PROJECT 10073 RECORD CARD

1. DATE
20 SEp 61

2. LOCATION
Lincoln, New Hampshire

3. DATE-TIME GROUP
Local 0001-0100
GMT 200401-0500Z

4. TYPE OF OBSERVATION
☒ Ground-Visual ☐ Ground-Radar
☐ Air-Visual ☒ Air-Intercept Radar

5. PHOTOS
☐ Yes
☒ No

6. SOURCE
Civilian

7. LENGTH OF OBSERVATION
30 min

8. NUMBER OF OBJECTS
1

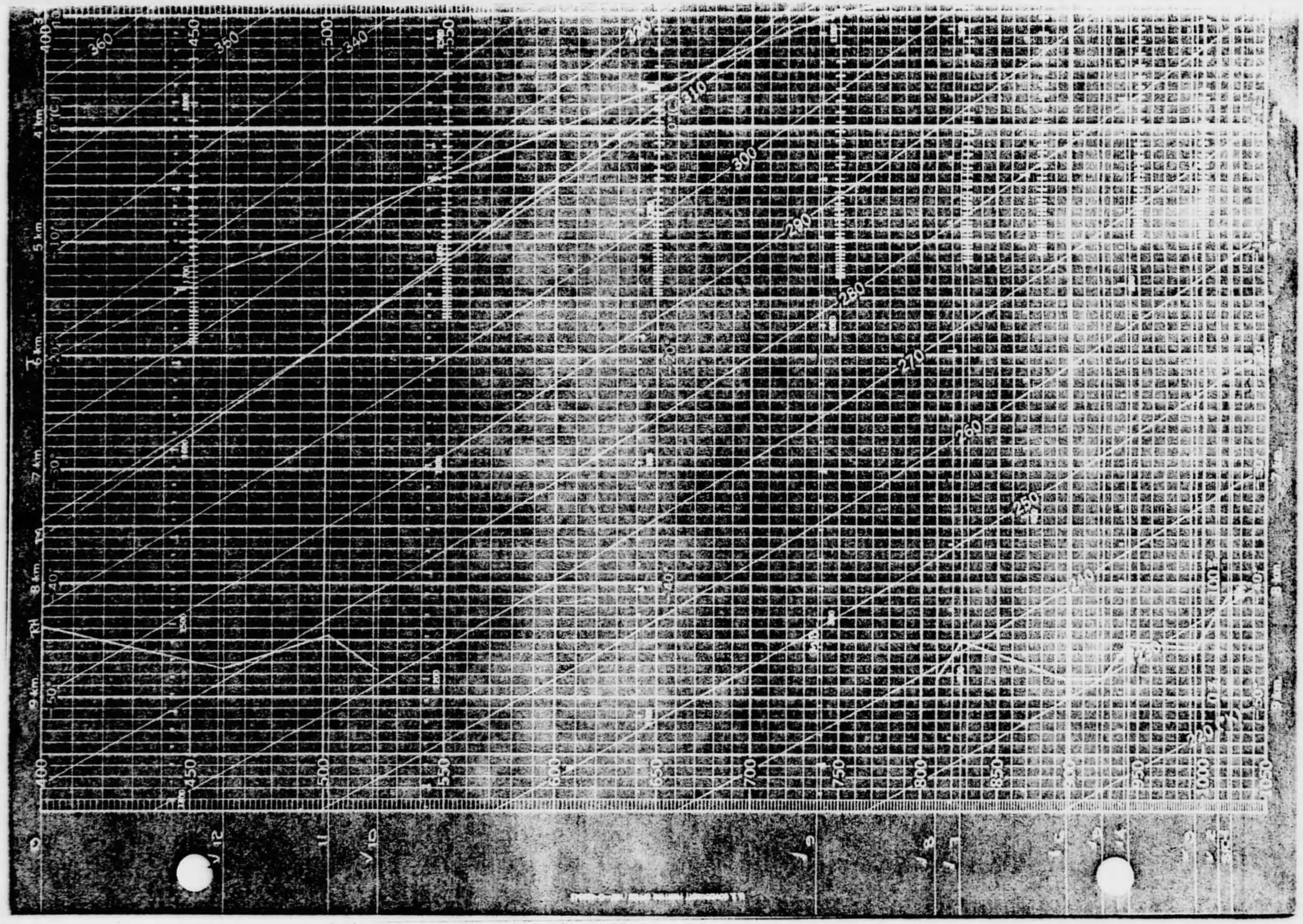
9. COURSE
N

10. BRIEF SUMMARY OF SIGHTING
Continuous band of light Cigar shaped at all times despite changes of direction. Wings seemed to appear on main body. Described as V shaped with red lights on tips; later wings appeared to extedn further. Appeared about 45°. Varied direction abruptly and disappeared to N.

11. COMMENTS
Both radar and visual sighting are probably due to conditions resulting fr strong inversion which prevaled in area on morning of sighting. Actual source of light viewed is not known but it has all characteristics of an advertising search light. Radar probably was looking at some ground target due to strong inversion No evidence indicating objts were due to other than natural causes.

12. CONCLUSIONS
☐ Was Balloon
☐ Probably Balloon
☐ Possibly Balloon
☐ Was Aircraft
☐ Probably Aircraft
☐ Possibly Aircraft
☐ Was Astronomical
☐ Probably Astronomical
☐ Possibly Astronomical
☒ Other INSUFF DATA FOR EVALUATION
☐ Insufficient Data for Evaluation
☐ Unknown

ATIC FORM 329 (REV 26 SEP 52)



WB Form 610-16A (Revised 4-1-57) WBAN 31A

U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

ADIABATIC CHART

DATA BLOCK A

Code Check	Type of Entry	Level No.	PRESSURE Contact	PRESSURE mb.	TEMPERATURE Ordinate	TEMPERATURE Ascent °C	REL. HUM Ordinate	REL. HUM Including Corr. of ±0 %	DEW POINT °C	Altitude of Significant Levels or Remarks
8	0	1		1022		12.9		92	11.6	20
11	1	2	3.0	1012	65.4	12.7	79.0	76	8.6	110
22	2	3	4.0	994	67.8	17.5	46.9	40	4.7	280
33		4	6.4	943	67.0	16.3	50.4	47	4.6	
44		5	7.5	924	67.0	15.9	50	47	-2.1	
55	4	6	9.0	898	66.9	15.6	50	47	-2.4	1110
66	1	7	12.0	826	64.4	10.9	54.9	50	0.9	1820
77	2	8	14.0	810	63.0	12.0	5.0	15	-11.6	2000
88		9	18.0	738	63.6	9.5	(10)	(13)	MB	
99		10	21.4	672	53.8	-6.4	5.0	23	-24.1	
	4	11	33.0	562	52.0	-9.0	43.0	53		5860
11	4	12	37.0	462	47.8	-12.2	8.0	25	-28.0	6900
		13	41.4	400	43.9	-20.4	40.3	52		
		14								
		15								

SURFACE OBSERVATION AT RELEASE

PRESSURE — Station (Inches, mb.) | Correction (mb.) | at Shelter (mb.) | CONTACT Dial | CONTACT Record

TEMPERATURE | RELATIVE HUMIDITY

CLOUDS AND WEATHER

Constant Pressure Blocks

4D184	7 571	-20.4
K0156	62	-25.0
D2721	269	11

PUNCHED CARD No. 3

0100	-13.8
01	X
270	8

1600

50328	5878	-22
59671	52	-17.2
02616	262	8

(5)

5140	4.1	
(4)	X	
263	7	

1455

1449	281	
(3)	X	
245	8	

2805	45	
(2)	X	
241	6	

1245

70418	5134	70
01410	(1)	MD
02510	245	K

2000	22	
(1)	X	
245	6	

1107

2087	11.1	
(12)	X	
260	7	

1501

85518	15 89	124
12515	58	15
02316	23	7

BASELINE CHECK READINGS

Time G.C.T.	TEMPERATURE Ordinate	TEMPERATURE Dry	TEMPERATURE Wet
2252	72.C	28.5	25.5

RELATIVE HUMIDITY Ordinate	Rad. %	Corr. %	Psychrometer %
85.1	77	±0	77

CODED MESSAGE FOR TRANSMISSION

60C	20057	15057	07010	85518
12515	02716	70418	01410	02510
50328	20571	02616	40404	70156
01721	20162	85926	02653	26511
93559	02760	20052	04531	00002
85443	88881	00057	10111	16888
00920				

LEGEND FOR CONSTANT PRESSURE BLOCKS

LEGEND FOR PLOTTED CURVES

PUNCHED CARD No. 2

PUNCHED CARD No. 1

SURFACE 800 850 900 950 1000 700 750

DATA BLOCK B

PRESSURE		TEMPERATURE				REL. HUM.		DEW POINT °C	Altitude of Constant Pressure Surface (Tenths of Meters)
mb	mb	Ordinate	Ascent °C	Correction	Corrected	Ordinate	Including Corr. of °C		
20	574	11.3	-23.9			20.6	30	-31.4	
10	283	30.2	-38.5			11.0	46	-46.0	
00	220	22.5	-49.5						
00	183	16.5	-57.3						12900
00	147	14.2	-63.6						
94	135	12.4	-67.1						14790
90	127	13.0	-66.0						
20	108	12.0	-68.0						
00	100	13.0	-66.0						16608

Constant Pressure Blocks

10149	16405	-66.5
85410	X	X
02623	281	14

1249

13649	-66.2
2690	28?

1101

15643	14151	-63.1
85421	X	X
02767	271	34

925

13196	-60.2
267	40

1114

20052	12352	-54.8
04078		
02792	265	47

1148

30162	9637	-35.4
85920	46	-42.9
02633	264	47

1091

8546	-27.4	
49	X	
273	15	

PUNCHED CARD No. 1

PUNCHED CARD No. 2

U.S. Form 610.14B (Revised 4-1-57) WBAN-SIE

U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

ADIABATIC CHART

Solar Radiation Corrections for Dew Temperatures

1. Time (GCT) elapsed since release
2. Difference between (1) and Sunset Hour
3. Difference between (2) and Sunset Hour
4. Difference between (2) and Sunset Hour
5. Elevation angle of Sun for (1)
6. Elevation angle of Sun for (2)
7. Elevation angle of Sun for (3)
8. Elevation angle of Sun for (4)
9. Elapsed time from 150 to 80 mb or its approximation between these levels
10. Elapsed time from 80 to 50 mb or its approximation between these levels
11. Elapsed time from 80 to ___ mb
    - a. ___ to ___ mb
    - b. ___ to ___ mb
12. Ascendiosat rate corresponding to (10)
    - a. (10a)
    - b. (10b)
    - c. (10c)
    - d. (10d)

CODED MESSAGE FOR TRANSMISSION

LEGEND FOR CONSTANT PRESSURE BLOCKS

DATA AS TRANSMITTED	DATA AS ENTERED ON PUNCHED CARD	
00Mmm	Altitude (tenths)	Temperature (°C)
TTT$_d$T$_d$	Dewpoint depression (°C)	Dew point (°C)
Ddff	Direction (degrees)	Speed (knots)

*Omitted above 200 mb

LEGEND FOR PLOTTED CURVES

Dew point

Air temperature (°C)

Wet-bulb temperature (°C)

Ground by [illegible]

Verified by [illegible]

Inspected by

DATE AND RELEASE TIME

GMT	1961	SEP	19	1705
EST	1961	SEP	19	2305

Radiosonde No. [illegible] Ascension No. [illegible]

Station

Portland, Maine (City Airport)

43° 39' N. 70° 19' W.

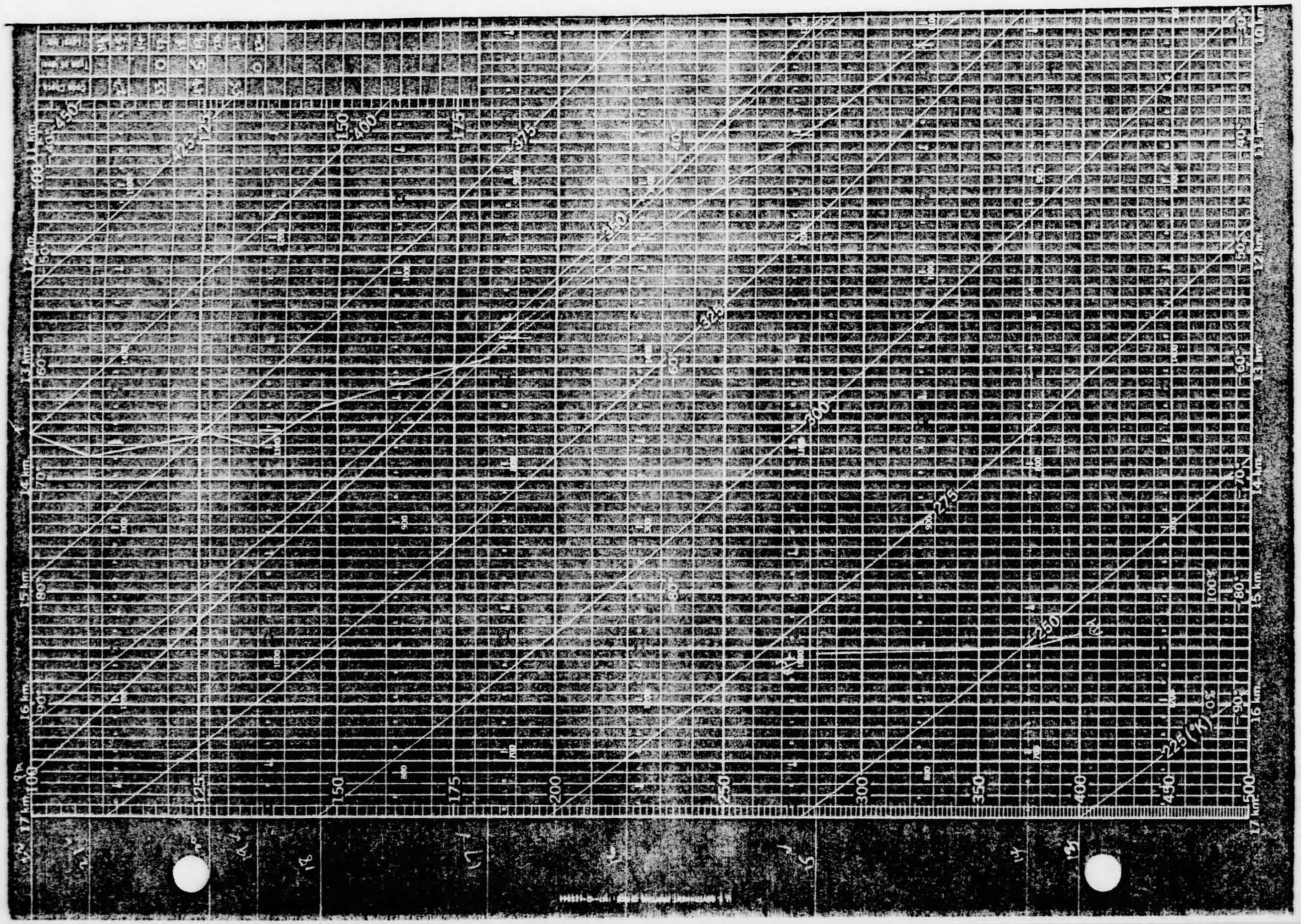
Elev.

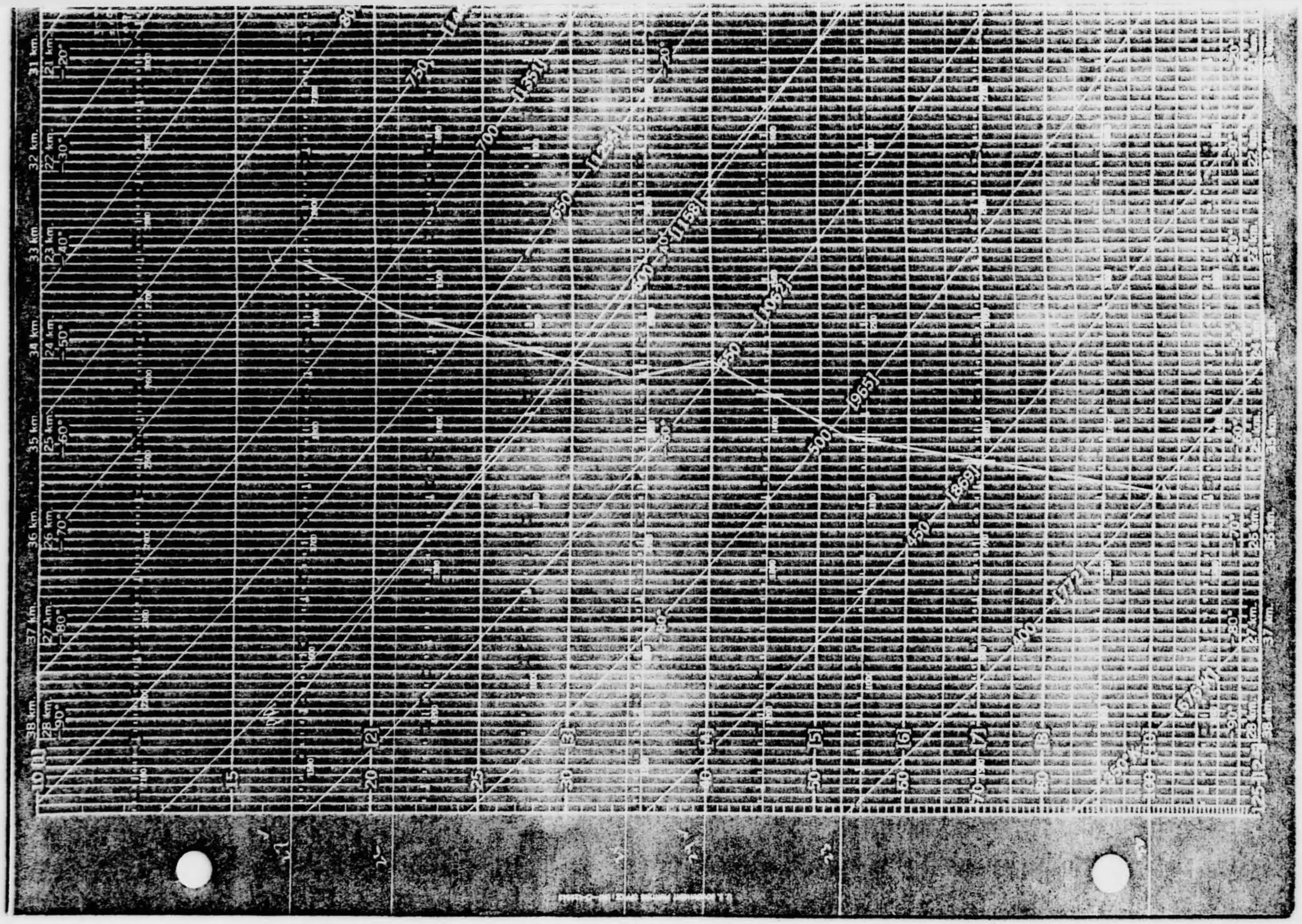
Pressure at Sea Level at Release Time

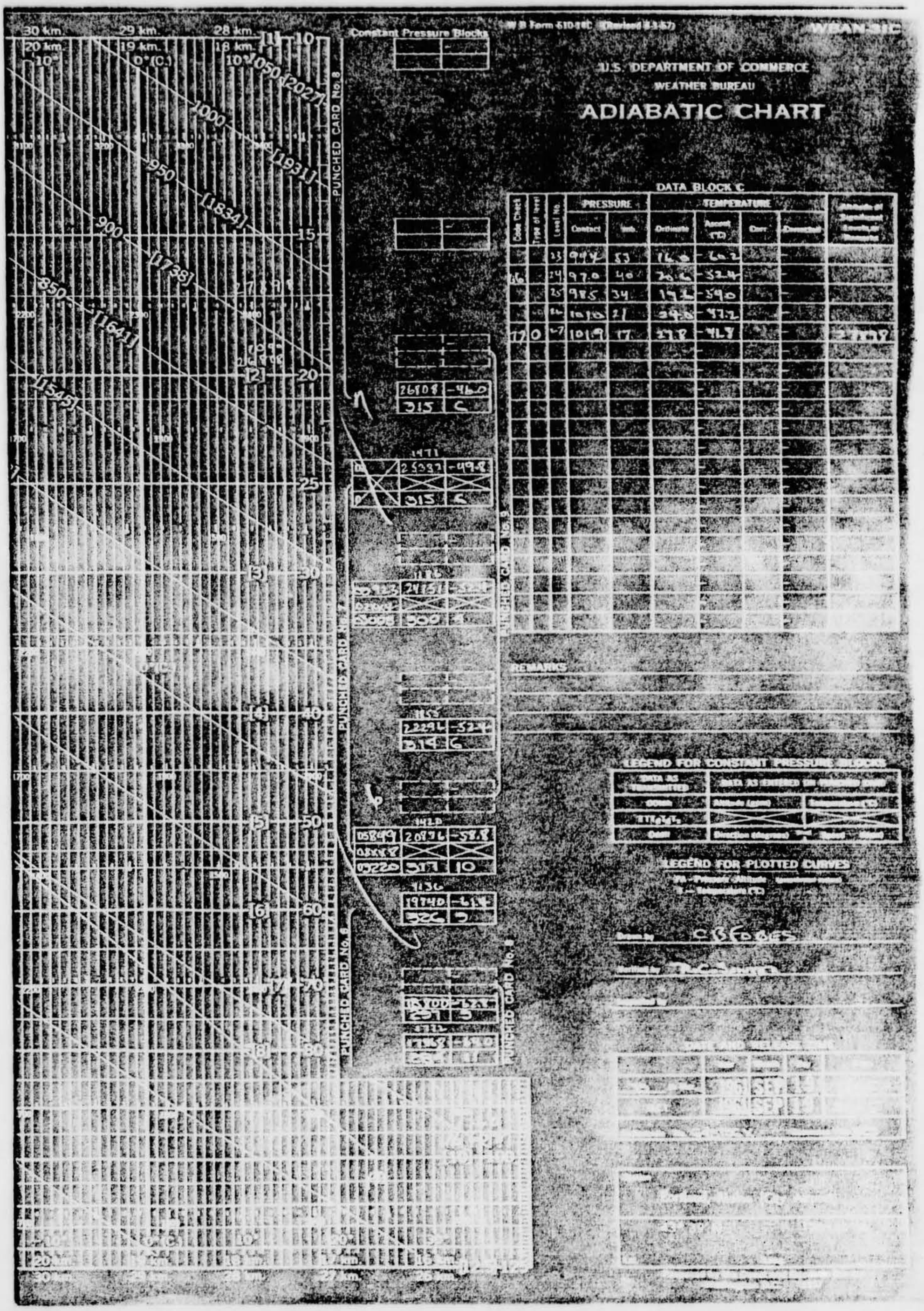
400 350 300 250 200 150 100 50

−20° −10° 0° (C.) 10°

9 km 8 km 7 km 6 km 5 km






30 km
29 km
28 km
20 km
19 km
18 km
0° (C.)
PUNCHED CARD No. 8
Constant Pressure Blocks
U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU
ADIABATIC CHART
DATA BLOCK C
Code Check
Type of Level
Level No.
PRESSURE
TEMPERATURE
Contact
Diff.
Orthonic
Ascent (°F)
Corr.
Corrected
REMARKS
LEGEND FOR CONSTANT PRESSURE BLOCKS
LEGEND FOR PLOTTED CURVES
PUNCHED CARD No. 6
PUNCHED CARD No. 7

ADIABATIC CHART

U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

WBAN STA.

DATA BLOCK A

Code Check	Time of Release	Level No.	PRESSURE Contact	PRESSURE Mb.	TEMPERATURE Ordinate	TEMPERATURE Ascent °C	REL. HUM. Ordinate	REL. HUM. Including Corr. of +5 %	DEW POINT °C	Altitude of Standard Level or Significant Point
00	1	1		1020		10.4		94	9.6	20
11	0	2	3.4	1005	65.8	16.1	78	77	17.0	140
22	2	3	6.0	955	66.8	18.2	75.6	71	12.8	580
33	1	4	8.0	922	66.0	18.5	72.8	68	10.5	880
44	2	5	9.4	901	64.3	17.0	60	32	-4.9	1080
55	4	6	14.0	825	64.5	18.1	71.0	68	11.9	1830
66		7	24.4	655	57.7	2.0	79.1	85	-9.2	
77		8	29.4	597	56.2	-0.8	63.3	72		
07		9	32.4	562	53.0	-5.3	71.0	48	-14.7	
		10	34.4	519	51.6	-7.4	49.8	60		
88		11	37.0	487	49.8	-10.0	46.0	60	-16.3	
99		12	39.4	460	47.8	-12.9	15.2	41	-23.5	
		13	41.0	441	45.9	-15.5	20.4	46		
11	0	14	47.0	422	44.2	-17.9	51.4	69	-22.9	7170
		15								

Constant Pressure Blocks

40468	7569	-20.8
70757	69	-25.0
03577	2466	11
66540	-14.2	
1404	X	
24449	12	
50927	5875	-8.8
58657	60	-15.2
02718	2774	9
51110	-4.7	
51	X	
282	5	
85517	1595	14.6
14044	52	4.8
03007	295	4
14340	-6.6	
73	X	
2668	6	
9160	-1.6	
24	X	
260	9	
2610	8.6	
76	X	
255	6	
1106		
2087	11.7	
79	X	
270	4	
512		
85517	1595	14.6
14044	52	4.8
03007	295	4
1090	17.0	
23	X	
271	6	
670	18.0	
71	X	
262	6	
903		
11061	11.7	16.2
16124	77	17.8
03206	322	3
1020	10.4	
94		
355	7	

PUNCHED CARD No. 1

PUNCHED CARD No. 2

PUNCHED CARD No. 3

BASELINE CHECK READINGS

TEMPERATURE Ordinate	TEMPERATURE Ascent °C	DEW POINT °C	
		21.7	17.4
71.2	21.8	22.6	25.2

RELATIVE HUMIDITY Ordinate			
84.9	78	45	92

CODED MESSAGE FOR TRANSMISSION

60606 11061 16124 03206 85517
14044 03007 70084 05727 02718
50927 51657 02718 40468 70757
02522 10163 85517 03510 75575
72421 07662 20061 03510 07671
15655 14340 03206 10084 11061
02829
55525 00020 10084 11065 16121
22955 16113 03322 40105 40850
17543 55525 13072 66655 02801
77547 55643 10121 07171 72220

REMARKS

SURFACE OBSERVATION AT RELEASE

PRESSURE Station Inches	PRESSURE Station Mb.	PRESSURE Correction to Station	PRESSURE at Station	CONTACT Ground Check	CONTACT Instrument
	1020.4				

*For difference in elevation between barometer and instrument shelter.

