

1. DATE - TIME GROUP 13 Feb 53 13/0835Z	2. LOCATION Carswell AFB, Texas
3. SOURCE Civilian Man	10. CONCLUSION VISUAL - WAS AIRCRAFT. RADAR - GROUND TARGETS. Evaluation: Possible ground clutter & F-86. Temperature inversion existent. Radar analyst stated that it had highly probably that blips were ground targets.. VISUAL: It is believed that lights were from an a/c. 11. BRIEF SUMMARY AND ANALYSIS Three bright lights were observed hovering in various formations during a period of 10-15 minutes. Objects were also picked up by radar on B-36 a/c. 2 minutes elapse between visual sighting and radar sighting.
4. NUMBER OF OBJECTS Three	
5. LENGTH OF OBSERVATION 10-15 Min.	
6. TYPE OF OBSERVATION Ground-Visual Ground-Radar	
7. COURSE	
8. PHOTOS ☐ Yes ☒ No	
9. PHYSICAL EVIDENCE ☐ Yes ☒ No	

FORM
FTD SEP 63 0-329 (TDE) Previous editions of this form may be used. /

UNCLASSIFIED

TO: ATIAE-5
THRU: ATIAE

SUBJECT: Carswell AFB Radar Sites

FROM: ATIAE

DATE: 4 Aug 53

COMMENT NO. 2

ATIAE2/Mr. James/wh
65364/Bldg 268 A

1. Reference is made to the additional information mentioned in paragraph 1 of Comment No. 1. This information is quoted below:

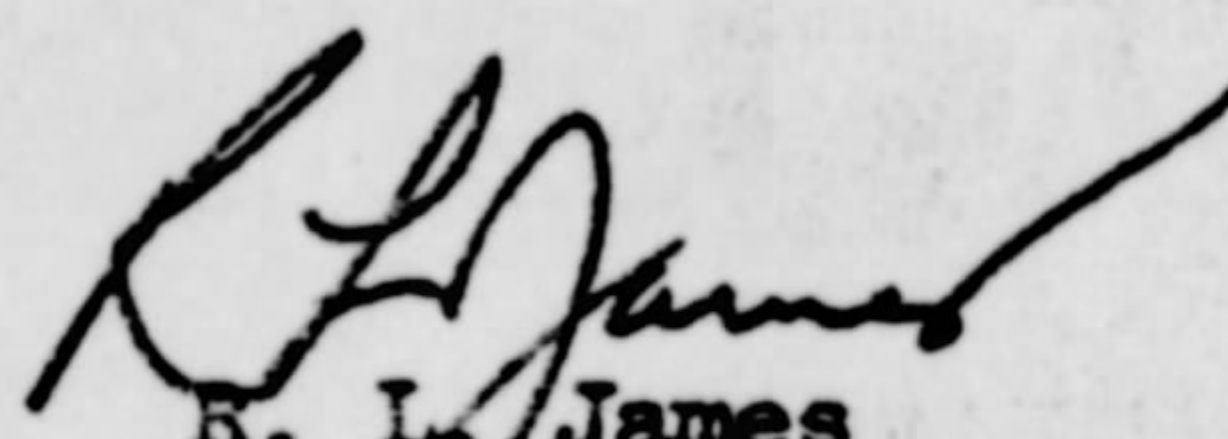
"Blips were at extreme range of radar and operator could not tell whether they moved in range, but they did not move in azimuth. Blips did not change size. Blips disappeared into noise and did not reappear. Radar observers then attempted to pick them up on tail radar of another B-36 aircraft unsuccessfully. Returns of nearest blip were very sharp compared to B-36 target. Other blip was just above noise level of the radar."

2. The characteristics of the above signals are compatible with those of ground return. The inclosed weather information indicates that there was a temperature inversion at 1000 Mb pressure (near the earth) and at 890 Mb pressure. Also a rapid moisture lapse began at 890 Mb pressure.

3. It is considered that it is highly probable that the reported radar targets were ground targets.

4. This correspondence may be downgraded to CONFIDENTIAL upon removal of inclosure, in accordance with paragraph 25e, Air Force Regulation 205-1.

1 Incl
n/c


R. L. James
Chief, Radiation Section

2

DOWNGRADED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS.
DOD DIR 5200.10

UNCLASSIFIED

DISPOSITION FORM

SECURITY CLASSIFICATION (If any)

UNCLASSIFIED

FILE NO.

SUBJECT

Carswell AFB Radar Sites

TO ATIAE-2

FROM ATIAE-5

DATE 27 Jul 53

COMMENT NO. 1

Lt Olsson/vs
65365/B263A/P A-12

1. Inclosed is a radar sighting on 13 Feb 53 from Carswell AFB, Texas, concerning radar blips picked up by B-36 tail radar. In a preliminary analysis of this report, your office stated that the radar information supplied was insufficient for you to analyze. For example, there was no indication that the targets observed on the APG-41 were moving targets. Project Blue Book has requested and received the additional information needed and incloses it herewith.

2. According to this information the targets in question were moving and also a certain amount of ground clutter or "noise" was present. Project Blue Book requests your office determine, in the light of the additional information you had requested, whether temperature inversion was present or any other phenomena known to you could have caused this sighting.

1 Incl

File dtd 13 Feb 53
Carswell AFB, Texas

for *Map B. Hutch, A/c*
ROBERT M. OLSSON, 1st Lt, USAF
Chief, Aerial Phenomena Section
Electronics Branch
Technical Analysis Division

If inclosure ☒ Is withdrawn (or not attached), the classification of this correspondence will be downgraded to ~~Secret~~ in accordance with paragraph 25E, AFR205-1.

