

NATIONAL BUREAU OF STANDARDS REPORT

3536

**CHEYENNE MOUNTAIN TROPOSPHERIC
PROPAGATION DATA
FEBRUARY - MARCH 1954**

by

A. P. Barsis, B. R. Bean and K. O. Hornberg



**U. S. DEPARTMENT OF COMMERCE
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ABSTRACT

This report describes tropospheric propagation measurements taken over the Cheyenne Mountain paths on frequencies between 92 and 1046 Mc during February, 1954. The results of the measurements are given in terms of cumulative distributions of hourly medians (in units of basic transmission loss), diurnal variations and interdecile range of hourly medians of transmission loss, and dependence of the above quantities on the angular distance θ . Results of meteorological measurements on the 500-foot tower at Haswell, Colorado, are also shown together with radiosonde data obtained at Denver, Colorado, and Dodge City, Kansas, during the recording period. A general description of the weather during the measurement period is also given.

INTRODUCTION

The Tropospheric Propagation Research Section of the Radio Propagation Engineering Division, National Bureau of Standards, has conducted a long-range recording program over paths extending from the front range of the Rocky Mountains across the plains of southeastern Colorado and Kansas. Portions of this program were sponsored by the Evans Signal Laboratories and the Wright Air Development Center, and comprise, among other tasks, continuous measurements on five frequencies over these paths during February and August 1954, with simultaneous meteorological measurements.

This report contains certain results of the radio and meteorological measurements obtained during February of 1954. Subsequent reports will cover the evaluation of radio and meteorological data for this and other recording periods, studies of fading range and fading rate, comparative studies of meteorological and radio phenomena including evaluation of observed space-wave fadeouts, and evaluation of airborne measurements.

Section I. Measurements of Basic Transmission Loss.

A. Facilities: The transmitting and receiving sites, the equipment used, and the method of obtaining data have been described in previous publications 1, 2/. For the February, 1954, recording period another receiving site called "Marble" has been added at a distance of approximately 140 miles from the transmitters. This is within that region where the signals from the summit of Cheyenne Mountain produced by diffraction, and the ones produced by tropospheric scattering are presumed to be comparable in magnitude. Fig. 1 shows in a panoramic view locations of all transmitting and receiving facilities. Pertinent data for all locations are given in Tables 1 through 5 below.

Table I

Recording Site	Distance Between Transmitting and Recording Sites in Miles		
	Transmitters		
	Cheyenne Mt. Summit	Cheyenne Mt. Base	Camp Carson
Kendrick	49.3	49.4	46.6
Karval	70.2	70.2	68.0
Haswell	96.6	96.8	93.8
Marble	141.0	141.1	138.5
Garden City	226.5	226.6	223.6

Table 2

Angular Distance (in Milliradians) Between Transmitting
and Recording Sites

Recording Site	Transmitters					
	Cheyenne Mt Summit			Cheyenne Mt Base		Camp Carson
	100 Mc	230 Mc	1046 Mc	92 Mc	236 Mc	100 Mc
Kendrick	- 3.2	- 3.3	- 3.7	1.0	0.9	5.6
Karval	- 1.3	- 1.5	- 1.4*	4.1	4.0	8.5
Haswell	1.8	1.7	1.8	6.5	6.4	11.5
Marble	9.8	9.7	10.0	14.8	14.7	18.1
Garden City	28.1	28.1	28.8	31.3	31.3	38.4

*For 43 foot receiving antenna.

Table 3

Transmitting Antenna Data

Transmitter	Elevation above Mean Sea Level in Feet	Antenna Gain over an Isotropic Antenna in Decibels
Cheyenne Mt Summit		
100 Mc	8805	10.0
230 Mc	8855	11.5
1046 Mc	8760	26.0
Cheyenne Mt Base		
92 Mc	7485	9.3
236 Mc	7505	11.7
Camp Carson		
100 Mc	6260	14.5

Table 4

Elevation of Recording Sites

<u>Site</u>	<u>Elevation above Mean Sea Level in feet</u>
Kendrick	5260
Karval	5060
Haswell	4315
Marble	4060
Garden City	2855

Table 5

Receiving Antenna Data

<u>Recording Site</u>	<u>Antenna Height Above Ground in Feet</u>				
	<u>92 Mc</u>	<u>100 Mc</u>	<u>230 Mc</u>	<u>236 Mc</u>	<u>1046 Mc</u>
Kendrick	37	19	17.5	35.5	43
Karval	37	19	17.5	35.5	43, 14, 5
Haswell	37	19	17.5	35.5	43
Marble	32	32	32	32	32
Garden City	37	19	17.5	35.5	9

<u>Recording Site</u>	<u>Antenna Gain Over an Isotropic Antenna in Decibels</u>				
	<u>92 Mc</u>	<u>100 Mc</u>	<u>230 Mc</u>	<u>236 Mc</u>	<u>1046 Mc</u>
Kendrick	2.15	2.15	2.15	2.15	2.15
Karval	2.15	2.15	2.15	2.15	2.15
Haswell	2.15	2.15	2.15	2.15	2.15
Marble	2.15	2.15	2.15	--	2.15
Garden City	2.15	2.15	8.0	--	25.4

B. Results: The terms "angular distance" and "basic transmission loss" have been fully explained in the NBS Circular quoted 2/. The appendix contains complete tabulations of measured hourly median values of basic transmission loss for all frequencies recorded at all receiving sites. Basic transmission loss as used in these tabulations and also as the ordinate designation in Figs. 2-10 was determined on the assumption that the free-space gain of the transmitting and receiving antennas were realized. If the actual path antenna gains are less than the theoretical free-space gains, the corresponding basic transmission loss values would be too high. However, for the low and

medium-gain antennas used over most paths, the error is not expected to be appreciable with the possible exception of the 1046 Mc Garden City path. Additional studies of path antenna gain as compared to free-space gain are in progress.

Figs. 2 to 6 show the observed distributions of hourly medians of basic transmission loss (as defined above) for all frequencies at all receiving sites. The number of hours comprising each distribution is indicated. The graphs include 100 Mc data obtained from the Camp Carson transmitter at Kendrick, Karval, and Haswell, 1046 Mc data received on three antennas at Karval (at 5, 14, and 43 feet above ground), and 236 Mc data, which were all obtained prior to February 15. Data for 230 Mc received at Garden City will be added in a subsequent report.

Figs. 7, 8, and 9 show diurnal variations of median hourly transmission loss, based on three-hour time blocks 2/.

Fig. 10 indicates the dependence of basic transmission loss on the angular distance θ . In order to include the paths within the radio horizon the angle θ has also been defined for such paths, and it assumes a negative sign in this case. The values of basic transmission loss shown represent the median values read from the all-hour distribution curves (Figs. 2 to 6). The same curves serve to determine the interdecile range 2/ of hourly medians shown for all paths and frequencies in Fig. 11; also versus the angle θ . Fig. 11 also indicates the dependence of diurnal change on the angle θ . Diurnal change is defined as the difference between the maximum and minimum three-hour median levels taken from Figs. 7, 8, and 9.

C. Discussion of Results: During the February recording period a series of severe dust storms occurred in eastern Colorado and in Kansas affecting the Haswell and Marble sites especially. Several days of data were lost due to equipment failures caused by the blowing dust. The tabulations in the appendix show exactly the hours for which data were obtained. The 1046 Mc results from Marble show the effect of too few hours, and are therefore not considered conclusive.

The summary of results represented by Figs. 10 and 11 may be interpreted as follows:

The graph of over-all median values of transmission loss versus the angular distance θ shows that it is increased with frequency and θ except for small positive and all negative values of θ where transmission

loss is also dependent upon antenna height. This is especially illustrated by the results for Kendrick and Karval on transmissions from the Cheyenne Mountain Summit site, where ground reflections produce a substantial amount of phase interference on the 100 and 230 Mc frequencies. The following table shows the relation of measured over-all median basic transmission loss and computed basic transmission loss in free space for these paths:

Ratio of Measured Median Basic Transmission Loss and Computed Basic Transmission Loss in Free Space

Site	Frequency	Ratio in Decibels
Kendrick	100 Mc	21.8
	230 Mc	11.6
	1046 Mc	-0.6
Karval	100 Mc	21.5
	230 Mc	15.7
	1046 Mc (43-ft. antenna)	2.4
	1046 Mc (14-ft antenna)	7.1
	1046 Mc (5-ft antenna)	16.1

The above tabulation also illustrates the height gain observed at Karval on 1046 Mc.

Most of the transmission loss values measured at Haswell are substantially greater than could be expected from comparison with the rest of the paths. This might be explained by the topography: the site is located not far beyond the summit of a small ridge (see Fig. 4, NBS Circular 554). Furthermore, the site is only very slightly below the radio horizon, and may constitute a transitional stage between phase interference and "smooth-earth" diffraction effects.

Fig. 11 shows the dependence of the variability of hourly medians on the angular distance θ . This is expressed in two ways: the interdecile range takes into account the complete all-hour distribution, and the diurnal change is based on the comparison of three-hour time block medians. For the interdecile range graph a very pronounced frequency dependence is evident, with the maximum range observed at the Marble site (θ between 10 and 15 milliradians). The highest interdecile range was observed for 230 Mc. The low value of interdecile range on 1046 Mc at the Marble site may be attributed

to relatively too few hours of observations. The decrease in interdecile range for larger θ (corresponding to Garden City) is in agreement with previous results.

The diurnal trend also shows a very marked change between Marble and Garden City. Not only is the diurnal change (as defined above) substantially reduced, but the observed 92 and 100 Mc transmission loss values show minima during daytime hours, and maxima at night (at Garden City). This reduction of the daytime transmission loss may be caused by increased turbulence-produced tropospheric scattering during daylight hours. This effect, in the course of a diurnal cycle, is usually obscured by the much larger reduction in transmission loss due to super-refraction which occurs principally at night. Therefore, the usual diurnal trend shows transmission loss minima during the night and early morning hours where superrefraction is prevalent. In the absence of substantial superrefraction extending as far as Garden City during the February recording period (as apparent from a study of the refractive index profiles below), the daytime reduction in transmission loss due to scattering is better discernible than during any of the previous recording periods analyzed.

Section II. Radio Meteorological Measurements

A. Background: The purpose of the National Bureau of Standards Radio-Meteorological measurements is to determine the degree to which the weather affects the level and fading of VHF and UHF radio waves.

Current theory explains the variations in level of VHF - UHF signals by four principal mechanisms: scattering, refraction around the earth, ducting, and reflection from elevated layers. The first two mechanisms are in general ever present while the latter two may or may not exist at any given time. While all four of these mechanisms are vitally dependent upon the refractive index distribution, the instrumentation requirements are very different for each of the mechanisms.

1. Refraction and Ducting Refraction and ducting differ only in degree and can be suitably described by the refractive index profile in the lowest kilometer of the atmosphere. For ducting to be effective there must be: (1) a refractive index gradient sufficient to produce an effective earth's radius factor of infinity which is given by the following relationship:

$$k = \frac{1}{1 + \frac{a}{n} \frac{\Delta n}{\Delta h}}$$

where a = earth's radius
 = 6,370 km
 n = mean radio refractive index of the interval
 $\frac{\Delta n}{\Delta h}$ = gradient of refractive index of the interval

and (2) the effective earth's radius factor of infinity must extend over a sufficient height dependent upon radio frequency. The necessary duct height for each of the frequencies now in use on the Cheyenne Mountain Program is given in Table 6. */

Table 6

Necessary Duct Height for Frequencies in Use on the Cheyenne Mountain Experiment

<u>Frequency in Megacycles</u>	<u>Duct Height in Feet</u>
92	815
100	771
230	443
236	435
1046	161

As can be seen from Table 6, meteorological measurements taken on the 500-foot tower will give full detail of necessary duct heights for frequencies above 230 Mc. Detailed refractive index profiles for the period February 15 through March 2, 1954, are given in Section II B. The comparison of these measurements with the transmission loss will be left for a subsequent report.

*/Derivation of the formula used to compute these heights is found on pages 15-21 of Vol. 13, Radiation Laboratory Series; these results are comparable with the Booker-Walkinshaw theory.

2. Reflection from Elevated Layers: The information needed for studies of the reflection of radio waves from an elevated layer is: the height of the layer, thickness of the layer, and refractive index drop through the layer. There are two independent sources of this information during the period: (1) standard radiosonde ascents from Lowry Air Force Base in Denver, Colorado, and the Dodge City, Kansas, Weather Bureau observatory and (2) the Wright Air Development Center, (WADC), airborne microwave refractometer. The radiosonde observations have been converted into refractometer profiles and are described in Section C.

3. Scattering: The microwave refractometer currently presents the best method of determining the variations of refractive index fluctuations with height that are so vital to the scattering theory. This information is available from the WADC airborne refractometer.

B. Refractive Index Profiles from the NBS 500-Foot Meteorological Tower at Haswell, Colorado:

The 500-foot tower at Haswell, Colorado is equipped with Aminco-Dunmore Electric Hygrometer Multiple Range sensing elements. These units combine a number of limited range sensing elements by a suitable electrical network to cover a wider range of relative humidity than that covered by a single limited range-sensing element. The error of measurement of these instruments is given as $\pm 1.5\%$ relative humidity and $\pm 2^{\circ}$ Fahrenheit. The radio refractivity, N, is given by the expression: 3/

$$N = (n - 1) \times 10^6 = \frac{k_1 P}{T} + \frac{k_2 e_s RH}{T^2}$$

where

N is the radio refractivity

n is the refractive index

P is the atmospheric pressure in millibars

T is the atmospheric temperature in degrees Kelvin

e is the saturation water vapor pressure in millibars at the temperature T

RH is the relative humidity in percent

k_1 and k_2 are experimentally determined constants and are equal to:

$$k_1 = 77.6 \qquad k_2 = 3.75 \times 10^5$$

The instrumental error in determining N can be given by:

$$\sigma_N^2 = \left[\left(\frac{\partial N}{\partial P} \right) \sigma_P \right]^2 + \left[\left(\frac{\partial N}{\partial T} \right) \sigma_T \right]^2 + \left[\left(\frac{\partial N}{\partial RH} \right) \sigma_{RH} \right]^2$$

We may assume average values of the parameters as follows: pressure, 870 mb; temperature, 18°C; relative humidity, 55 percent. These average values allow an estimate of the probable error in N of ± 1.5 N units provided that we disregard other possible sources of error such as poor instrument-shelter flushing at low wind speeds, errors in calibration and in the reduction of the data. This error would result in a probable error of 2.1 N units in the gradient between two sampling points. The normal gradient (corresponding to a k of 4/3) over the 500 feet of the tower is approximately -6 N units, while the minimum gradient necessary for ducting in a 500-foot increment is -24 N units. The instrumental error, therefore, precludes an exact knowledge of the refractivity gradient.

Figs. 12 through 23 give the hour-by-hour refractivity profiles for Haswell, Colorado for those times that data were available during the recording period. Reference gradients for the radio standard atmosphere ($k = 4/3$) and for ducting ($k = \infty$) are given in each figure. The profiles are plotted with the surface values of N arbitrarily moved such as to be on the appropriate hour mark. The surface values of N are plotted immediately below the refractivity profiles. Surface values of N for Kendrick, Colorado (where available) are also plotted for comparisons with the Haswell values. Hourly average wind velocity in mph and direction are also plotted at the 15, 150, and 492-foot levels. Whenever data is not plotted, it is missing due to disruption of operations by power failures or the dust storms that swept the area throughout the period of recording.

Returning to Fig. 12, for the 14th of February, we notice that those profiles that display steep gradients correspond to those nocturnal hours when the surface refractivity was highest. During the mid-part of the day the refractivity is at its lowest values and the profiles are linear with height.

Fig. 24 presents the average gradient for the period of recording between the sampling heights on the tower. We see that the amplitude of the diurnal cycle of the gradient decreases with height. The relationship between these gradients and the recorded transmission loss will be presented in a subsequent report.

C. Radiosonde Observations. The standard radiosonde observations are taken twice daily (0800 and 2000 MST) by the Weather Bureau at Dodge City, Kansas, and four times a day (0200, 0800, 1400 and 2000 MST) by the Air Force at Lowry Air Force Base in Denver, Colorado. These observations are converted into refractivity soundings and presented in Figs. 25 through 38. It should be borne in mind that the Lowry soundings represent an area approximately 20 miles east of the front range of the Rocky Mountains while the Dodge City data represent the great plains area of western Kansas. In addition, there is a general drop in elevation from about 5500 feet above MSL at Lowry to about 2850 feet above MSL at Dodge City.

D. General Description of the Weather During the Reporting Period. The Weather Bureau reported the month of February, 1954, as the warmest and driest February since records have been kept in eastern Colorado. The weighted monthly mean temperature, 37.4°F was 10.1°F above the normal. Precipitation was only 27 per cent of the normal with a weighted average of 0.27 inches.

For a short time around the 19th and 20th a cyclonic system brought modified polar maritime air into the area causing unusually low temperature. At the close of the period another cyclonic system brought a wave of modified polar maritime air followed by extremely cold polar continental air into eastern Colorado. With these two exceptions, temperatures were much above normal for the two-week period.

During the last two weeks of February there was unusually strong wind movement that raised and drifted topsoils producing conditions similar to the "dust bowl" of the 1930's. The dust storms were most severe on the 19th and 22nd of February. Less severe "dusters" were over the general area on the 18th, 23rd, and 26th of the month. The storms were associated with either a cold front passage or the turbulent periphery of a strong anticyclone.

There were a few slight snowfalls or snow showers over the area on the 26th and 27th of February and the 1st and 2nd of March with movement of cold air into the area.

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- 1/ A. P. Barsis, B. R. Bean, J. W. Herbstreit, K. O. Hornberg, and K. A. Norton, "Propagation of Radio Waves Over Land at 1046 Mc", National Bureau of Standards Report No. 2494, May 1953.
- 2/ A. P. Barsis, J. W. Herbstreit, and K. O. Hornberg, "Cheyenne Mountain Tropospheric Propagation Experiments", National Bureau of Standards Circular No. 554, January, 1955.
- 3/ E. K. Smith and S. Weintraub, "The Constants in the Equation for Atmospheric Refractive Index at Radio Frequencies", Proc. IRE, Vol. 41, No. 8, pp. 1035-1037, Aug. 1953.

