

1. DATE - TIME GROUP 28 Dec 53 1155Z/28 Dec	2. LOCATION Marysville, Calif
3. SOURCE Civilian	10. CONCLUSION UNIDENTIFIED Jet with afterburner ruled out since observer too close to obj not to hear sound and have illusion of hovering.
4. NUMBER OF OBJECTS one	
5. LENGTH OF OBSERVATION 1½ minutes	11. BRIEF SUMMARY AND ANALYSIS Saucer shape, size of baseball, brilliant bluish light which did not radiate, observer saw reflection of light from obj on nearby filling station bldg, Est speed 140-190 mph, hovered momentarily, moved north and faded into night. Obj was 300 ft alt before drop to 100-150 ft alt, hovered over airport.
6. TYPE OF OBSERVATION ground vis	
7. COURSE - - -	
8. PHOTOS ☐ Yes ☒ No	
9. PHYSICAL EVIDENCE ☐ Yes ☐ No	

Copy for Hynch

DEPARTMENT OF THE AIR FORCE

**DATA PROCESSING DIVISION, ETAC (MAC)
ASHEVILLE, NORTH CAROLINA 28801**



REPLY TO
ATTN OF: **USAF (ETACOL-1)**

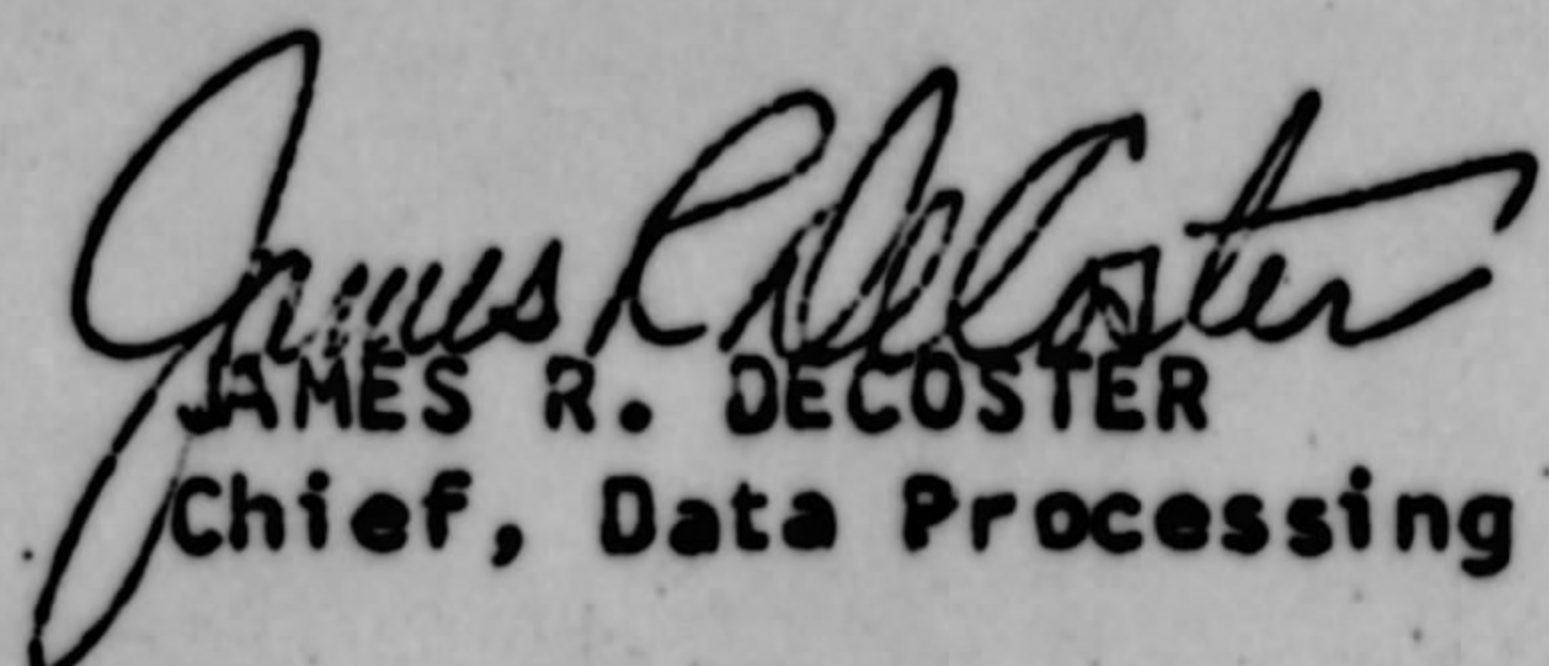
27 Aug 1968

SUBJECT: Shipment of Climatological Data

TO: FTD-TDPTR-4 (SSgt Kist)

- 1. Reference: Ltr 9 July 68, request for Weather Data.**
- 2. We are shipping this date the following climatological data for 28 Dec 53:**
 - a. Copies of WB Form 1130A for 23201 Chico Calif Mun Apt and for 93505 Marysville Calif SAWRS Apt**
 - b. Copies of both WBAN Form 10A and WBAN Form 10B for 23206 Sacramento Calif/Mather AFB.**
 - c. Copies of WB Form 1130A and WB Form 1130B for 23225 Blue Canyon Calif WBAS-Austin.**
 - d. Copies of WB Form 1126A and WB Form 1126B (0300Z and 1500Z obs) for 23230 Oakland Calif WBAS.**
- 3. Surface data is not available for Beale AFB prior to Jul 59 so we have included data for Blue Canyon Calif and Mather AFB, Calif.**

FOR THE COMMANDER


JAMES R. DECOSTER
Chief, Data Processing Division

4 June 1968

it occurred at a small airport and the duration was one and one-half minutes. Followup should have been made to determine whether there were other potential witnesses. Since it occurred at midnight on December 28, it is possible that there were no other witnesses available. Must be carried as unidentified, single witness.

15. 12 August 1965, Ramona, California.

One witness, duration of sighting only 15 seconds. Witness was a 67 year old lady. Sighting occurred at 9p.m. daylight saving time in the middle of August, and thus the sky should still have been reasonably bright. Witness said sighting occurred at night and sky very blue. Perhaps she thinks that anything after 6 p.m. is night. Must be listed as unknown (meager data, single witness, very short duration).

16. 26 February 1966, Bartlett, New Hampshire

I have in my files for 26 February 1966, Manchester, New Hampshire. I do not seem to find a Bartlett, New Hampshire case. See attached supplemental sheet A.

17. 17 July 1966, Centerville, Ohio.

Temporarily not in file. Will study this case when I visit Dayton.

18. 9 February 1967, Odessa, Delaware.

Since by an admitted breakdown in communications the Dover Air Force Base delayed some five months in investigating this case, all I have is the NICAP report. Evaluation pending my getting a copy of the Air Force investigation of same. Based on NICAP report, the sighting is obviously unidentified.

19. 12 February 1967, Grand Rapids, Michigan.

I have only the card on this case, but judging from it there seems to be a possibility that this one-witness case was caused by low-flying birds reflecting light. The sighting lasted 4 to 10 seconds, and witness mentions a high-pitched chirping noise.

20. 1 April 1967, Wellington or Loco, Texas.

I had a great personal involvement in this case, much of it

SURFACE WEATHER OBSERVATIONS

STATION WRAS, Blue Canyon, Calif. DATE DEC 28 1953

TIME and CEILING (hundreds of Feet)	VISIB- ILITY (Miles)	WEATHER and OBSTRUCTIONS TO VISION	SEA LEVEL PRESS. (mba.)	TEMP (°F)	DEW PT. (°F)	WIND			ALTIM- ETER SET (ins)	REMARKS AND SUPPLEMENTAL CODED DATA			OBSER- VERS INITIALS
						DIREC- TION	SPEED (mph)	CHARAC- TER AND SHIFTS					
0	30		213	43	15	↙	16	+22	1021	44839			13K
0	30		217	40	10	←	7		1021	105 25051			13K
0	30		213	44	13	↙	13		1021				13K
0	30		210	51	10	→	7		1022	KLYT SW			13K
0	30		210	54	17	→	9		1024	SMKY S-SW / 108 38 25071			13K
0	30		200	57	8	↓	8		1021	SMKY SW Quad			13K
0	30		183	60	2	↙	9		1019	SMKY W Quad			13K
0	30		169	60	10	↙	8		1015	SMKY SW Quad / 924			13K
										0029 24991			
0-00	30		176	55	31	↙	12		014	SMKY SW			13K
0-00	30		180	50	29	↙	6		014	SMKY SW			13K
0-00	30		180	48	31	↓	8		013	SMKY SW 607 0467 60 24979			13K
0-00	30		183	47	29	↙	7		013				13K
0-00	15+		176	48	11	↙	9		013				13K
0-00	15+		183	47	11	→	6		012	603 0019 24966			13K
0	15+		176	46	15	↙	6		012				13K
0	15+		169	44	15	↙	7		012				13K

SURFACE WEATHER OBSERVATIONS

STATION WBAS, Blue Canyon, Calif.DATE DEC 28 19

TIME (LST)	STATION PRESSURE (ins.)	DRY BULB (°F)	WET BULB (°F)	REL HUMIDITY (%)	TOTAL SKY COVER	CLOUDS AND ObsCURING PHENOMENA													
						LOWEST LAYER			SECOND LAYER			SUMMA- TION TOTAL	THIRD LAYER			SUMMA- TION TOTAL	FOURTH LAYER		
						AMT. 22	TYPE & DIR 23	HEIGHT 24	AMT. 25	TYPE & DIR 26	HEIGHT 27		AMT. 29	TYPE & DIR 30	HEIGHT 31		AMT. 33	TYPE & DIR 34	HEIGHT 35
16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35
00		44																	
01	24835	44																	
02		42																	
03		43																	
04	24870	42																	
05		41																	
0630	24885	42.7	32.4	32	0	0			0			0	0			0	0		
0730	24885	37.8	29.7	29	0	0			0			0	0			0	0		
0830	24870	44.3	33.0	28	0	0			0			0	0			0	0		
0930	24900	51.2	36.0	19	0	0	K	20	0			0	0			0	0		
1031	24910	54.2	39.0	23	0	0	K	-	0			0	0			0	0		
1131	24870	56.6	38.5	14	0	0	K	-	0	ci	250	0	0			0	0		
1231	24865	59.7	37.2	10	0	0	K	-	0	ci	250	0	0			0	0		
1331	24840	60.2	40.6	14	0	0	K	-	0	ci	220	0	0			0	0		
1430	24830	55.0	43.3	40	4	0	K	-	4	ci	220	4	0			4	0		
1530	24830	47.8	40.0	43	7	0	K	-	0	ac	130	0	7	ci	220	7	0		
1630	24820	47.9	39.9	51	9	0	K	-	0	ac	120	0	9	ci	220	9	0		
1729	24815	47.3	38.8	46	8	0	ac	130	8	ci	220	8	0			8	0		
1830	24815	48.3	34.6	21	5	0	ac	130	5	ci	220	5	0			5	0		
1931	24810	46.8	33.8	23	2	2	ci	220	0			2	0			2	0		
2031	24810	46.0	34.4	29	0	0	ci	220	0			0	0			0	0		
2130	24805	44.3	33.4	30	0	0			0			0	0			0	0		
2200	24795	45.1																	
23		43																	

SYNOPTIC OBSERVATIONS

TIME (GCT)	TIME (LST)	NO.	PRECIP. (ins.)	SNOW FALL (ins.)	SNOW DEPTH (ins.)	MAX TEMP (°F)	MIN. TEMP (°F)	HGT. 850 MB. SURFACE	STATE OF GRND	SEA STATE & DIR.	SWELL HGT. & DIR.	SWELL PERIOD	SURF H _s H _m H _l M _s P _s D _s	WATER TEMP	SOIL TEMP				
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
	MID TO	0400	0	0	0	44	42												
		0400	1	0	0	44	41	5030	1										ATT. THERM
		1020	2	0	0	54	38	5070	1										OBSRVD BA
		1620	3	0	0	60	47	4970	1										TOTAL COR
		2200	4	0	0	49	43	4950	1										STA PRESS
	MID		0	0	0	46	42												BAROGRAPH
																			BAR CORN

SUMMARY OF DAY (MIDNIGHT TO MIDNIGHT)

24-HR MAX TEMP (°F)	24-HR MIN TEMP (°F)	24-HR PRECIP. (water equiv (ins.)	24-HR SNOWFALL UNMLTD. (ins.)	SNOW DEPTH (ins.)	PEAK GUST			THICK- NESS OF ICE ON WA- TER (ins.)	FROZEN GRND LAYER (ins.)		RIVER GAGE								
					SPEED (mph)	DIREC- TION	TIME (LST)		TOP	BASE									
66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81				
60	38	0	0	0							1								

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA

SUNRISE ----- SUNSET -----

SURFACE WEATHER OBSERVATIONS

STATION WBAS, Blue Canyon, Calif.DATE DEC 28 1953

WET BULB (°F)	REL HUMIDITY (%)	TOTAL SKY COVER	CLOUDS AND ObsCURING PHENOMENA												PRESSURE TENDENCY	NET 3-HR CHANGE	DIRECTION OF WIND	SPEED OF WIND	WIND GUST		
			LOWEST LAYER			SECOND LAYER			SUMMA- TION TOTAL	THIRD LAYER			SUMMA- TION TOTAL	FOURTH LAYER							
			AMT.	TYPE & DIR	HEIGHT	AMT.	TYPE & DIR	HEIGHT		AMT.	TYPE & DIR	HEIGHT		AMT.						TYPE & DIR	HEIGHT
19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40
																	5	005			
																	1	035			
32.4	32	0	0			0			0	0			0	0					0		
29.7	29	0	0			0			0	0			0	0			1	015	0		
33.0	28	0	0			0			0	0			0	0					0		
36.0	19	0	0	K	20	0			0	0			0	0					0		
39.0	23	0	0	K	—	0			0	0			0	0			1	025	0		
38.5	14	0	0	K	—	0	ci	250	0	0			0	0					0		
37.2	10	0	0	K	—	0	ci	250	0	0			0	0					0		
40.6	14	0	0	K	—	0	ci	220	0	0			0	0			9	070	0		
43.3	40	4	0	K	—	4	ci	220	4	0			4	0					0		
40.0	43	7	0	K	—	0	ac	130	0	7	ci	220	7	0					0		
39.9	51	9	0	K	—	0	ac	130	0	9	ci	220	9	0			6	020	0		
38.8	46	8	0	ac	130	8	ci	220	8	0			8	0					0		
34.6	21	5	0	ac	130	5	ci	220	5	0			5	0					0		
33.8	23	2	2	ci	220	0			2	0			2	0			6	010	1		
31.4	29	0	0	ci	220	0			0	0			0	0					0		
33.4	30	0	0			0			0	0			0	0			9	015	0		

