

## PROJECT 10073 RECORD CARD

|                                                                                                                                                                                      |                                                                                                                                                                                                       |                                      |                                                                                                                                                              |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 1. DATE<br>24 June 1957                                                                                                                                                              | 2. LOCATION<br>Villa Grove, Colorado                                                                                                                                                                  |                                      | 12. CONCLUSIONS<br><input type="checkbox"/> Was Balloon<br><input type="checkbox"/> Probably Balloon<br><input checked="" type="checkbox"/> Possibly Balloon |
| 3. DATE-TIME GROUP<br>Local _____<br>GMT 24/2330Z                                                                                                                                    | 4. TYPE OF OBSERVATION<br><input checked="" type="checkbox"/> Ground-Visual <input type="checkbox"/> Ground-Radar<br><input type="checkbox"/> Air-Visual <input type="checkbox"/> Air-Intercept Radar |                                      | <input type="checkbox"/> Was Aircraft<br><input type="checkbox"/> Probably Aircraft<br><input type="checkbox"/> Possibly Aircraft                            |
| 5. PHOTOS<br><input type="checkbox"/> Yes<br><input checked="" type="checkbox"/> No                                                                                                  | 6. SOURCE<br>Civilian                                                                                                                                                                                 |                                      | <input type="checkbox"/> Was Astronomical<br><input type="checkbox"/> Probably Astronomical<br><input type="checkbox"/> Possibly Astronomical                |
| 7. LENGTH OF OBSERVATION<br>2 hours                                                                                                                                                  | 8. NUMBER OF OBJECTS<br>one                                                                                                                                                                           | 9. COURSE<br>315 dgr                 | <input type="checkbox"/> Other _____<br><input type="checkbox"/> Insufficient Data for Evaluation<br><input type="checkbox"/> Unknown                        |
| 10. BRIEF SUMMARY OF SIGHTING<br>Object round at bottom, star shaped on top; size of volley ball, color bright Gold. Object drifted behind mountains. Straight flight, no maneuvers. |                                                                                                                                                                                                       | 11. COMMENTS<br>Balloon observation. |                                                                                                                                                              |



- B. VOLLEY BALL
- C. BRIGHT GOLD
- D. ONE
- E. NEGATIVE
- F. NEGATIVE
- G. NEGATIVE
- H. NEGATIVE
- I. NEGATIVE

*the*

PAGE TWO RJEDEN 116

- 2. A. SIGHTER OBJECT FROM HIGHWAY
- B. APPROXIMATELY 60 DEGREES ELEBATION DASH 315 DEGREES AXIMUTH
- C. APPROXIMATELY 40 DEGREES ELEVATION DASH 315 DEGREES AZIMUTH
- D. STRAIGHT FLIGHT DASH PATH DASH NO MANEUVERS
- E. DRIFTET BEHIND MOUNTAINS
- F. APPROXIMATELY TWO PAREN 2 PAREN HOURS
- 3. A. 24/2330 Z
- B. DAY
- 5. VILLA GROVE CMM COLORADO
- 6. CIVILIAN [REDACTED] CMM AGE 50 [REDACTED]
- [REDACTED] CMM VILLA GROVE CMM COLORADO
- 7. A. CLEAR
- B. NEGATIVE
- C. UNLIMITED
- D. UNLIMITED



F. NONE

8. NEGATIVE

9. NEGATIVE

10. NEGATIVE

PAGE THREE RJEDEN 116

11. CAPTAIN EUGENE MAXWELL CMM INTELLIGENCE OFFICER PD POSSIBLY

A WEATHER BALLON PD END

BT

25/2047Z JUN RJEDEN



24/2330Z

160th

ATIC

240657-07

25-

26 JUN 57 10 02

25 JUN 57 22 01z

17444

3-4X2a

RD

P.

WPHQ 15V WPCUE YMB126ENA137

RJEDNF RJEPHQ RJWFDN

DE RJEDEN 116

251635Z

FM COMDR 4602 AISS ENT AFB COLO

TO ZEN/COMADC ENT AFB COLO

WFDN/COMDR 34TH AD KIRTLAND AFB NMEX

WPNP/COMDR ATIC WPAFB OHIO

WPHQ/DE HEDUSAF WASH DC

CLASS/ISOP 553 PD U F O E PD



Report # DI-0706-1-57

Incl # 2

WHEN FILLED IN  
Title: Overlay showing aircraft plotted by "Overlay" on the night of 23 June 57

