



**International HF Broadcasting Conference
(Mexico, 1948-1949)**

A set of charts showing curves of Optimum Working Frequency (OWF) was prepared by the United States and provided to the International HF Broadcasting Conference (Mexico, 1948-1949) to facilitate its work.

The pages in this file are a small sample of what is included in these documents. The complete set is available for consultation at the ITU Library & Archives in Geneva, Switzerland, and includes the following charts:

- June [no Sunspot Number specified]
- June, Sunspot Number 40
- June, Sunspot Number 40 & 12 - Supplement
- Equinox [no Sunspot Number specified]
- Equinox, Sunspot Number 40
- Equinox, Sunspot Number 40 & 12 – Supplement
- December [no Sunspot Number specified]
- December, Sunspot Number 40
- December, Sunspot Number 125.70 & 5 - Supplement

Please contact library@itu.int for more information.

C.I.R.A.F.

Mexico City, 1948/49

UNITED STATES DELEGATION

APPROXIMATE CONVERSION FACTORS
FOR VARIOUS DISTANCES

The OWF curves included in these books may be converted for use at distances between 0 and 4000 km other than those marked on the sheets, by a series of conversion factors.

Curves marked with distances between 0 km (vertical incidence) and 1500 km may be converted for use at other distances between 0 km and 1500 km by application of the following factors:

<u>Distance in km</u>	<u>Percent of 0 km Frequency</u>
750	117
1000	130
1250	150
1500	180

Curves marked with distances between 1500 km and 4000 km may be converted for use at other distances between 1500 km and 4000 km by application of the following factors:

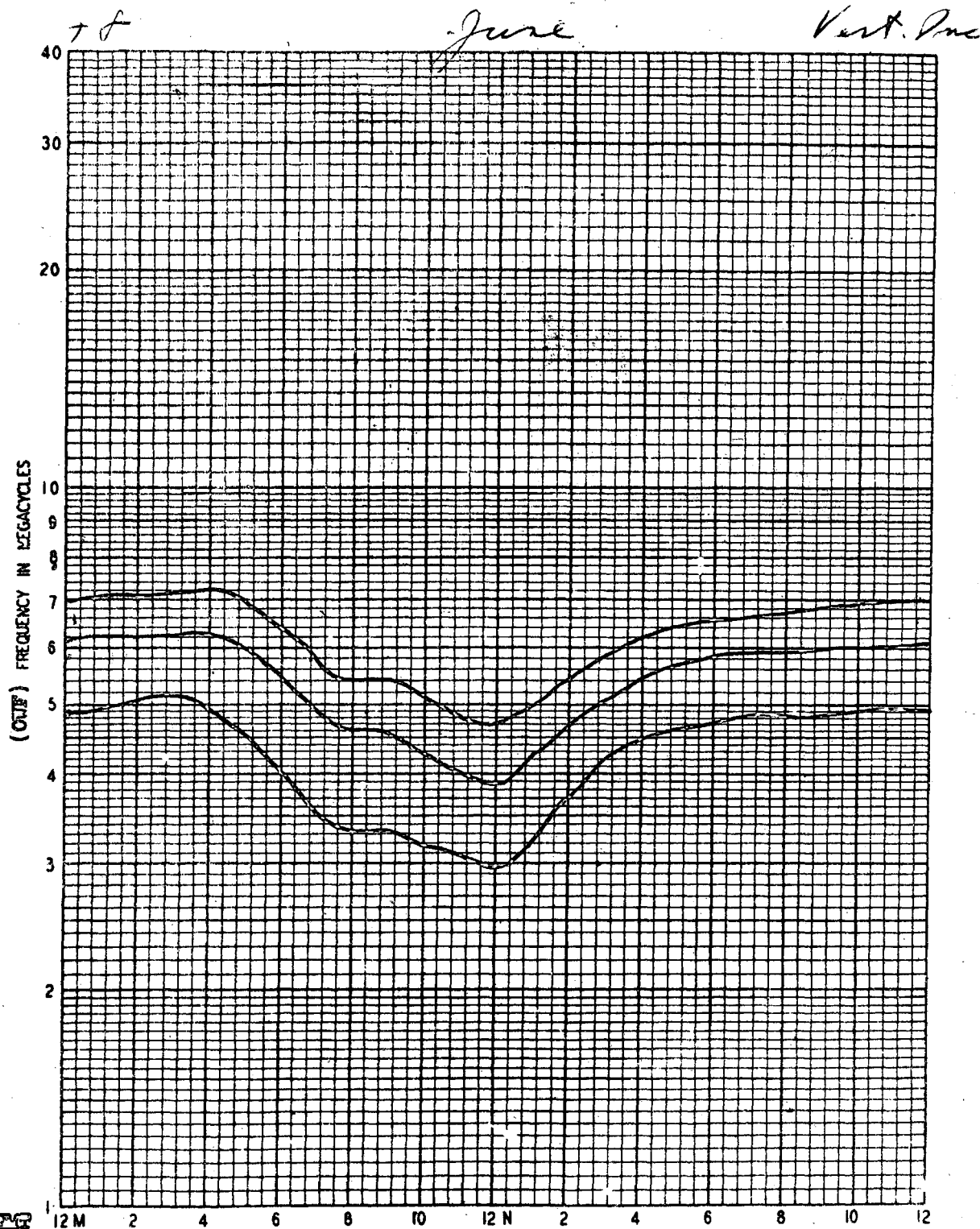
<u>Distance in km</u>	<u>Percent of 4000 km Frequency</u>
1500	60
2000	72
2500	83
3000	92
3500	99
4000	100

Conversion factors cannot be applied for path lengths greater than 4000 km.

ORIGINAL

OPTIMUM TRANSMITTING FREQUENCIES

Transmitter: Area 2 Receiver: Area 2
Lat. _____ Long. _____ Lat. _____ Long. _____
Control Pt. Lat. 50° Long. _____ Control Pt. Lat. _____ Long. _____
Zone W Sunspot Number _____ Zone _____