SYNOPTIC OBSERVATIONS

SNOW FALL (ins)	SNOW DEPTH (ins)	MAX TEMP (°F)	MIN. TEMP (°F)	HGT. 950 MB. SURFACE	STATE OF GRND	SEA STATE & DIR.	SWELL HGT. & DIR.	SWELL PERIOD	SURF H _s H _m H _l M _s P _s D _s	WATER TEMP	SOIL TEMP			STATION PRESSURE COMPUTATIONS			
														TIME (LST)			
0	0	44	42											59	1025	1625	2200
0	0	44	41	5030	1									60	75.0	72.0	74.0
0	0	54	38	5070	1									61	25.029	24.923	24.912
0	0	60	47	4970	1									62	7.120	-.113	-.118
0	0	49	43	4950	1									63	24.909	24.820	24.774
0	0	46	42											64	24.870	24.875	24.810
0	0	46	42											65	7.015	+.010	+.005

SUMMARY OF DAY (MIDNIGHT TO MIDNIGHT)

4 - HR SNOWFALL UNMLTD. (ins.)	SNOW DEPTH (ins.)	PEAK GUST			THICK- NESS OF ICE ON WA- TER (ins.)	FROZEN GRND LAYER (ins.)		RIVER GAGE						THORSTM 02	BEGAN 03	ENDED 04	05		TO VIS 06	BEGAN 07	ENDED 08	09	
		SPEED (m.p.h.)	DIREC- TION	TIME (LST)		TOP	BASE										hrs	mins				hrs	mins
89	70	71	72	73	74	75	76	77	78	79	80	81											
0	0							1															

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA

SUNSET

A-14

SURFACE WEATHER OBSERVATIONS

STATION CHICO CHIE DATE 12/28/53

TYPE	TIME (LST)	CEILING (Hundreds of Feet)	SKY	VISIBILITY (Miles)	WEATHER and OBSTRUCTIONS TO VISION	SEA LEVEL PRESS. (mba.)	TEMP (°F)	DEW PT. (°F)	DIRECTION	SPEED (m.p.h.)	CHARACTER AND SHIFTS	ALTIMETER SET. (ins)	REMARKS AND SUPPLEMENT
R	0445		0	15+			46	29		C		E020	
R	0540		0	15+			39	29		C		E020	
L	0700		0	5+			36	27		C		E020	
R	0730		0	70			37	26	N	6E		E021	
R	0835		0	15+			45	32	N	5E		E022	
R	0930		0	10			49	33	N	5E		E022	
R	1035		0	6	HK		54	35	N	5E		E021	
R	1130		0	7			M	M	N	6E		E016	
R	1235		0	7			58	34	N	5E		E013	
R	1330	300-0	0	7			61	38	↑	5E		E011	
R	1429	200-0 300-0	0	8			62	37	↑	6E		E010	
R	1540	250-0	0	8			58	38	N	4E		E010	
R	1639	300-0 400-0	0	6	HK		55	38	←	7E		E008	BINDUC
R	1740	300-0 400-0	0	4	HK		52	36	←	7E		E009	
R	1832	400-0	0	6	HK		48	36	←	5E		E008	
R	1935	400-0	0	10			47	37	←	5E		E009	
12/29/53													
L	0700		0	10			36	30		C		E011	THN PATCHES GF
R	0728		0	15+			37	32	↓	1E		E012	
R	0833		0	70			38	30	↓	3E		E013	
R	0931	300-0	0	70			42	32	↓	5E		E015	
R	1039	300-0	0	70			50	32	↓	12E		E014	
R	1141	300-0	0	70			M	M	↓	10E		E011	
R	1232	500-0	0	70			61	39	↓	15E		E009	
R	1325	300-0	0	70			64	38	↓	17E		E007	
R	1433		0	70			63	36	↓	17E		E007	
R	1535		0	70			60	38	↓	15E		E007	
R	1630		0	70			60	31	↓	12E		E007	
R	1735		0	15+			54	34	↓	7E		E008	
R	1830		0	15+			49	34	↑	6E		E011	
R	1929		0	15+			49	36	↑	8E		E013	
12/30/53													
R	0732		0	10			36	32	↓	2E		E035	
R	0840		0	8			35	30	↓	7E		E037	
R	0928		0	6	HK		39	32	↓	7E		E038	
R	1042		0	5	HK		46	35	↓	7E		E038	
R	1135		0	10			50	35	↓	5E		E036	
R	1239		0	15			55	35	↓	15E		E033	
R	1329		0	15			58	36	↓	16E		E032	
R	1442		0	15			M	M	↓	15E		E030	
R	1546		0	15			60	37	↓	15E		E030	
R	1628		0	15+			59	37		C		E031	
R	1715		0	15+			49	37	↓	2E		E032	
R	1845		0	15+			48	38		C		E032	
R	1929		0	15			46	38	↓	3E		E032	

SURFACE WEATHER OBSERVATIONS

STATION CHICAGO CHICAGO DATE 12/28/53

SKY	VISIBILITY (Miles)	WEATHER and OBSTRUCTIONS TO VISION	SEA LEVEL PRESS. (mb.)	TEMP (°F)	DEW PT. (°F)	WIND			ALTIMETER SET (ins)	REMARKS AND SUPPLEMENTAL CODED DATA	OBSERVER INITIALS
						DIRECTION	SPEED (m.p.h.)	CHARACTER AND SHIFTS			
0	15+			46	29	C		E020		04001300	FM
0	15+			39	29	C		E020		05281344	FM
0	55			36	27	C		E020		01360132.5	AT
0	70			37	26	N 6E		E031		0137.01330	AT
0	15+			45	32	N 5E		E022		0145.0139.3	AT
0	10			49	33	N 5E		E022		0149.0142.0	AT
0	6 HK			54	25	N 5E		E021		0154.3145.0	AT
0	7			M	M	N 6E		E016		0111	M AT
0	7			58	34	N 5E		E013		0158.4147.1	AT
0	7			61	38	↑ 5E		E011		3161.0147.2	AT
0	8			62	37	↑ 6E		E010		7162.0149.6	AT
0	8			58	38	N 4E		E020		10158.2148.2	FM
0	6 HK			55	38	← N 7E		E008	BINDVC	10155.0146.8	FM
0	4 HK			52	36	← N 7E		E009		9159.4144.4	FM
0	6 HK			48	36	← 5E		E008		7148.0142.7	FM
0	10			47	37	← 5E		E009		5147.1142.6	FM
12/29/53											
0	10			36	30	C		E011	THN PATCHES 6F SE	0136.0132	FM
0	15+			37	32	↓ 1E		E012		0137.01350	FM
0	70			38	30	↓ 3E		E013		0138.01350	FM
0	70			42	32	↓ 5E		E015		1142.4138.2	FM
0	70			50	32	↓ 12E		E014		1150.1142.3	FM
0	70			M	M	↓ 10E		E011		6141.1141	FM
0	70			61	39	↓ 15E		E009		4160.0149.9	FM
0	70			64	33	↓ 17E		E007		2163.9149.3	FM
0	70			62	36	↓ 17E		E007		0163.3150.1	FM
0	70			60	38	↓ 15E		E007		0160.2149.7	AT
0	70			60	31	↓ 12E		E007		0159.5146.5	AT
0	15+			54	34	↓ 7E		E008		0151.2143.5	AT
0	15+			49	34	↑ 6E		E011		0149.0142.4	AT
0	15+			49	36	↑ 8E		E013		0149.01430	AT
12/30/53											
0	10			36	32	↓ 2E		E038		0136.01345	FM
0	8			35	30	↓ 7E		E037		0135.21330	FM
0	6 HK			39	32	↓ 7E		E033		0138.91360	FM
0	5 HK			46	35	↓ 7E		E038		0146.31411	FM
0	10			50	35	↓ 5E		E036		0150.21432	FM
0	15			55	35	↓ 15E		E033		0154.91457	FM
0	15			58	36	↓ 16E		E032		0157.51470	FM
0	15			M	M	↓ 15E		E030		0141.1131	FM
0	15			60	37	↓ 5E		E030		0160.01488	FM
0	15+			59	37	↓ 10E		E031		0159.11488	FM
0	15+			49	37	↓ 12E		E032		0149.01483	FM
0	15+			42	38	↓ 10E		E032		0148.01473	FM
0	15			46	38	↓ 13E		E032		0146.31424	FM

Time entries on this form are 120 to meridian time
To convert to G.C.T. (add) 3 hours
Height of barometer 92 ft (MSL)

23206

WBAN FORM 10A

SURFACE

TYPE	TIME (LST)	CEILING (hundreds of feet) AND SKY	VISIBILITY (Miles)	WEATHER AND OBSTRUCTIONS TO VISION	SEA LEVEL PRESS (mb)	TEMP (°F)	DEW PT (°F)	WIND			CHARAC- TER AND SHIFTS	ALTIM- ETER SET (ft)	REMARKS AND SUPPLEMENTAL CODED DATA
								DIRECTION	SPEED (Knots)	SPEED (mph)			
1	2	3	4	5	6	(7)	8	9	10	11	12	13	
SK	R 0000	250 (1)	15+		197 40 23	←	10 12		10 12		011	300K	
SK	R 0030		15		202 42 33	←	10 12		10 12		017	317	
SK	R 0020	250 (1)	10		219 41 24	←	5 6		5 6		017	11191	
SK	R 0326	250 (1)	10		219 40 35	←	5 6		5 6		017		
SK	R 0429		8		217 39 24	→	5 6		5 6		017	012 39	
SK	R 0530		8		219 39 33	←	4 5		4 5		018	0/963	
SK	R 0629		10		219 40 33	←	9 10		9 10		018		
SK	R 0727		6	H	219 40 31	←	9 10		9 10		018	103	
SK	R 0828		6	H	228 40 32		C C		C C		017	0/933	
SK	R 0927		6	H	230 43 35		C C		C C		021		
SK	R 1028		6	H	233 48 36		C C		C C		022	VSBY SW 28/ 314 39	
SK	R 1127		6	H	224 55 35		C C		C C		019	0/933	
SK	R 1326		6	H	213 58 35		C C		C C		016		
SK	R 1328		6	H	199 59 36	↑	7 8		7 8		012	832	
SK	R 1427		6	H	192 60 35	↑	8 9		8 9		010	11191	
SK	R 1528	250 (1)	6	H	192 60 35	↑	7 8		7 8		010		
SK	R 1627	250 (1)	6	H	189 59 37		C C		C C		009	812 0049 60	
SK	R 1729	250 (1)	6	H	184 53 41		C C		C C		008	11191	
SK	R 1828	250 (1)	6	H	183 47 38	↖	9 10		9 10		008		
SK	R 1929	250 (1)	6	H	180 45 38	↖	10 12		10 12		007	905 0019	
SK	R 2029	250 (1)	6	H	180 45 38	↖	14 16		14 16		007	11191	
SK	R 2130	250 (1)	7		180 44 37	↖	12 14		12 14		007		
SK	R 2229	250 (1)	7		184 43 36	↖	7 8		7 8		008	402 0019 60	
SK	R 2330	250 (1)	7		185 43 37	↖	9 10		9 10		008	11191	

23206

SURFACE WEATHER OBSERVATIONS

WBAN FORM 108

REMARKS AND SUPPLEMENTAL CODED DATA	OBSERVER INITIALS			TIME (LST)	STATION PRESSURE (mb)	DRY BULB (°F)	WET BULB (°F)	REL HUMIDITY (%)	TOTAL SKY COVER	CLOUDS AND OBSCURING PHENOMENA											
	13	14A	14B							LOWEST LAYER			SECOND LAYER			SUMMATION TOTAL 23	THIRD LAYER			SUMMATION TOTAL 32	FC
										AMT 22	TYPE AND DIR. 23	HEIGHT 24	AMT 25	TYPE AND DIR. 26	HEIGHT 27		AMT 29	TYPE AND DIR. 30	HEIGHT 31		
20K			23	0000	30.00	48.4	40.4	46	4	4	CS 250	0			4	0		4	0		
517			23	0100	30.00	42.2	38.2	69	0	0		0			0	0		0	0		
1101			23	0200	30.00	40.6	38.0	77	2	3	CS 350	0			3	0		3	0		
			23	0300	30.070	40.4	37.9	79	2	2	CS 250	0			2	0		2	0		
012 39			23	0400	30.065	38.8	36.6	81	0	0		0			0	0		0	0		
0/963			23	0500	30.075	39.6	36.2	79	0	0		0			0	0		0	0		
			23	0600	30.075	40.0	37.0	75	0	0		0			0	0		0	0		
103			23	0700	30.075	39.6	36.0	70	0	0		0			0	0		0	0		
0/933			23	0800	30.000	39.7	36.4	72	0	0		0			0	0		0	0		
			23	0900	30.105	42.6	39.1	73	0	0		0			0	0		0	0		
VSBY SW 28/ 314 39			23	1000	30.115	47.8	42.4	63	0	0		0			0	0		0	0		
0/933			23	1100	30.090	54.7	45.6	41	0	0		0			0	0		0	0		
			23	1200	30.055	58.1	47.2	42	0	0		0			0	0		0	0		
832			23	1300	30.020	59.2	48.1	42	0	0		0			0	0		0	0		
11191			23	1400	30.000	60.3	48.2	38	0	0		0			0	0		0	0		
			23	1500	29.995	59.9	48.1	39	2	2	CS 250	0			2	0		2	0		
812 0049 60			23	1600	29.985	58.6	48.2	44	5	5	CS 250	0			5	0		5	0		
11191			23	1700	29.990	52.8	47.0	64	5	5	CS 350	0			5	0		5	0		
			23	1800	29.975	47.2	42.8	70	4	4	CS 250	0			4	0		4	0		
205 0019			23	1900	29.970	45.4	42.0	75	4	4	CS 250	0			4	0		4	0		
11101			23	2000	29.970	45.2	41.5	76	3	3	CS 250	0			3	0		3	0		
			23	2100	29.970	43.8	40.8	78	1	1	CS 250	0			1	0		1	0		
402 0019 60			23	2200	29.975	43.2	40.2	77	1	1	CS 250	0			1	0		1	0		
11191			23	2300	29.975	42.8	40.0	78	1	1	CS 250	0			1	0		1	0		

SYNOPTIC OBSERVATIONS

TIME (G.C.T.)	TIME (L.S.T.)	NO	PRECIP (ins)	SNOW FALL (ins)	SNOW DEPTH (ins)	MAX TEMP (°F)	MIN TEMP (°F)	HEIGHT 850 MB SURFACE	STATE OF SKY	SEA STATE AND DIR	SWELL HEIGHT AND DIR	SWELL PERIOD	SURFACE WIND	WATER TEMP	SOIL TEMP	
0000	0000	0	0	0	0	51	29		1							
0100	0100	0	0	0	0	54	29		1							
0200	0200	0	0	0	0	48	39		1							
0300	0300	0	0	0	0	60	48		1							
0400	0400	0	0	0	0	59	48		1							
0500	0500	0	0	0	0	42	47		1							