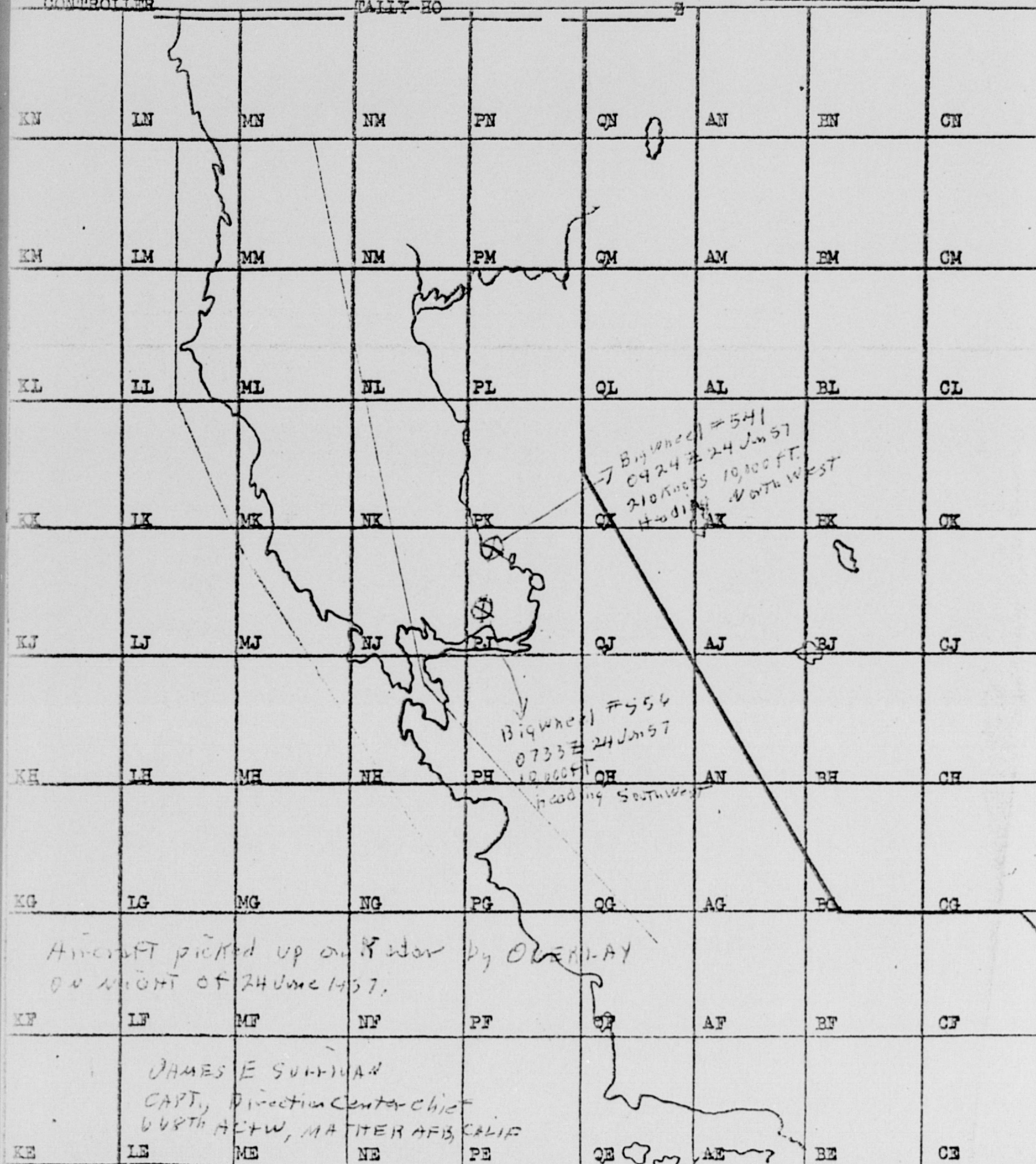
DATE 24 JUNE 1957 INITIAL \_\_\_\_\_

TRACK NO \_\_\_\_\_ UNKNOWN \_\_\_\_\_

FIGHTERS \_\_\_\_\_

I.D. \_\_\_\_\_

CONTROLLER \_\_\_\_\_ TALLY-RO \_\_\_\_\_



WHEN FILLED IN

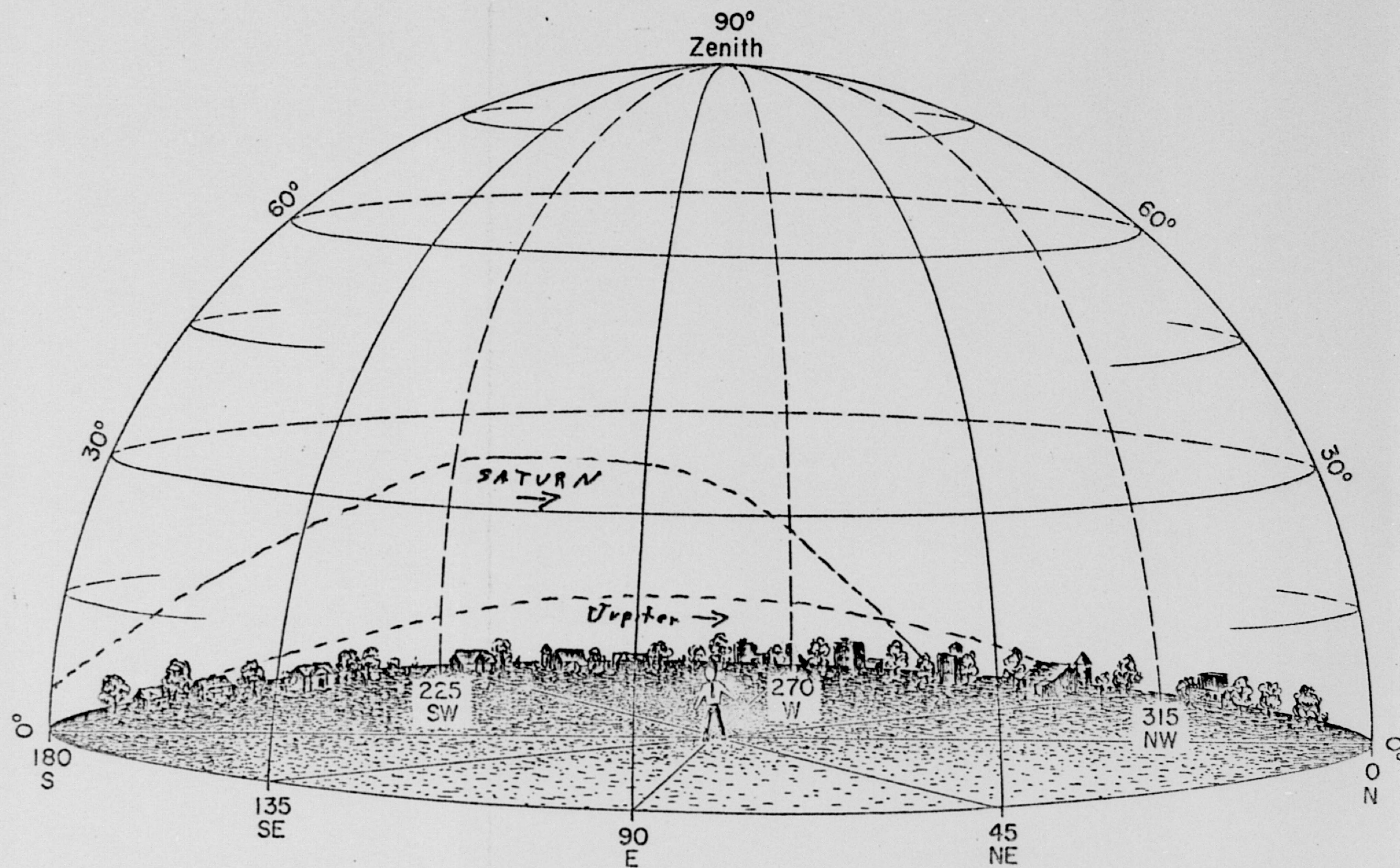
DET 1, ATSS CLAS



Report # DL-UFOB-1-57

Incl # 3

Title: Sketch showing positions and tracks of Planets Jupiter and Saturn on the night of 23 June as drawn by Captain James E. Sullivan Direction Center Chief, 668th AC&W, Mather AFB, Calif., Senior Navigator.