TEMPERATURE Dry	TEMPERATURE Wet	RELATIVE HUMIDITY	
69.8	58.0		
11.4	11.0	78	365

LEGEND FOR CONSTANT PRESSURE BLOCKS

DATA AS TRANSMITTED	DATA AS ENTERED ON PUNCHED CARD
00mb	Altitude (Decam.)	Temperature (°C)
11 1/2 mb	Relative Humidity (%)	Dew Point (°C)
Date	Direction (degrees)	Speed (knots)

LEGEND FOR PLOTTED CURVES

Dr. Pressure Altitude
T — Temperature °C

Drawn by P H Loyd Jr.

Verified by J.F. CHECK

Inspected by

1

DATE AND RELEASE TIME

	Year	Month	Day	Hour
GCT	1961	SEP	20	0625
LST	1961	SEP	20	1125

Station: Portland, Maine (City Airport)

43° 39' N 70° 19' W

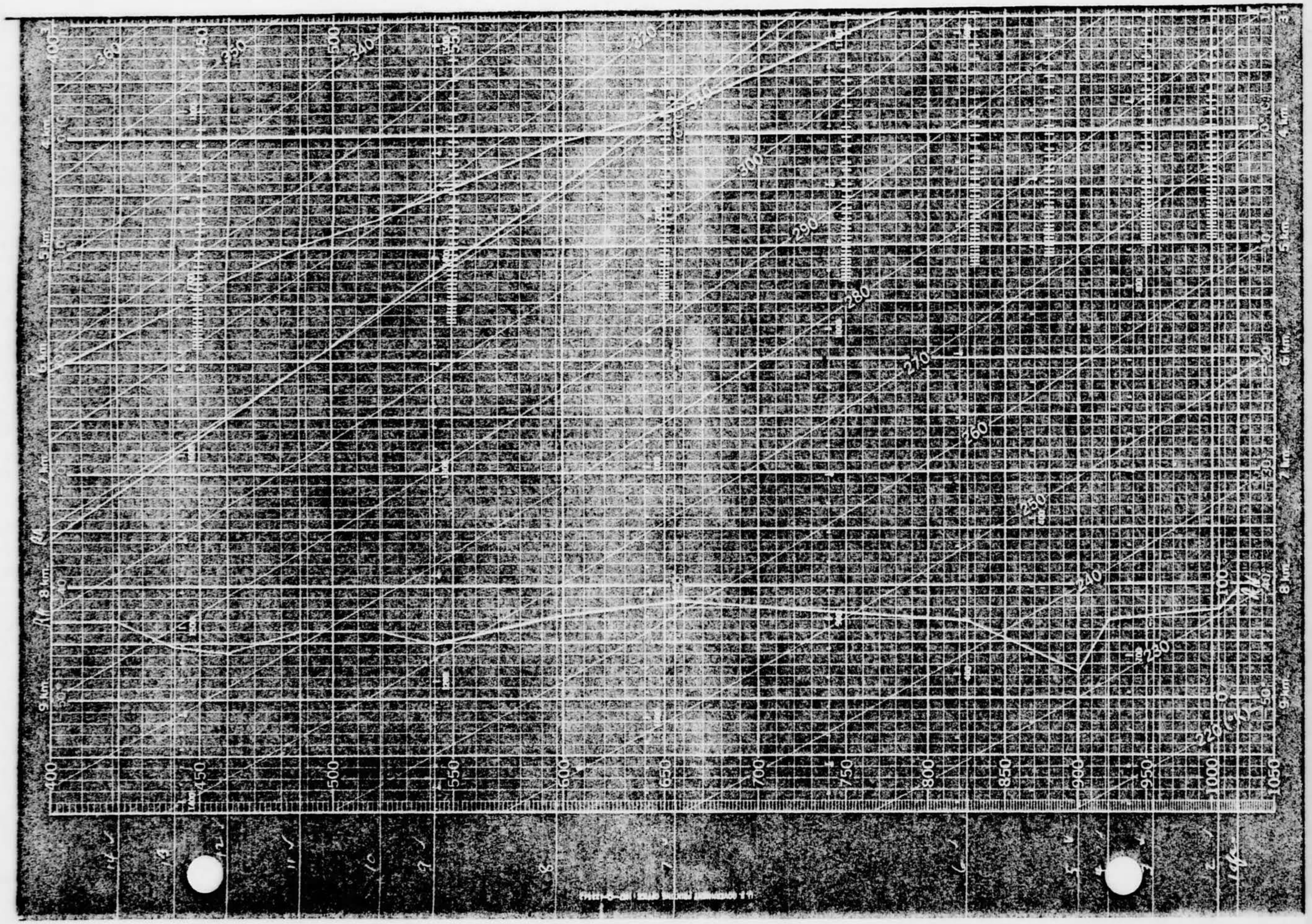
Prepared by the Upper Air Branch, Aerology Section, Weather Bureau, Washington D.C., 1957

600 650 700 750 800 850 900 950 1000 1050

20 30 40 50

2 km. 1 km. MSL

787



DATA BLOCK B

SURF mb	TEMPERATURE Ordinate	TEMPERATURE Ascent °C	TEMPERATURE Correction	TEMPERATURE Corrected	REL. HUM. Ordinate	REL. HUM. Including Corr. of +5 %	DEW POINT °C	Altitude of significant levels, m; Remarks
337	35.6	-29.4			34.0	68		
314	34.0	-31.5			28.0	65		
270	28.3	-39.3			13.6	56	-44.8	
230	25.9	-45.6						
204	19.7	-52.3						
154	13.1	-44.2						14000
109	11.5	-67.8						16100

Constant Pressure Blocks

10460	16442	-67.5
17XX5	XXXX	XXXX
02829	277	15

1348

15294	-66.3
270	25

11110

15653	4184	-64.5
14XX5	XXXX	XXXX
02768	269	35

9555

13229	-58.7
267	35

8515

20061	12378	-53.0
23XX0		
02678	263	-4.0

PUNCHED CARD No.

W B Form 610-14M (Revised 4-1-57) WBAN-51

U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

ADIABATIC CHART

Solar Radiation Corrections for Radio Temperatures

1. Time, LST, at termination if between 150 and 61 mb or at 120 mb if termination above 150 mb
2. Time, LST, at termination if between 140 and 61 mb or at 90 mb if termination higher than X mb
3. Time, LST, at 20 mb if reached
4. Correction for (3)
5. Time, LST, algebraic sum of (2) & (4)
6. Time, LST, algebraic sum of (1) & (4)
7. Difference between (5) and Solar Noon
8. Difference between (6) and Solar Noon
9. Difference between (7) and (8)
10. Difference between (7) and Solar Noon
11. Elevation angle of Sun for (5)
12. Elevation angle of Sun for (6)
13. Elevation angle of Sun for (10)
14. a. Elapsed time from 150 to 80 mb or the termination if between these levels
    b. Elapsed time from 80 to 50 mb or the termination if between these levels
    c. Elapsed time from 80 to ____ mb
    d. " " " 60 to ____ mb
    e. " " " 80 to ____ mb
15. a. Accessional rate corresponding to (14a)
    b. " " " (14b)
    c. " " " (14c)
    d. " " " (14d)
    e. " " " (14e)

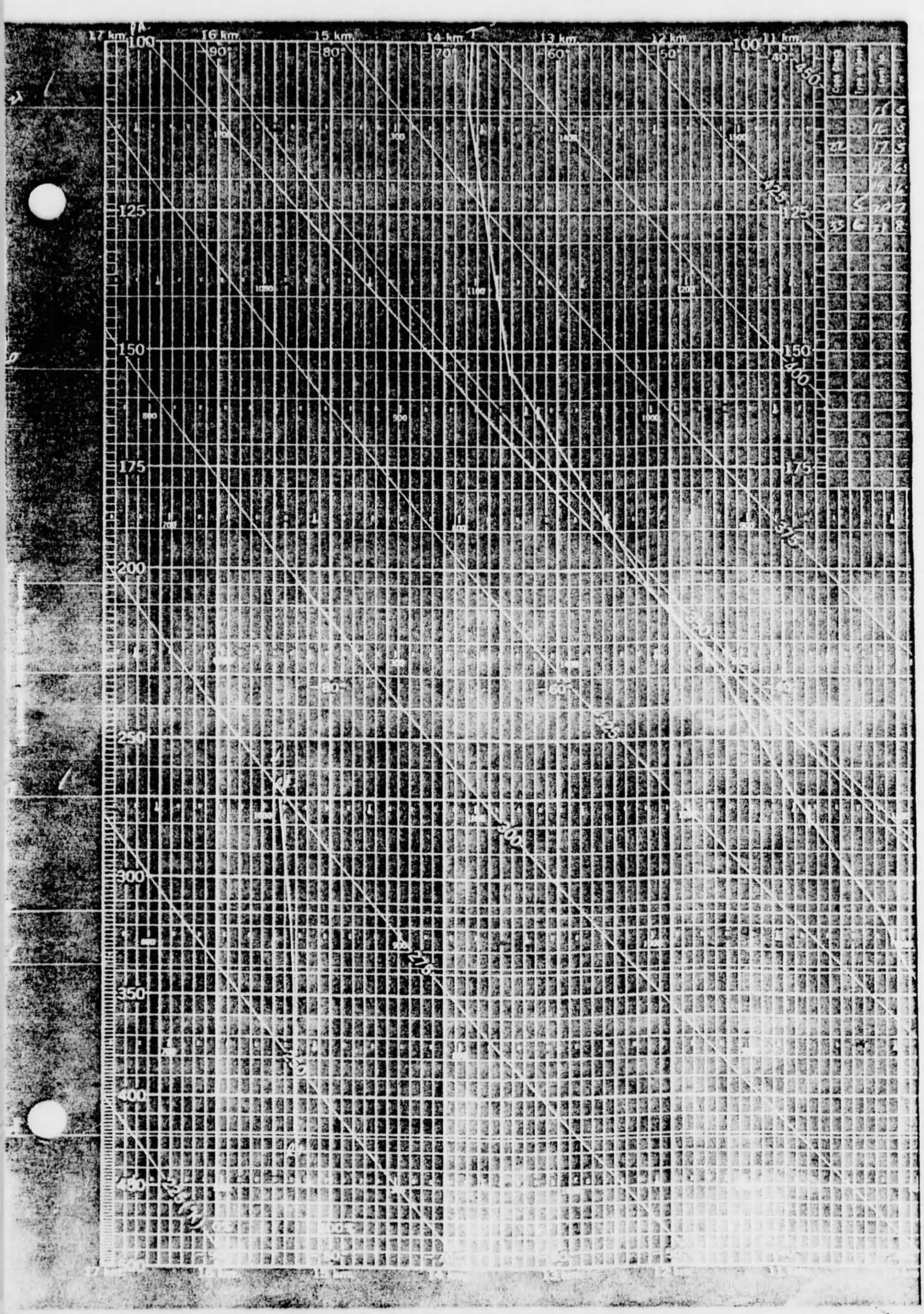
CODED MESSAGE FOR TRANSMISSION

60611 05956 07022 03208

PUNCHED CARD No.

LEGEND FOR PLOTTED CURVES

PUNCHED CARD No.


17 km
16 km
15 km
14 km
13 km
12 km
11 km
100
90
80
70
60
50
40
125
150
175
200
250
300
350
400
450
500
600
700
800
900
1000
1100
1200
1300
1400
1500
1600

UFO ANALYSIS SHEET

Location LINCOLN, N.H.

Date (Local) 20 SEPT '61 Hour (Local) 20 SEPT 0001 to 0100

Hour (Z Time Group) 20/0401 to 0500

Satellite: ———

Astronomical Phenomena (Meteor, Comet, Planet, etc) ✓

Radar Analysis (TD-E1) POSSIBLY FALSE TARGET DUE TO WEATHER (INVERSION)

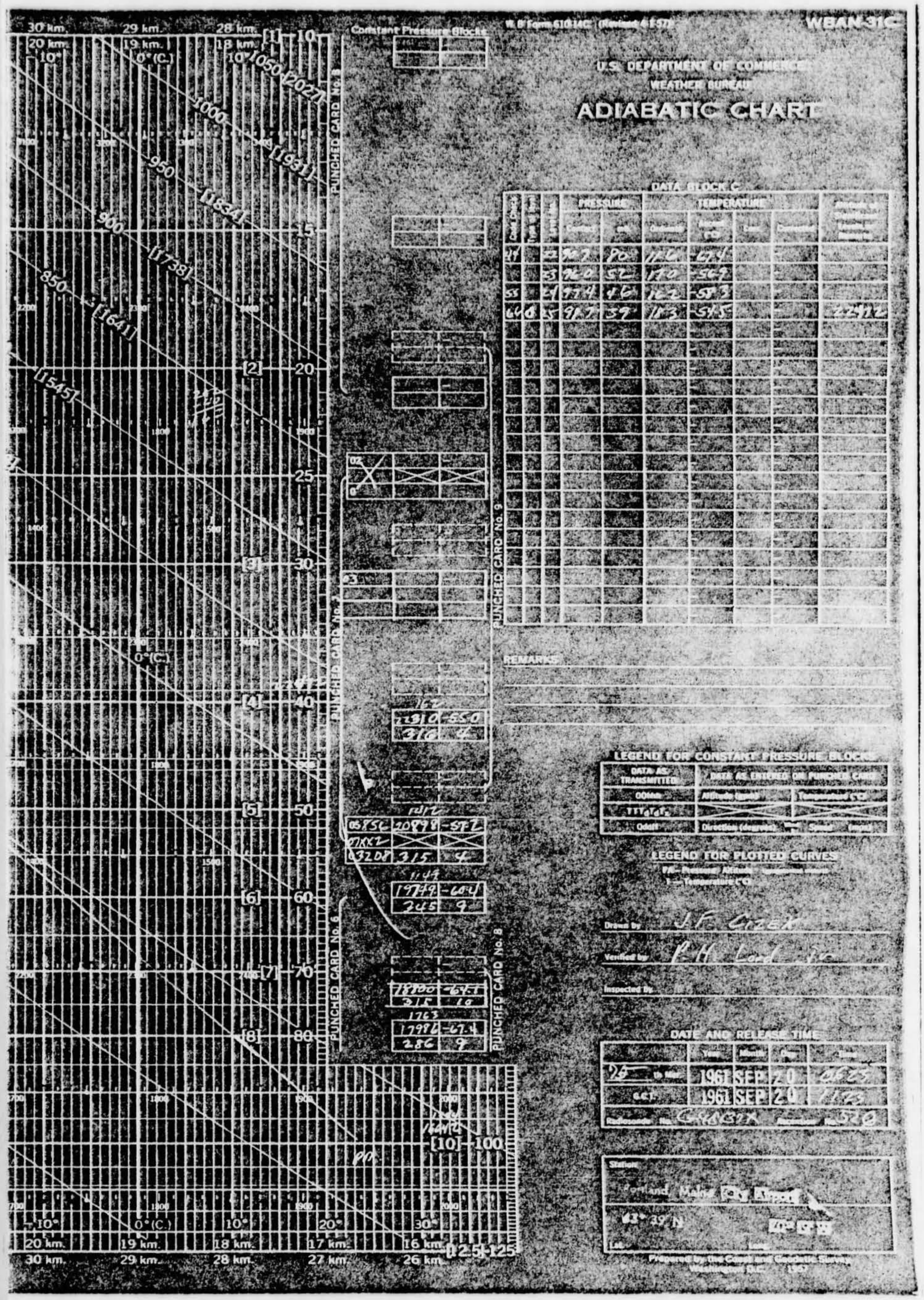
Natural Phenomena (Ball Lightning, etc) ———

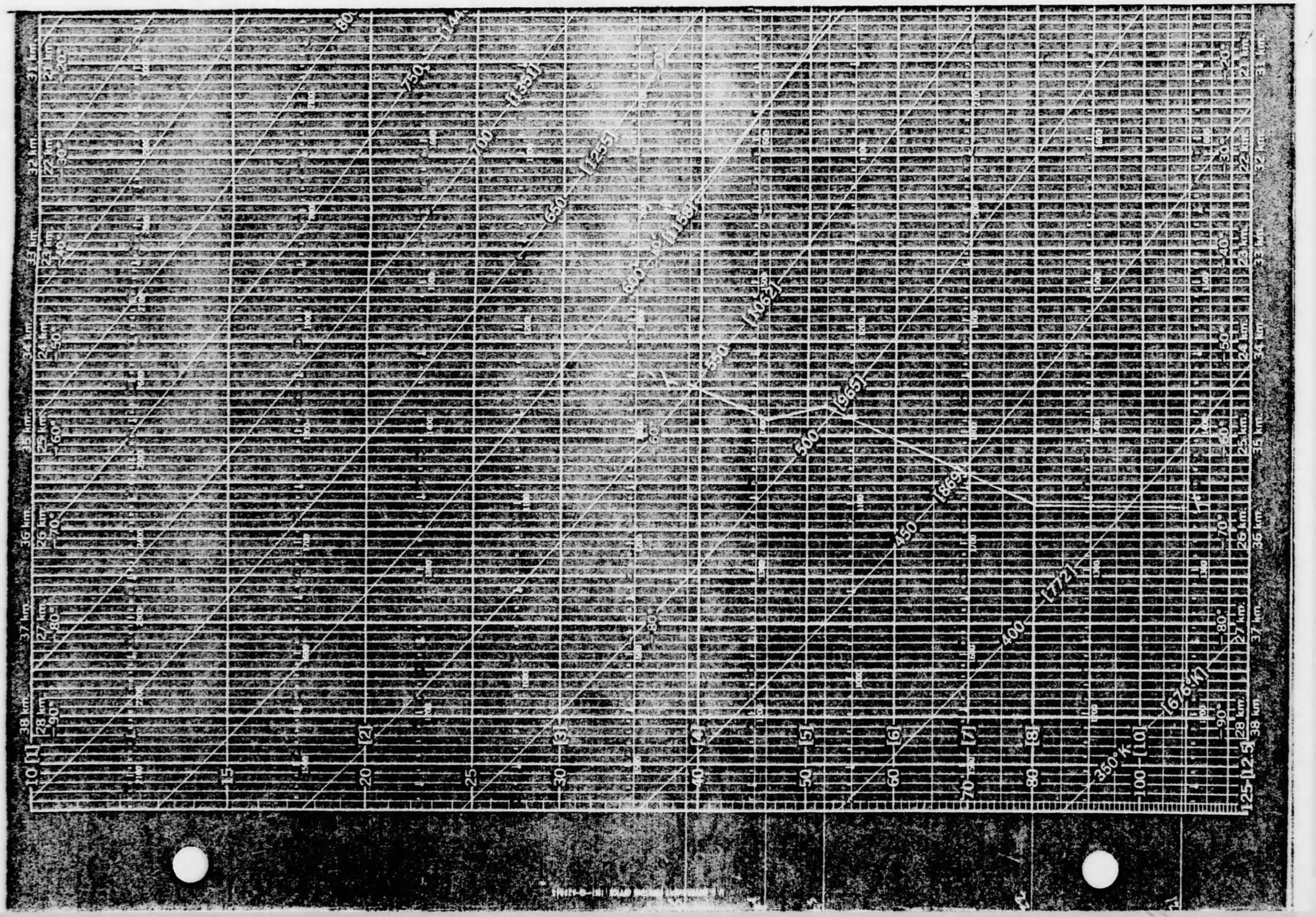
Aircraft, Balloons, Airships, etc ———

Other OBSERVATION DUE TO UNUSUAL OPTICAL CONDITION RESULTING FROM ATMOSPHERIC CONDITIONS.

Evaluation of Source Reliability PROBABLY GOOD.

Analysis and Conclusions: BOTH THE RADAR AND VISUAL SIGHTING ARE PROBABLY DUE TO [redacted] CONDITIONS RESULTING FROM THE STRONG INVERSION WHICH PREVAILED IN THE LINCOLN N.H. AREA ON THE MORNING OF THE SIGHTING. THE ACTUAL SOURCE OF LIGHT VIEWED BY THE WITNESSES WHO REPORTED THE VISUAL SIGHTING IS NOT KNOWN BUT IT [redacted] HAS ALL OF THE CHARACTERISTICS OF AN ADVERTISING SEARCH LIGHT. THE RADAR PROBABLY WAS LOOKING AT SOME GROUND TARGET DUE TO THE STRONG INVERSION. THERE IS NO EVIDENCE WHICH WOULD INDICATE THAT THE OBJECTS OF THESE SIGHTINGS WERE DUE TO OTHER


WBAN 31C
U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU
ADIABATIC CHART
Constant Pressure Blocks
DATA BLOCK C
PUNCHED CARD No. 9
REMARKS
LEGEND FOR CONSTANT PRESSURE BLOCKS
DATA AS TRANSMITTED
DATA AS ENTERED ON PUNCHED CARD
LEGEND FOR PLOTTED CURVES
Drawn by
Verified by
Inspected by
DATE AND RELEASE TIME
Year
Month
Day
Time
Station
PUNCHED CARD No. 6
PUNCHED CARD No. 8
30 km.
29 km.
28 km.
27 km.
26 km.
20 km.
19 km.
18 km.
17 km.
16 km.
0°(C.)



W B Form 610.1AM (Revised 4-1-57) WBAN 31A

U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

ADIABATIC CHART

PUNCHED CARD No. 3

DATA BLOCK A

Data Block	Type of Level	Level No.	PRESSURE Correct	PRESSURE Mb.	TEMPERATURE Ordinate	TEMPERATURE Ascent °C	REL. HUM. Ordinate	REL. HUM. Including Corr. of ±0%	DEW POINT °C	Altitude of Significant Levels, or Remarks
00	W	1		1018		10.6		85	14.1	20
11	2	2	4.6	981	68.2	20.0	58.1	37	4.3	520
12		3	9.5	932	66.7	16.9	29.9	52	-9.1	
13		4	11.0	861	65.6	14.5	14.2	66	8.2	
14		5	17.5	752	62.8	9.5	54.1	51		
15		6	21.0	689	61.0	6.4	29.5	38	-8.0	
16	4	7	22.4	666	60.1	4.5	65.9	62	-21.1	9999
17		8	23.5	604	57.6	0.7	44.0	46	-9.0	
18		9	27.5	580	56.6	-0.8	57.0	57	-8.5	
19		10	28.5	575	56.0	-1.9	8.0	20	-18.9	
20	0	11	31.0	539	54.6	-3.9	5.0	25	-22.0	5270
21		12	34.0	502	51.5	-8.0	5.0	24		
22	0	13	38.4	449	46.2	-16.0	48.0	60	-22.0	6690
23		14	43.0	400	45.0	-17.7	62.6	75		
24		15								
25										
26										
27										
28										

Constant Pressure Blocks

4081	7501	-17.7
5117	75	-21.5
01916	100	0
6610	-158	
50	X	
100	0	
1651		
50832	58710	-8.5
58142	26	-84.4
01511	151	6
5110	-33	
24	X	
164	6	
1440		
4450	02	
50	X	
105	4	
01160		
90	X	
146	6	

SURFACE OBSERVATION AT RELEASE

PRESSURE Station Inches	PRESSURE Station mb.	PRESSURE Correction mb.	PRESSURE at Shelter mb.	CONTACT Cld. Cloud	CONTACT Relative Humidity
	1017.5	+0	1017.5	2.0	2.0

"For difference, elevation between barometer and instrument shelter

TEMPERATURE Dry	TEMPERATURE Wet	RELATIVE HUMIDITY	WIND	
66	60	78		
16	08	85	10	10

Clouds and Weather

20000810

BASELINE CHECK READINGS

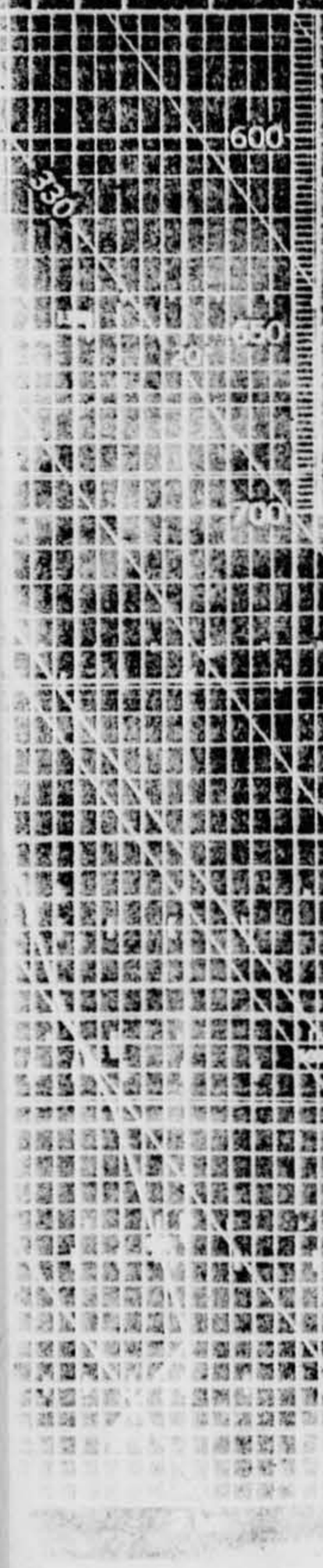
Time Code	TEMPERATURE Dry	TEMPERATURE Wet	TEMPERATURE Dew Point
2304	71.2	26.1	24.8