SUMMARY OF DAY (MIDNIGHT TO MIDNIGHT)

24-HR MAX TEMP (°F)	24-HR MIN TEMP (°F)	24-HR PRECIP. WATER EQUIV. (ins)	24-HR SNOWFALL UNMELTD. (ins)	SNOW DEPTH (ins)	PEAK GUST SPEED (mph)	PEAK GUST DIRECTION	PEAK GUST TIME (L.S.T.)	THICKNESS OF ICE ON WATER (ins)	FROZEN GRND LAYER (ins)	RIVER GAGE	24-HR MAX R. H. (%)	24-HR MIN R. H. (%)		
60	29	0	0	0	25	N	0000	—	—	—	41	31		

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA

SUNRISE: _____ SUNSET: _____

23206

STATION Mather AFB Calif.
MONTH Dec DAY 28 YEAR 1955
LAT 35°34'N LONG 121°13'W

WBAN FORM 108

OBSERVATIONS

TIME (LST)	STATION PRESSURE (in)	DRY BULB (°F)	WET BULB (°F)	REL HUMIDITY (%)	TOTAL SKY COVER	CLOUDS AND OBSCURING PHENOMENA												TOTAL CLOUD SKY COVER %	PRES TENDY	NET 3-HR CHANGE	39	40		
						LOWEST LAYER			SECOND LAYER			SUMMA TION TOTAL 28	THIRD LAYER			SUMMA TION TOTAL 32	FOURTH LAYER							
						AMT 22	TYPE AND DIR 23	HEIGHT 24	AMT 25	TYPE AND DIR 26	HEIGHT 27		AMT 29	TYPE AND DIR 30	HEIGHT 31		AMT 33						TYPE AND DIR 34	HEIGHT 35
0000	30.01	48.6	40.4	46	4	4	CS	250	0			4	0			4	0			2				
0100	30.02	42.5	38.2	69	0	0			0			0	0			0	0			2	5	.050		
0200	30.06	40.8	38.0	77	2	3	CS	250	0			3	0			3	0			2				
0300	30.07	40.4	37.9	79	2	2	CS	250	0			2	0			2	0			2				
0400	30.05	38.8	36.6	81	0	0			0			0	0			0	0			0	0	.035		
0500	30.05	39.6	36.2	79	0	0			0			0	0			0	0			0				
0600	30.07	40.0	37.0	75	0	0			0			0	0			0	0			0				
0700	30.07	39.6	36.0	70	0	0			0			0	0			0	0			0	1	.010		
0800	30.08	39.7	36.4	72	0	0			0			0	0			0	0			0				
0900	30.10	42.6	39.1	73	0	0			0			0	0			0	0			0				
1000	30.15	47.8	42.4	63	0	0			0			0	0			0	0			0	3	.040		
1100	30.20	54.7	45.6	47	0	0			0			0	0			0	0			0				
1200	30.55	58.1	47.2	42	0	0			0			0	0			0	0			0				
1300	30.20	59.2	48.1	42	0	0			0			0	0			0	0			0	8	.095		
1400	30.00	60.3	48.2	38	0	0			0			0	0			0	0			0				
1500	29.95	59.9	48.1	39	2	2	CS	250	0			2	0			2	0			2				
1600	29.95	58.6	48.2	44	5	5	CS	250	0			5	0			5	0			3	8	.035		
1700	29.97	52.8	47.0	64	5	5	CS	250	0			5	0			5	0			4				
1800	29.95	47.2	42.8	70	4	4	CS	250	0			4	0			4	0			4				
1900	29.97	45.4	42.0	75	4	4	CS	250	0			4	0			4	0			4	9	.015		
2000	29.97	46.2	41.5	76	3	3	CS	250	0			3	0			3	0			3				
2100	29.97	43.8	40.8	79	1	1	CS	250	0			1	0			1	0			1				
2200	29.97	43.2	40.2	77	1	1	CS	250	0			1	0			1	0			1	4	.005		
2300	29.97	42.8	40.0	78	1	1	CS	250	0			1	0			1	0			1				

SYNOPTIC OBSERVATIONS

TIME (GCT)	TIME (LST)	NO	PRECIP (ins)	SNOW- FALL (ins)	SNOW- DEPTH (ins)	MAX TEMP (°F)	MIN TEMP (°F)	HEIGHT 850 MB SURFACE	STATE OF GRND	SEA STATE AND DIR	SWELL HEIGHT AND DIR	SWELL PERIOD	SURFACE WIND No Pn Dn			WATER TEMP	SOIL TEMP	57	58	STATION PRESSURE COMPUTATION																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																														
													54	55	56					TIME (LST) 59	60	61	62																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
41	42	43	44	45	46	47	48	49	50	51	52	53	54	55	56																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																			

SUMMARY OF DAY (MIDNIGHT TO MIDNIGHT)

24-HR MAX TEMP (°F)	24-HR MIN TEMP (°F)	24-HR PRECIP. WATER EQUIV. (ins)	24-HR SNOWFALL UNMELT. (ins)	SNOW DEPTH (ins)	PEAK GUST			THICK- NESS OF ICE ON WATER	FROZEN GRND LAYER (ins)	RIVER GAGE	24-HR MAX R. H. (%)	24-HR MIN R. H. (%)	59	60	61
					SPEED (mph)	DIRECT TION	TIME (LST)								
56	34	0	0	0	26	N	002	0	0	0	41	31			

REMARKS, NOTES AND MISCELLANEOUS PHENOMENA

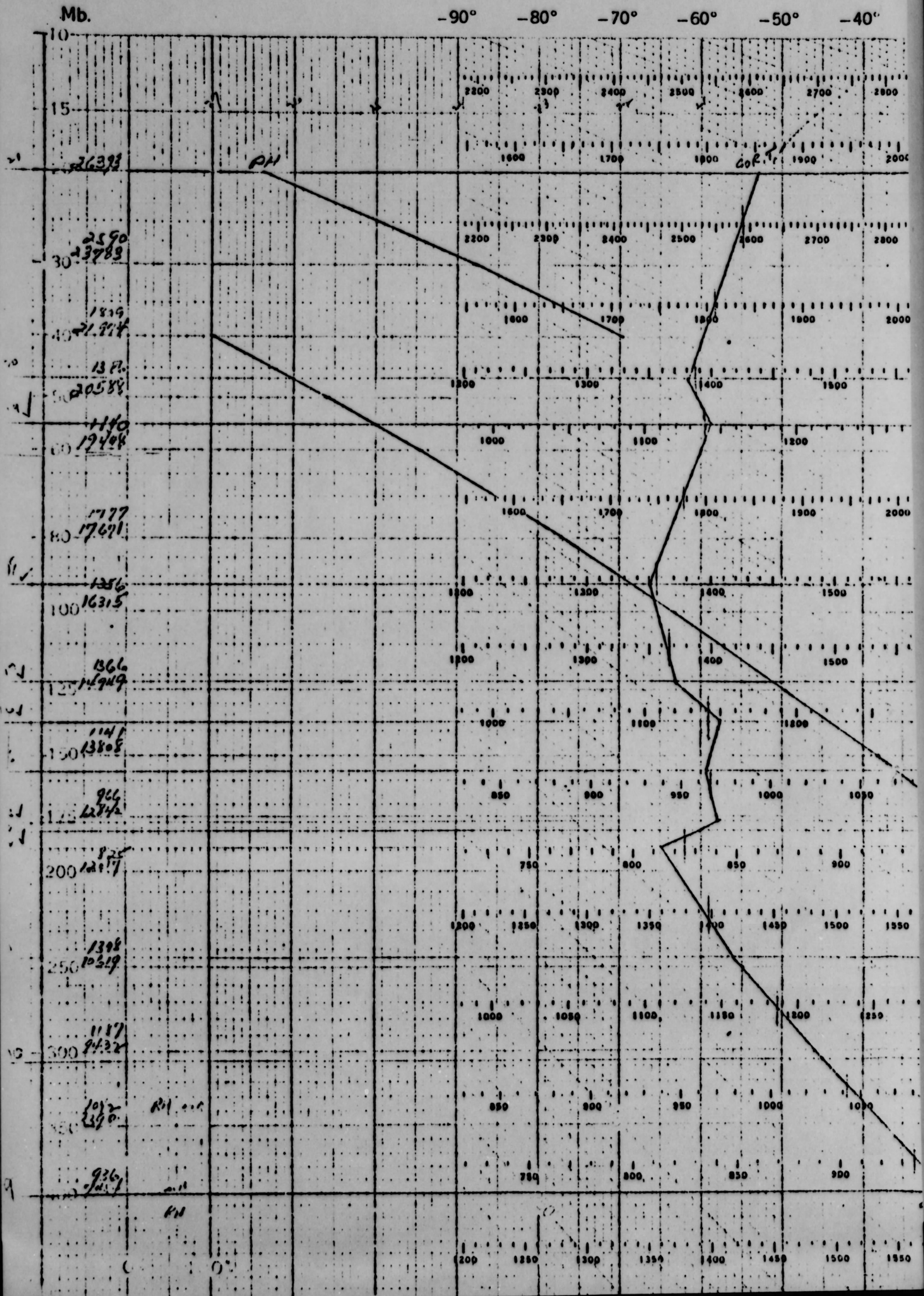
90

SUNRISE: _____ SUNSET: _____

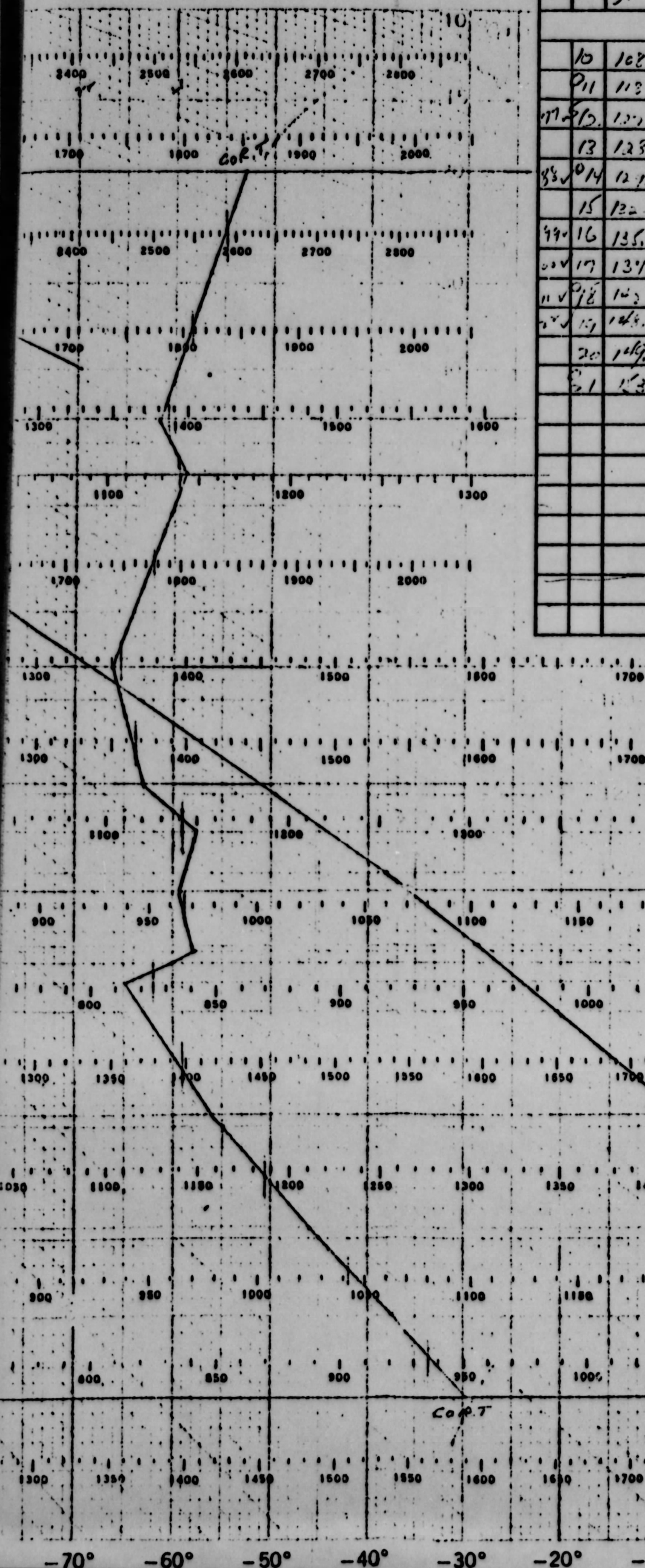
A-16

ADIABATIC CHART

WBAN-31B



-70° -60° -50° -40° -30°



CODED MESSAGE FOR TRANSMISSION

<u>492.5.</u>	<u>30005.</u>	<u>96990.</u>	<u>20142.</u>
<u>15530.</u>	<u>87009.</u>	<u>10353.</u>	<u>15793.</u>
<u>10994.</u>	<u>6655.</u>	<u>12915.</u>	<u>1700.</u>
<u>12213.</u>	<u>09216.</u>	<u>05537.</u>	

SOLAR RADIATION
RAOB TEM

1. Time, LST, at 200 ml at termination, if bet 400 mb. and 200 ml
2. Correction for TST.
3. Time, TST, Algebraic sum of (1) and (2).
4. Differences between and solar noon.
5. Elevation angle of s
6. Elapsed time from mb. to terminating
7. Ascensional rate

DATA BLOCK B

Code Check	Level No.	PRESSURE		TEMPERATURE				RELATIVE HUMIDITY		DEW POINT	REMARKS
		Contact	mb.	Ordinate	Ascent (°C)	Correction	Corrected	Ordinate	Including Correction of $\frac{1}{2}\%$	°C	
		S.									
SIGNIFICANT LEVELS											
	10		102.0	306	27.3	-44.5	-0.7	-44.5			
	11		112.0	254	17.7	-55.9	-0.3	-56.1			10750
	12		122.0	151	14.6	-55.9	-0.4	-56.1			12240
	13		132.0	151	14.2	-51.7	0.4	-6.1			
	14		142.0	77	18.6	-51.5	-0.4	-51.1			12800
	15		152.0	151	17.8	-51.5	-0.4	-51.2			
	16		162.0	151	18.8	-51.1	-0.4	-51.5			
	17		172.0	151	15.6	-62.6	-0.4	-63.0			
	18		182.0	151	14.0	-65.6	-0.5	-66.1			1634
	19		192.0	151	13.4	-57.7	-0.5	-58.2			
	20		202.0	151	16.9	-60.4	-1.0	-61.4			
	21		212.0	22.7	51.1	-1.8	-52.9				26370

CODED MESSAGE FOR TRANSMISSION

49235 30205 95990 22142 12410
 15530 09209 10352 15793 05755
 10994 65115 12415 17000 12708
 12213 09216 05539