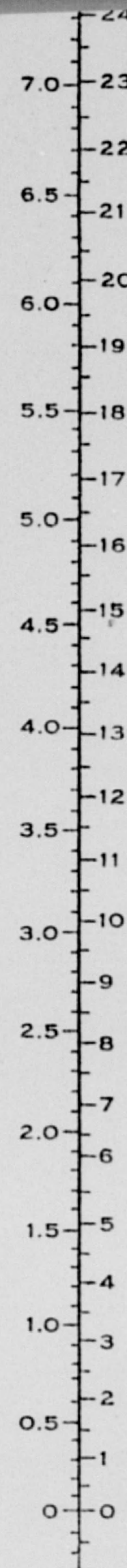
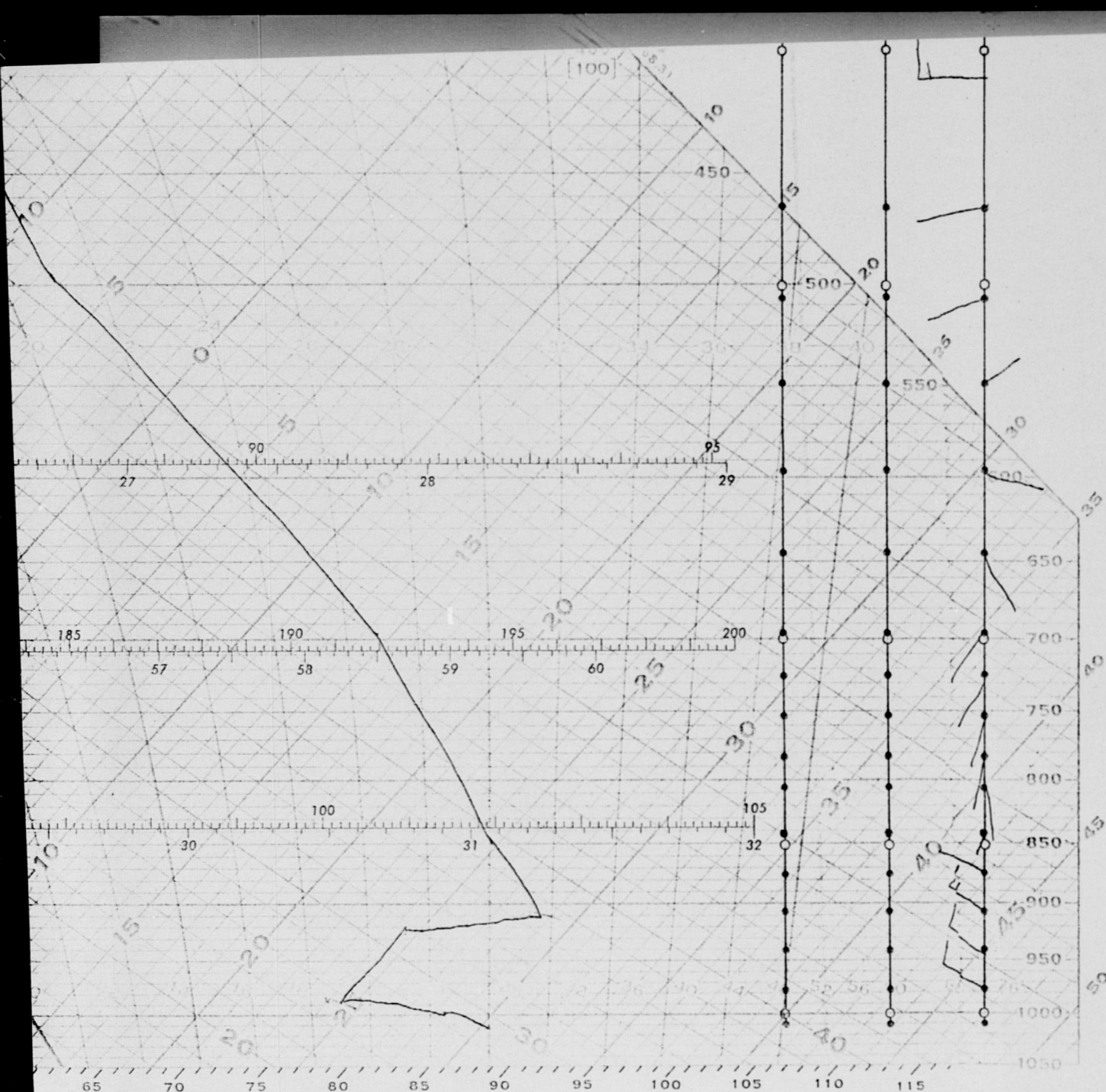


incl # 3









|                                                        |  |            |  |
|--------------------------------------------------------|--|------------|--|
| TO                                                     |  | TO         |  |
| TO                                                     |  | TO         |  |
| CLOUDS                                                 |  |            |  |
| TYPE                                                   |  |            |  |
| AMOUNT                                                 |  |            |  |
| BASES                                                  |  |            |  |
| TOPS                                                   |  |            |  |
| ICING                                                  |  |            |  |
| TYPE                                                   |  |            |  |
| SEVERITY                                               |  |            |  |
| BOUNDARIES                                             |  |            |  |
| CONTRAILS                                              |  |            |  |
| PERSISTENCE                                            |  |            |  |
| HEIGHT                                                 |  |            |  |
| TURBULENCE                                             |  |            |  |
| DEGREE                                                 |  |            |  |
| HEIGHT(S)                                              |  |            |  |
| MAX WIND GUSTS                                         |  |            |  |
| HAIL SIZE                                              |  |            |  |
| TEMPERATURES                                           |  |            |  |
| MAX.                                                   |  |            |  |
| MIN.                                                   |  |            |  |
| CUMULUS CLOUD FORMATION AT TEMP. _____ TIME _____      |  |            |  |
| DISSIPATION OF LOW LEVEL INVERSION AT _____ TIME _____ |  |            |  |
| REMARKS                                                |  |            |  |
| FORECASTER                                             |  | FORECASTER |  |

493 OAK  
 0000Z +7  
 THIS TRUE ~~EXTRACT~~ 24 JUN 57  
 OF RAOB FOR 24 JUNE 57  
 LAUNCHED FROM OAKLAND  
 CALIF AND PLOTTED BY

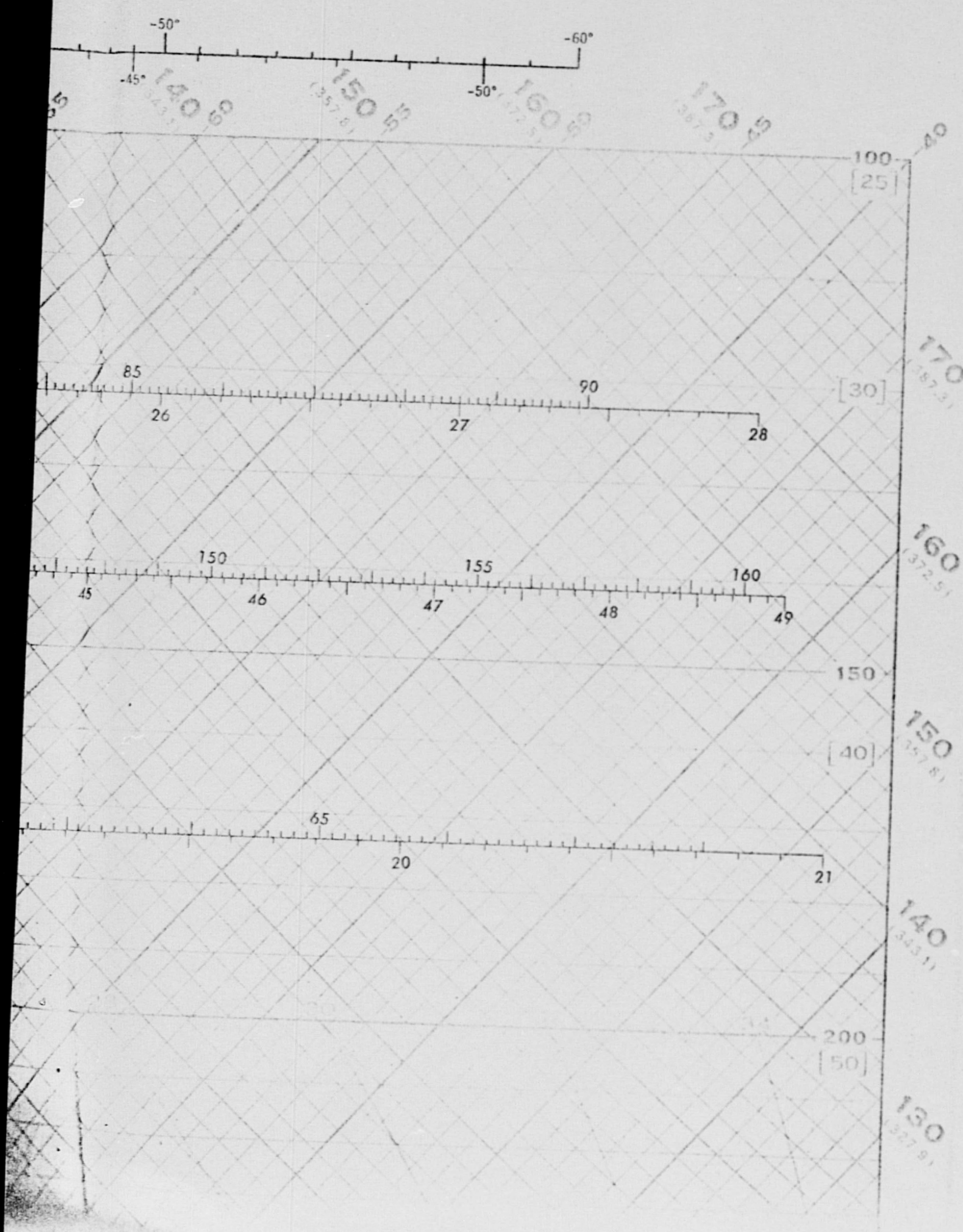
NUMBER WEATHER STATION STATION  
 AT MC CLELLAN AFB  
 TIME (GCT) AB DATE (GCT) 24 JUN 57

