IRPL-F7

IONOSPHERIC DATA

ISSUED

MARCH, 1945

PREPARED BY INTERSERVICE RADIO PROPAGATION LABORATORY
National Bureau of Standards
Washington, D.C.

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Issued
25 Mar 1945

Organized under Joint U.S. Communications Board

IONOSPHERIC DATA

Note.- Following the recommendations of the International Radio Propagation Conference, held in Washington 17 April to 5 May 1944, median values of all ionospheric characteristics are reported, beginning with data for January, 1945, for Washington, for all stations reporting to the IRPL, i.e., Baffin I., Canada; Christmas I.; Fairbanks, Alaska; Reykjavik, Iceland; Maui, Hawaii; Trinidad, Brit. West Indies; Huancayo, Peru; Watheroo, W. Australia; San Francisco, Calif.; Baton Rouge, La.; San Juan, Puerto Rico, and for the Canadian stations at Churchill and Ottawa, Canada. Conventions used in determining median values are given on page 6.

CONTENTS

Provisional data (continued)

Final data

Final data (continued)

TERMINOLOGY

The symbols and terminology used in this report are those adopted by the International Radio Propagation Conference, and given in detail on pages 24 to 26 of the report IRPL-C61, "Report of International Radio Propagation Conference", and on pages 4 and 5 of the previous F-series reports IRPL-F1, 2, 3, 4, 5, and 6.

MONTHLY AVERAGES AND MEDIAN VALUES OF IONOSPHERIC DATA

The tables and graphs of ionospheric data presented here are assembled by the Interservice Radio Propagation Laboratory for analysis and correlation principally incidental to IRPL predictions of radio propagation conditions. These data are furnished by the following:

Carnegie Institution of Washington (Department of Terrestrial Magnetism)
Baffin I., Canada
Christmas I.
Fairbanks, Alaska (University of Alaska, College, Alaska)
Reykjavik, Iceland
Maui, Hawaii
Trinidad, Brit.West Indies
Huancayo, Peru
Watheroo, W. Australia

British National Physical Laboratory, and Inter-Services Ionosphere Bureau
Radio Research Station, Slough, England
Great Baddow, England
Burghead, Scotland
Delhi, India
Madras, India
Simonstown, Union of S. Africa

Australian Council for Scientific and Industrial Research
Radio Research Board, Australia
Brisbane, Q., Australia
Mt. Stromlo, Canberra, NSW, Australia
Cape York, Q., Australia

Canadian Department of National Defence, Naval Service
Churchill, Canada
Ottawa, Canada

New Zealand Radio Research Committee
Kermadec Is.
Christchurch (Canterbury University College Observatory)
Campbell Is.
Pitcairn I.

Peoples' Commissar for Postal and Electric Communications, Moscow, U.S.S.R.
Tykhi Bay, U.S.S.R.
Tomsk, U.S.S.R.
Sverdlovsk, U.S.S.R.
Moscow, U.S.S.R.

National Bureau of Standards, Washington, D.C.
Stanford University, (San Francisco), California
Louisiana State University, Baton Rouge, Louisiana
University of Puerto Rico, San Juan, P.R.
United States Army Air Forces, Pacific Ocean Area
Guam I.
Kwajalein Atoll

The "provisional data" tables give values as reported to the IRPL by telephone or telegraph. Any errors in these values will be corrected in later issues of the F-series reports.

The "final data" tables and graphs are correct for the values reported to the IRPL, but, because of variations in practice in the interpretation of records and scaling and manner of reporting of values, may at times give an erroneous conception of typical ionospheric characteristics at the station. Some of these errors are due to:

a. Differences in scaling records where spread echoes are present.

b. Omission of values where $f^{o}F2$ is less than or equal to $f^{o}F1$, leading to erroneously high values of monthly average or median values.

c. Omission of values where critical frequencies are less than the lower frequency limit of the recorder, also leading to erroneously high values of monthly average or median values.

These effects were discussed on pages 6 and 7 of the previous F-series reports, IRPL-F1, 2, 3, 4, and 5. Discrepancies between predicted and observed values are often ascribable to these effects.

IONOSPHERIC DATA FOR EVERY DAY AND HOUR

These data, observed at Washington, D.C., follow the scaling practices given in the report IRPL-C61, "Report of International Radio Propagation Conference", pages 36 to 39.

In determining the median values presented in this report, the following Conventions have been adopted:

a. For all characteristics: where the value is missing because of A, B, or C (see IRPL-C61, loc. cit.), that hour is omitted from the median count.

b. In addition,

(1) For critical frequencies:
For all layers, where a value is missing because of E (see IRPL-C61, loc. cit.), it is counted as less than the lower limit of the recorder.

(2) For virtual heights:
Values missing for any reason are omitted from the median count.

(3) For muf factors:
Where a value is missing because of G (see IRPL-C61, loc. cit.), it is counted as less than the median count.
Values missing for any other reason are omitted from the median count.

Table 62 presents ionospheric character figures for Washington, D.C., during February, 1945, as determined by the criteria presented in the report IRPL-R5, "Criteria for Ionospheric Storminess", together with American magnetic K-figures which are usually covariant with them.

ERRATA

1. In the January issue of this report, IRPL-F5, values of $f^{o}E$ for Maui, Hawaii, in October, 1944, were plotted in Fig. 26 one hour earlier than they should have been. Values given for these data in the provisional Table 3, of IRPL-F3, with revisions indicated in Table 31, IRPL-F5 (no revision being necessary for $f^{o}E$ values), are correct.

2. In the report "Radio Propagation Conditions", issued 10 July, 1944, Fig. 4, values of F1-M2500 are incorrectly presented as $f^{o}F1$ values.

Table 1

Fairbanks, Alaska (64.8°N, 147.8°W) February, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	300	1.3						3.0
01	320	1.8						3.0
02	340	2.0						3.0
03	330	2.1						2.8
04	340	2.3						2.9
05	340	2.2						2.8
06	370	2.0						2.9
07	270	2.4						3.0
08	250	3.0			100	1.5		3.3
09	240	4.1	200	3.2	100	1.9		3.3
10	240	4.7	220	3.2	100	2.1		3.3
11	240	5.0	220	3.4	100	2.1		3.3
12	240	5.3	230	3.3	100	2.2		3.3
13	240	5.4	220	3.3	100	2.2		3.3
14	230	5.6	230	3.2	100	2.1		3.3
15	230	5.5			100	1.8		3.4
16	230	5.1			100	1.5		3.3
17	220	4.6			100	1.2		3.3
18	230	3.4						3.3
19	240	2.6						3.4
20	280	2.0						3.2
21	290	1.7						3.1
22	300	1.5						3.1
23	300	1.8						3.0

Time: 150°W.
Length of time sweep: 16 Mc to 0.5 Mc in fifteen minutes.

Table 2

Reykjavik, Iceland (64.1°N, 21.7°W) February, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00								
01								
02								
03								
04								
05								
06	320	2.7						3.0
07	280	2.4						3.0
08	230	3.0						3.2
09	220	4.0						3.4
10	200	4.7						3.4
11	210	5.2	230	3.6	112	2.4		3.4
12	220	5.4	210	3.6	110	2.3		3.6
13	240	5.3	190	3.6				3.5
14	220	5.5		3.4	110	2.4		3.5
15	210	5.4						3.5
16	220	5.1						3.4
17	220	4.6						3.4
18	220	4.2						3.2
19	230	4.2						3.3
20	250	4.9						3.2
21								
22	220	5.1						3.4
23								

Time: 15°W.
Length of time sweep: 2 Mc to 16 Mc in one minute.

Table 3

Churchill, Canada (58.8°N, 94.2°W) February, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		3.3						3.0
01								
02								
03								
04								
05								
06								
07								
08		3.6						3.2
09		4.2						3.2
10		4.7						3.2
11		5.3						3.2
12		5.4						3.2
13		5.7						3.1
14		5.9						3.2
15		6.1						3.2
16		6.1						3.2
17		5.9						3.2
18		4.6						3.0
19		3.8						3.1
20		3.7						3.0
21		3.7						3.0
22								
23								

Time: 90°W.
Length of time sweep: 2 Mc to 16 Mc in one minute.

Table 4

Great Baddow, England (51.7°N, 0.5°E) February, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		3.0						2.8
01		3.1						2.8
02		3.0						2.9
03		3.0						2.9
04		2.7						2.9
05		2.5						3.0
06		2.2						3.0
07		3.1						3.2
08		4.9						3.5
09		5.6						3.5
10		6.1						3.4
11		6.5						3.4
12		6.7						3.4
13		6.4						3.4
14		6.5						3.5
15		6.2						3.4
16		5.9						3.4
17		5.5						3.4
18		4.9						3.2
19		4.3						3.1
20		3.6						3.0
21		3.3						2.9
22		3.2						2.9
23		3.2						2.9

Time: 0°
Length of time sweep: Manual operation.

Table 5

Maui, Hawaii (20.8°N, 156.5°W) February, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	280	3.2						3.0
01	280	3.4						3.3
02	240	3.5						3.4
03	230	3.2						3.4
04		2.3						
05								
06								
07	240	4.0						3.3
08	230	6.2			115	2.5		3.4
09	260	7.1	200		100	2.8		3.3
10	290	8.6	200	4.6	100	3.1		3.1
11	280	9.7	200	4.7	100	3.3		3.2
12	280	11.0	190	4.8	100	3.4		3.1
13	280	11.3	200	4.7	100	3.4		3.0
14	270	12.2	200	4.6	100	3.3		3.2
15	260	12.0	190	4.5	100	3.2		3.2
16	240	10.4	200	4.2	100	2.9		3.4
17	220	8.4			110	2.4		3.5
18	210	7.0						3.5
19	200	5.5						3.5
20	220	4.1						3.4
21	250	3.4						3.2
22	260	3.5						3.1
23	260	3.4						3.2

Time: 150°W.
Length of time sweep: 2 Mc to 16 Mc in one minute.

Table 6

Huancayo, Peru (12.0°S, 75.3°W) February, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	280	6.2						2.8
01	260	5.2						3.3
02	250	4.8						3.0
03	250	3.9						3.1
04	250	3.1						3.4
05	260	2.2						3.0
06	260	4.2				1.6		3.2
07	240	6.8				2.5		3.3
08	300	8.4	220	4.4		2.9		3.0
09	320	9.0	220	4.5		3.4		2.9
10	340	9.2	210	4.7		3.7		2.7
11	360	9.0	210	4.7		3.9		2.5
12	350	8.9	200	4.7		3.8		2.5
13	350	9.1	200	4.6				2.6
14	330	9.6	200	4.6				2.6
15	320	10.0	200	4.4		3.3		2.6
16	290	10.2	200	4.2		3.0		2.6
17	230	9.9				2.5		2.7
18	260	9.3				1.8		2.7
19	280	9.4						2.8
20	280	9.2						2.7
21	300	8.9						2.8
22	280	8.5						2.9
23	280	8.3						2.9

Time: 75°W.
Length of time sweep: 16 Mc to 0.5 Mc in fifteen minutes.

Table 7

Brisbane, Q., Australia (27.5°S, 153.0°E) February, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		5.1						2.9
01		4.9						3.0
02		4.4						3.1
03		3.9						3.1
04		3.4						3.0
05		3.2						3.1
06		4.3						3.4
07		5.2						3.4
08		5.5						3.3
09		6.0						3.1
10		6.6						3.0
11		7.0						3.0
12		7.3						3.0
13		7.5						3.0
14		7.7						3.0
15		7.8						3.1
16		7.6						3.1
17		7.2						3.3
18		6.6						3.2
19		6.0						3.1
20		5.6						2.9
21		5.2						2.9
22		5.1						2.8
23		5.1						2.8

Time: 150°E.
Length of time sweep: 2.2 Mc to 12.5 Mc in two minutes, thirty seconds

Table 8

Kermadec Is. (29.2°S, 177.9°W) February, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	308	5.37						
01	298	5.32						
02	286	4.97						
03	292	4.30						
04	303	4.01						
05	304	3.48						
06	272	4.50				1.54		
07	293	5.76	256	3.72	124	2.26		
08	300	6.51	254	4.19	113	2.74		
09	303	7.12	245	4.35	116	3.03		
10	312	7.39	242	4.52	116	3.09		
11	320	7.65	244	4.59	116	3.31		
12	342	7.98	259	4.69	114	3.33		
13	314	8.16	240	4.63	116	3.38		
14	321	7.99	255	4.51	114	3.35		
15	316	7.50	253	4.24	118	3.22		
16	309	6.73	264	4.25	122	2.97		
17	299	7.80	266	3.93	124	2.81		
18	286	7.72	245	3.25	127	2.25		
19	271	7.33						
20	279	6.43						
21	296	5.97						
22	309	5.80						
23	314	5.57						

Time: Local.
Length of time sweep: 1.8 Mc to 12.8 Mc. Manual operation.

Table 9

Christchurch, N.Z. (43.5°S, 172.6°E) February, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	276	4.58						
01	273	4.23						
02	263	3.81						
03	266	3.44						
04	260	2.78						
05	266	2.86						
06	248	3.37			99	1.91		
07	272	4.65	231	3.72	98	2.40		
08	316	5.16	226	4.03	110	2.67		
09	317	5.69	221	4.21	99	2.83		
10	316	5.94	230	4.46	96	3.08		
11	331	5.99	213	4.49	98	3.16		
12	320	6.15	222	4.54	100	3.19		
13	329	6.11	216	4.54	100	3.31		
14	325	6.26	228	4.51	100	3.24		
15	315	5.79	226	4.38	102	3.09		
16	311	6.17	230	4.13	100	2.92		
17	298	6.21	240	3.89	101	2.53		
18	277	6.08	241	3.41	103	2.13		
19	245	6.67				1.63		
20	241	6.54						
21	255	6.00						
22	264	5.36						
23	276	4.83						

Time: 172.5°E.
Length of time sweep: 2.5 Mc to 12 Mc in two minutes.

Table 10

Burghead, Scotland (57.7°N, 3.5°W.) January, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		2.3						
01		2.4						
02		2.5						
03		2.3						
04		2.4						
05		2.2						
06		2.0						
07		2.0						
08		2.7						
09		4.3						
10		5.3						
11		5.8						
12		6.2						
13		6.2						
14		6.0						
15		5.5						
16		5.2						
17		4.6						
18		3.1						
19		2.7						
20		2.5						
21		2.5						
22		2.3						
23		2.2						

Time: 0°

Table 11

Delhi, India (28.6°N, 77.2°E) January, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		2.7						
01		2.8						
02		2.4						
03		2.6						
04		2.2						
05		2.1						
06		2.7						
07		4.9						
08		6.0						
09		7.2						
10		8.1						
11		8.5						
12		8.4						
13		8.2						
14		7.3						
15		7.1						
16		6.6						
17		5.4						
18		4.2						
19		3.9						
20		3.4						
21		2.7						
22		2.6						
23		2.6						

Time: 75°E.

Table 12

Trinidad, Brit. West Indies (10.6°N, 61.3°W) January, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	300	3.4						3.0
01	260	3.5						3.1
02	250	3.7						3.3
03	250	3.1						3.2
04	315	3.0						2.9
05	260	3.2						3.2
06	260	3.2						3.1
07	240	5.4				1.8		3.4
08	260	6.5	250	4.2	100	2.5		3.3
09	265	8.0	238	4.4	105	2.9		3.4
10	252	7.8	220	4.5	105	3.2		3.5
11	288	7.0	205	4.6	105	3.3		3.3
12	312	6.9	200	4.6	105	3.4		3.0
13	300	8.0	225	4.6	105	3.4		3.1
14	300	8.0	240	4.5	105	3.3		3.2
15	300	6.8	240	4.4	105	3.1		3.1
16	290	6.8	240	4.2	105	2.8		3.1
17	258	7.9	238	3.4	105	2.4		3.2
18	230	7.0				2.1		3.4
19	220	3.8				1.7		3.4
20	250	3.2						3.1
21	300	3.3						3.0
22	275	3.3						3.0
23	300	3.1						2.9

Time: 60°W.
Length of time sweep: 2 Mc to 16 Mc in one minute.

Table 13

Christmas I. (2.00°N, 157.00°W.) January, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	240	4.6						3.3
01								
02								
03								
04								
05								
06	280	3.7						3.1
07	240	4.9						3.1
08	230	6.9	220	4.1	120	2.6		2.8
09	320	6.8	210	4.5	120			2.6
10	360	6.8	210	4.5				2.5
11	380	6.5	200	4.6				2.7
12	380	6.9	190	4.7				2.6
13	370	7.4	190	4.6				2.6
14	360	7.7	190	4.6	110	3.4		2.7
15	330	8.4	180	4.5	120	3.2		2.9
16	310	9.0	210	4.4	120	3.0		3.0
17	250	9.2	230		110			3.1
18	240	9.1			120			3.1
19	240	8.4						3.2
20	240	7.4						3.2
21	240	6.3						3.2
22	250	6.0						3.2
23	250	5.2						3.3

Time: 150°W.
Length of time sweep: Manual operation.

Table 14

Watheroo, W. Australia (30.3°S, 115.9°E) January, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		4.5						2.9
01		4.0						2.9
02		3.6						2.9
03		3.2						2.9
04		3.0						2.8
05		3.4						3.0
06		4.3						3.2
07		4.9						2.9
08		5.4						2.9
09		5.7						2.9
10		6.0						2.9
11		6.6						2.8
12		7.0						2.9
13		7.3						2.9
14		7.4						3.0
15		7.0						3.1
16		6.5						3.2
17		6.0						3.2
18		5.5						3.1
19		5.2						3.0
20		5.2						2.9
21		5.0						2.9
22		4.8						2.8
23		4.7						2.8

Time: 120°E.
Length of time sweep: 16 Mc to 0.5 Mc in fifteen minutes.

Table 15

Cape York, Q., Australia (11.0°S, 142.4°E) December, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		7.2						3.0
01		6.7						3.0
02		6.5						3.2
03		5.6						3.2
04		4.6						3.2
05		4.5						3.2
06		5.1						3.4
07		5.8						3.4
08		6.2						3.1
09		6.9						3.0
10		7.4						2.8
11		8.1						2.7
12		9.4						2.8
13		10.4						2.9
14		10.4						3.0
15		9.9						3.0
16		9.2						2.9
17		8.8						2.9
18		8.3						2.8
19		8.3						2.8
20		8.5						3.0
21		8.7						3.2
22		8.3						3.1
23		7.7						3.1

Time: Local.

Table 16

Washington, D.C. (39.0°N, 77.5°W) February, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	260	2.8					2.4	3.0
01	270	2.4					2.2	2.9
02	280	2.6					1.9	2.9
03	260	2.6					0.9	3.0
04	260	2.9					2.3	3.0
05	240	2.8					2.8	3.2
06	240	2.7					2.3	3.2
07	240	3.8					2.3	3.3
08	220	5.4			120	2.0	2.5	3.4
09	240	5.7	220		120	2.6	3.0	3.4
10	260	6.4	220	4.0	120	2.9	3.1	3.3
11	260	6.6	220	4.2	120	3.0		3.3
12	280	6.7	220	4.2	120	3.1		3.3
13	280	7.4	220	4.2	120	3.1		3.2
14	280	7.0	220	4.1	120	3.0	3.2	3.2
15	260	6.9	220	5.8	120	2.8	2.7	3.2
16	260	6.8	220		120	2.4	2.8	3.2
17	240	6.2			120	1.9	2.8	3.3
18	220	5.4					2.4	3.2
19	240	4.7						3.2
20	240	3.8						3.2
21	260	3.2						3.1
22	260	2.8					1.9	3.1
23	260	2.7						3.0

Time: 75°W.
Length of time sweep: 0.8 Mc to 14 Mc in two minutes.

Table 17

San Francisco, Calif. (37.4°, 122.2°W.) February, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	250	3.2					2.4	3.1
01	250	3.1					2.0	3.0
02	260	3.2					2.1	3.1
03	250	3.3					2.4	3.2
04	240	3.3					1.9	3.2
05	250	3.2						3.2
06	240	3.2						3.2
07	240	4.3					2.0	3.3
08	230	6.3	220	3.0	110	2.3	3.0	3.4
09	240	6.9	220	3.8	110	2.5	3.4	3.4
10	250	7.3	220	4.0	110	2.9	3.7	3.4
11	270	7.8	220	4.2	110	3.0	3.7	3.3
12	270	8.3	220	4.3	110	3.2	3.7	3.2
13	260	8.5	220	4.2	110	3.2	3.8	3.4
14	260	7.9	220	4.2	110	3.0	3.6	3.4
15	250	7.4	220	3.3	110	2.9	3.6	3.4
16	240	6.3	230	3.5	110	2.5	3.3	3.4
17	230	6.4			110	2.1	3.2	3.4
18	220	4.9					2.7	3.4
19	230	3.9					2.6	3.3
20	240	3.3					2.4	3.4
21	240	3.0					2.4	3.3
22	240	3.0					2.4	3.2
23	250	3.1					2.4	3.0

Time: 120°W.
Length of time sweep: 0.3 Mc to 12 Mc in six minutes. Record centered on the hour.

Table 18

Baton Rouge, Louisiana (30.5°N, 91.2°W) February, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	290	3.5						3.0
01	280	3.5						3.0
02	280	3.3						3.0
03	275	4.0						3.1
04	250	4.0						3.2
05	255	3.5						3.1
06	265	3.2						3.1
07	250	5.2						3.4
08	250	6.1			120	2.2		3.3
09	260	6.6	250	3.7	120	2.6		3.3
10	285	7.0	240	4.4	120	2.9		3.2
11	290	7.4	240	4.5	120	3.1		3.1
12	290	7.6	230	4.5	120	3.1		3.1
13	290	8.1	230	4.5	120	3.1		3.1
14	280	8.0	240	4.4	120	3.1		3.2
15	270	7.5	240	4.2	120	2.9		3.2
16	260	7.2	240	3.7	120	2.6		3.2
17	245	7.0			120	2.0		3.3
18	230	6.0						3.4
19	230	4.3						3.3
20	250	3.6						3.1
21	255	3.5						3.2
22	280	3.4						3.0
23	290	3.4						3.0

Time: 90°W.
Length of time sweep: 1.9 Mc to 9.8 Mc in three minutes, thirty seconds. Record centered on the hour.

Table 19

San Juan, Puerto Rico (18.4°N, 66.1°W) February, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		3.4						3.0
01		3.6						2.9
02		3.7						3.0
03		4.0						3.1
04		3.7						3.2
05		3.0						3.1
06		3.0						3.1
07	320	4.6						3.1
08	300	6.0						3.2
09	320	6.5	280	4.1		3.0		3.1
10	330	7.2	270	4.3		3.2		3.1
11	320	7.6	255	4.6		3.3		3.0
12	320	7.7	250	4.6		3.4		3.0
13	330	7.8	250	4.6		3.3		3.0
14	330	7.8	275	4.5		3.4		3.0
15	330	6.9	270	4.3		3.2		3.0
16	325	7.2	275	4.0				3.0
17	320	7.7		3.4				3.0
18	290	6.9						3.2
19	290	6.0						3.3
20		4.8						3.2
21		3.6						3.1
22		3.5						3.0
23		3.4						3.0

Time: 60°W.
Length of time sweep: 2.7 Mc to 11.4 Mc in twelve minutes. Record centered on the hour.

Table 20

(Corrections and additions to previously published provisional data)

Fairbanks, Alaska (64.9°N, 147.8°W.) January, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00							3.2	
01		1.2					3.2	3.1
02	355						3.2	
03	325						3.5	3.0
04	345						3.4	
05	325					-	3.2	2.9
06						-	3.2	
07						-	3.1	
08							2.6	
09							2.1	3.3
10							1.8	
11		5.1					2.2	
12								
13								
14								
15								3.3
16								
17							3.1	3.3
18	245						2.5	
19						-	3.1	
20	295					-	3.1	
21							3.2	
22						-	3.1	
23							3.2	

Time: 150°W.
Length of time sweep: 16 Mc to 0.5 Mc in fifteen minutes.

Table 21

(Corrections and additions to previously published provisional data)

Churchill, Canada (59.8°N, 94.2°W.) January, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	370	3.1					5.0	
01	305						4.8	
02	290	3.2					3.9	
03	280						3.8	
04	305						3.6	
05	330						3.8	
06	320						3.8	
07	310						3.9	
08	310						3.8	
09	250	3.8			110	2.9	3.1	
10	250				110	2.8		
11	250		230	3.0	120	2.8		
12	250		230	3.2	120	2.8		
13	260		240	3.3	130	2.7		
14	250	6.4	240	3.3	130	2.6		
15	240	6.4	230	2.7	125	2.7		
16	240	5.9			120	2.6		
17	240	5.1					2.7	
18	265	3.9					2.7	
19	290						3.6	2.9
20	320						3.8	
21	300						3.6	3.1
22	285						4.1	
23	280						5.1	

Time: 90°...
Length of time sweep: 2 Mc to 16 Mc in one minute.

Table 22

(Corrections and additions to previously published provisional data).

San Francisco, Calif. (37.4°N, 122.2°W.) January, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	260						2.5	
01	260						2.4	
02	260						2.4	
03	250						2.4	3.2
04	255						2.3	3.2
05	260						2.3	
06	260						2.4	
07	240						2.4	
08	230		230	2.6	110	1.8	3.0	
09	240		215	3.4	110	2.4	3.0	
10	280		240	4.0	110	2.8	3.3	
11	265		230	4.1	110	3.0		
12	260		220	4.2	110	3.1		
13	260	7.4	220	4.1	110	3.0		
14	260		220	3.9	110	2.9		
15	250		240	3.8	110	2.7	3.3	
16	240		240	3.2	110	2.2	3.2	
17	220				120	1.8	2.5	
18	220						2.6	
19	230						2.5	
20	240						2.5	
21	270						2.4	
22	270						2.4	
23	270						2.4	

Time: 120°...
Length of time sweep: 0.5 Mc to 12 Mc in six minutes. Record centered on the hour.

Table 23

(Corrections and additions to previously published provisional data).

Maui, Hawaii (20.8°N, 156.5°W.) January, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		3.3						
01								3.3
02	235							
03								
04								3.6
05								
06								
07								
08	235							
09								
10	250							
11					10[illegible]			
12								
13	275		155		105			3.2
14		11.7			125			
15								3.3
16			210					
17				3.3	150		[illegible]	
18	20[illegible]						[illegible]	
19	20[illegible]						3.4	
20							3.4	
21	225						[illegible]	
22								
23								2.9

Time: 150°...
Length of time sweep: 2 Mc to 16 Mc in one minute.