SOLAR RADIATION CORRECTIONS FOR RAOS TEMPERATURE

1. Time, LST, at 200 mb. or at termination, if between 400 mb. and 200 mb.	0741
2. Correction for TST.	-10
3. Time, TST, Algebraic sum of (1) and (2).	0730
4. Difference between (3) and solar noon.	4.5
5. Elevation angle of sun.	0°
6. Elapsed time from 200 mb. to terminating level.	25.1
7. Ascensional rate	30.1

CONSTANT PRESSURE DATA

6:73	-52.7

3783	-56.7

1974	-59.3

0575	0583	-52.7
1099		
0		

9448	-60.0

7:01	-64.1

1035	6:15	-65.3
1579		
0		

4740	-62.5

15530	3905	-51.4
5799		
0		

2042	-57.1

2094	2517	-62.0
1399		
0		

0619	-55.2

3020	9422	-46.5
16490		
0		

8390	-37.5
1221	
15	037

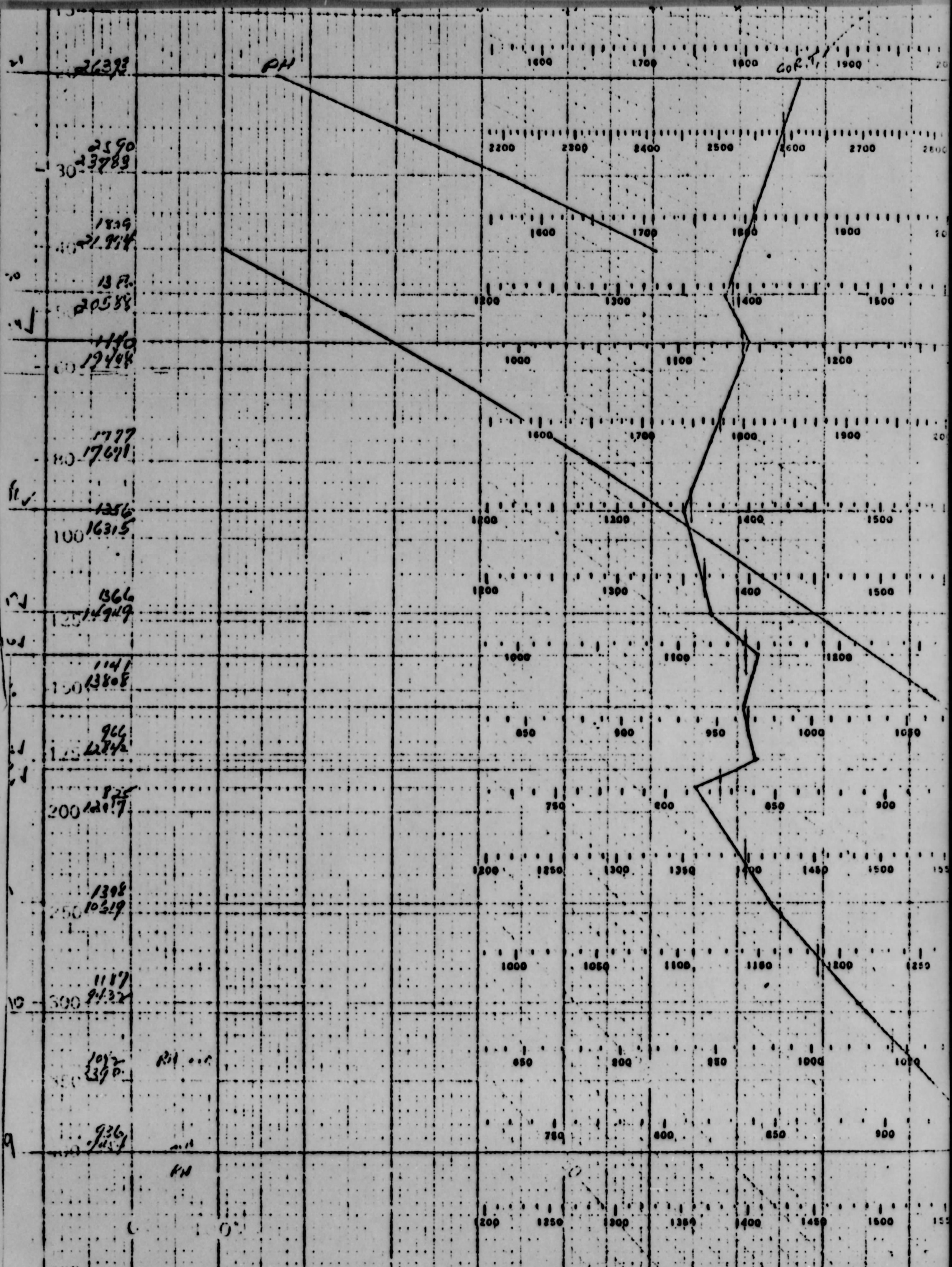
PUNCHED CARD No. 8

PUNCHED CARD No. 7

PUNCHED CARD No. 6

PUNCHED CARD No. 5

PUNCHED CARD No. 4

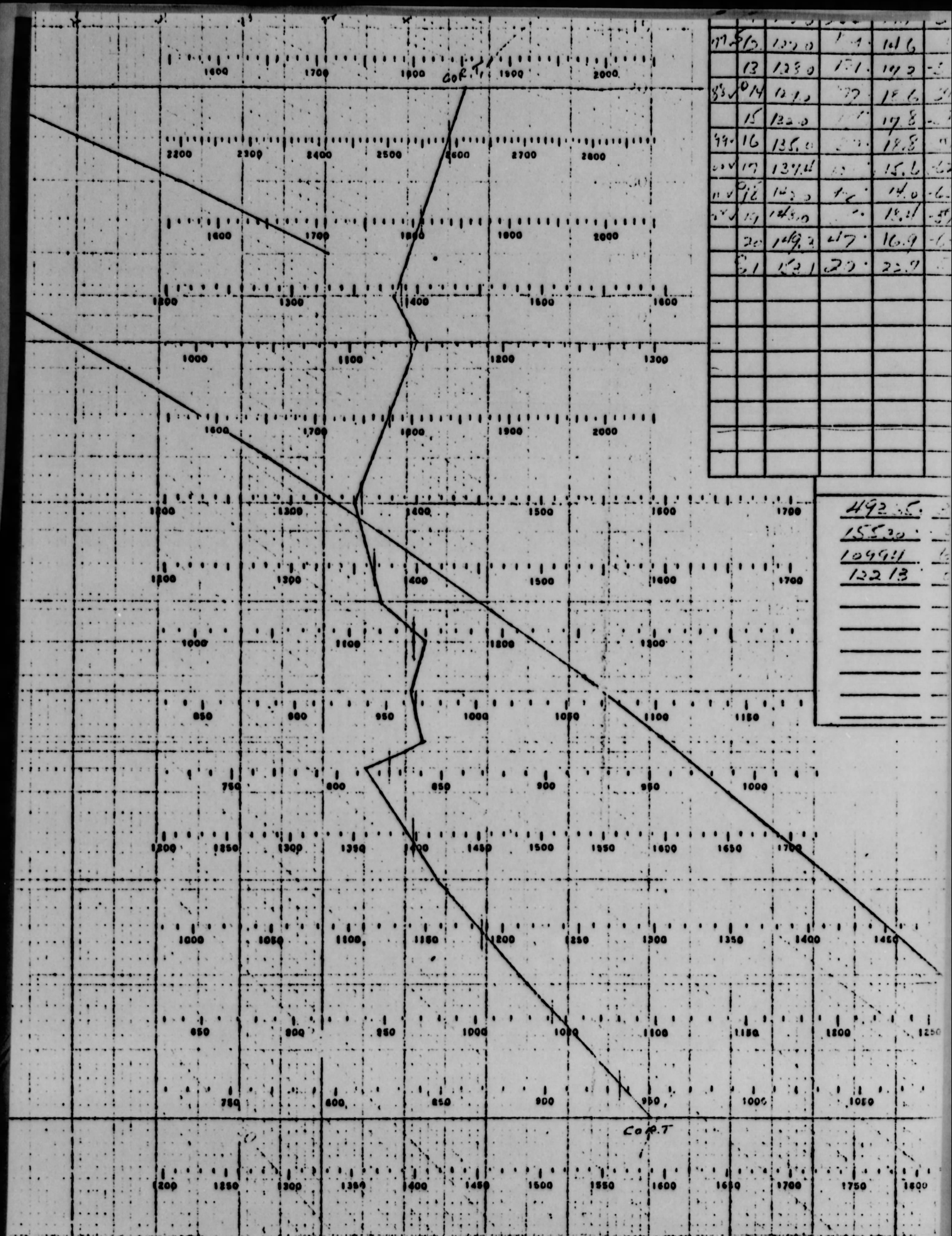


24 Km. 23 Km. 22 Km. 21 Km. 20 Km. 19 Km. 18 Km. 17 Km. 16 Km. 15 Km. 14 Km.

Station **Oakland Airport,**
Oakland, Calif
 Lat. **37° 44' N.** Long **122° 12' W.**

DATA AS TRANSMITTED	O. P. TO 0.1°C OTHER DATA AS ENTERED ON WBAN-33 OR PUNCHED CARD	
00bbb	H (gpm)	T
TTTTT ₂	°RH	°D.P.
00dH	D (16 pts.)	Wind S (m.p.s.)

A-11
 PH—Pressure-height
 T—Temperature °C
 RH—Relative Humidity
 Height scale in geopotential meters
 *Omitted above 200 mbs.



12	122.0	17.1	14.6
13	123.0	17.1	14.2
14	124.0	17.2	14.6
15	125.0	17.3	14.8
16	126.0	17.4	14.8
17	127.0	17.5	15.6
18	128.0	17.6	14.0
19	129.0	17.7	13.1
20	130.0	17.8	16.9
21	131.0	17.9	22.9

492.5
155.30
1099.1
122.13

-90° -80° -70° -60° -50° -40° -30° -20° -10° 0°
 20 Km. 19 Km. 18 Km. 17 Km. 16 Km. 15 Km. 14 Km. 13 Km. 12 Km. 11 Km. 10 Km.

DATA AS TRANSMITTED	D. P. TO 0.1°C OTHER DATA AS ENTERED ON WBAN-33 OR PUNCHED CARD	
00000	M (gpm)	T
TTT ₀ T ₀ T ₀	°RH	°D.P.
0000	D (16 pts.)	Wind S (m.p.s.)

*Omitted above 200 mbs.

A-11

PH—Pressure-height
 T—Temperature °C
 RH—Relative Humidity
 Height scale in geopotential meters

Drawn by E. M. VOESTE
 Verified by M. R. McDONOUGH
 Inspected by _____

13	1280	151	172	-517	0.4	-6.1			
14	1290	172	186	-515	-0.4	511			12800
15	1300	171	178	-515	0.4	512			
16	1350	170	188	-511	-0.4	115			
17	137.11	170	15.6	-62.6	-0.4	-63.5			
18	1400	170	14.0	-65.6	-0.5	-66.1			16340
19	14300	170	13.1	-57.7	-0.6	589			
20	1492	170	16.9	-62.4	-1.0	-14			
21	153120	22.7	51.1	-1.8	52.7				26370

6:73 -52.9

3783 -56.7

1974 -59.8

05 75 0588 -52.4
1099 -52.4
0

9448 -60.0

7:1 -64.1

10 33 6:15 -65.3
15993 -65.3
0

4740 -62.5

16536 3:05 -5.9
5949 -5.9
0

2042 -52.1

20942 20:17 -62.0
13992 -62.0
0

6619 -55.2

20295 94:25 -46.5
76490 -46.5
0

5390 -37.5
1221 -37.5
15 037

CODED MESSAGE FOR TRANSMISSION

49255 30305 96990 20402 12400
15530 07009 10352 15793 05155
10994 6615 13915 17505 13708
12213 09216 05537

SOLAR RADIATION CORRECTIONS FOR RAOS TEMPERATURE

1. Time, LST, at 200 mb. or at termination, if between 400 mb. and 200 mb.	1741
2. Correction for TST.	-10
3. Time, TST, Algebraic sum of (1) and (2).	1730
4. Difference between (3) and solar noon.	4.5
5. Elevation angle of sun.	0°
6. Elapsed time from 200 mb. to terminating level.	15.5 25.1
7. Ascensional rate	30.1 35.0

6619 -55.2

20295 94:25 -46.5
76490 -46.5
0

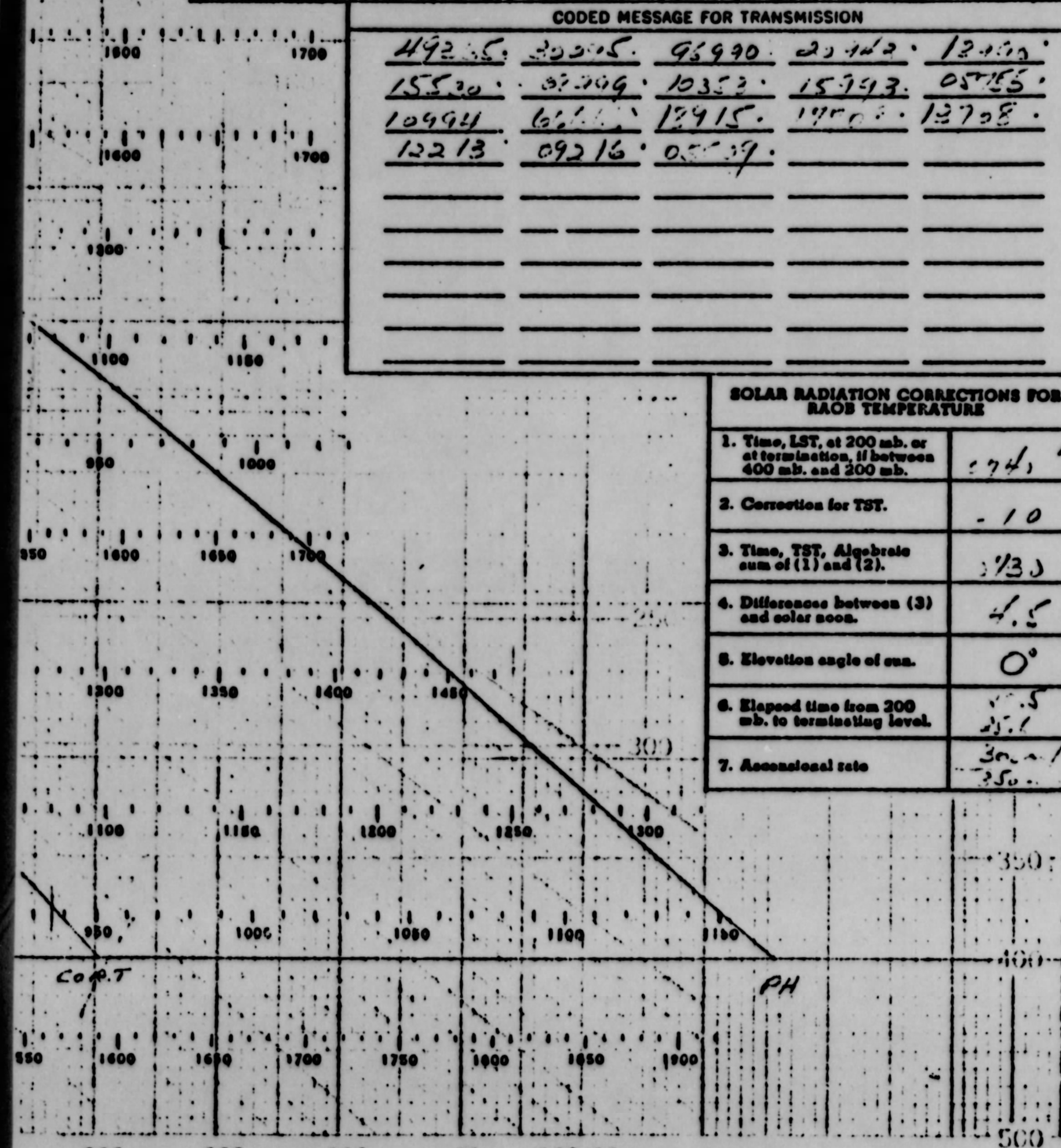
5390 -37.5
1221 -37.5
15 037

PUNCHED CARD No. 7

PUNCHED CARD No. 6

PUNCHED CARD No. 5

PUNCHED CARD No. 4



-30° -20° -10° 0° 10° (°C.)
13 Km. 12 Km. 11 Km. 10 Km. 9 Km. 8 Km. 7 Km. 6 Km. 5 Km.