M/SGT A. B. SORENSEN  
 DET 8-6TH WEA GROUP  
 Form: AWS WPC 9-16

This diagram replaces AWS WRC 9-16



AM



## EXPLANATION

ISOBARS are straight, horizontal brown lines. The heights of the pressure surfaces in the ICAO Standard atmosphere, below the pressure values on the left, are in parentheses ( ) for values in feet and brackets [ ] for meter values.

ISOTHERMS ( $^{\circ}\text{C}$ ) are the straight, equidistant brown lines running diagonally upward from left to right.

DRY ADIABATS are the slightly curved brown lines that intersect the 1000 mb. isobar at intervals of  $2^{\circ}\text{C}$ , and run diagonally upward from right to left. The Dry Adiabats for the overlap portion of the pressure range are labeled with two (2) values. (See below.)

SATURATION ADIABATS are the curved green lines that intersect the 1000 mb. isobar at intervals of  $2^{\circ}\text{C}$ , diverging upward and tending to become parallel to the dry adiabats.

SATURATION MIXING RATIO (in gm. per kg.) is represented by dashed green lines. Their values appear between the 1050 and 1000 mb. lines.

THICKNESS (in hundreds of geopotential feet and meters) of the layers 1000-700, 1000-500, 700-500, 500-300, 300-200, 200-150, 150-100, 100-50, and 50-25 mb. is represented by numbers and a graduation along the middle of each layer. The thicknesses are obtained from the virtual temperature curve by the equal-area method, using any straight line as a dividing line.

HEIGHT in geopotential feet or meters above mean sea level, or station level, of the 1000 mb. surface is obtained from the nomogram in the upper left-hand corner by drawing a straight line from the temperature scale ( $^{\circ}\text{F}$ ) or ( $^{\circ}\text{C}$ ) through the point  $p_s$  (mean sea level or station pressure) on the pressure scale, and reading height on the appropriate height scale.

ICAO STANDARD ATMOSPHERE SOUNDING is indicated by a thick brown line.

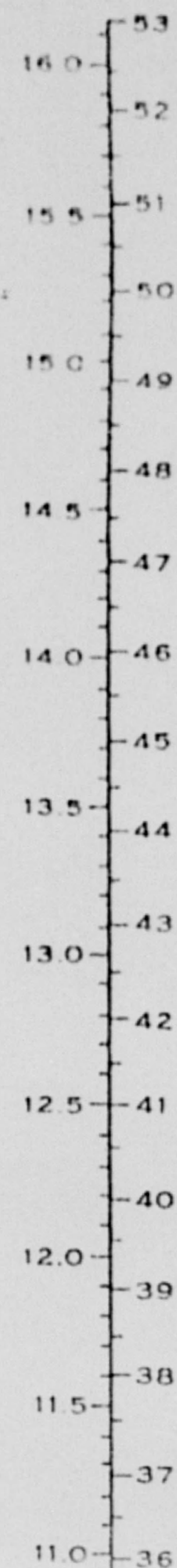
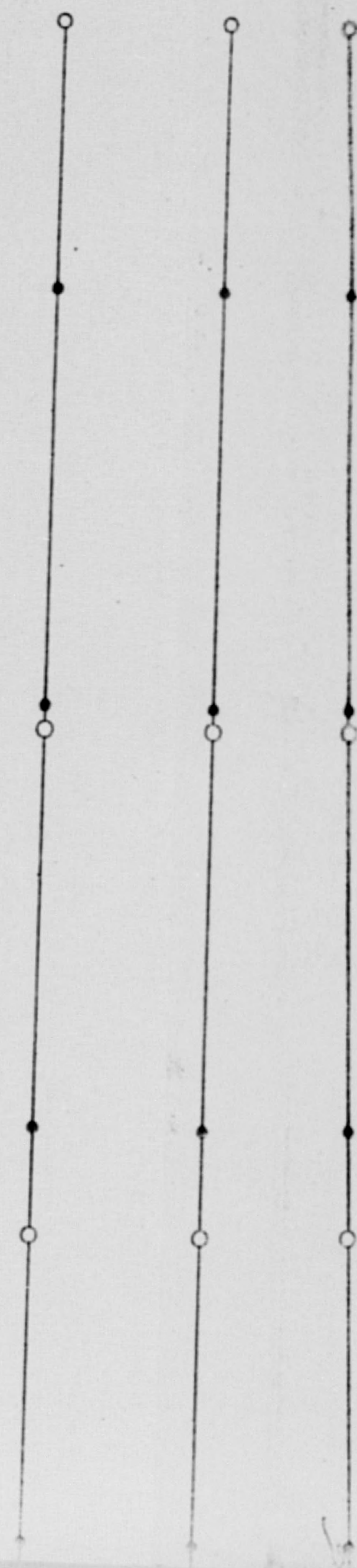
The saturated adiabats and isopleths of saturation mixing ratio are computed by use of vapor pressure over a plane water surface at all temperatures.

Extension of chart to 25 mb. has been accomplished by overlap with pressure indicated in brackets [100] at 400 mb, and [25] at 100 mb. Dry adiabats for the overlap are labeled in parentheses ( ).