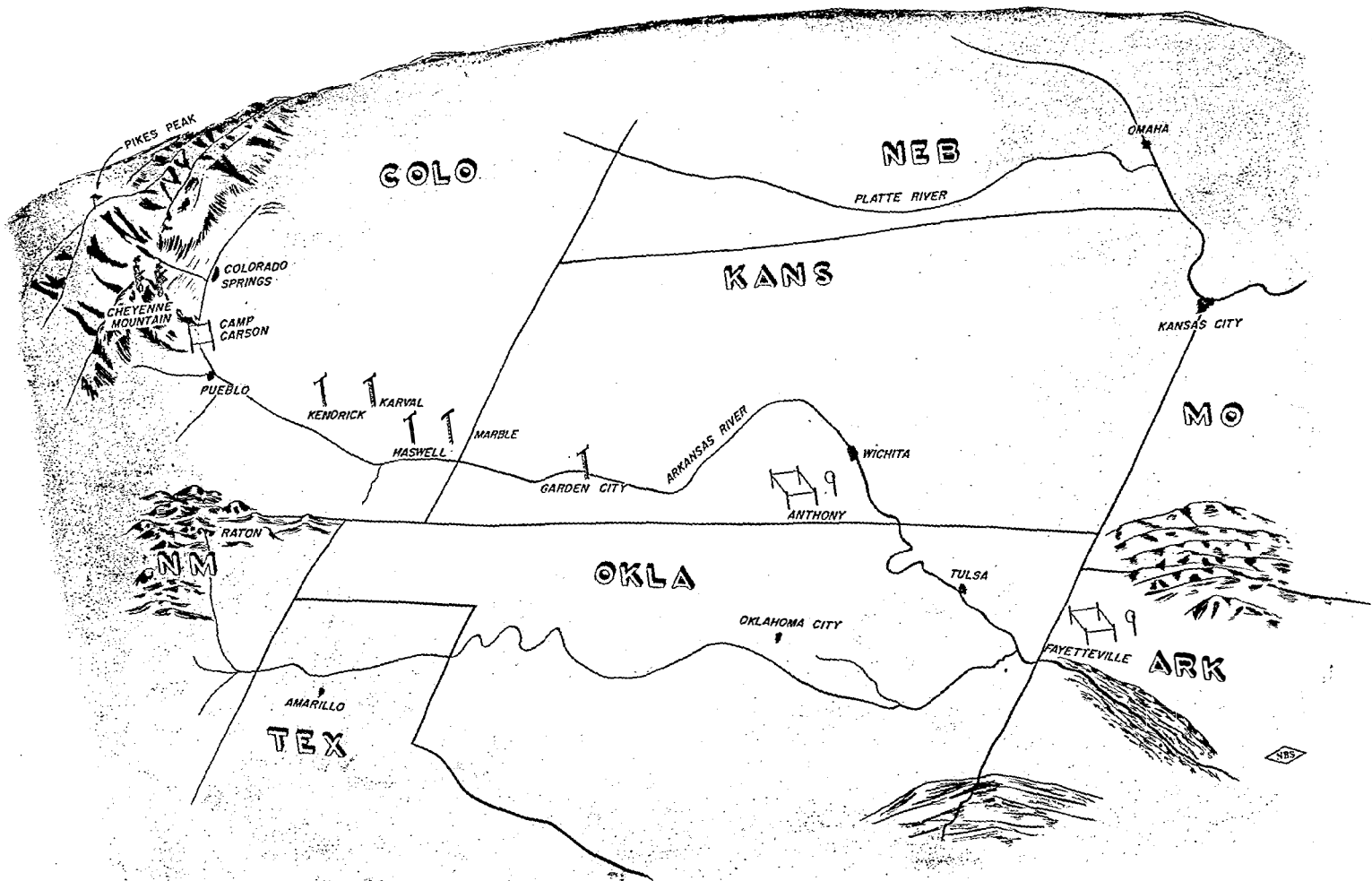


FIG. 1

DISTRIBUTIONS OF HOURLY MEDIAN LEVELS
OF BASIC TRANSMISSION LOSS RECORDED ON 92 MEGACYCLES
DURING FEBRUARY 1954

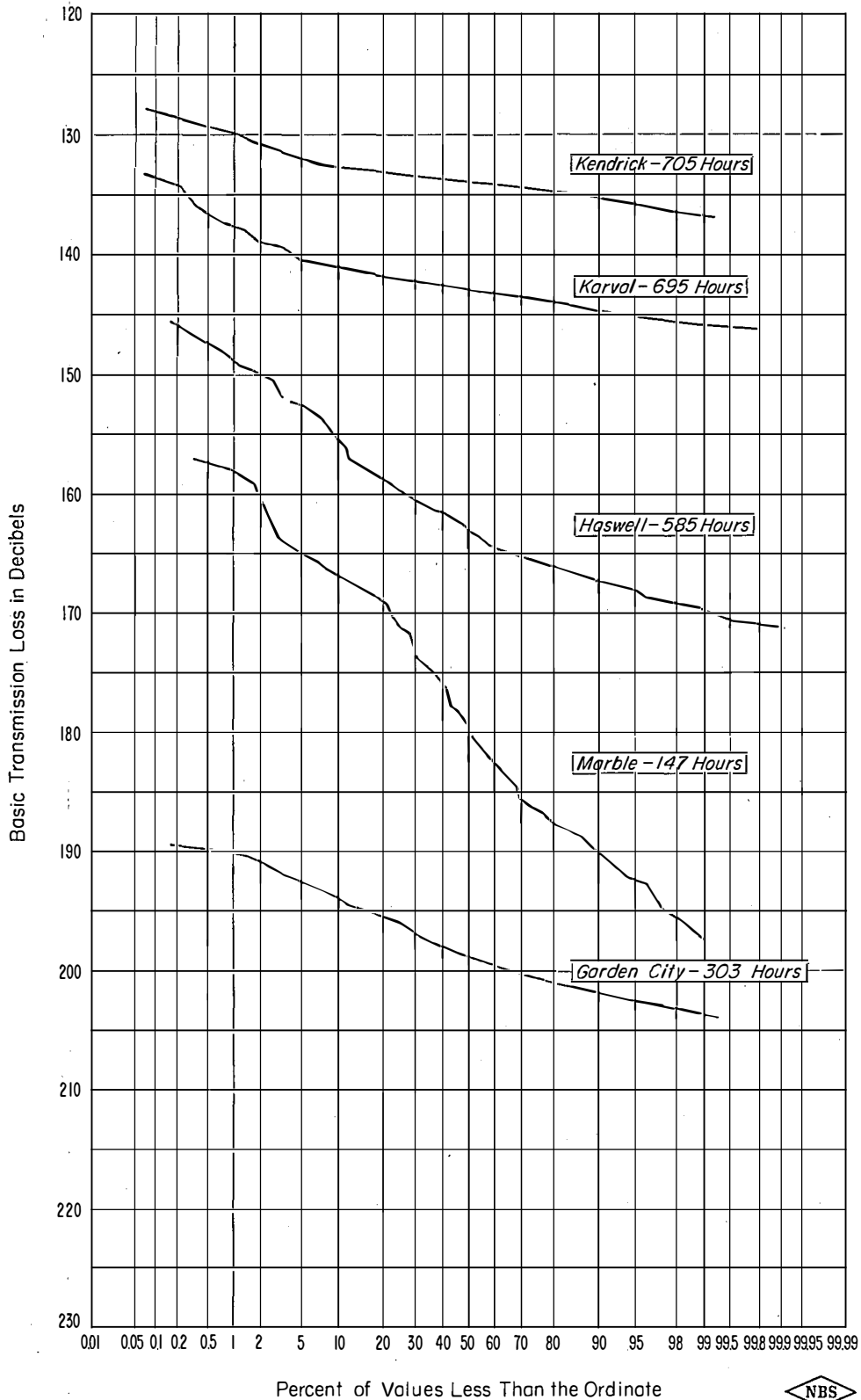


Figure 2



DISTRIBUTIONS OF HOURLY MEDIAN LEVELS
OF BASIC TRANSMISSION LOSS RECORDED ON 100 MEGACYCLES
DURING FEBRUARY 1954

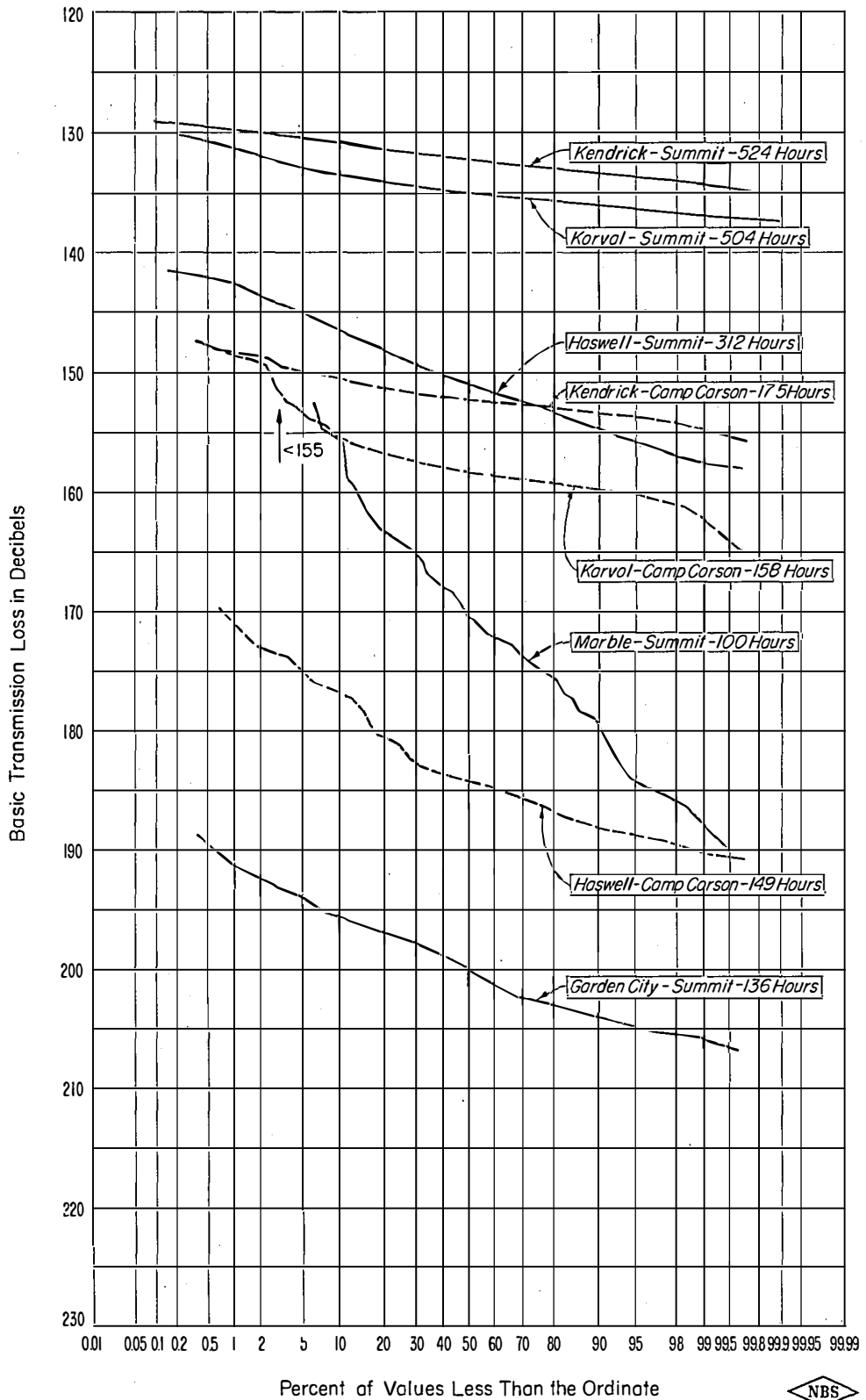


Figure 3



DISTRIBUTIONS OF HOURLY MEDIAN LEVELS
 OF BASIC TRANSMISSION LOSS RECORDED ON 230 MEGACYCLES
 DURING FEBRUARY 1954

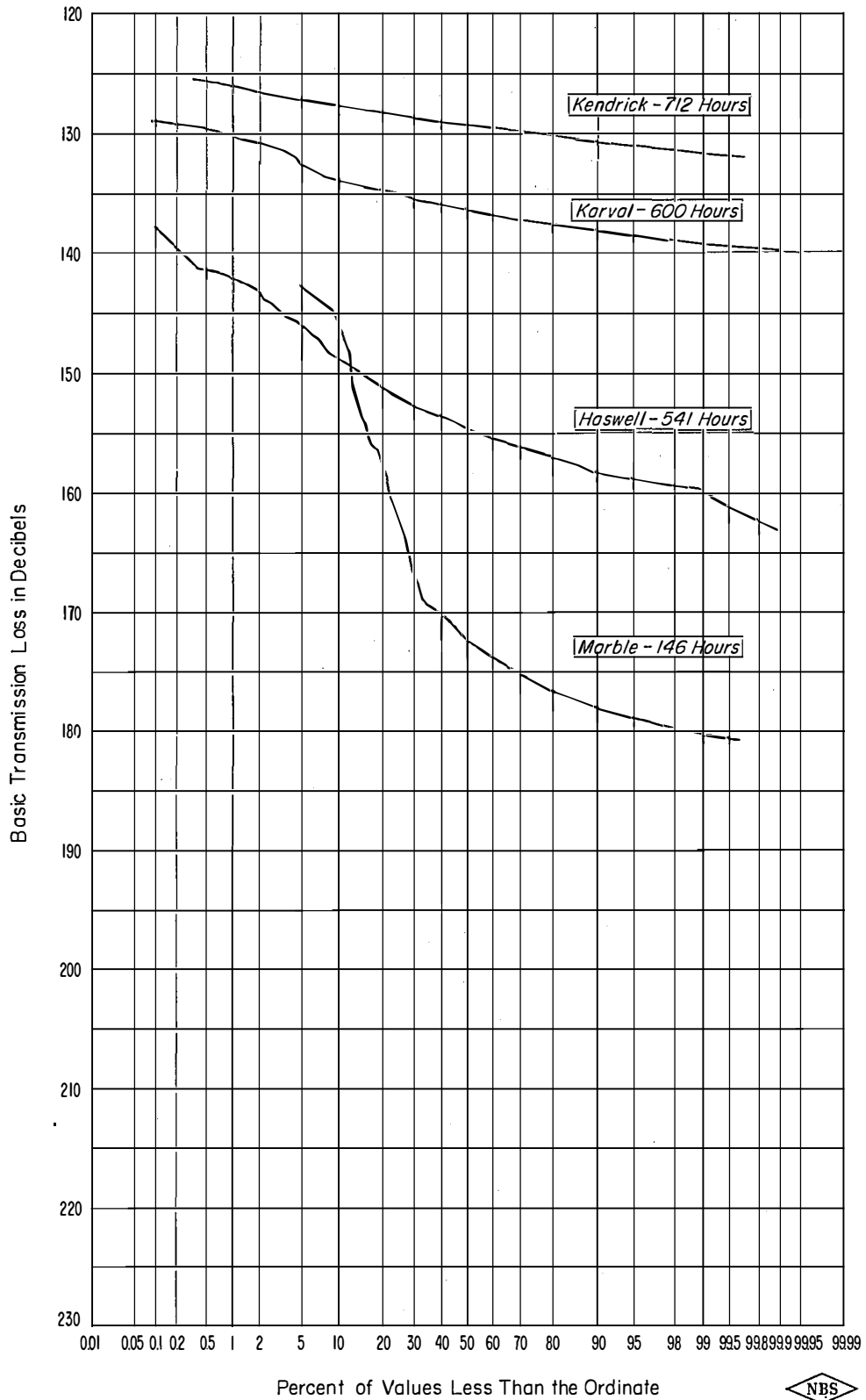


Figure 4



DISTRIBUTIONS OF HOURLY MEDIAN LEVELS
OF BASIC TRANSMISSION LOSS RECORDED ON 236 MEGACYCLES
DURING FEBRUARY 1954

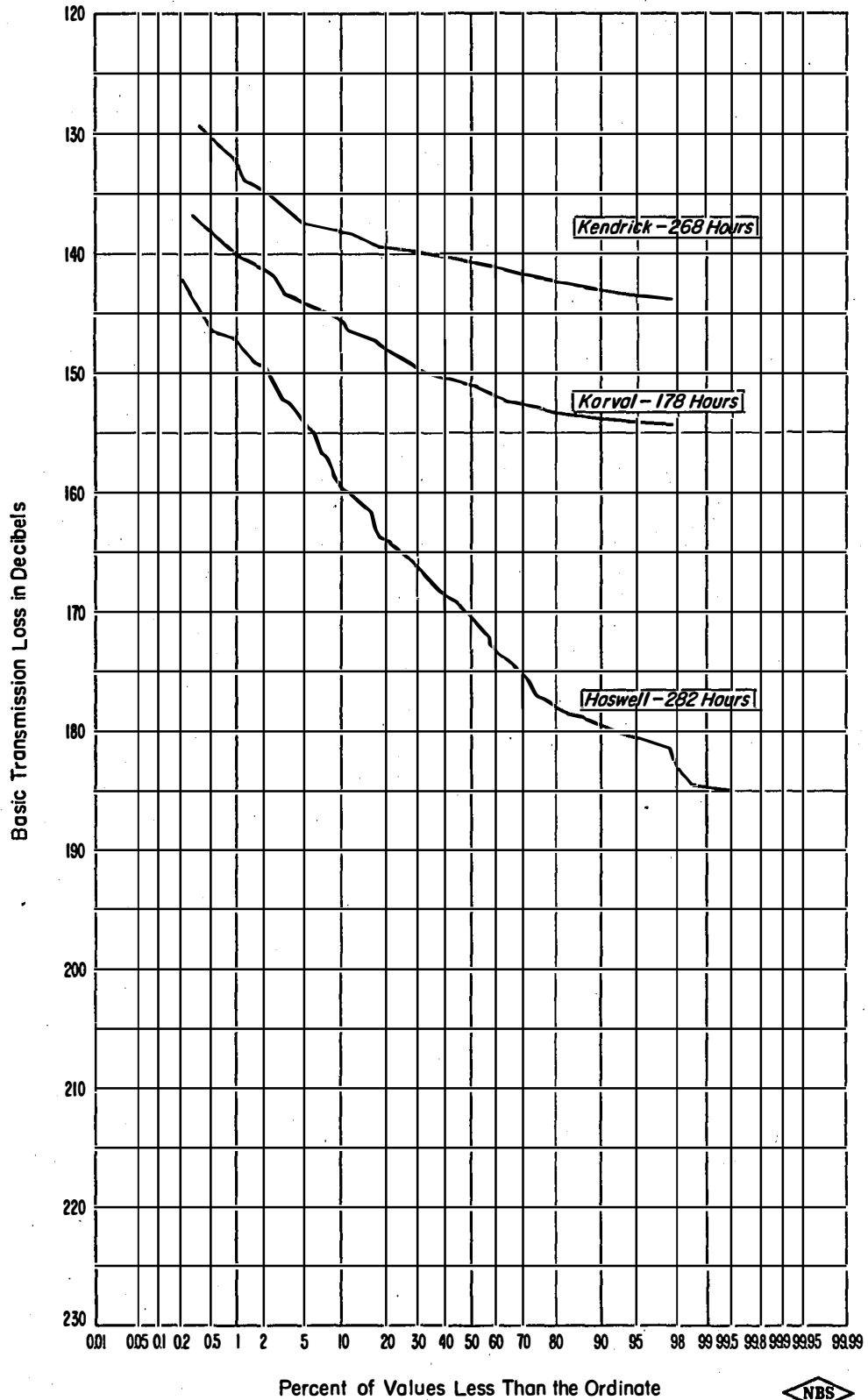


Figure 5



DISTRIBUTIONS OF HOURLY MEDIAN LEVELS
OF BASIC TRANSMISSION LOSS RECORDED ON 1046 MEGACYCLES
DURING FEBRUARY 1954

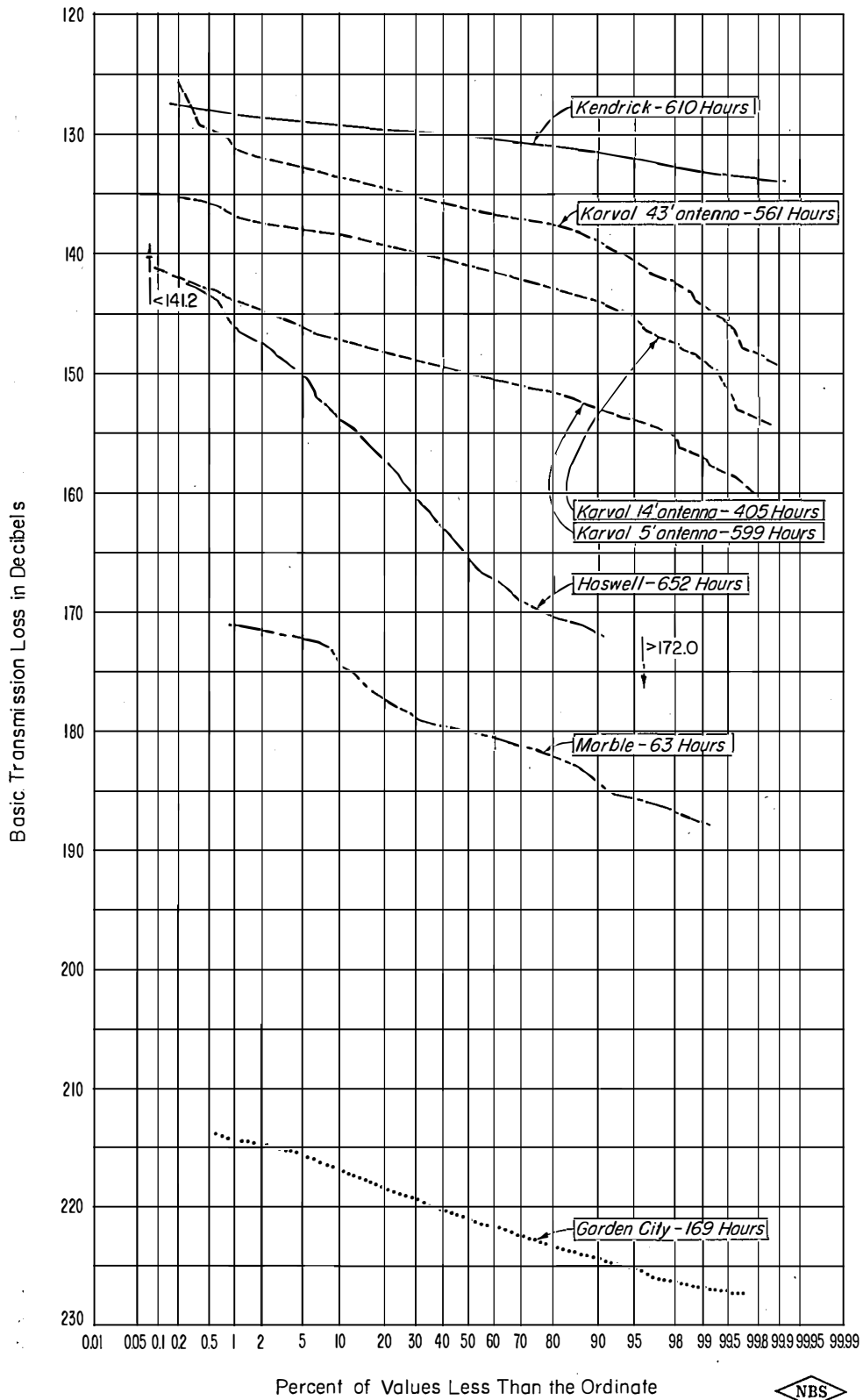


Figure 6



DIURNAL VARIATIONS OF HOURLY MEDIANS
FEBRUARY 1954

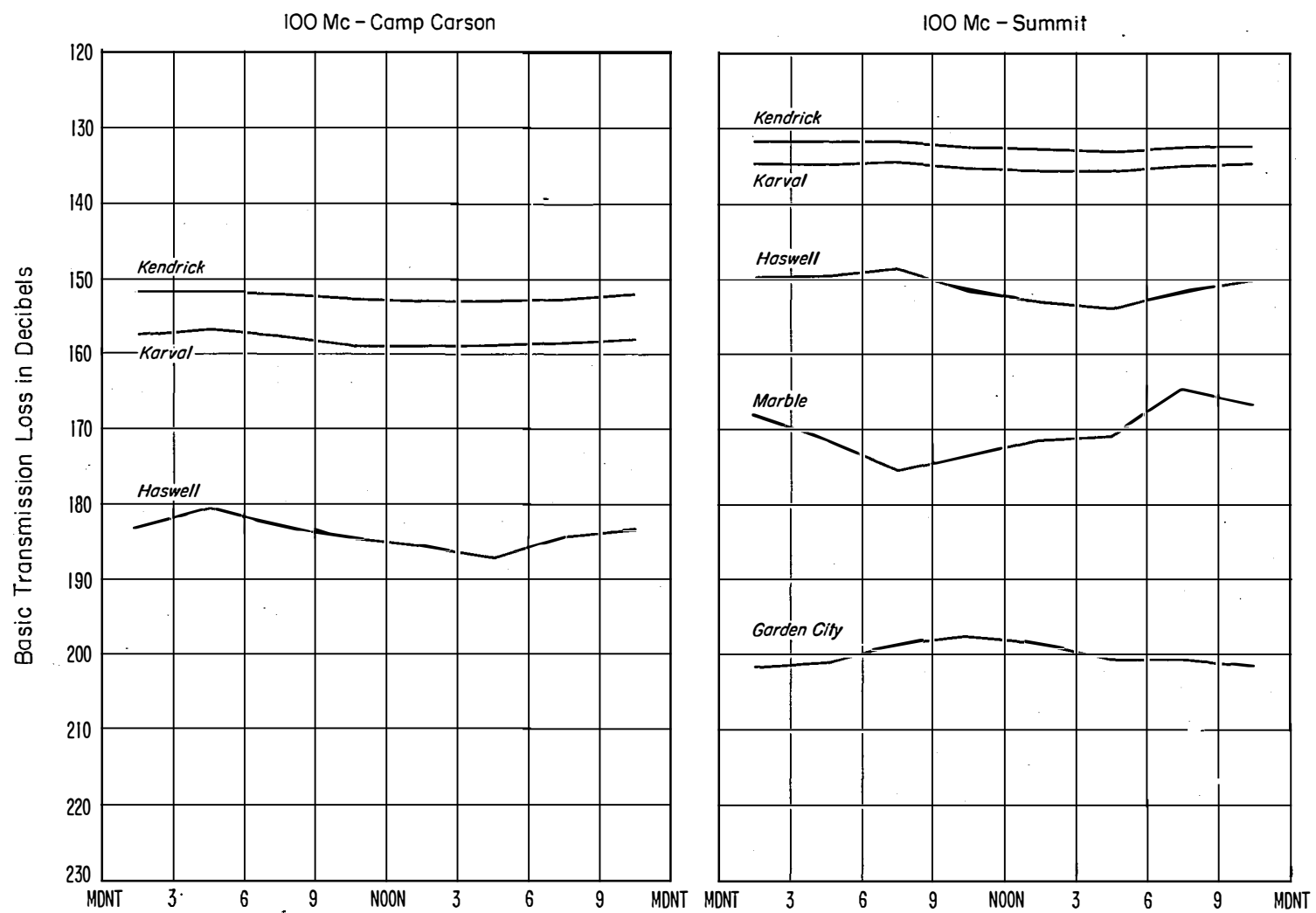


Figure 7



DIURNAL VARIATIONS OF HOURLY MEDIANS
FEBRUARY 1954

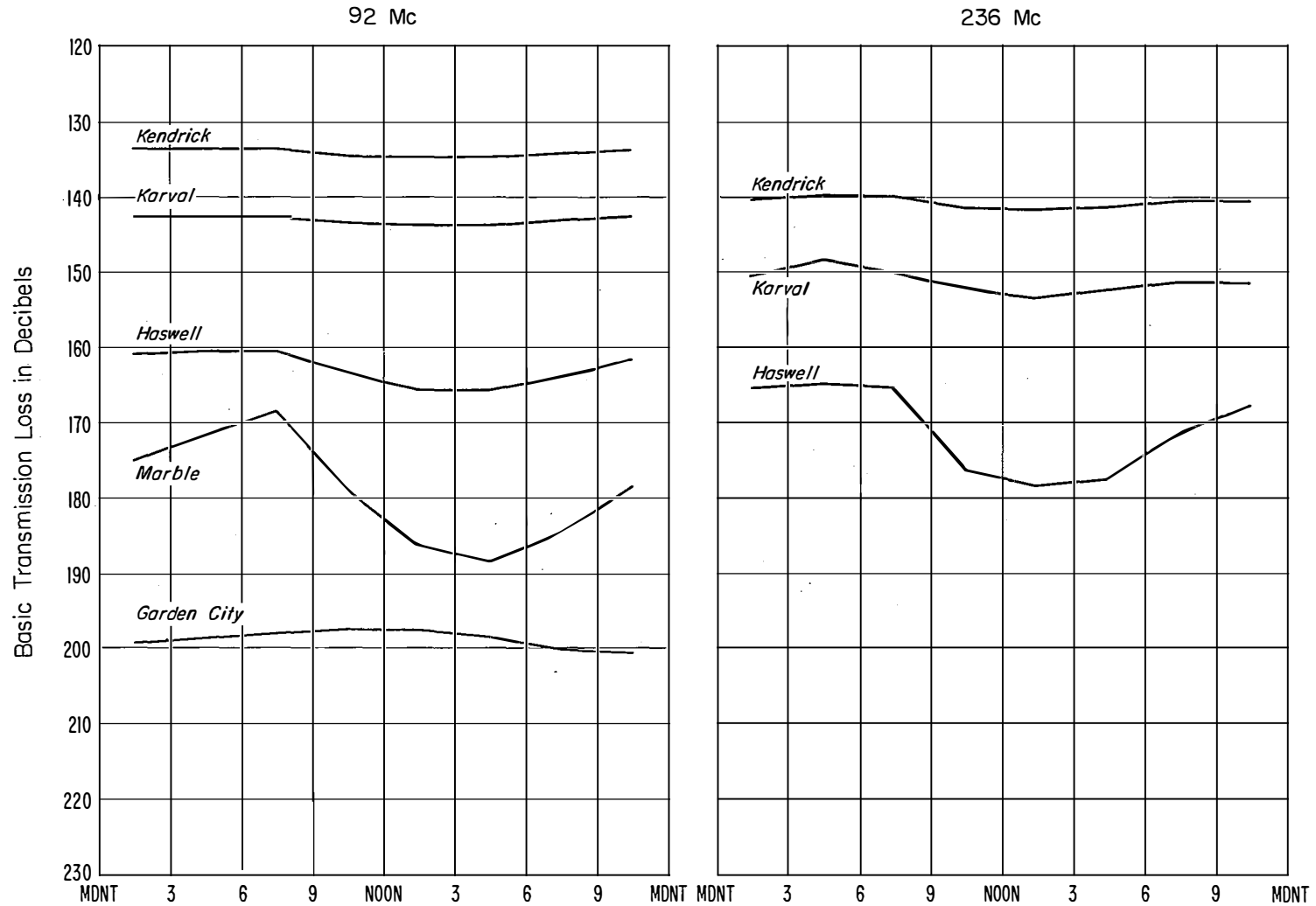


Figure 8



DIURNAL VARIATIONS OF HOURLY MEDIANS
FEBRUARY 1954

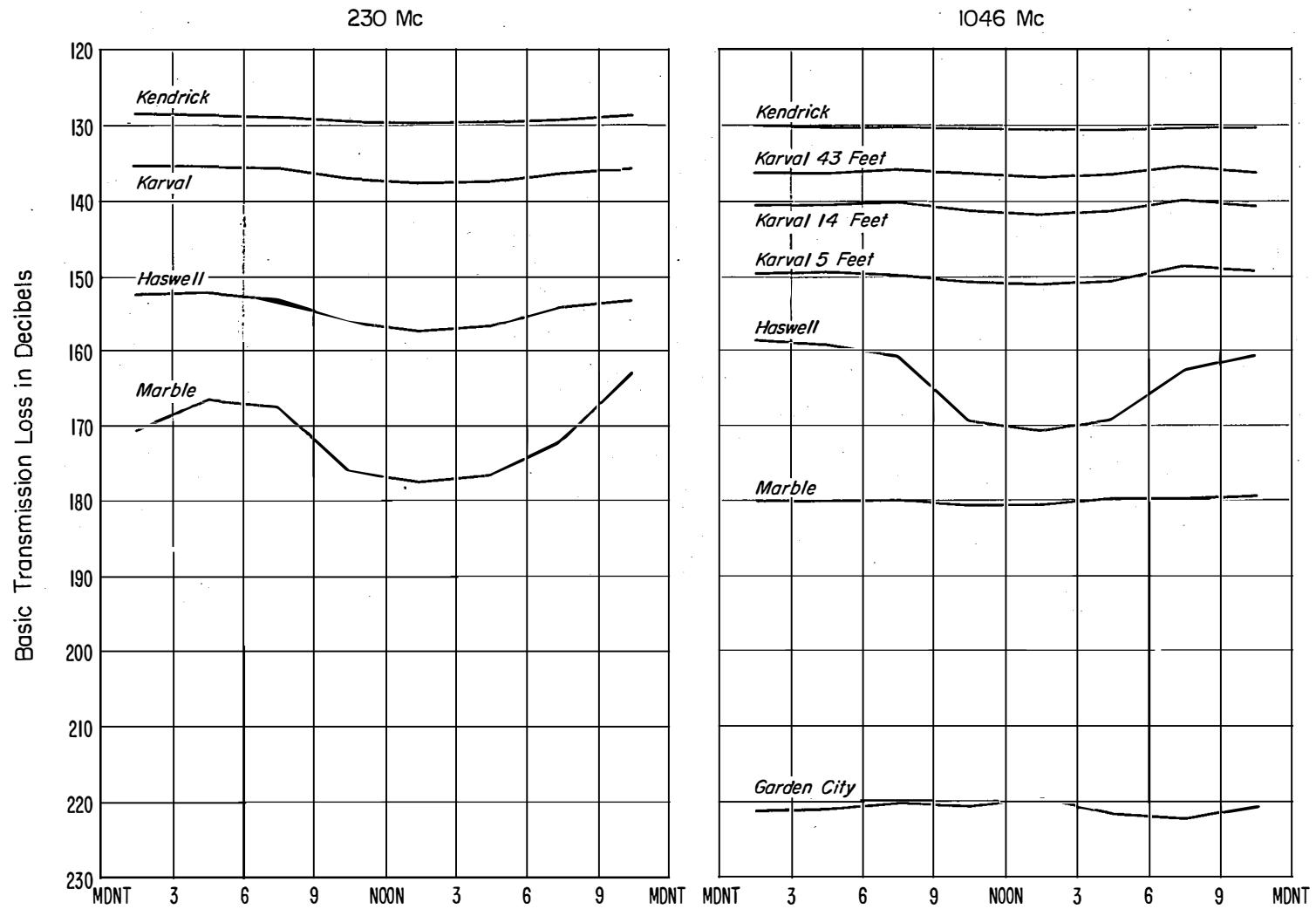


Figure 9



GRAPH OF ALL-HOUR MEDIANS OF BASIC TRANSMISSION LOSS
 VS ANGULAR DISTANCE θ
 Cheyenne Mountain Paths
 February 1954

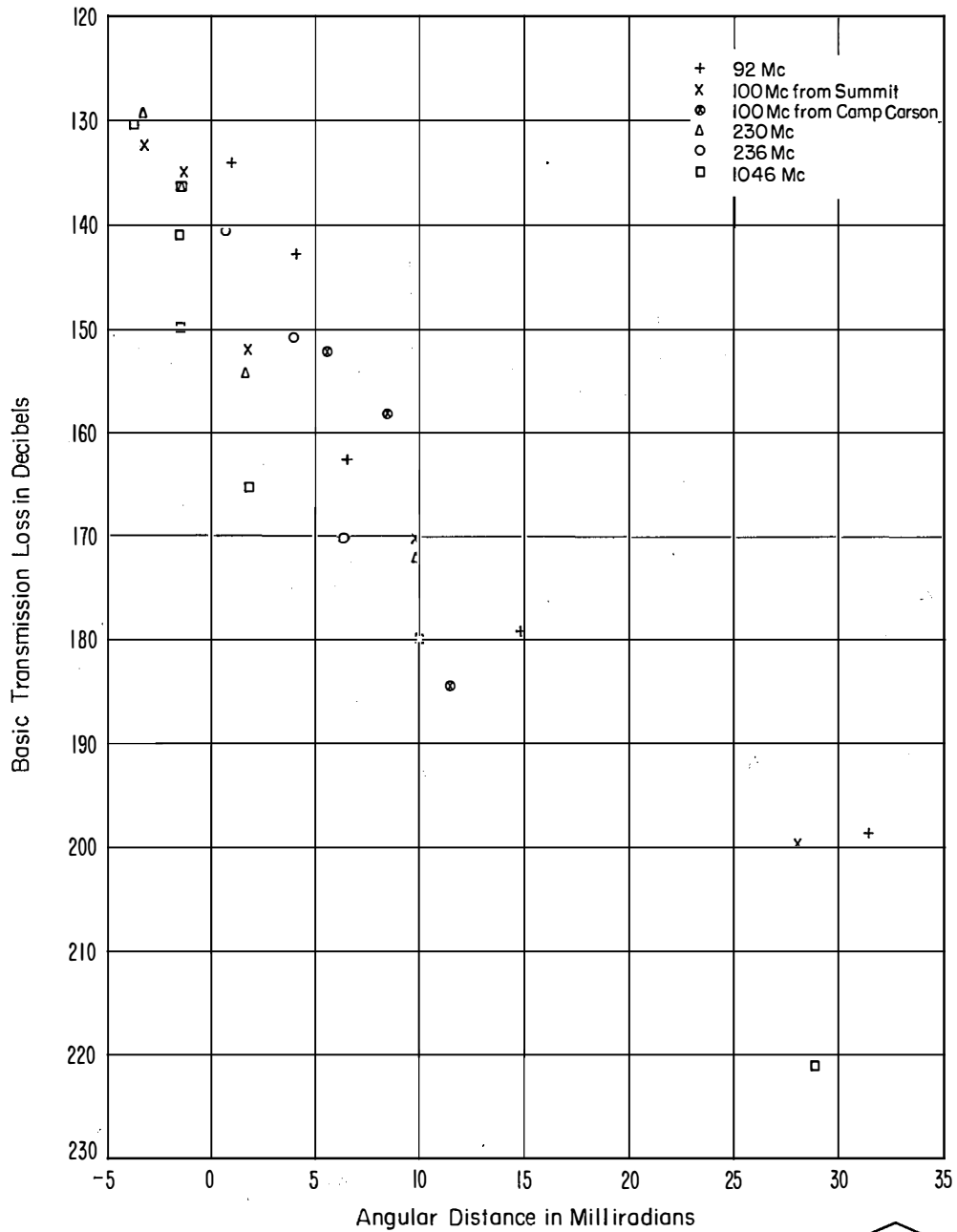
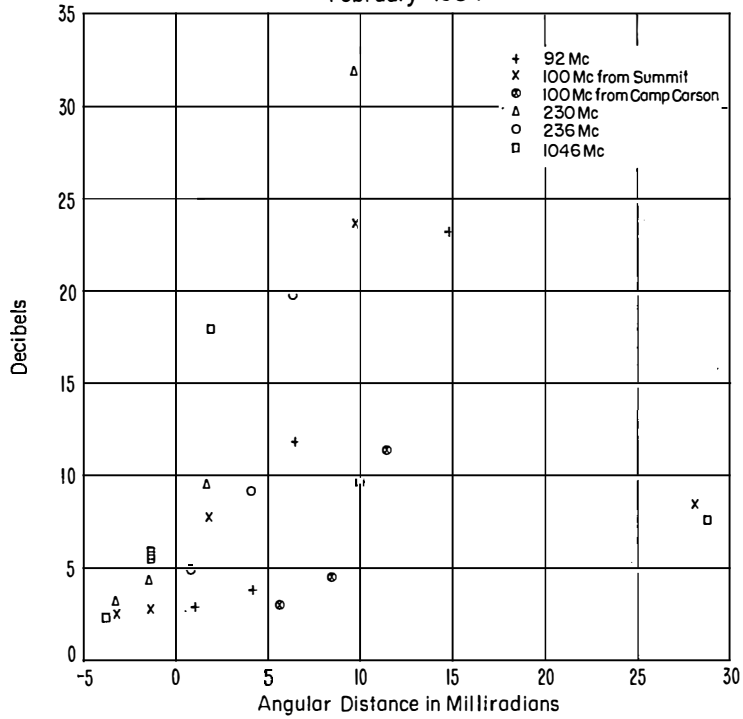


Figure 10

GRAPH OF INTERDECILE RANGE OF HOURLY MEDIANS VS ANGULAR DISTANCE θ
 Cheyenne Mountain Paths
 February 1954



GRAPH OF DIURNAL CHANGE OF HOURLY MEDIANS VS ANGULAR DISTANCE θ
 Cheyenne Mountain Paths
 February 1954

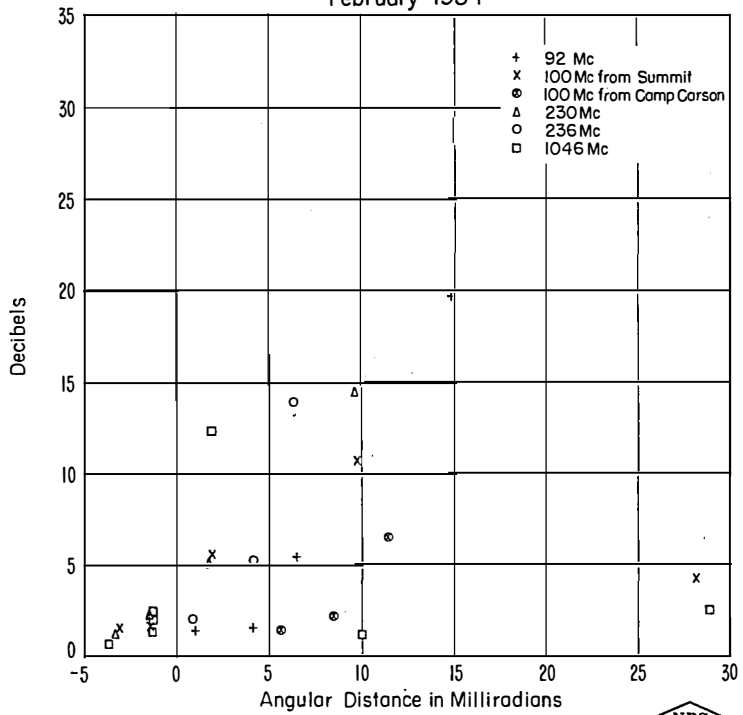
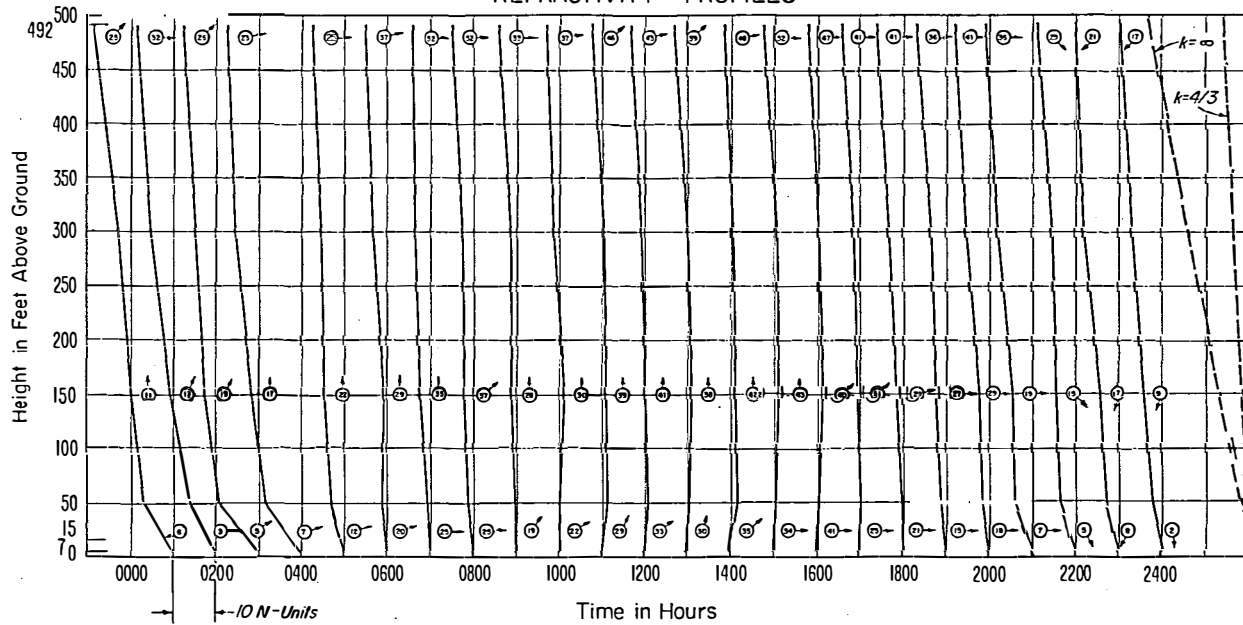


Figure 11



RADIO-METEOROLOGICAL OBSERVATIONS
 HASWELL, COLORADO
 FEBRUARY 14, 1954

REFRACTIVITY PROFILES



SURFACE REFRACTIVITY

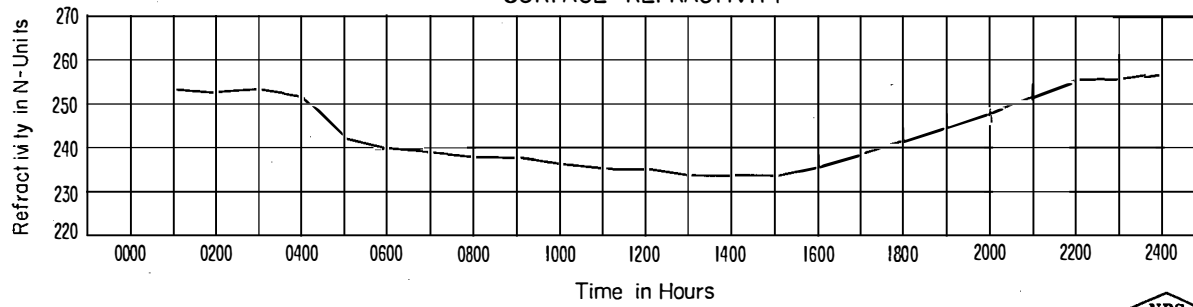


Figure 12



RADIO-METEOROLOGICAL OBSERVATIONS
 HASWELL, COLORADO
 FEBRUARY 15, 1954

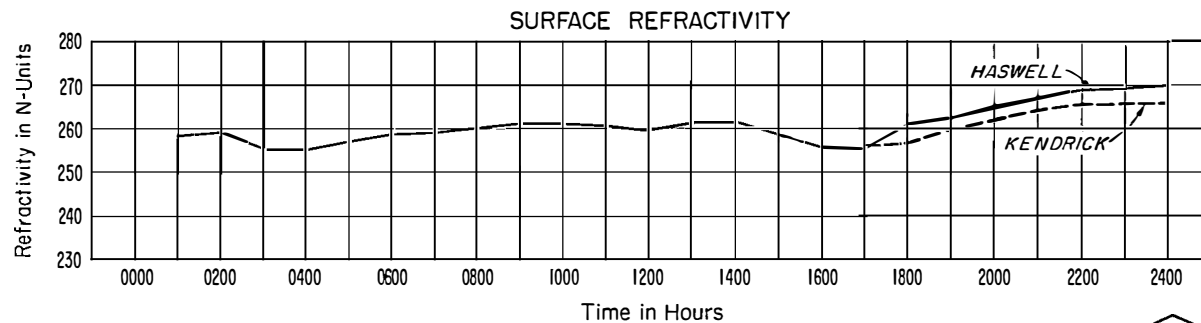
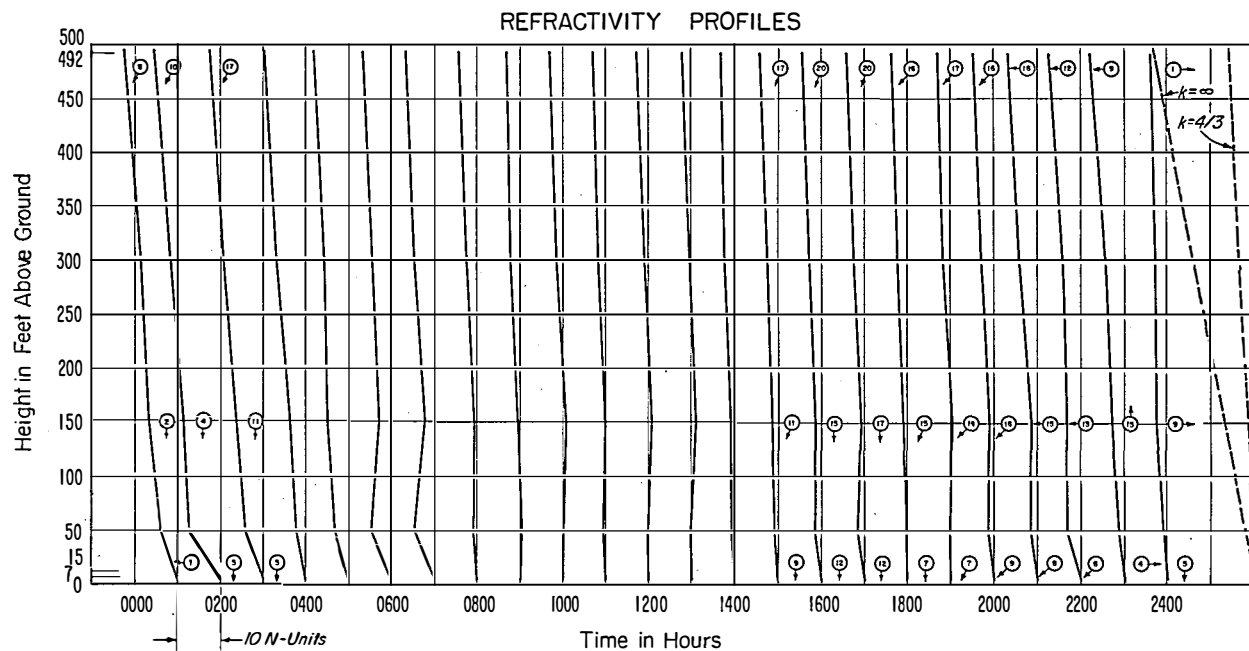