Table 24

Guam I. (13.5°N, 144.8°E) January, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00								
01								
02								
03								
04								
05								
06							1.6	
07	242	4.38					2.4	3.3
08	234	6.62					4.4	3.1
09	297	7.77	212	4.27			4.8	2.9
10	336	7.13		4.48			4.8	2.8
11	346	6.82					5.8	2.6
12	343	7.05		4.48			5.2	2.7
13	330	7.65		4.58			5.2	2.9
14	330	7.92	233	4.67			3.8	2.9
15	264	8.48					4.6	3.0
16	255	8.62					4.8	3.1
17	242	8.77					4.3	3.3
18	218	8.30					4.0	3.4
19	222	6.75					4.0	3.4
20	229	6.07					4.3	3.4
21	226	6.60					3.9	3.4
22	236	5.35					3.1	3.3
23	268	4.30					3.4	3.2

Time: 150° E
Length of time sweep: Manual operation.

Table 25

Kwajalein Atoll (9.2°N, 167.5°E) 11-27 January, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	232	5.28						3.3
01	240	5.57						3.3
02	258	5.12						3.2
03	272	4.34						3.3
04	268	3.40						3.4
05	249	2.85						3.5
06	250	2.31						3.5
07	254	3.23						3.2
08	222	6.06				2.30	3.0	3.3
09	273	7.65	209	4.24		2.84	4.0	2.9
10	311	8.00	193	4.41		3.28	4.6	2.7
11	333	7.55	192	4.58		3.42	4.6	2.7
12	334	7.52	200	4.58		3.65	5.2	2.7
13	329	7.76	185	4.59		3.58	4.6	2.7
14	321	8.10	195	4.51		3.55	4.2	2.7
15	313	8.56	195	4.48		3.52	4.5	2.9
16	284	9.04	205	4.31		3.27	4.1	3.1
17	232	9.08				2.94	4.6	3.2
18	238	8.75				2.22	3.7	3.2
19	223	8.35					2.2	3.4
20	232	7.56					2.0	3.2
21	236	7.07						3.2
22	235	6.42					2.1	3.3
23	233	5.48					2.4	3.4

Time: 180°E.
Length of time sweep: Manual operation.

Table 26

(Corrections and additions to previously published provisional data).

Huancayo, Peru (12.0°S, 75.3°W) January, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	300	4.8						
01	280							3.1
02	280	3.8						
03	270	3.1						3.2
04	280	2.9						3.2
05	270							
06	255					1.8	2.7	
07	230		230	4.1		2.3	4.6	3.0
08	310	8.0	220	4.4		3.0	5.5	2.9
09	340	8.5	210	4.5		3.4	5.5	
10	370	8.4	210	4.6		3.6	5.5	
11	400	8.0	200	4.7		3.6	5.5	
12	400		200	4.7		3.7	5.5	
13	400	7.8	200	4.6		3.7	5.5	
14	360	8.1	200	4.6		3.6	5.5	2.6
15	350	8.5	200	4.5		3.4	5.5	2.7
16	320	8.8	200	4.3		3.0	4.5	
17	240					2.6	3.3	
18	260					1.8	2.6	
19	270	8.5						
20	290	8.0						
21	320	6.7						2.7
22	330	5.8						2.8
23	310							

Time: 75°W.
Length of time sweep: 16 Mc to 0.5 Mc in fifteen minutes.

Table 27

Pitcairn I. (25.0°S, 130.0°W) January, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00								
01	265	4.70						
02								
03								
04	248	3.92						
05								
06	274	6.60	234	4.33				
07								
08	337	8.77	230	4.61				
09								
10	348	9.97	210	4.67				
11								
12	312	10.47	228	4.61				
13								
14	263	9.99	219	4.45				
15								
16								
17								
18	296	5.81						
19								
20								
21	306	5.95						
22								
23								

Time: 150°W.
Length of time sweep: Manual operation.

Table 28

Kermadec Is. (29.2°S, 177.9°W) January, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
0010	301	6.17						
0100	296	5.54						
0200	300	4.75						
0310	320	4.28						
0400	317	4.00						
0500	309	3.72						
0600	300	4.95	277	3.39	134	1.97		
0700	329	6.03	268	4.02	125	2.46		
0800	353	6.72	262	4.27	121	2.86		
0900	337	7.71	278	4.45	120	3.10		
1000	345	8.27	254	4.57	119	3.20		
1100	338	8.32	247	4.61	117	3.31		
1200	359	8.07	259	4.63	118	3.36		
1300	330	8.04	263	4.61	119	3.40		
1400	349	8.08	259	4.58	118	3.36		
1500	343	7.22	257	4.37	121	3.28		
1600	324	7.80	284	4.22	123	3.05		
1700	304	7.35	271	3.98	125	2.72		
1800	300	6.55	256	3.42	127	2.15		
1858	302	6.72						
2000	308	6.47						
2100	319	6.37						
2200	326	6.34						
2300	318	6.36						

Time: Local.
Length of time sweep: 1.8 Mc to 12.8 Mc. Manual operation.

Table 29

Christchurch, N.Z. (43.5°S, 172.6°E) January, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	260	5.0					3.5	
01	255	4.8					3.6	
02	250	4.0					3.6	
03	250	3.5					2.9	
04	250	3.1					2.9	
05	250	3.7			100	1.7	2.7	
06	280	4.6	240	3.5	100	2.2	3.3	
07	310	5.2	220	4.0	95	2.5	4.1	
08	300	5.7	210	4.2	95	2.7	5.6	
09	300	6.1	200	4.5	100	3.0	5.5	
10	315	6.1	215	4.5	100	3.2	4.0	
11	330	6.1	210	4.5	100	3.4	4.0	
12	340	6.3	210	4.6	100	3.5	4.2	
13	330	6.1	200	4.5	100	3.5	3.9	
14	340	6.0	220	4.5	100	3.4	4.0	
15	320	6.0	220	4.5	100	3.3	3.8	
16	315	6.1	220	4.2	100	3.0	3.8	
17	300	6.3	225	4.0	100	2.7	4.7	
18	280	6.5	230	3.5	100	2.3	4.3	
19	250	6.1		2.7	100	1.8	4.1	
20	250	6.0					4.0	
21	250	6.2					4.0	
22	270	5.8					3.9	
23	250	5.4					3.5	

Time: 172.5°E.
Length of time sweep: 2.5 Mc to 12 Mc in two minutes.

Table 30

Campbell I. (52.5°S, 169.0°E) January, 1945

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00								
01								
02								
03								
04								
05	249	4.37	219	3.14	109	2.19		
06								
07	275	4.30	205	3.88				
08								
09	314	5.43	213	4.34	101	3.19		
10								
11	328	5.45	212	4.47	101	3.27		
12	330	5.66	213	4.43	100	3.31		
13	345	5.50	223	4.57	102	3.39		
14								
15	321	5.70	211	4.28	102	3.19		
16								
17	300	5.75	220	3.91	105	2.84		
18								
19	256	5.92	219	3.30	111	2.24		
20								
21	244	5.60						
22								
23								

Time: 165°E.
Length of time sweep: 1 Mc to 12 Mc. Manual operation.

Table 31

(Corrections and additions to previously published provisional data)

Reykjavik, Iceland (64.1°N, 21.7°W) December, 1944.

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	-	-					4.1	-
01							3.8	
02	-	-					3.4	-
03	333	3.70	-	-			3.7	2.9
04	-	-					2.4	-
05								3.1
06	-							-
07								-
08								
09								
10			-	-				
11								
12								
13								
14								
15								
16								
17		3.07						3.3
18	-	-					2.6	-
19							3.3	
20							4.0	
21							4.0	
22							4.0	
23	-	-					3.6	-

Time: 15°W.
Length of time sweep: 2 Mc to 16 Mc in one minute.

Table 32

(Corrections and additions to previously published provisional data)

Burghead, Scotland (57.7°N, 3.5°W) December, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		2.31						
01		2.20						
02		2.03						
03		2.00						
04		2.14						
05		2.02						
06		2.05						
07		1.89						
08		2.40						
09		3.93						
10		4.76						
11		5.25						
12		5.79						
13		5.74						
14		5.48						
15		5.13						
16		4.70						
17		3.91						
18		3.07						
19		2.41						
20		2.27						
21		2.32						
22		2.30						
23		2.31						

Time: Local.

Table 33

Sverdlovsk, U.S.S.R. (56.7°N, 61.1°E) December, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	250	2.7						
01	250	2.8						
02	250	2.9						
03	240	2.8						
04	250	2.6						
05	240	2.5						
06	240	2.3						
07	240	2.3						
08	200	3.6						
09	200	5.2			110	1.9		
10	200	5.8			110	2.0		
11	200	5.9			110	2.2		
12	200	6.2			110	2.2		
13	200	6.2			110	2.2		
14	190	5.7			110	2.0		
15	190	4.9			110	1.9		
16	190	4.2			110	1.8		
17	200	3.3						
18	230	2.5						
19	230	2.4						
20	250	2.2						
21	250	2.3						
22	250	2.4						
23	250	2.5						

Time: 60°E.

Table 34

Slough, England (51.5°N, 0.6°W) December, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		2.69						
01		2.67						
02		2.60						
03		2.34						
04		2.23						
05		2.08						
06		1.96						
07		1.96						
08		3.81						
09		5.08						
10		5.66						
11		5.80						
12		5.95						
13		5.95						
14		5.84						
15		5.50						
16		4.83						
17		3.88						
18		3.15						
19		2.59						
20		2.56						
21		2.59						
22		2.59						
23		2.75						

Time: 0°
Length of time sweep: 0.5 Mc to 16 Mc in four minutes.

Table 35

(Corrections and additions to previously published provisional data)

Maui, Hawaii (20.8°N, 156.5°W) December, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00								3.0
01								
02								3.3
03								
04								3.3
05								3.1
06								
07					-	-		
08								
09	265							
10								
11								
12					110			
13							4.5	
14							3.9	
15							4.1	
16				-			3.7	
17					-	-	3.6	
18							3.6	
19		3.89					3.7	3.4
20							3.6	3.2
21							3.4	
22							2.8	
23							2.6	3.0

Time: 150°W.
Length of time sweep: 2 Mc to 16 Mc in one minute.

Table 36

Guam I. (13.5°N, 144.8°E) December, 1944

Time	h'F2*	f°F2**	h'F1*	f°F1*	h'E	f°E*	fEs*	F2-M3000**
00	258	4.47					1.5	3.0
01	238	4.55						3.3
02	233	3.49					1.6	3.2
03	254	3.30						3.1
04	305	3.31						3.0
05	320	3.09						3.0
06	303	3.01					1.3	3.0
07	257	4.94					2.0	3.1
08	244	7.34	240	3.8		2.7	3.4	3.1
09	281	8.60	218	4.28		3.18	4.2	3.1
10	294	8.83	210	4.55		3.47	3.5	2.9
11	313	8.95	209	4.62		3.60	4.8	2.7
12	336	8.86	219	4.63		3.7	4.8	2.7
13	325	9.20	216	4.64		3.80	4.8	2.8
14	308	9.45	215	4.58		3.62		2.8
15	265	9.85	222	4.44		3.4	4.4	2.9
16	275	9.88	228	4.25		2.8	4.4	3.0
17	248	9.81					3.7	3.1
18	224	9.43					3.6	3.3
19	232	8.54					3.6	3.1
20	236	8.05					2.6	3.1
21	238	7.22					3.0	3.3
22	232	5.63					2.0	3.2
23	254	4.69					1.5	3.0

Time: 150°E.
*24-31 Dec.
**17-31 Dec.

Table 37

(Corrections and additions to previously issued provisional data)

Brisbane, Q., Australia (27.5°S, 153.0°E) December, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	270	6.31					4.1	3.2
01	264	5.80					3.3	
02	258	5.31					3.7	
03	272	4.56					3.3	
04	258	4.16						3.3
05	246	4.45						
06	237	5.35	234					
07	292	5.62	223	4.06		2.68	4.2	
08	311	6.08		4.38	112	3.00	5.6	
09	313	6.61		4.54	111	3.20	6.6	
10	339	6.89		4.64	110	3.36	6.6	
11	347	7.45	197	4.69	110	3.42	7.1	
12	346	7.90	197	4.72	110	3.45	5.1	
13	338	7.89	214	4.65	110	3.43	5.6	
14	317	8.22	222	4.49	111	3.33	4.1	
15	300	8.22	215	4.45	114	3.14	4.3	
16	283	8.00	221	4.24	120	2.89	4.3	3.3
17	268	7.34	222			2.42	4.9	
18	259	6.94					4.8	
19	270	6.53					4.4	
20	291	6.57					4.4	
21	293	6.61					4.2	
22	292	6.50					4.7	
23	283	6.53					5.2	

Time: 150°E.
Length of time sweep: 2.2 Mc to 12.5 Mc in two minutes, thirty seconds.

Table 38

(Corrections to previously published provisional data)

Kermadec Is. (29.2°S, 177.9°W) December, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
0010								
01								
02								
0310								
04								
05								
06								
07								
08								
09								
10								
11								
12					122			
13								
14								
15								
16								
17			-					
18			-					
1350								
20								
21								
22								
23								

Time: Local
Length of time sweep: 1.8 Mc to 12.3 Mc. Manual operation.

Table 39

(Corrections and additions to previously published data)

Watheroo, Western Australia (30.3°S, 115.9°E) December, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00							4.3	
01							5.2	
02							4.4	
03							4.0	
04							3.8	
05							3.0	3.0
06							3.8	
07							4.6	3.1
08							5.0	
09							5.0	
10							5.0	
11							5.2	
12							5.4	
13							5.4	
14							5.0	
15							5.0	
16							4.9	
17							4.2	
18							3.8	
19							3.1	
20							3.2	
21							3.0	
22							3.1	2.8
23							3.9	

Time: 120°E.
Length of time sweep: 16 Mc to 0.5 Mc in fifteen minutes.

Table 40

(Corrections and additions to previously published provisional data)

Mt. Stromlo, N.S.W., Australia (35.3°S, 149.0°E) December, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	281	5.41						
01	275	5.00						
02	269	4.53						3.0
03	280	3.78						
04	282	3.40						
05	264	3.62						3.0
06	268	4.42	230	3.48		2.19		
07	286	5.01	232	3.78	112	2.55		
08	316	5.38	220	4.04	108	2.96	5.1	3.0
09	336	5.74	208	4.11	107	3.08	5.7	
10	339	6.04	213	4.35	108	3.25	6.2	
11	352	6.28		4.50	107	3.39	6.0	
12	342	6.45	209	4.45	105	3.44	5.1	
13	346	6.34	210	4.41	104	3.36	4.6	
14	343	6.52	214	4.28	105	3.21	4.3	
15	320	6.63	216	4.19	106	3.03		
16	310	6.59	221	4.05	108	2.82		
17	299	6.34	235	3.84	111	2.57		
18	272	6.19	247	3.40	120	2.17	3.6	
19	253	6.09						
20	270	6.04						
21	282	5.81						
22	293	5.71						
23	286	5.68						

Time: 150°E.
Length of time sweep: 1.6 Mc to 12.5 Mc in two minutes.

Table 41

(Corrections and additions to previously published provisional data)

Christchurch, N.Z. (43.5°S, 172.6°E) December, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00							3.2	
01							2.9	
02	247						3.0	
03							3.0	
04							3.2	
05							3.0	
06							3.6	
07							4.0	
08							5.1	
09							5.7	
10							6.0	
11							5.5	
12							5.5	
13							4.6	
14							4.8	
15							3.8	
16							4.0	
17							6.2	
18							4.6	
19						1.75	4.2	
20							4.4	
21							3.4	
22							3.5	
23							3.8	

Time: 172.5°E.
Length of time sweep: 2.5 Mc to 12 Mc in two minutes.

Table 42

Campbell I. (52.5°S, 169.0°E) December, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00								
01								
02								
03								
04								
05	251	4.19						
06								
07			229	4.06	109	2.80		
08								
09			219	4.32	112	3.20		
10								
11			204	4.36	105	2.92		
12			226	4.39	106	3.03		
13								
14								
15	320	5.95	207	4.29	109	3.09		
16								
17	298	6.34	219	3.97	111	2.73		
18								
19	267	5.67						
20								
21	262	5.32						
22								
23								

Time: 165°E.
Length of time sweep: 1 Mc to 12 Mc. Manual operation.

Table 43

(Corrections and additions to previously published provisional data)

Reykjavik, Iceland (64.1°N, 21.7°W) November, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	-	-					3.0	-
01	-	-					3.1	-
02	-	-					3.1	-
03	-	-						-
04								
05	-	-						-
06	-	-						-
07								
08								
09	214							
10								
11					-	-		
12								
13								
14								
15								
16								
17								3.4
18							3.0	
19							3.0	
20							3.8	
21								
22								
23								

Time: 15°W.
Length of time sweep: 2 Mc to 16 Mc in one minute.

Table 44

(Corrections and additions to previously published provisional data)

Burghead, Scotland (57.7°N, 3.5°W) November, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		2.18						
01		2.15						
02		2.12						
03		2.24						
04		2.20						
05		2.06						
06		1.91						
07		2.29						
08		3.87						
09		4.85						
10		5.57						
11		5.78						
12		5.88						
13		5.80						
14		5.53						
15		5.34						
16		4.91						
17		4.47						
18		3.83						
19		3.25						
20		2.50						
21		2.31						
22		2.34						
23		2.34						

Time: 0°

Table 45

(Corrections and additions to previously published provisional data)

Slough, England (51.5°N, 0.6°W.) November, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		3.02						
01		2.99						
02		2.96						
03		2.74						
04		2.44						
05		2.36						
06		2.29						
07		3.22						
08		4.88						
09		5.55						
10		6.03						
11		6.43						
12		6.33						
13		6.03						
14		6.04						
15		5.84						
16		5.22						
17		4.31						
18		3.71						
19		3.14						
20		2.67						
21		2.59						
22		2.84						
23		2.98						

Time: 0°
Length of time sweep: 0.5 Mc to 16 Mc in four minutes.

Table 46

(Corrections and additions to previously published provisional data)

Delhi, India (28.6°N, 77.2°E) November, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00		2.85						
01		2.80						
02		2.74						
03		2.71						
04		2.73						
05		2.74						
06		3.13						
07		5.32						
08		6.51						
09		7.10						
10		7.68						
11		7.71						
12		8.28						
13		9.06						
14		8.97						
15		8.36						
16		7.40						
17		6.49						
18		5.10						
19		4.37						
20		3.67						
21		3.14						
22		3.02						
23		2.93						

Time: 75°E.

Table 47

(Corrections and additions to previously published provisional data)

Watheroo, Western Australia (30.3°S, 115.9°E) November, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	261	4.42					3.0	2.9
01	248	4.28					3.0	
02	249	3.87					3.3	
03	242	3.45					3.2	3.0
04	244	3.10					2.8	
05	242	3.53					2.8	3.2
06	245	4.62				2.90	3.0	3.4
07	289	5.18				2.48	4.1	
08	320	5.55	231	4.18		2.90	4.6	
09	324	5.32	215	4.34		3.13	5.1	
10	340	6.38	210	4.40		3.26	5.1	
11	334	6.92	211	4.46		3.26	5.8	
12	322	7.51	209	4.48		3.23	5.0	2.6
13	317	8.01	213	4.43		3.25	5.0	
14	303	8.23	215	4.40		3.19	5.1	
15	294	8.03	225	4.24		3.02	4.5	
16	281	7.74	232	4.06		2.82	4.0	3.1
17	264	7.23				2.43	3.4	
18	244	6.79				1.71	3.1	
19	235	6.23					3.0	
20	234	5.70					2.8	
21	246	5.07					2.8	
22	262	4.77					3.1	
23	265	4.52					3.2	

Time: 120°E.
Length of time sweep: 16 Mc to 0.5 Mc in fifteen minutes.

Table 48

(Corrections and additions to previously issued provisional data)

Watheroo, Western Australia (30.3°S, 115.9°E) October, 1944

Time	h'F2	f°F2	h'F1	f°F1	h'E	f°E	fEs	F2-M3000
00	261	3.91					2.8	
01	258	3.85					2.8	
02	236	3.72					2.9	
03	240	3.40					2.8	
04	257	3.20					2.8	
05	259	3.26					2.8	3.0
06	247	4.40				1.66	2.8	
07	286	5.10				2.30	2.9	
08	321	5.49	228	4.06		2.69	3.3	
09	333	5.89	220	4.30		2.94	4.0	
10	333	6.36	211	4.37		3.09	4.0	
11	329	6.80	201	4.40		3.15	3.8	
12	318	7.20	207	4.42		3.15	3.9	
13	309	7.36	215	4.39		3.10	3.8	
14	303	7.12	221	4.35		3.11	3.5	
15	298	6.83	222	4.21		3.00	3.3	3.1
16	284	6.32	224	3.96		2.71	3.7	
17	266	6.05				2.27	3.4	
18	235	5.73				1.53	2.9	
19	233	5.33					2.[illegible]	
20	236	4.74					2.[illegible]	
21	256	4.20					2.8	
22	263	4.10					2.8	2.9
23	269	3.99					2.3	

Time: 120°E.
Length of time sweep: 16 Mc to 0.5 Mc in fifteen minutes.

TABLE 49

IONOSPHERE DATA--I

RESTRICTED

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of $h'F2$ in km for February (Month) 1945

Records measured by: M.R.R. A.F.

TIME: 75°W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	280	300	270	260	270	270	220	220	240	240	280	260	260	C	C	260	240	220	220	240	(240)	260	(240)	(260)
2	260	250	280	270	230	230	270	240	240	240	280	260	260	260	260	250	240	220	220	220	230	260	260	260
3	280	280	260	260	260	220	220	240	230	220	260	270	260	270	250	260	230	220	220	220	240	(280)	260	280
4	300	300	280	280	260	220	200	240	220	240	240	230	280	(280)	260	240	250	220	220	230	260	280	280	300
5	260	300	300	260	250	240	220	260	220	220	230	240	300	280	[280]C	260	260	220	220	220	260	260	240	300
6	(280)	260	260	260	270	240	260	240	240	260	270	320	260	280	300	295	260	240	220	220	230	220	260	280
7	280	260	260	260	260	240	240	240	250	260	C	C	C	300	280	280	240	230	240	240	240	260	280	260
8	280	280	260	260	260	260	260	240	210H	270	230	280	300	300	280	280	260	240	220	240	240	240	(280)	260
9	260	280	260	280	260	270	260	240	270	250	(280)	280	280	[280]C	260	280	260	240	240	240	240	260	280	260
10	280	260	270	260	250	(240)	280	260	270	270	260	260	280	290	280	260	240	240	220	220	240	260	260	(280)
11	280	280	280	240	240	260	240	240	240	220	220	260	260	280	260	240	240	230	240	230	240	240	260	260
12	260	280	280	280	240	240	240	220	220	230	260	280	280	260	260	260	240	220	220	240	260	280	280	260
13	240	260	260	260	240	240	220	220	230	240	260	260	280	280	290	240	240	240	240	230	240	260	(260)	240
14	260	260	270	280	260	240	240	220	220	240	250	260	260	[270]C	260	260	260	240	210	C	C	C	C	C
15	C	C	C	C	C	C	C	C	C	C	240	270	260	260	280	[260]C	240	240	230	240	C	C	260	280
16	280	240	240	240	260	260	260	250	240K	300K	320K	380K	400K	380K	320K	320K	300K	260	240	260	260	260	280	(280)
17	280	270	280	280	280	240	240	240	270	260	280	310H	300	300	300	280	280	240	240	240	240	260	260	280
18	280	280	290	260	270	250	260	240	220H	270	240	260	300	300	270	260	260	240	220	240	240	260	240	260
19	260	260	280	280	260	260	240	240	270	260	280	300	300	270	270	260	260	240	220	240	240	250	260	260
20	260	260	260	260	270	260	260	220	220	240	260	260	280	280	280	280	240	220	220	220	240	240	240	240
21	260	260	280	260	260	240	220	220	220	240	260	260	280	240	280	260	270	220	230	250	240	220	220	260
22	240	260	280	260	280	260	240	220	220	260	280	250	260	260	280	270	260	230	220	240	240	240	240	240
23	220	260	280	280	280	260	240	220	220	220	260	260	300	280	280	260	260	240	240	220	230	240	240	240
24	260	280	280	280	270	260	220	240	220H	260	280	290	280	280	260	270	280	240	220	220	240	250	250	250
25	260	280	260	260	260	260	240	240	220	240	270	260	280	280	280	280	260	240	220	240	240	240	240	240
26	260	270	280	280	260	260	260	260	240	270	320	280	280	280	280	260	260	240	220	240	260	[270]C	[280]C	[280]C
27	280	280	280	260	260	260	240	220H	220	240	240H	260	260	270	300	280	260	240	220	220	240	(280)	260	240
28	260	280	280	240	240	260	260	240	220	240	240	260	260	280	280	280	260	240	220	220	240	250	260	280
29																								
30																								
31																								
Sum																								
Median	260	270	280	260	260	240	240	240	220	240	260	260	280	280	280	260	260	240	220	240	240	260	260	260

TABLE 50

IONOSPHERE DATA – 2

RESTRICTED

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of $f^{\circ}F_2$ in {Mo for February (Month) 1945