APPROXIMATE VIRTUAL TEMPERATURE may be obtained from the formula  $T_v = T \frac{w}{6}$  where  $T_v$  is virtual temperature in  $^{\circ}\text{C}$ ,  $T$  is free air temperature in  $^{\circ}\text{C}$ , and  $w$  is mixing ratio in grams/kilogram. For purposes of thickness computation, use the mean temperature of the layer for  $T$  and use the mean mixing ratio of the layer for  $w$ .

Black dots • along wind scale line indicate the levels for which wind data is reported and plotted. The open circles ○ indicate the mandatory pressure levels at which wind data is also entered.

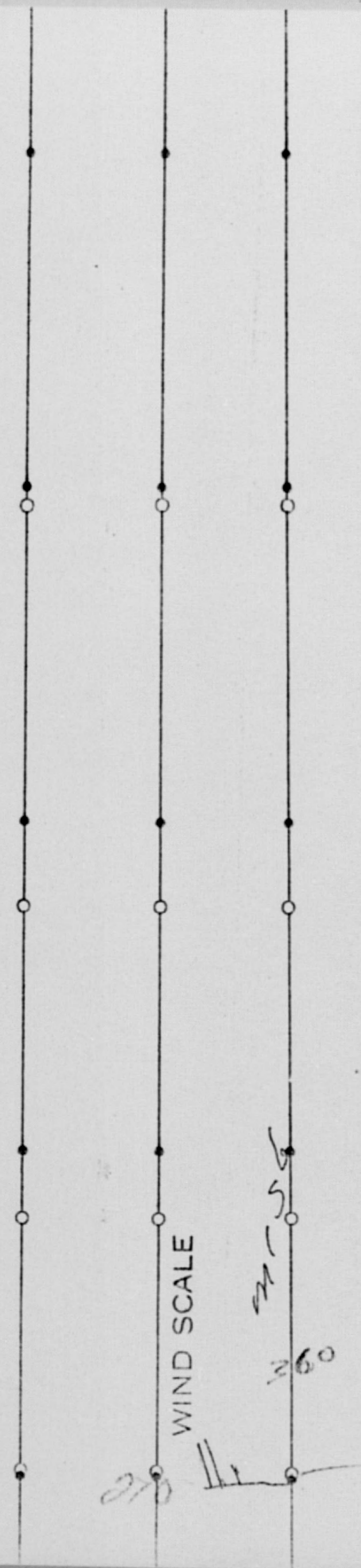
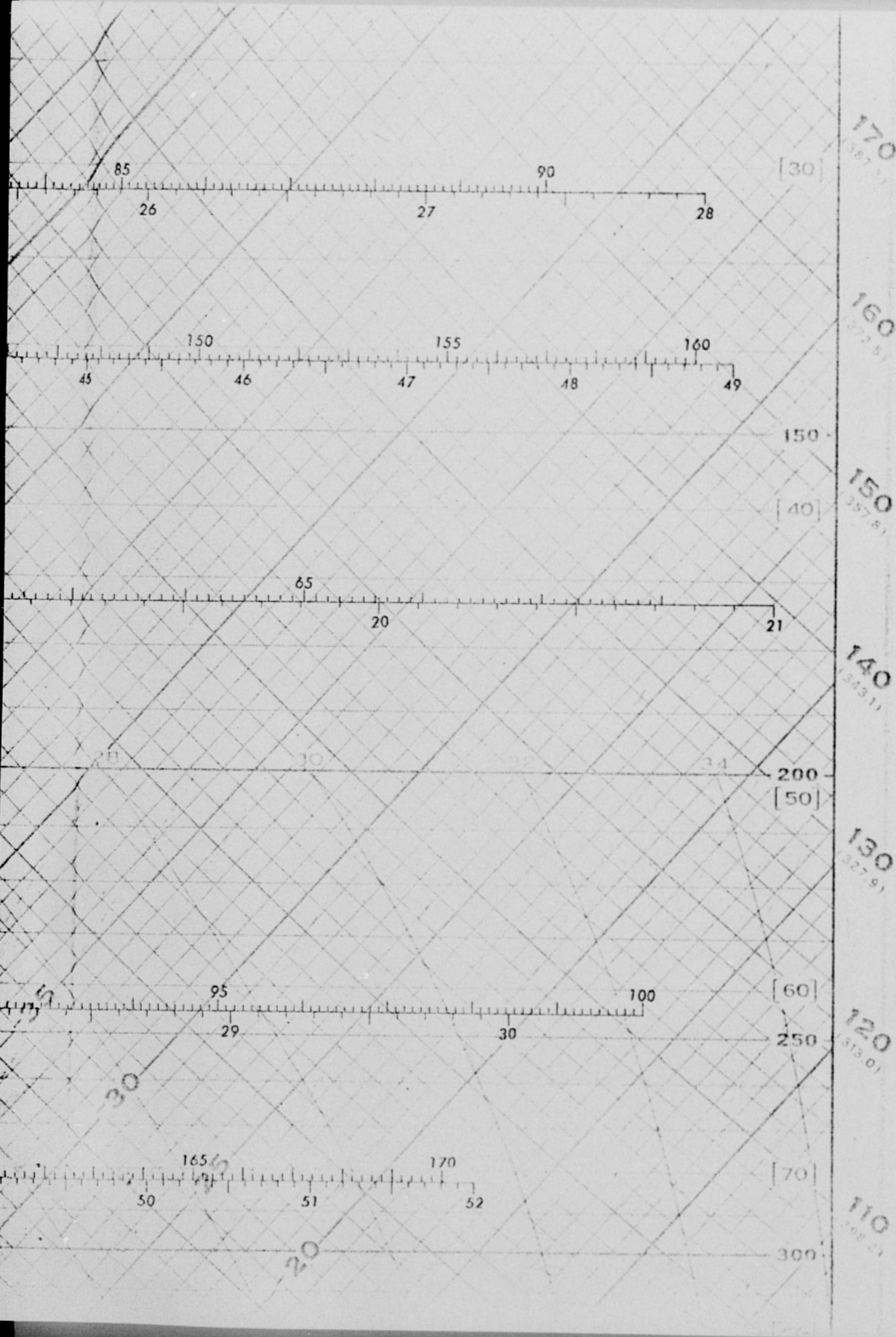
ALL heights used in this diagram are in geopotential feet and meters.



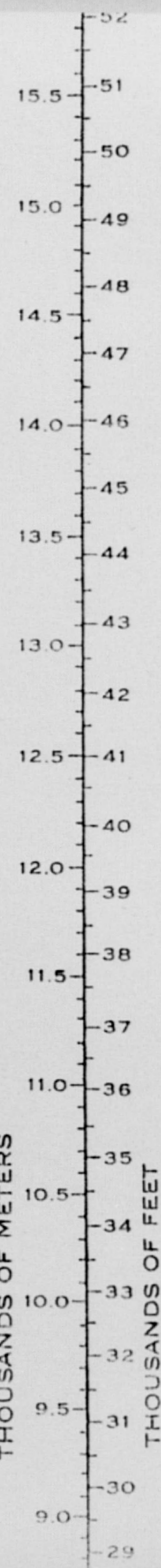
RE ALTITUDE  
ERS

| SKEW T-LOG P ANALYSIS |      |
|-----------------------|------|
| TIME                  | TIME |





0 STANDARD ATMOSPHERE ALTITUDE  
THOUSANDS OF METERS



bar at intervals of 2°C, and run diagonally upward from right to left. The Dry Adiabats for the overlap portion of the pressure range are labeled with two (2) values. (See below.)