FEDERAL COMMUNICATIONS COMMISSION

TIME

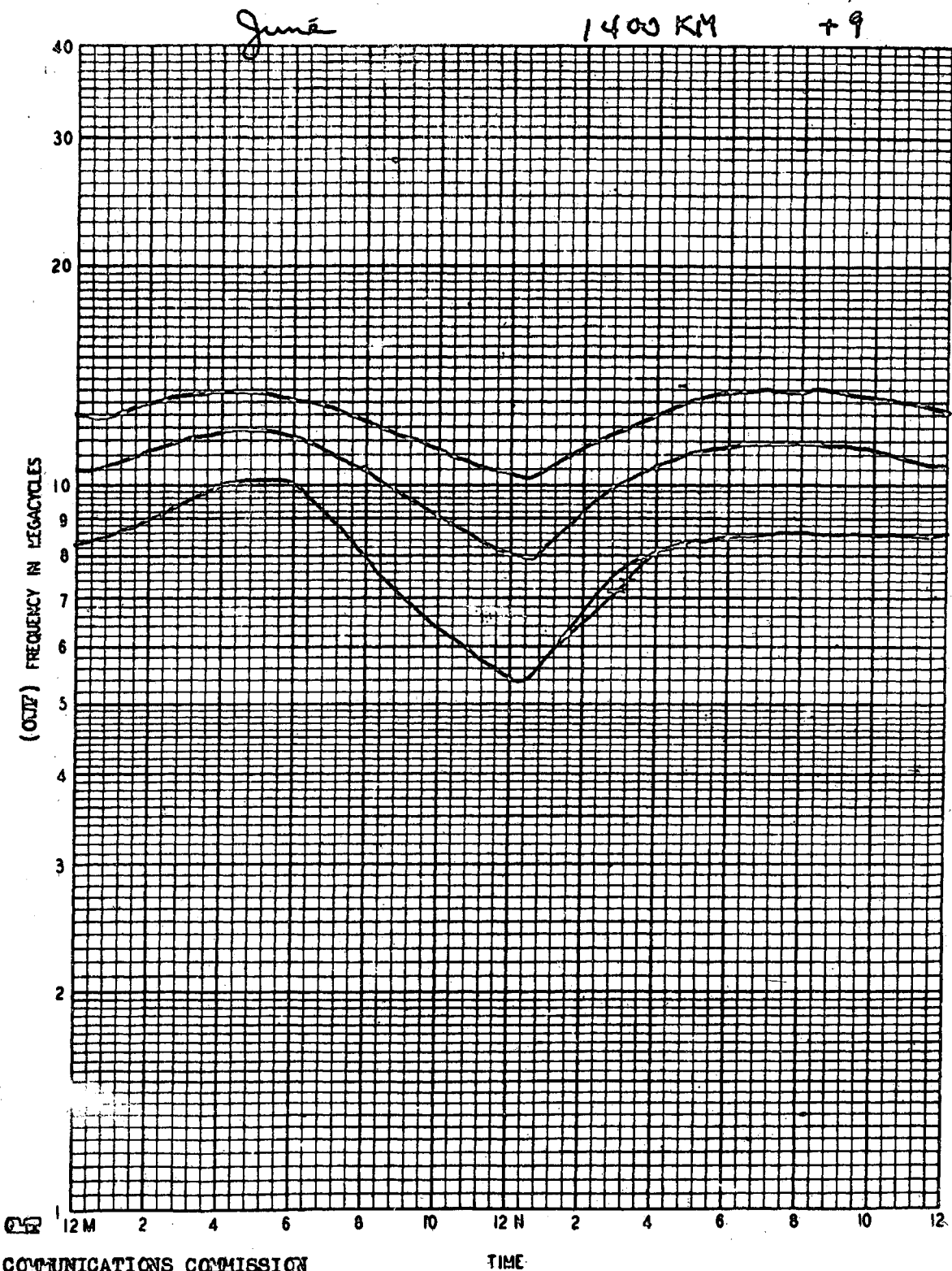
BASED ON CRPL-R-22

13580-1

A

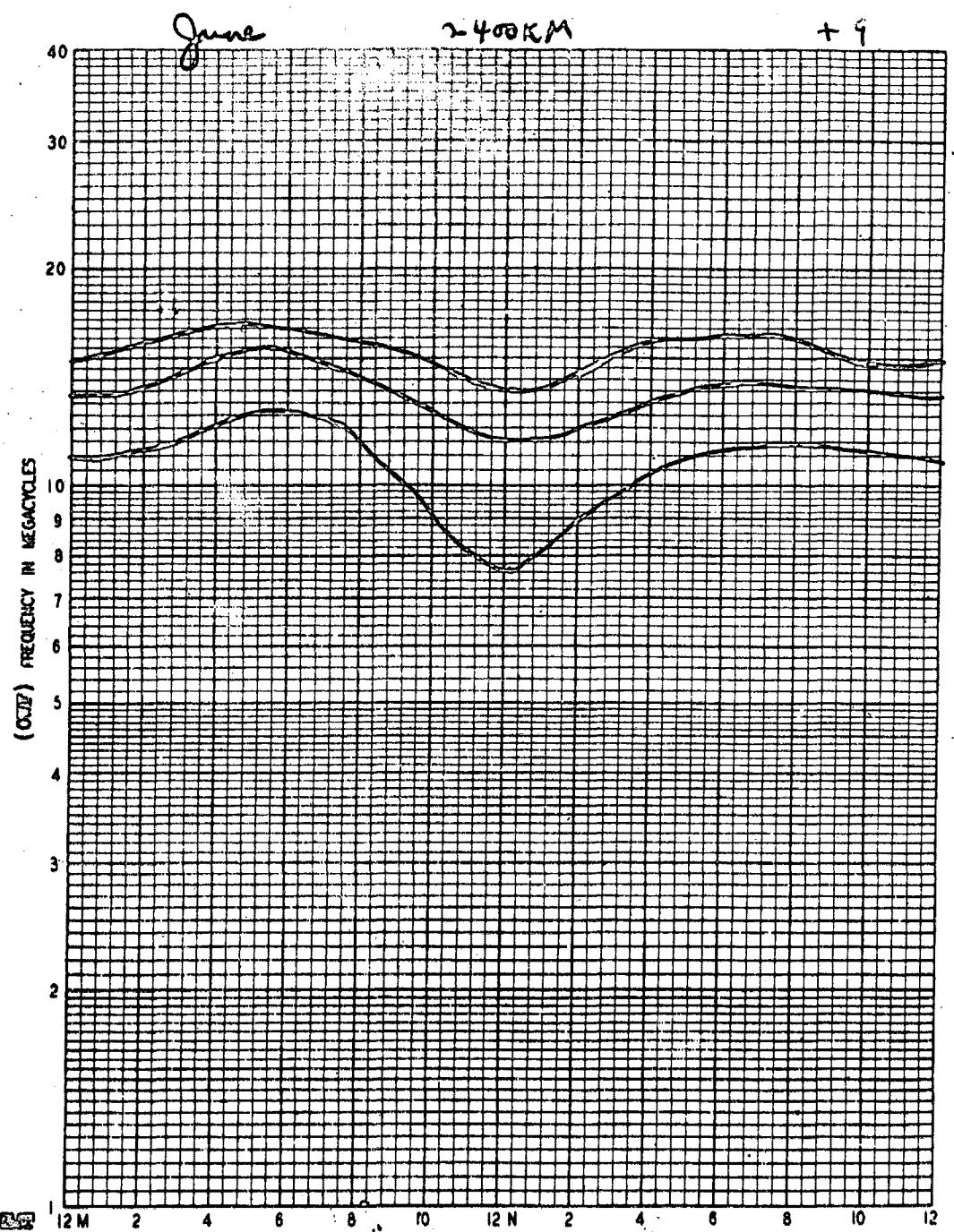
OPTIMUM TRANSMITTING FREQUENCIES

Transmitter: Vancouver (AREA 2) Receiver: China 2
Lat. _____ Long. 135°W Lat. _____ Long. _____
Control Pt. Lat. 50N Long. _____ Control Pt. Lat. _____ Long. _____
Zone 20 Sunspot Number _____ Zone _____