Records measured by: M.R.R. A.F.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	1.9 F	1.9 F	2.2 F	(2.4) F	2.2 F	(2.3) F	(2.5) J	[3.0] C	5.0	5.7	6.5	[7.0] C	6.6	C	C	6.6	6.6	5.5	4.1	(3.5)	3.2	2.6	2.5	2.6
2	2.7 F	2.4 F	2.8 F	3.1 F	3.3 F	3.3	3.0 J	3.3	5.6	5.3	6.4	(7.0)	(8.0)	(7.6)	(7.8)	7.6	6.8	5.9	5.4	4.7	3.7	3.0	2.8	2.4 F
3	2.4 F	2.4 F	2.6 F	2.8 F	2.9	2.6 F	2.4 F	3.0 F	5.0	5.6	(7.2)	(7.3)	6.9	(7.4)	6.8	6.8	6.6	5.5	4.8	3.9	2.8 F	2.4 F	2.3	2.2 F
4	2.2 F	2.1 F	2.2 F	(2.5) F	2.9 F	2.9	2.3	3.0	4.9	(5.1)	5.4	(5.6)	6.7	6.8	6.8	6.4	6.0	6.0	(5.2) J	3.9	2.8	2.5	2.1	2.0
5	1.8 F	1.7 F	1.9 F	2.5 F	2.6 F	(2.5) F	1.9 F	3.0	5.0	5.0	5.9	(5.8)	6.5	(7.6)	[7.0] C	6.4	6.9	6.0	[5.3] C	4.6 F	3.3	3.1	2.6	2.1 F
6	2.5 F	3.0 F	3.9 F	3.3 F	3.4	2.8 F	(2.6) F	3.0	4.6	5.1	5.8	6.0	6.6	6.3	6.2	6.3	6.4	6.4	5.0	(3.6) F	3.0	2.3 F	2.2 F	2.2 F
7	2.1 F	(2.2) F	2.0 F	2.0 F	2.9 F	2.8 F	2.7 F	3.3 F	4.3	5.5	C	C	C	6.1	6.4	6.2	6.0	5.8	4.5	3.9 F	3.3 F	2.9 F	2.8 F	2.2 F
8	1.8 F	1.8 F	1.8 F	1.6 F	1.6 F	1.8 F	1.9 F	2.8 F	4.8 H	4.8	5.5	6.0	6.0	6.2	6.4	5.8	6.0	5.4	5.5	4.5 F	4.2	3.7 F	2.3 F	2.2 F
9	2.1 F	2.1 F	1.9 F	1.7 F	(1.9) F	1.9 F	(2.0) F	3.0 F	4.7	5.6	[5.3] C	5.7	6.4	[6.8] C	6.9	5.6	5.8	5.1	5.0	4.4	3.7	3.0	2.5 F	2.3 F
10	2.2 F	2.3 F	2.6 F	2.7 F	2.9 F	2.2 F	1.8 F	2.9 F	4.9	5.4	5.7	5.5	5.9	7.2	5.8	6.0	6.2	(6.0)	5.1	3.8 F	3.4 F	3.0 F	2.6 F	2.4 F
11	2.6 F	3.3 F	2.8 F	2.9 F	2.8 F	3.1 F	3.4	4.0	5.7	(6.2)	5.9	6.6	(6.0)	6.6	7.0	6.4	5.7	5.8	5.0	4.2	3.8	3.3	2.7	2.7 F
12	2.6 F	2.3 F	2.6 F	2.8 F	3.0 F	3.4	3.3	(4.0)	5.5	5.7	6.4	6.4	6.5	7.6	7.4	7.3	6.8	5.7	4.8	3.6	2.8	2.4	2.3	2.4 F
13	2.4 F	2.6 F	2.6 F	2.7 F	2.7 F	2.8 F	3.0	3.9	5.7	(6.4)	6.8	6.6	6.4	6.8	7.2	6.8	6.4	6.4	5.3	4.2	3.9	3.1	(3.0)	2.8
14	2.8 F	2.8	2.7 F	2.2 F	2.2 F	2.6 F	3.3 F	4.1	5.8	6.3	6.4	7.4	7.4	[7.8] C	7.4	7.3	(7.8)	8.0 J	7.2	C	C	C	C	C
15	C	C	C	C	C	C	C	C	C	C	6.4	[8.0] C	(7.7)	(8.0)	C	C	[7.7] C	7.2	[7.8] C	5.0	C	C	(2.8) F	2.7 F
16	3.3	3.6	3.1	2.9	3.0	2.6	2.5	3.2	4.2 K	4.7 K	4.7 K	5.1 K	5.1 K	5.0 K	5.2 K	5.1 K	5.1 K	5.0	4.4	3.6	3.2	3.0	2.7	2.5
17	2.2	2.2 F	2.4 F	2.6 F	2.9 F	2.9	2.5	3.5	4.7	5.4	5.5	6.4 H	(6.4)	6.4	6.4	5.9	6.4	6.1	5.4	5.5	3.7	3.0	2.8	2.4
18	2.4 F	2.2 F	2.6 F	2.6 F	(2.7) F	2.8 F	3.0 F	4.0	5.5 H	5.7	6.4 H	6.5	7.3	7.2	7.2	6.9	(7.2)	6.2	5.4	5.0	4.3	3.8	3.0 F	3.1 F
19	3.0 F	3.2 F	3.2 F	3.2 F	3.2 F	3.2 F	2.9 F	4.1	5.5	(7.0)	6.5	(7.1)	7.2	(7.9)	7.3	7.4	7.6	7.4	6.0	4.8	3.9	3.3	3.1	2.8
20	2.7	2.4	2.5	2.6	2.9	3.1	3.1	4.7	(6.0)	6.4	6.6	7.2	(7.6)	7.9	7.1	(8.3)	7.6	6.8	6.4	5.6	4.4	4.1	3.5	3.1
21	2.7	2.6	2.7	2.9	3.0	3.3	3.3	4.5	5.4	5.9	6.6	6.8	7.2	(8.0)	7.6	7.6	7.4	6.2	5.4	4.9	4.8	3.7	2.7	2.8
22	2.2	2.1	2.2	2.4	2.4	2.7	3.0	4.8	6.0	(6.5)	(7.0)	6.9	7.4	6.2	7.0	7.5	7.1	6.7	6.3	6.0	5.2	4.3	3.9	3.4
23	2.9	2.3	2.3	2.3	2.7	3.1	3.0	4.0	5.2	5.7	6.4	6.6	6.6	7.7	7.8	7.2	6.5	6.0	(6.4)	5.7	4.8	4.3	3.7	2.9
24	2.4	2.3	2.6	2.8	2.9	3.0	3.1	3.9	5.7 H	5.8	7.0	7.4	7.4	(7.8)	7.4	7.6	(7.8)	(7.5)	6.4	5.0	4.7	4.0	3.7	3.0
25	2.9	3.1 F	3.3	3.2	2.9 F	2.9 F	2.6 F	3.6	6.0	6.5	7.4	6.4	(6.9)	(7.8)	7.4	(8.2)	6.8	7.5	5.9	5.3	4.9	4.0	3.8	3.4
26	2.6 F	2.6 F	2.6 F	2.6 F	2.7	2.6 F	2.3 F	3.8	4.8	6.0	6.2	7.0	(7.9)	7.5	7.6	9.0	7.4	7.8	7.2	5.3	4.7	4.5	[3.9] C	[3.3] C
27	2.9	2.7 F	2.9	2.5 F	2.5 F	2.8 F	3.3	5.4 H	(8.0)	7.8	(6.5) H	7.9	6.4	(8.2)	(8.0)	(8.2)	8.8	7.4	6.6	6.4	4.3	3.8 F	3.6 F	(3.0) F
28	2.7 F	(2.6) F	2.3 F	2.5 F	(2.5) F	2.1 F	1.8 F	4.2	5.7	6.2	(8.0)	(7.2)	7.8	7.2	6.9	6.9	7.0	6.8	5.7	5.2	4.1	3.7	3.3	2.9 F
29																								
30																								
31																								
Sum																								
Median	2.5	2.4	2.6	2.6	2.9	2.8	2.7	3.8	5.4	5.7	6.4	6.6	6.7	7.4	7.0	6.9	6.8	6.2	5.4	4.7	3.8	3.2	2.8	2.7

TABLE 51

IONOSPHERE DATA – 3

RESTRICTED

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Half Hourly values of $f^{\circ}F_2$ in {Mo ■} for February (Month) 1945

Records measured by: M.R.R. A.F.

TIME: 75° W MERIDIAN

Day	0030	0130	0230	0330	0430	0530	0630	0730	0830	0930	1030	1130	1230	1330	1430	1530	1630	1730	1830	1930	2030	2130	2230	2330
1	1.9 F	1.9 F	(1.9) F	(2.2) F	(2.3) F	2.3 F	2.4	4.3	5.3	5.4	7.8	6.4	C	C	C	(6.8)	(6.1)	4.9	3.7	3.4	2.9	2.5	2.4	2.6
2	2.6	2.7	3.2	3.2 F	3.4	3.3	2.9	4.6	6.2	6.0	6.8	(8.2) J	(7.6)	(7.8)	(7.6)	6.8	6.0	6.0	5.0	4.3	3.3	3.0	2.6	2.4
3	2.4 F	2.6 F	2.6 F	2.9	2.8	2.4 F	2.5	4.0	5.4	5.6	(5.5)	7.1	6.8	7.4	6.9	6.7	5.9	5.4	4.4	3.2	2.6 F	2.3 F	2.2 F	2.2 F
4	2.1 F	2.3 F	2.3 F	2.6 F	3.0	2.7	2.3	4.0	5.1	5.2	5.4	6.1 J	6.8	7.2	7.0	6.3	6.3	5.0	4.7	3.2	2.8	2.4	2.1 F	2.0
5	1.7 F	1.7 F	2.2 F	2.6 F	2.6 F	2.4 F	1.8 F	4.0	5.0	5.9	(6.8)	(7.0)	7.7	[7.4] C	(6.7) C	6.8	6.8	5.8	4.9	3.5	3.3	3.0	2.2 F	2.3 F
6	2.9 F	(3.2) F	3.3 F	3.3 F	3.4	(2.5) F	(2.2) F	4.1	[5.0] C	5.2	5.4	6.3	[6.0] K	6.4	6.5	6.4	6.8	5.9	4.1	3.1	2.4 F	2.1 F	2.2 F	2.1 F
7	2.2 F	2.2 F	2.2 F	(2.8) F	2.8 F	2.6 F	2.8 F	4.0 H	5.0	C	C	C	6.2	5.6	6.4	6.1 J	5.8	4.9	4.0 F	3.6 F	2.9 F	(2.4) F	2.2 F	2.0 F
8	1.7 F	1.9 F	1.8 F	1.6 F	1.7 F	1.7 F	2.0 F	4.1	5.1 H	4.8	5.7	6.2	6.1	6.2	5.8	6.0	5.9	5.5	5.1	4.3 F	3.5 F	3.0	2.2 F	2.1 F
9	2.0 F	1.9 F	1.9 F	1.9 F J	2.0 F	(1.9) F	2.1 F	4.3	5.4	5.1	5.5	6.2	6.6	6.9	5.7	5.6	5.6	5.2	4.6	3.8	3.2	2.6 F	2.4 F	2.2 F
10	2.3 F	2.4 F	2.8 F	2.8 F	2.6 F	(1.6) F	1.8 F	4.0	5.0	5.4	5.9	6.1	6.2	6.8	5.8	6.0	5.9	5.1 F	4.4	3.4 F	3.0 F	2.8 F	2.4 F	2.4 F
11	2.9 F	3.3 F	(3.0) F	(3.0) F	2.9 F	3.3 F	3.6	4.9	5.8	(6.4)	6.4	6.4	6.6	7.0	6.3	6.4	6.1	5.5	4.2	4.0	3.6	2.9	2.6 F	2.7 F
12	2.5 F	2.3 F	2.8 F	3.2 F	3.3 F	3.3 F	3.1	4.9	6.2	5.8	6.4	6.5	7.1	7.6	7.0	7.2	6.5	5.2	4.2	3.3	2.3	2.3	2.3 F	2.5 F
13	2.4 F	2.5 F	2.7 F	2.7 F	2.7 F	3.1 F	3.0	4.6	6.6	6.8	6.4	6.6	7.1	(7.4)	[7.0] C	7.0	6.4	5.9	5.0	4.1	3.3	2.9	(2.9)	2.8 F
14	(2.5) F	(2.8)	2.2 F	2.2 F	2.3 F	2.9 F	3.4 F	5.1	6.0	7.2	6.4	7.1	[7.7] C	[7.9] C	7.4	7.2	7.9	(7.8)	C	C	C	C	C	C
15	C	C	C	C	C	C	C	C	C	7.2	6.6	(8.0)	8.6	C	C	[7.4] C	[7.4] C	(7.6)	6.2	4.9	C	C	2.9 F	(3.2)
16	3.5	3.3	3.0	2.8	2.8	2.4	2.2 F	3.6 K	4.8 H K	4.6 K	4.6 K	5.0 K	5.3 K	4.9 K	5.2 K	5.1 K	4.8 K	4.8	3.8	3.3	3.0	2.8	2.5	2.3
17	2.2 F	2.3 F	2.4 F	2.7 F	2.9	2.7 F	2.4	4.5	5.2	5.6	5.5	6.4	6.6	6.4	6.2	6.2	6.1	5.7	5.4	4.9	3.4	2.9	2.6 F	2.5 F
18	2.3 F	2.6 F	2.7 F	2.6 F	2.6 F	2.9 F	3.1	4.9	6.2	(5.9)	(6.4)	6.7	7.4	7.4	7.0	6.7	6.8	6.1	5.3	4.7	4.0	3.3	3.0 F	3.1 F
19	3.1 F	3.2 F	3.2 F	3.2 F	3.2 F	3.1 F	3.0 F	5.1	5.7	6.4	6.4	7.2	7.6	7.6	7.4	7.4	7.4	(6.6)	4.9	4.4	3.4	3.2	2.9	2.9
20	2.5	2.5	2.6	2.7	3.0	3.1	3.6	5.5	(6.1)	6.3	6.9	7.4	7.6	7.4	7.6	7.7	7.7	6.6	6.1	5.1	4.2	3.7	3.3	2.9
21	2.6	2.6	2.8	3.0	3.2	3.3	3.4	5.6	6.2	6.3	7.0	6.6	(7.6)	7.5	7.6	7.6	7.1	5.6	4.9	4.9	4.1	3.4	2.7	2.5
22	2.2	2.1	2.3	2.5	2.5	2.8	3.5	5.5	5.7	7.0	(7.3)	7.7	[6.7] C	6.6	7.4	6.6	7.2	6.4	5.8	5.6	4.6	4.2	3.8	3.3
23	2.6	2.2	2.2	(2.6)	2.8	3.0	3.2	4.9	5.4	6.4	6.4	6.8	7.0	7.6	[7.1] C	6.9	6.7	6.0	6.5	5.4	4.5	4.2	3.4	2.7
24	2.3	2.4	2.8	2.9	3.0	3.1	3.3	5.2 H	5.9	6.0	7.4	7.8	7.8	(7.6)	7.2	7.5	7.8 J	6.8	5.4	4.9	4.2	3.8	3.3	3.0
25	3.0	3.2	3.2 F	3.1	2.9 F	2.8 F	2.9	5.6	6.1	6.4	7.5	7.0	7.5	7.6	(7.7)	(7.2)	7.3	6.6	5.1	4.8	4.5	3.7	3.7	2.9 F
26	2.7 F	2.6 F	2.7 F	2.7 F	2.6 F	2.3 F	2.8 F	4.4	5.4	5.8	7.0	(7.9)	7.4	(7.8)	8.6	7.9	7.3	7.8	5.7	4.8	4.6	[4.3] C	[3.7] C	[3.1] C
27	2.7 F	2.9	2.8 F	2.6 F	2.8 F	2.9 F	5.6	5.8	6.4	7.0	6.9	7.2	7.4	7.8	8.6	8.6	8.0 J	7.2	6.6	5.3	3.9 F	3.8	3.7 F	2.6 F
28	2.5 F	2.5 F	2.3 F	(2.6) F	2.4 F	1.9 F	2.8 F	4.8	6.0	(8.2)	(6.9)	7.2	6.8	7.3	6.8	6.8	6.8	6.9	5.8	4.7	4.1	3.4	3.2	3.0
29																								
30																								
31																								
Sum																								
Median	2.5	2.5	2.7	2.7	2.8	2.8	2.9	4.6	5.7	6.0	6.4	6.8	7.1	7.4	7.0	6.8	6.8	5.9	5.0	4.3	3.4	3.0	2.6	2.6

TABLE 52

IONOSPHERE DATA – 4

RESTRICTED

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of $h'F_1$ in km for February (Month) 1945

Records measured by: M.R.R. A.F.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1											200	200H	220	C	C	220									
2												220	200	200H	230	220									
3										200	200	200	200H	220	220	210									
4										200H	(200)	200	200	220	180H	220H	210								
5											200	220	200	180H	[200]	240	240								
6										220	220	220	210	200	200H	210	220								
7										240	C	C	C	240	220	220	220								
8										220	220	210	220	220	240	240	220								
9											240	220	200	[220]	230	220	220								
10											240	220	220	200	220	220									
11											200	180H	220	(200)H	200	220	220								
12										220	200H	200	240	200	220	220									
13											200	220	220	200H	220H	240									
14										220	220	220	210	[220]	220	220	220								
15										C	230	200	240	220	240	240									
16										280K	220K	220K	220K	240K	240K	220K	240K								
17										220	220	210	200H	220	220	220H	220								
18										220	220	220	220	200	220	220	220								
19										240	240	220	240	240	240	220	240								
20										220	200	240	220	220	220	220	180								
21										220	220	220	220	240	240	240	220H								
22										200	200H	240	220	210	220	220H	220								
23											240	240	220	220	220	220	220								
24										220	220	220	200H	220	220	240	240								
25										220	220	220	210	220	(220)	230	220								
26									220	220	220	220	220	220	200H	220	210								
27										220	220	210	240	220	220	220									
28										220	240	220	220	220	240	230	240								
29																									
30																									
31																									
Sum																									
Median										220	220	220	220	220	220	220	220								

TABLE 53

IONOSPHERE DATA—5

RESTRICTED

Washington, D. C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of $f^{\circ}F_1$ in Mo for February (Month) 1945

Records measured by: M.R.R. A.F.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1												H	4.2	C	C	3.6								
2													4.1	[4.1]H										
3												3.8	4.1H	(4.2)	4.1									
4										H		4.0	(4.2)	[4.2]C	(4.1)H	H								
5													[4.1]	4.2H	C									
6												4.1	4.0	4.0	4.0H									
7											C	C	C	[4.1]	4.1									
8											(3.9)	(4.0)	(4.1)	(4.0)										
9												(4.1)	[4.1]	[4.1]C	4.0	3.7								
10										(3.5)	[3.8]	(4.0)	(4.1)	(4.1)	4.1									
11											3.8	[4.0]H	4.1	[4.1]H	4.1									
12											H	(4.2)			(4.2)									
13													[4.2]	[4.2]H	H									
14												(4.2)		C	4.1									
15										C		4.1	[4.4]											
16									K	K	(3.9)H K	4.0K	4.1K	4.1K	4.0K	3.9K	(3.5)K							
17												4.2	4.3H	4.2	4.0									
18												4.2	[4.2]	4.4	4.2									
19													[4.3]	4.3	4.2									
20												4.4	4.4	4.4	4.6									
21											4.0	[4.2]	(4.6)	4.3	(4.3)	3.8	H							
22										3.5	4.1H	[4.2]	4.2	(4.4)	4.4	H								
23											(4.1)	4.2	4.2	4.4	4.3									
24											4.2	4.4	(4.5)H	4.3	4.2									
25											4.2	[4.3]	4.3	4.3	(4.1)	4.1								
26											(4.2)	[4.2]	4.3	4.3	[4.1]H	4.0								
27												4.3	4.3	4.2	4.3	3.8								
28												(4.3)	4.3	4.4	[4.3]	4.2								
29																								
30																								
31																								
Sum																								
Median											4.0	4.2	4.2	4.2	4.1	3.8								

TABLE 54

IONOSPHERE DATA — 6

RESTRICTED

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of h'E in (km) for February (Month) 1945

Records measured by: M.R.R. A.F.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1									120	130	130	120	120	C	C	120	120	130						
2									130	130	130	120	120	120	120	120	120	120						
3									130	120	120	120	120	120	120	120	120	120						
4									120	120	120	120	120	120	120	120	120	130						
5									120H	120	120	120	120	120H	[120]C	120	120H	120						
6									120	120	110	120	120	120	120	120	110	140						
7									120	120	C	C	C	120	120	120	110	(120)						
8									140	120	120	120	120	130	120	120	120	120						
9									120	120	120	120	120	[110]C	120	120	120	120						
10									120H	120H	120	120	120	120	120	120	120	120						
11									120H	120	120	120	130	130	130	120	120	140						
12									140	120	110	120	120H	110	110	120	120	120						
13									120	120	120	120	120H	120	120	120	120	140						
14									130H	120H	120H	120	110	[110]C	110	120	120	120						
15									C	C	110	110	110	120	120	120	120	130						
16									120K	120K	120K	120K	120K	110K	110K	120K	120K	120						
17									120	120	120	120	120	120	120	120	120H	140						
18									120	120	120	120	120	120	120	120	120	120						
19									120H	120	120	[120]B	120	120	120	120	130	140						
20									130H	120	120	120	120	120	120	120	120H	120						
21									120H	120H	120	120	120	120	120	120	120	120						
22									120	120	120	120	120	120	120	120	120	120						
23									120	120	120	120	120	120	120	110	120	140						
24									120	120	120	120	120	120	120	120	120	120						
25									120	120	120	120	120	120	120	120	120	120						
26									120	120	120	120	120	120	120	120	120	140H						
27								120	120	120	120	120	120	120	120	120	120	120						
28								110	120	120	120	120	110	120	120	120	120	120						
29																								
30																								
31																								
Sum																								
Median									120	120	120	120	120	120	120	120	120	120						

TABLE 55

IONOSPHERE DATA – 7

RESTRICTED

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of f°E in (Mo) for February (Month) 1945

Records measured by: M.R.R. A.F.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1									(2.0)F	(2.6)	2.9	3.0	3.1	C	C	2.8	2.3	1.7						
2									[1.9]C	(2.4)	(2.8)	3.0	3.1	3.1	3.0	2.8	(2.4)	[1.9]A						
3									[2.0]F	(2.4)	(2.7)	2.9	3.1	(3.1)	3.0	2.7	2.2	(1.7)						
4									2.1	2.4	(2.7)	3.0	3.1	3.1	2.9	2.7	2.4	F						
5									1.9H	(2.4)	(2.8)	2.9	3.0	2.9	[2.9]C	2.6	2.4H	1.8						
6									(1.9)F	[2.3]A	[2.5]C	2.9	3.0	[2.9]C	2.8	2.6	2.3	1.9						
7									(2.0)F	2.4	C	C	C	2.9	[2.9]A	2.7	(2.4)F	F						
8									(1.8)	(2.3)	(2.8)	(3.0)	(3.1)	(3.0)	2.8	2.7	(2.2)	A						
9									F	2.5	(2.7)	2.9	3.1	[3.0]C	[2.9]A	2.8	(2.3)	(1.9)F						
10									(2.0)H	(2.4)H	(2.9)	(3.0)	A	A	A	A	A	A						
11									1.9H	2.6	(2.9)	(3.0)	(3.1)	(3.1)	(2.9)	2.8	(2.4)	1.9						
12									2.0	2.6	2.9	3.1	3.1H	[3.1]A	(3.0)	2.9	2.3	2.0						
13									(2.2)F	2.8	3.0	3.1	3.2H	3.1	3.0	2.8	2.4	(1.9)						
14									(2.0)H	2.7H	3.0H	3.1	(3.2)	[3.2]C	3.1	2.9	2.6	[2.0]A						
15									C	C	3.0	3.1	3.1	(3.1)	3.0	[2.8]C	2.5	1.9						
16									2.1K	(2.4)K	2.9K	(2.9)K	(3.1)K	3.6K	(2.9)K	2.7K	2.2K	(1.9)						
17									2.1	(2.4)	2.8	3.1	3.1	3.1	3.1	2.7	2.4H	1.9						
18									2.1	(2.5)	[2.9]A	[3.0]A	[3.1]A	3.1	3.0	2.9	2.6	2.0						
19									2.0H	(2.7)	[2.9]A	[3.0]B	3.2	3.1	3.0	[2.9]A	2.5	[2.1]A						
20									2.3H	2.7	2.9	(3.2)	(3.3)	3.3	[3.2]A	2.9	2.5H	(2.1)						
21									(2.0)H	2.7H	(3.1)	(3.2)	3.4	3.3	3.1	(2.8)	(2.3)	1.9						
22									2.4	2.7	3.1	3.4	3.2	3.2	(3.2)	2.9	[2.6]A	2.1						
23									2.3	(2.6)	3.0	3.1	3.3	3.2	3.2	3.0	2.6	2.1						
24									2.2	2.7	3.0	[3.2]A	(3.2)	3.3	3.2	2.9	2.7	2.1						
25									2 3	(2.7)	(2.9)	(3.2)	3.2	(3.2)	[3.1]A	3.0	2.6	A						
26									A	A	A	3.2	3.3	(3.2)	3.1	2.9	2.6	2.0H						
27								1.9	A	A	3.1	(3.2)	(3.2)	3.2	3.2	3.0	2.7	A						
28								1.7	[2.2]A	(2.7)	A	A	(3.2)	3.2	3.1	3.0	2.6	2.1						
29																								
30																								
31																								
Sum																								
Median									2.0	2.6	2.9	3.0	3.1	3.1	3.0	2.8	2.4	1.9						

TABLE 56

IONOSPHERE DATA—8

RESTRICTED

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of E_s in Mc for February (Month) 1945

Records measured by: M.R.R. A.F.

