 696 ++ 11- 675 ++ 23- 593 15- 31- 511 ++ 44- 464 ++ 42- 422 ++ 50- 392 36- 370 41- 303 50- 253 47- 170 44- 121 49- 088 51-			303	08990	50-
CAMBORNE 03808	01 14640	015 004 832	999 11 08 935 ++ 05 842 00 02- 800 ++ 06- 788 ++ 09- 718 06- 15- 467 29- 34- 438 32- 38- 379 40- 45- 314 50- 245 45- 189 44- 116 51- 044 51- 030 46-			314	08720	50-
	02 38502	017 006 839	985 ++ 06 951 ++ 06 931 ++ 03 835 00 02- 764 04- 08- 651 09- 20- 528 19- 33- 503 22- 36- 425 26- 40- 336 39- 50- 257 52- 234 54- 219 54- 203 49- 070 54- 040 52-			234	10800	54-
VALENTIA 03953	80 33500	016 015 860	984 10 08 860 00 02- 724 08- 10- 624 11- 26- 576 15- 32- 506 20- 38- 411 31- 48- 578 32- 49- 244 53- 118 47- 102 5-			244	10600	53-
	01 22502	016 014 850	975 07 03 904 04 00 820 03- 05- 766 02- 12- 694 06- 19- 583 10- 24- 472 20- 35- 336 37- 40- 272 50- 216 61- 182 52- 090 54-			216	11300	61-
Ocean Weather Station 'I' 59°00'N 19°00'W	01 38500	014 014 868	962 ++ 03 886 ++ 04- 833 03- 04- 814 03- 07- 804 ++ 09- 754 08- 10- 736 07- 13- 711 ++ 14- 704 08- 18- 682 08- 20- 609 12- 24- 539 19- 33- 467 21- 39- 350 37- 50- 272 50- 235 56- 225 53- 164 47- 078 59-			235	10700	56-
	01 42508	011 011 864	969 07 04 933 04 03 895 02 01- 857 ++ 03- 780 06- 09- 764 ++ 09- 724 ++ 17- 657 07- 22- 570 15- 31- 531 19- 30- 505 19- 25- 480 22- 25- 336 40- 42- 234 59- 218 61- 206 56- 183 50-			218	11200	61-
Ocean Weather Station 'J' 52°30'N 20°00'W	60 6557+	017 017 739	904 04 02 884 ++ 05 874 06 03- 848 06 01- 817 06 01 696 ++ 05- 642 07- 10- 608 07- 10- 422 23- 28- 314 40- 45- 264 50- 203 63- 188 57- 093 53-			203	11800	63-
	61 4732+	007 007 749	980 10 10 948 12 12 834 05 03 734 01- 01- 613 07- 08- 549 11- 13- 355 32- 36- 312 40- 44- 225 56- 180 50- 080 50-			225	11100	56-



STATION	YYGGgg	Type	Surface	1000mb	900m	850mb 1500m	750mb 2100m	700mb 3000m	600mb 4200m	500mb 5400m	400mb 7200m	300mb 9000m	250mb 10500m	200mb 12000m	150mb 14100m	100mb 15900m	70mb 18300m	50mb 20700m	30mb 23700m	20mb 26400m	10mb 30900m
LERWICK 03005	082333		No Winds reported.																		
	090535	P	030 18	+++ ++	050 17	090 12	100 13	110 14	110 15	110 23	110 25	150 28	160 13	170 13	140 06	150 05	150 06	090 12			
	091135	T	030 19	+++ ++	050 11	080 08	100 07	100 08	100 14	090 20	070 25	120 26	150 11	170 08	210 05	150 07	110 10				
	091730	P	300 15	+++ ++	250 06	240 08	240 09	240 08	250 06	300 09	320 24	290 03	240 05	220 07	240 04	180 05	160 06				
STORNOWAY 03026	082330	T	030 18	+++ ++	030 14	010 15	010 19	010 17	010 13	020 15	360 17	340 14	350 08	300 05	240 03	250 06	090 09				
	090530	P	020 20	+++ ++	030 22	030 22	020 19	010 17	360 14	340 12	350 20	340 29	330 18	320 07	320 04	290 06	080 03	100 15			
	091130	T	030 14	+++ ++	010 14	360 14	360 18	350 19	350 19	330 19	330 25	310 30	320 14	280 06	P230 04	190 04	130 07	140 07			
	091730	P	350 13	+++ ++	350 14	330 14	340 19	340 18	300 15	290 17	300 27	310 75	300 28	290 21	280 08	240 08	090 04	100 08			
SHANWELL 03170	082330	T	030 05	+++ ++	330 10	310 11	380 09	310 09	330 11	360 07	030 13	280 03	180 05	240 05	180 04	320 02	120 05				
	090530	P	270 07	+++ ++	300 12	290 12	280 17	290 14	340 14	340 18	340 23	320 12	310 08	310 06	040 03	250 02	070 04	090 14			
	091130	T	290 08	+++ ++	310 10	310 09	300 08	300 10	300 17	300 19	300 19	310 27	300 18	320 13	280 05	090 04	210 02	P100 13			
	091730	P	190 04	+++ ++	300 07	300 11	290 17	270 20	280 23	290 19	300 32	310 69	300 32	290 20	300 09	260 05	000 00	100 09			
ALDERGROVE 03917	082330	T	280 14	+++ ++	320 30	320 27	310 22	310 22	310 25	310 23	320 29	320 31	320 22	320 12	330 07	020 05	170 03				
	090530	P	270 08	+++ ++	310 22	310 22	310 18	310 15	320 14	310 11	330 32	330 16	330 35	320 27	320 08	320 06	060 08	090 11			
	091130	T	270 12	+++ ++	280 18	280 20	300 11	300 11	310 16	320 23	320 55	330 89	320 69	320 32	320 08	010 07	330 02				
	091730	P	290 05	+++ ++	270 12	260 14	270 11	280 10	270 16	300 27	310 53	300 76	300 89	310 29	290 15	270 10	130 02	120 03	110 13	100 17	
AUGHTON 03322	082330	T	250 14	+++ ++	280 27	280 24	280 27	280 28	280 31	290 24	280 19	290 24	280 15	260 09	280 06	240 03	010 02				
	090530	P	240 16	+++ ++	290 23	290 24	290 25	290 25	280 20	270 24	300 28	310 30	290 17	330 13	300 06	310 04	070 02	100 07			
	091130	T	250 13	+++ ++	280 17	280 16	280 12	280 12	290 14	310 18	320 23	330 43	320 38	310 24	310 10	320 03	160 03	120 06			
	091740	P	240 14	+++ ++	270 16	270 10	270 10	270 12	280 14	300 18	330 57	320 90	320 75	300 27	290 15	300 05	330 04	100 04			
HEMSBY 03496	082330	T	260 06	+++ ++	290 16	270 15	240 17	250 20	230 23	230 33	200 69	200 54	200 36	210 29	210 14	270 04	210 06	070 04			
	090530	P	250 08	+++ ++	250 19	240 22	240 20	250 20	250 24	250 31	230 44	220 43	220 21	230 15	230 08	220 07	090 06				
	091130	T	260 08	+++ ++	260 13	270 12	250 12	240 15	230 21	220 25	230 24	220 31	230 17	230 10	250 09	190 05	190 06	140 08			
	091730	P	050 04	+++ ++	260 07	240 14	240 16	250 11	260 12	240 14	230 18	290 18	290 15	270 14	270 12	240 07	150 03	110 05			
CRAWLEY 03774	082330	T	240 05	+++ ++	290 09	270 13	270 18	270 19	270 18	280 29	260 48	240 42	240 29	240 20	250 15	P260 04	270 04				
	090530	P	000 00	+++ ++	280 14	280 15	260 17	260 11	240 13	240 19	240 23	230 25	260 19	280 16	280 09	240 07	140 03	150 08			
	091110	P	300 10	+++ ++	290 11	290 11	270 10	260 11	260 12	210 10	230 11	270 11	300 18	290 18	290 13	360 05	220 09	050 07	090 14	120 19	110 33
	091730	P	250 07	+++ ++	290 11	300 12	280 12	280 09	290 18	310 15	320 27	340 80	330 51	310 23	300 23	290 06	310 04				
CAMBORNE 03808	082330	T	270 13	+++ ++	300 17	310 17	290 18	290 18	300 21	290 21	290 25	310 31	310 36	310 24	300 17	310 04	280 07	100 07			
	090530	P	310 12	+++ ++	320 17	310 21	290 23	290 23	300 23	300 28	320 49	330 92	330 56	320 32	310 21	310 11	030 08	090 04			
	091150	T	290 10	+++ ++	280 08	300 10	300 17	310 16	320 19	330 36	330 80	340 92	340 109	320 51	320 33	310 08	230 06	100 06	P190 06		
	091730	P	290 12	+++ ++	260 13	250 10	270 11	300 15	310 29	320 38	320 60	320 69	320 81	320 48	300 22	300 11					
VALENTIA 03953	082344	T	300 08	300 09	+++ ++	300 15	+++ ++	300 23	+++ ++	310 56	320 85	330 109									
	091200	T	310 06	290 07	+++ ++	240 09	+++ ++	300 19	+++ ++	310 51	310 65	310 66	+++ ++	310 55							
Ocean Weather Station 'I' 59°00'N 19°00'W	090000	T	000 00	+++ ++	000 00	000 00	290 07	310 09	330 11	330 39	320 61	300 73	300 80	300 38	300 17	260 07					
	090600	P	090 10	+++ ++	130 07	140 07	170 04	+++ ++	+++ ++	310 31	300 35	300 46	280 87	300 39	300 18	290 10	080 02				
	091200	T	120 16	+++ ++	130 12	130 19	140 11	190 02	300 08	+++ ++	+++ ++	270 43	260 37	260 39	270 13	280 08					
	091800	P	135 20	+++ ++	120 16	110 13	000 00	120 09	090 04	800 08	+++ ++	+++ ++	+++ ++	+++ ++	280 19	270 07					
Ocean Weather Station 'J' 52°30'N 20°00'W	082330	T	210 12	+++ ++	220 21	260 16	280 25	270 25	270 42	290 58	300 60	300 65	290 64	290 63	290 24	340 16					
	090700	P	180 20	+++ ++	250 18	270 22	270 23	270 28	260 43	260 44	260 40	260 45	260 58	270 36	280 13						
	091100	T	280 09	+++ ++	300 17	310 24	310 18	290 14	260 21	240 35	240 36	220 48	220 64	240 40	280 29	250 09					
	091700	P	270 20	+++ ++	300 32	290 30	280 32	280 32	280 38	280 38	280 47	280 56	280 49	290 33							
LARKHILL 03743	090625	P	280 03	+++ ++	290 13	290 15	280 13	280 17	280 14	240 15	270 18	290 22	300 19	300 09	300 07	070 02					
	091030	P	280 07	+++ ++	290 14	290 13	280 15	280 17	280 11	260 11	270 09	310 17	320 28	300 17	300 12	000 00	190 07				

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE		SURFACE	1000mb	950mb	900mb	850mb	800mb	750mb	700mb	650mb	600mb	550mb	500mb
		MSL	Surf. 0°C level	m °C °C	m	°C °C	m °C °C	m °C °C	m °C °C	°C °C	m °C °C	°C °C	m °C °C	°C °C	m °C °C
091305	53.5°N 25.3°W	011	004 718	061 08 01-	290	05 05	954 06 06	1420 05 07-	1911 05 11-	02 ++	2987 01- ++	06- ++	4194 09- ++	15- ++	5572 21- ++
Cloud :— 7/8 Sc 1500 to 2400ft. 2/8 Ci 25000ft to TNG.															
Inversion															
Levels :— 950mb to 900mb 5½°C to 6°C.															
Isothermal															
Levels :— 850mb to 800mb 4½°C															
YYGGgg	POSITION	PRESSURE		SURFACE	1000mb	950mb	900mb	850mb	800mb	750mb	700mb	650mb	600mb	550mb	500mb
		MSL	Surf. 0°C level	m °C °C	m	°C °C	m °C °C	m °C °C	m °C °C	°C °C	m °C °C	°C °C	m °C °C	°C °C	m °C °C
091430	57.3°N 23.3°W	005	998 818	061 08 08	046	05 05	908 03 03	1366 02 02	1859 01- ++	02 ++	2917 05- ++	08- ++	4112 13- ++	18- ++	5474 23- ++
Cloud :— 4/8 St. 400 to 1200 ft. 5/8 Sc 1500 to 2200 ft. 7/8 Sc 3000 to 6000 ft. 5/8 As 7000 to 10000 ft. 4/8 Cs 20000 ft to TNG.															
Inversion															
Levels :—															
Isothermal															
Levels :—															
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Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General Meteorological Office, Air Ministry, Kingsway, London, W.C.2															



# UPPER WINDS AT ADDITIONAL LEVELS

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STATION		MAX. WIND
LERWICK 03005	053mb 140 06 19500m 130 08	
STORNOWAY 03026	23200m 100 14 16520/9 P21600m 100 12 23100m 090 13 07640/0 08130/0 09940/1 17940/8	310 80 08340m
SHANWELL 03170	060mb 100 10 22080m 100 09 P22200m 120 09 08100m 310 55 07720/0 08150/0 09000/1 10240/1	320 78 08750m
ALDERGROVE 03917	330mb 320 43 052mb 080 15 21600m 120/ 11 06960/0 217mb 320 41 163mb 310 21 060mb 140 05 27900m 180 19 08100/0 09100/0 10840/1 11380/1	330 93 09100m 300 90 10590m
AUGHTON 03322	056mb 300 05 23400m 120 12 361mb 330 35 035mb 090 06 05640m 320 32 11010m 320 47 21600m 110 10 07040/0 10270/1 11010/1	320 103 09570m
HEMSBY 03496	423mb 200 60 09500m 220 36 19460m 130 09 09500/1 037mb 120 15 08620/5	190 72 06940m
CRAWLEY 03774	P20400m 080 05 28800m 110 19 33000m 110 27 34800m 120 19 08400m 340 64 19800m 050 05 07530/0 07950/0 09820/1 10250/1	340 101 09530m
CAMBORNE 03808	033mb 100 13 23100m 120 08 08070m 320 70 07250/0 08070/0 08510/0 09390/1 10220/1 448mb 330 69 221mb 330 80 P25800m 150 10 12800m 310 32 17700m 340 06 06400/0 11600/1	330 93 09190m 340 112 10480m 320 82 10910m
VALENTIA 03953	724mb 300 19 624mb 310 33 576mb 310 39 411mb 320 78 378mb 320 93 904mb 240 07 820mb 250 11 766mb 280 16 583 61 320 37 336mb 320 75 272mb 310 72	330 112 09450m 310 85 10600m
Ocean Weather Station 'J' 59°00'N 19°00'W	226mb 290 61 083mb 280 06 09600m 280 52 11100 260 57 10100m 120 02 08100/0 10280/0 10650/0 11050/1 11270/1 517mb 300 16 176mb 270 24 081mb 270 09 06300m 290 18 12900m 250 20 02520/8	318 86 09770m 280 95 10820m
Ocean Weather Station 'J' 52°30'N 20°00'W	177mb 310 37 13200m 300 25 15600m 270 05 205mb 220 48 083mb 250 08 13200m 280 26	290 77 11000m 260 64 10820m 220 68 10350m 290 65 09500m
LARKHILL 03743	09120/2 09010/3	

## NOTES ON THE AEROLOGICAL SITUATION

The ridge near the Rocky Mountains is slow moving while the low near Baffin Island is moving south. The low which was over the Davis Strait yesterday has moved north and filled. The ridge over the Atlantic is moving east and intensifying while the downstream trough moves east across the British Isles. The blocking pattern over Russia persists.

## AVERAGE AND EXTREME VALUES 1951-55 JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	°	Kt.
40	22345	-48.1	-42	-55	...	...
60	19675	-48.1	-41	-55	120	3
100	16320	-48.8	-41	-56	244	5
150	13660	-48.3	-41	-59	263	10
200	11770	-49.8	-39	-67	271	16
300	9125	-46.7	-37	-56	271	22
400	7160	-32.6	-23	-44	271	18
500	5555	-20.8	-11	-31	269	14
700	2985	-5.2	3	-14	266	9
850	1435	2.8	14	-7	269	6

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	257	-54.7	10190
Max.	405	-40	12955
Min.	172	-68	6890

LARKHILL/CRAWLEY† (Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.) at 03, 15h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	°	Kt.
40	22310	-49.6	-47	-57	106	9
60	19675	-51.4	-45	-59	136	3
100	16370	-52.6	-46	-61	251	8
150	13745	-51.8	-42	-65	265	15
200	11890	-54.0	-40	-65	268	20
300	9265	-44.7	-36	-54	265	20
400	7275	-29.6	-19	-41	265	17
500	5640	-17.8	-9	-28	263	15
700	3050	-2.1	7	-10	263	11
850	1480	5.7	16	-3	264	7

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	234	-56.8	10950
Max.	388	-41	13440
Min.	160	-66	7225

MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	°	Kt.
40	(22185)	(-60.7)	...	...	120	5
60	19670	-60.7	-53	-69	135	4
100	16510	-62.9	-57	-71	255	21
150	13995	-59.0	-51	-67	265	38
200	12185	-56.6	-47	-67	275	42
300	9530	-40.1	-33	-46	285	32
400	7500	-23.9	-19	-29	285	27
500	5835	-11.8	-8	-17	285	24
700	3165	7.2	13	-1	290	18
850	1535	17.9	27	8	290	9

Tropopause	Average Press.	Average Temp.	Max. Press.	Min. Press.	Max. Temp.	Min. Temp.
Upper	123	-65.7	...	73	...	-73
Lower	193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

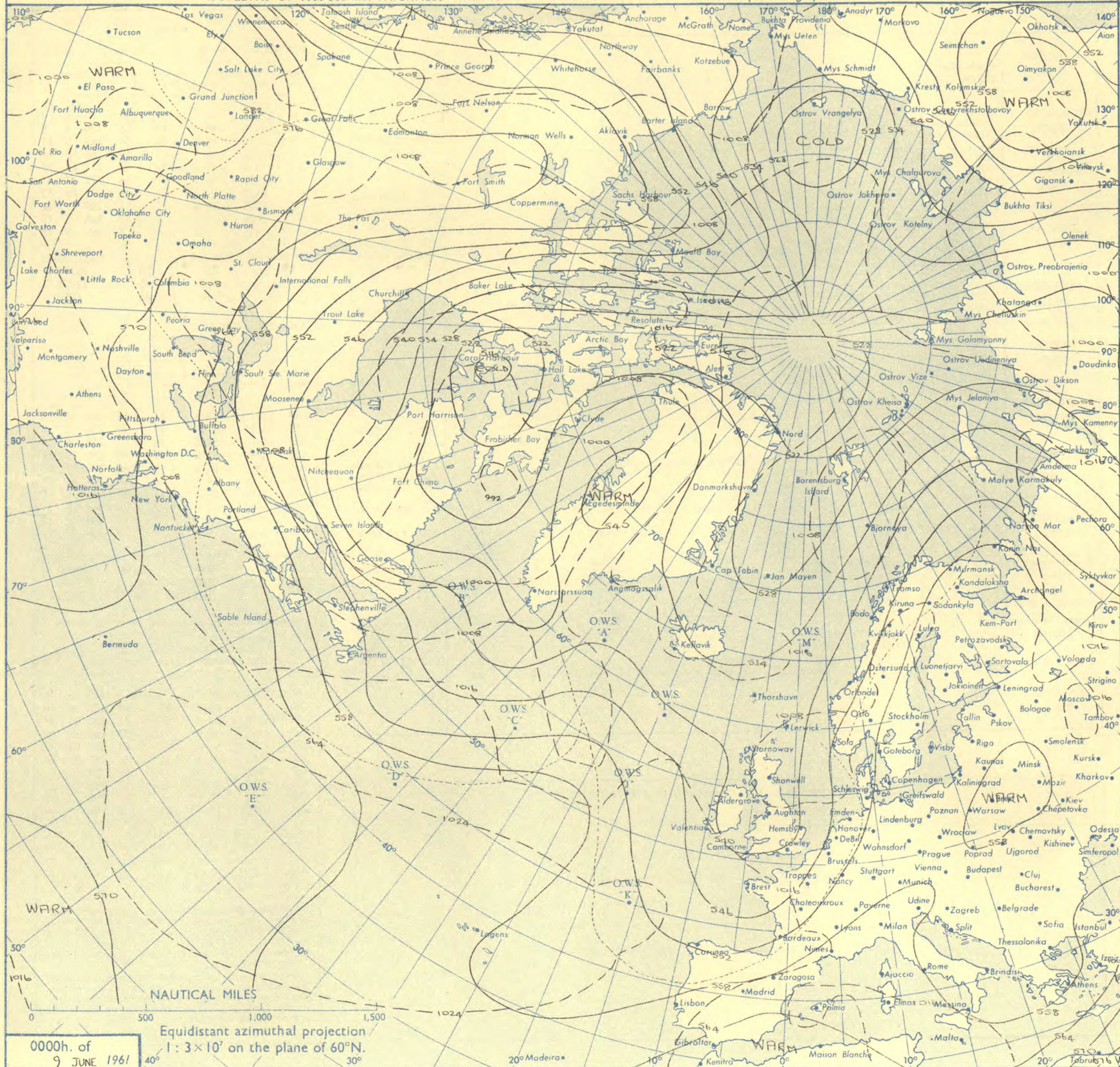
† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.



ISOPLETHS OF 1000-500 mb. THICKNESS WITH SEA LEVEL ANALYSIS

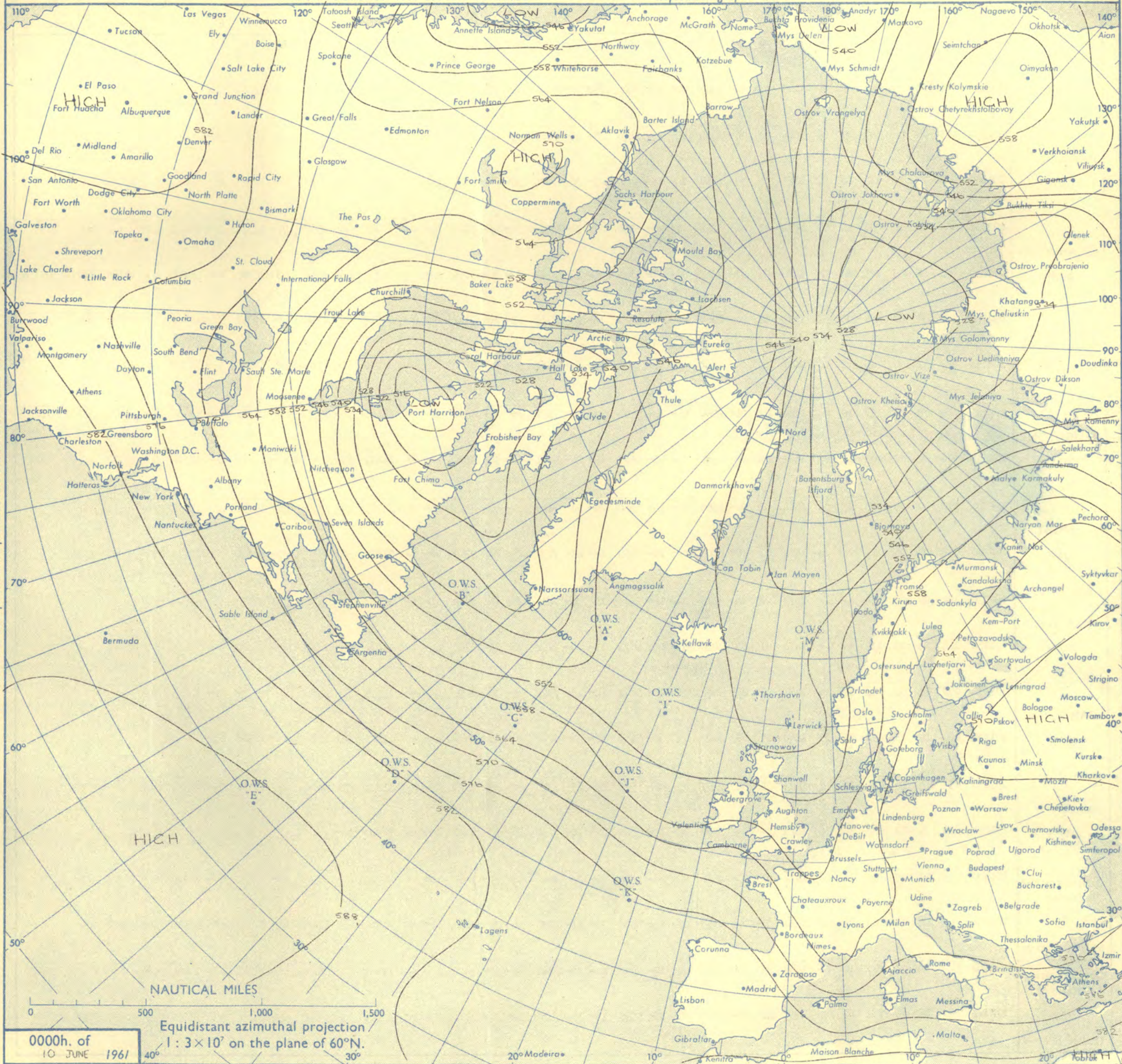
Thickness isopleths in geopotential decametres





CONTOURS OF THE 500 mb. SURFACE

Isopleths in geopotential decametres





STATION	YYGGgg	SURFACE			1000mb			850mb			700mb			500mb			400mb			300mb			200mb			150mb			100mb			70mb			50mb			30mb		
		gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C				
LERWICK 03005	092330	082	08	08	020	++	++	1350	01	01-	2889	08-	12-	5418	25-	32-	6998	38-	47-	8940	43-	++	11695	41-	13645	43-	16340	48-	18683	49-	20893	49-								
	101135	082	10	06	098	09	05	1413	03-	06-	2942	09-	18-	5462	26-	35-	7041	37-	47-	8986	48-	++	11717	42-	13664	43-	16360	48-												
STORNOWAY 03026	092330	013	08	04	101	07	03	1416	00	08-	2949	09-	13-	5470	25-	35-	7063	33-	45-	9033	46-	++	11689	45-	13611	45-	16287	50-												
	101130	013	10	03	116	08	02	1434	01	08-	2961	10-	13-	5480	23-	36-	7075	35-	48-	9027	49-	++	11711	43-	13638	45-	16323	49-	18655	50-	20861	49-								
SHANWELL 03170	092330	005	10	10	091	10	08	1422	01	01-	2960	07-	10-	5496	24-	34-	7095	32-	43-	9065	46-	++	11725	45-	13648	47-	16317	50-	18648	49-										
	101130	005	11	09	105	10	08	1430	01	01-	2962	08-	11-	5499	21-	26-	7114	32-	36-	9079	47-	++	11755	45-	13674	45-	16361	48-	18709	49-	20919	48-	24309	43-						
ALDERGROVE 03917	092345	077	08	07	096	09	07	1430	01	01-	2962	06-	15-	5531	18-	27-	7161	29-	34-	9147	46-	++	11777	49-	13668	49-	16317	51-	18631	52-	20821	50-								
	101153	077	12	08	085	12	08	1418	02	01	2964	05-	06-	5534	19-	32-	7160	30-	42-	9140	47-	++	11822	45-	13744	45-	16434	47-	18779	48-	20996	49-								
AUGHTON 03322	092355	056	09	06	117	10	06	1451	02	01-	2992	05-	17-	5564	18-	38-	7192	30-	37-	9186	45-	++	11816	50-	13711	48-	16365	51-	18685	51-	20872	51-	24211	49-						
	101130	056	12	09	103	11	07	1432	02	00	2981	04-	07-	5567	19-	24-	7191	30-	36-	9168	46-	++	11817	47-	13718	48-	16378	49-	18714	50-	20917	49-								
HEMSBY 03496	092330	012	09	05	123	13	04	1464	02	01-	2999	06-	16-	5552	24-	41-	7149	31-	45-	9129	45-	++	11785	48-	13683	48-	16332	51-	18648	51-										
	101130	012	16	08	129	14	05	1468	02	02-	3009	04-	25-	5599	17-	21-	7232	29-	33-	9219	46-	++	11824	52-	13703	50-	16341	52-	18638	54-										
CRAWLEY 03774	092330	144	09	07	138	++	++	1477	02	04-	3016	06-	16-	5586	19-	36-	7215	29-	44-	9209	44-	++	11833	51-	13715	49-	16350	52-	18654	54-										
	101130	144	14	09	134	++	++	1470	01	00	3020	03-	06-	5623	17-	20-	7262	28-	35-	9260	44-	++	11874	55-	13742	50-	16380	52-	18682	53-	20852	53-								
CAMBORNE 03808	092330	088	11	09	126	12	10	1476	06	02	3048	00	02-	5682	14-	17-	7342	25-	30-	9359	43-	++	11998	52-	13881	49-	16529	51-	18855	50-										
	101130	088	14	13	092	14	13	1440	07	03	3023	02	32-	5647	16-	24-	7288	28-	35-	9288	44-	++	11901	54-	13765	51-	16388	54-												
VALENTIA 03953	092330	014	12	10	058	12	10	1403	05	04	2967	03-	04-	5570	17-	23-	7210	30-	39-	9190	45-	++	11820	52-	++++	++	16310	55-												
	101130	014	14	12	088	13	10	1428	05	03	2997	02-	10-	5600	17-	20-	7240	29-	33-	9230	46-	++	11900	46-																
Ocean Weather Station 'I' 59°00'N 19°00'W	100000		10	05	090	10	05	1412	01-	03-	2938	08-	20-	5490	21-	23-	7090	34-	37-	9040	50-	++	11670	47-	13580	48-	16250	50-	18580	50-	20780	50-								
	101100		12	08	105	09	04	1428	01-	06-	2953	09-	15-	5500	22-	27-	7100	36-	38-	9050	50-	++	11710	45-	13630	46-	16320	48-	18680	48-	20890	49-								
Ocean Weather Station 'J' 52°30'N 20°00'W	092300		11	07	107	10	05	1440	06	08-	3012	01	17-	5620	16-	24-	7260	28-	33-	9260	43-	++	11880	57-	13730	52-	16340	53-	18640	53-										
	101200		11	05	132	10	04	1452	02	06-	3002	04-	17-	5590	19-	35-	7210	32-	48-	9130	43-	++	11850	50-	13730	51-	16350	53-	18660	52-	20830	52-								



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE			TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m
LERWICK 03005	02 862++	002 993 826	979 08 06 787 02-- 05-- 446 ++ 40-- 382 40-- 48-- 364 44-- 337 45-- 260 41-- 180 41-- 100 48-- 050 49--				364 07630 44--
	02 6843+	012 002 886	982 07 03 937 ++ 01 895 ++ 03-- 844 03-- 06-- 829 00 09-- 825 ++ 12-- 742 ++ 17-- 650 14-- 21-- 572 19-- 29-- 505 ++ 34-- 408 37-- 47-- 295 48-- 223 40-- 100 48-- 088 48--				295 09080 48--
STORNOWAY 03026	01 35700	013 011 893 844	873 02-- 04-- 862 00 06-- 855 ++ 08-- 827 ++ 09-- 809 01-- 09-- 776 ++ 07-- 582 19-- 23-- 555 ++ 29-- 526 ++ 32-- 349 39-- 50-- 268 52-- 238 54-- 230 48-- 218 46-- 152 45-- 102 50-- 074 51--				238 10520 54--
	02 21600	014 013 840	997 07 01 902 01 01-- 885 03 04-- 785 ++ 07-- 836 ++ 09-- 810 ++ 08-- 798 02-- 08-- 665 ++ 16-- 640 15-- 18-- 624 ++ 19-- 604 ++ 24-- 500 23-- 36-- 362 39-- 50-- 272 53-- 240 44-- 197 43-- 076 51-- 047 49--				272 09660 53--
SHANWELL 03170	02 786++	011 011 825	993 10 07 732 06-- 08-- 612 14-- 21-- 470 27-- 38-- 440 28-- 39-- 348 39-- 49-- 283 50-- 247 54-- 239 49-- 179 44-- 107 51-- 100 50-- 070 49--				247 10340 54--
	80 7843+	013 012 840	983 08 06 722 07-- 08-- 684 09-- 13-- 663 10-- 17-- 605 15-- 24-- 576 18-- 25-- 535 20-- 25-- 488 21-- 26-- 346 40-- 44-- 319 45-- 261 53-- 231 45-- 100 48-- 042 49-- 039 46-- 030 43--				261 09990 53--
ALDERGROVE 03917	03 657+2	011 002 831	995 11 08 988 ++ 06 850 ++ 01-- 748 06-- 08-- 691 07-- 16-- 665 ++ 20-- 590 13-- 27-- 538 15-- 30-- 519 17-- 29-- 507 17-- 27-- 465 ++ 29-- 397 30-- 34-- 332 ++ 44-- 244 57-- 209 49-- 077 52-- 038 52--				244 10500 57--
	61 5647+	010 001 813	993 10 07 950 ++ 06 920 ++ 04 806 00 01-- 739 02-- 04-- 659 ++ 08-- 604 11-- 14-- 598 ++ 14-- 563 ++ 27-- 548 ++ 25-- 537 18-- 26-- 525 ++ 30-- 500 19-- 32-- 480 ++ 33-- 437 ++ 33-- 380 ++ 46-- 340 ++ 50-- 317 44-- 295 48-- 254 45-- 225 45-- 096 47-- 088 50-- 063 48-- 040 49--				254 10240 50--
AUGHTON 03322	02 20932	014 007 824	990 10 06 935 08 02 766 04-- 06-- 760 ++ 06-- 740 ++ 14-- 733 03-- 15-- 618 10-- 24-- 530 18-- 36-- 514 17-- 36-- 440 25-- 43-- 427 ++ 37-- 401 ++ 37-- 323 40-- 45-- 300 45-- 238 56-- 217 56-- 206 50-- 182 48-- 057 52-- 030 49--				238 10700 56--
	63 474++	012 006 820	001 ++ 07 875 02 00 720 03-- 06-- 586 11-- 15-- 419 28-- 33-- 338 40-- 46-- 262 54-- 185 47-- 077 51-- 048 49--				262 10050 54--
HEMSBY 03496	02 00961	015 013 823	995 14 05 976 ++ 03 830 00 03-- 795 ++ 08-- 767 ++ 08-- 755 06-- 11-- 744 04-- 11-- 692 07-- 17-- 673 ++ 18-- 640 10-- 24-- 558 16-- 32-- 507 23-- 39-- 430 31-- 45-- 399 31-- 45-- 367 35-- 49-- 260 52-- 193 47-- 112 51-- 066 51--				260 10050 52--
	03 68582	015 014 821	988 12 04 903 ++ 01-- 894 ++ 00 772 04-- 06-- 768 ++ 05-- 753 01-- 09 742 ++ 17-- 688 05-- 28-- 651 06-- 32-- 613 ++ 33-- 588 ++ 14-- 540 13-- 17-- 400 ++ 33-- 378 ++ 37-- 358 ++ 43-- 331 40-- 48-- 239 59-- 192 50-- 115 51-- 068 54-- 055 51--				239 10680 59--
CRAWLEY 03774	01 14500	017 999 819	995 13 07 850 ++ 04-- 774 04-- 07-- 761 03-- 10-- 753 ++ 12-- 595 12-- 28-- 550 15-- 32-- 453 23-- 41-- 349 36-- 47-- 250 55-- 211 58-- 198 50-- 140 49-- 122 52-- 060 53--				211 11500 58-- 122 15050 52--
	02 62533	016 999 834	983 11 05 892 ++ 03 826 01-- 03-- 798 00 06-- 722 ++ 04-- 698 03-- 06-- 617 07-- 11-- 546 ++ 16-- 374 31-- 39-- 333 39-- 47-- 228 58-- 165 49-- 088 53-- 040 52--				228 11060 58--
CAMBORNE 03808	60 4562+	015 005 695	983 13 10 915 08 06 863 ++ 01 817 04 02 795 04 03 600 05-- 07-- 439 20-- 23-- 336 ++ 41-- 312 40-- 45-- 224 56-- 182 49-- 109 51-- 058 50--				224 11270 56--
	50 763++	011 001 677	986 11 10 899 08 06 887 08 06 863 ++ 01 836 06 03 814 08 07-- 802 ++ 14-- 700 02 32-- 640 03-- 36-- 618 ++ 36-- 592 ++ 23-- 537 11-- 22-- 484 18-- 26-- 324 40-- 46-- 243 56-- 232 58-- 191 52-- 130 51-- 100 54-- 094 52-- 073 54--				232 10980 58--
VALENTIA 03953	60 864++	006 005 765	891 06 05 834 05 04 748 01-- 02-- 630 07-- 08-- 620 07-- 08-- 535 13-- 17-- 464 20-- 28-- 257 55-- 188 51-- 123 51-- 100 55--				257 10200 55--
	02 724++	011 009 720	977 10 08 897 05 04 835 05 02 804 04 00 776 04 03-- 748 02 10-- 656 07-- 12-- 645 05-- 09-- 589 08-- 12-- 487 18-- 21-- 317 42-- 297 47-- 245 52-- 221 46-- 172 46--				245 10700 52--
Ocean Weather Station 'I' 59°00'N 19°00'W	25 12568	011 011 863	861 00 02-- 795 04-- 05-- 770 ++ 06-- 741 06-- 16-- 731 06-- 17-- 720 ++ 20-- 687 ++ 13-- 658 ++ 21-- 615 14-- 26-- 604 ++ 29-- 593 16-- 26-- 511 16-- 21-- 545 18-- 21-- 541 17-- 20-- 506 21-- 23-- 359 40-- 43-- 256 59-- 248 52-- 197 46-- 113 50-- 038 49--				256 10100 59--
	01 12531	013 013 858	999 09 04 950 ++ 03 899 ++ 03-- 850 01-- 06-- 828 ++ 05-- 803 03-- 07-- 770 05-- 08-- 748 ++ 12-- 722 08-- 13-- 710 09-- 14-- 655 10-- 20-- 568 ++ 28-- 548 ++ 25-- 467 26-- 31-- 360 40-- 44-- 264 56-- 246 48-- 212 45-- 050 49--				264 09900 56--
Ocean Weather Station 'J' 52°30'N 20°00'W	02 7552+	013 013 711	000 ++ 05 916 ++ 03 908 03 00 884 07 05-- 880 ++ 07-- 769 04 15-- 712 ++ 19-- 630 ++ 16-- 621 08-- 13-- 610 ++ 19-- 592 08-- 15-- 581 ++ 15-- 555 ++ 18-- 531 ++ 17-- 498 ++ 24-- 468 19-- 26-- 366 ++ 37-- 318 40-- 43-- 237 57-- 207 59-- 194 55-- 163 52-- 065 54-- 055 52--				207 11700 59--
	02 555++	016 016 882 783	937 04 01-- 868 01-- 03-- 831 03 09-- 689 05-- 18-- 667 05-- 20-- 603 10-- 27-- 561 14-- 28-- 547 14-- 29-- 357 38-- ++ 233 52-- 212 50-- 094 53-- 047 52--				233 10800 52--



## UPPER WINDS AT STANDARD LEVELS

10 June, 1961

STATION	YYGGgg	Type	Surface	1000mb	900m	850mb	750mb	700mb	600mb	500mb	400mb	300mb	250mb	200mb	150mb	100mb	70mb	50mb	30mb	20mb	10mb
						1500m	2100m	3000m	4200m	5400m	7200m	9000m	10500m	12000m	14100m	15900m	18300m	20700m	23700m	26400m	30900m
LERWICK 03005	092330	T	330 17	+++ ++	340 14	340 09	330 09	330 13	330 17	320 17	310 28	290 21	250 13	250 10	230 11	180 07	130 06				
	100530	P	300 21	+++ ++	310 27	310 24	300 23	300 24	280 24	260 20	260 20	260 29	250 19	250 16	220 11	190 12					
	101135	T	260 18	+++ ++	280 14	280 14	270 22	270 27	260 23	240 26	240 40	240 59	240 33	240 13	210 13	200 12					
	101735	P	250 12	+++ ++	290 11	290 10	250 25	250 25	240 22	250 27	240 51	230 55	230 32	220 17	210 14	210 10	160 07				
STORNOWAY 03026	092330	T	010 11	+++ ++	360 08	330 14	300 12	300 11	270 11	290 18	290 48	290 60	290 62	280 22	260 14	220 10					
	100530	P	360 07	+++ ++	340 07	310 08	300 07	280 05	280 11	270 19	270 38	270 35	270 33	250 23	250 07	220 09					
	101130	T	050 10	+++ ++	040 04	260 03	290 05	270 05	250 12	280 18	270 25	250 27	250 28	250 19	240 17	210 09	170 04	140 10			
	101730	P	040 18	+++ ++	030 08	000 00	300 05	270 06	250 09	290 14	270 24	260 27	260 24	240 17	250 11	220 09	200 03	130 07	090 14		
SHANWELL 03170	092330	T	120 02	+++ ++	P090 03	190 01	240 10	240 15	T260 16	270 23	300 48	300 75	300 62	280 24	250 14	150 03					
	100530	P	110 11	+++ ++	180 09	210 09	230 11	250 08	230 16	250 21	260 32	250 46	250 35	250 22	240 12	220 10	200 05				
	101130	T	100 10	+++ ++	120 06	210 04	220 08	210 14	230 13	240 23	230 30	230 33	240 33	240 27	220 21	220 10	170 05	150 09	130 12	P100 24	
	101730	P	090 08	+++ ++	140 07	150 08	160 04	170 04	230 11	230 20	240 38	230 56	230 31	230 22	240 14	210 12	210 07	160 08	110 12		
ALDERGROVE 03917	092345	T	070 03	+++ ++	160 06	210 10	220 11	210 10	250 13	270 21	270 33	270 45	270 63	280 29	270 12	220 08	190 02	100 06			
	100530	P	140 03	+++ ++	160 11	160 08	160 08	130 04	250 15	260 25	260 29	260 33	270 35	260 26	270 16	250 10	190 03	090 04			
	101153	T	110 10	+++ ++	130 18	140 09	240 09	250 16	230 22	240 33	250 42	250 47	250 39	250 32	250 16	240 13	170 09	080 06			
	101730	P	060 10	+++ ++	070 13	080 11	030 17	290 07	260 13	250 15	230 39	230 46	240 36	250 25	260 18	240 13	240 06	120 05	130 09		
AUGHTON 03322	092355	T	160 04	+++ ++	240 09	240 06	230 10	220 13	250 15	280 26	290 31	300 50	290 68	300 32	270 16	260 05	190 06	070 07	100 14		
	100530	P	090 04	+++ ++	190 11	190 12	200 13	190 15	240 25	260 32	250 37	240 43	250 41	270 25	270 20	240 08	210 05	140 07	120 08		
	101130	T	120 10	+++ ++	150 20	180 20	220 24	230 24	240 25	240 32	260 42	260 44	260 40	250 30	260 17	240 10	160 06				
	101730	P	120 08	+++ ++	190 25	220 22	220 22	210 24	220 21	230 19	240 30	240 38	250 40	250 32							
HEMSBY 03496	092330	T	210 05	+++ ++	250 09	230 07	220 10	210 10	250 07	290 13	330 41	330 83	320 38	290 17	280 12	230 04	160 12				
	100600	P	220 06	+++ ++	210 11	210 13	230 16	240 15	240 14	260 15	270 23	290 32	290 35	270 22							
	101130	T	160 13	+++ ++	190 16	200 16	210 20	220 21	240 18	260 21	250 29	240 36	240 36	250 19	250 18	250 10	190 05				
	101730	P	190 13	+++ ++	200 21	200 16	220 21	230 18	220 18	240 25	240 32	250 36	250 31	250 23	250 17	230 09	220 07	120 06	110 03		
CRAWLEY 03774	092330	T	000 00	+++ ++	260 07	250 10	250 12	270 12	290 17	310 28	320 40	320 71	330 71	310 31	290 18	310 15	180 09				
	100530	P	000 00	+++ ++	210 15	210 16	210 15	230 16	270 15	270 20	280 21	280 30	280 36	280 27	280 15	270 08	220 01				
	101110	T	150 10	+++ ++	200 13	210 20	210 20	250 13	260 23	270 20	270 23	250 32	250 30	270 26	270 12	260 13	210 07	220 05	090 15	120 14	
	101730	P	200 05	+++ ++	200 28	210 24	210 24	240 19	260 22	260 27	250 33	250 34	280 45	260 23	260 20	250 08					
CAMBORNE 03808	092330	T	190 08	+++ ++	200 18	200 15	260 18	280 25	280 29	280 35	280 37	280 39	270 50	280 30	300 17	260 07	270 06				
	100530	P	170 18	+++ ++	190 32	230 18	240 19	250 20	240 18	290 16	300 13	300 11	270 17	290 31	280 23	260 07	270 04	140 05			
	101130	T	260 14	+++ ++	250 17	250 22	280 21	290 23	280 26	280 32	280 34	290 43	290 53	290 36	270 29	260 12					
	101730	P	270 17	+++ ++	280 25	280 28	270 25	250 29	250 34	250 38	260 45	260 46	260 49	270 37	270 26	270 17	250 05	120 08			
VALENTIA 03953	092330	T	130 10	130 10	+++ ++	200 24	+++ ++	260 25	+++ ++	300 33	290 36	240 30	+++ ++	280 32	+++ ++	260 08					
	101130	T	330 12	330 13	+++ ++	320 22	+++ ++	280 35	+++ ++	280 45	270 45	270 59	+++ ++	270 46							
Ocean Weather Station 'I' 59°00'N 19°00'W	100000	T	110 09	+++ ++	120 16	120 17	120 10	120 07	120 09	040 01	310 04	020 04	300 04	270 24							
	100600	P	090 10	+++ ++	100 13	100 10	100 08	100 06	090 10	090 06	310 04	050 03									
	101100	T	070 07	+++ ++	070 01	060 05	050 10	060 06	070 09	110 05	300 02	340 03	+++ ++	+++ ++	290 18	270 11	130 15				
	101800	P	090 20	+++ ++	100 14	100 10	100 12	100 03	130 01	150 03	+++ ++	+++ ++	+++ ++	+++ ++	+++ ++	270 10					
Ocean Weather Station 'J' 52°30'N 20°00'W	092300	T	290 20	+++ ++	290 26	290 27	270 26	270 31	260 50	270 45	270 60	270 69	280 77	270 57	270 29	270 17	270 04				
	100500	P	315 20	+++ ++	300 24	280 25	280 25	280 32	260 52	270 49	270 64	270 75	270 72	260 39	270 21						
	101200	T	310 21	+++ ++	310 23	300 20	300 29	300 29	300 31	280 42	290 55	290 94	290 99	290 63	300 37	310 18	320 09	350 08			
	101700	P	270 20	+++ ++	300 20	300 20	300 23	300 29	290 34	280 43	280 74	290 86	290 84	290 43	290 19	290 08					
LARKHILL 03743																					

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE	SURFACE	1000mb	950mb	900mb	850mb	800mb	750mb	700mb	650mb	600mb	550mb	500mb
		MSL Surf. 0°C level	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	°C °C	m °C °C	°C °C	m °C °C	°C °C	m °C °C
101316	44.1°N 11.5°W	021 014 687	061 15 14	180 12 12	1064 09 09	1536 09 02	2939 06 02	04 01	3121 01 ++	02- ++	4346 05- ++	11- ++	5749 16- ++	
Cloud :— 2/8 Cu. 1000 to 2000 ft. 3/8 Sc. 1500 to 2000 ft. 3/8 Sc. 3500 to 4500 ft.														
Inversion Levels :— Isothermal Levels :— 968mb to 950mb 11.2°C														
YYGGgg	POSITION	PRESSURE	SURFACE	1000mb	950mb	900mb	850mb	800mb	750mb	700mb	650mb	600mb	550mb	500mb
		MSL Surf. 0°C level	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	°C °C	m °C °C	°C °C	m °C °C	°C °C	m °C °C
101334	45.1°N 06.0°W	018 011 680	061 14 12	152 11 08	1027 06 06	1497 09 04	2000 06 ++	05 ++	3082 02 ++	02- ++	4304 07- ++	21- ++	5700 16- ++	
Cloud :— 6/8 Sc. 3300 to 4200 ft.														
Inversion Levels :— 990mb to 850mb 06°C to 09.2°C Isothermal Levels :— 1011mb to 1000mb 14°C														
RATES OF SUBSCRIPTION: Single copy 5d. or post free 7d. One calendar month 13/-; one quarter 35/-; one year 125/-.											Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General			
For special arrangements for supply to schools and colleges see Form 2452.											Meteorological Office, Air Ministry, Kingsway, London, W.C.			



## UPPER WINDS AT ADDITIONAL LEVELS

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STATION		MAX. WIND
LERWICK 03005	053mb 140 07 18000m 160 09 093mb 230 04 19500m 140 06	250 66 08920m
STORNOWAY 03026	080mb 220 07 17100m 220 06 10940/1 24800m 110 17 00740/1 01480/9 18460/5	280 71 09600m
SHANWELL 03170	223mb 280 28 076mb 070 04 20400m 090 11 10200/1 P30300m 130 19 09480/1	300 82 09660m
ALDERGROVE 03917	222mb 280 44 043mb 120 07 23400m 110 10 03630/2 04040/3 15850/5 02580/8 07310/0 20000/8	280 64 10700m
AUGHTON 03322	P24900m 100 14 03420/2 054mb 220 06 13500m 250 32 10870/1	300 69 09810m
HEMSBY 03496	456mb 280 19 13200m 270 13 060mb 140 11	330 84 09060m
CRAWLEY 03774	212mb 330 49 27900m 120 23 02400/2 11120/1	330 75 10710m
CAMBORNE 03808	820mb 240 15 060mb 270 02 22200m 100 07 04820/2 05680/2 10690/0 080mb 230 12 23100m 110 06	
VALENTIA 03953	891mb 190 24 748mb 230 26 620mb 290 30 535mb 300 33 257mb 240 40 123mb 260 16 897mb 330 20 748mb 300 30 645mb 270 39 589mb 270 39 245mb 270 65 172mb 270 38	
Ocean Weather Station 'I' 59°00'N 19°00'W	224mb 250 12 09900m 030 02 057mb 190 03 061300m 280 24 12900m 280 12 19500m 040 03	
Ocean Weather Station 'J' 52°30'N 20°00'W	176mb 270 48 060mb 270 03 03730/6 350mb 280 70 124mb 310 37 12900m 290 31 16500m 290 07 06680/0	290 76 10620m 270 90 09590m 290 110 09580m 280 106 09890m
LARKHILL 03743		

## NOTES ON THE AEROLOGICAL SITUATION

The upper trough over the North Sea and France is weakening while a shallow trough behind a weakening ridge approaches the British Isles from the west. The high over northwest Russia persists. The intense low near Hudson Bay is moving slowly southeast with minor troughs circulating around it over northeast Canada.

AVERAGE AND EXTREME VALUES 1951-55							
JUNE							
LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.							
Press. Level	Average Height Temp.		Extreme Temps. Max. Min.		Wind* V <sub>R</sub> V <sub>S</sub>		
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	22345	-48.1	-42	-55	...	...	(11)
60	19675	-48.1	-41	-55	120	3	8
100	16320	-48.8	-41	-56	244	5	11
150	13660	-48.3	-41	-59	263	10	18
200	11770	-49.8	-39	-67	271	16	27
300	9125	-46.7	-37	-56	271	22	41
400	7160	-32.6	-23	-44	271	18	33
500	5555	-20.8	-11	-31	269	14	26
700	2985	-5.2	3	-14	266	9	19
850	1435	2.8	14	-7	269	6	18
Tropopause		Press. (mb.)	Temp. (°C)		Height (gpm.)		
Average		257	-54.7		10190		
Max.		405	-40		12955		
Min.		172	-68		6890		
LARKHILL/CRAWLEY† at 03, 15h. (Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.)							
Press. Level	Average Height Temp.		Extreme Temps. Max. Min.		Wind* V <sub>R</sub> V <sub>S</sub>		
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	22310	-49.6	-47	-57	106	9	10
60	19675	-51.4	-45	-59	136	3	8
100	16370	-52.6	-46	-61	251	8	13
150	13745	-51.8	-42	-65	265	15	21
200	11890	-54.0	-40	-65	268	20	32
300	9265	-44.7	-36	-54	265	20	39
400	7275	-29.6	-19	-41	265	17	31
500	5640	-17.8	-9	-28	263	15	25
700	3050	-2.1	7	-10	263	11	19
850	1480	5.7	16	-3	264	7	16
Tropopause		Press. (mb.)	Temp. (°C)		Height (gpm.)		
Average		234	-56.8		10950		
Max.		388	-41		13440		
Min.		160	-66		7225		
MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.							
Press. Level	Average Height Temp.		Extreme Temps. Max. Min.		Wind* V <sub>R</sub> V <sub>S</sub>		
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5	11
60	19670	-60.7	-53	-69	135	4	10
100	16510	-62.9	-57	-71	255	21	24
150	13995	-59.0	-51	-67	265	38	42
200	12185	-56.6	-47	-67	275	42	47
300	9530	-40.1	-33	-46	285	32	38
400	7500	-23.9	-19	-29	285	27	31
500	5835	-11.8	-8	-17	285	24	28
700	3165	7.2	13	-1	290	18	22
850	1535	17.9	27	8	290	9	14
Tropo- pause		Average	Max.	Min.	Max.	Min.	
		Press. Temp.	Press.	Press.	Temp.	Temp.	
		mb. °C	mb.	mb.	°C	°C	
Upper		123 -65.7	...	73	...	-73	
Lower		193 -59.8	266	...	-46	...	

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

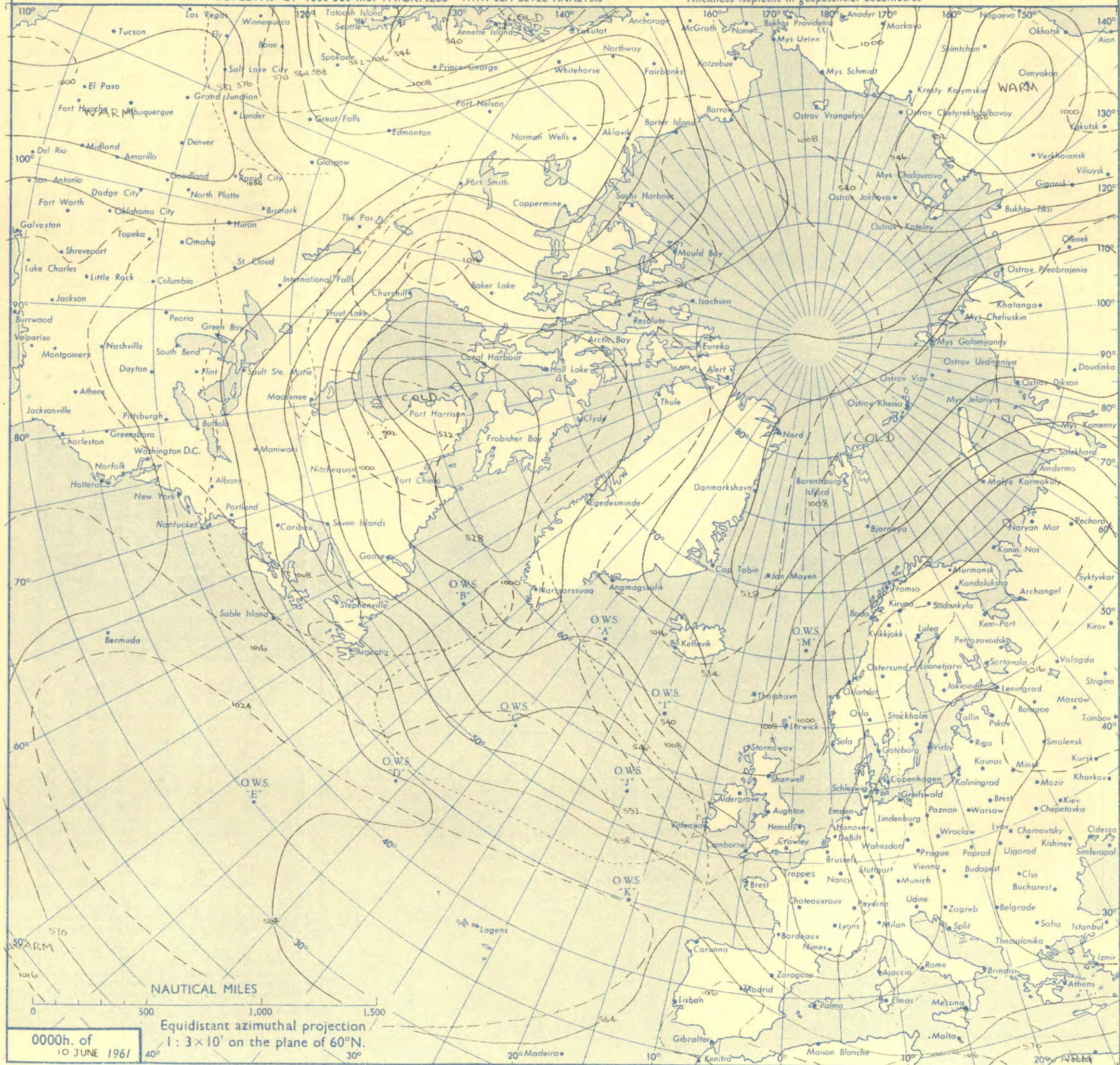
† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.



ISOPLETHS OF 1000-500 mb. THICKNESS WITH SEA LEVEL ANALYSIS

Thickness isopleths in geopotential decametres



NAUTICAL MILES

Equidistant azimuthal projection  
1:3 x 10<sup>7</sup> on the plane of 60°N.

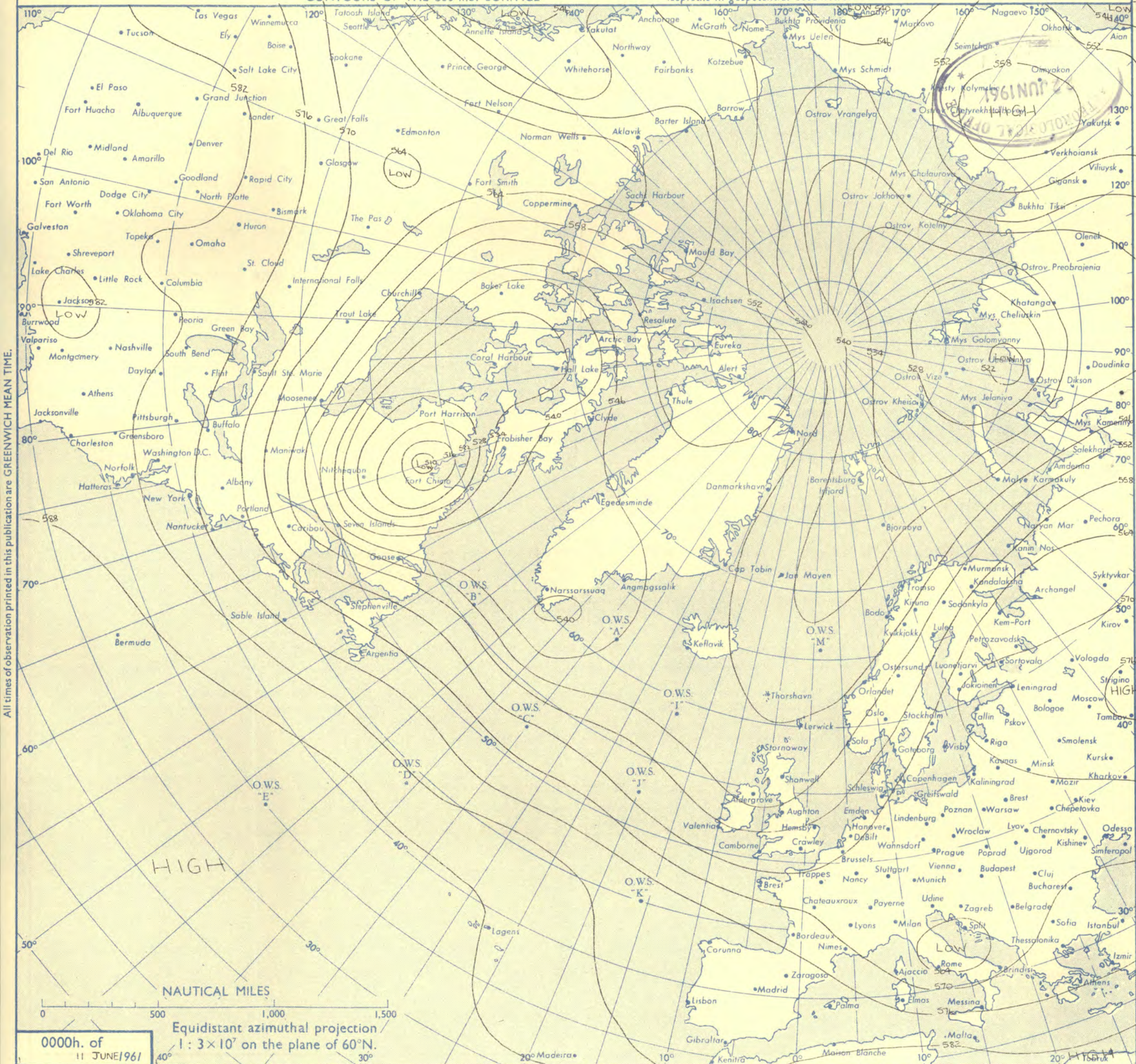
0000h. of  
10 JUNE 1961



CONTOURS OF THE 500 mb. SURFACE

Isopleths in geopotential decametres

All times of observation printed in this publication are GREENWICH MEAN TIME.



NAUTICAL MILES

Equidistant azimuthal projection  
1:3 x 10<sup>7</sup> on the plane of 60°N.

0000h. of  
11 JUNE/1961



STATION	YYGGgg	SURFACE			1000mb			850mb			700mb			500mb			400mb			300mb			200mb			150mb			100mb			70mb			50mb			30mb		
		gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C						
LERWICK 03005	102332	082	06	04	124	06	02	1432	03-	08-	2955	10-	20-	5475	25-	38-	7064	36-	47-	9003	48-	++	11728	41-	13666	44-	16366	47-	18729	47-	20958	47-								
	111145	082	10	05	134	09	04	1450	02-	03-	2963	11-	28-	5476	26-	45-	7046	39-	50-	8969	50-	++	11668	44-	13592	46-	16272	49-	18604	51-										
STORNOWAY 03026	102335	013	09	06	118	08	05	1441	00	05-	2971	10-	16-	5494	25-	36-	7073	37-	47-	9006	51-	++	11674	45-	13590	47-	16257	48-	17720	50-										
	111130	013	11	06	141	08	03	1460	01-	04-	2990	07-	24-	5529	24-	36-	7114	37-	48-	9044	51-	++	11703	45-	13617	47-	16293	49-	18626	50-										
SHANWELL 03170	102330	005	11	09	103	10	08	1433	01	01-	2967	08-	12-	5509	24-	26-	7100	36-	45-	9023	51-	++	11715	45-	13616	47-	16283	50-												
	111130	005	14	07	114	10	04	1434	01-	03-	2964	08-	12-	5511	23-	35-	7106	35-	47-	9051	49-	++	11719	45-	13637	46-	16316	48-	18665	48-	20887	47-	24307	38-						
ALDERGROVE 03917	102330	077	11	07	084	10	07	1418	02	01	2959	06-	08-	5516	23-	28-	7120	34-	46-	9075	46-	++	11790	43-	13711	46-	16386	50-	18722	50-	20926	49-	24277	49-						
	111130	077	14	06	112	14	06	1449	01	02-	2989	06-	13-	5560	20-	36-	7175	32-	48-	9137	49-	++	11803	44-	13720	47-	16396	49-	18736	50-	20948	48-								
AUGHTON 03322	102330	056	13	12	049	++	++	1395	06	03	2953	05-	08-	5520	20-	24-	7130	33-	37-	9086	49-	++	11738	47-	13637	49-														
	111130	056	13	10	076	12	10	1412	04	03	2966	04-	08-	5536	20-	39-	7143	34-	++	9103	45-	++	11821	43-	13745	46-	16433	47-	18794	47-	21043	44-								
HEMSBY 03496	102330	012	13	10	101	13	10	1445	05	02	3008	04-	05-	5590	18-	22-	7220	28-	31-	9210	46-	++	11835	49-	13726	49-	16381	51-	18695	52-										
	111140	012	13	11	073	12	10	1411	03	01	2957	06	07-	5526	19-	21-	7156	30-	32-	9134	47-	++	11819	45-	13735	47-	16411	50-												
CRAWLEY 03774	102330	144	12	11	097	++	++	1441	05	03	3004	01-	23-	5581	20-	30-	7206	29-	36-	9196	45-	++	11831	50-	13715	50-														
	111130	144	13	09	091	++	++	1432	03	01-	2976	07-	10-	5540	22-	38-	7142	34-	50-	9117	42-	++	11830	46-	13730	49-	16379	51-												
CAMBORNE 03808	102330	088	12	11	109	12	10	1453	05	00	3003	07-	09-	5575	19-	22-	7192	33-	37-	9161	44-	++	11860	48-	13751	49-	16387	53-	18686	52-										
	111130	088	15	13	133	15	13	1469	02	02-	3020	03-	15-	5604	17-	34-	7243	29-	37-	9249	42-	++	11880	54-	13747	51-														
VALENTIA 03953	102330	014	12	10	113	11	09	1447	01	00	2994	05-	14-	5560	21-	38-	7180	28-	45-	9200	41-	++	11880	49-	++++	++	16420	51-												
	111130	014	13	11	134	10	08	1461	01	00	3017	04-	16-	5620	16-	31-	7270	26-	37-	9280	42-	++	11950	51-	++++	++	16520	48-												
Ocean Weather Station 'I'  59°00'N 19°00'W	110100		10	08	125	09	05	1451	00	03-	2980	10-	14-	5510	24-	28-	7100	37-	41-	9030	52-	++	11690	45-	13610	47-														
	111200		11	09	132	09	06	1452	01-	03-	2981	10-	14-	5510	24-	40-	7110	35-	47-	9050	50-	++	11700	45-	13630	45-	16320	48-												
Ocean Weather Station 'J'  52°30'N 20°00'W	102300		11	06	148	10	07	1472	02	05-	3026	04-	12-	5620	16-	17-	7270	26-	28-	9290	41-	++	11910	60-	13760	53-	16370	53-	18680	52-										
	111200		13	06	116	10	03	1444	02	05-	3005	02-	08-	5620	15-	36-	7260	27-	46-	9250	45-	++	11880	56-	13730	52-														



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	02 45600	015	005	903	992 06 01 965 ++ 02- 865 ++ 05- 855 04- 08- 821 02- 14- 780 ++ 19- 680 ++ 19- 635 ++ 26- 460 28- 40- 382 39- 50- 307 48- 278 48- 220 51- 100 47- 038 47-	307	08860	48-
	80 42500	016	006	883	983 07 02 860 ++ 04- 825 04- 06- 771 06- 08- 755 09- 13- 729 ++ 23- 702 ++ 28- 647 14- 33- 524 23- 41- 454 32- 50- 342 46- 293 51- 265 46- 212 44- 100 49- 078 51- 056 49-	293	09120	51-
STORNOWAY 03026	02 15600	015	013	843	932 05 03 868 01 00 849 ++ 05- 825 ++ 05- 792 02- 07- 708 ++ 15- 677 ++ 17- 657 13- 21- 648 ++ 24- 600 16- 31- 517 ++ 35- 421 35- 46- 373 40- 50- 306 50- 276 53- 264 52- 252 47- 203 45- 113 49- 103 48- 070 50-	276	09540	53-
	02 12641	017	016	865	006 09 04 966 05 02 865 00 03- 854 ++ 03- 788 ++ 16- 741 ++ 22- 695 08- 25- 520 22- 34- 387 38- 49- 302 51- 278 54- 246 48- 199 45- 065 50-	278	09520	54-
SHANWELL 03170	01 15538	012	012	833	000 10 08 952 ++ 05 930 06 03 796 02- 03- 780 ++ 07- 727 ++ 09- 718 ++ 11- 660 ++ 14- 637 12- 14- 615 ++ 14- 593 14- 17- 585 ++ 19- 572 ++ 20- 475 26- 28- 433 ++ 40- 390 37- 46- 375 40- 48- 314 51- 272 50- 242 45- 219 44- 100 50- 080 49- Pressure doubtful above 300mb.	314	08710	51-
	02 784++	014	013	864	004 10 04 906 02 00 807 03- 06- 793 02- 06- 740 06- 09- 653 10- 15- 594 14- 18- 493 24- 37- 470 26- 34- 447 29- 41- 373 39- 49- 305 48- 282 53- 233 45- 100 48- 041 47- 039 44- 036 46- 030 38-	282	09460	53-
ALDERGROVE 03917	02 355++	010	001	815	922 07 04 735 05- 06- 693 ++ 09- 662 08- 13- 559 16- 21- 505 22- 27- 453 27- 37- 364 39- 50- 306 47- 202 43- 105 50- 062 50- 030 49-	306	08950	47-
	05 785++	013	004	831	985 ++ 06 890 04 01 790 03- 04- 760 03- 08- 700 ++ 13- 650 10- 16- 620 09- 20- 610 ++ 23- 552 15- 30- 409 31- 47- 305 48- 275 52- 202 44- 083 49- 045 49-	275	09720	52-
AUGHTON 03322	21 865++	006	999	761	987 ++ 10 771 01 03- 705 05- 08- 518 18- 22- 352 40- 44- 279 53- 260 53- 245 50- 195 46- 105 53-	279	09540	53-
	02 6557+	009	002	767	990 11 09 944 08 06 853 04 03 771 00 03- 730 03- 06- 712 03- 07- 652 08- 13- 632 09- 18- 530 ++ 37- 500 20- 39- 353 40- 319 45- 252 46- 204 43- 153 46- 129 45- 105 49- 099 47- 071 48- 060 44- 049 44-	319	08700	45-
HEMSBY 03496	21 7557+	012	010	760	878 ++ 04 853 ++ 02 827 ++ 03 670 06- 07- 625 10- 17- 602 11- 18- 569 ++ 16- 505 18- 22- 415 27- 30- 360 34- 40- 329 40- 46- 257 54- 237 57- 202 49- 053 51-	237	10730	57-
	95 895++	009	007	798	987 11 09 875 ++ 02 735 05- 06- 713 05- 06- 510 19- 21- 483 19- 21- 336 40- 43- 292 49- 200 45- 100 50-	292	09300	49-
CRAWLEY 03774	51 873++	012	994	716	984 ++ 09 957 ++ 08 792 01 02- 778 ++ 13- 766 ++ 20- 747 02 25- 514 20- 32- 451 23- 32- 400 29- 36- 330 ++ 47- 258 54- 181 49- 118 51-	258	10160	54-
	25 79333	011	994	803	982 ++ 03 944 ++ 05 794 01- 06- 713 06- 10- 624 10- 14- 593 15- 16- 583 13- 19- 578 ++ 21- 500 ++ 38- 391 35- 50- 320 42- 095 52- 074 52-	320	08690	42-
CAMBORNE 03808	25 354++	013	002	782	985 ++ 10 925 08 06 903 09 05 864 ++ 01 720 06- 13- 673 08- 10- 610 09- 11- 496 20- 23- 391 34- 38- 347 40- 45- 282 45- 088 54- 067 52-	282	09580	45-
	02 41506	016	005	809 760	970 11 08 938 07 05 873 04 00 797 01- 04- 778 ++ 11- 770 00 10- 735 ++ 09- 703 ++ 15- 480 19- 35- 382 ++ 38- 313 40- 46- 233 56- 168 51- 136 52- 128 49-	233	10900	56-
VALENTIA 03953	03 884++	014	012	830	012 12 10 805 02- 03- 761 00 09- 400 28- 45- 383 28- 46- 272 46- 227 53- 215 49- 125 49- 088 51-	227	10800	53-
	25 784++	016	015	760	984 08 06 842 01 00 785 01 04- 656 07- 18- 642 05- 17- 589 08- 26- 545 13- 31- 450 20- 29- 271 47- 256 48- 219 53- 175 47- 060 470	219	11450	53-
Ocean Weather Station 'I' 59°00'N 19°00'W	01 52438	015	015	842	015 10 08 997 ++ 05 970 07 03 696 10- 14- 625 ++ 19- 508 23- 27- 377 40- 45- 302 52- 282 53- 248 48- 196 45- 108 48-	282	09400	53-
	01 784++	016	016	875	000 09 06 976 07 05 910 ++ 01 897 ++ 02- 860 01- 03- 848 01- 03- 728 ++ 10- 712 09- 13- 682 11- 15- 664 11- 15- 614 16- 20- 603 ++ 19- 565 18- 31- 463 ++ 44- 371 39- 50- 291 51- 256 54- 243 49- 167 44- 073 49-	256	10100	54-
Ocean Weather Station 'J' 52°30'N 20°00'W	01 5852+	018	018	772	018 11 06 953 ++ 05 89+ 02 01 881 ++ 01 860 03 02- 850 ++ 05- 782 00 08- 743 ++ 10- 720 ++ 10- 659 06- 16- 588 11- 15- 555 12- 14- 306 40- 43- 238 54- 207 61- 174 53- 055 52-	207	11700	61-
	01 48531	014	014	736	004 10 03 978 08 01- 920 05 05- 882 03 04- 868 ++ 04- 833 01 05- 808 03 04- 695 02- 08- 672 02- 10- 628 06- 16- 575 13- 17- 557 10- 24- 474 18- 37- 391 28- 37- 304 44- 244 55- 201 56- 180 52- 147 52- 115 54-	244	10600	55-



## UPPER WINDS AT STANDARD LEVELS

11 June

1961

STATION	YYGGgg	Type	Surface	1000mb	900m	850mb 1500m	750mb 2100m	700mb 3000m	600mb 4200m	500mb 5400m	400mb 7200m	300mb 9000m	250mb 10500m	200mb 12000m	150mb 14100m	100mb 15900m	70mb 18300m	50mb 20700m	30mb 23700m	20mb 26400m	10mb 30900m
LERWICK 03005	102332	T	290 08	+++ ++	250 07	240 05	250 17	240 21	250 19	250 24	250 42	230 54	230 30	230 20	220 14	190 07	150 05	150 08			
	110530	P	300 04	+++ ++	330 05	340 05	300 06	260 09	240 18	230 32	230 41	220 47	230 27	220 13	200 11	190 12	180 05	110 10	110 12		
	111145	P	090 02	+++ ++	240 02	280 03	250 03	250 06	270 12	270 20	250 28	220 45	220 27	220 17	220 14	200 11	150 08				
	111730	P	000 00	+++ ++	020 03	360 04	360 04	260 02	250 13	240 16	260 19	250 23	240 22	230 17	240 09						
STORNOWAY 03026	102335	T	050 16	+++ ++	090 02	260 02	320 08	300 06	300 09	300 14	280 19	260 30	260 22	260 16	260 14	210 06					
	110550	P	030 13	+++ ++	010 08	350 08	340 08	310 14	310 15	300 17	300 21	300 30	280 20	250 18	250 10	250 05					
	111130	T	040 17	+++ ++	140 02	190 03	300 08	300 10	300 11	300 16	300 26	300 32	270 20	260 17	250 13	240 11	230 03				
	111740	P	040 15	+++ ++	060 08	160 03	250 03	280 10	280 12	280 14	260 18	260 21	270 22	260 15	260 11	270 06	230 05	120 06	090 11		
SHANWELL 03170	102330	T	030 17	+++ ++	080 14	080 13	080 12	080 09	270 08	200 21	200 37	310 31	220 23	240 20	250 13	230 12	190 05				
	110630	P	040 20	+++ ++	050 23	050 23	060 18	050 13	160 03	210 14	220 18	210 23	240 18	250 16	240 08	240 10	250 04	130 05			
	111130	T	060 20	+++ ++	030 21	040 20	030 14	030 10	280 04	280 06	240 13	260 18	240 17	260 15	250 15	210 08	160 07	130 05	120 14		
	111730	P	080 14	+++ ++	010 16	010 11	020 10	020 10	340 07	320 10	290 15	280 17	250 16	260 17	240 14	240 08	230 05				
ALDERGROVE 03917	102330	T	350 04	+++ ++	030 16	030 21	010 15	360 10	320 12	300 10	250 15	240 18	270 21	280 20	270 18	240 11	170 03	180 05	080 10		
	110530	P	350 01	+++ ++	020 15	010 17	010 20	350 18	340 14	330 18	360 25	340 26	310 26	290 26	270 19	280 11	290 04	120 06			
	111130	T	360 02	+++ ++	020 12	010 12	360 10	360 12	350 15	340 18	300 19	290 29	290 32	280 24	270 19	260 11	220 04				
	111730	P	050 03	+++ ++	060 05	340 07	320 10	330 06	290 13	280 16	300 25	300 50	290 35	280 25	280 20	260 10	270 10	110 05	130 10		
AUGHTON 03322	102330	T	180 05	+++ ++	230 09	250 07	230 06	240 05	240 09	240 14	220 30	220 45	220 33	260 23	250 15						
	110530	P	270 08	+++ ++	300 17	300 17	300 14	290 11	300 08	270 04	200 14	200 22	270 20	270 24	260 17	260 10	220 05	090 04	120 10		
	111130	T	280 16	+++ ++	330 18	330 16	340 12	340 14	340 18	310 14	300 09	320 16	300 21	270 20	280 19	250 09	170 05				
	111730	P	290 10	+++ ++	340 16	340 19	340 21	340 17	320 16	320 22	310 24	300 29	290 29	280 27	270 19	270 13	230 05				
HEMSBY 03496	102330	T	180 12	+++ ++	190 34	190 33	210 20	210 19	250 31	220 25	220 25	230 35	230 38	230 25	250 17	240 14	230 08				
	110530	P	220 10	+++ ++	210 15	210 18	210 19	200 26	190 25	200 23	190 24	190 41	200 28	240 17	240 17	270 09	280 04	090 08	130 12		
	111140	T	200 08	+++ ++	210 20	210 19	220 14	220 13	210 10	220 09	190 14	180 31	210 15	260 17	250 15						
	111730	P	240 10	+++ ++	250 26	250 31	250 28	260 21	280 19	300 16	240 07	050 08	250 13	270 17	270 15	250 14	190 03	270 02			
CRAWLEY 03774	102330	T	210 04	+++ ++	230 24	230 25	230 19	210 13	230 24	230 40	220 32	220 39	230 37	260 28	250 19						
	110530	P	240 07	+++ ++	260 22	250 31	240 30	220 17	220 18	240 18	210 21	190 28	260 21	270 24	270 17	260 14	250 06	080 04	120 10		
	111111	P	270 05	+++ ++	270 20	280 20	280 21	270 24	270 18	260 22	270 21	280 42	290 42	280 31	280 18	270 14	200 06				
	111730	P	270 07	+++ ++	290 22	290 23	300 21	290 20	300 26	310 28	310 56	310 50	300 54	290 39	270 17	260 17					
CAMBORNE 03808	102330	T	290 15	+++ ++	290 20	270 18	290 22	300 21	300 32	280 34	260 34	270 39	290 47	280 42	290 30	270 14	230 05	160 06	090 12	110 08	
	110530	P	300 12	+++ ++	290 20	290 22	290 22	290 26	290 35	290 44	290 78	300 92	300 91	290 64	270 30	280 16	290 06	110 05			
	111130	T	280 17	+++ ++	300 18	300 17	310 15	310 17	300 34	300 41	290 49	290 88	290 102	290 56	290 30						
	111730	P	280 13	+++ ++	290 18	290 15	290 13	280 20	290 26	290 26	290 53	300 68	290 90	290 55	280 32	280 22					
VALENTIA 03953	102330	T	300 08	300 09	+++ ++	310 20	+++ ++	310 24	+++ ++	300 46	300 77	310 113									
	111130	T	280 10	280 10	+++ ++	270 12	+++ ++	280 12	+++ ++	280 24	290 45	290 58	+++ ++	290 55	+++ ++	290 14					
Ocean Weather Station 'I' 59°00'N 19°00'W	110100	T	060 19	+++ ++	100 18	100 16	100 13	100 13	200 04	240 04	220 16	+++ ++	+++ ++	270 19	270 15						
	110600	P	135 20	+++ ++	150 13	160 19	140 14	140 10	260 04	290 13	270 32	250 14	250 23	280 30	280 13	290 11	320 05				
	111200	T	160 10	+++ ++	180 03	180 04	150 12	140 16	160 06	280 09	270 23	290 36	270 24	270 21	270 07	290 04					
	111800	P	135 20	+++ ++	140 14	170 12	160 12	140 07	120 05	160 06	180 07	210 15	250 22	270 26	290 21	300 15	290 05	360 06	070 08		
Ocean Weather Station 'J' 52°30'N 20°00'W	102300	T	270 09	+++ ++	270 08	270 11	250 05	240 06	230 19	250 26	280 47	270 78	270 78	270 74	270 29	270 16	270 05				
	110500	P	180 10	+++ ++	190 06	180 07	150 07	200 07	270 22	270 31	270 50	270 54	270 78	260 66	290 41	270 21	270 07				
	111200	T	130 10	+++ ++	140 10	170 09	280 19	270 23	290 24	280 43	290 71	280 71	280 75	290 71	250 41						
	111700	P	090 10	+++ ++	130 08	180 04	280 09	+++ ++	+++ ++	270 54	270 65	280 72	280 74	280 53	290 26	280 18	280 06	280 04			
LARKHILL 03743																					

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m	950mb °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
Cloud :— Inversion Levels :—														
Isothermal Levels :—														
YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m	950mb °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
Cloud :— Inversion Levels :—														
Isothermal Levels :—														
RATES OF SUBSCRIPTION: Single copy 5d. or post free 7d. One calendar month 13/-; one quarter 35/-; one year 125/-. For special arrangements for supply to schools and colleges see Form 2452.										Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General Meteorological Office, Air Ministry, Kingsway, London, W.C.2				



# UPPER WINDS AT ADDITIONAL LEVELS

Page 5

STATION		MAX. WIND
LERWICK 03005	042mb 120 08 26100m 100 16 19000/5 060mb 160 13	
STORNOWAY 03026	074mb 170 03 25000m 090 15 03030/9	
SHANWELL 03170	P20000m 180 06 22060m 130 11 08030/0 10090/2 19800m 220 03	
ALDERGROVE 03917	051mb 160 05 08140m 310 40 25000m 140 07 07650/0 10100/7	
AUGHTON 03322	110mb 240 13 26100m 070 18 09840/2 052mb 180 07 20400m 180 05	
HEMSBY 03496	060mb 230 06 10970/5 109mb 250 12	
CRAWLEY 03774	126mb 260 16 25500m 090 12 09080/4 20100m 220 02 09650/0 16800m 260 12 07750/0 08570/1	310 69 08400m
CAMBORNE 03808	06000/0 08150/0 09910/1 11900/1 12300/1 140mb 290 22 17700m 280 11 05960/0 10900/1	300 106 09700m 290 107 10550m 290 92 10700m
VALENTIA 03953	805mb 310 20 761mb 310 22 400mb 300 59 383mb 300 95 272mb 310 119 785mb 270 10 656mb 280 13 589mb 290 20 450mb 290 35 256mb 290 73 175mb 290 46	310 121 09500m 290 77 10760m
Ocean Weather Station 'I' 59°00'N 19°00'W	228mb 270 21 117mb 260 05 04800m 320 12 19500m 350 05 06880/0 08280/1 25200m 090 19	
Ocean Weather Station 'J' 52°30'N 20°00'W	349mb 280 65 182mb 270 45 060mb 270 05 09600m 270 64 12900m 250 43 451mb 270 59 186mb 300 56 120mb 280 20 21600m 270 03	270 91 11220m 270 80 10670m 290 82 10750m 280 80 10500m
LARKHILL 03743		

## NOTES ON THE AEROLOGICAL SITUATION

The intense low over Ungava continues to drift southeast while an intensifying trough extending southeastwards from the centre is swinging northeast. The downstream ridge off the east coast of Labrador is intensifying as warm air is carried northwards. A westerly stream with only minor perturbations continues downstream to the British Isles. Here a new trough has developed and is moving east across the country. All that remains of the old trough is a cut-off low over Italy.

## AVERAGE AND EXTREME VALUES 1951-55 JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22345	-48.1	-42	-55	...	...
60	19675	-48.1	-41	-55	120	3
100	16320	-48.8	-41	-56	244	5
150	13660	-48.3	-41	-59	263	10
200	11770	-49.8	-39	-67	271	16
300	9125	-46.7	-37	-56	271	22
400	7160	-32.6	-23	-44	271	18
500	5555	-20.8	-11	-31	269	14
700	2985	-5.2	3	-14	266	9
850	1435	2.8	14	-7	269	6

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	257	-54.7	10190
Max.	405	-40	12955
Min.	172	-68	6890

LARKHILL/CRAWLEY† at 03, 15h.  
(Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.)

