PROJECT 10073 RECORD CARD

1. DATE	2. LOCATION	12. CONCLUSIONS
24 June 1957	Villa Grove, Colorado	☐ Was Balloon ☐ Probably Balloon ☒ Possibly Balloon
3. DATE-TIME GROUP Local _____ GMT 24/2330Z	4. TYPE OF OBSERVATION ☒ Ground-Visual ☐ Ground-Radar ☐ Air-Visual ☐ Air-Intercept Radar	☐ Was Aircraft ☐ Probably Aircraft ☐ Possibly Aircraft
5. PHOTOS ☐ Yes ☒ No	6. SOURCE Civilian	☐ Was Astronomical ☐ Probably Astronomical ☐ Possibly Astronomical
7. LENGTH OF OBSERVATION 2 hours	8. NUMBER OF OBJECTS one	9. COURSE 315 dgr
		☐ Other _____ ☐ Insufficient Data for Evaluation ☐ Unknown

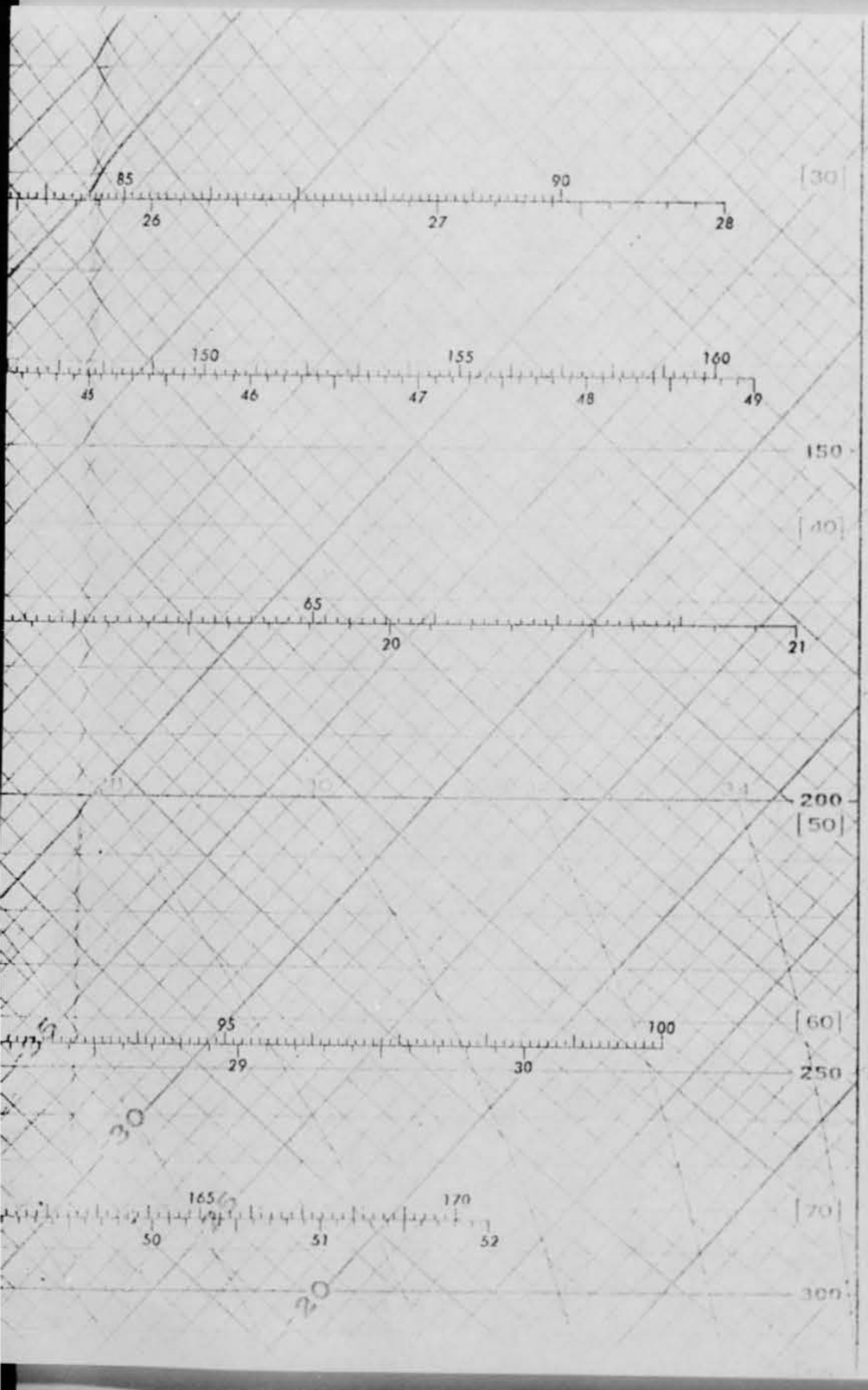
10. BRIEF SUMMARY OF SIGHTING

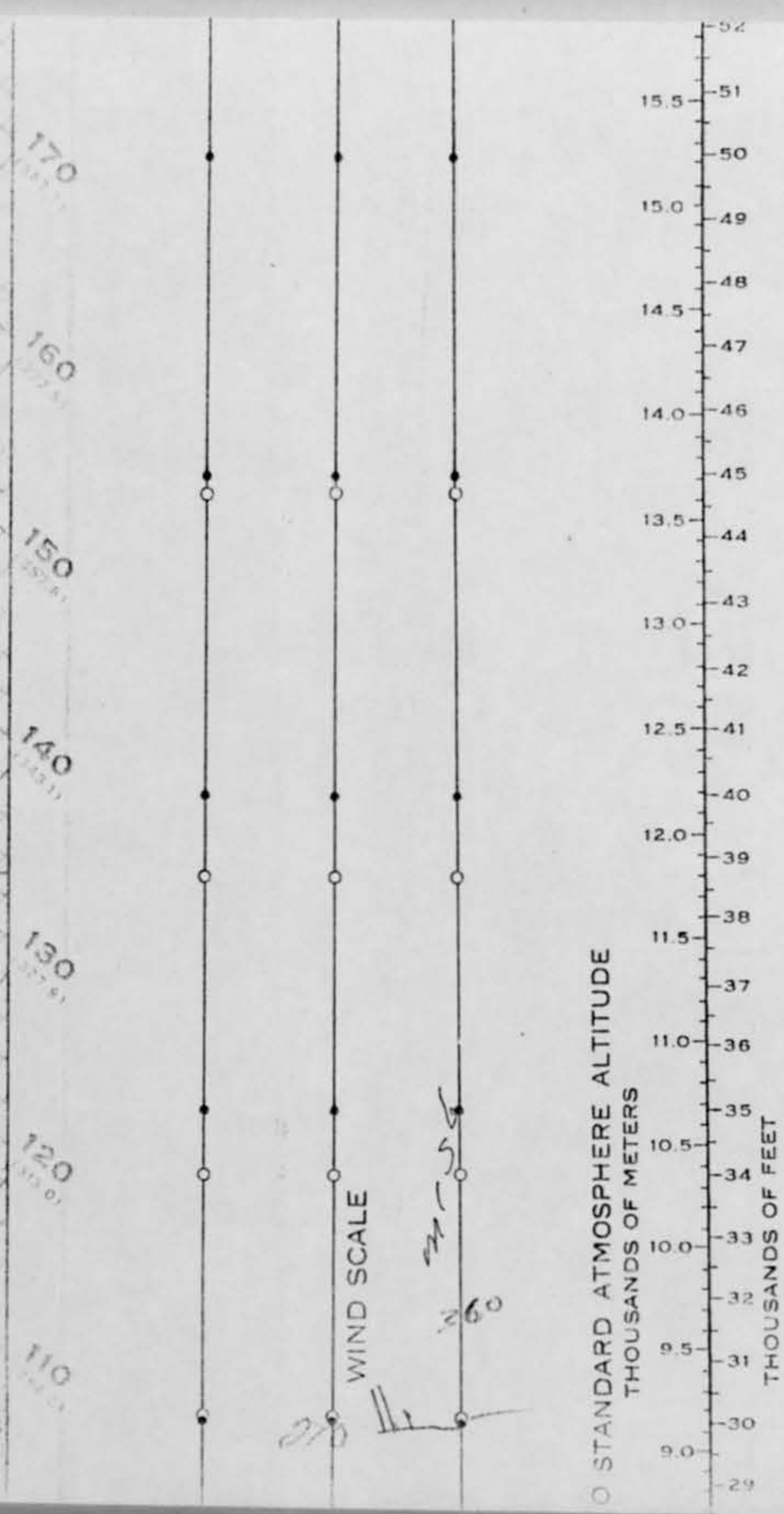
Object round at bottom, star shaped on top; size of volley ball, color bright Gold. Object drifted behind mountains. Straight flight, no maneuvers.

11. COMMENTS

Balloon observation.

ATIC FORM 329 (REV 26 SEP 52)





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.)

SATURATION ADIABATS are the curved green lines that intersect the 1050 mb. isobar at intervals of 2°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 (°F) or (°C) through the point p_o (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 °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.
TYPE			
FREEZING LEVEL(S)			
INVERSIONS			
FRONTAL			
RADIATION			
SUBSIDENCE			
TROPOPAUSE			

Form: AWS WPC 9-16

USAF SKEW T, log p DIAG

TEMPERATURE IN DEGREES FAHRENHEIT AND CELS

54650

46640

40730

FEET

PRESSURE in millibars

(when pressure p_s less than 1000 mb.)

FEET

HEIGHT in feet or meters (negative when pressure p_o less than 1000 mb.)