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APPROXIMATE VIRTUAL TEMPERATURE may be obtained from the formula  $T_v = T \frac{1}{1 - w \frac{p}{p_s}}$  where  $T_v$  is virtual temperature in °C,  $T$  is free air temperature in °C, and  $w$  is mixing ratio in grams/kilogram. For purposes of thickness computation, use the mean temperature of the layer for  $T$  and use the mean mixing ratio of the layer for  $w$ .

Black dots • along wind scale line indicate the levels for which wind data is reported and plotted. The open circles ○ indicate the mandatory pressure levels at which wind data is also entered.

ALL heights used in this diagram are in geopotential feet and meters.

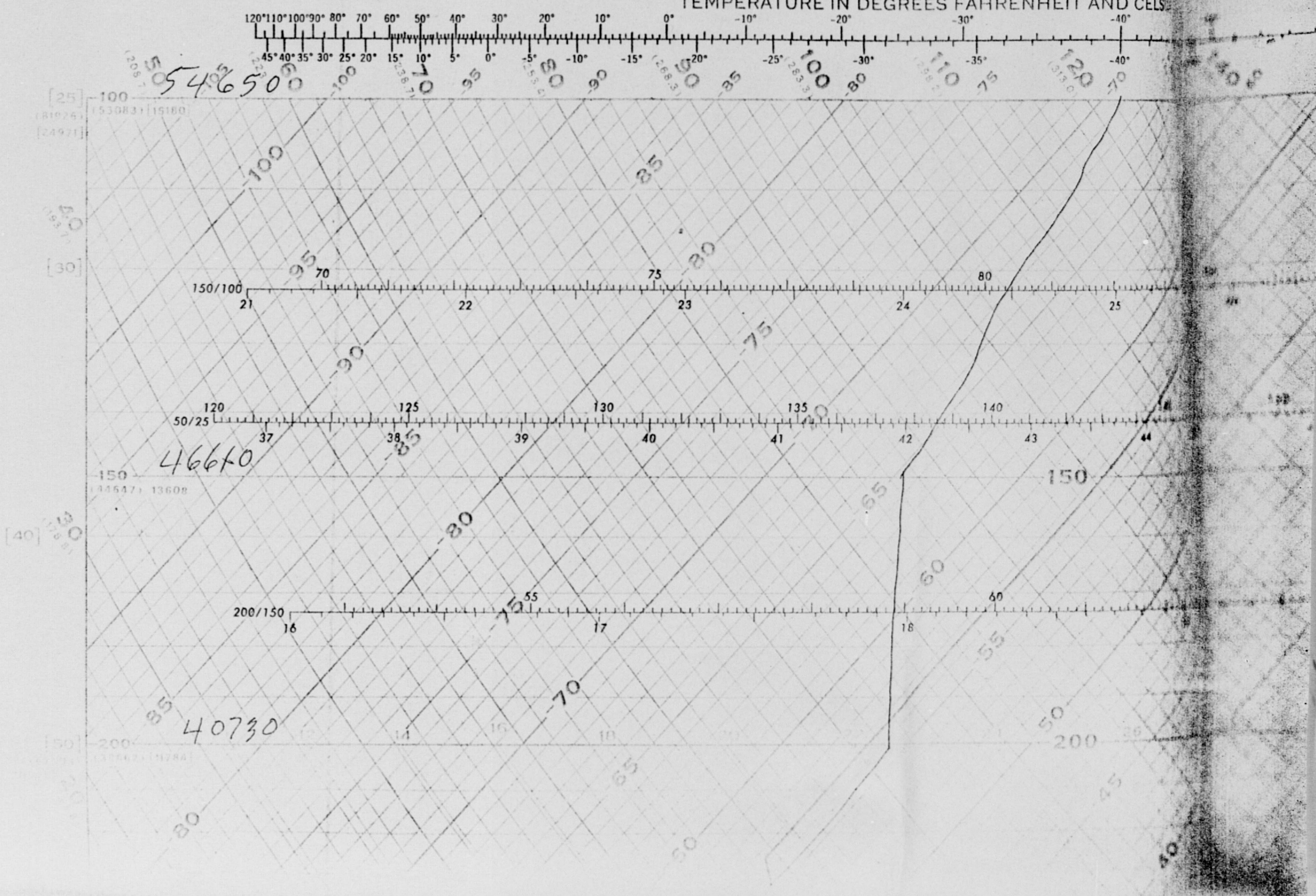
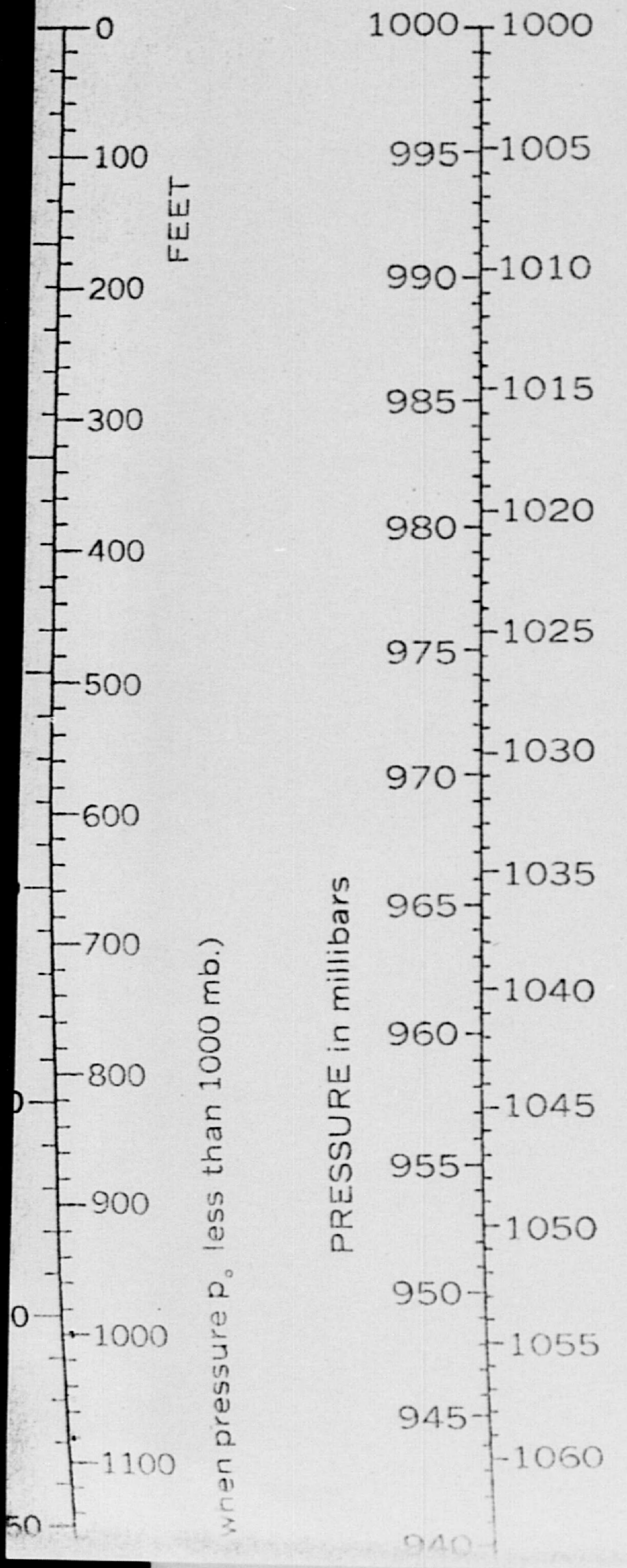
| SKEW T - LOG P ANALYSIS |          |      |     |
|-------------------------|----------|------|-----|
| TIME                    |          | TIME |     |
| AIRMASS ANALYSIS        |          |      |     |
| TYPE                    | BOUNDARY | FT.  | FT. |
| TYPE                    | BOUNDARY | FT.  | FT. |
| FREEZING LEVEL(S)       |          |      |     |
| INVERSIONS              |          |      |     |
| FRONTAL                 |          |      |     |
| RADIATION               |          |      |     |
| SUBSIDENCE              |          |      |     |
| TROPopause              |          |      |     |