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22310	-49.6	-47	-57	106	9
60	19675	-51.4	-45	-59	136	3
100	16370	-52.6	-46	-61	251	8
150	13745	-51.8	-42	-65	265	15
200	11890	-54.0	-40	-65	268	20
300	9265	-44.7	-36	-54	265	20
400	7275	-29.6	-19	-41	265	17
500	5640	-17.8	-9	-28	263	15
700	3050	-2.1	7	-10	263	11
850	1480	5.7	16	-3	264	7

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	234	-56.8	10950
Max.	388	-41	13440
Min.	160	-66	7225

MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5
60	19670	-60.7	-53	-69	135	4
100	16510	-62.9	-57	-71	255	21
150	13995	-59.0	-51	-67	265	38
200	12185	-56.6	-47	-67	275	42
300	9530	-40.1	-33	-46	285	32
400	7500	-23.9	-19	-29	285	27
500	5835	-11.8	-8	-17	285	24
700	3165	7.2	13	-1	290	18
850	1535	17.9	27	8	290	9

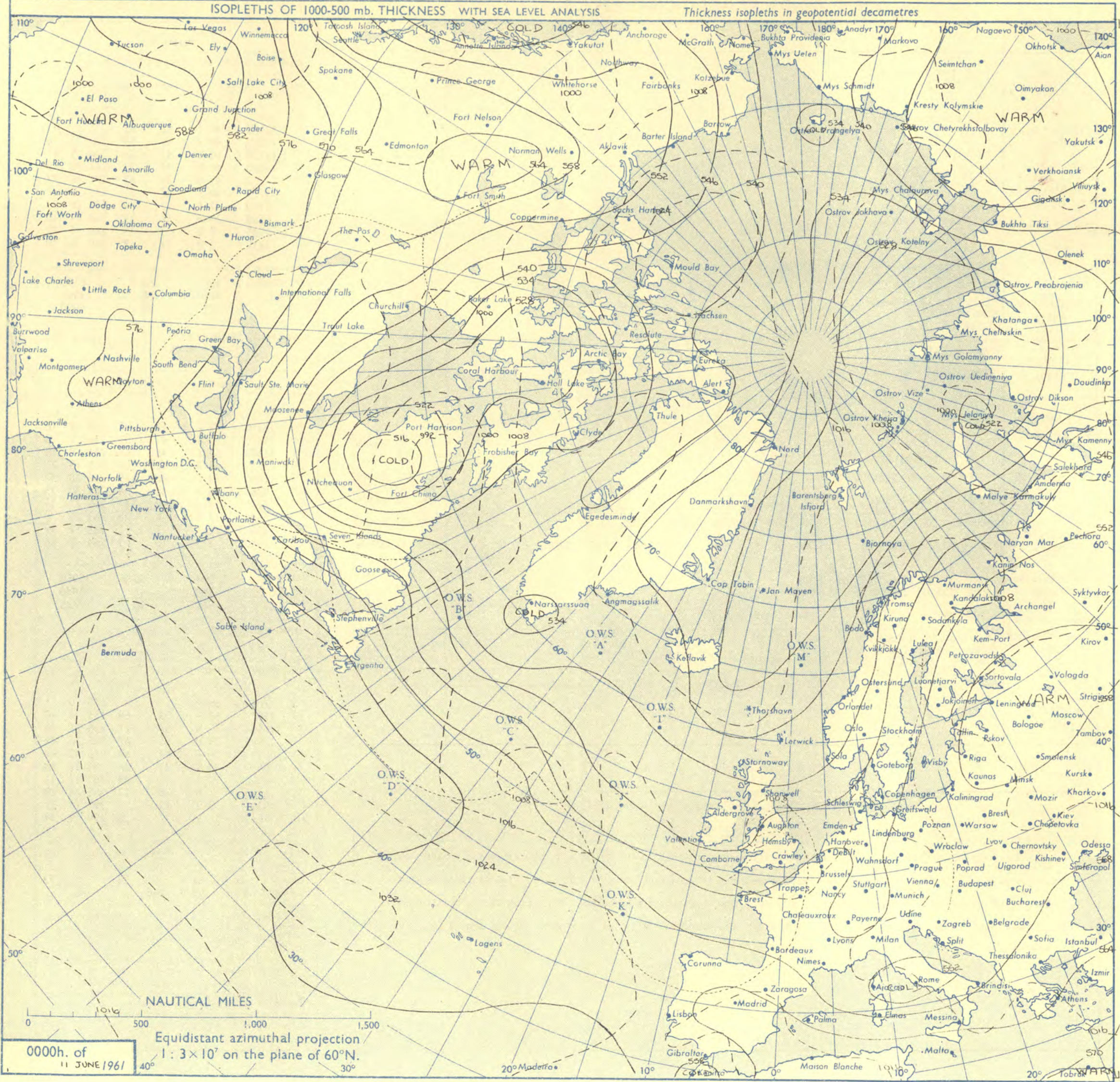
Tropopause	Average Press.	Average Temp.	Max. Press.	Min. Press.	Max. Temp.	Min. Temp.
Upper	mb.	°C	mb.	mb.	°C	°C
Lower	123	-65.7	...	73	...	-73
	193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

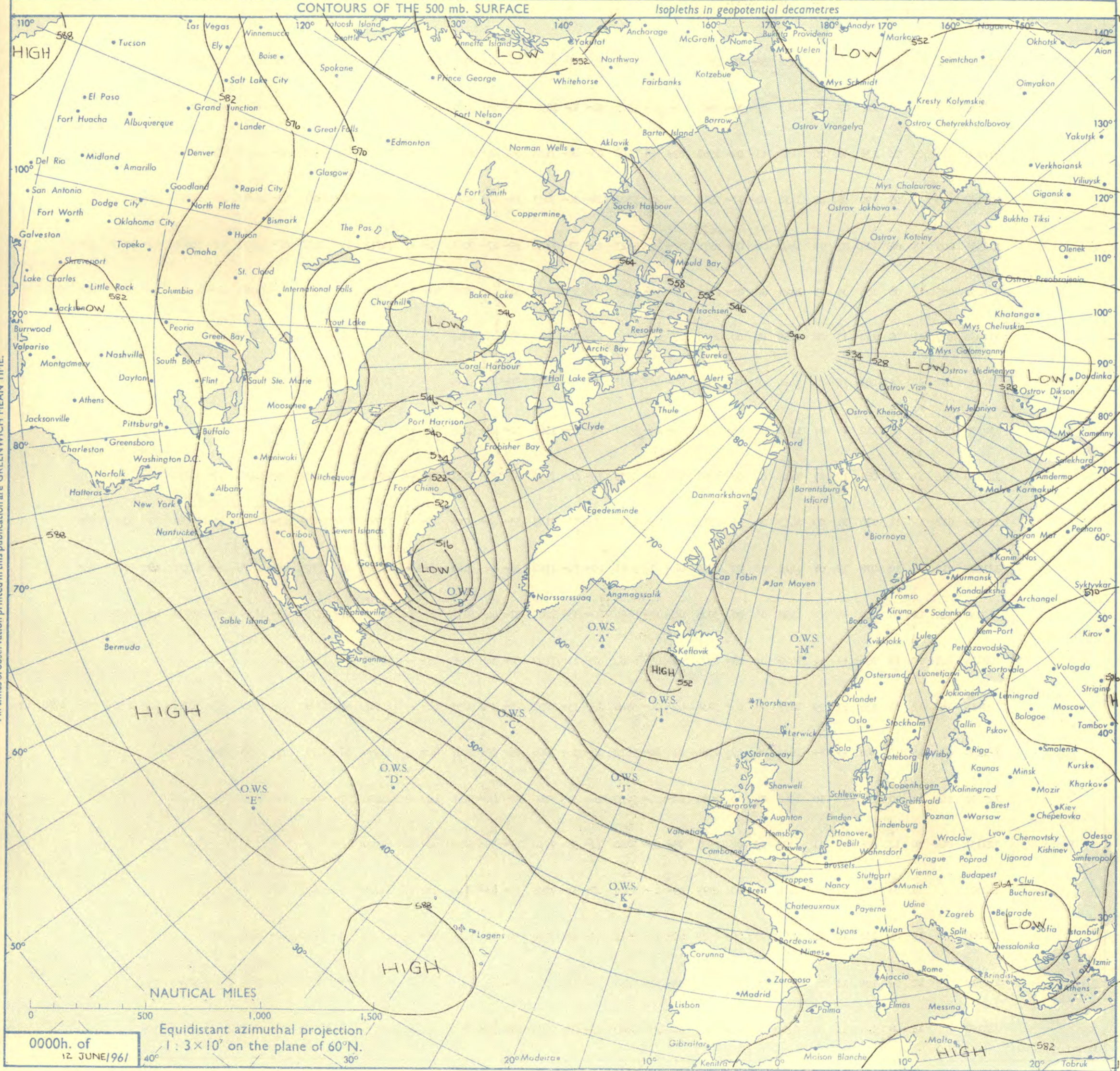
† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.









All times of observation printed in this publication are GREENWICH MEAN TIME.



STATION	YYGGgg	SURFACE	1000mb	850mb	700mb	500mb	400mb	300mb	200mb	150mb	100mb	70mb	50mb	30mb
		gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C
LERWICK 03005	112330	082 07 06	136 07 05	1452 02- 03-	2970 09- 23-	5505 25- 38-	7095 36- 47-	9027 52- ++	11708 44-	13634 45-	16328 47-	18683 48-		
	121130	082 09 06	128 07 03	1443 03- 06-	2967 08- 19-	5509 24- 34-	7099 36- 45-	9036 50- ++	11724 44-	13656 45-	16361 47-	18722 47-		
STORNOWAY 03026	112330	013 09 05	136 08 04	1458 01- 04-	2988 07- 34-	5528 25- 40-	7114 36- 46-	9049 51- ++	11704 45-	13625 46-	16308 48-	18654 49-	20869 47-	
	121133	013 11 05	120 08 02	1438 01- 13-	2968 07- 24-	5503 24- 30-	7093 36- 42-	9024 52- ++	11689 45-	13608 47-	16282 49-	18620 50-	20820 49-	
SHANWELL 03170	112330	005 08 04	124 07 03	1444 00 04-	2978 07- 19-	5527 23- 37-	7124 35- 47-	9063 51- ++	11712 46-	13621 47-	16292 48-	18628 50-	20832 49-	
	121130	005 12 06	106 09 03	1426 00 03-	2966 06- 18-	5523 22- 35-	7128 34- 43-	9078 50- ++	11760 44-	13691 45-	16383 47-	18740 48-	20973 46-	
ALDERGROVE 03917	112330	077 11 08	118 11 08	1455 02 00	2997 07- 09-	5559 21- 32-	7166 33- 43-	9121 49- ++	11777 46-	13687 48-	18693 49-			
	121130	077 14 06	081 12 04	1416 03 04-	2958 05- 10-	5517 21- 25-	7125 34- 40-	9075 48- ++	11793 44-	13711 47-	16389 49-			
AUGHTON 03322	112330	056 11 08	112 10 07	1443 02 05-	2989 05- 13-	5557 21- 36-	7169 32- 48-	9124 50- ++	11763 47-	13662 49-	16314 51-			
	121130	056 13 08	081 12 07	1414 02 00	2958 06- 19-	5530 19- 24-	7150 31- 37-	9121 47- ++	11824 45-	13732 48-	16424 47-	18778 48-		
HEMSBY 03496	112330	012 12 11	074 11 09	1413 04 01	2963 05- 09-	5537 20- 38-	7147 33- 44-	9108 48- ++	11786 45-	13699 47-	16360 50-	18691 51-	20885 50-	
	121214	012 12 10	078 10 08	1412 03 00	2962 04- 21-	5541 20- 50-	7162 31- ++	9127 48- ++	11795 46-	13708 47-	16376 48-	18718 49-	20943 45-	
CRAWLEY 03774	112330	144 12 08	110 ++ ++	1450 03 00	3004 04- 12-	5584 20- 33-	7209 31- 44-	9175 48- ++	11839 47-	13738 49-	16384 50-	18711 49-	20918 50-	
	121134	144 12 11	096 ++ ++	1429 01 01-	2978 04- 05-	5582 18- 21-	7209 30- 34-	9195 45- ++	11857 48-	13751 48-				
CAMBORNE 03808	120013	088 11 09	136 11 09	1471 05 06-	3036 02- 04-	5646 15- 33-	7291 28- 33-	9291 44- ++	11914 54-	13784 51-	16409 52-	18718 52-	20909 50-	24260 47-
	121130	088 15 15	040 ++ ++	1402 08 07	2984 01 10-	5619 14- 35-	7266 25- 33-	9287 42- ++	11920 57-	13773 51-	16394 52-			
VALENTIA 03953	120000	014 12 10	105 12 10	1440 04 00	3004 02- 04-	5620 16- 32-	7260 27- 40-	9270 44- ++	11900 51-	++++ ++	16420 51-			
	121130	014 14 12	055 13 11	1393 03 02	2951 05- 09-	5540 11- 36-	7210 23- 39-	9250 40- ++	11900 56-					
Ocean Weather Station 'I' 59°00'N 19°00'W	112300		10 08	125 09 06	1448 01 00	2979 09- 12-	5500 26- 33-	7099 35- 43-	9020 52- ++	11700 45-	13620 46-			
	121200		11 05	132 10 05	1650 03- 05-	2979 09- 13-	5510 23- 31-	7110 34- 42-	9100 41- ++	11760 49-	13670 47-	16340 49-		
Ocean Weather Station 'J' 52°30'N 20°00'W	112300		12 09	104 11 08	1437 04 03	3003 03- 05-	5630 13- 38-	7290 25- 38-	9310 41- ++	11940 59-	13770 53-	16390 52-	18700 52-	
	121100		13 08	121 11 06	1452 04 05-	3014 00 23-	5660 12- 22-	7330 23- 27-	9380 39- 43-	12030 58-	13820 58-	16410 54-	28720 52-	



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE																							TROPOPAUSE		
		MSL	Surf.	0°C level																					mb	m	°C
LERWICK 03005	80 624++	017	077	883	999 ++ 04 955 ++ 03 937 ++ 00 825 04- 05- 780 06- 12- 754 ++ 19- 732 ++ 20- 729 ++ 26- 710 08- 25- 689 ++ 21- 665 ++ 22- 615 ++ 30- 582 16- 31- 370 40- 50- 294 53- 258 47- 233 44- 100 47- 065 48-																				294	09160	53+
	80 784++	015	005	896	001 07 03 912 01 01- 864 02- 05- 813 04- 07- 792 ++ 11- 762 04- 14- 659 10- 23- 554 18- 29- 370 40- 48- 318 48- 290 51- 275 51- 239 45- 171 44- 100 47- 058 47-																				290	09250	51+
STORNOWAY 03026	01 12532	017	015	858	912 ++ 01 818 04- 07- 786 03- 18- 715 06- 33- 623 12- 33- 480 27- 42- 432 ++ 41- 385 ++ 48- 368 40- 50- 306 50- 270 54- 258 51- 210 45- 075 49- 044 47- 038 49-																				270	09730	54+
	03 11602	015	013	868	006 08 02 940 04 00 912 ++ 03- 890 01 03- 868 00 11- 830 ++ 15- 642 11- 27- 572 ++ 26- 371 40- 46- 282 55- 233 45- 192 45- 099 49- 050 49-																				282	09420	55+
SHANWELL 03170	02 00902	015	015	853	985 ++ 02 929 02 01- 897 03 01- 919 02- 05- 790 02- 07- 774 02- 09- 745 ++ 15- 726 ++ 15- 667 ++ 24- 590 14- 29- 373 39- 50- 347 44- 280 52- 270 54- 211 46- 100 48- 074 50- 046 49-																				280	09510	53+
	02 68531	013	012	862 816	003 09 03 905 02 00 854 01- 03- 840 01 04- 780 02- 08- 765 ++ 11- 735 04- 16- 720 05- 14- 685 06- 20- 515 21- 35- 423 31- 40- 358 40- 47- 279 54- 242 45- 188 43- 100 47- 060 47- 055 45- 046 47- 037 46- 033 42-																				279	09520	54+
ALDERGROVE 03917	02 756++	014	005	818	997 11 07 938 09 05 838 ++ 01- 813 00 02- 686 08- 10- 647 08- 16- 512 19- 30- 353 40- 49- 282 53- 227 47- 189 45- 120 50- 060 49-																				282	09520	53+
	01 38638	011	001	817	995 10 03 915 05 02 900 06 01- 833 ++ 04- 780 03- 05- 775 ++ 05- 758 ++ 10- 746 ++ 06- 734 03- 08- 665 08- 12- 594 14- 17- 553 ++ 20- 497 22- 27- 485 ++ 25- 468 ++ 31- 420 ++ 38- 357 ++ 46- 302 49- 282 45- 206 43- 094 50-																				302	09030	49+
AUGHTON 03322	02 855++	014	007	824	987 ++ 05 891 03 02 879 04 02 859 ++ 01- 801 02- 03- 791 ++ 03- 769 01- 05- 737 02- 10- 711 ++ 13- 681 07- 13- 672 06- 14- 599 ++ 28- 547 16- 37- 528 18- 33- 421 29- 45- 352 40- ++ 283 53- 261 55- 245 50- 196 46- 163 49- 078 51-																				261	10020	55+
	02 6552+	010	003	815	995 11 07 970 09 06 897 ++ 02 789 02- 05- 763 01- 13- 685 07- 22- 669 ++ 26- 636 08- 23- 583 ++ 18- 485 21- 26- 341 40- 46- 290 49- 220 43- 149 48- 100 47- 666 48- 059 45-																				290	09340	49+
HEMSBY 03496	25 32500	009	007	776	900 ++ 04- 826 ++ 01- 689 06- 10- 664 06- 12- 624 10- 15- 606 10- 15- 558 ++ 20- 535 16- 30- 503 ++ 37- 424 30- 44- 348 40- 49- 288 50- 188 45- 097 51- 047 50-																				288	09360	50+
	21 7531+	009	008	788	000 10 08 765 ++ 04- 740 ++ 16- 718 03- 25- 673 ++ 18- 643 ++ 28- 625 ++ 41- 565 13- 45- 495 ++ 50- 482 ++ 45- 419 28- 354 39- 279 51- 178 45- 107 49- 080 50- 050 45-																				279	09600	51+
CRAWLEY 03774	01 00900	013	996	795	988 13 09 974 ++ 06 904 06 03 853 ++ 01 827 03 01- 781 01- 03- 758 01- 06- 578 11- 23- 501 20- 33- 456 23- 37- 351 ++ 50- 284 51- 234 47- 179 47- 102 50- 050 50- Pressure doubtful above 150mb																				284	09520	51+
	62 8722+	011	994	828	934 06 04 828 00 02- 762 01- 02- 714 03- 04- 565 12- 13- 436 25- 30- 327 40- 44- 273 50- 142 48-																				273	09820	50+
CAMBORNE 03808	02 756++	016	006	735	998 12 10 875 03 01 870 ++ 02 858 05 05- 828 ++ 10- 784 ++ 06- 770 ++ 08- 742 ++ 04- 710 ++ 03- 623 06- 09- 584 ++ 14- 549 14- 16- 529 12- 23- 500 ++ 33- 321 40- 50- 247 54- 226 57- 164 50- 127 52- 067 52- 030 47-																				226	11140	57+
	21 873++	005	994	661	986 13 11 926 ++ 10 800 05 04 750 03 00 732 ++ 04- 710 01 06- 692 02 14- 645 01- 12- 608 05- 22- 519 12- 35- 465 19- 36- 424 25- 38- 414 23- 33- 375 29- 34- 308 48- 46- 217 59- 163 51- 125 53- 078 50- 074 53-																				217	11400	59+
VALENTIA 03953	02 885++	012	011	773	873 03 00 836 04 02 773 00 01- 725 00 02- 653 04- 06- 546 11- 24- 440 22- 32- 367 32- 42- 241 56- 209 51- 137 50- 062 51-																				241	10700	56+
	50 864++	007	005	780	963 08 06 882 05 03 832 02 01 808 01 00 768 01- 05- 740 00 06- 700 05- 09- 587 13- 33- 557 12- 34- 537 13- 36- 517 12- 37- 507 10- 34- 454 17- 39- 445 17- 38- 216 57- 173 52- 138 52-																				216	11500	57+
Ocean Weather Station 'I' 59°00'N 19°00'W	80 884++	015	015	836	956 05 03 928 ++ 02 851 01 00 686 10- 13- 579 19- 25- 538 ++ 28- 490 27- 35- 471 27- 37- 369 40- 47- 287 55- 258 46- 217 44- 120 48-																				287	09300	55+
	01 757++	016	016	881	928 03 00 847 03- 05- 824 01- 06- 815 ++ 10- 774 ++ 12- 746 ++ 11- 624 15- 19- 554 19- 27- 474 25- 33- 362 39- 47- 345 36- 46- 318 37- 46- 305 40- 46- 241 53- 192 48- 124 47- 079 49-																				241	10600	53+
Ocean Weather Station 'J' 52°30'N 20°00'W	80 5847+	012	012	744	955 08 06 884 04 03 843 04 03 671 04- 06- 654 ++ 23- 631 05- 29- 601 ++ 23- 576 09- 26- 541 08- 33- 473 16- 42- 414 23- 48- 352 33- 41- 303 40- 46- 212 60- 154 53- 099 52- 053 51-																				212	11600	60+
	03 22572	015	015	698	006 11 06 945 06 03 887 03 00 860 05 05- 792 01 10- 762 02 16- 743 02 18- 670 ++ 24- 607 04- 10- 568 ++ 12- 556 07- 17- 536 08- 19- 481 14- 22- 461 ++ 22- 419 22- 25- 380 25- 30- 334 31- 35- 293 40- 44- 208 59- 200 58- 179 61- 104 53- 082 51- 074 54- 062 05- 053 50-																				179	12700	61+



STATION	YYGGgg	Type	Surface	1000mb	900m	850mb 1500m	750mb 2100m	700mb 3000m	600mb 4200m	500mb 5400m	400mb 7200m	300mb 9000m	250mb 10500m	200mb 12000m	150mb 14100m	100mb 15900m	70mb 18300m	50mb 20700m	30mb 23700m	20mb 26400m	10mb 30900m
LERWICK 03005	112330	T	010 13	+++ ++	060 10	050 07	320 05	280 04	270 12	250 18	250 24	240 29	230 23	240 16	230 11	210 07	130 12				
	120530	P	010 13	+++ ++	010 11	020 10	030 07	290 06	260 09	240 15	230 24	220 30	230 23	230 13	210 08	230 05	150 06	120 09	090 15		
	121130	T	030 19	+++ ++	030 18	030 17	020 07	360 05	250 08	250 14	260 16	230 21	230 24	230 17	230 11	220 05	190 06				
	121730	P	020 18	+++ ++	030 16	030 14	040 13	350 08	320 09	280 10	260 21	250 28	250 14	250 12	250 08	230 06	170 04	090 09	070 14		
STORNOWAY 03026	112330	T	050 14	+++ ++	090 08	130 03	270 03	280 04	260 05	230 12	270 20	280 32	270 23	260 17	270 12	280 07	100 03	110 03			
	110530	P	070 13	+++ ++	060 12	280 02	270 04	290 02	230 06	230 08	250 17	250 19	260 16	280 15	270 10						
	121227	P	030 20	+++ ++	090 13	100 06	090 04	070 02	260 03	250 02	180 09	220 12	280 14	280 18	280 12	270 10	140 02	080 03			
	121730	P	040 27	+++ ++	080 19	100 07	240 03	360 04	320 05	250 03	240 04	260 06	290 22	290 19	290 10	260 12					
SHANWELL 03170	112330	T	360 06	+++ ++	020 09	020 07	030 08	010 05	310 04	290 11	240 15	280 23	260 20	260 17	260 15	240 09	170 03	120 06			
	120530	P	330 10	+++ ++	030 08	030 07	030 04	350 02	250 02	250 09	260 16	260 16	260 18	270 14	270 13	280 07	270 02	110 03			
	121130	T	080 16	+++ ++	020 15	030 12	090 07	090 03	160 02	190 04	210 13	230 17	250 17	270 15	270 14	250 07	160 03	110 07			
	121730	P	070 23	+++ ++	030 18	020 14	010 09	140 03	070 05	160 04	200 07	160 05	290 18	280 20	290 14	260 09	280 05	070 02			
ALDERGROVE 03917	112330	T	110 01	+++ ++	170 06	220 05	270 07	270 09	310 07	260 11	250 18	270 30	280 37	280 29	280 20	270 11	250 05				
	120530	P	090 11	+++ ++	140 11	140 09	160 04	260 04	240 09	250 17	250 18	230 21	240 26	260 27	270 20						
	121130	T	080 13	+++ ++	100 15	090 12	070 09	060 10	060 07	230 03	250 12	240 22	280 31	290 30	290 24	280 15	230 03	120 05	160 09		
	121730	P	030 10	+++ ++	040 12	050 15	050 16	040 13	030 11	360 16	310 11	310 54	300 55	300 44	290 23	290 16	260 07				
AUGHTON 03322	112330	T	320 05	+++ ++	350 11	350 11	330 13	340 10	310 13	300 21	300 29	290 40	290 43	290 29	290 19	240 13					
	120530	P	010 02	+++ ++	330 09	360 07	340 11	310 09	270 13	260 15	270 23	270 30	280 44	280 31	270 20	290 14	270 02	090 04	120 14		
	121130	T	080 11	+++ ++	120 09	130 09	130 07	150 06	190 06	260 10	270 28	240 50	280 45	280 30	290 24	270 11	300 04				
	121730	P	360 08	+++ ++	070 14	070 14	070 19	080 17	300 06	270 06	310 17	290 25	290 46	290 34	290 23	290 15					
HEMSBY 03496	112330	T	280 10	+++ ++	310 20	320 19	330 19	330 17	300 25	290 20	290 23	280 21	300 26	280 24	270 18	260 04	210 05				
	120530	P	260 12	+++ ++	290 18	300 17	290 20	290 28	300 27	290 25	300 40	300 45	290 40	290 25	270 15	250 09	230 03				
	121214	T	260 12	+++ ++	270 10	280 09	270 05	270 06	270 14	290 21	290 41	270 75	280 52	290 38	270 18	260 09	250 06				
	121730	P	100 06	+++ ++	220 06	220 09	170 07	150 04	210 15	240 20	250 32	240 36	270 41	280 33	280 19	270 13					
CRAWLEY 03774	112330	T	270 03	+++ ++	300 21	300 22	290 21	290 20	300 28	300 35	290 41	300 42	290 51	290 36	290 25	270 16	260 09	090 03			
	120530	P	000 00	+++ ++	290 19	280 24	290 21	290 21	290 22	280 30	290 55	290 67	290 69	290 40	280 29	280 13	270 05	100 03			
	121114	P	240 06	+++ ++	220 16	220 08	240 11	250 16	260 30	270 49	270 54	280 63	290 81	290 42	280 29	270 21					
	121730	P	150 15	+++ ++	200 33	230 32	250 36	240 33	250 34	270 54	270 70	280 104	290 103	290 50	290 27						
CAMBORNE 03808	112330	P	190 02	+++ ++	250 15	250 13	260 15	270 18	290 35	290 46	290 62	290 66	290 78	290 54	290 29	280 18	280 10	000 00	100 05		
	120530	P	160 12	+++ ++	190 20	220 28	230 22	240 30	260 36	280 48	280 59	290 86	300 86	300 64							
	121130	T	250 15	+++ ++	260 31	260 34	260 37	260 36	260 46	270 44	280 73	290 82	290 80	300 69	290 32						
	121730	P	270 18	+++ ++	290 35	290 41	290 44	280 42	270 68	280 69	280 74	290 80	300 81	300 71	290 34	290 20					
VALENTIA 03953	120000	T	150 03	150 04	+++ ++	190 11	+++ ++	260 22	+++ ++	280 37	280 65	280 71	+++ ++	280 59	+++ ++	270 18					
	121130	T	340 08	340 08	+++ ++	330 16	+++ ++	300 27	+++ ++	290 79	300 92	300 92	+++ ++	310 86							
Ocean Weather Station 'I' 59°00'N 19°00'W	112300	T	130 17	+++ ++	120 18	110 11	110 15	120 11	170 06	140 10	080 11	350 04	300 21	290 37							
	120600	P	135 20	+++ ++	110 18	110 12	110 10	110 06	150 03	120 04	340 07	300 42	+++ ++	+++ ++	290 23	310 13	340 02	110 02			
	121200	T	120 15	+++ ++	130 15	130 12	150 06	190 06	210 08	230 07	250 19	290 73	300 63	300 42	300 21	280 13					
	121800	P	135 10	+++ ++	140 08	150 07	200 12	220 12	230 15	250 17	280 48	280 53	270 9	290 42	280 21	260 13	260 06	130 02	090 08		
Ocean Weather Station 'J' 52°30'N 20°00'W	112300	T	040 09	+++ ++	340 05	310 06	270 16	280 22	280 48	270 72	280 70	300 87	300 96	300 70	300 40	280 16	310 06				
	120500	P	360 10	+++ ++	340 14	310 15	290 17	290 33	280 44	280 60	280 57	290 63	290 79	300 62	270 28	260 11					
	121100	T	310 08	+++ ++	300 10	310 12	310 16	310 27	290 44	290 55	280 51	260 64	260 68	270 71	260 45	270 16	270 10				
	121700	P	315 05	+++ ++	290 07	290 12	290 15	280 26	280 37	280 39	280 47	270 56	270 56	270 57	260 35						
LARKHILL 03743	120630	P	230 02	+++ ++	280 12	260 16	270 16	280 17	290 34	280 47	290 56	290 77	290 72	290 38	270 25	290 14	190 04				
	121030	P	170 04	+++ ++	190 12	190 11	200 15	240 24	260 42	260 52	270 41	290 85	290 82	290 43	300 27	270 16					

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE	SURFACE	1000mb	950mb	900mb	850mb	800mb	750mb	700mb	650mb	600mb	550mb	500mb
		MSL Surf. 0°C level	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C
121224	44.1°N 11.5°W	018 010 661	061 15 15	149 15 15	1039 13 13	1518 11 11	2021 09 09	05- 02-	3115 03 -02	01- 05-	4346 05- 06-	08- ++	5761 12- ++	
Cloud :— 8/8St. 100 to 1800ft; 4/8Sc. HNC to 3800ft; 7/8Sc. 6000 to 8000ft.														
Inversion Levels :— Isothermal Levels :— 965 - 950mb. 14½ °C														
YYGGgg	POSITION	PRESSURE	SURFACE	1000mb	950mb	900mb	850mb	800mb	750mb	700mb	650mb	600mb	550mb	500mb
		MSL Surf. 0°C level	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C
121337	45.1°N. 06.0°W	013 005 668	061 15 15	104 12 12	991 12 12	1469 11 11	1975 09 07	05 05	3066 02 02	02- ++	4292 05- ++	08- ++	5703 13- ++	
Cloud :— 8/8Sc. 300 to 5000ft; 2/8Sc 8000 to 8000ft; 2/8AC 10000 to 10000ft; 2/8Cs 20000ft to TNR														
Inversion Levels :— Isothermal Levels :— 960 - 950mb 124°C														
RATES OF SUBSCRIPTION: Single copy 5d. or post free 7d. One calendar month 13/-; one quarter 35/-; one year 125/-.												Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General		
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## UPPER WINDS AT ADDITIONAL LEVELS

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STATION		MAX. WIND
LERWICK 03005	24900m 100 14 053mb 160 10 25800m 070 06	
STORNOWAY 03026	043mb 110 10 14700m 280 08 03910/8 18100m 290 04 01603/9 09830/0	
SHANWELL 03170	036mb 100 07 09600/3	
ALDERGROVE 03917	15500m 280 16 P26100m 120 19 08510m 310 35 19300m 330 05 06200/5 08720/0 12450/1	
AUGHTON 03322	082mb 250 04 02710/5 07620/0 10920/1 062mb 280 05 18000m 270 07 03930/4	
HEMSBY 03496	053mb 210 02 347mb 280 55 171mb 270 28 056mb 090 06 16900m 280 08	270 76 09370m
CRAWLEY 03774	P21300m 190 03 11070m 290 66 16800m 280 11 09270/0 09630/0 10360/1 15300m 280 17 05520/0 08200/0 10020/1 11020/1 11530/1 12040/1	300 79 09690m 290 94 09800m 290 110 09770m
CAMBORNE 03808	24600m 090 12 11700/1 12510/1 12910m 310 61 08700/0 09100/0 176mb 300 45 120mb 280 24 12970m 300 46 03350/0 12800/1	290 82 10500m 290 94 09310m 300 86 11300m 310 86 10990m
VALENTIA 03953	873mb 180 11 773mb 240 18 653mb 260 22 241mb 280 74 137mb 290 31 062mb 320 06 963mb 340 19 740mb 310 22 587mb 280 53 537mb 280 67 454mb 290 83 216mb 310 92	280 77 09700m 320 98 10730m
Ocean Weather Station 'I' 59°00'N 19°00'W	287mb 330 05 04200m 150 03 08700m 290 21 13200m 300 23 09070/0 09450/0 334mb 280 45 087mb 280 08 06300m 270 23 25200m 090 11 06950/0	290 79 09640m 300 84 09390m
Ocean Weather Station 'J' 52°30'N 20°00'W	556mb 280 64 212mb 300 80 124mb 290 27 060mb 060 07 123000m 280 28 18000m 250 05 12180/1 172mb 260 58 122mb 230 31 056mb 270 03 15000m 250 27	310 103 09950m 300 82 10800m 270 73 11860m 270 64 12280m
LARKHILL 03743	17100m 270 06 01900/3	290 94 09800m 290 94 09850m

## NOTES ON THE AEROLOGICAL SITUATION

The intense vortex off Labrador is moving eastwards while the trough on the eastern side continues to swing north. The downstream ridge over mid-Atlantic is moving east. The trough west of the British Isles is moving steadily east while the trough over the North Sea and the low countries is moving slowly northeast. The cut off low over Yugoslavia continues to move east. The high over Russia persists.

## AVERAGE AND EXTREME VALUES 1951-55

## JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	° Kt.
40	22345	-48.1	-42	-55	...	...
60	19675	-48.1	-41	-55	120	3 8
100	16320	-48.8	-41	-56	244	5 11
150	13660	-48.3	-41	-59	263	10 18
200	11770	-49.8	-39	-67	271	16 27
300	9125	-46.7	-37	-56	271	22 41
400	7160	-32.6	-23	-44	271	18 33
500	5555	-20.8	-11	-31	269	14 26
700	2985	-5.2	3	-14	266	9 19
850	1435	2.8	14	-7	269	6 18

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	257	-54.7	10190
Max.	405	-40	12955
Min.	172	-68	6890

LARKHILL/CRAWLEY† at 03, 15h.  
(Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.)

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	° Kt.
40	22310	-49.6	-47	-57	106	9 10
60	19675	-51.4	-45	-59	136	3 8
100	16370	-52.6	-46	-61	251	8 13
150	13745	-51.8	-42	-65	265	15 21
200	11890	-54.0	-40	-65	268	20 32
300	9265	-44.7	-36	-54	265	20 39
400	7275	-29.6	-19	-41	265	17 31
500	5640	-17.8	-9	-28	263	15 25
700	3050	-2.1	7	-10	263	11 19
850	1480	5.7	16	-3	264	7 16

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	234	-56.8	10950
Max.	388	-41	13440
Min.	160	-66	7225

MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	° Kt.
40	(22185) (-60.7)	...	...	...	120	5 11
60	19670	-60.7	-53	-69	135	4 10
100	16510	-62.9	-57	-71	255	21 24
150	13995	-59.0	-51	-67	265	38 42
200	12185	-56.6	-47	-67	275	42 47
300	9530	-40.1	-33	-46	285	32 38
400	7500	-23.9	-19	-29	285	27 31
500	5835	-11.8	-8	-17	285	24 28
700	3165	7.2	13	-1	290	18 22
850	1535	17.9	27	8	290	9 14

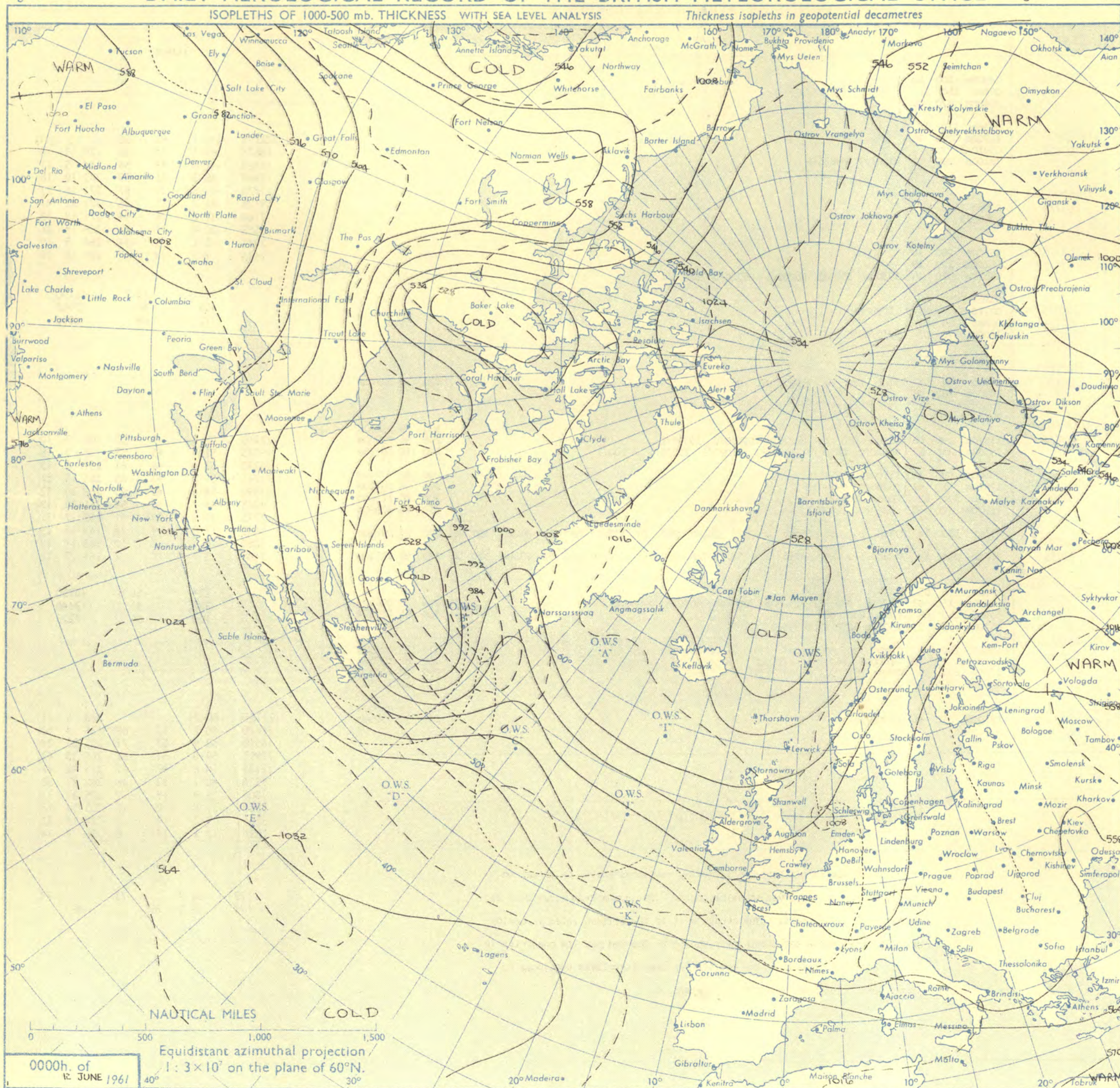
Tropopause	Average Press.	Average Temp.	Max. Press.	Min. Press.	Max. Temp.	Min. Temp.
	mb.	°C	mb.	mb.	°C	°C
Upper	123	-65.7	...	73	...	-73
Lower	193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

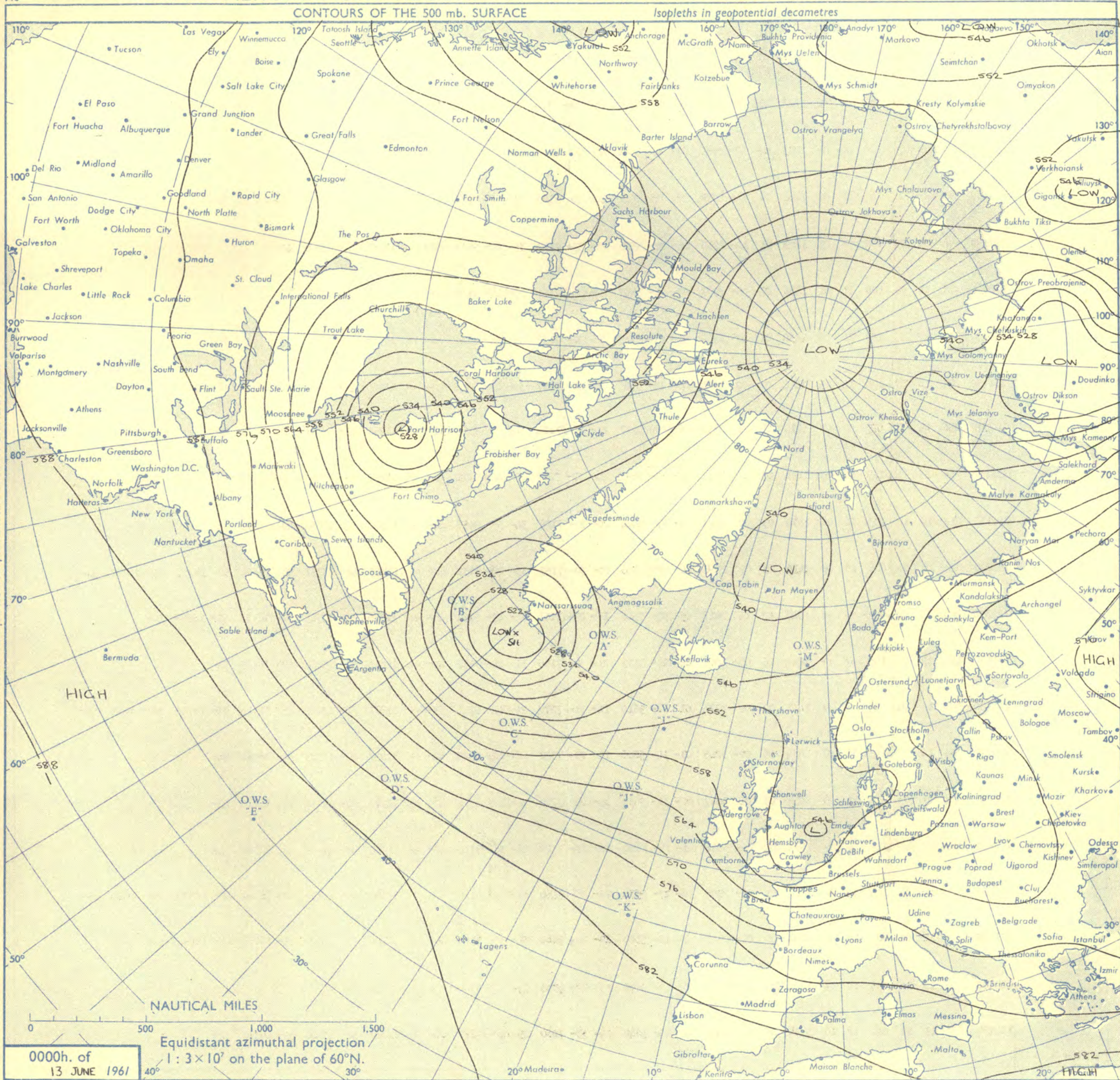
† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.











STATION	YYGGgg	SURFACE			1000mb			850mb			700mb			500mb			400mb			300mb			200mb		150mb		100mb		70mb		50mb		30mb	
		gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C		
LERWICK 03005	122330	082	07	03	123	07	02	1434	01	16-	2971	06-	25-	5519	24-	42-	7107	36-	++	9038	51-	++	11707	45-	13630	46-	16323	47-	18674	48-	20895	48-		
	131130	082	09	02	130	08	01	1443	01	10-	2983	06-	19-	5533	23-	38-	7124	36-	49-	9061	48-	++	11747	45-	13666	45-	16365	46-	18732	46-	20967	46-		
STORNOWAY 03026	122330	013	09	06	134	09	06	1453	02-	05-	2980	07-	22-	5521	24-	30-	7112	36-	45-	9042	50-	++	11706	48-	13602	48-	16263	50-						
	131130	013	11	03	146	08	00	1462	01	10-	2998	07-	22-	5551	22-	33-	7163	31-	42-	9138	46-	++	11764	51-	13647	49-	16305	49-						
SHANWELL 03170	122330	005	08	05	108	08	05	1429	01	12-	2968	06-	22-	5518	23-	33-	7113	35-	40-	9043	52-	++	11716	47-	13621	47-								
	131130	005	13	03	128	11	01	1456	01-	05-	2997	04-	20-	5559	22-	36-	7161	35-	48-	9132	45-	++	11794	48-	13692	48-								
ALDERGROVE 03917	122330	077	07	05	107	08	06	1438	01	00	2980	05-	27-	5539	22-	32-	7137	35-	48-	9112	43-	++	11780	49-										
	131130	077	16	07	136	14	05	1472	02	00	3013	06-	13-	5585	16-	38-	7217	30-	47-	9209	45-	++	11826	56-	13694	50-	16331	51-	18660	51-	20860	49-		
AUGHTON 03322	122330	056	09	07	079	09	07	1412	04	01	2959	06-	08-	5517	21-	28-	7124	34-	44-	9084	42-	++	11791	48-	13686	49-	16337	51-						
	131130	056	13	06	129	12	03	1456	03	13-	3012	03-	19-	5592	20-	37-	7217	29-	46-	9211	44-	++	11857	51-	13737	50-	16387	51-	18709	51-				
HEMSBY 03496	122330	012	10	10	033	10	08	1370	03	00	2917	05-	07-	5494	20-	23-	7106	34-	38-	9057	44-	++	11760	47-	13653	49-	16292	50-						
	131200	012	11	09	088	10	08	1418	03	02	2968	04-	09-	5546	20-	30-	7159	33-	42-	9131	42-	++	11825	46-	13731	48-	16393	50-	18717	51-	20907	49-		
CRAWLEY 03774	122330	144	13	12	009-	++	++	1347	07	05	2917	03-	07-	5506	18-	27-	7161	24-	45-	9191	40-	++	11876	51-	13743	51-	16373	52-	18687	52-				
	131130	144	12	07	108	++	++	1442	05	02-	3000	05-	13-	5571	21-	38-	7186	31-	48-	9167	45-	++	11811	54-	13666	53-	16265	54-						
CAMBORNE 03808	122330	088	12	09	075	++	++	1411	02	01	2973	01	11-	5610	12-	31-	7279	24-	44-	9314	39-	++	11971	58-	13805	55-	16415	53-	18730	50-	20928	51-		
	131130	088	14	10	143	11	07	1484	05	02-	3046	01-	14-	5666	13-	29-	7321	28-	42-	9325	42-	++	11957	57-	13789	55-	16381	54-						
VALENTIA 03953	122330	014	11	09	118	11	09	1458	03	01	3017	02-	11-	5630	15-	29-	7290	26-	40-	9310	40-	++	11970	57-	++++	++	16420	52-						
	131200	014	17	11	143	14	09	1481	02	02-	3044	01-	19-	5660	16-	25-	7310	26-	36-	9320	42-	++	11940	58-	++++	++	16380	54-						
Ocean Weather Station 'I' 59°00'N 19°00'W	122300		11	09	124	10	06	1448	01	06-	2988	08-	13-	5530	22-	28-	7150	31-	42-	9130	46-	++	11760	50-	13650	48-	16320	49-	18670	49-	20880	48-		
	131200		12	08	085	10	06	1409	00	04-	2947	07-	12-	5520	19-	24-	7140	30-	35-	9120	46-	++	11740	53-	13620	49-	16280	48-	18630	48-				
Ocean Weather Station 'J' 52°30'N 20°00'W	122300		12	10	136	11	09	1470	03	02	3045	01	13-	5670	15-	22-	7330	27-	36-	9340	43-	++	11960	58-										
	131200		13	12	092	12	10	1434	05	01	3009	02	25-	5640	16-	33-	7280	29-	40-	9270	44-	++	11890	56-	13740	52-	16370	51-						



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	02 656++	015 005 910 836	990 ++ 01 886 02- 03- 853 01 16- 788 ++ 23- 716 05- 25- 582 15- 34- 410 35- 50- 303 51- 270 54- 260 49- 224 45- 100 47- 086 49- 036 46-			270	09720	54-
	02 655++	016 006 910 820	996 ++ 01 970 04 02- 888 02- 05- 853 01 10- 749 03- 16- 502 23- 38- 393 37- 50- 345 45- 313 48- 150 45- 100 46- 038 47-			313	08750	48-
STORNOWAY 03026	02 15600	016 015 871	890 ++ 01- 864 ++ 05- 832 ++ 05- 812 04- 08- 782 03- 13- 738 ++ 17- 712 06- 21- 632 ++ 28- 619 13- 25- 562 ++ 26- 519 ++ 29- 530 ++ 29- 497 ++ 30- 439 30- 37- 375 ++ 47- 338 46- 308 50- 154 48- 093 50-			308	08860	50-
	02 21600	018 016 890 820	009 09 00 879 ++ 04- 867 02- 08- 854 01 08- 848 ++ 11- 746 ++ 21- 690 ++ 21- 647 10- 26- 617 ++ 23- 597 ++ 27- 566 ++ 27- 528 ++ 32- 457 26- 37- 434 27- 38- 339 40- 49- 245 55- 185 49- 071 50-			245	10480	55-
SHANWELL 03170	02 00901	013 013 839	962 06 01 907 02 01- 881 01 06- 864 02 11- 812 02- 11- 806 02- 11- 749 02- 19- 657 09- 23- 528 ++ 35- 370 40- 46- 297 53- 261 47- 108 50-			297	09110	53-
	02 65500	015 015 860	997 11 01 805 04- 06- 779 01- 10- 736 02- 17- 682 05- 22- 487 23- 38- 393 36- 49- 373 35- 48- 265 50- 245 52- 210 48- 123 48-			245	10480	52-
ALDERGROVE 03917	03 25601	013 004 829	989 09 06 946 08 03 846 01 00 806 ++ 04- 778 03- 11- 770 01- 11- 738 ++ 23- 724 ++ 25- 681 ++ 27- 653 ++ 20- 638 09- 20- 559 18- 27- 543 18- 28- 387 36- 48- 332 39- 49- 259 50- 154 50-			259	10100	50-
	03 685++	017 007 818	997 13 04 922 06 02 891 ++ 00 846 01 01- 798 ++ 07- 778 02- 08- 750 ++ 07- 727 04- 11- 710 ++ 11- 670 08- 18- 655 ++ 20- 642 ++ 18- 607 11- 25- 576 ++ 31- 544 16- 27- 526 ++ 33- 500 16- 36- 392 30- 47- 349 36- 304 44- 258 52- 216 58- 182 51- 167 50- 090 50- 047 50- 036 48-			216	11340	58-
AUGHTON 03322	02 855++	009 003 790	935 06 04 894 07 04 786 ++ 01- 654 10- 12- 527 ++ 23- 507 20- 27- 423 ++ 40- 362 40- 50- 347 43- 323 42- 133 50- 083 50-			347	08090	43-
	02 34500	015 009 750	004 ++ 04 995 11 02 911 03 01- 886 ++ 01- 880 01 03- 852 03 11- 820 ++ 20- 741 00 25- 722 ++ 18- 565 14- 29- 457 25- 41- 412 27- 44- 312 43- 225 54- 182 49- 054 51-			225	11100	54-
HEMSBY 03496	61 6742+	004 002 820	991 11 09 852 ++ 02 820 00 02- 587 12- 14- 491 21- 24- 360 40- 44- 321 47- 306 44- 114 52- 097 50- 40- 48- 339 42- 311 41- 255 49- 216 45- 061 52- 044 47-			321	08590	47-
	60 864++	011 009 792	000 10 08 929 05 04 850 03 02 782 01- 02- 761 00 04- 706 ++ 09- 672 06- 11- 555 ++ 20- 510 19- 29- 354 40- 48- 339 42- 311 41- 255 49- 216 45- 061 52- 044 47-			255	10200	49-
CRAWLEY 03774	51 870++	999 982 741	969 ++ 10 898 10 08 720 ++ 05- 670 ++ 11- 656 06- 17- 622 ++ 31- 550 ++ 30- 536 14- 26- 500 18- 27- 480 ++ 32- 433 19- 41- 357 31- 49- 246 49- 186 53- 099 52- 054 50-			186	12340	53-
	02 755++	013 996 753	984 10 05 916 05 03 888 03 01 861 05 02- 774 00 06- 755 00 08- 678 ++ 13- 651 09- 17- 631 08- 19- 612 ++ 26- 394 ++ 49- 317 43- 244 52- 190 55- 180 52- 119 55- 094 54- 076 57-			190	12120	55-
CAMBORNE 03808	02 762++	009 999 690	833 01 00 825 01 00 704 01 10- 686 ++ 14- 666 ++ 14- 590 06- 24- 571 05- 26- 441 18- 38- 370 28- 48- 261 47- 197 58- 186 55- 129 52- 108 54- 063 50- 043 50- 033 46-			197	12060	58-
	02 31600	017 006 718	002 11 07 937 07 04 925 08 04 888 ++ 00 872 ++ 00 833 05 02- 781 01 07- 769 01 06- 726 01 13- 684 03- 16- 555 09- 23- 489 14- 30- 404 27- 41- 336 37- 50- 270 49- 215 57- 072 53-			215	11500	57-
VALENTIA 03953	02 11500	014 013 755	832 02 01- 809 03 01- 755 00 07- 652 04- 15- 594 08- 23- 540 09- 23- 484 17- 31- 469 17- 32- 338 34- 47- 240 52- 200 57- 186 53- 117 54- 108 52- 081 52-			200	11970	57-
	03 68500	017 015 715	928 07 02 832 01 04- 792 02 06- 746 02 14- 659 05- 16- 649 03- 15- 611 05- 21- 484 18- 27- 456 19- 28- 291 44- 255 51- 223 56- 202 58- 168 54- 104 54- 093 52- 062 52-			202	11800	58-
Ocean Weather Station 'I' 59°00'N 19°00'W	03 3563+	015 015 821	913 ++ 01- 873 ++ 02- 865 00 04- 847 02 05- 817 00 07- 788 ++ 10- 661 11- 15- 628 13- 21- 578 17- 27- 570 18- 27- 545 ++ 23- 536 19- 23- 505 23- 27- 497 21- 28- 492 ++ 30- 446 25- 37- 400 ++ 42- 335 40- 47- 265 52- 233 56- 224 55- 208 50- 037 48-			233	10800	56-
	03 4567+	010 010 843	977 07 04 896 03 01- 815 02- 06- 783 ++ 06- 780 03- 08- 769 02- 10- 761 ++ 13- 704 07- 12- 697 07- 12- 680 07- 23- 674 07- 22- 650 ++ 18- 593 12- 16- 550 15- 19- 448 25- 31- 418 28- 33- 337 40- 46- 245 57- 232 57- 173 49- 055 47-			245	10400	57-
Ocean Weather Station 'J' 52°30'N 20°00'W	01 15600	016 016 674	011 ++ 09 942 07 07 881 ++ 03 834 03 02 820 ++ 04 808 ++ 16- 800 05 06- 779 ++ 02 731 03 07- 717 ++ 12- 587 07- 20- 570 09- 19- 540 11- 18- 471 17- 26- 315 40- 47- 222 58- 156 56-			222	11300	58-
	01 764++	011 011 668	971 10 08 873 06 03 844 ++ 01- 820 03 00 809 ++ 26- 781 05 ++ 690 01 21- 643 01- 26- 569 08- 25- 539 10- 34- 430 25- 35- 324 40- 236 58- 151 52- 088 52-			236	10900	58-



STATION	YYGGgg	Type	Surface	1000mb	900m	850mb 1500m	750mb 2100m	700mb 3000m	600mb 4200m	500mb 5400m	400mb 7200m	300mb 9000m	250mb 10500m	200mb 12000m	150mb 14100m	100mb 15900m	70mb 18300m	50mb 20700m	30mb 23700m	20mb 26400m	10mb 30900m					
LERWICK 03005	122330	T	020 12	+++ ++	020 13	020 13	020 16	020 13	360 06	290 09	260 19	240 28	250 14	270 11	270 09	220 03	140 03	130 03	090 09	090 09						
	130530	P	010 20	+++ ++	020 22	020 14	020 12	360 10	350 08	290 07	270 14	250 16	290 11	290 14	270 05	230 06	200 04	110 09								
	131130	T	020 22	+++ ++	020 19	020 18	360 13	350 09	320 06	300 05	240 09	300 12	310 21	300 11	270 07	160 03	190 05	170 05								
	131730	P	030 21	+++ ++	020 19	010 14	360 12	330 11	300 07	310 10	330 12	330 55	320 39	300 16	270 08	230 08	180 03	130 08				230 03				
STORNOWAY 03026	122330	T	050 17	+++ ++	070 14	050 08	020 05	360 07	350 05	300 08	290 20	300 31	320 43	310 27	290 17	270 10										
	130530	P	030 13	+++ ++	060 08	060 05	060 04	360 04	310 11	300 13	310 23	320 42	310 41	300 25	300 14											
	131130	T	030 10	+++ ++	030 02	080 02	030 01	300 01	270 08	300 16	320 41	320 49	320 55	300 30	280 17	260 08										
	131730	P	040 11	+++ ++	050 02	200 07	210 04	230 07	270 11	310 24	300 36	310 38	300 41	290 27												
SHANWELL 03170	122330	T	360 18	+++ ++	030 21	010 16	360 11	350 09	360 08	010 07	340 08	330 08	310 29	300 19	290 16	280 06 280 04										
	130530	P	330 10	+++ ++	020 19	360 18	350 17	350 13	340 10	320 13	330 21	330 49	330 43	310 21	290 12											
	131130	T	020 15	+++ ++	340 11	340 09	360 14	320 12	320 09	310 17	320 25	320 52	320 49	310 31	300 14											
	131730	P	130 07	+++ ++	240 04	310 11	360 15	320 09	320 14	320 22	330 43	330 49	320 52	310 25	300 15											
ALDERGROVE 03917	122330	T	360 03	+++ ++	030 15	020 14	020 16	010 18	360 20	340 28	320 39	320 65	310 57	310 50	300 25 290 16 300 40 300 25 290 16 290 19 290 15 150 03 310 02 290 24 290 18 250 05											
	130530	P	000 00	+++ ++	350 09	350 15	350 18	330 21	320 21	320 29	320 54	320 57	310 54	300 40												
	131130	T	310 04	+++ ++	340 10	330 15	300 15	290 17	290 19	310 32	310 39	310 49	310 49	300 40						290 19	290 15	150 03	310 02			
	131730	P	070 06	+++ ++	040 05	270 14	270 16	290 14	310 22	310 34	310 31	300 33	300 31	300 36						290 24	290 18	250 05				
AUGHTON 03322	122330	T	360 10	+++ ++	040 23	040 17	030 15	030 18	010 15	340 21	330 22	310 58	310 60	290 45	300 24	280 18	300 04 100 03 300 04 300 04 290 12 250 03 120 06									
	130530	P	340 09	+++ ++	360 17	350 20	350 19	350 17	340 26	330 31	330 39	320 59	310 52	300 46	290 21	300 14						300 04	100 03			
	131130	T	300 11	+++ ++	010 13	360 14	330 22	330 22	320 17	310 29	320 56	320 70	320 65	310 42	300 28	280 13						300 04				
	131730	P	290 11	+++ ++	350 09	360 07	330 18	310 23	300 23	320 31	310 39	310 46	310 44	300 45	300 23	290 12						250 03	120 06			
HEMSBY 03496	122330	T	020 08	+++ ++	060 15	070 17	080 14	080 06	240 09	270 13	250 16	270 38	270 44	280 38	290 20	290 08 290 08 290 14 290 14 230 03 010 04 100 14 280 16 300 20 280 16										
	130530	P	360 20	+++ ++	010 27	010 23	360 25	010 21	010 22	340 17	320 16	310 31	290 42	290 33	290 22						290 08					
	131130	P	340 17	+++ ++	340 26	340 22	340 25	340 28	340 27	320 26	320 22	320 63	310 52	300 31	280 23						290 14	230 03	010 04	100 14		
	131730	P	340 16	+++ ++	330 28	330 20	320 19	330 21	320 24	320 29	320 52	320 65	310 59	310 39	300 20						280 16					
CRAWLEY 03774	122330	T	270 05	+++ ++	280 18	290 14	270 15	260 16	310 13	300 23	280 68	280 81	280 77	290 61	290 29	290 17	290 05	270 08 070 07 100 09 120 17 100 22 270 04 130 03								
	130530	P	340 14	+++ ++	360 31	010 34	010 34	360 34	330 26	330 36	300 62	300 64	290 72	280 51	290 25	290 15										
	131113	P	340 08	+++ ++	350 17	350 29	010 25	340 17	330 27	320 36	320 62	310 65	310 62	290 46	290 32	280 12	270 08					070 07	100 09	120 17	100 22	
	131730	P	360 03	+++ ++	330 09	310 15	300 21	330 21	320 26	320 39	310 54	310 61	310 57	310 50	290 58	300 14	270 04					130 03				
CAMBORNE 03808	122330	T	350 20	+++ ++	350 25	350 27	330 31	320 30	310 40	300 57	290 66	280 80	280 83	290 69	290 34	290 15	290 09	110 10	P120 12							
	130530	P	360 12	+++ ++	360 20	360 19	360 19	350 20	330 26	320 41	310 53	300 63	290 63	290 60	290 33	290 23	280 09	100 06	050 06							
	131130	T	350 12	+++ ++	350 15	300 04	310 08	310 11	310 21	300 24	300 32	300 51	300 59	290 57	290 35	260 18										
	131730	P	330 06	+++ ++	280 08	270 10	280 10	290 11	320 22	310 33	300 32	290 37	290 59	290 59	290 29											
VALENTIA 03953	122330	T	000 00	040 02	+++ ++	010 04	+++ ++	330 21	+++ ++	320 49	310 55	300 63	+++ ++	290 59	+++ ++	290 14										
	131200	T	230 07	220 09	+++ ++	150 07	+++ ++	300 15	+++ ++	290 26	290 34	290 36	+++ ++	280 49	+++ ++	270 16										
Ocean Weather Station 'I' 59°00'N 19°00'W	122330	T	150 16	+++ ++	160 17	170 18	190 20	200 20	220 15	250 26	280 62	270 65	280 54	270 35	260 22	270 11	260 05	070 06								
	130600	P	180 20	+++ ++	160 23	190 18	190 22	200 21	210 20	220 29	260 41	270 60	260 54	270 40	270 22	220 10	140 05	070 09								
	131200	T	160 24	+++ ++	160 28	180 23	200 22	200 22	220 26	240 33	240 42	230 50	230 47	240 27	240 21	240 10	200 03									
	131800	P	180 20	+++ ++	170 32	180 31	180 24	180 28	180 28	220 38	220 44	220 48	240 48	230 50	230 40	190 25	220 05	220 01								
Ocean Weather Station 'J' 52°30'N 20°00'W	122300	T	190 11	+++ ++	210 13	230 11	270 14	270 19	260 31	270 37	270 46	270 46	260 48	260 55	250 26 250 19 250 11 250 09 240 42 240 44 260 42 250 32 240 20 230 46 230 46 270 27 230 07 230 05											
	130500	P	180 20	+++ ++	190 20	210 20	230 21	240 24	250 26	260 29	260 42	250 38	250 53	260 42						250 32	240 20					
	131200	T	180 17	+++ ++	200 23	200 24	230 26	240 20	240 32	250 36	240 36	240 43	240 44	260 42						250 32	240 20					
	131700	P	225 20	+++ ++	220 20	220 22	220 26	220 29	220 40	220 43	230 45	240 53	230 46	230 46						270 27	230 07	230 05				
LARKHILL 03743	130630	P	350 17	+++ ++	010 32	010 30	010 31	340 28	330 38	320 40	310 57	300 66	300 69	300 53	300 35	290 17	310 09									
	131030	P	340 10	+++ ++	350 18	010 22	350 21	340 21	330 29	320 36	320 61	320 60	310 60	300 42	290 28	230 09	240 07									

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE			SURFACE	1000mb	950mb	900mb	850mb	800mb	750mb	700mb	650mb	600mb	550mb	500mb
		MSL	Surf.	0°C level	m °C °C	m	°C °C	m °C °C	m °C °C	m °C °C	°C °C	m °C °C	°C °C	m °C °C	°C °C	m °C °C
131139	58.2°N 26.7°W	005	997	900	061 06 00	037	03 02	890 00 00	1344 03- 11-	1820 06- 14-	09- 17-	2853 11- 20-	13- 26-	4023 17- 31-	20- 34-	5374 24- 34-
Cloud :— 5/8Sc. 2200 to 3800ft; 3/8Sc. at 6000ft; 7/8Ac. 9000 to 10000ft; 1/8Ac. at 16000ft; 1/8Ci. at 25000ft.																
Inversion Levels :—										Isothermal Levels :—						
YYGGgg	POSITION	PRESSURE			SURFACE	1000mb	950mb	900mb	850mb	800mb	750mb	700mb	650mb	600mb	550mb	500mb
		MSL	Surf.	0°C level	m °C °C	m	°C °C	m °C °C	m °C °C	m °C °C	°C °C	m °C °C	°C °C	m °C °C	°C °C	m °C °C
131255	60.8°N 20.8°W	008	001	850	061 10 10	064	06 06	930 03 03	1389 00 00	1871 02- ++	05- ++	2923 07- ++	10- ++	4112 12- ++	15- ++	5486 19- ++
Cloud :— 5/8St. 1200 to 1400ft; 8/8Ns. 4000 to 19000ft.																
Inversion Levels :—										Isothermal Levels :—						
RATES OF SUBSCRIPTION: Single copy 5d. or post free 7d. One calendar month 13/-; one quarter 35/-; one year 125/-.												Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General Meteorological Office, Air Ministry, Kingsway, London, W.C.2				
For special arrangements for supply to schools and colleges see Form 2452.																



## UPPER WINDS AT ADDITIONAL LEVELS

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STATION		MAX. WIND
LERWICK 03005	039mb 090 15 05000/5 14700/5 040mb 110 11 24600m 050 10 07850/0 09050/1	
STORNOWAY 03026	15700m 290 07 07500/0 11130/1 220mb 310 44 080mb 220 04 12800m 280 20 11340/1	310 62 09630m
SHANWELL 03170	268mb 320 20 115mb 280 13 19200m 020 03 09700m 330 63 08400/0 08800/0 09220/0 10100/1 10460/1 132mb 290 12 11700/1	330 68 09470m
ALDERGROVE 03917	366mb 320 55 164mb 300 31 06150/0 06620/0 171mb 300 31 040mb 100 13 04600/0	320 68 08980m 320 65 07810m
AUGHTON 03322	326mb 310 42 087mb 280 12 22800m 040 02 07400/0 07820/0 060mb 210 03 22800m 110 06	300 72 09770m 330 64 08050m 320 72 09270m
HEMSBY 03496	103mb 280 12 17100m 280 12 09150/0 08260m 310 31 08260/0 08650/0 10330/1 06560m 320 38 16600m 310 08 07420/0	320 64 09250m 320 66 08550m
CRAWLEY 03774	450mb 290 54 058mb 290 06 28800m 090 19 33000m 110 18 33900m 110 13 02900/5 10690/1 12260/1	280 82 09540m 300 74 10360m 310 70 10480m 310 62 08740m
CAMBORNE 03808	180mb 290 50 P24600m 090 13 12600m 290 52 25500m 070 11 076mb 270 07 12920m 280 38 14700m 300 24 10560/0 12200/1 12480/1	280 89 10580m 290 65 11180m 290 63 10920m 280 73 11530m
VALENTIA 03953	809mb 350 07 755mb 340 13 594mb 320 30 469mb 310 48 240mb 290 64 117mb 300 25 928mb 170 09 792mb 240 05 746mb 300 10 255mb 290 42 168mb 280 37 062mb 300 04	290 67 10270m
Ocean Weather Station 'I' 59°00'N 19°00'W	444mb 260 45 040mb 360 03 15300m 230 12 21900m 070 06 06150/3 11800/1 060mb 120 02 04800m 190 37 15600m 220 20 21600m 220 02 05620/0 10640/0	260 69 09850m
Ocean Weather Station 'J' 52°30'N 20°00'W	162mb 260 41 21900m 250 02 093mb 240 16 19800m 300 02 13680/1	
LARKHILL 03743	15430/7	300 72 10730m 310 66 10400m

## NOTES ON THE AEROLOGICAL SITUATION

The low east of Hudson Bay and the downstream ridge over Labrador are moving slowly east with some intensification of the ridge. The low which yesterday was off Labrador is now south of Greenland and continues to move east. The ridge over the east Atlantic is moving slowly in over the British Isles while the trough over the North Sea and eastern England is making slow eastward progress. The broad trough extending southeast across Europe from Denmark is moving very slowly northeast.

AVERAGE AND EXTREME VALUES 1951-55  
JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.						
Press. Level	Average Height	Average Temp.	Extreme Max.	Extreme Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22345	-48.1	-42	-55	...	...
60	19675	-48.1	-41	-55	120	3
100	16320	-48.8	-41	-56	244	5
150	13660	-48.3	-41	-59	263	10
200	11770	-49.8	-39	-67	271	16
300	9125	-46.7	-37	-56	271	22
400	7160	-32.6	-23	-44	271	18
500	5555	-20.8	-11	-31	269	14
700	2985	-5.2	3	-14	266	9
850	1435	2.8	14	-7	269	6
Tropopause						
Average	Press. (mb.)	Temp. (°C)	Height (gpm.)			
Max.	257	-54.7	10190			
Min.	172	-68	6890			

LARKHILL/CRAWLEY† at 03, 15h.  
(Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N.,  
Long. 00° 13' W.)

Press. Level	Average Height	Average Temp.	Extreme Max.	Extreme Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22310	-49.6	-47	-57	106	9
60	19675	-51.4	-45	-59	136	3
100	16370	-52.6	-46	-61	251	8
150	13745	-51.8	-42	-65	265	15
200	11890	-54.0	-40	-65	268	20
300	9265	-44.7	-36	-54	265	20
400	7275	-29.6	-19	-41	265	17
500	5640	-17.8	-9	-28	263	15
700	3050	-2.1	7	-10	263	11
850	1480	5.7	16	-3	264	7
Tropopause						
Average	Press. (mb.)	Temp. (°C)	Height (gpm.)			
Max.	234	-56.8	10950			
Min.	160	-66	7225			

MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.

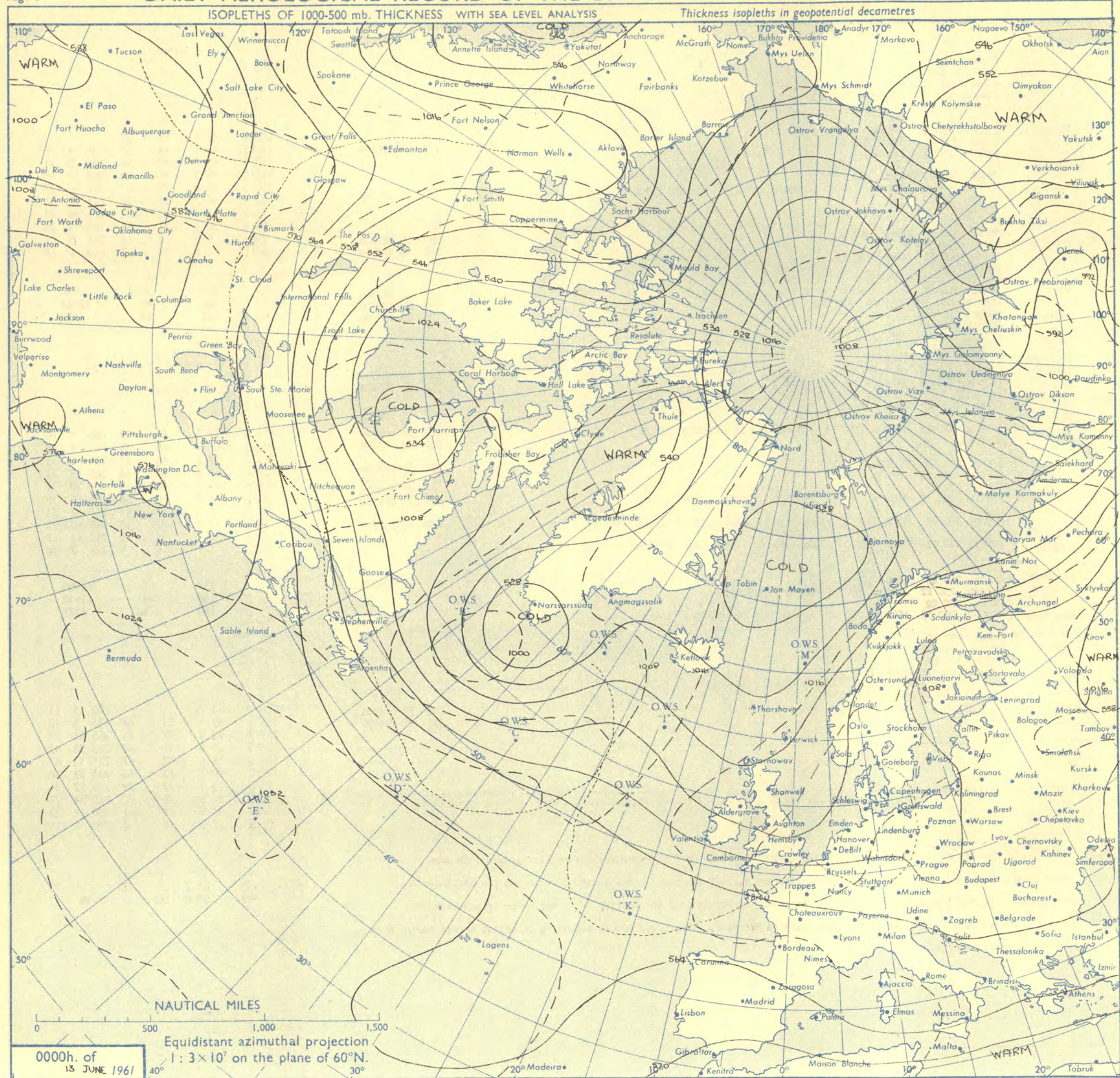
Press. Level	Average Height	Average Temp.	Extreme Max.	Extreme Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5
60	19670	-60.7	-53	-69	135	4
100	16510	-62.9	-57	-71	255	21
150	13995	-59.0	-51	-67	265	38
200	12185	-56.6	-47	-67	275	42
300	9530	-40.1	-33	-46	285	32
400	7500	-23.9	-19	-29	285	27
500	5835	-11.8	-8	-17	285	24
700	3165	7.2	13	-1	290	18
850	1535	17.9	27	8	290	9
Tropopause						
Average	Press.	Temp.	Max.	Min.	Max.	Min.
Upper	mb.	°C	mb.	mb.	°C	°C
Lower	123	-65.7	...	73	...	-73
	193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

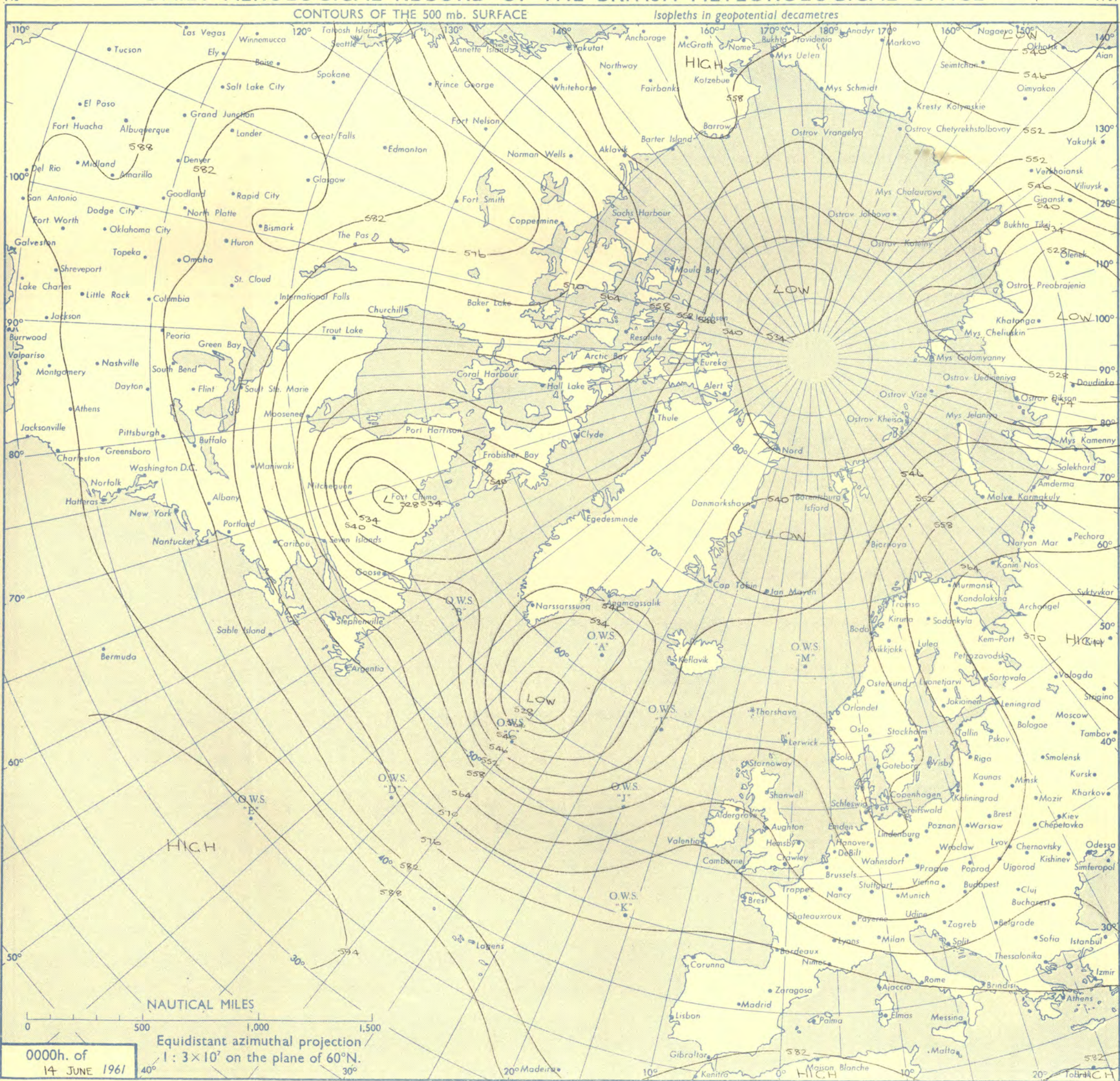
† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.