PRESSURE in millibars

46640

40730

35970

31900

150/100

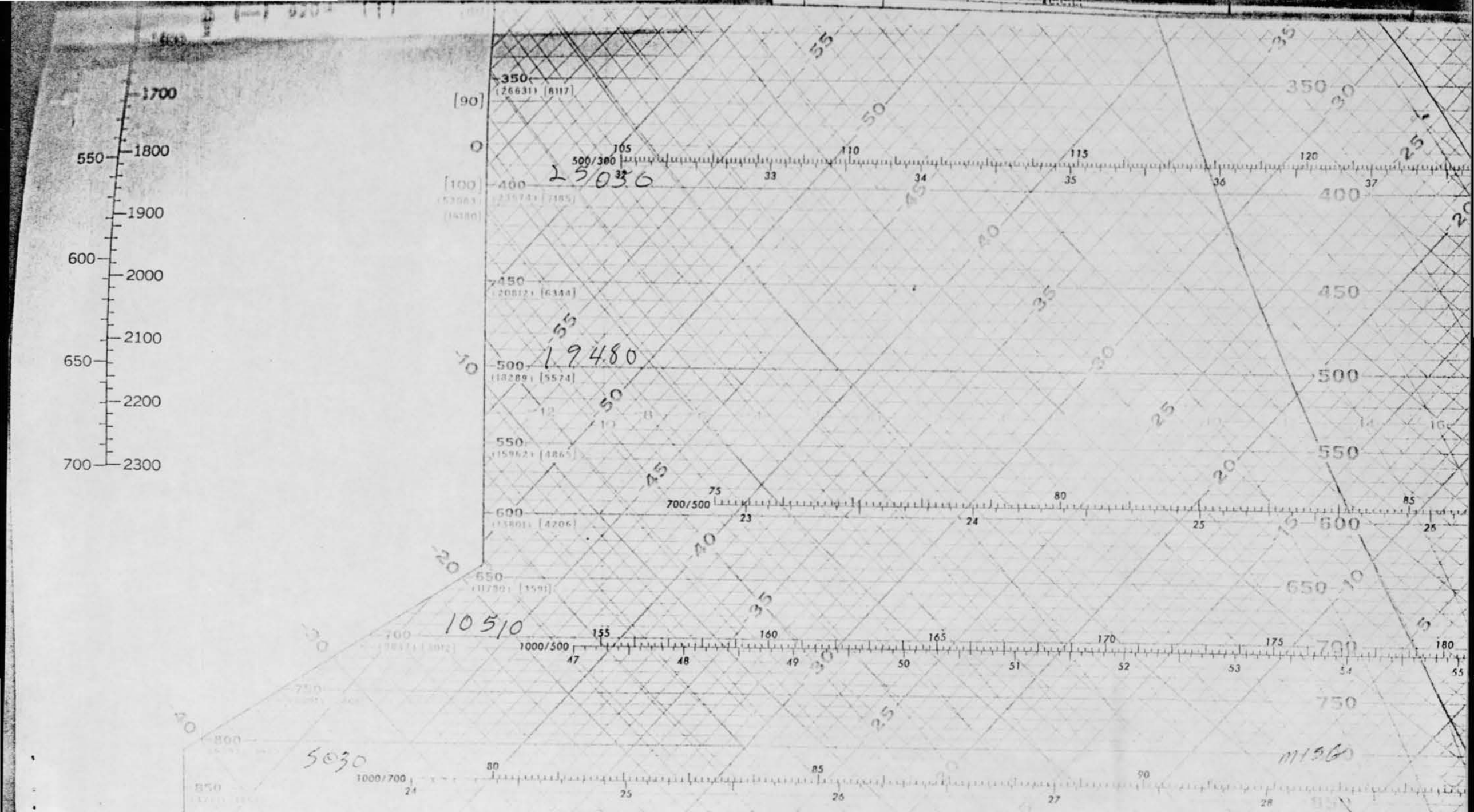
50/25

200/150

300/200

100/50

TROPOPAUSE


1700
1800
1900
2000
2100
2200
2300
350
400
450
500
550
600
650
700
750
800
850
900
950
1000
500/300
700/500
1000/500
1000/700
25030
19480
10510
5030
11560