Drawn by E. M. VOESTE

Verified by M. B. McDONOUGH

Inspected by _____

DATE AND RELEASE TIME

	Year	Month	Day	Time
120 th. No.	1953	Dec	25	0720
G.C.T.	1953	Dec	25	1500
Radiosonde No.	352937			
Ascension No.	703			

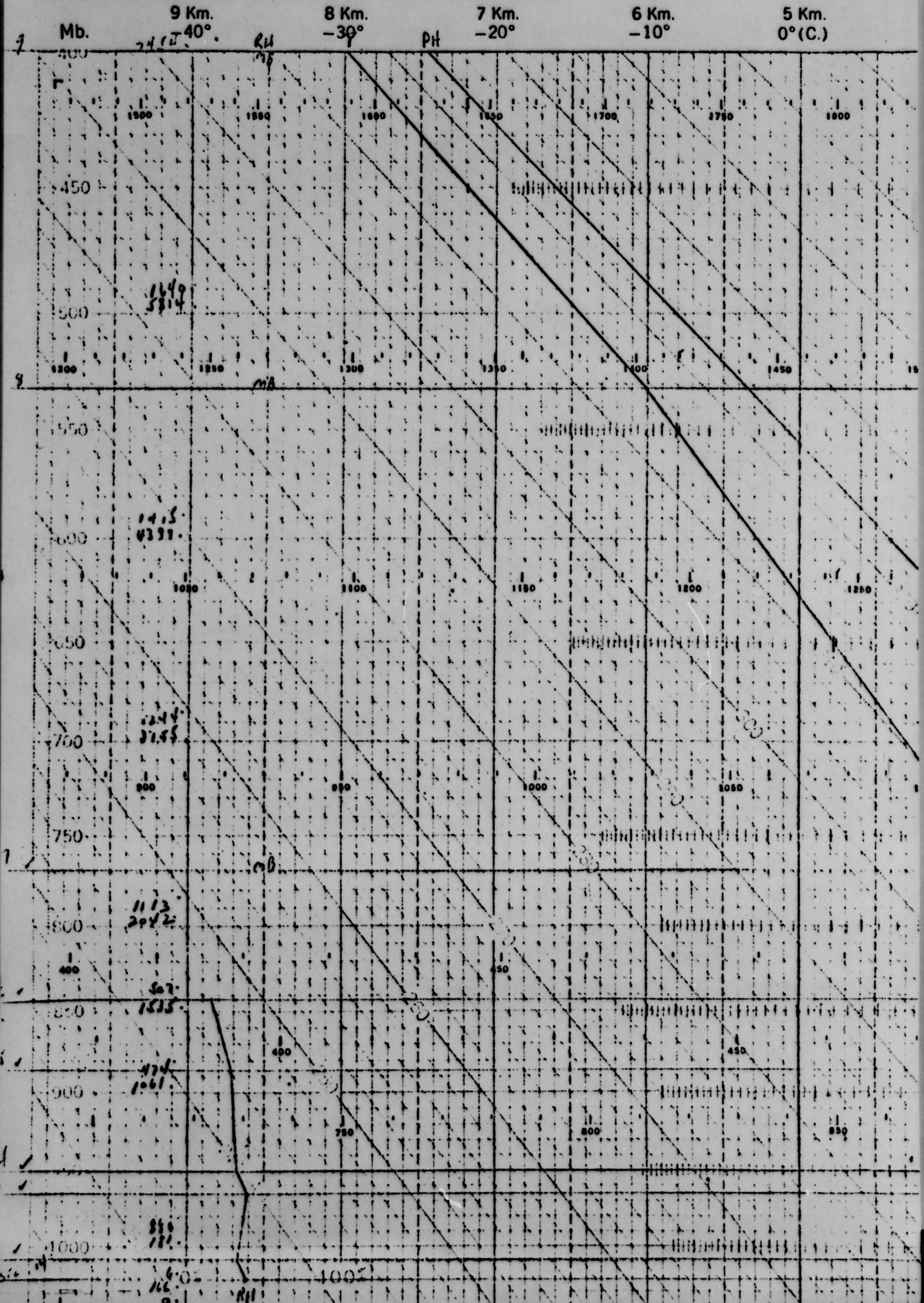
BASELINE CHECK READINGS

Time G. C. T.	TEMPERATURE			RELATIVE HUMIDITY			
	Ordinate	Dry	Wet	Ordinate	Roob	Cor.	Psychrometer
1452	69.4	18.0	12.4°C	73.6	71	-3	Water 68

U. S. DEPARTMENT OF COMMERCE, WEATHER

ADIABATIC CHART

WBAN-31A



ADIABATIC CHART

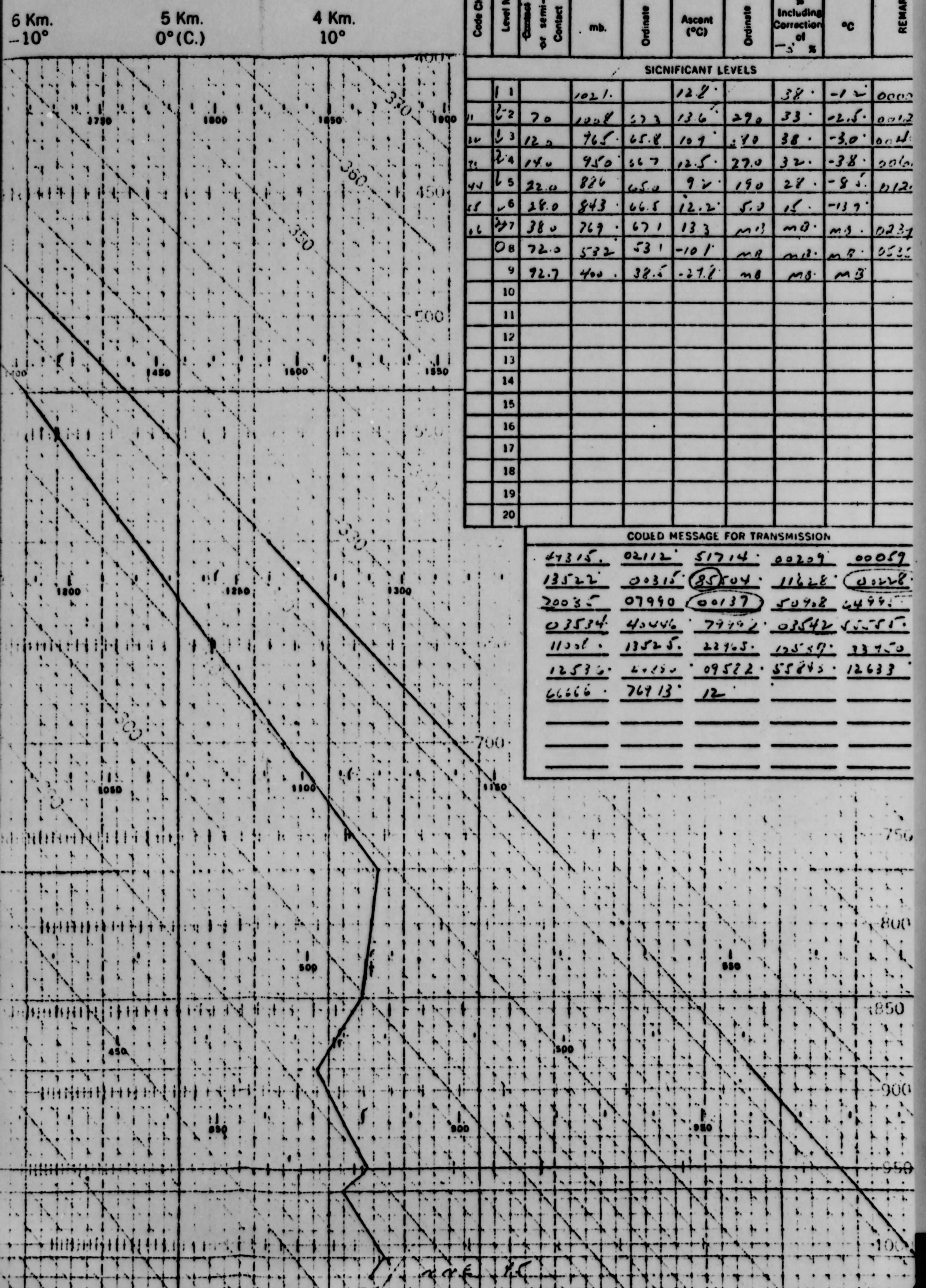
WBAN-31A

DATA BLOCK A

Code Check	Level No.	PRESSURE		TEMPERATURE		RELATIVE HUMIDITY		DEW POINT	REMARKS
		Contact or semi-Contact	mb.	Ordinate	Ascent (°C)	Ordinate	% Including Correction of -5% of %	°C	
SIGNIFICANT LEVELS									
	1		1021.		12.2.		38.	-12.	0000
11	2	70	1008	57.3	13.6.	290	33.	-2.5.	0012
21	3	120	965.	65.8	10.9.	240	38.	-3.0.	0041
31	4	140	950.	66.7	12.5.	270	32.	-3.8.	0060
41	5	220	826	65.0	9.2.	190	28.	-8.5.	0121
51	6	280	843.	66.5	12.2.	5.0	15.	-13.7.	
61	7	380	769.	67.1	13.3	m13	m0.	m3.	0237
	8	720	532.	53.1	-10.1	m8	m18.	m8.	0535
	9	92.7	400.	38.5	-27.6	m0	m0.	m3.	
	10								
	11								
	12								
	13								
	14								
	15								
	16								
	17								
	18								
	19								
	20								

CODED MESSAGE FOR TRANSMISSION

47315.	02112.	51714.	00209.	00059.
13522.	00315.	85504.	11628.	00028.
20035.	07990.	00137.	50908.	6499.
03534.	40006.	79992.	03542.	55555.
11001.	13525.	22965.	12557.	23750.
12536.	60150.	09522.	55845.	12633.
66666.	76913.	12.		



DATA BLOCK A

Code Check	Level No.	PRESSURE		TEMPERATURE		RELATIVE HUMIDITY		DEW POINT	REMARKS
		Contact or semi-Contact	mb.	Ordinate	Ascent (°C)	Ordinate	% Including Correction of -3%	°C	
SIGNIFICANT LEVELS									
	1		1021.		12.8.		38.	-1.2.	00006
11	2	70	1028	67.3	13.6.	290	33.	-2.5.	00120
21	3	120	765.	65.8	10.9.	240	38.	-3.0.	00490
31	4	140	950.	66.7	12.5.	270	32.	-3.8.	00610
41	5	220	826	65.0	9.2.	190	28.	-8.5.	01200
51	6	280	843.	66.5	12.2.	5.0	15.	-13.7.	
66	7	380	769.	67.1	13.3	m13	m0.	m3.	02340
	8	720	532	53.1	-10.1	m0	m12.	m7.	05350
	9	92.7	400.	38.5	-27.8	m0	m0.	m3	
	10								
	11								
	12								
	13								
	14								
	15								
	16								
	17								
	18								
	19								
	20								