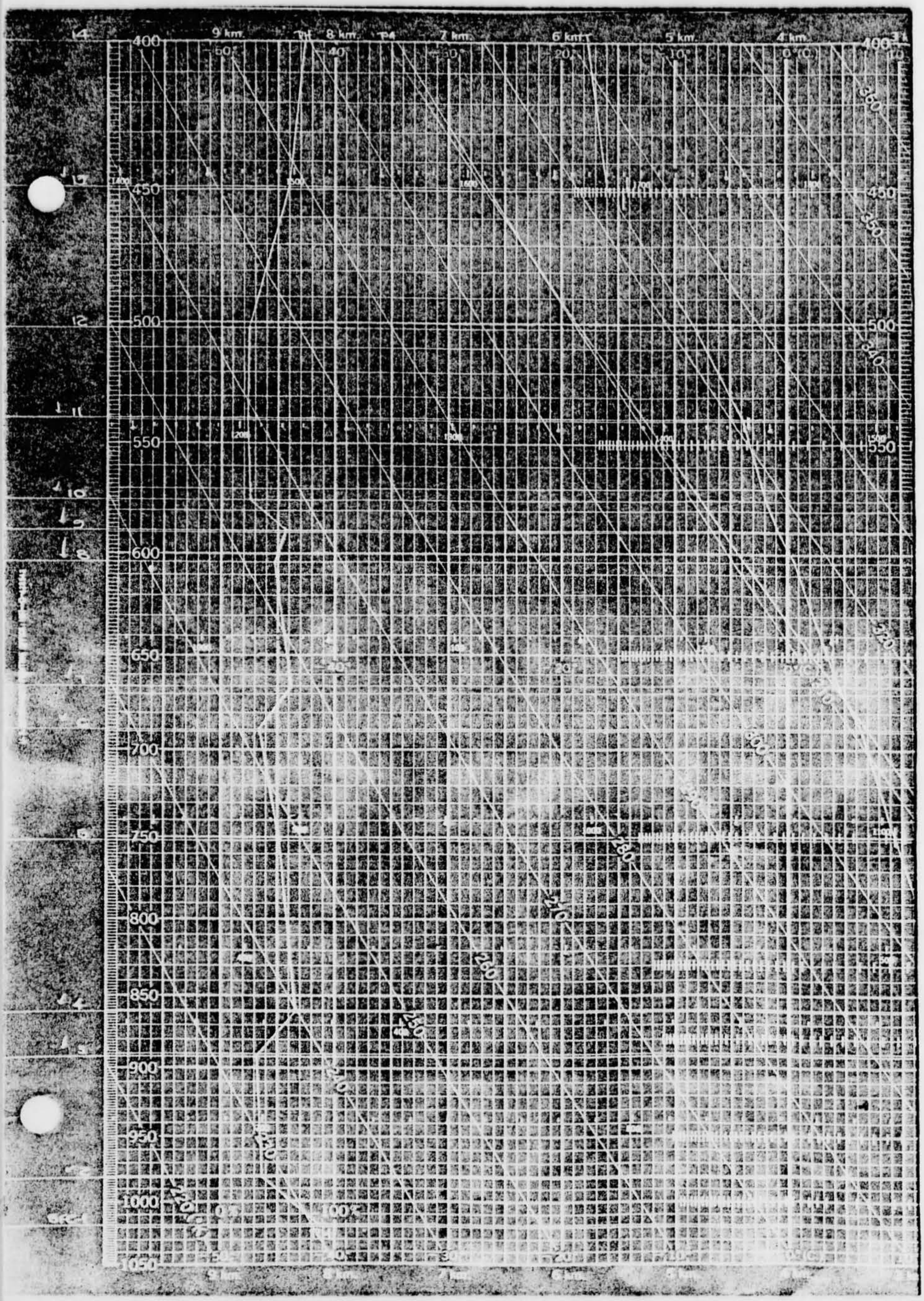
RELATIVE HUMIDITY Ordinate	Dry	Corr.	Psychrometer
85.5	81	+0	81

CODED MESSAGE FOR TRANSMISSION

00	99057	18102	00804	85512
14071	01206	70015	07562	01964
50925	58142	01511	40481	07119
01516	20161	72161	02225	29014
91313	02851	20070	01310	02004
15167	72471	02852	10172	72471
02815				
77550	00018	10142	10171	00000
22802	10504	50801	12547	40000
00004	50000	04852	07504	00000
77550	00018	10142	10171	00000

REMARKS




9 km.
8 km.
7 km.
6 km.
5 km.
4 km.
400
450
500
550
600
650
700
750
800
850
900
950
1000
1050

WBAN-31B

U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

ADIABATIC CHART

DATA BLOCK B

PRESSURE		TEMPERATURE				REL. HUM.		DEW POINT °C.	Altitude of Significant Inversion Meters
Mark	mb.	Observed	Adjusted °C.	Correction	Corrected	Observed	Indicated Calib. adj. %		
SFC	241	9.6	-35.2			27.1	64	-39.5	
14	264	23.9	-39.3			39.9	60	-44.1	
20	201	20.4	-51.5						12520
30	157	18.1	-61.0						
40	100	10.2	-71.4						15610

Constant Pressure Blocks

10432	16620	-71.4
21004	XXXXX	XXXXX
02013	276	1

1139

13441	2663
209	17

1116

15467	14223	-62.1
12XY1	XXXXX	XXXXX
02954	279	28

964

15261	-57.0
279	32

955

20037	12406	-52.8
02510		
02654	255	21

1418

35513	10921	-47.7
12XY1	XXXXX	XXXXX
02931	255	20

1227

30168	9636	-32.0
12761	66	-36.5
02295	219	18

1107

25349	-24.3
69	XXXXX
212	10

PUNCHED CARD No. 6

PUNCHED CARD No. 5

Solar Radiation Corrections for Block Temperatures

1. Time LST at termination of inversion above 150 mb
2. Time LST at termination of inversion above 150 mb
3. Time LST at termination of inversion above 150 mb
4. Time LST at 70 mb (if present)
5. Time LST at 50 mb (if present)
6. Time LST at 30 mb (if present)
7. Difference between (5) and Solar Noon
8. Difference between (6) and Solar Noon
9. Difference between (7) and Solar Noon
10. Difference between (8) and Solar Noon
11. Elevation angle of Sun for (3)
12. Elevation angle of Sun for (5)
13. Elevation angle of Sun for (10)
14. a. Elapsed time from 150 to 80 mb, or to termination if between these levels
    b. Elapsed time from 80 to 50 mb, or to termination if between these levels
    c. Elapsed time from 80 to ____ mb
    d. ____ to ____ mb
    e. ____ to ____ mb
15. Ascension rate correction for (14)

CODED MESSAGE FOR TRANSMISSION

LEGEND FOR CONSTANT PRESSURE BLOCKS

DATA AS TRANSMITTED	DATA AS ENTERED ON PUNCHED CARD	
OOMM	Altitude (gpm)	Temperature (°C)
13761	Millibar Reading (mb)	Dew Reading (°C)
Odd	Direction (degrees)	Speed (knots)

LEGEND FOR PLOTTED CURVES

P — Pressure (millibars)
T — Temperature (°C)
Dew — Dew Reading (°C)

Drawn by: C. B. Fo. 9-65

Verified by: P. C. SAWYER

Inspected by:

DATE AND RELEASE TIME

SFC	19	SEP	20	1245
14	19	SEP	20	1345

Radiosonde No. GAB-[illegible] Assessment No. -521

Station: Portland, Maine / Chatham, Massachusetts

43°39' N 70°19' W

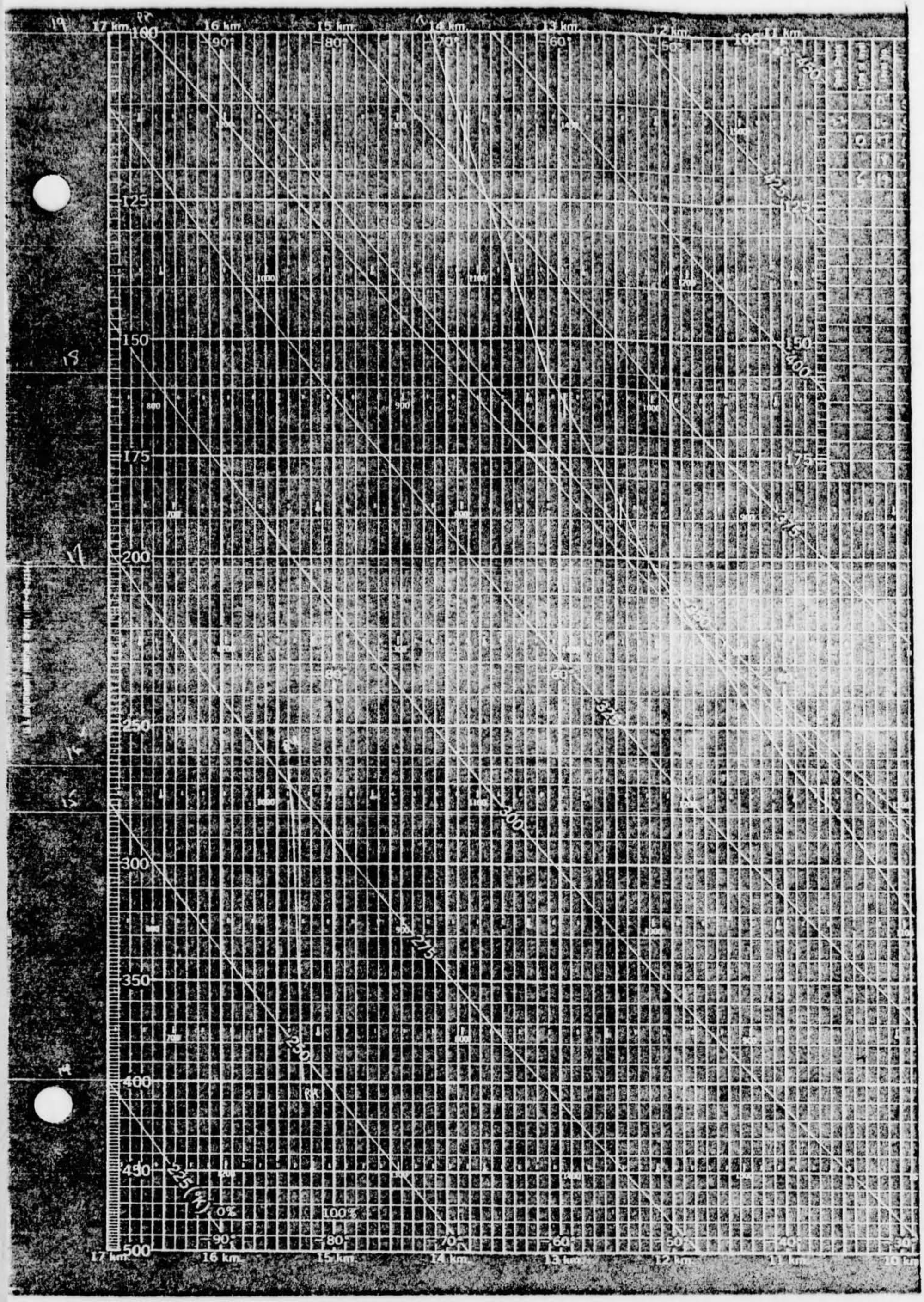
Log

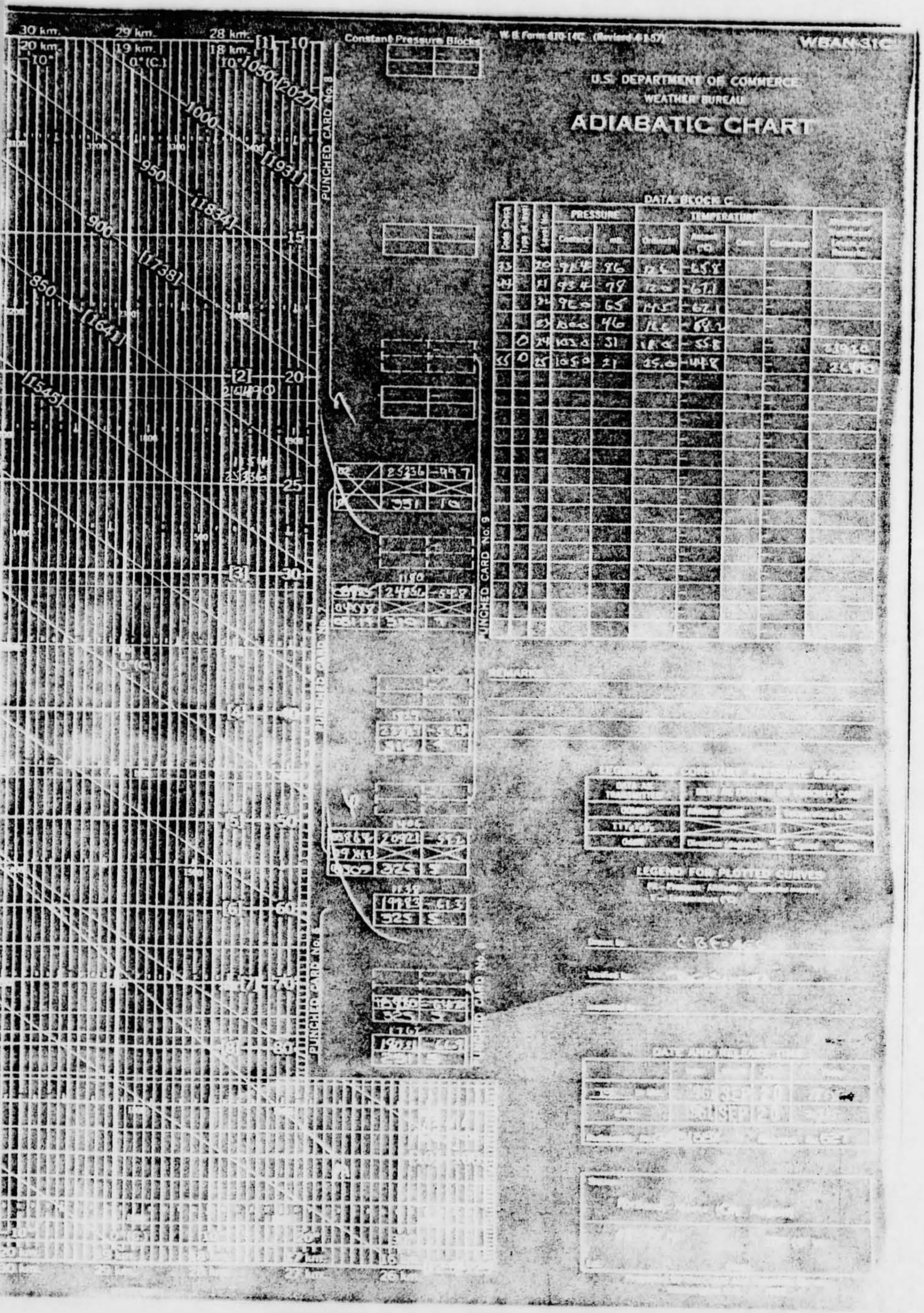
Prepared by the Cooperative Observer

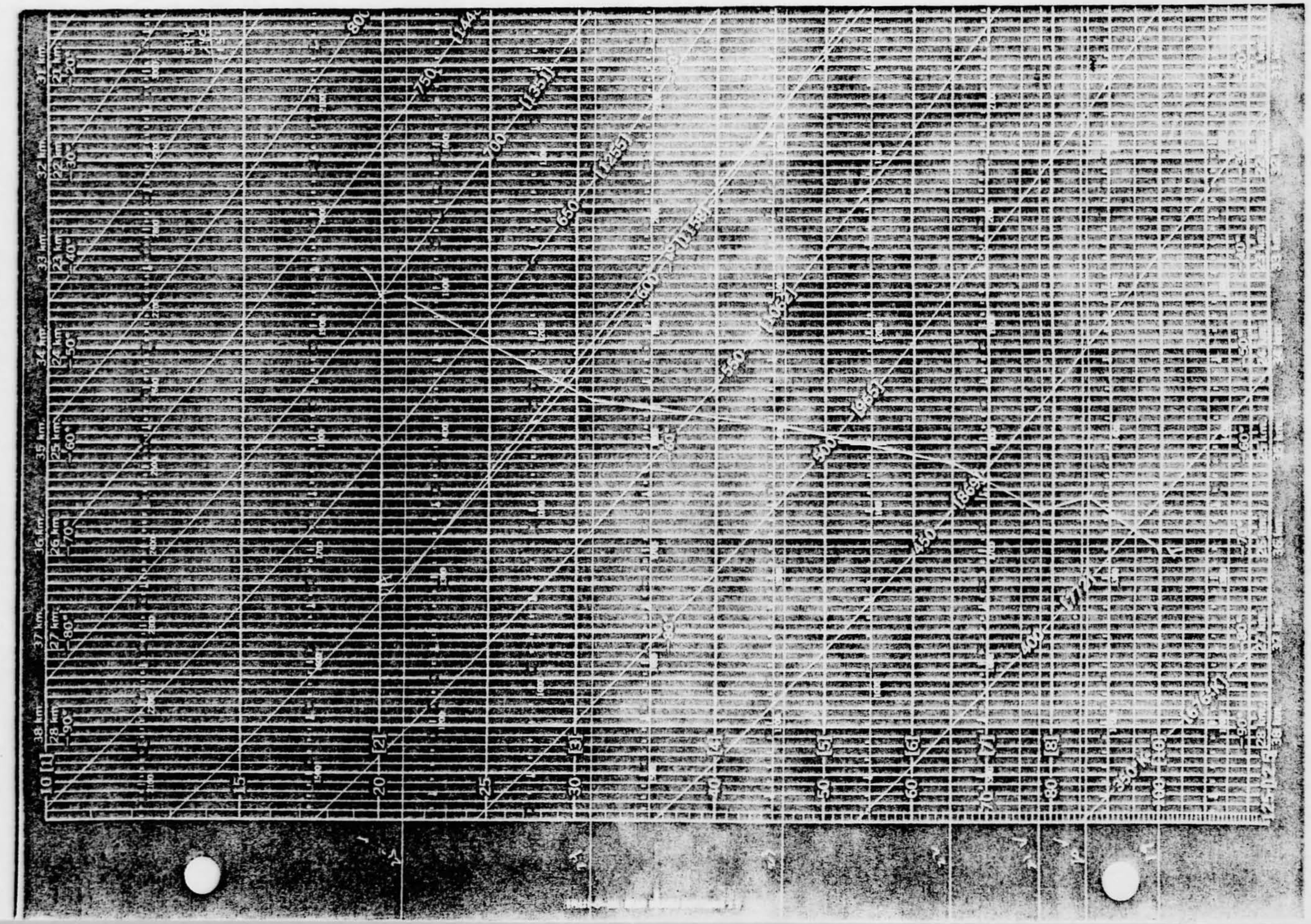
400 mb 425 450 200 250 300 350 400 450 500 mb

-20 -10 0° (C) 10

9 km 8 km 7 km 6 km 5 km


17 km
16 km
15 km
14 km
13 km
12 km
11 km
10 km
90°
80°
70°
60°
50°
40°
100
125
150
175
200
250
300
350
400
450
500
0%
100%


30 km.
29 km.
28 km.
20 km.
19 km.
18 km.
10°
0° (C.)
10°
1050
1027
1000
950
1931
900
1738
850
1641
1545
[1]
[2]
[3]
10
15
20
25
30
PUNCHED CARD No. 8
Constant Pressure Blocks
W. B. Form 610-14C (Revised 4-1-57)
U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU
ADIABATIC CHART
DATA BLOCK C
PRESSURE
TEMPERATURE
PUNCHED CARD No. 9
LEGEND FOR PLOTTED CURVES



W B Form 610-14A (Revised 6-1-57) WBAN 31A

U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

ADIABATIC CHART

DATA BLOCK A

			PRESSURE		TEMPERATURE		REL. HUM		DEW-POINT °C	Altitude of Significant Levels in Meters
			Condition	Mb.	Ordinate	Ascent °C	Ordinate	Including Corr. of ±0.5		
	A	1		1012		15.6		62	8.4	70
		2	944	988	66.8	15.0	44.8	45	3.2	220
		3	6.0	954	68.3	8.2	63.0	52	9.1	520
		4	7.4	930	68.2	17.9	77.5	69	12.1	
		5	11.0	867	67.1	15.6	78.9	72	10.6	
		6	12.4	846	66.9	15.2	82.0	54	5.9	
		7	16.0	786	65.4	12.2	80.0	77	8.2	
		8	23.0	690	61.0	4.5	68.1	65	-1.5	
		9	26.0	623	59.0	1.8	80.1	61	-1.5	
		10	34.4	510	54.8	-5.4	76.0	80	-8.3	
	0	11	44.0	400	47.0	-16.6	58.1	68	-8.2	7540
		12								
		13								
		14								
		15								

SURFACE OBSERVATION AT RELEASE

PRESSURE				CONTACT	
Station		*Correction	at Shelter	On chart	Recorder record
Inches	Mb.				
	1011.7	-	1011.7	30	31

*For difference in elevation between barometer and instrument shelter

TEMPERATURE		RELATIVE HUMIDITY	WIND	
Dry	Wet			
60.8°F	53.8°F			
15.8°C	11.7°C	62%	20	8.8

CLOUDS AND WEATHER

450 MSC 6015 E

35 - 7 AC

Constant Pressure Blocks

40475	7544	-16.6
66714	69	-21.2
01514	152	7
6640	-11	
72	X	
142	14	
1715		
50 912	5829	-6.3
56591	79	-9.2
01533	145	17
(+8)		
5070	-3.0	
81	X	
127	19	
1445		
01	4384	0.0
	82	
0	121	11
3740	3.1	
100	X	
109	11	
1432		
10078	3132	-6.6
06017	68	1.2
01035	152	16
2570	10.0	
74	X	
109	18	
1112		
2020	17.0	
71	X	
99	16	
512		
85 4495	1508	15.2
15071	58	7.0
00035	90	16
487		
1071	16.9	
70	X	
81	18	
570	14.0	
54	X	
77	11	
900		
11 0640	12.1	15.3
15053	53	5.8
00320	50	10
1012	15.6	
62	8.7	
20	9	

PUNCHED CARD No. 1

BASELINE CHECK READINGS

	TEMPERATURE		
	Ordinate	Dry	Wet
11084	7025	4720	2542

	RELATIVE HUMIDITY			
	Ordinate	Dry	Wet	Dewpoint
	8499	79	61	80

CODED MESSAGE FOR TRANSMISSION

606 11040 15053 00320 88885
15071 00035 70078 06017 01035
50912 56591 01533 62015 62707
01514 30116 81471 01819 25314
50XX1 01929 20072 00XX1 02213
15678 09XX2 02449 10115 11098
02420
/ 55555 00102 65085 11098 15210
22454 19191 33950 11017 21767
15165 15846 15069 16716 70707
70370 14456 88493 01514 70570
REMARKS 55591 11017 61021

PUNCHED CARD No. 2

LEGEND FOR CONSTANT PRESSURE BLOCKS

Data as transmitted	Data as entered on punched card	
00000	(Altitude (gpm))	Temperature (°C)
11123	Wind Direction (10's)	Dew Point (°C)
Oddity	Direction (units)	Speed (knots)

LEGEND FOR PLOTTED CURVES

P — Pressure, Altitude, Temperature and Dew Point

T — Temperature (°C)

Drawn By D. WINSLOW

Verified by J.E. CIZEK

Inspected by

PUNCHED CARD No. 3

DATE AND RELEASE TIME

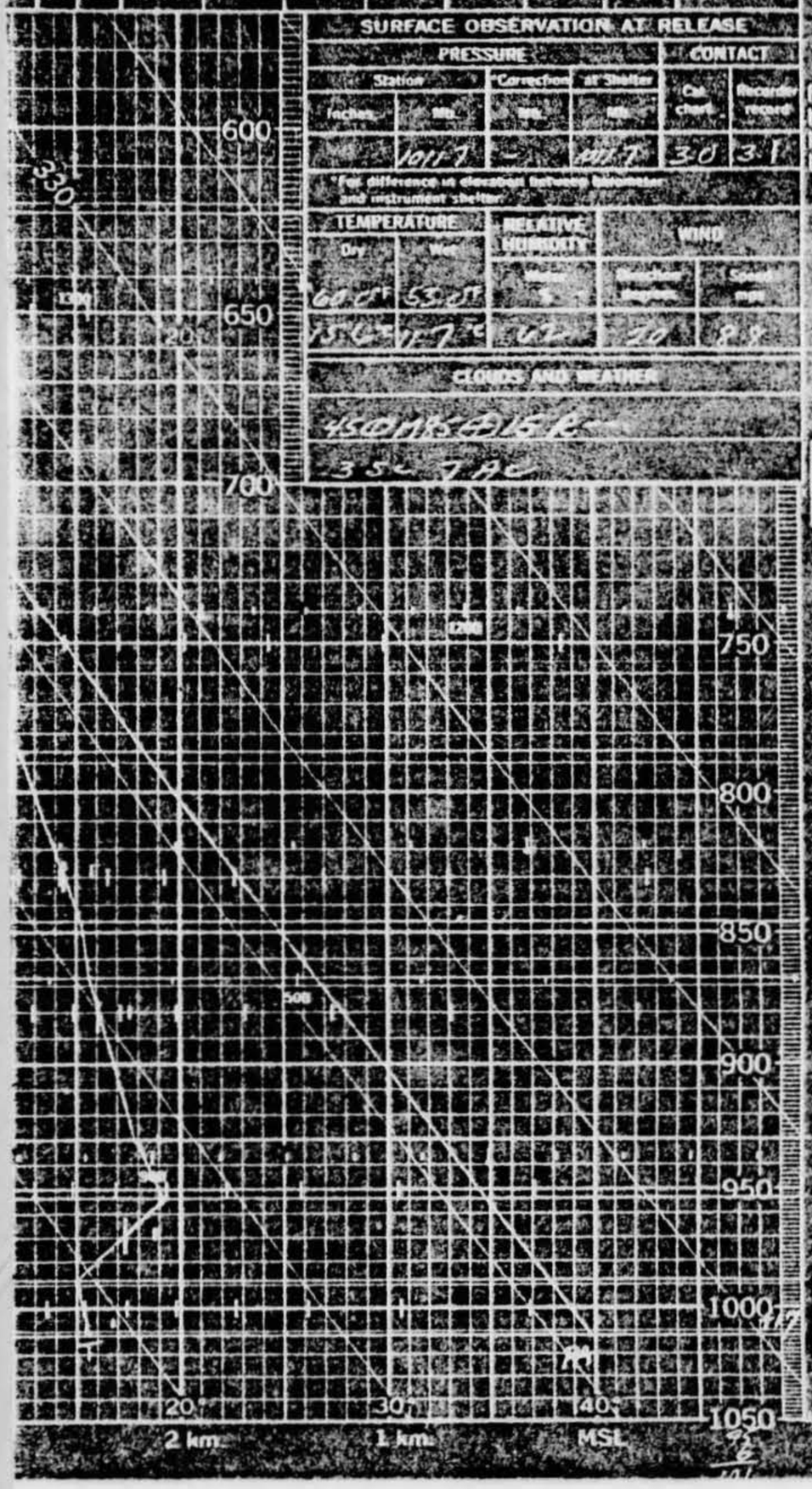
	Year	Month	Day	Time
72 Data	1965	5	27	0620
GCT	1965	5	27	1120