TIME: 75°W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1		3.9 120	4.2 120	3.1 130	0.9 130	4.0 120	2.9 120	3.2 120	3.1 120			C		C	C									
2	3.4 120		2.8 120	2.3 110	(2.5) 110	2.9 140	3.2 140	2.9 120	2.4 120	3.0 120	3.1 130	3.1 130			3.2 140	(3.6) 120	2.7 130	3.6 120	(3.6) 120					
3		3.9 120	2.8 120	0.9 110				3.1 120	(2.9) 120	3.3 120					4.7 120			2.3 160					2.4 110	2.2 110
4	3.0 110	2.4 100	3.0 100	3.7 140	2.4 110	3.0 110	3.2 110	3.0 140		3.4 140	4.3 120						3.1 160	2.9 140	2.4 120	2.4 120			2.8 110	
5		3.0 120	2.4 110	0.9 120		2.4 120			3.1 120		4.3 120	3.5 120			C				C					
6	1.9 120		1.9 110	1.9 120		2.7 120	2.4 110	3.0 110	3.5 120	4.2 120	3.6 120		C	3.4 130	3.4 110		2.4 120							
7						2.9 150				C	C	C	3.1 120	4.4 120	3.0 120	2.7 140		(3.6) 100			2.1 110	2.4 110	2.0 110	1.9 120
8	1.9 120				3.6 120	3.0 120	2.3 120	2.7 140			3.1 120		3.2 170	3.2 140	4.1 120	3.9 120	3.4 120	3.5 120	2.9 120					
9	2.4 140				5.3 120	4.7 120	4.0 110	3.6 120	3.6 120	3.6 120	3.1 140		3.2 130	3.0 120	3.8 120	3.6 120	4.0 120	3.0 130						2.3 120
10	(2.9) 120	2.2 120	2.9 120	(2.9) 120	2.3 120	4.0 120	2.4 120	2.9 120	3.4 120		3.1 140	3.7 120	3.6 120	4.0 120	3.9 120	2.9 120	3.8 120	3.8 120	2.5 120				2.3 120	2.3 120
11	2.4 120	2.4 120	2.8 110	2.0 120	1.9 110												2.4 140	2.0 120	3.0 110	3.2 110	2.8 110			
12	4.0 110	2.3 120	1.9 100			2.9 160		3.6 140						3.6 120	3.6 120	3.0 140	3.0 120	2.8 120		3.4 110	2.8 110			
13	2.9 120	1.9 120					2.9 120	2.3 120							C	2.4 130	3.7 120	3.6 130	3.1 120	4.1 130	2.2 120	3.0 120	3.4 120	2.3 120
14					2.8 120	3.0 120					3.6 140		C	C	C	3.0 140	2.4 130	3.2 120	C	C	C	C	C	C
15	C	C	C	C	C	C	C	C	C	3.2 120	3.9 120			C	C	C	C		C		C	C		
16			2.3 120	2.3 100	3.1 120		2.9 120	2.9 110										3.1 110	3.9 100	3.1 100				
17		2.3 120	1.2 120	3.2 120	3.1 120				2.4 140	3.3 120	3.4 120						2.4 120	2.1 140	2.4 120				2.0 100	2.4 120
18	2.7 100	3.0 120	2.3 120		1.9 140					3.4 120	4.0 120	3.9 120	4.4 120		3.2 180	3.1 160	2.9 140	3.4 130	2.5 120				2.3 140	3.1 120
19	2.8 120	3.1 120	3.0 110	3.0 120	2.8 130	2.5 120	2.4 120	2.3 110		4.1 130	4.4 120	3.2 140	4.1 120	3.5 130	3.2 120	3.0 140	2.8 140	2.3 130						
20	2.8 120	1.9 100			2.3 100		2.2 140		3.6 140	4.9 120	3.1 130	3.6 140		3.3 120	3.1 120		3.2 120	2.0 160	2.7 120					
21		2.4 120			2.4 120	2.8 110	3.2 120							3.3 140	3.2 120	2.7 120	2.5 140						1.9 120	1.9 120
22	3.0 110			2.3 120	3.0 120		2.9 120		4.4 140				C	3.3 160		3.1 140	3.6 120				2.4 110	2.9 110		
23	2.7 120					2.9 120	2.3 140		2.9 130						C		3.6 120	2.2 160					3.1 120	
24				0.9 120		3.0 120	2.8 100	2.3 120	3.2 170	3.2 120		3.9 120	3.4 140					3.1 120	2.9 120	2.3 120		2.4 120	2.8 120	2.1 120
25	1.9 120	3.0 120		2.4 120	4.0 120	3.0 120	2.4 120	2.4 120	3.6 120	3.1 120		4.0 120			3.4 120	3.0 120	4.1 120	3.7 120	2.9 120		3.1 120	2.8 110	1.9 110	2.3 100
26	3.2 120	2.2 120	2.4 120	2.3 120	(1.9) 110				2.6 120	3.7 120	4.2 120		3.2 120			3.0 140				2.3 140	2.4 120	4.3 120	3.3 120	C
27	3.5 120		5.7 110		1.3 120			3.0 120	3.6 120	3.4 120	4.0 120	3.4 120					3.6 120	4.2 120	2.3 120	2.9 120	5.7 120	4.0 120	5.1 120	4.0 120
28	4.0 120	3.1 120	4.1 120	4.5 120	3.7 120	3.0 100			2.5 120		(3.8) 120	5.5 110	4.5 110	5.5 120	(4.1) 140	3.3 140	4.1 120	3.7 120	3.1 120	2.4 120		2.2 120	2.4 120	2.4 120
29																								
30																								
31																								
Sum																								
Median	2.4	2.2	1.9	0.9	2.3	2.8	2.3	2.3	2.5	3.0	3.1	* *	* *	* *	3.2	2.7	2.8	2.8	2.4	E	E	E	1.9	E

* Less than median f°_{E}

TABLE 57

IONOSPHERE DATA – 9

RESTRICTED

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of F2-MI500 for February (Month) 1945

Records measured by: M.R.R. A.F.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	1.9 F	(1.9) F	(2.0) F	1.9 F	(2.2) F	(2.3) F	J	C	2.4	2.3	2.4	C	2.4	C	C	2.3	2.3	2.3	2.3	(2.3)	2.1	2.0	2.0	2.0
2	(2.0) F	2.0 F	2.0 F	(2.0) F	2.1 F	2.1	J	2.2	2.4	2.3	2.1	(2.2)	(2.3)	(2.1)	(2.4)	(2.3)	2.4	2.2	2.1	2.2	2.2	2.0	2.0	(1.9) F
3	1.9 F	1.9 F	(2.0) F	(1.9) F	(2.1) F	(2.1) F	(2.0) F	(2.2) F	2.3	2.6	(2.4)	(2.3)	2.3	(2.4)	2.3	2.2	2.4	2.3	2.2	2.3	(2.1) F	(2.0) F	(2.0)	(2.0) F
4	(2.0) F	(1.9) F	1.8 F	(1.9) F	(2.0) F	2.4	2.1	2.3	2.4	(2.4)	2.3	(2.2)	2.2	2.2	2.2	2.3	2.2	2.3	J	2.1	2.2	2.1	2.0	1.9
5	(2.0) F	1.8 F	(1.9) F	(1.9) F	(2.0) F	(2.0) F	(2.3) F	2.1	2.4	2.3	2.2	(2.5)	(2.1)	(2.1)	C	2.3	2.2	2.3	C	2.2 F	1.9	2.1	2.1	(1.9) F
6	(1.8) F	(2.0) F	(2.0) F	(2.0) F	2.1	(2.3) F	(2.0) F	(1.9)	2.3	2.3	2.3	(2.3)	2.3	1.9	2.2	2.1	2.2	2.2	2.2	(2.5) F	2.2	(2.1) F	(2.1) F	(1.9) F
7	(1.9) F	(1.9) F	(2.0) F	(1.9) F	(2.0) F	(2.1) F	(2.1) F	(2.1) F	2.3	2.3	C	C	C	2.3	2.2	2.1	2.3	2.4	2.1	(2.2) F	(2.2) F	(2.0) F	(2.1) F	(2.0) F
8	(2.2) F	(2.0) F	(2.0) F	(2.0) F	(2.0) F	(2.2) F	(2.2) F	F	2.4 H	2.4	2.2	2.2	2.0	2.2	2.3	2.1	2.2	2.2	2.3	2.1 F	2.1	2.2 F	2.0 F	(2.2) F
9	(2.1) F	(2.0) F	(1.9) F	(2.1) F	(2.1) F	(2.3) F	(2.6) F	(2.2) F	2.3	2.4	C	2.1	2.1	C	2.2	2.2	2.1	2.2	2.1	2.1	2.2	2.1	1.9 F	(2.0) F
10	(2.0) F	(1.9) F	(2.1) F	(2.1) F	(2.2) F	(2.2) F	(2.3) F	(2.3) F	(2.2)	2.5	2.4	2.5	2.3	2.1	2.3	2.3	2.3	(2.4)	2.2	(2.1) F	(2.0) F	(2.0) F	(2.0) F	(1.9) F
11	(1.9) F	(1.8) F	(1.9) F	(2.0) F	(2.0) F	(2.0) F	2.1	2.2	2.3	(2.5)	2.2	2.4	(2.4)	(2.3)	2.2	2.3	2.2	2.3	2.2	2.1	2.1	2.1	2.0	2.0 F
12	(2.1) F	(1.9) F	(1.9) F	(2.1) F	(2.1) F	2.3	2.3	(2.3)	2.4	2.4	2.3	2.3	2.3	(2.2)	2.2	2.2	2.3	2.4	2.2	2.2	2.2	1.9	2.1	2.0 F
13	2.1 F	1.9 F	(2.0) F	(2.1) F	2.2 F	(2.4) F	2.2	2.2	2.5	(2.4)	2.3	2.2	2.3	2.2	2.1	2.4	(2.5)	2.3	2.2	2.3	2.2	2.2	(2.1)	2.2
14	(2.0) F	1.9	(1.8) F	(2.0) F	(2.0) F	(2.2) F	(2.1) F	2.3	2.4	2.4	2.3	2.3	2.2	C	2.2	2.2	(2.2)	J	2.2	C	C	C	C	C
15	C	C	C	C	C	C	C	C	C	C	2.4	C	(2.3)	(2.4)	C	C	C	2.1	C	2.2	C	C	(2.1) F	1.8 F
16	1.9	2.1	2.1	2.0	2.1	1.9	1.9	2.1	2.2 K	2.1 K	2.1 K	1.9 K	1.8 K	1.9 K	2.1 K	2.1 K	2.1 K	2.1	2.1	2.0	1.9	2.0	1.9	1.8
17	1.9	2.0 F	1.9 F	1.9 F	2.0 F	2.0	2.2	2.1	2.3	2.2	2.2	1.9 H	(1.9)	2.1	2.1	2.2	2.1	2.1	2.0	2.2	2.0	2.0	2.1	2.0
18	(1.9) F	(1.9) F	2.1 F	(2.0) F	(2.0) F	(2.0) F	2.0 F	2.2	2.2 H	2.3	2.3 H	2.3	2.0	2.0	2.1	2.1	(2.3)	2.2	2.1	2.0	2.1	2.2	2.0 F	2.0 F
19	(2.0) F	(2.0) F	(1.9) F	(1.9) F	(2.0) F	(2.0) F	2.2 F	2.2	2.3	(2.4)	2.1	(2.1)	2.0	(2.2)	2.1	2.1	2.2	2.2	2.2	2.0	2.1	2.1	2.1	2.0
20	2.1	2.0	2.0	1.9	2.0	2.0	2.1	2.3	(2.3)	2.4	2.2	2.2	(2.2)	2.1	2.2	(2.2)	2.1	2.2	2.2	2.2	2.1	2.1	2.2	2.2
21	1.9	2.0	1.9	2.0	2.0	2.2	2.3	2.4	2.4	2.3	2.2	2.2	2.0	(2.4)	2.1	(2.2)	2.2	2.1	2.2	2.1	2.2	2.2	2.0	2.1
22	2.1	2.0	1.9	1.9	1.8	1.9	2.2	2.5	2.4	(2.4)	(2.2)	2.2	2.3	2.0	2.1	2.2	2.2	2.2	2.0	2.1	2.1	2.0	2.1	2.1
23	2.2	1.9	1.8	1.9	1.8	2.0	2.3	2.3	2.4	2.1	2.3	2.2	2.1	2.1	2.2	2.2	2.2	2.2	(2.0)	2.1	2.1	2.0	2.2	2.1
24	2.0	1.9	1.9	1.8	1.9	2.0	2.3	2.3	2.4 H	2.3	2.2	2.1	2.2	(2.2)	2.1	2.0	(2.1)	(2.3)	2.3	1.9	2.1	1.9	2.0	1.9
25	1.8	1.9 F	1.9	2.0	(2.1) F	(2.2) F	(2.2) F	2.3	2.2	2.3	2.2	2.2	(2.2)	(2.2)	2.0	(2.2)	2.1	(2.3)	2.3	2.0	2.1	2.1	2.1	2.2
26	1.9 F	1.9 F	2.0 F	1.9 F	2.0	(2.0) F	(2.0) F	2.2	2.3	2.2	2.0	2.0	(2.2)	2.2	2.1	2.1	2.2	2.1	2.1	2.1	2.0	1.9	C	C
27	(2.0)	2.0 F	2.0	1.9 F	(2.1) F	(2.2) F	1.9	2.1 H	(2.5)	2.5	(2.2) H	2.2	2.2	(2.3)	(2.1)	(2.1)	2.1	2.2	2.1	2.3	2.2	(2.0) F	(2.1) F	(2.0) F
28	(2.0) F	(1.9) F	(2.0) F	(2.0) F	(2.0) F	(2.1) F	(2.2) F	2.2	2.4	2.2	(2.4)	(2.4)	(2.3)	2.3	2.1	2.1	2.1	2.2	2.3	2.2	2.1	2.2	2.0	(2.0) F
29																								
30																								
31																								
Sum																								
Median	2.0	1.9	2.0	2.0	2.0	2.1	2.2	2.2	2.4	2.3	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.2	2.1	2.1	2.0	2.0	2.0

TABLE 58

IONOSPHERE DATA – 10

RESTRICTED

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of F2-M3000 for February (Month) 1945

Recorde measured by: M.R.R. A.F.

TIME; 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	2.9 F	(2.9)F	(2.9)F	(2.8)F	(3.2)F	(3.3)F	J	C	3.5	3.5	3.5	C	3.5	C	C	3.3	3.4	3.4	3.4	(3.3)	3.1	3.0	3.0	3.0
2	(3.0)F	3.0 F	2.9 F	(3.0)F	3.2 F	3.2	J	3.4	3.5	3.3	3.2	(3.3)	(3.4)	(3.2)	(3.5)	(3.3)	3.4	3.2	3.2	3.2	3.2	3.1	3.1	(2.9)F
3	2.8 F	2.8 F	(3.0)F	(2.9)F	(3.1)F	(3.1)F	(3.0)F	(3.2)F	3.4	3.6	(3.4)	(3.4)	3.3	(3.5)	3.3	3.3	3.5	3.4	3.3	3.4	(3.1)F	(3.0)F	(3.0)	(3.0)F
4	(3.0)F	(2.8)F	2.8 F	(2.9)F	(3.0)F	3.5	3.2	3.4	3.5	(3.5)	3.3	(3.3)	3.2	3.2	3.3	3.4	3.2	3.3	J	3.2	3.2	3.1	3.0	2.9
5	(3.0)F	2.7 F	(2.8)F	(2.9)F	(3.0)F	(3.1)F	(3.4)F	3.1	3.5	3.3	3.2	(3.4)	(3.2)	(3.2)	C	3.4	3.3	3.3	C	3.2 F	2.9	3.1	3.2	(2.9)F
6	(2.8)F	(3.0)F	(3.1)F	(3.1)F	3.2	(3.3)F	(3.1)F	(2.9)	3.4	3.4	3.4	(3.3)	3.4	2.9	3.2	3.1	3.3	3.2	3.3	(3.5)F	3.3	(3.1)F	(3.1)F	(2.8)F
7	(2.9)F	(2.9)F	(3.0)F	(3.0)F	(3.0)F	(3.2)F	(3.2)F	(3.2)F	3.4	3.4	C	C	C	3.3	3.3	3.2	3.3	3.5	3.1	(3.3)F	(3.3)F	(3.1)F	(3.2)F	(3.0)F
8	(3.2)F	(2.9)F	(3.0)F	(3.0)F	(3.0)F	(3.2)F	(3.2)F	F	3.4H	3.4	3.3	3.3	3.1	3.2	3.3	3.1	3.3	3.2	3.4	3.2 F	3.2	3.3 F	3.0 F	(3.2)F
9	(3.1)F	(3.0)F	(2.9)F	(3.2)F	(3.2)F	(3.3)F	(3.0)F	(3.3)F	3.4	3.5	C	3.2	3.1	C	3.2	3.3	3.2	3.3	3.2	3.2	3.3	3.2	2.9 F	(3.1)F
10	(3.0)F	(3.0)F	(3.1)F	(3.2)F	(3.2)F	(3.3)F	(3.3)F	(3.3)F	(3.3)	3.5	3.5	3.5	3.4	3.2	3.4	3.3	3.4	(3.5)	3.3	(3.2)F	(3.1)F	(3.0)F	(3.0)F	(2.9)F
11	(2.9)F	(2.8)F	(2.9)F	(3.0)F	(3.0)F	(3.0)F	3.2	3.2	3.4	(3.6)	3.2	3.5	(3.5)	(3.4)	3.2	3.3	3.2	3.3	3.2	3.1	3.2	3.2	3.1	3.0 F
12	(3.2)F	(2.9)F	(2.9)F	(3.2)F	(3.1)F	3.4	3.3	(3.3)	3.4	3.5	3.4	3.4	3.4	(3.2)	3.2	3.2	3.3	3.5	3.2	3.2	3.2	2.8	3.1	3.0 F
13	3.1 F	2.9 F	(3.0)F	(3.2)F	3.3 F	3.4)F	3.2	3.3	3.5	(3.4)	3.4	3.3	3.3	3.2	3.2	3.4	(3.6)	3.4	3.2	3.4	3.2	3.3	(3.2)	3.3
14	(3.0)F	2.9	(2.8)F	(3.0)F	3.0)F	3.2)F	(3.1)F	3.3	3.5	3.4	3.4	3.4	3.2	C	3.2	3.2	(3.2)	J	3.3	C	C	C	C	C
15	C	C	C	C	C	C	C	C	C	C	3.5	C	(3.3)	(3.5)	C	C	C	3.2	C	3.2	C	C	(3.1)F	(2.8)F
16	2.9	3.1	3.2	3.0	3.2	2.8	2.9	3.1	3.3K	3.2K	3.2K	2.8K	2.8K	2.9K	3.1K	3.1K	3.1K	3.2	3.1	2.9	2.9	3.0	2.8	2.8
17	2.9	3.0F	2.9F	2.8F	3.0F	3.0	3.2	3.2	3.4	3.2	3.3	2.8H	(2.8)	3.1	3.2	3.2	3.2	3.2	3.0	3.2	3.0	3.0	3.2	3.0
18	(2.9)F	(2.9)F	3.1F	(3.0)F	(3.0)F	(3.0)F	3.1F	3.2	3.3H	3.4	3.3H	3.4	3.1	3.1	3.2	3.2	(3.4)	3.3	3.2	3.0	3.1	3.2	3.1F	3.1F
19	(2.9)F	(3.0)F	(2.9)F	(2.8)F	(3.0)F	(3.0)F	3.2F	3.2	3.3	(3.5)	3.2	(3.2)	3.1	(3.3)	3.1	3.1	3.2	3.3	3.3	3.0	3.1	3.1	3.2	3.0
20	3.1	3.0	3.0	2.9	3.0	3.0	3.2	3.4	(3.3)	3.5	3.2	3.2	(3.3)	3.1	3.2	(3.2)	3.2	3.2	3.2	3.2	3.2	3.2	3.3	3.3
21	2.9	3.0	2.8	3.0	3.0	3.2	3.3	3.4	3.5	3.4	3.3	3.2	3.0	(3.4)	3.1	(3.2)	3.3	3.1	3.2	3.2	3.3	3.3	3.0	3.1
22	3.1	3.0.	2.8	2.9	2.8	2.9	3.2	3.5	3.6	(3.4)	(3.2)	3.3	3.4	3.0	3.1	3.2	3.2	3.2	3.0	3.1	3.1	3.1	3.1	3.2
23	3.2	2.9	2.7	2.8	2.8	3.0	3.4	3.4	3.5	3.2	3.3	3.2	3.2	3.2	3.2	3.2	3.2	3.2	(3.0)	3.2	3.2	3.0	3.3	3.1
24	3.0	2.8	2.8	2.8	2.8	3.0	3.3	3.4	3.5H	3.5	3.2	3.1	3.2	(3.3)	3.1	3.0	(3.2)	(3.4)	3.3	2.9	3.2	2.9	3.1	2.9
25	2.8	2.8F	2.8	3.0	(3.1)F	(3.2)F	(3.2)F	3.3	3.3	3.3	3.3	3.2	(3.3)	(3.3)	3.0	(3.2)	3.1	(3.4)	3.3	3.0	3.1	3.1	3.1	3.2
26	2.9 F	2.9F	3.0F	2.9F	3.0	(2.9)F	(3.1)F	3.3	3.4	3.2	3.1	3.0	(3.3)	3.3	3.2	3.1	3.2	3.1	3.1	3.1	3.0	2.9	C	C
27	(3.0)	3.0 F	3.0	2.9F	3.1)F	(3.2)F	2.9	3.1H	(3.6)	3.6	(3.2)H	3.3	3.2	(3.3)	(3.2)	(3.1)	3.1	3.2	3.1	3.3	3.2	(3.0)F	(3.1)F	(3.0)F
28	(3.0)F	(2.9)F	(3.0)F	(3.1)F	(3.1)F	(3.2)F	(3.3)F	3.3	3.4	3.2	(3.4)	(3.5)	(3.3)	3.3	3.2	3.1	3.1	3.3	3.4	3.3	3.1	3.3	3.0	(3.0)F
29																								
30																								
31																								
Sum																								
Median	3.0	2.9	2.9	3.0	3.0	3.2	3.2	3.3	3.4	3.4	3.3	3.3	3.3	3.2	3.2	3.2	3.2	3.3	3.2	3.2	3.2	3.1	3.1	3.0

TABLE 59

IONOSPHERE DATA - II

RESTRICTED

Washington, D.C. Ionosphere Station
(Location)

National Bureau Of Standards
(Institution)

Hourly values of F2-M3500 for February 1945
(Month)

Records measured by: M.R.R.
A.F.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	3.1 F	(3.1) F	(3.1) F	(3.0) F	(3.4) F	(3.5) F	J	C	3.7	3.6	3.8	C	3.8	C	C	3.5	3.5	3.6	3.5	(3.5)	3.3	3.2	3.2	3.2
2	(3.2) F	3.3 F	3.1 F	(3.2) F	3.4 F	3.4	J	3.5	3.7	3.5	3.4	(3.5)	(3.5)	(3.4)	(3.7)	(3.5)	3.6	3.4	3.3	3.4	3.4	3.3	3.3	(3.1) F
3	3.0 F	3.0 F	(3.2) F	(3.1) F	(3.3) F	(3.3) F	(3.2) F	(3.4) F	3.5	3.8	(3.6)	(3.6)	3.5	(3.6)	3.5	3.4	3.6	3.5	3.5	3.6	(3.3) F	(3.2) F	(3.2)	(3.2) F
4	(3.2) F	(3.0) F	3.0 F	(3.1) F	(3.2) F	3.7	3.3	3.5	3.6	(3.7)	3.5	(3.5)	3.4	3.4	3.5	3.5	3.4	3.5	J	3.3	3.4	3.3	3.2	3.1
5	(3.2) F	2.9 F	(3.0) F	(3.1) F	(3.2) F	(3.3) F	(3.6) F	3.2	3.7	3.5	3.4	(3.8)	(3.3)	(3.3)	C	3.6	3.5	3.5	C	3.4 F	3.1	3.3	3.3	(3.1) F
6	(3.0) F	(3.2) F	(3.2) F	(3.3) F	3.4	(3.5) F	(3.3) F	(3.1)	3.6	3.5	3.6	(3.5)	3.5	3.1	3.4	3.3	3.5	3.4	3.4	(3.7) F	3.5	(3.2) F	(3.2) F	(3.1) F
7	(3.1) F	(3.1) F	(3.2) F	(3.2) F	(3.2) F	(3.4) F	(3.4) F	(3.4) F	3.5	3.6	C	C	C	3.5	3.5	3.3	3.4	3.7	3.3	(3.5) F	(3.5) F	(3.3) F	(3.4) F	(3.2) F
8	(3.3) F	(3.1) F	(3.2) F	(3.2) F	(3.2) F	(3.3) F	(3.4) F	F	3.6 H	3.5	3.4	3.5	3.2	3.4	3.5	3.3	3.5	3.4	3.6	3.4 F	3.4	3.5 F	3.2 F	(3.4) F
9	(3.3) F	(3.2) F	(3.1) F	(3.4) F	(3.3) F	(3.4) F	(3.1) F	(3.5) F	3.5	3.7	C	3.3	3.3	C	3.4	3.5	3.3	3.5	3.4	3.3	3.4	3.4	3.1 F	(3.3) F
10	(3.2) F	(3.1) F	(3.3) F	(3.4) F	(3.4) F	(3.5) F	(3.5) F	(3.5) F	(3.5)	3.7	3.7	3.7	3.5	3.3	3.6	3.4	3.5	(3.7)	3.5	(3.3) F	(3.2) F	(3.2) F	(3.2) F	(3.1) F
11	(3.1) F	(3.0) F	(3.1) F	(3.2) F	(3.2) F	(3.2) F	3.4	3.4	3.5	(3.7)	3.4	3.7	(3.6)	(3.5)	3.4	3.5	3.3	3.5	3.4	3.3	3.3	3.3	3.3	3.2 F
12	(3.4) F	(3.1) F	(3.1) F	(3.4) F	(3.3) F	3.6	3.5	(3.5)	3.6	3.7	3.6	3.6	3.5	(3.4)	3.4	3.4	3.5	3.7	3.4	3.4	3.4	3.0	3.3	3.2 F
13	3.3 F	3.0 F	(3.2) F	(3.4) F	3.5 F	(3.6) F	3.4	3.4	3.7	(3.6)	3.6	3.4	3.5	3.4	3.4	3.6	(3.8)	3.6	3.4	3.5	3.3	3.5	(3.4)	3.4
14	(3.2) F	3.1	(3.0) F	(3.1) F	(3.2) F	(3.4) F	(3.3) F	3.5	3.6	3.6	3.6	3.6	3.4	C	3.4	3.4	(3.4)	J	3.4	C	C	C	C	C
15	C	C	C	C	C	C	C	C	C	C	3.7	C	(3.5)	(3.7)	C	C	C	3.3	C	3.4	C	C	(3.3) F	(3.0) F
16	3.1	3.3	3.3	3.2	3.3	3.0	3.1	3.3	3.4 K	3.4 K	3.4 K	3.0 K	3.0 K	3.1 K	3.3 K	3.3 K	3.3 K	3.3	3.3	3.1	3.1	3.2	3.0	3.0
17	3.1	3.2 F	3.1 F	3.0 F	3.1 F	3.2	3.4	3.3	3.5	3.4	3.4	3.0 H	(3.0)	3.3	3.4	3.4	3.4	3.3	3.2	3.4	3.2	3.2	3.4	3.2
18	(3.1) F	(3.1) F	3.3 F	(3.2) F	(3.2) F	(3.2) F	3.3 F	3.3	3.5 H	3.5	3.5 H	3.5	3.3	3.2	3.4	3.4	(3.5)	3.5	3.3	3.2	3.2	3.4	3.3 F	(3.3) F
19	(3.1) F	(3.2) F	(3.1) F	(3.0) F	(3.2) F	(3.2) F	3.4 F	3.4	3.5	(3.7)	3.3	(3.4)	3.2	(3.4)	3.3	3.3	3.4	3.5	3.4	3.2	3.3	3.3	3.4	3.2
20	3.3	3.1	3.2	3.0	3.2	3.2	3.4	3.6	(3.5)	3.7	3.3	3.4	(3.5)	3.3	3.4	(3.4)	3.4	3.4	3.4	3.4	3.3	3.3	3.4	3.5
21	3.1	3.2	3.0	3.1	3.2	3.4	3.5	3.6	3.6	3.5	3.5	3.4	3.2	(3.6)	3.3	(3.4)	3.5	3.3	3.4	3.4	3.5	3.5	3.2	3.3
22	3.3	3.2	3.0	3.0	3.0	3.1	3.4	3.7	3.7	(3.6)	(3.4)	3.4	3.5	3.2	3.3	3.4	3.4	3.4	3.2	3.3	3.3	3.3	3.3	3.4
23	3.4	3.1	2.9	3.0	2.9	3.2	3.5	3.5	3.6	3.3	3.5	3.4	3.3	3.4	3.4	3.4	3.4	3.4	(3.2)	3.3	3.4	3.2	3.4	3.3
24	3.2	3.0	3.0	3.0	3.0	3.2	3.5	3.6	3.6 H	3.6	3.4	3.3	3.4	(3.5)	3.3	3.2	(3.4)	(3.6)	3.5	3.1	3.3	3.1	3.2	3.1
25	3.0	3.1 F	3.0	3.1	(3.2) F	(3.4) F	(3.4) F	3.5	3.4	3.5	3.5	3.3	(3.4)	(3.5)	3.2	(3.4)	3.2	(3.6)	3.5	3.2	3.3	3.3	3.3	3.4
26	3.1 F	3.1 F	3.2 F	3.1 F	3.2	(3.2) F	(3.3) F	3.4	3.5	3.4	3.3	3.2	(3.5)	3.5	3.4	3.3	3.4	3.3	3.3	3.3	3.2	3.1	C	C
27	(3.1)	3.1 F	3.2	3.0 F	(3.3) F	(3.3) F	3.1	3.3 H	(3.7)	3.7	(3.4) H	3.5	3.5	(3.5)	(3.3)	(3.3)	3.3	3.3	3.3	3.5	3.4	(3.2) F	(3.3) F	(3.2) F
28	(3.2) F	(3.1) F	(3.2) F	(3.2) F	(3.2) F	(3.3) F	(3.4) F	3.4	3.6	3.4	(3.6)	(3.6)	(3.5)	3.5	3.3	3.3	3.3	3.5	3.6	3.4	3.3	3.4	3.2	(3.2) F
29																								
30																								
31																								
Obs																								
Median	3.2	3.1	3.1	3.1	3.2	3.3	3.4	3.4	3.6	3.6	3.5	3.5	3.5	3.4	3.4	3.4	3.4	3.5	3.4	3.4	3.3	3.3	3.3	3.2

TABLE 60

IONOSPHERE DATA – 12

RESTRICTED

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of FI-M3000 for February (Month) 1945

Records measured by: M.R.R. A.F.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1												H	3.8	C	C	3.8								
2													3.7	H										
3												3.7	3.6 H	3.6	(3.5)									
4										H		3.8	3.5	C	(3.6) H	H								
5														(3.6) H	C									
6												3.5	3.8	(3.7)	H									
7											C	C	C		(3.5)									
8											(3.5)	(3.6)	(3.6)	(3.8)										
9												(3.6)		C	3.5	3.8								
10										(3.8)		(3.8)	(3.6)	(3.6)	3.7									
11											3.9	H	3.5	H	3.5									
12											H	(3.7)			(3.7)									
13														H	H									
14												(3.7)		C	3.7									
15										C		3.9												
16									K	K	(3.5) H	(3.6) K	3.5 K	3.5 K	3.5 K	3.4 K	(3.6) K							
17												3.7	(3.7) H	3.6	3.6	H								
18												3.6		3.5	3.6									
19														3.5	3.7									
20												(3.5)	(3.6)	3.6	3.6									
21											3.7		(3.5)	3.6	(3.6)	3.6	H							
22										(4.0)	3.8 H		3.7	(3.7)	3.7	H								
23											(3.7)	3.6	3.7	3.4	3.6									
24											3.5	3.6	(3.5) H	3.7	3.7									
25											(3.5)		3.6	3.6	(3.7)	3.6								
26											(3.5)		3.5	3.7	H	3.6								
27												3.6	3.7	3.7	3.6	3.7								
28												(3.7)	3.6	3.5		3.6								
29																								
30																								
31																								
Sum																								
Median											3.5	3.6	3.6	3.6	3.6	3.6								

TABLE 61

IONOSPHERE DATA — 13

RESTRICTED

Washington, D.C. (Location) Ionosphere Station

National Bureau Of Standards (Institution)

Hourly values of E-MI500 for February (Month) 1945

Records measured by: M.R.R. A.F.