Figure 13



RADIO-METEOROLOGICAL OBSERVATIONS
HASWELL, COLORADO
FEBRUARY 16, 1954

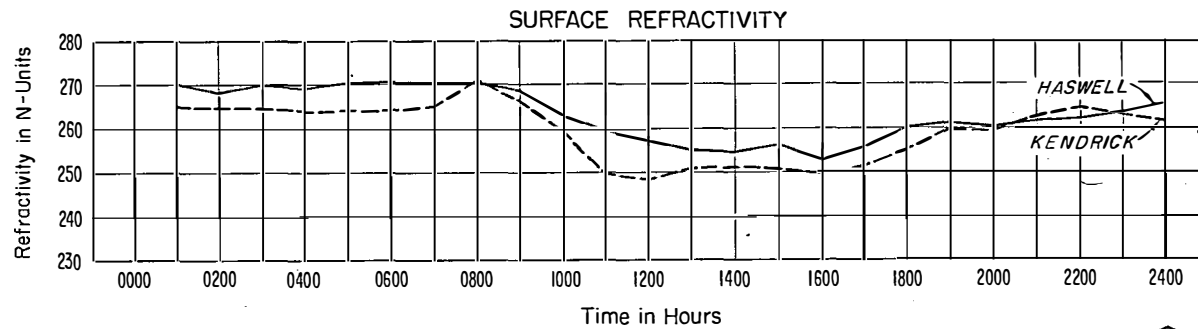
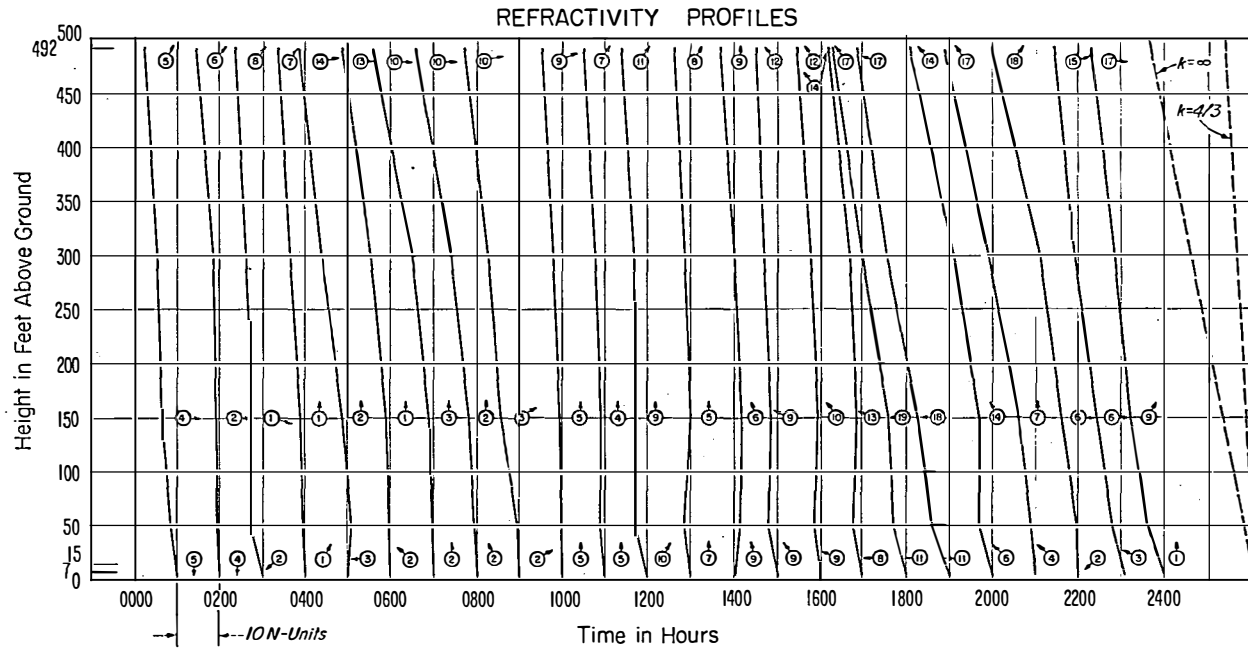


Figure 14



RADIO-METEOROLOGICAL OBSERVATIONS
 HASWELL, COLORADO
 FEBRUARY 17, 1954

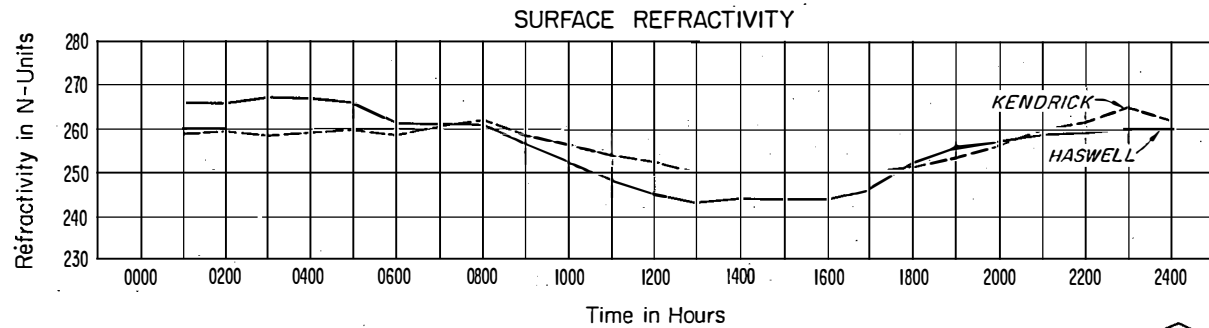
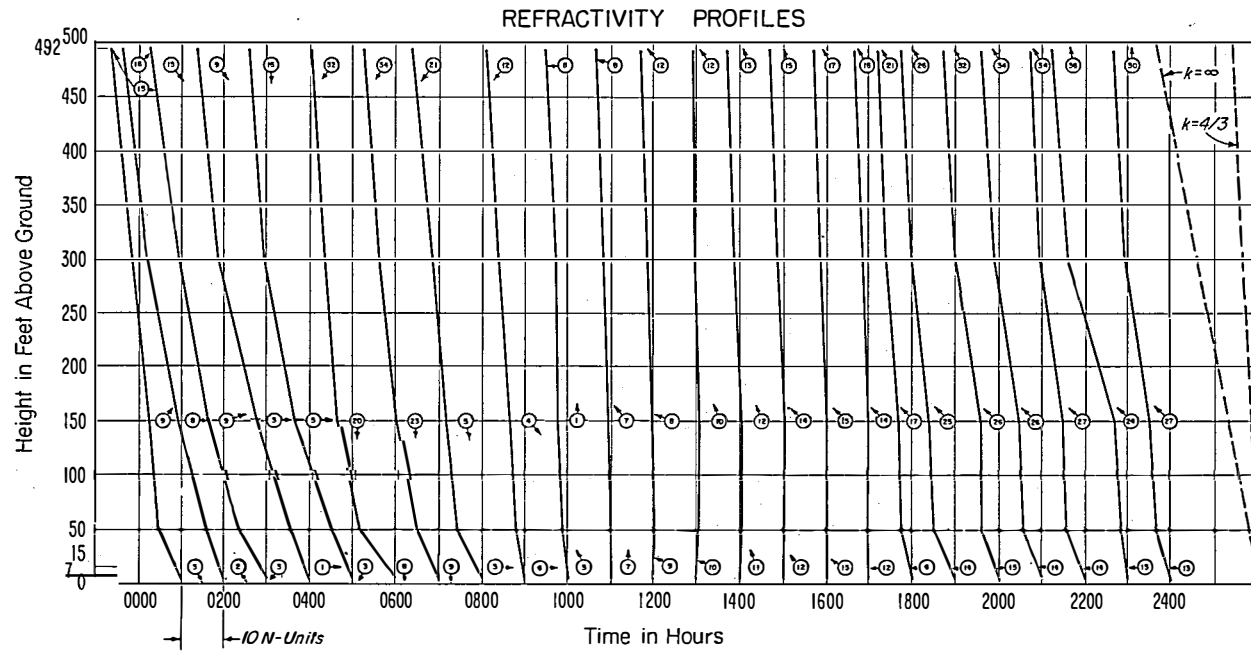


Figure 15



RADIO-METEOROLOGICAL OBSERVATIONS
HASWELL, COLORADO
FEBRUARY 18, 1954

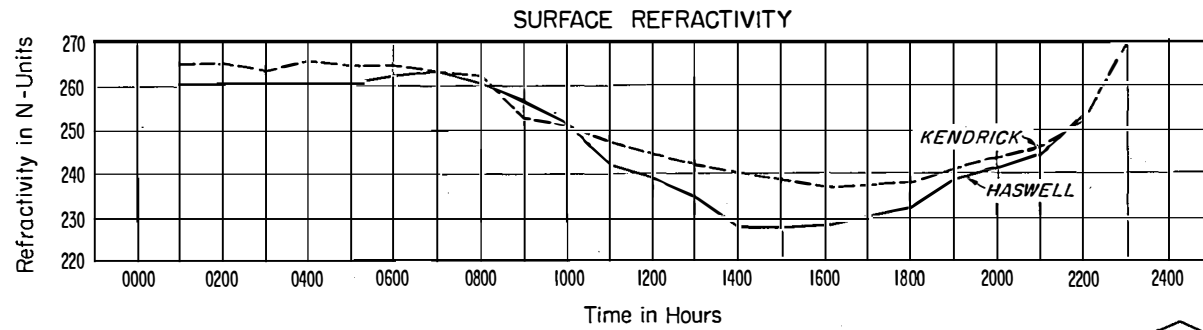
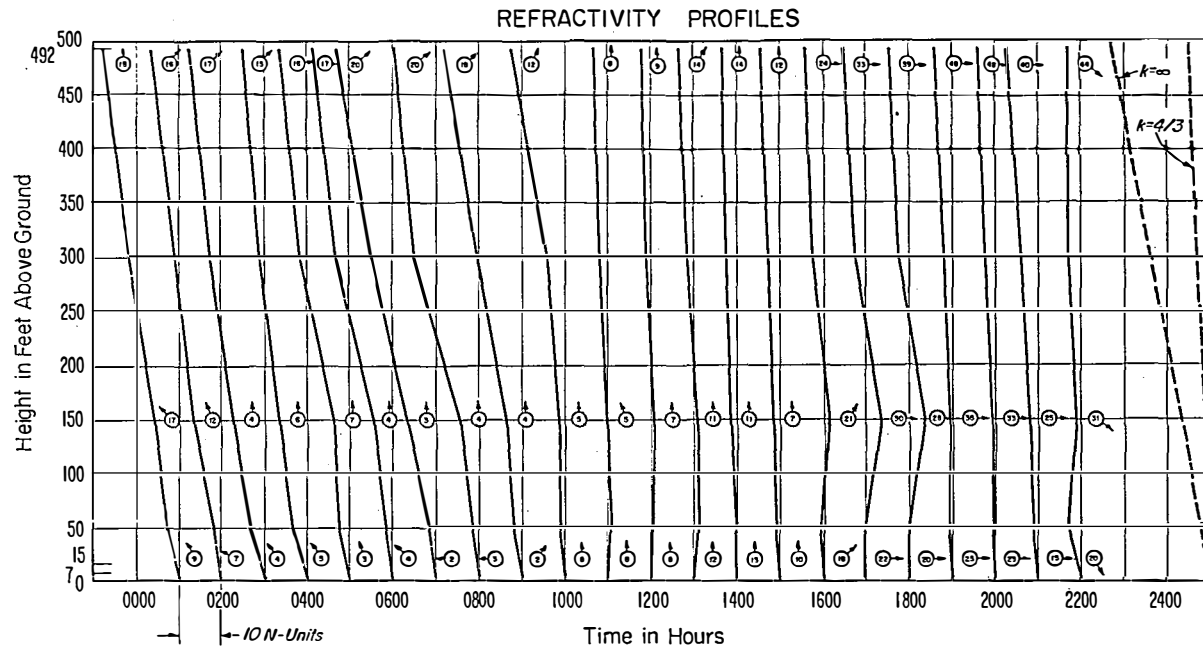


Figure 16



RADIO - METEOROLOGICAL OBSERVATIONS
 HASWELL, COLORADO
 FEBRUARY 23, 1954

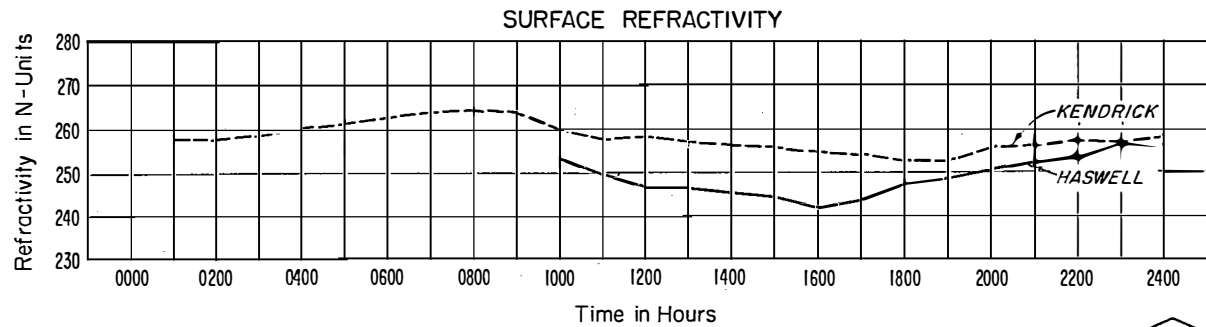
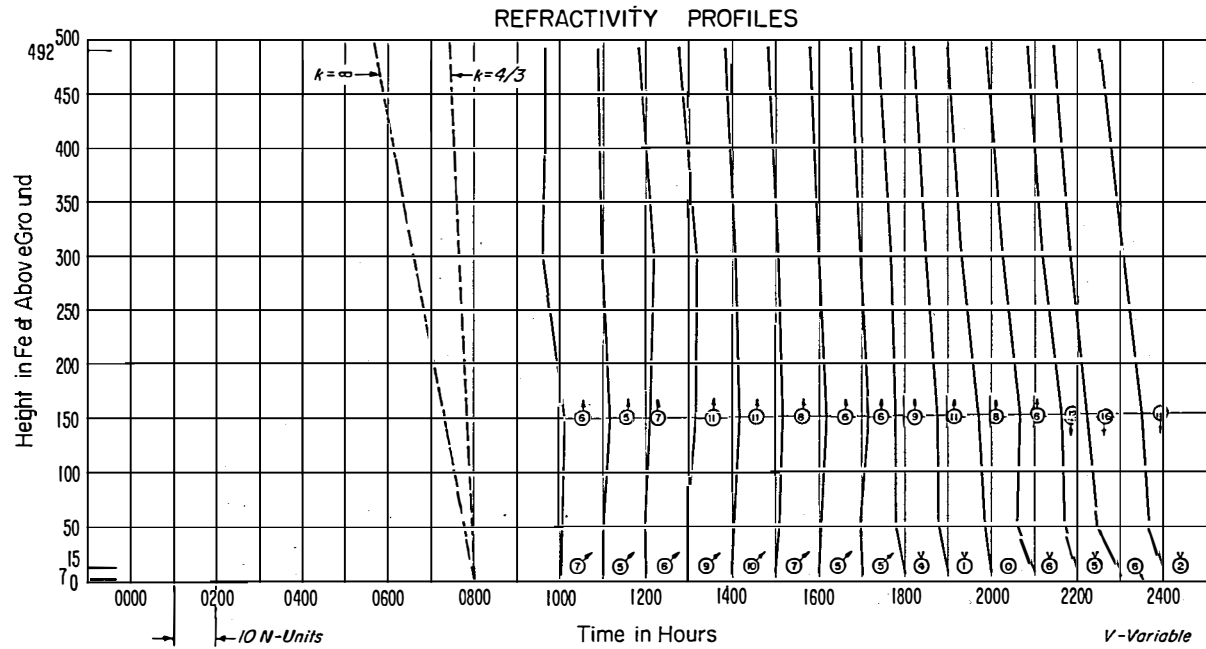


Figure 17



RADIO-METEOROLOGICAL OBSERVATIONS
 HASWELL, COLORADO
 FEBRUARY 24, 1954

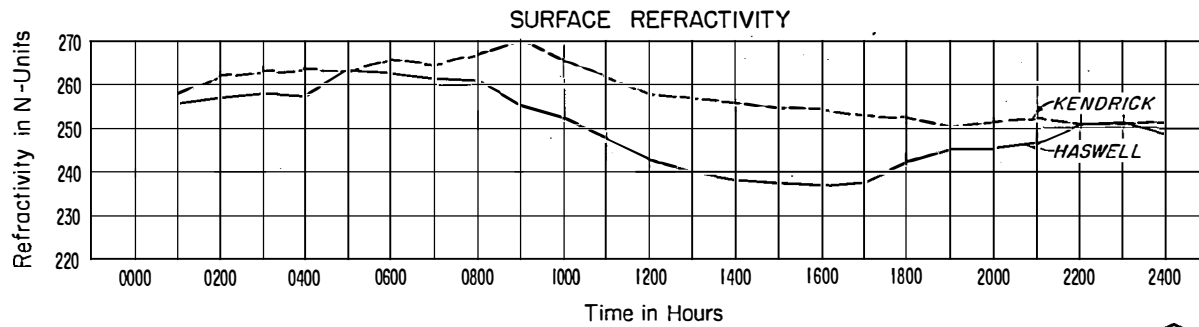
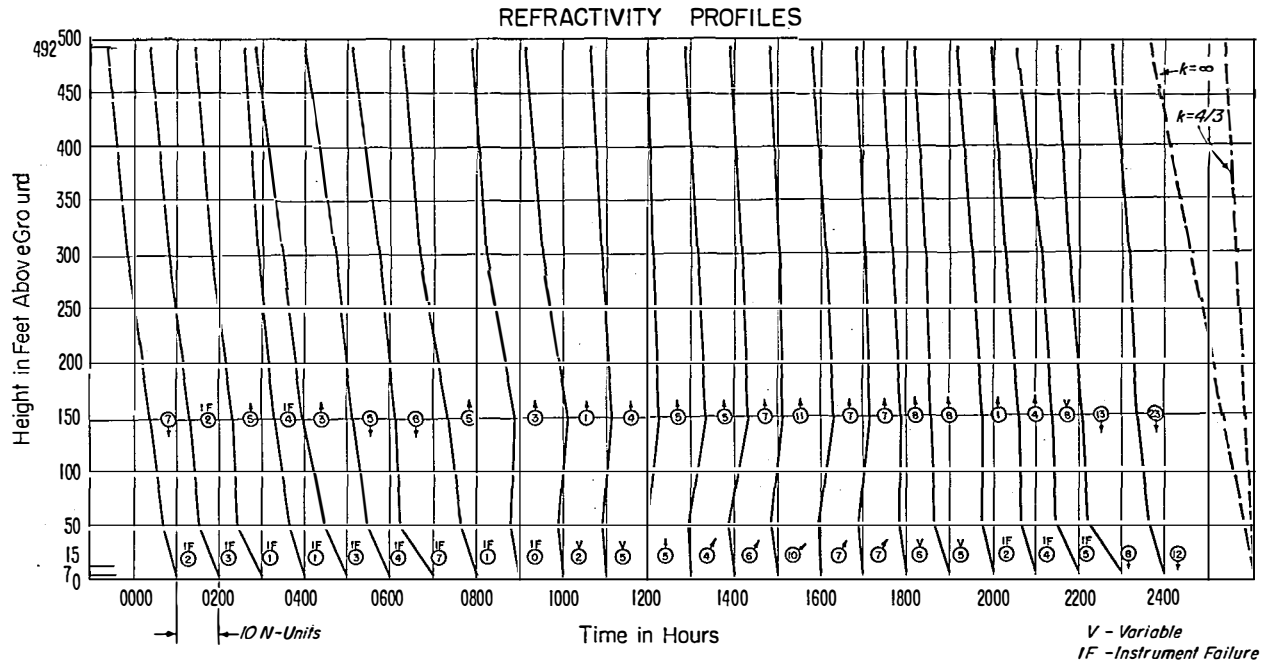
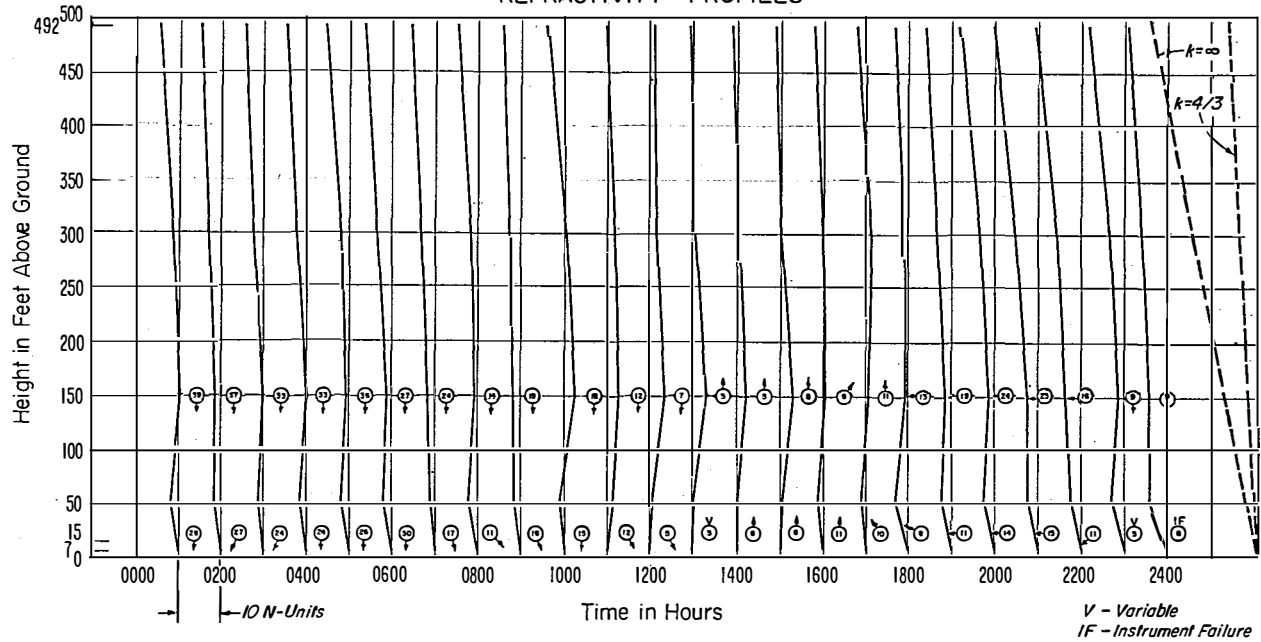


Figure 1B



RADIO-METEOROLOGICAL OBSERVATIONS
 HASWELL, COLORADO
 FEBRUARY 25, 1954

REFRACTIVITY PROFILES



SURFACE REFRACTIVITY

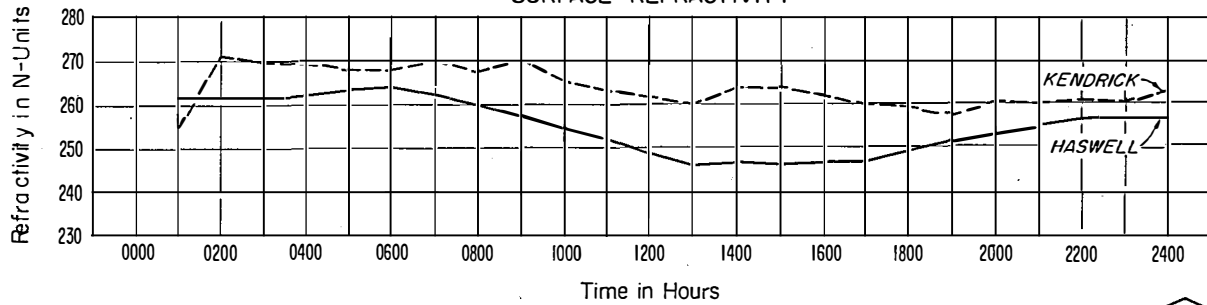


Figure 19



RADIO-METEOROLOGICAL OBSERVATIONS
 HASWELL, COLORADO
 FEBRUARY 26, 1954

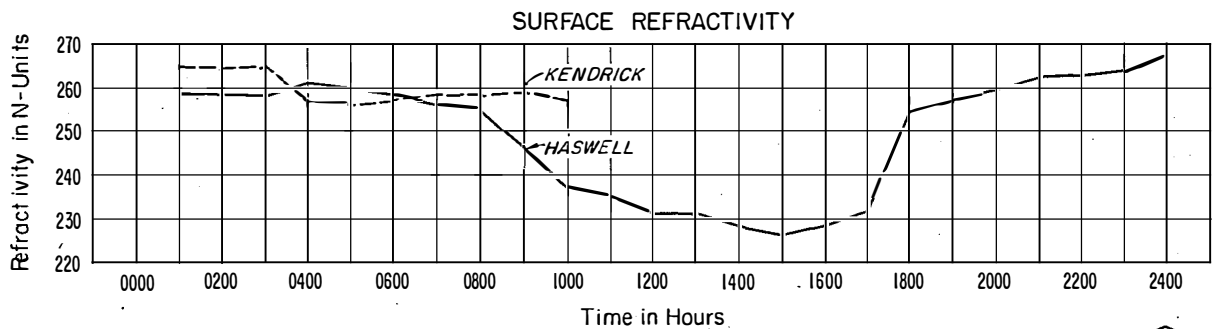
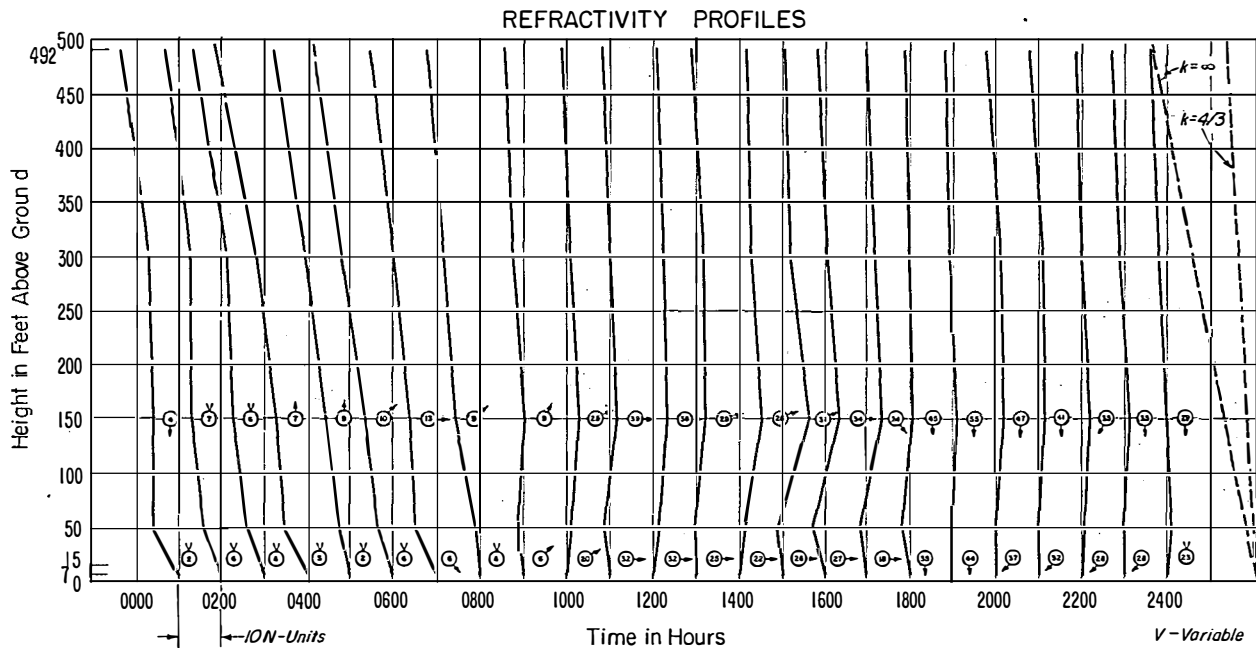
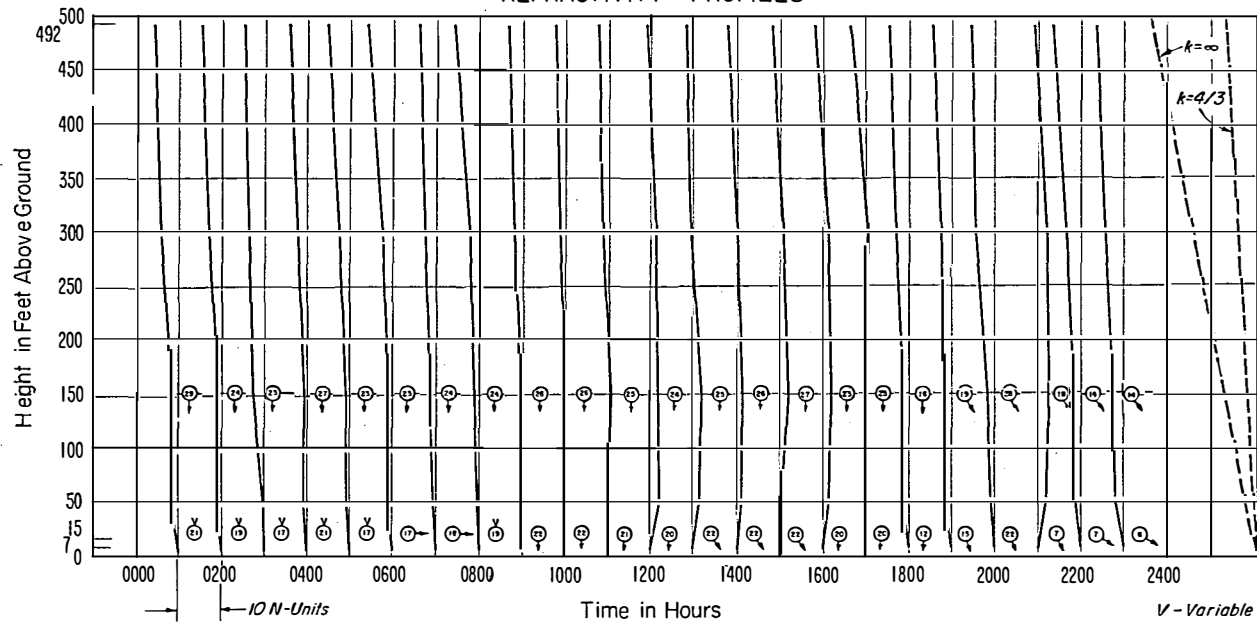


Figure 20



RADIO-METEOROLOGICAL OBSERVATIONS
 HASWELL, COLORADO
 FEBRUARY 27, 1954

REFRACTIVITY PROFILES



SURFACE REFRACTIVITY

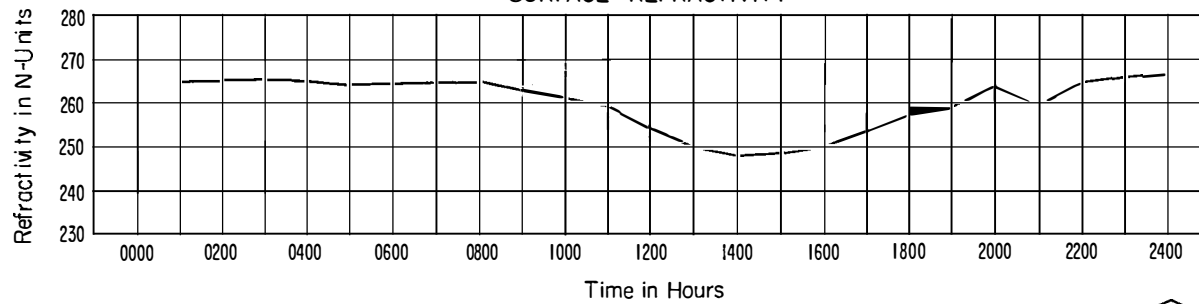


Figure 21



RADIO-METEOROLOGICAL OBSERVATIONS
HASWELL, COLORADO.
FEBRUARY 28, 1954

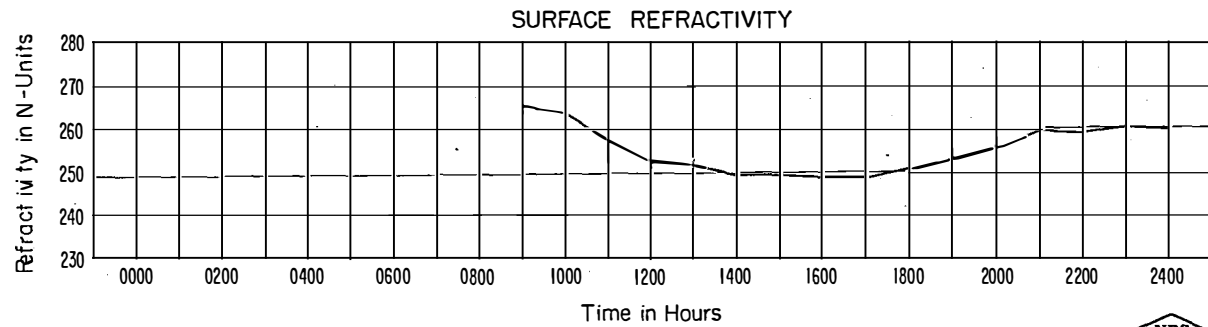
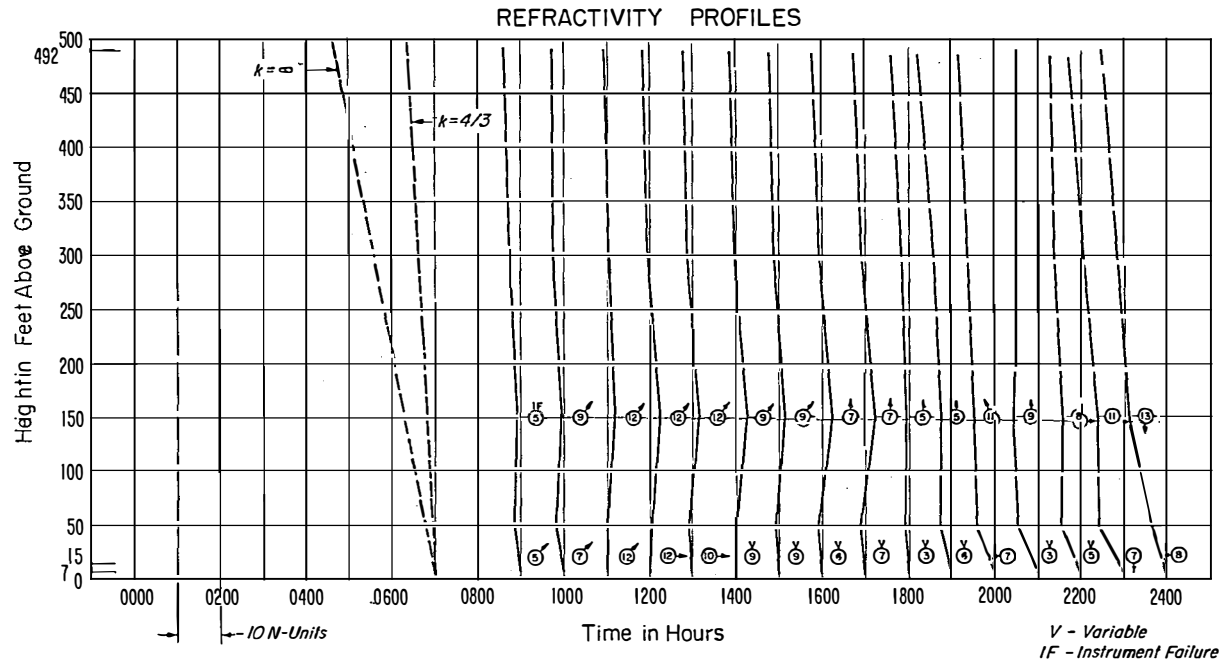