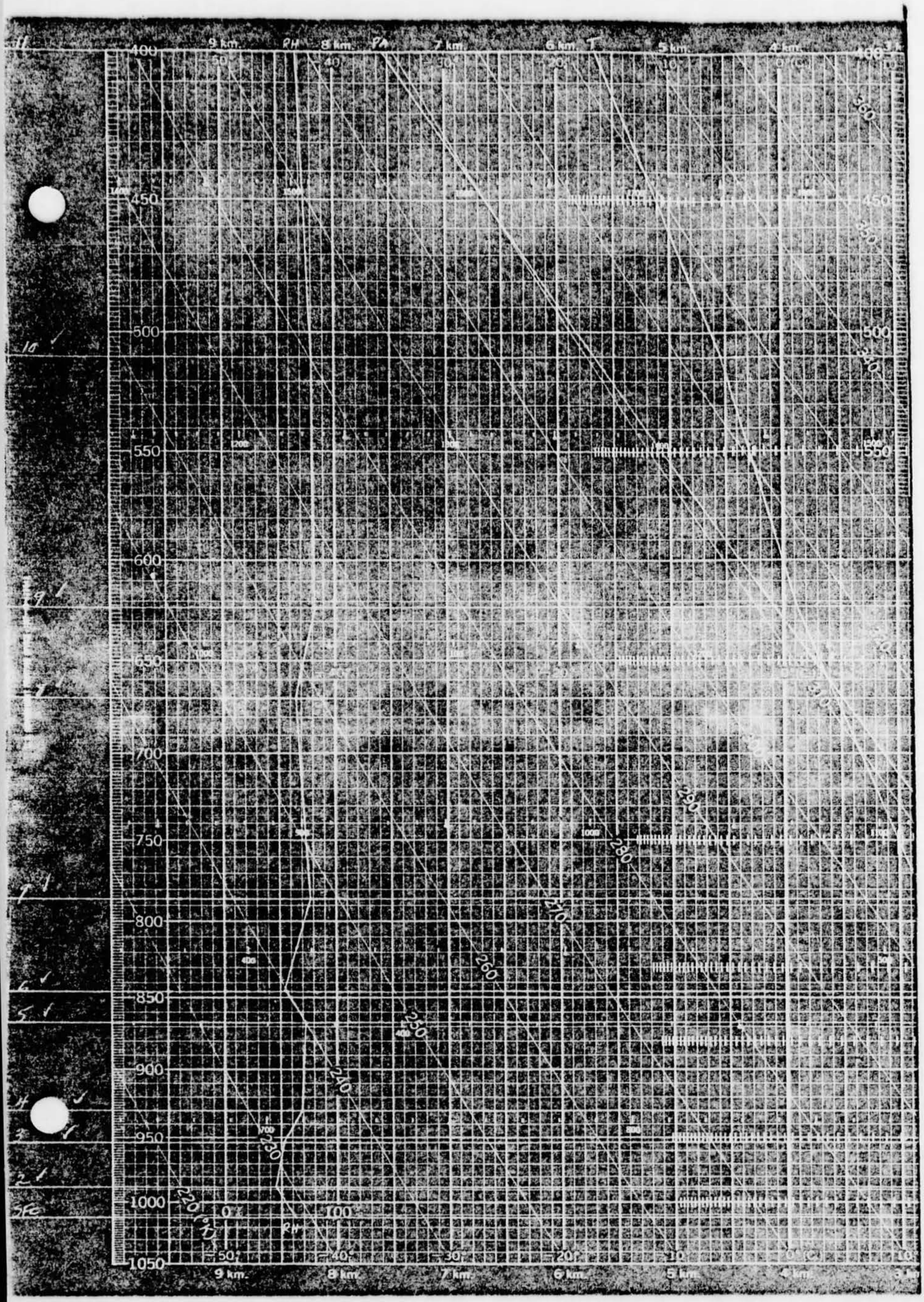
Radiosonde No. G-4801 Antenna 52

Station: Portland, Maine (City Airport)

Lat. Long.

Surface Pressure Set at Washington, D.C. 1013.2




9 km
8 km
7 km
6 km
5 km
4 km
400
450
500
550
600
650
700
750
800
850
900
950
1000
1050
290
280
270
260
250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0
1200
1100
1000
900
800
700
600
500
400
300

THAN NATURAL CAUSES.

Frank C.

DATA BLOCK B

PRESSURE		TEMPERATURE				REL. HUM.		DEW POINT °C	Altitude of significant levels, or Remarks
	mb.	Ordinate	Ascent °C	Correction	Corrected	Ordinate	Including Corr. of ±0.5		
	326	32.6	-26.4			32.8	58		
	257	29.9	-39.3			11.6	47	-46.3	
	197	21.6	-51.1						12510
	181	21.4	-51.5						13060
	147	15.8	-60.8						
	106	10.5	-70.7						16350

Constant Pressure Blocks

10485	16718	-67.8
18XX8	X	X
02420	235	10
1337		
15981	-65.8	
247	14	
1122		
15678	14259	-57.9
09XX9	X	X
02449	243	25
980		
13279	-53.0	
230	27	
918		
20072	24111	
00XX4		
98243	236	

PUNCHED CARD No. 2

W.B. Form 610 (Air) (Revised 4-1-51) WBAN-31B

U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

ADIABATIC CHART

Solar Radiation Corrections for Radio Temperatures

1. Time, LST, at termination if between 200 and 81 mb. or at 150 mb. if termination above 150 mb.
2. Time, LST, at termination if between 149 and 81 mb. or at 80 mb. if termination higher than 70 mb.
3. Time, LST, at 70 mb. if reached.
4. Correction for (1)
5. Time, LST, algebraic sum of (2) & (4)
6. Time, LST, algebraic sum of (3) & (4)
7. Difference between (5) and Solar Noon
8. Difference between (6) and Solar Noon
9. Difference between (7) and Solar Noon
10. Difference between (8) and Solar Noon
11. Elevation angle of Sun for (8)
12. Elevation angle of Sun for (9)
13. Elevation angle of Sun for (10)
14. a. Elapsed time from 150 to 80 mb. or to termination if between these levels
    b. Elapsed time from 80 to 50 mb. or to termination if between these levels
    c. Elapsed time from 80 to ____ mb.
    d. ____ ____ 80 to ____ mb.
    e. ____ ____ 80 to ____ mb.
15. a. Ascensional rate corresponding to (14a)
    b. ____ ____ (14b)
    c. ____ ____ (14c)
    d. ____ ____ (14d)
    e. ____ ____ (14e)

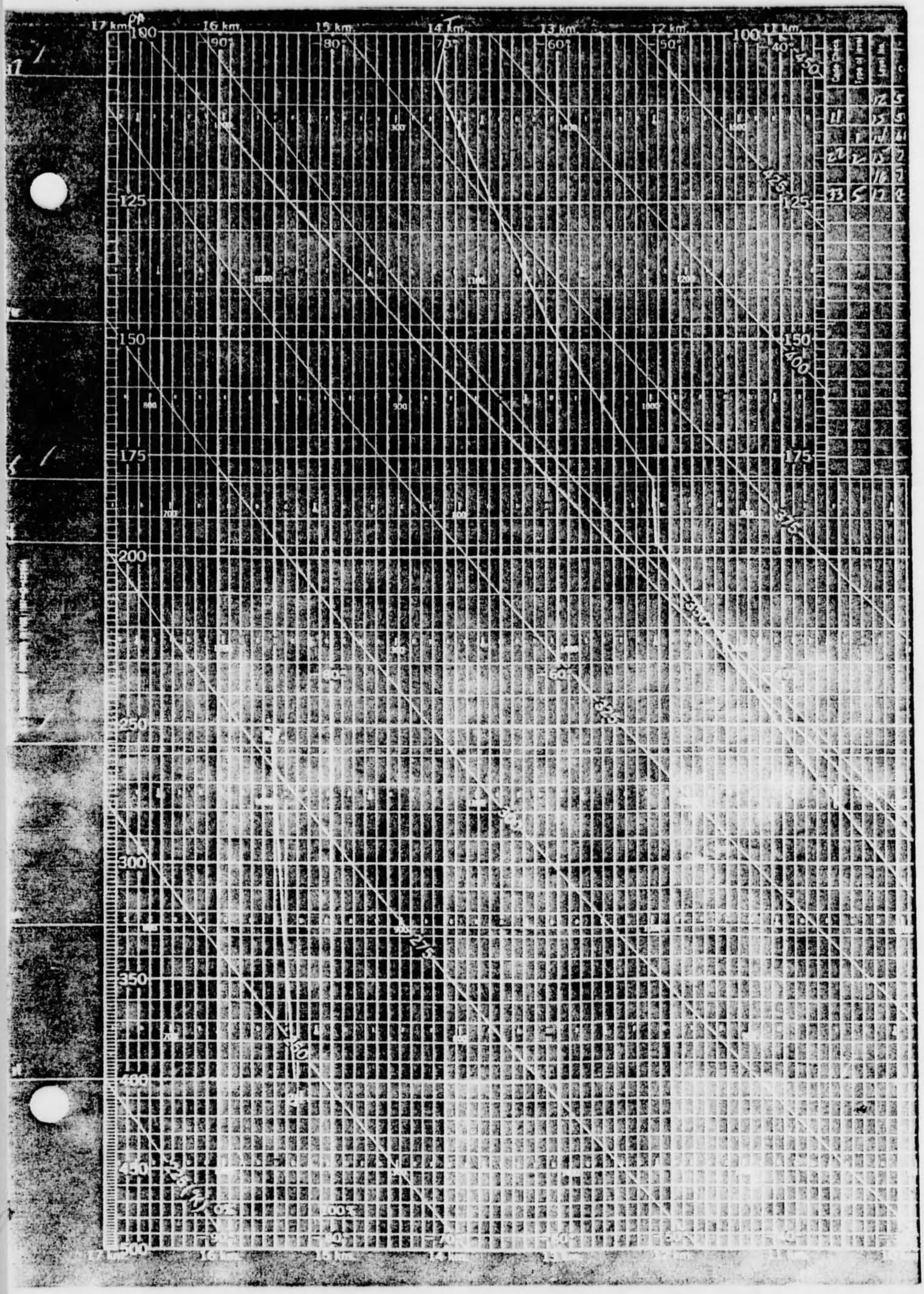
PUNCHED CARD No. 1

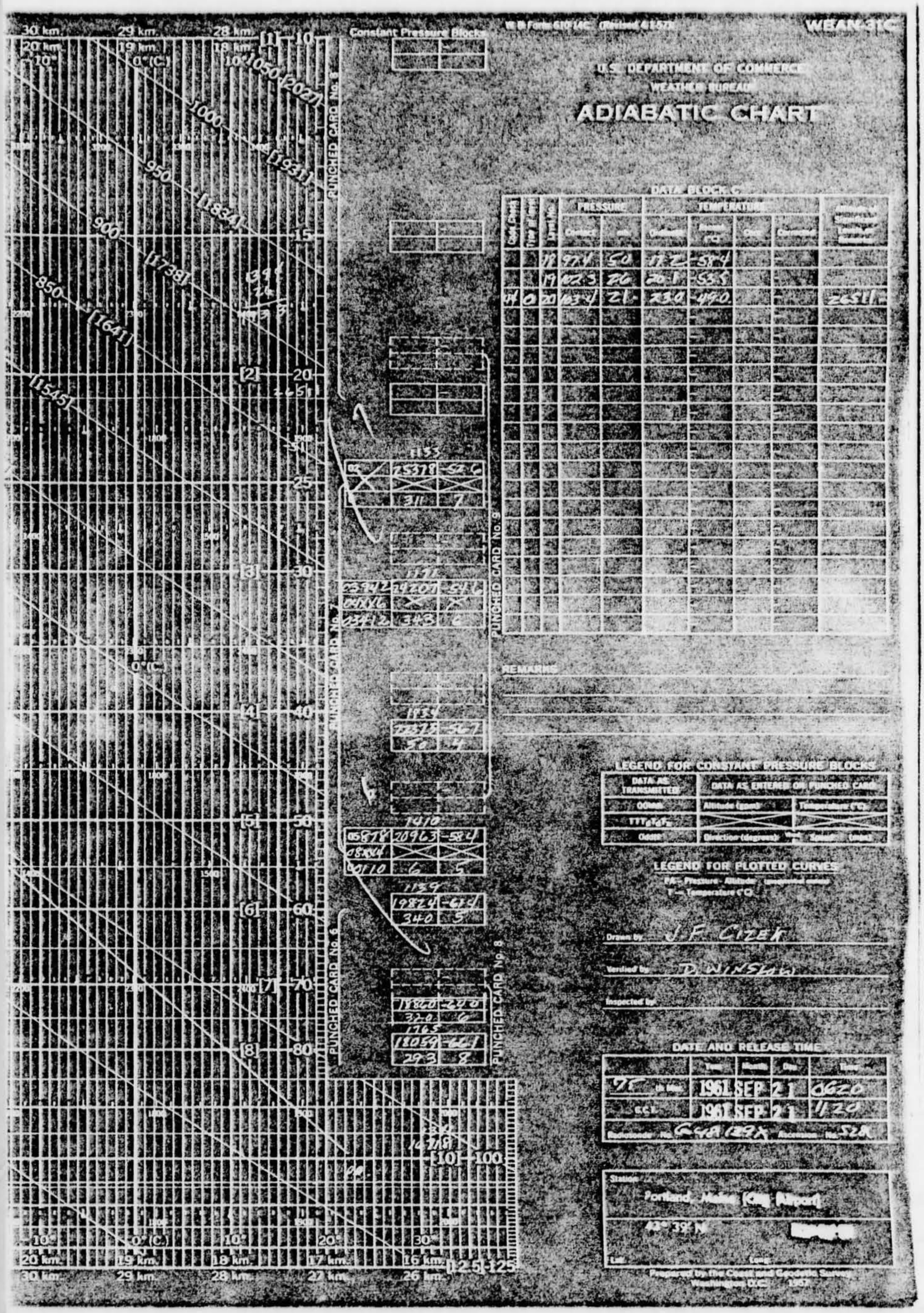
CODED MESSAGE FOR TRANSMISSION

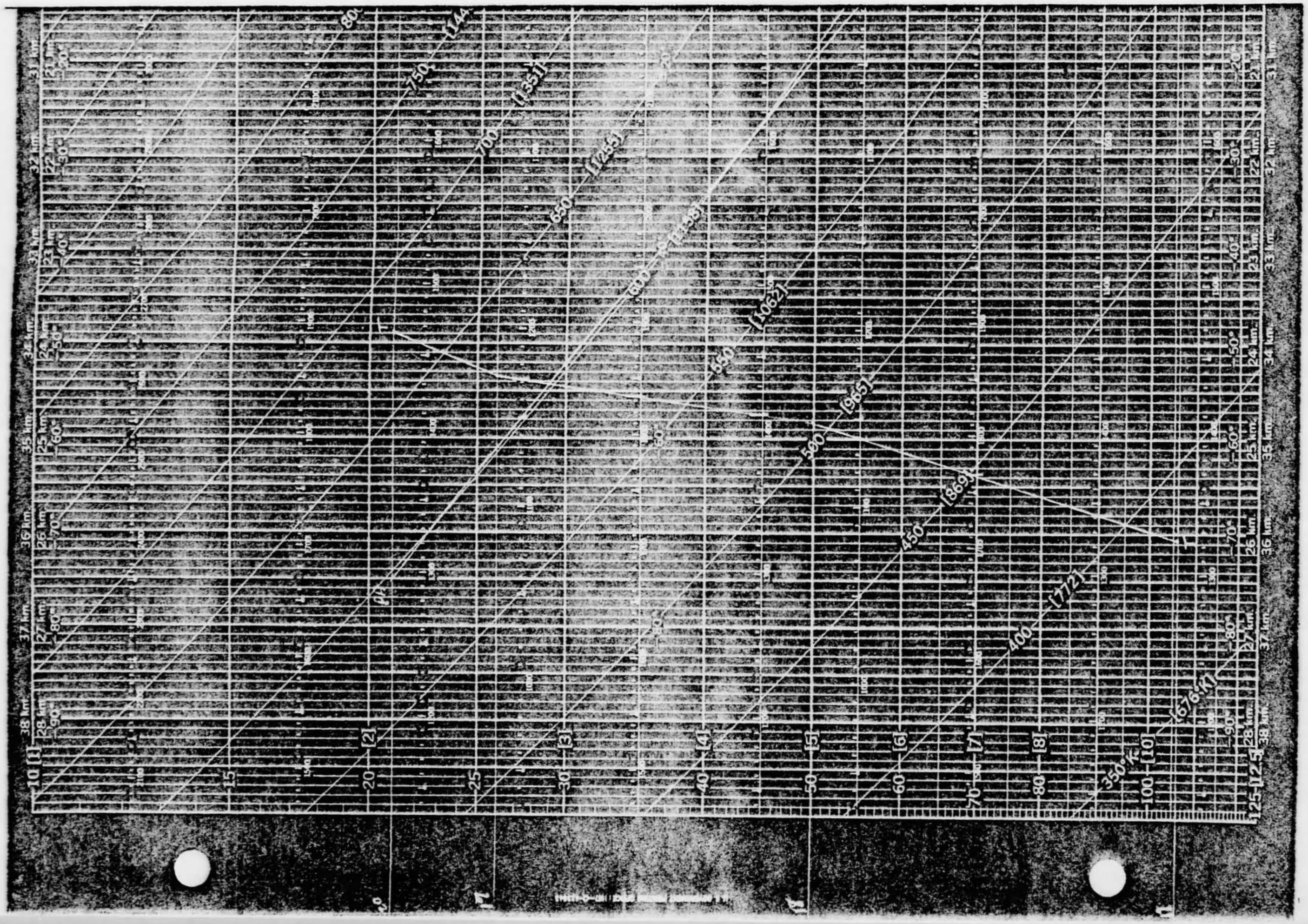
LEGEND

LEGEND FOR PLOTTED CURVES

400 425 450 1000 1100 200 300 350


17 km
16 km
15 km
14 km
13 km
12 km
11 km
100
90°
80°
60°
50°
40°
125
150
175
200
250
300
350
400
450
500


WBAN-3TC
U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU
ADIABATIC CHART
Constant Pressure Blocks
DATA BLOCK C
PRESSURE
TEMPERATURE
PUNCHED CARD No. 9
PUNCHED CARD No. 7
PUNCHED CARD No. 6
PUNCHED CARD No. 8
REMARKS
LEGEND FOR CONSTANT PRESSURE BLOCKS
DATA AS TRANSMITTED
DATA AS ENTERED ON PUNCHED CARD
LEGEND FOR PLOTTED CURVES
Drawn by J. F. CIZEK
Verified by D. WINSLOW
Inspected by
DATE AND RELEASE TIME
1961 SEP 21 0620
1961 SEP 21 1120
Portland Moses Lake (Larson) (Airport)
45° 39' N
Prepared by the Climatological Operations Section
Washington, D.C. 1957



W. B. Form 610-14A (Revised 4-1-57) WBAN-31A

U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

ADIABATIC CHART

DATA BLOCK A

Data Block	Point of Inflection	Level No.	PRESSURE Contact	PRESSURE Mb.	TEMPERATURE Ordinate	TEMPERATURE Ascent °C	REL. HUME Ordinate	REL. HUME Including Corr. of .05	DEW POINT °C	Altitude of Significant Levels or Remarks
0	0	1		1009		14.3		85	11.9	20
1	1	2	5.0	975	66.7	13.5	88.0	84	10.9	300
2	2	3	7.7	922	69.2	18.6	88.3	95	17.9	790
3		4	16.0	776	65.7	11.5	87.2	95	10.7	
4	0	5	22.0	670	61.3	4.7	76.4	78	0.3	3470
5		6	26.3	593	57.6	-2.3	41.0	17	-12.0	
6		7	29.3	559	57.2	-3.0	9.7	29	-19.0	
7	4	8	31.0	533	54.0	-4.8	5.0	23		5300
8		9	34.5	491	53.2	-8.9	5.0	24		
9		10	37.0	457	51.2	-10.4	40.2	52	-18.4	
10	0	11	40.0	425	50.4	-13.0	43.0	55		7050
11		12								
12		13								
13		14								
14		15								
15										

Constant Pressure Blocks

40463	7508	-15.9
65737	53	-23.3
01125	108	13
6610	-11.0	
53	X	
105	16	
17135	-7.9	
50901	5795	-7.9
57757	24	-25.0
01142	109	21
00		
5040	-36	
25	X	
112	19	
1441		
00	4354	-0.6
X	55	
0	107	15
5700	-11	
71	X	
101	-26	
1224		
2520	-4.7	
91	X	
93	-25	
1111		
1994	128	
45	X	
96	126	
513		
04126	1481	75.2
10142	51	
01044	100	

PUNCHED CARD No. 3

BASELINE CHECK READINGS

Time (GCT)	Temperature Ordinate	Temperature Ascent °C	Temperature Dew Point °C
1652	72.1	76.0	23.7

Relative Humidity Ordinate	Relative Humidity Ascent %	Wind Direction	Wind Speed kts
86.0	82	16	85

CODED MESSAGE FOR TRANSMISSION

606 17051 14112 00424 65126
15142 01044 70019 05057 01037
50901 57757 01142 40463 65737
01126 50126 70519 01210 75519
80515 01211 70019 00424 05057
15147 10015 05210 10519 10412
02009 05519 10015 05210 10412
00412
55555 00001 11112 11113
22222 10116 00116 11012 01210
03001 55512 50412 [illegible]

REMARKS

[illegible]
1000

LEGEND FOR MOISTURE CURVE

DRY

[illegible]

PUNCHED CARD No. 4

SURFACE OBSERVATION AT RELEASE

PRESSURE Station: Inches	PRESSURE Station: Mb.	PRESSURE Correction Mb.	PRESSURE at Shelter Mb.	CONTACT Calc.	CONTACT Recorder
	1008.5	±0	1008.5	3.2	3.2

"For difference in elevation between barometer and instrument shelter

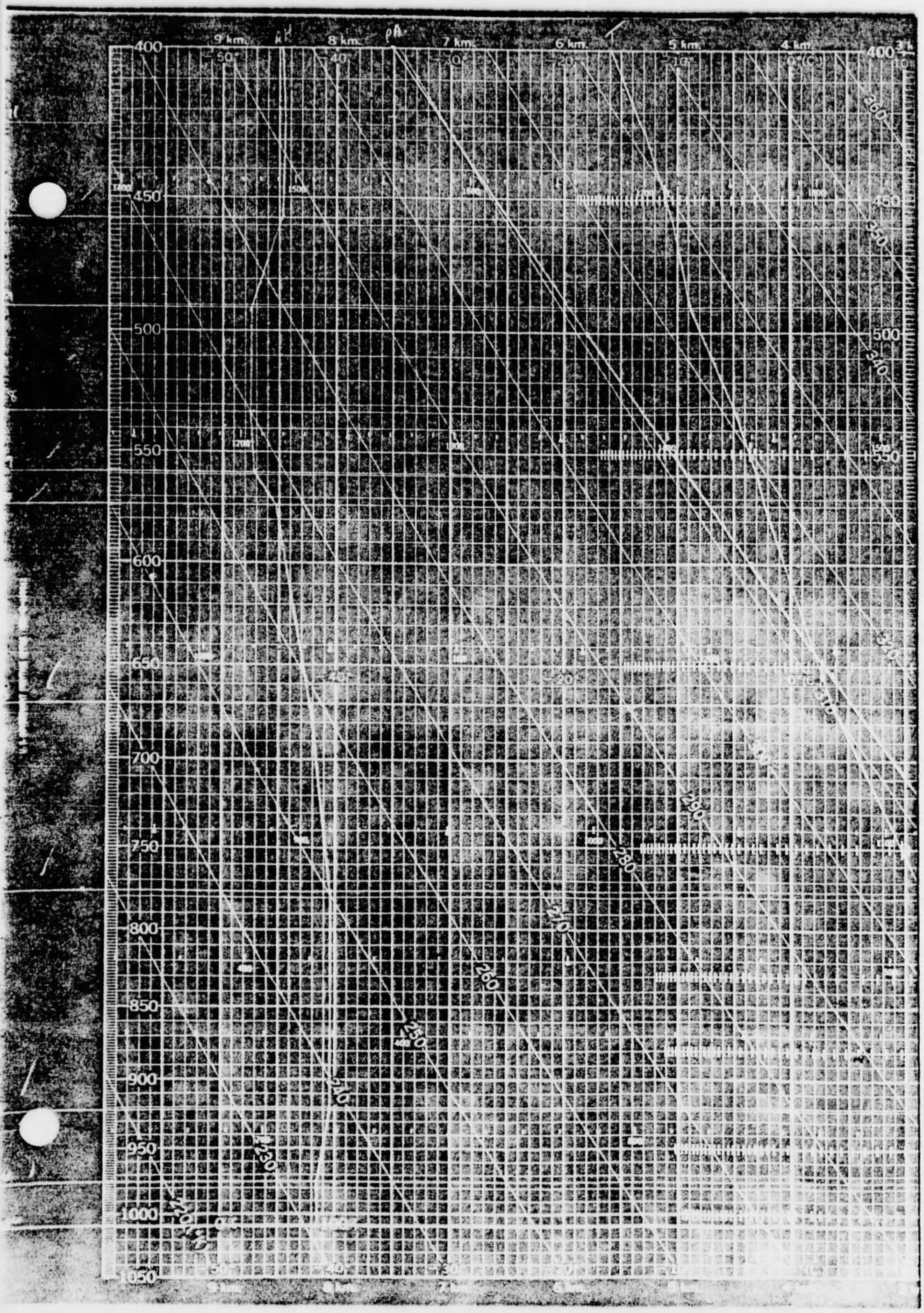
TEMPERATURE Dew	TEMPERATURE Wet	RELATIVE HUMIDITY	WIND	
1.2	1.7			
57.6	55.9	85	110	12.4