TIME: 75° W MERIDIAN

Day	00	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1									(3.5)F	(3.5)	3.4	3.8	3.7	C	C	3.7	3.7	3.5						
2									C	(3.5)	(3.5)	(3.7)	3.7	3.8	3.8	3.9	(3.8)	A						
3									F	A	(3.9)	3.7	3.6	(3.7)	3.8	3.8	4.0	FA						
4									(3.3)	3.8	A	3.6	3.7	3.6	(3.9)	3.8	(3.4)	F						
5									(3.7)H	(3.7)	(3.6)	(3.8)	3.8	3.7	C	3.8	3.8 H	3.4						
6									FA	A	C	3.7	3.8	C	3.7	(3.6)	3.6	3.4						
7									F	(3.6)	C	C	C	3.8	A	3.8	(3.5)F	F						
8									F	(3.6)	(3.3)	C	(3.6)	(3.8)	3.8	(3.8)	(3.9)	A						
9									F	(3.5)	(3.6)	3.8	3.7	C	A	3.7	A	AF						
10									(3.5)H	(3.8)H	(3.6)	(3.8)	A	A	A	A	A	A						
11									(3.5)H	3.4	(3.5)	(3.7)	(3.7)	(3.7)	(3.8)	3.6	(3.8)	3.6						
12									3.8	(3.6)	3.5	3.6	3.6 H	A	(4.0)	(3.8)	4.0	3.4						
13									(3.3)F	3.4	3.6	3.8	3.7 H	3.8	3.8	3.7	3.9	A						
14									(3.6)H	3.6 H	3.7 H	3.8	(3.7)	C	3.8	3.8	3.6	A						
15									C	C	3.7	3.8	3.8	(3.9)	3.8	C	3.6	3.6						
16									3.7 K	(3.7)K	3.8 K	(3.8)K	(3.5)K	3.7 K	(3.8)K	3.8 K	3.5 K	(3.8)						
17									3.4	(3.5)	3.7	3.6	3.6	3.6	3.5	3.7	3.6 H	3.3						
18									3.4	A	A	A	A	3.7	3.8	3.4	(3.7)	3.9						
19									3.7 H	3.5	A	B	(3.6)	3.9	3.8	A	A	A						
20									(3.5)H	(3.7)	(3.8)	(3.5)	(3.7)	3.7	A	3.7	H	(3.4)						
21									(3.9)H	3.6 H	(3.5)	(3.7)	3.7	3.6	3.8	A	A	3.8						
22									(3.5)	3.7	3.6	(3.7)	(3.7)	3.7	(3.7)	3.8	A	3.7						
23									3.6	(3.8)	3.8	3.9	3.7	3.9	3.6	3.6	3.6	(3.6)						
24									3.7	3.7	3.8	A	(3.7)	3.7	(3.9)	(3.7)	3.5	3.7						
25									3.8	A	(3.9)	A	3.9	(3.8)	A	3.7	4.0	A						
26									A	A	A	3.6	3.6	(3.8)	3.8	3.9	3.6	3.7 H						
27								A	A	A	A	(3.9)	(3.7)	3.8	3.7	3.8	(3.7)	A						
28								(3.2)	A	(4.0)	A	A	(3.9)	3.8	3.7	3.8	3.9	(3.9)						
29																								
30																								
31																								
Sum																								
Median									3.6	3.6	3.6	3.7	3.7	3.8	3.8	3.8	3.7	3.6						

Table 62

Ionospheric Storminess, February, 1945

Day	Ionospheric Character* 00-12 GCT	12-24 GCT	Principal Storms Beginning GCT	End GCT	Magnetic Character** 00-12 GCT	12-24 GCT
February						
1	3	1			1	1
2	1	1			1	2
3	2	1			2	1
4	2	2			1	1
5	3	2			3	2
6	2	3			3	2
7	3	3			1	1
8	3	3			3	2
9	2	3			3	2
10	2	3			2	1
11	1	2			2	1
12	1	1			2	1
13	1	2			1	0
14	1	0			0	2
15	***	2			4	3
16	0	5	1230	2200	3	3
17	2	3			2	2
18	2	1			2	1
19	1	2			1	1
20	1	1			1	1
21	1	1			1	0
22	2	1			1	2
23	1	1			1	2
24	2	1			2	2
25	1	1			3	2
26	1	2			2	3
27	1	2			2	2
28	1	1			2	1

*Ionosphere character figure (I-figure) for ionospheric storminess at Washington, D.C., during 12-hour period, on an arbitrary scale of 0 to 9, 9 representing the greatest disturbance.

**Average for 12 hours of American magnetic K-figure, determined by a number of observatories, on an arbitrary scale of 0 to 9, representing the greatest disturbance.

***No record.

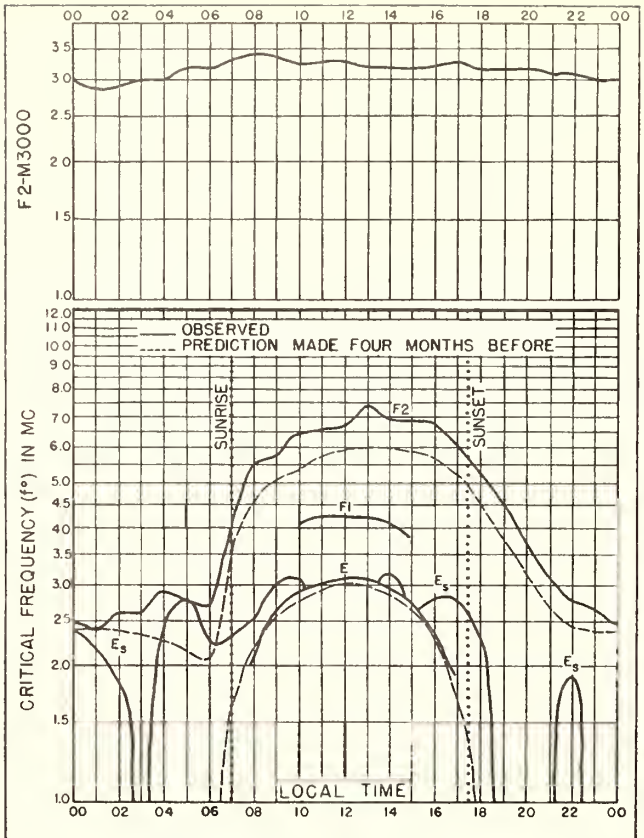

Fig. 1. WASHINGTON, D.C.
39.0°N, 77.5°W FEBRUARY, 1945

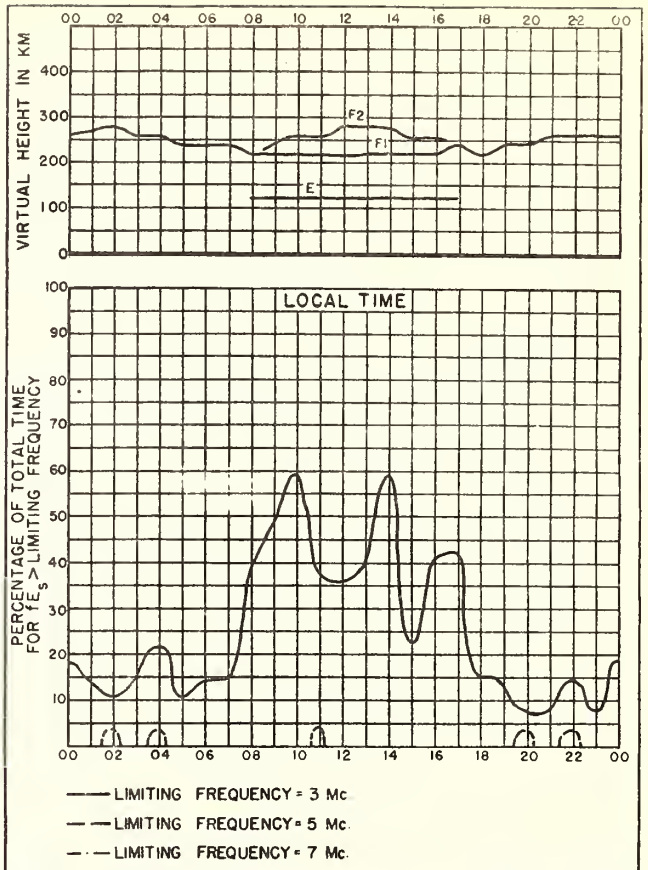

Fig 2. WASHINGTON, D.C. FEBRUARY, 1945

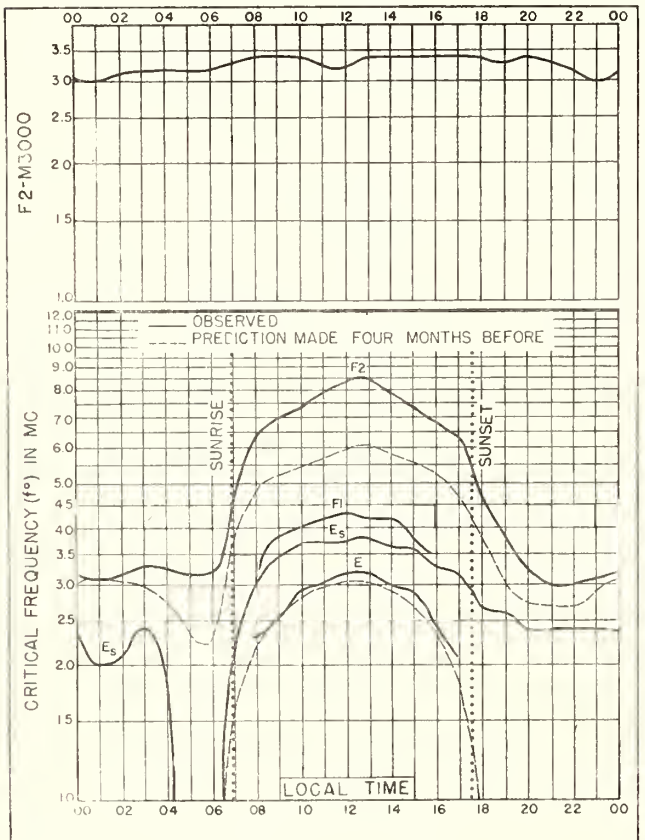

Fig 3 SAN FRANCISCO, CALIFORNIA
37.4°N, 122.2°W FEBRUARY, 1945.