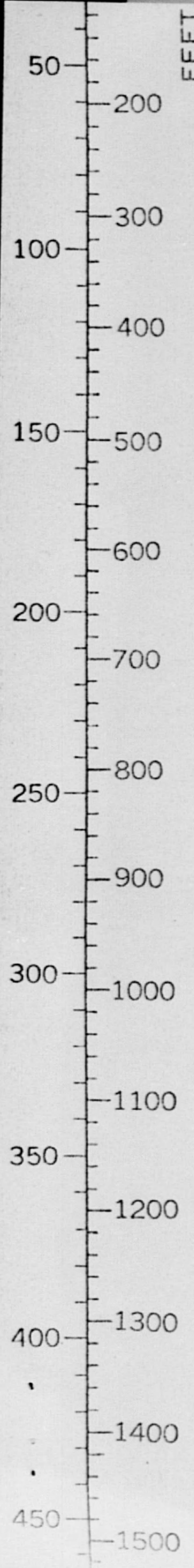
Form: AWS WPC 9-16

# USAF SKEW T, log p DIAG

TEMPERATURE IN DEGREES FAHRENHEIT AND CELSIUS

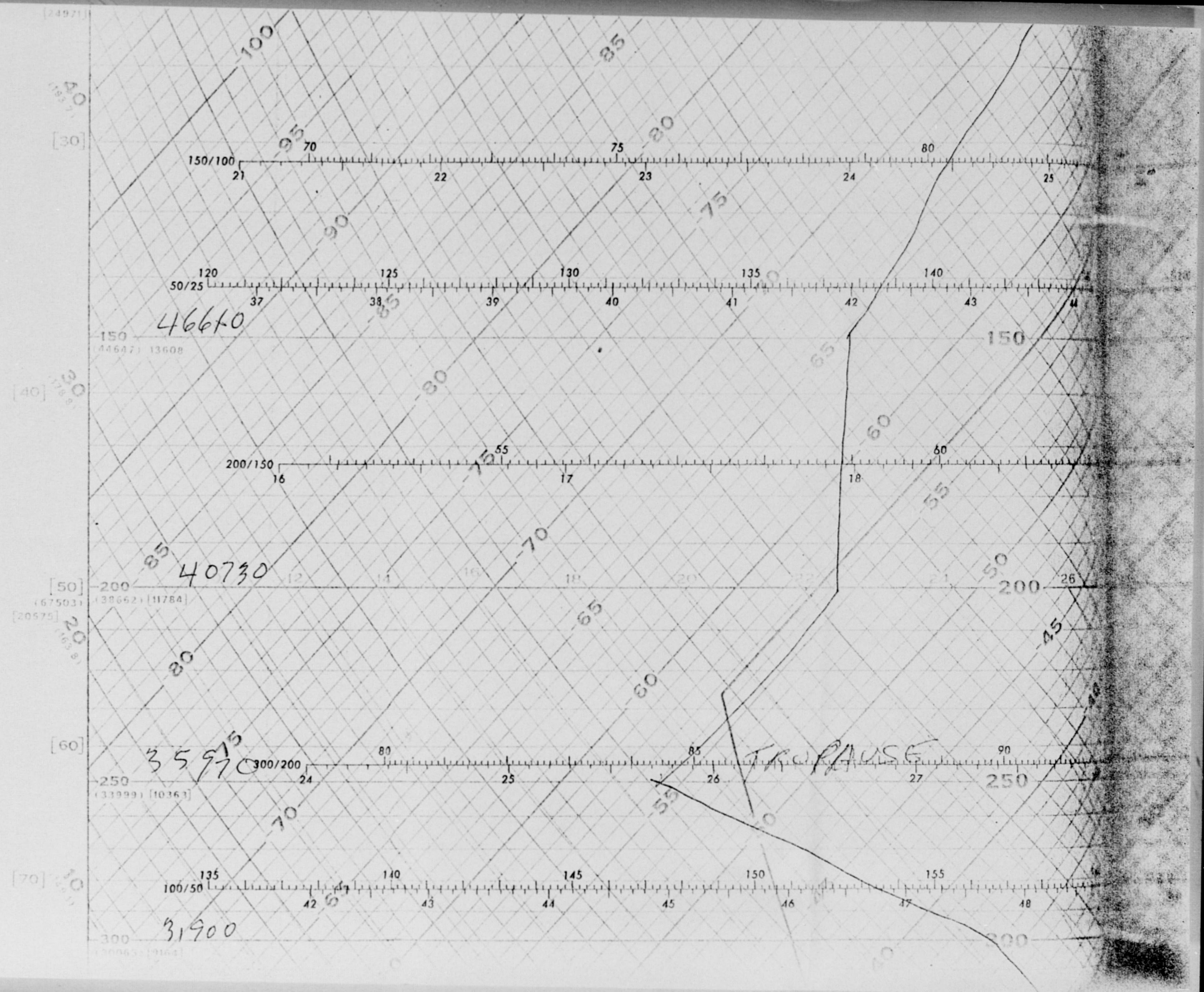
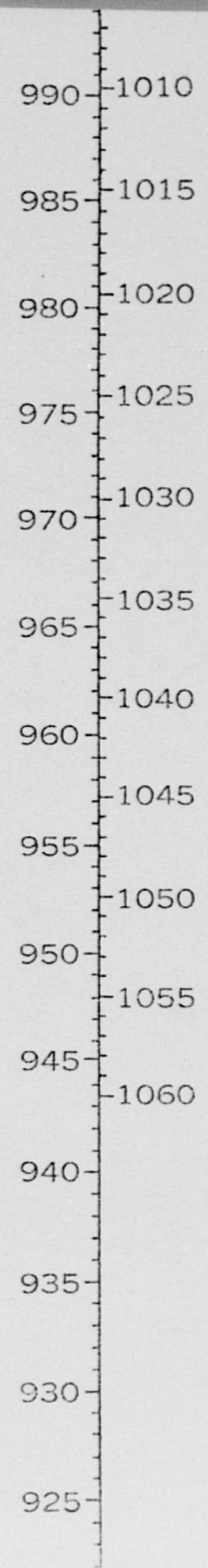