Figure 22



RADIO-METEOROLOGICAL OBSERVATIONS
HASWELL, COLORADO
MARCH 1, 1954

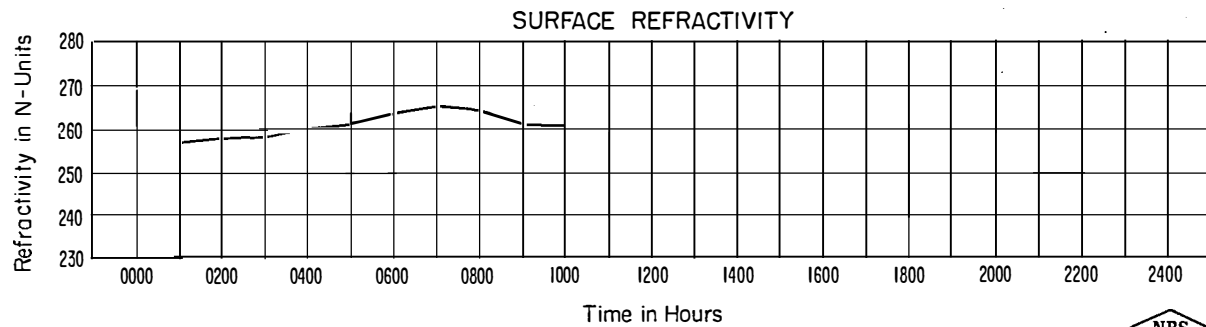
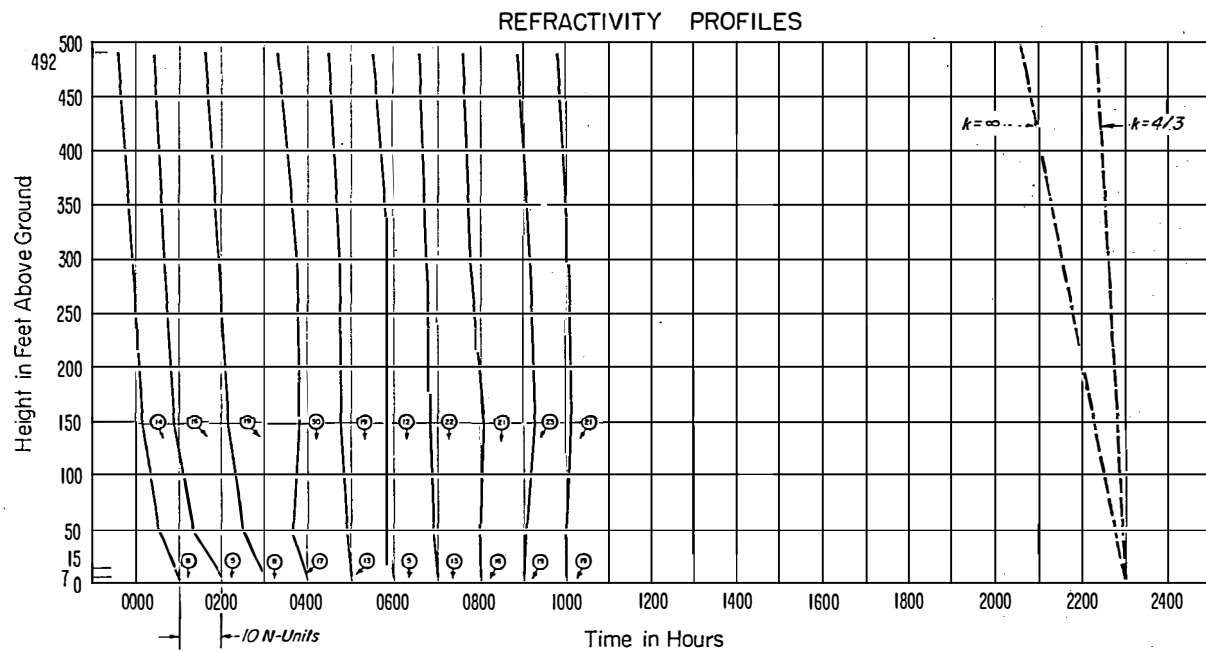


Figure 23



DIURNAL VARIATION OF HOURLY AVERAGE
REFRACTIVE INDEX GRADIENT
AT HASWELL, COLORADO
FOR THE PERIOD FEBRUARY 14 TO MARCH 1, 1954

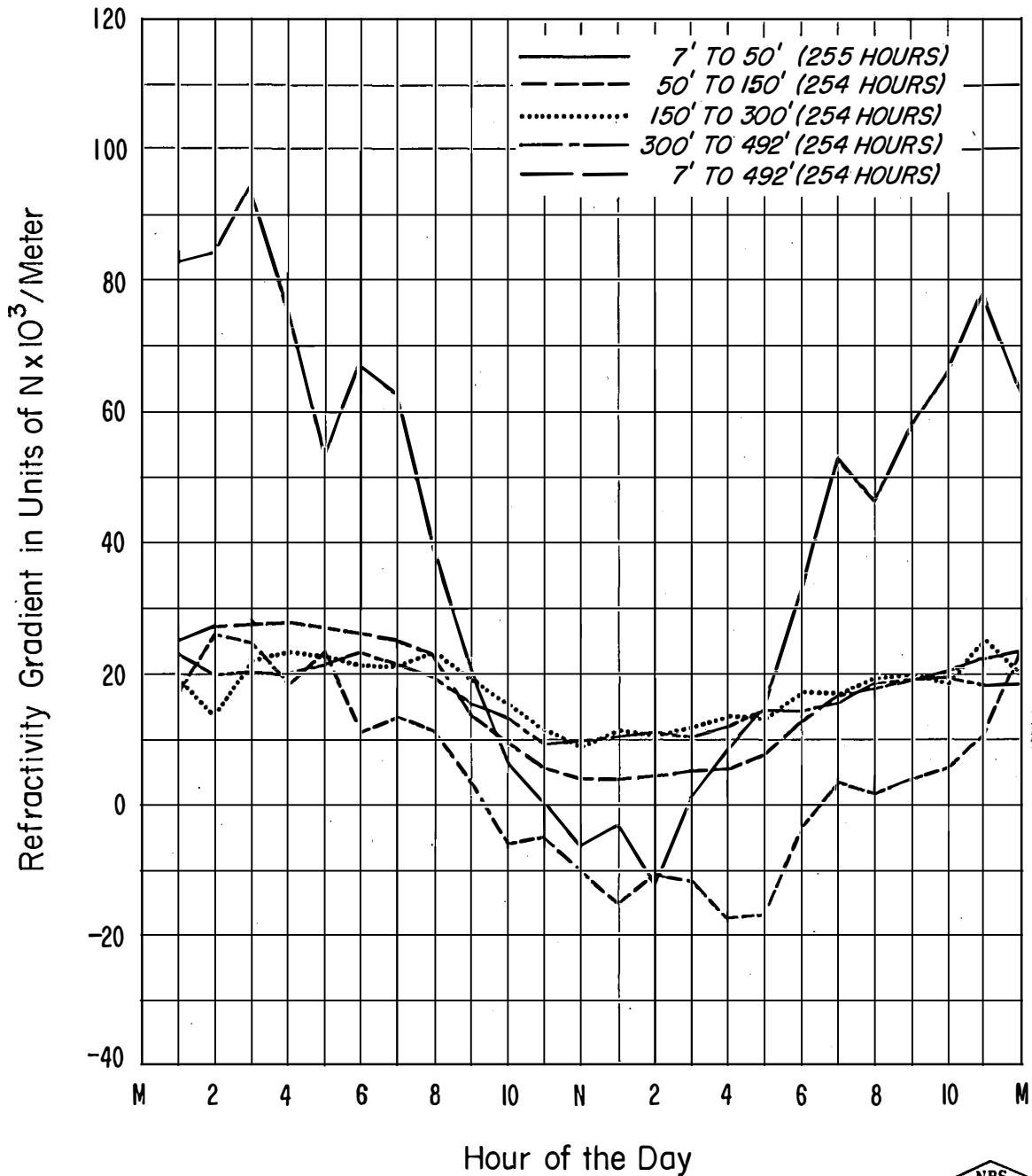


Figure 24



REFRACTIVITY PROFILES
DENVER, COLORADO AND DODGE CITY, KANSAS
FEBRUARY 15, 1954

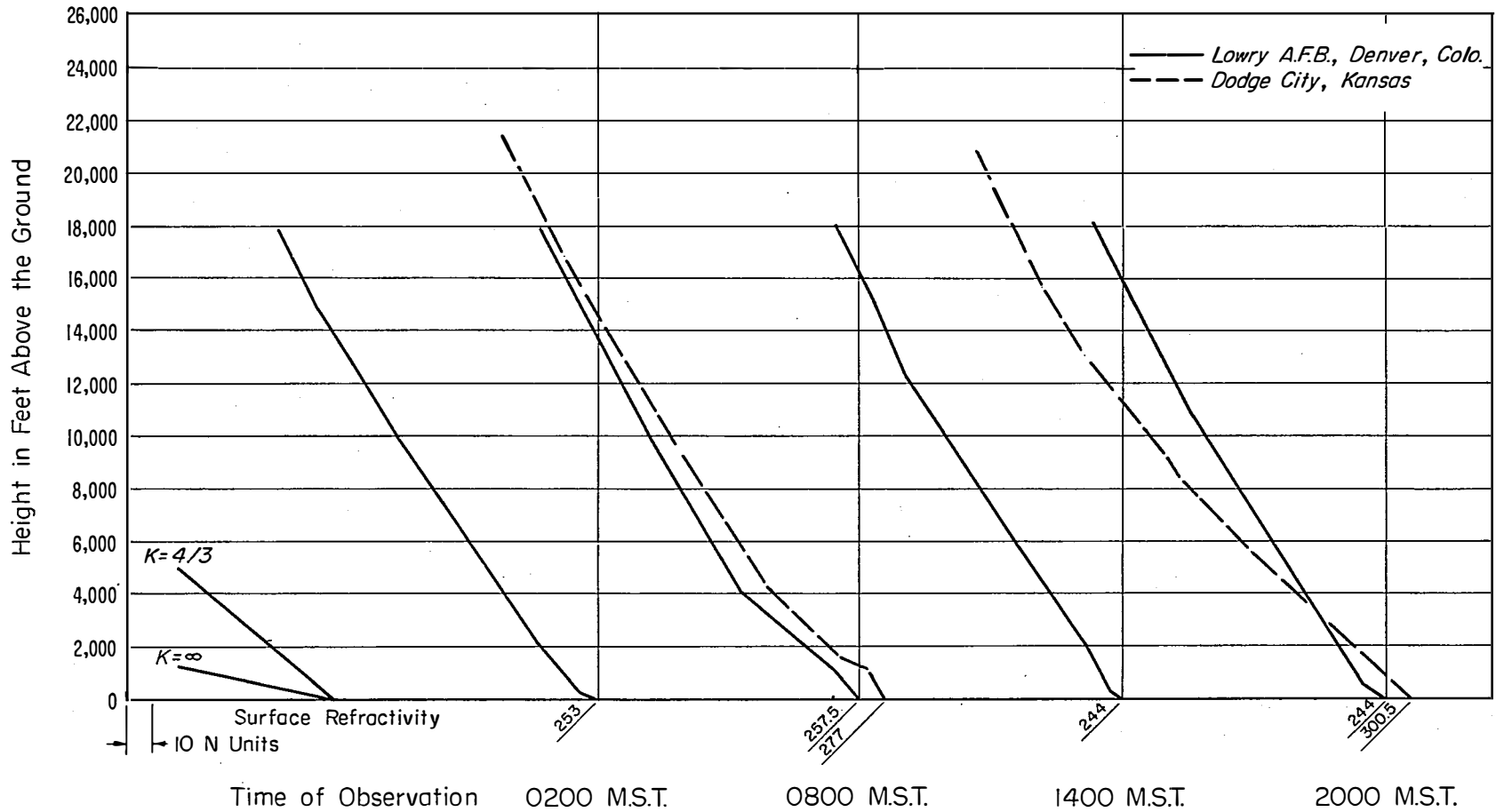


Figure 25

REFRACTIVITY PROFILES

DENVER, COLORADO AND DODGE CITY, KANSAS

FEBRUARY 16, 1954

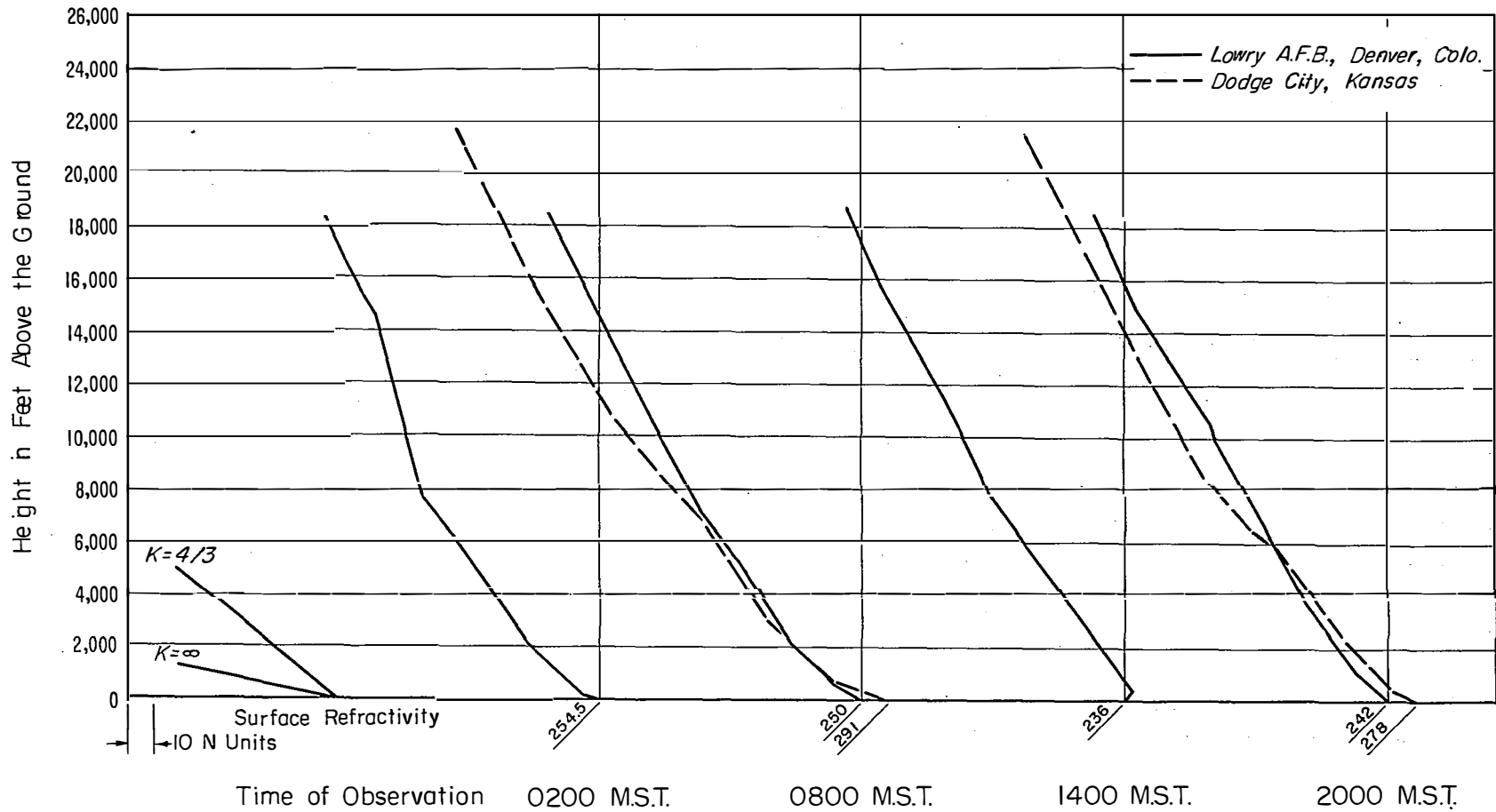


Figure 26

REFRACTIVITY PROFILES DENVER, COLORADO AND DODGE CITY, KANSAS FEBRUARY 17, 1954

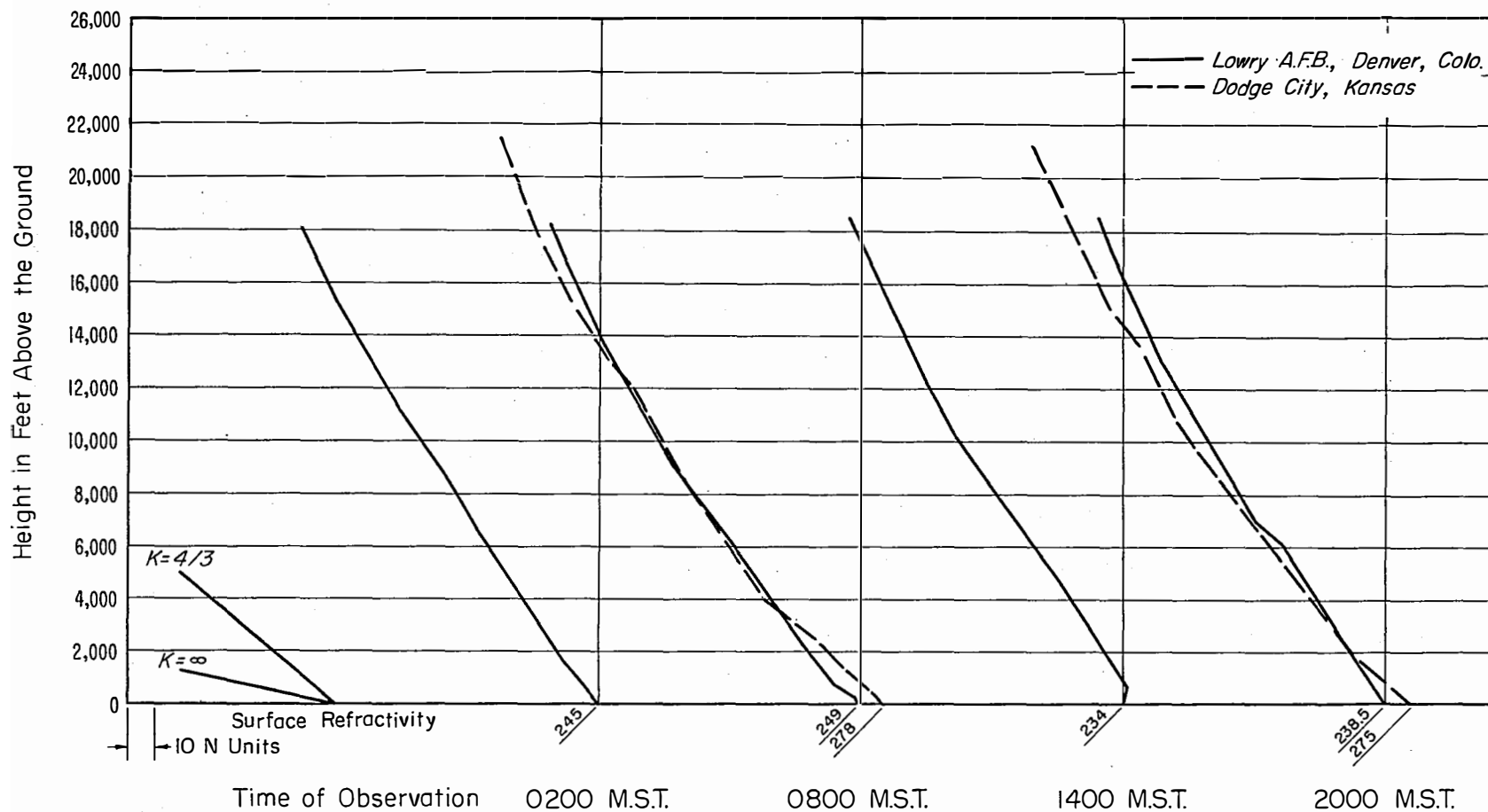


Figure 27

REFRACTIVITY PROFILES
DENVER, COLORADO AND DODGE CITY, KANSAS
FEBRUARY 18, 1954.