STATION	YYGGgg	SURFACE			1000mb			850mb			700mb			500mb			400mb			300mb			200mb			150mb			100mb			70mb			50mb			30mb		
		gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C				
LERWICK 03005	132330	082	06	04	142	06	04	1459	01	10	3001	06	21	5557	22	37	7172	32	44	9151	46	++	11791	49	13695	47	16376	48	18725	49	20946	47								
	141130	082	10	05	149	09	03	1471	02	10	3009	06	20	5583	20	28	7203	31	37	9179	46	++	11800	53	13683	48	16378	46	18757	45										
STORNOWAY 03026	132330	013	09	07	144	09	06	1471	02	12	3013	07	13	5593	19	25	7216	31	34	9191	46	++	11784	58	13636	51	16265	52												
	141134	013	14	07	130	12	03	1467	02	01	3016	03	11	5620	17	23	7253	29	33	9245	45	++	11861	56	13723	49	16387	49												
SHANWELL 03170	132330	005	07	05	153	09	03	1478	01	00	3021	05	20	5605	18	33	7240	29	38	9227	46	++	11833	54	13702	50														
	141130	005	13	06	147	09	04	1483	03	03	3032	03	14	5626	18	25	7251	31	35	9235	45	++	11836	59	13680	51	16314	51	18629	51	20816	50	24165	48						
ALDERGROVE 03917	132330	077	10	07	141	11	08	1483	03	01	3024	03	15	5626	16	26	7266	28	34	9257	45	++	11859	59	13692	53	16308	52	18615	52	20790	52								
	141130	077	16	06	132	15	05	1477	04	00	3032	04	07	5652	17	22	7287	29	33	9275	45	++	11874	60	13700	54	16308	53	18615	52	20797	50	24136	50						
AUGHTON 03322	132330	056	09	06	156	11	07	1491	03	02	3043	05	13	5638	17	34	7281	28	41	9281	44	++	11905	58	13752	52	16379	52	18689	52	20871	51	24209	49						
	141130	056	17	05	154	14	03	1499	04	04	3052	01	11	5670	17	25	7305	29	36	9299	44	++	11908	58	13760	51	16388	52	18709	51	20910	49	24278	47						
HEMSBY 03496	132330	012	07	06	144	09	05	1470	03	10	3031	03	28	5616	19	40	7251	28	47	9248	44	++	11880	53	13748	51	16395	51	18720	51										
	141130	012	15	09	166	10	06	1497	03	09	3052	03	15	5656	16	25	7296	29	36	9289	44	++	11905	57	13751	51	16373	53												
CRAWLEY 03774	132330	144	09	07	155	10	07	1492	03	01	3049	04	17	5641	16	34	7285	28	43	9281	44	++	11904	55	13760	52	16381	53												
	141130	144	16	08	165	15	07	1507	03	01	3063	02	19	5684	15	31	7329	28	37	9330	43	++	11953	55	13804	53	16413	53												
CAMBORNE 03808	132330	088	09	08	159	10	08	1502	06	01	3074	01	19	5701	15	27	7347	28	38	9346	43	++	11964	58	13796	55	16390	54	18688	52										
	141130	088	15	10	154	15	10	1495	06	02	3068	01	15	5693	16	30	7329	29	40	9324	45	++	11913	60	13743	55	16338	54	18646	51										
VALENTIA 03953	132330	014	13	10	146	12	10	1481	07	00	3059	01	03	5700	15	24	7350	28	34	9350	44	++	11960	57	++++	++	16380	53												
	141130	014	14	11	124	12	09	1458	04	02	3029	01	12	5650	16	30	7290	28	33	9290	43	++	11900	59	++++	++	16330	53												
Ocean Weather Station 'I'  59°00'N 19°00'W	140001		11	10	005	11	10	1345	04	03	2898	05	07	5480	19	24	7110	28	43	9120	43	++	11750	51	13630	49	16300	48	18660	47										
	141200		11	10	029	++	++	1303	02	01	2847	06	07	5410	180	42	7040	30	48	9020	44	++	11680	48	13590	47	16280	46	18630	46										
Ocean Weather Station 'J'  52°30'N 20°00'W	132300		13	10	061	12	09	1400	03	01	2969	00	05	5580	16	29	7220	29	37	9220	44	++	11850	54	13710	52	16340	51	18660	51	20860	49								
	141100		12	07	046	11	05	1371	00	03	2909	07	19	5480	19	42	7100	32	++	9080	45	++	11730	48	13630	49	16290	49	18630	50										



## PRESSURES AND TEMPERATURES OF SIGNIFICANT LEVELS

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STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE			TROPOPAUSE mb m °C
		MSL	Surf.	0°C level	
LERWICK 03005	02 45600	017 007 803	986 07 03 896 00 03- 870 02 07- 799 00 13- 620 11- 27- 576 16- 32- 495 23- 38- 465 24- 38- 334 40- 50- 261 52- 244	54- 188 47- 100 48- 047 47-	244 10510 54-
	02 785++	018 008 815	951 02 01- 921 03 03- 906 04 07- 839 02 10- 771 04- 17- 734 05- 22- 665 09- 23- 643 08- 22- 602 ++ 20- 583	++ 24- 550 ++ 22- 464 23- 32- 368 36- 42- 336 40- 46- 297 47- 237 56- 178 49- 100 46- 057 43-	237 10700 56-
STORNOWAY 03026	01 00901	018 016 805	006 10 08 972 ++ 01 921 04 02- 906 ++ 04- 892 ++ 03- 855 ++ 12- 844 02 12- 761 ++ 12- 702 ++ 13- 695 07- 14- 654 06- 19- 639 ++ 21- 618 ++ 18- 580 ++ 27- 522 ++ 24- 511 ++ 26- 495 ++ 24- 465 ++ 26- 433 26- 29- 339 40- 43- 239 57- 215 61- 181 53- 152 50- 102 52- 080 50-		215 11320 61-
	03 25671	016 014 814	008 12 04 990 ++ 01 893 05 03 846 02 01 807 ++ 02- 738 05- 06- 727 ++ 11- 711 03- 11- 632 06- 20- 610 07- 16- 592 ++ 18- 552 ++ 17- 528 14- 21- 460 22- 26- 324 40- 44- 218 59- 165 50- 098 49-		218 11290 59-
SHANWELL 03170	02 25630	019 018 830	006 09 02 934 03 01 916 04 02 867 03 01 792 03- 05- 776 01- 08- 762 ++ 13- 719 ++ 19- 485 18- 33- 333 40-	47- 240 57- 205 56- 181 50- 123 50-	240 10700 57-
	02 28402	018 017 811	003 09 04 968 ++ 04 931 ++ 04 920 08 03 892 06 01- 743 05- 08- 728 ++ 10- 709 02- 14- 663 06- 14- 654 ++ 17- 624 07- 16- 496 18- 25- 473 ++ 29- 408 ++ 34- 376 34- 39- 328 40- 46- 235 58- 205 59- 184 56- 173 52- 100 51- 030 48-		235 10830 58-
ALDERGROVE 03917	04 758++	017 008 809	994 12 09 976 ++ 07 947 11 08 841 ++ 00 796 ++ 04- 741 06- 07- 736 ++ 06- 726 03- 08- 715 ++ 12- 694 03- 16- 641 06- 18- 626 06- 21- 615 ++ 24- 539 ++ 22- 480 ++ 29- 448 21- 30- 327 ++ 44- 272 50- 233 57- 212 60- 152 53- 064 53- 030 50-		212 11490 60-
	03 11635	016 006 759	911 08 03 842 ++ 01- 812 01 05 788 ++ 06- 766 00 11- 750 ++ 06- 706 04- 06- 678 ++ 08- 672 ++ 10- 655 03- 10- 563 09- 17- 542 ++ 20- 482 ++ 23- 367 34- 38- 330 ++ 43- 228 59- 208 61- 173 56- 072 51- 030 50-		208 11620 61-
AUGHTON 03322	02 00900	019 012 787	996 11 07 965 ++ 02 854 ++ 00 844 02 04- 840 ++ 05- 780 ++ 04- 735 ++ 10- 705 ++ 11- 670 06- 19- 639 ++ 23- 606 09- 19- 586 09- 22- 536 13- 30- 498 18- 35- 468 19- 36- 320 40- 50- 211 59- 154 52- 030 49-		211 11570 59-
	03 11501	018 012 798 722	992 14 02 900 07 01 878 ++ 02- 776 02- 08- 764 01- 11- 736 01- 10- 722 00 14- 696 01- 10- 676 ++ 15- 640 04- 14- 606 ++ 21- 583 08- 18- 547 10- 20- 494 17- 25- 420 27- 34- 324 40- 46- 252 54- 203 59- 169 52- 069 51- 030 47-		203 11810 59-
HEMSBY 03496	02 25400	017 016 742 873	005 10 06 954 ++ 04 934 05 01- 867 01- 02- 856 03 09- 813 03 21- 790 03 21- 485 20- 41- 462 21- 42- 372 32- 50- 283 47- 220 56- 134 49- 058 52-		220 11280 56-
	02 11500	020 018 757	013 12 07 977 08 04 958 ++ 04 941 07 03 873 03 00 852 03 09- 793 02 15- 771 01 12- 713 03- 14- 631 06- 21- 563 11- 25- 553 10- 24- 502 ++ 24- 325 40- 46- 224 57- 206 58- 152 51- 076 53-		206 11720 58-
CRAWLEY 03774	02 35600	019 001 749	990 11 06 952 ++ 03 888 ++ 03 828 01 00 807 04 18- 702 ++ 16- 651 07- 22- 612 ++ 28- 592 ++ 23- 564 ++ 30- 532 ++ 29- 484 17- 36- 370 33- 46- 274 48- 227 56- 167 52- 088 52-		227 11100 56-
	02 685++	020 003 749	990 14 05 874 04 02 818 01 01- 801 02 05- 792 ++ 10- 740 ++ 13- 719 ++ 19- 664 03- 20- 644 02- 23- 506 14- 30- 378 32- 40- 316 ++ 50- 242 55- 219 57- 181 53- 080 53-		219 11380 57-
CAMBORNE 03808	02 00900	019 009 690	996 11 08 965 09 07 949 10 03 916 ++ 04 883 ++ 06- 873 ++ 06- 856 ++ 01- 781 ++ 05- 745 ++ 13- 700 ++ 19- 687 ++ 12- 675 01- 15- 661 00 19- 609 04- 23- 538 12- 23- 481 17- 29- 471 ++ 28- 322 40- 48- 215 59- 172 55- 097 54- 057 51-		215 11510 59-
	02 48600	018 008 678	942 08 06 898 ++ 03 881 05 03 858 06 00 828 06 10- 787 04 12- 752 03 20- 721 ++ 10- 701 ++ 15- 648 02- 17- 585 07- 20- 522 ++ 26- 500 16- 30- 425 26- 37- 326 40- 50- 221 61- 204 61- 187 55- 091 54- 052 47-		221 11290 61-
VALENTIA 03953	03 856++	017 016 649	975 11 07 874 03 01 841 09 01- 814 07 12- 744 01 02- 649 00 12- 307 42- 252 54- 227 57- 145 56- 133 53- 058 51-		227 11100 57-
	02 855++	015 013 731	990 11 09 864 03 00 800 06 29- 731 00 04- 723 01- 07- 685 01- 15- 594 07- 24- 511 15- 29- 312 41- 269 50- 230 57- 210 60- 153 53- 094 53- 041 48-		210 11600 60-
Ocean Weather Station 'I' 59°00'N 19°00'W	61 872++	001 001 770	782 01 01- 695 ++ 08- 677 07- 17- 662 ++ 32- 659 06- 26- 645 07- 18- 618 ++ 15- 592 10- 14- 552 14- 17- 530 ++ 22- 498 ++ 25- 489 21- 28- 481 20- 28- 463 ++ 36- 384 30- 46- 348 35- 49- 225 56- 208 57- 109 48- 053 47-		208 11500 57-
	61 873++	997 997 820	826 00 01- 695 07- 08- 663 ++ 10- 635 11- 19- 590 ++ 23- 576 ++ 29- 531 16- 38- 498 18- 42- 413 23- 48- 350 36- 262 51- 239 53- 196 47- 139 48- 103 46- 061 49-		239 10500 53-
Ocean Weather Station 'J' 52°30'N 20°00'W	03 856++	007 007 700	820 01 01- 795 04 24- 771 03 31- 737 ++ 04- 706 00 05- 642 ++ 09- 623 08- 21- 615 06- 25- 585 08- 13- 549 ++ 17- 540 ++ 23- 461 20- 33- 406 28- 36- 371 32- 41- 321 40- 50- 237 56- 214 56- 166 50- 078 52- 045 48-		237 10800 56-
	15 48570	006 006 850	000 11 05 925 ++ 02 863 00 03- 770 ++ 06- 748 03- 19- 748 ++ 12- 729 ++ 12- 700 ++ 19- 682 08- 23- 615 11- 35- 535 16- 40- 389 33- 377 33- 328 40- 259 53- 246 54- 212 48- 096 49- 061 49-		246 10400 54-



STATION	YYGGgg	Type	Surface	1000mb	900m	850mb	750mb	700mb	600mb	500mb	400mb	300mb	250mb	200mb	150mb	100mb	70mb	50mb	30mb	20mb	10mb
						1500m	2100m	3000m	4200m	5400m	7200m	9000m	10500m	12000m	14100m	15900m	18300m	20700m	23700m	26400m	30900m
LERWICK 03005	132330	T	360 10	+++ ++	030 20	040 14	350 08	320 10	300 10	290 18	310 34	310 49	310 46	300 22	270 08	210 04	160 04	140 05			
	140530	P	360 10	+++ ++	030 14	050 10	020 08	300 07	290 23	310 23	310 34	310 34	310 29	300 16	260 07	220 04	140 07	140 05	150 12		
	141130	T	050 13	+++ ++	090 13	070 05	260 05	300 07	290 10	310 19	300 25	310 30	310 27	290 17	270 08	230 05	160 10				
	141730	P	060 12	+++ ++	100 04	150 01	220 02	260 10	280 13	280 14	290 21	290 25	290 21	280 15	250 10	190 09	180 07	140 09			
STORNOWAY 03026	132330	T	080 03	+++ ++	160 03	270 09	250 11	250 12	270 15	290 17	280 28	280 32	280 37	270 28	260 16	220 03					
	140530	P	000 00	+++ ++	210 10	220 14	220 12	230 10	230 09	270 21	270 25	280 31	280 30	270 22	250 12	220 07	210 05	100 06			
	141134	T	150 07	+++ ++	190 20	200 21	210 18	220 15	230 15	240 21	250 28	260 29	250 29	250 24	240 15	220 09	180 08	150 11			
	141730	P	150 08	+++ ++	190 29	180 31	180 29	210 20	220 30	220 33	220 26	230 37	240 30	240 26	230 16	220 11	150 07				
SHANWELL 03170	132350	P	130 04	+++ ++	190 03	270 08	290 09	290 11	290 13	320 22	310 36	310 38	310 40	300 24	280 16	290 09	220 04				
	140530	P	000 00	+++ ++	280 04	290 08	300 14	280 11	290 17	290 25	290 28	290 29	290 28	290 23	280 13	250 05	200 04	140 04			
	141130	T	110 11	+++ ++	260 11	270 08	270 13	270 12	280 13	290 19	280 21	290 33	300 35	280 30	260 15	230 13	190 06	140 10	120 09	P120 11	
	141730	P	090 07	+++ ++	250 11	240 15	240 11	250 12	250 16	270 17	270 28	270 31	270 39	270 24	260 15	280 10					
ALDERGROVE 03917	132330	T	090 05	+++ ++	210 11	240 11	260 06	300 07	290 16	300 19	280 21	290 26	280 28	280 33	270 24	250 09	270 04	130 07	100 09		
	140545	P	170 04	+++ ++	220 11	210 16	200 15	250 10	260 16	270 22	280 22	290 26	290 35	280 26	270 16						
	141130	T	210 17	+++ ++	170 19	180 22	230 16	230 15	240 14	260 22	260 27	260 34	260 33	250 31	260 21	240 12	210 06	160 06	P120 10		
	141730	P	170 13	+++ ++	200 16	210 17	210 18	220 16	220 25	220 29	240 30	240 38	240 37	240 27	240 21	220 15	190 06	130 02	110 05		
AUGHTON 03322	132330	T	000 00	+++ ++	340 10	310 10	290 12	290 18	310 23	320 23	310 27	310 29	310 34	300 32	300 22	280 13	270 05	140 05	P110 10	110 13	
	140530	P	110 03	+++ ++	220 01	010 04	320 08	300 14	300 13	300 19	290 25	290 26	290 25	290 24	290 18	280 08	250 02	140 05			
	141130	T	160 09	+++ ++	150 07	180 04	250 08	260 11	280 15	290 19	300 20	290 20	310 30	290 27	260 15	240 07	310 03	180 05			
	141730	P	120 05	+++ ++	180 09	200 09	230 10	250 12	260 14	270 13	270 17	270 28	280 31	280 24	260 19	240 10	220 06	330 02			
HEMSBY 03496	132330	T	270 04	+++ ++	340 20	330 20	320 16	320 21	320 17	320 29	330 44	310 50	320 55	310 38	300 26	280 12	270 11				
	140530	P	300 05	+++ ++	340 22	340 20	310 17	320 15	320 15	310 27	320 32	330 35	320 39	310 35	290 20	280 10					
	141130	T	020 07	+++ ++	320 12	330 13	300 12	290 10	320 15	320 23	310 21	300 28	290 29	290 28	290 19	260 06					
	141730	P	150 08	+++ ++	290 04	300 12	300 14	290 12	310 17	320 19	330 25	330 33	320 32	310 27	280 17						
CRAWLEY 03774	132330	T	090 03	+++ ++	310 05	320 06	320 18	320 19	310 24	320 29	310 35	300 46	300 49	300 41	300 29	280 12					
	140530	P	090 02	+++ ++	300 08	290 07	300 07	300 14	320 25	320 31	320 28	320 34	310 33	300 31	290 25						
	141110	P	150 02	+++ ++	180 05	270 09	270 09	280 09	310 14	310 21	300 26	290 26	280 29	290 31	300 18	290 10	220 05	110 05			
	141730	P	160 02	+++ ++	230 11	250 07	280 10	280 09	290 12	320 12	310 17	330 26	330 35	310 23	280 17	270 11					
CAMBORNE 03808	132330	T	290 02	+++ ++	310 04	250 05	280 09	290 12	290 15	290 19	290 25	280 31	280 39	270 51	280 26	280 13	240 03				
	140530	P	000 00	+++ ++	260 05	250 07	250 10	280 07	280 13	290 17	290 23	290 25	290 22	280 35	280 23	270 11	240 03	000 00			
	141253	P	320 05	+++ ++	210 07	220 11	220 09	240 08	270 12	270 13	270 13	290 19	300 27	280 23	260 18	250 12	220 06	160 06			
	141730	P	170 06	+++ ++	170 06	190 10	220 14	250 13	230 10	250 07	240 22	250 28	260 28	260 27	260 20	260 15	250 06				
VALENTIA 03953	132330	T	200 04	190 07	+++ ++	220 12	+++ ++	260 16	+++ ++	270 16	270 27	270 31	+++ ++	270 31	+++ ++	250 17					
	141130	T	190 14	190 17	+++ ++	200 19	+++ ++	210 20	+++ ++	230 34	230 36	220 34	+++ ++	240 34	+++ ++	230 15					
Ocean Weather Station 'I' 59°00'N 19°00'W	140001	T	150 25	+++ ++	160 43	170 37	180 36	190 33	180 40	190 34	200 36	190 43	190 44	190 31	190 23	200 10	240 08				
	140600	P	180 20	+++ ++	180 25	170 28	170 33	170 33	170 34	180 39	180 56	180 49	190 46	200 32	220 19	220 10	130 10	130 06			
	141200	T	170 18	+++ ++	180 24	190 36	180 29	160 35	160 40	160 54	170 57	170 66	170 65	180 39	190 17	190 14	190 06				
	141800	P	180 20	+++ ++	180 24	190 28	190 29	190 30	180 41	150 57	160 69	160 79	160 54	180 28							
Ocean Weather Station 'J' 52°30'N 20°00'W	132300	T	190 20	+++ ++	210 34	220 34	220 41	220 43	220 39	220 45	220 51	220 62	220 65	220 52	220 37	220 20	230 16	230 05			
	140500	P	225 20	+++ ++	230 29	230 31	230 32	220 49	220 54	220 59	210 58	210 68	200 56	220 37	230 24	220 16	220 06				
	141100	T	270 17	+++ ++	230 28	230 34	210 45	210 48	220 49	210 68	210 80	220 83	210 73	210 48	210 28	210 15	210 05				
	141800	P	270 20	+++ ++	260 23	240 28	240 34	240 43	250 49	250 55	230 70	220 71	230 52	220 36							
LARKHILL 03743	140630	P	100 05	+++ ++	220 08	250 08	250 08	280 11	310 18	310 22	310 27	290 28	280 29	290 30	280 23	270 09	250 08				
	141020	P	170 05	+++ ++	180 07	230 07	250 07	260 07	310 14	300 18	290 24	290 26	290 24	290 26	300 21						

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE		SURFACE	1000mb	950mb	900mb	850mb	800mb	750mb	700mb	650mb	600mb	550mb	500mb
		MSL	Surf. 0°C level	m °C °C	m	°C °C	m °C °C	m °C °C	m °C °C	°C °C	m °C °C	°C °C	m °C °C	°C °C	m °C °C
Cloud :—															
Inversion Levels :—															
Isothermal Levels :—															
YYGGgg	POSITION	PRESSURE		SURFACE	1000mb	950mb	900mb	850mb	800mb	750mb	700mb	650mb	600mb	550mb	500mb
		MSL	Surf. 0°C level	m °C °C	m	°C °C	m °C °C	m °C °C	m °C °C	°C °C	m °C °C	°C °C	m °C °C	°C °C	m °C °C
Cloud :—															
Inversion Levels :—															
Isothermal Levels :—															
RATES OF SUBSCRIPTION: Single copy 5d. or post free 7d. One calendar month 13/-; one quarter 35/-; one year 125/-. For special arrangements for supply to schools and colleges see Form 2452.												Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General Meteorological Office, Air Ministry, Kingsway, London, W.C.			



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AVERAGE AND EXTREME VALUES 1951-55							
JUNE							
<b>LERWICK</b> (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.							
Press. Level	Average		Extreme Temps.		Wind*		
	Height	Temp.	Max.	Min.	V <sub>R</sub>	V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	22345	-48.1	-42	-55	...	...	(11)
60	19675	-48.1	-41	-55	120	3	8
100	16320	-48.8	-41	-56	244	5	11
150	13660	-48.3	-41	-59	263	10	18
200	11770	-49.8	-39	-67	271	16	27
300	9125	-46.7	-37	-56	271	22	41
400	7160	-32.6	-23	-44	271	18	33
500	5555	-20.8	-11	-31	269	14	26
700	2985	-5.2	3	-14	266	9	19
850	1435	2.8	14	-7	269	6	18
Tropopause		Press. (mb.)	Temp. (°C)		Height (gpm.)		
Average		257	-54.7		10190		
Max.		405	-40		12955		
Min.		172	-68		6890		
<b>LARKHILL/CRAWLEY</b> † at 03, 15h. (Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.)							
Press. Level	Average		Extreme Temps.		Wind*		
	Height	Temp.	Max.	Min.	V <sub>R</sub>	V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	22310	-49.6	-47	-57	106	9	10
60	19675	-51.4	-45	-59	136	3	8
100	16370	-52.6	-46	-61	251	8	13
150	13745	-51.8	-42	-65	265	15	21
200	11890	-54.0	-40	-65	268	20	32
300	9265	-44.7	-36	-54	265	20	39
400	7275	-29.6	-19	-41	265	17	31
500	5640	-17.8	-9	-28	263	15	25
700	3050	-2.1	7	-10	263	11	19
850	1480	5.7	16	-3	264	7	16
Tropopause		Press. (mb.)	Temp. (°C)		Height (gpm.)		
Average		234	-56.8		10950		
Max.		388	-41		13440		
Min.		160	-66		7225		
<b>MALTA</b> (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.							
Press. Level	Average		Extreme Temps.		Wind*		
	Height	Temp.	Max.	Min.	V <sub>R</sub>	V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5	11
60	19670	-60.7	-53	-69	135	4	10
100	16510	-62.9	-57	-71	255	21	24
150	13995	-59.0	-51	-67	265	38	42
200	12185	-56.6	-47	-67	275	42	47
300	9530	-40.1	-33	-46	285	32	38
400	7500	-23.9	-19	-29	285	27	31
500	5835	-11.8	-8	-17	285	24	28
700	3165	7.2	13	-1	290	18	22
850	1535	17.9	27	8	290	9	14
Tropo- pause		Average Press.	Max. Press.	Min. Press.	Max. Temp.	Min. Temp.	
		mb.	mb.	mb.	°C	°C	
Upper		123	-65.7	...	73	...	-73
Lower		193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

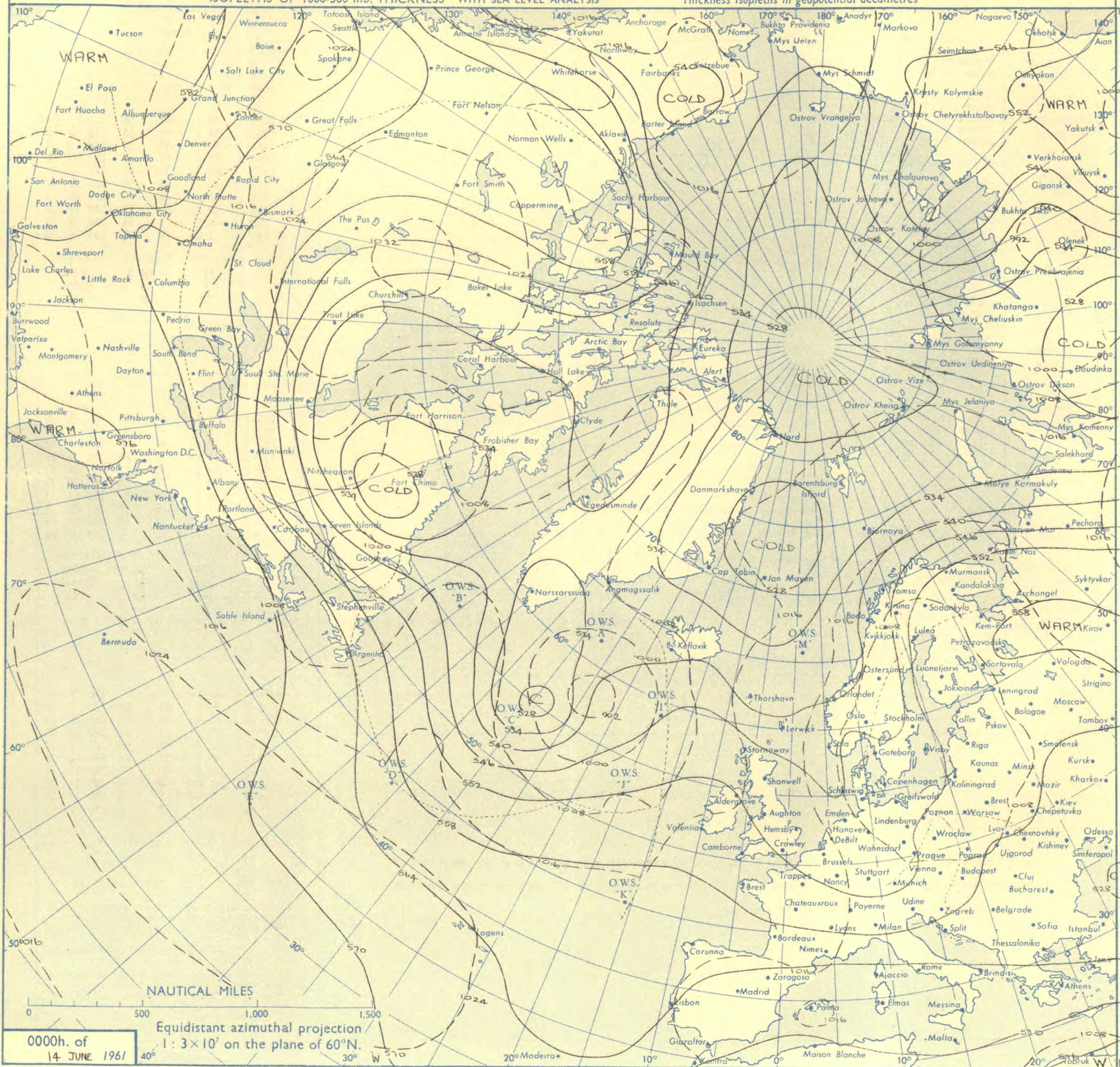
Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.

Today's maps show much the same features as yesterday's, except that most of them have continued their steady progress towards the east. The minimum in the thickness pattern at about 55°N 30°W represents air which is unseasonably cold and remarkably slow to warm up.



ISOPLETHS OF 1000-500 mb. THICKNESS WITH SEA LEVEL ANALYSIS

Thickness isopleths in geopotential decametres





## Isopleths in geopotential decametres





## HEIGHTS AND TEMPERATURES OF STANDARD ISOBARIC SURFACES

15 June, 1961

STATION	YYGGgg	SURFACE		1000mb		850mb		700mb		500mb		400mb		300mb		200mb		150mb		100mb		70mb		50mb		30mb	
		gpm	°C °C	gpm	°C °C	gpm	°C °C	gpm	°C °C	gpm	°C °C	gpm	°C °C	gpm	°C °C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C
LERWICK 03005	142330	082	07 06	141	07 05	1470	03 11	3017	04 17	5607	18 21	7237	30 34	9218	47 ++	11822	56 13686	50 16342	49 18695	47							
	151130	082	12 09	097	12 09	1437	05 01	2988	03 12	5589	17 24	7223	30 35	9219	44 ++	11827	54 13700	47 16385	48 18740	47 20973	46						
STORNOWAY 03026	142330	013	10 09	103	13 08	1453	04 03	3014	03 05	5605	18 21	7235	30 34	9221	45 ++	11827	55 13688	50 16336	51 18674	49							
	151130	013	11 10	067	11 09	1398	02 01	2943	07 12	5493	21 35	7099	33 42	9070	44 ++	11788	45 13708	45 16395	47								
SHANWELL 03170	142330	005	10 09	131	10 07	1478	04 03	3032	03 08	5643	17 25	7277	29 34	9271	44 ++	11872	59 13713	52 16351	51 18680	50							
	151130	005	14 10	100	13 08	1439	04 03	2996	02 03	5603	17 30	7242	28 43	9237	44 ++	11858	53 13752	46 16419	49 18765	49 20975	45 24376	45					
ALDERGROVE 03917	142330	077	13 10	106	13 10	1450	04 03	3021	01 05	5646	15 23	7287	28 32	9285	44 ++	11883	52 13729	51 16368	51 18694	50							
	151130	077	15 10	103	15 10	1443	03 01	3001	04 35	5575	20 50	7189	34 ++	9149	48 ++	11786	49 13667	51 16300	52 18621	52 20803	48 24161	44					
AUGHTON 03322	150115	056	10 09	135	13 07	1485	05 01	3054	03 06	5677	16 26	7316	28 33	9312	44 ++	11923	60 13752	53 16374	52 18693	50 20897	49						
	151140	056	15 09	132	14 09	1474	04 03	3044	01 03	5656	16 29	7292	29 42	9288	44 ++	11914	50 13807	48 16479	48 18853	45 21113	43						
HEMSBY 03496	142330	012	09 08	156	12 08	1499	05 01	3066	00 18	5695	15 26	7340	27 35	9345	43 ++	11953	59 13792	52 16409	52 18722	51 20914	50						
	151130	012	19 10	149	16 07	1502	05 02	3069	00 15	5686	16 27	7327	28 38	9327	43 ++	11946	60 13787	53 16409	52 18717	52 20903	51						
CRAWLEY 03774	142330	144	09 06	161	10 06	1511	05 02	3077	01 19	5711	14 27	7361	26 37	9371	43 ++	11977	61 13808	54 16414	53 18721	52 20915	50						
	151130	144	19 11	154	18 10	1515	06 03	3082	00 16	5699	16 20	7338	28 36	9343	43 ++	11961	60 13803	54 16420	52 18372	52							
CAMBORNE 03808	142330	088	11 09	145	11 09	1491	05 02	3066	01 07	5694	16 27	7334	28 35	9330	44 ++	11931	60 13761	54									
	151130	088	17 09	148	16 08	1500	06 01	3077	00 04	5688	17 27	7318	30 40	9215	47 ++	11903	53 13762	53 16386	52 18716	49 20934	47 24356	43					
VALENTIA 03953	150100	014	13 12	093	13 12	1438	06 04	3010	01 04	5630	16 19	7270	28 31	9280	42 ++	11900	57										
	151130	014	14 10	134	13 09	1471	05 01	3041	01 19	5650	16 ++	7290	28 ++	9280	45 ++	11940	50 +++++	++		16450	52						
Ocean Weather Station 'I' 59°00'N 19°00'W	150000	09 07		029 ++	++		1298	00 ++	2823	10 ++	5330	28 ++	6890	40 ++	8850	39 ++	11640	39 13590	43 16310	45 18680	46 20920	46					
	151100	10 07		041 ++	++		1280	01 03	2006	10 14	5310	29 38	6880	35 46	8850	40 ++	11610	43 13550	44 16240	48 18590	48 20810	48					
Ocean Weather Station 'J' 52°30'N 20°00'W	142300	12 07		079	11 05	1406	00 05	2944	05 26	5500	22 44	7110	31 ++	9080	47 ++	11760	46 13670	40 16330	49 18670	49							
	151100	12 09		096	11 08	1424	01 00	2975	00 01	5610	14 17	7270	24 29	9310	39 46	11990	57 13800	56									



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	03 755+1	017	007	800	007 07 06 995 07 04 960 05 03 941 07 03 898 ++ 09 840 ++ 12 780 ++ 16 745 ++ 12 690 05 20 646 06 17 618 ++ 13 566 ++ 15 422 27 30 336 40 44 296 47 288 47 228 58 219 59 177 51 100 49 055 45	219	11270	59
	02 5553+	012	002	787	974 07 03 960 09 00 950 ++ 07 910 08 02 844 04 02 755 01 07 720 06 10 705 03 10 677 ++ 14 656 48 048 46	211	11510	61
STORNOWAY 03026	02 8097+	012	011	762	977 14 08 835 03 02 759 00 01 593 11 13 584 10 12 543 ++ 17 487 ++ 22 453 23 27 356 36 40 327 40 45 267 51 219 60 196 54 138 49 066 50	219	11250	60
	21 7853+	008	007	802	986 09 07 730 04 08 686 08 13 642 ++ 16 584 15 26 523 20 34 511 20 33 474 25 40 433 ++ 38 387 34 43 362 39 48 356 38 48 308 44 273 46 250 43 122 48 084 47	273	09680	46
SHANWELL 03170	02 00901	016	015	801	997 10 07 987 12 08 962 12 06 930 10 05 880 ++ 01 846 04 03 820 02 02 798 00 04 776 01 08 752 01 11 717 ++ 06 690 04 10 664 02 17 596 ++ 18 575 ++ 18 561 ++ 22 505 16 24 345 37 42 325 40 45 250 55 23 58 207 60 191 59 174 53 100 51 056 49	207	11660	60
	60 5552+	012	011	768	088 14 09 924 07 05 656 05 07 619 ++ 11 592 ++ 15 543 ++ 25 472 19 34 357 35 49 299 44 228 58 210 52 197 53 179 47 100 49 053 49 049 44 045 47 030 45	228	11010	58
ALDERGROVE 03917	02 25776	013	003	716	996 13 10 930 ++ 05 844 03 02 828 06 15 822 ++ 09 793 ++ 05 753 03 08 729 ++ 14 700 ++ 05 681 ++ 08 659 ++ 16 616 05 19 612 ++ 22 572 ++ 14 555 11 14 542 ++ 15 518 13 18 510 ++ 22 394 ++ 33 365 ++ 38 323 40 45 230 59 213 61 205 58 140 50 053 48	213	11500	61
	01 42502	012	003	748	927 07 05 840 02 00 821 ++ 13 815 03 14 789 03 25 640 09 41 620 09 41 547 16 47 458 24 ++ 386 36 ++ 312 46 274 55 240 49 096 52 082 50 068 52 051 48 045 51 035 49 030 44	274	09730	55
AUGHTON 03322	02 255++	016	009	728	003 13 10 990 ++ 00 962 ++ 07 923 10 00 901 ++ 03 826 ++ 01 806 02 05 787 04 15 775 ++ 05 764 03 04 706 02 04 697 ++ 05 688 ++ 13 673 03 08 655 ++ 14 652 02 14 610 05 20 523 ++ 25 452 22 28 325 40 45 209 60 191 61 173 54 095 52 040 48	209	11630	60
	03 3567+	016	009	718	996 13 08 867 04 03 802 04 03 757 02 00 649 05 06 609 06 10 562 12 16 544 ++ 22 535 13 24 457 21 35 381 33 45 366 33 45 327 39 50 228 59 198 50 046 42 040 43	228	11070	59
HEMSBY 03496	01 00901	019	017	691	006 12 09 982 ++ 05 927 09 05 888 ++ 01 860 05 00 828 ++ 06 806 ++ 03 800 02 05 780 03 11 763 ++ 09 712 01 18 598 ++ 17 572 08 22 552 ++ 20 316 40 46 248 54 210 61 162 52 080 52 034 48	210	11640	61
	02 21501	018	016	696	002 17 08 903 ++ 05 885 ++ 02 866 06 04 818 ++ 03 790 01 05 766 03 12 726 ++ 20 707 ++ 13 565 09 22 380 31 40 317 40 46 210 60 185 54 050 51	210	11610	60
CRAWLEY 03774	02 00900	020	002	678	988 13 07 926 11 02 880 ++ 01 840 ++ 01 783 01 10 723 02 22 666 ++ 19 620 ++ 25 589 ++ 22 555 08 25 322 39 46 215 61 202 61 170 54 102 53 050 54	215	11510	61
	02 32642	018	001	691	982 16 09 950 ++ 09 928 ++ 04 857 ++ 03 786 ++ 02 781 01 03 763 ++ 12 735 02 17 728 ++ 20 697 ++ 15 669 01 15 645 ++ 20 600 ++ 24 578 ++ 15 552 ++ 21 526 ++ 19 468 ++ 23 427 25 28 420 ++ 29 417 ++ 31 387 ++ 40 328 38 44 259 51 211 61 201 60 186 54 091 51 076 53 053 50	211	11610	61
CAMBORNE 03808	02 00900	017	007	690	992 11 09 956 09 07 946 11 02 890 08 02 848 05 03 830 ++ 03 808 ++ 04 762 04 15 740 ++ 03 712 ++ 14 698 ++ 07 681 ++ 11 649 01 13 525 13 24 468 ++ 29 441 ++ 29 420 ++ 32 323 40 45 222 60 206 62 186 56 113 55	206	11750	62
	02 11631	017	007	704	992 15 07 960 ++ 09 862 06 02 821 07 13 804 06 05 775 04 01 757 ++ 06 743 03 04 735 02 09 710 ++ 02 568 10 12 522 14 19 512 ++ 25 440 ++ 38 353 ++ 43 337 40 45 245 57 185 52 099 52 041 46 039 43 030 43	245	10600	57
VALENTIA 03953	65 863++	011	009	720	889 06 04 848 07 05 720 00 03 678 02 05 524 13 16 370 32 36 294 43 215 60 167 51 133 51	215	11400	60
	03 58508	016	014	710	935 08 06 878 04 02 838 06 00 803 06 10 752 02 15 618 06 572 12 508 15 305 43 235 53 213 53 202 50 159 51 143 49 130 50 096 52 062 50	235	11000	53
Ocean Weather Station 'I' 59°00'N 19°00'W	25 53400	997	997	847	832 01 720 08 526 26 385 42 351 39 308 40 276 37 264 39 208 38 131 45 043 46	385	07100	42
	80 49460	995	995	871	985 08 04 871 00 02 764 06 08 667 13 16 637 ++ 24 570 22 28 509 28 37 453 35 45 427 34 44 400 35 46 314 42 222 40 127 47 047 48	314	08500	42
Ocean Weather Station 'J' 52°30'N 20°00'W	02 32600	009	009	846	001 ++ 05 909 04 03 853 ++ 05 802 03 06 763 ++ 17 756 04 19 722 03 23 451 28 49 435 28 43 383 37 ++ 342 40 ++ 277 51 228 45 103 50 060 50	277	10900	51
	02 6851+	012	012	760	932 06 04 842 01 00 824 02 07 820 ++ 31 779 00 19 728 ++ 22 715 03 11 705 00 01 641 03 03 540 10 13 502 ++ 17 458 19 21 377 26 31 299 35 46 280 43 234 49 182 63 157 56 108 53	182	12600	63



STATION	YYGGgg	Type	Surface	1000mb	900m	850mb 1500m	750mb 2100m	700mb 3000m	600mb 4200m	500mb 5400m	400mb 7200m	300mb 9000m	250mb 10500m	200mb 12000m	150mb 14100m	100mb 15900m	70mb 18300m	50mb 20700m	30mb 23700m	20mb 26400m	10mb 30900m
LERWICK 03005	142330	T	100 06	+++ ++	200 05	210 05	260 02	270 06	270 14	240 18	260 22	270 26	290 24	260 19	220 11	220 07	170 07				
	150530	P	120 11	+++ ++	140 14	170 10	190 10	200 11	190 16	230 20	230 20	230 22	240 23	230 22	230 12	190 11	170 07				
	151130	T	140 15	+++ ++	160 24	190 22	180 22	180 22	190 30	180 29	190 30	200 33	200 39	200 31	200 18	190 11	180 09	150 06			
	151730	P	240 19	+++ ++	230 22	220 22	230 27	220 32	200 40	190 55	190 73	170 82	180 49	210 29	200 16	220 12	170 07	140 05	120 14		
STORNOWAY 03026	142330	T	140 04	+++ ++	170 23	190 26	180 22	190 23	200 18	200 20	200 31	220 34	220 38	210 37	210 25	190 10					
	150535	P	150 16	+++ ++	180 30	180 31	180 34	180 34	170 38	190 31	190 40	190 56	200 54	200 32							
	151130	T	250 20	+++ ++	250 23	250 22	230 25	220 29	190 37	170 51	160 53	170 62	180 45	210 30	230 21	200 15					
	151730	P	250 18	+++ ++	230 26	230 28	240 30	240 35	240 41	250 50	250 61	260 47	260 40	260 33	250 14	240 17					
SHANWELL 03170	142330	T	060 07	+++ ++	200 13	210 17	230 11	240 07	230 19	230 26	240 23	250 27	250 30	240 23	230 14	210 09	170 04				
	150530	P	000 00	+++ ++	190 21	190 22	200 26	200 30	210 26	200 29	220 40	220 35	230 35	220 31	230 19	210 12	170 07	100 04			
	151130	T	220 17	+++ ++	220 29	230 31	230 31	220 34	220 46	210 51	210 56	190 67	200 67	210 39	230 20	200 07	250 12	120 12	080 15	P080 03	
	151835	P	240 13	+++ ++	270 16	250 14	250 14	250 21	240 31	220 34	230 36	220 49	260 33	270 31	250 18	270 11					
ALDERGROVE 03917	142330	T	170 12	+++ ++	180 25	190 24	200 23	210 28	220 32	220 36	210 35	220 40	230 48	220 39	230 25	210 11	170 03				
	150530	P	170 15	+++ ++	210 33	220 30	220 29	220 41	220 37	220 41	220 44	200 64	200 65	220 36	240 25	220 13					
	151130	T	280 10	+++ ++	270 14	260 20	260 27	250 27	250 33	240 41	240 47	220 65	230 51	240 37	240 28	250 11	230 10	170 05			
	151800	P	250 07	+++ ++	240 05	240 11	220 14	230 22	260 29	270 25	320 45	320 95	320 84	290 42	280 27	280 14					
AUGHTON 03322	142330	T	000 00	+++ ++	200 10	190 18	240 12	260 15	240 15	240 13	240 21	P260 20	250 30	250 24	250 18	250 12	210 06	140 08	120 14	090 13	
	150530	P	110 04	+++ ++	230 21	210 25	210 21	230 20	220 20	220 28	230 31	230 26	220 26	240 34	250 18	240 12	190 05	290 05	130 09		
	151130	T	200 10	+++ ++	230 16	240 16	250 22	240 25	240 30	240 25	240 29	220 51	220 55	230 34	240 23	240 08	320 05	120 06			
	151730	P	190 05	+++ ++	240 13	260 12	250 18	250 24	230 33	230 35	230 39	240 34	250 34	270 31	270 18	270 12	260 03				
HEMSBY 03496	142330	T	200 07	+++ ++	300 03	320 07	310 12	300 11	300 17	300 16	320 22	310 25	310 30	290 22	290 16	250 08	210 09	180 10			
	150530	P	210 07	+++ ++	220 11	270 08	280 11	280 08	280 10	270 17	270 20	270 25	270 30	290 22	260 16	260 08	190 05				
	151130	T	190 08	+++ ++	230 10	250 14	260 13	260 16	250 14	250 15	240 20	260 29	260 29	250 26	260 20	250 11	220 05				
	151730	P	190 08	+++ ++	230 14	260 14	280 16	290 12	260 16	240 19	250 25	240 29	240 38	250 27	280 19						
CRAWLEY 03774	142330	T	000 00	+++ ++	200 08	230 05	270 08	280 10	270 11	280 10	310 18	300 26	300 27	290 23	270 19	260 06	210 03				
	150552	P	180 04	+++ ++	200 11	220 09	240 10	230 11	250 12	250 16	260 21	260 36	260 33	270 24	260 16	260 11	230 05	100 02			
	151110	T	190 07	+++ ++	220 08	250 09	260 11	260 16	240 14	230 17	250 22	240 30	250 30	250 27	260 17	260 12	250 07	140 12			
	151730	P	220 02	+++ ++	250 17	260 14	280 08	270 13	260 16	250 23	250 25	240 30	230 43	250 30	270 31	290 10	280 06	070 02			
CAMBORNE 03808	142330	T	160 06	+++ ++	210 16	210 22	220 10	230 12	220 16	220 18	220 17	240 31	240 32	240 29	250 23						
	150530	P	160 03	+++ ++	210 15	220 19	220 16	240 17	250 20	250 22	230 30	230 29	240 34	230 36	240 24	280 18					
	151130	T	220 09	+++ ++	220 18	230 12	260 13	250 19	240 22	260 15	260 24	230 43	230 46	260 31	260 23	270 13	190 07	100 09	P100 07		
	151730	P	210 09	+++ ++	250 13	250 11	250 17	250 19	270 27	270 35	280 34	330 54	330 80	310 33	290 22	280 14	300 09	050 04	120 11		
VALENTIA 03953	150000	P	180 20	+++ ++	200 34	210 32	220 32	220 31	220 44	230 44	220 44	210 68									
	151130	T	290 07	290 09	+++ ++	250 14	+++ ++	260 28	+++ ++	250 44	260 56	300 69	+++ ++	300 43	+++ ++	250 10					
Ocean Weather Station 'I' 59°00'N 19°00'W	150000	T	190 16	+++ ++	190 27	190 30	190 24	180 23	180 18	170 27	150 44	160 45	180 28	190 21	220 12	190 06	200 05	200 05			
	150600	P	225 20	+++ ++	210 18	210 23	200 25	210 24	210 32	210 32	220 26	220 17	220 24	220 22	220 16	220 07	220 06	110 04	070 05		
	151100	T	250 25	+++ ++	250 37	250 36	230 32	240 29	240 30	250 34	260 50	280 64	270 48	270 32	260 23	230 15	220 08				
	151800	P	225 20	+++ ++	220 31	220 28	220 29	220 29	230 34	240 47	260 80	260100	270109	270 63	270 23	270 17					
Ocean Weather Station 'J' 52°30'N 20°00'W	142300	T	260 22	+++ ++	260 29	260 28	270 30	270 34	280 37	280 63	280 96	300 96	290 75	270 43	260 37	250 18	250 10				
	150600	P	270 20	+++ ++	260 26	260 28	260 32	260 35	250 47	260 50	280 68	300 84	310115	300 89	290 34	290 16					
	151100	T	210 16	+++ ++	210 15	210 24	220 34	230 42	260 63	280 55	280 64	290 51	290 79	300 83	300 43						
	151700	P	+++ ++	+++ ++	200 42	220 47	230 48	230 50	250 53	250 39	260 40	290 59	290 73	290 61	280 26						
LARKHILL 03743	150720	P	130 04	+++ ++	240 10	250 12	240 16	230 16	240 20	240 19	240 21	230 33	250 29	250 31	260 19	250 10					
	151050	T	160 08	+++ ++	210 09	230 14	240 14	250 16	240 15	240 20	250 24	240 34	240 32	240 33	240 20	270 14					

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE			SURFACE		1000mb	950mb	900mb	850mb	800mb	750mb	700mb	650mb	600mb	550mb	500mb				
		MSL	Surf.	0°C level	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C			
151214	52.0°N 24.5°W	005	998	675	061	09 06	046	07 07	911	04 04	1378	08 08	1878	06 06	04 04	2963	02 02	02- 05- 4188	05- 08- 08- 15- 5599	13- 16-	
Cloud :— 3/8 Cu. 1300 to 2500 ft. 8/8 Ns. 2600 to 12000 ft. 1/8 Ac. 14000 to 17000 ft. 6/8 Cs. 19000 ft. to HNG																					
Inversion Levels :— 900 to 850mb 04°C to 07°C										Isothermal Levels :—											
YYGGgg	POSITION	PRESSURE			SURFACE		1000mb	950mb	900mb	850mb	800mb	750mb	700mb	650mb	600mb	550mb	500mb				
		MSL	Surf.	0°C level	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C			
151342	49.3°N 19.8°W	015	008	657	061	12 05	146	08 05	1000	08 28-	1469	08 36-	1969	08 21-	06 13-	3057	02 06-	01- 11-	4289	05- 08- 08- 12- 5700	13- 18-
Cloud :— 6/8 Sc. 2300 to 2900 ft. 3/8 As. 11000 to 13000ft. 6/8 Ac. 17000 to 18000 ft. 7/8 Cs. 25000 ft to HNG																					
Inversion Levels :— 950mb to 850mb 07°C to 08°C										Isothermal Levels :—											
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## UPPER WINDS AT ADDITIONAL LEVELS

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STATION		MAX. WIND
LERWICK 03005	060mb 150 09 06000/0 09500/1 09800/1 11300/0	170 86 09300m
STORNOWAY 03026	072mb 180 08 13700m 200 21 10560/1 657mb 220 31 335mb 160 69 092mb 210 14 17700m 250 11	190 64 09810m 160 70 08760m 260 62 07200m
SHANWELL 03170	062mb 120 08 P28200m 320 19 17600m 210 08	190 74 09180m
ALDERGROVE 03917	127mb 230 18 057mb 160 07 11700m 210 46 17400m 240 15 11700/4 128mb 240 19 031mb 080 12 06380m 290 36 08050m 320 78 07200/0 07630/0 08050/0 10430/1 10910/1	200 72 09680m 220 69 09710m 320 102 09720m
AUGHTON 03322	347mb 220 42 042mb 070 10 19800m 290 02	
HEMSBY 03496	038mb 060 12 054mb 110 04 15000m 280 16	
CRAWLEY 03774	054mb 200 03 23400m 110 09 11390/1	
CAMBORNE 03808	122mb 250 14 343mb 240 35 P25800m 080 14 08010m 300 38 11100m 330 62 11100/1 11550/1	340 84 10420m
VALENTIA 03953	00300m 200 30 00600m 200 31 07500m 210 68 10800m 210 68 752mb 260 26 618mb 250 33 235mb 300 77 159mb 270 39 130mb 280 22 062mb 260 02	210 71 09680m 310 90 10330m
Ocean Weather Station 'I' 59°00'N 19°00'W	364mb 160 61 060mb 250 04 25200m 030 10 053mb 150 06 11400m 270 89 12600m 260 38 18000m 210 19 04120/0 06059/0 08940/0 11460/1 12300/1	160 68 07370m 280 73 08300m 270 114 10200m
Ocean Weather Station 'J' 52°30'N 20°00'W	530mb 280 56 228mb 280 57 067mb 250 10 12600m 300 53 17400m 290 08 06350/0 08520/0 09580/0 11040/1 11800/1 12310/1 168mb 300 66 118mb 290 30 12600m 290 44 12050/1	300 109 07990m 300 123 09830m 290 88 15300m 290 74 10040m
LARKHILL 03743		

## NOTES ON THE AEROLOGICAL SITUATION

The low which had a notably cold centre yesterday over the north-eastern Atlantic is now giving way to a new and more vigorous development farther southwest. On the southern flank of these, meanwhile, the main westerly jet stream becomes quite unseasonably strong, attaining 180 knots at 300mb over Newfoundland during the course of the day. The eastern end of the jet stream has not yet come into the British Isles.

## AVERAGE AND EXTREME VALUES 1951-55

## JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22345	-48.1	-42	-55	...	(11)
60	19675	-48.1	-41	-55	120	3 8
100	16320	-48.8	-41	-56	244	5 11
150	13660	-48.3	-41	-59	263	10 18
200	11770	-49.8	-39	-67	271	16 27
300	9125	-46.7	-37	-56	271	22 41
400	7160	-32.6	-23	-44	271	18 33
500	5555	-20.8	-11	-31	269	14 26
700	2985	-5.2	3	-14	266	9 19
850	1435	2.8	14	-7	269	6 18

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	257	-54.7	10190
Max.	405	-40	12955
Min.	172	-68	6890

LARKHILL/CRAWLEY† at 03, 15h.  
(Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.)

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22310	-49.6	-47	-57	106	9 10
60	19675	-51.4	-45	-59	136	3 8
100	16370	-52.6	-46	-61	251	8 13
150	13745	-51.8	-42	-65	265	15 21
200	11890	-54.0	-40	-65	268	20 32
300	9265	-44.7	-36	-54	265	20 39
400	7275	-29.6	-19	-41	265	17 31
500	5640	-17.8	-9	-28	263	15 25
700	3050	-2.1	7	-10	263	11 19
850	1480	5.7	16	-3	264	7 16

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	234	-56.8	10950
Max.	388	-41	13440
Min.	160	-66	7225

MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5 11
60	19670	-60.7	-53	-69	135	4 10
100	16510	-62.9	-57	-71	255	21 24
150	13995	-59.0	-51	-67	265	38 42
200	12185	-56.6	-47	-67	275	42 47
300	9530	-40.1	-33	-46	285	32 38
400	7500	-23.9	-19	-29	285	27 31
500	5835	-11.8	-8	-17	285	24 28
700	3165	7.2	13	-1	290	18 22
850	1535	17.9	27	8	290	9 14

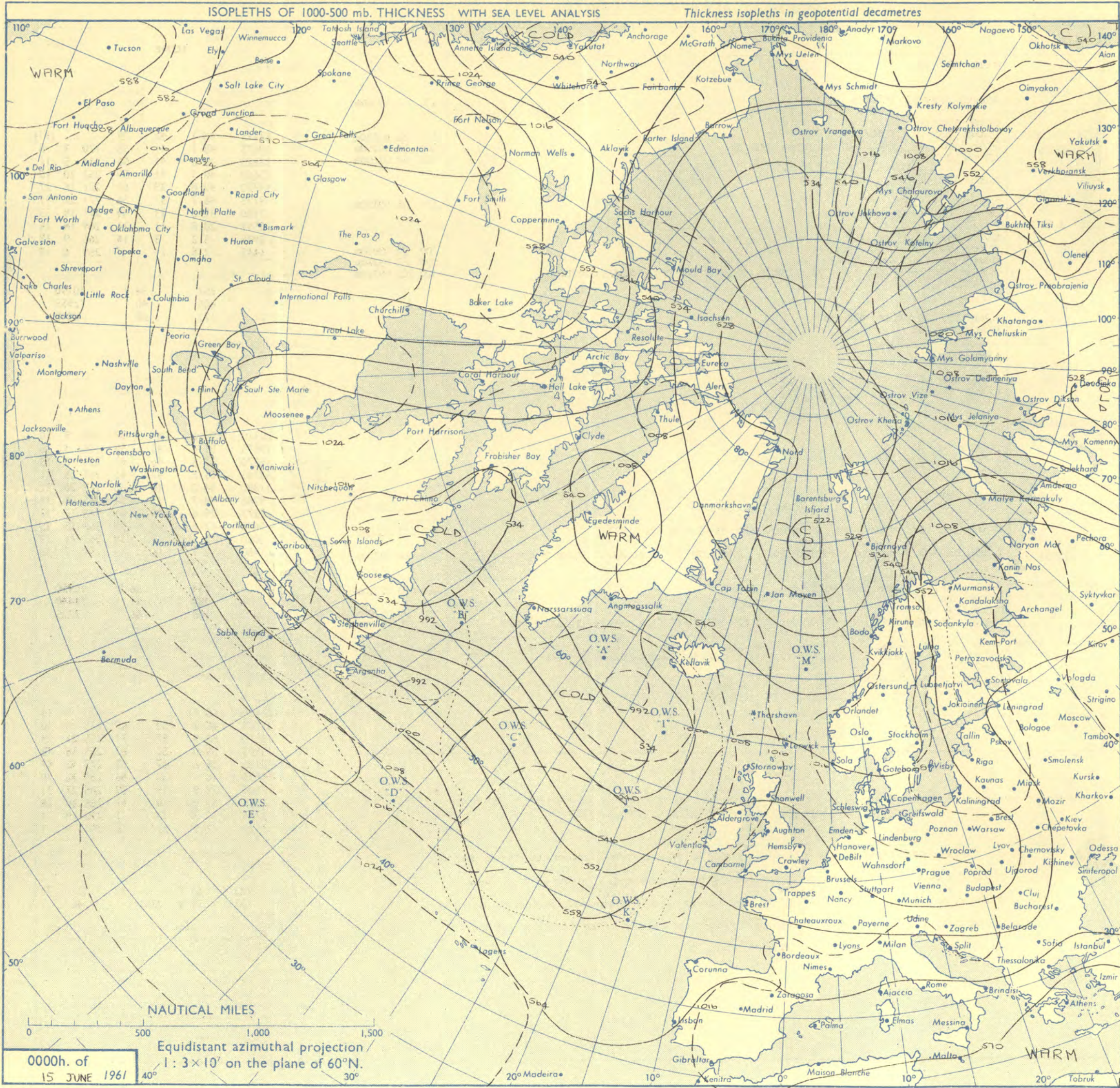
Tropopause	Average Press.	Average Temp.	Max. Press.	Min. Press.	Max. Temp.	Min. Temp.
	mb.	°C	mb.	mb.	°C	°C
Upper	123	-65.7	...	73	...	-73
Lower	193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

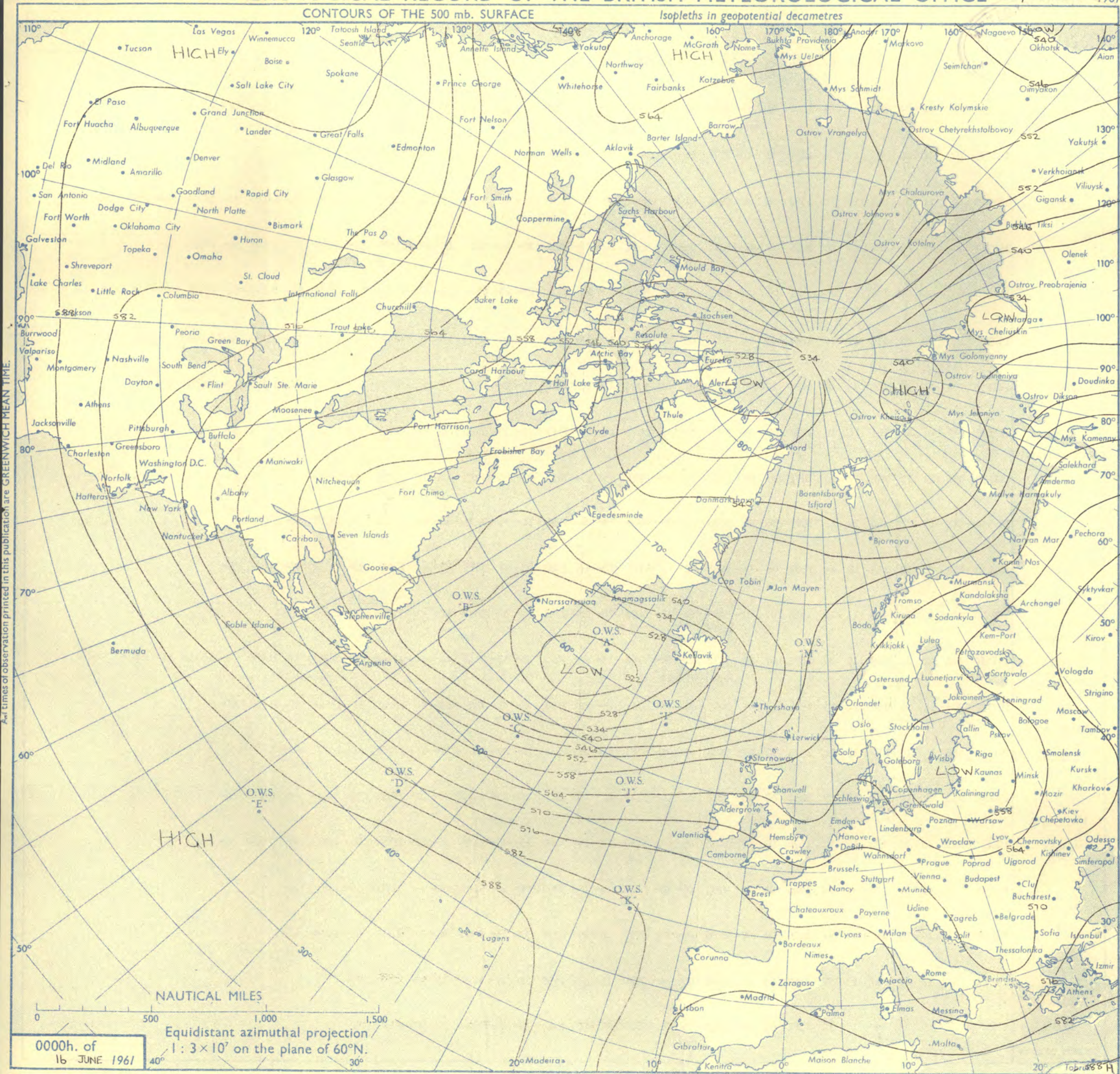
† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.











STATION	YYGG	SURFACE		1000mb		850mb		700mb		500mb		400mb		300mb		200mb		150mb		100mb		70mb		50mb		30mb	
		gpm	°C °C	gpm	°C °C	gpm	°C °C	gpm	°C °C	gpm	°C °C	gpm	°C °C	gpm	°C °C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C
LERWICK 03005	152330	082	09 07	103	09 07	1434	03 05	2977	06 18	5525	22 32	7132	33 39	9100	45 ++	11808	46	13713	47	16380	48	18721	49				
	161130	082	11 09	072	++ ++	1402	01 03	2951	02 03	5581	13 15	7255	23 27	9297	39 45	11945	59	13762	53	16391	51	18714	50				
STORNOWAY 03026	152335	013	11 08	098	11 09	1430	01 01	2975	06 15	5563	18 21	7198	27 29	9208	42 ++	11842	55	13702	51								
	161329	013	11 10	019	11 10	1357	06 04	2946	01 00	5601	10 14	7283	22 26	9328	39 45	11965	62	13775	55	16400	51	18733	49	20950	48		
SHANWELL 03170	152330	005	07 05	121	10 06	1458	04 08	3018	04 20	5592	16 27	7231	28 34	9235	43 ++	11873	52	13740	52	16369	51	18693	51				
	161130	005	16 09	104	13 08	1446	05 08	3025	03 01	5669	13 14	7341	23 27	9385	39 44	12036	61	13833	56	16437	52	18769	49				
ALDERGROVE 03917	152330	077	10 07	130	11 06	1467	03 01	3024	00 08	5660	15 18	7314	26 29	9335	42 ++	11972	58	13799	55	16398	54	18701	52	20887	51		
	161130	077	14 07	105	13 07	1458	10 08	3056	03 01	5720	10 14	7411	19 26	9481	36 42	12157	58	13951	60	16546	52	18871	50				
AUGHTON 03322	152330	056	14 12	143	14 10	1492	05 03	3055	02 37	5662	14 23	7317	27 30	9323	44 ++	11949	54	13804	53	16423	52	18731	52	20923	50		
	161130	056	19 12	144	17 10	1497	08 08	3088	03 01	5741	13 17	7413	23 28	9455	40 47	12105	59	13892	59	16478	53	18784	50	20988	50		
HEMSBY 03496	152330	012	15 12	144	16 12	1507	06 04	3074	03 05	5669	19 24	7294	30 35	9273	46 ++	11916	50	13788	52								
	161130	012	20 12	155	18 ++	1509	06 ++	3083	02 ++	5723	12 ++	7388	25 ++	9418	40 ++	12064	59	13858	58	16427	56						
CRAWLEY 03774	152330	144	13 12	164	13 11	1523	07 01	3089	01 11	5691	18 22	7321	30 42	9310	45 ++	11956	52	13820	53								
	161130	144	20 11	169	19 09	1532	07 03	3116	01 06	5762	13 20	7422	25 31	9448	41 ++	12085	60	13883	57	16456	56	18734	54	20905	52		
CAMBORNE 03808	152330	088	14 14	160	14 13	1514	07 05	3092	01 08	5731	13 21	7388	26 31	9409	41 ++	12041	61	13848	56	16429	56						
	161130	088	18 12	170	15 10	1524	10 07	3124	04 05	5783	11 16	7456	22 29	9502	38 43	12161	61	13923	64								
VALENTIA 03953	150000	014	11 09	150	11 09	1490	08 03	3078	03 06	5740	11 15	7410	23 26	9460	36 41	12170	55	++++	++	16500	56						
	161130	014	13 10	124	12 10	1476	09 07	3084	05 01	5760	10 17	7450	19 25	9520	35 41	12220	56	++++	++	16530	55						
Ocean Weather Station 'I'  59°00'N 19°00'W	160000		09 08	073	++ ++	1246	00 01	2785	06 07	5400	14 16	7060	26 28	9080	42 ++	11740	50	13630	49								
	161400		10 09	203	++ ++	1126	00 02	2656	08 13	5190	25 29	6770	33 45	8800	34 ++	11620	40	13570	43								
Ocean Weather Station 'J'  52°30'N 20°00'W	152300		13 13	014	13 12	1381	13 11	3002	06 04	5670	11 16	7350	21 27	9410	38 44	12080	58										
	161100		13 13	009	13 12	1361	07 05	2957	05 01	5640	09 14	7340	19 28	9420	35 44	12120	57										



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE			TROPOPAUSE							
		MSL	Surf.	0°C level		mb	m	°C				
LERWICK 03005	02 15531	013 003 807	981 10 07 907 05 01- 893 ++ 02- 878 ++ 07- 828 ++ 06- 720 ++ 18- 678 07- 20- 560 19- 30- 547 ++ 28- 518 ++ 33- 467 ++ 31- 455 26- 32- 390 35- 42- 343 40- 47- 291 46- 100 48- 073 51- 067 48- 055 48-							291	09290	46-
	02 5567+	009 999 830	974 08 03 958 ++ 01 852 ++ 04- 820 ++ 03- 799 02- 04- 722 01- 02- 648 03- 04- 561 08- 11- 503 13- 15- 475 14- 17- 296 40- 46- 248 51- 208 58- 187 60- 148 52- 111 53- 109 49- 100 51- 054 50-							187	12360	60-
STORNOWAY 03026	02 10946	012 010 834	935 07 05 880 ++ 01- 822 01- 02- 803 00 11- 776 02- 14- 763 01- 15- 742 01- 12- 678 08- 14- 642 08- 11- 596 09- 12- 468 22- 25- 420 25- 27- 311 40- 43- 215 58- 191 53- 144 51-							215	11390	58-
	38 862++	002 001 678	986 09 08 899 05 04 853 05 03 823 09 08 800 ++ 08 753 ++ 05 723 ++ 02 702 01 00 658 ++ 04- 576 04- 07- 547 ++ 10- 426 ++ 21- 410 20- 24- 347 ++ 37- 295 40- 46- 201 63- 116 50- 050 48-							201	11940	63-
SHANWELL 03170	02 00901	015 014 745	993 11 05 972 ++ 01 860 03 05- 837 05 12- 753 00 18- 622 11- 23- 606 13- 22- 578 13- 20- 560 ++ 20- 519 16- 24- 506 16- 27- 466 ++ 32- 376 32- 38- 355 34- 39- 258 51- 252 51- 225 56- 216 53- 100 51- 058 51-							225	11130	56-
	02 1567+	013 012 659	004 14 08 913 06 04 868 06 07- 843 ++ 09- 819 02 04- 797 05 03 700 03 01 490 14- 16- 353 29- 34- 293 40- 45- 193 62- 169 59- 137 54- 100 52- 064 49-							193	12260	62-
ALDERGROVE 03917	02 3552+	016 006 755	000 ++ 05 990 12 07 841 ++ 00 828 01 02- 802 ++ 07- 792 02 07- 734 ++ 15- 724 02- 12- 714 ++ 09- 704 00 08- 665 00 08- 652 ++ 10- 607 05- 12- 544 11- 15- 464 18- 21- 367 30- 33- 308 ++ 44- 250 51- 209 58- 183 58- 172 55- 091 53- 035 50-							209	11690	58-
	02 1547+	013 003 640	984 12 07 928 08 03 908 12 03- 865 ++ 08 757 05 03 734 05 03 685 ++ 00 654 ++ 01- 537 07- 10- 436 15- 21- 337 29- 34- 284 ++ 46- 223 54- 195 59- 178 59- 161 63- 156 60- 142 59- 122 51- 117 51- 112 54- 096 50- 058 48-							161	13510	63-
AUGHTON 03322	02 855++	017 010 730	006 ++ 10 947 10 08 790 ++ 01 769 02 32- 688 03- 37- 640 07- 40- 616 09- 20- 593 08- 24- 576 09- 31- 537 12- 24- 516 12- 21- 484 17- 26- 465 16- 25- 400 27- 30- 394 28- 44- 317 40- ++ 253 52- 218 57- 170 51- 064 51- 034 48-							218	11400	57-
	03 5153+	017 010 652	990 15 09 902 09 07 885 08 02 864 09 04- 829 08 12- 780 07 15- 719 03 06- 698 03 00 693 03 00 582 ++ 08- 566 ++ 12- 554 07- 12- 501 13- 17- 482 13- 18- 383 25- 31- 315 36- 44- 298 40- 47- 206 59- 170 63- 113 53- 043 49- 033 42-							170	13120	63-
HEMSBY 03496	60 4552+	017 016 744	991 16 10 831 05 03 595 ++ 12- 578 11- 15- 335 40- 46- 268 53- 205 50- 134 51-							268	10000	53-
	02 755++	018 017 658	954 13 ++ 865 07 ++ 784 04 ++ 640 01- ++ 588 06- ++ 538 09- ++ 303 40- 255 50- 186 62- 151 58- 101 56- 073 54-							186	12500	62-
CRAWLEY 03774	02 6093+	020 002 723	980 ++ 07 972 15 07 895 ++ 01- 880 ++ 00 840 ++ 02- 800 ++ 00 789 02 05- 777 03 07- 765 ++ 09- 738 ++ 21- 705 ++ 16- 692 ++ 08- 679 ++ 07- 658 ++ 08- 639 ++ 11- 628 ++ 11- 617 07- 13- 589 ++ 20- 509 19- 22- 500 18- 22- 469 ++ 29- 451 ++ 30- 431 ++ 37- 349 ++ 49- 312 43- 249 52- 124 54-							249	10540	52-
	03 61501	020 003 672	995 ++ 06 984 16 06 905 09 06 877 ++ 06 860 ++ 04 818 06 04 780 06 15- 748 ++ 30- 725 ++ 09- 700 ++ 06- 576 ++ 10- 546 08- 13- 495 ++ 21- 376 ++ 33- 328 35- 41- 306 40- 46- 216 58- 194 61- 148 57- 090 56- 047 51-							194	12260	61-
CAMBORNE 03808	58 860++	019 009 683	896 08 06 836 06 04 813 06 02 786 ++ 01 762 ++ 13- 751 02 15- 731 ++ 18- 724 03 14- 702 ++ 08- 672 01- 08- 617 ++ 11- 558 08- 17- 476 ++ 25- 420 ++ 29- 305 40- 45- 251 52- 231 54- 193 62- 184 59- 146 56- 080 55-							193	12250	62-
	02 41601	020 010 647	997 14 09 938 10 08 912 10 05 870 09 04 852 ++ 07- 810 10 15- 720 05 05- 654 ++ 08- 615 ++ 06- 582 ++ 08- 562 06- 12- 520 10- 15- 481 13- 19- 415 ++ 26- 376 ++ 33- 321 ++ 39- 289 40- 45- 206 59- 169 66- 116 58-							169	13180	66-
VALENTIA 03953	01 18500	018 016 650	000 11 09 936 07 05 905 06 02 860 08 00 829 07 08- 779 06 13- 659 01 07- 584 05- 08- 567 05- 08- 390 24- 27- 243 47- 159 63- 150 64- 088 55- 065 54-							150	14000	64-
	60 863++	015 013 618	962 09 07 940 10 08 767 09 04 600 01- 07- 424 18- 24- 400 19- 25- 275 40- 177 61- 158 65- 147 65- 100 55- 059 50- 030 42-							158	13700	65-
Ocean Weather Station 'I' 59°00'N 19°00'W	63 4732+	991 991 847	985 ++ 04 885 01 00 847 00 01- 754 04- 05- 713 06- 07- 649 07- 08- 625 05- 06- 487 15- 17- 432 21- 24- 313 40- 43- 305 41- 239 51- 210 54- 203 50- 113 48-							210	11400	54-
	03 864++	976 976 844	961 ++ 05 904 03 01 731 07 11- 665 10- 16- 551 21- 25- 494 26- 31- 459 31- 36- 422 33- 42- 352 32- 47- 225 37- 183 42- 120 45-							422	06400	33- 183 12200 42-
Ocean Weather Station 'J' 52°30'N 20°00'W	20 873++	002 002 637	933 11 09 889 14 12 858 13 11 830 13 11 796 13 04 790 ++ 01 784 10 01- 642 01 08- 557 06- 14- 474 14- 19- 410 19- 25- 288 40- 46- 202 57- 175 63- 138 58- 060 51-							175	12900	63-
	50 7732+	001 001 617	990 12 10 858 07 05 819 07 05 725 05 03 694 06 01 633 ++ 02- 623 ++ 05- 583 03- 07- 572 ++ 10- 548 04- 10- 524 ++ 15- 499 ++ 14- 445 ++ 18- 407 ++ 27- 386 21- 29- 308 34- 43- 292 35- 44- 204 56- 165 64-							165	+++++	64-



STATION	YYGGg	Type	Surface	1000mb	900m	850mb 1500m	750mb 2100m	700mb 3000m	600mb 4200m	500mb 5400m	400mb 7200m	300mb 9000m	250mb 10500m	200mb 12000m	150mb 14100m	100mb 15900m	70mb 18300m	50mb 20700m	30mb 23700m	20mb 26400m	10mb 30900m
LERWICK 03005	152330	T	250 13	+++ ++	250 22	240 18	240 22	240 30	230 37	230 50	220 50	250 44	260 43	260 30	240 19	240 10	210 07				
	160530	P	190 10	+++ ++	200 17	210 24	220 33	210 30	240 35	250 36	280 52	290 71	290 77	290 48	270 18	270 13	250 12				
	161130	T	180 13	+++ ++	190 27	180 33	210 30	220 31	250 33	250 44	260 45	280 53	280 64	280 61	250 37	250 14	180 08				
	161730	P	180 21	+++ ++	210 39	210 36	220 44	220 54	230 54	240 54	240 53	240 61	250 65	260 77	250 32						
STORNOWAY 03026	152335	T	190 13	+++ ++	210 26	210 25	230 27	230 30	250 37	250 39	280 53	290 90	300 86	290 56	280 28						
	160530	P	180 08	+++ ++	310 31	220 42	220 33	240 39	260 48	270 48	270 50	270 51	290 66	280 67	260 27	270 17					
	161150	P	180 33	+++ ++	210 55	230 49	230 51	230 50	240 61	240 45	250 57	260 61	260 72	260 70	260 44						
	161730	P	210 30	+++ ++	220 58	230 63	230 67	220 70	230 71	230 73	230 74	230 79	240 87	240 50	240 35						
SHANWELL 03170	152330	T	210 10	+++ ++	270 16	250 15	230 18	230 20	230 24	270 30	300 43	310 75	320 86	310 38	290 17	280 09	260 05				
	160600	P	000 00	+++ ++	240 20	240 24	220 27	250 31	270 32	280 42	300 38	310 48	310 56	320 66	300 21						
	161130	T	230 17	+++ ++	230 31	230 36	260 28	260 24	270 29	260 30	280 32	290 43	290 46	290 59	270 25	270 10	210 05				
	161730	P	220 18	+++ ++	230 38	230 42	230 38	240 40	250 44	260 36	250 35	270 42	270 51	270 55	270 34	260 19					
ALDERGROVE 03917	152330	T	000 00	+++ ++	240 10	230 15	240 21	260 27	250 30	290 37	300 54	310 58	320 67	320 55	300 36	300 13	150 06	270 02			
	160530	P	200 12	+++ ++	230 21	230 31	240 33	260 32	270 32	270 40	280 38	290 45	300 46	310 47	300 23	270 14	290 08	200 05	110 12		
	161130	T	190 15	+++ ++	220 30	240 36	250 32	250 32	250 31	250 35	270 38	270 42	280 53	280 57	290 30	250 15	190 19	P000 00	060 10	260 14	
	161730	P	220 14	+++ ++	230 34	240 40	250 42	240 39	250 37	250 40	260 49	260 54	260 58	270 57	270 39	260 18	170 10				
AUGHTON 03322	152330	T	190 03	+++ ++	240 13	240 14	250 20	260 22	300 33	310 34	320 51	330 71	340 74	330 53	310 24	310 10	240 02	100 09			
	160530	P	230 03	+++ ++	260 15	270 19	280 21	280 22	290 31	310 29	310 39	330 43	330 49	340 57	330 20	310 10	310 04				
	161130	T	230 10	+++ ++	220 14	230 18	260 27	270 27	270 24	280 25	310 29	320 32	320 35	320 45	310 19	270 06	220 01	090 06			
	161730	P	190 09	+++ ++	230 25	250 26	250 24	260 26	270 20	280 31	290 27	300 29	300 32	300 47	310 28	310 12	210 05	090 07			
HEMSBY 03496	152330	T	200 05	+++ ++	250 11	260 13	240 17	240 19	260 14	250 20	250 23	230 30	280 26	300 22	300 19						
	160530	P	000 00	+++ ++	240 04	240 10	250 13	270 16	280 15	330 28	340 43	360 70	360 83	350 48	340 20	330 16					
	161130	T	230 12	+++ ++	240 11	250 14	260 15	290 15	330 17	330 32	340 32	360 46	360 54	360 60	350 35	340 12					
	161730	P	240 08	+++ ++	230 13	260 15	270 13	290 20	300 23	310 20	330 21	340 37	350 44	350 50	340 30	340 14	340 01				
CRAWLEY 03774	152330	T	000 00	+++ ++	250 16	250 15	240 12	270 15	280 24	290 31	290 30	340 63	340 57	320 29	300 23						
	160530	P	000 00	+++ ++	250 21	250 21	270 15	260 16	310 22	310 38	340 41	350 64	360 72	350 58	340 20	320 12	330 07	080 06			
	161110	P	240 10	+++ ++	240 13	260 13	260 14	310 13	330 21	330 30	350 32	350 42	360 50	360 60	340 16	340 17	020 06	120 10			
	161730	P	250 08	+++ ++	250 16	260 18	280 13	300 18	310 16	320 22	330 25	360 36	360 38	350 49	350 29	340 16	350 03				
CAMBORNE 03808	152330	T	210 10	+++ ++	240 17	240 13	280 15	300 18	300 22	300 26	330 31	330 49	350 56	340 61	330 28	310 15	P330 04				
	160530	P	000 00	+++ ++	240 12	270 12	280 11	290 15	290 21	300 20	310 23	340 31	350 36	360 54	350 23	320 14	310 08	060 06	080 14		
	161130	T	210 12	+++ ++	230 16	230 12	260 13	270 15	290 17	290 17	310 19	340 27	350 29	350 39	340 17						
	161730	P	230 11	+++ ++	230 17	240 13	250 17	260 16	270 22	280 21	300 18	330 20	350 21	330 30	330 25						
VALENTIA 03953	150001	T	180 07	190 11	+++ ++	240 22	+++ ++	260 32	+++ ++	270 30	300 35	300 35	+++ ++	330 62	320 63	310 22					
	161130	T	290 20	270 23	+++ ++	220 37	+++ ++	260 27	260 29	250 26	260 29	280 34	+++ ++	280 35	+++ ++	270 19	+++ ++	+++ ++	110 02		
Ocean Weather Station 'I' 59°00'N 19°00'W	160000	T	150 28	+++ ++	+++ ++	180 47	180 44	200 35	230 58	240 65	220 83	240 98	250120								
	160600	P	225 20	+++ ++	220 49	230 50	230 53	220 62	230 85	220 82	220111	230132									
	161200	P	225 50	+++ ++	220 74	240 69	240 69	230 69	240 78	230 88	220102	220 91	220 91	210 65							
	161800	P	270 50	+++ ++	250 57	260 56	260 54	260 51	250 47	260 44	260 52	260 70	250 65	240 62	240 48	230 30	190 18	210 15			
Ocean Weather Station 'J' 52°30'N 20°00'W	152300	T	200 28	+++ ++	230 43	230 40	250 43	250 45	250 47	240 46	260 52	250 54	270 55	250 59	250 42						
	160600	P	225 10	+++ ++	250 49	240 50	240 57	240 60	230 62	230 65	250 73	260 76	240 78	260 78	250 69						
	161100	T	240 23	+++ ++	250 44	250 47	230 62	230 63	230 67	240 72	250 84	240 76	260 85	250 84							
	161700	P	270 30	+++ ++	270 34	270 37	260 50	250 66	250 72	240 86	250 87	250 92	250 96	250100	250 43						
LARKHILL 03743	160625	P	200 02	+++ ++	250 11	250 15	250 17	290 19	320 27	320 32	340 35	350 43	350 58	350 63	350 25	330 13	320 08				
	161030	P	230 07	+++ ++	220 13	250 12	280 14	300 17	320 22	320 26	320 20	340 34	360 45	360 54	350 22	340 13	010 13				

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGg	POSITION	PRESSURE	SURFACE	1000mb	950mb	900mb	850mb	800mb	750mb	700mb	650mb	600mb	550mb	500mb
		MSL Surf. 0°C level	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	°C °C	m °C °C	°C °C	m °C °C	°C °C	m °C °C
161222	53.5°N 25.3°W	000 993 860	061 09 02	000	06 01	866 02 01	1323 01- 05-	1804 03- 18-	05- 22-	2856 05- 37-	05- 43-	4060 09- 45-	12- 43-	5456 12- 50-
Cloud :— 4/8Cu. 1800 to 3200ft; 2/8Sc. 4000 to 4200ft; 2/3Ac. at 19000ft; 4/8Ci. at 25000ft.														
Inversion Levels :— Isothermal Levels :— 750mb to 700mb -4½°C.														
YYGGg	POSITION	PRESSURE	SURFACE	1000mb	950mb	900mb	850mb	800mb	750mb	700mb	650mb	600mb	550mb	500mb
		MSL Surf. 0°C level	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	m °C °C	°C °C	m °C °C	°C °C	m °C °C	°C °C	m °C °C
161334	57.3°N 23.3°W	987 979 861	061 08 03	113-	06 03	753 02 02	1210 01- 02-	1695 04- 05-	07- 09-	2734 11- 14-	15- 19-	3901 18- 21-	22- 26-	5240 26- 34-
Cloud :— 2/8Cb. 1500 to 11000ft; 1/8Cb. 1500 to 1500ft; 4/3Cu. 2000 to 4000ft; 2/8Ac. 9000 to 11000ft; 5/8Ac. 15000 to 17000ft; 1/8Ci. at 18000ft.														
Inversion Levels :— Isothermal Levels :—														
RATES OF SUBSCRIPTION: Single copy 5d. or post free 7d. One calendar month 13/-; one quarter 35/-; one year 125/-.												Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General		
For special arrangements for supply to schools and colleges see Form 2452.												Meteorological Office, Air Ministry, Kingsway, London, W.C.2		



STATION		MAX. WIND
LERWICK 03005	060mb 140 03 19800m 310 07 06800/3 060mb 200 12 15000m 250 30 12000/1 12500/1	310 84 11380m 290 75 11510m 260 85 11820m
STORNOWAY 03026	17000m 240 12 00770/0 02980/2 10750/0 11680/1 12500/1 12960/1 13380/1 14800m 240 25 06450/0 10990/1 13140/1 16250m 250 29 01134/0 10650/0 11160/1 12810/1 14190/1	290 96 09450m 290 83 11430m 250 74 12320m 240 99 10900m
SHANWELL 03170	548mb 250 28 15600m 260 10 12350/1 12700/1 16400m 260 18 00680/0 13690/1	320 88 10800m 320 68 11390m
ALDERGROVE 03917	123mb 290 18 11250m 310 58 25400m 080 15 12100/1 13010/0 13410/1 26080/8 19400m 170 06 13200/1 17500/9 19200/8	340 72 11420m 270 63 12400m
AUGHTON 03322	036mb 090 09 12820/1 13560/1 035mb 070 14	330 82 09700m 330 65 12590m
HEMSBY 03496	260mb 260 26 08200m 360 50 11160m 360 63 04400/2 05600/0 08610/0 09070/0 10960/1 11830/1 080mb 320 06 13340/1	360 88 10280m 350 68 12500m
CRAWLEY 03774	345mb 320 40 132mb 310 18 03300/2 08640/0 12580/1 13720/1 13200m 360 50 23400m 040 06 13300/1 13800/1 20100m 080 05 02050/2 13480/1	340 69 09470m 360 74 10320m 360 64 12510m
CAMBORNE 03808	175mb 340 47 P19500m 240 07 13300m 360 42 25800m 100 13 12100/0 1390/1 122mb 340 13 14700m 320 21	340 65 12250m 360 62 12300m
VALENTIA 03953	905mb 220 19 779mb 240 27 659mb 260 32 584mb 260 32 243mb 320 42 088mb 310 19 962mb 210 31 767mb 230 30 275mb 280 35 158mb 290 42 147mb 29 37 059mb 230 05	320 63 13960m
Ocean Weather Station 'I' 59°00'N 19°00'W	885mb 170 42 205mb 240 88 10200m 230 134 03920/0 04310/0 05830/0 06590/0 07050/1 09490/1 09810/0 13500m 220 52 04710/0 08840/1 11300/1 17100m 210 22 16780/1	240 126 10410m 230 140 09320m 220 114 07600m 260 75 09110m
Ocean Weather Station 'J' 52°30'N 20°00'W	05710/1 09470/1 12300/1 173mb 250 84 12900m 250 76 15300m 250 18 05160/0 13050/1 14110/1	250 68 12470m 260 83 09260m 250 88 11580m 250 101 12110m
LARKHILL 03743	03220/3 13000/1 02130/2 13950/1	350 66 12200m

## NOTES ON THE AEROLOGICAL SITUATION

The ridge over western America is persisting while the complex low over the Atlantic has amalgamated into one centre which is moving towards the eastnortheast. The strong westerly flow across the Atlantic to the south of this centre is extending eastwards and is beginning to affect western Britain. The centre over the Baltic States is moving east.

AVERAGE AND EXTREME VALUES 1951-55  
JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22345	-48.1	-42	-55	...	...
60	19675	-48.1	-41	-55	120	3
100	16320	-48.8	-41	-56	244	5
150	13660	-48.3	-41	-59	263	10
200	11770	-49.8	-39	-67	271	16
300	9125	-46.7	-37	-56	271	22
400	7160	-32.6	-23	-44	271	18
500	5555	-20.8	-11	-31	269	14
700	2985	-5.2	3	-14	266	9
850	1435	2.8	14	-7	269	6

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	257	-54.7	10190
Max.	405	-40	12955
Min.	172	-68	6890

LARKHILL/CRAWLEY† at 03, 15h.  
(Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.)

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22310	-49.6	-47	-57	106	9
60	19675	-51.4	-45	-59	136	3
100	16370	-52.6	-46	-61	251	8
150	13745	-51.8	-42	-65	265	15
200	11890	-54.0	-40	-65	268	20
300	9265	-44.7	-36	-54	265	20
400	7275	-29.6	-19	-41	265	17
500	5640	-17.8	-9	-28	263	15
700	3050	-2.1	7	-10	263	11
850	1480	5.7	16	-3	264	7

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	234	-56.8	10950
Max.	388	-41	13440
Min.	160	-66	7225

MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5
60	19670	-60.7	-53	-69	135	4
100	16510	-62.9	-57	-71	255	21
150	13995	-59.0	-51	-67	265	38
200	12185	-56.6	-47	-67	275	42
300	9530	-40.1	-33	-46	285	32
400	7500	-23.9	-19	-29	285	27
500	5835	-11.8	-8	-17	285	24
700	3165	7.2	13	-1	290	18
850	1535	17.9	27	8	290	9

Tropopause	Average Press.	Average Temp.	Max. Press.	Min. Press.	Max. Temp.	Min. Temp.
Upper	123	-65.7	...	73	...	-73
Lower	193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

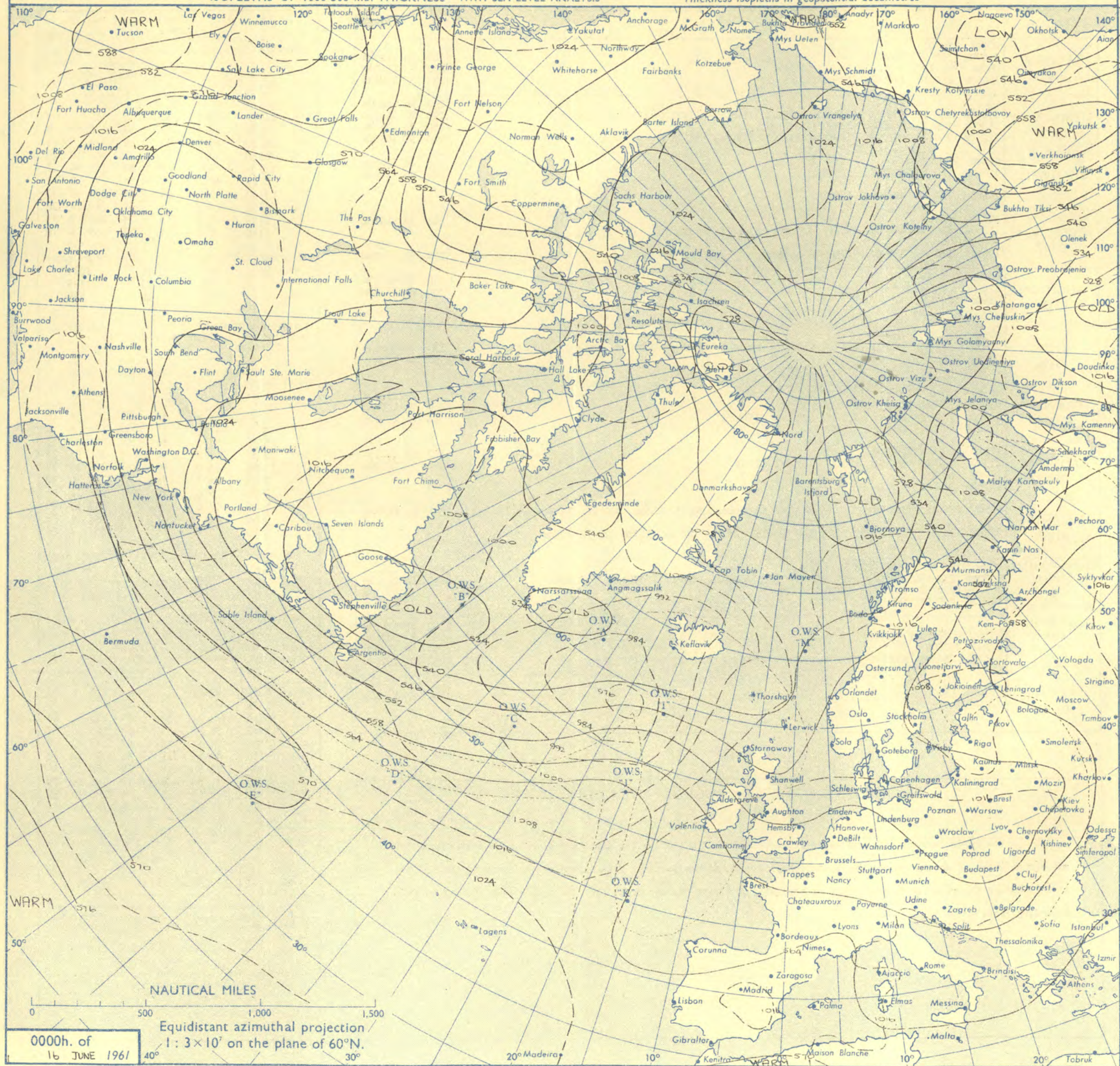
† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.