500/300
700/500
1000/500
1000/700
25036
19480
10510
5030
330
FAHRENHEIT TEMPERATURE SCALE

B. VOLLEY BALL

C. BRIGHT GOLD

D. ONE

E. NEGATIVE

F. NEGATIVE

G. NEGATIVE

H. NEGATIVE

I. NEGATIVE

2. A. SIGHTER OBJECT FROM HIGHWAY

B. APPROXIMATELY 60 DEGREES ELEEATION 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. 24/2330Z

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

8. NONE

9. NEGATIBE

10. NEGATIVE

11. CAPTAIN EUGENE MAXWELL CMM INTELLIGENCE OFFICER PD POSSIBLY

A WEATHER BALLON PD END

CT

25/3047Z JUN RJEDEN

24/23302

Matthews

240657-02

25-

1
2 } 4E4
3-4X2

26 JUN 57 10 02

WPHD 13V WPCUE YMB126ENA127

RJEDIT RJEPHQ RJWFDN

RJEDEN 116

251655Z

COMDR 4502 AISS ENT AFB COLO

DEN/COMADC ENT AFB COLO

FDH/COMDR 34TH AD KIRTLAND AFB NMEX

WP/COMDR ATIC WPAFB OHIO

HD/DI HEDUSAF WASH DC

WAE/-10CP 555 PD U F O E PD

Report # DI-UFOB-1-57
Encl # 2

[redacted] WHEN FILLED IN

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

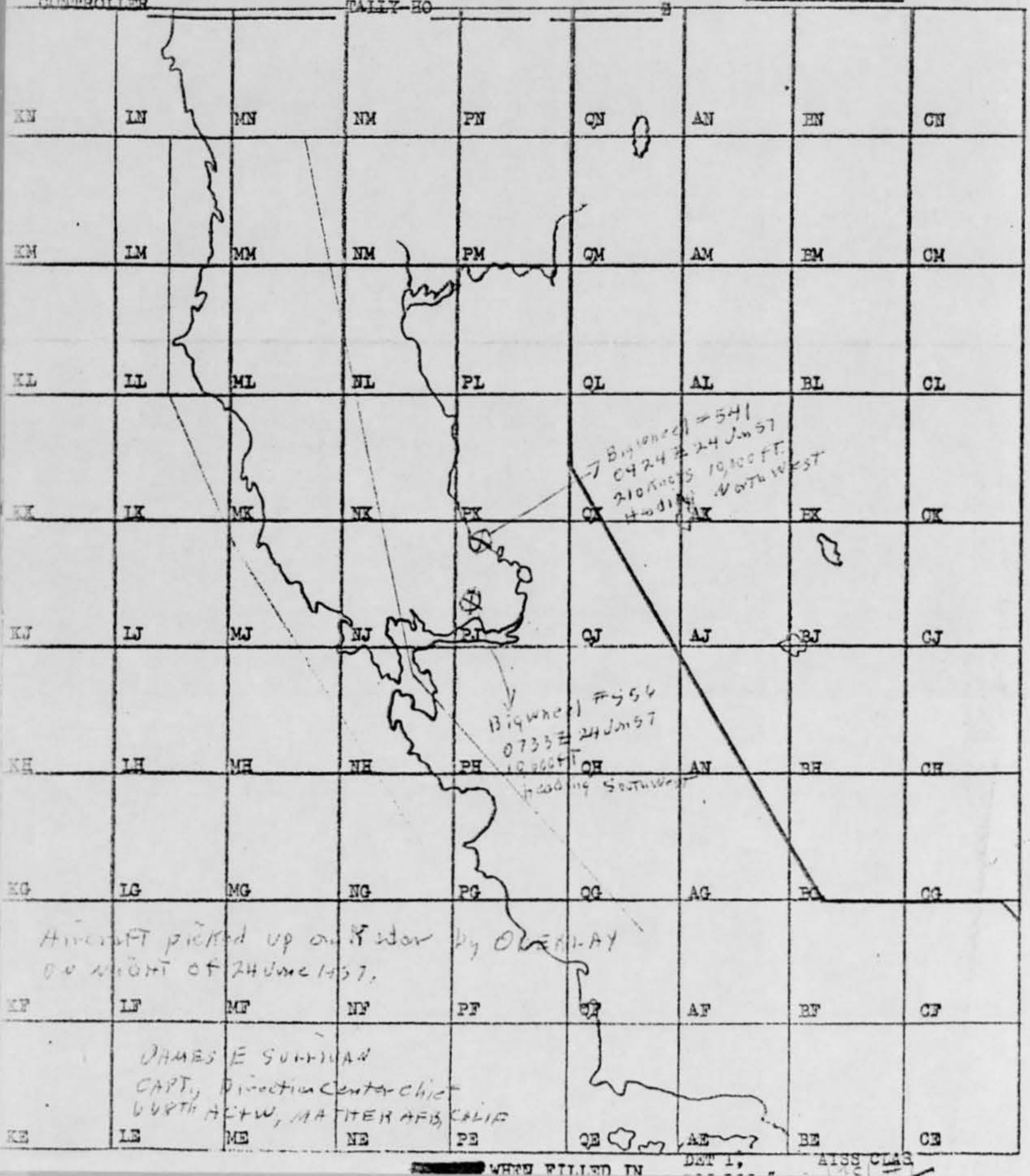