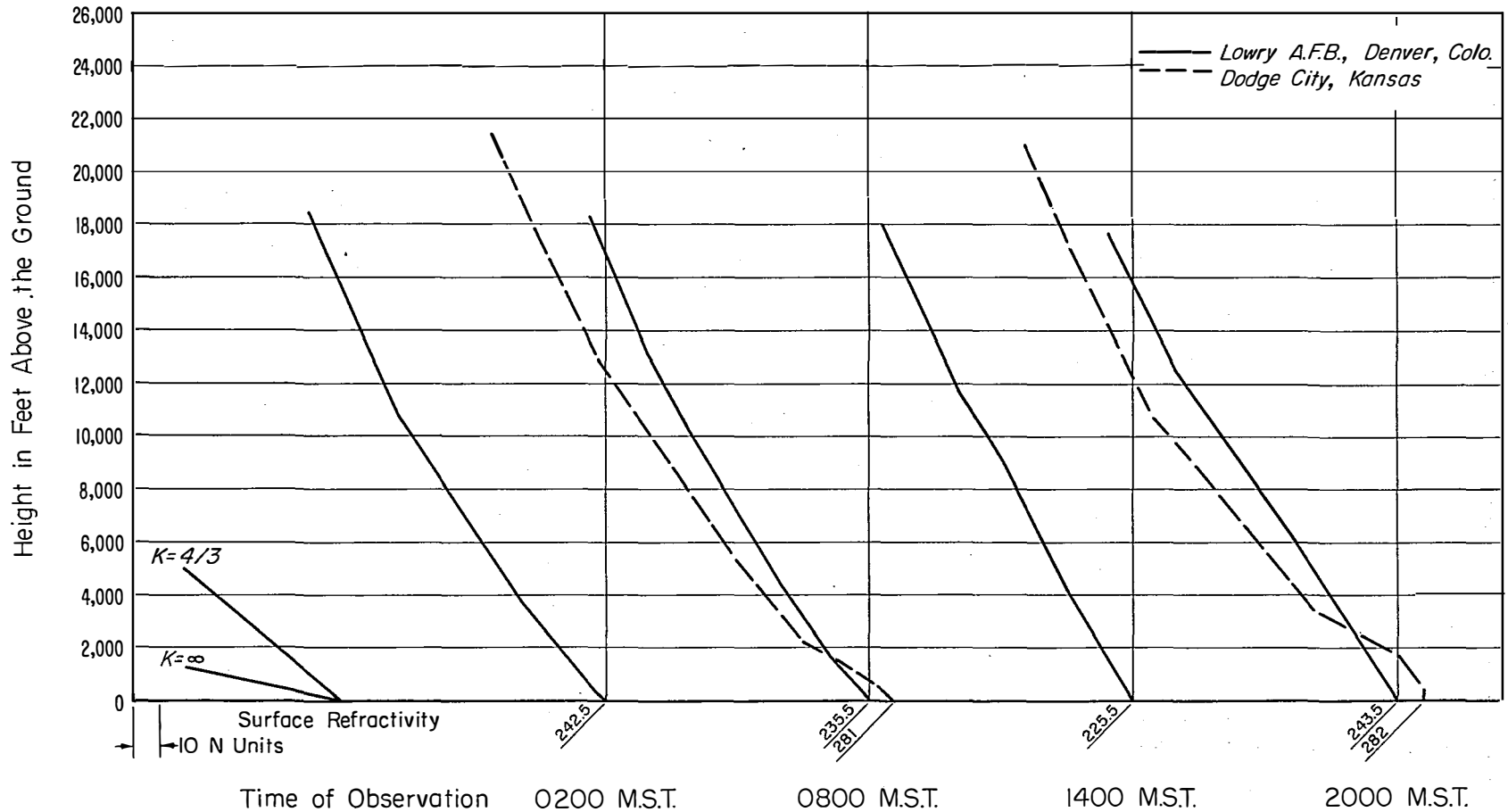


Figure 28



REFRACTIVITY PROFILES
DENVER, COLORADO AND DODGE CITY, KANSAS
FEBRUARY 19, 1954

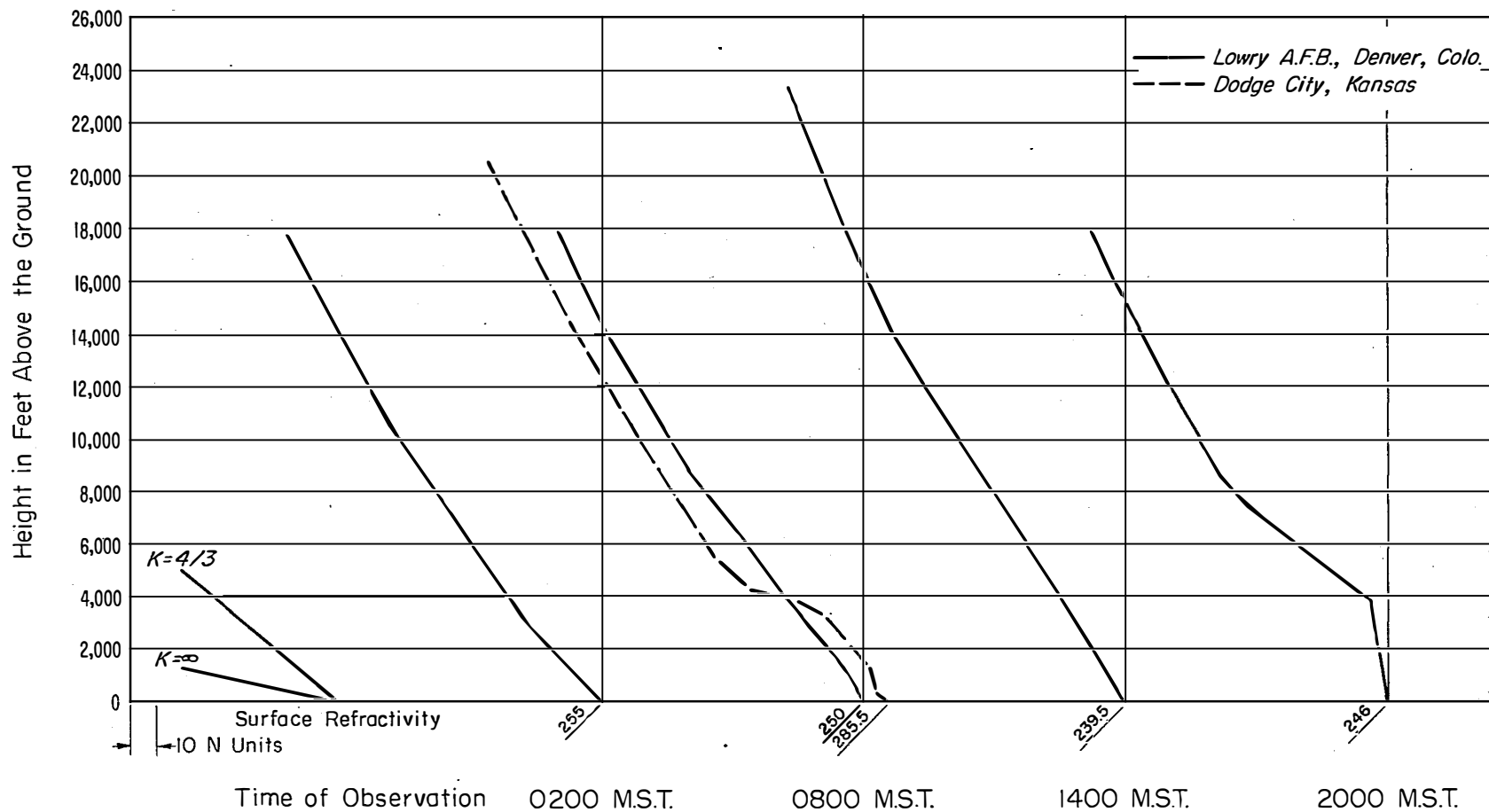


Figure 29



REFRACTIVITY PROFILES
 DENVER, COLORADO AND DODGE CITY, KANSAS
 FEBRUARY 20, 1954

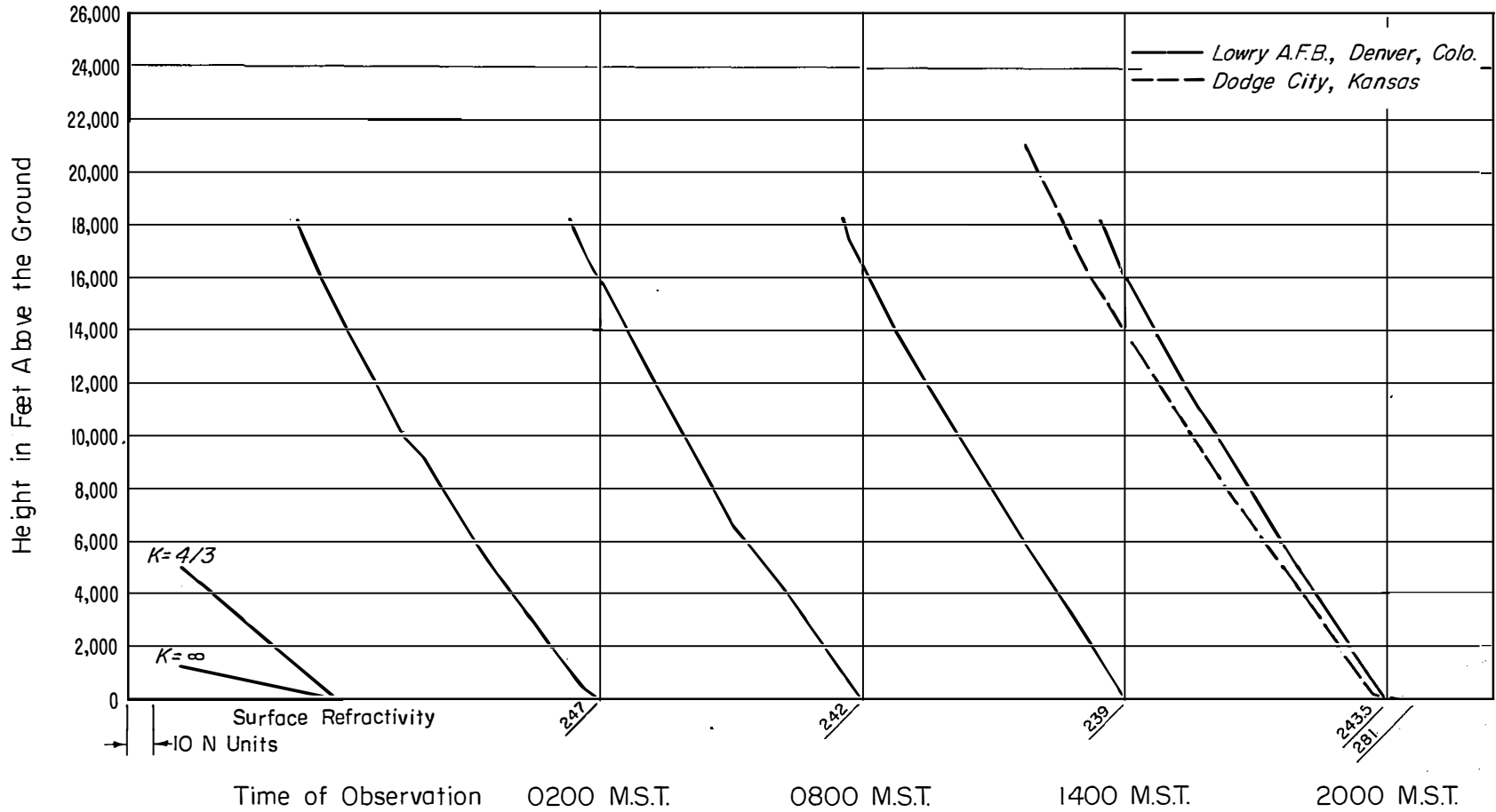


Figure 30

REFRACTIVITY PROFILES
DENVER, COLORADO AND DODGE CITY, KANSAS
FEBRUARY 21, 1954

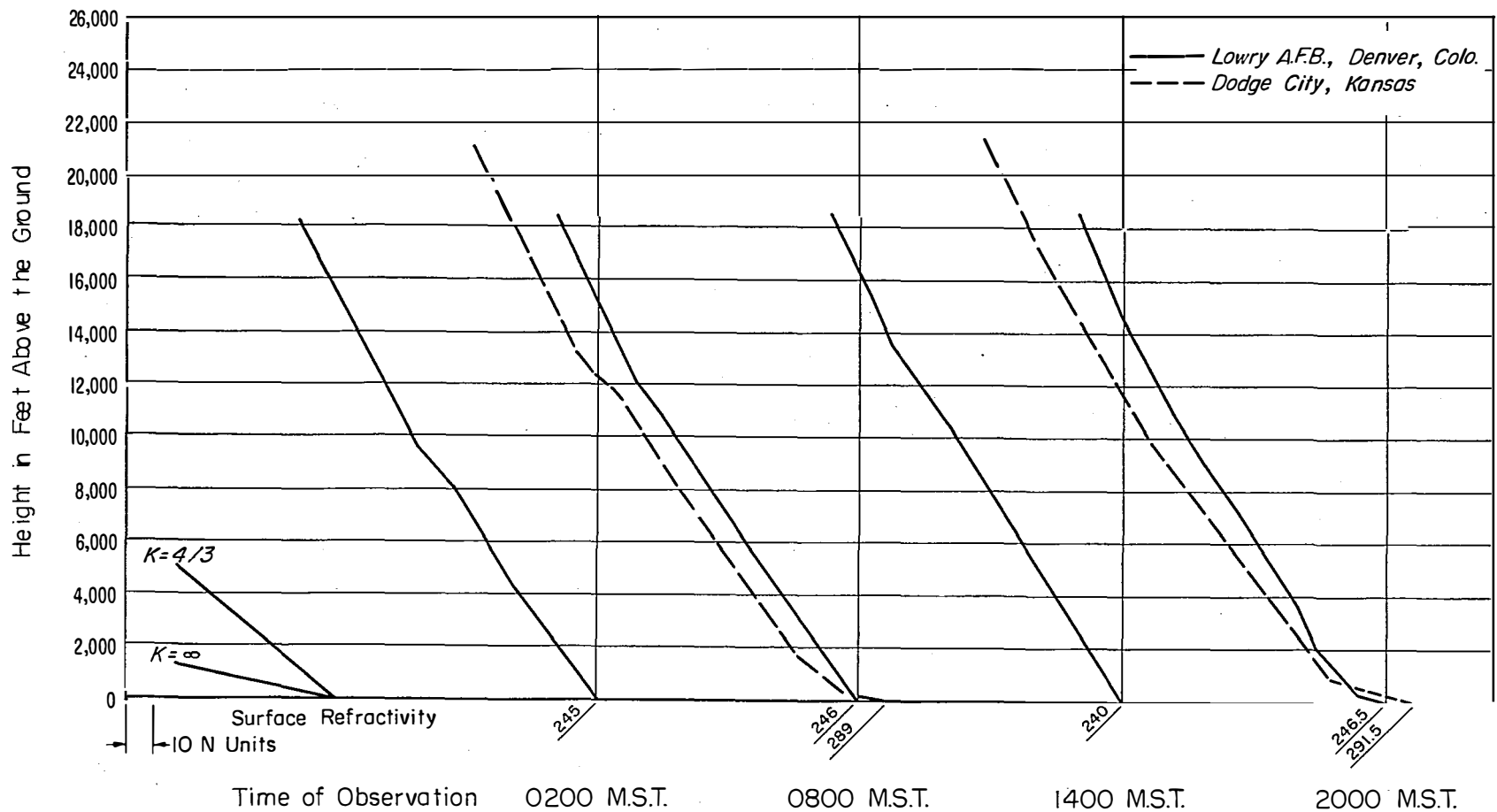


Figure 31

REFRACTIVITY PROFILES
DENVER, COLORADO AND DODGE CITY, KANSAS
FEBRUARY 22, 1954

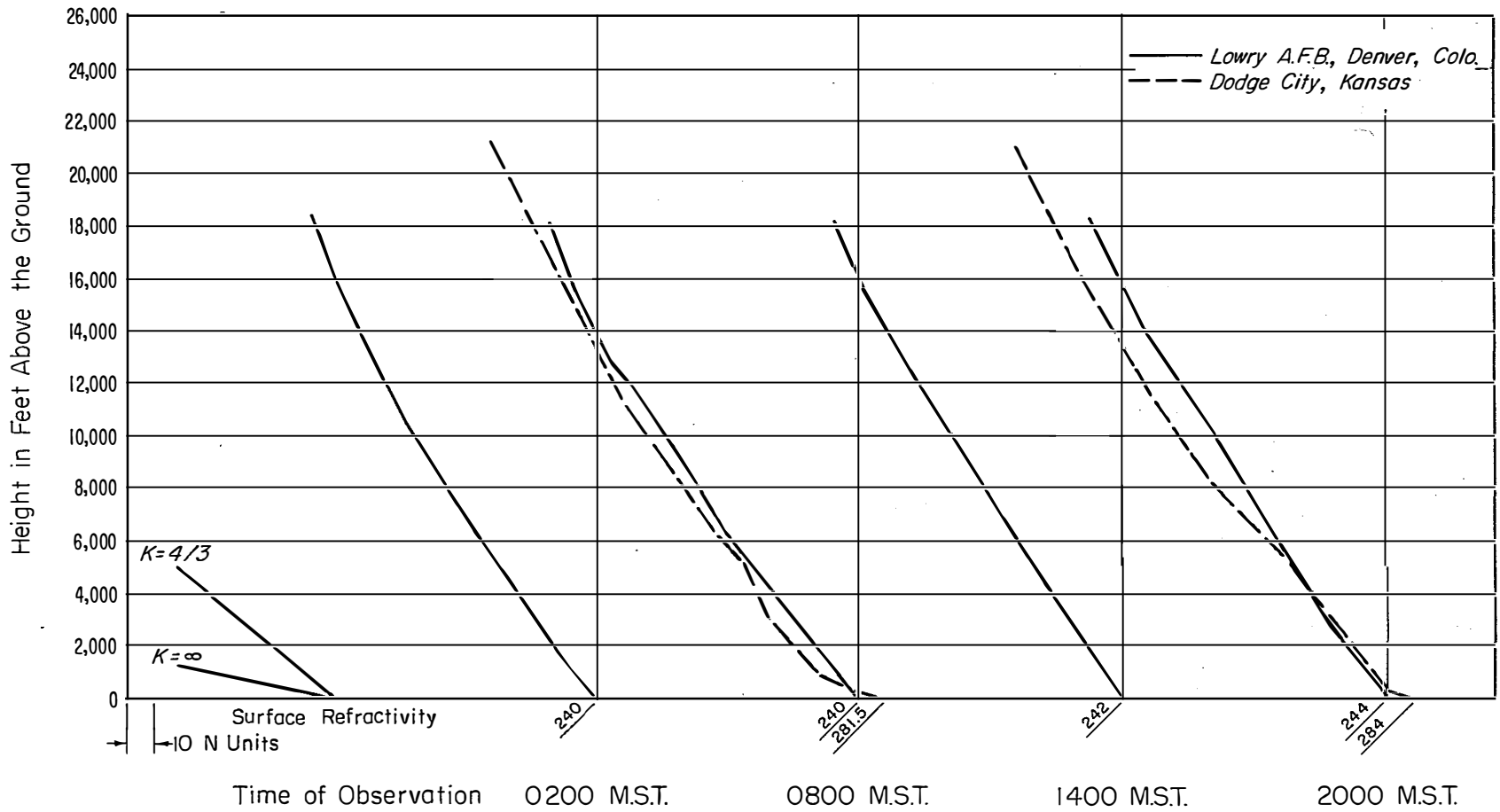


Figure 32

REFRACTIVITY PROFILES
DENVER, COLORADO AND DODGE CITY, KANSAS
FEBRUARY 23, 1954

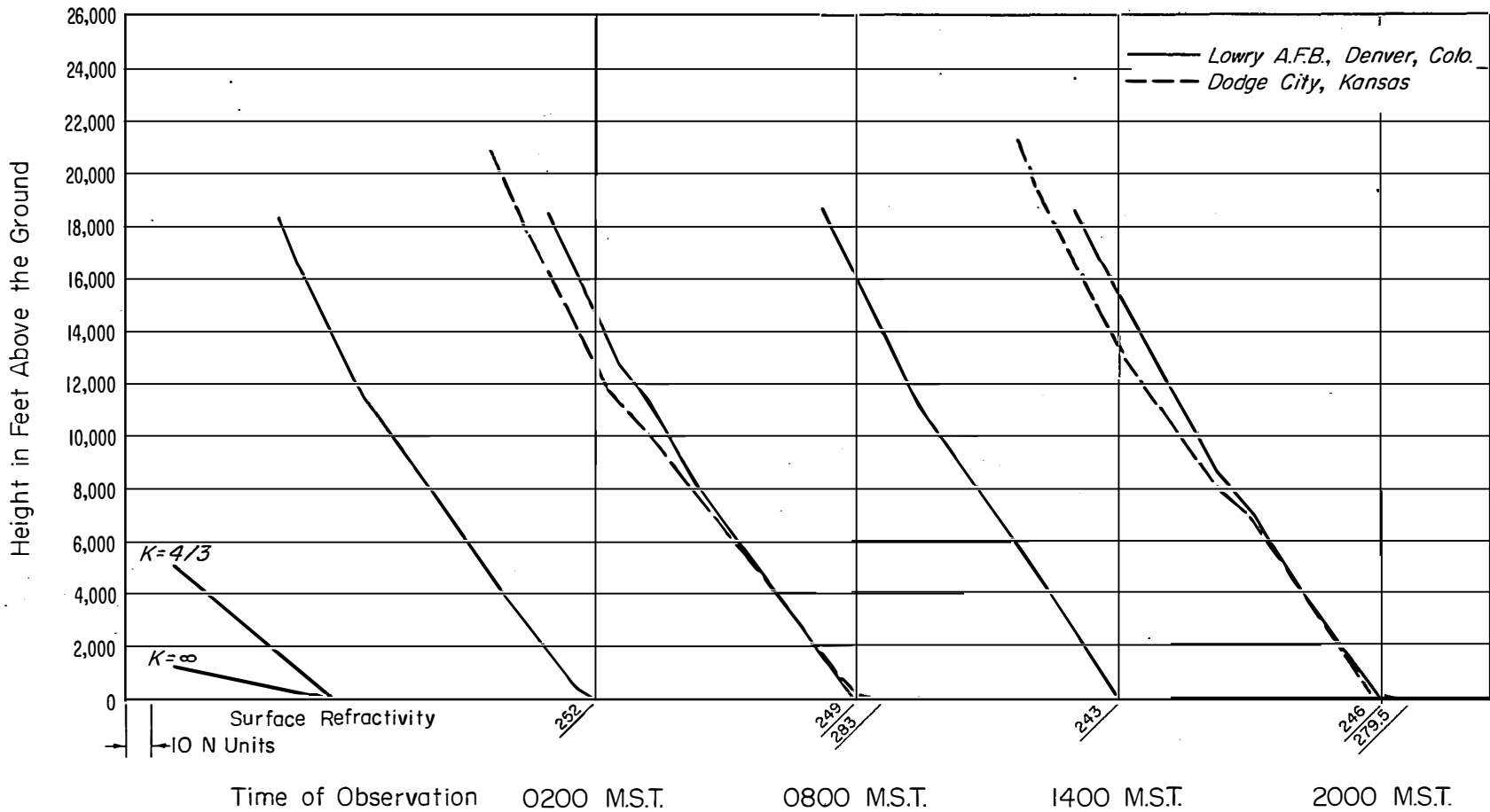


Figure 33

REFRACTIVITY PROFILES

DENVER, COLORADO AND DODGE CITY, KANSAS

FEBRUARY 24, 1954

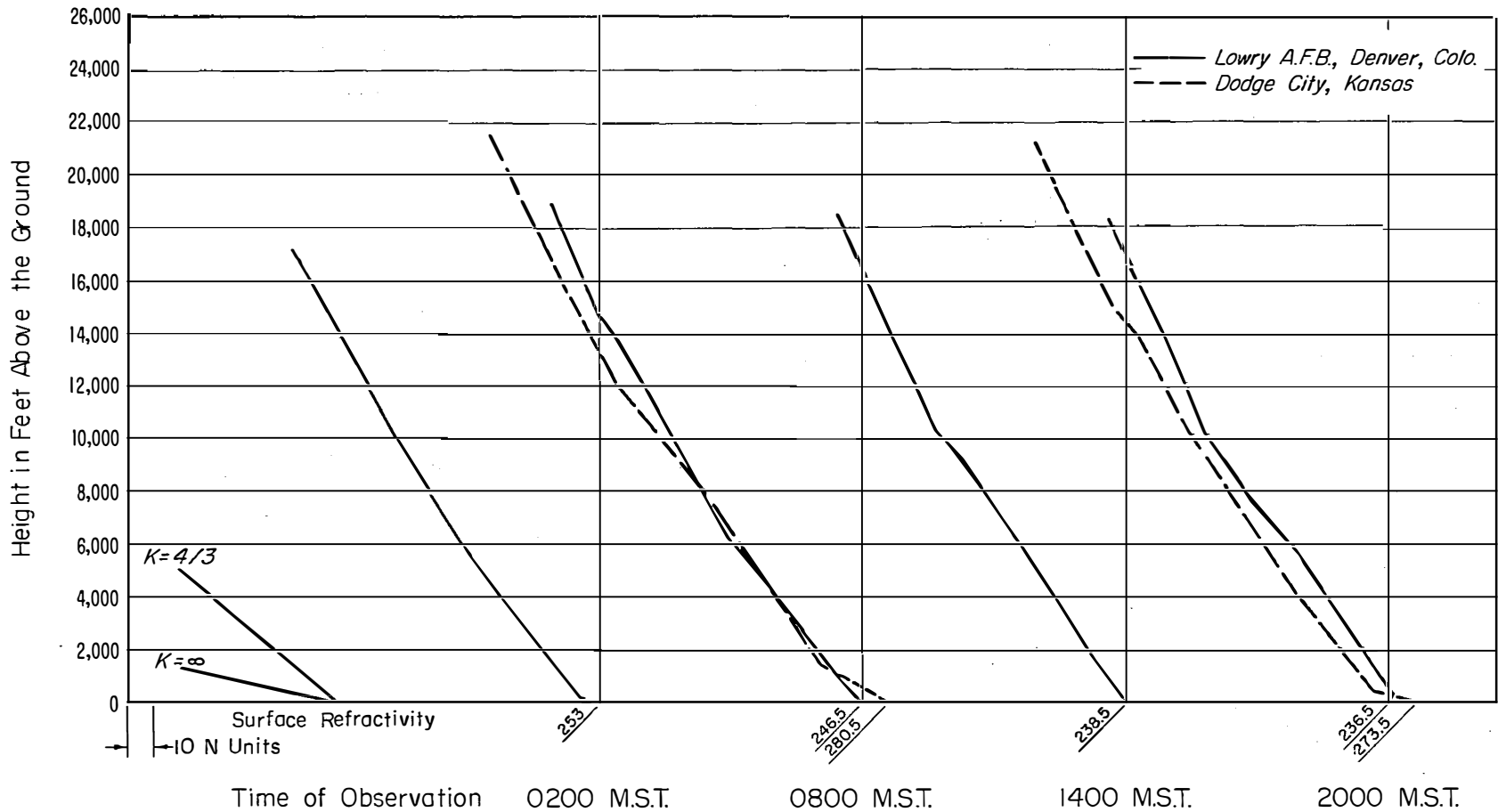


Figure 34



REFRACTIVITY PROFILES
 DENVER, COLORADO AND DODGE CITY, KANSAS
 FEBRUARY 25, 1954

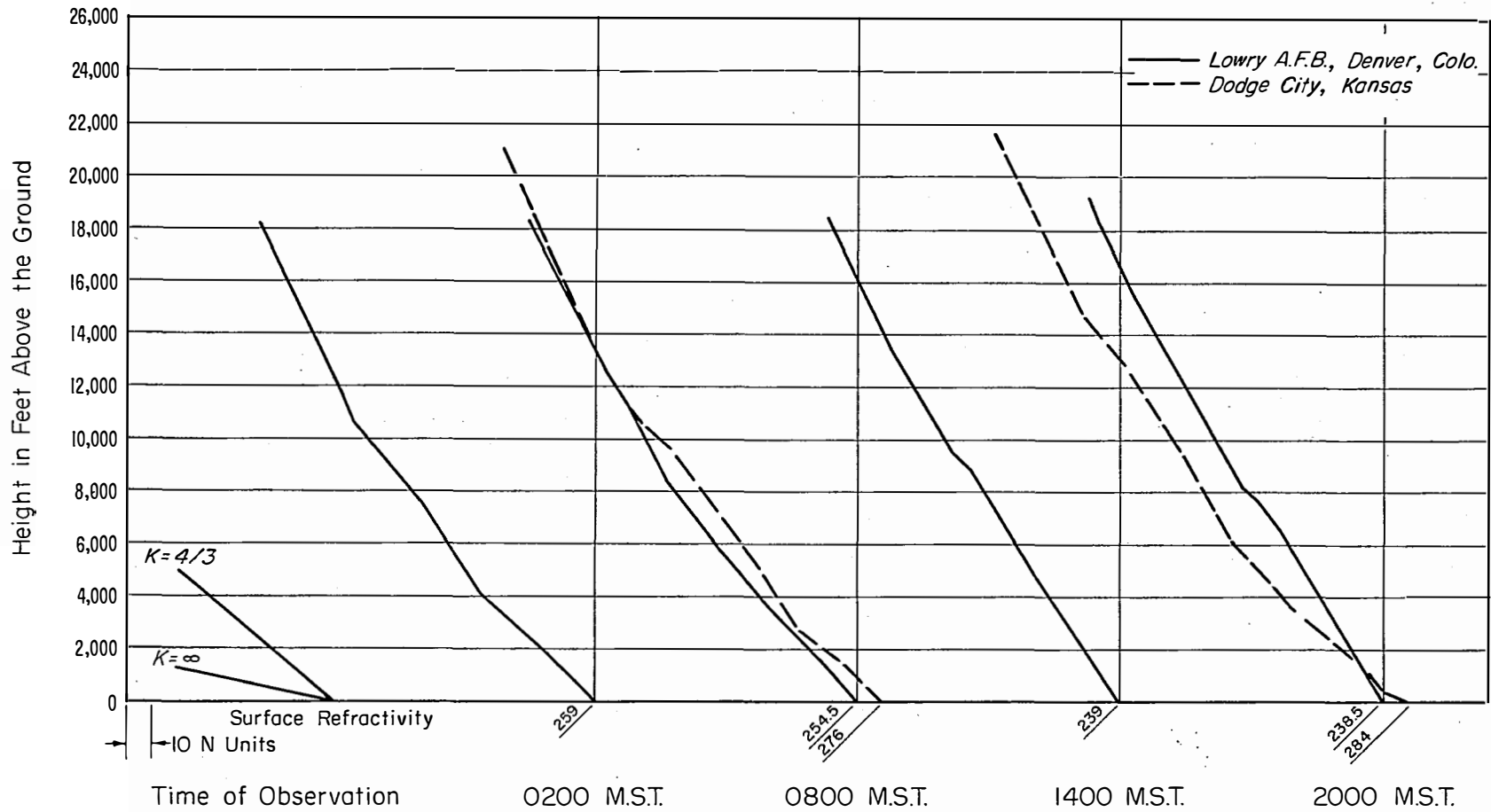


Figure 35

REFRACTIVITY PROFILES
DENVER, COLORADO AND DODGE CITY, KANSAS
FEBRUARY 26, 1954

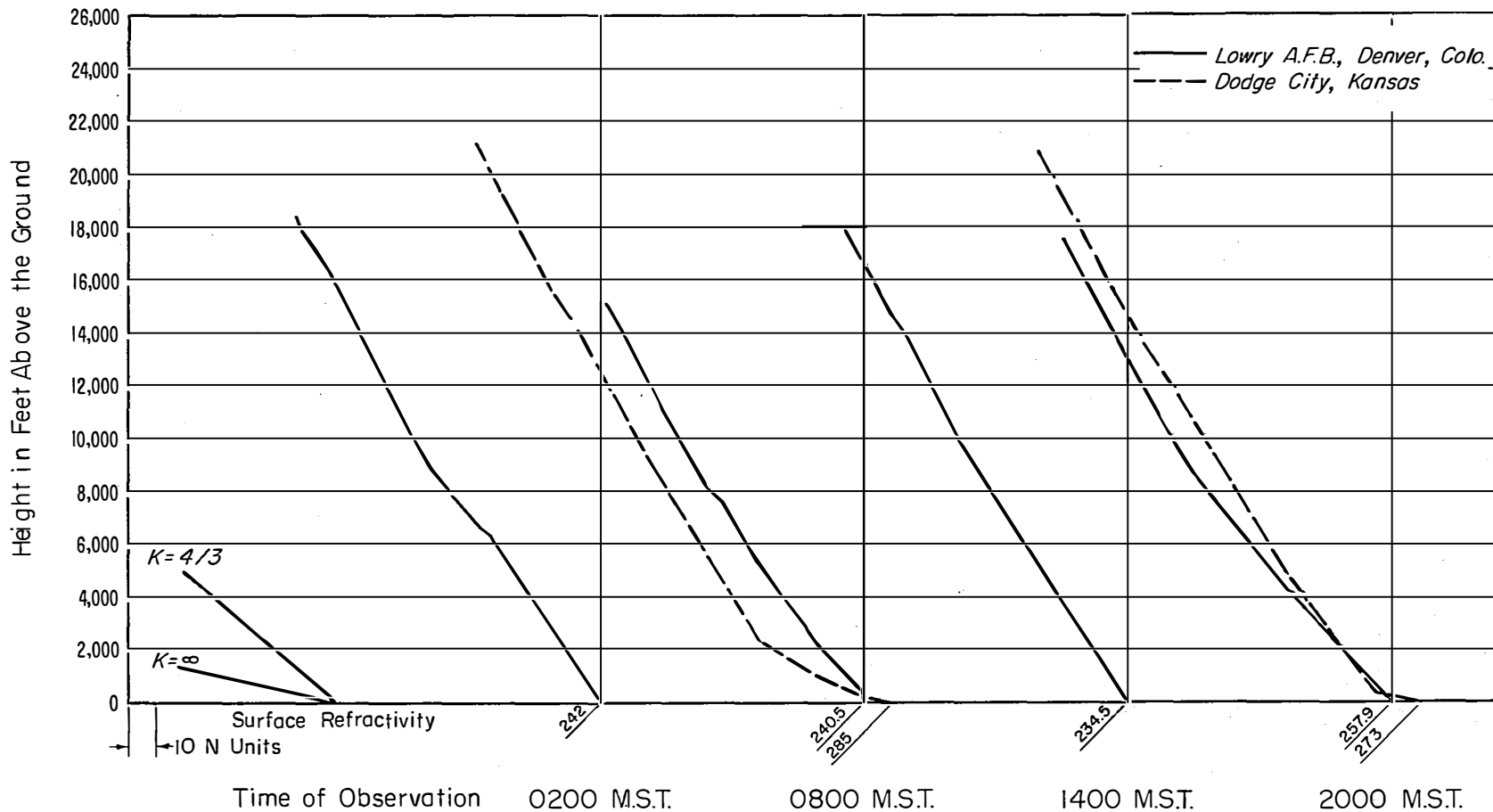
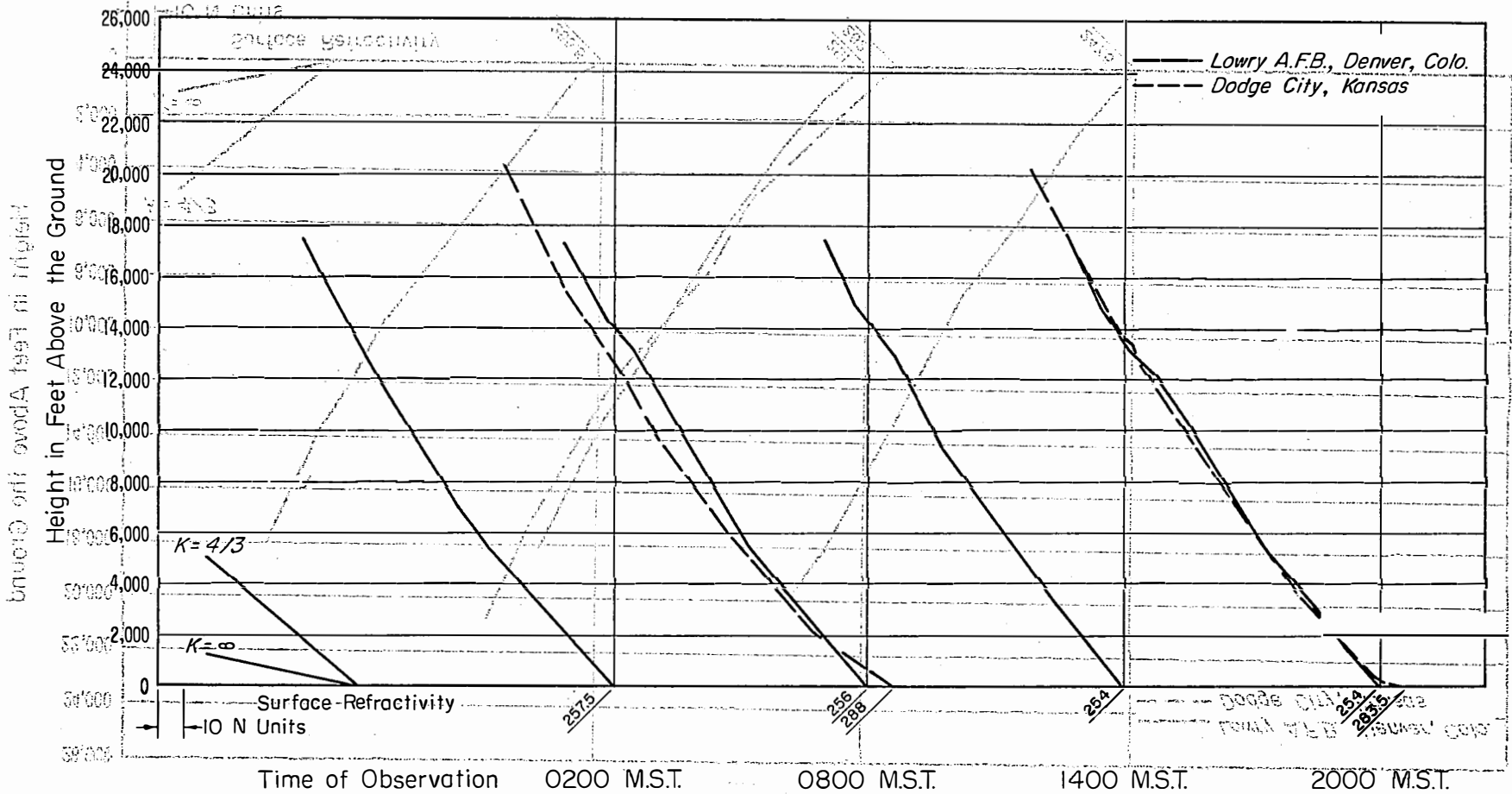


Figure 36

REFRACTIVITY PROFILES
DENVER, COLORADO AND DODGE CITY, KANSAS

FEBRUARY 27, 1954



DENVER, COLORADO AND DODGE CITY, KANSAS
REFRACTIVITY PROFILES
Figure 37



REFRACTIVITY PROFILES DENVER, COLORADO AND DODGE CITY, KANSAS FEBRUARY 28, 1954

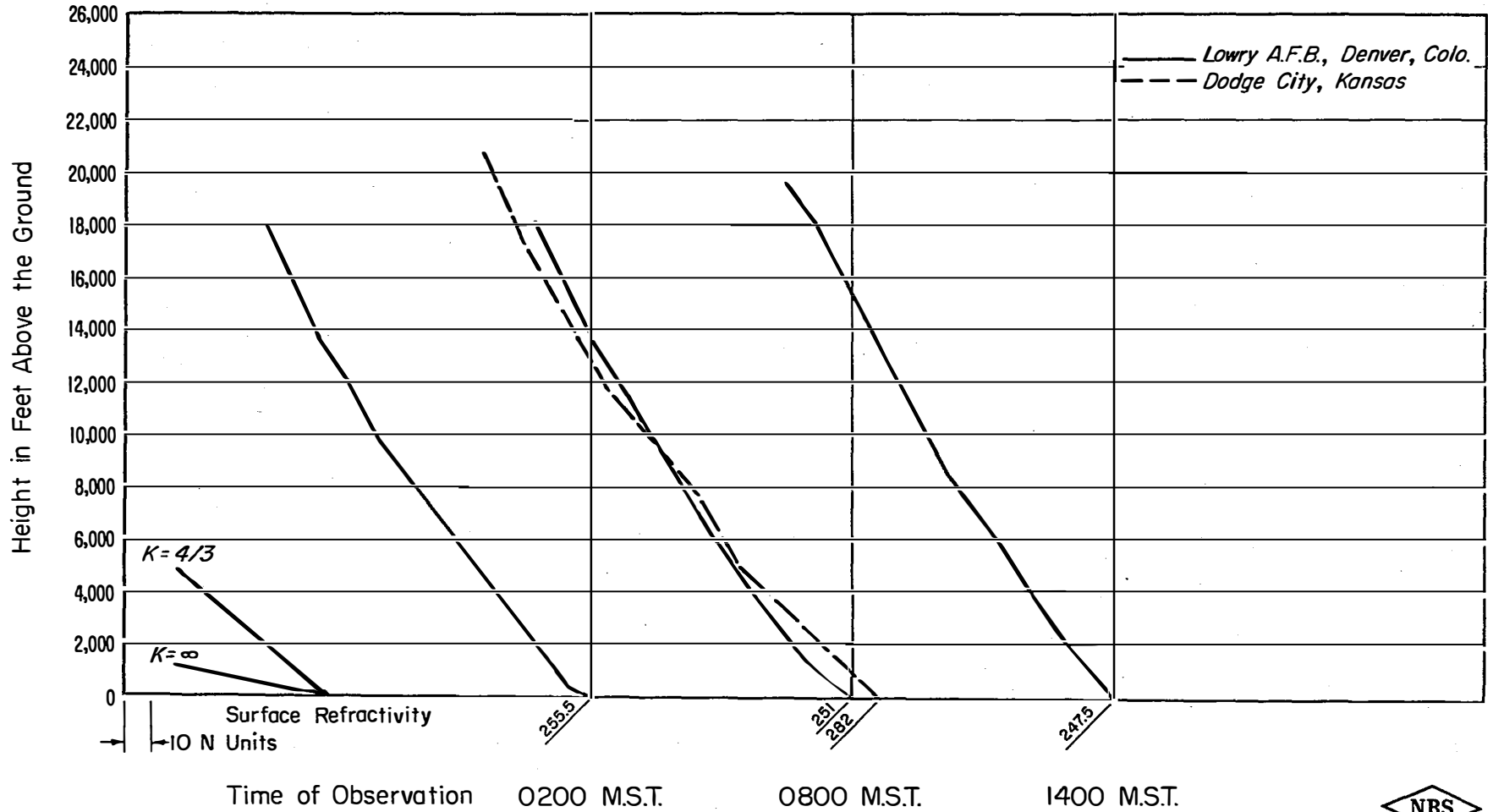


Figure 38



APPENDIX

**Tabulations of Hourly Median Values of Measured
Transmission Loss**

The following tabulations are arranged by frequencies and receiving sites showing the hourly medians of measured transmission loss for all hours.

All values have been converted to decibels of basic transmission loss under the assumption that measured or assumed free-space antenna gains have been realized.

TRANSMITTER:- 92Mc (BASE)
 RECEIVER:- KENDRICK
 MONTH & YEAR:- FEB 1954

UNITS OF MEASUREMENT:- L_{bm}

CENTRAL RADIO PROPAGATION LABORATORY
 BOULDER, COLORADO
 MONTHLY FIELD INTENSITY DATA SHEET

DONE BY:- JT
 CHECKED BY:-
 TIME ZONE:- M.S.T.