CONSTANT PRESSURE DATA

10406	74.54	-29.8
71001	(20)	m3
03542	15	022

6600	-21.9
(18)	X
15	020

10708	58.14	-14.5
64995	(16)	m3
03534	16	008

5090	-08.1
(15)	X
16	017

4399	-02.9
(14)	X
16	018

3770	002.2
(14)	X
16	021

70035	31.55	0070
07995	(13)	m3
00137	16	020

2600	0.16
(12)	X
16	015

2042	012.9
(12)	X
16	015

00504	1535	0117
11628	17	-12.6
00228	01	014

1061	010.0
27	X
01	015

0610	012.5
72	X
01	012

00254	0.11	0131
18522	34	-2.5
00385	01	008

02112	Pressure	2.0.8
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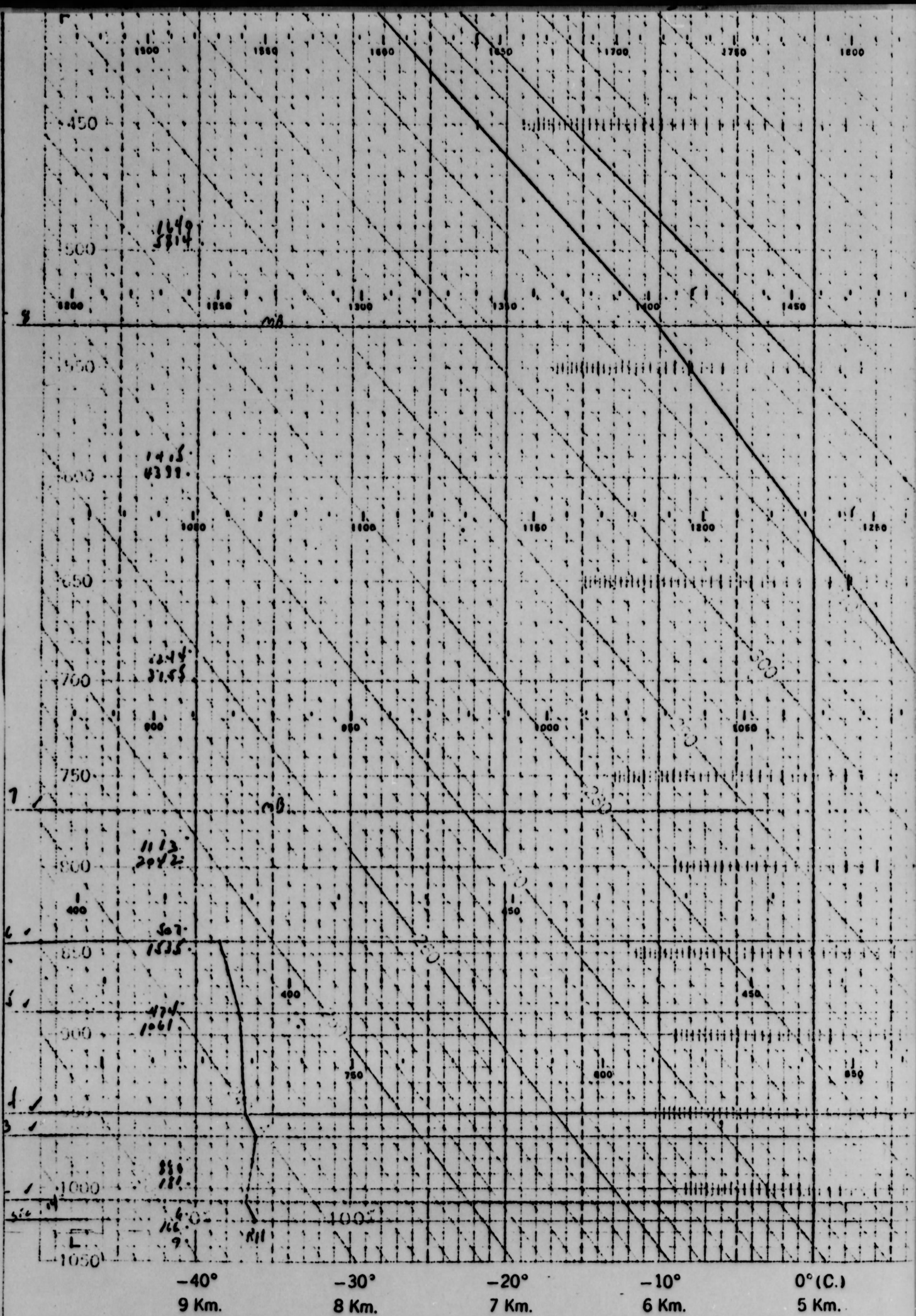
PUNCHED CARD No. 4

PUNCHED CARD No. 3

PUNCHED CARD No. 2

PUNCHED CARD No. 1

CODED MESSAGE FOR TRANSMISSION				
49315	02112	51714	00209	00069
13522	00315	85504	11628	00228
20035	07990	00137	50908	64995
03534	40046	79992	03542	50555
11001	13525	22905	12539	23450
12535	40050	09522	55845	12633
66666	76913	12		

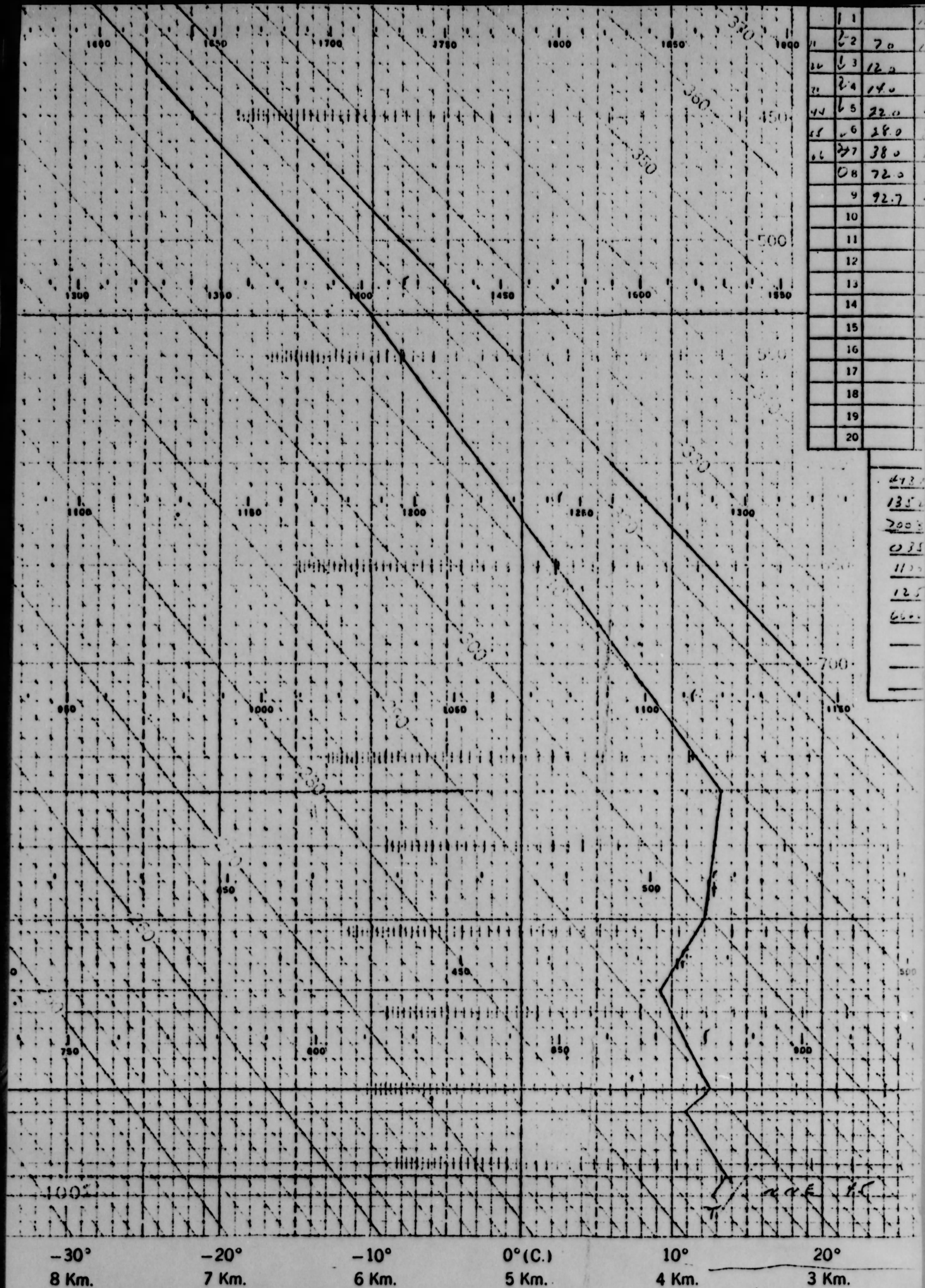


Station	
Oakland Airport,	
Oakland, Calif	
Lat. 37° 44' N.	Long. 122° 22' W.

DATA AS TRANSMITTED	D.P. TO 0.1°C. OTHER DATA AS ENTERED ON WBAN-33 OR PUNCHED CARD	
0000	M (gpm)	T
TTTTT ₀	RM	D.P.
0000	D (16 pts.)	Wind S (m.p.s.)

A-10

PH - Pressure-Height
T - Temperature °C
RM - Relative Humidity
Height scale in geopotential



DATA AS TRANSMITTED	D. P. TO 0.1°C. OTHER DATA AS ENTERED ON WBAN-33 OR PUNCHED CARD	
Q0000	M (gpm)	T
TTT ₀ T ₀ T ₀	RH	D.P.
Q0000	Wind O (16 pts.)	S (m.p.s.)

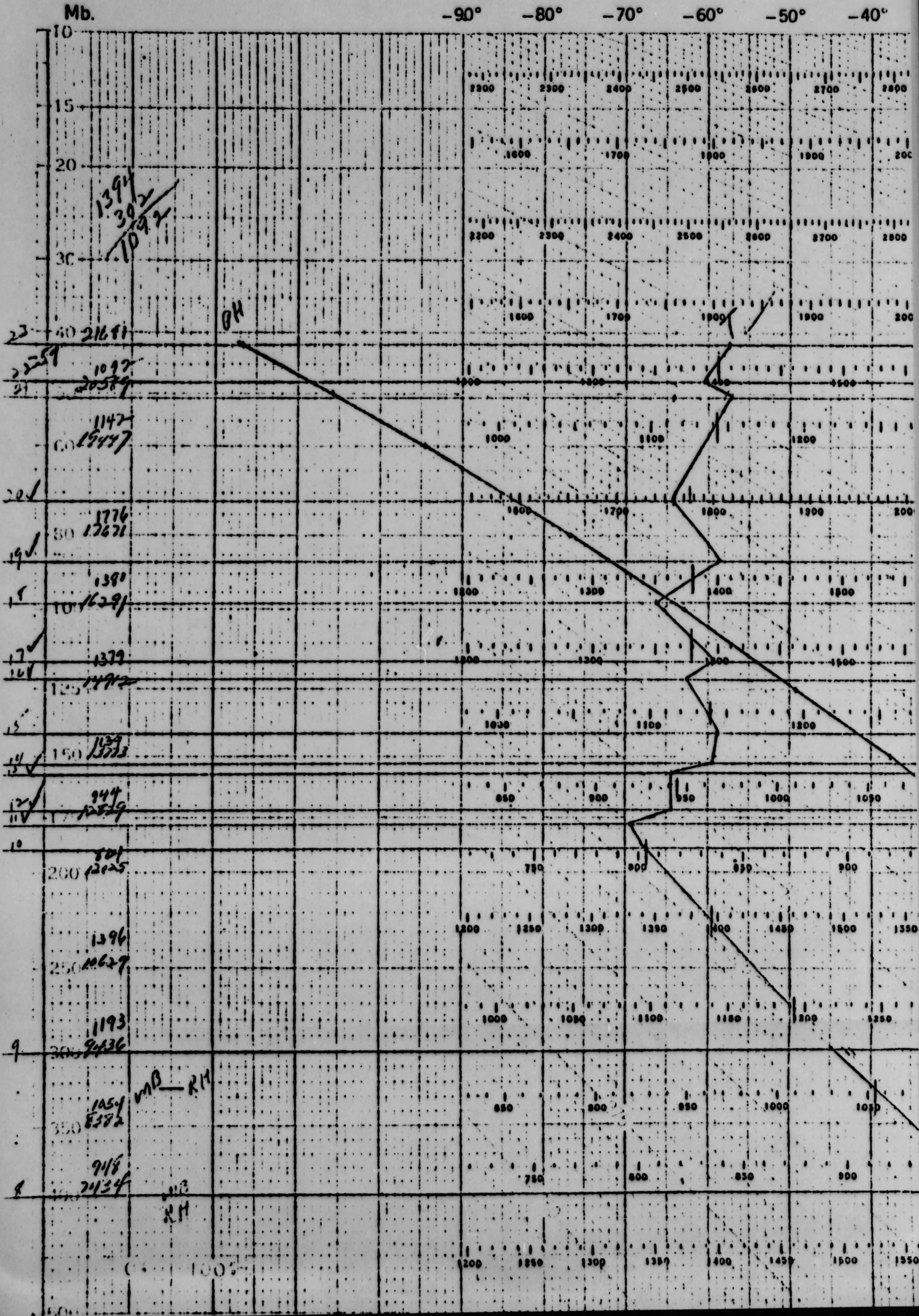
A-10

PM - Pressure-height
T - Temperature °C
RH - Relative Humidity
Height scale in geopotential meters

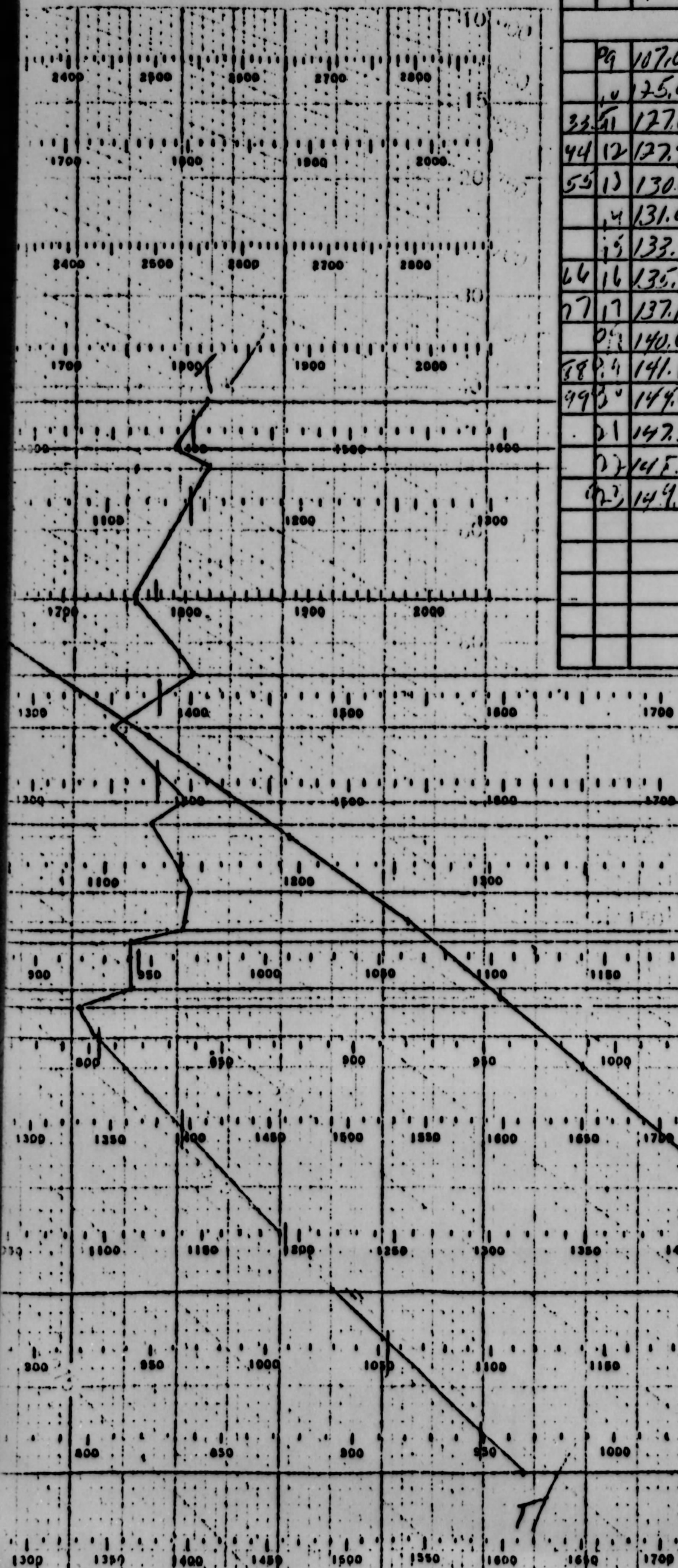
Drawn by MPH: Doe
Verified by E. M. V.
Inspected by _____