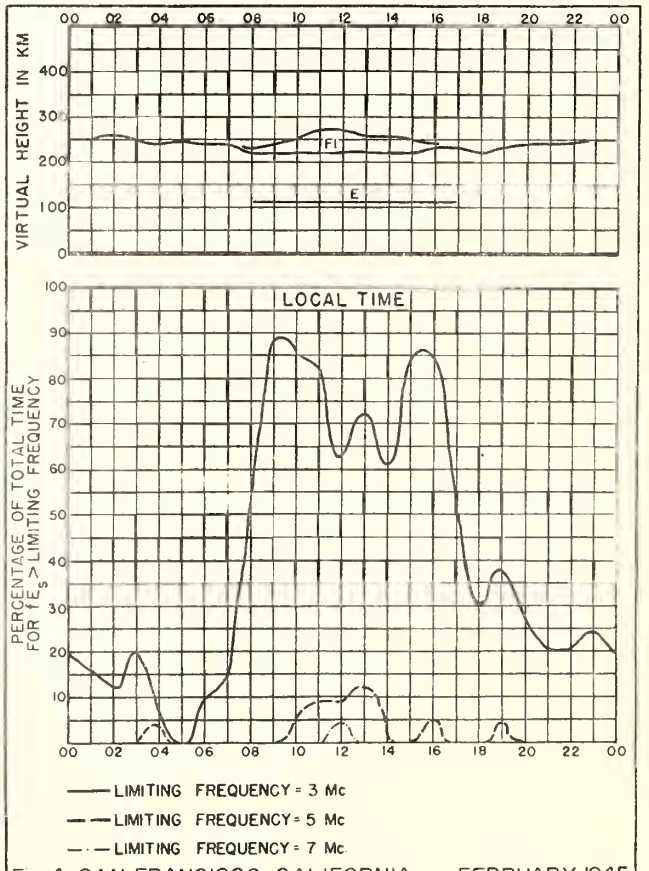

Fig. 4 SAN FRANCISCO, CALIFORNIA FEBRUARY, 1945

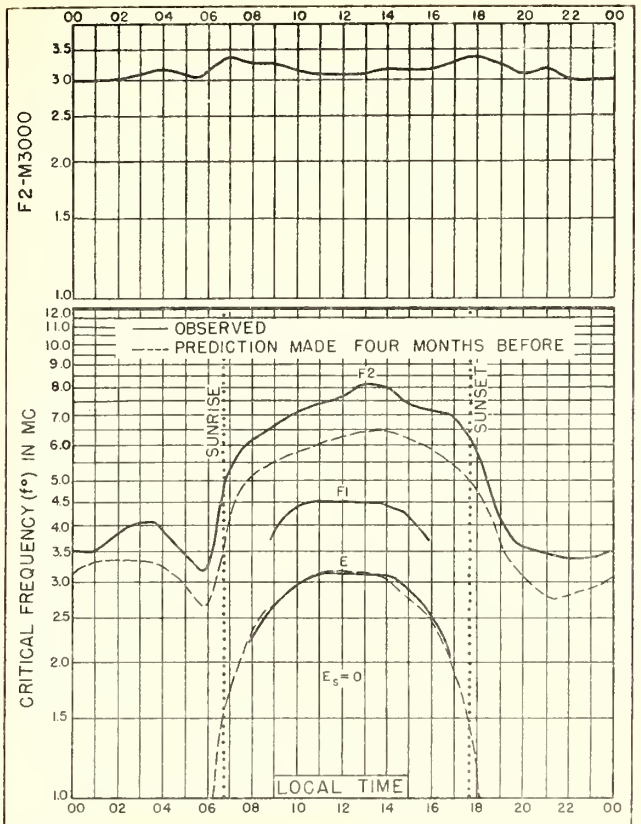

Fig. 5 BATON ROUGE, LOUISIANA
30.5°N, 91.2°W FEBRUARY, 1945

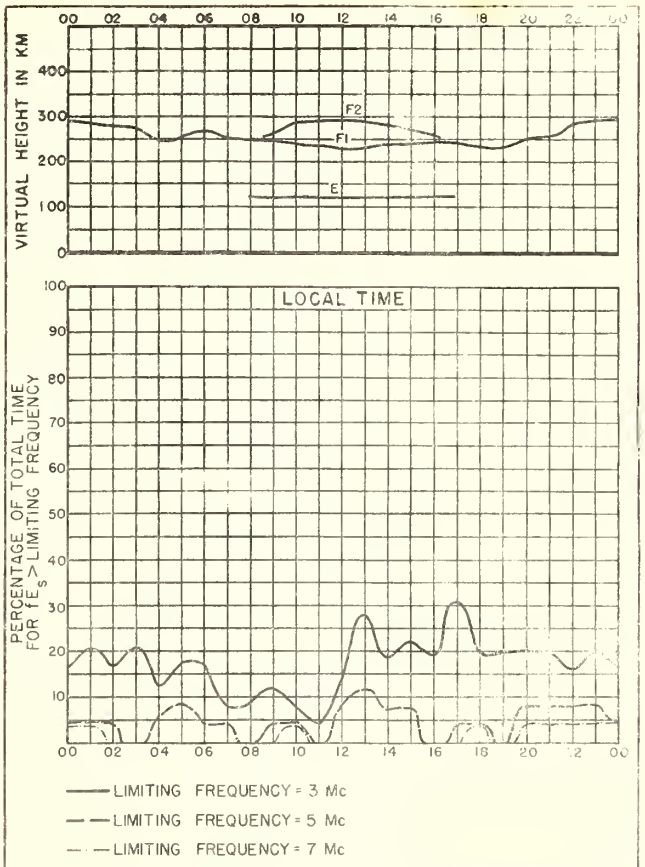

Fig. 6. BATON ROUGE, LOUISIANA FEBRUARY, 1945

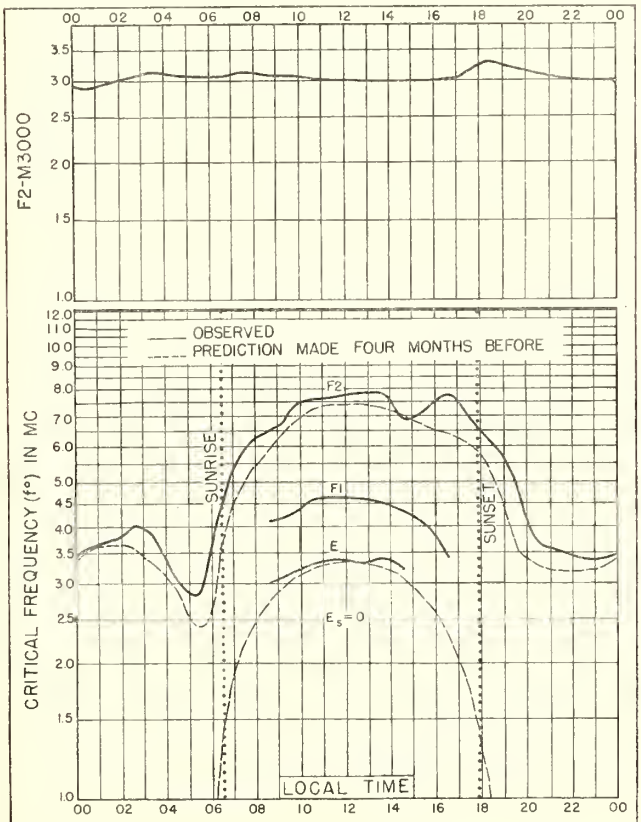

Fig 7. SAN JUAN, PUERTO RICO
18.4°N, 66.1°W FEBRUARY, 1945

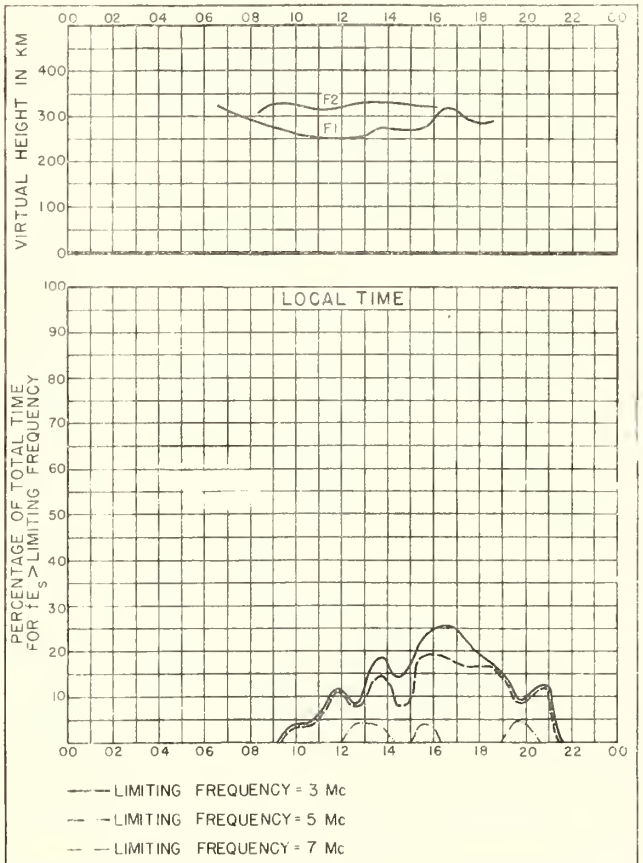

Fig 8 SAN JUAN, PUERTO RICO FEBRUARY, 1945

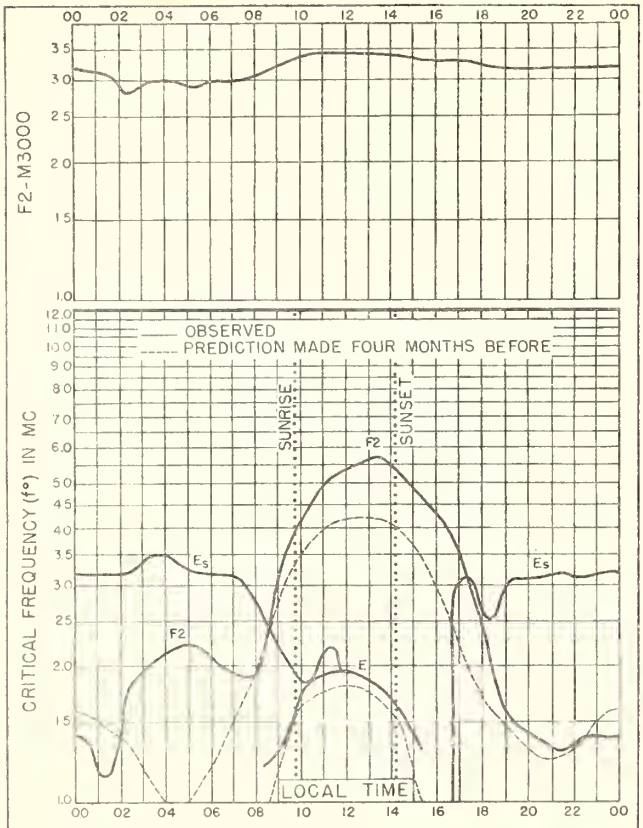

Fig. 9 FAIRBANKS, ALASKA
64.9°N, 147.8°W JANUARY, 1945

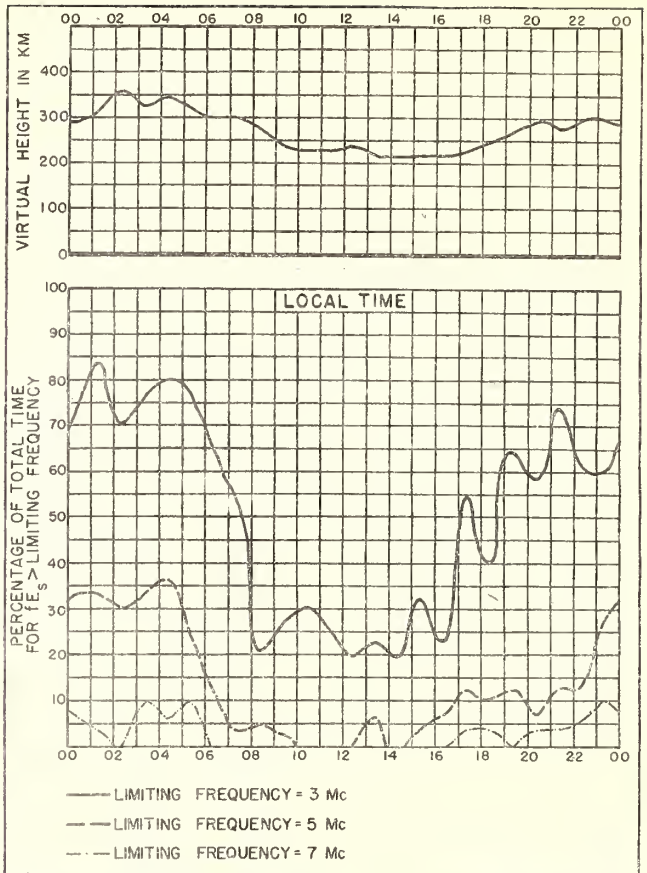

Fig 10. FAIRBANKS, ALASKA JANUARY, 1945

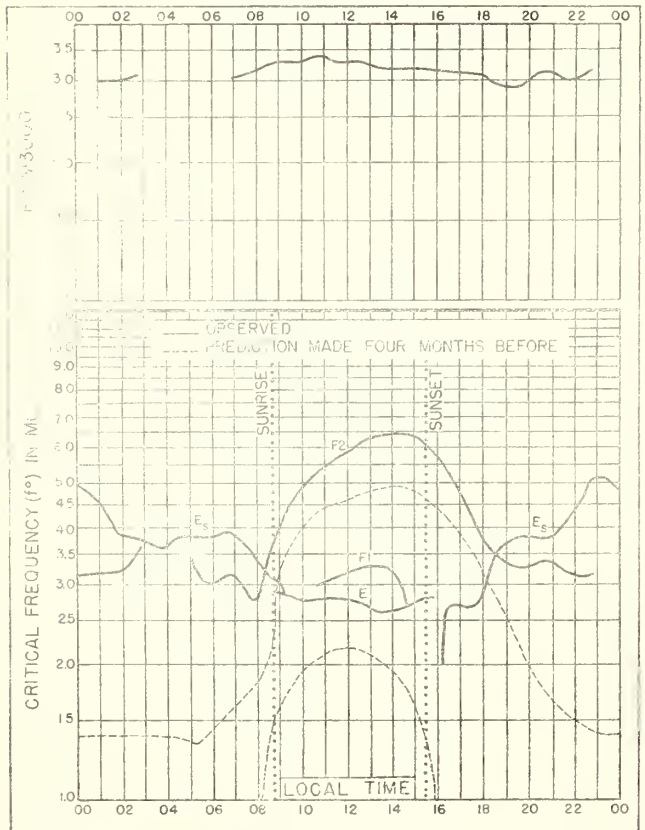

Fig 11 CHURCHILL, CANADA
58.8°N, 94.2°W JANUARY, 1945

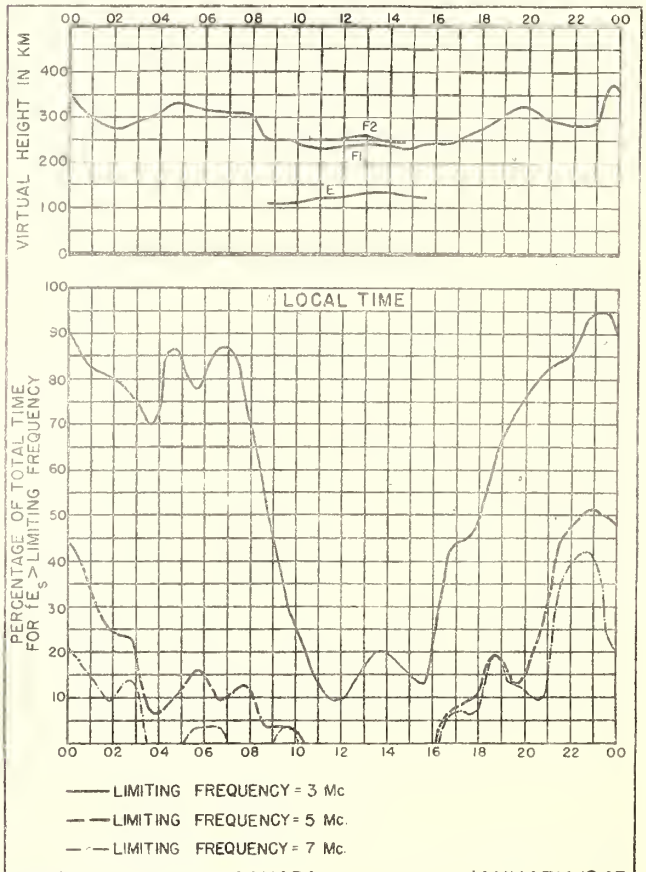

Fig 12. CHURCHILL, CANADA JANUARY, 1945

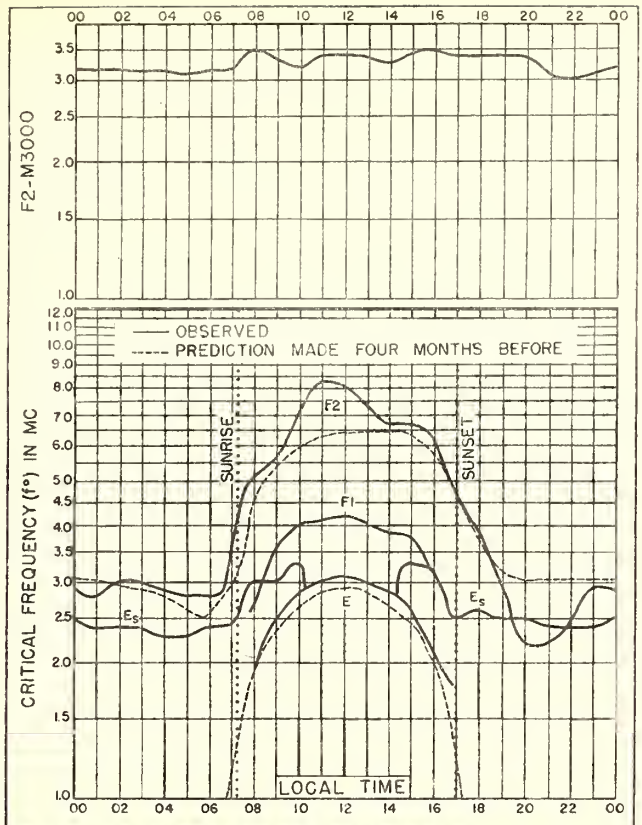

Fig 13. SAN FRANCISCO, CALIFORNIA
37.4°N, 122.2°W JANUARY, 1945

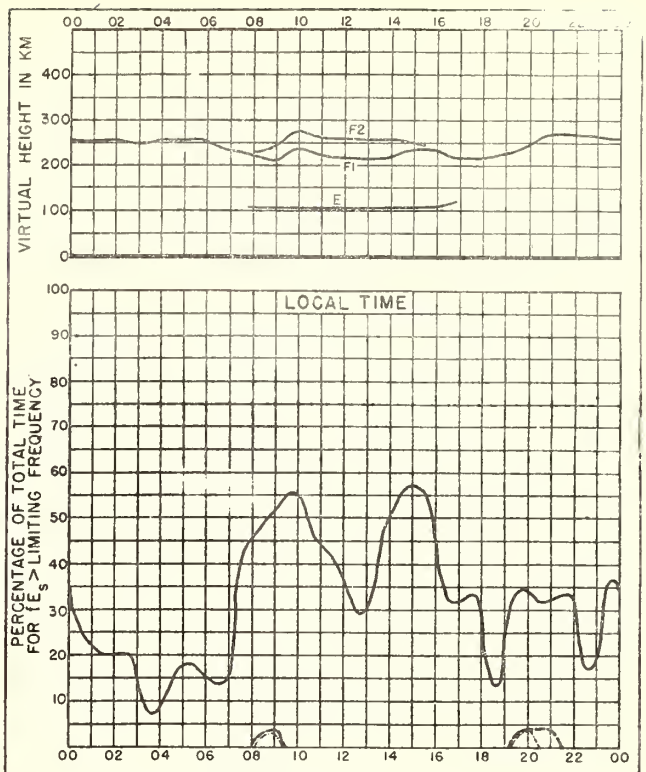

Fig 14 SAN FRANCISCO, CALIFORNIA JANUARY, 1945

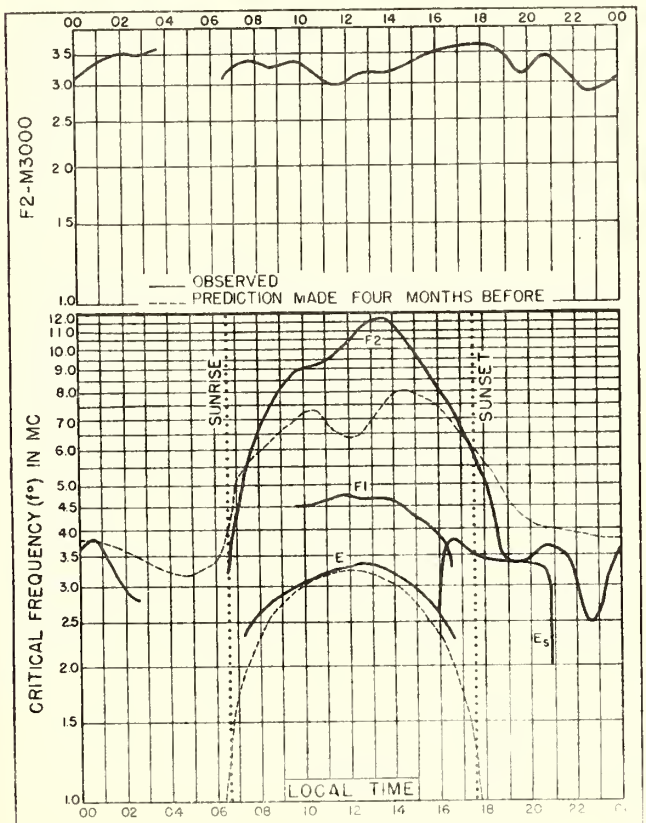

Fig 15. MAUI, HAWAII
20.8°N, 156.5°W JANUARY, 1945

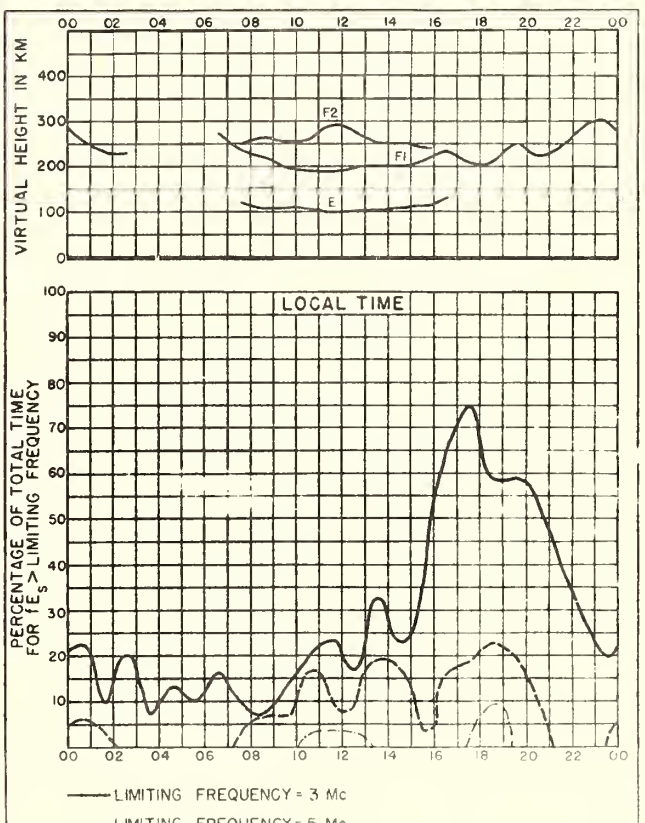

Fig 16. MAUI, HAWAII JANUARY, 1945

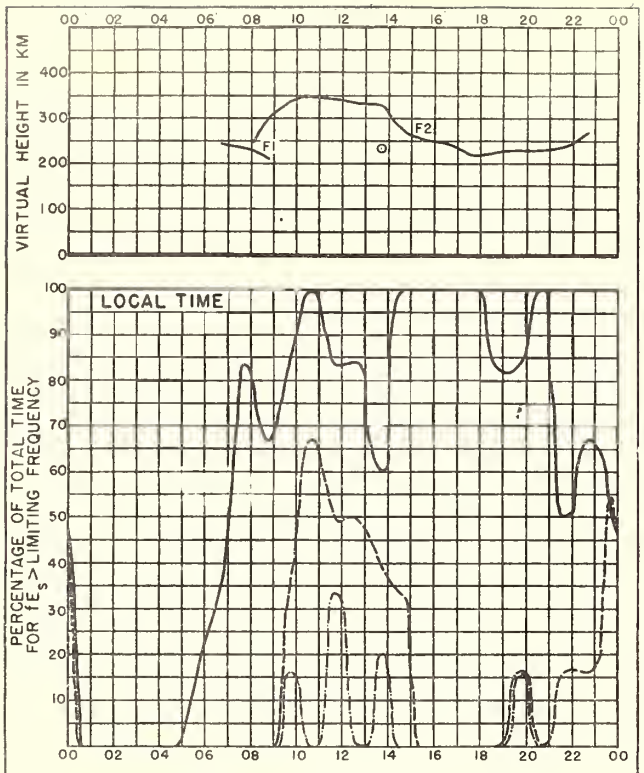

Fig. 17 GUAM I. JANUARY, 1945

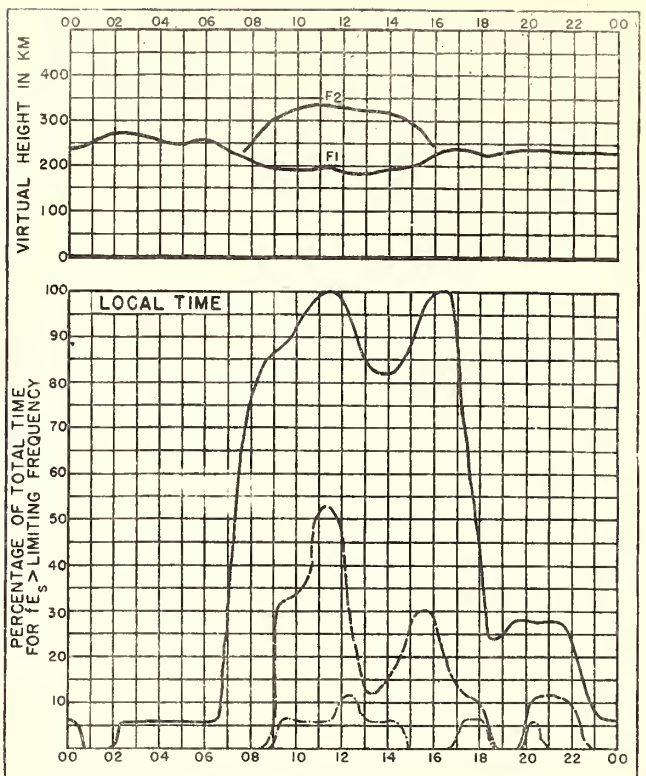

Fig. 18 KWAJALEIN ATOLL JANUARY, 1945

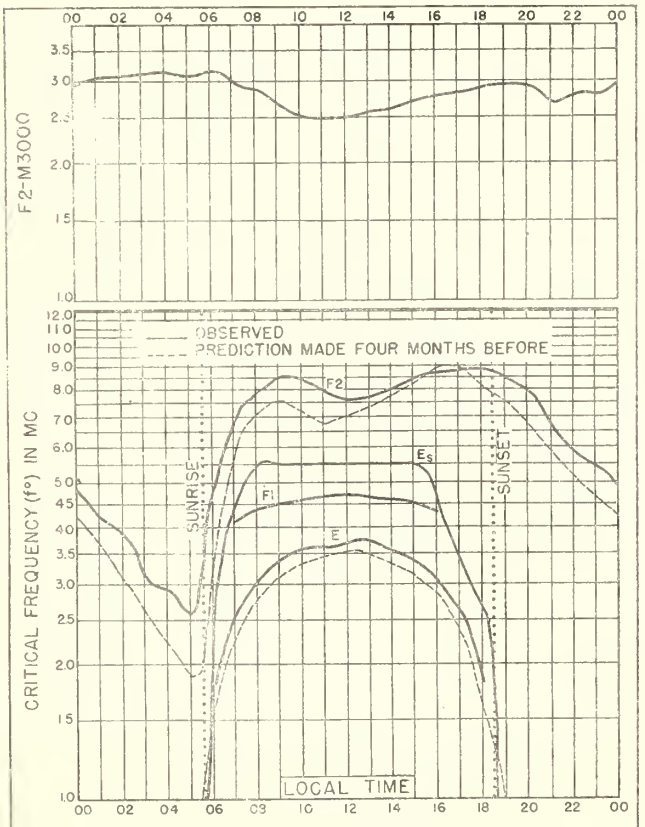

Fig. 19 HUANCAYO, PERU
12.0°S, 75.3°W JANUARY, 1945

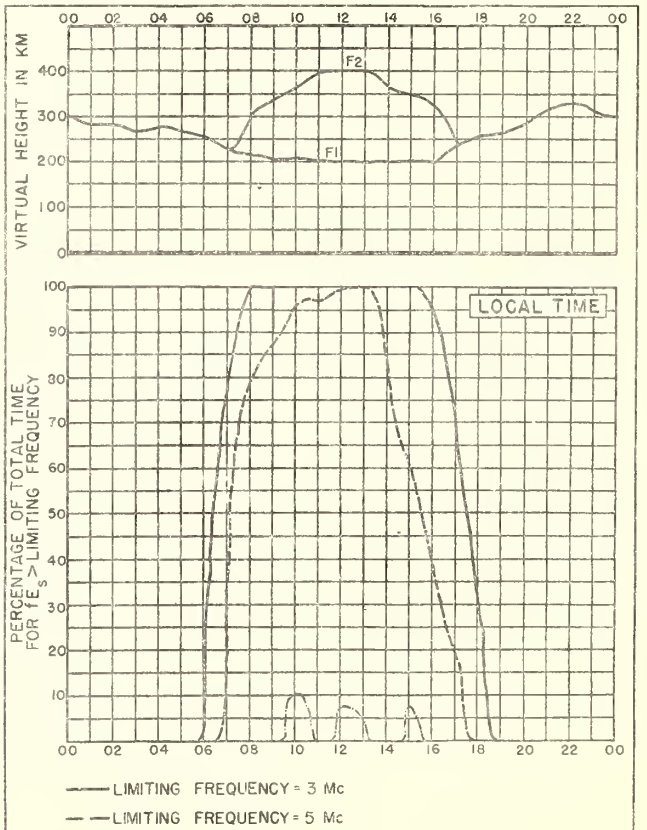

Fig. 20. HUANCAYO, PERU JANUARY, 1945

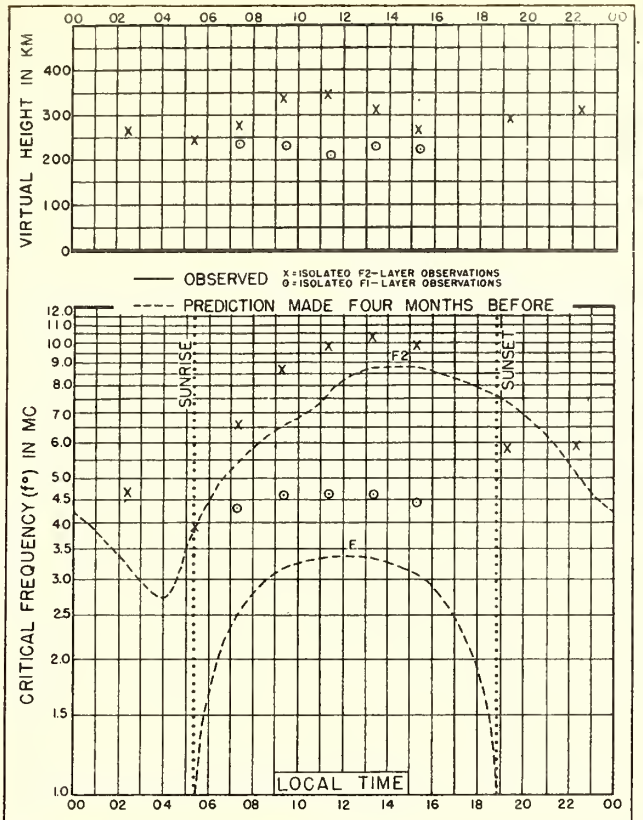