OPTIMUM TRANSMITTING FREQUENCIES

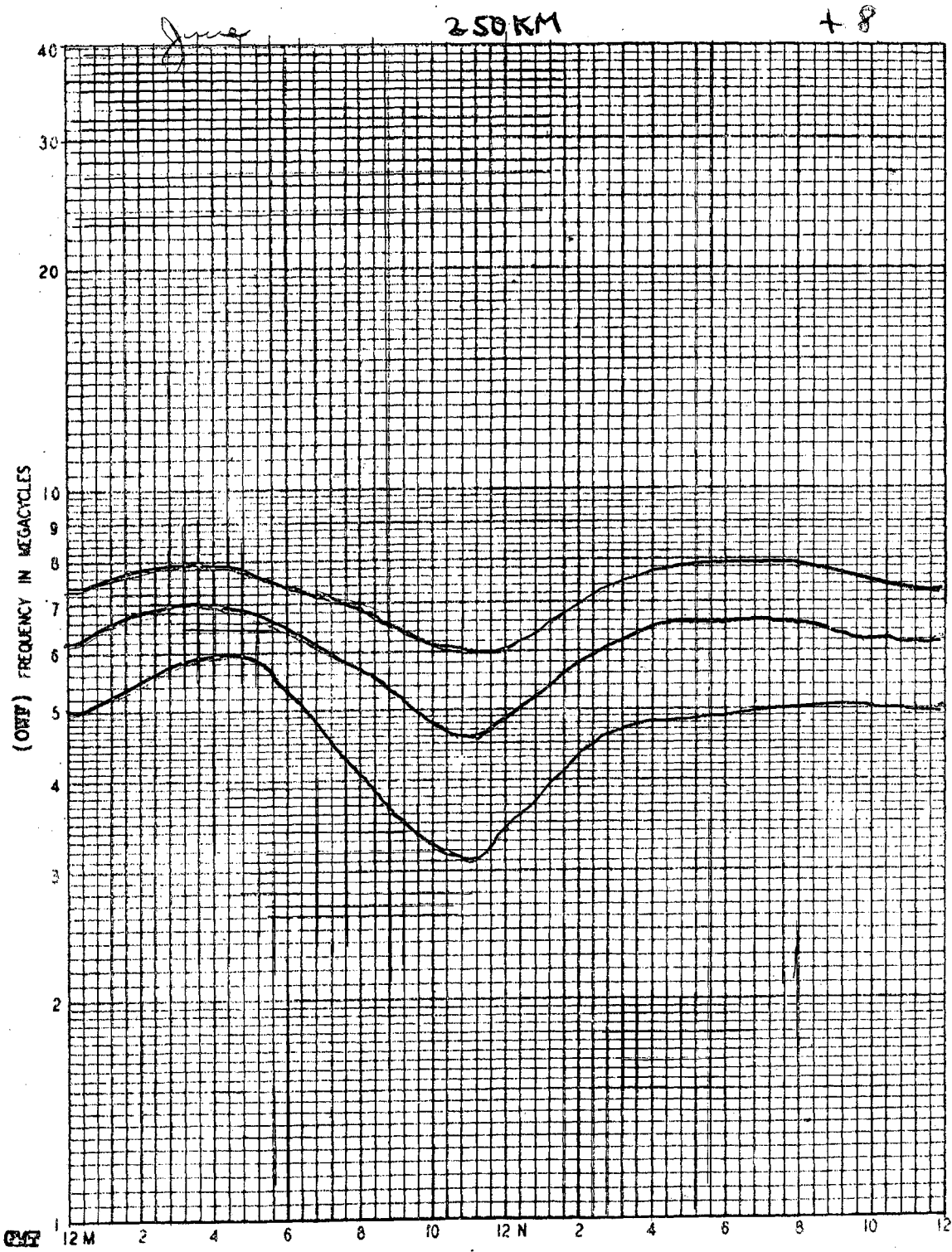
Transmitter: Vancouver (AREA 2) Receiver: White Horse, Yukon (AREA 2)
Lat. _____ Long. 135 W Lat. _____ Long. _____
Control Pt. Lat. 55 N Long. _____ Control Pt. Lat. _____ Long. _____
Zone 50 I Sunspot Number _____ Zone _____



1C

OPTIMUM TRANSMITTING FREQUENCIES

Transmitter: Vancouver (AREA 2) Receiver: Area 2
Lat. 49° 15' N Long. 123° 00' W
Control Pt. Lat. 50° N Long. 120° W
Zone 17 Frequency Number 1 Zone 17