ISOPLETHS OF 1000-500 mb. THICKNESS WITH SEA LEVEL ANALYSIS

Thickness isopleths in geopotential decametres

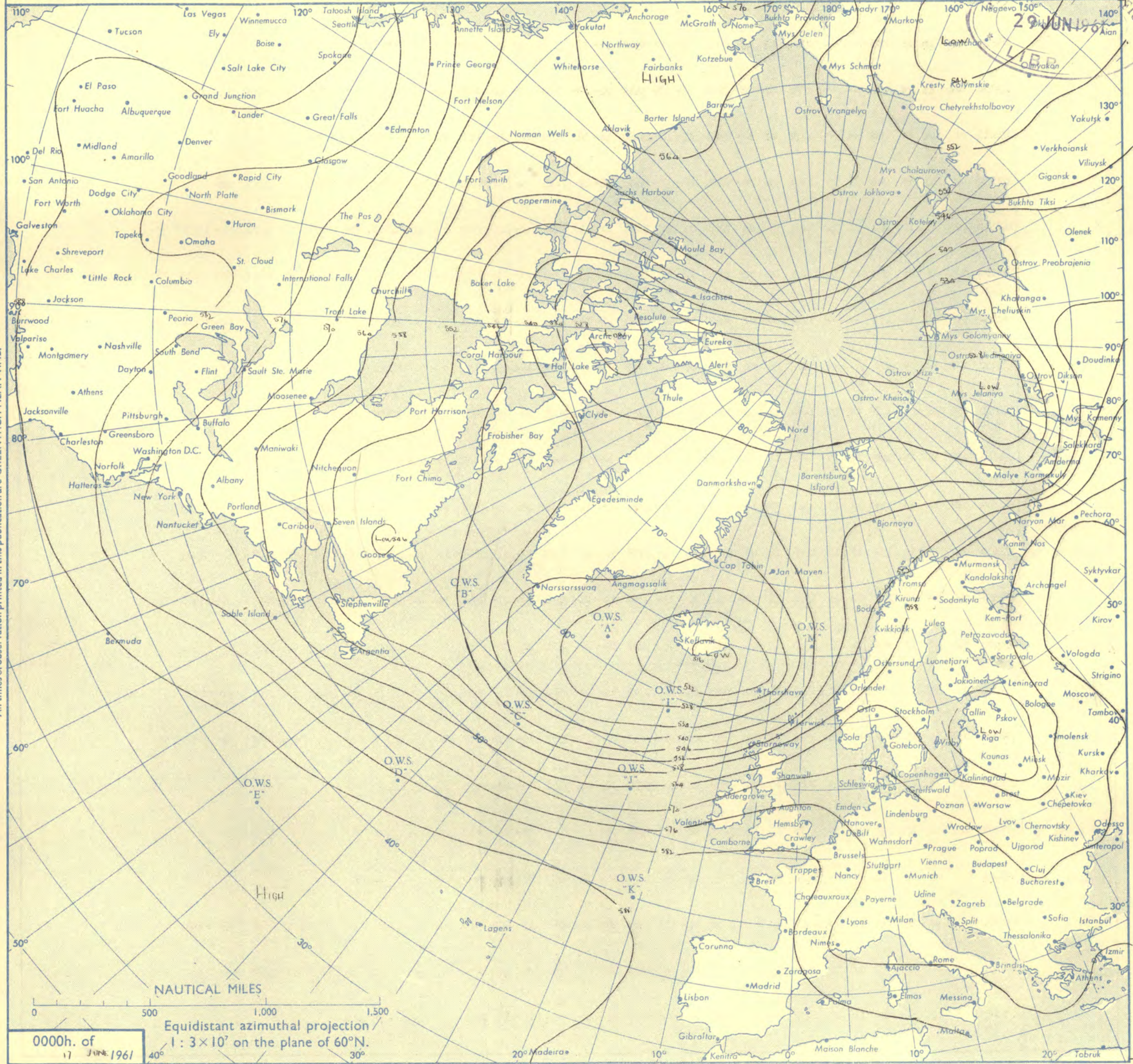




CONTOURS OF THE 500 mb. SURFACE

Isopleths in geopotential decametres

29 JUN 1961



NAUTICAL MILES

Equidistant azimuthal projection  
1 : 3 x 10<sup>7</sup> on the plane of 60°N.

0000h. of  
17 JUNE 1961



STATION	YYGGgg	SURFACE			1000mb			850mb			700mb			500mb			400mb			300mb			200mb			150mb			100mb			70mb			50mb			30mb		
		gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C			
LERWICK 03005	162330	082	10	10	026-	++	++	1324	07	03	2895	01-	02-	5548	11-	12-	7231	21-	24-	9290	37-	41-	11969	57-	13813	51-														
	171130	082	13	08	002	++	++	1336	01	03-	2874	06-	17-	5439	20-	32-	7078	28-	42-	9099	40-	++	11783	49-	13686	48-	16339	51-	18656	52-										
STORNOWAY 03026	170015	013	11	08	006	++	++	1338	01	02-	2880	05-	17-	5467	14-	31-	7139	22-	39-	9190	38-	++	11886	50-	13770	50-														
	171130	013	13	05	018	13	05	1346	01	01-	2882	06-	17-	5470	18-	22-	7115	24-	34-	9161	38-	44-	11858	52-	13747	49-	16417	46-												
SHANWELL 03170	162330	005	15	12	042	14	12	1405	09	08	3008	04	02-	5672	10-	14-	7365	20-	25-	9429	37-	42-	12101	59-	13865	63-	16444	54-	18740	53-										
	171130	005	16	06	060	15	06	1403	03	02-	2978	02	01	5649	10-	15-	7333	21-	25-	9395	36-	42-	12079	56-	13881	56-	16500	55-	18813	51-	21024	48-								
ALDERGROVE 03917	162340	077	15	14	073	++	++	1433	09	07	3027	04	02	5705	10-	14-	7393	22-	26-	9448	37-	41-	12113	60-	13883	63-	16394	61-	18644	56-	20790	54-	24071	53-						
	171250	077	14	09	076	++	++	1419	04	01	3010	06	04	5695	08-	12-	7397	18-	23-	9487	33-	42-	12224	53-	14038	59-														
AUGHTON 03322	162330	056	14	09	118	14	09	1482	11	10	3091	05	03-	5756	10-	21-	7449	20-	29-	9503	39-	46-	12152	61-	13904	62-	16440	58-	18709	54-	20874	54-								
	171140	056	18	15	109	17	14	1472	11	01-	3085	07	02	5769	10-	14-	7460	20-	29-	9530	36-	45-	12230	56-	14009	67-	16518	61-	18760	58-	20886	57-								
HEMSBY 03496	162330	012	16	13	141	16	13	1513	12	17-	3115	03	01-	5778	10-	14-	7465	20-	23-	9525	36-	41-	12193	59-	13975	60-	16546	54-	18846	52-										
	171130	012	19	14	132	17	12	1506	12	08	3112	04	04-	5778	11-	18-	7452	22-	31-	9497	39-	49-	12146	62-	13868	75-	16290	63-	18499	59-										
CRAWLEY 03774	162338	144	12	12	165	12	11	1528	13	26-	3132	04	12-	5807	10-	18-	7498	20-	27-	9563	37-	44-	12240	58-	14017	65-	16550	56-	18824	54-										
	171135	144	17	13	162	16	13	1530	12	09	3142	07	05-	5822	09-	24-	7514	20-	32-	9585	35-	48-	12285	56-	14063	68-	16569	59-	18831	55-										
CAMBORNE 03808	162330	088	14	12	168	13	11	1528	11	10	3138	05	00	5815	10-	20-	7502	20-	31-	9556	38-	46-	12223	59-	13982	66-	16477	60-	18724	57-	20868	55-								
	171130	088	15	15	157	15	14	1527	13	10	3143	06	01	5830	09-	15-	7531	19-	29-	9612	35-	45-	12317	57-	14086	69-	16584	59-	18851	55-										
VALENTIA 03953	162330	014	15	14	120	14	13	1484	10	09	3089	05	03	5770	08-	14-	7480	19-	28-	9560	34-	41-	12260	56-																
	171200	014	14	13	107	14	13	1475	13	12	3085	06	02	5760	09-	13-	7460	18-	27-	9540	35-	43-	12240	56-	++++	++	16580	55-												
Ocean Weather Station 'I' 59°00'N 19°00'W	170001		09	08	092-	++	++	1234	00	02-	2768	07-	21-	5310	25-	39-	6910	33-	45-	8900	37-	++	11700	39-																
	171200		10	06	094-	++	++	1229	01-	02-	2752	11-	15-	5260	27-	33-	6840	37-	44-	8810	38-	++	11600	39-	13560	43-	16270	46-	18640	47-	20870	46-								
Ocean Weather Station 'J' 52°30'N 20°00'W	162300		12	08	083	12	08	1417	02	05-	2992	02	00	5670	10-	13-	7360	20-	26-	9430	35-	42-	12130	56-	13920	65-	16470	56-	18750	53-										
	171100		12	09	080	11	08	1407	01	00	2955	03-	07-	5610	09-	22-	7300	21-	33-	9360	38-	49-	12070	53-																



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	21 5647+	997	987	737	880 09 08 860 ++ 03 811 04 03 702 01- 02- 626 02- 03- 484 ++ 14- 372 25- 29- 284 40- 45- 208 57- 175 56- 161 52- 116 52-	208	11710	57-
	02 22400	000	990	837	948 07 04 784 03- 09- 754 03- 12- 634 09- 23- 524 19- 31- 481 21- 34- 469 20- 33- 317 37- 50- 253 47- 250 46- 222 51- 163 47- 100 51- 070 52-	222	11100	51-
STORNOWAY 03026	01 42502	001	999	813	991 11 08 867 02 00 774 ++ 10- 718 05- 15- 698 05- 17- 524 15- 32- 505 14- 31- 404 21- 38- 316 35- 50- 291 40- ++ 218 51- 157 49- 124 54- 107 49-	218	11300	51- 124 15000 54-
	02 3263+	002	001	839	995 11 05 885 02 01- 754 05- 06- 743 05- 09- 727 ++ 15- 654 ++ 25- 634 ++ 24- 599 11- 19- 589 10- 16- 573 ++ 14- 545 12- 16- 506 ++ 20- 497 18- 22- 473 ++ 30- 413 24- 38- 400 24- 34- 365 27- 34- 344 ++ 35- 287 40- 46- 205 53- 180 48- 131 51- 104 45- 091 49- 081 49- 076 46-	205	11720	53- 091 17060 49-
SHANWELL 03170	02 865++	005	004	654	938 12 11 863 09 08 819 09 08 775 ++ 03 763 ++ 02- 749 08 01 717 ++ 01 667 ++ 09- 630 ++ 04- 562 07- 08- 544 06- 09- 456 13- 17- 380 23- 28- 283 40- 45- 194 61- 167 66- 158 64- 151 65- 145 55- 138 53- 125 58- 118 58- 111 54- 100 54- 072 52- 068 54- Pressure doubtful above 200 mb	167	13140	66- 125 15010 58-
	03 2252+	007	006	640	002 15 06 871 04 01 847 03 03- 832 04 05- 799 03 11- 776 04 12- 748 01 06- 741 03 03- 730 ++ 00 678 02 01 614 01- 03- 586 02- 08- 530 ++ 12- 497 ++ 15- 441 17- 20- 387 22- 26- 283 40- 46- 211 54- ++ 175 62- 161 61- 156 57- 118 50- 103 55- 096 55- 087 50- 048 49- 044 44-	175	12910	62- 103 16320 55-
ALDERGROVE 03917	20 574++	009	999	611	903 10 08 809 08 05 751 04 01 720 05 03 681 02 00 633 02 04- 573 04- 10- 486 11- 16- 478 11- 17- 385 ++ 27- 286 40- 45- 210 57- 170 66- 160 63- 142 64- 126 60- 098 61- 075 56- 030 53-	170	13110	66-
	60 2647+	009	000	607	988 13 09 905 06 04 825 03 02- 808 06 04 746 07 05 649 03 01 560 03- 06- 552 02- 05- 525 ++ 11- 491 09- 13- 435 14- 19- 364 23- 28- 313 29- 38- 298 34- 43- 267 ++ 49- 258 42- 213 47- 198 53- 160 62- 116 53-	160	13640	62-
AUGHTON 03322	03 855++	014	007	622	925 11 09 905 13 12 803 11 09 775 09 07 728 07 01 630 ++ 10- 561 05- 17- 517 10- 19- 490 10- 23- 450 14- 23- 294 40- 47- 175 67- 164 68- 143 58- 132 62- 060 53- 047 54- 040 51-	164	13360	68-
	02 855++	013	006	608	984 15 13 926 11 09 868 09 07 854 12 04 850 ++ 01- 836 ++ 05 798 09 07 783 10 08 733 07 04 723 08 04 635 ++ 04- 608 07 05- 544 07- 11- 530 06- 13- 499 ++ 14- 482 ++ 19- 452 ++ 21- 371 24- 33- 278 40- 49- 153 68- 139 67- 123 58- 093 61- 088 58- 044 56-	153	13900	68-
HEMSBY 03496	03 34530	017	015	631	985 18 14 951 ++ 09 928 ++ 12- 900 ++ 09 897 12 06 880 13 04- 872 ++ 11- 840 12 20- 801 11 12- 762 08 09- 703 ++ 02- 682 01 00 653 01 01- 607 02- 06- 588 03- 06- 520 08- 13- 469 ++ 16- 441 15- 19- 358 ++ 29- 305 35- 40- 284 40- 45- 201 59- 179 62- 152 62- 146 58- 070 52-	179	12900	62-
	02 11507	016	014	634	984 15 11 870 12 10 854 13 09 949 ++ 07 807 10 07 776 08 04 754 09 04- 750 ++ 09- 725 ++ 04- 688 03- 05- 637 00 05- 515 ++ 18- 490 ++ 18- 406 22- 31- 292 40- 50- 187 66- 148 75- 102 64- 063 58- Temperature suspect above 200 mb	148	13970	75-
CRAWLEY 03774	02 00900	020	002	624	989 ++ 11 973 14 09 970 ++ 07 906 10 02 893 ++ 02 878 14 16- 873 ++ 25- 833 13 26- 763 08 12- 678 ++ 16- 650 ++ 09- 619 ++ 16- 594 ++ 09- 555 ++ 14- 538 06- 14- 517 ++ 13- 500 ++ 18- 440 ++ 20- 423 17- 24- 370 ++ 30- 284 ++ 46- 266 44- 176 63- 165 62- 158 65- 145 65- 136 61- 101 56- 068 54-	158	13700	65-
	02 864++	019	002	605	973 12 10 945 11 10 932 13 12 872 11 09 863 12 10 834 12 06 783 09 04 730 ++ 13- 718 08 11- 702 ++ 05- 630 ++ 09- 594 ++ 21- 579 ++ 12- 575 ++ 15- 523 ++ 28- 508 ++ 20- 497 ++ 26- 449 ++ 38- 403 ++ 31- 360 25- 39- 286 ++ 49- 245 46- 149 69- 124 60- 105 60- 069 55-	149	14100	69-
CAMBORNE 03808	02 554++	020	010	618	988 12 11 977 ++ 09 946 ++ 08 929 12 10 899 10 10 883 11 10 828 11 09 760 ++ 06 744 ++ 03 710 06 01 648 01 03- 612 00 06- 588 02- 13- 551 05- 17- 503 ++ 17- 493 ++ 23- 479 ++ 21- 435 16- 27- 400 20- 31- 288 40- 47- 191 62- 151 67- 095 59- 036 54-	151	13940	67-
	20 860++	019	008	608	959 12 11 942 13 12 905 ++ 11 878 13 12 842 13 09 824 13 00 815 ++ 04- 790 ++ 02 768 ++ 06 737 ++ 05 724 ++ 00 712 ++ 01 654 04 02- 596 01- 08- 484 10- 15- 477 13- 21- 436 ++ 21- 392 ++ 30- 368 23- 33- 268 40- 50- 208 55- 152 70- 129 63- 079 53- 068 56- 061 50-	152	14010	70-
VALENTIA 03953	58 862++	014	013	615	932 11 10 906 12 11 851 10 09 832 10 09 754 08 06 512 06- 13- 445 14- 20- 340 27- 35- 295 35- 42- 253 43- 212 53- 175 63- 153 66-	153	13900	66-
	58 863++	012	011	617	930 11 10 900 13 12 842 13 12 746 06 04 617 00 04- 514 08- 17- 478 10- 16- 451 11- 21- 358 24- 33- 296 36- 44- 208 54- 166 64- 145 63- 124 57- 090 54-	166	13400	64-
Ocean Weather Station 'I' 59°00'N 19°00'W	25 694++	989	989	846	967 08 05 795 03 06- 777 03- 06- 758 ++ 08- 731 06- 08- 710 ++ 18- 691 07- 22- 599 15- 34- 484 ++ 40- 476 27- 38- 374 36- 48- 349 38- 237 37- 172 41-	349	07900	38-
	25 32460	989	989	867	970 ++ 03 957 07 04 908 03 00 854 01- 02- 832 01- 03- 798 ++ 07- 710 ++ 14- 622 ++ 21- 492 ++ 34- 405 37- 43- 374 40- 46- 369 41- 256 37- 089 47- 040 46-	369	07400	41-
Ocean Weather Station 'J' 52°30'N 20°00'W	03 58532	010	010	629	905 05 03 860 02 04- 806 ++ 16- 786 05 09- 766 03 07- 727 04 00 704 02 00 666 02 00 591 02- 03- 545 ++ 09- 471 ++ 15- 442 14- 18- 403 ++ 26- 377 24- 28- 361 24- 30- 352 26- 33- 277 40- 47- 167 63- 150 65- 137 58- 103 58- 099 55- 085 57- 070 53-	150	13900	65-
	25 675++	009	009	839	990 ++ 07 931 05 04 822 01- 02- 797 01- 04- 787 ++ 05- 768 00 03- 713 05- 07- 690 02- 11- 673 02- 18- 655 02- 20- 628 04- 27- 602 02- 27- 563 07- 34- 528 07- 22- 519 07- 22- 463 13- 25- 456 13- 15- 366 26- 38- 318 33- 44- 285 40- 256 43- 187 55-	187	++++	55-



STATION	YYGGgg	Type	Surface	1000mb	900m	850mb 1500m	750mb 2100m	700mb 3000m	600mb 4200m	500mb 5400m	400mb 7200m	300mb 9000m	250mb 10500m	200mb 12000m	150mb 14100m	100mb 15900m	70mb 18300m	50mb 20700m	30mb 23700m	20mb 26400m	10mb 30900m
LERWICK 03005	162330	T	190 23	+++ ++	230 41	240 41	230 50	220 58	210 80	220 84	220 90	220 93	220 93	220 93	220 93	220 93					
	170530	P	220 28	+++ ++	250 43	250 36	240 40	240 45	240 57	240 73	240108	250110	240121	240 96							
	171130	T	220 31	+++ ++	240 39	240 48	240 44	240 45	240 59	240 75	240107	250135	250106	250 70							
	171732	P	210 20	+++ ++	230 35	230 37	240 41	240 42	230 43	230 65	230120	240153	240140	240115							
STORNOWAY 03026	162330	P	250 27	+++ ++	240 42	240 41	240 48	240 63	230 85	230108	240111	240124	240130	250113	240 45	230 46	220 16				
	170545	P	240 22	+++ ++	240 38	240 42	240 43	240 53	250 66	250 96	250114	250134	250136	250102	240 53						
	171130	T	220 21	+++ ++	230 39	230 40	240 41	240 44	240 64	240 95	240120	240144	240118								
	171730	P	250 14	+++ ++	240 33	250 34	250 41	250 43	250 53	240 64	230122	230151	240148	240 99	240 68	240 51					
SHANWELL 03170	162330	T	220 25	+++ ++	250 52	250 54	240 57	230 58	240 57	250 67	240 62	250 63	250 61	250 59	P260 40	270 28					
	170530	P	270 12	+++ ++	260 29	250 39	250 49	250 54	260 66	260 76	250 82	260 81	260 81	260 80							
	171130	T	230 22	+++ ++	240 24	240 32	240 47	240 58	250 68	250 78	250 84	250 84	250 88	250101							
	171730	P	230 13	+++ ++	250 36	240 39	250 48	250 64	240 85	230 91	240100	250123	240104	240100							
ALDERGROVE 03917	162340	T	230 20	+++ ++	250 36	250 40	250 52	250 54	240 59	250 62	260 67	260 72	270 73	270 75	270 59	240 22	270 11				
	170530	P	260 10	+++ ++	240 26	250 37	250 44	250 47	260 65	260 68	250 70	260 67	260 74	270 76	260 43	260 30	260 08				
	171130	P	230 12	+++ ++	240 28	240 38	250 53	240 62	250 65	250 68	250 72	250 80	250 82	250 89							
	171730	T	230 10	+++ ++	250 32	250 41	250 49	250 71	240 84	240 85	250 96	250100	250107	260111							
AUGHTON 03322	162330	T	160 12	+++ ++	260 33	260 30	260 33	250 31	260 36	260 36	280 33	280 31	300 43	300 48	300 40	270 15	130 04	070 08			
	170530	P	200 14	+++ ++	250 28	250 34	250 34	260 40	260 45	270 40	270 40	270 42	270 40	280 44	270 40	270 12	260 12				
	171140	T	200 12	+++ ++	240 23	250 30	250 47	250 46	250 43	240 47	250 50	260 56	260 55	260 50	260 46	240 49	220 29	220 33			
	171730	P	180 20	+++ ++	240 14	250 51	250 50	250 48	250 55	250 54	250 61	260 60	260 61	260 56	250 43	240 26					
HEMSBY 03496	170030	P	210 08	+++ ++	250 19	250 16	260 18	270 22	280 22	320 18	320 24	330 32	340 40	330 42	340 28	320 12	350 03	060 06			
	170530	P	230 10	+++ ++	250 21	250 18	260 19	270 23	290 20	290 23	310 26	310 24	340 37	340 38	330 24	320 09	020 03	090 12	100 13		
	171130	T	230 16	+++ ++	250 20	260 22	250 21	260 21	280 24	270 23	280 24	290 31	290 32	300 31	320 22	240 07	200 06				
	171730	P	240 16	+++ ++	240 27	250 29	250 29	250 28	250 29	260 34	270 33	270 34	280 34	280 33	280 26	290 12	000 00	130 03	100 11		
CRAWLEY 03774	162338	T	000 00	+++ ++	250 22	260 15	270 15	270 17	300 16	340 20	330 28	350 28	350 37	360 38	350 36	340 09	340 07				
	170530	P	240 05	+++ ++	260 15	270 15	260 18	290 20	310 18	300 18	320 17	330 21	350 30	360 33	340 26	350 10	070 05				
	171110	P	230 12	+++ ++	260 24	260 13	250 15	280 17	280 15	280 21	290 19	300 20	310 21	330 30	360 20	320 06	290 01	140 09	090 15	100 20	090 28
	171730	P	220 07	+++ ++	250 29	250 26	250 28	260 27	250 21	270 26	280 25	280 26	290 31	300 31	300 19	300 11	320 03				
CAMBORNE 03808	162330	T	220 12	+++ ++	260 24	260 25	280 18	270 13	280 14	300 16	300 24	310 19	320 20	330 29	340 27	290 07	350 04	080 04			
	170530	P	210 10	+++ ++	250 23	260 20	270 21	280 18	270 17	270 18	280 20	280 21	330 18	340 17	330 21	320 15	310 04	080 08	080 12	090 19	
	171130	T	200 13	+++ ++	240 21	250 24	250 21	260 18	260 22	260 25	260 29	260 22	280 24	280 20	300 18	300 05	280 02				
	171730	P	210 13	+++ ++	260 30	260 28	260 26	260 28	260 29	260 32	260 33	270 37	260 37	260 34	280 23	280 09	000 00	110 04	090 14		
VALENTIA 03953	162330	T	220 10	220 13	+++ ++	220 32	+++ ++	270 45	+++ ++	270 52	250 41	270 38	+++ ++	270 47							
	171200	T	190 17	190 19	+++ ++	240 47	+++ ++	240 48	+++ ++	250 57	260 59	260 55	+++ ++	270 60							
Ocean Weather Station 'I' 59°00'N 19°00'W	170001	T	250 35	+++ ++	260 54	260 51	260 39	260 45	250 46	250 56	240 67	250 84	240 77	240 75	P250 51	250 28	250 20				
	170600	P	270 30	+++ ++	250 43	250 48	270 43	260 43	250 47	250 54	250 76	250 77	250 72	240 65	250 54	250 30					
	171200	T	240 30	+++ ++	260 43	260 44	260 37	260 38	270 34	270 50	260 70	250 52	250 59	250 57	260 43	240 31	230 18	190 13			
	171800	P	270 30	+++ ++	260 50	260 47	270 51	270 45	280 36	290 33	290 44	280 41	270 55	260 54	270 39						
Ocean Weather Station 'J' 52°30'N 20°00'W	162300	P	240 21	+++ ++	250 26	250 28	250 44	250 59	240 75	250 82	240 97	250 87	250 90	250 91	250 67	250 41					
	170500	P	225 20	+++ ++	240 28	250 33	240 41	240 65	240 82	240 89	250 93	250 91	250103	240 91	240 61						
	171100	T	270 20	+++ ++	280 30	270 31	260 43	250 54	250 78	250102	250106	240117	240111	240122	250 80	250 31					
	171700	P	270 20	+++ ++	280 23	280 25	280 37	270 42	270 60	260 88	260 98	260113	260127	250100	250 75	260 38	260 19				
LARKHILL 03743																					

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE MSL Surf. °C level	SURFACE m °C °C	1000mb m °C °C	950mb m °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb m °C °C	700mb m °C °C	650mb m °C °C	600mb m °C °C	550mb m °C °C	500mb m °C °C
171322	46.2°N 23.9°W	020 013 610	061 16 16	168 15 15	1061 15 11	1542 12 09	2048 12 05	09 01-	3155 06 04-	02 12-	4398 01-15-	06- 12-	5828 10- 23-	
Cloud :— 7/8 Sc 100 to 1000ft, 5/8 Sc 1800 to 2200 ft., 2/8 Sc. 4500 to 6000ft., 2/8 Ci 28,000 to TNG Inversion Levels :— 1013mb to 1000mb 16°C to 17°C Isothermal Levels :— 967mb to 900mb 15°C														
YYGGgg	POSITION	PRESSURE MSL Surf. °C level	SURFACE m °C °C	1000mb m °C °C	950mb m °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb m °C °C	700mb m °C °C	650mb m °C °C	600mb m °C °C	550mb m °C °C	500mb m °C °C
Cloud :— Inversion Levels :— Isothermal Levels :—														
RATES OF SUBSCRIPTION: Single copy 5d. or post free 7d. One calendar month 13/-; one quarter 35/-; one year 125/-. For special arrangements for supply to schools and colleges see Form 2452.												Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General Meteorological Office, Air Ministry, Kingsway, London, W.C.2		



## UPPER WINDS AT ADDITIONAL LEVELS

Page 5

STATION		MAX. WIND
LERWICK 03005	13500m 230 60 12600 240 104 05350/0 06200/0 06600/0 07800/0	220 100 11080m 240 125 10300m 240 160 09710m 240 168 09630m
STORNOWAY 03026	13100m 250 74 19100m 200 11 03465/0 04910/0 05890/0 12120/1 12700/1 13620/1 16320/1 15300m 250 47 05020/0 05470/0 07480/0 12280/1 12970/1 235mb 250 91 18000m 240 46 06160/0 06560/0 06950/0 07770/0 11810/1 13060/1 14410/1	240 132 10600m 250 143 10250m 240 146 09520m 230 154 08930m
SHANWELL 03170	P16800m 270 27 13200m 260 63 161mb 260 81 02080/0 04400/0 08870/0 09430/1	250 68 05540m 260 86 08700m 250 108 11650m 250 136 09150m
ALDERGROVE 03917	134mb 270 40 19500m 240 07 03880/0 13550/1 14050/1 17250/1 13500m 280 90 02100/0 13100m 260 108 04100/0	260 81 11810m 270 80 11300m 250 99 11620m 250 120 10000m
AUGHTON 03322	042mb 110 10 15320/1 18000m 250 16	260 63 07470m
HEMSBY 03496	23200m 070 11 14160/1 15120m 320 16	
CRAWLEY 03774	14290/1 28800m 110 26 33000m 110 27 34800m 080 27	
CAMBORNE 03808	132mb 320 17 039mb 060 17 28800m 080 19 30300m 070 28 13510/0 13900/1	
VALENTIA 03953	906mb 210 21 832mb 220 38 754mb 240 42 512mb 270 55 253mb 270 43 153mb 300 55 900mb 230 44 746mb 240 50 617mb 250 51 358mb 260 57	260 67 10270m
Ocean Weather Station 'I' 59°00'N 19°00'W	P12900m 260 56 15000m 250 37 19200m 250 15 16800m 250 30 045mb 210 11 02450/1	250 82 08860m 260 72 06470m
Ocean Weather Station 'J' 52°30'N 20°00'W	080mb 250 21 12900m 240 67 15000m 240 63 01610/0 02760/0 07120/0 12480/1 12900/1 13200m 250 86 15300m 250 48 16500m 250 36 14700m 260 55 20100m 260 18	250 101 11270m 250 104 09950m 240 126 09310m 250 128 10610m
LARKHILL 03743		

## NOTES ON THE AEROLOGICAL SITUATION

The ridge over western America is persisting while the small low near Baffin Land is moving south. The centre over the Atlantic is moving towards the northeast and deepening slowly with the strong westerly flow on its southern flank persisting. The trough over the Baltic states is moving east and filling.

AVERAGE AND EXTREME VALUES 1951-55  
JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22345	-48.1	-42	-55	...	...
60	19675	-48.1	-41	-55	120	3
100	16320	-48.8	-41	-56	244	5
150	13660	-48.3	-41	-59	263	10
200	11770	-49.8	-39	-67	271	16
300	9125	-46.7	-37	-56	271	22
400	7160	-32.6	-23	-44	271	18
500	5555	-20.8	-11	-31	269	14
700	2985	-5.2	3	-14	266	9
850	1435	2.8	14	-7	269	6

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	257	-54.7	10190
Max.	405	-40	12955
Min.	172	-68	6890

LARKHILL/CRAWLEY† at 03, 15h.  
(Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N.,  
Long. 00° 13' W.)

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22310	-49.6	-47	-57	106	9
60	19675	-51.4	-45	-59	136	3
100	16370	-52.6	-46	-61	251	8
150	13745	-51.8	-42	-65	265	15
200	11890	-54.0	-40	-65	268	20
300	9265	-44.7	-36	-54	265	20
400	7275	-29.6	-19	-41	265	17
500	5640	-17.8	-9	-28	263	15
700	3050	-2.1	7	-10	263	11
850	1480	5.7	16	-3	264	7

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	234	-56.8	10950
Max.	388	-41	13440
Min.	160	-66	7225

MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5
60	19670	-60.7	-53	-69	135	4
100	16510	-62.9	-57	-71	255	21
150	13995	-59.0	-51	-67	265	38
200	12185	-56.6	-47	-67	275	42
300	9530	-40.1	-33	-46	285	32
400	7500	-23.9	-19	-29	285	27
500	5835	-11.8	-8	-17	285	24
700	3165	7.2	13	-1	290	18
850	1535	17.9	27	8	290	9

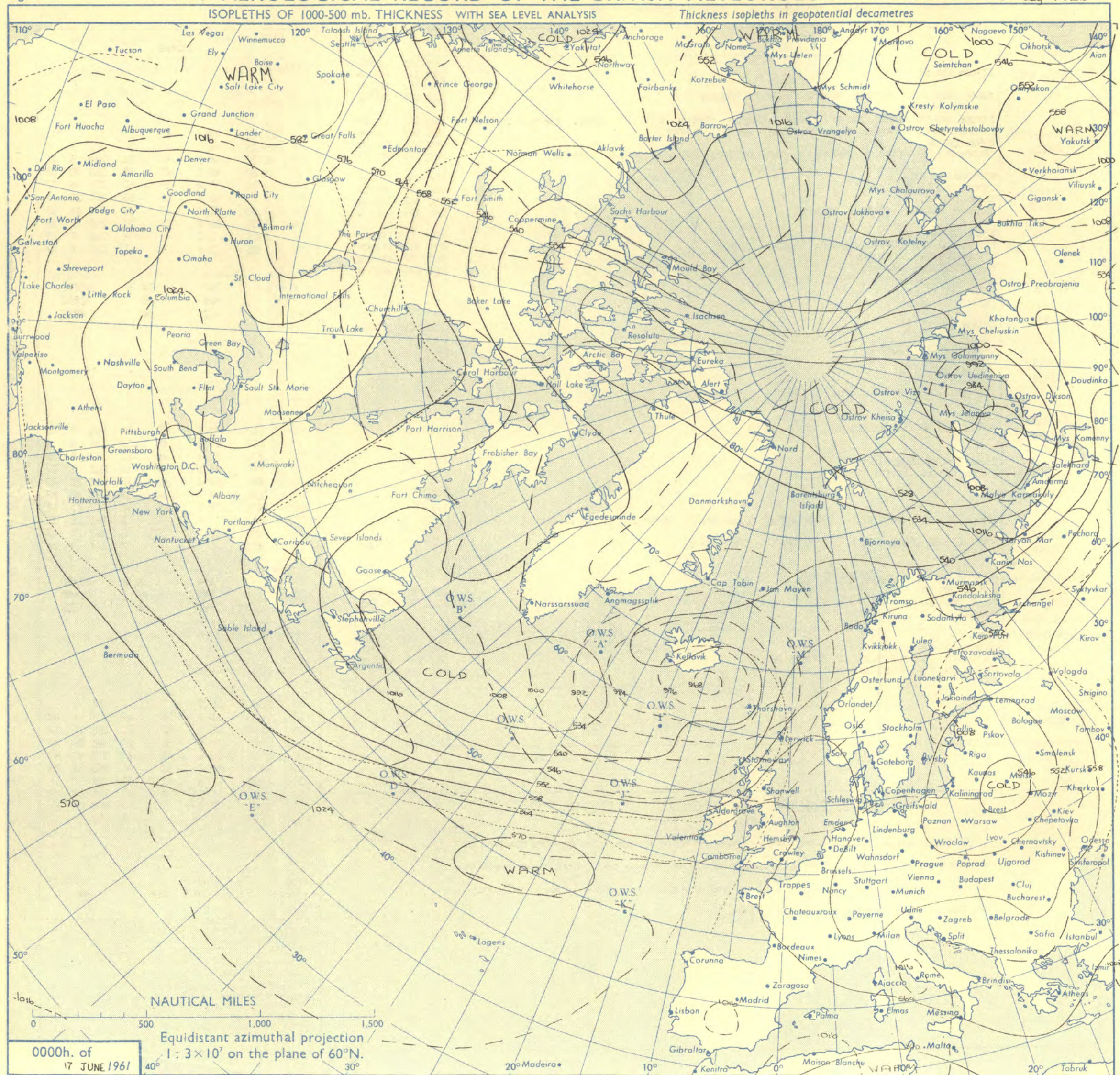
Tropopause	Average Press.	Average Temp.	Max. Press.	Max. Temp.	Min. Press.	Min. Temp.
Upper	123	-65.7	mb.	73	...	-73
Lower	193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed.  
Average winds are based on observations at Lerwick,  
Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at  
03, 15h.

† Observations were made at Larkhill (Lat. 51° 12' N.,  
Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values  
for any element are given for less than 10 observations.  
Otherwise no averages are given for less than 3 observa-  
tions and average values based on less than 10 observa-  
tions are given in brackets.

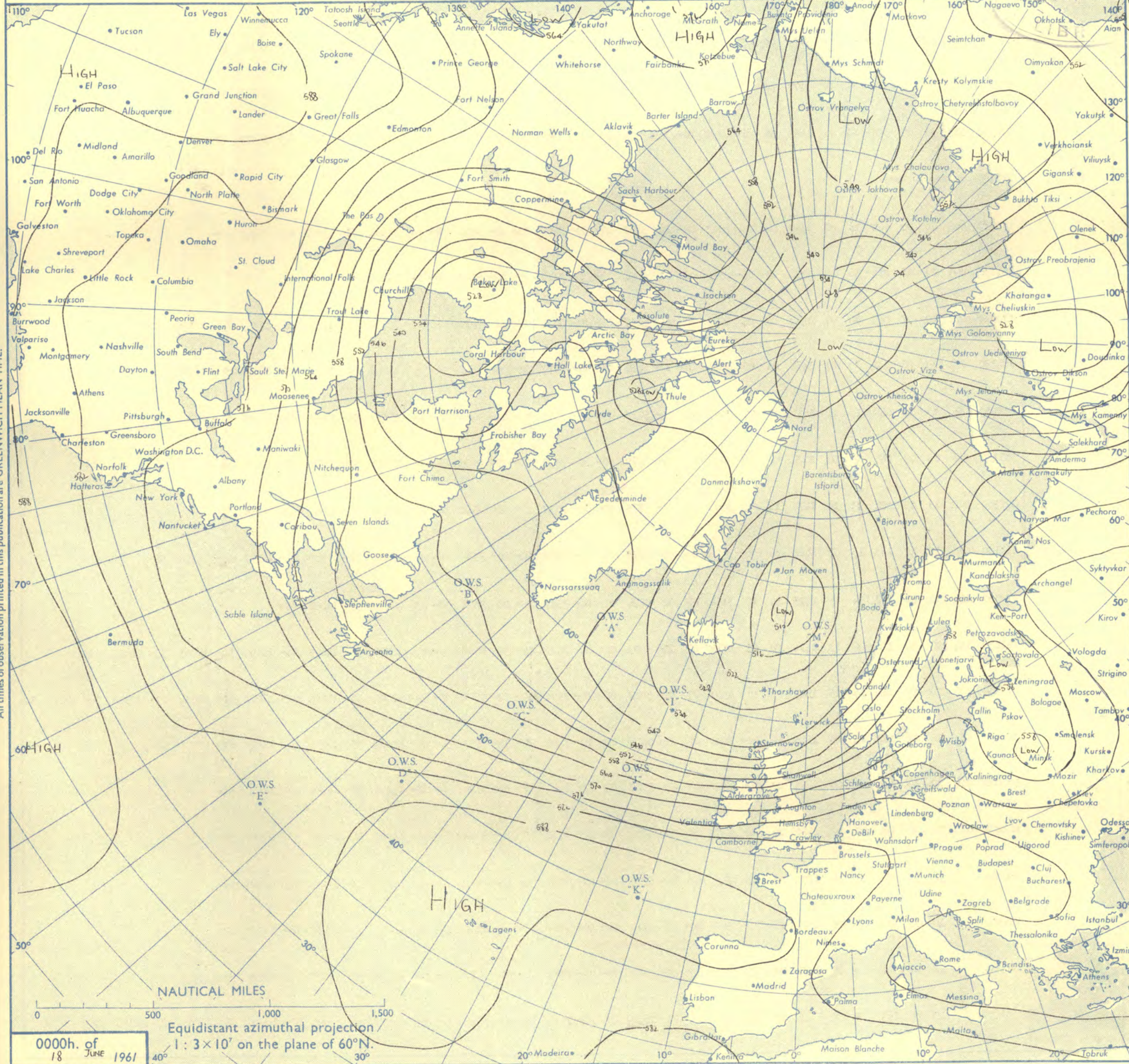






CONTOURS OF THE 500 mb. SURFACE

Isopleths in geopotential decametres



All times of observation printed in this publication are GREENWICH MEAN TIME.

NAUTICAL MILES

Equidistant azimuthal projection  
1 : 3 x 10<sup>7</sup> on the plane of 60°N.

0000h. of  
18 JUNE 1961



STATION	YYGGgg	SURFACE		1000mb		850mb		700mb		500mb		400mb		300mb		200mb		150mb		100mb		70mb		50mb		30mb		
		gpm	°C °C	gpm	°C °C	gpm	°C °C	gpm	°C °C	gpm	°C °C	gpm	°C °C	gpm	°C °C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	
LERWICK 03005	172330	082	09 07	055- ++ ++	1271	00 03-	2802	09- 15-	5327	24- 30-	6917	36- 43-	8883	37- 47-	11681	39- 13636	43- 16338	48- 18692	48- 20911	48-								
	181130	082	10 07	050- ++ ++	1277	01 02-	2808	08- 12-	5337	24- 34-	6927	35- 47-	8892	41- ++	11672	40- 13624	42- 16344	46- 18715	46-									
STORNOWAY 03026	172330	013	11 07	007- ++ ++	1323	01 01-	2859	08- 13-	5370	28- 32-	6955	34- 45-	8952	37- ++	11755	39- 13701	45- 16379	49-										
	181130	No ascent made																										
SHANWELL 03170	172330	005	10 08	029 10 08	1359	04 03-	2913	04- 18-	5489	17- 39-	7156	21- 43-	9221	34- ++	11931	51- 13827	49- 16453	53-										
	181130	005	17 06	062 16 06	1396	00 03-	2930	08- 21-	5492	23- 38-	7112	25- 42-	9162	36- ++	11869	51-												
ALDERGROVE 03917	172330	077	10 07	085 10 07	1417	02 00	2972	01- 16-	5617	05- 24-	7325	18- 32-	9410	34- 47-	12124	55- 13962	51- 16555	55- 18852	52-									
	181150	077	15 08	132 13 07	1465	01 02-	2994	07- 17-	5591	11- 29-	7277	19- 39-	9345	36- ++	12040	54- 13897	51- 16497	56- 18782	53-									
AUGHTON 03322	172330	056	13 12	088 13 11	1441	07 02	3027	04 22-	5710	07- 28-	7413	19- 42-	9484	36- ++	12177	56- 13958	64- 16495	57- 18765	53-									
	181130	056	15 08	145 13 07	1474	00 03-	3027	02- 22-	5679	08- 27-	7370	20- 35-	9435	36- ++	12116	58- 13910	58- 16467	56-										
HEMSBY 03496	172330	012	18 15	098 17 14	1478	14 09	3093	07 01-	5775	09- 16-	7472	19- 28-	9542	36- 49-	12214	59- 13982	64- 16496	59-										
	181130	012	17 12	133 15 07	1482	06 04	3074	03 09-	5773	07- 14-	7472	20- 26-	9536	36- 41-	12211	58- 13990	61- 16517	59- 18790	54-									
CRAWLEY 03774	172330	144	14 14	137 ++ ++	1513	14 10	3134	07 02	5824	09- 14-	7522	20- 28-	9591	36- 43-	12283	57- 14058	66-											
	181130	144	17 14	150 16 13	1512	08 06	3114	07 29-	5823	06- 24-	7523	19- 32-	9598	36- 47-	12286	58- 14067	64- 16592	58- 18863	53- 21035	52-								
CAMBORNE 03808	172330	088	15 15	141 15 15	1517	12 10	3130	07 01-	5827	08- 18-	7526	19- 32-	9602	35- 47-	12302	56- 14084	67- 16567	60- 18804	57- 20950	54- 24239	52-							
	181130	088	16 12	182 13 10	1519	10 01-	3129	06 29-	5835	08- 19-	7526	20- 33-	9591	36- 46-	12269	58- 14031	68- 16535	61- 18788	54-									
VALENTIA 03953	180000	014	12 10	134 12 08	1465	03 05-	3043	03 32-	5740	07- 25-	7440	18- 32-	9520	34- 48-	12230	56- +++++ ++	16540	60-										
	181200	014	14 10	187 11 07	1516	00 04-	3070	01 17-	5740	09- 22-	7430	19- 34-	9510	36- 40-	12200	56- +++++ ++	16520	58-										
Ocean Weather Station 'I' 59°00'N 19°00'W	180000		10 08	055- ++ ++	1273	01 02-	2804	09- 12-	5320	25- 29-	6900	38- 42-	8840	42- ++	11620	41- 13550	44- 16260	48-										
	181300		10 08	061 08 06	1379	01- 03-	2902	10- 13-	5410	24- 30-	7000	36- 44-	8940	47- ++	11650	44- 13580	45- 16270	47-										
Ocean Weather Station 'J' 52°30'N 20°00'W	180000		12 08	144 10 06	1471	01- 04-	3023	03- 24-	5660	09- 23-	7360	19- 30-	9430	36- 46-	12120	56- 13950	56- 16530	55-										
	181100		13 05	181 09 00	1499	02- 05-	3040	05- 22-	5640	13- 35-	7310	23- 40-	9360	37- 49-	12030	58- 13840	58- 16420	58- 18700	54- 20870	52-								



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE			TROPopause
		MSL	Surf.	0°C level	
					mb m °C
LERWICK 03005	02 1843+	994 984 842	895 ++ 01- 814 02- 04- 710 08- 14- 616 16- 19- 506 24- 30- 370 40- 46- 351 43- 305 37- 197 39- 100 48- 045	48- 48-	351 07800 43-
	02 784++	994 984 840	940 05 07- 717 07- 11- 655 12- 16- 605 ++ 21- 571 ++ 29- 554 ++ 29- 510 23- 33- 361 39- 50- 336 43- 261	38- 100 46- 068 46- 062 48-	336 08110 43-
STORNOWAY 03026	25 685++	999 998 840	810 02- 04- 780 03- 08- 724 06- 12- 622 ++ 18- 514 ++ 28- 488 29- 34- 472 29- 35- 369 36- 48- 311 37- 270	35- 200 39- 142 47- 102 49- 080 47-	369 07500 36- 142 14100 47-
SHANWELL 03170	01 14600	004 003 768	987 ++ 05 955 09 04 903 05 00 848 ++ 04- 836 03 08- 819 03 12- 770 ++ 16- 719 04- 17- 700 04- 18- 670	06- 23- 523 18- 38- 485 16- 39- 454 17- 39- 428 21- 43- 416 20- 42- 350 28- 49- 291 36- 225 51- 213 52- 202	213 11520 52- (084 17580 56-)
	03 31500	007 007 856	955 09 01 885 ++ 01- 844 01- 04- 818 02- 06- 805 01- 09- 795 ++ 10- 708 08- 20- 670 ++ 24- 630 09- 23- 555	15- 30- 486 24- 39- 434 27- 42- 410 25- 42- 331 30- 47- 269 42- 222 50- 203 52- 195 50-	(203 11750 52-)
ALDERGROVE 03917	15 48600	010 001 740	825 00 02- 811 01 04- 798 ++ 08- 650 03- 19- 580 08- 25- 530 03- 22- 497 05- 24- 455 12- 29- 404 17- 31-	267 40- 88- 235 48- 194 56- 175 58- 160 51- 126 56- 086 54- 055 51-	175 12970 58- 126 15080 56-
	03 685++	016 007 839	997 12 06 905 04 01 741 ++ 09- 735 07- 11- 710 06- 15- 625 10- 26- 556 09- 30- 502 11- 32- 396 20- 40-	322 ++ 50- 224 51- 197 55- 159 51- 133 52- 106 58- 096 54- 063 52-	197 12140 55- 106 16120 58-
AUGHTON 03322	21 855++	011 004 604	994 ++ 11 832 06 01 798 06 00 769 04 02- 718 ++ 03- 713 03 05- 705 04 14- 701 ++ 21- 688 ++ 32- 666 03	33- 645 ++ 34- 629 ++ 15- 613 ++ 13- 553 02- 23- 433 14- 38- 280 40- 196 58- 161 65- 127 58- 118 60- 103	161 13520 65-
	03 11530	017 011 848 765	988 11 06 940 ++ 04 920 ++ 00 830 02- 04- 813 02 07- 740 01- 20- 703 03- 23- 608 03- 35- 563 06- 28- 553	05- 27- 518 06- 25- 459 13- 29- 279 40- 181 63- 146 57- 116 59- 107 55- 081 54- 075 50-	181 12730 63-
HEMSBY 03496	02 856++	011 010 608	936 13 13 910 16 14- 841 14 08 774 08 06 743 10 03 689 ++ 02- 647 ++ 02- 612 ++ 07- 587 02- 08- 426 16-	26- 402 ++ 27- 314 33- 45- 295 37- 50- 257 46- 197 60- 166 65- 144 65- 113 59- 100 59-	166 13360 65-
	02 854++	016 014 573	006 15 07 994 14 07 900 06 04 880 06 04 836 05 03 805 07 01 765 07 03- 700 03 09- 648 04 08- 536 03- 11-	413 19- 25- 282 40- 45- 221 54- 186 63- 098 59- 091 55- 060 52-	186 12670 63-
CRAWLEY 03774	02 860++	016 999 598	996 ++ 14 982 13 12 920 13 12 909 ++ 13 895 16 13 870 16 12 801 10 08 762 11 07 695 ++ 02 500 ++ 14-	395 20- 29- 280 40- 46- 158 67- 130 66-	(158 13720 67-)
	20 773++	017 001 552	980 14 12 853 08 06 831 ++ 07 810 10 01- 792 ++ 18- 700 07 29- 672 ++ 24- 658 ++ 11- 576 02 17- 336 29-	41- 180 63- 149 65- 080 54- 035 49-	180 12950 63-
CAMBORNE 03808	50 860++	017 006 595	956 13 12 939 16 15 740 06 04 726 08 02 718 ++ 01- 703 ++ 00 674 06 03- 658 ++ 03- 602 ++ 13- 573 ++ 11-	485 09- 20- 414 ++ 27- 404 ++ 30- 354 25- 38- 279 39- 50- 170 63- 148 67- 095 59- 030 52-	148 14170 67-
	03 786++	022 011 569	998 12 09 953 ++ 07 943 07 04 872 04 02 862 ++ 04 845 11 08- 835 ++ 13- 723 ++ 30- 701 ++ 29- 695 06 18-	685 ++ 10- 655 07 09- 589 02 13- 466 13- 22- 423 17- 30- 417 ++ 32- 367 ++ 35- 287 39- 49- 215 55- 187	152 13960 68-
VALENTIA 03953	03 62400	016 015 570	001 12 09 882 03 00 827 03 05- 797 06 17- 699 03 32- 663 05 32- 624 01 35- 587 01 35- 532 03 25- 443 14-	29- 411 16- 31- 183 61- 157 64- 148 60- 100 60- 085 55- 058 55-	157 13700 64-
	02 785++	023 021 850 670	998 10 06 823 03- 05- 811 01- 03- 795 01 07- 701 01 18- 635 01- 22- 560 02- 18- 429 16- 31- 381 21- 37- 244	58- 177 62- 169 62- 159 64- 128 57- 103 60- 097 58- 039 54-	159 13600 64-
Ocean Weather Station 'J' 59°00'N 19°00'W	02 724++	993 993 840	982 ++ 06 905 03 01 707 09- 12- 633 16- 18- 548 20- 23- 381 40- 45- 349 45- 326 46- 256 38- 173 44- 088	47- 055 49-	326 09600 46-
	25 884++	007 007 868	980 06 02 947 ++ 02 890 01 05- 862 ++ 04- 672 ++ 15- 650 ++ 19- 626 16- 22- 564 23- 25- 556 21- 25- 544	++ 28- 509 24- 30- 446 29- 36- 372 40- 47- 316 50- 284 45- 229 43- 111 47- 074 48-	336 08600 50-
Ocean Weather Station 'J' 52°30'N 20°00'W	02 784++	017 017 863 782	009 ++ 07 932 ++ 01 849 01- 04- 820 03 06- 800 ++ 15- 764 01- 18- 542 ++ 39- 512 09- 24- 413 17- 28- 331	29- 40- 280 40- 50- 257 45- 210 54- 182 58- 146 56- 122 57- 080 53-	182 12700 58-
	01 48506	022 022 890	013 10 01 882 00 03- 848 ++ 04- 839 02- 07- 816 ++ 10- 804 01- 11- 747 02- 18- 645 07- 27- 496 14- 36- 420	++ 42- 380 ++ 40- 318 34- 46- 288 40- 224 54- 192 59- 167 59- 159 56- 152 58- 118 55- 101 58- 095 55- 061	192 12300 59- 101 16400 58-



## UPPER WINDS AT STANDARD LEVELS

18 June, 1961

STATION	YYGGgg	Type	Surface	1000mb	900m	850mb 1500m	750mb 2100m	700mb 3000m	600mb 4200m	500mb 5400m	400mb 7200m	300mb 9000m	250mb 10500m	200mb 12000m	150mb 14100m	100mb 15900m	70mb 18300m	50mb 20700m	30mb 23700m	20mb 26400m	10mb 30900m
LERWICK 03005	172330	T	220 29	+++ ++	240 41	240 39	250 36	250 36	250 44	240 54	240 63	240 69	240 71	250 62	240 60						
	180530	P	220 32	+++ ++	260 50	260 48	260 45	250 44	260 53	260 57	260 70	260 73	250 70	260 57							
	181130	T	220 36	+++ ++	250 49	260 49	260 43	250 43	260 38	260 38	270 34	270 40	260 53	260 58	260 45	260 37					
	181730	P	260 20	+++ ++	280 33	270 37	270 40	270 40	280 46	270 44	250 35	240 41	260 63	260 55	250 50						
STORNOWAY 03026	172330	T	240 22	+++ ++	260 42	260 44	260 49	260 51	260 54	250 70	250 86	260 86	250 81	250 73	250 65	250 42					
	180550	P	250 23	+++ ++	250 43	250 42	250 44	250 54	240 54	240 50	250 66	250 77	260 84	260 68	260 50	240 48	240 09				
	181130		No winds reported																		
	181730	P	270 22	+++ ++	270 38	270 38	270 36	270 39	260 44	260 45	270 49	260 76	260 76	260 69	250 52	250 46					
SHANWELL 03170	172330	T	250 19	+++ ++	270 40	260 37	270 43	270 47	260 50	260 87	250137	250150	240142								
	180530	P	250 22	+++ ++	270 47	270 47	260 44	260 45	250 47	250 59	250114	260144	260151	260137							
	181130	T	270 38	+++ ++	270 38	270 44	270 45	270 45	280 45	280 54	260109	260157	260138								
	181730	P	260 20	+++ ++	260 30	260 31	280 42	270 41	270 45	270 63	260103	260147	260140	260 88							
ALDERGROVE 03917	172330	T	250 15	+++ ++	280 31	280 33	280 40	280 45	270 58	260104	250113	260102	260118	260115							
	180530	P	250 14	+++ ++	280 30	270 35	270 39	260 46	260 62	260 99	270120	260121	260128	260108							
	181130	T	270 16	+++ ++	280 29	280 28	280 31	280 37	270 48	260 93	260111	260119	260108	270122	270127						
	181730	P	270 18	+++ ++	280 34	270 35	270 36	280 42	270 44	270 82	260104	260123	260117	260108							
AUGHTON 03322	172330	T	250 18	+++ ++	280 30	270 36	250 59	250 63	250 70	260 74	260 76	260 75	270 77	270 71							
	180530	P	240 15	+++ ++	280 22	270 25	270 35	260 46	260 62	260 78	260 86	260 81	260 85	260 82							
	181130	T	250 17	+++ ++	280 27	280 26	270 35	270 46	270 59	260 82	260 85	260 93	250 71	240 44							
	181730	P	240 16	+++ ++	280 29	280 29	280 27	270 31	270 54	270 76	260 81	260 88	260 94	250 87	240 64	260 36	260 11				
HEMSBY 03496	172330	T	240 15	+++ ++	250 36	250 37	250 38	250 39	250 43	250 45	260 45	280 41	280 45	280 44	250 27	260 12	P220 09				
	180530	P	260 06	+++ ++	280 24	260 27	260 40	250 45	250 46	250 45	250 55	270 56	270 56	270 54	260 32	280 16	210 09				
	181130	T	030 06	+++ ++	270 17	260 29	260 37	260 40	260 51	260 62	260 65	260 67	260 60	260 63	250 39	250 14	210 14	P170 13	090 14		
	181730	P	150 08	+++ ++	270 09	270 17	270 28	270 47	270 60	260 72	260 68	260 72	260 72	260 70	240 43	260 26	220 15	110 05	130 10		
CRAWLEY 03774	172330	T	230 10	+++ ++	250 33	270 29	260 34	260 35	260 33	260 32	270 24	280 33	280 40	280 42	280 24						
	180530		No winds reported																		
	181130	P	300 10	+++ ++	280 15	260 24	260 35	270 35	270 46	270 46	260 40	260 41	270 38	270 37	260 25	240 17	220 11	160 07	100 12	100 25	120 31
	181730	P	340 03	+++ ++	310 08	300 10	280 18	270 31	270 45	260 49	270 51	260 47	250 45	260 50	250 40	260 15	230 17	130 10			
CAMBORNE 03808	172330	T	240 15	+++ ++	260 28	260 32	260 34	260 34	260 36	270 40	270 37	280 30	270 30	250 37	270 39	270 14	260 03	090 03	090 12		
	180530	P	310 07	+++ ++	300 19	260 33	260 37	260 41	270 47	270 41	270 39	260 35	270 38	260 35	250 28	300 13	210 05	120 08	100 18		
	181130	T	320 13	+++ ++	300 13	290 21	270 26	270 35	270 45	270 41	250 46	260 36	250 34	250 39	240 34	250 12	220 06				
	181730	P	320 13	+++ ++	320 15	290 20	280 24	280 25	270 41	260 47	260 43	260 44	250 45	250 53	240 45	240 17					
VALENTIA 03953	180000	T	290 07	290 11	+++ ++	280 27	+++ ++	260 49	+++ ++	260 70	270 68	270 74	+++ ++	270 67	+++ ++						
	181200	T	290 10	290 11	+++ ++	290 22	+++ ++	280 45	+++ ++	260 75	260 77	270 80									
Ocean Weather Station 'I' 59°00'N 19°00'W	180000	T	260 38	+++ ++	270 54	280 46	280 42	280 39	280 29	290 24	300 22	290 42	280 46	260 57	250 49	250 32	240 20				
	180600	P	270 30	+++ ++	280 36	290 39	300 35	280 39	280 29	250 37	260 40	270 42	270 42	260 55	260 48	270 36	230 23	210 08			
	181300	T	290 11	+++ ++	300 11	300 16	290 22	280 22	270 19	280 28	290 30	290 39	280 42	270 47	250 36	240 27					
	181800	P	270 10	+++ ++	260 18	270 19	270 17	270 20	290 16	310 28	290 30	310 37	270 42	260 46	260 40	260 29	230 20	220 08	100 09		
Ocean Weather Station 'J' 52°30'N 20°00'W	180000	T	290 16	+++ ++	260 31	260 31	260 36	260 44	250 68	260 83	260105	250106	250109	250105	240 64	250 34					
	180500	P	270 30	+++ ++	270 32	280 30	270 31	270 44	260 64	260 79	260 93	250101	240102	250 90	240 49	250 10					
	181100	T	280 25	+++ ++	270 30	280 32	270 30	260 34	270 62	260 76	260 93	260 94	250 94	250 93	240 57	220 24					
	181700	P	270 20	+++ ++	270 36	270 37	270 36	270 37	270 57	270 69	260 97	270105	250107	240 85	260 43	260 26	190 11				
LARKHILL 03743																					

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m	950mb °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
Cloud :— Inversion Levels :— Isothermal Levels :—														
YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m	950mb °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
Cloud :— Inversion Levels :— Isothermal Levels :—														
RATES OF SUBSCRIPTION: Single copy 5d. or post free 7d. One calendar month 13/-; one quarter 35/-; one year 125/-. For special arrangements for supply to schools and colleges see Form 2452.										Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General Meteorological Office, Air Ministry, Kingsway, London, W.C.2				



STATION		MAX. WIND
LERWICK 03005	130mb 240 45 13500m 260 50 080mb 260 19 15000m 250 43	240 75 11220m 260 78 08750m 260 63 11870m 260 65 10700m
STORNOWAY 03026	090mb 250 33 20200m 220 10 17580/1 17700m 260 22 08260/0 12500/1	250 88 07550m 260 85 10080m 260 81 10230m
SHANWELL 03170	06150m 250 97 13300m 260 116 05290/0 05700/0 06150/0 07030/0 08460/0 10690/1 11550/1 214mb 260 120 07050/0 08670/0 11400/1	250 164 09360m 260 156 10460m 260 168 09300m 260 152 10180m
ALDERGROVE 03917	575mb 270 75 552mb 270 69 118mb 280 47 05080m 270 65 13500m 260 97 11720/1	260 134 10100m 250 137 10270m 270 135 12410m 260 128 11380m
AUGHTON 03322	13800m 260 71 04140/0 05250/0 181mb 240 35 20400m 200 08 04050/0 04410/0	260 80 07840m 260 88 07140m 260 94 09260m 260 96 10550m
HEMSBY 03496	164mb 280 44 P19400m 230 05 19300m 130 03 13370/1 01910/0	260 72 07830m 260 77 11340m
CRAWLEY 03774	28800m 120 29 33000m 090 28 33900m 100 27 02000/0 14720/1	
CAMBORNE 03808	14930m 260 17 24000m 090 16 01180/0 057mb 160 04 15000m 240 30 16800m 250 16 15050/1	
VALENTIA 03953	882mb 290 22 797mb 270 32 663mb 260 57 624mb 260 60 532mb 260 69 183mb 270 62 823mb 280 23 811mb 280 25 795mb 280 33 635mb 270 57 560mb 260 68 244mb 270 65	270 75 09410m 270 81 09680m
Ocean Weather Station 'I' 59°00'N 19°00'W	352mb 300 25 060mb 220 18 17100m 250 27 19200m 230 15 23100m 160 11 09600m 290 37 25500m 090 11	250 63 11900m
Ocean Weather Station 'J' 52°30'N 20°00'W	168mb 250 84 127mb 240 56 084mb 250 25 12900m 250 73 14400m 240 24 12980/1 14420/1 647mb 270 43 173mb 240 82 077mb 230 12 12900, 250 60 17100m 220 11 07980/0 11740/1 12100/1 12920/1 16800/5	250 118 11180m 250 106 08450m 260 104 08400m 240 118 11580m
LARKHILL 03743		

## NOTES ON THE AEROLOGICAL SITUATION

The strongest winds in the westerly jet are now over the British Isles. While the jet is weakening at its western end it continues to propagate forwards in the east turning northeast over Scandinavia. The associated low centre continues to move east-northeast into the Norwegian Sea. Upstream the ridge over the Davis Strait is only a weak feature though intensifying a little while the low moving slowly east over Hudson Bay is deepening.

## AVERAGE AND EXTREME VALUES 1951-55

## JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.							
Press. Level	Average		Extreme Temps.		Wind*		
	Height	Temp.	Max.	Min.	V <sub>R</sub>	V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	22345	-48.1	-42	-55	...	...	(11)
60	19675	-48.1	-41	-55	120	3	8
100	16320	-48.8	-41	-56	244	5	11
150	13660	-48.3	-41	-59	263	10	18
200	11770	-49.8	-39	-67	271	16	27
300	9125	-46.7	-37	-56	271	22	41
400	7160	-32.6	-23	-44	271	18	33
500	5555	-20.8	-11	-31	269	14	26
700	2985	-5.2	3	-14	266	9	19
850	1435	2.8	14	-7	269	6	18
Tropopause		Press. (mb.)	Temp. (°C)		Height (gpm.)		
Average		257	-54.7		10190		
Max.		405	-40		12955		
Min.		172	-68		6890		
LARKHILL/CRAWLEY† at 03, 15h. (Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.)							
Press. Level	Average		Extreme Temps.		Wind*		
	Height	Temp.	Max.	Min.	V <sub>R</sub>	V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	22310	-49.6	-47	-57	106	9	10
60	19675	-51.4	-45	-59	136	3	8
100	16370	-52.6	-46	-61	251	8	13
150	13745	-51.8	-42	-65	265	15	21
200	11890	-54.0	-40	-65	268	20	32
300	9265	-44.7	-36	-54	265	20	39
400	7275	-29.6	-19	-41	265	17	31
500	5640	-17.8	-9	-28	263	15	25
700	3050	-2.1	7	-10	263	11	19
850	1480	5.7	16	-3	264	7	16
Tropopause		Press. (mb.)	Temp. (°C)		Height (gpm.)		
Average		234	-56.8		10950		
Max.		388	-41		13440		
Min.		160	-66		7225		
MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.							
Press. Level	Average		Extreme Temps.		Wind*		
	Height	Temp.	Max.	Min.	V <sub>R</sub>	V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5	11
60	19670	-60.7	-53	-69	135	4	10
100	16510	-62.9	-57	-71	255	21	24
150	13995	-59.0	-51	-67	265	38	42
200	12185	-56.6	-47	-67	275	42	47
300	9530	-40.1	-33	-46	285	32	38
400	7500	-23.9	-19	-29	285	27	31
500	5835	-11.8	-8	-17	285	24	28
700	3165	7.2	13	-1	290	18	22
850	1535	17.9	27	8	290	9	14
Tropo- pause		Average	Max.	Min.	Max.	Min.	
		Press.	Press.	Press.	Temp.	Temp.	
		mb.	°C	mb.	mb.	°C	°C
Upper		123	-65.7	...	73	...	-73
Lower		193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

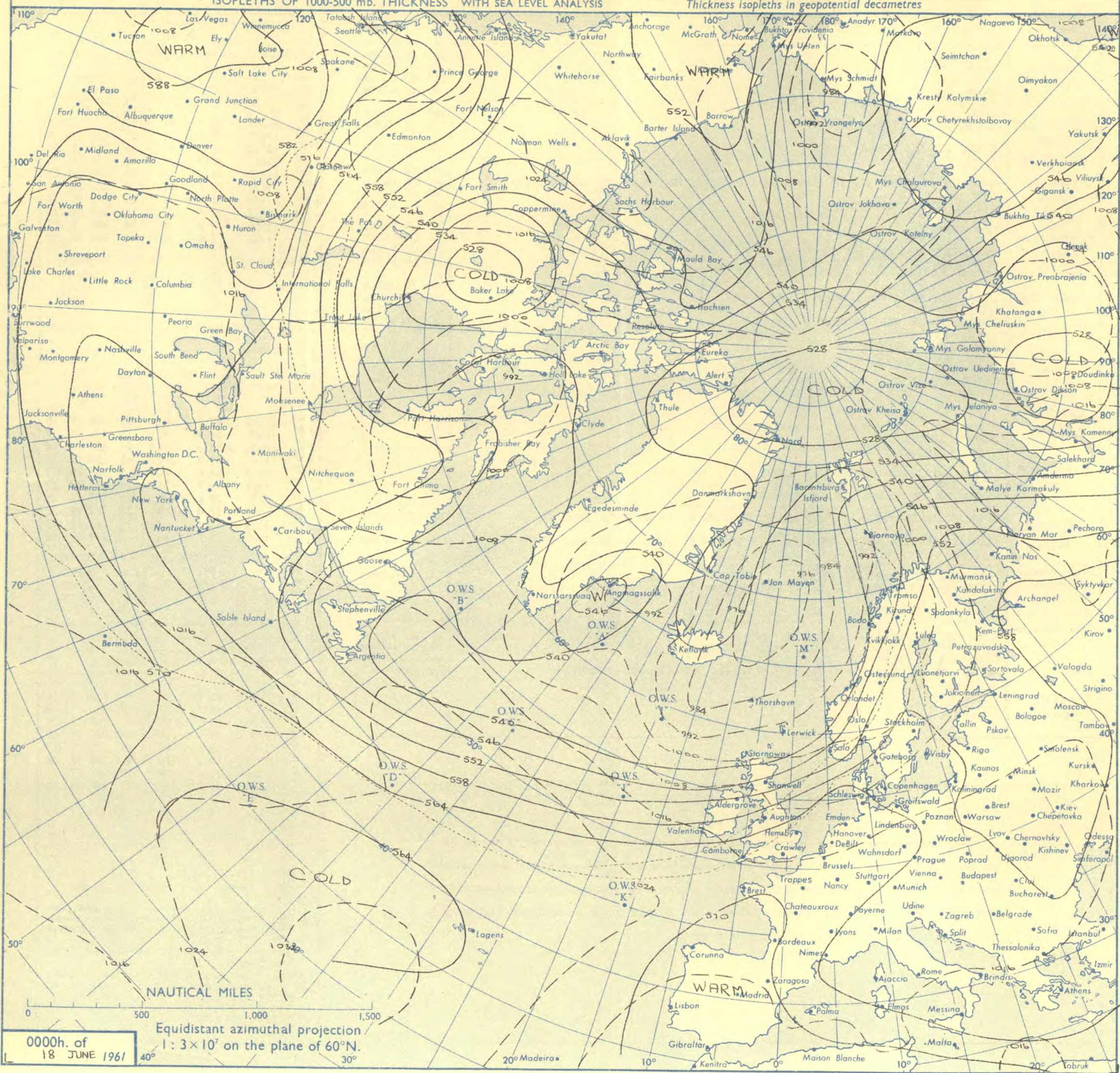
† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.



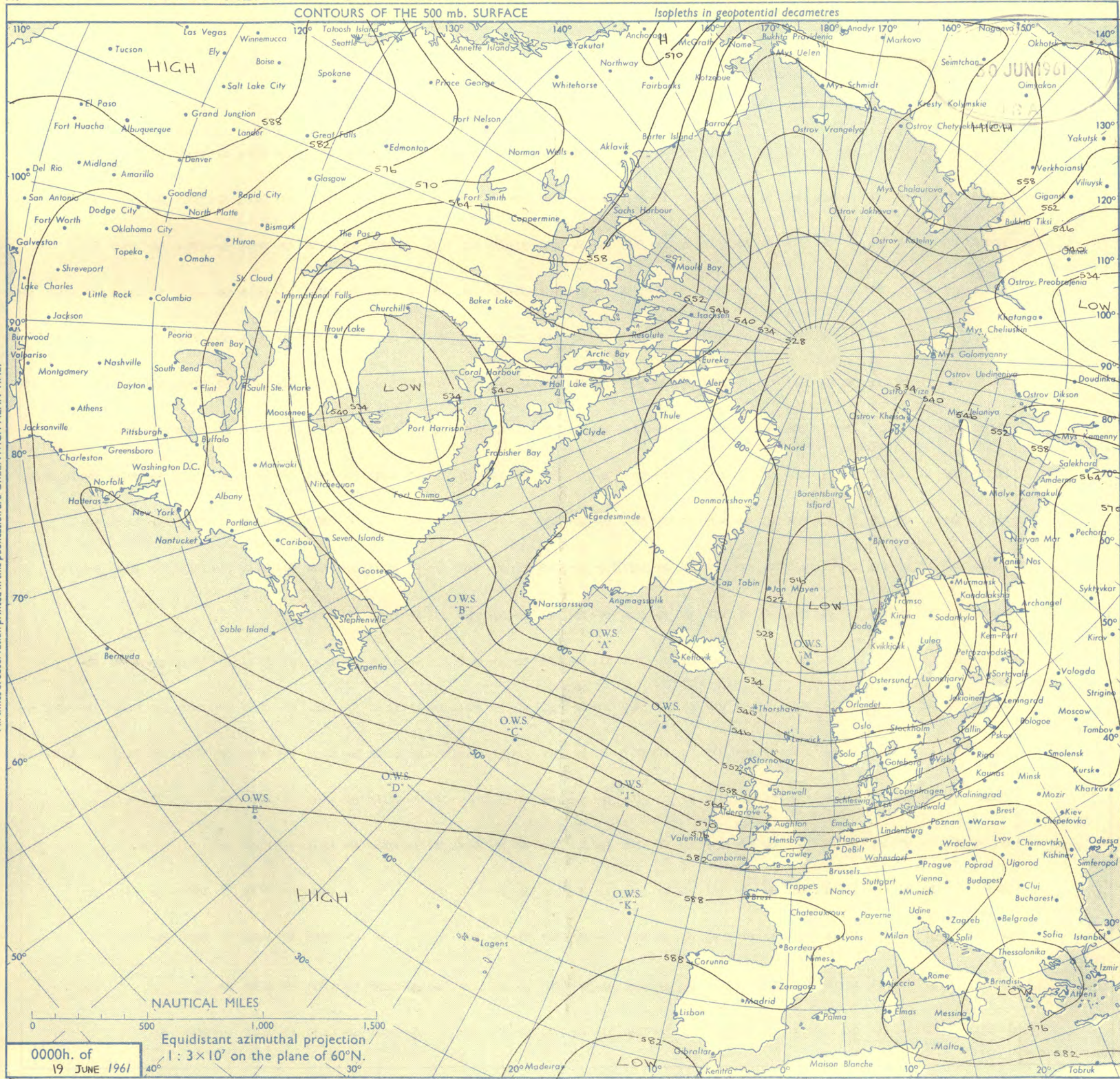
ISOPLETHS OF 1000-500 mb. THICKNESS WITH SEA LEVEL ANALYSIS

Thickness isopleths in geopotential decametres





All times of observation printed in this publication are GREENWICH MEAN TIME.





STATION	YYGGgg	SURFACE			1000mb			850mb			700mb			500mb			400mb			300mb			200mb		150mb		100mb		70mb		50mb		30mb				
		gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C			
LERWICK 03005	182330	082	08	07	022	++	++	1345	01-	04-	2870	10-	16-	5391	25-	29-	6979	35-	40-	8924	47-	++	11682	40-	13631	44-	16347	46-	18714	47-							
	191145	082	12	08	108	11	07	1430	01-	06-	2952	11-	15-	5476	25-	31-	7064	36-	41-	9020	48-	++	11688	43-	13621	45-	16324	45-	18698	46-							
STORNOWAY 03026	182330	013	09	07	110	09	05	1431	01-	08-	2955	10-	18-	5478	24-	35-	7076	34-	43-	9027	46-	++	11759	42-	13692	45-	16369	47-	18726	50-							
	191140	013	13	06	166	10	04	1491	00	03-	3023	07-	18-	5578	22-	41-	7183	33-	++	9148	47-	++	11823	46-	13737	47-	16424	47-	18779	46-	21005	47-					
SHANWELL 03170	182330	005	10	05	119	10	04	1444	00	03-	2977	08-	21-	5519	22-	34-	7123	33-	45-	9113	41-	++	11823	47-	13726	49-	16368	52-	18691	50-	20903	49-					
	191130	005	17	04	182	13	01	1517	01	05-	3048	08-	15-	5594	22-	31-	7201	34-	43-	9180	42-	++	11865	48-	13760	49-	16399	50-	18735	50-	20945	48-	24307	49-			
ALDERGROVE 03917	182330	077	11	06	176	10	06	1502	00	04-	3036	07-	17-	5613	17-	34-	7260	25-	42-	9299	39-	++	11974	55-	13833	51-	16441	53-	18752	51-							
	191130	077	13	06	222	10	04	1543	01-	04-	3070	06-	20-	5635	20-	37-	7260	29-	++	9263	42-	++	11890	58-	13700	57-	16281	58-	18551	56-	20711	52-	24022	51-			
AUGHTON 03322	182330	056	12	07	186	12	07	1518	01	02-	3062	03-	16-	5693	10-	37-	7382	21-	41-	9436	38-	++	12100	57-	13893	59-	16476	55-	18750	53-	20933	51-					
	191130	056	14	08	233	10	05	1559	00	03-	3103	04-	17-	5705	15-	37-	7363	25-	39-	9403	38-	48-	12072	58-	13878	57-	16467	56-	18738	51-	20913	50-	24227	53-			
HEMSBY 03496	182330	012	12	09	178	14	04	1521	03	03-	3075	00	35-	5735	09-	40-	7420	22-	++	9455	41-	++	12095	58-	13883	58-	16438	56-	18730	51-	20915	51-					
	191130	012	17	06	219	13	03	1553	01	01-	3102	02-	20-	5737	10-	34-	7412	23-	39-	9467	37-	++	12133	59-	13918	61-	16474	58-	18750	54-	20906	54-					
CRAWLEY 03774	190200	144	11	07	200	12	04	1548	04	00	3128	04	32-	5808	09-	28-	7503	20-	39-	9566	37-	47-	12246	57-	14028	65-											
	191130	144	17	07	232	15	03	1576	02	00	3148	02	31-	5808	11-	38-	7486	22-	43-	9538	37-	++	12205	58-	13982	63-	16519	59-	18795	52-	20981	51-					
CAMBORNE 03808	182330	088	12	11	217	12	09	1554	03	01-	3146	05	23-	5829	10-	22-	7522	21-	35-	9583	37-	45-	12262	57-	14041	66-	16550	60-	18806	55-	20964	53-	24271	50-			
	191130	088	15	09	257	12	06	1592	07	07-	3171	02	11-	5837	10-	23-	7521	22-	33-	9570	38-	49-	12233	59-	14003	65-	16514	60-	18775	54-	20943	52-	24284	47-			
VALENTIA 03953	190001	014	12	08	232	11	08	1558	01	03-	3120	00	28-	5760	10-	34-	7450	21-	33-	9500	38-	45-	12160	59-	++++	++	16480	57-									
	191130	014	15	08	263	11	05	1593	04	07-	3155	01-	28-	5780	14-	22-	7440	24-	30-	9480	38-	44-	12140	62-	++++	++	16480	56-									
Ocean Weather Station 'I' 59°00'N 19°00'W	182300		10	06	114	09	04	1433	02-	05-	2967	07-	19-	5520	22-	36-	7120	35-	47-	9070	50-	++	11700	48-	13600	48-	16270	49-	18610	49-	20830	49-					
	191200		11	08	135	10	06	1460	00	07-	2991	08-	18-	5520	26-	35-	7090	38-	44-	9010	50-	++	11670	47-	13580	49-	16240	50-	18570	50-	20780	51-					
Ocean Weather Station 'J' 52°30'N 20°00'W	190100		12	07	218	10	06	1539	01-	01-	3087	04-	23-	5690	15-	46-	7340	29-	38-	9370	38-	48-	12020	62-	13820	59-	16380	57-									
	191200		12	06	252	08	04	1572	04	08-	3127	03-	22-	5720	17-	20-	7370	27-	32-	9380	40-	45-	12020	62-	13830	55-	16420	54-	18720	53-							



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK  03005	02 52400	003 993 861	980 08 06 888 02 00 796 ++ 10- 774 ++ 10- 734 ++ 13- 620 16- 21- 500 25- 29- 456 30- 34- 418 33- 37- 369 40- 45- 333 45- 303 47- 269 41- 214 39- 150 44- 100 46- 090 45- 079 48- 067 46- 060 49-				303 08850 47-	
	02 67430	013 003 864	996 09 05 935 ++ 03 915 ++ 01- 866 00 03- 837 ++ 08- 694 11- 15- 660 13- 17- 628 ++ 25- 560 19- 26- 396 36- 41- 352 40- 46- 270 54- 214- 43- 100 45- 060 46-				270 09710 54-	
STORNOWAY  03026	02 22500	013 012 864	000 ++ 05 900 02 00 837 ++ 09- 726 ++ 17- 676 12- 19- 561 ++ 26- 550 19- 28- 497 ++ 35- 437 30- 40- 360 40- 49- 323 46- 293 46- 235 41- 157 44- 114 49- 086 46- 072 51- 066 49-				323 08540 46- (072 18540 51-)	
	03 7254+	020 018 856	008 11 05 930 05 03 914 ++ 00 880 ++ 00 807 03- 05- 791 02- 09- 762 ++ 14- 704 07- 18- 678 ++ 34- 663 ++ 22- 598 13- 34- 572 15- 32- 541 ++ 38- 408 32- 50- 276 51- 259 48- 168 45- 099 47- 084 50- 075 46- 040 46-				276 09700 51-	
SHANWELL  03170	01 14700	014 014 857	006 ++ 04 970 08 02 850 00 03- 793 02- 11- 778 ++ 11- 753 04- 15- 720 ++ 16- 700 08- 21- 610 ++ 22- 556 18- 27- 546 18- 29- 418 32- 43- 365 36- 47- 273 43- 258 46- 143 48- 094 54- 088 49- 072 51- 040 47-				258 10130 46-	
	02 48500	021 021 835	018 15 03 865 02 05- 809 02- 07- 746 05- 11- 653 12- 19- 600 14- 22- 450 27- 36- 400 34- 42- 340 40- 48- 312 40- 48- 232 51- 212 48- 163 48- 110 52- 100 50- 048 48- 030 49- Pressures doubtful above 100 mb.				232 10900 51-	
ALDERGROVE  03917	01 55600	021 012 852	908 03 01 886 ++ 00 864 01 03- 817 03- 05- 792 02- 07- 767 ++ 12- 748 ++ 12- 700 ++ 17- 640 10- 18- 592 11- 23- 515 17- 33- 489 17- 34- 450 20- 37- 422 24- 42- 381 26- 42- 331 33- 47- 291 41- 215 53- 183 56- 167 50- 121 56- 083 51- 060 51-				183 12560 56-	
	02 755++	029 017 869	998 09 03 924 03 00 815 04- 07- 773 05- 08- 760 ++ 16- 756 04- 16- 740 04- 17- 693 06- 21- 559 16- 35- 546 16- 37- 478 23- 38- 426 26- 45- 370 33- 305 41- 289 45- 217 59- 189 58- 178 61- 163 56- 104 55- 099 58- 084 53- 055 54- 046 51- 030 51-				217 11300 59-	
AUGHTON  03322	02 5557+	023 016 841	956 09 04 802 03- 05- 795 01- 06- 770 01- 11- 760 ++ 15- 645 05- 22- 578 06- 31- 553 08- 33- 477 11- 38- 375 25- 42- 288 40- ++ 239 52- 165 63- 136 56- 117 57- 111 52- 092 57- 040 50-				165 13280 63- 092 17000 57-	
	03 48530	028 021 853	007 11 06 973 ++ 05 950 ++ 01 812 03- 05- 806 04- 08- 799 00 06- 788 00 11- 760 01- 15- 666 ++ 17- 601 09- 32- 573 09- 36- 414 22- 37- 309 36- 46- 207 57- 174 60- 129 54- 092 58- 069 51- 062 54- 050 50- 030 53-				174 12940 60-	
HEMSBY  03496	02 00900	021 020 816 761 662	013 14 07 010 14 05 968 12 02 851 ++ 03- 804 01- 03- 784 01 16- 721 ++ 35- 619 02- 37- 563 04- 38- 474 11- 39- 367 28- 50- 299 41- 230 55- 179 63- 145 58- 122 59- 072 51- 050 51-				179 12790 63-	
	03 51500	026 025 830 772	020 14 03 872 02 00 833 ++ 03- 814 01- 07- 799 01 11- 793 ++ 13- 724 02- 16- 681 02- 24- 613 05- 35- 585 05- 36- 550 08- 40- 542 07- 38- 489 12- 34- 467 15- 35- 379 24- 40- 312 35- 50- 241 50- 194 60- 181 61- 158 63- 113 56- 101 58- 082 55- 043 53-				181 12760 61-	
CRAWLEY  03774	03 40941	024 007 609	002 12 06 000 ++ 04 975 12 04 938 ++ 03 840 04 02 826 ++ 14- 815 07 16- 775 04 21- 760 06 23- 659 03 33- 621 ++ 18- 584 01- 20- 494 10- 30- 451 13- 35- 283 ++ 50- 254 46- 192 59- 162 64- 105 57-				162 13560 64-	
	02 55700	028 010 648	005 15 04 918 ++ 01 844 02 00 840 ++ 00 817 05 09- 810 ++ 13- 748 ++ 24- 614 01- 36- 560 04- 482 14- 38- 465 14- 38- 334 32- 50- 217 55- 170 64- 120 58- 104 60- 092 56- 054 50- 038 49-				170 13210 64-	
CAMBORNE  03808	02 00900	026 016 595	005 ++ 09 976 ++ 09 958 ++ 06 852 03 00 834 06 05- 800 08 11- 760 08 15- 698 05 22- 657 ++ 12- 620 02 12- 490 11- 23- 479 10- 23- 403 ++ 34- 357 27- 37- 285 40- 47- 202 57- 153 66- 138 66- 133 62- 093 60- 079 55- 030 50-				153 13910 66-	
	02 38500	031 020 623	987 10 05 965 ++ 06 920 ++ 01- 885 03 03- 872 ++ 07- 864 07 07- 790 04 14- 742 05 18- 703 02 10- 675 02 17- 610 01- 24- 500 10- 23- 289 40- 49- 208 58- 152 66- 079 55- 042 52- 030 47-				152 13920 66-	
VALENTIA  03953	02 725++	028 026 754	855 00 02- 824 04 13- 754 00 17- 702 00 28- 601 04- 33- 551 07- 38- 526 07- 39- 390 22- 34- 259 46- 222 56- 168 65- 149 60- 081 56-				168 13400 65-	
	03 685+1	032 030 720	005 11 05 866 01 05- 846 06 18- 777 01 22- 751 02 21- 649 03- 30- 417 22- 29- 335 33- 39- 311 36- 42- 192 64- 168 62- 149 58- 100 56- 064 50-				192 12400 64-	
Ocean Weather Station 'I'  59°00'N 19°00'W	25 784++	014 014 873	998 ++ 04 952 ++ 03 908 02 01- 835 03- 06- 820 01- 05- 753 04- 13- 700 ++ 18- 612 12- 24- 453 27- 40- 385 37- 49- 324 47- 266 55- 257 55- 217 48- 037 48-				266 09800 55-	
	01 21502	016 016 844	995 ++ 05 937 04 02 915 05 04- 872 02 07- 865 ++ 06- 815 03- 09- 804 03- 09- 786 03- 14- 777 03- 14- 653 12- 22- 616 14- 25- 580 18- 26- 529 23- 33- 520 24- 33- 495 27- 37- 477 29- 36- 390 40- 46- 377 42- 306 51- 187 46- 100 50- 034 49-				306 09000 51-	
Ocean Weather Station 'J'  52°30'N 20°00'W	02 856++	026 026 862 760	900 02 01 841 02- 02- 822 ++ 15- 813 03 14- 712 03- 21- 615 08- 33- 580 09- 39- 497 15- 46- 417 26- 35- 383 32- 42- 344 31- 41- 284 40- 195 63- 176 59- 085 56-				195 12200 63-	
	02 785++	030 030 745	008 08 04 890 01 01 860 ++ 09- 850 04 08- 804 01 11- 748 00 17- 631 ++ 26- 621 08- 21- 608 08- 15- 599 ++ 13- 578 11- 14- 535 13- 16- 398 ++ 32- 353 33- 37- 333 35- 39- 300 40- 45- 217 59- 190 64- 178 57- 086 53- 079 51- 070 53-				190 12300 64-	



AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m	950mb °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
191244	58.2°N 26.7°W	019 012 835	061 08 05	155	04 04	1015 03 07+	1475 01 07-	1960 03- 07+	07- 13-	3002 10- 22-	14- 30-	4173 16- 41-	20- 43-	5520 25- 45-
Cloud :— 8/8 Sc. 1600 to 4200 ft. 1/8 Sc. 6500 to 7000ft.														
Inversion Levels :— Isothermal Levels :—														
YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m	950mb °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
191406	60.8°N 20.8°W	013 005 880	061 09 05	104	05 01	966 01 02-	1423 01- 01-	1908 02- 17-	05- 21-	2957 08- 29-	12- 31-	4136 15- 31-	19- 35-	5186 26- 43-
Cloud :— 1/8 Cu 2500 to 3200 ft. 4/8 Ci at 22000ft. 7/8 Sc 3500 to 4900 ft.														
Inversion Levels :— 850mb to 837mb -1°C to 0°C Isothermal Levels :—														
RATES OF SUBSCRIPTION: Single copy 5d. or post free 7d. One calendar month 13/-; one quarter 35/-; one year 125/-. For special arrangements for supply to schools and colleges see Form 2452.											Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General Meteorological Office, Air Ministry, Kingsway, London, W.C.2.			