ADIABATIC CHART

WBAN-31B



-70° -60° -50° -40° -30°



Code Check	Level No.	PRESSURE		TEMPERATURE				RELATIVE HUMIDITY		D PC
		Contact	mb.	Ordnate	Ascent (°C)	Correction	Corrected	Ordnate	Including Correction of %	
SIGNIFICANT LEVELS										
09	107.0	300	27.1	-44.8						
10	125.0	199	13.0	-67.6						
33	127.0	178	12.2	-69.3						
44	127.9	172	14.7	-61.2						
55	130.0	159	14.7	-64.2						
14	131.0	153	17.3	-59.6						
15	133.0	141	17.8	-58.5						
66	135.9	122	15.7	-61.4						
77	137.1	116	12.3	-59.6						
08	140.0	98	13.7	-66.2						
88	141.6	87	17.8	-58.5						
99	144.0	72	14.8	-61.1						
21	147.5	51	18.8	-57.2						
72	147.6	45	16.9	-60.5						
92	149.1	42	18.6	-57.4						

<u>49353</u>	<u>30096</u>	<u>94998</u>	<u>20945</u>
<u>15519</u>	<u>09992</u>	<u>10345</u>	<u>15994</u>
<u>07995</u>	<u>66666</u>	<u>17819</u>	<u>17214</u>
<u>122-12</u>	<u>11610</u>	<u>08709</u>	<u>07210</u>

1. Time, LST, at 200 mb. at termination, if between 400 mb. and 200 mb.

2. Correction for TST.

3. Time, TST, Algebraic sum of (1) and (2).

4. Differences between (and solar noon.

5. Elevation angle of sun

6. Elapsed time from 20C
mb. to terminating loc

7. Ascensional rate

-30°

CONSTANT PRESSURE DATA

0755	0.589	-57.5
07955	X	X
0		

9447	-608

7671	-668

1600 1700

1600 1700

10345	6291	-65.4
10345		
0		

4912	-619

115193773-552		
	X	X
0		

2829	-67.3

950 1000

1600 1650 1700

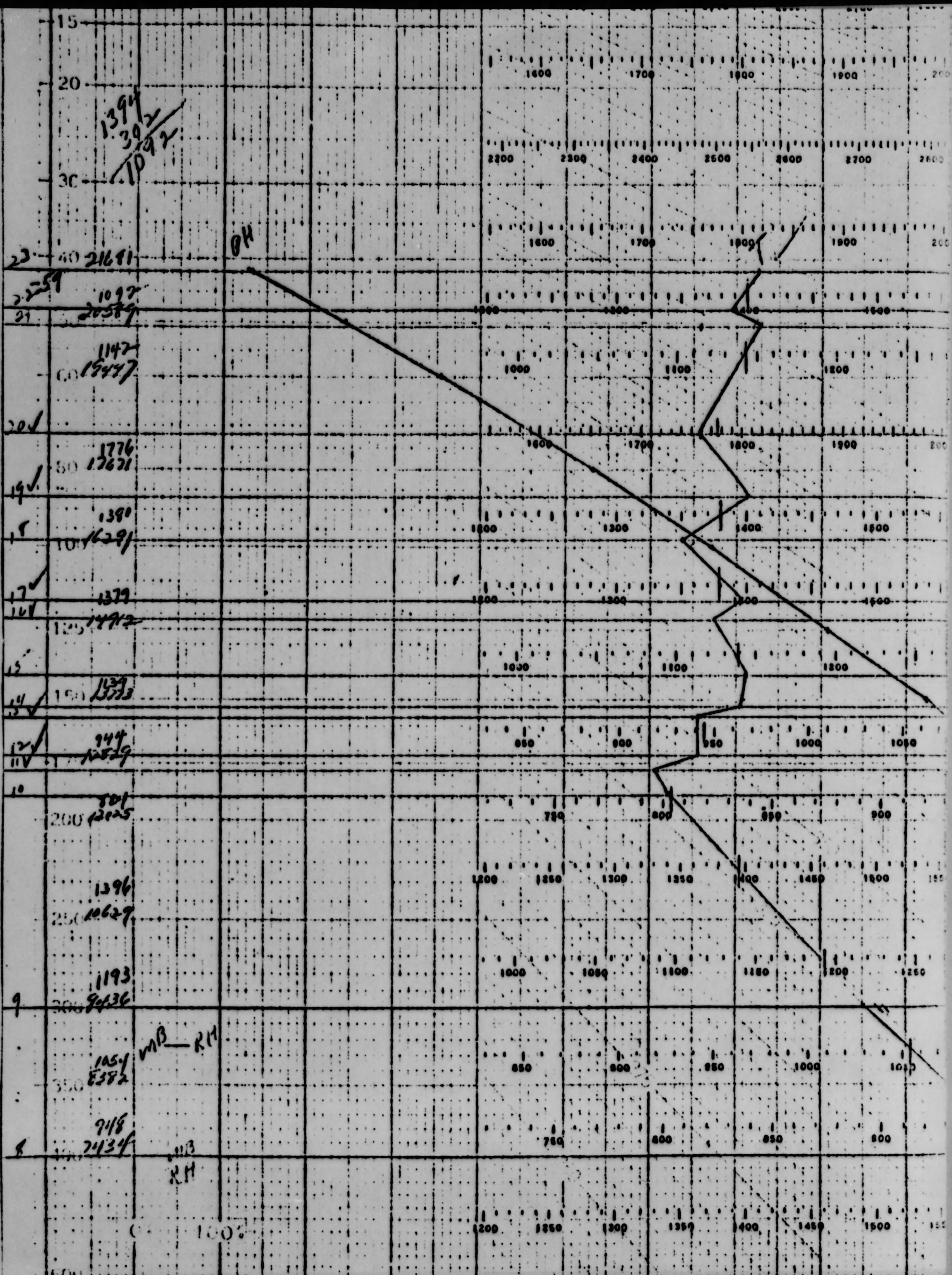
20749	2025	-649
1649	001	...
0		

0129	-542
m	

30096	6/4/36	--- 5
7/5/36	on	1.2
0		

7-5	2-15
(2)	X

UNCLASSIFIED CARD NO. 9



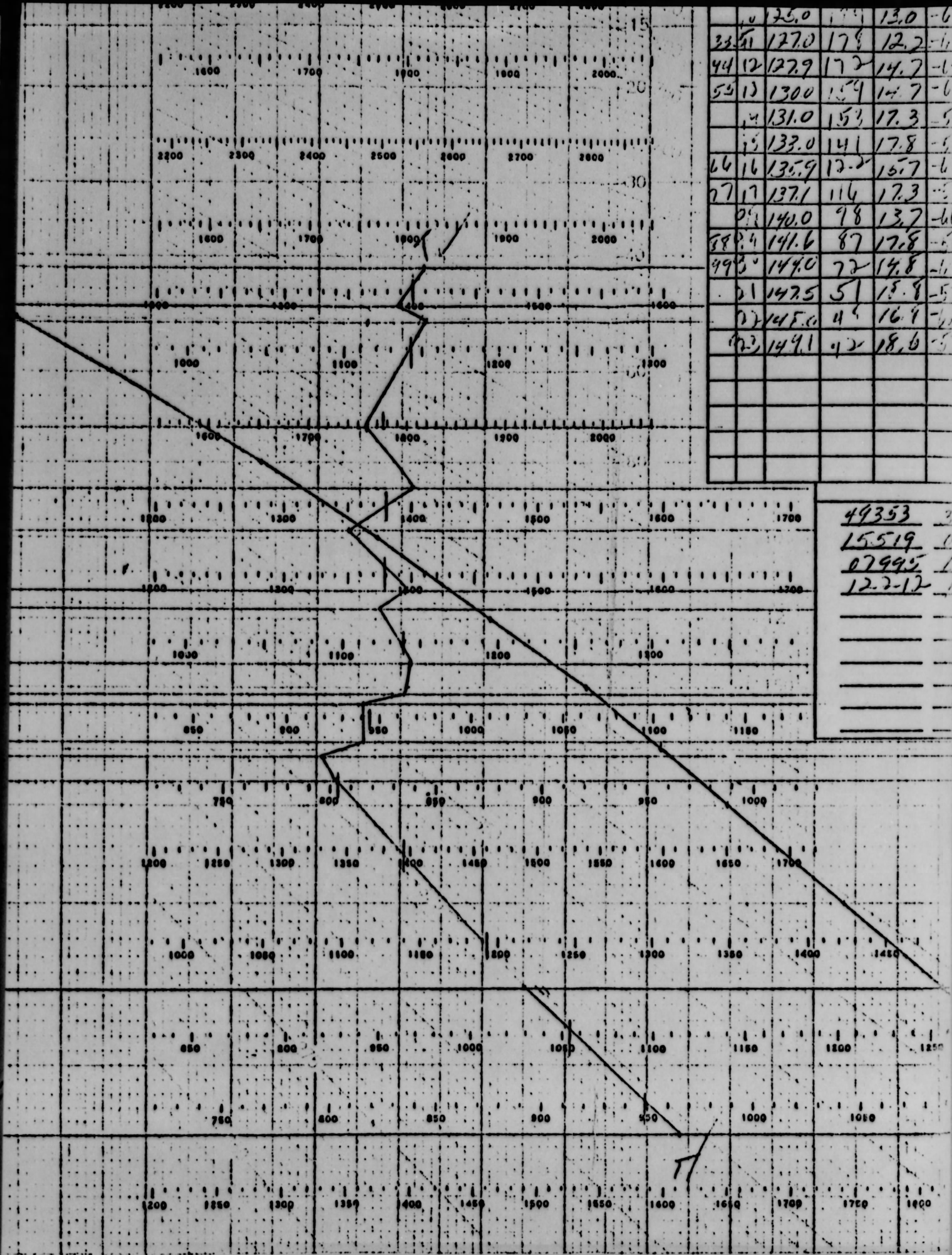
24 Km. 23 Km. 22 Km. 21 Km. 20 Km. 19 Km. 18 Km. 17 Km. 16 Km. 15 Km. 14 Km.

Oakland Airport, Oakland, Calif	
Lat. 37° 44' N.	Long. 122° 12' W.

DATA AS TRANSMITTED	D. P. TO 0.1°C OTHER DATA AS ENTERED ON WBAN-33 OR PUNCHED CARD	
00000	M (gpm)	T
TTT ₀ T ₂ T ₃	°RH	°D.P.
0000	D (16 pts.)	Wind S (m.p.s.)

PH—Pressure-height
 T—Temperature °C
 RH—Relative Humidity
 Height scale in geopotential meters

*Omitted above 200 mbs.



1	125.0	17	13.0	-6
33	127.0	17	12.2	-1
44	127.9	17	14.7	-6
55	130.0	15	14.7	-6
66	131.0	15	17.3	-5
77	133.0	14	17.8	-5
88	135.9	12	15.7	-6
99	137.1	11	17.3	-5
100	140.0	9	13.7	-6
101	141.6	8	17.8	-5
102	144.0	7	14.8	-1
103	147.5	5	15.8	-5
104	145.0	4	16.9	-1
105	149.1	4	18.6	-5

49353	3
15519	1
07995	1
12.2-12	1

-90° -80° -70° -60° -50° -40° -30° -20° -10° 0°
 20 Km. 19 Km. 18 Km. 17 Km. 16 Km. 15 Km. 14 Km. 13 Km. 12 Km. 11 Km. 10 Km.

DATA AS TRANSMITTED	D. P. TO 0.1°C OTHER DATA AS ENTERED ON WBAN-33 OR PUNCHED CARD	
00000	H (gpm)	T
TTC ₁ T ₂ T ₃	°RH	°D.P.
00000	D (16 pts.)	Wing S (m.p.s.)

*Omitted above 200 mbs.

A-9

PH—Pressure-height
 T—Temperature °C
 RH—Relative Humidity
 Height scale in geopotential meters

Drawn by W. E. Lucas
 Verified by G. MANNION
 Inspected by _____

33	51	127.0	178	12.2	-1.9					1272-0
44	12	127.9	172	14.7	-6.1					
55	13	130.0	159	14.7	-6.1					
	14	131.0	153	17.3	-5.6					
	15	133.0	141	17.8	-5.8					14150
66	16	135.9	122	15.7	-6.1					
77	17	137.1	116	17.3	-5.6					
	01	140.0	98	13.7	-6.2					16410
88	04	141.6	87	17.8	-5.8					17:80
99	05	144.0	72	14.8	-1.1					18340
	01	147.5	51	18.8	-5.7					
	02	145.0	45	16.9	-1.5					
	02	149.1	02	18.6	-5.7					1681

CODED MESSAGE FOR TRANSMISSION

49353	30096	94998	20945	14999
15519	09992	10345	15994	05755
07995	11666	17819	17214	15914
12212	11610	08709	07214	

SOLAR RADIATION CORRECTIONS FOR
RAOB TEMPERATURE

1. Time, LST, at 200 mb. or at termination, if between 400 mb. and 200 mb.
2. Correction for TST.
3. Time, TST, Algebraic sum of (1) and (2).
4. Differences between (3) and solar noon.
5. Elevation angle of sun.
6. Elapsed time from 200 mb. to terminating level.
7. Ascensional rate