DATE 24 JUNE 1957 INITIAL _____ _____ S

TRACK NO _____ UNKNOWN _____ _____ S

CONTROLLER _____ TALLY-HO _____ _____ S

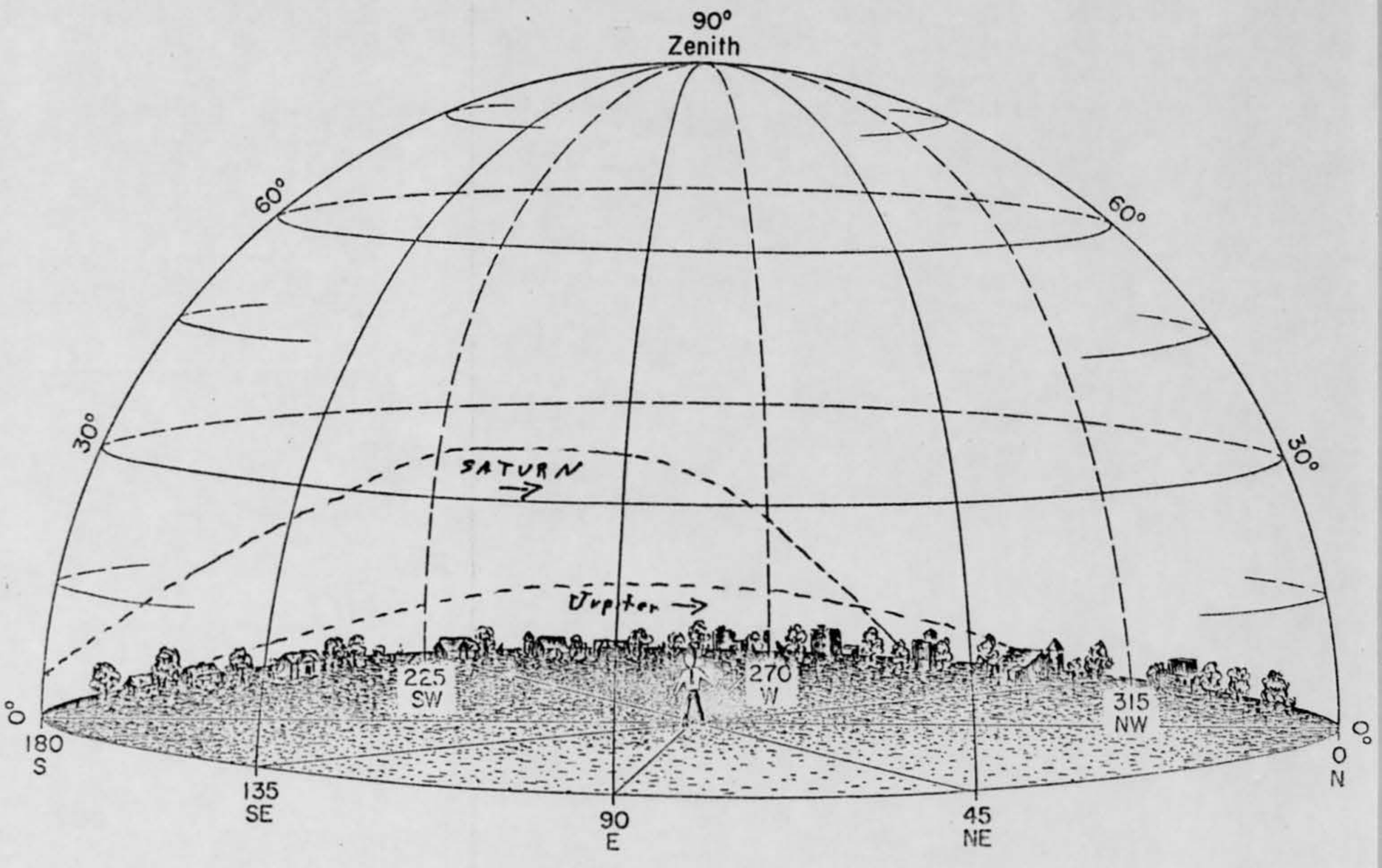
FIGHTERS _____

I.D. _____

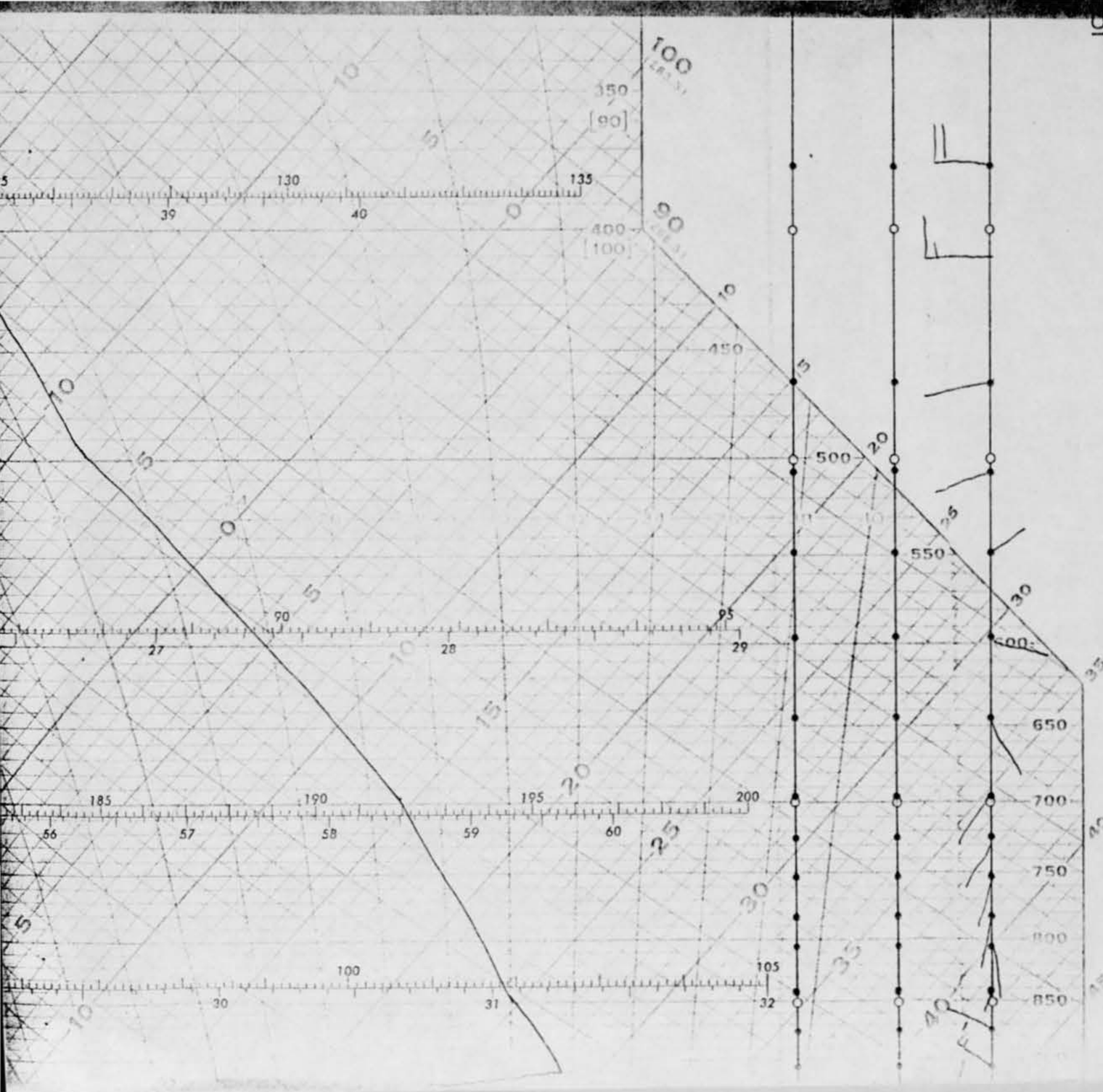


[redacted] WHEN FILLED IN DET 1, AISS CLASS

Report # D1-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



L.F.C.	
SIGNIFICANT WIND	
MAX.	
MIN.	
LEVELS OF SHEAR	
STABILITY	
INDEX TO	INDEX TO
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