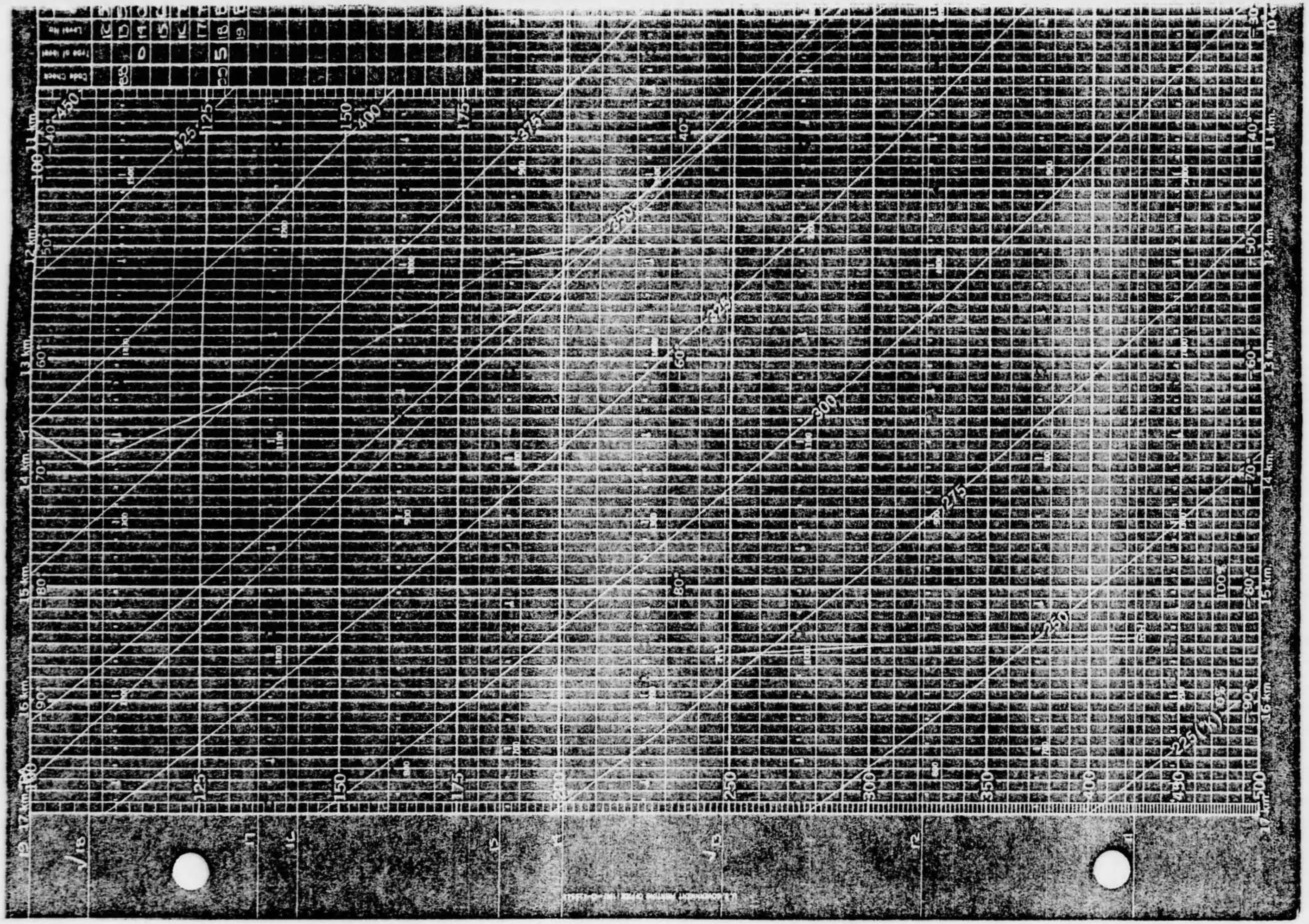
CLOUDS and WEATHER

REMARKS

IONS

600 650 700 750 800 850 900 950 1000


9 km.
8 km.
7 km.
6 km.
5 km.
4 km.
400
450
500
550
600
650
700
750
800
850
900
950
1000
1050
50°
40°
30°
20°
10°
0°(C.)
260
250
240
230
220
210
290
280
270



WBAN-31B

W B Form 610-14B (Revised 4-1-57)

U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

ADIABATIC CHART

PUNCHED CARD No.

DATA BLOCK B

PRESSURE		TEMPERATURE				REL. HUM.		DEW POINT °C	Altitude of significant levels, or Remarks
mb	mb	Ordinate	Ascent °C	Correction	Corrected	Ordinate	Ascent (excluding Corr. of ±0 %)		
0.0	322	40.8	-55.3			25.0	51		
20	248	30.2	-37.9			8.6	40	48.9	
40	201	22.0	-50.2						12340
60	185	22.1	-51.4						
80	142	15.3	-62.5						
100	135	15.3	-62.5						
120	108	11.9	-69.2						15240
140	100	10.4	-66.2						

Constant Pressure Blocks

10478	6697	-00.2
16XX2	X	X
02908	284	4

1047

5350	-61.9
252	19

1124

15667	14226	-60.3
10XX3	X	X
02343	228	25

915

13251	-50.2
217	25

BC8

20967	12383	-30.1
00XX4		
02035	206	16

1451

85[illegible]	0892	-[illegible]5
[illegible]7[illegible]	41	-[illegible]6
01211	118	6

1215

30156	26191	-23.6
12818	48	-21.4
01218	116	5

117

85022	-22.1	
52	X	X
121	9	

Solar Radiation Corrections for Raob Temperatures

1 Time, LST, at termination if between 999 and 81 mb, or at 350 mb, if termination above 350 mb	
2 Time, LST, at termination if between 149 and 81 mb, or at 80 mb, if termination higher than 70 mb	
3 Time, LST, at 70 mb, if reached	
4 Correction for TST	
5 Time, TST, algebraic sum of (1) & (4)	
6 Time, TST, algebraic sum of (2) & (4)	
7 Time, TST, algebraic sum of (3) & (4)	
8 Difference between (5) and Solar Noon	
9 Difference between (6) and Solar Noon	
10 Difference between (7) and Solar Noon	
11 Elevation angle of Sun for (8)	
12 Elevation angle of Sun for (9)	
13 Elevation angle of Sun for (10)	
14 a Elapsed time from 850 to 80 mb, or to termination of between these levels	
b Elapsed time from 80 to 50 mb, or to termination of between these levels	
c Elapsed time from 80 to ___ mb	
d " " " 80 to ___ mb	
e " " " 80 to ___ mb	
15 a Supplemental data corresponding to (14a)	
b " " " (14b)	
c " " " (14c)	
d " " " (14d)	
e " " " (14e)	

CODED MESSAGE FOR TRANSMISSION

XMTD

LEGEND FOR CONSTANT PRESSURE BLOCKS

DATA AS TRANSMITTED	DATA AS ENTERED ON PUNCHED CARD	
Ordinate	Altitude (gpm)	Temperature (°C)
Ascent °C	Relative Humidity (%)	Dew Point (°C)
Cutoff	Direction (degrees) and Speed (knots)	

LEGEND FOR PLOTTED CURVES

PA—Pressure Altitude (computational units)
T—Temperature (°C) RH—Relative Humidity (%)

Drawn by R.C. SAWYER

Verified by J.F. CINEY

Computed by

DATE AND RELEASE TIME

	Year	Month	Day	Time
GMT	1961	SEP	27	1201
EST	1961	SEP	27	0701

Radiosonde Set No. [illegible] Assembly No. [illegible]

HURRICANE SPECIAL

Station: Portland, Maine (City Airport)

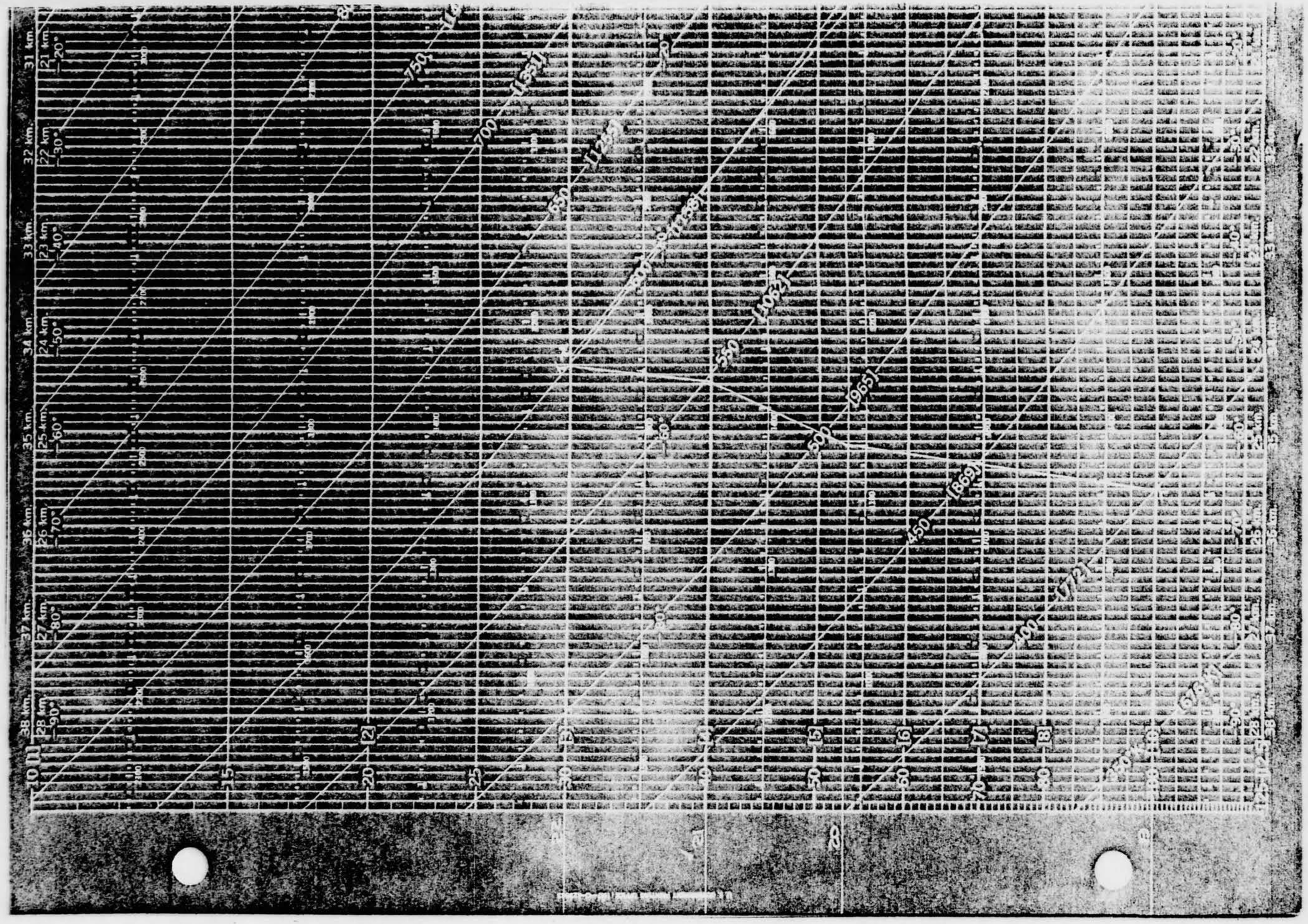
[illegible]° N 70° 17' W

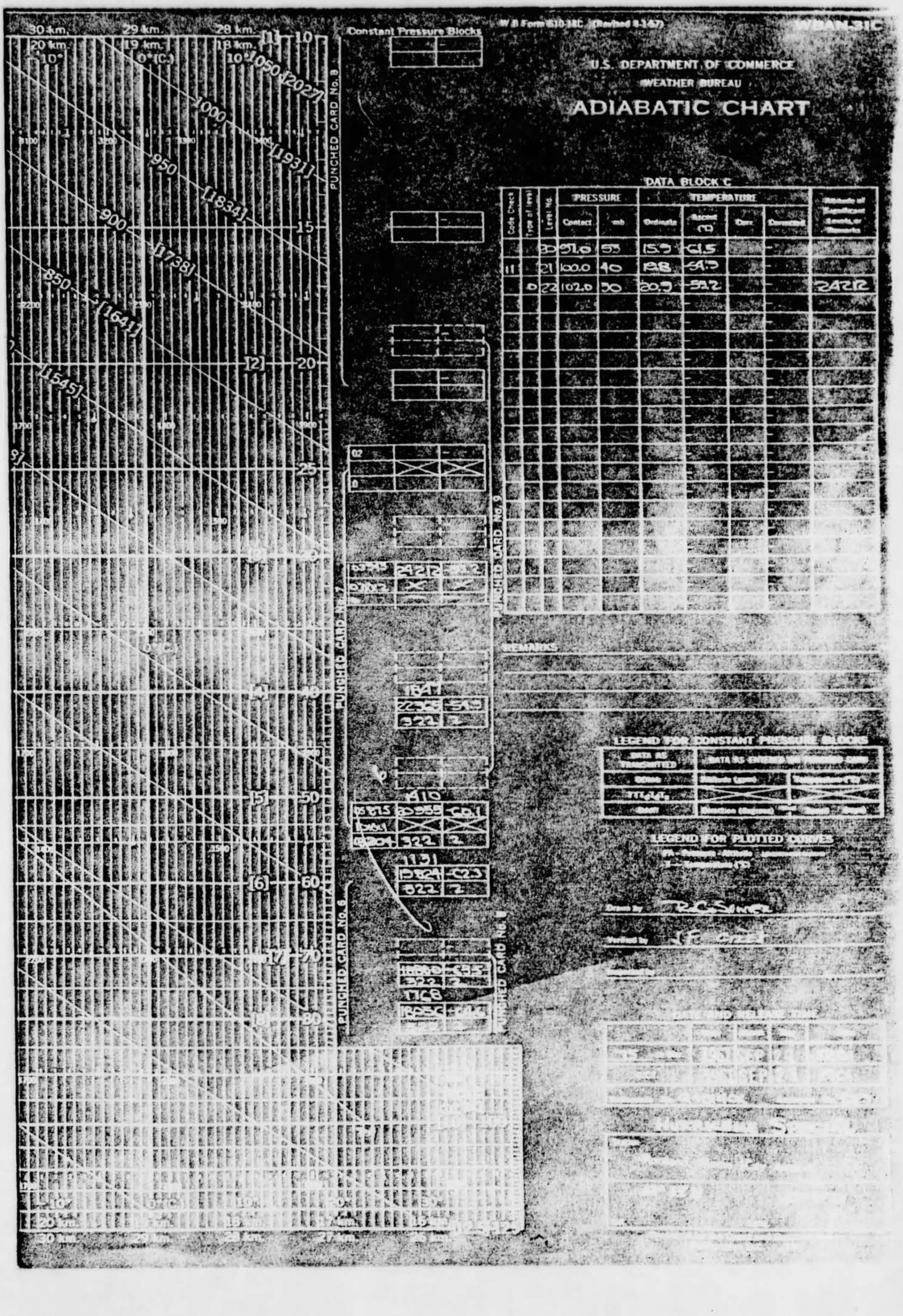
Lat. Long.

Prepared by the Coast and Geodetic Survey
Washington, D. C. 1957

PUNCHED CARD No.

PUNCHED CARD No.




30 km.
29 km.
28 km.
20 km.
19 km.
18 km.
10°
0°(C.)
1000
950
900
850
[1931]
[1834]
[1738]
[1641]
[1545]
[2027]
[2]
[6]
PUNCHED CARD No. 8
Constant Pressure Blocks
W B Form 610-12C (Revised 8-1-67)
U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU
ADIABATIC CHART
DATA BLOCK C
Code Check
Type of Level
Level No.
PRESSURE
Contact
mb
TEMPERATURE
Ordinate
Ascent (°C)
Corr.
Corrected
Elements of Significant Levels or Remarks
30 97.0 55 15.9 -61.5
11 21 100.0 40 18.8 -54.7
22 102.0 30 20.9 -52.2 22212
REMARKS
PUNCHED CARD No. 9
PUNCHED CARD No. 7
PUNCHED CARD No. 6
PUNCHED CARD No. 5
LEGEND FOR CONSTANT PRESSURE BLOCKS
DATA AS TRANSMITTED
DATA AS ENTERED
LEGEND FOR PLOTTED CURVES
Drawn by R.C. Singh
Verified by

HEADQUARTERS
FOREIGN TECHNOLOGY DIVISION
AIR FORCE SYSTEMS COMMAND
UNITED STATES AIR FORCE
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

REPLY TO ATTN OF: TDEW

SUBJECT: Request for UFO Information

27 SEP 1963

TO: Hq USAF SAF-OI 3b (Mrs Gaiser)
Wash 25 D C

1. Reference the attached letter from [redacted] requesting information on unidentified objects. Our records indicate fourteen specific requests from Mr [redacted] pertaining to various sightings. He has also received the DOD Fact Sheet. This letter is forwarded to your office for whatever action you deem necessary.

2. Specific answers pertaining to the case of Sep 19-20, 1961 are as follows:

a. The Barney Hill sighting was investigated by officials from Pease AFB. The case is carried as insufficient data in the Air Force Files. No direction (azimuth) was reported and there are inconsistencies in the report. The sighting occurred about midnight and the object was observed for at least one hour. No specific details on maneuverability were given. The planet Jupiter was in the South West, at about 20 degrees elevation and would have set at the approximate time that the object disappeared. Without positional data the case could not be evaluated as Jupiter. There was a strong inversion in the area. The actual light source is not known. As no lateral or vertical movement was noted, the object was in all probability Jupiter. No evidence was presented to indicate that the object was due to other than natural causes.

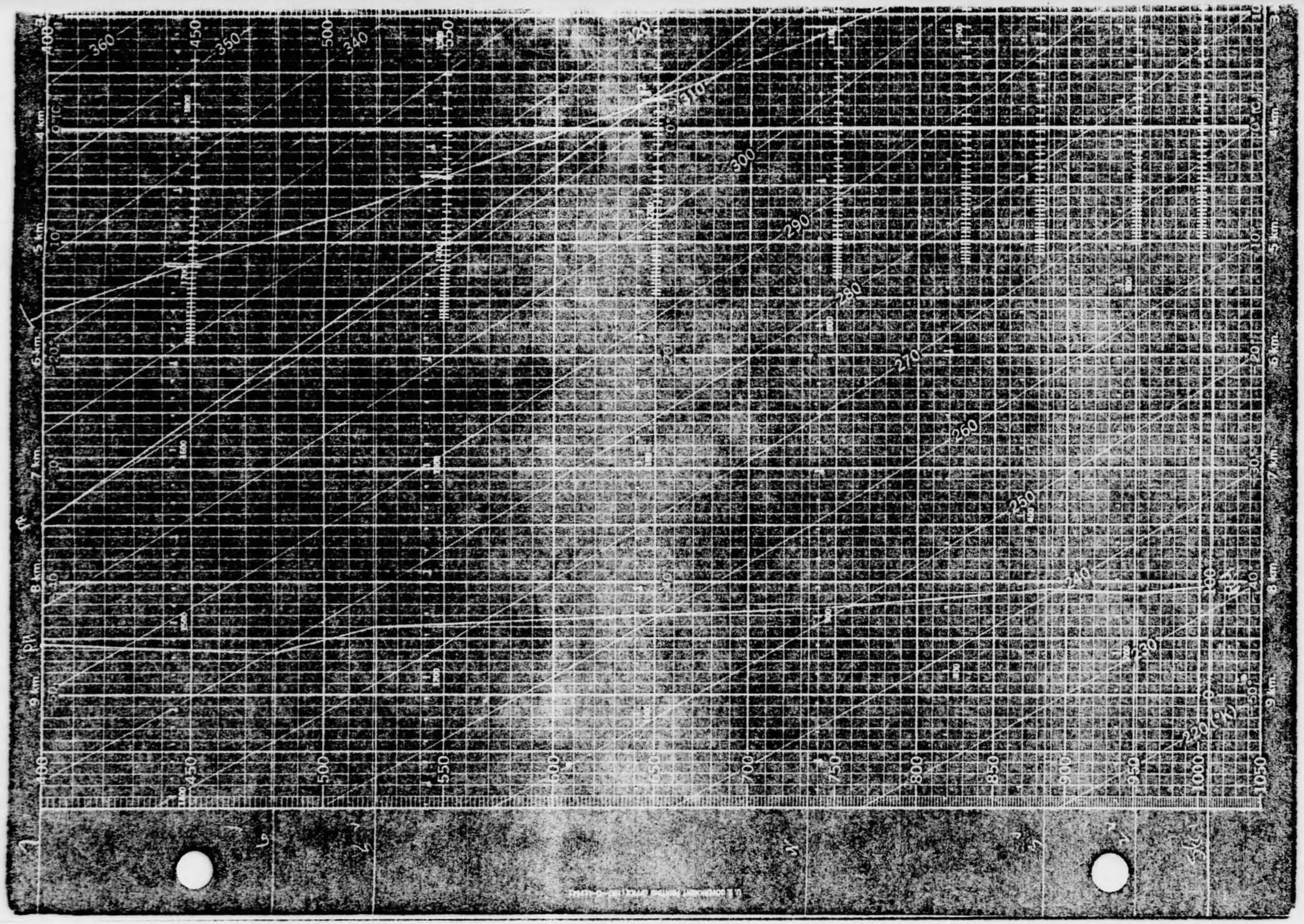
b. The Air Force did not investigate the sightings in Hollywood, California, on Feb 5 and 6, 1960.

FOR THE COMMANDER

David C. Blaney

ERIC T deJONCKHEERE
Colonel, USAF
Deputy for Technology
and Subsystems

1 Atch
Ltr fm [redacted]
27 Aug 63


360
450
350
500
340
550
320
310
300
290
280
270
260
250
240
230
220
210
200
190
180
170
160
150
140
130
120
110
100
90
80
70
60
50
40
30
20
10
0°C
4 km
5 km
6 km
7 km
8 km
9 km
400
450
500
550
600
650
700
750
800
850
900
950
1000
1050

W B Form 610-5A (Revised 4-1-57) WBAN-31A

U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

ADIABATIC CHART

DATA BLOCK A

Time (GCT)	Hour	Line No.	PRESSURE Ordinate	PRESSURE mb	TEMPERATURE Ordinate	TEMPERATURE Record °C	REL. HUM Ordinate	REL. HUM Including Corr. of ±0%	DEW POINT °C	Altitude of Significant Levels or Remarks
00	0	1		1006		16.1		95	15.9	40
11	1	2	6.0	958	65.5	13.7	92.0	90	12.1	500
22	2	3	10.0	916	64.2	16.5	97.5	91	15.0	710
		4	19.0	734	62.0	7.9	77.0	75	3.7	
33		5	33.0	521	53.2	-6.5	57.0	60	-12.7	
44		6	36.0	491	51.0	-9.4	52.0	39	-20.7	
	0	7	43.7	400	46.2	-16.3	24.0	44	-25.6	7475
		8								
		9								
		10								
		11								
		12								
		13								
		14								
		15								
		16								
		17								
		18								
		19								
		20								
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		41								
		42								
		43								
		44								
		45								
		46								
		47								
		48								
		49								
		50								
		51								
		52								
		53								
		54								
		55								
		56								
		57								
		58								
		59								
		60								

SURFACE OBSERVATION AT RELEASE

PRESSURE Station Inches	PRESSURE Station mb	PRESSURE *Correction mb	PRESSURE at Shelter mb	CONTACT Dry	CONTACT Wet
	1005.6	+0	1005.6	5.1	3.5

*For difference in elevation between barometer and instrument shelter.