Fig. 21. PITCAIRN, IS.
25.0°S, 130.0°W
JANUARY, 1945

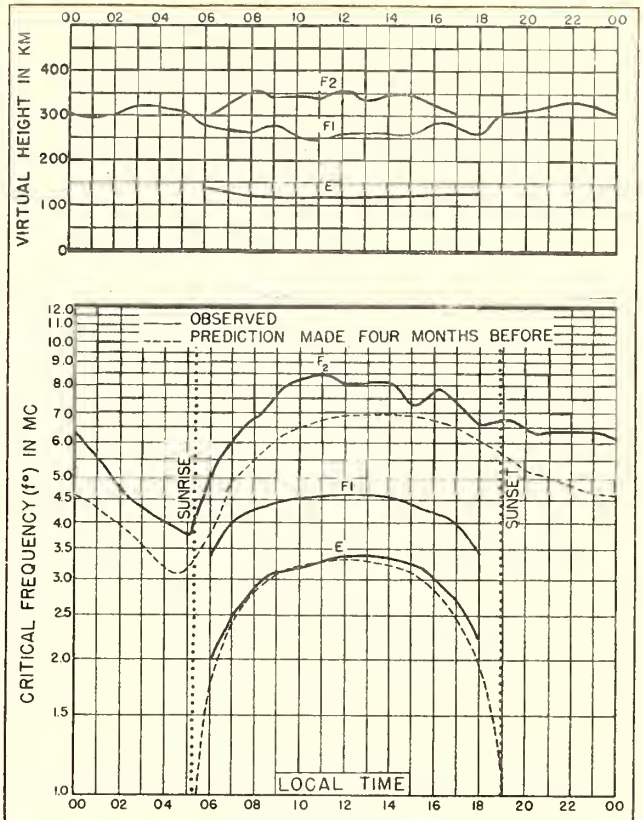

Fig. 22. KERMADEC IS.
29.2°S, 177.9° W
JANUARY, 1945

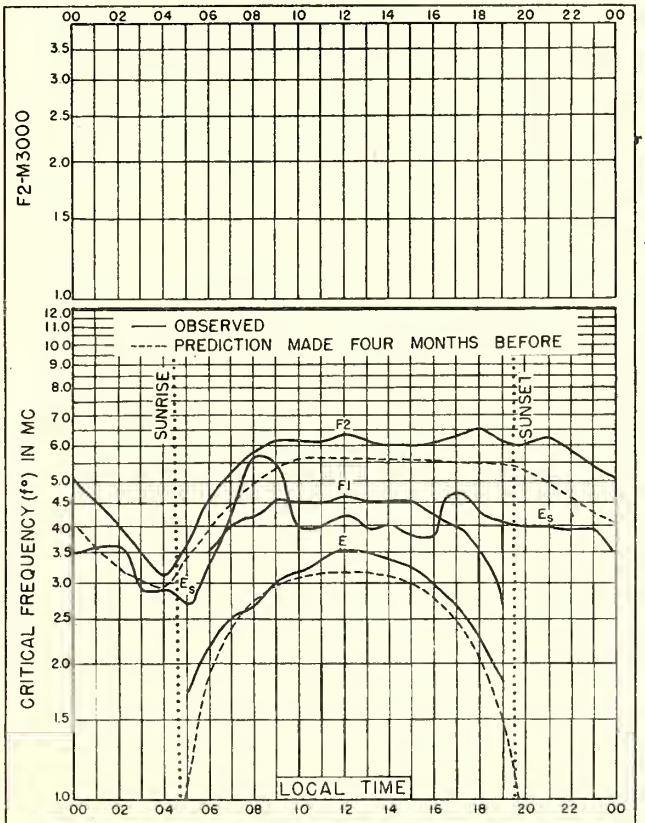

Fig. 23. CHRISTCHURCH, NEW ZEALAND
43.5°S, 172.6°E
JANUARY, 1945

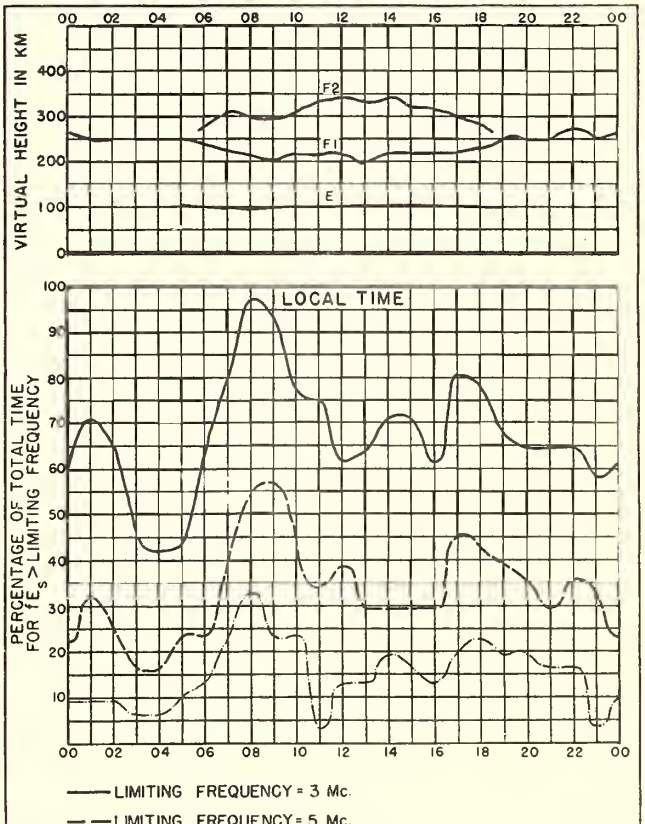

Fig. 24. CHRISTCHURCH, NEW ZEALAND
JANUARY, 1945

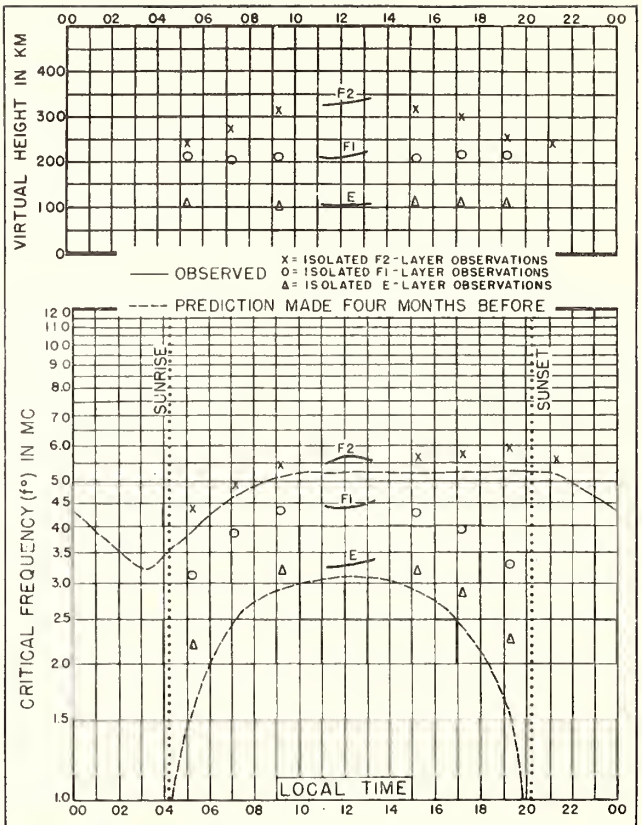

Fig 25 CAMPBELL I
52.5°S, 169.0°E JANUARY, 1945

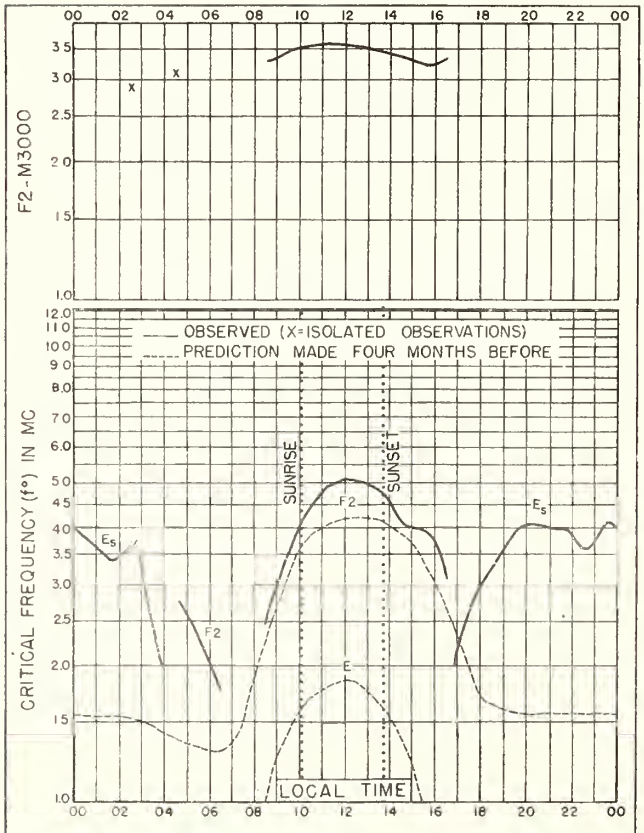

Fig 26. REYKJAVIK, ICELAND
64.1°N, 21.7°W DECEMBER, 1944

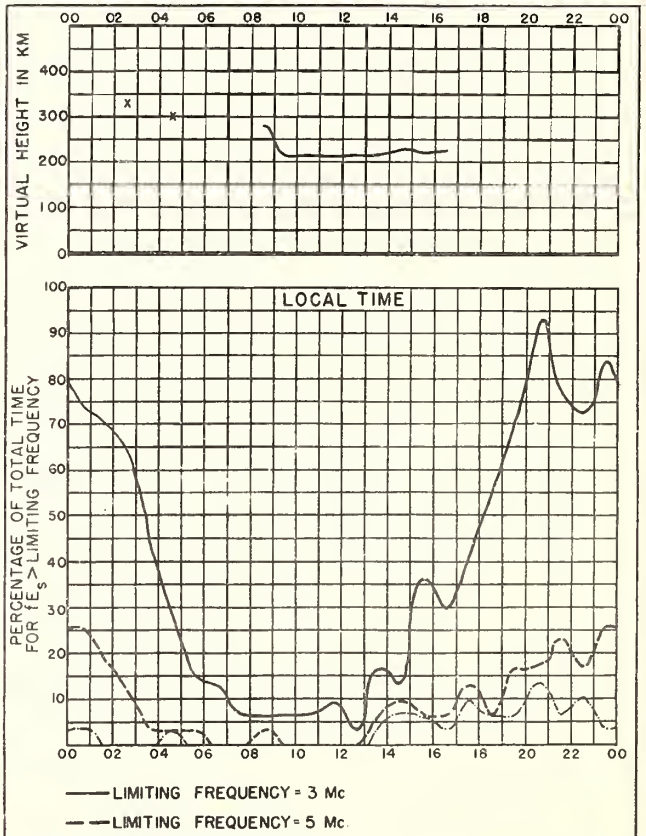

Fig. 27 REYKJAVIK, ICELAND DECEMBER, 1944

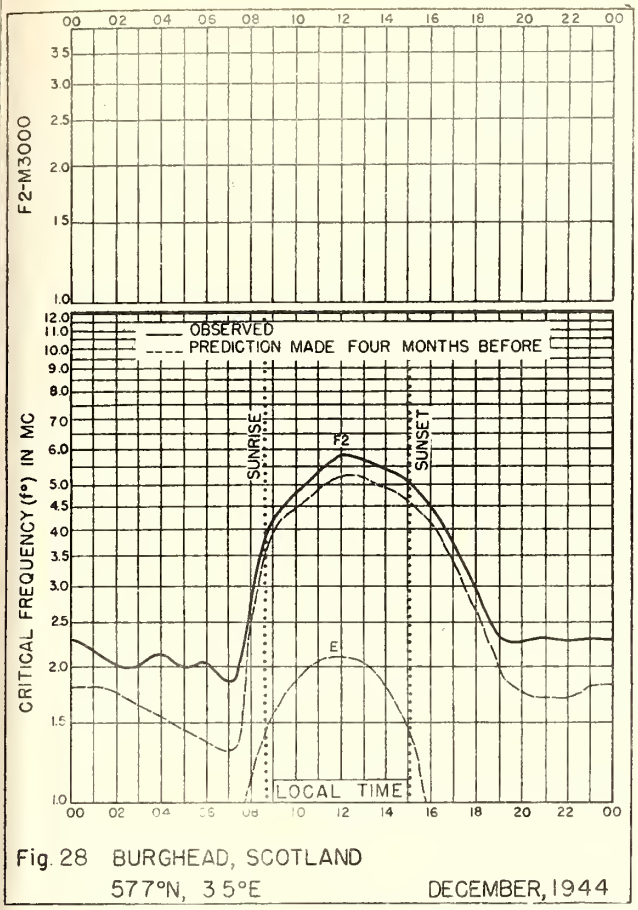

Fig. 28 BURGHEAD, SCOTLAND
57.7°N, 3.5°E DECEMBER, 1944

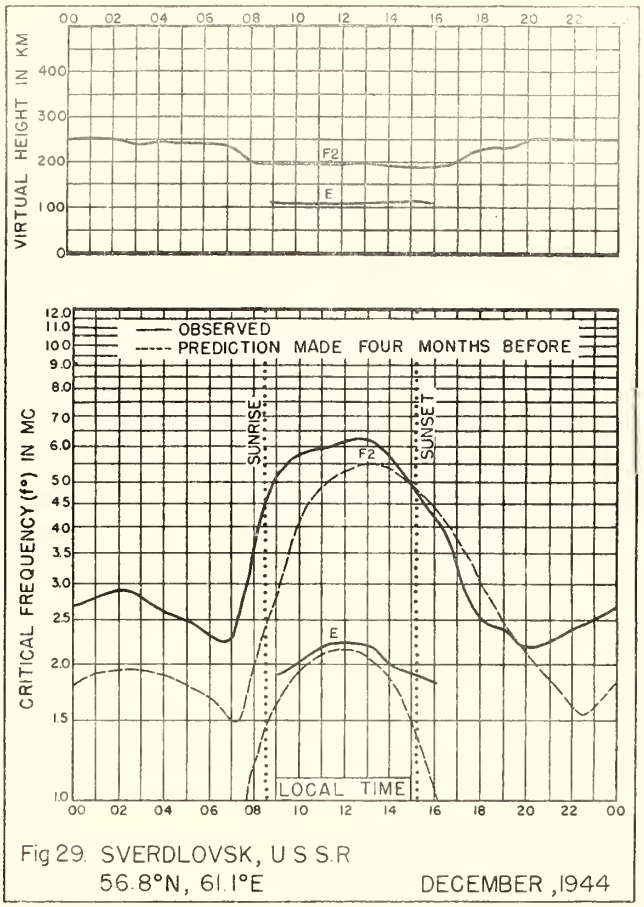

Fig 29. SVERDLOVSK, U S S.R
56.8°N, 61.1°E DECEMBER, 1944

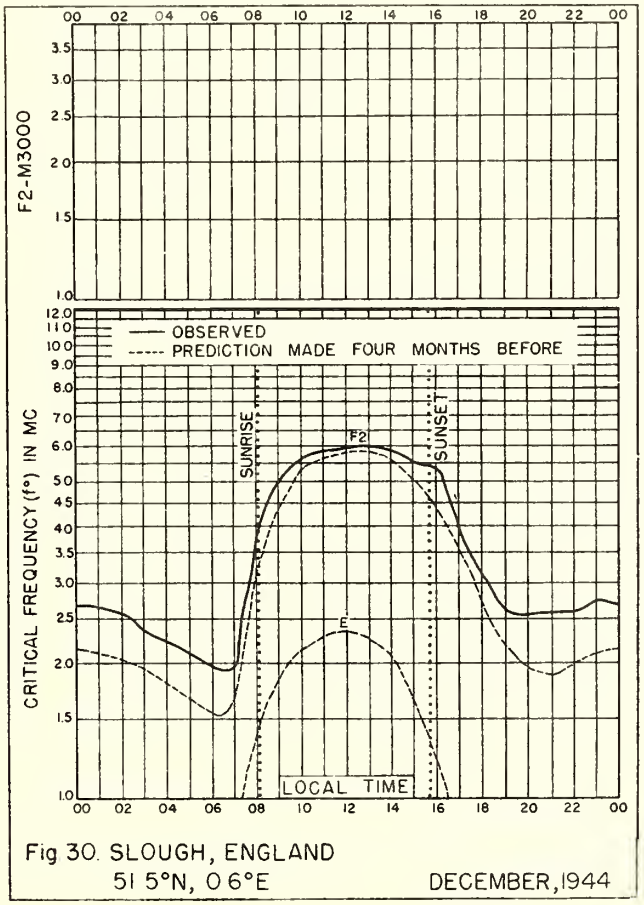

Fig 30. SLOUGH, ENGLAND
51.5°N, 0.6°E DECEMBER, 1944

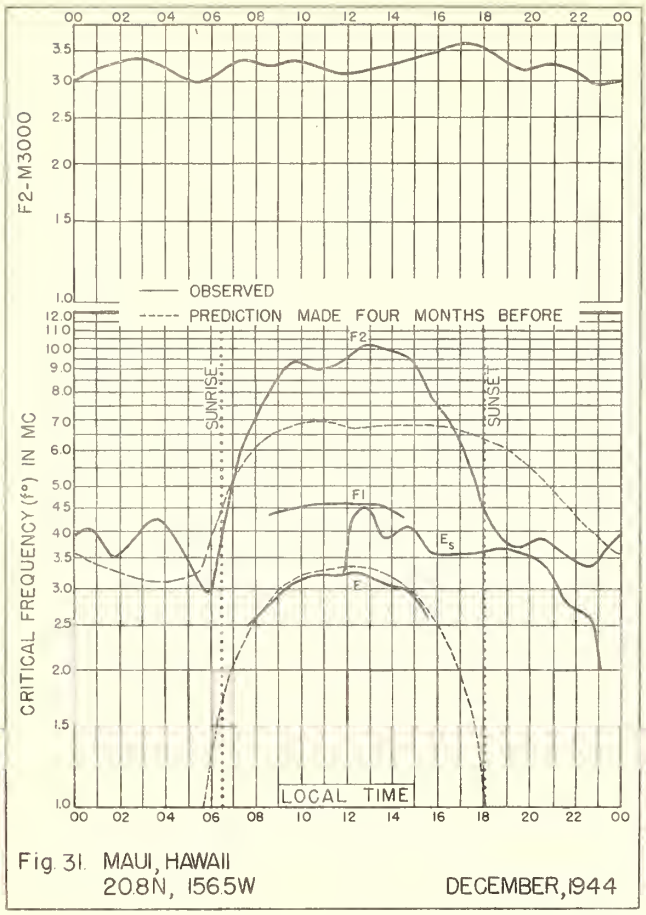

Fig. 31. MAUI, HAWAII
20.8N, 156.5W
DECEMBER, 1944

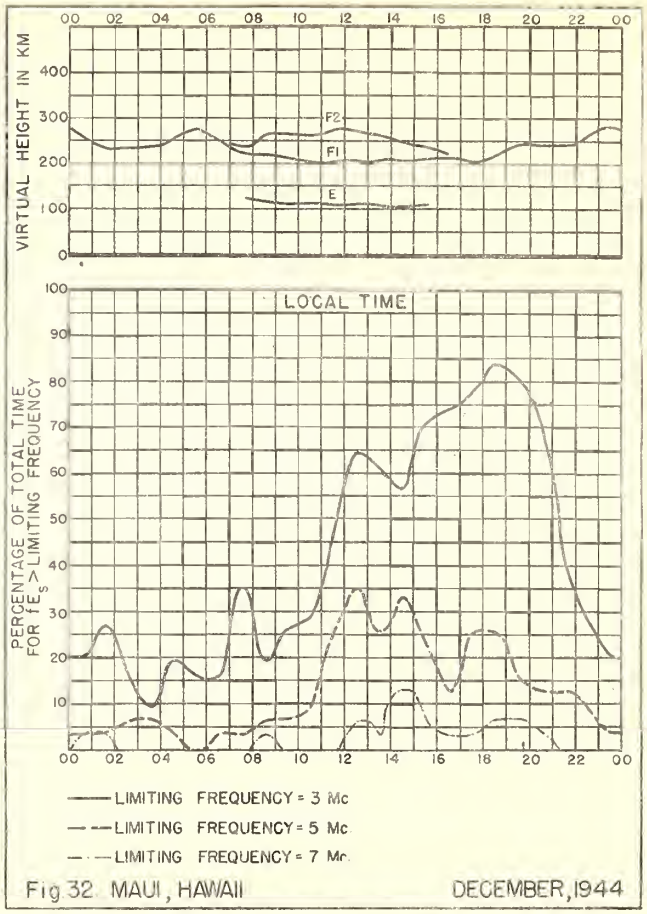

Fig 32. MAUI, HAWAII
DECEMBER, 1944

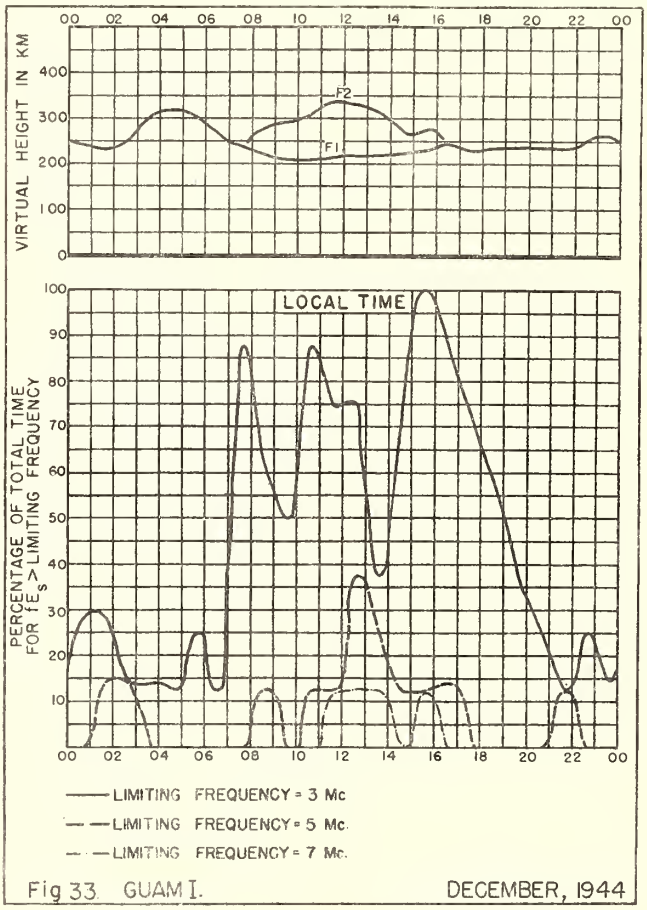

Fig 33. GUAM I.
DECEMBER, 1944

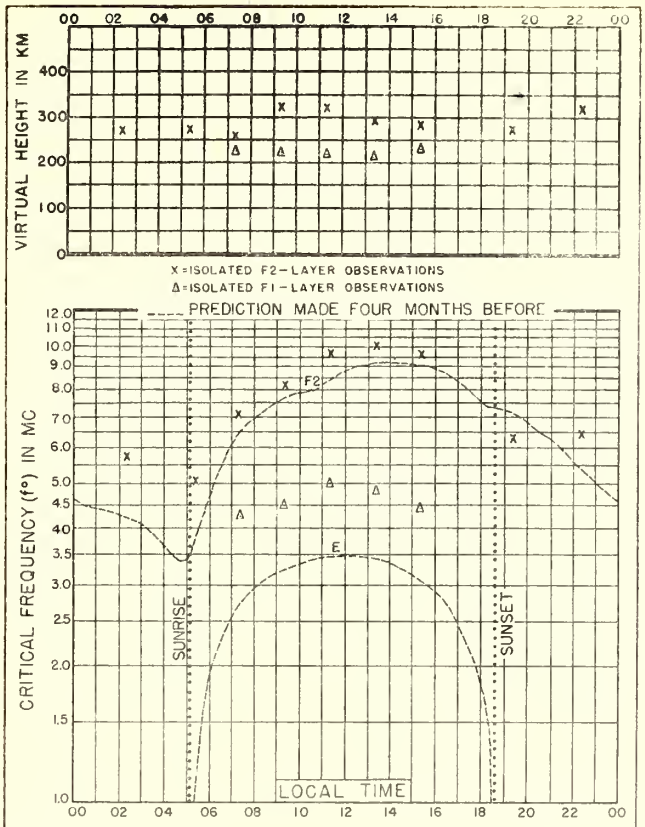

Fig. 34. PITCAIRN I.
25.0°S 130°W
DECEMBER, 1944

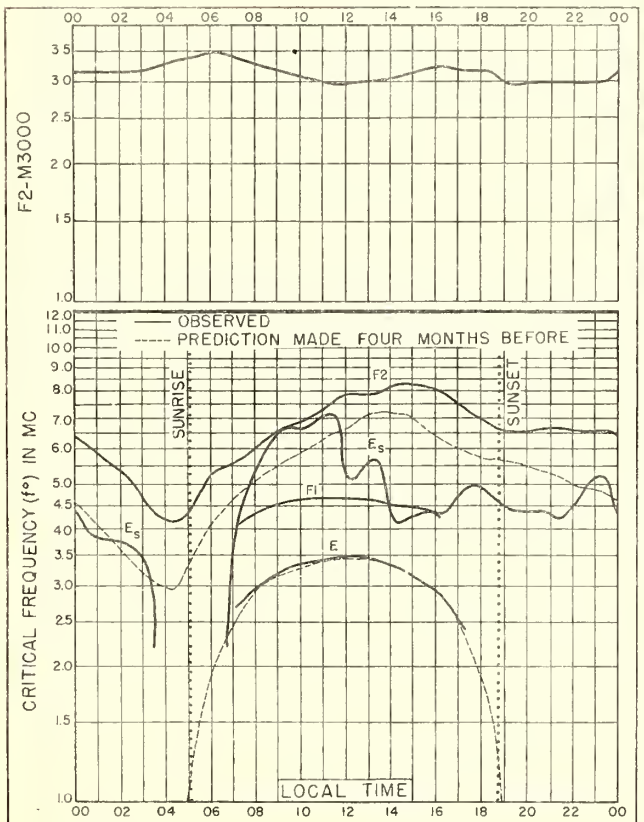

Fig. 35. BRISBANE, Q, AUSTRALIA
27.5°S, 153.0°E
DECEMBER, 1944

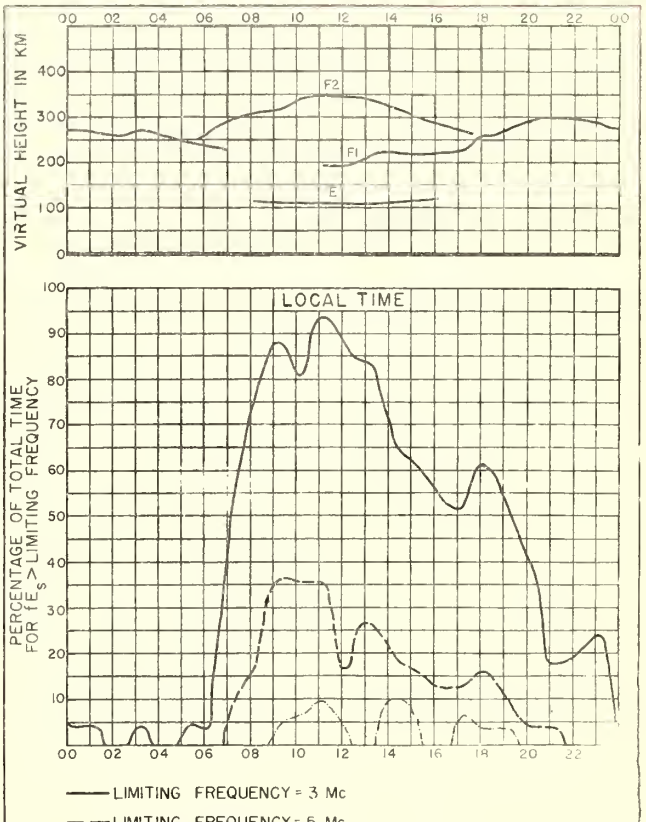

Fig 36 BRISBANE, Q, AUSTRALIA DECEMBER, 1944

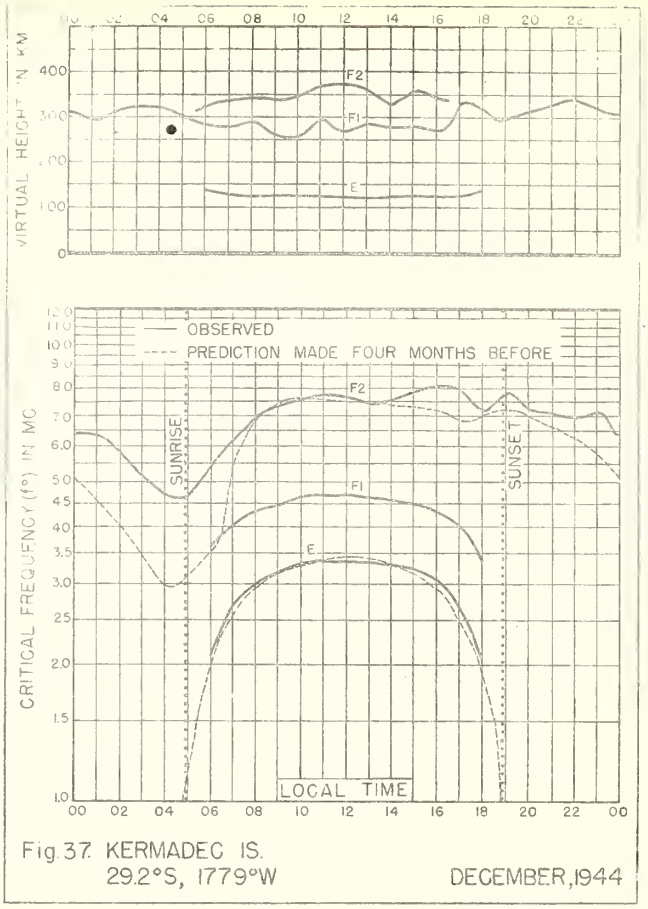

Fig. 37. KERMADEC IS.
29.2°S, 177.9°W
DECEMBER, 1944

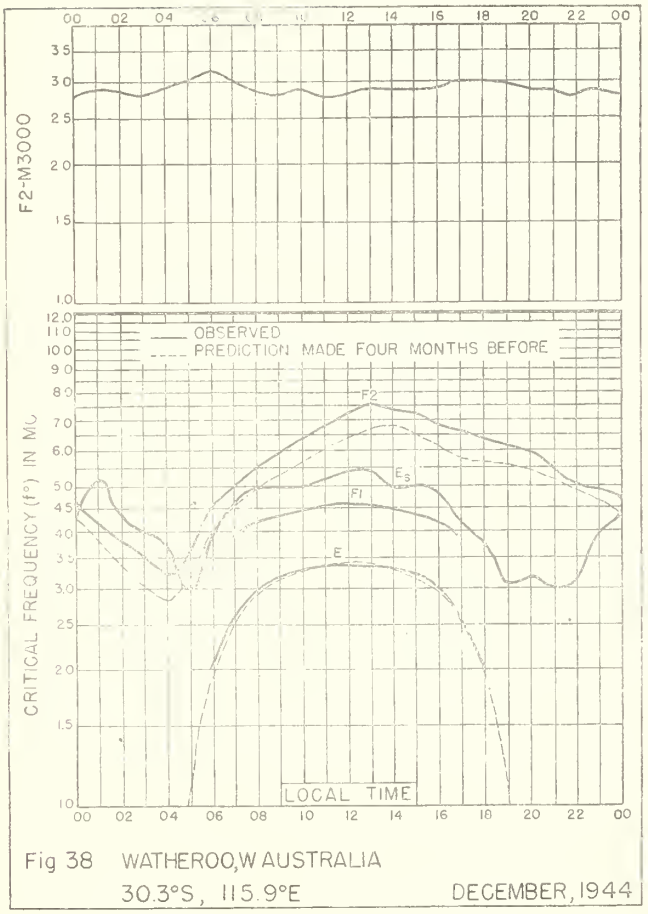