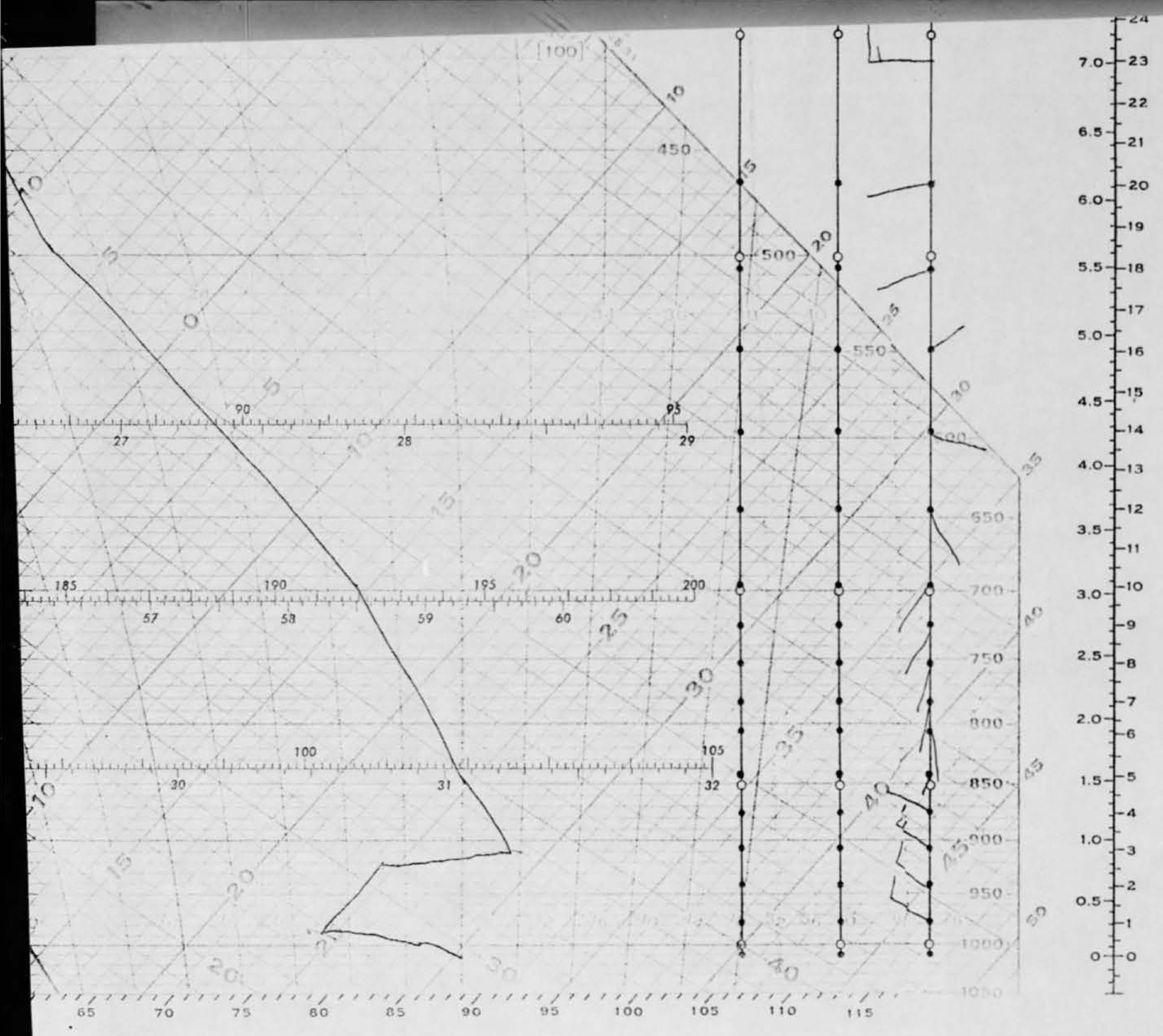
FORECASTER	FORECASTER

493 OAK

00002 +7 [illegible] 24 JUN 57

THIS TRUE [illegible]

OF RAOB FOR 24 JUNE 57



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 ~~Extract~~ 24 JUN 57

THIS TRUE ~~Extract~~ OF RAOB FOR 24 JUNE 57 LAUNCHED FROM OAKLAND CALIF AND PLOTTED BY BASE WEATHER STATION AT MC CLELLAN AFB

NUMBER STATION

TIME (GCT) DATE (GCT)

A B S[illegible]