FEDERAL COMMUNICATIONS COMMISSION

TIME

BASED ON CRPL-R-22

13580-1
A

1-D

76 1/2 JUNE 2400 km

(OJT) FREQUENCY IN MEGACYCLES

12M 2 4 6 8 10 12N 2 4 6 8 10 12

13580-1

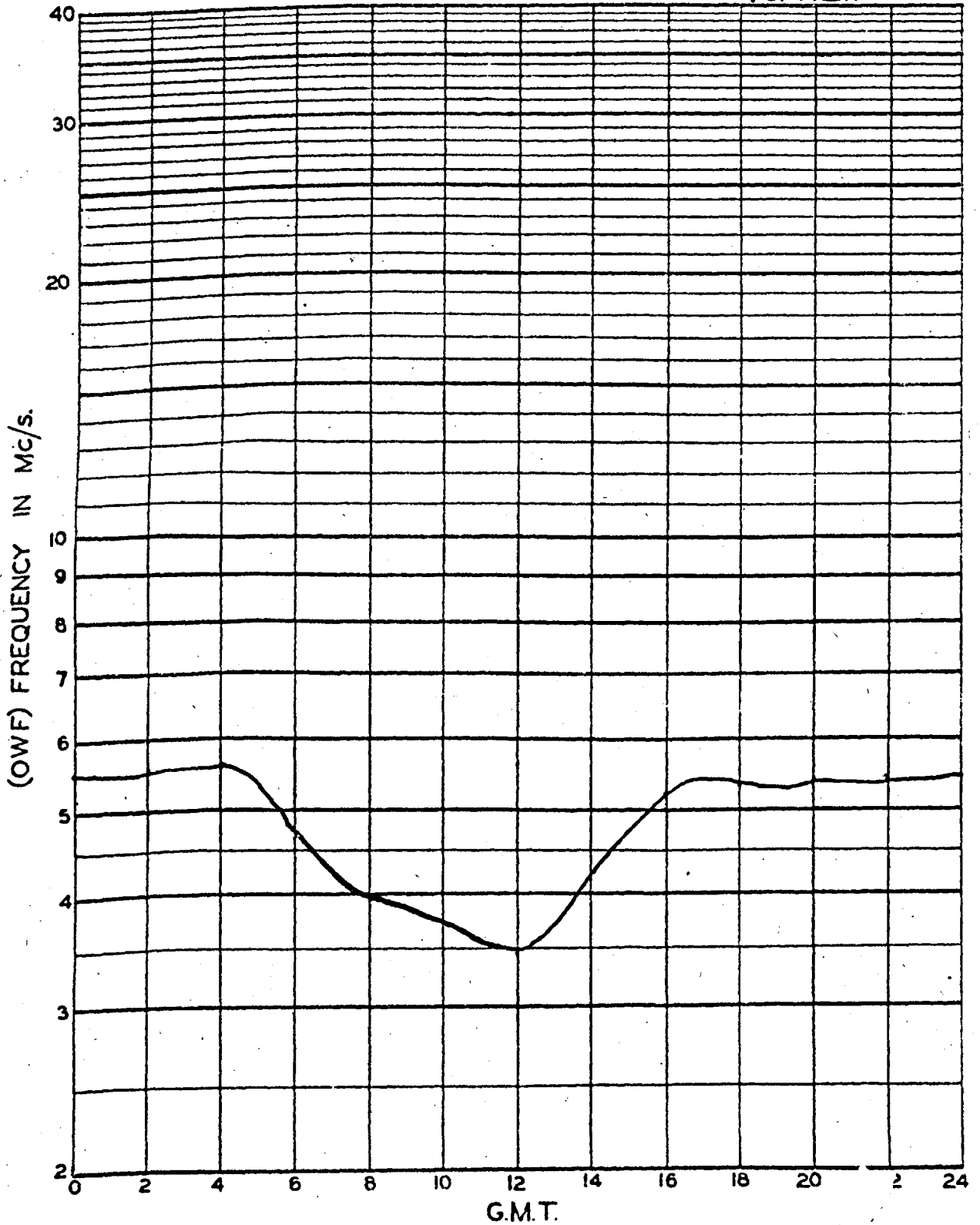
JUNE

OPTIMUM TRANSMITTING FREQUENCIES

SUNSPOT NUMBER 40

TRANSMITTER AREA 2 RECEIVER AREA 2

Vert. Inc



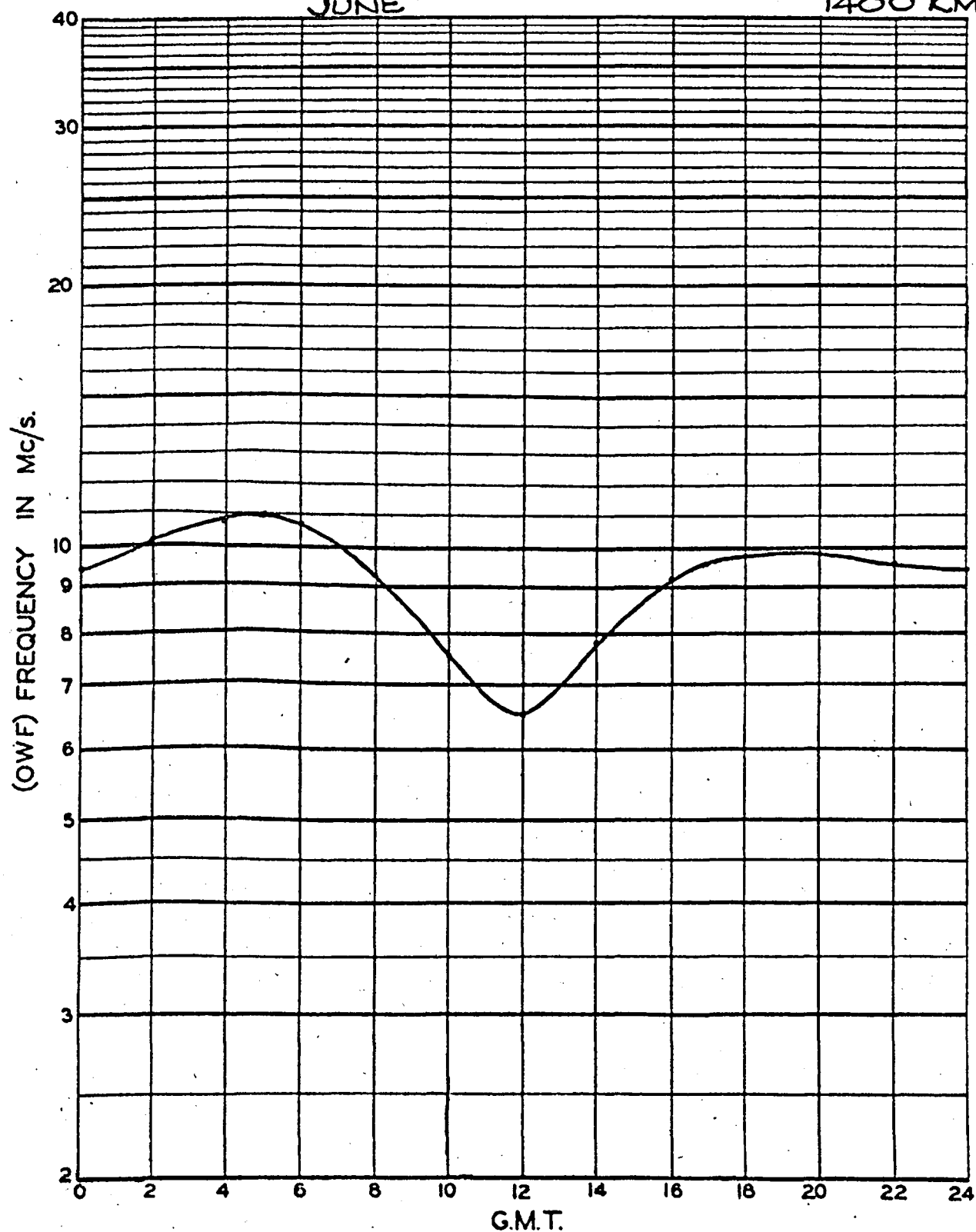
OPTIMUM TRANSMITTING FREQUENCIES

SUNSPOT NUMBER...40.....

TRANSMITTER AREA...2..... RECEIVER AREA...2.....