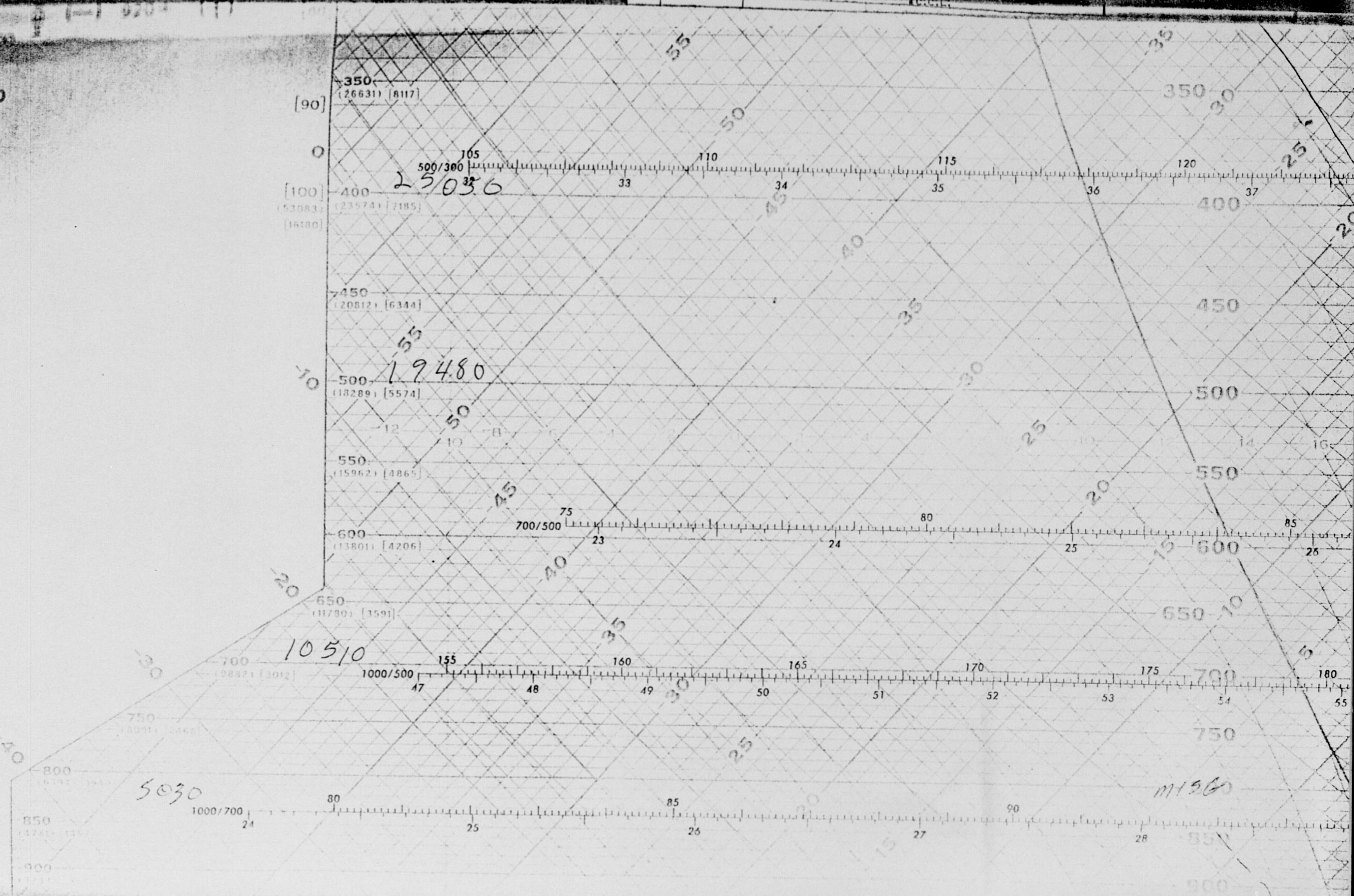
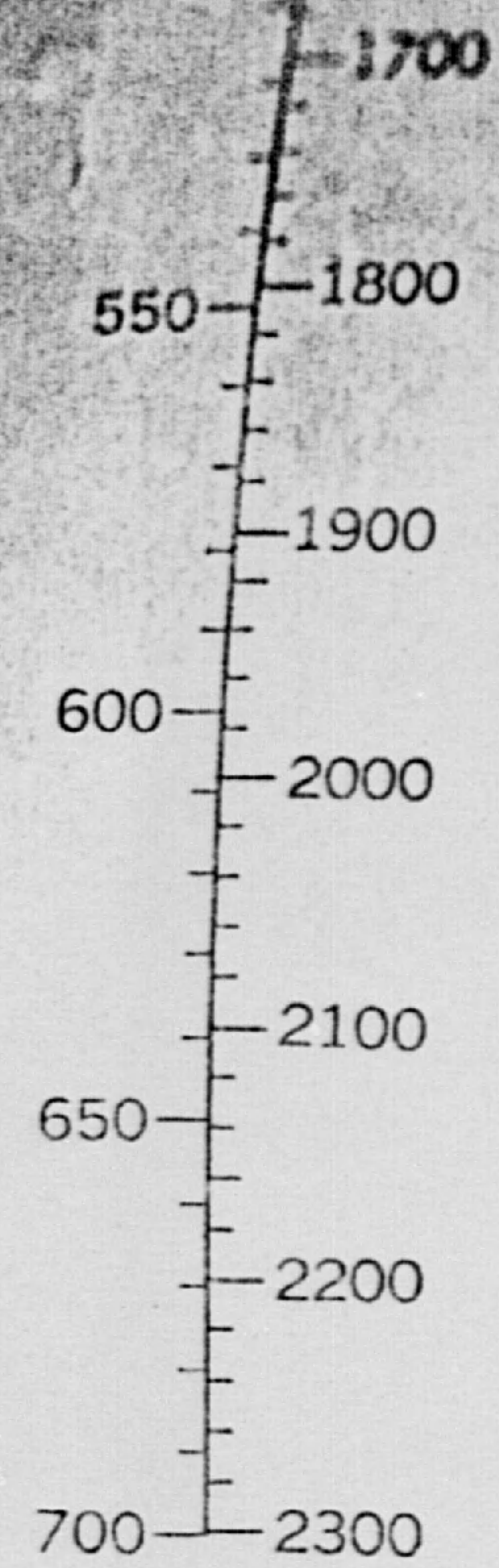


HT in feet or meters (negative when pressure  $p_0$  less than 1000 mb.)

PRESSURE in millibars









550  
600  
650  
700

1800  
1900  
2000  
2100  
2200  
2300