TEMPERATURE Dry	TEMPERATURE Wet	RELATIVE HUMIDITY %	WIND Direction	WIND Speed
61.0	60.0	95	35	8.2

CLOUDS AND WEATHER

MG 02 RW-F

25F

Constant Pressure Blocks

40	7476	-16.3
44	44	-25.7
05018	90	9

4570	-33.0	
40	X	
72	12	

1709

50 220	5767	-7.9
57668	49	-16.6
06833	79	17

5010	-41	
62	X	
90	15	

1137

4537	-20.5	
66		
10.2	2.2	

7610	-5.5	
70	X	
109	16	

1297

700 10	3081	-3.7
05018	72	14
01195	111	23

3500	9.0	
77	X	
112	21	

1101

19774	118	
83	X	
110	21	

510

85 4750	14463	14.7
14137	89	110
01498	110	25

484

9771	60	
92	X	
100	21	

500	-1.7	
90	X	
60	11	

887

21 0057	858	15.9
61567	96	14.0
00418	41	2

1006	101	
500	150	
30	8	

PUNCHED CARD No. 3

PUNCHED CARD No. 2

PUNCHED CARD No. 1

BASELINE CHECK READINGS

Time G.C.T.	TEMPERATURE Ordinate	TEMPERATURE Dry	TEMPERATURE Wet
2059	71.0	75.8	74.1

RELATIVE HUMIDITY Ordinate	Wash %	Dew °F	Psychrometer °F
84.8	78	+2	80

CODED MESSAGE FOR TRANSMISSION

606 21029 15157 00418 85410
14437 01148 70011 05018 01145
50250 57668 00037 40813 06753
00918 30113 80208 0 23500
20460 0 70048 01067 0
15650 40041 0 10468 10466
15151 00418 16151 11937 11137
59116 11154 33521 [illegible]
59702 [illegible]

REMARKS

LEGEND FOR CONSTANT PRESSURE BLOCKS

DATA AS TRANSMITTED	DATA AS ENTERED ON PUNCHED CARD	
DDhh	Altitude (gpm)	Temperature (°C)
TT fofofo	Relative Humidity (%)	Dew Point (°C)
ddff	Direction (degrees)	Speed (knots)

LEGEND FOR PLOTTED CURVES

T — Temperature (°C) RH — Relative Humidity (%)

Drawn by S.D. COBBS

Verified by R.C. SAWYER

Inspected by

DATE AND RELEASE TIME

	Year	Month	Day	Time
	1961	SEP	21	1700
	1961	SEP	21	2059

GABLEY

HURRICANE SPECIAL

Station Portland, Maine (City Airport)

Radiosonde Kaysn GMD-1 Balloon 20 gm

Unit

Issued by Weather Bureau, Washington, D.C. 1957

DATA BLOCK B

PRESSURE		TEMPERATURE				REL. HUM.		DEW POINT °C	Altitude of significant levels or Remarks
...stant	mb.	Ordinate	Ascent °C	Correction	Corrected	Ordinate	Inclosing Curve at ±0%		
3.0	260	30.0	31.7			5.0	35	-48.5	
1.0	200	20.9	-51.2						12557
1.0	127	13.7	-53.1						
50	103	10.9	-53.7						16490
51	100	12.2	-55.8						

Constant Pressure Blocks

10464	16553	-55.6
5XXC	X	X
0570	5476	5

1545		
5304	5442	
7261	70	

1150		
15030	11174	-50.1
00XX1	X	X
0222	257	11

916		
13198	-55.0	
2520	8	

801		
20346	12551	-51.2
3XXX2		
02510	2520	8

481		
9XX6	10654	1406
0XX0		
1XX2	765	

1110		
0XX6	5306	151
0XX8	48	28
0XX9	64	16

1115		
8461	156	
4	X	
42		

PUNCHED CARD No. 1

U. S. Form 610-14B (Revised 4-1-52) WBAN 318

U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

ADIABATIC CHART

Solar Radiation Corrections for Radiosonde Temperatures

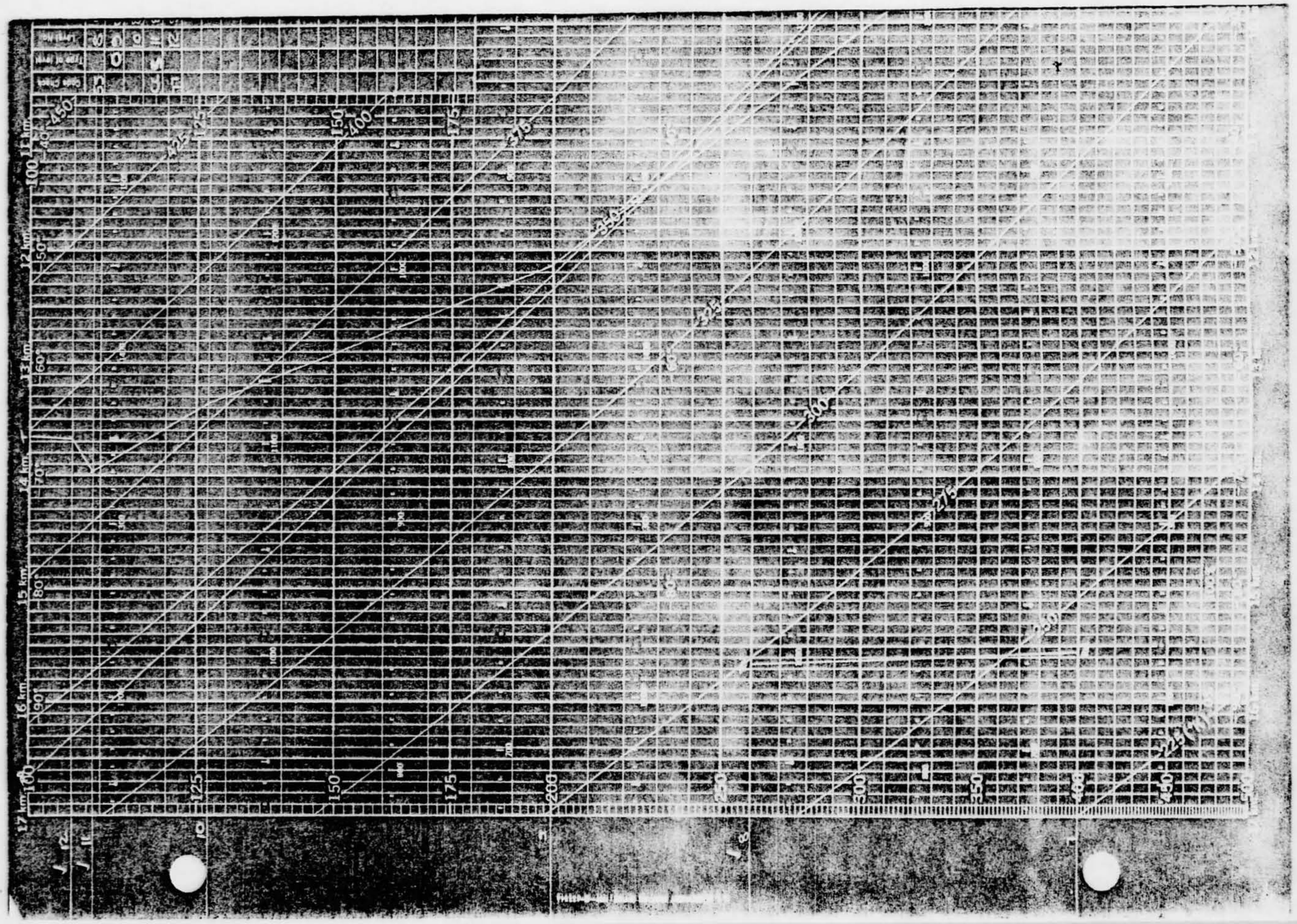
1. Time, LST, at termination if between 370 and 88 mb, or at 150 mb, if termination above 150 mb
2. Time, LST, at termination if between 140 and 65 mb, or at 80 mb, if termination higher than 70 mb
3. Time, EST, at 200 mb, if reached
4. Correction for (1)
5. Time, EST, at 100 mb, if reached
6. Time, EST, algebraic sum of (3) & (4)
7. [illegible]
8. Difference between (5) and Solar Noon
9. Difference between (6) and Solar Noon
10. Difference between (7) and Solar Noon
11. Elevation angle of Sun for (8)
12. Elevation angle of Sun for (9)
13. Elevation angle of Sun for (10)
14. a. Elapsed time from 150 to 80 mb, or to termination if between these levels
    b. Elapsed time from 80 to 50 mb, or to termination if between these levels
    c. Elapsed time from 80 to ___ mb
    d. ___ ___ ___ 80 to ___ mb
    e. ___ ___ ___ 80 to ___ mb
15. a. Ascensional rate corresponding to (14a)
    b. ___ ___ ___ (14b)
    c. ___ ___ ___ (14c)
    d. ___ ___ ___ (14d)
    e. ___ ___ ___ (14e)

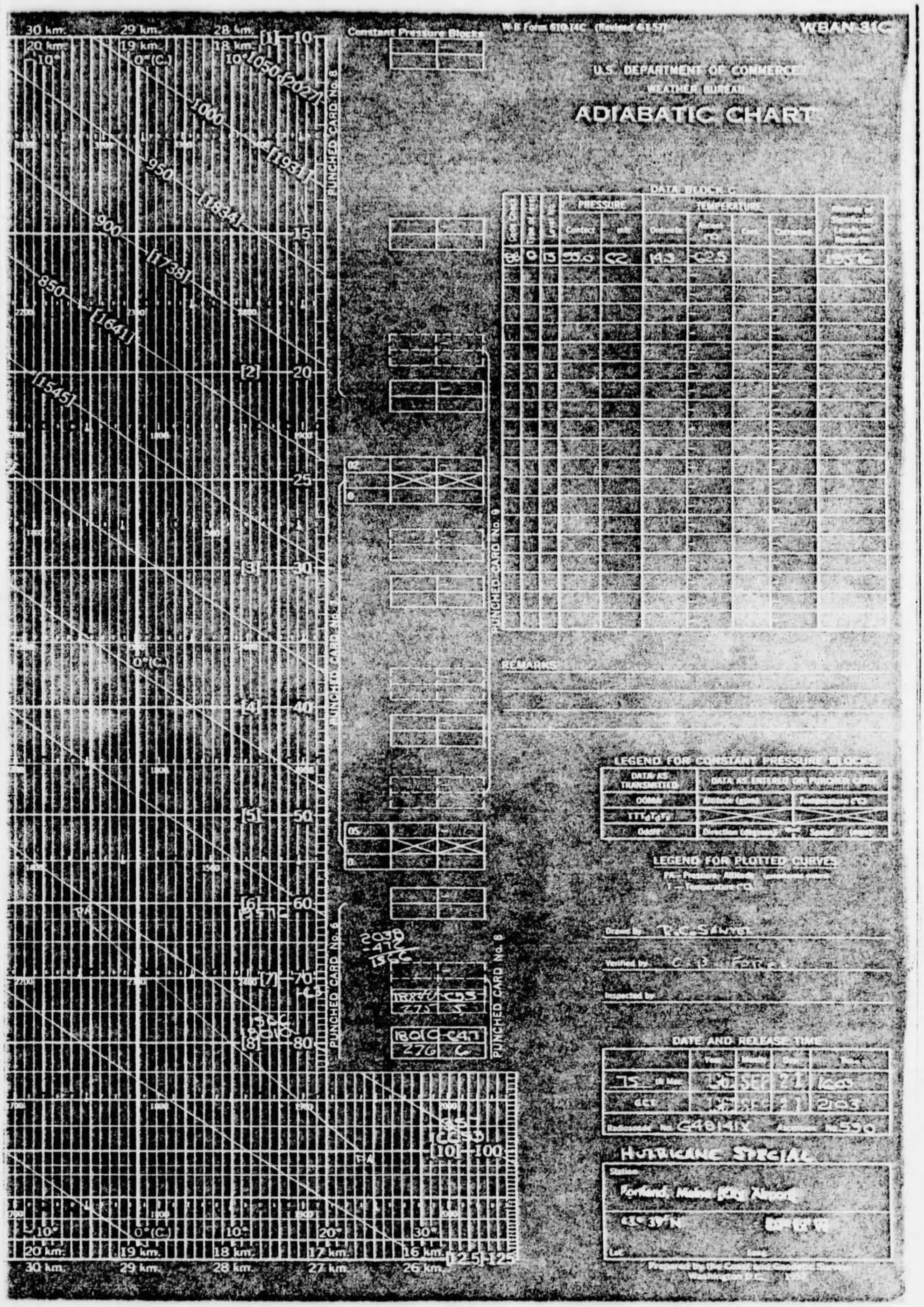
CODED MESSAGE FOR TRANSMISSION

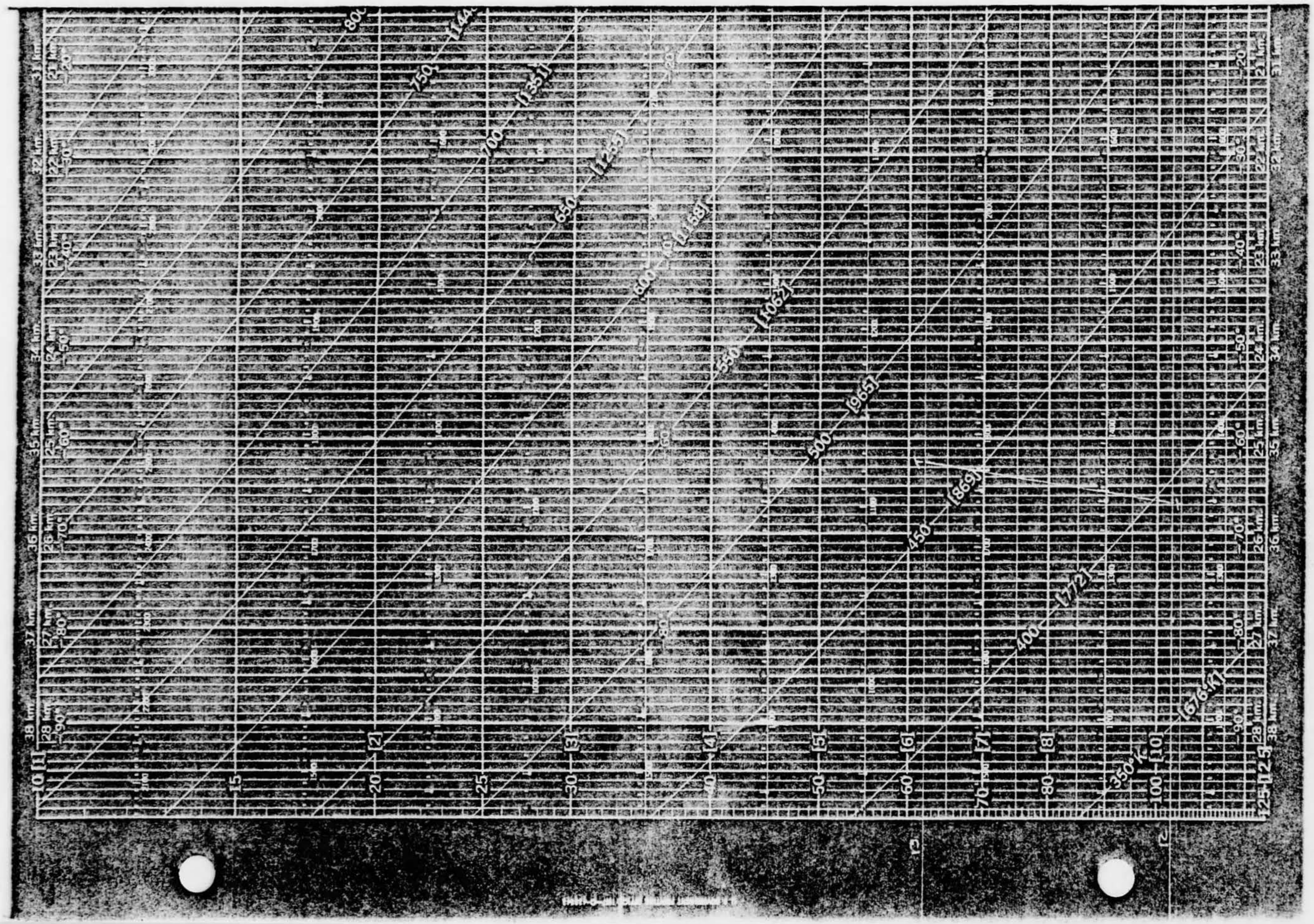
LEGEND FOR WORKED CURVE

PUNCHED CARD No. 2

400 450 200 30 35




W.B. Form 610.14C (Revised 6-57)
WBAN 31C
U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU
ADIABATIC CHART
Constant Pressure Blocks
PUNCHED CARD No. 6
PUNCHED CARD No. 8
DATA AS TRANSMITTED
PRESSURE
TEMPERATURE
REMARKS
LEGEND FOR CONSTANT PRESSURE BLOCKS
DATA AS TRANSMITTED
DATA AS ENTERED ON PUNCHED CARD
LEGEND FOR PLOTTED CURVES
Drawn by
Verified by
Inspected by
DATE AND RELEASE TIME
HURRICANE SPECIAL
Station
Portland, Maine (CAA Airport)
43°39'N
Lat.
Prepared by the Climatic and Geophysical
30 km.
29 km.
28 km.
27 km.
26 km.
20 km.
19 km.
18 km.
17 km.
16 km.
0°(C.)



WBAN 31A

U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

ADIABATIC CHART

PUNCHED CARD No. 1

DATA BLOCK A

Data Check	Logic of Items	Level No.	PRESSURE Contact	PRESSURE Mb.	TEMPERATURE Ordinate °C	TEMPERATURE Ascent °C	REL. HUM. Ordinate	REL. HUM. Including Corr. of 0.5	DEW POINT °C	Altitude of Significant Levels or Remarks
	0	1		1006		16.1		94	15.1	70
7	1	2	8.0	923	65.8	14.4	87.5	94	13.5	770
72	2	3	10.0	890	66.8	16.4	87.9	94	15.4	1090
39		4	24.0	661	59.4	3.0	72.1	70	-2.0	
44		5	29.5	580	55.0	-3.9	37.9	47	-13.6	
51	0	6	31.4	552	53.2	-6.5	58	24	-23.8	10140
56	3	7	36.0	493	51.3	-9.3	24.2	41	-20.1	9880
71	0	8	37.4	478	49.3	-12.2	5.0	25	-28.3	9710
		9	41.4	432	47.1	-16.3	5.0	25		
		10	44.5	400	46.2	-17.9	14.9	38	-21.8	
		11								
		12								
		13								
		14								
		15								

Constant Pressure Blocks

40497	7460	-179
67789	38	-28.9
00620	51	10
6880	-14.0	
20	X	
12	13	
1695	-10.0	
50891	7765	-9.0
97702	39	-20.5
00921	85	14
+1		
5020	-6.6	
24	X	
96	16	
1427		
4336	-21	
51		
81	16	
3710	87	
80	X	
42	11	
1401		
1.1.1	1.1.1	
2	X	
104	1	

BASELINE CHECK READINGS

Time GCT	Ordinate	TEMPERATURE Dry	TEMPERATURE Wet
2302	71.6	77.0	58.2

Ordinate	Asc. %	Corr. %	Psychrometer
84.8	78	+2	80

CODED MESSAGE FOR TRANSMISSION

606 13029 16160 00218 96163
14123 01151 70014 [illegible]
50891 97702 [illegible] 67789
00620 30151 81110 00104 21112
90009 03306 20081 02011 01121
42336 11110 01211 [illegible]
01114
[illegible]
72010 [illegible]
31511 [illegible]

REMARKS

SURFACE OBSERVATION AT RELEASE

PRESSURE Station Inches	PRESSURE Station MB.	PRESSURE Correction MB.	PRESSURE If Standby MB.	CONTACT Col. direct	CONTACT Recorder record
	1008.2		1008.2		3.1

TEMPERATURE		RELATIVE HUMIDITY	WIND		
	60.0°				
16.5	14.6	74	20	NNE	

CLOUDS AND WEATHER

Notes

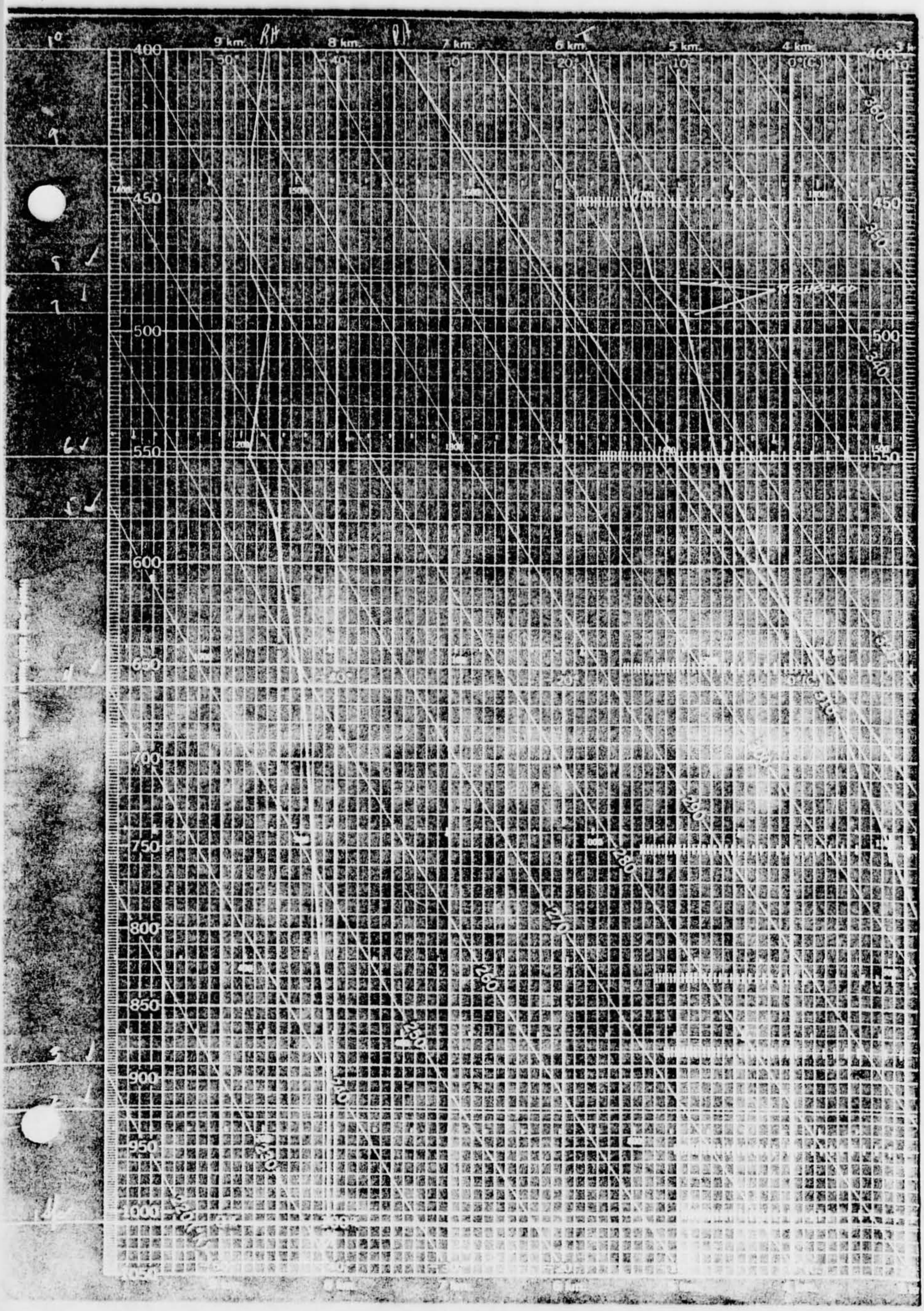
LEGEND FOR [illegible] SOUNDING

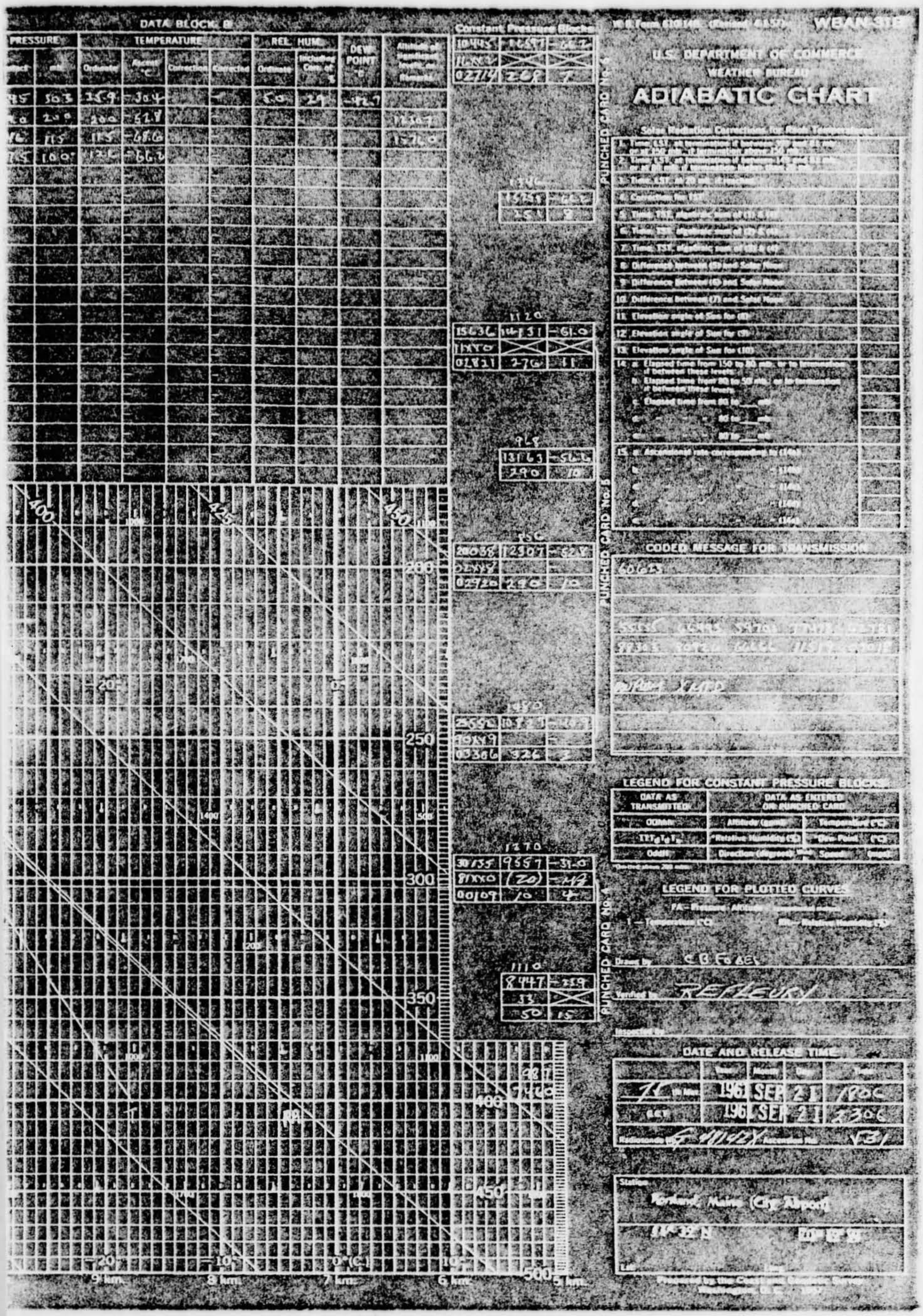
LEGEND FOR PROFILE CURVE

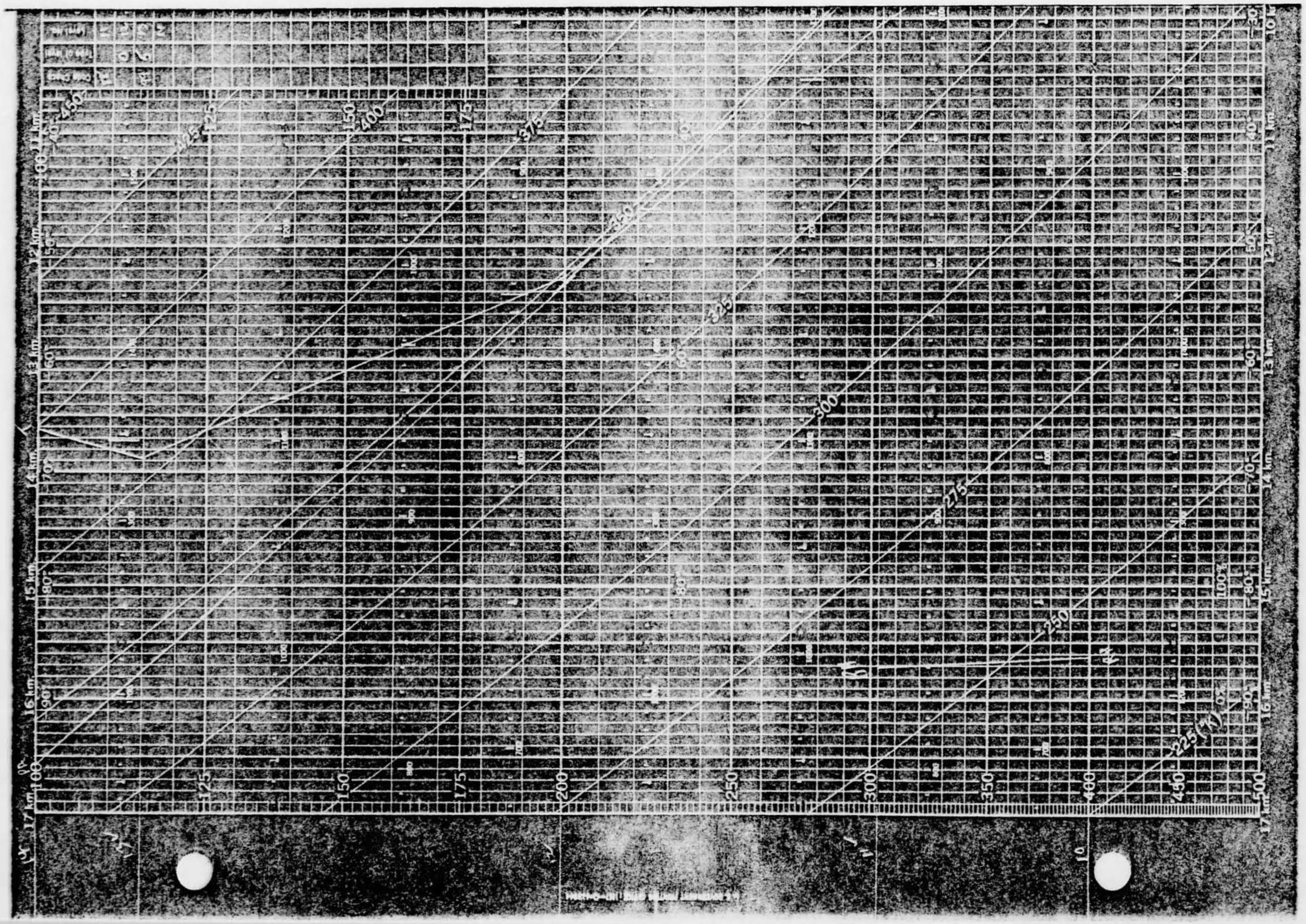
PLOTTED [illegible]