MARCH

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29 30 31				
Mn-1A	131.8	132.8	133.6	132.9	133.6	132.9	133.6	134.4	133.1	132.3	133.1	132.3	133.7	133.1	132.7	131.3	133.6	131.0	133.7	132.9	133.9	134.2	133.7	134.2	133.8	133.8	135.5	134.2		1	2		
1A-2A	131.8	131.3	134.0	132.8	133.6	133.6	133.9	133.9	133.1	132.8	133.1	132.8	133.1	133.7	132.4	131.3	134.2	131.0	133.7	132.9	133.4	134.2	134.2	133.4	132.6	134.7	135.5	134.7		135.5	135.5		
2A-3A	132.1	129.2	134.4	133.1	133.6	133.1	133.6	133.9	133.1	132.8	133.7	133.1	133.7	133.1	131.4	132.1	134.2	132.5	133.7	133.7	133.4	134.6	134.6	133.7	133.4	134.7	135.5	135.1		132.3	135.5		
3A-4A	132.1	128.0	134.4	133.1	133.6	133.1	132.8	133.9	132.8	132.8	133.7	131.5	133.7		132.7	131.1	133.9	131.9	133.4	133.4	134.6	134.2	133.7	133.1	135.1	135.1	133.8		135.5	135.5			
4A-5A	132.7	129.2	134.0	133.6	133.6	133.1	131.9	133.9	133.1	133.1	134.1	129.7	133.1		132.3	130.3	133.6	131.9	133.4	135.2	133.7	134.2	135.7	133.7	133.4	135.1	135.1	132.0		135.5	135.5		
5A-6A	133.6	130.8	134.4	133.6	133.7	133.1	131.3	134.4	132.3	133.1	133.1	130.1	133.1		133.3	129.2	133.9	132.9	133.4	135.2	134.2	134.6	133.7	133.7	133.4	134.7	135.1	132.4		135.1	136.0		
6A-7A	132.7	132.3	134.4	133.1	133.7	133.1	131.0	133.6	132.3	133.1	134.1	130.5	133.1		133.3	129.7	133.6	133.4	133.7	135.2	133.7	134.2	134.2	133.7	134.2	134.7	135.5	132.0		134.2	135.5		
7A-8A	132.7	133.2	133.6	133.1	133.9	133.1	131.3	133.6	132.8	133.1	133.7	131.0	133.7		135.3	129.2	133.2	133.4	133.7	135.2	134.2	132.9	134.2	133.4	134.2	134.7	135.1	133.8		133.8	135.5		
8A-9A	133.1	133.2	133.6	133.6	133.7	133.1	132.8	133.1	132.8	133.1	133.1	131.0	133.1		133.3	129.2	134.2	133.4		133.7	134.2	133.4	134.6	133.7	135.1	134.7	136.0	135.1		136.0	136.0		
9A-10A	133.1	133.2	133.6	133.9	133.9	132.6	132.8	132.3	133.1	133.7	133.7	132.8	134.7	134.1	133.3	131.3	133.9	133.4	134.6	134.6	134.6	134.6	134.2	134.2	133.7	135.1	135.1	136.0	136.3		136.3	136.0	
10A-11A	133.1	134.0	134.0	133.9	133.9	133.6	133.6	133.6	133.1	133.7	134.1	133.1	135.1	134.7	133.7	133.6	134.2	133.7	134.2	135.1	135.1	134.6	134.2	134.2	135.1	135.1	136.5	136.3		136.0	136.0		
11A-NOON	133.1	134.4	134.4	134.4	133.7	133.6	134.4	133.9	133.1	133.7	134.1	134.1	135.1	134.7	134.6	134.2	134.2	134.2	134.6	134.6	135.1	135.1	135.1	133.7	134.6	135.6	135.1	136.0	136.8		135.5	136.3	
NOON-1P	134.0	134.4	134.4	134.4	133.7	133.9	134.8	133.9	133.7	133.7	133.7	134.1	134.1	134.1	134.1	134.2	134.2	134.6	134.6	135.1	135.1	135.5	134.2	135.1	135.1	135.1	136.3	136.3		135.5	136.3		
1P-2P	134.0	134.4	134.4	134.4	133.9	133.9	134.4	134.1	133.1	133.7	133.7	134.1	134.1	134.1	134.1	134.8	134.2	134.6	134.6	135.1	135.1	135.5	135.5	135.1	135.1	135.1	136.3	136.3		135.5	136.0		
2P-3P	134.0	134.4	133.9	134.4	133.7	133.9	133.9	133.7	133.1	133.7	134.1	134.1	134.1	134.1	134.8	135.1	135.1	134.6	135.1	135.5	135.5	135.5	134.6	134.6	135.6	135.1	136.3	136.8		135.5	136.0		
3P-4P	134.0	134.4	133.9	134.4	133.7	133.9	133.9	133.7	133.7	133.7	133.7	133.7	133.7	134.1	134.1	135.1	134.6	134.6	134.6	135.1	135.1	135.1	134.2	134.6	135.6	135.1	136.3	136.8		135.5	136.0		
4P-5P	134.0	134.4	133.9	134.4	133.9	133.9	133.9	133.7	133.7	133.7	134.1	133.7	133.7	133.1	133.1	133.2	133.9	135.1	134.6	134.6	133.7	135.5	135.5	135.1	134.7	135.1	136.0	136.3	136.8		135.5	136.0	
5P-6P	134.4	134.4	133.9	134.4	133.9	133.6	133.9	134.1	134.1	132.8	133.7	133.7	133.7	133.1	134.6	135.2	133.2	135.1	134.2	134.6	133.7	135.1	135.1	134.6	134.7	135.1	136.0	136.0	134.8		135.5		
6P-7P	134.0	133.6	133.6	133.9	133.9	133.1	133.6	134.1	134.1	131.9	133.1	133.1	133.1	133.1	134.1	135.2	133.7	134.6	134.6	134.6	133.4	134.6	134.6	134.6	134.7	134.2	135.5	136.0	136.8		135.5		
7P-8P	133.6	133.2	133.1	133.9	133.6	133.6	133.1	133.7	133.7	132.3	133.1	134.1	133.1	133.1	133.7	133.7	132.3	134.6	134.2	134.6	133.7	135.5	134.6	133.7	134.2	134.7	133.8	135.5	135.1	136.3		135.5	
8A-9A	134.0	133.6	133.6	133.7	133.6	133.1	133.9	133.1	133.7	133.1	133.7	134.1	133.1	133.1	133.7	133.7	132.3	133.7	135.1	134.6	133.4	134.6	134.2	134.2	134.7	133.9	135.5	135.5	136.3		135.5		
9A-10P	134.0	133.6	133.1	133.7	133.1	133.6	133.9	134.8	133.1	133.7	133.1	135.1	135.1	133.7	133.7	133.7	133.6	131.9	134.6	134.2	133.4	134.6	133.7	134.2	134.7	133.9	135.1	134.2	136.3		135.5		
10P-11P	134.0	133.6	132.9	133.7	133.6	133.6	133.9	133.1	133.1	134.1	133.1	133.7	135.7	135.7	133.3	133.5	133.6	131.7	133.7	133.4	133.4	133.7	133.7	134.2	135.1	132.6	135.1	134.7	136.0		135.1		
11P-Mn	132.9	133.6	132.8	133.6	133.9	133.2	134.0	133.7	132.9	133.7	132.1	135.1	135.1	135.1	134.7	135.1	133.2	131.9	133.7	132.9	133.4	134.2	133.7	134.6	134.7	133.8	135.5	134.7	136.3		135.5		

TRANSMITTER:- 92 Mc (BASE)
 RECEIVER:- KARVAL
 MONTH & YEAR:- FEB. 1954

UNITS OF MEASUREMENT:- L_{om}

CENTRAL RADIO PROPAGATION LABORATORY
 BOULDER, COLORADO
 MONTHLY FIELD INTENSITY DATA SHEET

DONE BY:- JI
 CHECKED BY:-
 TIME ZONE:- M.S.T. 2

March

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Mn-1A	141.1	139.6	141.9	141.2	141.7	143.2	143.2	142.3	143.2	142.6	144.0	143.4	144.1	144.4	142.1	142.7	140.1	144.3	141.9	142.4	140.9	142.8	142.9	142.0	141.6	141.9	140.8				142.2	142.2
1A-2A	140.8	134.3	142.1	141.4	141.2	141.4	143.0	142.0	143.3	142.3	142.9	141.7	144.5	144.7	139.4	141.4	141.2	140.3	143.5	141.9	142.4	141.4	143.3	142.4	141.4	142.0	142.2	139.7			142.2	141.7
2A-3A	140.3	137.7	142.7	142.0	141.4	140.8	142.6	143.0	143.6	141.7	143.6	141.1	144.5	144.7	142.9	141.2	142.1	141.4	142.8	141.9	142.2	142.2	142.9	142.4	140.9	142.5	141.9	137.5			142.2	141.7
3A-4A	141.3	139.2	143.0	143.4	142.6	142.3	144.0	143.2	142.8	143.4	140.8	144.5	144.7	142.9	142.9	142.1	141.4	142.8	141.9	142.2	142.2	142.9	142.2	140.9	142.5	141.9	137.5			142.2	141.7	
4A-5A	146.1	140.6	142.5	142.1	142.4	141.7	142.2	143.4	141.9	143.4	142.3	141.1	144.4	144.7	142.9	142.9	142.1	141.4	142.8	141.9	142.2	142.2	142.9	142.2	140.9	142.5	141.9	137.5			142.2	141.7
5A-6A	142.5	141.1	141.9	142.6	142.8	141.4	142.7	143.1	142.6	142.6	142.9	141.1	144.6	144.7	142.9	142.9	142.1	141.4	142.8	141.9	142.2	142.2	142.9	142.2	140.9	142.5	141.9	137.5			142.2	141.7
6A-7A	141.3	141.1	141.9	143.4	143.2	141.4	142.3	145.4	142.9	143.2	142.9	140.2	143.3	144.7	142.9	142.9	142.1	141.4	142.8	141.9	142.2	142.2	142.9	142.2	140.9	142.5	141.9	137.5			142.2	141.7
7A-8A	140.6	140.3	141.6	143.4	143.0	141.4	143.2	144.1	143.2	143.7	141.4	140.2	142.9	144.7	142.9	142.9	142.1	141.4	142.8	141.9	142.2	142.2	142.9	142.2	140.9	142.5	141.9	137.5			142.2	141.7
8A-9A	142.3	140.8	141.3	143.0	143.0	141.7	143.0	140.6	143.2	143.3	141.1	140.5	143.3	144.7	142.9	142.9	142.1	141.4	142.8	141.9	142.2	142.2	142.9	142.2	140.9	142.5	141.9	137.5			142.2	141.7
9A-10A	142.3	141.1	141.1	143.2	142.1	142.7	142.0	140.6	142.9	143.7	143.2	141.1	144.0	145.9	142.9	142.9	142.1	141.4	142.8	141.9	142.2	142.2	142.9	142.2	140.9	142.5	141.9	137.5			142.2	141.7
10A-11A	142.6	141.3	142.2	143.0	143.2	142.7	142.0	142.5	143.7	142.2	142.9	143.2	142.9	142.9	142.9	142.9	142.1	141.4	142.8	141.9	142.2	142.2	142.9	142.2	140.9	142.5	141.9	137.5			142.2	141.7
11A-NOON	142.6		143.4	143.0	143.2	143.2	143.7	144.1	144.0	142.2	142.2	144.5	145.9	146.2	142.7	142.2	142.1	141.4	142.8	141.9	142.2	142.2	142.9	142.2	140.9	142.5	141.9	137.5			142.2	141.7
NOON-1P	142.6	143.0	143.4	143.7	143.2	143.0	144.1	144.3	144.2	144.2	142.7	144.5	146.2	146.2	142.2	142.1	141.4	142.8	141.9	142.2	142.2	142.9	142.2	140.9	142.5	141.9	137.5			142.2	141.7	
1P-2P	142.8	143.0	143.4	143.9	143.3	143.2	144.1	144.3	144.2	144.2	142.7	144.5	146.2	146.2	142.2	142.1	141.4	142.8	141.9	142.2	142.2	142.9	142.2	140.9	142.5	141.9	137.5			142.2	141.7	
2P-3P	142.8	142.7	143.7	143.2	143.3	143.0	143.7	144.0	144.0	144.0	142.7	144.5	146.2	146.2	142.2	142.1	141.4	142.8	141.9	142.2	142.2	142.9	142.2	140.9	142.5	141.9	137.5			142.2	141.7	
3P-4P	142.7	142.7	143.7	143.2	143.0	143.4	143.7	144.5	144.0	143.7	144.0	145.3	145.9	145.6	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1			142.2	141.7
4P-5P		143.0	143.4	143.0	143.1	143.4	143.2	144.5	144.0	143.4	144.7	145.3	145.9	145.6	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1			142.2	141.7
5P-6P	142.3	142.2	143.3	143.4	142.7	143.2	144.5	144.0	143.4	144.7	145.3	145.9	145.6	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1	145.1			142.2	141.7
6P-7P	141.6	142.2	142.6	143.0	142.7	143.2	144.2	144.0	142.9	144.5	144.7	144.4	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0			142.2	141.7
7P-8P	142.5	141.6	142.3	142.6	142.7	143.0	143.0	143.7	143.4	142.3	143.7	144.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0			142.2	141.7
8A-9A	143.0	141.9	142.3	142.6	142.4	142.3	143.7	143.7	143.7	142.6	143.4	144.6	145.0	144.2	144.5	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0			142.2	141.7
9A-10P	141.9	142.2	141.8	142.4	141.5	142.2	143.2	143.2	142.7	143.2	144.7	144.0	145.0	144.2	144.5	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0			142.2	141.7
10P-11P	142.6	142.2	142.0	143.2	142.1	142.3	143.0	143.4	142.9	143.7	143.4	144.2	145.0	144.2	144.5	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0	145.0			142.2	141.7
11P-Mn	135.7	141.6	141.4	141.4	142.7	142.3	142.2	143.2	142.0	144.0	144.0	144.2	144.7	144.2	144.7	144.2	144.2	144.2	144.2	144.2	144.2	144.2	144.2	144.2	144.2	144.2	144.2	144.2			142.2	141.7

TRANSMITTER:- 92 Mc (BASE)
 RECEIVER:- HASWELL
 MONTH & YEAR:- FEB. 1954

UNITS OF MEASUREMENT:- L_{dm}

CENTRAL RADIO PROPAGATION LABORATORY
 BOULDER, COLORADO
 MONTHLY FIELD INTENSITY DATA SHEET

DONE BY:- J. J. 3
 CHECKED BY:-
 TIME ZONE:- M.S.T.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
Mn-1A	161.1	157.4	165.6	159.4	145.6		161.2	159.6	162.3	162.3	161.2	159.6	160.1	165.6	161.2	162.3	159.6	159.6				159.1	160.9	161.1	163.4	162.1	168.5	155.5			158.1		
1A-2A	165.1	152.1	166.0	153.1	145.6		161.2	158.1	162.3	163.4	161.2	158.6	161.2	169.7	156.9	158.1	162.9	161.1				159.6	162.1	160.1	164.7	162.8	168.9	156.8			152.3		
2A-3A	160.5	152.1	166.8	157.6	148.1		161.2	158.6	162.3	161.2	160.1	160.1	163.9	165.1	162.3	158.5	163.3	160.1				160.1	162.0	159.1	163.1	164.1	169.5	152.0			157.3		
3A-4A	165.5	150.9	165.6	159.6	153.5		159.1	164.9	161.2	161.2	161.2	158.6	163.9	163.4	164.0	163.3	159.1					159.1	161.3	159.9	163.1	163.8	176.2	152.0			157.3		
4A-5A	165.5	149.7	165.1	152.2	149.6		160.1	161.8	159.1	161.8	160.0	158.1	161.2		165.8	156.9	163.9	163.1				159.1	160.9	159.1	162.5	162.8	176.2	152.0			157.4		
5A-6A	165.5	149.7	164.8	157.6	151.4		159.1	161.2	158.6	157.9	158.7	158.6	161.2		165.6	153.5	163.3	163.1				160.1	160.9	158.3	163.9	162.8	168.1	152.0			158.0		
6A-7A	165.5	153.9	164.7	155.0	157.6		161.2	153.9	158.1	159.9	155.7	159.6	162.9		165.3	155.7	165.1	163.1				161.1	159.8	159.9	166.1	162.8	168.1	152.0			161.2		
7A-8A	165.5	155.7	165.1	163.5	151.4		159.1	160.6	157.9	163.4	158.6	152.1	161.2		164.4	152.7	166.1	161.1				159.1	160.6	159.1	162.1	162.8	169.0	152.0			152.3		
8A-9A			165.0	153.0	150.1		161.2	160.1	157.9	161.2	158.6	153.9	161.2		163.9	159.6	167.1	162.3				160.1	160.1	160.1	162.1	164.5	152.0				161.2		
9A-10A			156.1	156.2	155.0		162.3	152.9	153.9	163.4	159.6	152.8	161.2	166.6	165.0	152.7	167.5	161.6				160.6	160.6	161.2	165.6	165.0	152.6				163.3		
10A-11A			153.4	153.1	152.0	160.0	164.5	161.4	161.2	165.1	159.1	152.9	163.4	166.6	167.4	160.6	166.7	167.6				162.1	162.3	168.9	165.1	164.6	165.1				164.1		
11A-NOON			155.7	160.5	152.0	157.0	164.5	161.4	161.2	165.1	166.6	159.1	166.6	167.4	167.5	167.5	167.5					165.9	162.1	162.1	162.1	164.1	165.1				162.1		
NOON-1P			162.1	162.1	153.1	163.1	162.1	163.1	165.1	165.5	163.4	163.4	166.6	167.2	167.4	167.1	167.9					165.9	162.1	162.3	162.5	162.1	162.1	162.1				162.1	
1P-2P			166.6	165.1	152.6	163.1	169.3	165.1	165.1	165.1	163.4	164.8	166.6	166.6	166.6	165.9	167.5	165.5					165.9	162.3	166.6	167.5	162.1	162.1	162.1			160.9	
2P-3P			167.6	165.2	153.1	164.1	164.1	165.1	165.1	165.1	165.1	165.1	166.8	166.8	167.1	167.1	167.1	167.1					165.9	162.1	169.1	165.0	162.1	162.1	162.1			160.9	
3P-4P			167.8	165.2	155.6	167.1	165.1	165.6	165.2	166.6	165.1	163.4	165.9	167.2	166.9	167.1	167.5	167.5					165.1	162.5	170.7	162.1	162.1	162.1	162.1			160.9	
4P-5P			167.6	166.1	161.7	162.1	165.1	165.1	165.7	166.6	164.8	165.8	165.5		164.3	166.7	167.5	167.7					165.9	162.3	170.0	165.5	162.1	162.1	162.1			160.9	
5P-6P			166.6	166.6	165.3	165.1	164.3	164.8	165.1	165.1	167.3	165.9	164.8		164.9	166.7	167.1	167.1					165.1	162.5	163.1	169.8	162.1	162.1	162.1	162.1			160.9
6P-7P			165.1	164.7	153.1	160.5	163.5	164.0	165.1	165.1	163.1	161.2	164.8	166.6	166.6	167.1	165.1	165.5	165.9					162.1	166.8	162.1	162.1	165.1	162.1	162.1			160.9
7P-8P			152.6	154.1	159.1		160.8	163.4	163.7	165.1	161.2	161.8	164.4	166.6	166.6	166.7	158.6						156.1	160.6	162.1	162.1	162.1	162.1	162.1	162.1			152.1
8A-9A			164.0	162.0	152.0		161.2	162.8	163.5	161.5	161.8	161.8	162.6	166.6	165.1	163.0	150.9	165.1					152.1	160.6	162.1	162.1	162.1	162.1	162.1	162.1			152.1
9A-10P			166.0	152.0	152.0		161.2	161.2	162.3	152.1	163.4	159.1	162.3	165.9	165.1	162.3	160.9	163.7					152.1	161.1	162.1	162.1	162.1	162.1	162.1	162.1			152.1
10P-11P			166.0	153.1	156.5		162.3	161.2	163.5	163.3	161.8	162.3	160.6	165.9	165.1	163.3	152.1	162.1					152.1	162.1	162.1	162.1	162.1	162.1	162.1	162.1			152.1
11P-Mn			166.2	152.1	167.1		160.5	158.6	162.1	162.3	161.2	158.6	159.1		162.1	165.1	163.1						152.1	160.6	162.1	162.1	162.1	162.1	162.1			152.1	

TRANSMITTER: - CM Base-92M
 RECEIVER: - Marble
 MONTH & YEAR: - Feb, 1954

UNITS OF
 MEASUREMENT: - Lbm

CENTRAL RADIO PROPAGATION LABORATORY
 BOULDER, COLORADO
 MONTHLY FIELD INTENSITY DATA SHEET

DONE BY: - RDT 4
 CHECKED BY: -
 TIME ZONE: - M.S.T.

March
 1 2 3

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Mn-1A															165.7	181.0		157.3									180.0			181.7		
1A-2A															166.2	174.0		159.4									177.7			175.3		
2A-3A															179.6	174.4		167.2									175.0			177.6		
3A-4A															171.6	176.0		168.7									169.3	178.2	177.9			
4A-5A															175.5	178.8		162.0									164.7	171.7	176.6			
5A-6A															71.5	171.9		166.9									169.0	176.3	172.7			
6A-7A															163.6			158.4									171.1	167.7	169.1			
7A-8A															165.0			164.0									175.3	169.7	168.8			
8A-9A															165.4			162.0									174.2	174.0	173.8			
9A-10A															174.5			168.4									178.6	174.1	176.5	175.7		
10A-11A																		168.7									181.6	181.2	182.5	178.3		
11A-NOON																		183.0									181.6	178.3	182.9	183.8		
NOON-1P																		186.2									184.3	179.7	184.9	187.5		
1P-2P															187.1			187.7									186.9	183.5	182.7			
2P-3P															188.2			192.2								180.3	183.8	189.2	188.0	181.9		
3P-4P															190.9			195.2	194.2	188.8						187.9	185.8	192.4	187.8	182.8		
4P-5P															190.2	167.9		194.0			190.7	191.2				189.7	186.5	175.6	192.4	187.7	182.2	
5P-6P															186.5	170.4					192.7	189.7				181.9	186.9	189.5				
6P-7P															185.8	170.9	168.0					186.2				182.6	185.3					
7P-8P															186.0	167.1	169.0					184.2				188.2	185.0					
8A-9A															188.0	181.4	168.6					184.6			189.2	192.8	185.0					
9A-10P															183.3	179.2	166.8					187.2			189.1	197.2	188.5	169.9				
10P-11P															178.2	178.7	166.6								187.0	186.2	190.7	171.7				
11P-Mn															167.3	174.7	165.5									178.2			170.8			

TRANSMITTER:- 5-100Mc
 RECEIVER:- Kendrick
 MONTH & YEAR:- Feb, 1954

UNITS OF MEASUREMENT:- L_{hm}

CENTRAL RADIO PROPAGATION LABORATORY
 BOULDER, COLORADO
 MONTHLY FIELD INTENSITY DATA SHEET

DONE BY:- *QD4-6*
 CHECKED BY:-
 TIME ZONE:- M.S.T.

MARCH
 1 2 3

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Mn-1A	131.2	130.5	132.2	132.1	131.4	132.1	132.8	132.4	133.0	132.0	132.5	132.0	132.5	132.5	131.9	132.1	131.0		130.4	130.4					130.0	130.4			132.3	131.1	
1A-2A	131.2	130.0	132.2	132.2	132.1	131.7	132.4	132.4	132.5	132.0	132.0	131.6	132.5	133.0	131.9		131.0	131.4		130.4	131.4				131.0	132.7			132.0		
2A-3A	131.5	129.4	132.6	131.3	132.1	131.7	132.1	132.4	132.0	131.6	131.6	131.2	132.5	132.0	132.2	131.7		131.4	132.0				131.4	130.4			132.7	131.5			
3A-4A	130.7	129.4	132.2	132.1	132.4	131.7	131.7	132.1	132.0	132.0	132.5	131.2	132.5	132.0	131.9	131.3	132.1			131.4	130.4			130.4	129.0			131.1	132.7		
4A-5A	131.5	130.0	131.7	132.1	132.4	132.1	131.3	132.4	132.0	132.0	132.0	130.6	132.0	132.0	132.2	132.1	131.4			130.4	130.4				129.4	131.0			132.7	132.3	
5A-6A	131.2	129.4	132.2	132.1	132.1	132.1	130.5	132.4	131.6	132.0	131.6	130.6	132.0	132.0	132.2	130.4	131.4	131.0			130.4	131.4				131.0	132.7			132.7	
6A-7A	130.7	131.2	132.2	131.7	132.1	132.1	130.5	132.1	131.6	132.0	131.6	130.6	132.0	132.0	132.2	130.4			131.4	131.4				131.4	130.4			132.7	130.6		
7A-8A	130.7	131.7	132.2	132.1	132.1	132.1	131.3	132.4	132.0	131.6	131.6	130.6	131.6	132.5	132.2					132.0	131.4				130.0	131.4			130.6	131.5	
8A-9A	131.5	132.2	132.6	132.4	132.1	132.1	131.7	132.1	132.5	132.0	131.6	130.6	132.0	132.5	132.7			132.0			131.4	130.0				131.4	131.4			131.5	132.0
9A-10A	131.8	131.7	132.6	132.4	132.1	132.1	131.7	132.1	133.0	133.0	131.6	131.2	132.5	132.5	132.2	132.1		132.3	132.0			130.4	131.0			131.4	132.7			132.3	
10A-11A	131.8	132.6	133.5	132.8	132.4	132.4	132.4	132.4	133.0	133.0	132.0	131.6	133.0	132.5	132.2	132.1			132.0	132.0			131.0	131.4			132.7	132.3			
11A-NOON	131.8	133.5	133.5	132.8	132.8	132.4	132.8	132.8	133.0	133.0	132.0	132.5	133.0	132.5		132.9			132.0	131.4				131.4	131.4			132.3	132.7		
NOON-1P	131.8	133.1	133.5	133.3	133.3	132.4	132.8	133.3	133.4	132.4	132.0	132.0	133.4	132.1	132.7	132.5		132.3	133.3			131.4	132.0			131.4	131.4			132.7	132.7
1P-2P	133.1	133.1	133.5	133.3	133.9	132.1	132.8		133.4	132.4	132.0	133.0	133.4	132.1	132.7	132.5		132.8	132.0			132.0	131.0			132.0	132.7			132.7	
2P-3P	132.6	133.5	133.0	133.3	133.9	132.1	132.8	133.4	133.4	132.4	132.5	132.0	133.4	131.4	132.2	132.5			132.0	132.0			131.0				133.1	132.7			
3P-4P	132.6	133.5	133.3	133.3	133.9	132.1	132.8	133.8	134.3	133.9	132.5	132.0	132.0	132.1						131.4	131.0			131.4	132.0			132.7	132.3		
4P-5P	133.1	134.0	133.3	133.6	133.6	132.4	132.8	134.3	133.8	133.8	132.0	133.4	132.0	132.1		133.3	135.0			131.4	132.0				132.0			132.0	132.7		
5P-6P	133.1	133.5	133.3	133.3	133.6	132.4	132.8	133.3	134.3	133.8	132.0	132.5	132.0	132.0	132.7	133.1	132.1		135.0	131.4			132.0	131.0			132.3	132.7			
6P-7P	132.6	132.1	132.2	133.3	133.6	132.4	132.4	133.8	133.4	132.5	132.5	132.5	132.5	132.2	133.1	131.7			132.0	131.0			130.4	131.0			132.3	132.3			
7P-8P	132.6	132.4	132.4	133.3	133.6	132.8	132.4	133.8	133.4	132.5	132.5	132.5	132.5	132.2		132.9			131.0	130.4				130.4	131.0			132.3	132.0		
8A-9A	132.2	132.6	132.8	133.3	133.6	132.8	132.8	133.4	133.4	132.5	132.0	132.0	132.5	132.2		132.3	132.3			130.4	131.4				131.4	132.3			131.1		
9A-10P	132.2	133.1	132.8	133.3	133.3	132.4	132.8	133.0	133.4	133.0	132.5	132.0	132.5	131.9	132.5	132.1		132.3	131.4			131.4	131.0			131.4	132.0			132.0	
10P-11P	131.7	132.6	132.1	133.3	132.3	132.4	132.4	132.4	133.0	132.5	132.0	132.0	132.5	131.9	133.1	131.7				131.4	131.0			131.0	131.0			132.3	132.3		
11P-Mn	131.2	132.2	131.7	132.5	132.4	132.4	132.4	133.4	132.0	132.5	131.6	132.5	132.5	131.9		131.0				131.0	130.4			131.4	130.4			132.0	131.1		

TRANSMITTER:- S-100Mc
 RECEIVER:- Karval
 MONTH & YEAR:- Feb, 1954

UNITS OF MEASUREMENT:- Lbm

CENTRAL RADIO PROPAGATION LABORATORY
 BOULDER, COLORADO
 MONTHLY FIELD INTENSITY DATA SHEET

DONE BY:- *QJ* 7
 CHECKED BY:-
 TIME ZONE:- M.S.T. *March 1 2 3*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
Mn-1A	134.1	130.5	134.9	133.9	134.7	134.6	134.4	133.6	135.6	134.9	135.0	133.3	134.7	135.0	134.2	136.1	132.8			134.7	133.6			133.1	133.9			131.3	134.5					
1A-2A	133.9	129.9	135.2	133.7	134.6	133.1	134.4	133.9	135.0	134.6	134.8	133.5	134.8	135.3	133.1		132.0	134.7			134.0	134.7			134.4	135.0			134.6					
2A-3A	133.7	131.4	135.2	134.2	134.6	132.8	134.4	134.6	135.6	134.7	135.0	133.1	135.0	135.2	135.1	133.6			134.6	134.6			134.9	134.6			135.0	131.3						
3A-4A	133.9	131.6	135.2	134.7	134.7	134.6	133.6	134.6	134.6	135.0	135.0	133.0	135.0	135.3	134.0	134.4	136.6			134.0	134.7			134.3	133.1			131.0	135.0					
4A-5A	137.0	132.5	133.7	135.5	134.6	134.2	133.7	134.9	133.8	135.6	134.8	133.0	134.8	135.5	135.5	136.7	133.6				134.7	134.6			132.7	134.6			133.6					
5A-6A	135.1	133.9	134.4	134.7	135.2	134.2	134.0	134.9	134.0	135.0	134.6	133.0	135.1	135.6	135.7		134.6	134.3				135.0	135.1			134.2	134.3							
6A-7A	133.7	133.7	134.0	134.4	135.0	133.7	134.7	132.7	134.4	135.3	134.6	132.6	133.9	135.6	135.9	132.4			134.0	134.0			135.1	134.0			134.3	132.2						
7A-8A	133.3	133.1	134.4	134.7	135.2	134.7	134.9	132.4	135.0	135.6	134.4	132.2	133.9	135.7	135.6	131.9				134.6	134.7			134.0	133.1			132.5	134.0					
8A-9A	134.4	134.0	134.4	135.2	134.9	134.0	134.4	133.3	136.0	135.6	134.4	132.2	134.8	135.9	136.3		133.6					135.0	133.6			133.6	134.0			135.6				
9A-10A	135.2	133.9	134.2	135.7	134.2	134.6	134.2	133.5	135.7	136.1	134.4	133.0	134.7	135.9	136.1		135.4					135.5	134.6			135.2	135.0							
10A-11A	135.0	134.0	135.4	135.4	135.2	134.7	134.7	134.2	136.1	136.6	135.3	133.6	135.7	136.0	136.5	135.4					135.9			135.0	135.1			135.2	134.6					
11A-NOON	135.0	135.9	136.0	135.4	135.4	134.7	134.9	134.9	136.0	136.6	134.8	135.3	136.0	136.2	136.5		136.5				135.9	135.5			135.1	134.6			134.7	135.0				
NOON-1P	135.8	135.8	135.9	135.6	135.7	134.7	135.0	134.7	135.9	136.7	135.0	135.3	136.0	136.0			136.3	136.1				135.7	135.6			134.6	135.7			135.2				
1P-2P	136.0	135.6	136.0	135.6	135.4	134.7	135.0	134.7	135.7	136.3	135.0	135.7	135.9	135.8			136.1					135.6	135.1			135.2	135.5							
2P-3P	135.8	135.6	136.0	135.7	135.6	134.6	135.2	134.9	135.6	136.6	135.6	135.7	135.6	135.7	137.1	136.3					135.9			135.5			135.5	135.7						
3P-4P	135.8	135.6	136.0	135.7	135.4	134.6	135.0	136.3	135.6	136.6	135.6	135.7		135.8	136.3						135.6	135.6			136.0	135.0			135.7	135.5				
4P-5P	135.8	135.2	135.9	135.7	135.6	134.6	134.9	136.3	135.7	136.1	135.7	135.7		135.7			136.0	135.9				135.6	135.5			134.7	135.9			135.0				
5P-6P	135.6	135.0	135.6	135.6	135.4	134.4	134.6	136.3	135.0	136.9	135.7	135.6		135.6	136.7		135.9					135.1	135.1			135.0	134.7							
6P-7P	134.7	135.0	135.4	135.2	134.9	134.2	134.0	136.3	134.4	135.0	135.6	135.3		135.5	136.6	135.8						135.5			135.1	135.5			134.0					
7P-8P	135.2	134.9	135.2	135.0	134.7	134.0	134.0	135.9	135.6	135.0	135.3	135.1	135.0	135.4	133.9	135.1						135.1	134.0			135.0	133.9			135.5	135.2			
8A-9A	133.7	135.4	135.0	135.2	134.6	133.9	134.9	135.5	135.5	134.4	135.1	134.8	135.3	135.6			134.4	135.5				133.8	134.7			133.9	134.6			133.9				
9A-10P	133.6	135.4	134.6	135.2	134.0	133.9	134.0	135.0	136.0	134.7	135.6	134.7	135.3	135.3	135.8		136.1					134.7	135.9			134.6	135.9							
10P-11P	132.6	135.4	133.9	135.4	133.7	134.6	134.2	135.6	134.8	134.8	134.7	134.7	135.3	134.8	135.4	133.6						135.0			135.5	135.0			133.6	136.1				
11P-Mn	132.6	133.7	133.7	134.6	134.7	134.7	134.2	136.0	135.0	135.0	134.0	134.8	135.0	134.2		135.1	132.9					134.7	133.4			135.2	132.9			131.6	134.3			

TRANSMITTER: - S-100 Mc
 RECEIVER: - Hoswell
 MONTH & YEAR: - Feb, 1954

UNITS OF MEASUREMENT: - Lbm

CENTRAL RADIO PROPAGATION LABORATORY
 BOULDER, COLORADO
 MONTHLY FIELD INTENSITY DATA SHEET

DONE BY: - P. J. 8
 CHECKED BY: -
 TIME ZONE: - M.S.T.