JUNE

1400 KM



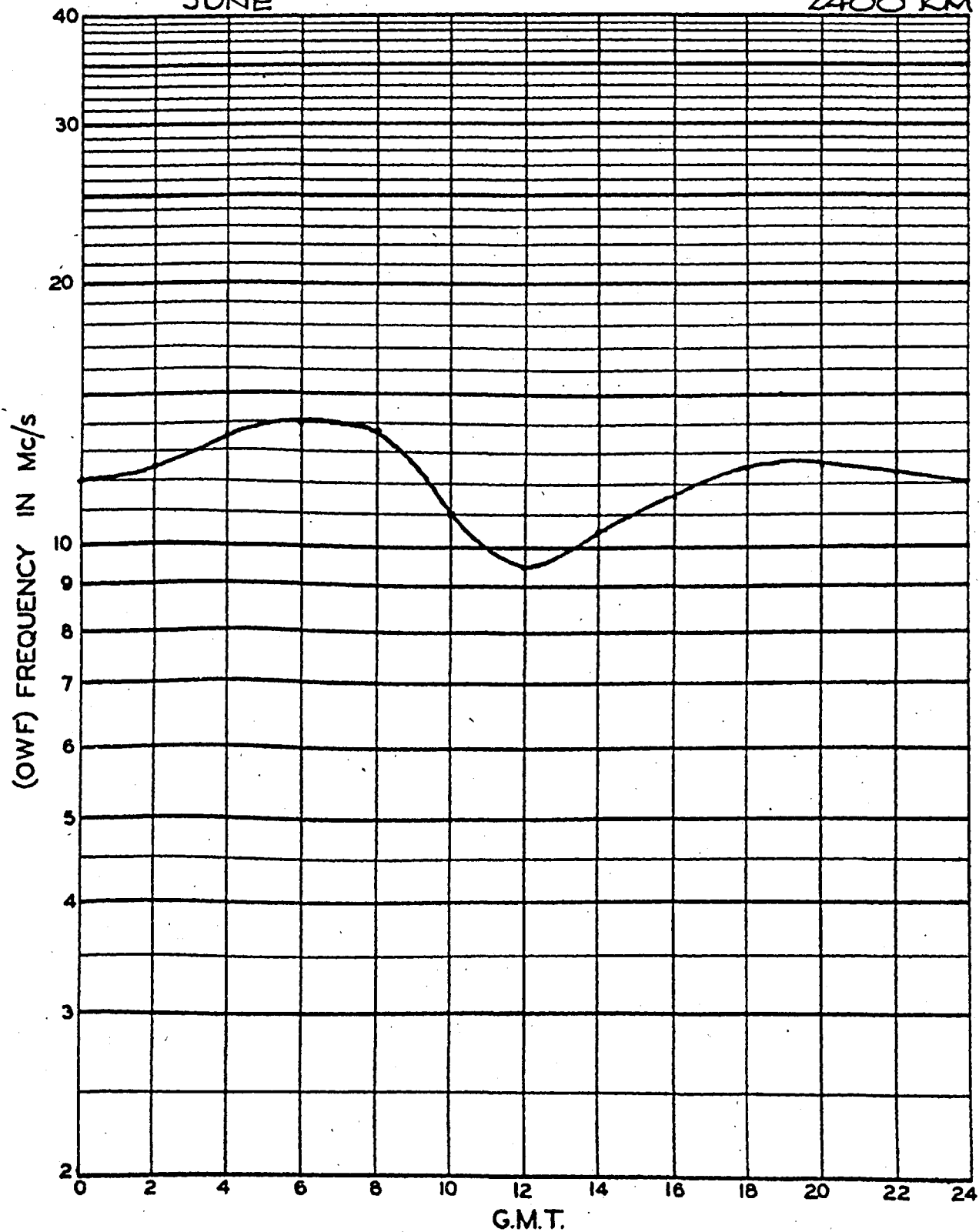
OPTIMUM TRANSMITTING FREQUENCIES

SUNSPOT NUMBER....40.....

TRANSMITTER AREA....2..... RECEIVER AREA.....2.....