M/SGT A. B. SORENSEN

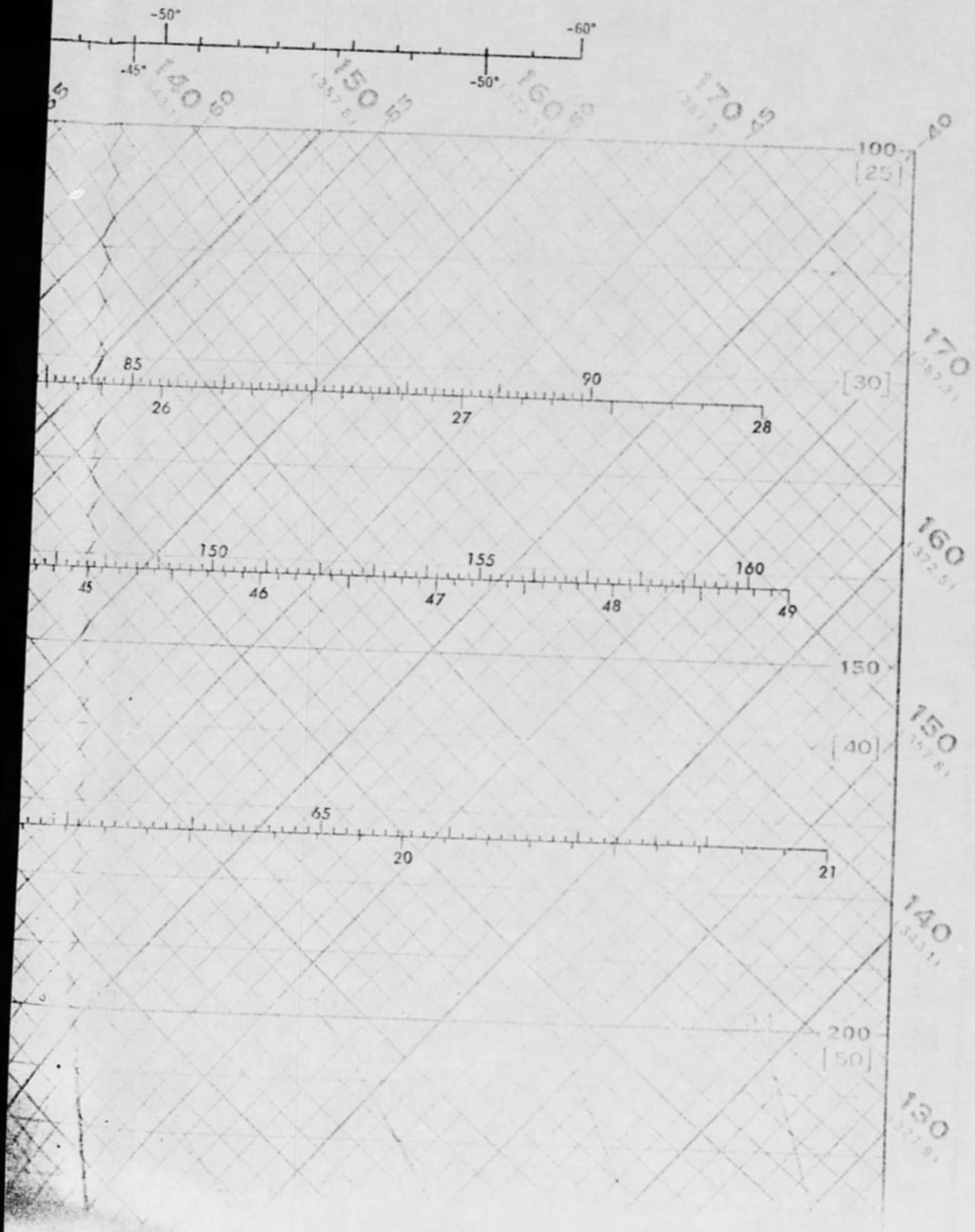
Det 8 - 6th WEA GROUP

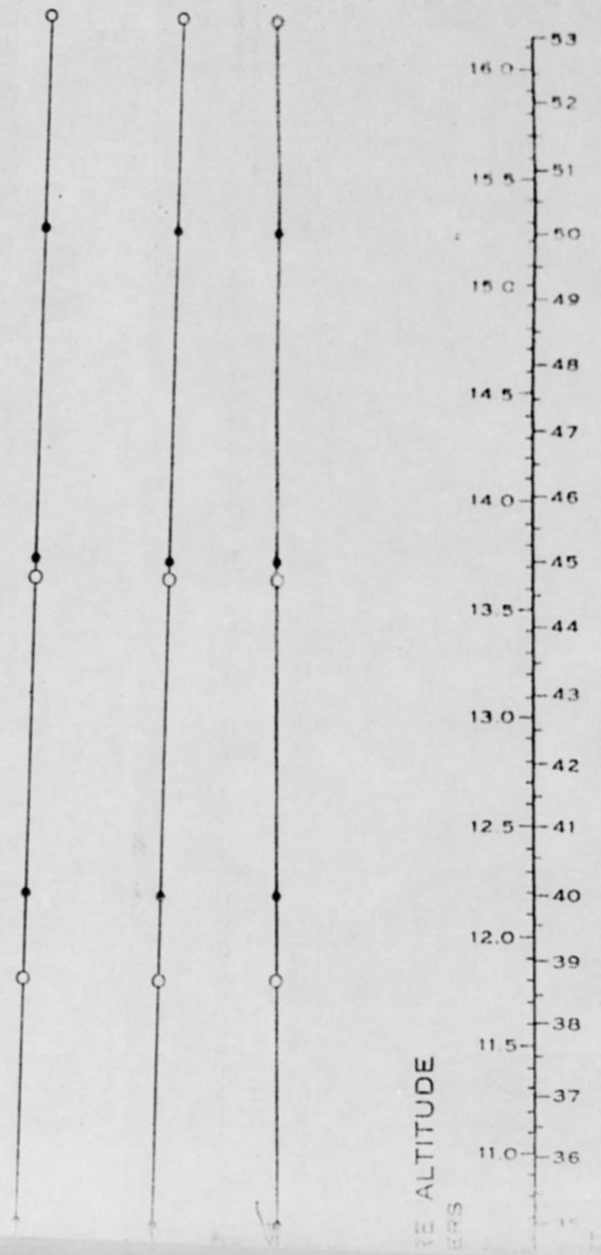
corrections and additions to this diagram will be direct to HEADQUARTERS AIR WEATHER SERVICE Washington 25 D. C.

This diagram replaces AWS WPC 9-16

Form: AWS WPC 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 (°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°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°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 (°F) or (°C) through the point p_o (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 °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