March

1 2 3

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
Mn-1A			150.3						148.4	150.3	147.3	148.8	149.8		147.5		147.8	143.6		154.3	149.2			155.0	149.8			157.1	152.5						
1A-2A			150.8						148.0	150.1	147.5	147.4	150.8		146.1			145.0	150.6		148.7	151.5			151.5	153.8			151.0						
2A-3A			150.8						147.8	148.7	147.5	145.8	152.1		149.1	149.8							151.6	149.8		153.9	145.8								
3A-4A			150.3						146.0	146.9	150.2	146.1	151.7		147.1	150.8	151.0			152.8				150.7	149.4		145.8	147.4							
4A-5A			149.7						145.5	148.0	149.7	146.8	150.1		150.3		151.4	147.2			152.3	148.7			148.8	150.7			144.7	152.4					
5A-6A			149.1						145.1	146.8	146.3	145.2	150.9		150.4		146.7				148.7	151.5				150.6	152.3			151.0					
6A-7A			149.6						145.2	148.0	146.5	145.2	151.3		151.8	146.6							150.9	150.8			152.3	144.5							
7A-8A			149.0						145.5	150.3	148.8	147.7	150.9		149.4	146.2					149.0			149.8	152.8			144.5	147.0						
8A-9A			143.5	140.2					145.4	148.0	147.0	143.2	150.4		149.2						149.0	147.5			152.5	152.2			150.7	154.4					
9A-10A			142.4	146.8					148.0	149.7	148.8	144.8	150.8		152.1								151.0	153.2		152.4	153.8			152.0					
10A-11A			141.4	147.2					147.5	152.3	151.0		152.4		152.1	150.1								152.0	152.3		152.0	152.7							
11A-NOON			144.5	157.2					150.8	152.2	151.3				155.6	155.1						155.4			153.8		154.2	150.7							
NOON-1P			149.9	152.3					151.3	152.3	151.3	152.1			151.8							156.2	154.1		153.0	156.1		149.8	152.8						
1P-2P			152.2	152.5					151.8	152.2	151.3	152.6			153.1							154.1	156.8		156.8	152.6		152.2	152.8						
2P-3P			152.0	152.8					151.8	152.2		155.6			153.1	157.9							155.3		152.4	156.8		152.4	156.8						
3P-4P			152.3	152.6					152.1	152.2		155.8			157.9						156.2	157.2		156.4	156.6		152.2	149.8							
4P-5P			151.9	152.8					152.8	152.1		155.5			155.1	155.2					157.4	162.8		159.6	152.8		159.6	152.8							
5P-6P			151.3	152.8					152.0	151.0	151.3	154.0			155.1								153.9	154.3		156.1		152.2	152.8						
6P-7P			150.8	151.9					152.5	150.1	149.7	153.1	154.0		154.2	150.4						154.1		152.1	152.6		152.2	151.1							
7P-8P			140.7	152.2					152.0	150.6	148.4	152.7	153.7		146.2	151.8					154.1	149.2		152.6	152.7		152.6	152.8		152.3	149.8				
8A-9A			148.1	149.2					148.4	150.9	148.7	151.3	152.5		148.8	152.8							151.5	151.5		151.5	152.1		148.5						
9A-10P			149.7	149.2					147.2	149.7	148.0		152.2										152.1	149.0		153.1	152.3								
10P-11P			152.3	146.8					147.5	147.1	147.2	147.5	150.8		152.5						153.0			152.1	152.8		152.2	151.1							
11P-Mn			150.5	146.8					149.3	147.5	147.3	149.5	149.3		148.1	146.1					153.0	152.1		152.6	149.4		150.2	152.1							

TRANSMITTER:— Summit - 100mc
 RECEIVER:— Marble
 MONTH & YEAR:— Feb, 1954

UNITS OF
 MEASUREMENT:— Lbm

CENTRAL RADIO PROPAGATION LABORATORY
 BOULDER, COLORADO
 MONTHLY FIELD INTENSITY DATA SHEET

DONE BY:— *O.J.T.* 9
 CHECKED BY:—
 TIME ZONE:— M.S.T. **MARCH**
 1 2 3

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Mn-IA																	165.5	155.1	172.0										163.3	167.8		
1A-2A																	164.1		171.1								176.9				168.4	
2A-3A																	174.0	155.3									179.0					
3A-4A																	174.4	155.3	165.3											168.1		
4A-5A																	182.2		163.1	168.4										158.8	172.3	
5A-6A																	189.8		175.2								177.3				172.3	
6A-7A																	184.6	155.3									176.9					
7A-8A																	186.5	155.3	152.9											170.6		
8A-9A																	183.9		115.0										175.3	175.1		
9A-10A																	184.3		162.2								178.6				174.9	
10A-11A																	178.5	160.1										173.7	170.6			
11A-NOON																	169.5	182.3										170.8	167.6			
NOON-1P																		185.3	171.0										164.1	169.4		
1P-2P																	171.8		172.3								175.1					
2P-3P																	176.3	167.9									174.8					
3P-4P																					172.5	170.5							167.9			
4P-5P																			174.4		177.4								167.2			
5P-6P																	166.1		172.3								173.4					
6P-7P																	164.3	159.4			172.9						172.2	169.0				
7P-8P																		152.9	174.4		172.7	161.5						160.4	164.0			
8A-9A																	169.5		178.8	173.0							173.2		164.7			
9A-10P																	167.5	155.3			179.0						175.8	166.9				
10P-11P																	171.8	155.3	155.7									167.5	164.2			
11P-Mn																	165.6	155.2	173.9									161.7	168.1			

TRANSMITTER: - Camp Carson - 100MC
 RECEIVER: - Kendrick
 MONTH & YEAR: - Feb, 1954

UNITS OF MEASUREMENT: - Lbm

CENTRAL RADIO PROPAGATION LABORATORY
 BOULDER, COLORADO
 MONTHLY FIELD INTENSITY DATA SHEET

DONE BY: - P.D.T. 11
 CHECKED BY: -
 TIME ZONE: - M.S.T.

MARCH

1 2 3

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
Mn-1A																153.0			152.7	150.5			151.4	150.7			152.8	150.4						
1A-2A																151.4	153.0			150.7	151.2			150.5	148.5			157.8	152.4					
2A-3A																	152.7				151.4	151.7			148.1	152.1			152.4	152.0				
3A-4A																				152.7		151.4	151.7			152.1	152.4			152.4	152.0			
4A-5A																	151.7			152.7	152.0			151.4	150.5			152.2	148.9					
5A-6A																150.7				152.0	152.5			150.7	150.7			148.3	152.2					
6A-7A																	152.7				152.5	151.4			152.7	151.7			152.7	152.4				
7A-8A																				151.7		149.8	152.0			151.7	153.2			152.2	152.4			
8A-9A																148.1				152.5	152.5			152.5	150.7			152.4	149.8					
9A-10A																150.0	153.4				152.7	152.0			152.7	153.4			142.2	153.2				
10A-11A																	153.5				152.5	152.5			153.4	153.7			153.2	152.4				
11A-NOON																153.9				152.7			153.0	152.0			153.0	153.2			152.2			
NOON-1P																153.3	153.4				152.7	152.7			152.0	152.5			152.8	153.5				
1P-2P																	153.6	153.7				152.7	152.0			152.0	153.0			153.5	152.8			
2P-3P																		153.9	152.5			152.0	153.0			152.7	153.4			153.2	152.8			
3P-4P																153.3				154.3	152.5			153.0	152.7			153.7	153.2			152.4		
4P-5P																154.0	153.8				152.7	152.0			152.5			153.4	148.8			152.4		
5P-6P																153.0	153.7				151.7	151.7			152.3	153.4			153.2	152.8				
6P-7P																		153.7	153.1			151.7	152.7			153.7	152.8			153.2	152.4			
7P-8P																154.3				152.7	152.5			152.7	151.7			152.8	152.4			152.4		
8A-9A																154.6	151.4				152.0	152.5			151.4	151.4			153.5	152.4				
9A-10P																153.4	150.5				152.7	151.2			151.7	152.1			157.4	151.8				
10P-11P																	150.2	153.1				151.2	151.4			149.3	152.4			152.4	152.4			
11P-Mn																156.0				152.7	150.5			151.4	152.5			152.4	151.5					

TRANSMITTER: - 100Mc - Camp Carson
 RECEIVER: - Kannel
 MONTH & YEAR: - Feb, 1954

UNITS OF
 MEASUREMENT: - Lbm

CENTRAL RADIO PROPAGATION LABORATORY
 BOULDER, COLORADO
 MONTHLY FIELD INTENSITY DATA SHEET

DONE BY: - *BDT* 12
 CHECKED BY: -
 TIME ZONE: - M.S.T.

March

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Mn-1A																156.1		152.8					151.5	156.2			157.9	155.3				
1A-2A																155.1	159.6		151.1	159.1				156.1	154.3			153.0	152.2			
2A-3A																159.6			151.3	152.3				153.8	152.8			157.0	(160)			
3A-4A																		151.6			151.6	152.1				151.5	152.4				160.1	
4A-5A																157.2		151.6	156.2			152.4	156.0				152.1	148.7				
5A-6A																148.5			155.4	151.1				156.2	155.5			144.1	152.7			
6A-7A																	158.8			151.1	151.8				151.8	151.5			150.1			
7A-8A																				156.6	152.1					156.7	152.5					
8A-9A																147.5			157.6			152.2	151.1				152.2	151.3				
9A-10A																152.5	152.5		152.8	152.2				152.4	152.5			151.1	160.1			
10A-11A																	160.5			152.8	152.2				156.5	152.4			160.1			
11A-NOON																>155.8						152.2	152.2			152.4	152.5					
NOON-1P																155.8	160.5			152.2			152.2	152.2			152.5	152.5				
1P-2P																160.5	159.6			152.2	152.2			152.2	152.2			152.5	152.5			
2P-3P																	152.6	152.6			152.2	152.2			152.2	152.2			152.2			
3P-4P																161.1		152.6				152.2	152.2			152.2	152.2					
4P-5P																160.5	162.4			152.8			152.2	152.2			152.2					
5P-6P																157.2	152.2			152.8	152.2			152.2	152.2			152.2				
6P-7P																	152.2	152.2			152.8	152.2			152.2	152.2			152.2			
7P-8P																152.6		152.8				152.2	152.2			152.2	152.2			152.2		
8A-9A																152.6		152.8				152.2	152.2			152.2	152.2			152.2		
9A-10P																152.1	155.8			152.1				152.2	152.2			152.2	152.2			
10P-11P																	152.5	152.6			152.1	152.2			152.2	152.2			152.2	152.2		
11P-Mn																164.8		152.8				152.2	152.2			152.2	152.2					

TRANSMITTER: Camp Carson - 1 mmc
 RECEIVER: HASWELL
 MONTH & YEAR: Feb, 1954

UNITS OF MEASUREMENT: Lbm

CENTRAL RADIO PROPAGATION LABORATORY
 BOULDER, COLORADO
 MONTHLY FIELD INTENSITY DATA SHEET

DONE BY: 807 13
 CHECKED BY: March
 TIME ZONE: M.S.T.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31				
Mn-1A																177.8		176.9					180.9	185.4			184.0	185.5							
1A-2A																173.9	178.1				183.3			184.6	180.2			187.4	183.2						
2A-3A																	177.6				185.0	182.5			180.9	184.3			183.5	188.8					
3A-4A																						180.8	187.2			183.3	180.8			189.9					
4A-5A																	173.8							184.4	180.9			175.8	176.8						
5A-6A																	172.7				184.3				180.5	180.1			174.0	176.5					
6A-7A																		180.5			184.3	180.8				187.6	182.8			178.1	184.8				
7A-8A																							179.3	182.5			182.8	184.5			184.9				
8A-9A																	169.8							183.3	185.0			183.8	180.6						
9A-10A																	169.7				184.3				186.1	185.8			182.2	183.7					
10A-11A																						184.3	184.2			184.2	184.6			183.7	183.2				
11A-NOON																>176.8						184.2	185.8			183.7	186.8			184.9					
NOON-1P																>176.8	184.9							187.6	184.4			185.3	185.0						
1P-2P																	183.8	184.8				188.7			185.9	186.3			180.3	183.2					
2P-3P																		186.3				188.3	185.0			185.5	190.2			183.7	182.3				
3P-4P																>176.8			185.7				186.8	188.8			190.8	186.3			183.2				
4P-5P																					186.8			188.5	188.5			186.8	188.3						
5P-6P																		183.3				187.3	187.7			188.5	187.8			185.8	184.5				
6P-7P																		183.7	184.5				185.9	185.9			187.3	182.8			184.9				
7P-8P																>176.8			182.0					186.3	184.0			184.2	184.5						
8A-9A																>176.8	175.8					187.7			188.5	185.0			185.5	184.9					
9A-10P																	175.8	175.7				187.3	179.5			186.3	185.5			184.5	181.1				
10P-11P																		173.2				182.0	185.9				184.3	185.8			182.8				
11P-Mn																	179.8							184.2	187.2			184.8	185.8						

TRANSMITTER: - CM-230Mc
 RECEIVER: - Kendrick
 MONTH & YEAR: - Feb. 1954

UNITS OF MEASUREMENT: - L_{bm}

CENTRAL RADIO PROPAGATION LABORATORY
 BOULDER, COLORADO
 MONTHLY FIELD INTENSITY DATA SHEET

DONE BY: - *RF* 14
 CHECKED BY: -
 TIME ZONE: - M.S.T. 1 2 3
 March, 1 2 3

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Mn-1A	128.2	127.5	127.8	128.2	127.8	129.1	129.1	129.1	127.9	126.7	128.3	128.8	127.9	128.8	129.2	130.6	129.9	126.7	129.7	129.7	130.4	129.7	130.1	129.7	128.9	128.9	129.4	127.4	127.4	128.6	
1A-2A	128.2	126.9	127.8	129.1	127.8	129.1	129.1	129.1	127.9	126.7	127.9	128.8	127.9	128.8	128.3	130.6	130.6	127.2	130.4	129.7	130.1	129.3	130.1	128.6	128.6	129.6	129.4	127.1	127.8	128.6	
2A-3A	128.9	125.9	128.2	129.1	127.8	129.1	129.1	127.8	127.5	126.7	127.9	128.3	128.3	128.8	128.9	130.2	130.6	127.5	130.4	129.7	130.1	128.9	130.4	128.6	128.9	129.6	129.4	127.8	127.4	128.1	
3A-4A	128.4	125.7	127.8	128.2	128.2	129.9	127.8	128.2	127.5	127.5	128.8	127.9	128.8	129.1	128.9	130.2	130.2	127.5	130.4	130.1	130.1	129.3	129.7	128.9	128.6	130.0	129.9	127.1	127.4	129.0	
4A-5A	129.3	125.7	127.8	129.1	128.2	129.3	127.7	129.1	127.9	128.3	129.1	127.5	127.9	129.1	129.5	129.5	129.5	127.9	130.4	130.1	129.7	129.3	129.3	129.7	128.9	130.0	129.0	126.3	127.8	129.0	
5A-6A	128.9	125.7	127.8	129.1	127.8	129.1	125.8	128.2	127.9	128.3	128.8	127.5	127.5	129.1	129.8	127.5	130.2	127.9	130.4	130.1	130.1	129.7	128.9	129.3	128.9	129.6	129.0	125.5	127.4	129.4	
6A-7A	128.9	127.8	128.2	129.1	127.8	129.3	125.8	127.8	128.3	128.3	128.3	127.5	127.5	129.7	129.8	127.5	130.2	127.9	130.4	130.1	130.1	129.7	129.7	129.3	129.6	129.3	129.0	125.5	127.7	129.4	
7A-8A	128.9	127.8	128.2	129.3	128.2	129.3	126.7	128.2	128.3	127.5	127.9	127.2	127.5	129.7	130.0	127.5	130.2	127.5	130.4	130.1	130.1	129.3	129.3	129.3	129.3	129.3	129.6	129.0	125.8	127.4	129.7
8A-9A	129.9	128.2	128.2	129.3	128.2	129.1	126.7	127.1	128.8	128.3	128.3	127.5	127.5	129.7	130.0	127.5	131.3	128.2	130.8	130.1	130.1	129.7	130.1	130.1	129.3	130.2	129.4	127.4	128.1	129.4	
9A-10A	130.1	127.2	128.2	129.3	129.1	129.3	127.8	127.8	128.3	129.1	128.8	128.3	128.8	129.7	129.8	129.5	130.9	129.3	131.1	130.4	130.8	130.8	130.8	130.4	129.3	130.2	129.4	128.6	128.6	129.4	
10A-11A	130.8	128.9	128.9	129.9	129.9	130.2	129.3	128.2	128.8	129.1	129.1	128.3	129.1	129.1	130.0	130.9	129.7	129.7	131.6	130.8	130.8	131.6	130.8	130.8	129.3	130.2	129.4	128.6	128.6	129.4	
11A-NOON	130.1	128.9	129.9	129.9	129.3	130.2	129.9	128.2	129.1	129.1	128.8	129.7	128.8	129.1	130.0	130.9	130.1	130.1	131.6	131.1	131.1	131.6	130.8	131.1	129.3	130.7	129.4	128.6	127.8	129.4	
NOON-1P	130.1	129.3	129.9	129.9	129.3	130.2	129.1	129.1	129.1	129.1	129.7	129.7	128.8	129.1	130.0	130.9	129.7	130.1	131.6	131.1	130.8	131.6	131.6	130.8	131.1	129.6	130.7	129.4	129.0	128.1	129.4
1P-2P	129.3	128.9	129.3	129.9	129.1	130.2	129.1	130.0	129.1	129.1	131.0	129.1	128.8	129.1	130.0	130.9	129.7	130.1	131.6	130.8	130.4	131.6	130.8	131.1	129.6	130.7	129.4	129.0	128.1	129.0	
2P-3P	128.9	129.3	129.9	129.3	129.3	130.2	129.3	130.7	129.1	129.7	131.0	129.7	128.8	129.1	130.0	130.9	130.1	130.4	131.6	131.1	130.4	131.6	130.8	131.1	130.0	130.7	129.4	129.0	128.1	129.0	
3P-4P	128.9	129.3	130.2	129.3	129.3	130.2	129.1	130.7	130.0	130.0	130.0	129.1	128.8	129.7	130.0	130.6	130.1	130.1	131.1	130.8	130.9	131.6	130.8	131.1	130.0	130.2	129.0	129.0	128.1	129.0	
4P-5P	128.9	129.3	129.9	129.1	129.9	130.2	129.1	130.7	130.7	129.7	130.0	129.1	128.8	129.7	130.2	130.1	129.7	131.1	130.8	130.4	131.6	130.8	131.6	130.8	130.0	130.0	129.0	129.0	128.1	129.4	
5P-6P	128.9	128.9	129.9	129.9	129.3	130.2	129.2	131.8	130.0	128.8	129.7	128.8	128.8	129.8	130.3	129.9	129.7	129.3	131.1	130.8	130.1	131.1	130.8	130.0	130.0	128.1	128.6	129.0	128.1	128.1	
6P-7P	128.4	128.4	129.3	129.3	129.9	129.3	127.1	131.8	131.0	127.9	129.1	128.3	129.1	129.5	131.3	129.9	129.3	129.3	130.8	130.8	129.7	130.4	130.1	129.6	130.0	127.8	128.6	129.0	128.6	128.6	
7P-8P	128.2	127.8	129.1	128.2	129.1	129.9	126.7	131.5	130.7	127.5	128.8	127.9	129.1	129.2	130.9	129.2	128.9	129.7	130.1	130.8	129.7	130.1	129.7	129.3	129.6	128.1	128.1	128.6	128.6	128.6	
8A-9A	127.8	127.8	129.1	128.2	128.2	129.3	127.9	130.7	129.7	127.9	129.1	127.9	129.1	129.1	129.1	130.9	128.9	128.6	130.1	130.4	130.4	130.1	130.1	129.7	129.3	129.6	128.6	128.1	128.6	127.4	
9A-10P	127.8	127.8	128.2	127.8	127.1	129.1	127.8	128.3	128.8	128.3	129.1	127.9	128.8	129.2	129.2	129.2	127.5	130.1	130.1	130.4	129.7	130.1	130.1	129.3	128.9	129.0	127.4	127.8	127.8	127.8	
10P-11P	127.5	127.8	126.7	127.8	127.8	129.1	127.9	128.8	127.9	127.9	129.1	129.3	128.8	128.9	129.2	129.5	127.2	130.1	129.7	130.4	130.1	130.1	130.1	129.3	128.9	129.0	127.1	127.8	128.6	128.6	
11P-Mn	127.2	127.8	127.1	123.6	128.2	129.1	128.2	128.8	127.5	128.3	128.8	128.3	128.8	128.9	130.9	129.9	127.2	130.1	129.7	130.4	129.7	130.1	130.1	129.3	128.6	129.4	127.1	127.8	128.1	128.1	

TRANSMITTER:- C.M. 230 Mc
 RECEIVER:- Caval
 MONTH & YEAR:- Feb, 1954

UNITS OF MEASUREMENT:- Lbm

CENTRAL RADIO PROPAGATION LABORATORY
 BOULDER, COLORADO
 MONTHLY FIELD INTENSITY DATA SHEET

DONE BY:- *QJ* 15
 CHECKED BY:-
 TIME ZONE:- M.S.T.

March
 1 2 3

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Mn-1A	134.2	130.1	136.2	133.6					136.5	137.1	137.7	135.7	137.1	137.6	134.3	134.6	134.9	130.9	136.3	135.4	135.7	134.2	136.3	136.3	134.9	134.9	135.4	133.9	135.1	134.2	
1A-2A	134.7	129.2	136.7	134.1					136.5	136.0	137.4	135.2	137.1	137.7	133.2	132.4	135.5	130.9	136.3	135.1	135.7	134.2	136.7	135.4	133.9	135.4	136.0	133.0	135.4	134.9	
2A-3A	134.2	130.8	136.7	134.9					136.8	135.7	137.1	134.9	137.7		135.5	132.4	136.0	131.3	135.7	135.4	135.7	135.1	136.3	135.1	133.9	136.0	135.7	130.9	135.7	134.5	
3A-4A	134.5	134.4	137.3	134.6					136.2	136.8	137.7	134.7	137.4		134.6	132.9	135.5	131.3	135.4	135.1	136.0	135.4	136.3	135.1	133.0	135.7	135.7	130.2	134.2	135.1	
4A-5A	137.3	133.1	136.7	136.0					135.7	137.4	137.9	134.7	137.7		136.0	131.2	136.0	131.9	135.1	134.0	135.7	135.4	136.7	134.9	133.0	136.0	135.1	130.0	132.2	135.4	
5A-6A	135.5	133.7	136.2	135.2					135.4	136.8	137.1	134.7	137.7	137.9	136.7	130.5	136.0	133.9	135.4	134.0	136.0	135.7	136.0	136.0	133.9	136.0	135.1	130.9	132.2	135.1	
6A-7A	134.2	133.7	135.7	134.9					136.2	137.7	136.8	134.4	136.2	137.9	136.3	129.2	136.0	133.3	135.7	134.9	136.0	136.0	136.3	135.4	132.0	135.7	135.1	130.9	132.7	135.1	
7A-8A	134.5	133.9	136.2	135.2					137.7	137.7	136.2	134.4	136.0	136.1	136.7	128.9	136.3	133.3	135.7	135.7	135.7	135.4	136.0	135.1	134.2	135.4	135.4	130.9	133.0	136.0	
8A-9A	135.7	134.5	136.2	136.0					138.1	137.1	136.5	133.8	137.1	138.5	136.9	129.5	136.7	33.3	136.0	136.9	136.0	135.4	135.7	135.4	135.1	135.7	135.7	132.2	134.5	135.7	
9A-10A	136.2	134.9	136.4	136.6					137.7	138.1	137.1	134.9		139.0	136.9	130.8	136.7	132.6	136.9	137.9	136.7	136.9	136.7	136.7	135.1	137.3	136.0	135.7	135.4	136.0	
10A-11A	136.4	136.4	137.5	136.8					138.5	139.0	137.9	136.2		139.0	137.3	134.9	137.3	136.7	137.3	137.9	137.3	137.6	137.3	137.6	135.1	137.6	136.0	136.3	135.7	136.0	
11A-NOON	136.4	137.4	137.9	137.4					138.7	139.0	137.7	138.1		139.2	137.3	136.3	137.6	137.6	137.3	137.2	137.2	137.6	137.3	137.9	137.9	135.4	137.6	136.3	136.7	134.5	135.4
NOON-1P	137.1	137.6	137.9	137.4					138.7	139.2	137.9	136.5		139.1	137.3	136.3	137.6	137.9	137.3	137.9	137.6	137.9	137.6	137.9	137.9	135.7	137.9	136.7	136.0	134.5	135.4
1P-2P	137.3	137.6	138.1	137.1					138.5	139.0	139.2	136.7		139.2	137.4	136.3	137.9	138.2	137.3	137.9	137.6	137.9	137.6	137.9		136.3	137.9	136.7	136.3	136.0	
2P-3P	137.3	137.6	138.1						138.5	139.2	139.2	139.0		139.2	137.3	136.7	137.9	138.2	137.3	137.9	137.6	137.9	138.2	138.2	136.7	135.7	137.9	136.7	137.3	134.9	136.0
3P-4P		137.6	138.1						137.9	138.5	139.0	137.5		139.0	137.3	136.7	137.3	137.5	137.3	137.9	137.6	137.6	138.2	137.6	136.3	137.9	136.7	137.6	134.9	136.0	
4P-5P		137.6	137.9						138.1	138.1	138.5	138.7	137.1	139.0	137.3	136.0	137.3	137.5	136.9	137.6	137.3	137.6	138.2	137.3	136.3	137.9	136.7	137.9	136.3	134.9	136.0
5P-6P	136.7	137.1	137.4						138.1	137.9	137.7	137.9	137.9	137.4	136.7	136.9	134.3	137.3	137.9	136.7	137.3	136.9	137.3	138.2	136.9	136.0	135.7	136.0		134.9	
6P-7P	135.9	136.9	137.1						137.7	136.5	136.8	137.4	137.7	137.4	136.7	134.3	136.7	137.3	136.0	137.3	136.0	137.3	136.9	137.6	136.3	136.9	137.6	136.3	135.4	135.1	135.1
7P-8P	136.4	135.9	136.8						137.4	137.7	136.2	136.8	137.4	137.4	136.7	132.9	135.4	136.7	136.0	136.7	134.2	136.0	136.9	136.9	136.0	135.1	134.9	134.9	134.9	135.1	
8A-9A	135.7	136.2	136.0						137.1	138.1	136.0	137.1	136.8	136.9	135.7	136.3	131.5	134.2	136.9	136.0	136.7	134.5	136.0	136.7	135.7	135.1	135.1	134.2	135.1	133.9	
9A-10P	136.4	136.7	134.6						136.0	137.9	136.8	137.4	137.1	137.2	135.5	138.4	132.1	132.0	137.0	135.4	136.0	134.2	136.3	137.9	136.3	134.5	135.1	134.5	135.1	133.9	
10P-11P	134.5	136.7	133.8						137.4	136.8	137.1	136.8	137.4	137.2	134.6	136.7	133.2	130.9	137.3	134.9	136.0	134.9	136.3	136.9	136.0	133.9	135.1	134.2	135.7	134.5	
11P-Mn	131.4	135.9	133.6						137.9	136.5	137.1	136.0	137.1	137.2	134.0	135.1	134.3	131.3	135.7	134.9	135.7	133.9	136.0	136.9	136.0	134.5	135.4	135.9	135.7	133.9	

TRANSMITTER: - C.M. 230Mc
 RECEIVER: - Haswell
 MONTH & YEAR: - Feb 1954

UNITS OF MEASUREMENT: - Lbm

CENTRAL RADIO PROPAGATION LABORATORY
 BOULDER, COLORADO
 MONTHLY FIELD INTENSITY DATA SHEET

DONE BY: - *R.F.* 16
 CHECKED BY: -
 TIME ZONE: - M.S.T.

March
 1 2 3

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
Mn-1A	152.4	152.3	154.5	146.9	148.9	152.6	153.2	154.2	149.5	153.9	152.9	150.4	154.3	152.9	146.4	150.2	155.1	151.1	152.0	154.7	150.2	149.8	150.0	149.9	153.0	152.7						
1A-2A	151.3	151.2	151.9	148.7	149.7	158.3	154.8	150.2	149.1	152.7	154.3	152.7	152.2	152.2	148.1	142.7	155.5	153.2	150.1	153.7	150.1	153.7	150.7	156.4	145.0	153.2	154.3					
2A-3A	152.4	152.3	154.9	149.7	151.3	158.1	156.0	156.0	149.2	148.8	153.7	151.2	152.9	154.2	152.1	149.3	142.9	155.2	154.0	149.7	154.9	157.2	151.1	157.0	142.7	153.5	154.1					
3A-4A		147.4	153.7	150.0	152.3	158.7	153.7	158.1	149.2	147.2	152.4	148.6	150.9	153.7	151.5	150.0	141.7	156.2	153.2	149.4	154.2	150.8	150.9	157.0	145.1	154.4	156.0					
4A-5A	163.1	145.7	154.5	151.5	151.5	157.7	154.5	158.4	147.7	152.2	154.2	148.6	150.4	155.5	142.4	144.0	142.0	152.2	153.2	149.7	154.0	151.5	152.3	156.8	142.7	147.9	156.4					
5A-6A	156.5	146.5	150.1	151.9	153.0	156.0	154.5	159.5	145.1	152.9	154.5	148.7	148.5	156.6	156.0	143.7	150.2	145.8	153.2	150.1	153.7	153.7	153.7	152.7	148.2	148.2	157.2					
6A-7A	156.6	145.2	150.8	154.8	155.2	153.2	153.3	153.3	144.2	152.4	154.2	146.7	149.4	156.1	154.9	141.2	150.2	142.7	153.0	152.0	154.2	152.2	155.0	144.1	157.9	157.8						
7A-8A	152.6	153.0	156.1	153.0	156.7	154.8	150.7	145.1	153.2	153.7	146.7	149.8	157.4	155.3	149.9	144.2	153.3	152.4	153.6	155.0	153.5	155.8	143.1	157.5	158.2							
8A-9A	161.1	141.2	149.4	158.3	152.4	156.7	154.8	145.7	147.2	151.7	155.2	145.2	148.7	152.2	156.1	152.2	144.2	153.0	153.0	152.5	149.2	155.3	155.7	156.1	146.8	154.4	157.4					
9A-10A		137.7	150.0	158.6	156.2	158.1	153.4	153.0	151.7	154.1	154.5	157.0	157.5	156.1				153.8	155.1	153.4	155.9	157.0	158.4	152.1	153.2	155.4						
10A-11A		144.7	156.1	158.6	158.6	158.7	158.7	156.7	155.5	152.4	155.6	151.0	157.0	157.2				157.5	156.6	156.4	155.8	157.2	157.0	153.7	153.4	153.2						
11A-NOON		148.7	158.7	158.7	158.7	158.7	159.4	158.7	156.4	156.2	156.0	152.9	157.0	157.2				156.9	157.1	156.9	158.0	155.2	157.6	157.0	153.5	153.0	154.7					
NOON-1P		156.8	159.7	159.2	159.3	158.7	159.3	158.7	156.4	156.0	156.2	157.3	157.2	156.9				157.5	157.1	158.4	155.2	157.7	157.0	155.0	153.4	154.7						
1P-2P		158.9	159.4	159.2	159.4	158.6	159.6	158.4	156.4	157.1	157.0	156.9	157.9	157.1	157.1	158.7	155.9	156.2	157.2	153.0	153.0	153.0	153.0	153.0	153.0	153.0						
2P-3P		158.9	158.7	159.2	159.6	158.6	159.6	158.2	156.2	156.2	157.1	156.9	156.9	157.2	156.6	156.6	156.0	159.2	157.0	153.3	152.5	153.2	153.2	153.2	153.2	153.2						
3P-4P		158.9	159.4	159.4	158.7	159.4	158.7	156.2	156.2	156.2	156.9	156.5	156.5	156.5	156.6	156.6	155.7	158.6	157.0	156.6	155.7	152.7	152.7	153.2	153.2	153.2						
4P-5P		158.9	161.2	158.7	159.2	158.7	156.2	153.9	156.9	156.3	158.0	156.3	158.0	156.4	156.4	153.3	157.0	156.6	155.7	152.7	152.7	153.2	153.2	153.2	153.2	153.2						
5P-6P		157.6	161.2	159.2	158.7	158.1	158.6	155.7	153.0	156.3	157.4	156.3	157.4	156.0	156.3	153.3	153.7	156.2	157.1	157.1	157.1	157.1	157.1	157.1	157.1	157.1						
6P-7P		156.4	158.2	155.6	157.4	156.7	157.4	153.7	153.6	153.4	156.0	156.3	156.3	153.3	153.7	156.2	157.1	157.1	157.1	157.1	157.1	157.1	157.1	157.1	157.1	157.1						
7P-8P		153.3	153.7	153.7	155.6	156.1	156.9	153.2	153.7	154.5	158.1	153.2	147.2	152.9	153.5	154.3	153.5	154.5	151.1	153.7	154.5	144.7	153.0	157.4	157.4	157.4						
8A-9A		153.7	154.5	152.3	157.7	155.2	156.7	152.0	153.9	154.2	158.2	155.7	153.4	145.5	151.1	153.7	154.5	144.7	153.0	157.4	157.4	157.4	157.4	157.4	157.4	157.4						
9A-10P		158.7	155.7	153.0	152.3	153.6	153.3	157.7	152.0	154.2	153.5	155.5	155.5	153.2	157.5	152.0	152.0	152.0	152.0	152.0	152.0	152.0	152.0	152.0	152.0	152.0						
10P-11P		155.5	153.0	145.7	152.7	154.5	153.3	151.5	153.3	153.7	154.9	154.7	157.7	146.2	157.7	157.7	157.7	157.7	157.7	157.7	157.7	157.7	157.7	157.7	157.7	157.7						
11P-Mn		153.7	155.2	146.5	151.7	152.1	154.2	150.7	154.3	152.9	149.7	154.9	152.2	146.2	152.7	152.7	152.7	152.7	152.7	152.7	152.7	152.7	152.7	152.7	152.7	152.7						

TRANSMITTER: - Summit - 230Mc
 RECEIVER: - Marble
 MONTH & YEAR: - Feb, 1954

UNITS OF MEASUREMENT: - Lbm

CENTRAL RADIO PROPAGATION LABORATORY
 BOULDER, COLORADO
 MONTHLY FIELD INTENSITY DATA SHEET

DONE BY: - *SDA* 17
 CHECKED BY: -
 TIME ZONE: - M.S.T. *March 1 2 3*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
Mn-1A																	158.6	142.6	173.6						175.1	174.3	173.1	171.1						
1A-2A																	153.6	144.7	173.5						170.1	175.4	170.0	171.1						
2A-3A																	155.1	143.4	171.2						164.5	174.9	166.8	172.1						
3A-4A																	158.8	144.6	172.1							169.1	161.1	169.1						
4A-5A																	142.5	146.4	170.7						160.4	166.6	148.3	149.8						
5A-6A																	167.4	147.6	170.1								170.3	155.4	168.4					
6A-7A																	155.6	142.6	169.3								173.6	158.2	172.0					
7A-8A																	151.6	142.6	169.3									171.1	164.6	172.0				
8A-9A																	153.2	142.6									174.3	172.9	172.0					
9A-10A																	162.1	142.6									176.1	176.4	176.5					
10A-11A																	169.4	154.2										177.5	175.5	172.2	176.4			
11A-NOON																	173.1	174.9									177.2	175.3	175.9	176.3				
NOON-1P																	175.1	177.5									173.1	175.5	174.5	176.8				
1P-2P																	177.1	178.4									179.8	178.6	176.9	172.4				
2P-3P																	176.9	172.6									180.8	172.6	172.2	172.5				
3P-4P																	172.1	179.3									180.1	172.1	178.5	174.0				
4P-5P																	169.4	177.3	178.6							173.3	179.4	172.9	178.9	172.5				
5P-6P																	157.4	176.1	175.4							175.2	176.8	172.3	171.9					
6P-7P																	150.9	149.8	174.4							175.1	175.4	174.1	174.0					
7P-8P																	144.2	160.9	172.6									172.5	169.7	173.2				
8A-9A																	142.6	159.2	173.5									170.4	165.9	172.0				
9A-10P																	142.6	159.0	174.0									163.7	166.5					
10P-11P																	142.6	146.4											162.2	172.0				
11P-Mn																	143.9	143.8									174.9	172.9	168.4					