JUNE

2400 KM

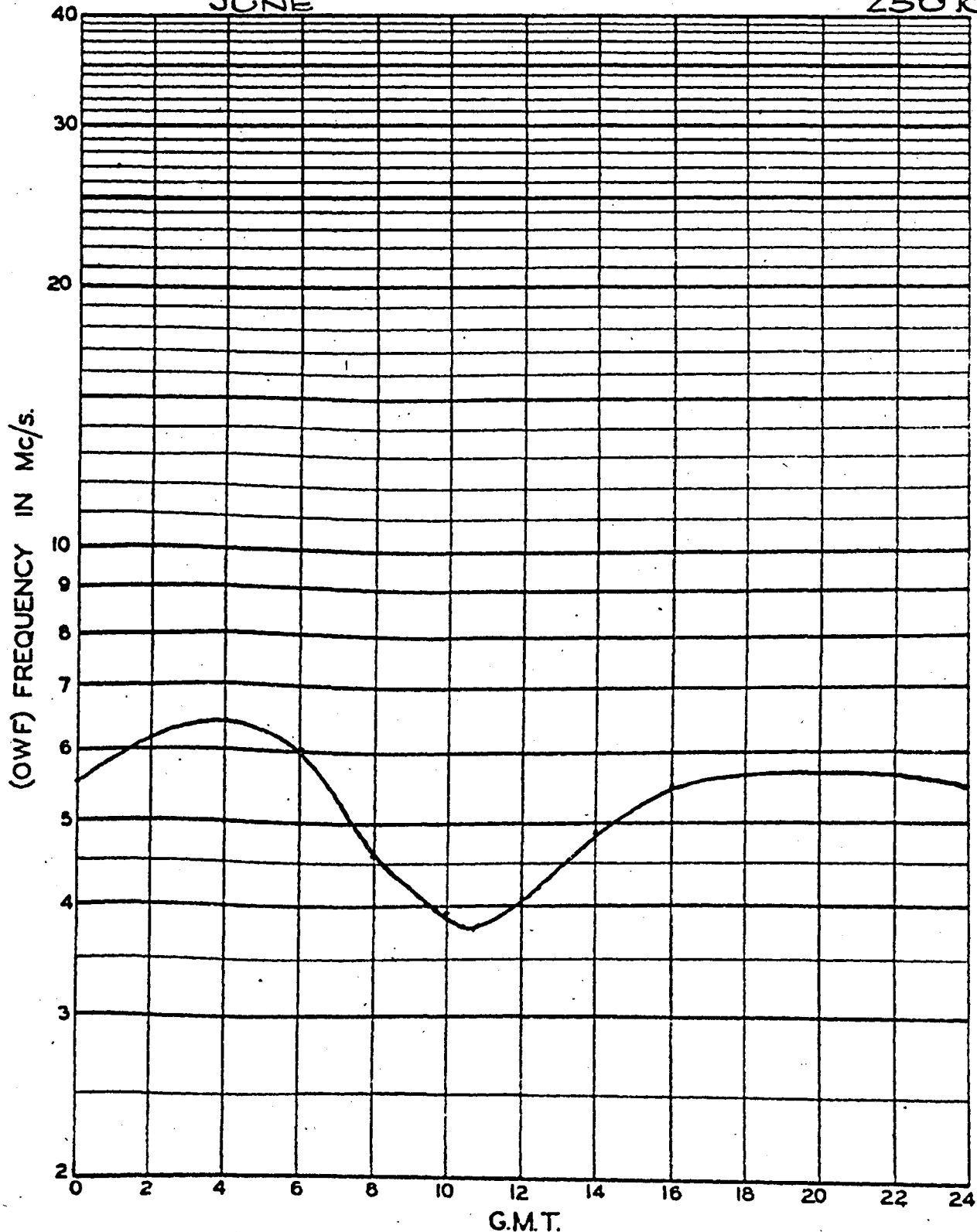


OPTIMUM TRANSMITTING FREQUENCIES

SUNSPOT NUMBER 40TRANSMITTER AREA 2 RECEIVER AREA 2

JUNE

250 KM



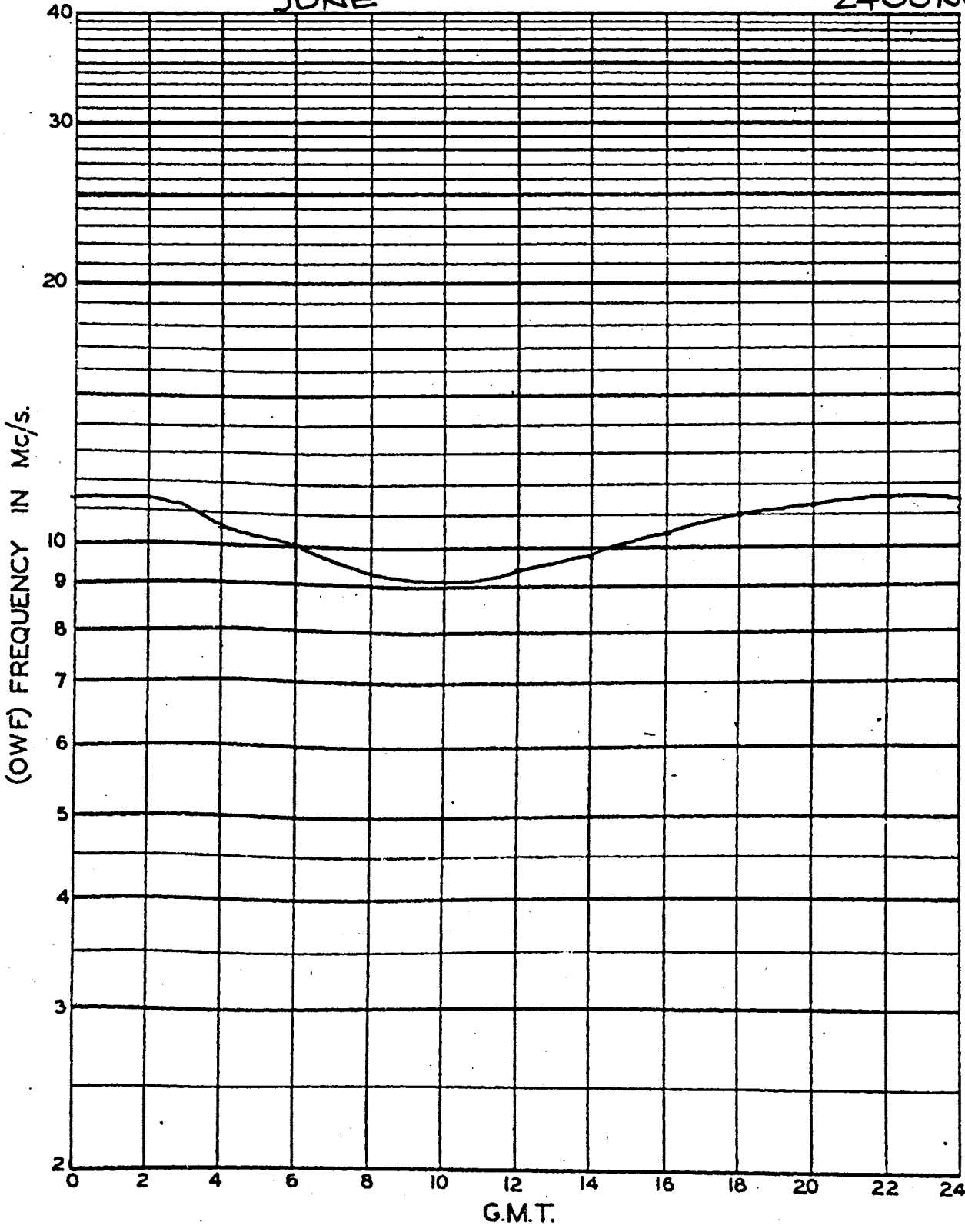
OPTIMUM TRANSMITTING FREQUENCIES

SUNSPOT NUMBER...40.....

TRANSMITTER AREA.....2..... RECEIVER AREA.....4.....