STATION		MAX. WIND
LERWICK 03005	18200/5 13200m 290 30	260 64 10330m
STORNOWAY 03026	18700m 250 14 16340/1 045mb 260 05 09630/0 10130/0 13520/1 14640/1	270 68 10300m 270 62 11130m
SHANWELL 03170	09230/0 11790/1 12120/1 340mb 280 60 P22500m 000 00 06780m 270 39 06620/0 06990/0 10600/1	260 134 09320m 270 88 11230m 270 126 09960m 270 119 10360m
ALDERGROVE 03917	519mb 270 67 171mb 270 81 06320/0 07360/0 07800/0 11150/1 13000/1 14350/1 550mb 280 52 123mb 270 42 05800/0 07800/0 11800/1 12900/1	260 141 10490m 280 144 08020m 270 132 10470m 270 120 11530m
AUGHTON 03322	170mb 250 69 04730/0 120mb 270 42 P21300m 090 02 15300m 250 19 12830/1 13080/1 14760/1	260 103 10850m 270 109 10420m 270 112 11580m 270 112 11300m
HEMSBY 03496	140mb 240 41 13200m 250 78 21600m 160 07 13670/1 14270/1 640mb 280 42 080mb 280 21 21570m 060 05 12800/1 13750/1 14910/1	260 86 09900m 270 86 09360m 270 95 11740m 270 90 10900m
CRAWLEY 03774	01800/3 02650/0 13880/1 15380/1 24600m 100 12 20470/8 25200m 090 20 20400m 320 02	270 67 13620m 270 68 12270m 260 69 12200m 270 70 11500m
CAMBORNE 03808	116mb 250 29 P25200m 090 15 15220m 270 31 18900m 260 08 P25800m 080 17 22200m 090 10	
VALENTIA 03953	824mb 290 25 754mb 290 26 601mb 270 48 551mb 280 58 259mb 260 72 222mb 260 71 777mb 290 24 751mb 290 24 649mb 290 31 335mb 270 62 168mb 270 70 149mb 290 49	260 77 09100m 270 74 13020m
Ocean Weather Station 'I' 59°00'N 19°00'W	042mb 120 05 20400m 180 06 03150/1 10000/0 19220/5 348mb 200 21 060mb 260 08 038mb 120 03 15000m 250 18 12820/1	
Ocean Weather Station 'J' 52°30'N 20°00'W	177mb 260 69 121mb 260 37 073mb 260 12 13200m 250 70 15000m 230 43 17700m 250 17 01770/0 13450/1	260 99 12110m 250 107 11070m
LARKHILL 03743	20120m 240 04 01740/0	260 68 13400m 270 72 11950m

## NOTES ON THE AEROLOGICAL SITUATION

The low over the Norwegian Sea continues to move eastnortheast and is now beginning to fill. The jet on its southern side now extends from mid-Atlantic across the Baltic States to the White Sea, with the strongest winds over Denmark. The ridge over central Europe continues to intensify. The low over Hudson Bay is deepening as it drifts slowly east.

## AVERAGE AND EXTREME VALUES 1951-55

## JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.

Press. Level	Average Height Temp.	Extreme Temps. Max. Min.	Wind* V <sub>R</sub> V <sub>S</sub>
mb.	gpm. °C	°C °C	° Kt. Kt.
40	22345	-48.1 -42 -55	... (11)
60	19675	-48.1 -41 -55	120 3 8
100	16320	-48.8 -41 -56	244 5 11
150	13660	-48.3 -41 -59	263 10 18
200	11770	-49.8 -39 -67	271 16 27
300	9125	-46.7 -37 -56	271 22 41
400	7160	-32.6 -23 -44	271 18 33
500	5555	-20.8 -11 -31	269 14 26
700	2985	-5.2 3 -14	266 9 19
850	1435	2.8 14 -7	269 6 18

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	257	-54.7	10190
Max.	405	-40	12955
Min.	172	-68	6890

LARKHILL/CRAWLEY† at 03, 15h.  
(Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N.,  
Long. 00° 13' W.)

Press. Level	Average Height Temp.	Extreme Temps. Max. Min.	Wind* V <sub>R</sub> V <sub>S</sub>
mb.	gpm. °C	°C °C	° Kt. Kt.
40	22310	-49.6 -47 -57	106 9 10
60	19675	-51.4 -45 -59	136 3 8
100	16370	-52.6 -46 -61	251 8 13
150	13745	-51.8 -42 -65	265 15 21
200	11890	-54.0 -40 -65	268 20 32
300	9265	-44.7 -36 -54	265 20 39
400	7275	-29.6 -19 -41	265 17 31
500	5640	-17.8 -9 -28	263 15 25
700	3050	-2.1 7 -10	263 11 19
850	1480	5.7 16 -3	264 7 16

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	234	-56.8	10950
Max.	388	-41	13440
Min.	160	-66	7225

MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.

Press. Level	Average Height Temp.	Extreme Temps. Max. Min.	Wind* V <sub>R</sub> V <sub>S</sub>
mb.	gpm. °C	°C °C	° Kt. Kt.
40	(22185) (-60.7)	... ...	120 5 11
60	19670	-60.7 -53 -69	135 4 10
100	16510	-62.9 -57 -71	255 21 24
150	13995	-59.0 -51 -67	265 38 42
200	12185	-56.6 -47 -67	275 42 47
300	9530	-40.1 -33 -46	285 32 38
400	7500	-23.9 -19 -29	285 27 31
500	5835	-11.8 -8 -17	285 24 28
700	3165	7.2 13 -1	290 18 22
850	1535	17.9 27 8	290 9 14

Tropo- pause	Average Press. Temp.	Max. Press.	Min. Press.	Max. Temp.	Min. Temp.
	mb. °C	mb.	mb.	°C	°C
Upper	123	-65.7	...	73	...
Lower	193	-59.8	266	...	-46

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed.  
Average winds are based on observations at Lerwick,  
Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at  
03, 15h.

† Observations were made at Larkhill (Lat. 51° 12' N.,  
Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values  
for any element are given for less than 10 observations.  
Otherwise no averages are given for less than 3 observa-  
tions and average values based on less than 10 observa-  
tions are given in brackets.

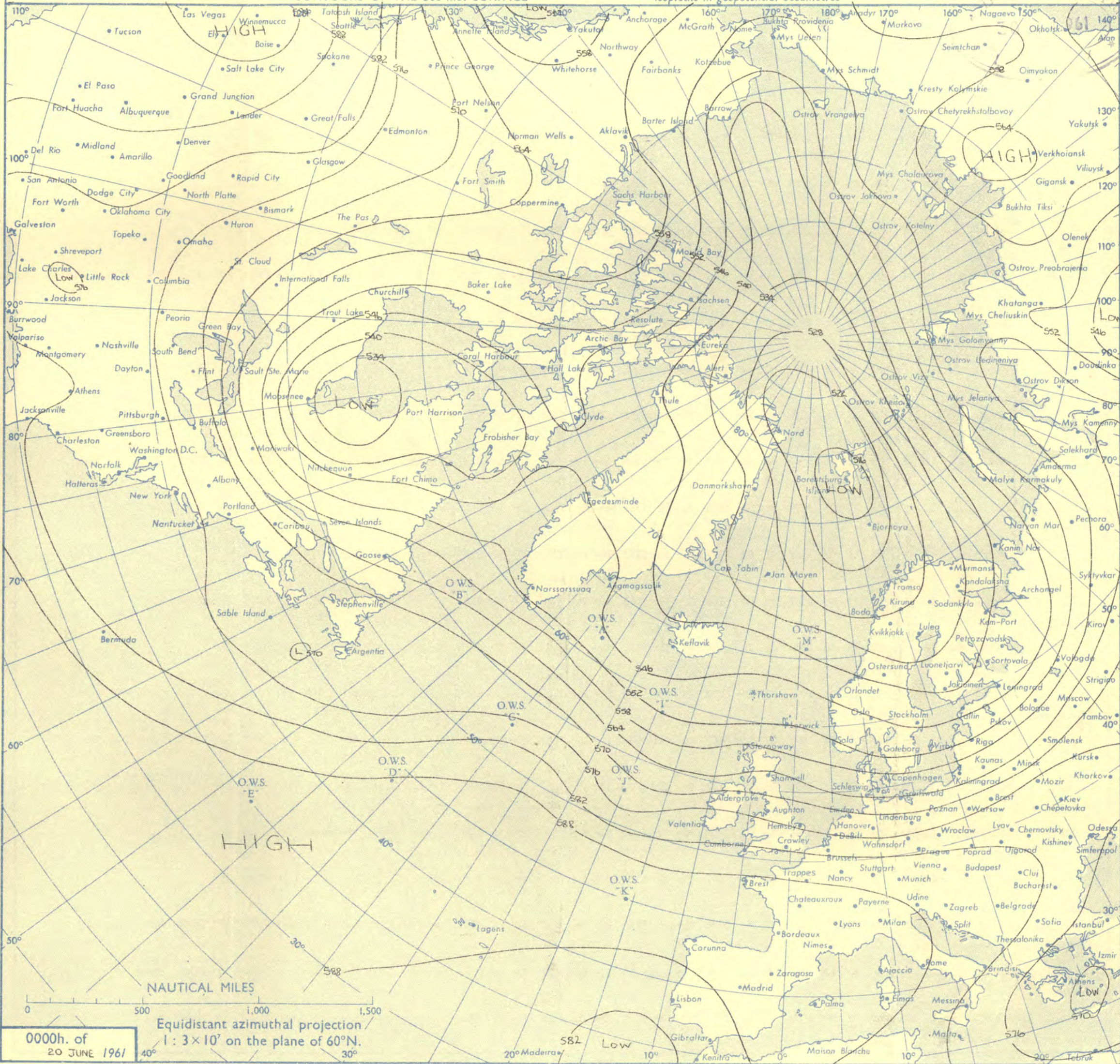






CONTOURS OF THE 500 mb. SURFACE

Isopleths in geopotential decametres



All times of observation printed in this publication are GREENWICH MEAN TIME.



STATION	YYGGgg	SURFACE			1000mb			850mb			700mb			500mb			400mb			300mb			200mb			150mb			100mb			70mb			50mb			30mb		
		gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C			
LERWICK  03005	192334	082	08	07	127	08	07	1448	01-	05-	2982	05-	22-	5540	23-	36-	7136	35-	47-	9075	50-	++	11696	48-	13598	48-	16271	49-	18622	48-	20843	49-								
	201130	082	10	08	149	09	07	1470	01-	02-	2992	11-	25-	5506	26-	33-	7083	38-	48-	9013	49-	++	11705	45-	13629	44-	16329	46-	18702	48-										
STORNOWAY  03026	192330	013	10	08	183	09	06	1506	01-	03-	3045	06-	21-	5584	24-	37-	7172	36-	47-	9119	48-	++	11771	47-	13663	50-	16321	49-	18666	48-										
	201130	013	14	06	184	11	04	1510	01-	05-	3029	10-	17-	5543	26-	36-	7117	39-	48-	9031	50-	++	11736	44-	13660	46-														
SHANWELL  03170	192330	005	08	05	204	09	05	1524	02-	04-	3077	05-	17-	5633	22-	31-	7245	31-	41-	9228	44-	++	11879	49-	13751	51-														
	201130	005	15	06	198	11	04	1521	01-	04-	3044	09-	19-	5577	21-	31-	7179	35-	45-	9129	47-	++	11807	48-	13701	49-	16359	49-	18695	49-	20911	48-	24285	46-						
ALDERGROVE  03917	192330	077	11	07	235	10	06	1556	02-	04-	3112	03-	25-	5688	19-	23-	7317	30-	35-	9310	44-	++	11941	56-	13790	53-	16414	52-	18737	49-	20947	48-								
	201130	077	13	08	220	11	07	1547	00	04-	3075	08-	12-	5647	20-	33-	7257	34-	46-	9217	46-	++	11888	48-	13778	50-	16427	51-	18758	48-	20999	45-								
AUGHTON  03322	192330	056	10	08	243	11	06	1573	00	04-	3130	02-	29-	5731	17-	21-	7376	26-	32-	9398	39-	44-	12050	61-	13855	55-	16451	55-												
	201130	056	13	06	234	11	05	1561	00	02-	3097	03-	05-	5706	16-	19-	7347	28-	32-	9357	38-	43-	12019	57-	13872	51-	16503	52-	18825	50-	21037	48-								
HEMSBY  03496	192330	012	10	09	232	13	07	1570	02	01-	3128	01-	19-	5751	14-	22-	7411	25-	32-	9441	40-	46-	12081	60-	13885	57-	16463	54-	18764	52-	20961	49-								
	201130	012	16	08	231	11	02	1567	01	00	3127	01-	36-	5737	16-	17-	7382	27-	32-	9403	40-	46-	12053	59-																
CRAWLEY  03774	192345	144	10	07	240	15	04	1587	03	00	3164	02	++	5804	12-	24-	7476	23-	35-	9517	39-	++	12172	59-	13952	62-	16497	56-	18782	53-										
	201130	144	18	09	232	15	04	1579	04	01	3154	01	35-	5792	14-	21-	7447	26-	33-	9476	39-	++	12131	59-	13918	59-	16489	55-												
CAMBORNE  03808	192330	088	10	08	258	11	07	1594	07	15-	3179	03	29-	5815	13-	25-	7481	24-	38-	9513	40-	++	12148	61-	13907	64-	16434	58-	18698	55-	20857	53-								
	201130	088	15	11	243	12	08	1583	06	13-	3167	01	04-	5804	14-	19-	7459	26-	32-	9479	41-	++	12112	60-	13894	60-	16451	56-	18731	54-	20902	52-								
VALENTIA  03953	200001	014	12	06	261	11	06	1591	05	09-	3161	00	26-	5800	13-	19-	7460	24-	30-	9510	37-	43-	12180	59-	++++	++	16550	55-												
	201200	014	13	11	249	09	07	1590	02	01	3150	02-	07-	5760	17-	41-	7400	29-	++	9380	45-	++	12040	53-	++++	++	16510	52-												
Ocean Weather Station 'I'  59°00'N 19°00'W	200000		10	07	133	09	05	1452	02-	04-	2987	09-	16-	5510	26-	34-	7090	38-	47-	9010	50-	++	11690	45-	13610	47-	16290	49-												
	201200		11	09	127	09	++	1448	00	++	2984	05-	++	5550	22-	++	7150	34-	++	9110	48-	++	11790	45-	13710	47-	16400	47-	18760	47-	20990	46-								
Ocean Weather Station 'J'  52°30'N 20°00'W	200001		11	10	206	10	10	1550	05	05	3124	01-	02-	5730	17-	36-	7370	29-	46-	9360	44-	++	12000	53-	13860	52-	16480	53-	18780	51-										
	201200		14	08	247	09	06	1582	06	12-	3148	00	31-	5780	15-	34-	7420	29-	36-	9440	44-	++	12000	63-	13820	56-	16410	53-	18700	54-										



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	02 39400	015	005	865	936 ++ 03 880 01 04- 827 ++ 07- 792 06- 07- 778 ++ 14- 768 01- 16- 751 ++ 25- 719 04- 17- 700 05- 22- 551 18- 33- 422 32- 44- 378 39- 50- 257 58- 229 49- 164 47- 100 49- 072 48- 050 49-	257	10060	58-
	80 784++	018	008	860	000 09 07 745 08- 12- 717 ++ 23- 675 13- 27- 600 ++ 27- 566 ++ 30- 528 23- 31- 420 ++ 45- 385 40- 50- 350 45- 280 51- 250 46- 154 44- 100 46- 085 45- 070 48-	280	09480	51-
STORNOWAY 03026	25 48500	022	021	861	820 03- 05- 800 00 12- 749 02- 19- 707 ++ 21- 599 15- 31- 564 ++ 31- 520 ++ 37- 433 33- 42- 370 39- 50- 301 48- 253 52- 202 47- 137 50- 074 48- 053 49-	253	10220	52-
	25 52501	022	020	859	930 05 00 821 ++ 06- 805 ++ 09- 794 ++ 09- 774 06- 13- 765 ++ 14- 729 ++ 20- 698 ++ 18- 652 ++ 21- 554 ++ 32- 516 24- 35- 394 40- 48- 350 47- 313 50- 247 44- 147 46-	313	08760	50-
SHANWELL 03170	02 21500	025	024	868 755	012 10 06 848 02- 04- 827 03 08- 801 04 13- 740 ++ 18- 656 10- 16- 637 10- 20- 552 ++ 30- 470 25- 33- 444 26- 36- 329 40- 50- 231 54- 200 49- 166 52- 113 50-	231	10970	54-
	02 784++	024	023	867	985 09 03 854 01- 04- 793 05- 07- 770 ++ 06- 743 ++ 13- 682 10- 21- 622 15- 23- 575 17- 22- 516 21- 30- 500 21- 31- 380 38- 48- 364 39- 49- 338 43- 276 49- 204 47- 144 50- 100 49- 077 51- 064 47- 060 49- 030 46- Pressure doubtful above 100mb.	276	09690	49-
ALDERGROVE 03917	02 757++	029	019	878 751	845 03- 45- 833 03 02- 813 ++ 13- 793 03 16- 670 ++ 27- 625 09- 28- 571 15- 27- 550 15- 22- 490 ++ 24- 474 21- 27- 462 ++ 30- 423 27- 32- 323 ++ 46- 265 49- 208 58- 190 54- 099 52- 067 49- 054 50- 034 43-	208	11690	58-
	16 6547+	026	017	846	914 04 01 899 ++ 01 849 ++ 04- 759 05- 07- 731 ++ 13- 715 ++ 12- 687 09- 12- 668 08- 13- 615 ++ 22- 585 11- 25- 415 32- 44- 363 39- ++ 314 46- 277 46- 253 50- 122 49- 096 52- 059 45- 045 46- 036 38-	253	10330	50-
AUGHTON 03322	02 15501	030	023	847 747	007 12 08 957 ++ 04 942 ++ 01 928 ++ 02 835 01- 04- 826 04 09- 816 ++ 16- 693 03- 30- 679 02- 33- 599 09- 30- 559 11- 25- 532 ++ 19- 481 ++ 23- 455 ++ 27- 331 36- 41- 294 40- 45- 197 61- 176 61- 171 58- 142 54- 094 56- 077 49-	197	12140	61-
	02 4552+	028	021	842	011 12 05 917 ++ 01- 881 02 01- 813 ++ 05- 780 03- 07- 744 06- 11- 724 02- 04- 686 03- 05- 510 15- 18- 398 28- 32- 362 34- 38- 323 38- 42- 307 37- 42- 247 50- 199 57- 190 54- 147 51- 078 51- 040 46-	199	12060	57-
HEMSBY 03496	02 00900	028	027	741	020 15 11 018 ++ 10 968 ++ 05 841 01 02- 814 03 05- 788 ++ 07- 760 ++ 14- 721 01- 18- 677 00 19- 607 07- 23- 594 06- 20- 505 14- 22- 495 14- 22- 330 34- 41- 298 40- 46- 218 58- 190 61- 140 56- 093 55- 085 51- 040 48-	190	12390	61-
	03 32531	028	026	839 720	018 13 01 970 ++ 05 905 ++ 02 872 ++ 02 860 ++ 01 832 00 00 811 04 11- 801 ++ 19- 720 00 35- 630 06- 40- 590 10- 16- 573 ++ 17- 542 ++ 16- 501 16- 17- 488 ++ 21- 465 ++ 24- 300 40- 46- 202 59- 187 57- 173 60- 156 56-	(202	11970	59-
CRAWLEY 03774	02 00900	029	012	662	000 15 04 977 ++ 01 842 ++ 00 838 02 04- 825 05 10- 806 ++ 22- 751 05 ++ 608 ++ 38- 545 09- 20- 489 12- 24- 303 ++ 49- 213 57- 173 63- 089 54- 054 52-	173	13070	63-
	02 41700	027	010	678	002 16 05 887 06 03 834 03 01 818 06 14- 802 ++ 26- 748 04 32- 641 ++ 37- 635 ++ 16- 596 ++ 13- 557 08- 18- 421 23- 32- 405 ++ 32- 348 ++ 45- 283 41- 214 57- 175 62- 156 61- 141 57- 076 53-	175	12960	62-
CAMBORNE 03808	02 00900	031	021	667	010 11 08 975 ++ 06 955 ++ 01 920 ++ 00 895 05 04- 870 08- 11- 845 ++ 17- 739 05 28- 630 03- 34- 572 08- 21- 540 09- 22- 315 37- 49- 243 52- 168 67- 156 64- 092 57- 047 53-	168	13230	67-
	02 11631	029	019	670	008 12 08 980 ++ 03 927 ++ 03 895 05 00 860 ++ 11- 790 07 20- 782 ++ 21- 760 ++ 02- 715 ++ 02- 650 ++ 08- 627 ++ 09- 542 ++ 24- 527 11- 21- 508 ++ 19- 417 ++ 31- 379 30- 36- 335 ++ 44- 307 40- 47- 228 56- 193 61- 159 62- 141 57- 113 58- 092 54- 036 53-	193	12340	61-
VALENTIA 03953	02 756++	031	030	700	030 12 06 983 10 05 867 01 02- 852 05 09- 740 03 33- 667 02- 09- 650 02- 07- 532 10- 15- 424 21- 28- 361 29- 35- 323 33- 39- 208 59- 195 59- 179 63- 120 55- 085 55-	179	12900	63-
	50 863++	030	028	809	020 10 08 962 06 05 809 00 02- 742 01 02- 701 02- 07- 658 03- 08- 600 07- 36- 410 28- 314 43- 270 48- 211 53- 082 53- 055 50-	211	11700	53-
Ocean Weather Station 'I' 59°00'N 19°00'W	03 464++	016	016	878	001 ++ 05 935 04 02 842 02- 04- 824 01- 06- 814 ++ 06- 804 01- 07- 760 04- 12- 676 11- 18- 531 22- 31- 385 40- 48- 293 51- 274 51- 236 45- 086 48-	293	09200	51-
	01 455++	015	015	848	903 02 761 04- 739 04- 599 12- 459 27- 293 49- 277 50- 228 45- 185 45- 090 48- 040 46-	277	09600	50-
Ocean Weather Station 'J' 52°30'N 20°00'W	61 3742+	025	025	725	828 04 04 763 03 03 664 14- 16- 642 ++ 29- 592 09- 33- 541 12- 37- 476 20- 38- 343 37- 50- 278 48- 226 54- 186 51- 060 52-	226	11200	54-
	02 756++	030	030	707	998 08 03 946 05 05 932 ++ 13- 913 09 10- 855 06 10- 781 02 25- 585 ++ 40- 555 08- 34- 422 26- 37- 403 ++ 36- 325 40- 46- 203 64- 185 67- 145 55- 062 54-	203	11900	64-



## UPPER WINDS AT STANDARD LEVELS

20 June

1961

STATION	YYGGgg	Type	Surface	1000mb	900m	850mb 1500m	750mb 2100m	700mb 3000m	600mb 4200m	500mb 5400m	400mb 7200m	300mb 9000m	250mb 10500m	200mb 12000m	150mb 14100m	100mb 15900m	70mb 18300m	50mb 20700m	30mb 23700m	20mb 26400m	10mb 30900m
LERWICK 03005	192334	T	250 22	+++ ++	270 33	270 33	280 29	280 29	280 31	290 33	280 28	270 33	270 36	270 41	280 34	280 21	260 08				
	200530	P	270 24	+++ ++	280 33	290 31	290 31	270 30	280 25	260 31	250 36	250 43	260 40	270 44	270 29	270 29	300 10	180 06	100 08		
	201130	T	250 20	+++ ++	250 29	260 32	260 29	260 28	250 31	250 29	250 35	250 40	250 39	260 37	260 28	260 21					
	201735	P	230 23	+++ ++	260 30	260 31	250 29	250 30	260 27	280 27	290 25	280 28	270 35	280 28	270 23	250 24	270 11	270 03			
STORNOWAY 03026	192330	T	250 13	270 26	260 25	290 24	290 29	280 28	270 29	270 36	270 44	270 61	270 68	260 52	270 44	280 22	260 10				
	200530	P	240 13	+++ ++	260 22	270 20	270 21	260 26	250 34	250 34	250 46	250 60	250 56	260 43	260 37	270 22	240 09	310 04			
	201130	T	260 20	+++ ++	240 23	240 25	260 29	260 31	270 31	270 31	270 35	270 42	260 41	260 37							
	201730	P	250 18	+++ ++	250 29	250 31	260 33	270 36	290 34	290 34	290 37	290 45	290 38	280 35	280 36	270 22	270 13	300 04			
SHANWELL 03170	192330	T	210 10	+++ ++	290 23	290 26	290 21	290 24	290 31	280 43	280 72	280 87	270112	280 76	280 47						
	200530	P	230 09	+++ ++	290 17	290 19	270 15	250 21	250 30	250 42	250 68	260 92	260101	260 58							
	201130	T	260 13	+++ ++	250 16	260 15	260 18	270 19	270 25	260 38	250 52	250 82	250 74	250 58	260 44	270 25	P280 10	170 05	110 07	090 12	
	201730	P	270 12	+++ ++	270 23	280 23	270 22	280 22	280 33	280 40	280 49	270 56	270 51	270 45	270 32	270 23					
ALDERGROVE 03917	192330	T	260 08	+++ ++	P280 15	270 15	260 20	260 21	T270 31	270 51	270 65	270 86	260106	260 97	270 46	P270 35	270 16	290 12	100 11	080 14	
	200530	No winds reported																			
	201130	T	280 08	+++ ++	280 16	280 24	280 20	290 25	270 36	270 48	260 63	250 79	250 93	250 58	270 48	260 20	310 09	120 08			
	201730	P	300 14	+++ ++	280 15	280 17	280 20	290 33	290 42	280 46	280 63	290 67	290 63	270 51	270 30	280 27	300 12				
AUGHTON 03322	192330	T	000 00	+++ ++	290 12	280 16	280 18	280 21	260 32	270 52	270 64	270 89	270 94	270 91	270 58	250 27					
	200530	P	000 00	+++ ++	270 10	270 17	270 19	260 26	250 36	260 46	260 54	260 80	260 91	250 91	250 49	280 31	290 10	310 04			
	201130	T	270 08	+++ ++	270 13	250 19	250 26	260 31	260 43	250 45	250 67	250102	240104	250 88	260 46	250 22	290 13	210 04			
	201730	P	270 10	+++ ++	280 16	280 13	310 18	290 24	280 39	280 49	270 55	260 63	260 75	260 67	260 44	260 32	280 17				
HEMSBY 03496	192330	T	230 03	310 13	310 10	270 13	290 26	290 34	280 42	280 54	280 61	270 75	270 82	270 82	280 49						
	200530	P	000 00	+++ ++	270 08	270 15	270 17	280 21	270 27	270 40	270 46	270 73	260 70	260 75	260 44	270 28	280 11	180 02	100 09		
	201130	T	090 08	070 03	240 08	250 15	260 23	250 29	250 39	260 46	260 60	260 68	260 79	260 78							
	201730	P	120 06	+++ ++	290 06	270 19	260 25	270 34	260 48	270 56	250 70	250 94	250107	250 87	270 38	250 26					
CRAWLEY 03774	200020	P	000 00	+++ ++	040 06	260 06	280 09	300 18	280 24	270 37	270 53	270 49	270 46	270 54	270 50	270 27	250 13				
	200530	P	060 05	+++ ++	110 08	250 06	270 11	280 15	270 23	270 30	270 50	270 59	260 63	260 69	260 44	280 22	270 13	050 04			
	201110	P	230 06	+++ ++	220 07	280 05	270 11	250 20	260 35	270 44	260 53	250 64	250 76	250 71	260 48						
	201730	P	210 03	+++ ++	280 11	310 12	290 15	270 28	260 38	260 52	250 71	250 82	240 86	240 84	260 41						
CAMBORNE 03808	192330	T	040 03	010 09	040 05	070 01	300 11	290 13	280 25	270 43	260 44	260 48	260 53	250 53	260 43	280 18	230 05	000 00	P090 11	090 15	
	200530	P	070 05	+++ ++	040 05	230 04	260 11	260 20	270 28	270 39	260 44	260 54	250 59	240 64	240 38	270 20	250 07	060 03	110 16	080 20	
	201130	T	330 10	+++ ++	280 04	280 07	290 18	280 22	260 31	250 46	260 53	240 69	240 78	240 63	250 45	270 20	270 07	060 06	P070 15		
	201730	P	360 08	+++ ++	350 10	280 10	290 18	280 26	280 31	290 31	280 39	250 75	240 83	250 75	260 41	260 31	270 13	350 06	080 11		
VALENTIA 03953	200001	T	000 00	280 02	+++ ++	250 14	+++ ++	260 25	+++ ++	260 43	260 53	250 68	+++ ++	260 77							
	201200	T	210 05	210 06	+++ ++	260 14	+++ ++	290 29	290 32	290 38	310 44	280 57	+++ ++	250 68	+++ ++	280 15					
Ocean Weather Station 'I' 59°00'N 19°00'W	200001	T	250 30	+++ ++	240 42	250 44	260 35	260 36	260 29	280 31	280 34	280 43	280 36	270 30	270 34	270 26					
	200600	P	270 30	+++ ++	270 41	280 42	280 42	280 39	280 34	300 43	290 49	290 52	300 52	300 35	290 25	290 15	240 10	200 11			
	201200	T	270 30	+++ ++	290 45	290 51	280 42	280 40	280 39	290 36	290 63	300 75	300 54	290 44	280 30	270 21	320 05	020 04			
	201800	P	270 20	+++ ++	260 34	280 29	280 36	280 31	280 28	280 35	320 64	300 80	290 90	290 50	290 36	290 26	290 09	290 07			
Ocean Weather Station 'J' 52°30'N 20°00'W	200100	P	090 13	+++ ++	010 13	320 13	290 15	300 24	310 26	300 31	280 53	250 74	240 82	270 58	270 41	270 31	270 13				
	200600	P	360 10	+++ ++	350 12	330 14	290 23	280 31	280 32	290 36	300 48	300 53	300 56	300 48	300 37	300 22	300 04				
	201200	T	000 00	+++ ++	+++ ++	+++ ++	+++ ++	300 24	280 30	280 37	280 45	280 49	280 54	290 51	290 34	300 17	290 09				
	201800	P	180 10	+++ ++	200 13	220 13	250 16	270 28	280 33	270 39	270 41	280 46	280 51	280 53	300 30	310 24					
LARKHILL 03743	200625	P	020 02	+++ ++	160 04	240 07	250 11	260 18	260 28	270 36	270 53	260 59	260 63	260 70	250 40	270 23	270 09				
	200920	T	110 03	+++ ++	170 05	240 07	260 18	260 22	260 35	270 38	260 57	250 65	250 69	250 72	260 49	240 23					

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m	950mb °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
201152	52.0°N 24.5°W	028 020 695	061 11 11	226	08 03	1097 10 ++	1567 08 02	2070 06 02	04 02-	3155 00 03-	02- 10-	4115 06- 25-	09- 37-	5776 15- 45-
Cloud :— 8/8Sc. 1400 to 2500ft; 5/8Sc. 3000 to 3300 ft; 5/8Ac. 9000 to 10000ft. Inversion Levels :— 950mb to 900mb 7½°C. to 10°C. Isothermal Levels :— 973mb to 950mb 7½°C.														
YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m	950mb °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
201310	49.3°N 19.8°W	030 023 650	061 12 09	244	12 04	1125 12 05	1597 09 04-	2100 07 04-	05- 32-	3188 03 32-	00 37-	4420 04- 30-	08- 53-	5831 15- 50-
Cloud :— 7/8Sc. 800 to 1900ft; 2/8Sc. 5000 to 6000ft. Inversion Levels :— 976mb to 950mb 9½°C. to 12½°C. Isothermal Levels :—														
RATES OF SUBSCRIPTION: Single copy 5d. or post free 7d. One calendar month 13/-; one quarter 35/-; one year 125/-. For special arrangements for supply to schools and colleges see Form 2452.										Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General Meteorological Office, Air Ministry, Kingsway, London, W.C.2				



## UPPER WINDS AT ADDITIONAL LEVELS

Page 5

STATION		MAX. WIND
LERWICK 03005	054mb 250 15 080mb 270 16 23100m 080 05	
STORNOWAY 03026	060mb 260 08 21500m 310 03 07080/0 11630/1 162mb 260 34 22800m 050 08	260 70 10650m 250 64 09190m
SHANWELL 03170	232mb 270 105 122mb 280 43 13700m 260 46 11070/1 11430/1 P28200m 080 16	270 120 10220m 260 104 10420m 250 87 09470m
ALDERGROVE 03917	179mb 260 63 16050/1 21480/8 232mb 250 77 039mb 150 06 20100m 360 06 11450/1 13500/1	260 117 11600m 250 97 10500m 280 72 09680m
AUGHTON 03322	084mb 250 24 12900m 250 68 13060/1 169mb 260 62 043mb 190 07 20400m 310 05 12160/1	260 100 11560m 250 96 11750m 250 116 10520m 260 78 10180m
HEMSBY 03496	171mb 270 70 125mb 270 33 24600m 130 06 08260/0 13040/1 164mb 260 58 12880m 250 57 07960/0 12010/1 12450/1 13950/1	270 84 10410m 260 77 09430m 260 83 09850m 250 112 10920m
CRAWLEY 03774	20400m 150 01 13950/1 14630/1 01260/8 14700m 270 31 09950/0 15000m 260 36 12550/1 12860/1	270 66 12150m 260 70 11920m 260 81 10130m 240 92 10300m
CAMBORNE 03808	P28800m 090 23 20800m 120 18 12010/0 P24300m 070 14 12900m 260 65 01170/5 08210/0 10940/0 11470/1 12800/1 13430/1	250 70 12240m 240 81 10790m 240 95 11200m
VALENTIA 03953	740mb 260 24 650mb 260 28 208mb 250 79 179mb 260 71 120mb 260 45 742mb 290 26 658mb 280 33 314mb 290 37 270mb 250 61 211mb 250 75 055mb 180 09	250 79 11910m 250 80 11400m
Ocean Weather Station 'I' 59°00'N 19°00'W	17100m 260 10 10840/1 080mb 270 14 044mb 020 04 06000m 300 48 23400m 030 05 06700/0 11150/1	300 78 09190m 290 96 10460m
Ocean Weather Station 'J' 52°30'N 20°00'W	18600m 270 08 05700/0 11580/1 16800m 300 14 02190/0 724mb 300 21 112mb 300 24 066mb 290 06 12900m 300 30 17400m 300 17	240 87 10450m 290 61 11000m
LARKHILL 03743		250 76 12600m 250 76 11700m

## NOTES ON THE AEROLOGICAL SITUATION

The low near Hudson Bay has moved east with slight deepening whilst its down-wind ridge, now over the Davis Strait and western Greenland has moved slowly east. The trough which yesterday was near the Greenland east coast has moved east and relaxed whilst a new trough has formed to the west of the British Isles, and is moving east. The low near Spitzbergen has moved northnortheast and the strong flow to the south of this system has weakened to the west of the British Isles. The ridge over France and the western Mediterranean has continued to intensify, whilst the low to the southwest of Gibraltar has persisted with little movement. Over the eastern Mediterranean the low over Greece has moved southeast and has deepened slightly.

AVERAGE AND EXTREME VALUES 1951-55  
JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22345	-48.1	-42	-55	...	(11)
60	19675	-48.1	-41	-55	120	3
100	16320	-48.8	-41	-56	244	5
150	13660	-48.3	-41	-59	263	10
200	11770	-49.8	-39	-67	271	16
300	9125	-46.7	-37	-56	271	22
400	7160	-32.6	-23	-44	271	18
500	5555	-20.8	-11	-31	269	14
700	2985	-5.2	3	-14	266	9
850	1435	2.8	14	-7	269	6

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	257	-54.7	10190
Max.	405	-40	12955
Min.	172	-68	6890

LARKHILL/CRAWLEY† at 03, 15h.  
(Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.)

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22310	-49.6	-47	-57	106	9
60	19675	-51.4	-45	-59	136	3
100	16370	-52.6	-46	-61	251	8
150	13745	-51.8	-42	-65	265	15
200	11890	-54.0	-40	-65	268	20
300	9265	-44.7	-36	-54	265	20
400	7275	-29.6	-19	-41	265	17
500	5640	-17.8	-9	-28	263	15
700	3050	-2.1	7	-10	263	11
850	1480	5.7	16	-3	264	7

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	234	-56.8	10950
Max.	388	-41	13440
Min.	160	-66	7225

MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5
60	19670	-60.7	-53	-69	135	4
100	16510	-62.9	-57	-71	255	21
150	13995	-59.0	-51	-67	265	38
200	12185	-56.6	-47	-67	275	42
300	9530	-40.1	-33	-46	285	32
400	7500	-23.9	-19	-29	285	27
500	5835	-11.8	-8	-17	285	24
700	3165	7.2	13	-1	290	18
850	1535	17.9	27	8	290	9

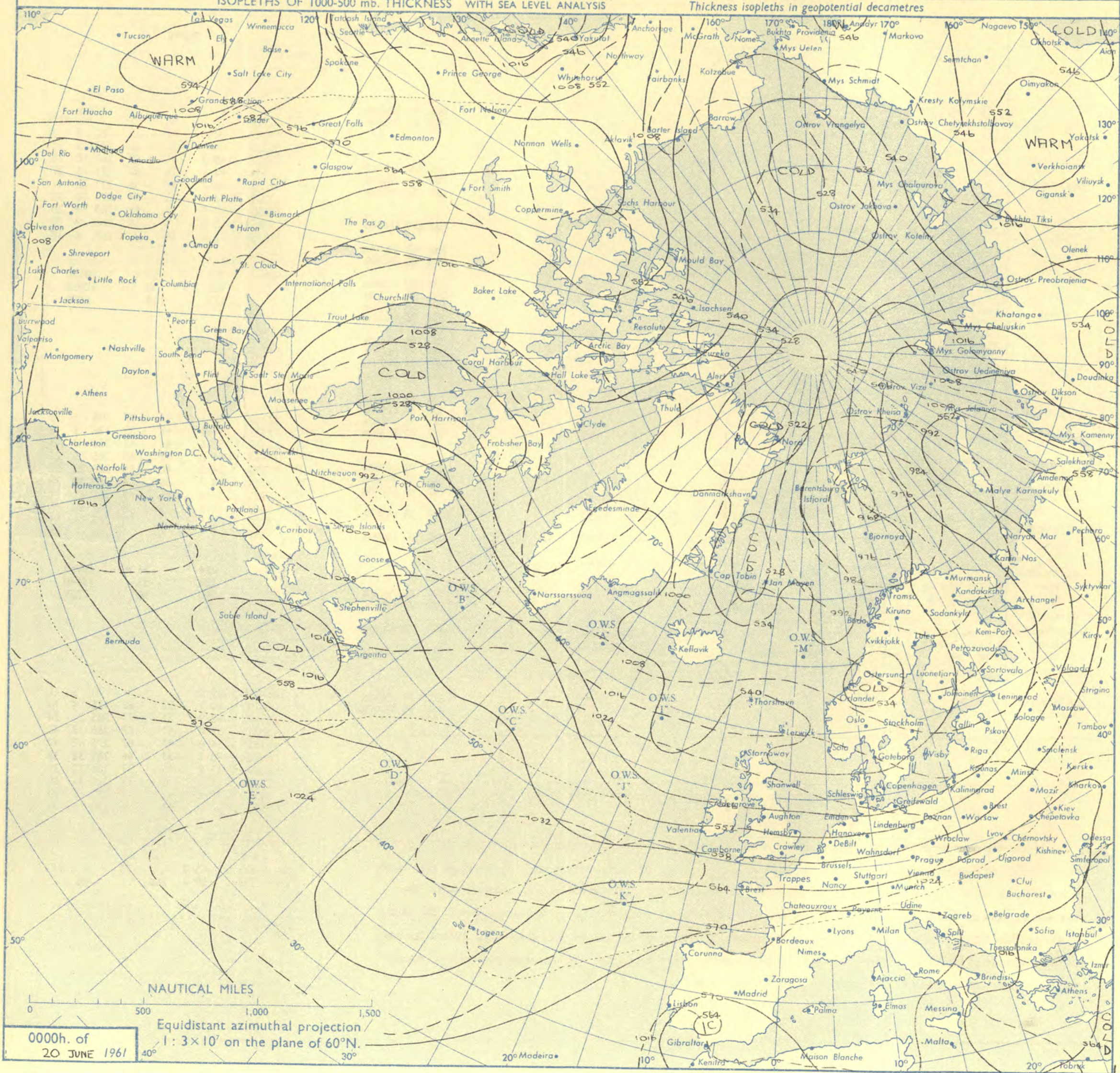
Tropopause	Average Press.	Average Temp.	Max. Press.	Min. Press.	Max. Temp.	Min. Temp.
Upper	mb.	°C	mb.	mb.	°C	°C
Lower	123	-65.7	...	73	...	-73
	193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.











52°30'N 20°00'W



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	02 362++	014 004 852	957 ++ 04 920 ++ 03 820 02-- 05-- 756 ++ 10-- 710 09-- 13-- 652 11-- 27-- 600 15-- 33-- 575 ++ 32-- 388 39-- 50-- 284	54-- 225 45-- 100 46-- 068 47--		284	09360	54--
	60 6847+	012 002 856	986 08 06 923 03 01 690 09-- 11-- 672 07-- 09-- 621 ++ 14-- 560 ++ 18-- 546 ++ 21-- 433 26-- 31-- 403 31-- 36-- 341	40-- 45-- 255 56-- 148 44-- 100 45-- 030 47--		255	10190	56--
STORNOWAY 03026	80 724++	020 018 830	931 05 03 809 01-- 03-- 724 ++ 10-- 709 10-- 25-- 696 09-- 25-- 560 17-- 41-- 451 ++ 50-- 308 48-- 259 56-- 205 47--	098 48--		259	10050	56--
	02 5552+	016 015 827	998 10 06 899 02 01 866 01 00 837 00 05-- 763 ++ 14-- 751 05-- 10-- 734 04-- 08-- 715 ++ 07-- 672 09-- 11-- 659	08-- 10-- 567 ++ 19-- 533 ++ 27-- 474 23-- 37-- 355 40-- 49-- 264 55-- 257 51-- 215 46-- 099 46-- 042 43--		264	09950	55--
SHANWELL 03170	02 15600	022 021 800	020 11 07 852 03 02-- 818 02 04-- 718 ++ 12-- 694 10-- 15-- 677 09-- 15-- 586 16-- 24-- 370 40-- 47-- 331 44-- 285	46-- 167 44-- 136 48-- 119 48--		285	09470	46--
	02 3857+	021 021 820	004 11 06 952 ++ 03 908 ++ 00 888 ++ 03-- 796 ++ 08-- 776 ++ 08-- 733 06-- 11-- 699 05-- 10-- 682 07-- 12-- 650 07--	13-- 633 ++ 14-- 617 ++ 14-- 534 15-- 18-- 373 35-- 42-- 347 40-- 46-- 257 56-- 241 52-- 186 47-- 154 50-- 136 47-- 100		257	10200	56--
ALDERGROVE 03917	01 15600	026 017 814	007 10 06 903 04 01 880 04 03-- 855 ++ 06-- 745 05-- 11-- 724 02-- 14-- 688 ++ 19-- 655 ++ 13-- 613 09-- 16-- 595	++ 19-- 568 ++ 19-- 536 ++ 24-- 514 ++ 25-- 490 20-- 30-- 417 28-- 40-- 330 ++ 48-- 253 53-- 199 49-- 072 49--		253	10390	53--
	02 5853+	022 013 770	947 07 04 863 02 00 840 03 05-- 780 ++ 16-- 699 02-- 21-- 615 07-- 27-- 580 ++ 18-- 553 ++ 18-- 515 17-- 20-- 481	++ 24-- 456 24-- 29-- 341 38-- 42-- 270 51-- 261 55-- 254 54-- 238 57-- 184 50-- 089 51-- 030 47--		238	10760	57--
AUGHTON 03322	02 556++	027 020 831	007 12 09 938 08 05 928 ++ 03 882 04 02 804 ++ 06-- 777 04-- 06-- 766 02-- 09-- 757 ++ 15-- 723 02-- 21-- 614	++ 31-- 581 ++ 18-- 550 ++ 22-- 540 ++ 26-- 533 15-- 27-- 419 29-- 43-- 340 40-- 47-- 254 54-- 191 49-- 100 51-- 066		254	10350	54--
	03 11537	025 019 739	991 12 04 832 0 02-- 800 ++ 09-- 773 ++ 11-- 761 01 09-- 692 03-- 07-- 678 02-- 08-- 615 08-- 13-- 586 ++ 18-- 539	++ 17-- 504 16-- 21-- 359 34-- 38-- 326 40-- 44-- 218 61-- 209 61-- 180 55-- 099 51-- 073 53-- 062 50-- 047 51--		218	11410	61--
HEMSBY 03496	02 00900	026 024 832	018 13 10 010 ++ 07 928 ++ 02 860 02 01-- 809 ++ 05-- 749 05-- 08-- 741 ++ 07-- 726 ++ 09-- 701 02-- 19-- 646 ++	30-- 530 16-- 39-- 508 18-- 33-- 362 37-- 49-- 281 52-- 168 51-- 151 54-- 093 54-- 038 51--		281	09690	52--
	02 42607	026 025 829 736	005 12 08 885 04 02 857 02 01-- 822 00 02-- 804 ++ 17-- 797 03 17-- 725 01-- 16-- 714 01-- 13-- 694 01-- 20-- 670	++ 17-- 605 ++ 27-- 586 09-- 28-- 563 11-- 22-- 536 13-- 23-- 489 19-- 27-- 390 ++ 43-- 332 40-- 50-- 272 51-- 226 60--		204	11810	63--
CRAWLEY 03774	02 00900	026 009 672	001 14 08 897 08 04 821 02 01 806 ++ 08-- 799 04 03-- 790 ++ 01-- 762 ++ 00 753 01 03-- 714 03 17-- 597 ++	29-- 573 08-- 28-- 490 ++ 29-- 333 ++ 50-- 313 44-- 231 57-- 072 51--		231	11100	57--
	03 616++	027 009 680	986 14 03 836 ++ 02 823 02 01 805 06 03 789 ++ 01-- 760 ++ 02-- 726 ++ 01 629 ++ 05-- 572 07-- 11-- 510 ++	15-- 448 20-- 23-- 317 ++ 42-- 212 63-- 171 55-- 092 55-- 068 51-- 053 52-- Dewpoints suspect above 800mb		212	11680	63--
CAMBORNE 03808	02 00900	029 018 657	010 12 09 966 09 07 937 08 02 900 08 01 850 08 03 820 ++ 02 778 03 04-- 758 05 07-- 749 ++ 12-- 711 04 16--	614 03-- 25-- 489 15-- 29-- 321 39-- 50-- 197 63-- 193 59-- 147 55-- 138 57-- 070 53--		197	12190	63--
	03 22402	027 017 649	002 14 08 889 06 04 870 07 01 844 06 03 822 08 07-- 805 ++ 14-- 634 01-- 27-- 368 32-- 49-- 225 60-- 209 63-- 152	55-- 072 55-- 038 48--		209	11800	63--
VALENTIA 03953	02 45600	029 027 690	892 06 04 874 06 04 824 02 00 803 06 20-- 754 04 25-- 552 10-- 31-- 489 15-- 29-- 426 23-- 33-- 379 29-- 41-- 250	54-- 206 61-- 163 55-- 092 53-- 062 52-- 048 53--		206	11900	61--
	03 824++	024 023 725	996 12 10 925 07 05 878 08 07 858 09 04 830 09 12-- 814 09 06-- 714 01-- 03-- 677 00 06-- 639 04-- 12-- 618	04-- 12-- 467 19-- 29-- 404 29-- 35-- 333 31-- 36-- 245 42-- 250 53-- 207 62-- 178 54-- 084 53-- 071 50-- 039 55--		210	11600	62--
Ocean Weather Station 'I' 59°00'N 19°00'W	61 4642+	014 014 860	003 ++ 04 970 06 03 852 01-- 02-- 797 03-- 04-- 770 01-- 02-- 720 02-- 04-- 593 11-- 13-- 468 24-- 29-- 348 40-- 46--	259 57-- 216 48-- 073 48--		259	10100	57--
	02 5246+	009 009 732	962 07 05 887 05 03 853 ++ 00 813 01 03-- 784 ++ 01-- 770 04 04-- 757 02 11-- 719 ++ 13-- 682 04-- 19-- 639 06--	27-- 390 35-- 50-- 350 42-- 313 47-- 286 50-- 260 46-- 202 43-- 184 46-- 063 49-- 055 45--		286	09400	50--
Ocean Weather Station 'J' 52°30'N 20°00'W	03 6567+	026 026 712	000 11 10 973 11 11 939 14 12 878 12 09 802 06 04 743 02 01 696 01-- 07-- 622 06-- 12-- 603 06-- 15-- 537 ++	20-- 440 22-- 31-- 318 40-- 50-- 262 52-- 200 61-- 177 56-- 157 56--		200	12000	61--
	02 862++	022 022 638	989 11 10 929 11 10 898 09 09 877 11 08 833 10 12-- 800 10 25-- 743 07 27-- 703 04 26-- 644 00 33-- 523 10--			523	+++++	10--



STATION	YYGGgg	Type	Surface	1000mb	900m	850mb 1500m	750mb 2100m	700mb 3000m	600mb 4200m	500mb 5400m	400mb 7200m	300mb 9000m	250mb 10500m	200mb 12000m	150mb 14100m	100mb 15900m	70mb 18300m	50mb 20700m	30mb 23700m	20mb 26400m	10mb 30900m
LERWICK 03005	202330	T	230 21	+++ ++	260 26	260 28	260 34	260 33	280 29	300 30	310 30	340 43	310 33	290 26	280 30	310 19					
	210530	P	270 17	+++ ++	270 27	270 30	270 28	270 27	280 30	280 34	290 42	290 56	300 49	290 36	290 25	260 16	270 12	000 00			
	211130	T	250 28	+++ ++	250 33	250 34	250 31	250 28	250 26	250 32	250 38	250 48	250 54	270 38	280 27	280 24	240 06	310 09			
	211730	P	220 27	+++ ++	250 38	260 36	260 36	260 31	260 27	260 31	260 43	250 40	260 40	270 30	290 28	270 18	290 10	350 05			
STORNOWAY 03026	202345	T	250 13	+++ ++	270 28	270 32	270 37	280 29	300 30	310 32	330 42	320 56	320 55	290 39	290 33	290 20					
	210600	P	260 15	+++ ++	260 31	250 36	260 39	250 37	260 31	250 40	270 47	260 50	270 55	280 42	290 29	290 22					
	211130	T	230 20	+++ ++	230 34	240 41	260 41	270 38	260 48	270 51	270 50	260 77	270 55	270 37	270 32	280 19	290 08	310 05			
	211730	P	190 18	+++ ++	230 32	240 27	250 26	260 33	260 39	260 41	260 48	270 47	270 40	280 41	290 28	290 22	290 12	010 07	090 04		
SHANWELL 03170	202330	T	260 15	+++ ++	290 31	290 31	290 28	300 22	280 31	290 45	300 59	300 47	290 43	280 49	290 29						
	210530	P	250 13	+++ ++	280 27	290 31	290 34	280 19	290 28	290 34	300 44	300 50	290 66	290 46	270 33	290 25					
	211130	T	230 17	+++ ++	250 25	250 29	270 27	280 37	280 41	270 45	270 52	270 63	270 64	270 45	280 30	280 18	290 09	040 04	080 11	P100 11	
	211730	P	No winds reported																		
ALDERGROVE 03917	202330	T	210 05	+++ ++	290 12	310 16	300 18	290 30	290 36	300 62	290 84	300 87	300 88	290 40	280 40	270 21					
	210540	P	230 07	+++ ++	240 11	250 10	280 16	270 25	290 33	280 38	280 46	280 60	280 67	290 54	280 26	280 26					
	211130	T	210 15	+++ ++	230 19	240 24	250 28	260 30	260 33	280 40	270 48	260 54	260 69	280 46	280 39	280 23	310 14				
	211730	P	240 15	+++ ++	240 36	240 34	250 38	260 49	270 44	270 44	260 51	240 57	250 68	270 38							
AUGHTON 03322	202330	T	250 05	+++ ++	290 14	310 15	290 26	280 29	290 39	290 59	290 69	290 89	290 84	280 66	260 42	300 23	260 10				
	210530	P	000 00	+++ ++	280 17	290 19	290 21	300 22	300 36	300 48	290 50	300 69	300 73	290 55	290 32	260 21	310 10	310 04			
	211145	T	230 07	+++ ++	240 10	240 19	260 21	260 23	270 28	270 32	270 45	270 51	270 59	260 57	280 37	280 21	290 12	230 06			
	211730	P	200 13	+++ ++	220 19	230 20	240 22	250 29	260 33	270 39	260 42	260 43	260 60	270 43	270 34	290 23	300 16				
HEMSBY 03496	202330	T	000 00	+++ ++	300 08	290 14	270 24	280 29	270 41	270 57	270 70	270 73	260 81	270 63	270 52	270 25	270 15	270 02			
	210530	P	000 00	+++ ++	320 20	310 17	290 19	290 30	300 41	290 64	290 73	280 79	280 82	280 63	270 39	270 22	270 05	190 07	120 09		
	211130	T	100 10	+++ ++	250 06	260 12	270 16	270 19	280 30	280 40	270 47	270 57	280 56	270 59	280 40	280 27	270 12	330 08			
	211745	P	150 12	+++ ++	190 12	250 13	270 20	280 15	250 27	260 36	260 49	260 60	260 63	270 56	270 34	280 18	280 05	270 02	050 08		
CRAWLEY 03774	202330	T	000 00	+++ ++	350 11	290 14	270 27	280 27	280 35	280 47	280 56	280 51	270 69	260 68	270 47	250 18	P270 12				
	210530	P	020 02	+++ ++	350 04	300 09	300 18	300 25	290 37	300 40	290 53	290 60	280 64	270 62	280 34	270 29	290 06				
	211110	P	000 00	+++ ++	190 02	270 01	290 09	290 16	280 25	270 35	270 43	270 47	270 50	270 51	270 34	280 20	270 07	320 04	110 10	110 12	110 25
	211730	P	180 03	+++ ++	240 03	250 06	250 15	260 18	250 30	270 37	260 49	260 58	270 54	270 45	280 30						
CAMBORNE 03808	202330	T	360 10	+++ ++	010 13	300 09	290 17	290 21	290 21	290 38	280 40	290 38	280 44	270 44	270 37	270 20					
	210530	P	070 02	+++ ++	020 06	320 04	280 10	270 16	260 23	260 27	260 33	260 38	260 38	260 44	260 40	250 16	280 06	040 06			
	211130	T	010 09	+++ ++	120 03	190 06	270 12	270 18	270 29	270 35	270 38	270 38	260 40	270 45	270 29	280 19	300 03	050 04	P090 10	110 22	
	211730	P	290 06	+++ ++	260 09	260 12	280 18	280 21	250 28	250 45	250 56	270 49	270 45	260 48	270 26	300 20	300 08				
VALENTIA 03953	202330	T	150 05	150 03	+++ ++	250 10	+++ ++	290 32	+++ ++	290 42	290 42	290 45	300 55	290 51	+++ ++	290 24					
	211130	T	230 14	220 17	+++ ++	250 19	+++ ++	280 21	+++ ++	260 36	270 36	270 59	+++ ++	280 56	+++ ++	280 20					
Ocean Weather Station 'I' 59°00'N 19°00'W	210000	T	230 30	+++ ++	260 48	270 43	280 40	280 36	280 38	270 30	250 44	260 56	270 62	280 43	280 34	280 20					
	210600	P	225 20	+++ ++	250 31	260 30	270 32	260 44	240 41	260 41	280 64	290 68	270 75	280 49	280 32	280 28	290 24	310 13			
	211200	T	260 23	+++ ++	280 27	280 27	280 33	280 37	240 91	300 49	320 53	310 56	320 57	300 44	300 42	280 25	270 12				
	211800	P	270 20	+++ ++	300 30	320 30	310 35	300 35	310 50	310 61	320 79	320 92	320 90	320 96	310 50	310 34					
Ocean Weather Station 'J' 52°30'N 20°00'W	210000	T	190 22	200 26	240 25	280 30	290 45	290 34	270 28	250 31	270 34	270 43	270 53	310 77							
	210600	P	270 20	+++ ++	270 25	260 30	260 27	260 38	260 39	260 31	270 49	270 57	270 69	270 62	280 41						
	211300	T	260 18	+++ ++	280 30	280 26	280 27	290 27	290 27	290 29											
	211800	P	270 20	+++ ++	280 24	280 23	280 23	290 27	290 20	310 18	320 24	320 48	290 72	290 57	320 32	320 23	310 11	010 08			
LARKHILL 03743	210625	P	350 02	+++ ++	020 07	350 05	300 16	300 19	290 31	280 36	290 42	290 53	280 54	270 50	280 33	280 21	280 10				
	211027	P	020 02	+++ ++	130 04	240 03	280 07	280 15	270 24	280 34	280 39	280 50	270 51	270 53	260 35	280 23	280 04				

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m °C °C	950mb °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
Cloud :—														
Inversion Levels :—														
Isothermal Levels :—														
YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m °C °C	950mb °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
Cloud :—														
Inversion Levels :—														
Isothermal Levels :—														
RATES OF SUBSCRIPTION: Single copy 5d. or post free 7d. One calendar month 13/-; one quarter 35/-; one year 125/-. For special arrangements for supply to schools and colleges see Form 2452.											Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General Meteorological Office, Air Ministry, Kingsway, London, W.C.1.			



STATION		MAX. WIND
LERWICK 03005	072mb 290 07 22200m 270 03 P21600m 310 06 21900m 290 04	300 63 10020m
STORNOWAY 03026	08690/0 11210/1 047mb 310 05	320 62 09640m 260 79 09560m
SHANWELL 03170	125mb 290 25 10860/1	300 61 07220m 290 70 10620m 270 66 10120m
ALDERGROVE 03917	214mb 290 62 080mb 260 20 12900m 280 43 02220/0 12720/1 13000m 280 39 10270/0 11700/1	310 94 09810m 280 71 10660m 260 75 10900m 250 76 10480m
AUGHTON 03322	22500m 110 06 07410/0 12580/1 16460/2 19800m 330 08 11760/1	300 91 09450m 290 78 10990m 270 62 10360m 260 67 11200m
HEMSBY 03496	041mb 040 03 11210/1 12550/1 044mb 090 03	260 87 10750m 270 87 10980m 280 71 11060m 260 68 11170m
CRAWLEY 03774	P19200m 290 06 13200m 280 54 20400m 320 04 28800m 090 20 33000m 110 15 36000m 080 21 32750/5	260 82 11330m 270 70 11500m 270 62 11050m
CAMBORNE 03808	080mb 300 12 21600m 080 05 01630/5 P27300m 100 17 19800m 000 00	
VALENTIA 03953	892mb 230 10 754mb 280 18 552mb 290 38 163mb 280 44 062mb 310 06 048mb 320 09 925mb 220 20 618mb 270 27 250mb 270 66 178mb 280 49 071mb 330 11 039mb 100 05	
Ocean Weather Station 'I' 59°00'N 19°00'W	080mb 290 14 06300m 260 49 21300m 280 13 07410/0 08390/1 10390/0 11240/1 060mb 280 10 17100m 310 28 12840/1 13600/1	270 70 10160m 300 92 08150m 320 63 09320m 320 97 11800m
Ocean Weather Station 'J' 52°30'N 20°00'W	170mb 330 63 164mb 320 42 14700m 280 41 15300m 280 26 559mb 300 30 08100m 330 35 12900m 300 43 22200m 070 13 10900/0 11620/1	330 92 12340m 270 72 11680m 280 87 11100m
LARKHILL 03743		

## NOTES ON THE AEROLOGICAL SITUATION

The low near Hudson Bay has moved northeast and deepened slightly whilst the down wind ridge now over Greenland has moved east and amplified. The trough over the North Sea has moved east. The low to the west of Spitzbergen has moved slowly west and is filling. The low to the southwest of Gibraltar has persisted. The low over western Turkey has moved east and is filling.

## AVERAGE AND EXTREME VALUES 1951-55

## JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22345	-48.1	-42	-55	...	...
60	19675	-48.1	-41	-55	120	3
100	16320	-48.8	-41	-56	244	5
150	13660	-48.3	-41	-59	263	10
200	11770	-49.8	-39	-67	271	16
300	9125	-46.7	-37	-56	271	22
400	7160	-32.6	-23	-44	271	18
500	5555	-20.8	-11	-31	269	14
700	2985	-5.2	3	-14	266	9
850	1435	2.8	14	-7	269	6

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	257	-54.7	10190
Max.	405	-40	12955
Min.	172	-68	6890

LARKHILL/CRAWLEY† at 03, 15h.  
(Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.)

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22310	-49.6	-47	-57	106	9
60	19675	-51.4	-45	-59	136	3
100	16370	-52.6	-46	-61	251	8
150	13745	-51.8	-42	-65	265	15
200	11890	-54.0	-40	-65	268	20
300	9265	-44.7	-36	-54	265	20
400	7275	-29.6	-19	-41	265	17
500	5640	-17.8	-9	-28	263	15
700	3050	-2.1	7	-10	263	11
850	1480	5.7	16	-3	264	7

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	234	-56.8	10950
Max.	388	-41	13440
Min.	160	-66	7225

MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5
60	19670	-60.7	-53	-69	135	4
100	16510	-62.9	-57	-71	255	21
150	13995	-59.0	-51	-67	265	38
200	12185	-56.6	-47	-67	275	42
300	9530	-40.1	-33	-46	285	32
400	7500	-23.9	-19	-29	285	27
500	5835	-11.8	-8	-17	285	24
700	3165	7.2	13	-1	290	18
850	1535	17.9	27	8	290	9

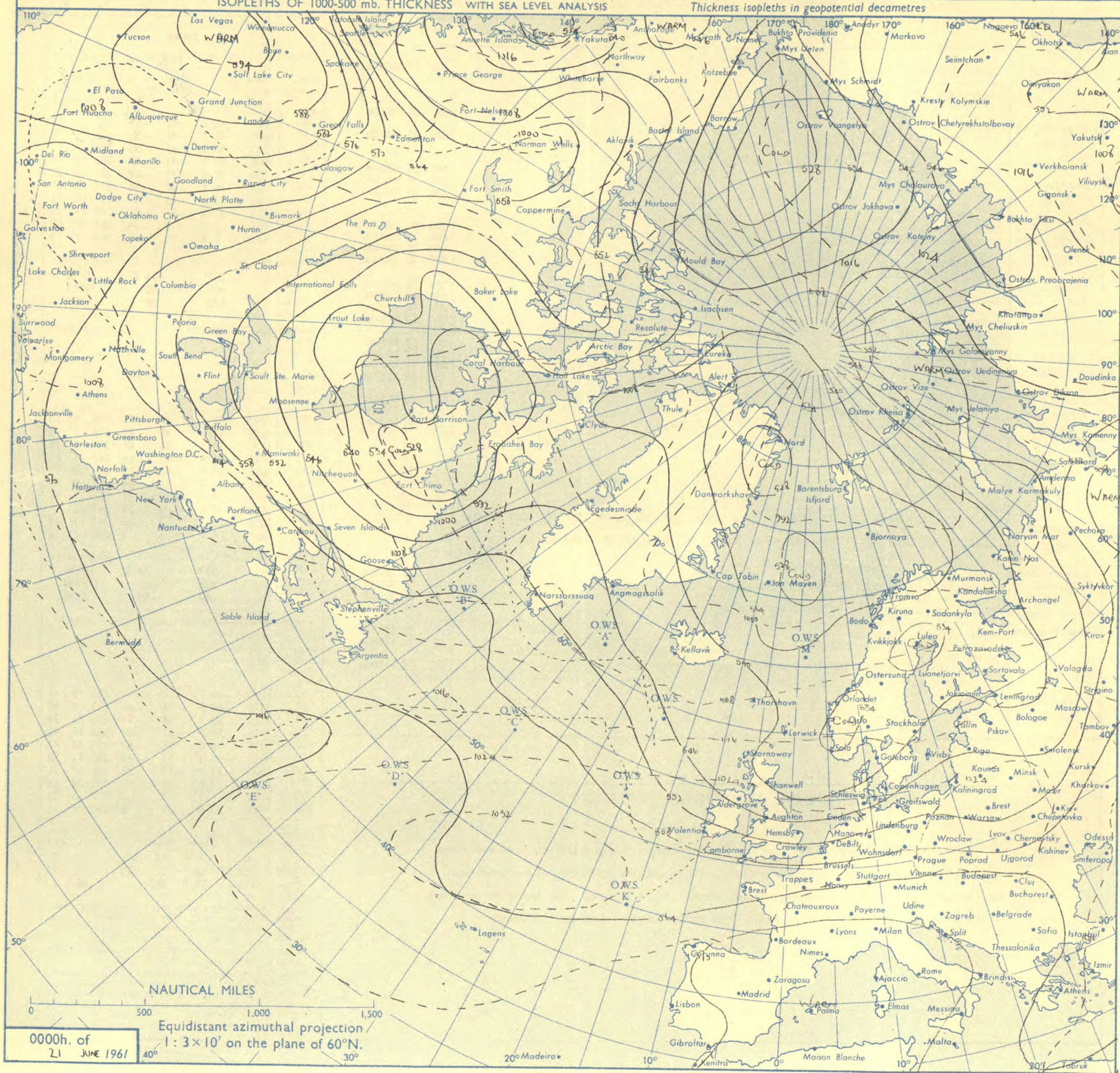
Tropo- pause	Average Press.	Average Temp.	Max. Press.	Min. Press.	Max. Temp.	Min. Temp.
	mb.	°C	mb.	mb.	°C	°C
Upper	123	-65.7	...	73	...	-73
Lower	193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.

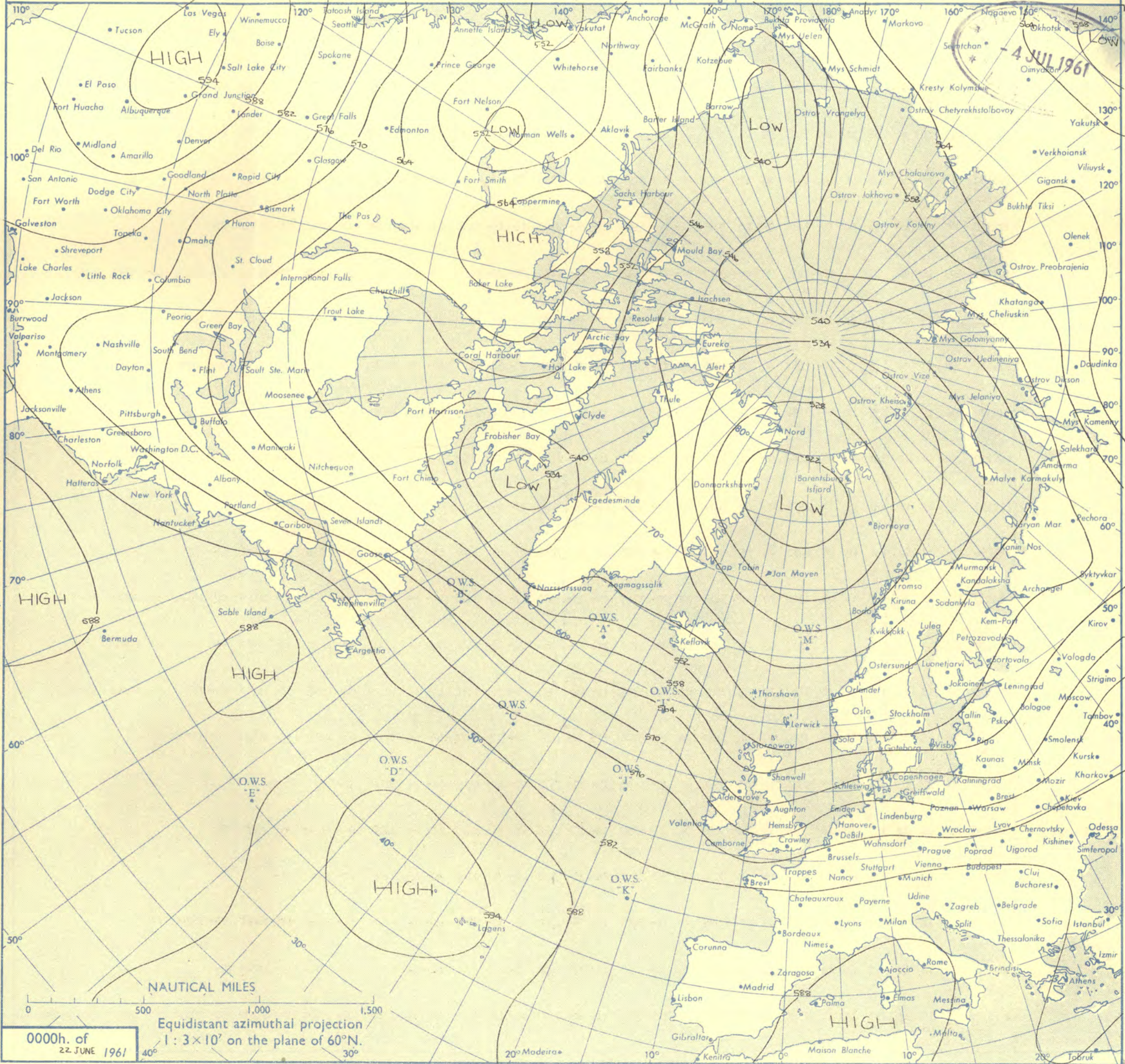






CONTOURS OF THE 500 mb. SURFACE

Isopleths in geopotential decametres





STATION	YYGGgg	SURFACE			1000mb			850mb			700mb			500mb			400mb			300mb			200mb			150mb			100mb			70mb			50mb			30mb		
		gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C			
LERWICK 03005	212330	082	09	09	063	++	++	1394	02	01	2938	06-	08-	5484	24-	29-	7074	36-	44-	9019	47-	++	11711	45-	13634	45-														
	221130	082	10	06	059	++	++	1380	01-	03-	2925	04-	29-	5505	20-	46-	7133	30-	37-	9126	43-	++	11786	48-	13687	47-	16372	46-	18743	46-										
STORNOWAY 03026	212330	013	11	10	086	11	10	1428	03	02	2976	05-	14-	5551	20-	40-	7162	33-	++	9126	47-	++	11809	46-	13715	48-	16383	49-	18728	48-	20943	48-								
	221130	013	13	06	101	11	04	1426	06	11-	2995	01-	22-	5598	17-	33-	7238	27-	41-	9246	42-	++	11878	55-	13747	50-	16415	48-												
SHANWELL 03170	212330	005	12	11	093	12	10	1439	06	04	3005	02-	08-	5590	21-	40-	7200	34-	49-	9156	47-	++	11839	46-	13751	47-	16432	50-												
	221130	005	19	06	107	16	03	1449	02	02-	3010	01-	22-	5614	17-	25-	7254	29-	35-	9254	43-	++	11878	56-	13746	50-	16390	48-	18734	48-	20965	44-								
ALDERGROVE 03917	212330	077	13	12	124	12	11	1467	04	03	3030	02-	30-	5619	20-	45-	7230	34-	++	9180	48-	++	11858	48-	13737	49-	16372	52-	18690	50-	20889	50-								
	221130	077	15	09	151	13	08	1488	04	00	3078	03	16-	5718	15-	26-	7372	26-	32-	9401	40-	++	12040	61-	13855	55-	16464	50-	18709	51-	20968	53-								
AUGHTON 03322	212330	056	12	10	157	12	08	1497	06	04	3062	02-	05-	5657	19-	25-	7281	30-	37-	9255	48-	++	11891	50-	13755	50-														
	221130	056	14	10	151	12	08	1487	07	01	3067	01	25-	5697	15-	27-	7342	27-	35-	9354	42-	++	11976	59-	13823	52-	16452	53-	18772	50-	20978	49-								
HEMSBY 03496	212330	012	13	11	172	13	07	1524	05	03	3086	01-	19-	5696	18-	26-	7324	29-	34-	9315	45-	++	11909	56-	13758	53-	16374	54-												
	221130	012	17	12	146	14	08	1492	04	03	3045	01-	24-	5657	18-	42-	7282	29-	++	9278	43-	++	11924	50-	13799	51-	16421	52-	18733	52-	20920	51-	24257	51-						
CRAWLEY 03774	212330	144	11	10	185	13	11	1540	07	02-	3118	02	20-	5743	16-	33-	7386	27-	34-	9396	42-	++	12012	57-	13858	52-	16475	52-	18787	51-	20980	50-								
	221130	144	17	12	168	16	12	1517	07	04	3098	00	20-	5701	16-	42-	7346	28-	45-	9342	44-	++	11981	52-	13839	52-	16443	53-	18741	53-	20915	51-								
CAMBORNE 03808	212338	088	13	10	190	13	10	1542	10	04	3129	01-	03-	5753	15-	22-	7393	29-	39-	9388	43-	++	12028	52-	13889	53-	16500	53-	18809	52-	21002	51-	24372	44-						
	221130	088	15	14	192	13	11	1544	10	04	3140	04	29-	5796	13-	30-	7456	26-	37-	9471	42-	++	12089	62-	13894	55-	16482	55-	18778	52-										
VALENTIA 03953	212330	014	13	12	174	14	13	1536	10	03	3141	05	15-	5800	12-	37-	7470	24-	40-	9500	40-	++	12160	52-																
	221130	014	14	12	197	12	10	1546	10	14-	3144	04	22-	5790	13-	27-	7450	26-	36-	9470	42-	++	12080	64-	++++	++	16450	55-												
Ocean Weather Station 'I' 59°00'N 19°00'W	220001		09	07	106	08	05	1447	08	22-	3030	02	34-	5660	14-	34-	7320	26-	34-	9340	40-	46-	11980	60-	13820	51-														
	221200		12	08	049	12	08	1409	09	03-	2986	01	17-	5610	15-	38-	7260	28-	46-	9260	43-	++	11910	50-	13810	50-	16460	50-	18800	48-										
Ocean Weather Station 'J' 52°30'N 20°00'W	220001		13	13	177	13	13	1537	10	09	3134	03	10-	5790	12-	37-	7450	26-	45-	9470	41-	++	12090	62-	13910	56-	16500	54-												
	221200		15	13	183	13	11	1550	11	06	3150	04	12-	5820	11-	36-	7490	23-	46-	9530	40-	++	12160	61-	13960	59-	16530	58-	18810	55-	20970	52-	24290	49-						



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	63 5732+	008 998 812	995 ++ 08 722 ++ 06- 672 07- 09- 369 40- 48- 318 47- 140 45-				318 08630 47-	
	80 6843+	007 997 865	960 ++ 01 917 03 00 895 ++ 00 814 ++ 05- 806 03- 10- 794 01- 17- 778 ++ 28- 753 01- 31- 558 ++ 44- 502 ++ 50- 478 ++ 32- 444 24- 33- 385 ++ 38- 350 36- 47- 241 53- 197 48- 100 46- 056 47-				241 10580 53-	
STORNOWAY 03026	01 372++	010 009 795	796 00 01- 762 ++ 06- 727 06- 07- 709 04- 10- 702 ++ 14- 666 08- 21- 640 08- 27- 579 12- 34- 415 32- 50- 293 48- 180 46- 139 49- 034 47-				293 09270 48-	
	02 6564+	012 011 717	997 10 03 874 ++ 02- 870 00 03- 856 06 08- 844 ++ 13- 777 ++ 24- 697 ++ 22- 683 ++ 11- 673 03- 20- 638 ++ 224 11150 57- 17- 576 ++ 29- 554 ++ 23- 541 ++ 29- 501 ++ 34- 489 ++ 30- 451 22- 31- 428 25- 31- 420 24- 33- 412 ++ 37- 372 ++ 48- 321 39- 49- 224 57- 211 57- 182 51- 098 48- 091 44- 084 45-					
SHANWELL 03170	01 37300	011 011 729	007 13 11 882 ++ 00 814 03 01 793 04 01 667 06- 12- 650 06- 17- 623 08- 24- 581 11- 25- 530 17- 37- 390 35- 50- 312 47- 297 48- 242 49- 221 45- 143 48- 130 46- 111 47- 100 50- 088 46-				297 09220 48-	
	02 58502	013 012 720	994 14 02 836 01 03- 797 03 07- 763 ++ 20- 676 02- 23- 648 ++ 26- 612 08- 19- 600 08- 17- 537 14- 22- 519 ++ 24- 502 ++ 24- 490 ++ 28- 457 21- 31- 380 31- 37- 320 40- 46- 240 54- 228 58- 203 58- 191 51- 119 52- 104 47- 100 48- 091 50- 046 45- 044 42- 042 44- 036 42-				228 11020 58-	
ALDERGROVE 03917	02 463++	015 006 721	836 ++ 02 830 02 01- 822 ++ 06- 813 04 03- 799 ++ 03- 775 ++ 18- 729 01 25- 587 11- 32- 507 19- 43- 462 ++ 48- 410 ++ 50- 318 47- 301 48- 269 49- 217 46- 185 50- 167 51- 097 52- 034 47-				301 09170 48- 185 12380 50-	
	03 785++	018 009 651	998 13 08 855 02 01 842 06 04- 829 ++ 07- 819 08 08- 777 08 11- 711 03 16- 679 02 18- 532 ++ 26- 403 25- 31- 388 ++ 32- 357 30- 38- 217 58- 187 64- 174 56- 126 55- 100 50- 048 54-				187 12440 64-	
AUGHTON 03322	63 855++	019 012 747	001 12 08 950 09 07 905 06 04 849 06 04 583 10- 14- 341 40- 47- 284 51- 215 49- 145 50-				248 10500 54-	
	02 755++	018 011 685	008 13 09 986 10 07 880 04 03 860 07 02 836 ++ 00 816 07 10- 756 ++ 21- 693 00 26- 643 01- 28- 562 09- 22- 440 22- 33- 401 ++ 35- 311 40- 48- 209 60- 196 59- 192 55- 135 53- 127 50- 101 53- 089 50- 079 52- 042 48-				209 11680 60-	
HEMSBY 03496	02 8097+	021 019 790 714	998 ++ 07 984 14 07 968 ++ 05 878 ++ 05 786 00 01- 774 02 09- 770 02 14- 749 02 20- 717 ++ 26- 700 01- 19- 668 03- 18- 655 ++ 24- 598 ++ 20- 588 09- 23- 555 ++ 21- 539 13- 22- 442 25- 32- 400 29- 34- 329 40- 43- 235 59- 219 61- 190 53- 100 54- 077 52-				219 11330 61-	
	02 885++	017 016 740 707	010 ++ 08 993 13 08 912 07 06 827 03 03 789 05 04- 740 00 07- 734 01- 10- 720 01 19- 570 11- 40- 473 22- 45- 410 28- 50- 326 38- 247 53- 222 53- 211 50- 108 53- 030 51-				247 10530 53-	
CRAWLEY 03774	02 00907	022 005 670	000 13 11 968 13 06 943 ++ 04 913 11 01- 808 04 02- 790 06 08- 680 01 21- 479 18- 33- 387 29- 36- 328 37- 43- 215 60- 171 53- 050 50-				215 11560 60-	
	01 786++	020 003 695	978 13 10 930 ++ 08 867 06 04 834 08 03 795 07 01- 746 02 03- 734 01 16- 721 02 20- 614 ++ 34- 448 ++ 45- 417 25- 44- 326 40- 47- 263 50- 235 54- 150 52- 119 55- 050 51-				235 10940 54-	
CAMBORNE 03808	21 756++	023 012 711	990 13 10 968 11 09 956 12 01 895 09 05 884 10 00 863 10 04- 843 ++ 06 830 09 05 680 02- 04- 655 01- 03- 538 12- 14- 498 15- 23- 442 ++ 33- 358 35- 45- 316 40- 50- 227 57- 214 52- 112 54- 089 52- 048 51- 030 44-				227 11200 57-	
	20 872++	023 012 630	992 12 11 890 09 07 884 ++ 00 870 11 04 843 ++ 04 820 ++ 03- 789 ++ 06- 780 ++ 16- 764 08 18- 653 02 32- 540 08- 24- 517 ++ 28- 400 26- 37- 351 34- 44- 328 36- 46- 310 40- 50- 223 59- 189 63- 158 56- 091 55- 078 51- 060 52- 054 49-				189 12430 63-	
VALENTIA 03953	55 862++	021 019 635	983 15 14 944 12 10 922 13 11 863 10 07 819 12 00 770 09 00 710 05 13- 693 06 18- 629 01- 31- 597 02- 36- 467 16- 34- 430 20- 37- 322 36- 39- 221 54- 172 60- 105 51-				221 11500 54-	
	01 685++	023 022 655	966 08 06 927 06 04 903 12 08 844 10 17- 803 10 28- 669 01 22- 464 17- 30- 400 26- 36- 361 31- 40- 236 55- 191 65- 154 57- 087 55-				191 12300 65-	
Ocean Weather Station 'I' 59°00'N 19°00'W	02 785++	013 013 677	986 ++ 04 945 04 03 916 10 07- 910 ++ 16- 720 03 31- 695 ++ 35- 653 ++ 15- 598 ++ 28- 530 11- 34- 511 13- 36- 464 19- 31- 450 19- 32- 442 ++ 35- 367 31- 37- 300 40- 46- 212 59- 195 61- 179 52- 136 51-				195 12100 61-	
	01 15600	006 006 677	981 ++ 08 968 ++ 06- 962 15 07- 923 ++ 13- 890 ++ 13- 870 ++ 05- 813 ++ 02- 792 ++ 02- 743 ++ 02- 740 01 03- 726 ++ 14- 701 01 17- 643 02- 25- 531 13- 34- 486 16- 38- 443 23- 45- 348 35- 50- 267 50- 236 53- 179 47- 152 50- 102 50- 057 47-				236 10800 53- 152 13700 50-	
Ocean Weather Station 'J' 52°30'N 20°00'W	51 902++	021 021 638	881 ++ 10 861 10 09 790 06 05 770 08 02 745 ++ 09- 700 03 10- 654 01 14- 600 03- 18- 585 03- 24- 440 21- 42- 308 40- 222 58- 192 63- 176 55- 110 55- 075 52-				192 12300 63-	
	02 762++	022 022 621	996 12 10 917 14 12 842 11 06 828 ++ 05- 736 06 05- 695 ++ 14- 662 ++ 14- 576 03- 25- 494 12- 36- 395 23- 46- 302 40- ++ 208 60- 174 62- 162 57- 150 59- 125 55- 101 58- 030 49-				208 11900 60-	



STATION	YYGGgg	Type	Surface	1000mb	900m	850mb 1500m	750mb 2100m	700mb 3000m	600mb 4200m	500mb 5400m	400mb 7200m	300mb 9000m	250mb 10500m	200mb 12000m	150mb 14100m	100mb 15900m	70mb 18300m	50mb 20700m	30mb 23700m	20mb 26400m	10mb 30900m
LERWICK 03005	212330	T	210 21	+++ ++	240 26	240 23	240 27	240 29	240 22	230 23	240 23	250 28	270 31	280 33	280 28						
	220530	P	240 17	+++ ++	260 20	260 19	260 21	270 22	270 22	280 26	290 33	310 37	310 41	300 35	300 28	250 20	320 08	070 03			
	221130	T	260 18	+++ ++	270 19	270 22	270 23	280 24	280 33	300 39	300 47	320 72	320 80	310 51	290 29	290 19	270 11				
	221730	P	230 28	+++ ++	260 31	260 24	250 25	280 41	280 44	270 53	270 46	250 49	270 66	280 44	290 35	270 17	280 12	130 05			
STORNOWAY 03026	212330	T	260 08	+++ ++	280 19	280 19	260 21	280 22	300 31	290 37	290 41	310 52	320 52	300 37	290 27	300 24	320 07	310 07			
	220530	P	290 13	+++ ++	270 22	270 23	280 25	290 31	300 40	300 51	310 60	320 78	310 91	300 41	290 36	290 24	290 08				
	221130	T	260 20	+++ ++	250 25	270 26	290 31	290 34	290 41	300 53	300 59	300 68	300 76	300 57	290 35	290 18					
	221730	P	240 26	+++ ++	240 36	270 41	270 44	270 47	280 51	280 56	280 76	280101	280 96	280 66	280 36	280 25					
SHANWELL 03170	220130	P	240 10	+++ ++	270 29	270 26	270 25	270 24	270 30	270 36	260 40	280 39	290 35	280 36	290 27	290 22	300 13				
	220530	P	270 12	+++ ++	280 24	290 20	290 19	280 26	290 37	280 41	310 58	330 76	320 64	310 37							
	221130	T	270 14	+++ ++	280 15	290 16	300 27	300 31	310 43	310 51	310 57	320 62	320 71	320 58	280 28	270 14	P290 05	200 02	090 10		
	221730	P	250 21	+++ ++	280 30	290 35	290 36	290 38	280 42	290 56	290 59	290 66	290 80	290 73	280 33	290 22					
ALDERGROVE 03917	212330	T	250 12	+++ ++	270 27	280 25	280 30	280 30	280 33	280 32	270 36	280 42	300 43	310 25	290 31	290 21	320 10	020 05			
	220530	P	290 14	+++ ++	300 18	300 24	290 28	300 33	310 40	330 45	330 53	330 68	330 75	330 59	310 31	300 09					
	221130	T	270 12	+++ ++	290 18	300 19	320 22	320 30	310 35	310 46	310 56	320 59	330 62	320 58	310 31	310 22	240 12	250 12			
	221730	P	270 17	+++ ++	270 18	280 24	290 29	290 32	290 39	290 43	290 53	290 64	290 63	290 55	290 33	300 21					
AUGHTON 03322	212330	T	170 09	+++ ++	250 19	260 23	260 33	270 31	280 30	270 29	250 28	230 38	250 59	260 37	270 29						
	220530	P	240 12	+++ ++	270 21	280 23	290 24	300 29	300 26	300 27	330 38	350 72	350 64	300 37	290 24	280 23	320 09	010 09			
	221130	T	270 15	+++ ++	280 19	280 22	300 27	320 30	320 41	320 43	320 53	340 63	340 65	330 61	300 25	300 15	280 07	080 03			
	221730	P	250 13	+++ ++	290 18	300 24	300 25	300 27	310 33	310 41	310 51	310 54	320 55	310 45	290 28	290 18	290 12	020 05			
HEMSBY 03496	212330	T	200 07	+++ ++	210 20	230 17	250 19	250 22	250 27	250 33	250 47	250 60	250 76	250 60	270 34	270 19					
	220530	P	230 04	+++ ++	250 13	240 20	240 24	260 20	260 25	270 26	250 24	230 56	230 67	270 37	270 23	280 18	280 06	090 02			
	221130	T	260 09	+++ ++	280 16	290 22	280 22	280 23	290 25	290 23	330 34	340 46	330 43	310 30	280 25	280 21	260 08	320 07			
	221730	P	020 08	+++ ++	280 14	260 18	270 24	300 28	320 35	320 39	330 47	330 56	330 57	330 50							
CRAWLEY 03774	212330	T	000 00	+++ ++	230 12	230 11	250 20	260 23	250 27	250 53	250 65	250 59	250 60	250 47	270 29	290 19	280 05				
	220600	P	250 03	+++ ++	270 18	270 16	270 25	270 32	290 29	260 33	260 37	240 47	240 45	270 45	290 23	280 15					
	221110	P	240 06	+++ ++	290 22	280 19	290 21	290 25	310 24	310 28	340 47	330 50	340 53	310 33	280 24	290 21	250 08	310 05	100 14		
	221730	P	270 05	+++ ++	270 15	300 18	310 27	310 29	310 31	320 32	330 42	330 52	330 47	340 46							
CAMBORNE 03808	212338	T	250 05	+++ ++	270 16	290 16	280 22	290 26	280 32	280 39	270 47	240 65	240 71	270 42	280 29	300 20	320 05	050 07	P080 14		
	220530	P	270 16	+++ ++	290 20	290 20	300 23	310 24	310 39	310 45	330 66	330 70	340 63	320 49	280 29	320 15	260 14	020 12	180 04		
	221130	T	270 10	+++ ++	300 19	300 19	300 22	310 25	320 27	330 34	330 35	340 36	350 42	340 45	320 18	310 12	290 03				
	221730	P	280 12	+++ ++	280 16	290 21	310 20	320 18	300 18	310 23	320 22	330 26	330 21	340 20	300 19	300 10	290 04	030 05	090 08	060 15	
VALENTIA 03953	212330	T	300 09	300 11	+++ ++	290 21	+++ ++	310 30	+++ ++	310 48	320 68	330 74	+++ ++	330 58							
	221130	T	290 08	300 12	+++ ++	310 20	+++ ++	300 24	+++ ++	300 27	320 25										
Ocean Weather Station 'I' 59°00'N 19°00'W	220001	T	260 23	+++ ++	270 24	280 32	280 36	280 39	290 48	290 55	290 72	290 76	290 72	300 69	300 48	P310 32					
	220600	P	225 30	+++ ++	260 33	270 35	280 39	290 36	280 47	280 54	280 60	280 79	280 78	280 77	280 43	280 30	280 17				
	221200	T	230 25	+++ ++	270 47	280 47	280 51	280 51	270 58	280 71	270 89	280114	280117	280 66	280 40	280 19					
	221800	P	270 40	+++ ++	290 47	290 47	290 49	290 50	280 63	280 73	280 81	270 96	280105	280109	280 65						
Ocean Weather Station 'J' 52°30'N 20°00'W	220001	T	260 17	+++ ++	260 21	260 21	270 20	270 14	280 17	280 15	270 13	290 06	280 29	280 37	290 30	300 21					
	220600	P	270 10	+++ ++	250 10	260 10	250 10	260 05	050 06	+++ ++	+++ ++	+++ ++	+++ ++	+++ ++	+++ ++	+++ ++	310 12	360 05			
	221200	T	360 06	+++ ++	020 04	020 06	010 19	010 14	020 10	060 11	040 17	030 14	030 10	020 18	340 12	300 23	320 11	000 00			
	221800	P	315 10	+++ ++	340 12	340 12	330 11	320 14	320 16	310 15	310 23	290 20	290 23	300 31	320 28	290 20	310 08	030 06	080 22		
LARKHILL 03743	220625	P	230 07	+++ ++	290 24	290 23	280 24	290 26	290 28	290 27	280 35	310 37	300 35	300 31	300 38	280 20	310 08	290 01			
	221030	P	250 07	+++ ++	280 16	290 21	290 23	300 28	310 25	320 36	330 47	340 62	350 66	310 37	300 24	280 10					

### AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE			SURFACE		1000mb	950mb	900mb	850mb	800mb	750mb	700mb	650mb	600mb	550mb	500mb						
		MSL	Surf.	0°C level	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C					
221248	62.3°N 18.5°W	996	988	748	061	10 07	034-	05 05	835	03 03	1305	08 06-	1804	05 08-	00 08-	2874	04- 10-	07- 11-	4078	11- 14-	16- 18-	5450	22- 23-
Cloud :— 3/8St. 1300 to 1700ft; 8/8Sc. 1800 to 3400ft; 2/8Sc. 7000 to 8000ft.																							
Inversion Levels :— 950mb to 943mb 5½°C to 7¼°C, 900mb to 850mb 3¼°C to 8¼°C.																							
Isothermal Levels :—																							
YYGGgg	POSITION	PRESSURE			SURFACE		1000mb	950mb	900mb	850mb	800mb	750mb	700mb	650mb	600mb	550mb	500mb						
		MSL	Surf.	0°C level	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C					
221411	64.6°N 11.0°W	991	983	788	061	08 01	076-	05 01-	786	03 07-	1247	02 11-	1734	01 12-	02- 10-	2795	06- 07-	10- ++	3984	13- ++	18- ++	5346	22- ++
Cloud :— 1/8Cu. 1300 to 5000ft; 2/8Cu. 1500 to 3500ft; 3/8Ac. at 12000ft; 2/8Ac. at 14000ft; 3/8Ci. 22000 to 23000ft;																							
Inversion Levels :—																							
Isothermal Levels :—																							
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## UPPER WINDS AT ADDITIONAL LEVELS

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STATION		MAX. WIND
LERWICK 03005	060mb 000 00 22800m 160 04	310 83 10050m 280 69 10830m
STORNOWAY 03026	036mb 030 08 08450/0 08960/0 10990/1 11590/1 090mb 280 15 16800m 280 16 07290/0 10520/1 12150/1 12700/1 16000/1	320 96 10190m 300 79 10900m 280 108 09700m
SHANWELL 03170	19500m 350 07 13800m 310 37 10520/1 11310/1 172mb 310 33 12350/1 12700/1	330 79 09180m 320 76 10900m 290 84 10930m
ALDERGROVE 03917	223mb 310 34 038mb 040 05 11700/1 12300/1 P23100m 050 09 22100/9 17700m 290 12 08530/0 11750/1 13850/1	330 77 10330m 320 66 10400m 300 67 10580m
AUGHTON 03322	281mb 230 49 22200m 090 07 08090/0 188mb 330 43 22500m 090 06	240 70 10320m 350 74 10150m 340 70 11570m
HEMSBY 03496	175mb 260 39 083mb 270 06 08100m 230 37 22500m 110 07 09090/0 09550/0 10570/1 11530/1 034mb 170 05 13750m 290 32 12090/1 12510/1	250 78 10640m 230 80 09790m
CRAWLEY 03774	052mb 310 02 18000m 290 10 17970/2 03800/1 12900m 310 26 12310/7	240 67 07090m
CAMBORNE 03808	P24600m 090 16 21900m 110 05 03920/0 15820/2 16090/0 19100/2 19420/2 060mb 210 02 28200m 090 20 12700/5	240 72 10680m 330 72 09260m
VALENTIA 03953	983mb 290 24 922mb 290 16 819mb 300 21 597mb 310 39 221mb 340 74 172mb 330 52 966mb 310 17 903mb 310 20 844mb 310 20 803mb 300 22 669mb 300 22 464mb 300 26	340 80 10010m
Ocean Weather Station 'I' 59°00'N 19°00'W	177mb 300 57 P16800m 300 18 13200m 280 60 19200m 280 09 07200/0 13000/1 218mb 280 85 083mb 280 17 01230/1	300 84 11070m 280 88 11270m 280 26 09970m 280 117 11490m
Ocean Weather Station 'J' 52°30'N 20°00'W	270mb 290 16 082mb 300 16 05100m 050 09 16800m 320 05 22800m 010 03 03230/8 18850/2 169mb 360 12 137mb 320 20 034mb 000 00 18000m 300 14 22400m 050 11	
LARKHILL 03743	17370m 300 15 11800/7	350 68 10700m

## NOTES ON THE AEROLOGICAL SITUATION

Troughs continue to move quickly eastwards in the strong and mainly westerly flow extending across the Atlantic from the Great Lakes to the Baltic. The trough now over the British Isles has been intensifying as it approached the country. A large high persists northwest of the Azores and another is centred near Sardinia. High latitude lows over the Davis Strait and off northeast Greenland are drifting slowly southeast.