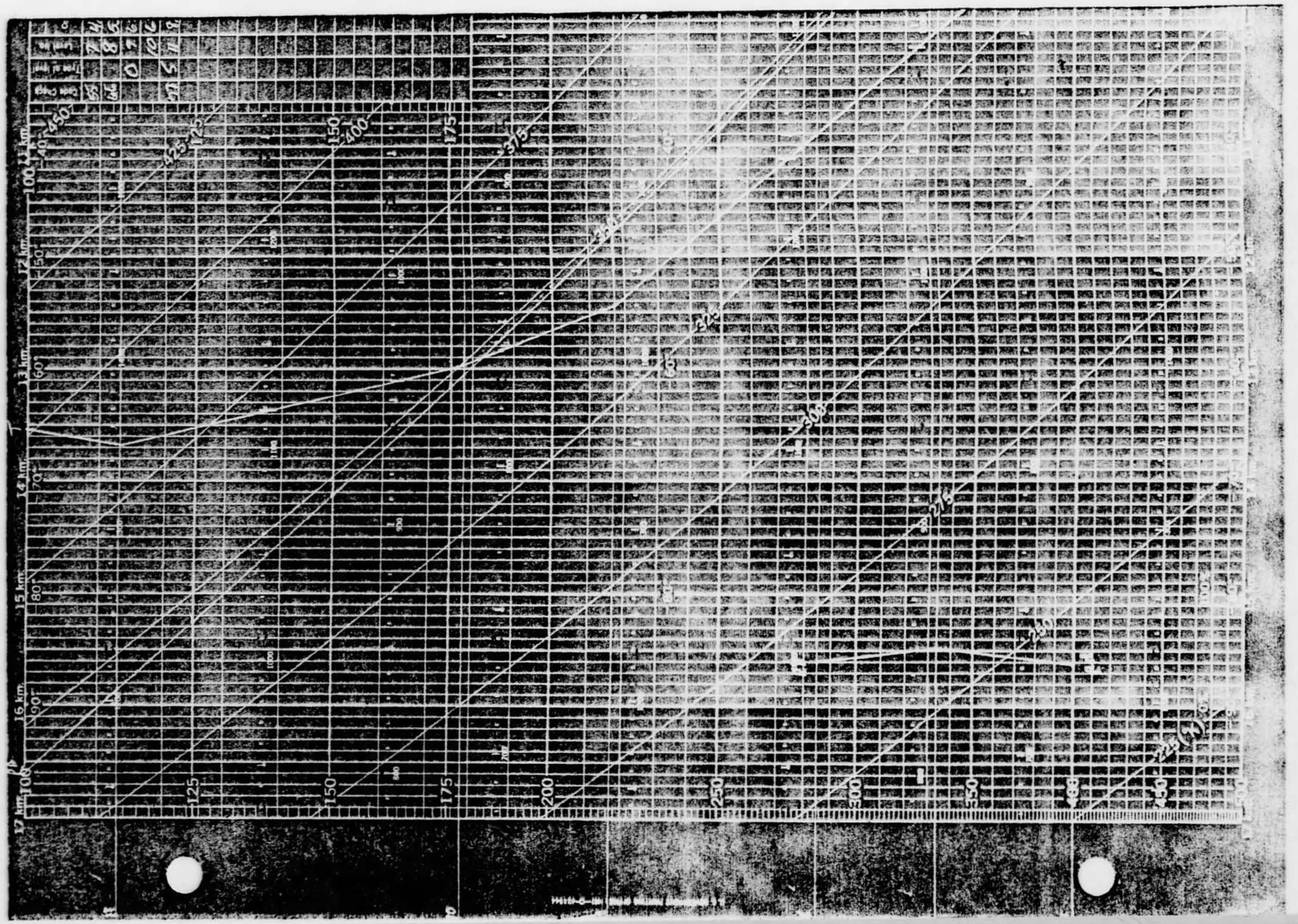
Rawin

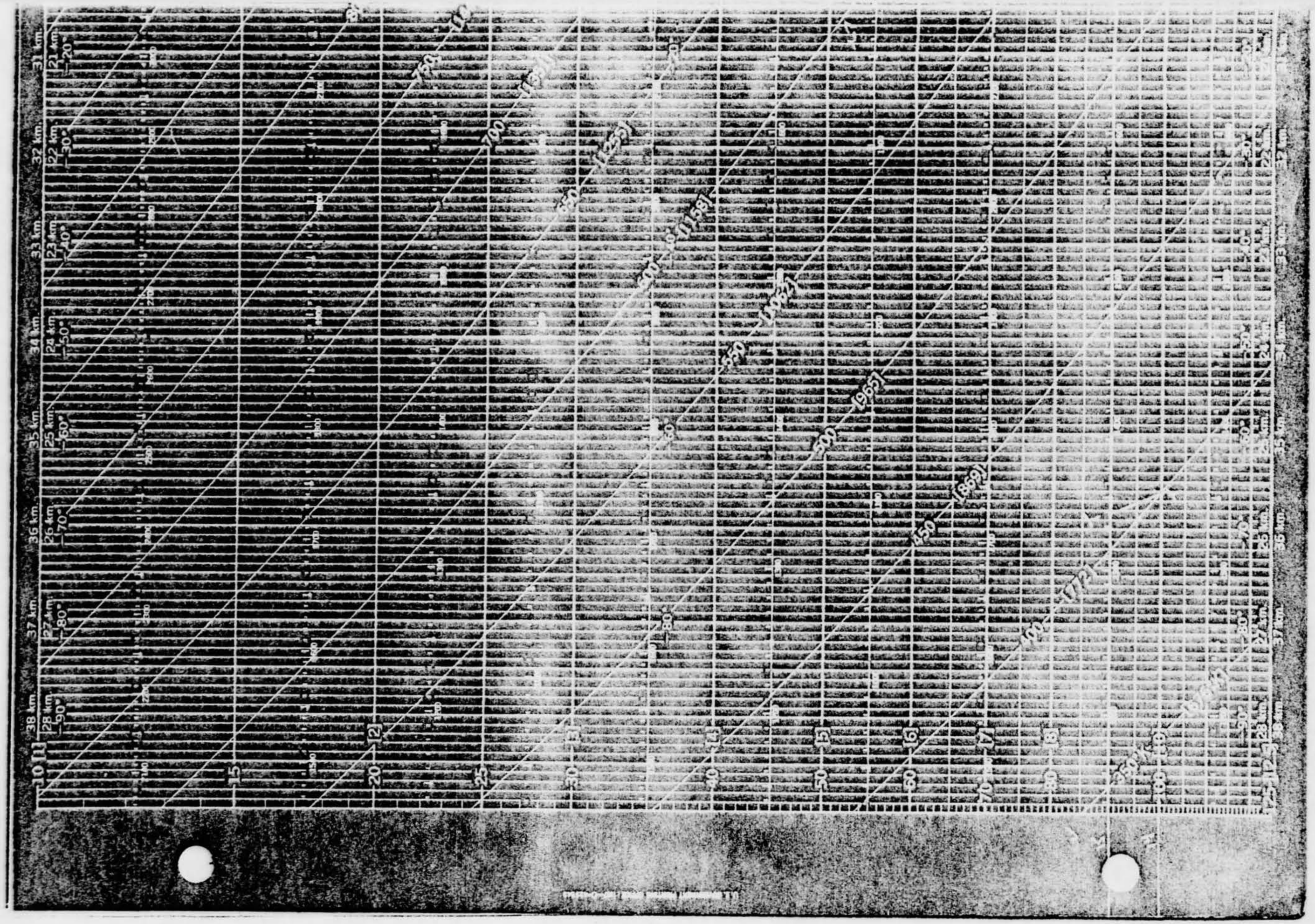
600 650 700 750 800 850 900 950 1000

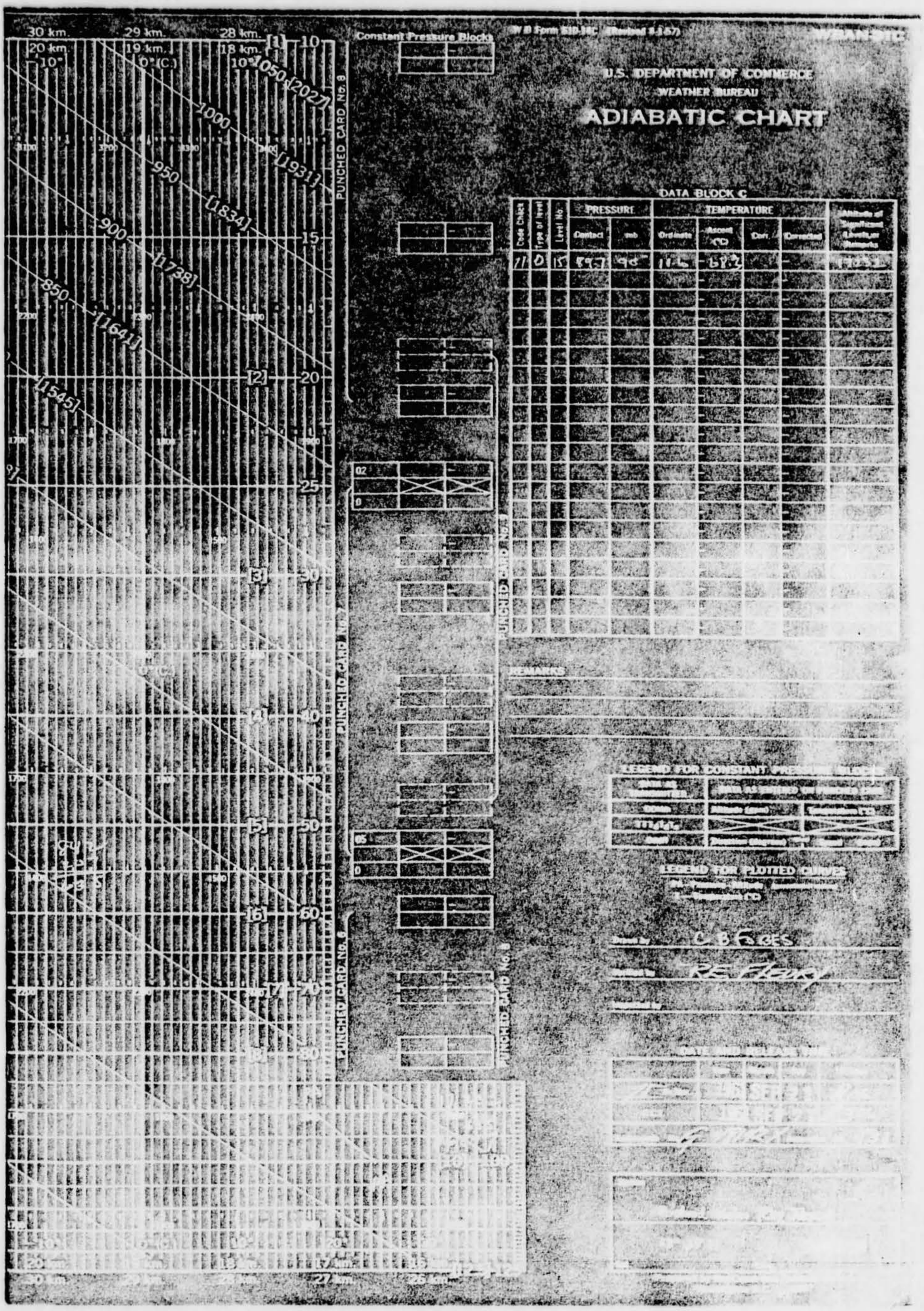

9 km.
8 km.
7 km.
6 km.
5 km.
4 km.
3 k
400
450
500
550
600
650
700
750
800
850
900
950
1000
50
40
30
20
10
0°C
RICHARDS


DATA BLOCK B
PRESSURE
TEMPERATURE
REL. HUM.
DEW POINT °C
Ordinate
Ascent °C
Correction
Corrected
Ordinate
Indicated Conc. of V
Constant Pressure Blocks
PUNCHED CARD No. 4
PUNCHED CARD No. 5
U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU
ADIABATIC CHART
Solar Radiation Corrections for Black Thermometer
CODED MESSAGE FOR TRANSMISSION
LEGEND FOR CONSTANT PRESSURE BLOCKS
DATA AS TRANSMITTED
DATA AS ENTERED ON PUNCHED CARD
LEGEND FOR PLOTTED CURVES
Drawn by
Verified by
Inspected by
DATE AND RELEASE TIME
Station
400
450
500
-20
-10
0 (C)
10
9 km
8 km
7 km
6 km
5 km








30 km.
29 km.
28 km.
20 km.
19 km.
18 km.
10°
0° (C.)
10°
1050
2027
1000
1931
950
1834
900
1738
850
1641
1545
PUNCHED CARD No. 8
Constant Pressure Blocks
U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU
ADIABATIC CHART
DATA BLOCK C
Code Check
Type of Level
Level No.
PRESSURE
TEMPERATURE
Contact
mb
Ordinate
Ascent
Corr.
Corrected
REMARKS
LEGEND FOR CONSTANT PRESSURE BLOCKS
LEGEND FOR PLOTTED CURVES
PUNCHED CARD No. 6
PUNCHED CARD No. 7

ADIABATIC CHART

U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU

WB Form 610-1AM (Revised 4-1-57) WBAN STA.

DATA BLOCK A

Level No.	Type of Point	Line No.	PRESSURE: Contact	PRESSURE: Millibars	TEMPERATURE: Ordinate °C	TEMPERATURE: Ascend. °C	REL. HUMID.: Ordinate	REL. HUMID.: Including Corr. of -20%	DEW POINT °C	Altitude of Standard Levels, or Remarks
0	1	1		1027		4.4		96	3.8	20
1	0	2	3.0	1012	6.3	11.0	77.6	74	6.6	150
2	2	3	-.5	964	14.0	16.0	5.0	16	-9.8	550
3	0	4	18.0	741	6.2	9.0	46.5	(13)	1.8	2750
4		5	37.4	450	4.4	-1.5	5.0	25	30.8	
5	0	6	41.6	400	4.2.6	-20.4	14.0	38		7450
		7								
		8								
		9								
		10								
		11								
		12								
		13								
		14								
		15								

Constant Pressure Blocks

40 411	7.4.4	-2.4
70 1516	38	-3.1
02218	2.6.0	.17
4700	-1.1.6	
25		
2.00	1.5	
1654		
50 939	1.8.9	-1.6.1
6411	1.1.2	
02618	2.6.2	.9
5140	-1.5.6	
1151		
257	3	
1454		
60 4946	-7.6	
1101		
2456	4	
3460	7.6.2	
(13)		
234	3	
1654		
70 2.16	3.6.2	-1.1
1601	(13)	
02404	2.4.4	2
2660	9.3	
1131		
241	2	
1105		
2115	11.0	
(13)		
234	6	
706		
85 428	1609	12.1
12X17	(12)	
02306	2.2.5	3
450		
1119	13.4	
(12)		
240	2	
680	1.6.6	
(12)		
245	2	
859		
11079	24	12.1
12042	60	4.1
02701	2.6.1	2
1177	11.2	
76		
272	2	

PUNCHED CARD No. 1

PUNCHED CARD No. 2

PUNCHED CARD No. 3

BASELINE CHECK READINGS

Time GCT	Ordinate	TEMPERATURE: Dry	TEMPERATURE: Wet
1154	2.4.0	2.6.0	4.2.6

Ordinate	RELATIVE HUMIDITY: Hygrometer %	RELATIVE HUMIDITY: Dew Point °C	Dew Point °F
842	77	1.1	7.8

CODED MESSAGE FOR TRANSMISSION

6x6	11019	11642	02201	85128
12X17	02206	70076	16411	02404
70934	60411	02618	11151	70076
02634	30165	16411	02404	26071
96916	02250	20416	04411	22071
11636	16411	02451	70076	16411
02453				
11151	20071	04306	11076	11611
22964	11476	25111	11611	11611
88917	47110			

REMARKS

SURFACE OBSERVATION AT RELEASE

PRESSURE: Station Inches	PRESSURE: Millibars	CONTACT: Clouds	CONTACT: Weather
	1.2.6.3	2	2

For difference in elevation between Barometer and Instrument Shelter

TEMPERATURE: Dry	TEMPERATURE: Wet	RELATIVE HUMIDITY	
40.0	37.1		
44.4	42.2	91	2.6.0

CLOUDS

1 (0) 2

72

LEGEND FOR CONSTANT PRESSURE BLOCKS

DATA AS TRANSMITTED	DATA AS ENTERED ON PUNCHED CARD
Ordinate	Altitude (geom.) / Temperature (°C)
T T_d or T-d	Relative Humidity (%) / Dew Point (°C)
Obsn.	Direction (degrees) / Speed (knots)

LEGEND FOR PLOTTED CURVES

V.T. — Pressure, Altitude
T — Temperature (°C)
T_d — Dew Point (°C)

Drawn by R. E. Peirce

Verified by J. F. Cizek

Inspected by

DATE AND RELEASE TIME

	Year	Month	Day	Hour GCT
75	1961	SEP	1.3	0.4.2.7
act.	1961	SEP	1.3	1.1.2.7
Radiosonde No.				

Station

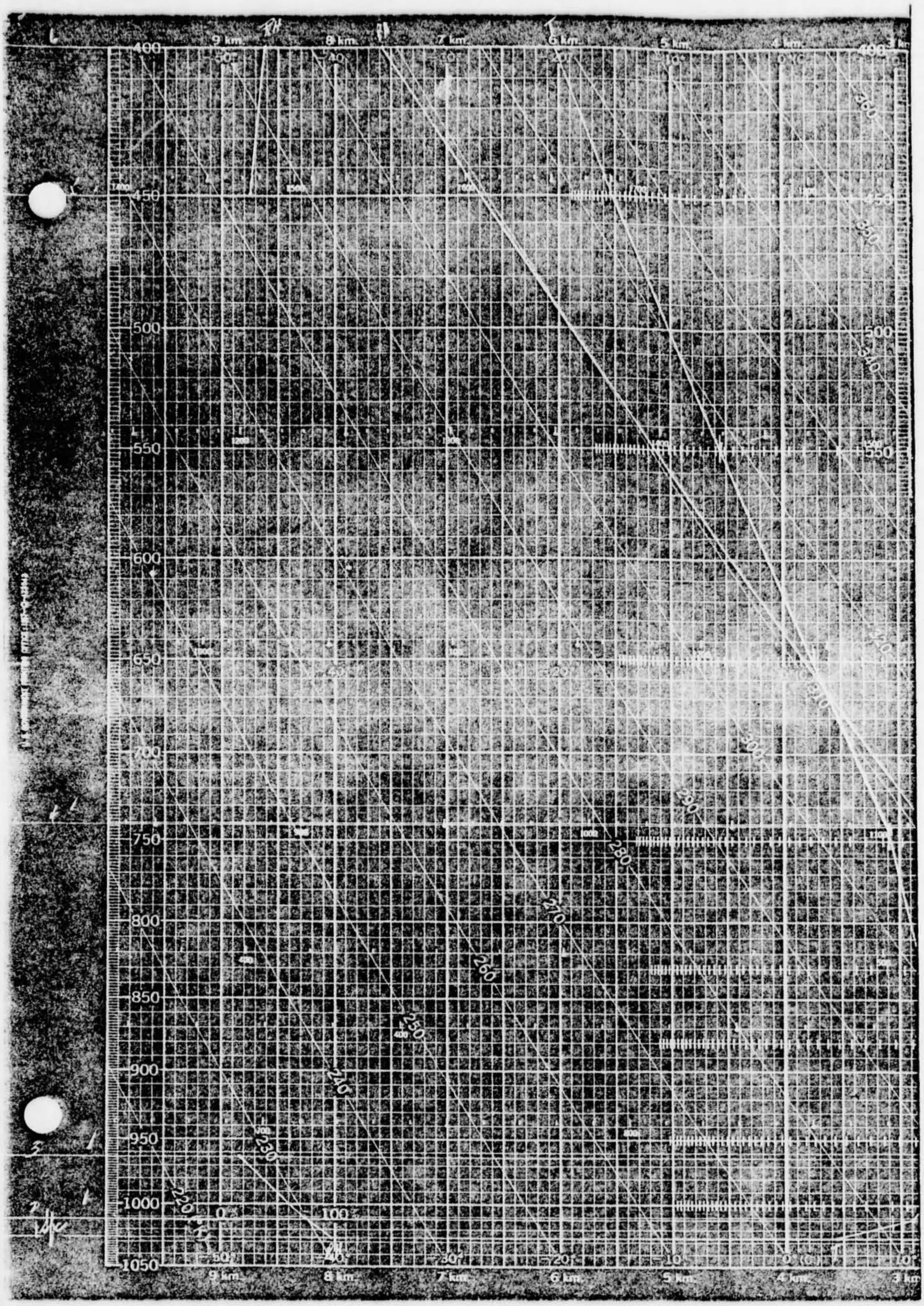
Portland Maine (City) Airport

Prepared by the Cartographic Section, U.S. Weather Bureau

600 650 700 750 800 850 900 950 1000 1050

20 30 40

2 km. 1 km. MSL


9 km
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Part Two: An "abducted" woman describes her incredible experience

BY JOHN G. FULLER

RETURNING FROM a brief vacation in Canada in September, 1961, Barney and Betty Hill had a deeply disturbing experience that they could remember only vaguely. They had sighted what may have been an Unidentified Flying Object that seemed to be following their car. Their anxiety about the incident led them to the office of Dr. Benjamin Simon, the distinguished Boston psychiatrist, on December 14, 1963. Because of the cloudiness of the Hills' conscious recollection of the episode, Dr. Simon decided to use regression under hypnosis in the hope that this would help them reconstruct the event more clearly. He also decided to tape-record these sessions for later study and reference.

During World War II, Dr. Simon, as Chief of Neuropsychiatry and Executive Officer at Mason General Hospital, the Army's chief psychiatric center, had extensive experience with hypnosis in the treatment of many psychiatric disorders among military personnel.

Barney Hill, who is a Negro, told of the journey from the Canadian border to their home in Portsmouth, N. H., and described a glowing UFO that seemed to follow them during part of their trip. Under hypnosis, he recreated the scene in much greater detail, and added an incident he had not mentioned during the earlier interview. The low-flying UFO had descended, Hill told the doctor, and humanoid creatures had then blocked the road. They had "abducted" him and carried him aboard the UFO for a strange physical examination. After several sessions with Barney, Dr. Simon decided to question Betty Hill, who is white, under hypnosis the following week.

Within the first moments of her trance, Betty Hill told a story that was remarkably similar to the one Dr. Simon had heard from her husband. After she and Barney made a number of stops in an attempt to observe the object more clearly, she said, they reached a point in the road where she saw "men standing in the highway . . . and these men started to come up to the car. . . . They came in two groups. . . ." At that point, "a kind of daze" overcame her.

The men took them both from the car, she said. ". . . And I turn around, and I say: 'Barney! Wake up!' . . . And he doesn't pay any attention. He keeps walking."

One of the men walking beside Betty said: "Don't be afraid. We're not going to harm you."