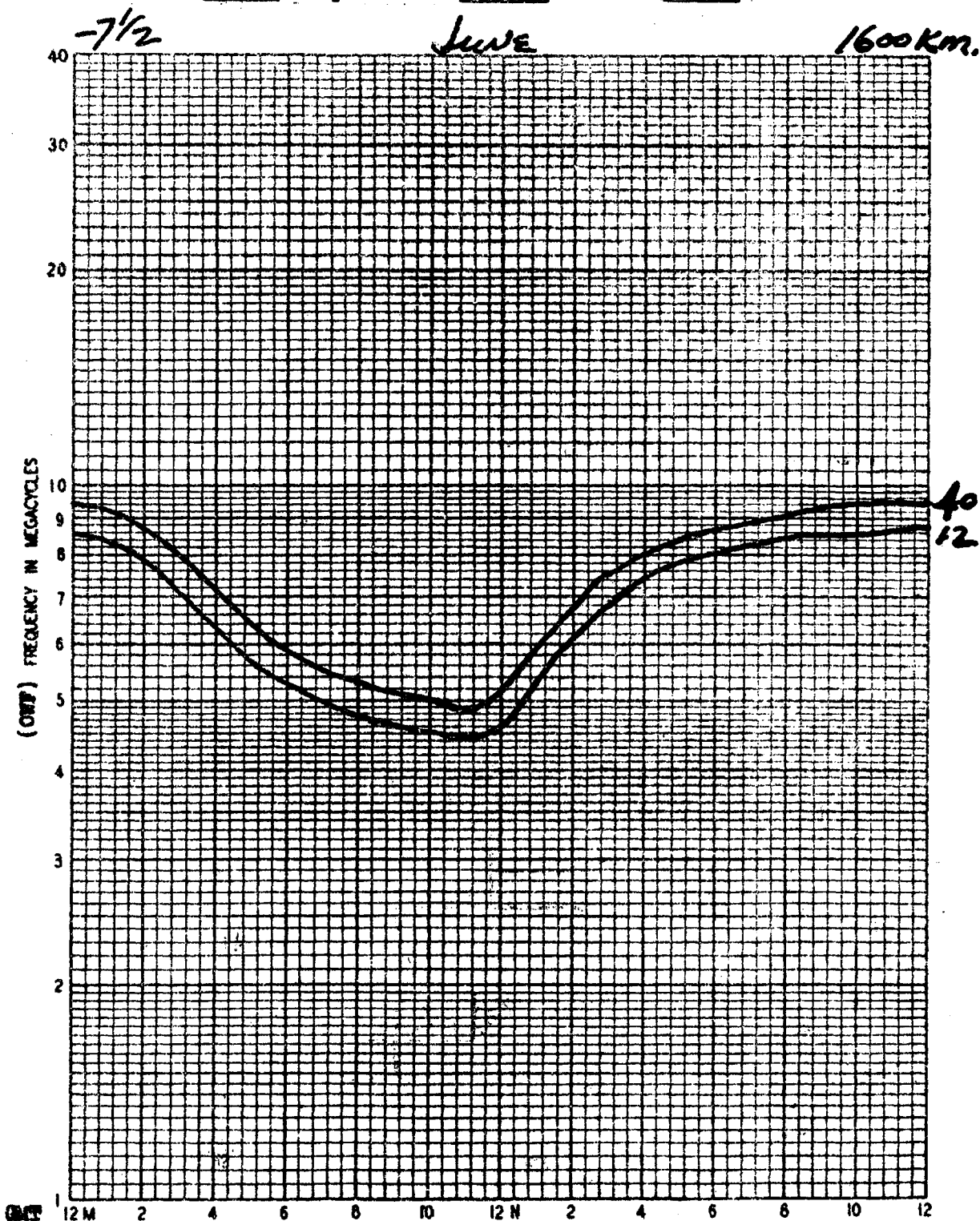
JUNE

2400KM



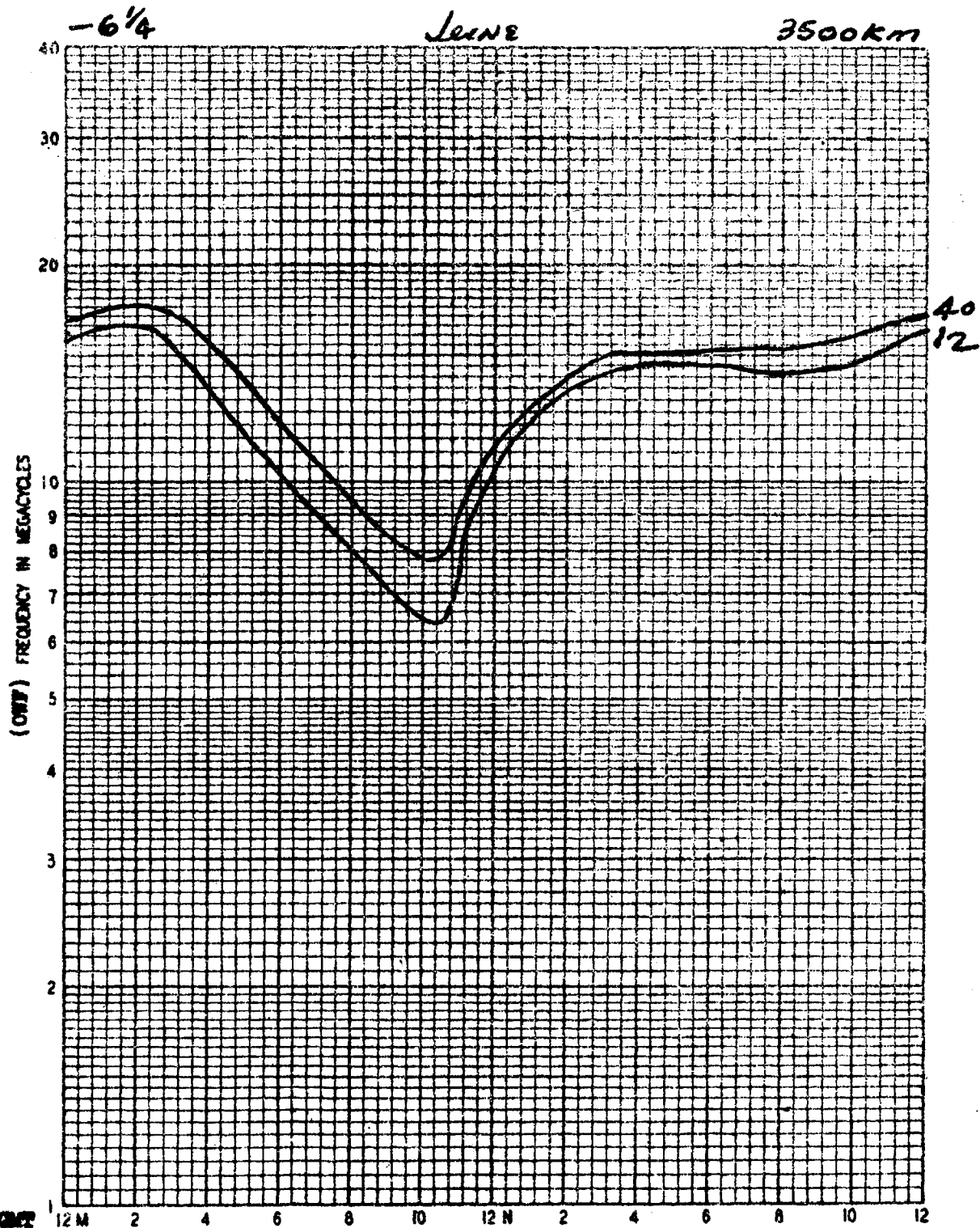
OPTIMUM TRANSMITTING FREQUENCIES

Transmitter: 2 Receiver: 3
 Lat. _____ Long. _____ Lat. _____ Long. _____
 Control Pt. Lat. 67N Long. _____ Control Pt. Lat. _____ Long. _____
 Zone I Sunspot Number _____ Zone _____