## AVERAGE AND EXTREME VALUES 1951-55

## JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22345	-48.1	-42	-55	...	...
60	19675	-48.1	-41	-55	120	3
100	16320	-48.8	-41	-56	244	5
150	13660	-48.3	-41	-59	263	10
200	11770	-49.8	-39	-67	271	16
300	9125	-46.7	-37	-56	271	22
400	7160	-32.6	-23	-44	271	18
500	5555	-20.8	-11	-31	269	14
700	2985	-5.2	3	-14	266	9
850	1435	2.8	14	-7	269	6

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	257	-54.7	10190
Max.	405	-40	12955
Min.	172	-68	6890

LARKHILL/CRAWLEY† at 03, 15h.  
(Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.)

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22310	-49.6	-47	-57	106	9
60	19675	-51.4	-45	-59	136	3
100	16370	-52.6	-46	-61	251	8
150	13745	-51.8	-42	-65	265	15
200	11890	-54.0	-40	-65	268	20
300	9265	-44.7	-36	-54	265	20
400	7275	-29.6	-19	-41	265	17
500	5640	-17.8	-9	-28	263	15
700	3050	-2.1	7	-10	263	11
850	1480	5.7	16	-3	264	7

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	234	-56.8	10950
Max.	388	-41	13440
Min.	160	-66	7225

MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5
60	19670	-60.7	-53	-69	135	4
100	16510	-62.9	-57	-71	255	21
150	13995	-59.0	-51	-67	265	38
200	12185	-56.6	-47	-67	275	42
300	9530	-40.1	-33	-46	285	32
400	7500	-23.9	-19	-29	285	27
500	5835	-11.8	-8	-17	285	24
700	3165	7.2	13	-1	290	18
850	1535	17.9	27	8	290	9

Tropopause	Average Press.	Average Temp.	Max. Press.	Min. Press.	Max. Temp.	Min. Temp.
Upper	123	-65.7	...	73	...	-73
Lower	193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

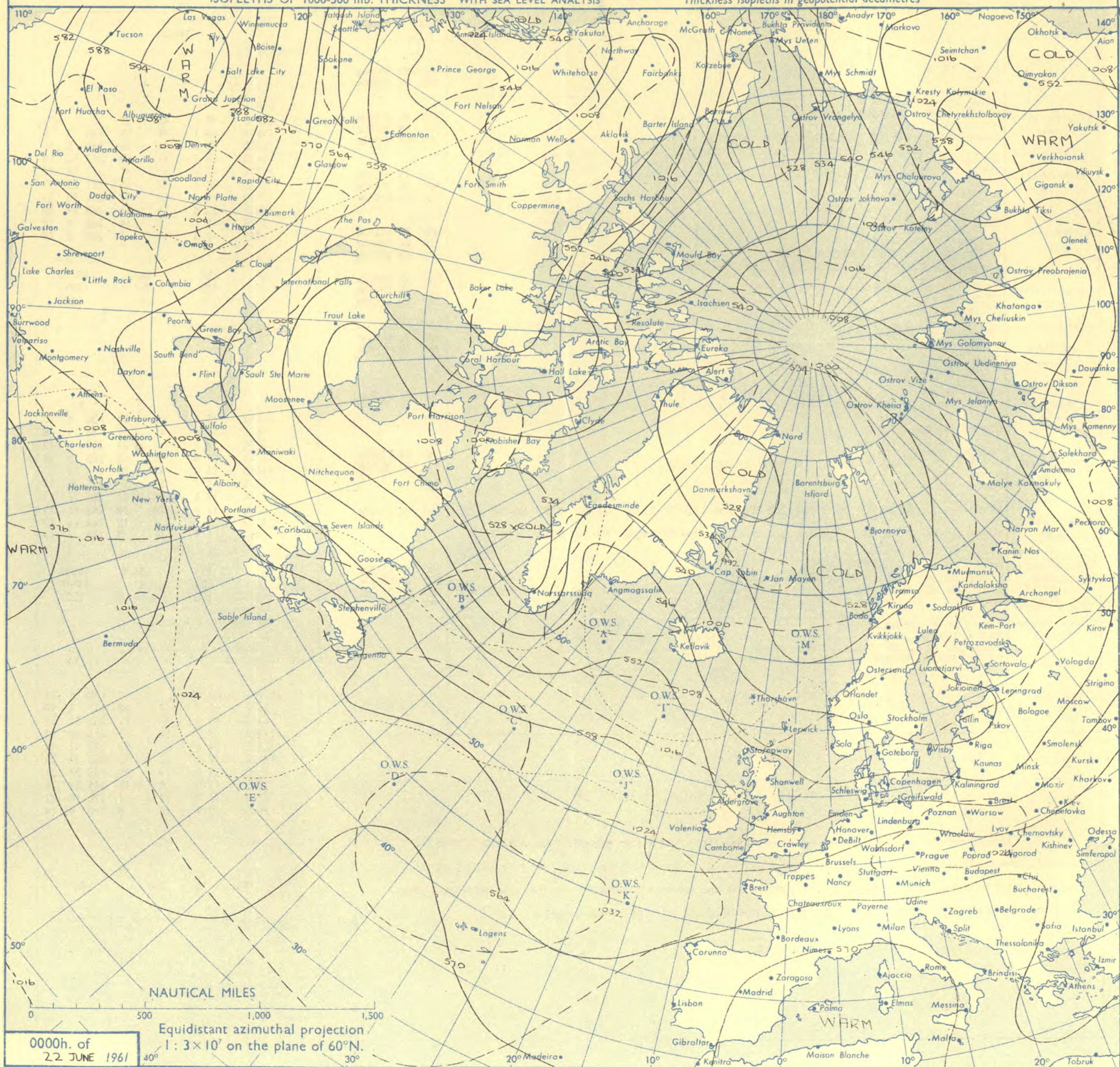
† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.



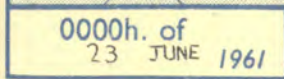
ISOPLETHS OF 1000-500 mb. THICKNESS WITH SEA LEVEL ANALYSIS

Thickness isopleths in geopotential decametres





*Isopleths in geopotential decametres*





52°30'N 20°00'W



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	20 6722+	001 991 774	863 02 01 846 05 06- 696 ++ 09- 693 07- 10- 680 05- 15- 656 ++ 24- 558 15- 33- 398 35- 50- 295 50- 268	51- 251 47- 146 45- 120 49- 100 47-087 46-		295 09130 50-	120 15080 49-	
	02 856++	001 991 850	987 10 07 824 03- 06- 812 01- 08- 809 ++ 10- 763 ++ 14- 745 ++ 10- 708 ++ 12- 696 ++ 13- 618 14- 22- 598	++ 26- 573 15- 27- 449 28- 42- 409 30- 45- 375 35- 49- 306 46- 282 49- 225 42- 128 47- 100 48- 057 46-		282 09400 49-	128 14700 47-	
STORNOWAY 03026	01 35400	008 007 780	894 ++ 02 889 03 00 878 06 01 843 05 07- 792 00 12- 742 01- 16- 728 00 17- 583 10- 29- 357 37- 49- 317	45- 307 44- 285 48- 262 51- 193 44- 167 48- 125 52- 103 46- 084 49- 076 47-		262 10030 51-	167 13020 48-	
SHANWELL 03170	02 10941	012 012 663	899 05 03 886 06 04 876 10 07 826 09 08- 745 ++ 06- 731 ++ 11- 696 00 07- 663 00 16- 643 ++ 19- 586 09-	15- 547 14- 18- 484 17- 31- 472 17- 30- 377 32- 39- 327 40- 46- 240 56- 218 56- 196 50- 100 50- 093 49-		240 10720 56-		
	01 10942	013 012 733	997 15 05 923 08 01 880 ++ 01- 842 03 03- 805 02 09- 774 02- 11- 760 02 09- 715 01- 12- 697 01- 08- 657	03- 09- 568 ++ 15- 518 16- 20- 440 22- 27- 324 40- 45- 265 51- 234 56- 211 51- 196 54- 164 49- 100 50-		234 10880 56-		
ALDERGROVE 03917	02 554+2	018 009 699	963 07 06 935 10 08 902 11 05 874 09 03 860 ++ 03 842 ++ 01- 809 08 00 690 01- 13- 638 ++ 18- 572 07-	18- 452 19- 32- 351 35- 47- 202 63- 189 57- 167 55- 128 56-		202 11920 63-		
	01 11602	018 009 656	934 09 04 867 04 01- 847 06 05- 833 06 09- 811 09 09- 802 ++ 13- 742 06 20- 702 ++ 11- 688 ++ 15- 605	++ 17- 521 ++ 26- 425 24- 33- 391 ++ 32- 381 28- 35- 371 ++ 39- 310 40- 50- 213 60- 131 54- 099 54- 093		213 11620 60-		
AUGHTON 03322	01 2553+	020 013 638	005 14 10 897 08 05 875 11 02- 876 ++ 07- 809 10 14- 747 08 16- 504 11- 31- 465 17- 31- 309 40- 192 64-	168 55- 099 52- 064 49-		192 12320 64-		
	02 11502	021 014 638	009 ++ 11 971 11 09 952 09 06 921 11 05 780 ++ 02 762 03 02- 747 ++ 13- 727 05 16- 650 ++ 27- 625 01-	21- 610 02- 18- 466 17- 28- 405 ++ 33- 304 40- 46- 192 66- 186 62- 144 51- 095 55- 086 50- 070 50-		192 12300 66-		
HEMSBY 03496	02 10940	019 017 625	008 15 09 000 ++ 05 948 11 05 892 ++ 07 860 08 10- 844 ++ 28- 833 11 27- 712 06 31- 518 ++ 43- 500 ++	41- 479 ++ 29- 463 16- 36- 379 28- 48- 253 49- 179 64- 169 61- 167 56- 095 53- 088 49- 058 51- 030 48-		179 12800 64-		
	02 00902	019 017 651	017 22 11 007 19 07 919 11 06 907 13 05 885 14 02 750 05 10- 700 02 24- 651 00 23- 512 12- 30- 495	++ 29- 477 ++ 36- 440 ++ 34- 343 35- 50- 194 66- 171 58- 080 53- 066 54-		194 12240 66-		
CRAWLEY 03774	02 00900	022 004 632	992 14 11 890 10 08 868 12 07- 852 ++ 14- 727 07 24- 511 10- 28- 340 33- 43- 295 42- 184 65- 149 58- 113	54- 060 52-		184 12640 65-		
	02 15501	022 005 611	999 17 09 918 10 07 902 14 01 896 ++ 06- 862 ++ 08- 834 ++ 03- 793 ++ 13- 733 07 16- 624 01 25- 472 16-	39- 379 ++ 47- 339 34- 266 49- 184 67- 165 59- 105 57- 095 54- 045 52-		184 12640 67-		
CAMBORNE 03808	03 755++	024 014 613	935 09 09 918 13 04 902 14 05- 881 ++ 12- 801 12 18- 690 ++ 32- 573 04- 30- 352 32- 50- 221 59- 196 65-	178 66-		178 +++++ 66-		
	50 763++	025 015 614	007 14 12 983 11 09 944 ++ 08 936 10 07 925 13 07 890 ++ 04 852 ++ 02 844 ++ 07- 825 11 08- 745 ++ 09-	717 ++ 18- 691 04 19- 639 02 35- 457 18- 46- 265 49- 187 66- 151 59- 103 58- 091 55- 030 49-		187 12540 66-		
VALENTIA 03953	53 862++	024 023 635	898 09 07 885 10 08 770 08 08- 732 06 04- 660 02 11- 612 02- 16- 582 02- 22- 543 07- 28- 459 18- 39- 266	47- 235 55- 175 67- 151 57- 103 57- 072 53-		175 13000 67-		
	50 663++	024 023 630	979 12 11 950 12 12 911 13 06 826 11 00 612 01- 19- 542 06- 24- 259 47- 195 64- 162 57- 093 54-			195 12300 64-		
Ocean Weather Station 'I' 59°00'N 19°00'W	03 3097+	008 008 774	973 09 06 955 12 04 944 ++ 00 751 02- 14- 731 01- 14- 688 04- 17- 587 ++ 24- 516 ++ 24- 492 18- 27- 331	40- 46- 309 44- 250 54- 227 48- 186 49- 179 47- 163 49- 148 47- 104 48- 091 48- 070 46-		250 10400 54-		
	60 864++	005 005 782	979 09 07 949 08 06 940 ++ 06 919 11 05 910 ++ 01 847 06 04- 782 00 08- 706 03- 15- 656 07- 20- 612 ++	24- 527 15- 21- 438 ++ 26- 362 30- 35- 300 40- 45- 276 45- 248 49- 241 49- 222 51- 180 47- 171 48- 148 47-		222 11200 51-		
Ocean Weather Station 'J' 52°30'N 20°00'W	01 00902	025 025 650	001 15 08 949 ++ 08 924 14 06 870 ++ 01 842 10 01 771 06 05- 710 04 13- 666 01 11- 600 02- 15- 560 ++	17- 522 09- 23- 470 17- 30- 427 21- 32- 305 40- 46- 195 63- 168 60- 164 56- 100 56- 052 53-		195 12300 63-		
	03 854++	025 025 653	985 10 10 958 15 09 950 15 05 915 15 06 862 12 04 842 ++ 05 802 10 00 737 06 05- 621 02- 12- 510 10-	26- 399 24- 42- 372 ++ 38- 296 40- 218 57- 192 63- 140 56- 116 57- 095 54-		192 12400 63-		



STATION	YYGGgg	Type	Surface	1000mb	900m	850mb	750mb	700mb	600mb	500mb	400mb	300mb	250mb	200mb	150mb	100mb	70mb	50mb	30mb	20mb	10mb
					1500m	2100m	3000m	4200m	5400m	7200m	9000m	10500m	12000m	14100m	15900m	18300m	20700m	23700m	26400m	30900m	
LERWICK 03005	222330	T	230 30	+++ ++	260 44	250 47	250 42	250 40	270 40	260 52	260 49	270 68	260 52	270 54	270 41						
	230530	P	270 25	+++ ++	270 38	280 41	280 39	280 39	280 45	280 51	260 55	270 67	280 58	280 52							
	231130	P	270 25	+++ ++	270 39	280 44	280 46	280 47	280 43	300 49	300 76	300 86	290 63	290 54	280 38	290 27					
	231735	P	250 30	+++ ++	270 43	280 37	280 35	270 44	270 50	270 63	280 75	280 92	280102	280 45							
STORNOWAY 03026	230022	T	250 13	+++ ++	260 37	270 44	270 47	270 53	270 57	270 71	280 85	270112	280 99	280 61	260 42	290 21					
	230530	P	260 23	+++ ++	280 33	280 36	280 39	280 48	280 63	280 81	290104	280120	280 95	280 51	280 34	270 43					
	231130	P	270 30	+++ ++	280 42	280 43	280 41	280 50	280 64	280 71	290 86	300108	300111	290 56	270 29	280 30					
	231730	P	240 17	+++ ++	250 43	260 57	270 57	280 57	280 53	280 57	280 56	280 72	280 87	280 69	280 28	280 23					
SHANWELL 03170	222330	T	260 22	+++ ++	270 39	280 44	280 50	280 47	280 48	280 62	280 74	280 94	280 98	270 64							
	230530	P	240 20	+++ ++	280 34	290 45	280 55	280 48	280 54	290 69	280 84	280 91	280 94	290 78							
	231130	T	250 25	+++ ++	270 26	280 33	290 54	280 55	280 53	280 55	280 69	280 80	280 83	280 75							
	231730	P	260 15	+++ ++	280 30	280 45	280 54	290 64	290 61	280 53	270 78	280 84	280 92	280 86							
ALDERGROVE 03917	222330	P	230 11	+++ ++	290 29	290 32	290 36	280 39	280 49	280 57	280 68	280 71	280 83	280 75	280 35	300 31					
	230530	P	260 16	+++ ++	290 33	280 40	280 45	280 46	260 45	280 48	270 65	280 70	270 78	280 72	290 39	280 27					
	231130	T	240 13	+++ ++	280 18	290 31	290 40	290 43	290 42	280 46	290 61	300 62	300 53	280 63	290 44						
	231730	P	260 17	+++ ++	270 23	280 26	290 32	290 35	290 50	280 57	280 67	280 71	290 65	300 63	290 39	290 25					
AUGHTON 03322	222330	T	220 08	+++ ++	280 24	290 23	290 27	280 30	280 35	290 42	290 52	290 66	290 64	280 63	280 31	290 20	290 06				
	230530	P	240 06	+++ ++	290 24	290 28	280 32	280 38	280 42	280 47	280 53	280 64	290 64	280 66	280 40	280 17					
	231130	T	260 14	+++ ++	280 25	280 33	280 42	280 42	280 48	280 50	280 54	280 59	280 59	280 62	280 45	290 15					
	231730	P	250 12	+++ ++	280 22	280 21	290 29	280 36	280 47	280 56	260 49	280 48	290 49	300 57	290 41	280 20	270 09				
HEMSBY 03496	222330	T	260 06	+++ ++	270 25	270 22	290 26	290 28	300 32	300 35	300 46	310 59	300 56	300 52	280 33	290 22	P 280 08	300 02	100 06		
	230530	P	240 07	+++ ++	270 21	280 21	290 20	290 27	280 36	280 40	290 48	290 64	290 64	290 70	280 31	280 22	290 11				
	231130	T	240 10	+++ ++	290 12	290 19	280 23	280 33	280 42	280 50	270 55	280 60	280 58	290 43	280 44	270 22					
	231730	P	050 06	+++ ++	270 16	270 24	280 31	290 34	280 37	280 46	270 42	290 42	280 58	290 55	270 34	290 22	280 10				
CRAWLEY 03774	222330	T	270 03	+++ ++	280 07	290 11	300 21	300 23	300 26	310 31	310 33	320 37	300 34	300 31	290 26	270 15	130 02				
	230530	P	000 00	+++ ++	280 15	290 17	290 18	280 26	280 26	290 26	280 29	290 39	280 37	300 32	280 20	280 20					
	231110	P	230 10	+++ ++	300 15	300 20	300 14	290 20	280 33	280 34	270 34	270 35	280 37	280 34	280 37	280 14	280 06	150 03	070 07	100 12	090 24
	231730	P	220 07	+++ ++	290 13	310 13	270 17	290 20	280 30	280 35	280 38	280 38	280 34	290 35	290 24	260 24					
CAMBORNE 03808	222330	T	290 07	+++ ++	320 14	320 22	300 13	290 14	300 17	300 16	290 14	300 12	280 18	270 21	P 300 22	300 16	280 07	170 03			
	230530	P	300 06	+++ ++	290 12	300 16	290 16	270 16	280 20	290 15	270 13	280 15	280 17	290 15	310 15	300 17	280 05	080 05	080 09		
	231130	T	320 11	+++ ++	300 14	300 15	290 14	280 14	270 21	260 19	260 17	260 19	260 16	250 12	280 16	270 10	140 01	090 08	090 05		
	231730	P	300 10	+++ ++	300 12	310 14	280 15	270 16	250 22	260 24	280 19	280 17	270 07	300 15	280 17	290 11	270 10				
VALENTIA 03953	222330	T	270 06	280 10	+++ ++	290 12	+++ ++	280 21	+++ ++	260 28	270 30	280 26	+++ ++	280 28	+++ ++	300 19					
	231130	T	290 07	290 09	+++ ++	290 18	+++ ++	280 18	+++ ++	270 22	270 29	280 32	+++ ++	290 32	+++ ++	300 19					
Ocean Weather Station 'I' 59°00'N 19°00'W	230000	T	260 33	+++ ++	270 44	290 40	280 38	280 46	280 69	290 81	290 93	290101	280109	290 65	280 39	260 27					
	230600	P	270 30	+++ ++	270 44	280 56	270 62	270 63	280 71	280 72	280 90	280103	290 94	290 67	290 30	300 30					
	231200	T	250 36	+++ ++	280 51	280 52	270 58	270 60	270 66	270 70	270 76	270 93	270 96	270 75	270 41	270 20	270 14				
	231800	P	225 30	+++ ++	250 39	260 54	260 60	260 70	270 80	270 74	270 90	270114	270126	280 98	300 39	270 30	270 07	270 09			
Ocean Weather Station 'J' 52°30'N 20°00'W	230100	P	280 09	+++ ++	310 13	310 17	310 18	320 17	310 19	310 24	280 28	270 26	290 20	300 30	310 30	310 25	310 07	330 04			
	230600	P	270 10	+++ ++	290 18	290 16	290 18	300 20	300 21	290 21	290 24	290 33	290 28	290 29	290 30	290 30	350 25	030 14			
	231200	T	260 17	+++ ++	270 23	280 24	270 21	270 20	270 21	270 23	280 26	290 15	300 19	310 26	290 27	320 32					
	231800	P	270 20	+++ ++	290 19	300 19	270 14	270 23	260 24	250 23	270 24	260 16	320 27	350 21	290 23	290 24	320 12	010 08			
LARKHILL 03743	230630	P	230 05	+++ ++	280 20	280 19	280 21	280 25	290 28	290 27	270 29	290 34	280 35	300 28	290 24	290 17	280 10	350 09			
	231030	P	260 10	+++ ++	310 11	310 15	300 16	190 27	280 32	280 32	280 32	270 34	280 35	270 33	270 23	280 16					

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE			SURFACE		1000mb	950mb	900mb	850mb	800mb	750mb	700mb	650mb	600mb	550mb	500mb						
		MSL	Surf.	0°C level	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C					
231257	58.2°N 26.7°W	007	000	730	061	09 05	061	11 03	939	10 01	1411	07 07	1911	05 05	01 35	2984	02 24	05 24	4191	11 26	15 26	5572	16 21
Cloud :— 7/8 Sc 600 to 1000 ft. 7/8 Sc 3800 to 6000 ft. 1/8 Sc 3800 to 8000 ft. 2/8 As. 17000 to 19000 ft. 5/8 Cl 20000 to 22000 ft.																							
Inversion Levels :— 1000 mb to 955 mb 8½° to 11° Isothermal Levels :—																							
YYGGgg	POSITION	PRESSURE			SURFACE		1000mb	950mb	900mb	850mb	800mb	750mb	700mb	650mb	600mb	550mb	500mb						
		MSL	Surf.	0°C level	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C					
231415	60.8°N 20.8°W	998	991	857	061	09 05	015	07 01	850	02 03	1308	01 01	1795	02 12	05 22	2844	07 37	11 33	4029	13 42	18 49	5392	21 25
Cloud :— 5/8 Sc. 1800 to 2400 ft. 8/8 Sc. 2900 to 4500 ft. 4/8 Sc. 22000 to TNC																							
Inversion Levels :— 850mb to 830mb -½° to 0°C Isothermal Levels :—																							
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## UPPER WINDS AT ADDITIONAL LEVELS

Page 5

STATION		MAX. WIND
LERWICK 03005	106mb 260 21 12900m 280 30 05850/0 10870m 280 72 13200m 290 47 07820/0 10870/1	270 73 09000m 270 79 09000m 290 90 08200m 280 108 10250m
STORNOWAY 03026	082mb 270 18 03050/0 05230/0 10100/1 10550/1 11480/1 16600m 300 16 08610/0 10540/1 11030/1 12360/1 12880m 290 51 12470/1 13620/1	280 118 09630m 290 121 09850m 290 117 10270m 280 92 10860m
SHANWELL 03170	175mb 280 45 176mb 280 64 12900m 280 85 01280/0 02200/0 05680/0	280 102 10000m 280 102 11560m 280 86 08330m 280 98 10660m
ALDERGROVE 03917	12500m 280 61 17600m 290 16 05100/0 07300/0 10820/0 11270/1 12290/1 12450m 290 59 12450/1 106mb 290 36 13500m 290 46 17400m 290 11 13220/1	280 91 11000m 280 81 10780m 300 66 07800m 280 75 08860m
AUGHTON 03322	177mb 280 46 18000m 270 16 12610/1 076mb 280 10 19800m 280 09 06290/1	290 69 09530m 280 69 12010m 280 69 11360m 270 65 06060m
HEMSBY 03496	165mb 290 32 P24500m 100 08 13400m 290 36 19100m 280 07 12450/1 12910/1 136mb 280 31 073mb 260 11 19360m 280 07	280 71 12160m 280 62 09800m 280 63 11490m
CRAWLEY 03774	063mb 340 05 17700m 280 09 28800m 090 17 33000m 060 22 18125m 280 13 07370/1 16180/2 16460/5 16960/2	
CAMBORNE 03808	24600m 060 16 20150m 310 03	
VALENTIA 03953	898mb 290 18 732mb 280 21 612mb 280 23 235mb 280 23 151mb 290 23 072mb 300 10 911mb 280 10 612mb 280 22 542mb 280 25 259mb 270 30 162mb 300 27 093mb 300 15	
Ocean Weather Station 'I' 59°00'N 19°00'W	229mb 280 82 180mb 290 48 075mb 280 09 11100m 290 76 12900m 290 48 17700m 300 20 10650/1 220mb 270 84 176mb 270 57 062mb 270 12 12900m 290 68	280 114 10070m 280 123 09920m 270 108 10400m 270 132 10310m
Ocean Weather Station 'J' 52°30'N 20°00'W	21900m 330 04 22800m 060 04 21300m 060 06 07500/1 10200/3 13000/5	
LARKHILL 03743	16500m 270 20	

## NOTES ON THE AEROLOGICAL SITUATION

The low off Greenland is almost stationary while the trough extending westsouthwest across Greenland to the Great Lakes is slow moving. The strong westerly flow from Labrador across the Atlantic to the Baltic persists. The trough which yesterday was over the British Isles is now over Sweden Denmark and north Germany and continues its eastward movement. The low latitude features over the Atlantic and those over the Mediterranean are almost stationary.

## AVERAGE AND EXTREME VALUES 1951-55

## JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.

Press. Level	Average Height	Average Temp.	Extreme Max.	Extreme Temp. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22345	-48.1	-42	-55	...	...
60	19675	-48.1	-41	-55	120 3	8
100	16320	-48.8	-41	-56	244 5	11
150	13660	-48.3	-41	-59	263 10	18
200	11770	-49.8	-39	-67	271 16	27
300	9125	-46.7	-37	-56	271 22	41
400	7160	-32.6	-23	-44	271 18	33
500	5555	-20.8	-11	-31	269 14	26
700	2985	-5.2	3	-14	266 9	19
850	1435	2.8	14	-7	269 6	18
Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)			
Average	257	-54.7	10190			
Max.	405	-40	12955			
Min.	172	-68	6890			

LARKHILL/CRAWLEY† at 03, 15h.  
(Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N.,  
Long. 00° 13' W.)

Press. Level	Average Height	Average Temp.	Extreme Max.	Extreme Temp. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22310	-49.6	-47	-57	106 9	10
60	19675	-51.4	-45	-59	136 3	8
100	16370	-52.6	-46	-61	251 8	13
150	13745	-51.8	-42	-65	265 15	21
200	11890	-54.0	-40	-65	268 20	32
300	9265	-44.7	-36	-54	265 20	39
400	7275	-29.6	-19	-41	265 17	31
500	5640	-17.8	-9	-28	263 15	25
700	3050	-2.1	7	-10	263 11	19
850	1480	5.7	16	-3	264 7	16
Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)			
Average	234	-56.8	10950			
Max.	388	-41	13440			
Min.	160	-66	7225			

MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.

Press. Level	Average Height	Average Temp.	Extreme Max.	Extreme Temp. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	(22185)	(-60.7)	...	...	120 5	11
60	19670	-60.7	-53	-69	135 4	10
100	16510	-62.9	-57	-71	255 21	24
150	13995	-59.0	-51	-67	265 38	42
200	12185	-56.6	-47	-67	275 42	47
300	9530	-40.1	-33	-46	285 32	38
400	7500	-23.9	-19	-29	285 27	31
500	5835	-11.8	-8	-17	285 24	28
700	3165	7.2	13	-1	290 18	22
850	1535	17.9	27	8	290 9	14
Tropo- pause	Average Press.	Average Temp.	Max. Press.	Min. Press.	Max. Temp.	Min. Temp.
Upper	mb.	°C	mb.	mb.	°C	°C
Lower	123	-65.7	...	73	...	-73
	193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed.  
Average winds are based on observations at Lerwick,  
Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at  
03, 15h.

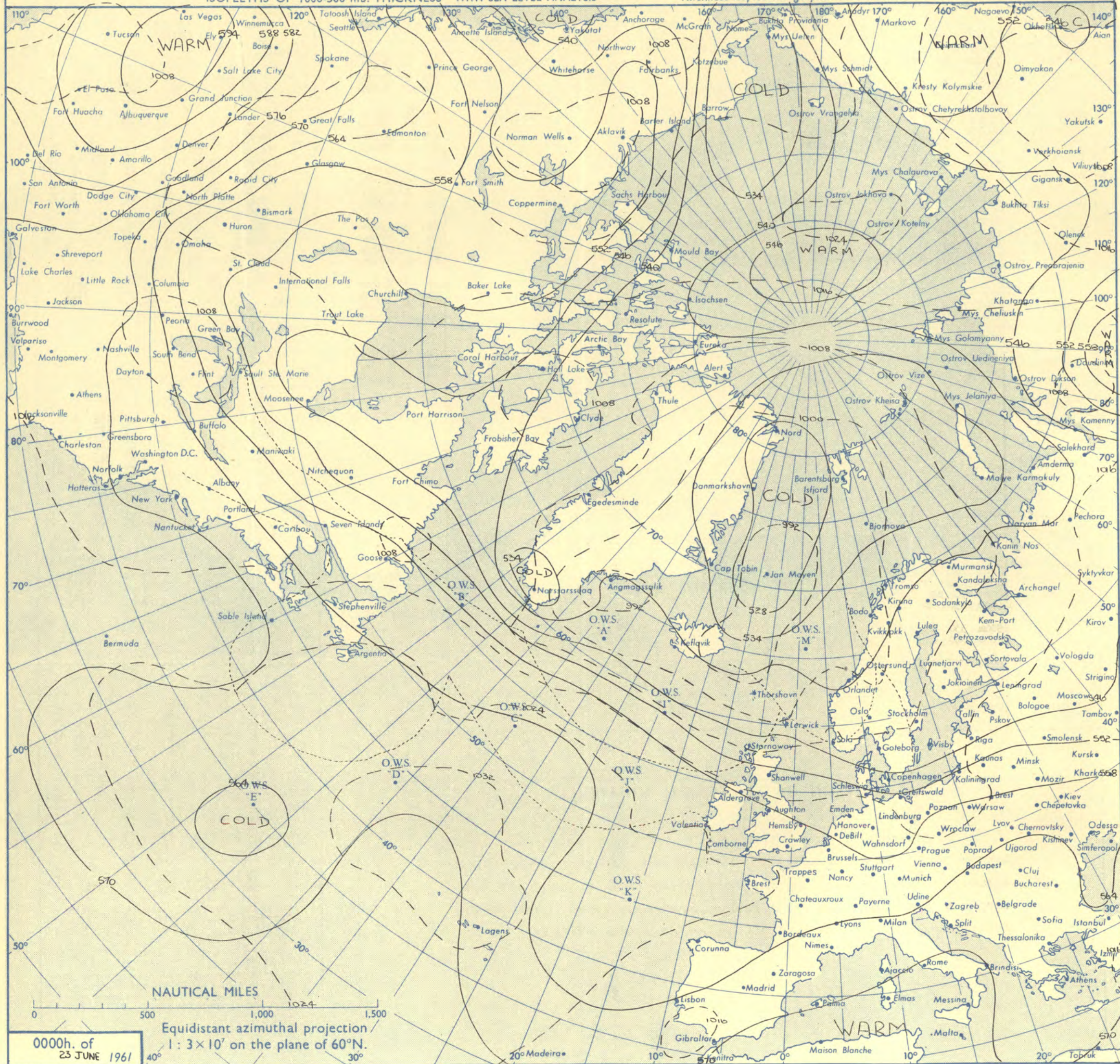
† Observations were made at Larkhill (Lat. 51° 12' N.,  
Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values  
for any element are given for less than 10 observations.  
Otherwise no averages are given for less than 3 observa-  
tions and average values based on less than 10 observa-  
tions are given in brackets.



ISOPLETHS OF 1000-500 mb. THICKNESS WITH SEA LEVEL ANALYSIS

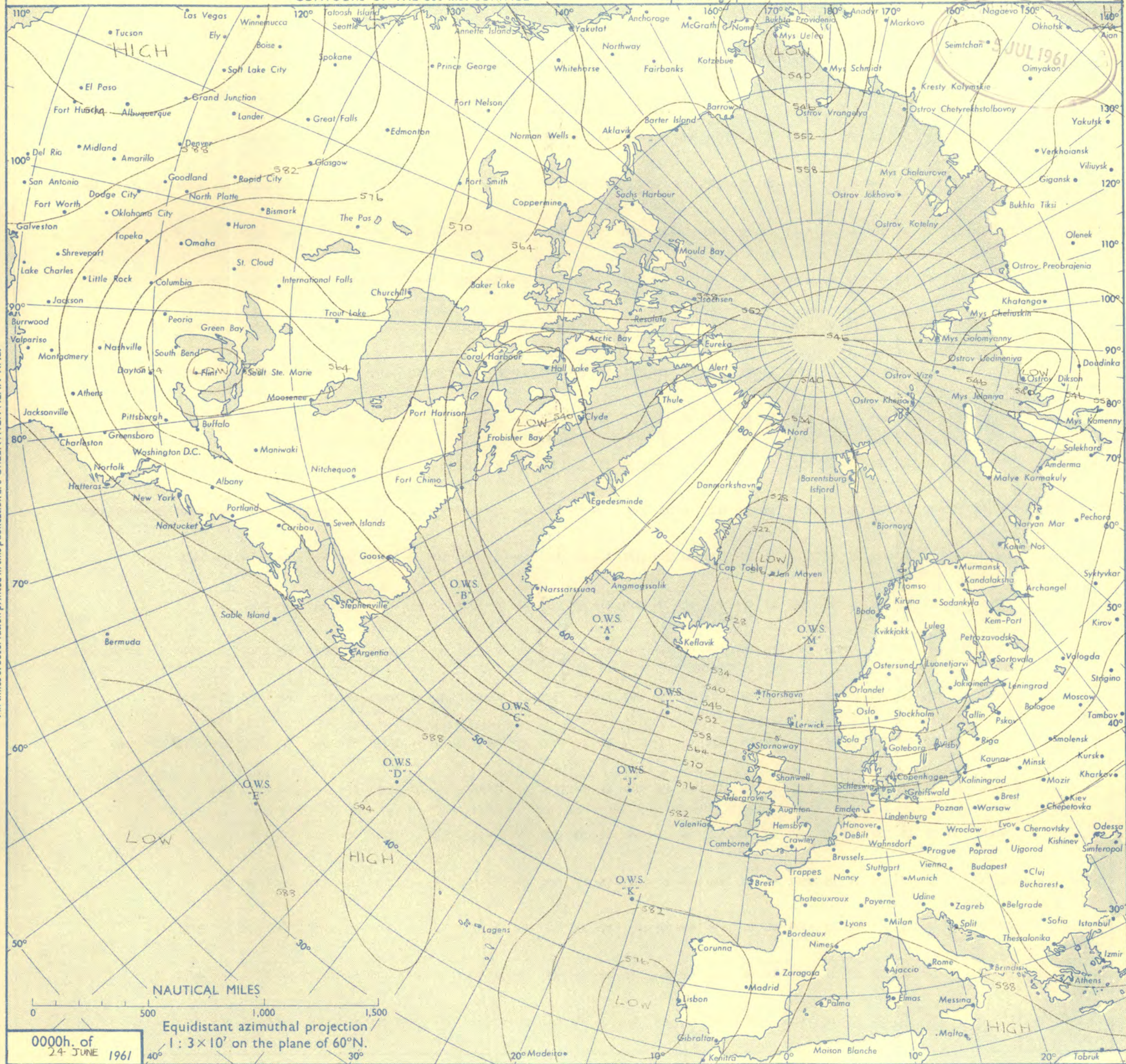
Thickness isopleths in geopotential decametres





CONTOURS OF THE 500 mb. SURFACE

Isopleths in geopotential decametres



NAUTICAL MILES

0000h. of  
24 JUNE 1961Equidistant azimuthal projection  
1 : 3 × 10<sup>7</sup> on the plane of 60°N.



STATION	YYGGgg	SURFACE			1000mb			850mb			700mb			500mb			400mb			300mb			200mb			150mb			100mb			70mb			50mb			30mb		
		gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C			
LERWICK  03005	232330	082	10	09	008	00	00	1340	01	01-	2884	06-	13-	5444	21-	24-	7059	32-	36-	9039	44-	++	11738	45-	13657	47-	16329	48-												
	241136	082	12	09	016	++	++	1350	03	06-	2891	08-	11-	5465	20-	27-	7084	31-	39-	9069	44-	++	11778	44-	13696	46-	16389	49-	18743	48-	20973	46-	24356	47-						
STORNOWAY  03026	232330	013	12	09	078	11	09	1449	05	02-	2979	04-	06-	5563	17-	20-	7203	27-	44-	9213	41-	++	11868	50-	13749	52-	16383	49-	18714	49-										
	241130	013	13	12	047	12	10	1397	07	04	2970	02-	15-	5572	18-	23-	7206	29-	35-	9200	44-	++	11863	47-	13766	49-	16428	46-	18781	47-	21010	46-								
SHANWELL  03170	232330	005	14	05	111	14	04	1463	09	04	3048	01-	07-	5658	17-	22-	7307	25-	28-	9337	40-	43-	11972	61-	13807	52-	16438	52-	18775	48-										
	241205	005	18	11	086	16	08	1450	08	06	3035	00	02-	5671	15-	21-	7321	27-	34-	9328	43-	++	11960	56-	13800	53-	16424	50-	18750	51-	20956	47-								
ALDERGROVE  03917	232330	077	14	07	154	14	06	1515	11	04	3106	00	05-	5747	15-	25-	7398	22-	25-	9445	39-	42-	12095	61-	13885	59-	16462	53-	18771	52-	20965	50-								
	241130	077	17	12	134	17	11	1501	12	02	3098	02	01-	5731	15-	25-	7387	23-	27-	9428	39-	42-	12079	60-	13868	60-	16440	53-	18739	52-	20927	50-								
AUGHTON  03322	232330	056	14	12	169	15	12	1534	11	10-	3128	03	17-	5763	15-	21-	7423	23-	27-	9463	39-	42-	12109	60-	13894	58-	16471	54-	18767	51-	20968	50-								
	241130	056	20	10	160	17	07	1527	12	07-	3124	02	18-	5759	13-	32-	7425	23-	38-	9466	39-	++	12121	61-	13871	60-	16447	55-	18739	53-										
HEMSBY  03496	232330	012	12	11	168	17	11	1539	12	04-	3144	04	16-	5792	12-	32-	7464	22-	37-	9505	39-	++	12150	61-	13923	60-	16502	54-	18801	53-	20995	49-								
	241130	012	24	11	162	21	12	1537	13	15-	3134	02	10-	5777	13-	35-	7433	25-	31-	9466	40-	46-	12105	52-	13860	59-	16421	56-	18711	50-										
CRAWLEY  03774	232330	144	16	14	188	16	13	1566	12	03-	3168	04	07-	5829	12-	29-	7497	24-	41-	9535	39-	++	12175	62-	13951	59-	16518	55-												
	241130	144	23	14	183	22	13	1560	13	00	3165	05	11-	5832	12-	30-	7499	24-	41-	9534	40-	++	12175	61-	13949	61-	16500	58-	18780	53-	20949	52-								
CAMBORNE  03808	232330	088	14	14	208	13	11	1576	12	06	3185	06	05-	5857	11-	28-	7527	24-	40-	9557	40-	++	12203	62-	13980	60-	16537	57-	18800	54-										
	241130	088	17	15	196	14	11	1565	12	06	3172	04	07-	5834	13-	32-	7492	25-	42-	9508	42-	++	12125	63-	13921	58-	16485	56-	18782	53-	20985	47-								
VALENTIA  03953	240000	014	12	11	201	13	09	1571	11	04	3177	03	12-	5840	11-	30-	7500	23-	31-	9550	39-	46-	12210	61-	++++	++	16510	60-												
	241130	014	15	13	188	12	10	1550	12	01-	3151	04	18-	5800	12-	30-	7470	23-	41-	9520	39-	++	12170	61-																
Ocean Weather Station 'I'  59°00'N 19°00'W	240000		11	10	020	11	09	1367	06	04	2940	03-	11-	5550	15-	18-	7200	27-	31-	9210	42-	++	11880	48-	13780	49-	16440	50-												
	241200		12	10	002	12	10	1334	02	00	2890	04-	08-	5490	17-	29-	7140	26-	42-	9160	41-	++	11870	45-	13790	46-	16490	46-	18850	48-										
Ocean Weather Station 'J'  52°30'N 20°00'W	240000		14	12	193	15	11	1562	12	00	3161	03	13-	5810	12-	23-	7490	22-	39-	9540	38-	++	12210	60-	14010	56-	16580	55-	18870	53-										
	241200		14	12	158	14	10	1524	10	00	3113	03	08-	5760	11-	28-	7440	22-	40-	9490	38-	++	12150	61-	13930	59-	16480	58-	18750	54-										



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	21 773++	001 991 832 779	889 ++ 00 816 02- 03- 808 ++ 02- 798 01 07- 793 ++ 11- 758 ++ 14- 728 05- 12- 710 ++ 14- 697 ++ 12- 675 ++ 17- 631 ++ 15- 582 13- 16- 568 ++ 20- 538 ++ 21- 514 20- 23- 378 ++ 39- 333 40- 46- 265 47- 178 45- 142 49- 100 48- 076 47-			265 09880 47-		
	02 68432	002 992 810	989 10 06 910 ++ 00 873 04 05- 788 ++ 11- 712 07- 11- 565 ++ 17- 536 15- 21- 518 ++ 25- 464 24- 29- 330 40- 50- 264 49- 233 43- 100 49- 052 46- 030 47-			264 09910 49-		
STORNOWAY 03026	60 664++	009 008 758	941 07 05 934 ++ 06 917 09 01- 890 ++ 03- 841 ++ 01- 822 ++ 05- 793 ++ 01- 767 ++ 01- 689 05- 07- 647 09- 12- 575 13- 16- 555 13- 16- 490 ++ 22- 465 ++ 23- 439 ++ 33- 416 25- 39- 360 ++ 48- 230 55- 210 53- 197 49- 173 49- 146 53- 123 54- 112 48- 091 51- 058 48-			230 10970 55- 146 13930 53- 091 16990 51-		
	50 473++	005 004 725	989 11 09 910 07 05 894 09 06 847 07 04 830 ++ 03 820 06 04- 725 00 15- 715 01- 08- 694 ++ 16- 658 05- 12- 538 ++ 18- 518 15- 20- 482 20- 24- 473 20- 27- 454 22- 31- 413 27- 32- 384 31- 38- 323 40- 46- 254 53- 244 53- 216 46- 114 50- 101 46- 083 50- 040 45-			254 10280 53-		
SHANWELL 03170	02 35578	013 013 717	003 14 04 898 09 01 878 10 04 826 ++ 04 810 07 00 794 08 02- 698 01- 07- 672 ++ 14- 650 03- 19- 575 ++ 19- 539 ++ 23- 517 ++ 20- 492 18- 23- 421 22- 25- 298 40- 43- 212 60- 199 61- 184 55- 116 51- 100 52- 088 48- 056 49-			199 12000 61-		
	02 21642	010 009 700	004 16 08 933 11 09 813 06 04 692 00 02- 686 00 02- 652 02- 09- 614 04- 10- 434 22- 39- 360 34- 41- 312 40- 46- 215 58- 167 54- 158 56- 134 50- 113 55- 100 50- 057 49- 044 47-			215 11500 58- 113 15630 55-		
ALDERGROVE 03917	01 40932	018 009 695	938 10 01 910 ++ 04 892 13 07- 844 ++ 04 721 ++ 01- 695 00 05- 650 ++ 20- 639 01- 17- 577 06- 19- 538 ++ 20- 521 ++ 26- 461 21- 27- 421 22- 25- 408 21- 24- 293 ++ 43- 185 65- 167 58- 128 59- 117 53- 091 54- 081 51- 043 50-			185 12550 65-		
	01 15632	016 007 809	914 11 08 895 ++ 09 847 12 01 814 ++ 05 785 07 03 780 ++ 01 750 ++ 02 722 03 02 700 ++ 01- 664 01- 05- 633 04- 07- 608 04- 10- 595 ++ 11- 580 ++ 16- 551 ++ 14- 525 ++ 21- 494 16- 26- 434 21- 32- 423 ++ 32- 414 23- 30- 403 23- 28- 339 ++ 35- 297 ++ 43- 245 50- 193 61- 135 59- 104 52- 093 54- 048 50- 034 52-			193 12300 61-		
AUGHTON 03322	02 10947	021 014 653	005 15 13 978 16 10 935 13 03 900 11 04 895 ++ 05 884 ++ 05- 875 12 06- 817 10 11- 793 ++ 04- 768 ++ 03- 712 04 15- 651 00 19- 554 ++ 20- 520 13- 20- 413 22- 25- 383 ++ 30- 296 40- 43- 183 64- 127 55- 112 57- 088 51- 076 55- 070 51- 046 50-			183 12670 64- 076 18260 55-		
	02 10979	019 012 667	997 16 07 920 13 02 877 13 11- 862 13 08- 845 12 06- 824 ++ 13- 768 ++ 06- 750 06 09- 732 ++ 06- 700 02 18- 556 09- 26- 415 21- 38- 292 40- ++ 173 69- 165 69- 159 64- 140 55- 120 57- 070 53-			173 13010 69-		
HEMSBY 03496	02 00901	020 019 649	012 ++ 09 005 17 11 975 16 08 908 ++ 10 872 ++ 07 867 11 04 850 ++ 04- 842 12 05- 798 ++ 15- 749 08 09- 679 ++ 20- 585 06- 25- 569 06- 25- 454 17- 36- 442 17- 34- 392 23- 38- 314 37- 50- 197 62- 171 64- 158 63- 138 56- 125 57- 118 54- 087 55- 084 51- 068 53- 064 50- 041 51- 036 46-			171 13110 64-		
	02 00901	019 017 663	013 22 12 907 12 07 874 15 05- 849 ++ 15- 820 ++ 13- 780 ++ 03- 705 02 09- 687 ++ 16- 597 04- 27- 467 ++ 39- 387 ++ 31- 300 40- 46- 182 67- 167 68- 152 60- 070 50-			167 13200 68-		
CRAWLEY 03774	02 00902	022 005 628	986 19 13 960 ++ 11 926 ++ 11 873 12 00 827 11 08- 727 ++ 13- 709 ++ 06- 604 01- 15- 496 12- 29- 337 33- 47- 215 59- 181 66- 165 60- 104 55- 085 56-			181 12780 66-		
	02 00901	021 005 614	999 22 13 905 13 10 883 14 01 685 04 13- 665 ++ 11- 588 02- 17- 547 07- 24- 318 36- 50- 219 50- 176 65- 141 59- 101 58- 091 54- 041 45-			176 12960 65-		
CAMBORNE 03808	51 860++	025 014 614	957 11 09 927 14 12 909 14 11 880 13- 08 793 ++ 03 733 ++ 04- 698 05 12- 624 01 16- 325 36- 49- 256 47- 188 65- 170 60- 158 62- 130 57- 079 57- 063 51-			188 12600 65-		
	01 754++	024 013 624	000 14 11 962 12 10 945 15 11 806 11 02 750 07 02- 636 01 17- 559 06- 26- 487 15- 34- 340 35- 50- 204 63- 195 63- 187 59- 179 61- 097 56- 058 48- 050 47-			204 12010 63-		
VALENTIA 03953	02 16401	024 022 630	963 14 02 958 14 01- 942 14 06 902 14 06 858 11 04 805 11 05 731 06 04 678 02 17- 654 02 18- 571 05 21- 552 06- 25- 444 19- 35- 347 29- 40- 288 41- 188 64- 166 61- 151 58- 128 60- 099 60- 072 54-			166 13400 66-		
	03 754++	022 021 640	974 10 08 941 14 06 910 14 06- 895 14 03- 807 10 04- 780 10 09- 609 03- 22- 471 15- 33- 461 15- 33- 385 25- 42- 377 25- 42- 196 62- 172 66- 155 59- 147 59-			172 13100 66-		
Ocean Weather Station 'I' 59°00'N 19°00'W	02 463++	002 002 734	993 ++ 09 936 08 06 923 09 07 800 05 02 782 ++ 01 738 ++ 08- 690 04- 12- 668 06- 12- 652 05- 09- 611 06- 09- 508 14- 17- 480 ++ 20- 379 31- 35- 311 40- 45- 253 50- 224 51- 209 48- 187 47- 165 49- 134 47- 097 50-			253 10300 50-		
	02 883++	000 000 764	952 07 05 836 02 00 811 02 01- 745 01- 04- 689 05- 09- 639 05- 17- 626 06- 21- 601 ++ 18- 580 09- 20- 523 15- 29- 484 18- 32- 445 20- 36- 337 35- 50- 269 47- 259 48- 230 44- 170 46- 100 46- 081 48- 060 47-			259 10100 48-		
Ocean Weather Station 'J' 52°30'N 20°00'W	03 764+1	026 026 671	976 14 08 940 ++ 13 923 12 10 903 13 09 824 ++ 09- 770 07 06- 701 03 13- 662 01- 09- 582 04- 17- 524 ++ 20- 498 12- 24- 475 12- 26- 433 ++ 36- 394 23- 40- 316 35 50- 245 47- 195 61- 176 64- 159 58- 063 53-			176 13000 64-		
	02 00901	019 019 658	999 14 09 971 16 06 890 12 04 756 05 11- 726 04 03- 690 03 09- 636 02- 15- 527 10- 25- 480 12- 30- 380 ++ 42- 288 40- 189 65- 147 58- 089 57- 068 54- 059 54-			189 12500 65-		



AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General  
Meteorological Office, Air Ministry, Kingsway, London, W.C.2



STATION		MAX. WIND
LERWICK 03005	12900m 280 60 10610/1 15300m 270 27 07500/0 08400/0 09800/1 11100/1	280 128 09280m 270 113 09870m 270 105 09540m
STORNOWAY 03026	060mb 290 09 15600m 270 24 07405/0 09255/0 11470/1 11890/1 12380/1 12900/1 044mb 060 03 12730m 280 65 17250m 240 16 10270/0 10690/1 12050/1 12730/1 13680/1	280 116 10140m 260 122 11220m 280 105 10120m 270 122 10480m
SHANWELL 03170	173mb 290 59 01850/1 02100/0 12600/1 13700m 260 41 15300m 260 23 14000/1 15070m 290 23	290 94 10500m 270 102 12400m 270 102 11300m 270 90 11600m
ALDERGROVE 03917	072mb 260 08 12210/1 12690/1 172mb 270 19 115mb 260 24 12410/1 16300/1	290 68 11520m 280 77 11980m 260 73 11000m 280 70 12180m
AUGHTON 03322	20100m 330 06 077mb 300 09 21600m 190 02	
HEMSBY 03496	167mb 290 30 039mb 030 04 076mb 240 11	
CRAWLEY 03774	090mb 290 13 22200m 070 06 22500m 100 06 22500m 050 06	
CAMBORNE 03808	28800m 080 25 12950/2 P25500m 100 10 25800m 060 07	
VALENTIA 03953	902mb 280 14 731mb 280 18 654mb 270 22 151mb 290 18 072mb 310 15 910mb 270 14 780mb 270 20 609mb 250 28 471mb 250 34 377mb 250 20 147mb 290 18	
Ocean Weather Station 'I' 59°00'N 19°00'W	222mb 270 100 06300m 260 79 11400m 270 72 17100m 270 22 08600/0 09100/1 12100/1 228mb 270 88 117mb 290 27 22200m 000 00 23700m 090 07 11650/1	270 125 10770m 260 117 08800m 270 121 10190m 270 123 10500m
Ocean Weather Station 'J' 52°30'N 20°00'W	068mb 270 08	
LARKHILL 03743		

## NOTES ON THE AEROLOGICAL SITUATION

The principal features, as noted yesterday remain slow to change. A westerly jet stream continues to lie across the north of the British Isles with little change of shape or of latitude, though its entrance and exit can be seen to have shifted down stream in the course of the last few days.

## AVERAGE AND EXTREME VALUES 1951-55

## JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22345	-48.1	-42	-55	...	...
60	19675	-48.1	-41	-55	120	3
100	16320	-48.8	-41	-56	244	5
150	13660	-48.3	-41	-59	263	10
200	11770	-49.8	-39	-67	271	16
300	9125	-46.7	-37	-56	271	22
400	7160	-32.6	-23	-44	271	18
500	5555	-20.8	-11	-31	269	14
700	2985	-5.2	3	-14	266	9
850	1435	2.8	14	-7	269	6

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	257	-54.7	10190
Max.	405	-40	12955
Min.	172	-68	6890

LARKHILL/CRAWLEY† at 03, 15h.  
(Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.)

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22310	-49.6	-47	-57	106	9
60	19675	-51.4	-45	-59	136	3
100	16370	-52.6	-46	-61	251	8
150	13745	-51.8	-42	-65	265	15
200	11890	-54.0	-40	-65	268	20
300	9265	-44.7	-36	-54	265	20
400	7275	-29.6	-19	-41	265	17
500	5640	-17.8	-9	-28	263	15
700	3050	-2.1	7	-10	263	11
850	1480	5.7	16	-3	264	7

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	234	-56.8	10950
Max.	388	-41	13440
Min.	160	-66	7225

MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5
60	19670	-60.7	-53	-69	135	4
100	16510	-62.9	-57	-71	255	21
150	13995	-59.0	-51	-67	265	38
200	12185	-56.6	-47	-67	275	42
300	9530	-40.1	-33	-46	285	32
400	7500	-23.9	-19	-29	285	27
500	5835	-11.8	-8	-17	285	24
700	3165	7.2	13	-1	290	18
850	1535	17.9	27	8	290	9

Tropopause	Average Press.	Average Temp.	Max. Press.	Min. Press.	Max. Temp.	Min. Temp.
Upper	mb.	°C	mb.	mb.	°C	°C
Lower	123	-65.7	...	73	...	-73
	193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

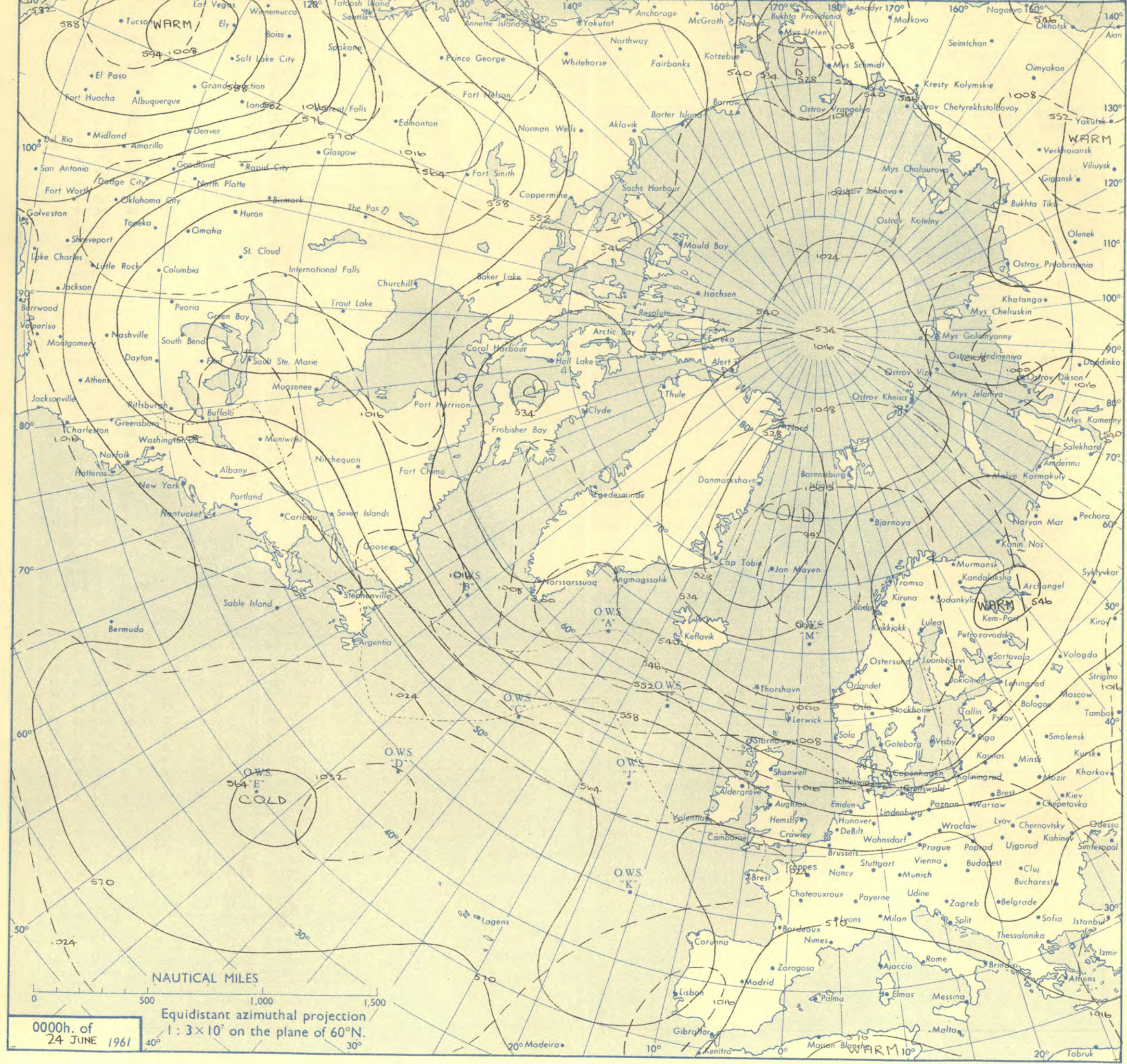
† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.

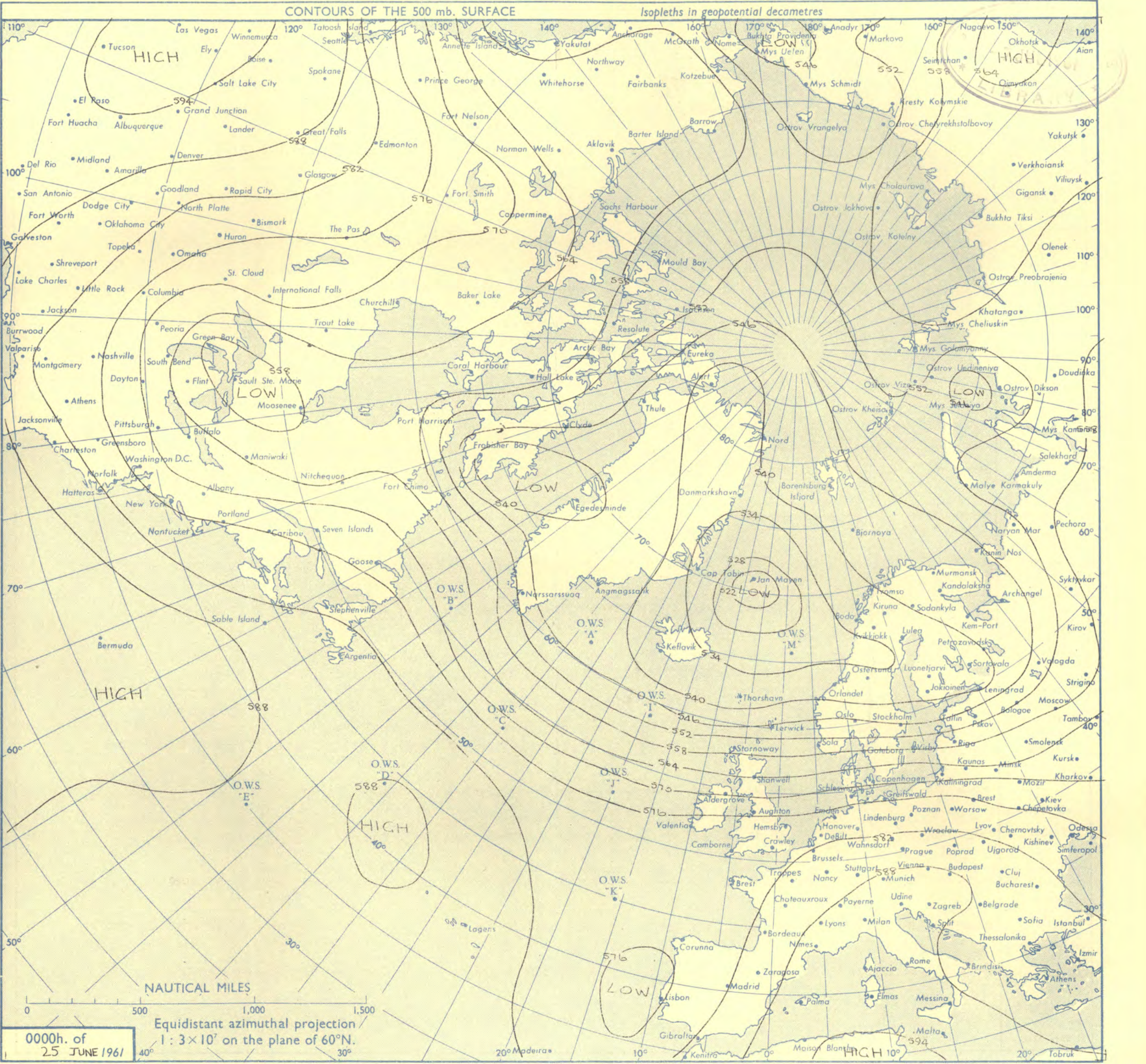


ISOPLETHS OF 1000-500 mb. THICKNESS WITH SEA LEVEL ANALYSIS

Thickness isopleths in geopotential decametres







All times of observation printed in this publication are GREENWICH MEAN TIME.



STATION	YYGG <sub>gg</sub>	SURFACE			1000mb			850mb			700mb			500mb			400mb			300mb			200mb		150mb		100mb		70mb		50mb		30mb									
		gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C										
LERWICK 03005	242330	082	09	08	025	++	++	1309	03	02	2867	03	22	5458	17	26	7098	28	31	9108	42	++	11788	49	13688	48																
	251135	082	12	07	025	++	++	1354	00	04	2887	06	17	5451	20	37	7076	30	45	9072	43	++	11768	45	13683	47	16371	47	18730	48	20954	47										
STORNOWAY 03026	242335	013	12	11	041	12	11	1382	05	03	2950	02	03	5547	17	20	7195	25	29	9223	40	44	11896	52	13756	54	16386	48														
	251130	013	13	07	043	12	06	1375	03	01	2926	05	08	5518	16	47	7161	27	++	9175	41	++	11869	46	13773	49	16433	47	18795	47	21028	45										
SHANWELL 03170	242330	005	14	12	071	14	12	1427	08	06	3010	01	08	5638	14	17	7306	24	26	9343	40	43	11971	59	13794	55	16396	53	18715	50												
	251130	005	18	12	060	16	12	1412	05	03	2978	02	03	5603	13	16	7268	25	29	9308	37	42	11981	56	13826	53	16446	53	18775	51	20985	48	24363	45								
ALDERGROVE 03917	242330	077	15	11	119	14	11	1474	10	03	3066	02	06	5715	11	18	7400	20	23	9465	36	39	12145	59	13936	58	16476	57	18763	54	20926	52	24238	52								
	251130	077	14	12	096	14	12	1442	05	03	3023	00	03	5663	13	17	7330	24	29	9377	37	45	12058	57	13890	56	16492	50	18808	51	21016	49	24377	47								
AUGHTON 03322	242330	056	14	13	144	15	10	1513	10	04	3103	03	08	5748	12	33	7422	22	45	9469	38	++	12129	60	13896	58	16468	57	18765	51	20947	52										
	251130	056	21	11	121	20	11	1483	09	00	3076	03	15	5724	13	29	7394	23	36	9434	39	45	12096	59	13869	60	16430	55	18711	54	20879	52										
HEMSBY 03496	242330	012	17	13	141	21	16	1532	13	04	3140	04	06	5797	12	23	7467	24	35	9507	39	49	12150	63	13933	57	16508	56														
	251130	012	25	11	126	22	13	1509	11	03	3108	02	11	5751	13	32	7411	26	45	9441	39	++	12081	62	13079	62	16389	59	18648	54	20804	53										
CRAWLEY 03774	242345	144	13	13	166	15	13	1547	14	11	3156	05	11	5818	13	30	7484	24	41	9511	41	++	12152	60	13931	60	16484	58	18758	54												
	251130	144	22	15	143	++	++	1524	13	02	3131	04	07	5775	13	26	7429	26	38	9437	43	++	12059	62	13858	59	16411	57	18678	55	20838	55										
CAMBORNE 03808	242330	088	13	12	175	12	11	1557	14	04	3168	05	12	5830	12	22	7495	25	35	9524	40	++	12169	60	13944	62																
	251130	088	14	13	154	14	13	1525	15	00	3139	05	05	5793	11	23	7462	24	37	9496	39	++	12159	59	13974	55	16566	54	18877	50	21094	46										
VALENTIA 03953	250001	014	13	11	173	12	10	1534	12	06	3146	06	08	5800	11	25	7480	23	35	9530	36	46	12200	61	++++	++	16540	57														
	251130	014	15	12	143	14	12	1504	11	01	3105	05	07	5770	12	27	7450	22	37	9500	37	50	12170	60																		
Ocean Weather Station 'I'  59°00'N 19°00'W	250001		11	06	031	10	06	1355	03	04	2901	06	20	5480	18	29	7110	28	40	9120	41	++	11810	47	13720	48	16380	50	18720	50	20920	49										
	251200		10	06	054	10	06	1372	03	05	2900	07	19	5450	22	33	7060	34	43	9020	43	++	11770	42	13700	45	16400	47	18750	48	20960	50										
Ocean Weather Station 'J'  52°30'N 20°00'W	250001		13	13	131	13	13	1487	10	02	3089	05	01	5750	11	15	7430	22	25	9480	37	43	12140	60	13930	59	16500	56	18760	55												
	251200		13	11	112	12	10	3035	00	07	3035	00	07	5670	14	20	7340	23	39	9380	39	49	12050	56	13890	56	16470	56	18740	55	20910	52										



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	02 753++	997	987	750	941 07 05 880 ++ 01- 850 03 02- 812 ++ 06- 800 ++ 19- 783 02 22- 665 05- 23- 568 ++ 33- 536 ++ 23- 522 16- 252 10280 49-	252	10280	49-
	02 684++	003	993	847	978 09 05 930 ++ 03 891 ++ 02- 829 02- 04- 782 ++ 06- 740 ++ 14- 706 06- 17- 612 ++ 23- 601 ++ 24- 522 265 09880 48-	265	09880	48-
STORNOWAY 03026	21 364++	005	003	740	835 ++ 03 807 03 01- 793 03 00 753 ++ 00 635 ++ 09- 600 ++ 15- 559 13- 17- 542 13- 17- 449 21- 24- 437 21- 24- 300 40- 44- 253 49- 213 52- 162 52- 121 54- 105 46- 084 53-	213	11490	52-
	02 5562+	005	004	792	992 11 05 907 04 02 824 02 00 707 06- 09- 696 ++ 08- 671 05- 23- 648 ++ 39- 568 12- 44- 503 16- 47- 461 20- 50- 355 33- ++ 234 50- 201 46- 165 47- 146 50- 061 47- 035 43-	234	10820	50-
SHANWELL 03170	02 48402	008	008	687	000 14 12 879 08 06 814 07 05 750 02 01 725 ++ 03- 713 02 09- 690 ++ 07- 657 ++ 20- 645 ++ 15- 574 09- 19- 537 ++ 15- 472 15- 18- 360 29- 32- 302 40- 43- 212 61- 185 60- 170 53- 153 56- 114 54- 106 51- 100 53- 086 51- 057 49-	212	11600	61-
	25 5857+	007	006	741	989 14 11 924 09 07 824 03 02 638 05- 07- 590 06- 09- 469 16- 19- 354 32- 36- 345 31- 35- 311 35- 40- 287 40- 45- 255 47- 207 57- 126 52- 100 53- 091 49- 036 49- 030 45-	207	11750	57-
ALDERGROVE 03917	02 364++	014	005	667	961 12 10 875 08 07 850 10 03 783 07 04- 766 ++ 01 725 ++ 04- 706 ++ 05- 690 ++ 10- 647 01- 11- 533 ++ 21- 468 ++ 17- 427 17- 20- 322 32- 35- 280 ++ 43- 187 62- 144 58- 116 51- 093 53- 030 52-	187	12570	62-
	21 464++	011	002	699	987 12 10 952 ++ 09 858 05 03 812 07 05 753 ++ 03- 718 01 03- 700 ++ 03- 651 02- 04- 622 02- 05- 496 14- 18- 467 15- 20- 364 29- 34- 321 33- 41- 285 40- 47- 190 58- 174 53- 151 56- 113 54- 102 50- 085 53- 058 49- 030 47-	190	12370	58-
AUGHTON 03322	02 00901	017	010	668	000 15 10 933 ++ 10 900 13 05 888 12 03 859 09 06 839 10 05- 834 ++ 09- 807 ++ 14- 790 ++ 07- 780 07- 12- 740 05- 16- 730 ++ 07- 688 ++ 07- 670 00 11- 632 ++ 21- 626 02- 22- 398 22- 45- 291 40- 170 67- 137 53- 121 58- 104 58- 097 54- 078 54- 073 50- 048 51-	170	13130	67-
	02 40931	014	007	661	990 17 09 958 ++ 07 946 ++ 10 938 13 05 898 11 05 878 10 04 836 ++ 02- 820 08 00 715 04 13- 675 ++ 16- 647 ++ 11- 558 07- 24- 472 15- 29- 458 ++ 23- 441 18- 25- 430 ++ 30- 409 22- 35- 373 ++ 39- 357 29- 36- 290 40- 46- 170 67- 156 59- 113 58- 101 55- 048 52-	170	13100	67-
HEMSBY 03496	02 00902	017	015	643	997 21 16 897 15 11 879 ++ 07 804 11 01 700 04 06- 542 08- 19- 293 40- 50- 192 65- 151 57- 097 56- 086 53- 20- 560 07- 18- 548 ++ 23- 502 ++ 32- 329 35- 50- 187 64- 143 59- 090 57- 053 55- 045 51-	192	12400	65-
	02 11600	015	013	670	007 23 12 918 ++ 10 869 11 06 804 ++ 08- 775 09 09- 710 03 08- 678 ++ 17- 654 01- 11- 638 ++ 18- 609 ++ 20- 560 07- 18- 548 ++ 23- 502 ++ 32- 329 35- 50- 187 64- 143 59- 090 57- 053 55- 045 51-	187	12500	64-
CRAWLEY 03774	02 00901	020	003	619	992 ++ 12 983 18 12 964 ++ 11 948 18 06 912 15 11 897 ++ 03- 877 15 09- 787 ++ 09- 757 ++ 05- 631 01 20- 332 ++ 50- 281 44- 182 64- 145 58- 099 58- 091 55- 058 53-	182	12720	64-
	02 15500	017	000	648	991 19 12 958 16 11 928 17 07 754 ++ 05- 732 ++ 11- 683 ++ 06- 666 02 09- 560 08- 17- 490 14- 28- 343 35- 47- 324 39- ++ 195 62- 186 59- 040 53-	195	12200	62-
CAMBORNE 03808	02 854++	021	011	633	994 12 10 973 16 07 956 ++ 11 900 15 07 885 ++ 05 848 ++ 04 834 13 01 755 08 02- 740 08 12- 731 08 12- 694 05 12- 659 02 07- 608 ++ 13- 576 ++ 13- 512 ++ 23- 487 14- 22- 458 ++ 25- 441 ++ 29- 308 39- 49- 202 60- 177 64- 139 59-	177	12900	64-
	02 862++	018	008	647	979 12 11 956 12 12 940 15 11 930 ++ 06 912 16 05 837 15 01- 816 ++ 03- 782 ++ 14- 748 ++ 02- 717 ++ 07- 654 ++ 07- 579 06- 14- 557 07- 20- 499 11- 23- 380 27- 39- 314 37- 49- 195 60- 153 55- 093 53- 045 46- 041 42-	195	12300	60-
VALENTIA 03953	02 763++	020	019	638	971 10 06 900 13 07 860 13 07 810 10 02 780 10 01- 723 08 09- 673 05 09- 611 03- 18- 468 14- 28- 298 37- 46- 193 63- 143 57- 104 57- 078 54-	193	12400	63-
	02 864++	017	015	625	948 09 07 926 13 11 809 10 02- 562 05- 19- 491 12- 27- 416 19- 34- 275 42- 204 59- 186 63- 173 54-	186	12600	63-
Ocean Weather Station 'I' 59°00'N 19°00'W	02 7846+	004	004	878 790	971 08 03 873 00 02- 853 03 03- 833 03 11- 804 ++ 14- 647 08- 23- 625 ++ 25- 581 13- 21- 520 16- 27- 448 24- 35- 418 26- 38- 309 40- 50- 249 49- 221 45- 206 47- 177 46- 042 49-	249	10400	49-
	02 58600	007	007	888	982 ++ 04 930 ++ 03 862 02- 04- 807 05- 07- 796 ++ 06- 788 04- 08- 770 ++ 12- 755 04- 13- 727 ++ 17- 559 17- 29- 458 26- 36- 357 40- 48- 334 43- 289 44- 254 41- 202 42- 142 46- 077 49- 060 48- 048 50-	334	08300	43-
Ocean Weather Station 'J' 52°30'N 20°00'W	51 862++	016	016	640	928 09 09 897 09 08 872 10 06 810 10 12- 800 10 05- 772 ++ 03- 606 03- 06- 564 07- 09- 553 07- 09- 452 ++ 20- 408 ++ 24- 376 25- 28- 336 31- 36- 285 40- 46- 213 57- 181 64- 143 57- 085 57- 067 54-	181	12800	64-
	02 6557+	013	013	689	951 08 06 916 04 02 864 09 07 790 ++ 00 745 ++ 01- 729 01 04- 721 02 03- 704 ++ 06- 658 ++ 04- 584 05- 09- 464 18- 26- 438 18- 33- 294 40- 50- 219 55- 203 57- 174 54- 092 57- 084 54- 070 55- 035 48-	203	11900	57-



## UPPER WINDS AT STANDARD LEVELS

25 June

1961

STATION	YYGGgg	Type	Surface	1000mb	900m	850mb 1500m	750mb 2100m	700mb 3000m	600mb 4200m	500mb 5400m	400mb 7200m	300mb 9000m	250mb 10500m	200mb 12000m	150mb 14100m	100mb 15900m	70mb 18300m	50mb 20700m	30mb 23700m	20mb 26400m	10mb 30900m
LERWICK 03005	242330	T	260 30	+++ ++	280 44	280 47	270 51	270 52	270 55	270 64	260 85	270 95	270103	270 70							
	250550	P	290 10	+++ ++	300 14	280 30	280 29	270 41	270 46	270 54	270 90	260111	260 95	260 58	270 40	270 32	290 07	270 04			
	251135	T	250 13	+++ ++	290 07	270 05	280 18	280 24	270 33	270 52	260 87	260109	260108	260 71	260 50	270 39	260 18	260 05			
	251730	P	040 07	+++ ++	250 04	240 06	260 11	270 20	270 31	260 46	260 75	260105	260 91	260 63	270 48	270 30	270 15	210 09			
STORNOWAY 03026	242335	T	250 17	+++ ++	260 35	260 38	250 47	260 52	260 62	260 71	260 82	260100	260103	270 73	270 40	260 15					
	250530	P	290 10	+++ ++	270 23	260 27	270 40	260 41	270 52	270 65	260 85	260102	260106	270 88	270 44	260 34	250 13				
	251130	T	260 10	+++ ++	260 15	250 20	260 33	250 38	260 48	260 65	260 80	250101	260106	260 75	260 47	260 21	270 12	250 02			
	251730	P	270 10	+++ ++	270 14	250 23	260 27	260 30	260 44	260 62	250 83	250111	250110	250 65	260 42	260 33	260 13	260 06	050 02		
SHANWELL 03170	242330	T	230 20	+++ ++	260 38	270 48	270 55	260 57	260 55	260 59	270 67	270 68	270 71	260 65	270 41	290 15					
	250530	P	260 17	+++ ++	260 33	270 44	270 45	260 46	260 52	270 62	270 64	260 76	260 84	270 77	270 50						
	251130	T	240 25	+++ ++	260 25	270 33	260 38	260 46	270 58	260 59	260 75	260 83	260 85	260 78	270 45	250 23	240 11	220 05	060 09		
	251730	P	250 16	+++ ++	260 21	270 27	270 29	260 38	260 47	260 64	250 75	250 83	250 97	250 73	270 50	260 24	300 18				
ALDERGROVE 03917	242330	T	230 16	+++ ++	270 33	270 41	260 45	260 48	260 53	260 52	270 56	270 54	270 57	280 59	260 33	280 33	250 16				
	250530	P	240 16	+++ ++	260 39	260 45	260 45	260 50	260 57	260 58	260 58	260 63	260 63	280 55	280 28	270 25					
	251130	T	240 16	+++ ++	250 30	260 35	280 40	270 43	260 52	260 51	250 52	260 57	260 61	250 60	270 31	280 25					
	251730	P	220 13	+++ ++	260 28	260 31	260 34	260 42	260 49	260 55	240 60	250 64	250 69	260 57	270 27						
AUGHTON 03322	242330	T	200 08	+++ ++	270 26	270 30	260 34	260 38	250 40	260 47	270 49	270 37	270 37	280 38	280 34	280 22	300 07				
	250530	P	210 07	+++ ++	270 25	270 28	270 34	260 44	260 43	260 51	270 43	270 38	270 27	280 26	280 27	280 18	330 05	070 04			
	251130	T	220 10	+++ ++	260 25	270 28	260 37	260 42	260 44	260 41	250 42	270 35	260 31	260 27	270 31	280 14	220 08				
	251730	P	220 09	+++ ++	260 18	260 26	250 31	250 41	250 43	260 44	250 42	250 34	250 35	250 32	270 25	250 17	280 07	160 03			
HEMSBY 03496	242330	T	250 05	+++ ++	260 16	260 18	260 22	260 24	260 34	260 41	260 40	260 29	280 23	270 29	280 23	270 16					
	250530	P	250 07	+++ ++	280 21	270 23	260 26	270 29	260 37	260 42	260 35	270 27	270 22	280 22	280 21	280 20	290 07	340 01			
	251130	T	230 07	+++ ++	250 13	260 21	270 30	260 29	250 34	250 31	250 33	260 18	230 18	290 15	270 15	270 21	270 07	220 03			
	251730	P	050 06	+++ ++	250 08	250 18	260 24	260 32	260 33	260 29	260 29	250 18	220 13	250 09	270 18	260 17	260 04	040 02			
CRAWLEY 03774	242330	T	000 00	+++ ++	270 13	270 14	260 18	260 21	250 25	250 25	250 16	230 12	200 04	040 08	260 16	280 16	280 12	P190 03			
	250530	P	000 00	+++ ++	270 12	260 13	260 20	260 23	250 24	250 27	220 17	270 05	070 01	240 03	270 16	280 15	280 07	040 03			
	251110	P	220 08	+++ ++	250 10	260 13	260 18	270 27	270 23	250 23	250 21	240 10	100 06	120 08	260 14	280 14	260 05	120 05			
	251730	P	190 03	+++ ++	260 16	270 16	270 21	260 26	250 29	260 23	250 23	250 16	250 05	150 06	260 15	250 17	290 13				
CAMBORNE 03808	242330	T	300 03	+++ ++	230 07	250 08	260 18	260 23	260 20	240 16	270 11	030 03	080 11	060 17	260 03	P260 12					
	250530	P	270 02	+++ ++	270 08	270 09	270 16	250 20	250 23	260 15	240 14	070 01	060 17	070 21	280 09	270 12	260 10	070 03	140 08		
	251130	T	280 05	+++ ++	250 08	240 10	250 22	250 21	240 18	250 16	240 20	140 03	090 14	090 17	260 04	270 10	290 03	140 04			
	251730	P	350 06	+++ ++	240 08	240 15	240 20	240 24	230 19	240 21	240 15	220 12	120 04	160 04	260 08	270 11	270 07	020 05	120 09	050 18	
VALENTIA 03953	250001	T	190 03	210 05	+++ ++	260 22	+++ ++	260 27	+++ ++	250 31	260 27	270 14	+++ ++	310 22	+++ ++	300 18					
	251130	T	230 11	230 13	+++ ++	250 25	+++ ++	250 33	+++ ++	250 29	240 30	260 29	+++ ++	240 14							
Ocean Weather Station 'I' 59°00'N 19°00'W	250001	T	270 18	+++ ++	300 20	310 22	290 21	290 25	270 43	270 54	270 84	260 96	260102	260 84	260 60	270 25	270 09	270 12			
	250600	P	270 20	+++ ++	290 16	290 16	290 14	280 18	270 28	260 33	260 43	250 75	250 92	250 68	250 46	280 30	270 11				
	251200	T	270 17	+++ ++	300 32	300 18	290 18	290 20	280 21	270 29	280 27	260 43	260 58	250 55	260 41	270 21	270 12				
	251800	P	315 20	+++ ++	310 16	320 18	310 20	300 18	280 26	270 28	290 23	270 29	270 34	270 38	260 36						
Ocean Weather Station 'J' 52°30'N 20°00'W	250001	T	240 20	+++ ++	240 31	250 33	260 34	260 36	260 35	260 39	260 43	260 38	260 37	260 29	290 29	290 21					
	250600	P	270 20	+++ ++	270 30	270 36	270 34	250 42	250 41	250 39	250 45	250 56	250 50	250 48	250 22	290 21	320 20				
	251200	T	280 13	+++ ++	270 23	270 30	250 43	250 38	250 50	250 49	250 48	250 68	240 70	230 70	250 41	250 18	260 10	330 21			
	251800	P	360 20	+++ ++	290 12	280 18	280 21	280 27	270 33	270 41	270 50	280 41	270 50	260 66	260 39	260 28	250 13	250 06	090 04		
LARKHILL 03743																					

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m	950mb °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
Cloud :— Inversion Levels :—														
Isothermal Levels :—														
YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m	950mb °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
Cloud :— Inversion Levels :—														
Isothermal Levels :—														
RATES OF SUBSCRIPTION: Single copy 5d. or post free 7d. One calendar month 13/-; one quarter 35/-; one year 125/-. For special arrangements for supply to schools and colleges see Form 2452.										Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General Meteorological Office, Air Ministry, Kingsway, London, W.C.2				



STATION		MAX. WIND
LERWICK 03005	21900m 000 00 07280/0 10860/1 21600m 200 11 07100/0 10200/1	270 110 10120m 260 113 09350m 260 118 09160m 260 110 09050m
STORNOWAY 03026	173mb 270 59 092mb 270 12 01720/0 11690/1 13200/1 13790/1 16150/1 038mb 130 03 24200m 080 04 04630/0 06720/0 07640/0 08550/0 11090/1 11560/1 12060/1 16100/1 22200/9	260 111 09980m 260 108 10390m 260 109 10560m 250 117 09810m
SHANWELL 03170	085mb 300 16 12900/1 25400m 120 13 11680/1 13900/1	270 82 11580m 260 88 10920m 250 95 10490m 250 99 10700m
ALDERGROVE 03917	170mb 270 44 13300m 280 42 18000m 280 11 13550/1 178mb 250 49 080mb 270 33 12800m 250 39 11950/1	270 63 11630m 260 65 05880m 260 66 11100m 240 75 10950m
AUGHTON 03322	053mb 270 06 22200m 110 03 053mb 310 06 21900m 120 03	
HEMSBY 03496	22100m 040 01 23100m 080 13	
CRAWLEY 03774	P21900m 080 06 21900m 070 03 17720/2	
CAMBORNE 03808	P16510m 280 12 26100m 070 13 10210/0 316mb 250 08 041mb 080 05 28500m 070 18	
VALENTIA 03953	971mb 340 11 900mb 270 20 723mb 260 28 611mb 250 28 143mb 290 20 078mb 350 06 926mb 250 19 562mb 250 28 275mb 250 25 173mb 250 11	
Ocean Weather Station 'I' 59°00'N 19°00'W	455mb 270 62 116mb 270 39 20100m 260 03 08350/0 10950/1 052mb 270 04 15000m 270 33	260 105 09990m 250 95 10100m 250 61 10950m
Ocean Weather Station 'J' 52°30'N 20°00'W	075mb 280 15 13200m 250 33 18600m 330 19 15400/2 179mb 240 50 054mb 310 15 040mb 340 34 13200m 250 53 18300m 250 13 24900m 090 05 10970/0 11940/0 12940/1 13370/1 22250/5	250 63 09420m 250 78 08940m 250 69 12220m
LARKHILL 03743		

## NOTES ON THE AEROLOGICAL SITUATION

There is still little change in the chief features of the pattern. A significant distortion of the main stream of westerlies, however, now begins to appear near the south of Greenland and is about to have an effect downstream across the British Isles.