TRANSMITTER: - 5-1046 Mc
 RECEIVER: - Kendrick
 MONTH & YEAR: - Feb, 1954

UNITS OF MEASUREMENT: - L_{bm}

CENTRAL RADIO PROPAGATION LABORATORY
 BOULDER, COLORADO
 MONTHLY FIELD INTENSITY DATA SHEET

DONE BY: - *mel* 21
 CHECKED BY: -
 TIME ZONE: - M.S.T.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	<i>March</i>				
																													<i>1</i>	<i>2</i>			
Mn-1A	129.3	129.0	129.9	129.3	130.7	129.9	130.2	129.7	131.0	133.3	130.6				131.4	130.1	131.0	130.1	130.0	130.1	130.5	130.2	129.7	131.2	130.1	129.9	129.3	130.8		131.0	129.6		
1A-2A	129.5	129.2	130.2	129.1	130.8	128.4	130.0	129.8	130.9	130.1	129.7				131.4	131.0	131.1	130.5	129.7	129.9	130.6	120.1	129.3	130.7	130.0	129.5	129.0	129.2		130.2	129.1		
2A-3A	128.8	129.3	130.6	129.1	130.5	129.2	130.2	130.1	130.8	130.3	129.8				132.0	130.3	131.6	130.1	129.2	129.6	130.5	120.6	129.7		130.0	129.8	129.2	129.6		130.0	129.0		
3A-4A	129.3	127.3	129.8	128.9	130.7	129.5	130.0	130.4	131.0	131.6	129.8				131.7	130.0	130.8	130.7	130.1	129.9	130.4	120.5	130.0	130.2	129.2	129.9	129.2	129.8		130.1	128.5		
4A-5A	129.7	129.5	129.9	129.1	130.7	129.6	131.7	131.3	131.3	130.4	129.9				132.0	130.6	129.9	132.1	129.3	129.9	130.5	130.6	130.4	130.2	129.2	129.5	129.2	129.0		129.7	129.0		
5A-6A	127.9	129.2	129.8	129.5	131.3	129.5	130.6	131.7	130.4	131.1	130.0				132.5	132.5	132.3	131.8	129.7	130.1	131.0	130.0	129.8	131.5	129.9	130.0	129.2	129.2		129.2	129.1		
6A-7A	129.2	130.7	129.9	129.3	130.4	129.2	130.4	130.7	129.5	131.6	129.7				132.3	132.3	130.0	130.6	129.2	129.0	130.5	129.8	130.0	131.0	129.3	129.9	129.1	129.8		129.5	129.0		
7A-8A	127.5	129.7	130.2	129.0	130.9	129.8	133.0	130.5		131.2					132.4	132.7	130.6	131.3	129.9	130.2	130.5	129.5	130.2	130.2	129.5	129.7	129.1	132.0		129.5	129.5		
8A-9A	128.3	130.2	129.9	130.0	130.2		132.4	130.9	129.8	130.3					133.7	131.4	130.8	132.0	130.7	130.6	130.4	129.5	129.9	131.5	129.5		129.2	129.7		129.4	129.2		
9A-10A	128.5	128.7	129.1	130.2	130.3		129.6	130.4	130.4	130.9					132.8	131.4	130.9	130.5	129.9	130.0	130.8	130.0	130.0	130.9	130.9	129.7	130.2	129.5	129.8		129.7	129.6	
10A-11A	128.8		129.5	130.4	130.7	129.8	130.4	130.9	130.6	131.0					132.2	131.5	131.8	130.6	129.5	131.0	130.6	130.0	130.0	130.7	130.1	130.3	129.7	129.8		129.8	129.5		
11A-NOON	129.0		129.6	130.6	130.7	129.9	130.7	131.0	130.8	131.0					132.8	130.6	131.0	131.0	130.2	131.0	130.8	130.0	130.0	130.7	130.3	129.9	129.8	130.0		129.3	129.5		
NOON-1P	129.3			130.8	130.9	130.1	130.9	131.0	131.1	131.3					132.5	131.8	131.1	131.2	130.1	131.0	130.7	130.2	130.8	130.8	130.8	130.7	130.3	129.8	130.0		129.2	129.5	
1P-2P				130.8	130.8	130.0	130.7	131.0	131.3	131.6					133.1	131.8	131.1	131.7	129.7	131.2	130.9	130.2	130.2	130.2	130.9	130.3	130.7	130.7	129.8	130.4		129.2	129.3
2P-3P			129.8	130.8	130.9		130.7	131.1	131.4	131.7					133.5	131.9	131.2	131.7	129.7	131.0	130.8	130.3	130.4	130.8	130.4	130.4	130.7	129.8	131.5		129.2	129.7	
3P-4P	129.5		130.5	130.9	130.9	129.8	130.7	131.1	130.9	131.9					133.2	131.0	131.2	131.5	129.7	130.8	130.6	130.2	131.5	131.0	130.4	130.5	130.5	129.7	130.5		129.5	129.7	
4P-5P	129.5		130.5	130.8	131.0	130.1	130.7	131.0		131.8					133.8	131.6	131.2	131.5	129.9	130.8	130.6	130.0	130.4	130.9	130.9	130.4	130.5	129.7	130.5		129.3	129.5	
5P-6P	129.2	129.3	130.3	131.0	131.0	130.3	130.1	130.9							131.1	130.9	130.9	131.5	129.8	130.5	130.4	129.7	130.2	130.8	131.0	130.3	129.4	130.5		129.2			
6P-7P	128.8	129.1	130.1	130.9	130.9	130.1	130.1	131.6	131.0	130.6				131.0	131.0	130.8	130.7	131.0	129.9	130.4	130.0	129.7	131.0	131.0	129.8	130.0	129.3	130.1		129.2			
7P-8P	128.8	129.3	129.9	130.3	131.0	130.1	130.4	131.8	131.0	130.7				131.1	130.8	130.8	130.2	130.5	130.1	130.5	130.0	129.9	129.9	131.2	129.7	129.4	129.2	130.0		129.2			
8A-9A	128.7	130.1	130.0	130.8	130.4	129.8	130.1	131.6	131.5	130.7				131.2	130.8	131.4	130.4	129.9	129.9	130.4	130.2	129.8	131.0	131.0	129.7	129.2	129.3	130.0		129.8			
9A-10P	129.7	129.9	130.1	130.7	130.3	130.1	130.1	131.6	131.5	130.7				131.5	131.7	131.4	130.0	130.6	129.7	130.5	130.0	129.9	129.9	131.0	129.8	129.1	129.1	131.1		129.8			
10P-11P	129.1	129.7	130.1	131.1	130.4	130.2	130.8	131.7	131.3	130.2				131.5	131.5	132.0	129.9	130.2	129.8	130.6	130.1	129.5	131.0	131.0	130.0	129.2	129.8	129.8		129.5			
11P-Mn	129.3	129.6	129.8	131.0	130.3	129.8	129.5	131.2	131.4	130.1				131.3	131.0	130.8	130.2	130.1	129.8	130.5	130.1	129.2	130.3	130.3	129.8	129.5	131.5	131.0		128.9			

TRANSMITTER:- S-1046 Mc
 RECEIVER:- KARVAL S' Ant.
 MONTH & YEAR:- Feb., 1954

UNITS OF
 MEASUREMENT:- Lbm

CENTRAL RADIO PROPAGATION LABORATORY
 BOULDER, COLORADO
 MONTHLY FIELD INTENSITY DATA SHEET

DONE BY:- 22
 CHECKED BY:-
 TIME ZONE:- M.S.T. March

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	
																														1	2	
Mn-1A		142.4	152.6	149.6	149.3	150.6	149.3	148.7	153.0	152.7	151.4				149.9	150.8	150.7	150.2	148.9	147.8	146.7	147.3	149.6	151.3	148.9	147.1	150.4	156.4	149.1	151.6		
1A-2A		141.3	156.6	149.3	149.1	150.7	149.9	150.9	149.9	154.0	151.4				148.7	149.3	150.3	149.4	149.4	150.1	147.7	148.0	148.6	156.9	148.6	147.0	150.5	156.6	149.5	152.5		
2A-3A		142.4	154.9	149.8	149.3	150.3	149.3	160.3	146.9	154.9	150.9				157.0	147.3	150.4	153.3	149.1	149.4	146.9	148.1	148.1		147.5	145.9	150.1	145.6	149.1	152.3		
3A-4A		146.4	154.1	149.0	150.1	150.6	149.7	149.3	149.5	152.2	151.4				151.2	146.4	149.1	151.1	149.1	149.1	147.1	147.7	148.3	152.9	147.4	148.1	150.4	143.0	147.8	152.4		
4A-5A		145.6	150.7	149.1	150.1	150.1	151.3	149.1	148.4	151.6	151.9				152.6	156.6	154.3	150.4	149.3	147.6	147.0	147.9	148.4	149.4	147.3	148.4	149.9	154.2	145.1	153.2		
5A-6A		146.0	150.9	149.1	153.5	150.1	153.7	148.7	146.2	152.6	150.9				153.1	148.8	151.4	148.8	149.4	147.3	147.7	147.7	148.2	151.0	147.5	148.8	149.3	148.4	145.5	153.2		
6A-7A		143.7	150.9	149.4	150.7	150.6	153.5	150.3	149.0	153.1	150.7				152.6	153.1	152.0	148.5	149.5	147.7	147.3	150.5	147.9	148.0	146.6	148.9	148.9	144.4	146.9	153.2		
7A-8A		144.7	149.7	149.0	150.1	150.1	156.2	154.8	148.2	154.5				152.7	150.8	150.8	150.2	149.5	147.8	147.8	148.2	148.2	148.8	150.8	146.8	148.1	149.5	150.5	147.1	153.7		
8A-9A		150.9	150.7	150.1	150.9	150.7	157.9	158.4	147.1	151.6				153.4	147.6	151.4	150.5	149.9	149.3	148.1	142.7	148.2	147.6	148.3	150.5	149.9	145.3	147.6	153.7			
9A-10A		144.0	150.9	150.9	149.8		148.7	145.5	148.2	152.3				153.5	147.0	152.4	146.0	151.0	150.5	150.4	150.1	148.9	151.0	149.1	151.4	150.2	148.4	151.4	154.0			
10A-11A			152.5	150.9	151.5	152.0	150.1	146.9	148.7	152.9				154.3	149.1	153.1	149.5	151.2	150.5	150.5	151.0	149.0	150.1	150.0	151.4	151.1	148.7	151.4	154.3			
11A-NOON			152.2	151.1	151.2	151.9	151.1	149.0	152.6	152.9				154.3	150.4	152.5	150.4	150.8	150.6	150.6	151.1	149.2	150.9	149.9	151.7	151.7	149.1	149.6	153.9			
NOON-1P				151.1	151.2	151.7	151.1	149.5	153.0	152.9				154.1	150.8	151.5	150.5	150.8	150.6	150.5	151.1	149.6	150.9	150.1	152.5	152.3	149.5	150.3	153.9			
1P-2P		151.8	152.2		150.9	151.8	151.1	150.1	153.1	153.3				154.1	151.1	151.4	150.5	150.9	150.6	150.5	151.0	150.1	150.9	150.9	150.3	152.4	152.1	149.5	150.2	153.8		
2P-3P		151.8	151.9	151.3	151.1	151.8	150.8	150.6	153.0	153.2					150.5		151.0	151.0	150.6	150.4	150.9	150.3	150.9	150.7	151.7	151.7	150.4	149.9	153.9			
3P-4P		151.7	150.9	150.7	150.7	151.8	150.8	149.6	152.3	153.1				153.2	151.3	150.7	150.8	150.8	150.4	150.3	150.7	150.2	150.2	150.8	150.3	151.8	151.7	150.6	150.1	153.6		
4P-5P	147.7	151.1	149.3	149.9	150.2	151.1	150.4	149.2	152.3	152.7				152.6	150.5	150.4	150.5	150.5	149.7	150.2	150.4	149.9	150.5	149.9	151.7	152.7	150.5	149.4	153.6			
5P-6P	146.5	149.9	148.7	149.1	149.6	149.8	145.9	148.4	152.2				151.9	147.4	148.8	149.4	149.4	149.3	148.8	148.9	149.2	149.2	149.4	149.3	150.7	151.1		149.4				
6P-7P	144.5	150.2	149.9	148.2	148.7	148.7	145.1	149.9	151.2	150.5				151.3	148.2	148.5	149.3	148.8	148.7	147.9	148.1	148.9	146.4	148.7	149.9	149.9		149.5				
7P-8P	144.5	150.5	147.7	147.3	148.7	148.7	145.8	147.3	151.2	151.1				151.0	150.8	147.4	148.8	148.9	148.6	147.9	146.9	147.4	148.7	147.1	148.1	149.9	147.8		149.5			
8A-9A	144.2	154.6	145.8	148.4	148.4	148.4	148.6	147.3	151.6	151.4				151.2	154.7	143.7	146.3	149.9	148.4	147.4	146.6	148.1	149.1		147.9	149.9	149.9	151.4	147.3			
9A-10P	145.3	152.9	147.8	148.9	146.9	148.6	145.1	145.4	151.6	151.6				149.9	152.7	147.4	144.5	149.6	147.5	147.4	147.6	148.1	149.3	147.2	148.5	149.6	150.7	147.3	148.6			
10P-11P	144.7	152.2	153.9	149.3	148.4	148.7	150.1	147.6	151.6	151.5				149.7	160.0	151.9	149.3	149.5	147.4	147.3	149.0	148.3	149.2	148.9	151.8	149.9	151.5	148.1	150.8			
11P-Mn	145.8	151.9	153.6	149.9	149.1	148.7	149.0	149.9	151.9	151.3				149.5	155.1	148.2	152.0	148.7	147.9	146.4	147.6	148.2	149.2	149.2	151.3	149.9	154.7	148.6	151.6			

TRANSMITTER: - S-1046 Mc
 RECEIVER: - Karval 14' Ant.
 MONTH & YEAR: - Feb., 1954

UNITS OF
 MEASUREMENT: - Lbm

CENTRAL RADIO PROPAGATION LABORATORY
 BOULDER, COLORADO
 MONTHLY FIELD INTENSITY DATA SHEET

DONE BY: - 23
 CHECKED BY: -
 TIME ZONE: - m.s.T.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
Mn-1A	142.3	137.7	144.3	142.8	143.1	140.2	140.2	142.5	146.1	143.0	138.4				138.5	139.5		142.3							140.0	139.6	144.3	146.0					
1A-2A	143.4	137.0	143.5	140.7	141.9	139.0	140.8	145.1	142.6	142.2	138.1				138.1	137.9		141.3							140.0	139.5	140.8	144.8					
2A-3A	139.5	138.9	147.3	139.7	141.7	138.5	140.8	154.7	140.1	144.3	138.2				139.6	137.0		146.0							139.2	140.0	140.8	135.2					
3A-4A	141.1	142.5	144.5	140.0	143.5	139.5	141.3	142.5	142.8	139.6	137.8				138.8	135.6		143.3							139.1	140.2	140.5	136.0					
4A-5A	139.5	142.5	141.3	140.0	143.5	140.2	142.5	141.2	141.8	138.3	138.5				140.1	145.3		142.8							139.1	140.5	140.5	144.3					
5A-6A	138.0	143.1	141.5	140.2	147.1	138.5	145.2	141.5	138.7	140.9	138.7				139.9	137.7		141.0							139.5	140.7	139.6	139.0					
6A-7A	137.4	140.6	141.6	139.3	145.3	138.5	146.9	143.3	139.8	142.6	138.1				139.7	141.5		140.7							138.8	140.2	139.6	138.0					
7A-8A	136.9	141.9	139.8	138.9	144.6	138.8	148.3	146.9		144.1					140.2	140.6		142.3							138.6	139.8	139.8	142.6					
8A-9A	138.2	146.8	144.5	138.7	144.7	138.8	150.0	152.8	139.5	138.3					140.8			142.7							139.9		140.2	138.6					
9A-10A	138.5	142.5	144.5	140.4	142.5		139.3	139.8	139.5	140.6					141.0			137.7							139.6	142.3	140.7	140.6					
10A-11A	138.7		143.4	141.9	141.4		141.4	141.2	140.0	141.1					141.4			140.7							140.8	142.8	141.1	141.0					
11A-NOON	138.7		143.6	143.9	142.6	141.4	142.0	142.7	140.4	141.3					141.3			141.5							140.8	142.8	141.6	141.1					
NOON-1P	138.9			144.3	144.4	141.0	142.3	142.7	140.6	141.1					141.3		142.0	141.5							141.0	143.6	141.8	141.7					
1P-2P		141.7	143.7		144.6	141.2	141.9	143.1	140.9	141.3					141.8		141.8	141.7								141.6	143.8	141.8	142.0				
2P-3P		141.5	143.7	144.4	142.1	141.6	141.8	143.3	140.4	141.3					141.8		142.0	142.0							143.7	147.6	142.3	141.8	142.5				
3P-4P		141.0	143.5	144.4	141.9	141.2	141.6	143.1	139.7	141.3					141.1		142.0	141.5							143.5	142.6	143.0	141.6	142.8				
4P-5P	138.9	139.3	143.5	143.8	141.8	141.0	141.3	142.2	140.4	140.7					140.8		141.5	141.5								143.3	141.7	142.8	141.5	142.6			
5P-6P	138.0	138.4	143.1	143.4	140.7	140.2	140.7	141.4	140.7						140.3		140.4	140.9								142.0	141.0	141.7	140.3				
6P-7P	138.0	138.3	142.8	142.6	140.2	139.5	140.0	141.6	138.1	137.8					138.8		139.7	140.0								141.0	140.3	141.0	137.5				
7P-8P	139.1	138.9	142.6	142.4	140.2	139.7	140.5	141.5	138.3	137.6					138.7		139.9	139.9								141.0	140.0	140.5	139.0				
8A-9A	138.9	143.1	142.4	142.8	139.0	138.5	143.4	140.8	137.2	138.7					139.9	142.9		138.2	140.7							140.3	140.5	138.6					
9A-10P	140.6	141.7	143.1	143.1	137.8	138.5	139.6	138.7	137.4	138.9					139.9	146.9		137.3	141.3							141.5	140.5	140.2	141.6				
10P-11P	139.9	140.6	142.9	143.4	138.8	138.9	143.9	141.4	137.4	138.7					139.1	148.4		141.1	140.3							140.7	143.8	140.3	142.0				
11P-Mn	141.1	140.7	146.6	143.2	140.7	139.2	142.0	141.2	140.2	138.4					138.5	142.5		144.4	139.7							141.0	143.3	141.0	144.8				

TRANSMITTER:—
 RECEIVER:—
 MONTH & YEAR:—

UNITS OF MEASUREMENT:— Lbm

CENTRAL RADIO PROPAGATION LABORATORY
 BOULDER, COLORADO
 MONTHLY FIELD INTENSITY DATA SHEET

DONE BY:— 24
 CHECKED BY:—
 TIME ZONE:— M.S.T.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31		
Mn-1A					137.2	134.2	134.8	137.4	142.2	141.4	130.3					134.7	132.3	139.9	135.9	136.7	135.9	136.8	137.5	140.2	133.4	132.7	133.7	141.5			136.4	132.2	
1A-2A					137.0	133.1	130.5	141.0	134.4	142.0	137.1					134.7	135.7	135.0	137.5	135.0	139.3	136.4	137.0		130.9	133.8	134.0	140.6			136.4	132.6	
2A-3A					137.2	133.1	130.7	149.9	130.0	142.4	135.3					135.3	134.1	131.7	144.6	130.7	139.0	135.9	130.7	137.1		133.0	132.7	134.2	142.8			136.5	132.1
3A-4A					137.1	133.7	131.7	134.1	141.0	134.0	135.5					134.1	134.0	131.0	144.8	134.6	137.9	130.0	130.5	130.5	142.4	133.7	133.7	134.7	142.2			134.9	132.1
4A-5A					137.1	133.7	131.5	130.7	135.0	135.0	136.0					135.7	134.0	134.0	140.5	136.7	130.0	130.7	137.1	137.0	133.7	133.7	134.2	133.7	140.9			132.0	132.1
5A-6A					137.2	133.2	134.0	130.0	134.1	131.7	130.4					135.7	130.0	131.5	139.0	134.2	130.7	130.2	130.0	130.0	140.3	133.0	134.4	134.4	133.7			133.0	130.9
6A-7A					137.5	133.5	132.0	140.0	135.0	141.0	135.1					137.0	134.0	131.0	131.0	130.0	135.5	130.0	130.0	131.0	131.0	132.0	133.4	133.5	132.8			133.4	132.1
7A-8A					137.5	133.5	142.0	142.5		141.7						135.5	134.0	131.0	140.0	134.1	135.5	130.0	135.3	130.0	140.5	132.0	133.0	133.9	130.7			133.7	132.8
8A-9A					137.0	133.0	142.0	141.7	137.0	130.0						135.0	135.0	130.0	134.5	130.0	135.5	134.0	130.0	135.7	132.3	135.2	130.0	133.2			132.2	132.0	
9A-10A					137.0		134.0	134.0	132.0	137.0						130.0	132.0	130.0	135.0	137.1	137.0	130.0	130.0	137.0	133.6	135.9	134.2	130.0			135.4	132.8	
10A-11A					137.0	133.1	134.0	135.0	137.0	130.0						130.0	133.0	130.0	135.0	137.0	137.0	137.0	130.0	137.0	134.4	130.7	134.7	135.3			130.0	132.0	
11A-NOON					136.0	135.6	135.0	130.0	135.0	130.0						130.0	130.0	130.0	135.9	137.0	137.0	137.0	130.0	137.0	138.2	134.2	130.5	135.1	135.4			134.0	133.0
NOON-1P					137.0	135.0	135.0	130.0	135.0	130.0						130.0	135.0	130.0	137.0	137.0	137.0	130.0	130.0	137.0	134.5	137.1	135.4	135.1			135.2	133.5	
1P-2P			137.0		137.1	135.0	134.0	137.0	130.0	130.0						130.0	130.0	130.0	137.0	137.0	137.0	130.0	130.0	135.0	137.1	137.1	135.3	130.0			132.2	133.4	
2P-3P		133.2	137.4		137.0	130.0	130.0	130.0	130.0	130.0						130.0	130.0	130.0	137.0	130.0	137.1	130.0	130.0	137.1	135.7	137.5	135.4	130.0			135.7	134.2	
3P-4P		137.0	137.0		137.2	130.0	130.0	130.0	130.0	137.0	130.0					130.0	130.0	130.0	137.0	130.0	137.0	130.0	130.0	137.0	137.5	130.0	137.0	135.4	130.0			133.1	134.0
4P-5P	134.0	130.0	136.6		137.1	130.0	130.0	130.0	130.0	130.0					130.0	130.0	130.0	137.0	130.0	137.0	130.0	130.0	130.0	137.1	135.1	137.0	137.0	130.0			135.7	134.0	
5P-6P	134.0	136.0	136.0		135.1	134.0	134.0	130.0	130.0	130.0					130.0	130.0	130.0	137.0	130.0	137.0	130.0	130.0	130.0	137.0	137.0	135.2	136.7	134.0			133.1		
6P-7P	130.0	132.0	135.0		130.0	130.0	130.0	130.0	130.0	130.0					130.0	130.0	130.0	137.0	130.0	137.0	130.0	130.0	130.0	137.0	134.2	134.2	132.7			133.1			
7P-8P	130.0	130.0	130.0		130.0	133.0	130.0	130.0	130.0	130.0					130.0	130.0	130.0	137.0	130.0	137.0	130.0	130.0	130.0	137.0	134.2	134.3	130.0	130.0			133.0		
8A-9A	130.0	135.9		137.0	130.0	130.0	130.0	130.0	130.0	130.0				130.0	130.0	130.0	130.0	137.0	130.0	137.0	130.0	130.0	130.0	137.0	130.0	134.0	134.0	132.3	133.7			132.0	
9A-10P	130.0	134.8		137.0	135.8	133.5	130.0	130.0	130.0	130.0				130.0	130.0	130.0	130.0	137.0	130.0	137.0	130.0	130.0	130.0	137.0	130.0	134.7	134.7	130.0	130.0			133.0	
10P-11P	130.0			137.1	134.2	130.0	130.0	130.0	130.0	130.0				130.0	130.0	130.0	130.0	137.0	130.0	137.0	130.0	130.0	130.0	137.0	130.0	134.7	134.7	130.0	130.0			132.4	
11P-Mn	130.0			137.1	135.0	134.5	130.0	130.0	130.0	130.0				130.0	130.0	130.0	130.0	137.0	130.0	137.0	130.0	130.0	130.0	137.0	130.0	134.7	134.7	130.0	130.0			132.2	

TRANSMITTER: - 5-1046 Nc
 RECEIVER: - Haswell
 MONTH & YEAR: - Feb, 1954

UNITS OF MEASUREMENT: - L_{bm}

CENTRAL RADIO PROPAGATION LABORATORY
 BOULDER, COLORADO
 MONTHLY FIELD INTENSITY DATA SHEET

DONE BY: - TRK 25
 CHECKED BY: -
 TIME ZONE: - M.S.T.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Mn-1A	149.2	155.1	159.0	158.2	166.4	168.3	158.9	161.7	149.9	155.3	160.9	162.3	159.0	157.7	167.5	167.2	153.2	149.6		157.2	165.8	171.1	166.4	159.4	169.3	160.5	168.3	156.6		159.1	166.3
1A-2A	146.8	156.5	155.7	156.5	165.3	167.8	157.8	161.7	150.2	154.5	163.0	162.8	159.3	159.0	166.2	165.7	156.0	146.6		153.9	169.3	177.0	165.4	159.2	167.4	159.3	160.8	158.0		158.6	166.6
2A-3A	154.3	151.9	159.4	155.2	173.6	165.8	157.3	161.7	159.4	147.3	163.5	161.2	157.7	160.6	162.2	160.3	156.2	146.2		152.9	173.0	158.7	165.4		167.4	154.7	169.3	159.0		157.5	165.9
3A-4A	157.1	150.2	156.2	156.3	162.2	166.5	154.6	162.1	154.7	149.6	164.5	157.2	154.0		167.0	157.7	155.7	144.0		151.2	>172.0	160.4	164.1	155.8	163.7	154.8	169.0	165.6		160.2	167.0
4A-5A	163.2	146.8	157.2	156.0	156.3	165.9	154.1	160.8	154.5	149.1	164.8	152.5	155.8	163.3	172.0	157.7	160.6	145.5	168.6	158.0	>172.0	161.3	162.1	152.6	163.2	161.7	169.0	161.2		165.6	168.0
5A-6A	162.5	149.2	153.9	157.9	154.2	163.6	155.9	155.0	147.0	148.6	165.0	157.2	152.7	167.0	>172.0	157.1	156.2	150.0	168.5	154.0	>172.0	162.4	159.8	152.1	160.5	159.8	168.6	160.2		161.4	168.6
6A-7A	162.5	147.4	155.4	161.7	154.5	163.1	156.3	156.8	149.1	154.4	164.0	150.2	147.4	167.0	>172.0	143.9	159.3	147.1	169.1	152.9	>172.0	>172.0	155.4	154.5	167.7	161.7	167.8	160.6		166.7	168.9
7A-8A	162.8	142.7	149.7	162.7	154.2	164.9	158.1	157.3	152.3	159.2		151.1	149.0	167.0	>172.0	143.2	157.6	149.6	168.3	153.4	>172.0	>172.0	154.0	155.4	163.9	164.6	169.8	161.2		165.2	169.7
8A-9A			152.9	164.6	157.2	167.8	156.8	159.2	153.1	160.6		157.7	152.5	170.3	>172.0	149.2	161.7	150.0	167.3	156.7	>172.0	>172.0	161.7	155.4	170.2	171.0	170.2	162.3		169.5	170.0
9A-10A		164.1	155.9	169.5	169.7		163.6	163.6	153.4	167.7		160.6	154.3	>172.0	166.7	148.0	165.8	159.7		165.0	>172.0	>172.0	167.2	171.2	171.8	170.8	168.8		170.9	169.5	
10A-11A			169.2	170.0	170.5	170.0	169.6	169.7	167.3	169.2		168.0	164.5	166.6	165.0					167.6	>172.0	>172.0	170.8	171.9	172.0	171.2	169.5		171.2	169.3	
11A-NOON			170.7	170.5	170.5	170.5	170.5	170.9	168.5	169.2		>172.0	>172.0	>172.0	167.2	165.6	164.7			168.3	>172.0		170.8		172.0	171.5	170.3		168.4	168.1	
NOON-1P		170.6		170.5	170.5	171.1	171.1	171.2	169.5	169.5	>172.0	>172.0	>172.0	>172.0	166.8	165.9	166.6	165.9		170.7	>172.0	171.8		171.0	170.6	171.5	171.5	171.2		167.3	168.9
1P-2P		171.1	170.7	170.5	170.8	171.1	170.7	171.9	169.1	170.0	>172.0	>172.0	>172.0	>172.0	167.5	166.3	167.0	170.2		170.3	>172.0	172.2		171.1	171.1	172.0	172.2	171.0		167.3	168.9
2P-3P		171.6	170.7	170.8	170.5	171.5	171.0	171.6	169.1	170.0	>172.0	>172.0	>172.0	>172.0	167.0	166.3	167.0	171.0		170.0	173.2	172.8		170.2	171.4	172.3	172.0	170.6		166.9	167.2
3P-4P		170.6	170.2	170.0	170.2	170.3	170.5	171.1	168.0	170.1	>172.0	>172.0	>172.0	>172.0	167.2	166.2	167.0	169.1		169.8	172.0	172.4		170.5	170.8	170.2	171.5	170.5		167.6	168.3
4P-5P		167.9	167.7	168.7	169.2	169.8	169.4	169.2	167.3	169.5	>172.0	170.6	>172.0	>172.0	166.9	165.3	169.7	169.4		167.7	170.0	171.0		169.2	171.2	169.4	171.0	172.0		167.0	
5P-6P		166.1	165.0	166.1	165.5	166.4	166.7	166.0	166.0	167.5	170.6	160.4	170.3	170.5	165.3	162.5	166.5	167.0		162.6	165.7	168.0		166.1	165.4	168.6		168.3		166.2	
6P-7P		162.3	160.9	163.8	162.1	161.5	162.5	164.1	163.8	161.4	170.2	158.7	164.9	170.7	164.4	161.1	162.7	166.8		162.1	160.6	164.5	166.3	163.5	165.2	167.5	168.0	167.5		166.3	
7P-8P		159.0	156.3	161.0	161.0	160.7	160.4	159.0	162.4	161.8	170.2	158.4	164.2	163.3	166.5	159.5	159.9	160.5		160.9	163.0	163.1	162.6	162.0	164.5	164.5	167.0	168.9		165.0	
8A-9A		160.7	158.1	159.9	163.1	160.3	161.2	165.8	162.4	162.7	170.6	157.0	163.3	165.0	167.7	148.8	158.8	166.1		161.9	166.2	162.2	167.1		166.8	171.2	163.6	167.7		161.7	
9A-10P		158.5	160.2	158.5	171.8	163.6	159.4	156.3	159.7	161.0	164.0	170.5	153.9	161.8	170.0		170.2	154.1	153.7	169.0		162.7	162.9	159.2	157.5	164.3	167.0	170.4	163.6	163.3	163.4
10P-11P		158.2	157.9	152.3	167.6	161.5	159.4	159.3	161.0	163.5	167.7	157.0	161.0	171.0		169.7	157.0	162.6		164.3	167.9	159.2		159.8	163.3	164.3	162.1	161.1		164.6	
11P-Mn		152.3	156.4	154.1	170.0	165.9	159.8	162.8	156.3	154.5	163.2	169.7	157.8	157.3	170.5	167.0	153.7	149.4		167.5	167.5	157.8	157.8	155.5	161.3	168.0	156.0	157.1		164.3	

Transmitter:-
 Receiver :-
 Month & Year:-

Units of
 Measurement:- Lbm

CENTRAL RADIO PROPAGATION LABORATORY
 Boulder, Colorado
 Monthly Field Intensity Data Sheet

Done By :-
 Checked By :-
 Time Zone :-

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31			
Mn - 1A																																		
1A - 2A																																		
2A - 3A																																		
3A - 4A																																		
4A - 5A																																		
5A - 6A																																		
6A - 7A																																		
7A - 8A																																		
8A - 9A																																		
9A - 10A																																		
10A - 11A																																		
11A - Noon																																		
Noon - 1 P																																		
1P - 2P																																		
2P - 3P																																		
3P - 4P																																		
4P - 5P																																		
5P - 6P																																		
6P - 7P																																		
7P - 8P																																		
8P - 9P																																		
9P - 10P																																		
10P - 11P																																		
11P - Mn																																		

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M.S.T.
 March

THE NATIONAL BUREAU OF STANDARDS

Functions and Activities

The functions of the National Bureau of Standards are set forth in the Act of Congress, March 3, 1901, as amended by Congress in Public Law 619, 1950. These include the development and maintenance of the national standards of measurement and the provision of means and methods for making measurements consistent with these standards; the determination of physical constants and properties of materials; the development of methods and instruments for testing materials, devices, and structures; advisory services to Government Agencies on scientific and technical problems; invention and development of devices to serve special needs of the Government; and the development of standard practices, codes, and specifications. The work includes basic and applied research, development, engineering, instrumentation, testing, evaluation, calibration services, and various consultation and information services. A major portion of the Bureau's work is performed for other Government Agencies, particularly the Department of Defense and the Atomic Energy Commission. The scope of activities is suggested by the listing of divisions and sections on the inside of the front cover.

Reports and Publications

The results of the Bureau's work take the form of either actual equipment and devices or published papers and reports. Reports are issued to the sponsoring agency of a particular project or program. Published papers appear either in the Bureau's own series of publications or in the journals of professional and scientific societies. The Bureau itself publishes three monthly periodicals, available from the Government Printing Office: The Journal of Research, which presents complete papers reporting technical investigations; the Technical News Bulletin, which presents summary and preliminary reports on work in progress; and Basic Radio Propagation Predictions, which provides data for determining the best frequencies to use for radio communications throughout the world. There are also five series of nonperiodical publications: The Applied Mathematics Series, Circulars, Handbooks, Building Materials and Structures Reports, and Miscellaneous Publications.

Information on the Bureau's publications can be found in NBS Circular 460, Publications of the National Bureau of Standards (\$1.00). Information on calibration services and fees can be found in NBS Circular 483, Testing by the National Bureau of Standards (25 cents). Both are available from the Government Printing Office. Inquiries regarding the Bureau's reports and publications should be addressed to the Office of Scientific Publications, National Bureau of Standards, Washington 25, D. C.