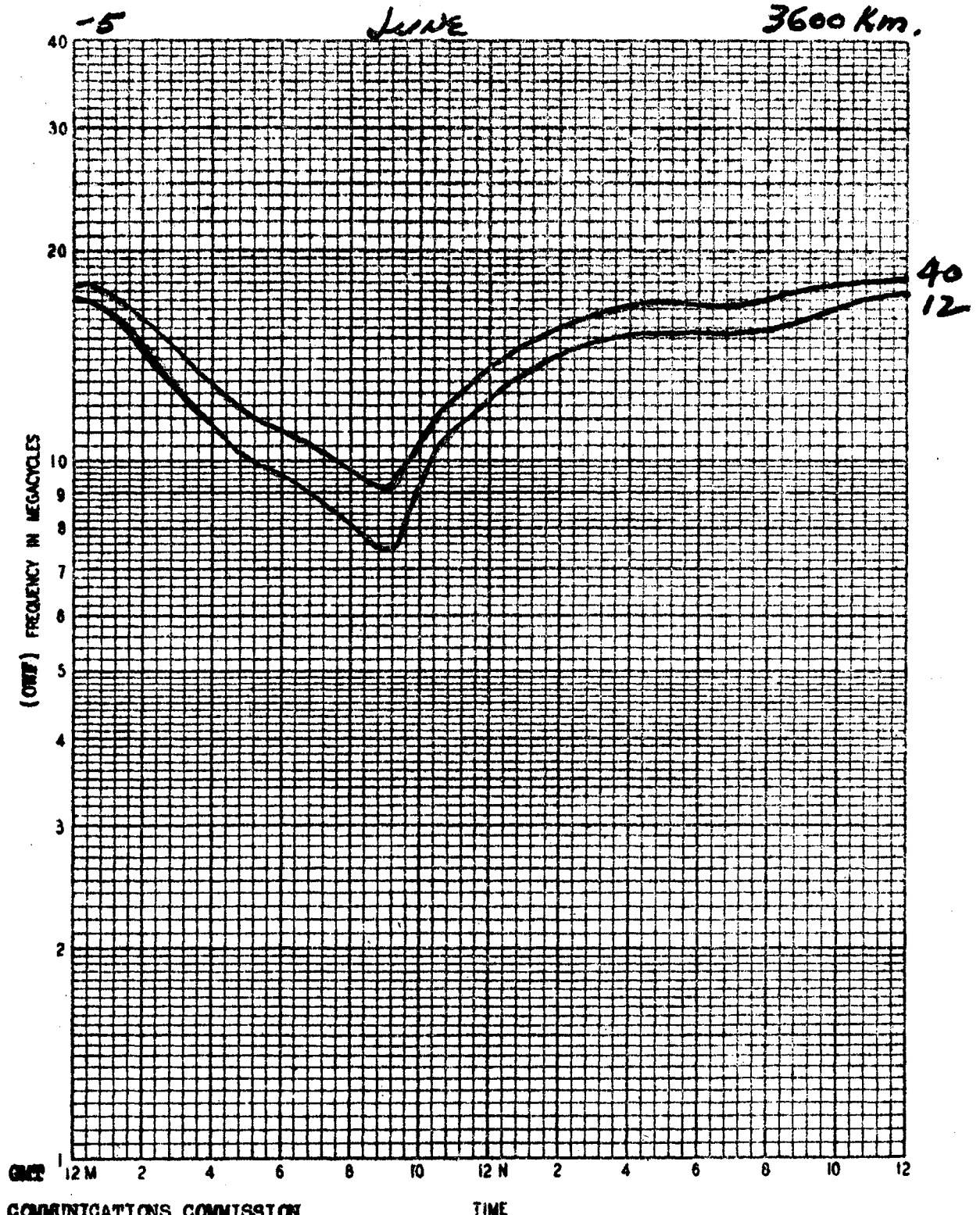
OPTIMUM TRANSMITTING FREQUENCIES

Transmitter: 4 Receiver: 10
 Lat. _____ Long. _____ Lat. _____ Long. _____
 Control Pt. Lat. 38N Long. _____ Control Pt. Lat. _____ Long. _____
 Zone N Sunspot Number _____ Zone _____



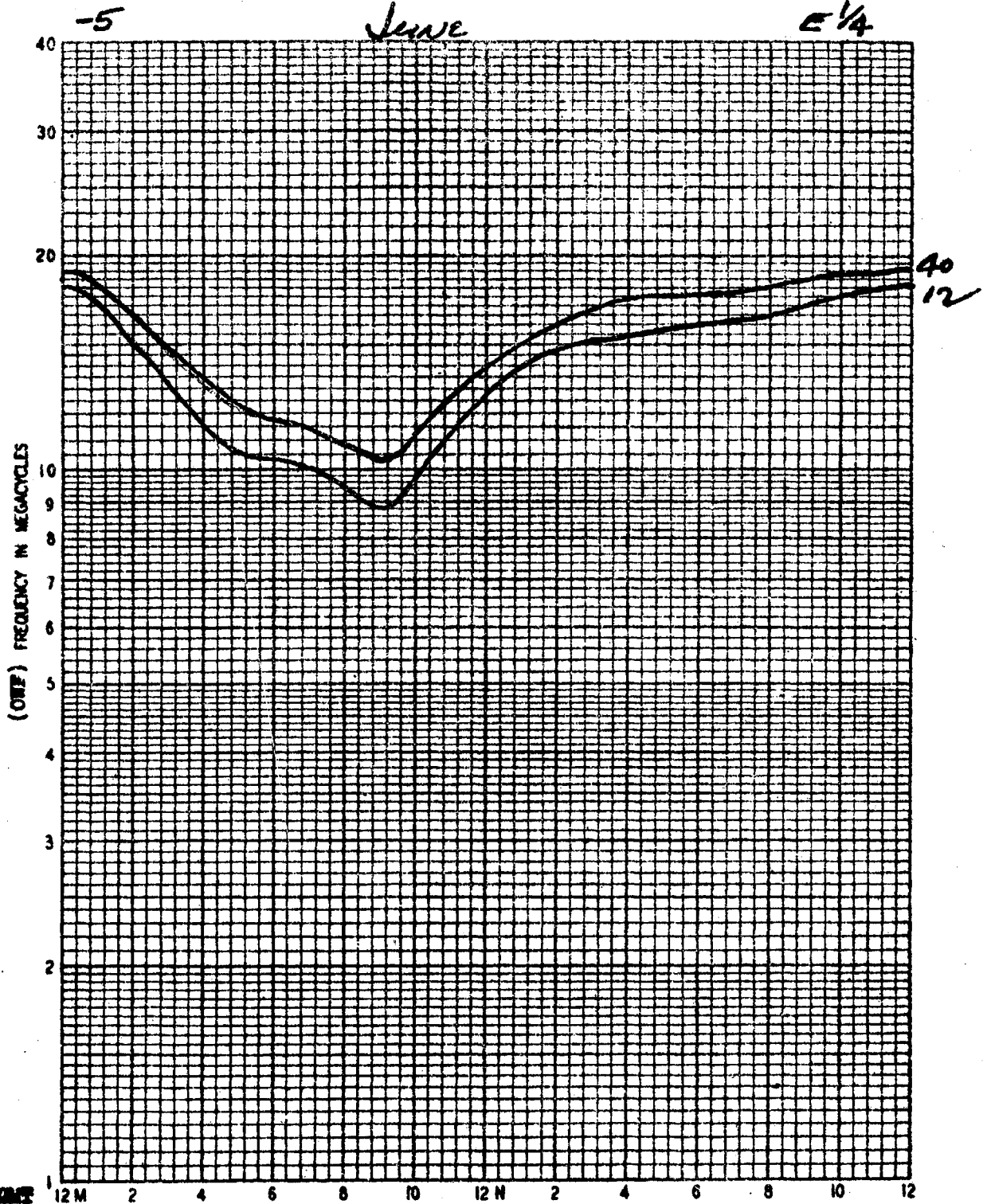
OPTIMUM TRANSMITTING FREQUENCIES

Transmitter: 4 Receiver: 11
 Lat. _____ Long. _____ Lat. _____ Long. _____
 Control Pt. Lat. 34N Long. _____ Control Pt. Lat. _____ Long. _____
 Zone W Sunspot Number _____ Zone _____



OPTIMUM TRANSMITTING FREQUENCIES

Transmitter: 4 Receiver: 12
Lat. Long. Lat. Long.
Control Pt. Lat. 32N Long. Control Pt. Lat. 12N Long.
Zone W Sunspot Number Zone W



OPTIMUM TRANSMITTING FREQUENCIES

Transmitter: 4 Receiver: 13
 Lat. Long. Lat. Long.
 Control Pt. Lat. 34N Long. Control Pt. Lat. 12N Long.
 Zone W Sunspot Number Zone W