AVERAGE AND EXTREME VALUES 1951-55							
JUNE							
LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.							
Press. Level	Average		Extreme Temps.		Wind*		
	Height	Temp.	Max.	Min.	V <sub>R</sub>	V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	22345	-48.1	-42	-55	...	...	(11)
60	19675	-48.1	-41	-55	120	3	8
100	16320	-48.8	-41	-56	244	5	11
150	13660	-48.3	-41	-59	263	10	18
200	11770	-49.8	-39	-67	271	16	27
300	9125	-46.7	-37	-56	271	22	41
400	7160	-32.6	-23	-44	271	18	33
500	5555	-20.8	-11	-31	269	14	26
700	2985	-5.2	3	-14	266	9	19
850	1435	2.8	14	-7	269	6	18
Tropopause		Press. (mb.)	Temp. (°C)		Height (gpm.)		
Average		257	-54.7		10190		
Max.		405	-40		12955		
Min.		172	-68		6890		
LARKHILL/CRAWLEY† at 03, 15h. (Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.)							
Press. Level	Average		Extreme Temps.		Wind*		
	Height	Temp.	Max.	Min.	V <sub>R</sub>	V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	22310	-49.6	-47	-57	106	9	10
60	19675	-51.4	-45	-59	136	3	8
100	16370	-52.6	-46	-61	251	8	13
150	13745	-51.8	-42	-65	265	15	21
200	11890	-54.0	-40	-65	268	20	32
300	9265	-44.7	-36	-54	265	20	39
400	7275	-29.6	-19	-41	265	17	31
500	5640	-17.8	-9	-28	263	15	25
700	3050	-2.1	7	-10	263	11	19
850	1480	5.7	16	-3	264	7	16
Tropopause		Press. (mb.)	Temp. (°C)		Height (gpm.)		
Average		234	-56.8		10950		
Max.		388	-41		13440		
Min.		160	-66		7225		
MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.							
Press. Level	Average		Extreme Temps.		Wind*		
	Height	Temp.	Max.	Min.	V <sub>R</sub>	V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°	Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5	11
60	19670	-60.7	-53	-69	135	4	10
100	16510	-62.9	-57	-71	255	21	24
150	13995	-59.0	-51	-67	265	38	42
200	12185	-56.6	-47	-67	275	42	47
300	9530	-40.1	-33	-46	285	32	38
400	7500	-23.9	-19	-29	285	27	31
500	5835	-11.8	-8	-17	285	24	28
700	3165	7.2	13	-1	290	18	22
850	1535	17.9	27	8	290	9	14
Tropo- pause		Average	Max.	Min.	Max.	Min.	
		Press.	Press.	Press.	Temp.	Temp.	
		mb.	mb.	mb.	°C	°C	
Upper		123	-65.7	...	73	...	-73
Lower		193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

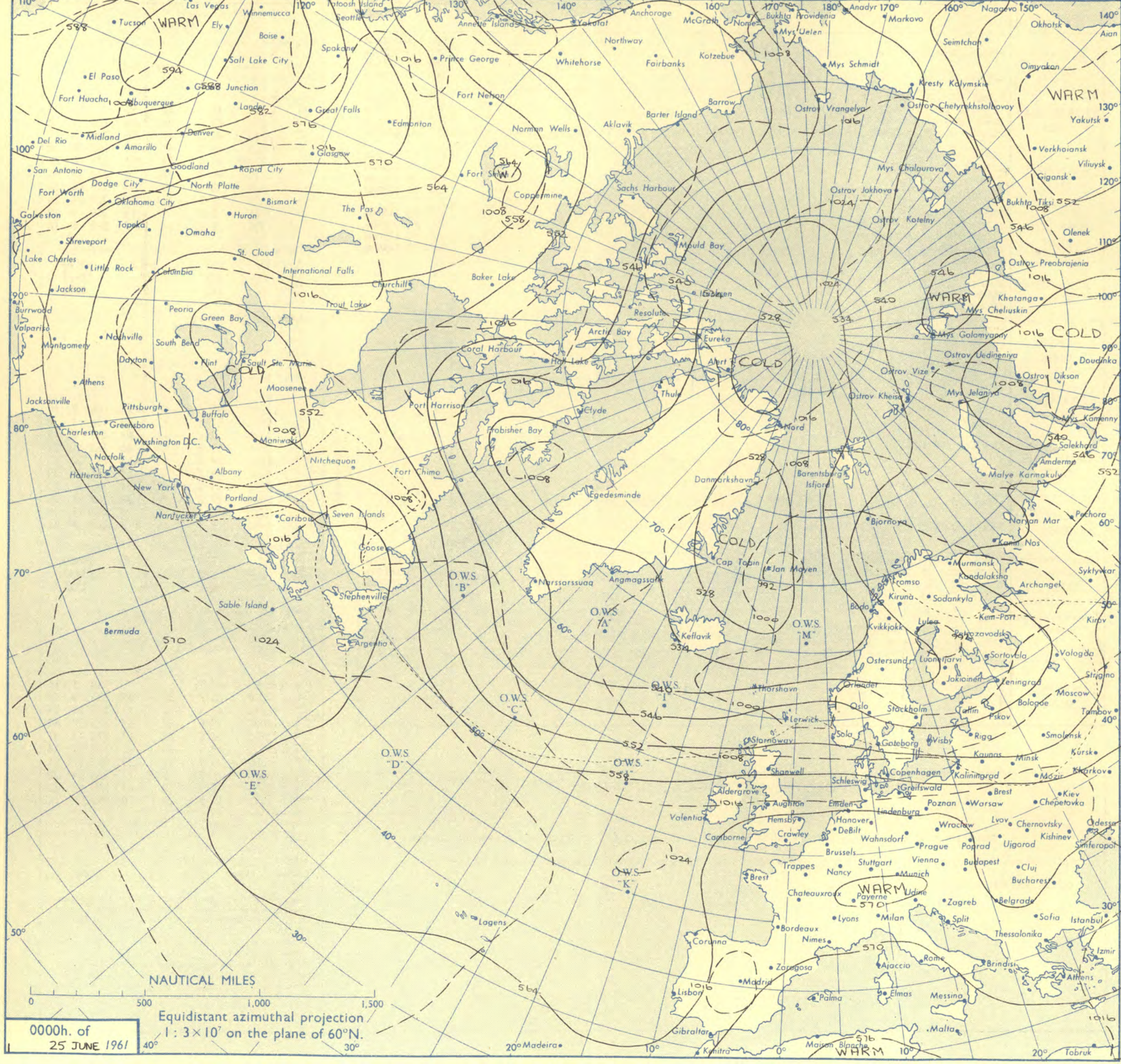
† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.



ISOPLETHS OF 1000-500 mb. THICKNESS WITH SEA LEVEL ANALYSIS

Thickness isopleths in geopotential decametres



NAUTICAL MILES

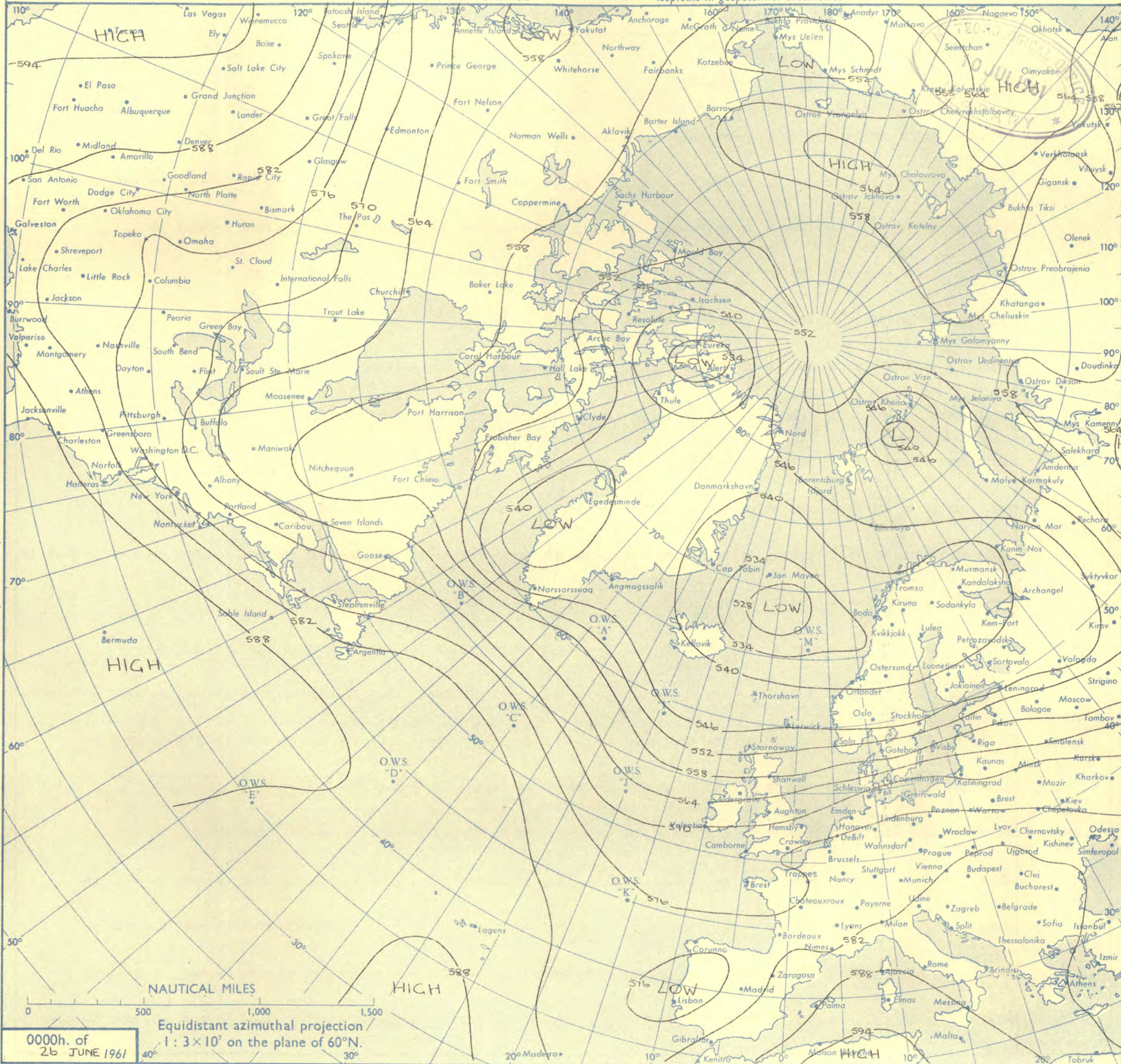
0000h. of  
25 JUNE 1961

Equidistant azimuthal projection  
1: 3 x 10<sup>7</sup> on the plane of 60°N.



CONTOURS OF THE 500 mb. SURFACE

Isopleths in geopotential decametres

0000h. of  
26 JUNE 1961Equidistant azimuthal projection  
1:3 x 10<sup>7</sup> on the plane of 60°N.



STATION	YYGGgg	SURFACE			1000mb			850mb			700mb			500mb			400mb			300mb			200mb			150mb			100mb			70mb			50mb			30mb		
		gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C			
LERWICK 03005	252330	082	08	08	044	++	++	1372	00	04-	2898	08-	20-	5448	22-	37-	7053	22-	37-	9024	45-	++	11743	43-	13673	46-	16360	48-	18719	47-	20945	47-	24341	46-						
	261130	082	09	07	046	++	++	1366	01-	04-	2895	08-	18-	5443	22-	40-	7048	34-	50-	9003	48-	++	11722	42-	13662	43-	16378	46-	18749	47-	20981	46-								
STORNOWAY 03026	252330	013	10	07	060	10	06	1384	01-	05-	2919	06-	22-	5479	21-	34-	7082	34-	43-	9048	44-	++	11754	45-	13669	48-														
	261130	013	12	05	065	12	05	1389	01-	03-	2912	08-	19-	5449	23-	35-	7049	34-	46-	8991	49-	++	11705	44-	13630	46-	16316	48-	18665	47-	20894	45-								
SHANWELL 03170	252330	005	13	11	054	13	10	1400	06	03	2967	04-	13-	5575	16-	19-	7219	27-	30-	9232	41-	++	11883	53-	13753	50-	16392	51-	18717	50-										
	261130	005	11	10	056	10	09	1386	02	02	2924	04-	20-	5503	20-	37-	7123	30-	46-	9110	45-	++	11782	47-	13693	48-	16360	49-												
ALDERGROVE 03917	252330	077	13	12	078	13	12	1419	05	03	2992	00	02-	5624	14-	18-	7276	27-	32-	9293	42-	++	11942	54-	13799	54-	16407	53-												
	261130	077	11	07	084	10	06	1407	00	01-	2953	03-	25-	5537	18-	43-	7167	28-	50-	9172	42-	++	11878	43-	13803	47-	16475	49-	18826	46-	21058	46-								
AUGHTON 03322	252330	056	14	12	094	14	12	1450	07	05	3038	02	14-	5661	14-	29-	7316	25-	39-	9346	41-	++	11983	61-	13803	57-														
	261130	056	14	08	077	13	07	1418	05	03	2987	01-	07-	5608	16-	20-	7253	27-	40-	9267	42-	++	11928	49-	13808	52-														
HEMSBY 03496	252300	012	15	12	091	22	15	1485	13	00	3092	04	04-	5747	12-	19-	7417	23-	33-	9467	36-	46-	12166	56-	13977	56-														
	261130	012	18	14	069	17	13	1438	11	02	3031	00	01-	5669	13-	16-	7335	25-	41-	9362	41-	++	12021	55-	13872	50-	16516	51-	18844	49-	21066	47-	24460	48-						
CRAWLEY 03774	252330	144	13	12	112	++	++	1501	15	02	3113	04	00	5756	13-	20-	7417	25-	37-	9442	41-	++	12090	58-																
	261130	144	21	16	072	++	++	1450	10	08	3046	02	00	5681	14-	23-	7336	26-	36-	9353	41-	++	11987	60-	13814	53-	16418	55-	18696	54-										
CAMBORNE 03808	252330	088	13	12	120	13	11	1491	14	11-	3103	04	01	5749	12-	29-	7418	24-	39-	9453	39-	++	12127	57-	13950	55-	16541	56-	18813	55-	20976	51-	24275	52-						
	261230	088	16	12	093	15	12	1443	10	03-	3034	02	05-	5660	15-	31-	7311	26-	36-	9331	41-	++	11988	55-	13855	49-	16485	53-	18785	51-	20988	48-								
VALENTIA 03953	252330	014	15	14	112	14	13	1469	09	07	3060	02	00	5700	14-	32-	7360	24-	32-	9390	39-	48-	12050	57-																
	261132	014	14	09	109	12	07	1440	00	03-	2999	01-	19-	5590	17-	36-	7230	30-	47-	9220	44-	++	11900	45-	++++	++	16450	52-												
Ocean Weather Station 'I' 59°00'N 19°00'W	260001		10	07	093	09	06	1415	01-	05-	2940	10-	18-	5470	23-	33-	7070	34-	42-	9020	49-	++	11710	43-	13650	44-	16350	47-	18710	47-	20930	47-								
	261200		10	05	116	08	03	1432	02-	05-	2970	06-	14-	5520	23-	31-	7130	32-	41-	9110	46-	++	11780	44-	13700	46-	16400	46-	18760	46-	21010	46-								
Ocean Weather Station 'J' 52°30'N 20°00'W	260001		12	07	140	10	06	1462	06	08-	3033	00	18-	5650	15-	34-	7300	27-	43-	9310	43-	++	11960	49-	13850	50-	16470	53-	18790	52-	20960	52-								
	261200		13	06	170	11	06	1493	03	06-	3066	00	16-	5690	16-	30-	7330	27-	37-	8350	41-	++	11990	58-	13820	53-	16430	55-	18720	54-	20890	54-	24180	53-						



## PRESSURES AND TEMPERATURES OF SIGNIFICANT LEVELS

Page 3

STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	02 755++	005 995 852	993 09 07 968 08 04 888 ++ 03- 800 04- 06- 726 06- 15- 700 ++ 20- 514 20- 36- 455 ++ 37- 382 36- 47- 362 37- 48- 308 45- 204 43- 100 48- 030 46-			308	08840	45-
	80 5343+	006 996 870	986 ++ 02 965 ++ 00 890 01 01- 822 02- 06- 814 02- 06- 718 ++ 12- 693 ++ 20- 684 ++ 20- 650 11- 28- 523 20- 38- 404 33- 49- 303 48- 288 48- 256 43- 207 42- 100 46- 073 48- 045 46-			303	08920	48-
STORNOWAY 03026	02 757++	007 006 866	979 09 01 854 ++ 04- 809 04- 08- 804 01- 06- 786 ++ 14- 735 04- 19- 586 ++ 31- 546 17- 29- 513 ++ 34- 399 34- 43- 351 40- 50- 261 47- 242 45- 177 45- 151 48- 105 48-			261	09980	47-
	02 62560	008 006 865	912 03 00 844 02- 04- 807 ++ 05- 780 ++ 11- 744 07- 14- 709 08- 18- 639 ++ 24- 418 32- 44- 371 39- 50- 303 49- 245 43- 076 50- 072 47- 063 49- 043 45-			303	08920	49-
SHANWELL 03170	02 28540	007 006 750	876 07 03 849 ++ 03 775 02 08- 722 ++ 13- 693 05- 13- 683 ++ 13- 669 ++ 14- 631 05- 14- 608 ++ 10- 454 21- 24- 379 30- 33- 306 40- 45- 271 47- 230 54- 144 50- 100 51- 095 52- 087 49- 082 51- 065 49- Pressure doubtful above 100mb.			230	11000	54-
	60 774++	007 006 822	992 09 08 938 ++ 06 760 04- 05- 752 ++ 06- 748 05- 07- 731 03- 13- 704 ++ 20- 623 09- 22- 612 ++ 26- 400 30- 46- 333 39- 50- 274 50- 260 50- 252 52- 225 46- 100 49- 085 50-			252	10250	52-
ALDERGROVE 03917	63 863++	009 000 705	980 11 10 786 02 00 717 00 02- 604 05- 07- 578 ++ 09- 425 23- 28- 381 30- 36- 342 34- 42- 310 40- 47- 224 56- 181 52- 138 55- 100 53-			224	11210	56-
	15 784++	010 001 846 782	996 09 05 945 05 03 920 ++ 02 900 ++ 02 793 03- 04- 782 00 12- 770 ++ 19- 760 ++ 18- 750 ++ 30- 738 01- 27- 710 ++ 22- 540 15- 39- 409 27- 50- 371 33- 46- 360 33- 47- 258 49- 217 42- 140 48- 086 49- 044 44- 042 41- 036 47-			258	10130	49- :036 +++++ 47-
AUGHTON 03322	02 755++	012 005 670	994 ++ 09 938 11 09 845 07 05 824 05 02 809 07 07- 800 08 09- 784 ++ 14- 755 ++ 11- 678 01 17- 649 ++ 14- 623 05- 18- 542 ++ 27- 342 32- 47- 302 40- ++ 207 61- 195 61- 184 55- 150 57-			207	11770	61-
	02 856++	009 003 710	986 11 05 947 ++ 03 925 07 03 907 ++ 05 820 05 02 733 00 03- 712 00 07- 667 03- 06- 625 05- 14- 597 07- 13- 561 ++ 15- 536 13- 21- 522 ++ 19- 475 ++ 22- 432 23- 29- 420 ++ 34- 398 27- 41- 312 40- ++ 219 55- 198 48- 151 52- 142 50-			219	11320	55-
HEMSBY 03496	02 00900	011 009 646	000 22 15 989 ++ 10 889 15 09 840 ++ 02- 770 ++ 00 728 ++ 08- 689 ++ 03- 670 ++ 06- 652 ++ 06- 582 ++ 10- 528 ++ 19- 509 11- 18- 337 31- 41- 283 39- 49- 179 60- 141 55- 123 55-			179	12840	60-
	60 8096+	008 007 699	994 16 10 984 18 10 960 16 07 928 ++ 09 910 12 04 878 12 04- 847 ++ 02 828 09 00 802 09 04 690 01- 02- 665 01- 02- 462 17- 20- 370 29- 34- 304 40- 46- 273 44- 248 50- 222 55- 203 56- 165 55- 155 50- 092 51- 037 45- 030 48-			203	11950	56-
CRAWLEY 03774	02 00900	013 996 658	980 19 12 976 ++ 10 946 ++ 13 914 16 12 890 17 06 851 ++ 02 835 ++ 04- 825 14 01- 750 ++ 05 706 ++ 00 667 ++ 02- 635 ++ 07- 612 04- 08- 543 ++ 14- 444 19- 32- 308 ++ 50- 288 43- 223 55- 189 60- 181 55- 157 55-			(189	12440	60-)
	02 38489	008 992 675	962 16 13 925 ++ 08 898 ++ 10 783 08 05 682 ++ 02- 650 ++ 06- 628 ++ 12- 606 ++ 09- 578 ++ 10- 568 ++ 11- 561 ++ 15- 522 ++ 23- 435 21- 31- 306 40- 50- 258 50- 199 60- 151 53- 084 56- 057 53-			199	12030	60-
CAMBORNE 03808	02 863++	014 004 659	958 11 10 944 17 04- 911 ++ 05- 865 14 00 850 ++ 11- 840 ++ 10- 832 13 04- 806 ++ 06 773 ++ 06 699 04 01 650 ++ 02- 632 ++ 09- 612 ++ 07- 560 09- 11- 548 ++ 15- 529 ++ 17- 519 10- 24- 500 ++ 29- 414 ++ 36- 325 35- 49- 260 46- 191 58- 131 54- 085 56- 030 52-			191	12430	58-
	02 455++	011 001 672	989 13 11 913 ++ 07 892 07 03 866 11 02- 833 ++ 06- 820 08 02 761 06 01- 741 ++ 05- 696 01 06- 670 ++ 12- 621 05- 15- 513 13- 28- 442 21- 33- 345 ++ 40- 304 40- 45- 224 54- 213 55- 196 55- 190 53- 153 49- 102 53- 045 48-			213	11540	55-
VALENTIA 03953	60 864++	013 012 670	879 08 06 842 09 07 657 01- 03- 630 04- 06- 605 04- 22- 563 08- 29- 450 19- 28- 352 30- 40- 217 57- 204 57- 188 54- 122 54-			217	11600	57-
	03 785++	013 011 850	924 06 02 837 01- 05- 810 05 06- 799 04 11- 716 01- 18- 691 01- 18- 635 07- 24- 481 18- 37- 353 37- 337 37- 261 48- 235 47- 219 49- 202 44- 190 45- 178 48- 136 48- 097 52-			261	10100	48- 178 12600 48-
Ocean Weather Station 'I' 59°00'N 19°00'W	03 48400	011 011 860	971 07 04 900 ++ 00 835 02- 07- 795 ++ 07- 782 04- 12- 641 15- 23- 620 14- 22- 599 ++ 27- 473 26- 36- 355 40- 47- 290 50- 237 46- 212 42- 116 47- 057 48- 033 46-			290	09200	50-
	02 885++	014 014 819 888	942 04 01 854 02- 05- 843 ++ 04- 829 00 06- 814 ++ 09- 779 01- 10- 718 05- 15- 653 08- 19- 548 18- 23- 522 ++ 27- 472 26- 31- 456 26- 31- 444 ++ 34- 405 ++ 40- 370 35- 44- 340 40- 47- 272 50- 238 50- 198 44- 075 47- 061 44- 045 46- 038 44-			272	09800	50-
Ocean Weather Station 'J' 52°30'N 20°00'W	02 756++	017 017 880 696	922 03 01 886 ++ 01- 875 00 04- 808 ++ 13- 707 01 17- 643 05- 22- 550 10- 28- 463 19- 39- 318 40- 277 48- 230 54- 205 49- 097 53- 040 50-			230	11100	54-
	01 756++	021 021 868 701	969 08 05 932 ++ 03 859 01- 09- 843 05 05- 797 04 11- 686 01- 17- 540 11- 25- 514 15- 29- 444 21- 33- 305 40- 47- 229 54- 201 58- 151 53- 103 54-			201	12000	58-



STATION	YYGGgg	Type	Surface	1000mb	900m	850mb 1500m	750mb 2100m	700mb 3000m	600mb 4200m	500mb 5400m	400mb 7200m	300mb 9000m	250mb 10500m	200mb 12000m	150mb 14100m	100mb 15900m	70mb 18300m	50mb 20700m	30mb 23700m	20mb 26400m	10mb 30900m
LERWICK 03005	252330	T	010 02	+++ ++	270 06	260 06	280 08	270 13	270 22	260 36	260 49	250 85	250 77	250 55	250 44	270 25	260 12	290 12	110 10		
	260530	P	000 00	+++ ++	350 03	270 02	270 06	270 08	250 18	250 30	250 34	240 63	240 65	250 43	260 31	250 20	240 12	090 05			
	261130	T	000 00	+++ ++	000 00	000 00	250 02	250 05	260 13	250 25	250 27	260 20	240 43	240 41	250 33	240 21	250 07	060 03			
	261730	P	000 00	+++ ++	020 13	020 04	350 03	330 08	260 16	250 24	240 30	250 18	240 45	250 36	250 26	240 20	240 11	140 06			
STORNOWAY 03026	252330	T	270 07	+++ ++	280 13	280 12	260 16	260 21	260 29	250 42	240 58	240 87	240 80	250 58	250 42						
	260530	P	000 00	+++ ++	290 10	280 11	270 11	280 17	260 23	260 28	270 24	240 55	240 55	250 46	260 34	240 23					
	261130	T	300 12	+++ ++	290 11	270 12	290 10	290 12	280 13	260 24	250 30	250 22	240 35	250 31	250 29	250 17	260 07	060 02			
	261730	P	330 12	+++ ++	330 12	320 13	320 13	320 17	300 15	290 16	260 21	280 17	260 31	260 32	260 29	260 17	250 04				
SHANWELL 03170	252330	T	270 12	+++ ++	270 21	270 21	260 24	260 36	250 46	250 53	240 68	240 90	240 93	250 74	250 45	270 17	P270 13				
	260530	P	280 12	+++ ++	260 12	260 12	250 20	250 26	250 36	240 57	240 70	240 83	230 82	250 69	260 38	250 20					
	261130	T	070 14	+++ ++	330 07	300 09	280 10	260 21	250 27	250 40	230 73	230 82	230 86	240 52	240 38	240 16					
	261730	P	120 06	+++ ++	210 03	290 14	310 16	300 12	260 19	240 29	230 56	220 81	230 68	240 42	240 32	240 17	250 11				
ALDERGROVE 03917	252330	T	240 07	+++ ++	260 16	260 21	260 38	250 43	250 48	250 55	240 63	240 74	240 83	270 59							
	260530	P	280 05	+++ ++	280 17	280 19	270 20	270 26	260 29	250 52	240 61	240 69	230 81	240 55	250 41	260 25	250 06	340 03			
	261130	T	330 10	+++ ++	290 14	290 14	280 15	270 23	250 31	250 36	230 60	230 73	230 70	230 48	250 37	250 22	260 09				
	261730	P	330 12	+++ ++	320 20	300 20	300 20	290 17	270 22	270 23	270 24	230 42	240 42	250 31	250 26	260 21	260 17	130 02			
AUGHTON 03322	252330	T	190 05	+++ ++	260 18	250 23	250 35	250 39	250 45	250 49	250 46	240 44	240 39	240 35	260 20	P280 21	280 07				
	260530	P	220 06	+++ ++	260 19	250 23	250 32	250 36	240 43	240 47	240 54	240 52	230 50	240 45	250 32	270 22	270 08				
	261130	T	290 07	+++ ++	290 14	270 17	260 26	250 36	250 41	230 46	230 55	220 61	220 71	240 56	240 36						
	261730	P	270 10	+++ ++	320 17	300 22	270 22	270 21	250 31	230 44	220 57	210 73	220 75	240 47	240 26	250 20					
HEMSBY 03496	252330	T	210 05	+++ ++	260 13	250 19	250 30	260 34	260 36	250 36	250 34	230 24	240 14	230 19	260 17						
	260530	P	260 07	+++ ++	250 15	250 25	250 30	250 35	240 32	240 41	240 37	240 42	250 39	250 30	240 23	250 15	270 07	090 04			
	261130	T	040 07	+++ ++	240 20	240 20	220 32	220 33	220 31	230 36	230 41	220 59	230 68	220 54	240 25	240 13	260 10	210 06			
	261730	P	150 05	+++ ++	230 07	260 19	250 22	230 26	220 28	230 32	230 41	220 59	220 54	220 46	240 26	230 20					
CRAWLEY 03774	252330	T	000 00	+++ ++	260 12	260 14	250 24	250 26	240 25	250 22	250 25	240 33	240 34	240 27							
	260530	P	180 05	+++ ++	220 15	240 19	250 22	240 21	230 22	230 28	240 34	230 40	230 54	250 21	240 20	250 22					
	261110	P	180 03	+++ ++	230 12	220 17	240 21	230 33	230 32	220 22	220 37	220 39	210 52	220 37	250 18	240 19	260 08	170 03	100 16	080 28	090 23
	261730	P	330 04	+++ ++	290 10	270 16	260 27	240 26	230 25	230 32	220 37	220 45	210 51	220 36	240 21	240 22					
CAMBORNE 03808	252330	T	310 08	+++ ++	280 07	250 15	230 21	220 17	210 21	220 20	220 21	240 17	240 10	240 11	230 10	250 14	P300 07	190 03	060 12		
	260530	P	320 06	+++ ++	290 08	250 11	240 18	240 20	240 14	230 19	230 24	230 16	270 12	290 15	250 14	230 14	270 08				
	261230	T	280 12	+++ ++	290 16	280 16	250 18	260 21	250 23	240 26	230 32	240 28	240 33	240 25	260 18	240 12	270 09	170 06			
	261820	P	290 12	+++ ++	310 17	320 17	290 16	280 27	260 30	250 38	230 39	230 49	220 50	260 40	260 25	240 18	250 06	030 07	100 08	080 17	
VALENTIA 03953	252330	T	230 06	230 08	+++ ++	270 22	+++ ++	260 33	+++ ++	250 39	250 42	240 49	+++ ++	250 44							
	261132	T	350 11	350 13	+++ ++	320 20	+++ ++	290 25	+++ ++	260 49	250 44	240 64	+++ ++	260 44	+++ ++	260 23					
Ocean Weather Station 'I' 59°00'N 19°00'W	260001	T	310 20	+++ ++	310 21	320 20	330 27	330 25	320 27	300 33	290 35	300 33	290 36	290 36	290 34	270 36	250 21	290 10			
	260600	P	315 20	+++ ++	300 16	300 17	300 23	300 25	300 27	310 38	310 36	310 44	310 43	310 34	310 26	310 20	310 08				
	261200	T	260 15	+++ ++	270 21	270 22	280 23	290 25	300 33	310 48	310 76	310 80	310 75	310 45	310 29	300 21	300 09				
	261800	P	270 20	+++ ++	260 21	270 24	280 24	280 24	280 36	300 49	300 66	300 85	310 82	310 47	300 31	300 19	300 08	120 05			
Ocean Weather Station 'J' 52°30'N 20°00'W	260001	T	330 17	+++ ++	320 14	300 18	290 27	300 28	290 36	280 44	270 56	270 61	270 60	270 52	250 40	270 18	270 05	000 00			
	260600	P	360 10	+++ ++	330 15	320 18	320 23	310 30	310 36	310 48	300 58	300 67	310 82	290 66	290 44	260 35	280 18	300 08			
	261200	T	330 07	+++ ++	330 03	340 10	340 20	340 24	320 22	310 35	300 43	300 51	300 52	310 53	310 46	300 25	310 15	310 10	000 00		
	261800	P	315 10	+++ ++	300 06	300 11	300 15	300 21	290 30	310 39	310 36	310 43	310 50	320 57	330 46	290 30	290 18	010 07			
LARKHILL 03743	260630	P	220 03	+++ ++	240 20	240 23	240 20	240 21	230 27	230 32	220 34	220 39	230 47	220 21	250 20						
	261030	P	310 06	+++ ++	250 13	240 20	250 21	250 20	230 28	220 30	210 29	220 40	210 39	230 27	240 21	260 17	230 08				

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE			SURFACE		1000mb	950mb	900mb	850mb	800mb	750mb	700mb	650mb	600mb	550mb	500mb	
		MSL	Surf.	0°C level	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C
261040	56.6°N 04.7°E	005	997	734	061	12 07	040	09 09	914	08 08	1381	05 05	1878	03 03	01 01	2950	02- 05-	
Cloud :— 7/8st. 300 to 900ft; 8/8sc. 2200 to 6000ft; 8/8sc. 7000 to 10000ft; 8/8As. 11000ft. to T.N.G.																		
Inversion Levels :— Isothermal Levels :— 950mb to 925mb 09½°C.																		
YYGGgg	POSITION	PRESSURE			SURFACE		1000mb	950mb	900mb	850mb	800mb	750mb	700mb	650mb	600mb	550mb	500mb	
		MSL	Surf.	0°C level	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C	m	°C °C
Cloud :—																		
Inversion Levels :— Isothermal Levels :—																		
RATES OF SUBSCRIPTION: Single copy 5d. or post free 7d. One calendar month 13/-; one quarter 35/-; one year 125/-.														Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General				
For special arrangements for supply to schools and colleges see Form 2452.														Meteorological Office, Air Ministry, Kingsway, London, W.C.				



STATION		MAX. WIND
LERWICK 03005	365mb 250 70 23400m 070 08 09600m 240 35 23400m 020 05	250 88 09460m 240 72 09500m
STORNOWAY 03026	116mb 270 31 16300m 240 25 08180/0 08660/0 047mb 070 05 20200m 230 02 09300/0	240 95 09700m
SHANWELL 03170	P20100m 290 12 17100m 240 19 087mb 240 14 20100m 270 05 07260/0 10390/1 10870/1	240 96 10500m 240 86 09520m 230 88 09980m 220 82 09150m
ALDERGROVE 03917	11200/4 16350/1 447mb 240 52 060mb 190 05 22800m 120 06	240 84 10800m 230 86 10920m 230 88 09920m
AUGHTON 03322	18000m 260 09 01550/5 11020/1	220 72 10620m 210 80 09770m
HEMSBY 03496	137mb 250 19 22950m 090 11 033mb 090 05 17700m 230 12	240 71 10160m 210 63 10310m
CRAWLEY 03774	177mb 240 22 18000m 270 11 11190/4 33000m 110 29 35400m 100 42 13200/1	
CAMBORNE 03808	P24100m 180 17 19800m 030 05 047mb 180 05 11140m 240 44 27900m 070 25 15090/5	
VALENTIA 03953	879mb 270 17 637mb 250 34 605mb 250 37 450mb 250 35 352mb 250 45 188mb 250 39 799mb 300 20 635mb 280 27 353mb 250 50 261mb 250 52 178mb 270 44 097mb 260 43	240 66 08980m
Ocean Weather Station 'I' 59°00'N 19°00'W	037mb 290 05 436mb 310 62 228mb 310 59 042mb 000 00 11700m 310 64 22800m 120 06	320 94 08520m 310 90 0990m
Ocean Weather Station 'J' 52°30'N 20°00'W	128mb 270 28 044mb 000 00 16800m 270 25 19500m 290 12 22200m 300 13 1610/0 6500/0 12800/1 16060/1 19680/1 530mb 310 29 143mb 300 34 21300m 010 06	260 65 11010m 310 84 10160m 310 66 10020m 320 61 12020m
LARKHILL 03743		

## NOTES ON THE AEROLOGICAL SITUATION

The trough from Greenland to the Great Lakes has weakened and there has been further distortion in the pattern across the Atlantic with a trough developing near the British Isles. The low near Iceland is nearly stationary and is filling and the trough near Spain is moving slowly east.

## AVERAGE AND EXTREME VALUES 1951-55

## JUNE

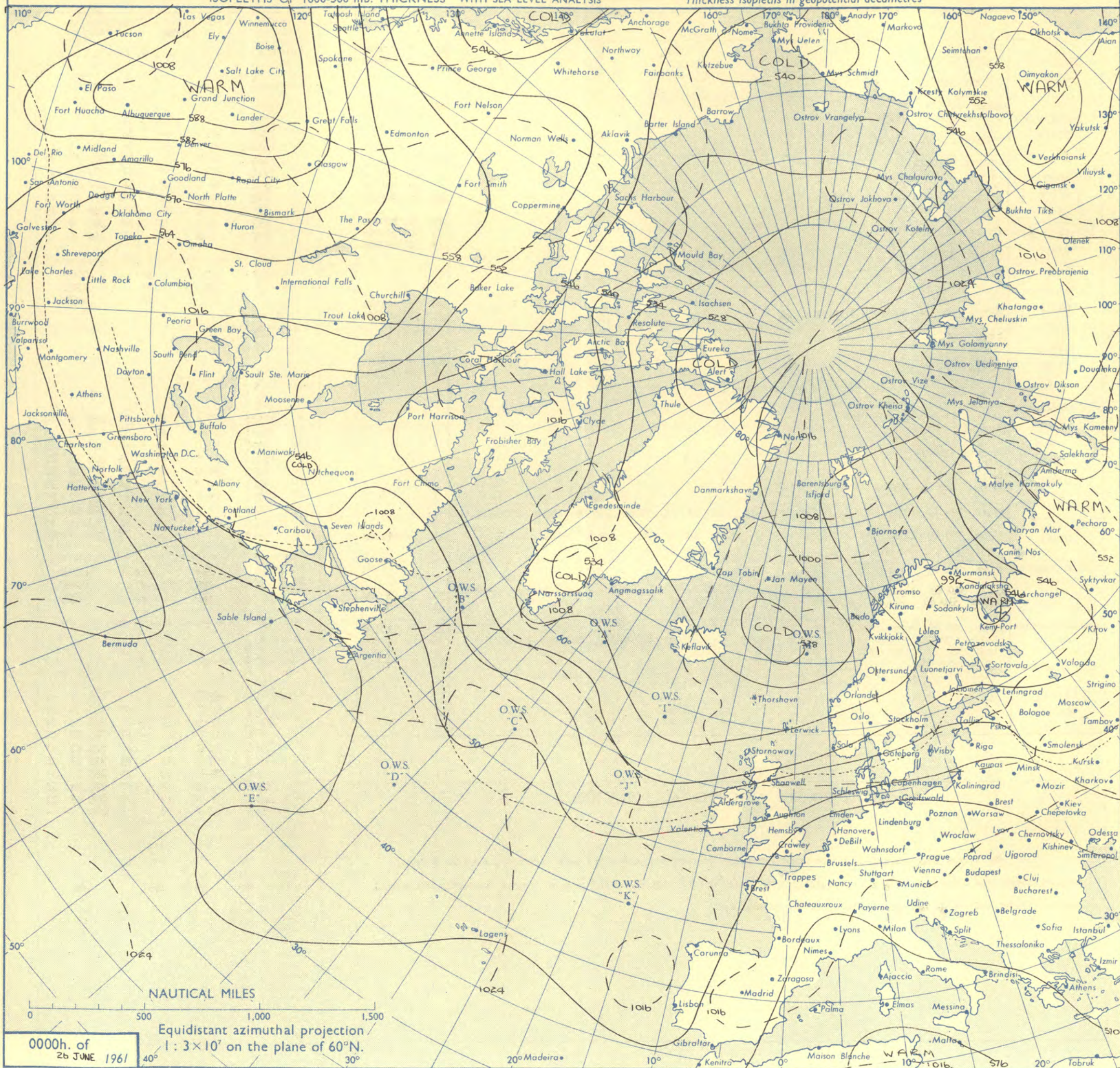
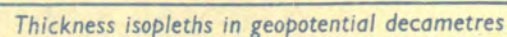
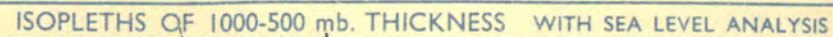
LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.						
Press. Level	Average Height      Temp.		Extreme Temps. Max.      Min.		Wind* V <sub>R</sub> V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°      Kt.	Kt.
40	22345	-48.1	-42	-55	...    ...	(11)
60	19675	-48.1	-41	-55	120    3	8
100	16320	-48.8	-41	-56	244    5	11
150	13660	-48.3	-41	-59	263    10	18
200	11770	-49.8	-39	-67	271    16	27
300	9125	-46.7	-37	-56	271    22	41
400	7160	-32.6	-23	-44	271    18	33
500	5555	-20.8	-11	-31	269    14	26
700	2985	-5.2	3	-14	266    9	19
850	1435	2.8	14	-7	269    6	18
Tropopause		Press. (mb.)	Temp. (°C)		Height (gpm.)	
Average		257	-54.7		10190	
Max.		405	-40		12955	
Min.		172	-68		6890	
LARKHILL/CRAWLEY† at 03, 15h. (Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.)						
Press. Level	Average Height      Temp.		Extreme Temps. Max.      Min.		Wind* V <sub>R</sub> V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°      Kt.	Kt.
40	22310	-49.6	-47	-57	106    9	10
60	19675	-51.4	-45	-59	136    3	8
100	16370	-52.6	-46	-61	251    8	13
150	13745	-51.8	-42	-65	265    15	21
200	11890	-54.0	-40	-65	268    20	32
300	9265	-44.7	-36	-54	265    20	39
400	7275	-29.6	-19	-41	265    17	31
500	5640	-17.8	-9	-28	263    15	25
700	3050	-2.1	7	-10	263    11	19
850	1480	5.7	16	-3	264    7	16
Tropopause		Press. (mb.)	Temp. (°C)		Height (gpm.)	
Average		234	-56.8		10950	
Max.		388	-41		13440	
Min.		160	-66		7225	
MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.						
Press. Level	Average Height      Temp.		Extreme Temps. Max.      Min.		Wind* V <sub>R</sub> V <sub>S</sub>	
mb.	gpm.	°C	°C	°C	°      Kt.	Kt.
40	(22185)	(-60.7)	...	...	120    5	11
60	19670	-60.7	-53	-69	135    4	10
100	16510	-62.9	-57	-71	255    21	24
150	13995	-59.0	-51	-67	265    38	42
200	12185	-56.6	-47	-67	275    42	47
300	9530	-40.1	-33	-46	285    32	38
400	7500	-23.9	-19	-29	285    27	31
500	5835	-11.8	-8	-17	285    24	28
700	3165	7.2	13	-1	290    18	22
850	1535	17.9	27	8	290    9	14
Tropo- pause		Average	Max.	Min.	Max.	Min.
		Press.	Temp.	Press.	Press.	Temp.
		mb.	°C	mb.	mb.	°C
Upper		123	-65.7	...	73	...
Lower		193	-59.8	266	...	-46

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.



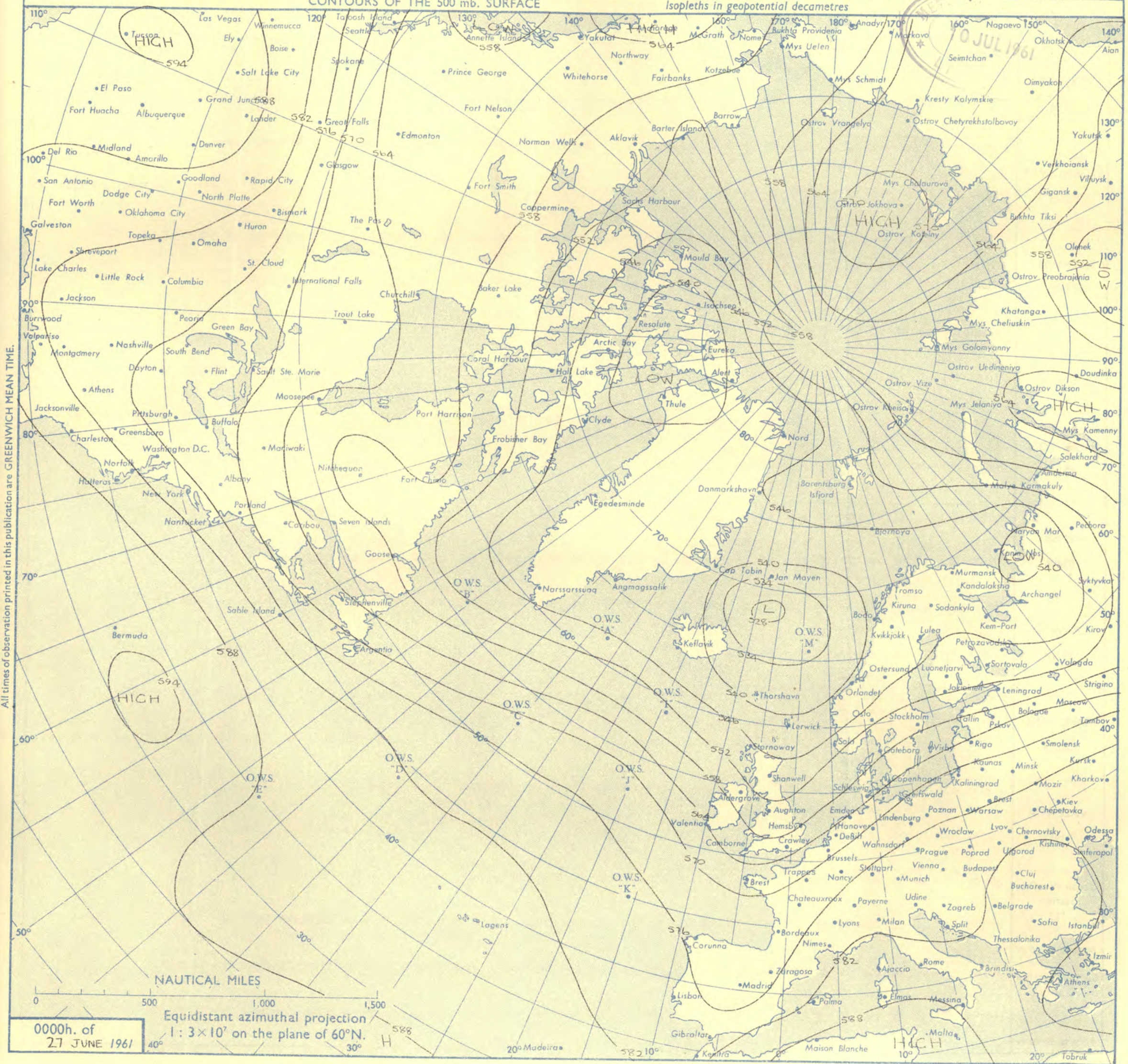




CONTOURS OF THE 500 mb. SURFACE

Isopleths in geopotential decametres

All times of observation printed in this publication are GREENWICH MEAN TIME.

0000h. of  
27 JUNE 1961Equidistant azimuthal projection  
1: 3 x 10<sup>7</sup> on the plane of 60°N.



STATION	YYGGgg	SURFACE	1000mb	850mb	700mb	500mb	400mb	300mb	200mb	150mb	100mb	70mb	50mb	30mb	
		gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C	gpm °C	gpm °C	gpm °C	gpm °C	gpm °C
LERWICK 03005	262330	082 06 06 069 ++ ++	1390 01- 04- 2911 11- 18- 5424 26- 34- 7011 36- 43- 8948 51- ++	11647 43- 13578 44- 16282 46- 18614 47- 20865 47-											
	271133	082 12 06 074 ++ ++	1397 01- 05- 2917 11- 17- 5422 27- 38- 6996 38- 48- 8938 45- ++	11685 41- 13632 41- 16341 45- 18713 47- 20936 48-											
STORNOWAY 03026	262330	013 07 05 101 09 05 1423 00 05- 2950 10- 16- 5475 25- 34- 7062 36- 43- 9011 45- ++	11741 44- 13669 45- 16359 46-												
	271130	013 11 09 098 09 06 1423 00 01- 2957 08- 11- 5505 23- 27- 7111 32- 37- 9085 45- ++	11759 44- 13679 45- 16367 46- 18737 46- 20967 44- 24428 43-												
SHANWELL 03170	262330	005 10 09 084 10 08 1446 01 01- 2949 09- 11- 5490 23- 35- 7087 35- 45- 9035 46- ++	11760 44- 13685 47- 16368 48- 18713 48-												
	271130	005 15 05 116 13 03 1450 01 03- 2975 09- 13- 5525 21- 25- 7136 33- 27- 9106 46- ++	11776 44- 13699 46- 16374 49-												
ALDERGROVE 03917	262330	077 09 07 117 09 07 1443 00 02- 2980 06- 19- 5533 23- 37- 7132 33- 46- 9103 44- ++													
	271130	077 13 06 157 12 06 1488 00 01- 3027 05- 08- 5628 16- 20- 7265 29- 35- 9261 43- ++	11883 52- 13767 49- 16412 52- 18727 51- 20922 50- 24278 49-												
AUGHTON 03322	262330	056 11 07 097 12 09 1430 01 03- 2970 04- 17- 5535 22- 35- 7140 33- 45- 9110 42- ++	11828 46- 13723 49- 16369 52- 18684 51- 20882 50- 24221 49-												
	271130	056 14 05 155 11 01 1485 02 13- 3022 06- 15- 5600 18- 26- 7225 31- 38- 9197 47- ++	11828 49- 13717 50- 16356 52- 18664 52- 20843 52-												
HEMSBY 03496	262330	012 14 13 060 13 11 1411 06 04 2984 02- 04- 5594 17- 21- 7228 30- 34- 9211 46- ++	11865 49- 13741 52-												
	271130	012 16 09 124 12 06 1460 03 02- 3006 05- 18- 5577 21- 36- 7197 30- 42- 9192 41- ++	11940 42- 13875 44-												
CRAWLEY 03774	262330	144 13 12 077 ++ ++	1436 08 06 3012 01- 15- 5627 16- 19- 7267 28- 33- 9271 43- ++	11935 51- 13817 51- 16432 53- 18732 53-											
	271130	144 15 05 145 15 05 1486 02 03- 3039 02- 20- 5648 17- 30- 7283 29- 41- 9278 43- ++	11932 51- 13817 50- 16448 53- 18743 53- 20912 54-												
CAMBORNE 03808	262330	088 13 11 118 13 11 1459 02 00 3015 01- 17- 5620 17- 39- 7251 30- 49- 9232 46- ++	11894 49- 13779 51- 16398 54- 18696 52- 20877 51-												
	271130	088 15 08 189 12 06 1522 03 09- 3080 03- 14- 5682 17- 26- 7319 29- 38- 9300 46- ++	11898 54- 13749 53- 16352 55- 18634 54- 20795 53- 24135 46-												
VALENTIA 03953	262330	014 12 08 159 11 08 1489 01 02- 3049 01- 15- 5670 15- 20- 7310 28- 35- 9310 44- ++	11940 53-												
	271130	014 14 09 190 11 08 1528 03 03- 3090 01- 06- 5700 16- 21- 7340 28- 32- 9340 42- ++	11960 58- +++++ ++ 16420 54-												
Ocean Weather Station 'I'  59°00'N 19°00'W	270001	10 09 096 09 07 1423 02 01 2964 07- 09- 5540 18- 21- 7170 30- 34- 9150 46- ++	11790 48- 13690 46-												
	271200	11 08 081 10 08 1406 02 01 2966 01- 09- 5580 15- 23- 7230 26- 33- 9250 41- ++	11920 48- 13830 47- 16510 46-												
Ocean Weather Station 'J'  52°30'N 20°00'W	270001	12 06 192 10 06 1520 06 10- 3092 00 13- 5730 14- 21- 7390 25- 32- 9420 39- 45- 12070 59- 13900 55- 16510 53- 18810 52-													
	271200	12 08 186 10 07 1519 09 09- 3110 03 27- 5750 13- 33- 7410 26- 42- 9440 40- ++	12090 59- 13920 53- 16510 56- 18790 52-												



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	02 18130	008 998 860	989 09 06 912 03 01 797 ++ 08- 791 ++ 11- 750 ++ 12- 721 ++ 17- 702 11- 18- 648 ++ 20- 626 ++ 26- 533	++ 30- 467 ++ 37- 416 34- 41- 372 40- 46- 291 52- 251 44- 100 46- 057 48- 035 45-		291	09140	52-
	02 34932	009 999 868	990 09 03 820 03- 07- 796 04- 09- 751 ++ 12- 699 ++ 17- 681 ++ 17- 648 ++ 23- 513 25- 36- 496 28- 40- 474	29- 41- 383 40- 50- 354 43- 306 46- 250 41- 200 41- 125 46- 100 45- 053 48- 042 47-		306	08800	46-
STORNOWAY 03026	02 12500	012 011 847	001 09 05 948 ++ 03 929 ++ 01- 850 00 05- 823 ++ 10- 678 11- 17- 573 18- 28- 369 40- 46- 319 45- 289 45-	230 41- 129 47- 095 46-		319	08570	45-
	50 855++	012 010 842	999 09 06 887 02 01 592 ++ 18- 574 16- 19- 521 ++ 23- 486 24- 30- 478 23- 30- 456 27- 31- 438 ++ 35- 420	++ 37- 401 ++ 36- 374 ++ 45- 335 40- 46- 287 48- 252 51- 197 44- 105 48- 102 45- 068 46- 054 43- 045 45- 042 42- 030 43-		252	10200	51-
SHANWELL 03170	02 756++	010 010 835	002 10 08 994 ++ 08 968 09 06 896 04 00 794 03- 04- 678 11- 13- 661 10- 15- 647 ++ 19- 550 18- 30- 419 32-	42- 373 39- 49- 360 42- 313 46- 279 46- 249 42- 100 48- 078 50- 056 47-		313	08740	46-
	01 68421	014 013 843	995 12 03- 794 04- 08- 758 ++ 12- 708 09- 13- 685 09- 13- 545 17- 20- 491 21- 25- 342 40- 45- 260 52- 205	44- 181 44- 130 49- 120 47- 100 49- 071 50-		260	10040	52-
ALDERGROVE 03917	02 25600	005 014 850	932 ++ 03 895 ++ 01 865 ++ 02- 855 ++ 02- 827 02- 04- 824 00 02- 816 01- 94- 799 01- 07- 787 ++ 10- 755	04- 14- 691 06- 20- 676 ++ 24- 501 23- 37- 368 37- 50- 321 42- 276 45- 241 45- 208 43-		276	09660	45-
	15 785++	019 010 843	997 11 05 932 ++ 05 832 01- 02- 747 04- 05- 710 ++ 08- 659 07- 11- 639 07- 11- 639 06- 10- 492 17- 22-	444 24- 29- 423 25- 31- 360 35- 41- 328 38- 44- 238 56- 227 56- 204 54- 195 50- 153 49- 092 52- 034 48- 030 49-		238	10720	56-
AUGHTON 03322	02 32500	012 005 830	999 12 09 940 08 06 882 ++ 01- 801 ++ 04- 789 03- 06- 771 02- 09- 648 07- 22- 504 22- 35- 468 25- 38-	347 40- 311 43- 163 47- 105 53- 030 49-		311	08860	43-
	02 32545	019 012 825	002 12 02 913 04 00 897 03 05- 877 04 09- 870 ++ 12- 767 04- 18- 714 ++ 19- 700 06- 15- 660 ++ 13- 653	09- 13- 637 08- 13- 608 10- 18- 559 ++ 19- 500 18- 26- 425 ++ 35- 342 40- 46- 244 56- 213 50- 161 48- 100 52- 040 52-		244	10530	56-
HEMSBY 03496	60 855++	007 006 729	999 13 11 924 09 07 904 09 07 665 05- 09- 613 07- 15- 579 09- 13- 558 ++ 17- 521 15- 19- 335 40- 45- 300	46- 247 53- 216 48- 121 54- 105 51- Pressure suspect above 300 mb		247	10490	53-
	02 62531	015 013 801	004 12 06 912 06 03 900 05 02 883 ++ 02- 843 03 02- 800 00 06- 776 ++ 05- 727 05- 08- 710 04- 13- 704	++ 17- 607 10- 26- 502 20- 35- 446 25- 41- 339 38- 49- 331 38- 49- 304 41- 192 42- 148 44- 110 49-		304	09100	41-
CRAWLEY 03774	02 00900	009 992 719	861 08 05 801 ++ 02 792 04 01- 761 ++ 10- 740 ++ 11- 722 ++ 17- 669 02- 10- 642 05- 15- 592 ++ 11- 534	13- 15- 478 ++ 22- 453 ++ 30- 403 ++ 32- 355 ++ 38- 327 ++ 45- 285 45- 244 51- 216 49- 161 50- 118 54- 057 52-		244	10620	51-
	02 686++	017 000 827	953 10 01 923 ++ 02- 802 02- 04- 783 ++ 12- 776 01 13- 751 01 16- 638 ++ 24- 603 07- 24- 375 33- 44- 328	++ 50- 245 52- 186 48- 105 53- 048 54-		245	10610	52-
CAMBORNE 03808	02 7847+	014 004 816	879 05 03 862 03 02 794 01- 02- 754 02 09- 724 ++ 15- 628 ++ 26- 518 15- 37- 386 32- 50- 305 45- 270 49-	234 51- 220 48- 118 54- 031 47-		270	09920	49-
	02 41501	023 012 747	994 11 05 914 04 07- 899 04 02- 886 ++ 04- 820 ++ 13- 766 01 17- 673 05- 14- 643 ++ 15- 613 08- 23- 591	08- 19- 565 10- 20- 408 28- 37- 350 38- 47- 29- 49- 231 59- 218 59- 199 54- 058 54- 030 46-		231	10990	59-
VALENTIA 03953	01 22500	019 018 720	854 01 02- 831 02 03- 787 01 13- 741 02 16- 664 04- 14- 646 04- 13- 574 08- 14- 512 14- 19- 450 21- 29-	306 43- 243 54- 208 54- 183 51- 117 52-		243	10700	54-
	02 68506	024 022 720	010 11 07 927 07 05 873 02 03- 811 04 06- 632 04- 09- 425 24- 28- 346 37- 40- 304 42- 239 55- 210 60- 182	53- 115 52- 086 55-		210	11600	60-
Ocean Weather Station 'I' 59°00'N 19°00'W	61 6742+	012 012 819	858 02 01 846 02 01 788 02- 03- 639 10- 12- 614 10- 12- 517 16- 19- 335 40- 44- 259 53- 240 54- 198 48-	150 46- 143 47-		259	10100	53-
	80 6247+	010 010 739	970 07 05 865 01 00 845 02 01 810 01 00 790 02 01 756 ++ 00 729 01- 07- 716 01- 09- 700 01- 09- 670 ++	08- 639 04- 11- 585 09- 14- 570 09- 16- 500 15- 23- 468 19- 25- 405 25- 32- 307 40- 46- 226 55- 195 47-		226	11100	55-
Ocean Weather Station 'J' 52°30'N 20°00'W	02 756++	023 023 700	898 ++ 02 881 01 04- 872 06 02- 860 10- 827 06 08- 733 ++ 15- 630 ++ 11- 553 08- 14- 296 40- 46- 204 60-	116 52- 078 53- 063 50-		204	12000	60-
	02 856++	022 022 660	938 ++ 04 892 03 02 878 ++ 06- 862 09 07- 803 09 14- 615 03- 39- 552 08- 28- 350 32- 49- 248 51- 193 60-	180 54- 124 57- 094 56- 067 52-		193	12300	60-
						124	15100	57-



STATION	YYGGgg	Type	Surface	1000mb	900m	850mb 1500m	750mb 2100m	700mb 3000m	600mb 4200m	500mb 5400m	400mb 7200m	300mb 9000m	250mb 10500m	200mb 12000m	150mb 14100m	100mb 15900m	70mb 18300m	50mb 20700m	30mb 23700m	20mb 26400m	10mb 30900m
LERWICK 03005	262330	T	000 00	+++ ++	340 05	340 06	320 10	300 13	270 13	250 21	240 24	240 22	240 34	240 30	250 29	250 20	170 07	270 02			
	270530	P	260 08	+++ ++	270 09	270 10	260 10	260 14	270 20	270 20	250 23	240 25	250 25	250 27	250 23	240 16	220 10	120 03			
	271130	T	240 17	+++ ++	250 18	260 17	260 20	260 19	270 23	280 22	270 26	270 29	270 32	260 27	260 22	230 15	200 05	190 08			
	271730	P	270 15	+++ ++	290 18	280 19	270 19	290 21	300 27	310 38	310 56	320 94	310 40	290 34							
STORNOWAY 03026	262330	T	280 03	+++ ++	300 16	300 15	290 17	290 17	290 22	300 26	300 26	310 33	300 35	280 26	260 23	260 16					
	270530	P	260 08	+++ ++	270 21	280 20	270 18	280 24	290 30	300 46	310 66	310 78	310 59	290 36	290 25	270 17	290 04				
	271130	T	200 11	+++ ++	250 18	260 22	280 25	280 24	290 33	290 53	300 82	310 96	310 85	300 42	280 35	270 18	250 03	150 08	120 03		
	271730	P	270 20	+++ ++	280 27	280 30	280 34	290 32	300 48	310 58	310 71	310 78	310 79	300 45	300 28	280 18	250 06	190 04			
SHANWELL 03170	262330	T	220 02	+++ ++	350 13	320 12	310 13	270 11	290 17	280 15	240 23	230 33	230 27	250 33	250 26	260 21	220 09				
	270530	P	270 07	+++ ++	320 13	310 14	310 17	300 21	310 25	310 25	320 48	330 67	300 32	270 32	260 23	260 15	230 05				
	271130	T	270 10	+++ ++	270 18	280 18	280 24	270 23	290 32	300 43	310 66	310 72	310 67	280 35	290 19	280 16					
	271730	P	260 16	+++ ++	290 29	300 28	300 29	300 30	310 38	310 64	320 76	320 82	320 78	310 37	290 31						
ALDERGROVE 03917	262330		No winds reported																		
	270530		No winds reported																		
	271130		No winds reported																		
	271730		No winds reported																		
AUGHTON 03322	262330	T	290 09	+++ ++	320 23	320 22	310 19	290 18	260 19	270 25	270 26	230 35	250 36	250 34	240 31	250 15	250 06	230 03	P080 13		
	270530	P	300 13	+++ ++	330 23	330 25	330 26	330 31	320 32	320 53	330 64	330 65	310 42	290 26	270 18	260 11	270 11	130 06	100 08		
	271130	T	280 18	+++ ++	310 19	310 20	310 24	310 26	300 32	310 37	320 54	320 61	320 57	300 34	270 20	260 13	260 06	130 08			
	271730	P	260 10	+++ ++	290 24	300 24	310 24	320 34	320 39	310 39	320 40	330 51	330 58	300 40	290 25	300 16	280 11	250 03			
HEMSBY 03496	262330	T	320 08	+++ ++	320 13	240 07	240 18	230 21	230 32	220 41	210 53	210 55	P210 69	230 36	240 27	260 17					
	270530	P	300 12	+++ ++	330 21	310 16	300 15	270 22	250 23	240 32	200 52	210 63	220 44	230 34	240 27	230 19					
	271130	T	350 18	+++ ++	330 21	330 21	330 18	310 19	310 29	320 37	330 62	320 63	290 32	260 28	250 32						
	271730	P	090 06	+++ ++	290 12	290 23	300 26	290 27	300 36	300 40	320 54	310 58	310 42	290 32							
CRAWLEY 03774	262330	T	360 06	+++ ++	330 14	290 09	260 19	240 22	230 32	230 37	220 46	210 51	210 46	230 35	240 26	270 13	220 05				
	270530	P	360 15	+++ ++	350 26	340 24	290 25	280 20	290 32	280 39	270 46	270 50	260 36	250 36	250 27	240 17	240 10				
	271130	P	330 10	+++ ++	340 17	330 21	330 22	330 28	320 38	310 42	320 54	320 49	310 43	280 30	250 28	250 20	230 07	170 07			
	271730	P	310 08	+++ ++	310 16	330 13	330 16	310 22	310 32	310 35	320 36	310 39	310 40	290 28	270 21	260 17	260 10	090 03			
CAMBORNE 03808	262330	T	340 15	+++ ++	340 17	330 18	310 25	310 28	310 32	310 40	310 45	300 38	290 39	270 30	260 25	250 14	290 04	130 04			
	270530	P	360 11	+++ ++	340 18	330 20	340 21	330 24	320 32	310 34	310 39	320 52	320 50	300 32	280 30						
	271130	T	310 12	+++ ++	350 14	360 15	320 15	320 23	300 25	310 25	310 30	330 32	330 53	310 31	290 19	260 14	340 03	110 09	P100 10		
	271730	P	350 10	+++ ++	340 14	350 12	320 12	330 17	340 23	320 23	310 26	320 28	310 32	320 27	310 19	270 13	270 04	020 05			
VALENTIA 03953	262330	T	360 07	360 11	+++ ++	350 20	+++ ++	340 32	+++ ++	310 38	320 47	330 59	+++ ++	330 48							
	271130	T	270 07	300 08	+++ ++	300 14	+++ ++	320 17	+++ ++	310 38	310 46	310 44	+++ ++	310 45	+++ ++	310 17					
Ocean Weather Station 'I' 59°00'N 19°00'W	270001	T	270 26	+++ ++	290 32	300 37	290 34	280 30	280 48	290 57	290 72	310 84	310 69	310 60	300 31						
	270600	P	270 20	+++ ++	250 20	260 28	260 34	270 46	300 49	300 51	300 52	300 66	310 78	300 60	300 36	290 22					
	271200	T	240 20	+++ ++	250 26	240 37	250 36	260 35	270 30	290 41	280 45	290 60	290 79	300 67	300 45	300 21					
	271800	P	225 20	+++ ++	240 32	250 32	240 36	250 36	260 28	270 40	260 59	270 60	280 74	280 81	280 36	280 19					
Ocean Weather Station 'J' 52°30'N 20°00'W	270001	T	260 08	+++ ++	270 09	280 09	310 16	300 19	310 25	320 28	310 34	310 44	310 41	310 53	310 35	340 18	310 08				
	270600	P	270 10	+++ ++	250 07	260 10	260 10	270 12	290 18	280 20	280 34	300 48	300 50	300 48	310 30	320 27	340 07	020 04			
	271200	T	240 15	+++ ++	240 18	240 17	240 17	240 20	260 22	290 26	290 23	310 34	330 34	310 43	300 28	310 12					
	271800	P	225 20	+++ ++	220 21	220 23	240 25	250 28	260 26	250 27	280 30	260 24	250 24	270 30	290 19	280 14	280 05	060 04	070 16		
LARKHILL 03743	270630	P	310 10	+++ ++	330 26	320 25	320 28	320 32	310 38	320 52	310 49	310 55	300 49	270 32	250 24	250 16	240 10				
	271030	P	330 13	+++ ++	340 14	340 18	340 25	330 29	320 35	310 36	310 44	330 50	320 44	280 31	250 22	250 15	230 06				

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m °C °C	950mb m °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
271132	62.3 <sup>0</sup> N 18.5 <sup>0</sup> W	007 000 838	061 08 01	061 05 01	920 02 09	1378 01 18	1862 02 23	04 26	2914 07 32	10 45	4100 13 45	17 49	5468 20 36	
Cloud :— 1/8 Cu 2000 to 2500ft 1/8 Sc at 5000ft 2/8 Ci 17000 to 20000ft 3/8 Ci 20000 to 21000ft.														
Inversion Levels :— Isothermal Levels :—														
YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m °C °C	950mb m °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
271251	64.6 <sup>0</sup> N 11.0 <sup>0</sup> W	004 997 945	061 03 01	034 00 03	881 02 02	1332 06 09	1804 09 12	12 16	2829 13 35	16 39	3990 19 42	24 45	5319 29 43	
Cloud :— 5/8 Sc 2000 to 38000ft 2/8 Sc 6000 to 7000ft 1/8 Ac at 8000ft.														
Inversion Levels :— Isothermal Levels :—														
RATES OF SUBSCRIPTION: Single copy 5d. or post free 7d. One calendar month 13/-; one quarter 35/-; one year 125/-. For special arrangements for supply to schools and colleges see Form 2452.										Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General Meteorological Office, Air Ministry, Kingsway, London, W.C.2				



STATION		MAX. WIND
LERWICK 03005	036mb 080 10 21600m 160 10 12600m 290 28	320 97 08660m
STORNOWAY 03026	07420/0 08680/0 09770/1 10370/1 10950/1 22800m 120 07 03640/0 10960/1 11460/1 15460/1 21260/8	310 84 09000m 310 106 08690m 310 81 09260m
SHANWELL 03170	062mb 260 08 20100m 150 11 218mb 300 45 080mb 280 06 15300m 280 15 11100/1	330 76 08430m 310 80 09920m 320 89 09850m
ALDERGROVE 03917		
AUGHTON 03322	10660/1 043mb 150 11	330 68 08700m 320 66 08280m 330 62 10450m
HEMSBY 03496	P17100m 230 20 1800m 230 10 277mb 310 48 116mb 250 20 13920m 260 20 04010/0 06100/0 10080/1	210 70 10960m 200 66 08850m 320 66 09000m
CRAWLEY 03774	19800m 130 08 19470/8 10350/1 10710/1 11110/1	
CAMBORNE 03808	035mb 110 10 1500m 290 20 P25800m 110 19 15430m 290 15 21600m 060 04 15430/5	
VALENTIA 03953	741mb 340 28 646mb 330 34 574mb 310 37 243mb 330 64 183mb 330 42 117mb 300 28 927mb 310 08 632mb 320 20 425mb 310 37 239mb 310 42 182mb 310 46 086mb 310 14	330 64 10780m
Ocean Weather Station 'I' 59°00'N 19°00'W	181mb 310 45 12900m 300 48 17400m 290 13 11350/1 12900m 280 58 16800m 270 18 12550/1	310 90 09480m 310 81 10720m 290 90 10620m 280 87 11530m
Ocean Weather Station 'J' 52°30'N 20°00'W	167mb 310 44 109mb 340 26 13200m 300 40 17100m 330 15 080mb 310 11 24300m 080 19 19300/2	300 63 10380m
LARKHILL 03743	10900/7 19700m 180 12 10500/1 11500/5	320 61 09370m

## NOTES ON THE AEROLOGICAL SITUATION

The American trough is continuing to weaken and is holding back in the south. The northern portion, however, is moving out into the Atlantic. The trough over the British Isles is sharpening and moving east with the centre near Jan Mayen Island remaining almost stationary. A trough persists over Russia.

## AVERAGE AND EXTREME VALUES 1951-55

## JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22345	-48.1	-42	-55	...	...
60	19675	-48.1	-41	-55	120	3
100	16320	-48.8	-41	-56	244	5
150	13660	-48.3	-41	-59	263	10
200	11770	-49.8	-39	-67	271	16
300	9125	-46.7	-37	-56	271	22
400	7160	-32.6	-23	-44	271	18
500	5555	-20.8	-11	-31	269	14
700	2985	-5.2	3	-14	266	9
850	1435	2.8	14	-7	269	6

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	257	-54.7	10190
Max.	405	-40	12955
Min.	172	-68	6890

LARKHILL/CRAWLEY† at 03, 15h.  
(Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.)

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22310	-49.6	-47	-57	106	9
60	19675	-51.4	-45	-59	136	3
100	16370	-52.6	-46	-61	251	8
150	13745	-51.8	-42	-65	265	15
200	11890	-54.0	-40	-65	268	20
300	9265	-44.7	-36	-54	265	20
400	7275	-29.6	-19	-41	265	17
500	5640	-17.8	-9	-28	263	15
700	3050	-2.1	7	-10	263	11
850	1480	5.7	16	-3	264	7

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	234	-56.8	10950
Max.	388	-41	13440
Min.	160	-66	7225

MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5
60	19670	-60.7	-53	-69	135	4
100	16510	-62.9	-57	-71	255	21
150	13995	-59.0	-51	-67	265	38
200	12185	-56.6	-47	-67	275	42
300	9530	-40.1	-33	-46	285	32
400	7500	-23.9	-19	-29	285	27
500	5835	-11.8	-8	-17	285	24
700	3165	7.2	13	-1	290	18
850	1535	17.9	27	8	290	9

Tropopause	Average Press.	Average Temp.	Max. Press.	Min. Press.	Max. Temp.	Min. Temp.
Upper	mb.	°C	mb.	mb.	°C	°C
Lower	123	-65.7	...	73	...	-73
	193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

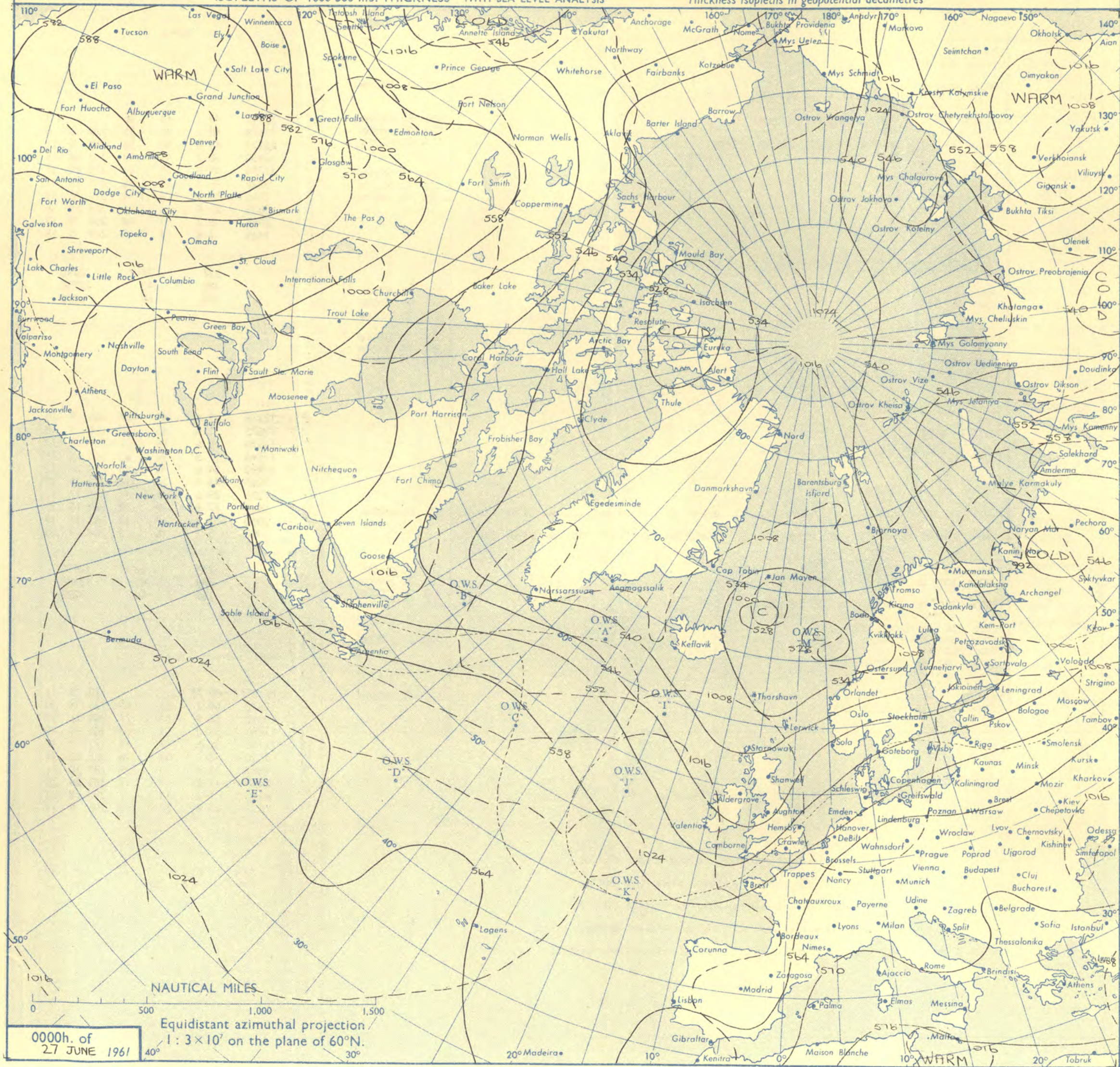
† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.