Fig 38 WATHEROO, W AUSTRALIA
30.3°S, 115.9°E
DECEMBER, 1944

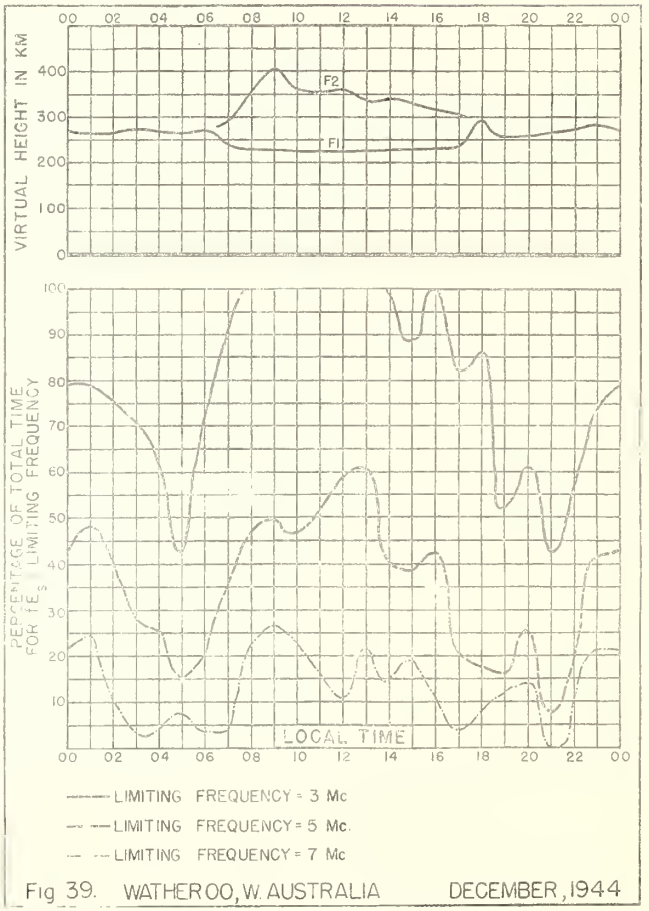

Fig 39. WATHEROO, W. AUSTRALIA
DECEMBER, 1944

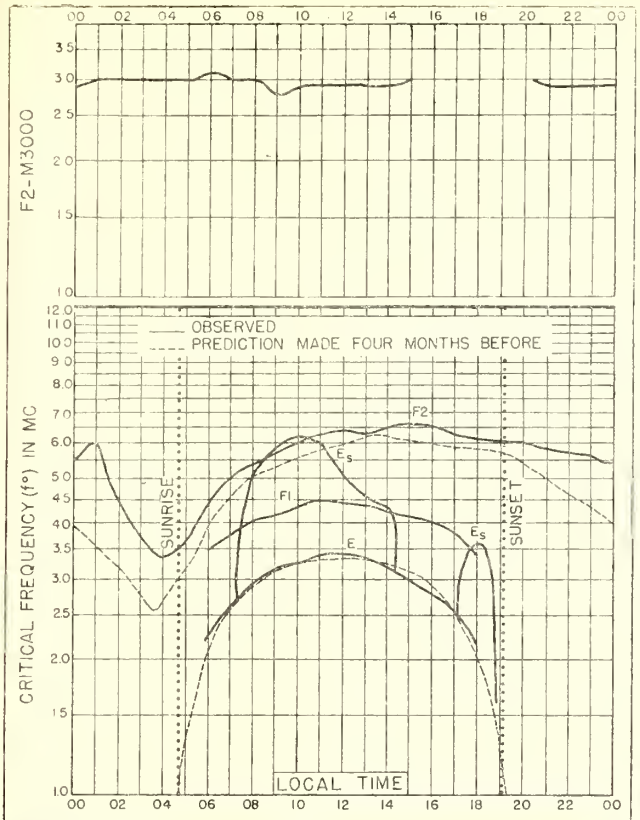

Fig. 40. MT. STROMLO, N.S.W., AUSTRALIA
353°S, 149.0°E DECEMBER, 1944

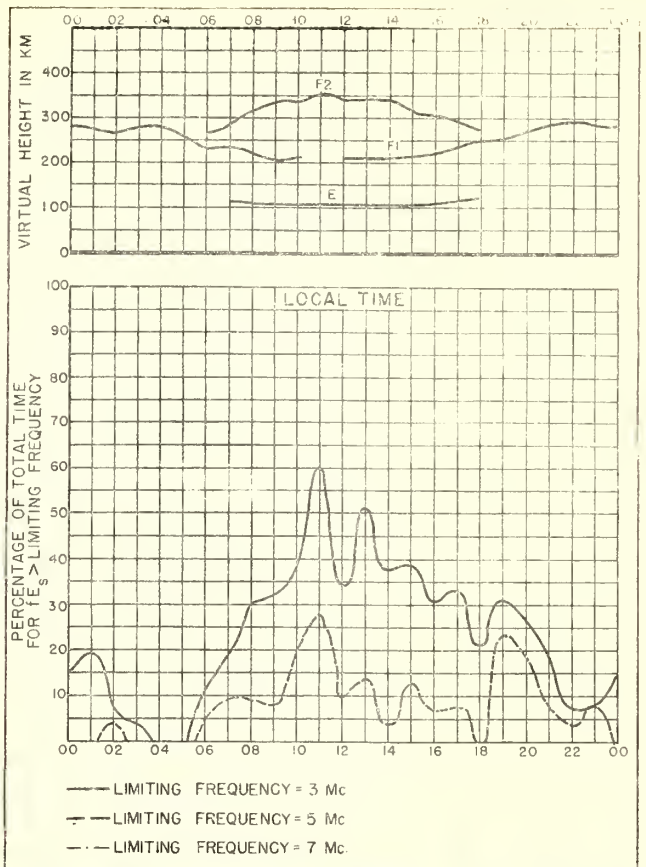

Fig 41 MT. STROMLO, N.S.W., AUSTRALIA DECEMBER, 1944

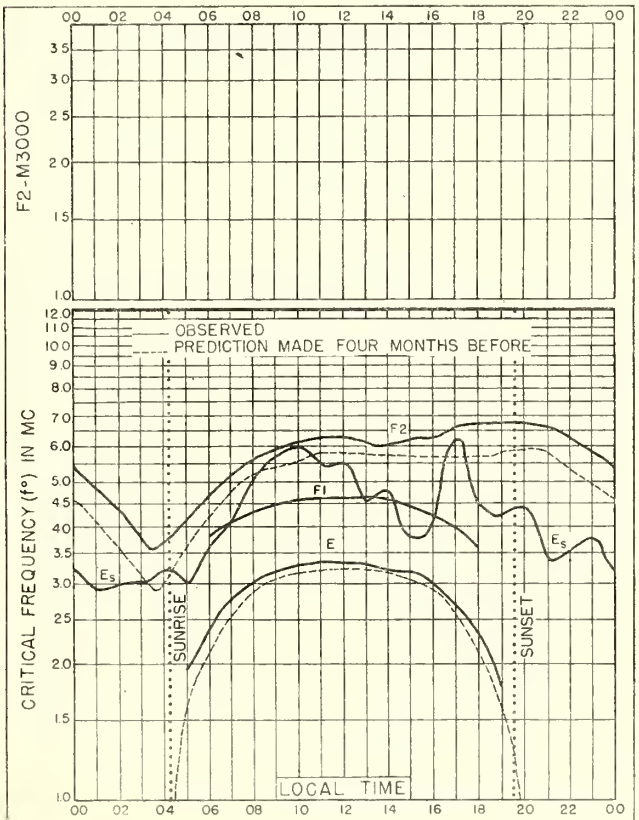

Fig 42 CHRISTCHURCH, NEW ZEALAND
43.5°S, 172.6°E DECEMBER, 1944

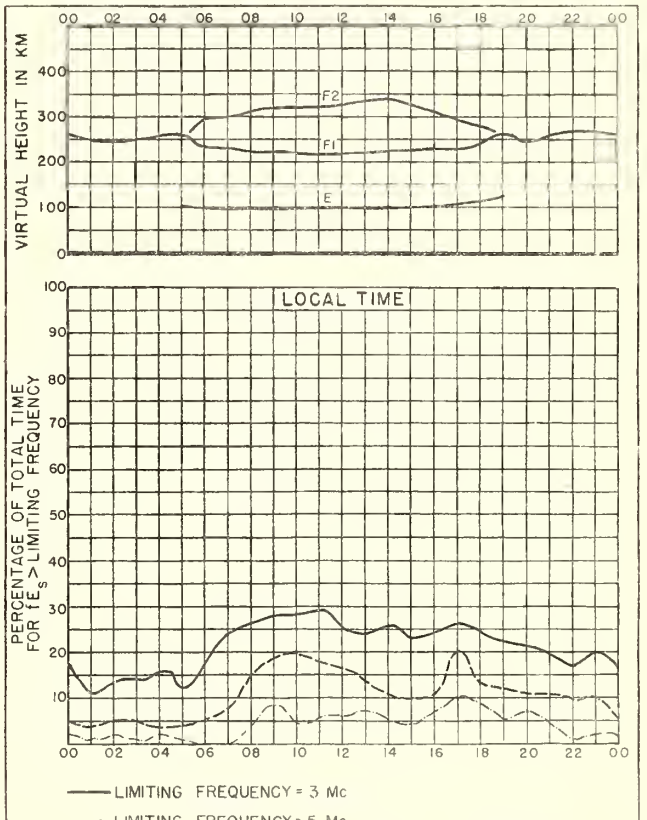

Fig. 43. CHRISTCHURCH, NEW ZEALAND DECEMBER, 1944

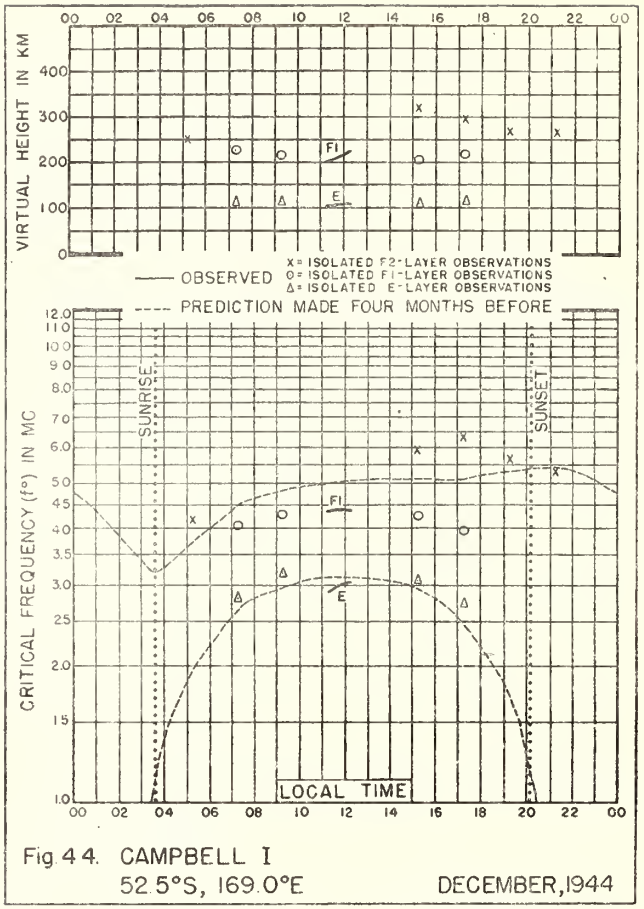

Fig. 44. CAMPBELL I
52.5°S, 169.0°E
DECEMBER, 1944

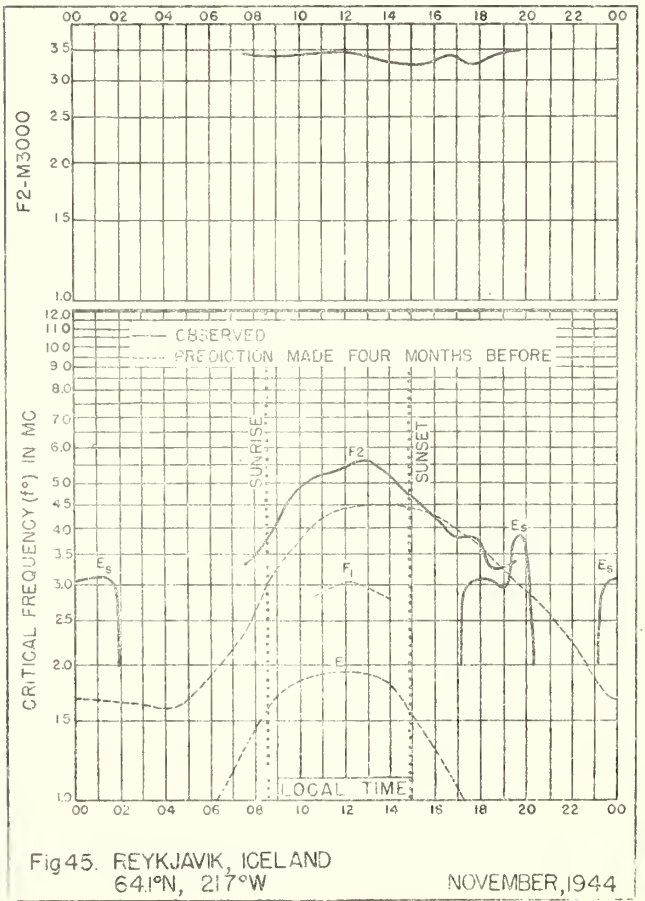

Fig. 45. REYKJAVIK, ICELAND
64.1°N, 21.7°W
NOVEMBER, 1944

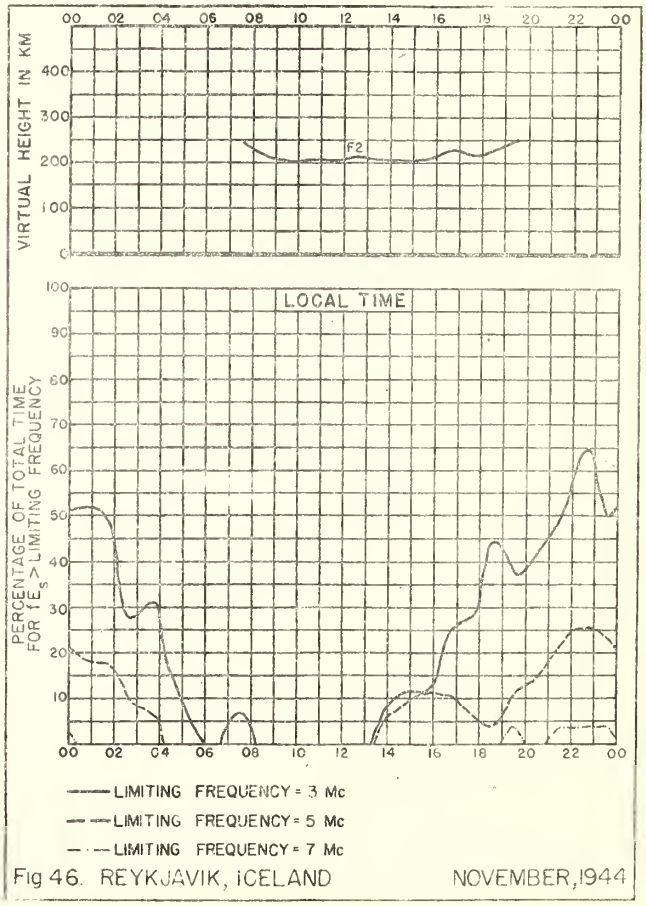

Fig. 46. REYKJAVIK, ICELAND
NOVEMBER, 1944

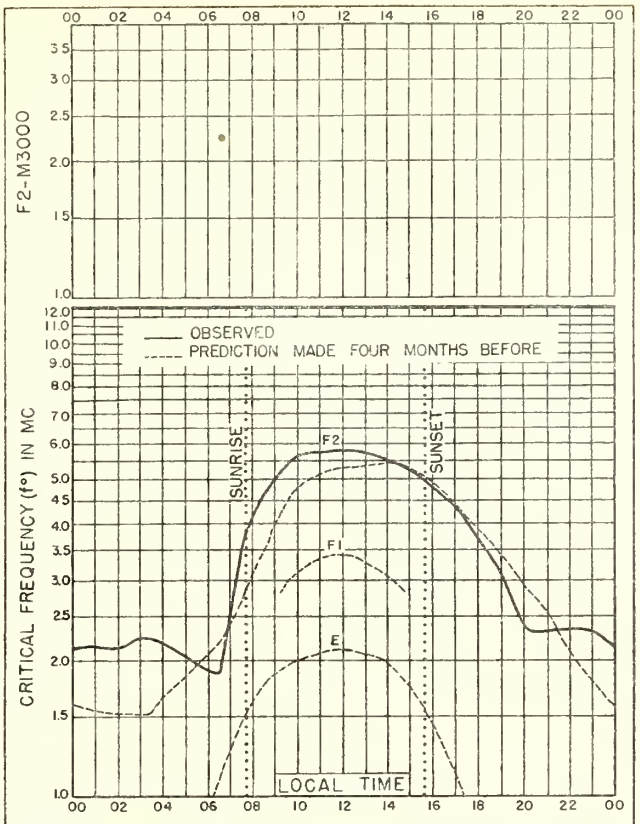

Fig 47 BURGHEAD, SCOTLAND
57.7°N, 3.5°W NOVEMBER, 1944

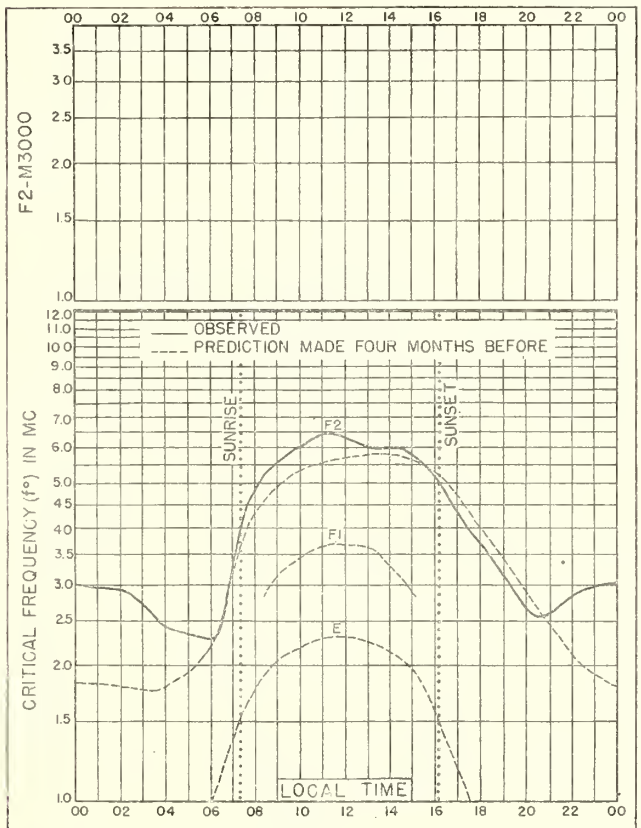

Fig 48. SLOUGH, ENGLAND
51.5°N, 0.6°E NOVEMBER, 1944

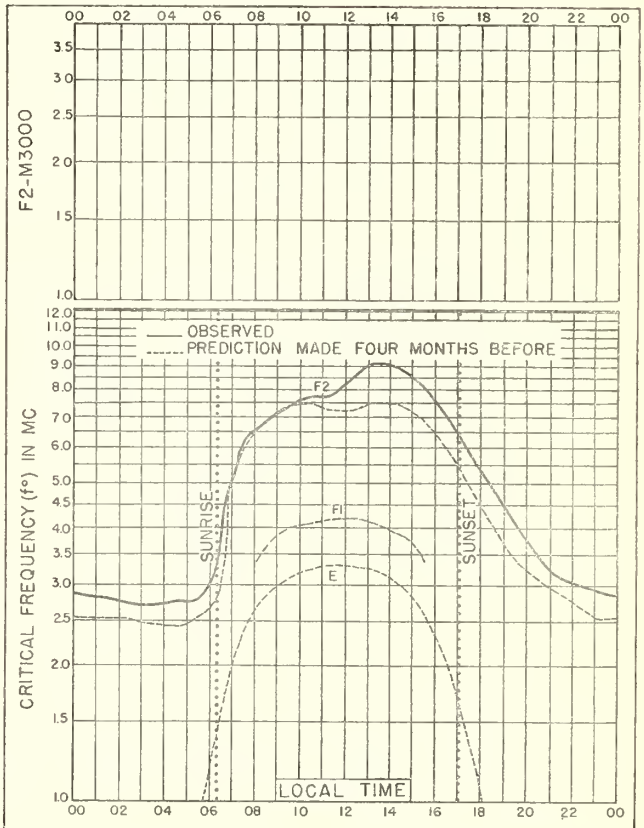

Fig 49. DELHI, INDIA
28.6°N, 77.2°E NOVEMBER, 1944

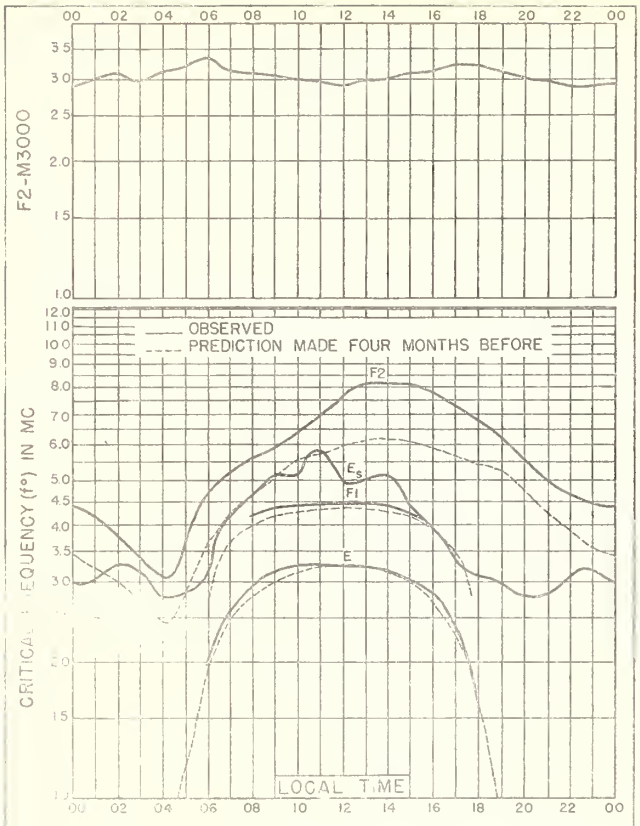

Fig. 50 WATHEROO, W. AUSTRALIA
30.3°S, 115.9°E NOVEMBER, 1944

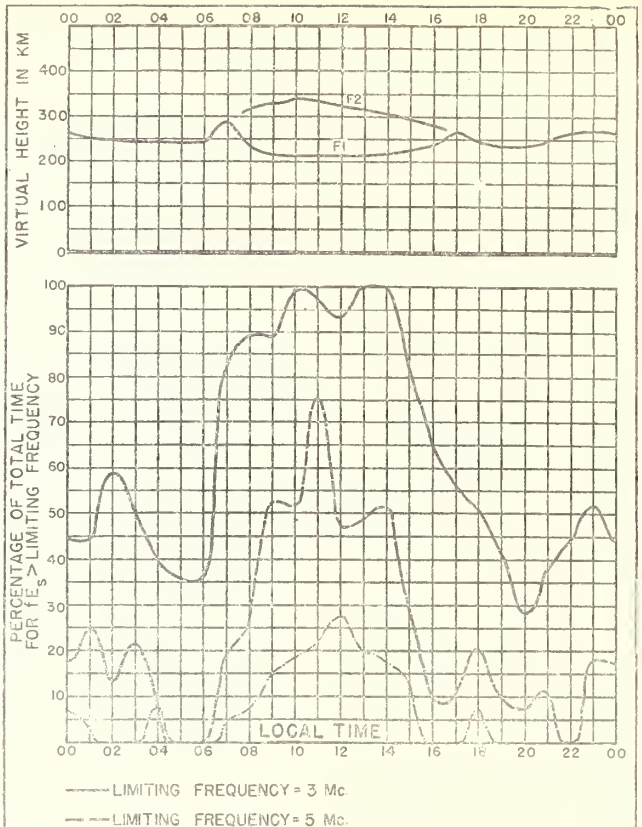

Fig. 51. WATHEROO, W. AUSTRALIA NOVEMBER, 1944

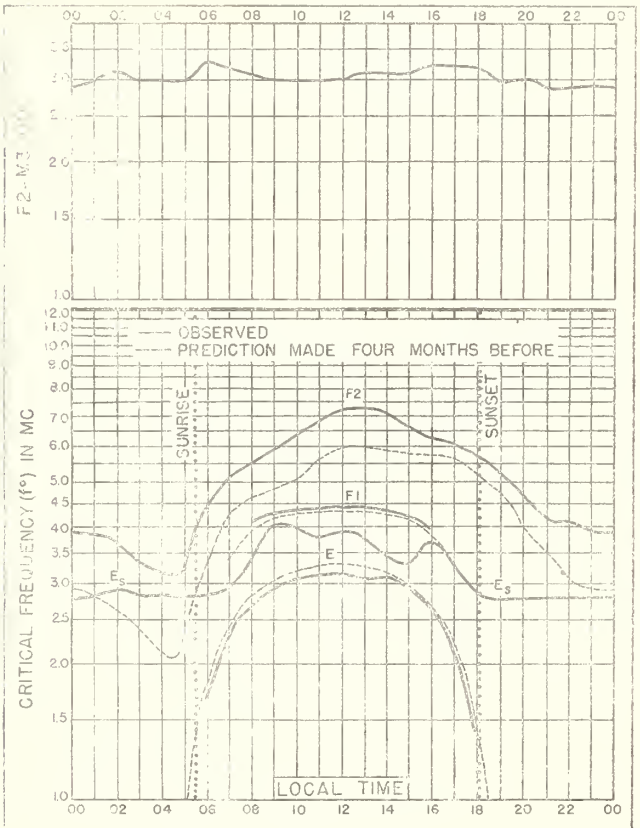

Fig. 52. WATHEROO, W. AUSTRALIA
30.3°S, 115.9°E OCTOBER, 1944

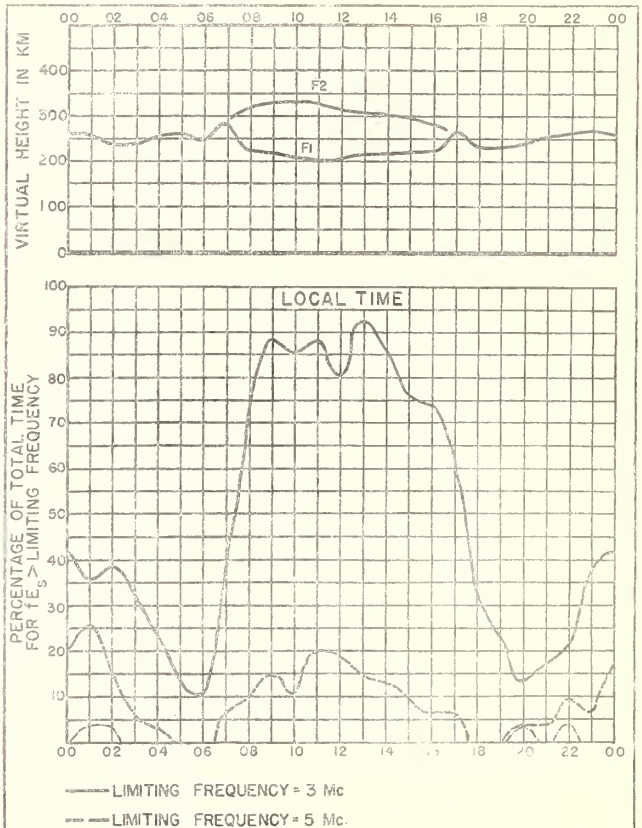

Fig. 53. WATHEROO, W., AUSTRALIA OCTOBER, 1944

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