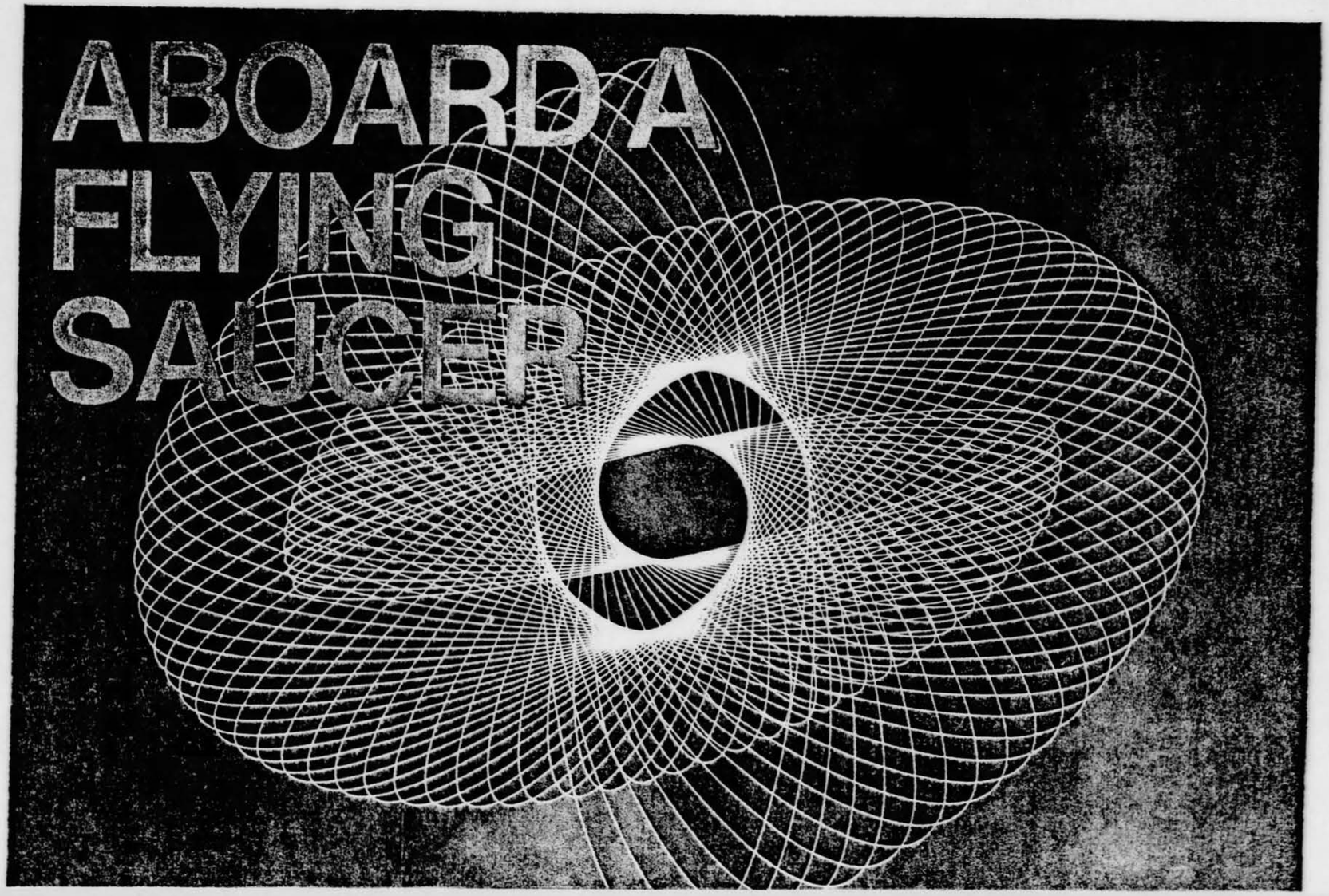
DOCTOR: These men spoke good English?

BETTY: Only one spoke. . . . He had sort of a foreign accent. . . . We kept walking, and we came to a clearing. . . . The object was on the ground. . . . I think it was the same one I had been watching in the sky. . . . And they're taking me up to the object. I didn't want to go on it. The man beside me says to go on. . . . So he and one of the others each take my arms. . . . I go inside, and there's a corridor. We go up the corridor, and there's a room. . . . I turn around, and I'm waiting for them to bring Barney in. But they lead Barney right past the door where I'm standing. I said: What are you doing with Barney? Bring him in here where I am. And the man said: No, we only have equipment enough in one room to do one person at a time. And if we took you both in the same room, it would take too long. . . . Another man comes in. . . . I think he's a doctor. . . . They push up the sleeve of my dress, and they look at my arm . . . and then they turn my arm over, and they look at the underside. . . . And they rub, they have a machine . . . it's something like a microscope, only a microscope with a big lens. . . . I had an idea they were taking a picture of my skin. . . . And then they took something like a letter opener—only it wasn't—and they scraped my arm. . . . And there was like little —you know—how your skin gets dry and flaky sometimes, like little particles of skin? And they took a piece of cellophane or plastic or

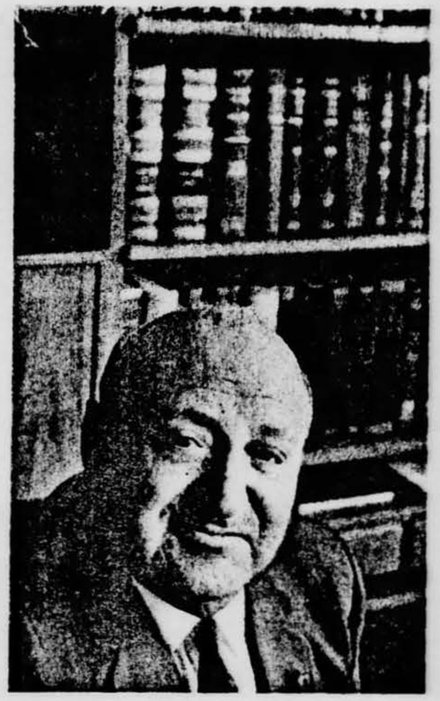
continued

September 9, 1961

ABOARD A FLYING SAUCER



"They" seem puzzled by time and aging



Bothered at first by the account given by the Hills, Dr. Simon (above) was convinced after a few sessions that they were telling him the truth as they understood it. The Hills (right) stand near the scene of their disturbing experience.

something like that, and they scraped, and they put the flakes on this plastic. . . . And the leader of the group puts it in the top drawer. And then they put my head . . . in this thing that holds your head. . . . And the examiner opens my eyes and looks into them with a light, and he opens my mouth, and he looks in my throat and my teeth and in my ears. . . . And then he takes like a—oh, a swab—and he puts it in my left ear, and he puts this on another piece of this material. And the leader rolls it all up and puts it in the top drawer too. Then they take a couple of strands of my hair, and they pull it out, and he gives this to the leader, and he wraps that up and puts that in the top drawer. . . . And then he feels my neck, behind my ears, under my chin, around my collar bone, and —oh—and then they take off my shoes and look at my feet and at my hands. . . . And he takes something, and he goes underneath my fingernail, and then he . . . cut off a piece of my fingernail. And then the doctor, the examiner, tells me to take off my dress . . . and so I slip my dress off. . . . I lie down on the table, on my back, and he brings over this—oh, how can I describe it? They're like needles, a whole cluster of needles, and each needle has a wire going from it. . . . They touch me with the needles. . . . It doesn't hurt at all. . . . He puts it on my knee, and my leg jumps. And then . . . then they said that was the end of the testing. And the leader helped me up. . . . I put my dress on. And I was going to zip it up, and he took hold of the zipper and zipped it up. And then—oh, I said: I can go now? I can go back to the car? And he said: Barney isn't ready yet. . . . He said that they were doing a few more tests with him, but he'd be right along in a minute. . . . I started talking with the leader. And I said to him that this had been quite an experience. . . . That no one would ever, ever believe me. . . . And that what I needed was some proof that this had really happened. . . . And I said to him that I knew practically nothing about the universe. And I told him, no, I know practically nothing. . . . And he went across the room and pulled out a map, and he asks me had I ever seen a map like this before. . . . There were all these dots on it, scattered all over it. Some were little, just pinpoints. And others were as big as a nickle. And there were lines . . . going from one dot to another. And there was one big circle, and it had a lot of lines coming out from it. A lot of lines going to another circle quite close, but not as big. And these were heavy lines. And I asked him what they meant. And he said

me over on my back, and the examiner had a long needle in his hand. . . . And I ask him what he's going to do with it . . . and he said he just wants to put it in my navel, it's just a simple test. And I tell him, no, it will hurt, don't do it, don't do it. And I'm crying, and I'm telling him: It's hurting, it's hurting, take it out, take it out! And the leader comes over, and he puts his hand, rubs his hand in front of my eyes, and he says it will be all right, I won't feel it. . . . The pain goes away. But I'm sore from where they put that needle.

DOCTOR: Did they make any sexual advances to you?

BETTY: No. . . . I asked the leader, I said: Why did they put that needle into my navel? And he said it was a pregnancy test. I said I don't know what they expected, but that was no pregnancy test. And he didn't say any more. . . .

DOCTOR: All right. We'll stop here now.

The Hills returned to the office for Betty's second session on March 14, 1964.

DOCTOR: About this needle. How far in did he inject the needle?

BETTY: Oh, it was a long needle. I don't know, I thought it—I didn't look, but I would say the needle was four inches long, six, maybe. . . . Something like a tube was attached to it. They didn't leave it in very long. Just for a second.

DOCTOR: What kind of pain was it?

BETTY: All I could think of was a knife. . . . Then, I was grateful to the leader for stopping the pain

me something to take back with me, then people would believe it. And so he told me to look around and maybe I could find something I would like to take. And I did—and there wasn't much around—but on the cabinet, there was a book, a fairly big book . . . and I said: Could I have this? And he told me to look in the book, and I did. It had pages, it had writing, but nothing like I had ever seen before. . . . The writing didn't go across, it went up and down.

DOCTOR: Did it look like any language that you know or was it in English?

BETTY: No, it wasn't in English.

DOCTOR: What language do you know that goes up and down?

BETTY: I don't know it, but I can recognize it. I can't read it: Japanese.

DOCTOR: Japanese. Did this look like Japanese?

BETTY: No.

DOCTOR: Was it writing or printing?

BETTY: It was different . . . it had sharp lines, and they were, some were very thin, and some were medium, and some were very heavy. It had some dots. It had straight lines and curved lines. And the leader laughed, and he asked me if I thought I could read it. And I told him no . . . but this was going to be my proof that this happened. . . . And so he said that I could have it. . . . And I was delighted. . . . And so then I said . . . I knew he wasn't from the earth, and I wanted to know where he did come from. And he asked me if I knew any-

casionally. And he said the broken lines were expeditions. . . . I asked him where was his home port, and he said: Where are *you* on the map? I looked and laughed and said I don't know. So he said: If you don't know where you are, then there isn't any point of my telling where I am from. And he put the map away. . . . And I thought: Well, I still have the book. . . . All of a sudden, some men came in with the examiner. They are quite excited. . . . The examiner has me open my mouth, and he starts checking my teeth. And he tugs at them. I asked what they are trying to do. . . . The examiner says they could not figure it out—Barney's teeth came out and mine didn't. I was really laughing and said Barney had dentures, and I didn't. They asked me: What are dentures? And I said people as they got older lost their teeth. They go to a dentist and get dentures. Or a person sometimes—Barney had to have dentures because he had a mouth injury. He had to have his teeth extracted. . . . I said it happens to almost everyone as they get older. And he said: What is older? I said: Old age. So he said: What is old age? And I said—well it varied, but as a person gets older, there are changes in him, particularly physical. He begins to sort of break down with age. So he said, what did I mean by age? And I said the life span—the length of time people live. He said, how long was this? And I said, well, about 100 years at the most. People can die before that—most of them do. . . . I think the average length of time . . . I don't know . . . was 65 or 70. So he said, 65 or 70 what? I said: Years. He said: What is a year? And I said it had to do with how many days, and the days had so many hours,

DATA BLOCK B

PRESSURE		TEMPERATURE				REL. HUM.		DEW POINT °C	Altitude of significant levels or Remarks
	mb	Ordinate	Ascent °C	Correction	Corrected	Ordinate	Including Corr. of ±0%		
0	334	35.3	-30.1			20.6	51	-37.0	
4	285	28.5	-39.3			8.7	90	-47.9	
H	217	18.4	-51.6						11790
0	178	15.4	-57.9						
0	113	11.9	-66.9						15870

Constant Pressure Blocks

10448	16605	-65.5
15XX5	XXXX	XXXX
00835	277	17

1351

52591	-65.3
260	24

1119

15636	41337	-62.4
12XY4	XXXX	XXXX
02751	270	29

958

13124	-60.0
263	36

842

20046	12332	-56.6
06XX6	XXXX	XXXX
02644	259	33

PUNCHED CARD No.

WB Form 610.1488 (Revised 6-1-57) WBAN-31B

U.S. DEPARTMENT OF COMMERCE

WEATHER BUREAU

ADIABATIC CHART

Solar Radiation Corrections for Raob Temperatures

1. Time, LST, at termination if between 399 and 81 mb, or at 150 mb...if termination above 150 mb	
2. Time, LST, at termination if between 149 and 81 mb, or at 80 mb, if termination higher than 70 mb	
3. Time, LST, at 20 mb, if reached	
4. Correction for TST	
5. Time, TST, at termination, sum of (1)-E (4)	
6. Time, TST, at 20 mb, sum of (2) & (4)	
7. Time, LST, at [illegible] sum of (3) & (4)	
8. Difference between (5) and Solar Noon	
9. Difference between (6) and Solar Noon	
10. Difference between (7) and Solar Noon	
11. Elevation angle of Sun for (8)	
12. Elevation angle of Sun for (9)	
13. Elevation angle of Sun for (10)	
14. a. Elapsed time from 150 to 80 mb, or to termination if between these levels	
b. Elapsed time from 80 to 50 mb, or to termination if between these levels	
c. Elapsed time from 80 to ___ mb	
d. " " " 80 to ___ mb	
e. " " " 80 to ___ mb	
15. a. Ascensional rate corresponding to (14a)	
b. " " " " (14b)	
c. " " " " (14c)	
d. " " " " (14d)	
e. " " " " (14e)	

CODED MESSAGE FOR TRANSMISSION

60611 05764 06XXC 0321 05851

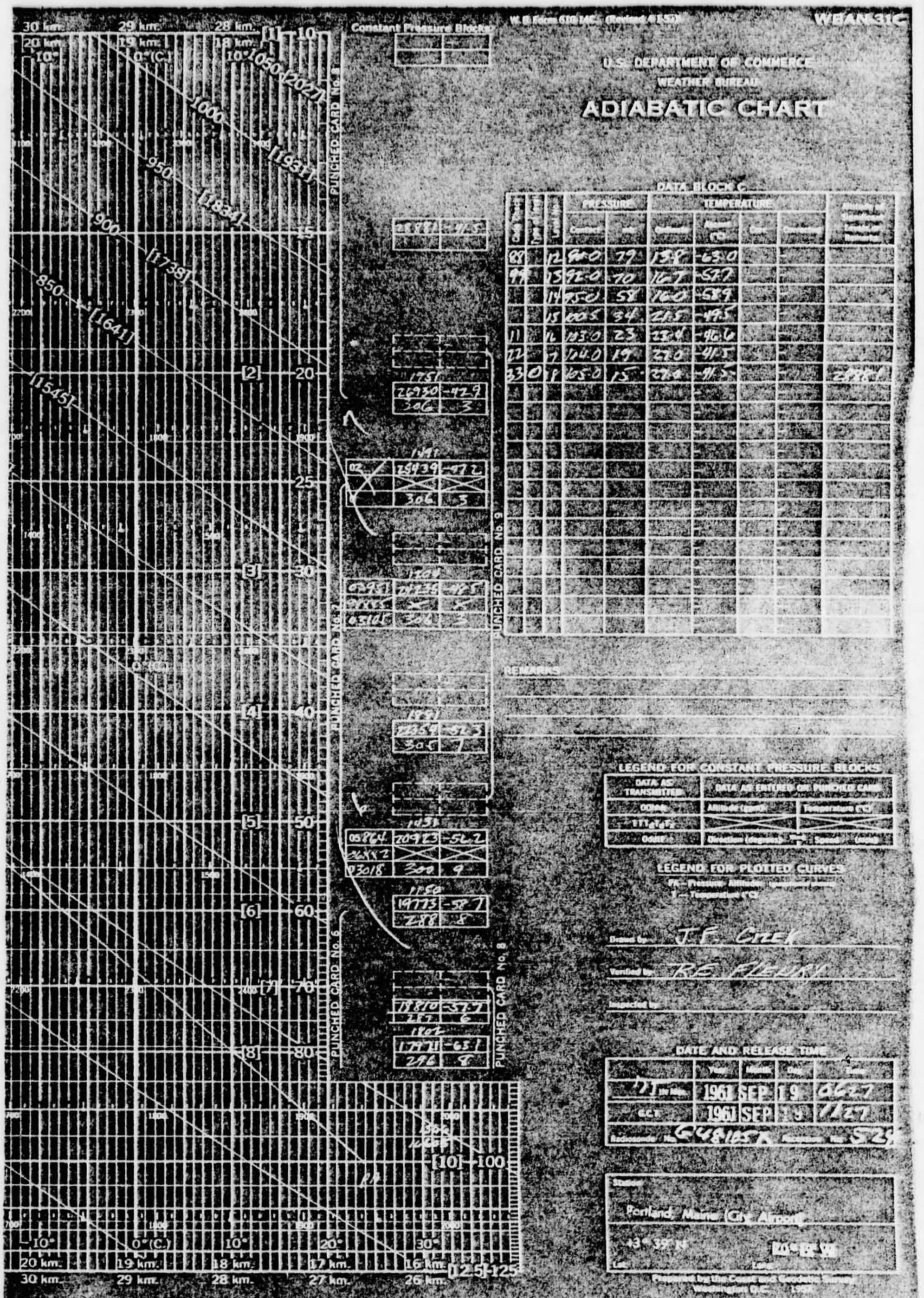
99XX5 03105

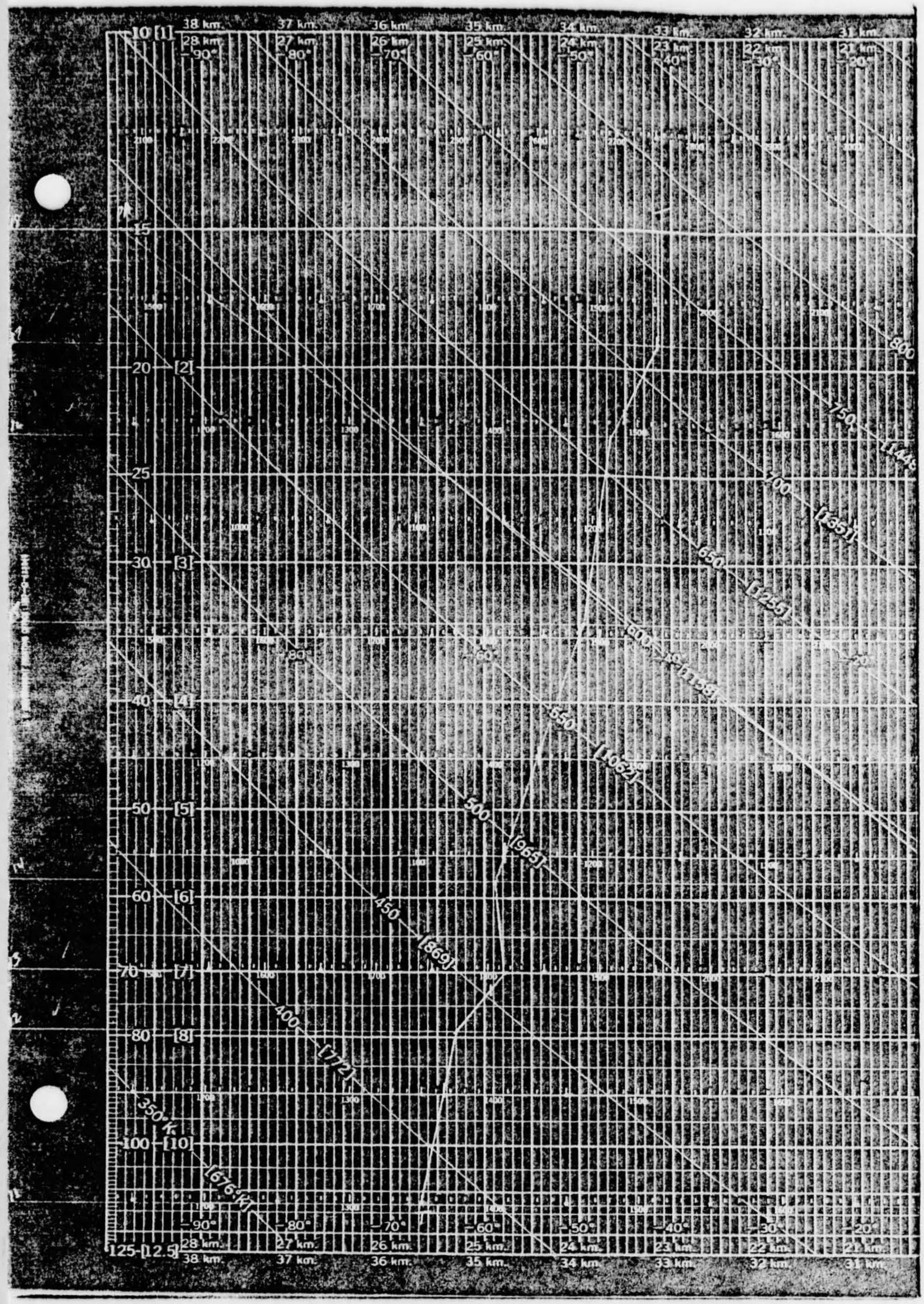
LEGEND FOR PLOTTED DATA

PUNCHED CARD No.

1091

1554	27.6
49	XXXX
740	7


WBAN 31C
U.S. DEPARTMENT OF COMMERCE
WEATHER BUREAU
ADIABATIC CHART
Constant Pressure Blocks
DATA BLOCK C
PRESSURE
TEMPERATURE
PUNCHED CARD No. 1
PUNCHED CARD No. 6
PUNCHED CARD No. 8
PUNCHED CARD No. 9
REMARKS
LEGEND FOR CONSTANT PRESSURE BLOCKS
LEGEND FOR PLOTTED CURVES
DATE AND RELEASE TIME
Portland, Maine (City Airport)
43° 39' N
70° 19' W
1961 SEP 19
30 km.
29 km.
28 km.
27 km.
26 km.
20 km.
19 km.
18 km.
17 km.
16 km.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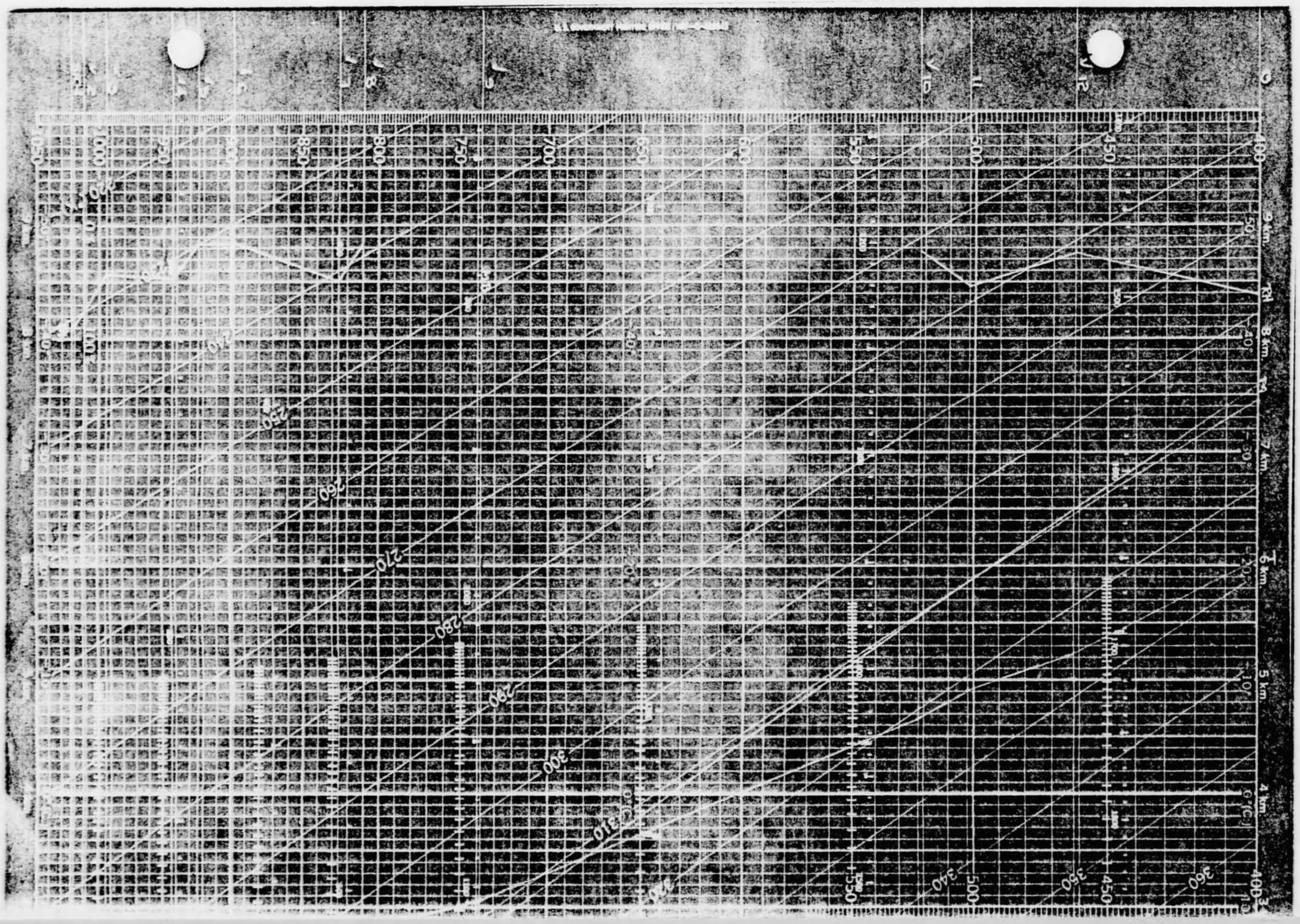
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