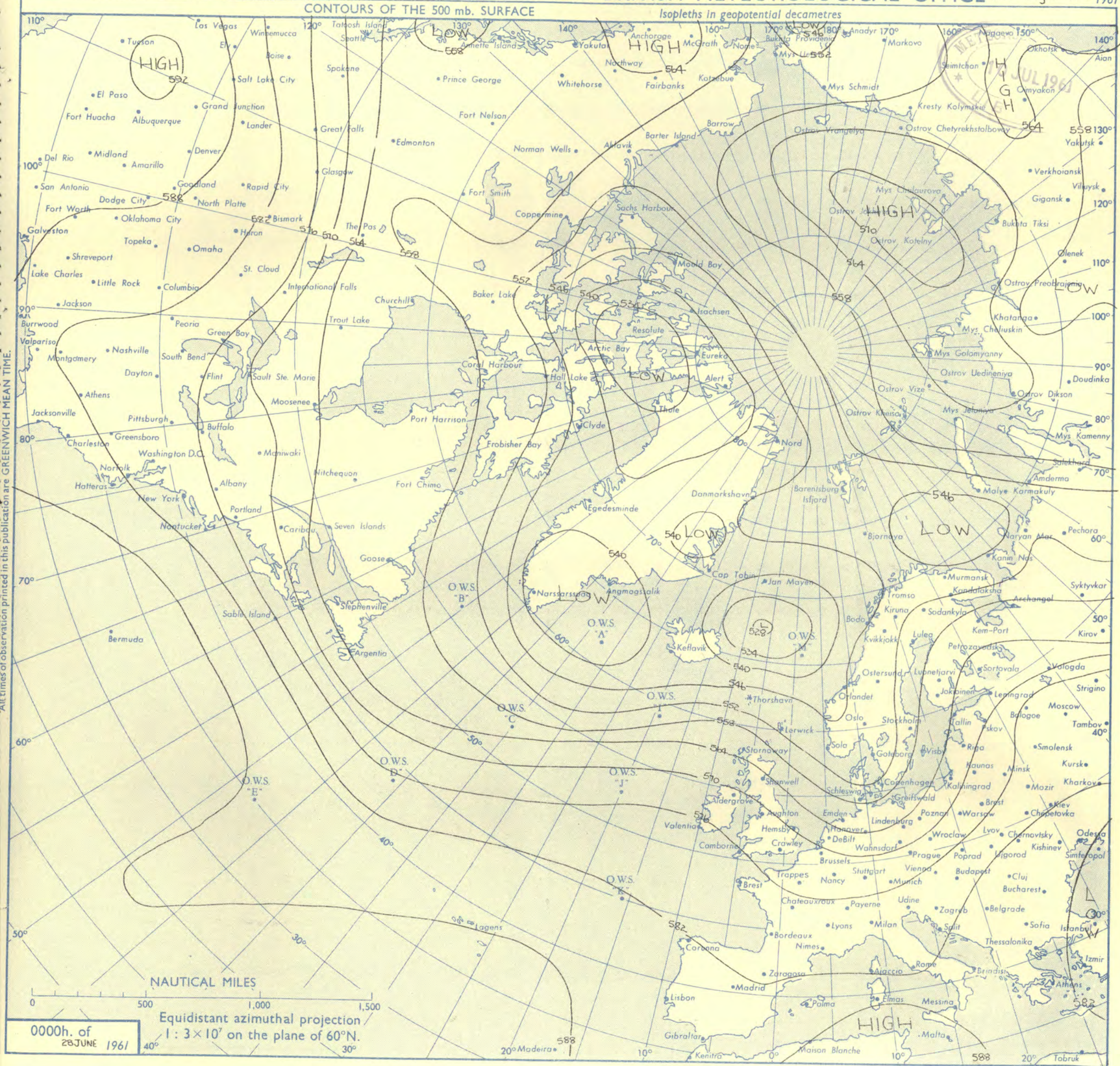


ISOPLETHS OF 1000-500 mb. THICKNESS WITH SEA LEVEL ANALYSIS

Thickness isopleths in geopotential decametres









STATION	YYGGgg	SURFACE	1000mb	850mb	700mb	500mb	400mb	300mb	200mb	150mb	100mb	70mb	50mb	30mb
		gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C °C	gpm °C	gpm °C	gpm °C	gpm °C	gpm °C
LERWICK 03005	272332	082 08 07	101 08 06	11426 00 04	2962 06- 25	5523 19- 24	71147 30- 36	9137 44- ++	11796 46- 13709	46- 16402	47- 18772	48- 21000	47-	
	281300	082 11 10	093 11 10	11423 03 02	2983 03- 06	5579 17- 25	7216 29- 40	9216 43- ++	11872 47- 13777	48- 16436	49- 18787	47-		
STORNOWAY 03026	280001	013 10 10	125 10 08	11455 04 02	3011 03- 14	5600 18- 22	7230 30- 35	9226 44- ++	11855 53- 13725	52-				
	281130	013 12 11	124 11 08	11467 06 04	3046 01 01	5686 14- 18	7342 25- 29	9372 40- 46	12028 54- 13903	50- 16538	49- 18873	49-		
SHANWELL 03170	272330	005 13 09	153 12 09	11490 02 01	3048 02- 08	5645 17- 22	7281 28- 32	9283 43- ++	11898 53- 13773	49- 16411	50- 18744	49-		
	281130	005 17 07	163 15 07	1503 02 00	3082 01 08	5704 14- 26	7359 26- 37	9379 41- ++	12020 56- 13877	53- 16494	52-			
ALDERGROVE 03917	280001	077 11 08	190 11 09	1522 05 01	3081 02- 15	5693 15- 26	7333 28- 34	9333 43- ++	11928 62- 13764	53- 16373	53- 18681	51-		
	281145	077 14 08	202 12 07	1538 06 07	3123 03 33	5772 12- 44	7448 21- ++	9484 41- ++	12113 61- 13937	55- 16519	53- 18818	52- 21009	49- 24388	48-
AUGHTON 03322	272330	056 12 09	202 12 08	1542 04 01	3102 02- 09	5719 16- 24	7361 28- 33	9359 44- ++	11965 58- 13813	53- 16429	54-			
	281250	056 18 08	227 13 07	1570 04 01	3144 02 16	5782 14- 27	7443 24- 39	9465 42- ++	12091 61- 13893	55- 16469	56- 18752	52-		
HEMSBY 03496	272330	012 10 07	190 12 05	1528 03 03	3081 04- 08	5704 14- 28	7355 27- 37	9360 43- ++	11979 55- 13847	50- 16481	52- 18793	51-		
	281130	012 19 10	236 16 07	1586 04 02	3155 02 21	5783 14- 28	7435 27- 34	9452 41- ++	12080 61- 13902	54-				
CRAWLEY 03774	272330	144 11 06	212 14 05	1556 03 00	3118 00 08	5747 13- 27	7400 27- 39	9400 45- ++	12009 53- 13882	51- 16511	51-			
	281130	144 19 09	247 17 06	1596 05 07	3172 01 17	5804 14- 26	7458 26- 37	9478 42- ++	12100 60-					
CAMBORNE 03808	272330	088 09 08	230 11 08	1570 07 07	3144 01 10	5770 15- 23	7421 26- 37	9433 43- ++	12046 56- 13898	54- 16502	54-			
	281130	088 17 11	245 13 09	1590 06 10	3175 03 08	5805 15- 24	7461 26- 34	9479 41- ++	12085 63- 13907	55- 16484	56-			
VALENTIA 03953	272330	014 13 10	220 13 10	1556 08 02	3144 03 04	5790 14- 22	7440 25- 30	9470 40- ++	12100 61- +++++	++ 16500	57-			
	281235	014 16 12	222 12 09	1566 03 00	3163 04 07	5820 13- 27	7490 23- 36	9540 38- 49	12180 61-					
Ocean Weather Station 'I' 59°00'N 19°00'W	280001	11 10 020	11 10 1370	08 07 2950	03- 04- 5560	17- 20- 7200	27- 30- 9220	42- ++	11840 51- 13720	52-				
	281200	11 09 027	10 08 1355	05 02 2932	01- 18- 5540	17- 33- 7170	30- 45- 9160	44- ++	11820 47- 13740	47- 16390	50- 18730	50-		
Ocean Weather Station 'J' 52°30'N 20°00'W	280001	13 08 157	12 10 1500	09 06- 3095	03 07- 5740	13- 25- 7400	26- 39- 9420	43- ++	12030 63- 13840	56- 16380	59- 18640	55-		
	281200	14 13 132	13 12 1496	09 07 3084	00 03- 5720	12- 44- 7380	26- ++ 9400	41- ++	12030 57- 13890	53- 16490	55- 18790	53-		



STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE			
		MSL	Surf.	0°C level		mb	m	°C	
LERWICK 03005	02 15636	012 002 849	991 09 07 986 ++ 06 930 ++ 03 870 ++ 04- 834 01- 04- 803 01- 11- 740 05- 18- 693 06- 26- 615 ++ 26- 570 16- 28- 532 17- 24- 515 ++ 23- 480 21- 26- 442 ++ 30- 376 ++ 40- 326 40- 46- 258 52- 237 55- 231 51- 208 46- 100 47- 035 46-				237	10700	55-
	51 863++	011 001 749	995 09 07 913 05 04 825 02 01 765 01 01- 660 06- 11- 640 ++ 10- 619 08- 13- 594 ++ 16- 530 16- 21- 520 15- 20- 480 ++ 31- 446 ++ 38- 389 ++ 39- 326 39- 50- 231 57- 213 49- 192 46- 100 49- 052 47-				231	10950	57-
STORNOWAY 03026	50 5557+	015 014 756	990 ++ 07 865 02 01- 852 04 02- 800 ++ 06- 734 ++ 13- 716 03- 18- 701 03- 16- 691 ++ 10- 644 08- 11- 607 ++ 14- 592 09- 14- 486 20- 24- 321 40- 46- 222 57- 184 50- 117 50-				222	11200	57-
	61 3642+	015 013 663	000 ++ 08 913 06 04 886 07 05 819 05 03 786 05 03 731 02 00 663 00 02- 547 09- 13- 298 40- 46- 208 57- 176 49- 113 53- 101 49- 080 50- 054 47-				208	11750	57-
SHANWELL 03170	02 6453+	018 018 753	821 00 01- 790 01 04- 779 01 04- 760 01 10- 715 01- 06- 705 ++ 08- 635 07- 09- 600 ++ 13- 575 13- 16- 560 12- 16- 535 14- 20- 523 ++ 18- 510 16- 21- 435 24- 27- 422 ++ 29- 318 40- 46- 236 57- 220 60- 202 53- 150 49- 105 52- 100 50- 053 49-				220	11300	60-
	02 725++	019 019 692	925 07 04 852 02 00 842 ++ 02 830 ++ 08- 826 07 07- 749 ++ 16- 733 04 13- 689 ++ 08- 651 ++ 09- 613 ++ 15- 593 08- 15- 568 08- 20- 483 15- 29- 438 ++ 31- 387 ++ 39- 350 33- 41- 304 40- 46- 220 57- 198 56- 181 51- 112 54- 100 52- 092 52-				220	11420	57-
ALDERGROVE 03917	02 756++	023 014 759	999 11 09 889 03 02 871 05 02 858 ++ 00 812 04 03- 765 ++ 04- 745 01- 08- 720 ++ 15- 689 ++ 17- 670 ++ 22- 652 04- 17- 639 ++ 14- 625 ++ 16- 611 07- 12- 600 ++ 18- 592 07- 19- 526 12- 26- 495 ++ 27- 479 ++ 25- 467 20- 29- 411 ++ 32- 318 ++ 46- 301 43- 221 61- 209 63- 196 62- 183 54- 074 52- 069 50- 055 51-				209	11620	63-
	01 455++	024 015 648	005 12 07 880 ++ 03 865 03 03- 843 08 11- 800 07 21- 677 02 34- 550 08- 41- 401 21- ++ 357 30- ++ 261 50- 251 51- 198 62- 182 57- 141 53- 113 59- 100 53- 053 50- 044 46- 030 48-				198	12190	62- 113 15740 59-
AUGHTON 03322	02 35530	025 018 770	008 13 09 867 04 02 830 04 01- 753 02- 07- 732 00 12- 697 02- 09- 680 01- 12- 502 ++ 25- 477 18- 25- 368 ++ 37- 322 40- 46- 259 52- 216 60- 189 54- 072 53-				216	11490	60-
	02 21541	027 020 665	998 12 06 924 07 04 879 05 02 845 04 02- 815 05 10- 772 04 13- 738 03 08- 707 02 15- 627 02- 23- 594 ++ 20- 532 ++ 26- 500 14- 27- 414 22- 37- 309 40- 205 61- 182 62- 145 54- 119 59- 105 55- 097 56- 070 52-				205	11920	61- 119 15370 59-
HEMSBY 03496	02 00901	023 021 788	011 13 06 941 ++ 04 845 03 03- 820 ++ 08- 757 02- 07- 719 ++ 09- 700 04- 08- 689 02- 07- 638 ++ 11- 619 ++ 15- 590 07- 16- 520 11- 23- 319 40- 47- 221 59- 162 49- 091 53- 070 51-				221	11350	59-
	02 51502	028 026 680	007 17 08 848 04 02 838 04 03 812 04 02- 789 ++ 05- 772 02 10- 758 03 11- 705 02 21- 618 ++ 16- 603 ++ 19- 511 13- 28- 407 26- 33- 307 40- 47- 194 62- 169 54- 130 54-				194	12270	62-
CRAWLEY 03774	02 00908	026 008 702	005 14 08 999 ++ 05 907 ++ 01 832 02 00 813 03 03- 790 ++ 05- 717 01 07- 640 ++ 12- 610 ++ 18- 561 09- 20- 519 11- 26- 329 ++ 50- 281 48- 230 59- 185 50- 088 51-				230	11120	59-
	02 25606	032 012 674	000 17 06 892 06 01 884 ++ 01 860 ++ 08- 825 05 04- 802 ++ 09- 769 04 13- 742 ++ 16- 724 ++ 11- 642 02- 24- 570 ++ 19- 554 ++ 23- 318 38- 48- 206 62- 194 59-				(206	11900	62-)
CAMBORNE 03808	01 00901	028 017 686	995 11 07 964 09 07 948 09 04 875 05 00 854 07 08- 840 ++ 03- 757 02 06- 723 02 06- 700 ++ 10- 641 03- 10- 592 ++ 17- 570 ++ 15- 392 27- 38- 316 40- 49- 282 47- 223 59- 212 59- 192 53- 084 53-				223	11360	59-
	02 11602	030 019 668	016 14 09 960 ++ 08 927 08 05 921 ++ 05 904 ++ 01- 895 09 02- 874 07 07- 776 ++ 12- 728 ++ 07- 710 04 08- 640 ++ 10- 581 09- 14- 538 11- 22- 506 14- 23- 456 18- 28- 307 40- 47- 210 63- 199 63- 170 55- 087 56-				210	11800	63-
VALENTIA 03953	03 856++	026 025 649	868 02 01 855 08 02 760 05 07- 734 05 05- 649 00 06- 575 08- 13- 409 23- 29- 305 39- 42- 270 48- 203 62- 189 60- 177 53- 140 53- 121 59- 100 57- 062 50-				203	12000	62-
	02 885++	027 025 660	003 13 10 848 03 00 840 03 02- 827 09 01- 742 07 12- 688 03 05- 573 05- 17- 507 12- 26- 375 26- 38- 233 53- 197 62- 171 54- 146 54- 127 57-				197	12300	62-
Ocean Weather Station 'I' 59°00'N 19°00'W	62 3722+	002 002 721	957 08 07 929 08 07 888 10 09 763 04 03 697 03- 04- 672 02- 04- 582 10- 13- 550 12- 15- 388 29- 32- 311 40- 44- 225 58- 213 57- 200 51- 182 51- 173 49- 144 52- 105 52-				225	11100	58-
	50 184++	003 003 707	982 ++ 06 971 07 05 892 03 02 878 04 03 837 06 02 827 06 01 798 ++ 15- 775 04 11- 761 ++ 08- 695 01- 18- 662 01- 21- 632 ++ 29- 601 ++ 18- 552 ++ 23- 526 15- 29- 509 ++ 33- 411 28- 44- 361 35- 45- 327 40- 50- 266 51- 243 54- 231 53- 215 48- 185 46- 118 50- 114 49- 100 50- 067 50-				243	10500	54-
Ocean Weather Station 'J' 52°30'N 20°00'W	01 5563+	019 019 666	902 04 04 868 10 03 848 ++ 09- 824 ++ 04 790 07 01 762 06 09- 685 ++ 08- 653 01- 12- 626 01- 15- 562 07- 18- 512 14- 24- 489 13- 26- 385 ++ 42- 314 40- 47- 206 64- 155 55- 117 60- 091 59- 079 55- 065 56-				206	11900	64-
	51 873++	016 016 700	989 12 11 959 13 12 738 03 00 660 04- 07- 631 ++ 20- 624 03- 21- 509 12- 44- 491 12- 44- 360 32- 207 59- 183 52- 093 55- 084 50- 067 53- 053 47-				207	11800	59-



STATION	YYGGgg	Type	Surface	1000mb	900m	850mb 1500m	750mb 2100m	700mb 3000m	600mb 4200m	500mb 5400m	400mb 7200m	300mb 9000m	250mb 10500m	200mb 12000m	150mb 14100m	100mb 15900m	70mb 18300m	50mb 20700m	30mb 23700m	20mb 26400m	10mb 30900m
LERWICK 03005	272332	T	230 08	+++ ++	260 18	270 23	270 24	270 24	280 30	300 59	310 74	320 83	310 89	300 37	290 32	260 10	210 08	160 07			
	280530	P	220 20	+++ ++	260 30	260 32	260 33	280 41	280 42	280 42	280 51	290 80	300 95	290 54	300 25	300 15	350 04				
	281130	T	230 28	+++ ++	260 36	260 31	280 35	280 36	280 39	280 48	280 52	280 86	290 95	290 55	270 30	270 20					
	281730	P	230 32	+++ ++	260 43	270 37	270 36	270 42	270 46	270 56	280 63	270 78	280 85	280 67	280 35						
STORNOWAY 03026	280001	T	250 15	+++ ++	240 32	260 33	260 39	270 41	280 38	280 44	290 57	300 72	310 81	310 53	300 34						
	280530	P	240 22	+++ ++	240 36	240 38	260 41	270 43	270 54	270 42	280 48	270 62	280 66	280 57	290 38	290 22	240 09	180 07			
	281130	T	240 20	+++ ++	240 36	250 37	260 37	270 30	270 42	270 56	270 60	270 69	280 81	270 67	270 39	270 21	250 10				
	281730	P	230 16	+++ ++	240 37	250 42	250 46	250 46	260 50	260 43	260 55	260 61	260 71	260 60	260 40	260 20					
SHANWELL 03170	272330	T	250 16	+++ ++	280 30	280 37	300 32	300 29	290 33	300 42	300 54	310 62	320 72	320 60	310 31	300 13	210 10				
	280530	P	240 17	+++ ++	260 39	260 39	270 34	280 33	290 15	280 42	290 46	290 55	300 56	300 43	280 27	300 12					
	281130	T	250 23	+++ ++	250 29	270 33	270 31	290 17	270 25	270 37	290 44	290 55	290 60	290 55	280 24	280 12					
	281730	P	250 20	+++ ++	260 36	270 32	280 30	270 25	270 27	270 35	270 52	270 55	270 53	280 52	270 31	270 15	230 09	160 09			
ALDERGROVE 03917	280001	No winds reported																			
	280530	No winds reported																			
	281145	T	240 17	+++ ++	250 21	250 27	260 30	260 29	280 30	280 33	280 27	280 35	280 36	280 32	280 23	270 07	280 04	090 06			
	281730	P	220 18	+++ ++	240 22	250 25	250 24	250 26	250 26	250 27	250 32	250 41	260 42	260 34	250 26	260 15	260 06				
AUGHTON 03322	272330	T	260 06	+++ ++	290 20	300 17	320 20	310 22	300 25	310 32	300 32	330 44	350 56	340 50	310 26	310 11					
	280530	P	250 07	+++ ++	250 23	230 22	230 17	280 21	290 28	300 33	290 30	320 32	330 30	350 31	330 31	300 11	300 06	120 04	110 12		
	281250	T	250 15	+++ ++	240 19	240 27	260 25	270 23	280 26	280 23	300 21	320 30	310 23	300 16	300 16	280 07					
	281730	P	270 10	+++ ++	250 16	250 22	260 23	260 24	270 24	280 18	270 19	280 19	290 20	270 15	270 11	290 07	260 03	140 07			
HEMSBY 03496	272330	T	000 00	+++ ++	310 19	300 16	310 22	320 32	320 39	300 43	310 42	330 50	320 56	320 42	300 26	260 19	240 05	120 06			
	280530	P	260 08	+++ ++	330 16	310 18	310 20	310 20	300 24	310 30	300 33	330 35	350 49	350 39	310 20	310 11	300 03	100 09			
	281130	T	220 11	230 11	240 10	250 13	280 17	280 18	290 21	300 29	300 30	320 25	330 30	340 27	330 16						
	281754	P	200 10	+++ ++	250 17	270 15	280 16	280 18	290 23	290 22	310 15	330 14	330 17	320 21	330 12						
CRAWLEY 03774	272330	T	360 03	+++ ++	330 09	310 12	310 15	320 18	310 27	310 17	330 18	340 28	340 41	320 27	300 14	270 08					
	280530	P	000 00	+++ ++	270 04	280 07	280 10	300 15	320 19	310 19	290 23	360 20	010 44	010 36	320 18	310 06					
	281115	P	230 06	+++ ++	210 11	220 06	300 12	320 14	300 12	320 10	310 14	360 16	010 19	010 29	350 11	290 08	240 02	120 10	060 15		
	281730	P	240 06	+++ ++	250 07	270 08	260 10	300 11	310 14	270 10	320 09	290 08	320 07	330 10							
CAMBORNE 03808	272330	T	000 00	+++ ++	330 05	340 06	340 12	340 15	330 14	320 15	330 14	330 33	340 31	350 34	330 23	300 08					
	280530	P	000 00	+++ ++	250 04	270 07	240 06	260 06	330 09	310 11	340 13	360 26	020 31	020 31	350 24	330 10	240 01	090 08	100 16	100 17	
	281130	T	340 08	+++ ++	200 04	220 07	240 12	220 10	270 03	330 07	340 04	360 17	030 16	040 14	350 09	300 04					
	281730	P	320 05	+++ ++	190 07	210 07	220 07	210 11	190 06	220 09	340 03	110 05	050 05	090 08	320 06	320 02	260 01				
VALENTIA 03953	272330	T	200 03	210 10	+++ ++	250 18	+++ ++	250 21	+++ ++	290 21	320 25	320 28	+++ ++	340 31	+++ ++	320 11					
	281130	P	225 10	+++ ++	200 21	230 23	230 21	230 25	230 18	250 19	250 19	230 23	240 22	230 22	250 12	240 06					
Ocean Weather Station 'I' 59°00'N 19°00'W	280000	T	210 30	+++ ++	240 36	250 39	250 42	240 42	240 43	230 53	240 58	240 74	240 80	240 57	240 36						
	280600	P	225 30	+++ ++	240 33	240 39	240 38	240 40	240 51	240 46	240 50	240 66	240 90	240 103	240 41	240 23	240 06	240 08	060 06		
	281200	T	240 26	+++ ++	240 30	230 39	240 40	230 41	230 50	230 62	230 74	230 96	230 96	230 51	240 42	250 15	250 07				
	281800	P	270 02	+++ ++	250 23	250 21	240 25	240 45	230 51	230 54	230 75	230 91	230 93	240 74	230 44	230 27	230 09				
Ocean Weather Station 'J' 52°30'N 20°00'W	280001	T	210 25	+++ ++	210 27	230 24	250 20	250 20	250 23	250 27	250 28	240 31	240 32	240 32	240 18	290 11	350 03				
	280600	P	225 30	+++ ++	230 27	240 23	250 21	240 19	230 23	220 33	220 35	220 44	200 50	210 29	220 24	250 15	220 05	000 00			
	281200	T	220 25	+++ ++	220 21	230 19	240 20	240 22	230 26	210 34	210 35	220 43	220 56	190 44	210 29	230 14	250 05				
	281800	P	180 20	+++ ++	210 24	220 22	230 24	220 22	210 23	220 27	210 31	200 25	210 37	210 34	210 25	210 11	210 09				
LARKHILL 03743	280630	P	000 00	+++ ++	210 06	250 07	290 10	310 16	320 21	310 20	310 15	350 20	020 34	010 44	340 17	320 08	000 00				
	281030	P	230 02	+++ ++	270 06	260 05	280 11	300 17	310 16	300 11	300 13	360 13	350 23	360 26	350 12	300 05	330 03				

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m	950mb °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
Cloud :— Inversion Levels :—														
Isothermal Levels :—														
YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m	950mb °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb °C °C	700mb m °C °C	650mb °C °C	600mb m °C °C	550mb °C °C	500mb m °C °C
Cloud :— Inversion Levels :—														
Isothermal Levels :—														
RATES OF SUBSCRIPTION: Single copy 5d. or post free 7d. One calendar month 13/-; one quarter 35/-; one year 125/-. For special arrangements for supply to schools and colleges see Form 2452.												Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General Meteorological Office, Air Ministry, Kingsway, London, W.C.2		



STATION		MAX. WIND
LERWICK 03005	223mb 300 54 040mb 130 07 08200/0 11000/1 P17100m 280 18 10900/1 15300m 280 26 11870/1	310 93 10000m 300 101 10350m 290 102 10050m 270 90 10570m
STORNOWAY 03026	119mb 290 25 22100m 160 10 12320/1 18120/5 119mb 270 33 061mb 250 09 17500m 260 13 11870/1 12200/1 14640/1	300 88 10970m 280 68 10960m 270 83 10460m 260 78 11570m
SHANWELL 03170	058mb 220 09 21900m 160 06 12260/1	320 73 10710m 300 62 10980m 290 64 10790m
ALDERGROVE 03917	131mb 270 15 031mb 140 09 20100m 180 06	
AUGHTON 03322	189mb 330 36 080mb 300 08 24600m 090 11 14460/1 080mb 220 05 21900m 130 08	350 68 11180m
HEMSBY 03496	P22400m 040 05 22500m 080 10 12120/1 13160/1 15640m 310 10	360 61 11440m
CRAWLEY 03774	17400m 250 07 10030/0 11920/1 24900m 120 16 12490/1 13200m 010 12	
CAMBORNE 03808	088mb 290 07 27600m 100 22 12740/7 089mb 100 01 20100m 190 06	
VALENTIA 03953	760mb 250 20 575mb 270 24 270mb 330 30 140mb 310 24 062mb 340 04 00300m 210 16 00600m 200 19 18000m 200 04 18900m 180 04	
Ocean Weather Station 'I' 59°00'N 19°00'W	113mb 240 19 12900m 240 72 09400/0 12650/1 13200/1 21450/8 227mb 230 75 135mb 250 29 12600m 240 55 19200m 230 08 12000/1	250 84 09680m 240 105 11600m 220 102 10100m 230 96 10720m
Ocean Weather Station 'J' 52°30'N 20°00'W	160mb 240 24 12900m 220 30 15300m 230 21 11250/1 15210/4 060mb 240 06 18900m 210 07	210 60 10850m
LARKHILL 03743	08480/3 12880/1 08150/2 12380/1 15530/7	

## NOTES ON THE AEROLOGICAL SITUATION

The trough which was over the British Isles yesterday has moved east to Germany and a developing ridge has approached Scotland from the west. Over the western Atlantic a trough has moved east, whilst a further weak trough has advanced to the Great Lakes. The low vortex south of Jan Mayen has changed little, and the air in this region is unusually cold for late June.

AVERAGE AND EXTREME VALUES 1951-55  
JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22345	-48.1	-42	-55	...	...
60	19675	-48.1	-41	-55	120	3
100	16320	-48.8	-41	-56	244	5
150	13660	-48.3	-41	-59	263	10
200	11770	-49.8	-39	-67	271	16
300	9125	-46.7	-37	-56	271	22
400	7160	-32.6	-23	-44	271	18
500	5555	-20.8	-11	-31	269	14
700	2985	-5.2	3	-14	266	9
850	1435	2.8	14	-7	269	6

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	257	-54.7	10190
Max.	405	-40	12955
Min.	172	-68	6890

LARKHILL/CRAWLEY† at 03, 15h.  
(Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.)

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22310	-49.6	-47	-57	106	9
60	19675	-51.4	-45	-59	136	3
100	16370	-52.6	-46	-61	251	8
150	13745	-51.8	-42	-65	265	15
200	11890	-54.0	-40	-65	268	20
300	9265	-44.7	-36	-54	265	20
400	7275	-29.6	-19	-41	265	17
500	5640	-17.8	-9	-28	263	15
700	3050	-2.1	7	-10	263	11
850	1480	5.7	16	-3	264	7

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	234	-56.8	10950
Max.	388	-41	13440
Min.	160	-66	7225

MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5
60	19670	-60.7	-53	-69	135	4
100	16510	-62.9	-57	-71	255	21
150	13995	-59.0	-51	-67	265	38
200	12185	-56.6	-47	-67	275	42
300	9530	-40.1	-33	-46	285	32
400	7500	-23.9	-19	-29	285	27
500	5835	-11.8	-8	-17	285	24
700	3165	7.2	13	-1	290	18
850	1535	17.9	27	8	290	9

Tropopause	Average Press.	Average Temp.	Max. Press.	Min. Press.	Max. Temp.	Min. Temp.
Upper	123	-65.7	...	73	...	-73
Lower	193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

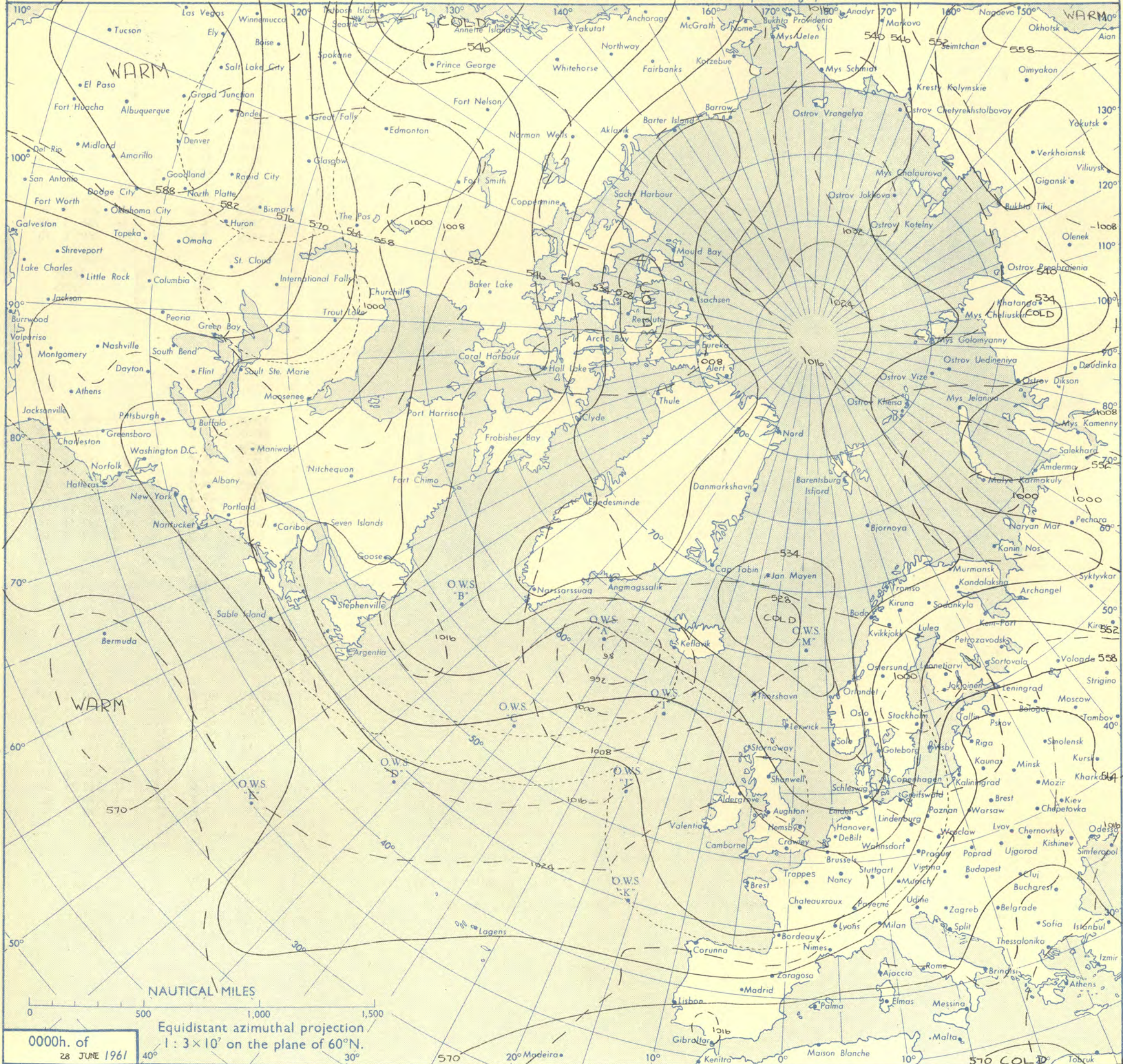
† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.



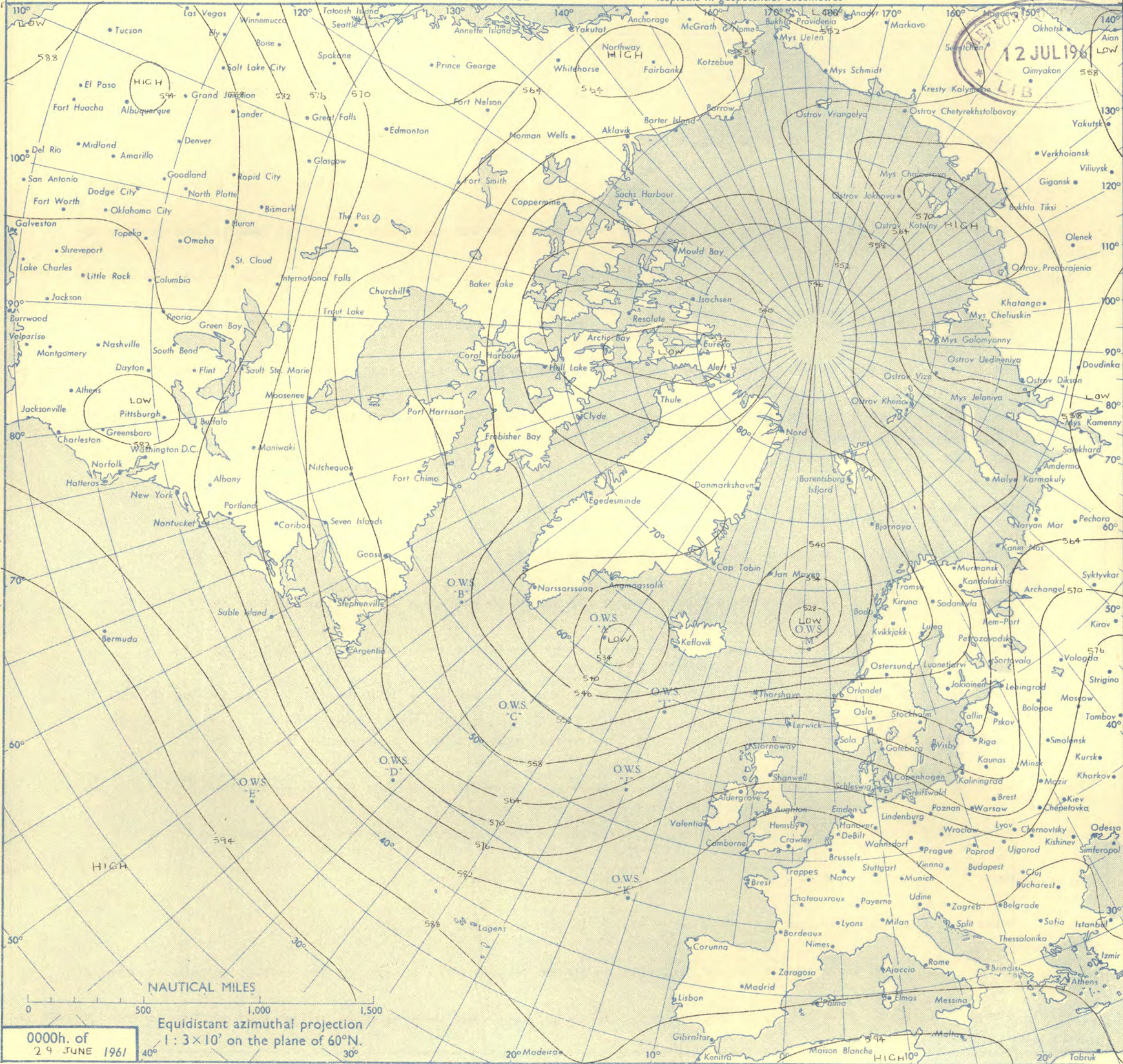
ISOPLETHS OF 1000-500 mb. THICKNESS WITH SEA LEVEL ANALYSIS

Thickness isopleths in geopotential decametres





## Isopleths in geopotential decametres





STATION	YYGGgg	SURFACE			1000mb			850mb			700mb			500mb			400mb			300mb			200mb		150mb		100mb		70mb		50mb		30mb	
		gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C		
LERWICK 03005	282330	082	11	10	105	10	10	1457	08	06	3034	01-	02-	5656	16-	21-	7301	28-	34-	9302	44-	++	11943	48-	13837	50-								
	291130	082	10	10	153	10	09	1501	08	05	3083	00	03-	5705	14-	31-	7362	26-	40-	9384	41-	++	12043	53-	13915	50-	16557	51-						
STORNOWAY 03026	290013	013	11	11	149	11	09	1494	08	06	3077	00	03-	5691	14-	31-	7347	26-	41-	9362	42-	++	12002	56-	13855	52-								
	291135	013	16	13	166	12	09	1515	08	04	3088	00	14-	5706	16-	32-	7345	28-	40-	9341	44-	++	11973	53-	13839	52-	16459	52-	18773	51-	20987	46-		
SHANWELL 03170	282330	005	11	07	185	12	07	1525	07	02	3118	01	13-	5752	14-	28-	7407	26-	38-	9423	41-	++	12052	60-	13891	53-	16484	53-	18788	51-	20990	49-		
	291130	005	20	08	189	16	06	1542	10	07-	3134	03	14-	5764	15-	27-	7415	27-	39-	9429	42-	++	12052	61-	13883	55-	16463	57-	18753	52-	20932	52-		
ALDERGROVE 03917	282330	077	13	07	206	13	08	1541	02	03-	3129	03	26-	5771	14-	30-	7429	26-	42-	9450	42-	++	12076	61-	13903	54-	16494	55-						
	291130	077	18	08	204	14	05	1552	04	00	3142	03	17-	5790	14-	28-	7450	26-	41-	9477	40-	++	12132	59-	13965	54-	16560	55-	18845	53-	21029	510 24372 48-		
AUGHTON 03322	282330	056	11	08	229	12	07	1570	09	12-	3157	02	11-	5795	15-	38-	7449	25-	47-	9468	42-	++	12081	63-	13900	55-	16472	56-	18760	52-	20945	49-		
	291245	056	21	11	214	17	08	1574	11	01-	3170	02	06-	5813	14-	27-	7473	25-	35-	9493	42-	++	12115	59-	13946	54-	16526	56-	18821	52-				
HEMSBY 03496	282330	012	13	11	229	17	10	1594	07	03	3185	04	12-	5839	12-	31-	7509	24-	42-	9542	40-	++	12176	62-	13993	55-	16572	55-						
	291130	012	22	11	234	17	09	1596	09	01-	3191	03	09-	5833	14-	27-	7493	25-	36-	9513	42-	++	12137	61-	13948	57-	16510	56-	18778	56-				
CRAWLEY 03774	282330	144	11	09	242	13	08	1601	09	01-	3196	04	05-	5837	13-	24-	7491	27-	36-	9504	42-	++	12125	62-	13938	55-	16518	56-						
	291130	144	22	11	232	19	07	1595	08	02-	3190	03	08-	5830	13-	26-	7485	27-	38-	9492	43-	++	12099	61-	13913	56-	16484	56-	18769	53-				
CAMBORNE 03808	282330	088	10	08	234	13	07	1592	09	09-	3187	03	09-	5835	13-	26-	7500	24-	36-	9526	41-	++	12147	60-	13966	56-	16533	57-	18809	54-	20981	51-		
	291130	088	21	09	211	17	09	1577	09	00	3169	03	10-	5811	14-	29-	7471	25-	39-	9491	41-	++	12115	60-	13948	55-	16515	57-						
VALENTIA 03953	282330	014	14	12	211	14	09	1553	10	02-	3148	04	11-	5800	15-	25-	7470	25-	36-	9500	41-	++	12130	56-	++++	++	16580	55-						
	291132	014	17	11	189	14	10	1528	05	05	3117	02	34-	5760	13-	42-	7420	25-	47-	9440	42-	++	12090	54-	++++	++	16580	54-						
Ocean Weather Station 'I' 59°00'N 19°00'W	290000		11	07	071	10	06	1399	03	05-	2960	01-	28-	5560	17-	19-	7200	28-	33-	9200	44-	++	11830	51-										
	291200		11	11	032	++	++	1321	07	05	2894	01-	03-	5520	15-	19-	7170	27-	32-	9180	42-	++	11860	44-										
Ocean Weather Station 'J' 52°30'N 20°00'W	290000		14	14	099	14	14	1469	10	10	3056	01-	02-	5680	14-	33-	7330	26-	45-	9350	42-	++	11990	53-	13860	51-	16490	52	18800	51-	21000	48-		
	291200		12	11	062	11	10	1408	07	07	2984	01-	04-	5590	17-	21-	7230	28-	44-	9220	44-	++	11890	48-	13800	48-	16450	52-	18760	53-	20950	52-	24270	52-



## PRESSURES AND TEMPERATURES OF SIGNIFICANT LEVELS

Page 3

STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE				TROPOPAUSE		
		MSL	Surf.	0°C level		mb	m	°C
LERWICK 03005	63 571++	013 003 726	903 10 08 726 00 01- 672 02- 04- 583 08- 11- 357 33- 40- 323 40- 47- 254 53- 231 56- 210 49- 164 48- 134	52- 122 49- 102 50-		231 11020 56- 134 11470 52-		
	51 860++	018 009 700	993 ++ 08 878 ++ 06 864 08 04 786 ++ 03 763 04 02 623 ++ 09- 598 ++ 10- 573 ++ 19- 545 ++ 18- 532 13-	25- 514 12- 29- 413 ++ 40- 361 32- 42- 320 37- 50- 233 53- 213 54- 155 49- 100 51- 075 48-		233 11080 53-		
STORNOWAY 03026	51 863++	018 016 704	001 ++ 09 926 08 06 879 09 07 854 08 06 837 08 06 736 ++ 00 713 01 02- 673 ++ 07- 640 06- 09- 625 05-	11- 605 ++ 12- 543 12- 24- 527 12- 27- 481 15- 33- 383 29- 43- 335 35- 48- 251 51- 218 56- 186 55- 176 52- 110 52-		218 11440 56-		
	03 22442	020 018 706	010 13 09 900 07 04 882 ++ 00 866 09 04 846 ++ 04 782 03 08- 766 04- 11- 750 ++ 17- 729 ++ 11- 713 ++ 11-	640 03- 22- 341 37- 48- 269 50- 242 54- 221 55- 178 51- 120 53- 068 51- 040 45-		242 10750 54-		
SHANWELL 03170	01 14741	022 022 688	014 12 07 895 05 02 869 ++ 00 846 08 03 820 09 06- 800 09 09- 676 01- 13- 632 02- 15- 598 05- 18- 541	09- 23- 430 22- 34- 328 37- 49- 202 60- 188 58- 161 52- 112 57- 101 53- 036 48-		202 11990 60-		
	02 15500	022 022 663	010 16 06 900 ++ 03 893 07 01 868 11 03- 850 ++ 07- 722 04 17- 688 ++ 13- 615 ++ 14- 549 11- 21- 494 15-	28- 335 36- 47- 219 59- 197 62- 185 56- 157 53- 100 57- 068 51- 045 51-		197 12170 62-		
ALDERGROVE 03917	01 45632	025 016 648	999 13 07 990 ++ 06 859 ++ 01- 853 01 03- 835 08 09- 809 08 14- 763 ++ 23- 615 02- 30- 574 ++ 22- 522 13-	27- 463 17- 35- 352 ++ 49- 242 54- 199 62- 169 54- 098 55- 074 52-		199 12120 62-		
	02 686++	024 015 381	005 14 05 854 03 02 833 10 07- 712 ++ 19- 690 ++ 14- 644 00 17- 452 18- 33- 389 27- 42- 338 34- 48- 229	54- 196 59- 171 54- 105 56- 030 48-		196 12280 59-		
AUGHTON 03322	02 14600	028 021 664	014 13 08 938 09 04 876 04 01 854 ++ 11- 850 09 12- 823 08 19- 783 06 09- 763 06 18- 747 06 21- 732 05	26- 715 ++ 10- 660 00 18- 635 01- 27- 600 ++ 39- 447 21- 39- 435 21- 40- 380 28- 50- 237 55- 200 63- 178 55- 096 56- 050 49-		200 12080 63-		
	02 00900	025 019 665	005 17 08 971 15 08 930 12 05 880 08 03 840 11 04- 793 ++ 10- 705 03 05- 536 09- 22- 310 40- 48- 264 50-	207 60- 189 56- 146 54- 101 56- 077 52- 056 52-		207 11910 60-		
HEMSBY 03496	02 00900	028 026 639	012 17 10 990 17 10 856 07 04 845 08 02 806 ++ 04- 782 ++ 14- 763 ++ 14- 733 ++ 05- 713 05 15- 680 ++	09- 662 ++ 16- 638 00 21- 556 ++ 24- 484 13- 32- 423 28- 38- 345 32- 49- 203 61- 189 62- 170 54- 129 57- 076 52-		203 12070 61-		
	02 11600	027 026 665	013 18 09 890 09 06 879 08 05 863 10 02 806 ++ 09- 708 04 08- 639 02- 12- 548 08- 22- 410 23- 34- 310 40-	49- 216 59- 193 62- 165 55- 116 58- 070 56-		193 12340 62-		
CRAWLEY 03774	02 00900	029 012 661	998 14 08 963 ++ 02 957 15 03 907 ++ 06 891 10 03 873 ++ 01- 830 ++ 02- 809 ++ 07- 792 07 01- 768 08 01-	715 ++ 05- 604 05- 13- 581 06- 17- 559 ++ 13- 528 10- 21- 311 40- 48- 280 46- 200 62- 170 56- 132 58- 117 55- 084 55-		200 12130 62-		
	02 11600	027 010 665	006 19 07 888 10 04 852 08 01- 810 ++ 07- 778 08 06- 655 01- 12- 500 13- 26- 323 ++ 50- 282 47- 206 62-	154 56- 132 58- 053 52-		206 11900 62-		
CAMBORNE 03808	02 10931	029 018 659	012 13 11 990 13 04 970 13 05 955 13 01 940 ++ 06- 876 ++ 10- 848 ++ 09- 796 08 13- 759 ++ 06- 726 05-	07- 613 04- 16- 543 08- 24- 304 40- 48- 264 50- 204 62- 171 55- 124 58- 090 56- 036 48-		204 12010 62-		
	02 00900	025 015 652	006 17 09 924 13 06 873 ++ 05 869 08 04 839 09- 03- 830 ++ 07- 804 07 07- 776 07 07- 574 06- 21- 384 27-	41- 336 36- 49- 226 57- 194 60- 175 54- 094 59- 087 56- 074 56-		194 12310 60-		
VALENTIA 03953	02 884++	025 024 645	015 15 11 864 02 01 850 10 02- 750 06 17- 677 03 08- 353 31- 43- 222 57- 208 58- 180 53- 111 55- 086 52-			222 11500 57-		
	01 785++	022 021 655	903 05 03 865 03 02 824 07 01 786 07 24- 761 07 25- 719 03 32- 675 01 26- 625 02- 28- 411 24- 47- 283 45-	224 55- 212 55- 160 51- 086 54-		224 11500 55-		
Ocean Weather Station 'I' 59°00'N 19°00'W	02 755++	009 009 722	980 09 06 904 ++ 02 877 01 02- 864 04 01- 852 ++ 05- 815 01 08- 784 03 13- 730 01 27- 691 ++ 29- 661 ++	04- 07- 617 ++ 10- 600 09- 13- 515 ++ 18- 495 17- 19- 402 27- 32- 521 40- 43- 258 53- 224 59- 214 53-		225 11100 59-		
	63 8032+	996 996 728	992 11 09 928 11 09 887 08 06 771 03 02 728 00 02- 672 02- 04- 514 13- 17- 439 ++ 27- 398 ++ 32- 375 30-	37- 311 40- 48- 278 47- 251 52- 233 51- 220 46- 209 44- 170 42-		251 10400 52-		
Ocean Weather Station 'J' 52°30'N 20°00'W	50 872++	012 012 707	932 14 14 824 ++ 08 770 05 03 701 01- 02- 638 ++ 07- 602 07- 16- 553 11- 25- 499 14- 33- 451 19- 39- 311	40- 235 56- 167 49- 137 52- 064 51- 040 48-		235 11000 56-		
	61 4727+	007 007 715	964 08 08 917 09 09 843 07 07 762 03 03 729 01 00 670 03- 98- 626 07- 12- 606 09- 13- 591 10- 15- 566 10-	21- 527 14- 38- 508 ++ 21- 474 20- 23- 456 22- 36- 397 28- 44- 365 34- 49- 293 46- 256 50- 139 48- 030 52-		256 10300 50-		







## UPPER WINDS AT ADDITIONAL LEVELS

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STATION		MAX. WIND
LERWICK 03005	13200m 280 46 12830/1 080mb 210 17 22200m 150 14	270 82 10900m 260 70 11200m 250 62 10680m 250 67 10020m
STORNOWAY 03026	06260/0 11810/1 16700m 240 13 04490/0 12520/1 044mb 130 06 17700m 180 08 09660/1 16470/7	250 72 11090m
SHANWELL 03170	040mb 130 11 16680m 250 08 01260/1 01540/2 08000/0 11430/1 14080/1	
ALDERGROVE 03917	081mb 210 10 23200m 130 18 09470/0 11950/1 P21600m 170 09 22000m 140 10	
AUGHTON 03322	055mb 140 07 22500m 140 12 059mb 150 06 13500m 210 18	
HEMSBY 03496	081mb 270 05 080mb 210 08 22310m 130 14	
CRAWLEY 03774	10990/5 24250/5 28800m 110 25 33000m 090 31 36000m 100 51 12750/4 22780/0 26180/0 26580/3 18000m 180 06	
CAMBORNE 03808	040mb 110 10 17799m 170 04 080mb 190 06	
VALENTIA 03953	677mb 200 25 353mb 210 36 222mb 200 45 180mb 200 27 086mb 210 08 903mb 180 22 761mb 190 28 625mb 190 29 224mb 210 39 160mb 220 25 086mb 210 13	
Ocean Weather Station 'I' 59°00'N 19°00'W	160mb 220 31 P18000m 220 08 17100m 230 10 01770/3 03740/0 06100/1 07330/0 09850/0 11850/1 337mb 190 63 225mb 180 52 183mb 180 33 22500m 200 03 10350/1	230 87 08970m 210 75 10750m 190 84 09730m 170 81 09720m
Ocean Weather Station 'J' 52°30'N 20°00'W	043mb 210 04 01200m 210 67 12900m 200 44 12500/1 13360/1 161mb 190 46 034mb 210 06 12300m 230 62 21000m 160 09 06340/0 07300/0 09910/0 11980/1	200 68 11700m 210 69 08070m 220 103 10800m
LARKHILL 03743	04190/2	

## NOTES ON THE AEROLOGICAL SITUATION

The trough over the Atlantic has continued to move east and the downstream ridge has amplified further and moved just to east of the British Isles. The low vortex over the Norwegian Sea has moved slowly east but remains as deep as yesterday. However the trough over eastern Europe has continued to move east into western Russia.

## AVERAGE AND EXTREME VALUES 1951-55

## JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22345	-48.1	-42	-55	...	...
60	19675	-48.1	-41	-55	120	3
100	16320	-48.8	-41	-56	244	5
150	13660	-48.3	-41	-59	263	10
200	11770	-49.8	-39	-67	271	16
300	9125	-46.7	-37	-56	271	22
400	7160	-32.6	-23	-44	271	18
500	5555	-20.8	-11	-31	269	14
700	2985	-5.2	3	-14	266	9
850	1435	2.8	14	-7	269	6

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	257	-54.7	10190
Max.	405	-40	12955
Min.	172	-68	6890

LARKHILL/CRAWLEY† at 03, 15h.  
(Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.)

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22310	-49.6	-47	-57	106	9
60	19675	-51.4	-45	-59	136	3
100	16370	-52.6	-46	-61	251	8
150	13745	-51.8	-42	-65	265	15
200	11890	-54.0	-40	-65	268	20
300	9265	-44.7	-36	-54	265	20
400	7275	-29.6	-19	-41	265	17
500	5640	-17.8	-9	-28	263	15
700	3050	-2.1	7	-10	263	11
850	1480	5.7	16	-3	264	7

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	234	-56.8	10950
Max.	388	-41	13440
Min.	160	-66	7225

MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5
60	19670	-60.7	-53	-69	135	4
100	16510	-62.9	-57	-71	255	21
150	13995	-59.0	-51	-67	265	38
200	12185	-56.6	-47	-67	275	42
300	9530	-40.1	-33	-46	285	32
400	7500	-23.9	-19	-29	285	27
500	5835	-11.8	-8	-17	285	24
700	3165	7.2	13	-1	290	18
850	1535	17.9	27	8	290	9

Tropopause	Average Press.	Average Temp.	Max. Press.	Min. Press.	Max. Temp.	Min. Temp.
Upper	123	-65.7	...	73	...	-73
Lower	193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

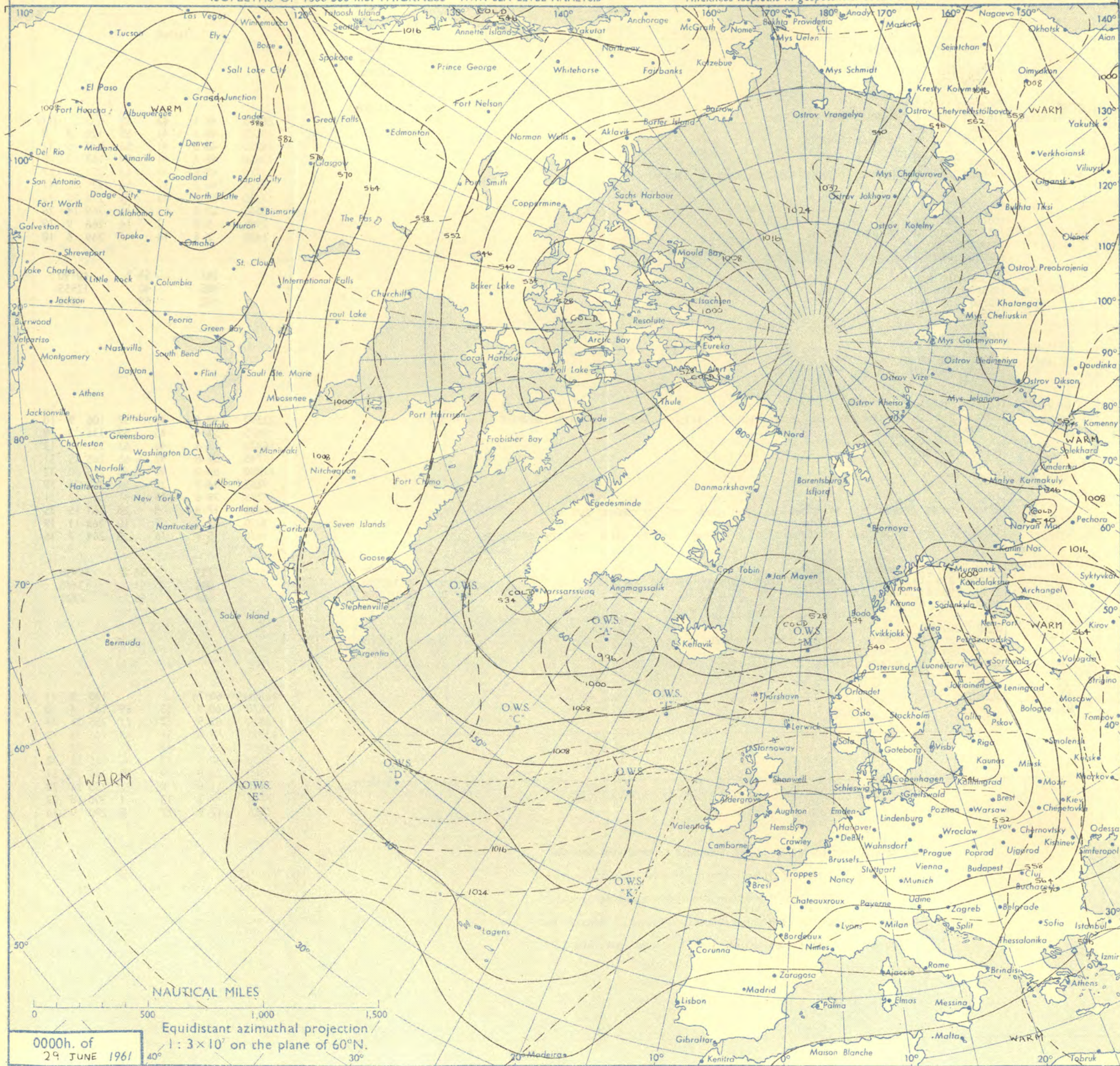
† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.



ISOPLETHS OF 1000-500 mb. THICKNESS WITH SEA LEVEL ANALYSIS

Thickness isopleths in geopotential decametres

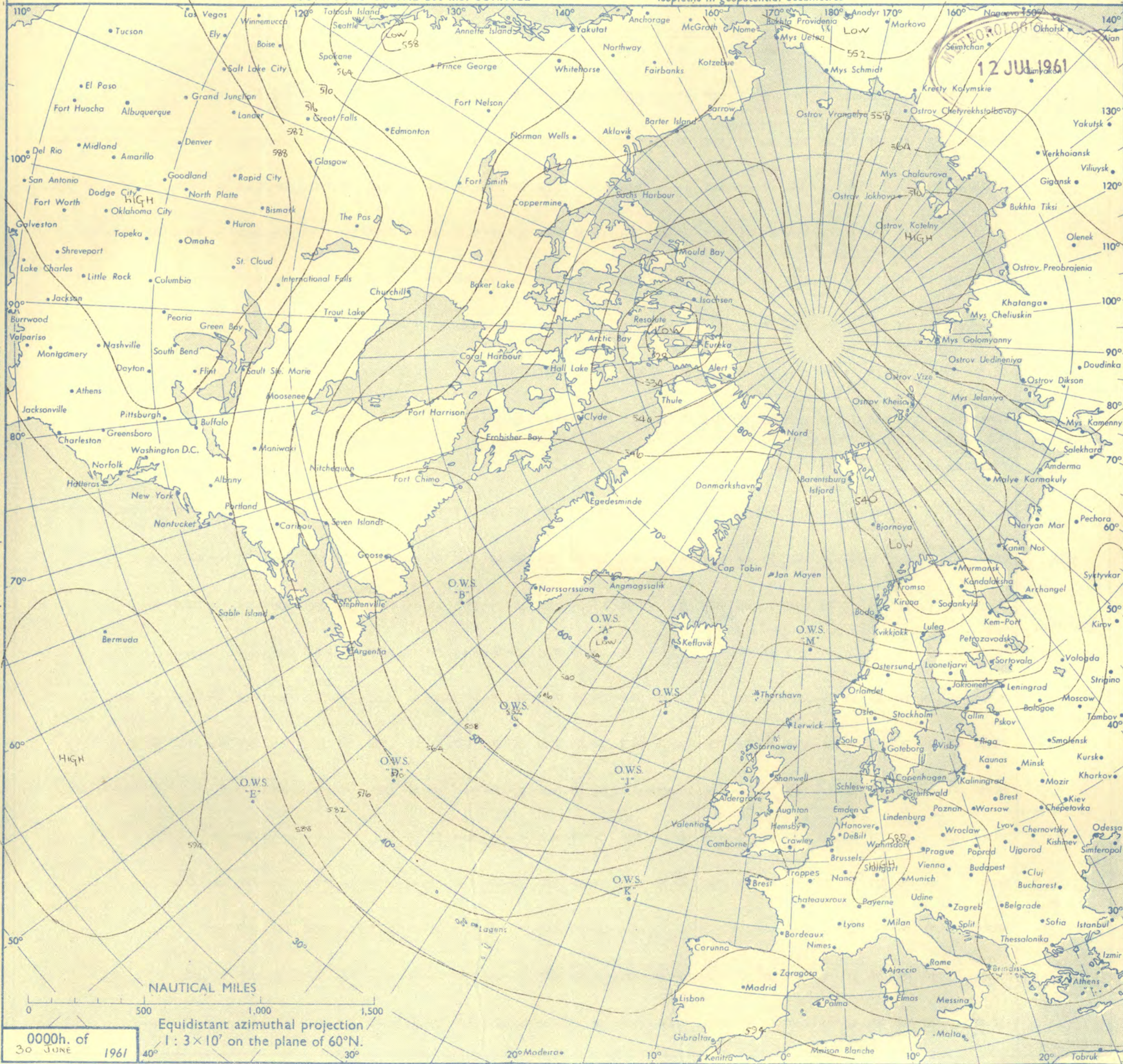




CONTOURS OF THE 500 mb. SURFACE

Isopleths in geopotential decametres

All times of observation printed in this publication are GREENWICH MEAN TIME.





STATION	YYGGgg	SURFACE			1000mb			850mb			700mb			500mb			400mb			300mb			200mb			150mb			100mb			70mb			50mb			30mb		
		gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C	gpm	°C						
LERWICK 03005	292330	082	11	11	168	12	10	1513	05	01	3088	01	27-	5718	15-	44-	7366	26-	++	9383	41-	++	12024	55-	13897	50-	16533	51-	18863	48-										
	301130	082	12	10	139	11	09	1485	04	01	3050	00	20-	5655	15-	18-	7310	25-	31-	9332	41-	++	11983	53-	13850	51-	16490	50-												
STORNOWAY 03026	292330	013	13	11	147	13	09	1491	04	01	3053	00	23-	5673	16-	32-	7321	26-	32-	9342	42-	++	11982	53-	13858	50-	16503	51-	18823	50-	21035	47-	24410	46-						
	301130	013	14	12	121	12	09	1466	07	04-	3036	02-	04-	5646	16-	18-	7288	28-	33-	9290	43-	++	11942	50-	13811	52-	16445	51-	18770	50-	20978	48-	24367	45-						
SHANWELL 03170	292330	005	09	07	180	13	09	1534	10	01-	3122	03	11-	5759	14-	26-	7414	25-	36-	9434	42-	++	12066	59-	13903	53-	16501	54-	18804	50-	20996	50-								
	301130	005	22	09	152	18	07	1517	06	03	3092	01	25-	5725	13-	16-	7390	24-	27-	9421	40-	44-	12066	59-	13895	52-	16503	52-	18811	51-										
ALDERGROVE 03917	292330	077	13	09	165	14	09	1523	06	02	3102	02	16-	5748	13-	32-	7413	24-	38-	9447	40-	47-	12088	59-	13921	53-	16530	53-	18847	51-	21039	50-	24405	46-						
	301130	077	18	11	145	17	10	1505	08	08	3090	01	01	5742	11-	12-	7416	23-	26-	9465	39-	43-	12123	59-	13942	57-	16534	53-	18843	52-										
AUGHTON 03322	292330	056	15	08	186	19	10	1558	09	04	3149	03	11-	5799	12-	28-	7461	25-	40-	9491	40-	++	12137	59-	13972	53-	16564	54-												
	301130	056	24	12	171	21	10	1545	13	04-	3137	02	12-	5797	12-	26-	7475	22-	26-	9525	38-	44-	12180	60-	13991	56-	16584	54-												
HEMSBY 03496	292330	012	14	11	211	19	12	1584	11	05-	3184	03	07-	5827	14-	29-	7487	36-	49-	9502	42-	++	12119	61-	13946	55-	16519	56-	18794	54-	20971	52-								
	301130	012	23	15	196	20	12	1576	13	00	3179	04	15-	5836	13-	29-	7498	26-	40-	9523	40-	++	12171	57-	14002	55-	16583	55-	18870	52-										
CRAWLEY 03774	292330	144	14	11	204	17	10	1583	10	04	3185	05	11-	5836	12-	28-	7494	26-	39-	9503	43-	++	12139	54-	13996	53-	16590	55-	18872	53-										
	301130	144	26	14	189	24	13	1579	11	06	3185	07	16-	5839	15-	34-	7493	26-	44-	9524	39-	++	12173	59-	13981	57-														
CAMBORNE 03808	292330	088	15	11	202	18	12	1573	11	07	3169	03	06-	5828	13-	28-	7483	26-	39-	9505	40-	++	12145	60-	13975	56-	16549	55-	18836	53-	21016	51-								
	301205	088	23	10	173	20	11	1548	12	07-	3156	06	14-	5827	11-	13-	7515	21-	24-	9570	38-	41-	12242	59-	14023	59-	16575	58-	18842	54-	21004	53-								
VALENTIA 03953	292330	014	14	12	157	13	11	1505	07	02-	3096	02	05-	5740	12-	14-	7410	23-	26-	9460	38-	41-	12120	60-	++++	++	16520	55-												
	301200	014	16	15	127	15	14	1487	08	03	3081	04	00	5740	11-	16-	7430	21-	28-	9490	37-	44-	12180	57-	++++	++	16580	57-												
Ocean Weather Station 'I'  59°00'N 19°00'W	300001		10	06	027	10	06	1350	01-	03-	2894	04-	27-	5480	20-	36-	7090	32-	48-	9050	49-	++	11760	42-	13700	44-	16400	48-	18750	48-										
	301200		11	05	042	10	05	1362	02-	05-	2895	07-	23-	5460	21-	36-	7070	33-	45-	9030	48-	++	11730	42-	13670	44-	16380	47-												
Ocean Weather Station 'J'  52°30'N 20°00'W	300001		12	09	075	11	09	1412	06	02	2979	03-	07-	5570	19-	31-	7200	29-	41-	9200	45-	++	11860	49-	13760	47-	16420	51-	18750	51-										
	301200		13	05	090	12	03	1431	03	05-	2991	04-	08-	5560	21-	36-	7170	32-	46-	9160	41-	++	11870	46-	13780	48-	16440	50-	18780	48-										



## PRESSURES AND TEMPERATURES OF SIGNIFICANT LEVELS

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STATION	ww N <sub>h</sub> C <sub>L</sub> hC <sub>M</sub> C <sub>H</sub>	PRESSURE																										TROPOPAUSE		
		MSL	Surf.	0°C level																									mb	m
LERWICK  03005	01 655++	020	010	674	992 12 10 886 ++ 05 870 07 04 855 ++ 01 816 ++ 00 812 02 03 807 ++ 08 792 06 10 761 ++ 19 603 05 38 458 20 46 221 57 165 49 133 52 100 51 070 48																							221	11400	57
	02 8097+	017	007	694	995 11 09 960 12 07 888 ++ 03 828 02 00 790 ++ 05 766 03 13 703 00 20 647 04 24 546 15 19 538 14 17 528 ++ 16 482 16 19 424 ++ 25 416 24 28 404 24 30 377 ++ 37 330 36 42 307 40 46 238 53 214 54 184 51 100 52 074 50																							238	10850	53
STORNOWAY  03026	03 25646	018	016	696	005 13 09 920 ++ 05 894 ++ 03 821 02 00 790 ++ 00 770 ++ 10 754 02 13 706 ++ 23 627 04 26 570 ++ 32 464 ++ 34 432 23 31 422 22 29 307 40 49 273 47 212 57 192 51 106 50 094 53 053 47 030 46																							212	11610	57
	03 1547+	015	013	736	005 12 10 949 09 07 935 ++ 05 914 ++ 05 882 08 01 862 ++ 05 827 ++ 05 807 05 00 770 ++ 00 668 04 06 493 17 19 418 ++ 28 377 ++ 39 318 40 49 267 50 241 53 207 50 083 51																							241	10710	53
SHANWELL  03170	02 24500	022	021	660	011 14 11 984 13 08 922 09 06 894 ++ 05 869 10 01 738 ++ 12 701 03 11 523 12 23 380 28 39 310 40 50 212 59 177 54 143 53 115 56 100 54 096 55 073 50 045 49																							212	11700	59
	02 12602	018	017	683	009 19 07 914 11 06 800 03 00 776 ++ 13 765 05 14 750 04 19 643 03 28 627 03 28 554 10 25 547 11 22 529 10 16 510 12 16 376 28 32 367 28 32 301 40 44 263 48 203 59 169 57 152 52 125 55 100 52 091 54 064 50																							203	11950	59
ALDERGROVE  03917	03 35602	020	010	657	986 15 10 920 ++ 06 853 06 03 823 07 07 803 07 12 760 ++ 06 753 02 09 731 ++ 13 720 03 14 679 01 19 600 04 24 423 21 38 355 ++ 37 339 33 41 300 40 47 243 52 197 59 168 53 103 54 092 51 030 46																							197	12160	59
	21 4567+	017	008	676	985 15 10 922 10 06 883 ++ 06 850 ++ 08 825 ++ 05 811 ++ 04 785 ++ 01 765 05 01 721 02 00 697 ++ 01 536 08 08 444 ++ 20 410 ++ 24 401 23 26 383 24 29 367 ++ 33 295 ++ 44 269 46 195 59 187 56 119 55 082 52 070 52																							195	12270	59
AUGHTON  03322	02 00900	022	015	649	000 19 10 833 08 03 813 08 04 752 06 10 708 ++ 09 647 00 17 504 12 28 302 40 ++ 198 60 158 52 110 56 072 52																							198	12200	60
	03 20977	020	013	626	013 24 12 001 21 10 918 14 08 879 11 05 858 13 03 852 ++ 06 832 11 02 763 ++ 02 755 04 03 743 ++ 11 739 05 09 710 02 11 633 00 20 535 08 26 485 ++ 27 477 15 22 466 14 20 376 26 30 324 33 39 291 40 46 192 62 183 59 129 55 084 53																							192	12410	62
HEMSBY  03496	02 00900	025	023	658	008 19 12 907 13 07 887 13 00 840 ++ 05 827 ++ 01 744 06 06 687 ++ 08 652 ++ 13 431 21 37 311 40 50 208 61 173 55 116 58 076 55 061 52 040 50																							208	11850	61
	02 00900	023	021	630	996 20 12 902 ++ 10 883 13 09 873 13 03 856 13 00 753 ++ 13 621 01 18 333 35 48 266 47 211 57 086 55 060 52																							211	11830	57
CRAWLEY  03774	02 00901	024	007	643	993 20 11 833 ++ 04 826 09 02 804 10 05 719 06 13 668 ++ 11 529 09 24 373 31 43 325 38 50 280 47 218 57 190 52 118 55 060 54																							218	11590	57
	02 11502	022	005	632	001 24 13 928 17 09 865 ++ 08 832 ++ 05 828 10 01 819 11 03 798 11 09 760 ++ 09 735 ++ 13 675 05 18 506 14 32 407 25 43 362 29 48 345 ++ 49 210 58 192 61 158 57 105 57																							192	12410	61
CAMBORNE  03808	02 00900	024	014	623	998 18 12 953 16 08 898 11 07 865 ++ 07 834 11 07 820 ++ 01 788 ++ 03 732 ++ 05 708 03 05 668 03 13 548 07 25 418 25 38 314 38 50 203 62 179 55 110 57 040 48																							203	12020	62
	01 30932	020	010	620	000 20 11 939 ++ 08 891 13 11 855 13 02 850 ++ 07 823 10 08 805 ++ 03 741 08 12 586 ++ 20 560 05 09 492 ++ 13 400 21 24 287 40 44 178 64 146 58 110 58 040 52																							178	12980	64
VALENTIA  03953	02 885++	018	017	680	938 09 08 869 06 03 841 09 06 809 07 03 774 07 01 636 03 11 601 07 10 589 05 06 386 24 27 224 55 195 60 178 59 161 56 104 54 094 56																							195	12100	60
	60 863++	015	013	645	994 14 13 896 11 08 794 05 01 744 08 04 658 01 03 543 07 11 507 11 16 492 10 15 456 14 25 333 30 36 279 40 190 59 174 60 154 54 093 57 070 52																							190	12500	59
Ocean Weather Station 'I'  59°00'N 19°00'W	02 884++	003	003	860	992 09 06 943 ++ 01 822 03 05 803 01 05 745 01 17 737 ++ 20 684 ++ 31 629 08 31 513 18 35 461 25 41 414 30 46 375 36 50 294 50 244 44 186 42 100 48 086 49 056 47																							294	09200	50
	02 58571	005	005	878	990 08 03 961 ++ 02 945 05 00 828 04 05 823 ++ 05 790 02 11 781 ++ 14 690 07 23 640 09 28 478 23 38 356 39 50 316 46 283 51 222 43 191 41 169 44 123 44 100 47 095 48 076 47																							283	09400	51
Ocean Weather Station 'J'  52°30'N 20°00'W	02 756++	009	009	740	962 ++ 06 929 ++ 02 893 03 01 865 07 03 706 03 07 627 09 13 613 08 12 493 19 31 325 40 ++ 267 51 232 47 146 47 100 51 060 51																							267	10000	51
	02 785+2	011	011	757	950 07 02 869 01 01 852 ++ 02 843 ++ 14 840 05 14 832 ++ 18 780 ++ 02 731 02 05 601 12 19 590 13 24 580 ++ 29 558 14 29 443 28 43 344 39 282 42 187 46 099 51 053 50																							253	10300	46



STATION	YYGGgg	Type	Surface	1000mb	900m	850mb 1500m	750mb 2100m	700mb 3000m	600mb 4200m	500mb 5400m	400mb 7200m	300mb 9000m	250mb 10500m	200mb 12000m	150mb 14100m	100mb 15900m	70mb 18300m	50mb 20700m	30mb 23700m	20mb 26400m	10mb 30900m
LERWICK 03005	292330	T	140 10	+++ ++	170 23	210 22	210 19	230 26	230 36	230 36	240 43	240 37	250 30	240 40	220 29	230 15					
	300530	P	140 09	+++ ++	170 13	180 15	210 22	210 32	220 34	230 38	230 42	230 46	240 59	240 46	220 33	230 17	170 10	140 14	130 14		
	301130	T	160 12	+++ ++	210 21	210 23	220 35	220 31	210 38	220 46	230 54	230 64	220 73	230 52	230 38	210 16					
	301730	P	180 12	+++ ++	210 27	210 31	220 29	220 29	230 34	240 45	230 54	240 66	250 90	240 64	230 33	230 32					
STORNOWAY 03026	292330	T	180 14	+++ ++	210 33	220 29	210 29	210 30	220 37	210 45	220 49	230 58	220 62	220 51	220 34	210 14	200 13	160 07			
	300530	P	200 18	+++ ++	200 30	200 32	200 29	210 31	210 49	210 34	210 53	210 59	220 77	220 58	230 34	220 21					
	301130	T	180 14	+++ ++	210 33	220 29	220 29	210 31	220 33	220 40	220 65	220 69	220 79	230 57	230 38	210 22	220 11	160 10	110 12		
	301730	P	170 18	+++ ++	200 46	220 43	220 38	210 43	220 45	230 50	220 64	230 92	240 99	240 94	230 40						
SHANWELL 03170	292330	T	000 00	+++ ++	230 27	210 30	210 27	210 28	210 34	220 38	220 44	220 45	240 43	230 43	220 32	220 13	220 08	180 05			
	300530	P	000 00	+++ ++	210 21	210 27	210 31	210 37	210 40	210 47	220 45	220 41	240 49	240 41	230 25	230 16	220 07	130 12			
	301130	T	220 13	+++ ++	200 22	210 33	210 34	210 38	210 45	220 44	230 47	240 52	260 56	250 54	230 31	220 17	190 12				
	301730	P	210 15	+++ ++	210 20	210 25	210 31	220 35	230 34	230 39	240 49	240 55	240 58	260 73	240 33						
ALDERGROVE 03917	292330	T	150 11	+++ ++	200 30	210 32	200 35	210 35	200 37	210 44	220 40	230 44	250 40	250 39	220 31	200 15	190 09	160 07	100 17		
	300530	P	150 09	+++ ++	210 27	200 36	210 30	210 37	210 45	230 41	220 40	230 49	240 62	250 63	230 31	230 18	220 12				
	301130	T	170 14	+++ ++	190 21	210 24	220 35	220 35	240 36	230 39	230 50	260 63	250 72	250 67	230 36	200 19					
	301730	P	170 13	+++ ++	200 28	220 33	220 36	220 38	220 40	220 48	240 56	240 60	230 64	240 68	230 31	230 29					
AUGHTON 03322	292330	T	040 07	+++ ++	180 16	190 21	210 24	210 24	200 27	230 23	200 26	200 26	250 20	230 21	220 20	200 12					
	300530	P	No winds reported																		
	301130	T	150 10	+++ ++	210 17	210 21	220 29	310 31	210 31	220 32	250 27	280 33	290 43	280 50	240 23	220 15					
	301730	P	270 08	+++ ++	190 16	200 22	210 26	230 27	220 24	240 26	260 28	250 30	250 31	270 41	250 19	240 15	190 10				
HEMSBY 03496	292330	T	160 08	+++ ++	190 12	180 09	170 14	170 15	200 17	200 17	170 22	180 22	180 28	170 21	220 07	220 07	210 02	100 04			
	300530	P	190 04	+++ ++	180 06	180 09	190 15	190 17	200 19	190 19	190 22	180 28	170 32	190 13	240 03	250 11	220 02	070 10			
	301130	T	120 08	+++ ++	180 14	200 16	200 17	200 18	200 21	190 24	200 19	330 19	340 40	330 21	260 06	240 07	130 08				
	301730	P	150 09	+++ ++	190 08	210 12	210 14	220 15	220 19	240 18	240 09	350 24	360 29	350 43	310 07	300 05	200 05	100 08			
CRAWLEY 03774	292330	T	120 03	+++ ++	190 10	210 12	190 16	190 17	190 17	180 21	180 20	170 27	170 24	170 10	250 05	200 05	230 06				
	300555	P	160 03	+++ ++	170 12	180 09	200 13	190 15	190 12	190 13	180 09	270 07	330 28	330 21	270 08	250 08	160 04				
	301110	P	220 06	+++ ++	170 10	200 11	230 13	220 19	220 18	230 12	280 05	340 33	350 51	350 44	290 07	250 10	150 06	110 10	120 14	090 26	110 31
	301730	P	180 05	+++ ++	200 09	220 08	260 14	250 18	230 14	250 12	330 11	360 20	010 28	360 43	300 06	270 04	240 06	090 10	100 16		
CAMBORNE 03808	292330	T	120 13	+++ ++	180 15	200 21	210 18	210 22	210 21	210 18	260 16	330 31	330 42	320 38	250 15	210 08	200 06	120 11			
	300530	P	140 06	+++ ++	190 14	210 23	210 24	220 26	220 24	220 19	260 19	290 30	300 32	310 49	270 14	230 13	210 07	100 12			
	301205	T	230 08	+++ ++	200 12	200 18	220 23	230 24	240 26	250 21	270 20	280 18	300 23	300 31	280 12	240 16	160 09	130 12			
	301730	P	170 08	+++ ++	220 16	230 19	230 20	240 21	250 23	260 14	250 16	260 20	250 16	280 10	270 09	240 08	200 08	090 08	100 17		
VALENTIA 03953	292330	T	180 12	180 17	+++ ++	210 25	+++ ++	220 31	+++ ++	220 43	220 47	240 50	+++ ++	260 72	+++ ++	230 23					
	301200	T	180 15	180 18	+++ ++	200 39	+++ ++	220 48	+++ ++	230 52	230 64	230 56	+++ ++	230 69	+++ ++	240 26	260 11				
Ocean Weather Station 'I' 59°00'N 19°00'W	300001	T	230 27	+++ ++	240 25	230 27	230 31	230 31	220 33	220 31	210 40	210 39	210 36	200 37	190 30	190 18	160 12				
	300600	P	225 30	+++ ++	240 27	230 24	230 27	220 36	220 43	220 38	200 48	220 48	220 46	210 36	220 30	220 21					
	301200	T	210 20	+++ ++	210 25	210 25	210 27	220 30	210 36	210 48	210 51	200 48	210 48	200 36	200 28	200 16					
	301800	P	225 30	+++ ++	230 24	230 27	240 24	230 32	210 36	210 37	220 44	210 51	200 46	200 40	200 26	200 17					
Ocean Weather Station 'J' 52°30'N 20°00'W	300001	T	020 11	+++ ++	290 04	250 06	220 13	230 15	220 23	210 33	220 53	210 71	220 87	220 63	220 41	220 18	220 08				
	300600	P	360 10	+++ ++	290 06	240 09	220 11	210 17	220 25	210 34	210 44	210 77	220 112	220 65	220 35	220 25	240 08	000 00			
	301200	T	340 08	+++ ++	320 07	270 11	230 18	230 15	220 18	220 39	210 54	210 96	210 91	200 65	210 48	210 17	210 14				
	301800	P	270 10	+++ ++	280 08	280 12	270 23	260 27	230 33	240 33	240 38	240 45	200 87	220 63	200 44	190 35					
LARKHILL 03743	300630	P	000 00	+++ ++	180 07	190 12	210 15	200 18	210 16	240 13	250 07	330 31	330 41	330 47	240 10	250 11	270 06				
	301030	P	190 02	+++ ++	190 11	220 09	230 13	220 19	210 22	210 18	280 10	310 29	340 38	330 48	270 09	230 10					

## AIRCRAFT OBSERVATIONS OF TEMPERATURE AND HUMIDITY

YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m °C °C	950mb m °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb m °C °C	700mb m °C °C	650mb m °C °C	600mb m °C °C	550mb m °C °C	500mb m °C °C
301200	52.0°N 24.5°W	014 006 875	061 10 00	113 05 01	975 02 02	1433 01- 01+	1917 03- 21- 03- 18-	2969 07- 13-	11- 19-	4157 11- 32-	16- 25-	5529 20- ++		
Cloud :— 3/8Cu. 1800 to 7000ft; 6/8Sc. 4700 to 6000ft; 2/8Ac. 11000 to 12000ft; 2/8Cs. at 30000ft. Inversion Levels :— 800 to 750mb -3½ to -2½°C. Isothermal Levels :—														
YYGGgg	POSITION	PRESSURE MSL Surf. 0°C level	SURFACE m °C °C	1000mb m °C °C	950mb m °C °C	900mb m °C °C	850mb m °C °C	800mb m °C °C	750mb m °C °C	700mb m °C °C	650mb m °C °C	600mb m °C °C	550mb m °C °C	500mb m °C °C
301324	49.3°N 19.8°W	013 005 723	061 13 13	104 11 11	981 09 07	1451 05 05	1945 03 03	02 02	3021 02- 02-	07- ++	4225 09- 31-	12- ++	5614 18- 48-	
Cloud :— 5/8St. 200 to 2500ft; 4/8Sc. 3300 to 4000ft; 7/8Sc. 4600 to 8000ft; 5/8Ac. 9000 to 10000ft; 4/8Ac. 12000 to 13000ft; 4/8Ci. 26000ft to TNG. Inversion Levels :— Isothermal Levels :—														
RATES OF SUBSCRIPTION: Single copy 5d. or post free 7d. One calendar month 13/-; one quarter 35/-; one year 125/-. For special arrangements for supply to schools and colleges see Form 2452.											Sir Graham Sutton, C.B.E., D.Sc., F.R.S., Director General Meteorological Office, Air Ministry, Kingsway, London, W.C.2			



STATION		MAX. WIND
LERWICK 03005	073mb 210 14 24600m 120 09 080mb 210 09 08400/0 09300/0 11600/1	240 64 11040m 220 80 10900m 260 96 10600m
STORNOWAY 03026	033mb 140 10 17300m 220 13 P25000m 110 14 12900m 240 67 15700m 210 25 08790/0 12510/1	220 64 10010m 220 80 10190m 220 87 10170m 240 102 10780m
SHANWELL 03170	21900m 120 12 12810m 260 65 15300m 230 17 12810/1	260 74 12620m
ALDERGROVE 03917	04400/2 12350/7 180mb 250 50 080mb 210 11 18000m 180 14 12950/1	250 64 12080m 250 81 10820m 240 72 11440m
AUGHTON 03322	080mb 190 12 089mb 210 09 19500m 190 03	
HEMSBY 03496	044mb 120 08 22250m 100 17 12000/4 340mb 200 15 07850m 300 05 23400m 090 17 10770/0 12800/1	
CRAWLEY 03774	09330m 320 18 20100m 070 09 12080/1 12470/5 28800m 100 31 33000m 090 35 35100m 100 33 10600/0 11020/1 12220/1 22280/5 23530/3 30160/1 06780/2 12600/1 13640/7 19170/8	350 62 10810m
CAMBORNE 03808	189mb 310 26 043mb 090 12 12900m 300 27 23100m 110 16 11300/0 12330/1 12910/1 171mb 310 29 044mb 150 11 25800m 090 16	
VALENTIA 03953	774mb 210 26 691mb 210 42 161mb 240 25 094mb 230 23 896mb 190 42 744mb 220 47 279mb 230 56 154mb 230 44	260 78 11850m 230 77 11220m
Ocean Weather Station 'I' 59°00'N 19°00'W	064mb 160 15 17700m 220 09 082mb 200 15 18300m 190 08 20700m 210 06 23400m 000 00	
Ocean Weather Station 'J' 52°30'N 20°00'W	121mb 220 29 066mb 220 07 08100m 210 60 11400m 220 87 21300m 000 00 07950/0 08500/0 09100/0 10490/0 11260/1 11600/1 365mb 210 70 121mb 210 32 067mb 210 12 09600m 220 65 18300m 170 24 09500/6 11600/1	220 99 10500m 210 123 10710m 210 114 09670m 200 90 10250m
LARKHILL 03743	04810/2 07610/3 13330/7 06130/2 08040/0 13430/7	

## NOTES ON THE AEROLOGICAL SITUATION

The trough east of Hudson Bay and the downstream ridge are moving east slowly. The low vortex west-southwest of Iceland is slow-moving and has changed little in intensity over the past 24 hours. The trough over the Atlantic continues to make slow eastward progress, while the downstream ridge now extending from western Germany to east of Iceland has increased further in amplitude. The low vortex which yesterday was over the Norwegian Sea has moved rather quickly east to north Sweden and has filled substantially. The trough extending southeast from this low to the Black Sea is moving eastwards slowly.

## AVERAGE AND EXTREME VALUES 1951-55

## JUNE

LERWICK (Lat. 60° 08' N., Long. 01° 11' W.) at 03, 15h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22345	-48.1	-42	-55	...	...
60	19675	-48.1	-41	-55	120	3
100	16320	-48.8	-41	-56	244	5
150	13660	-48.3	-41	-59	263	10
200	11770	-49.8	-39	-67	271	16
300	9125	-46.7	-37	-56	271	22
400	7160	-32.6	-23	-44	271	18
500	5555	-20.8	-11	-31	269	14
700	2985	-5.2	3	-14	266	9
850	1435	2.8	14	-7	269	6

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	257	-54.7	10190
Max.	405	-40	12955
Min.	172	-68	6890

LARKHILL/CRAWLEY† (Lat. 51° 12' N., Long. 01° 48' W./Lat. 51° 05' N., Long. 00° 13' W.) at 03, 15h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	22310	-49.6	-47	-57	106	9
60	19675	-51.4	-45	-59	136	3
100	16370	-52.6	-46	-61	251	8
150	13745	-51.8	-42	-65	265	15
200	11890	-54.0	-40	-65	268	20
300	9265	-44.7	-36	-54	265	20
400	7275	-29.6	-19	-41	265	17
500	5640	-17.8	-9	-28	263	15
700	3050	-2.1	7	-10	263	11
850	1480	5.7	16	-3	264	7

Tropopause	Press. (mb.)	Temp. (°C)	Height (gpm.)
Average	234	-56.8	10950
Max.	388	-41	13440
Min.	160	-66	7225

MALTA (Lat. 35° 50' N., Long. 14° 27' E.) at 03h.

Press. Level	Average Height	Average Temp.	Extreme Temps. Max.	Extreme Temps. Min.	Wind* V <sub>R</sub>	Wind* V <sub>S</sub>
mb.	gpm.	°C	°C	°C	° Kt.	Kt.
40	(22185)	(-60.7)	...	...	120	5
60	19670	-60.7	-53	-69	135	4
100	16510	-62.9	-57	-71	255	21
150	13995	-59.0	-51	-67	265	38
200	12185	-56.6	-47	-67	275	42
300	9530	-40.1	-33	-46	285	32
400	7500	-23.9	-19	-29	285	27
500	5835	-11.8	-8	-17	285	24
700	3165	7.2	13	-1	290	18
850	1535	17.9	27	8	290	9

Tropopause	Average Press.	Average Temp.	Max. Press.	Max. Temp.	Min. Press.	Min. Temp.
Upper	123	-65.7	...	73	...	-73
Lower	193	-59.8	266	...	-46	...

\* V<sub>R</sub> = Vector average wind. V<sub>S</sub> = average wind speed. Average winds are based on observations at Lerwick, Larkhill and Crawley at 03, 09, 15, 21h. and at Malta at 03, 15h.

† Observations were made at Larkhill (Lat. 51° 12' N., Long. 01° 48' W.) up to 28th April, 1953.

Notes: No vector average winds and no extreme values for any element are given for less than 10 observations. Otherwise no averages are given for less than 3 observations and average values based on less than 10 observations are given in brackets.



ISOPLETHS OF 1000-500 mb. THICKNESS WITH SEA LEVEL ANALYSIS

Thickness isopleths in geopotential decametres