05755	0589	-57.5
07995		
0		

9447	-6.8
------	------

7671	-6.8
------	------

10345	1291	-65.4
15994		
0		

4912	-6.9
------	------

15519	3723	-53.2
07995		
0		

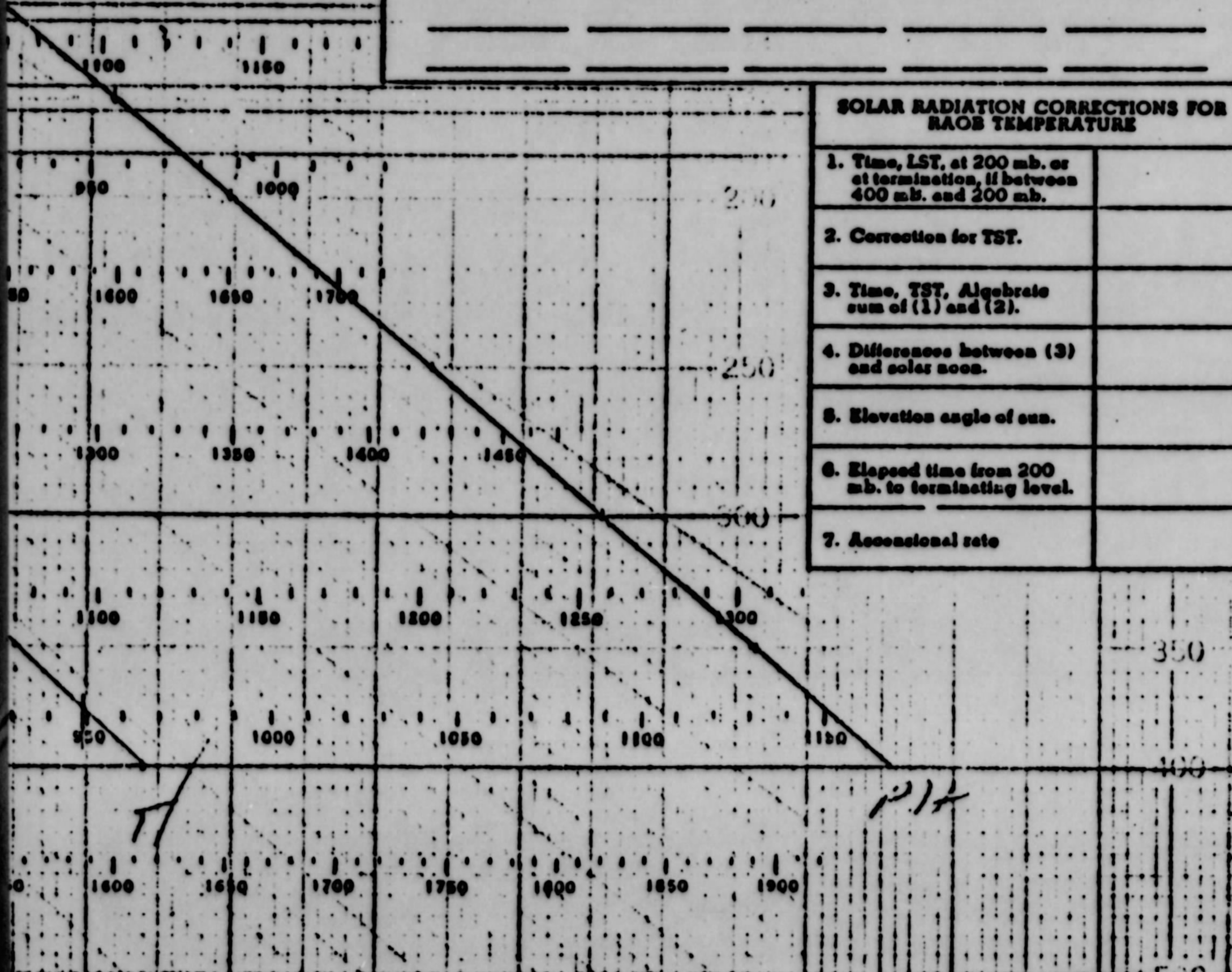
2829	-6.73
------	-------

20945	2025	-64.9
14999	m	
0		

0629	-54.2
m	

20996	9426	-11.5
07995	m	
0		

9426	-11.5
(2)	



-30° -20° -10° 0° 10° (°C.)
13 Km. 12 Km. 11 Km. 10 Km. 9 Km. 8 Km. 7 Km. 6 Km. 5 Km.

Drawn by U. E. Lucas

Verified by G. MANNION

Inspected by _____

DATE AND RELEASE TIME

	Year	Month	Day	Time
120 th. Mar.	1953	Dec	21	1900
G.C.T.	1953	DEC	28	0300
Radioonde No.	1114675		Ascension No. 722	

PUNCH

PUNCHED CARD No. 7

PUNCHED CARD No. 6

PUNCHED CARD No. 5

PUNCHED CARD No. 4

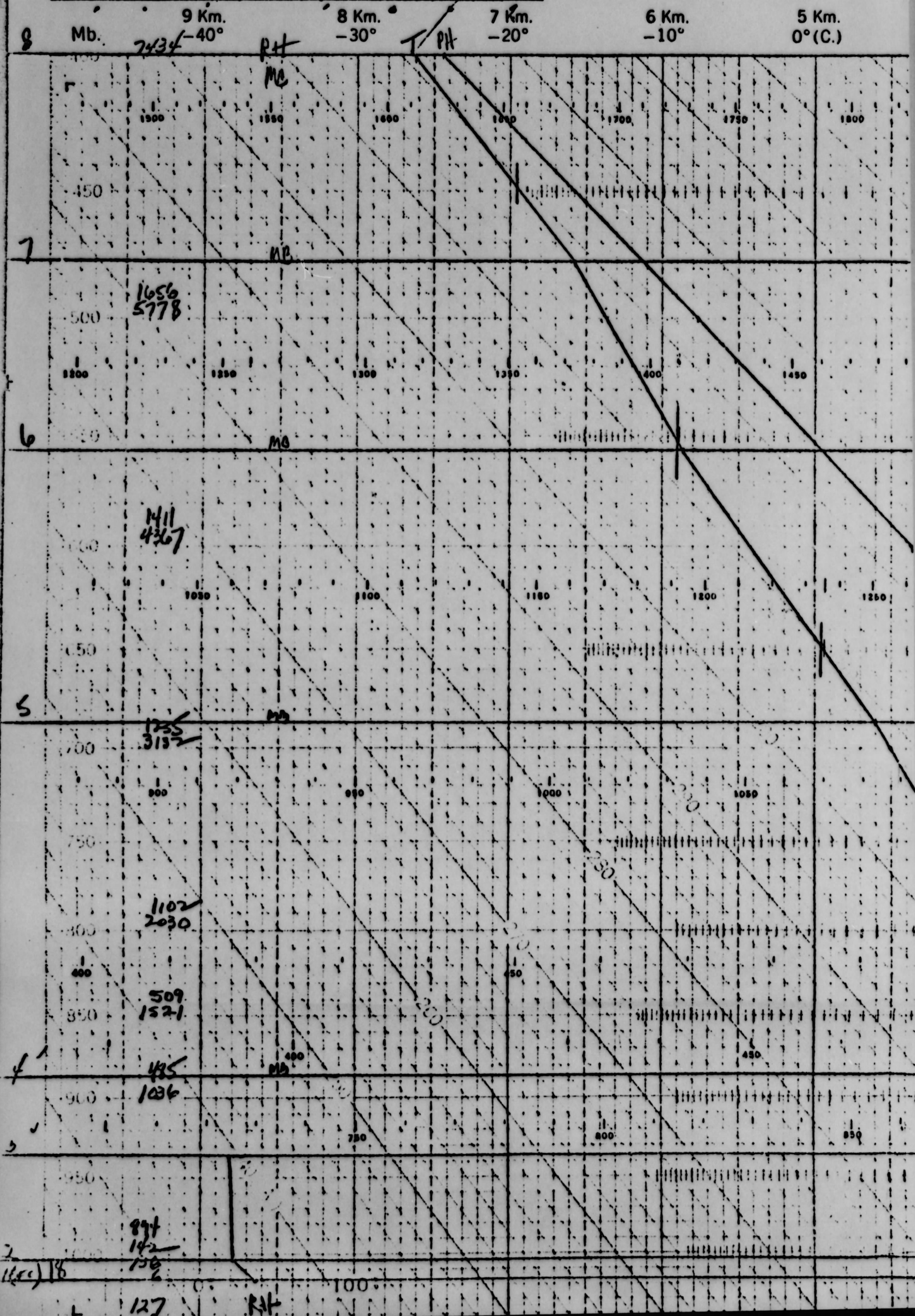
BASELINE CHECK READINGS

Time G. C. T.	TEMPERATURE			RELATIVE HUMIDITY			Psychrometer Ice
	Ordinate	Dry	Wet	Ordinate	Raob	Cor.	
0233	71.0	21.7	18.0 °C	74.3	1.8	2.2	Water 70

U. S. DEPARTMENT OF COMMERCE, WEA

ADIABATIC CHAR

WBAN-31A



ADIABATIC CHART

WBAN-31A

5 Km.
0° (C.)

4 Km.
10°

DATA BLOCK A

Code Check	Level No.	PRESSURE		TEMPERATURE		RELATIVE HUMIDITY		DEW POINT	REMARKS
		Contact or semi-Contact	mb.	Ordinate	Ascent (°C)	Ordinate	% Including Correction of 1.2%	°C	
SIGNIFICANT LEVELS									
	11		1016		16.1		35	0.4	00150
	12	80	1003	693	180	80	21	-4.7	00150
11	13	16.0	935	679	150	5.0	19	-8.5	00700
22	14	22.0	886	690	173	ME	ME	ME	01125
	15	48.0	686	620	40	ME	ME	ME	
	16	67.0	556	540	-86	ME	ME	ME	
	17	79.0	477	489	-159	ME	ME	ME	
	18	90.8	400	41.3	-261	ME	ME	ME	07434
	19								
	20								

CODED MESSAGE FOR TRANSMISSION

49303 01616 00214 03208 00047
17558 03417 85499 15991 00440
70928 05990 00447 50896 63998
40439 76991 55555 11935 15582
66666 88617

NW 40 MPS

CONS
404
767
0

60
63
0

71
81
0

65

71

PH
1050

DATA BLOCK A

4 Km.
10°

Code Check	Level No.	PRESSURE		TEMPERATURE		RELATIVE HUMIDITY		DEW POINT	REMARKS
		Contact or semi-Contact	mb.	Ordinate	Ascent (°C)	Ordinate	% Including Correction of 1.2%	°C	
SIGNIFICANT LEVELS									
	1		1016		16.1		35	0.4	00006
	2	80	1003	693	180	80	21	-4.7	00150
11	3	16.0	935	679	150	5.0	19	-8.5	00720
22	4	22.0	886	670	173	MB	MB	MB	01120
	5	48.0	686	620	4.0	MB	MB	MB	
	6	67.0	556	540	-8.6	MB	MB	MB	
	7	79.0	477	489	-15.9	MB	MB	MB	
	8	90.8	400	41.3	-26.1	MB	MB	MB	01434
	9								
	10								
	11								
	12								
	13								
	14								
	15								
	16								
	17								
	18								
	19								
	20								

CODED MESSAGE FOR TRANSMISSION

49303 01616 00214 03208 00047
 17558 03417 85499 15991 00440
 70928 05990 00447 50896 63998
 40439 76991 55555 11935 15582
 66666 88617

CONSTANT PRESSURE DATA

40439	7434	-26.1
76711	(19)	MB
0		

6580	-19.4
(17)	

4896	5778	-13.8
63948	(16)	MB
0		

5030	-09.1
(15)	

4367	-04.2
(14)	

3720	000.6
(14)	

700283132	005.0
05490	(13) MB
0044	02 02

2590	008.5
(13)	
02	032

2030	012.0
(12)	
02	037

4499	152.1	015.1
15491	(12)	MB
0044	02	030

1036	016.7
(12)	
01	030

0600	015.6
20	
01	03

0047	0142	0179
17558	20	-5.5
0044	15	019

01616	1016	0161
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PUNCHED CARD No. 4

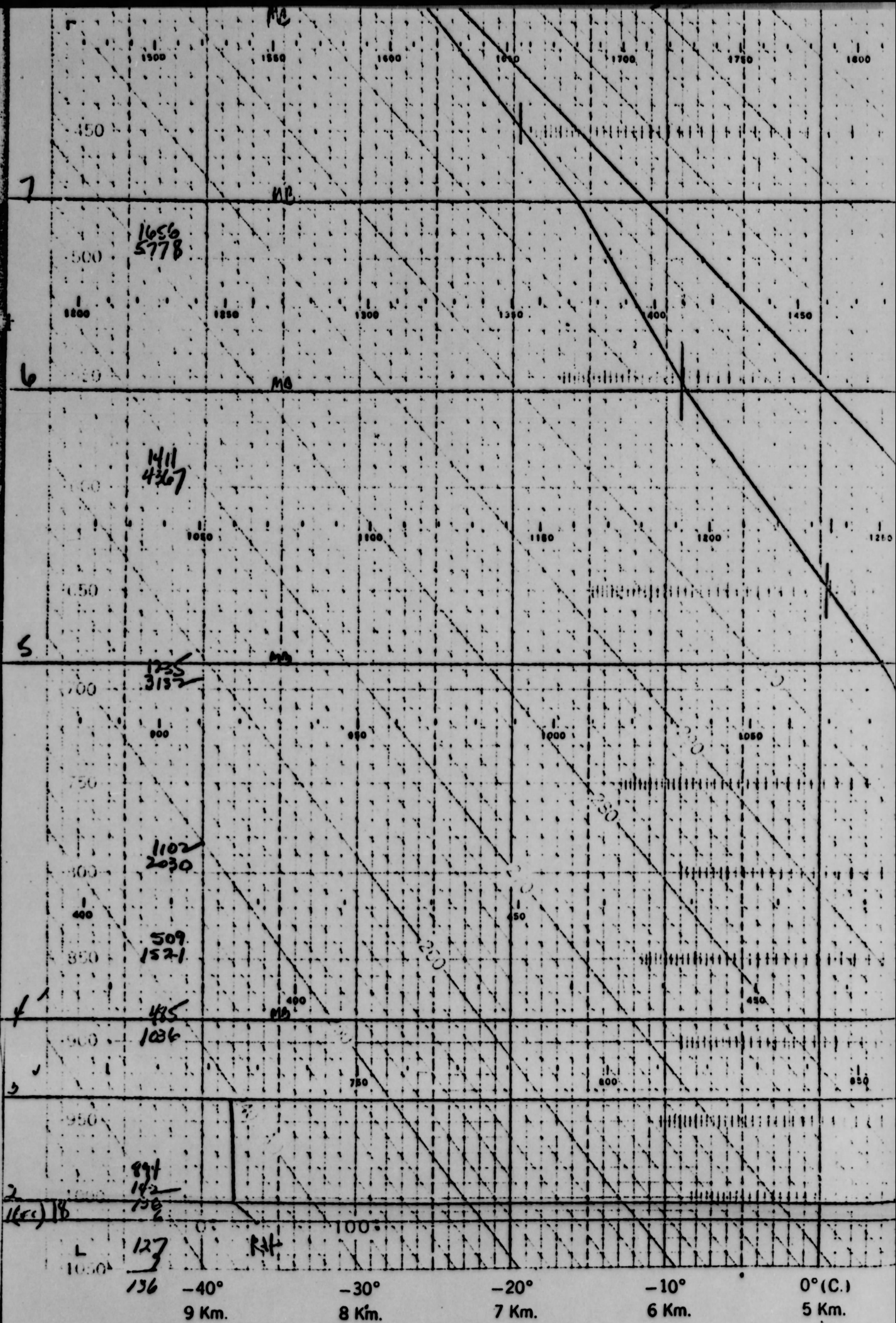
PUNCHED CARD No. 3

PUNCHED CARD No. 2

PUNCHED CARD No. 1

NW 40 mps

PH



Oakland Airport,	
Oakland, Calif	
Lat. 37° 44' N.	Long 122° 12' W.

DATA AS TRANSMITTED	D. P. TO 0.1°C. OTHER DATA AS ENTERED ON WBAN-33 OR PUNCHED CARD	
00100	M (gpm)	T
TT _d T _s	RH	D.P.
004H	D (16 pts.)	Wind S (m.p.s.)

A-8

PH - Pressure-height
T - Temperature °C
RH - Relative Humidity
Height scale in feet