3

DOWNGRADED AT 3 YEAR INTERVALS
DECLASSIFIED AFTER 12 YEARS.
DOD DIR 5200.10

UNCLASSIFIED

DD

BY US

16-52801-3

U. S. GOVERNMENT PRINTING OFFICE: 1952 O - 986875

CASE #24

13 Feb 53

Carswell AFB, Texas

At 0235 in the morning of 13 Feb 53, a civilian visually observed 3 very bright lights traveling across the sky over Fort Worth, Texas. The weather was clear and calm. These unidentified objects were traveling from ESE toward the observer at a moderate rate of speed. (Cruising speed of a F-86.) The 3 lights had the same intensity as the rotating beacon at Carswell AFB. All 3 lights were of similar intensity, and white in color except the center light which was bluish-green. These lights were observed for a period of 10-15 minutes until disappearing out of sight.

The lights were first observed approximately 500' apart and appeared stacked in ^{al} vertical echelon. The light suddenly accelerated a distance of 1500' and came to a complete stop. In sequence the other 2 lights duplicated this maneuver. After assuming the original formation these lights repeated the same maneuver only ending up in horizontal echelon. These maneuvers appeared to take place over a distance of 2 miles and at an altitude at or below 4,000'. After the 3 lights came to a stand-still in a third ^{al} maneuver they were arranged in a vertical echelon; then with the center light acting as a pivot the 2 outer lights maneuvered in a swinging motion resembling the motion of a kite's tail. The lights were next observed in a steep climb and attained an altitude of approximately 20,000' very rapidly.

A Radar technician then picked up blip on the tail radar of B-36 a/c. The lapse of time between visual and first radar sighting was estimated 2 minutes. The lights were observed at a maximum azimuth of 80 deg to the S, between 40-50 deg vertical angle, between 8-10,000 yards on etchings. On a 2-2 $\frac{1}{2}$ multiplier, this distance would be approximately 16,000 yards.

Only two of the three original lights were observed on the radar. There was a considerable amount of "snow" but the closer blip was distinguished easily. A check for ground returns was made and none was received. An attempt was made to pick up these lights on 3 different radar sets of other a/c with negative results.



CASE #24 (contd)

Besides the original observer, 8 other observers witnessed this incident. An Electronics Data Sheet was forwarded to Carswell AFB to be filled out so as to get technical information on radar.

The radar data contained in the report from Carswell AFB was not sufficient for analysis purposes. For instance, there was no indication that the targets observed on the radar set were moving targets. The weather data submitted indicated that there was ~~an~~ a temperature inversion and a moisture lapse at about the time of the incident. This weather condition could cause radar ground clutter signals to appear above the horizon, although the report states that a check indicated no ground return signals were received. A wire was sent to Carswell AFB requesting information as to whether the objects moved or not. Radar operators at Carswell AFB stated that this was extreme range of radar and operator could not tell whether they moved in range but they did not move in azimuth. Also stated that blip did not change side. Blip disappeared into noise and did not reappear. Radar eye observers then attempted to pick them up on tail radar of another a/c. This attempt was unsuccessful.

ATIC Comment and Conclusion

From

Since the above stated information, there was a temperature inversion at the time of sighting and it is believed by ATIC analysts that radar sighting was a temperature inversion or weather effects on radar and the visual sighting was an a/c flight.

UNCLASSIFIED

ER/jw

1443

HEADQUARTERS 19TH AIR DIVISION
Carswell Air Force Base
Fort Worth, Texas

7DI 350.09

- 6 JUL 1953

SUBJECT: Unidentified FLYOBRPT 13 February 1953

TO: Commander
Air Technical Intelligence Center
Wright-Patterson Air Force Base
Dayton, Ohio

1. Reference your letter AFOIN-ATIAE-5, 9 June 1953.
2. ATIC Form 332, forwarded to this headquarters by referenced letter, has been completed and is returned herewith as Inclosure #1.

FOR THE COMMANDER:

Carl T. Grounds

1 Incl:
ATIC Form 332, completed
29 June 1953 (1 copy)

CARL T. GROUNDS
WOJG USAF
Ass't Adj.

If inclosure no. 1 is withdrawn
(or not attached) the classification
of this correspondence will be down-
graded to Unclassified in
accordance with AFR 205-1.

DOWNGRADED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS.
DOD DIR 5200.10

UNCLASSIFIED

6897
705

ACTION

1953 FEB 16 09:18

DD

DISPATCHED

UNCLASSIFIED

AT/C

1. Attn
3. Attn
3. C files

RB391 0

JPB119

MA089

YA204

WDA205

JWFQB A065

PP JEDMH JEDWP JEDEN JEPHQ 444

DE JWFQB 066

P 132335Z ZNJ

FM CGADIV 19 CARSWELL AFB TEX

TO JEDMH/CGSAC OFFUTT AFB OMAH NEBR

JEN/CGAF 8 CARSWELL AFB TEX

JEPHQ /DIRECTOR OF INTEL HQ USAF WASHINGTON 25 DC

JEDWP /AIR TECH INTEL CENTER WRIGHT-PATTERSON AFB OHIO ATTN ATIAA2C

JEDEN/CG ENT AFB COLORADO SPRING COLO

[REDACTED] 7A2 644. FLYCDBRPT. 3 BRIGHT LIGHTS WER FIRST VISUAL
SIGHTING STACKED IN VERTICAL ECHELON HOVERING. SECOND VISUAL SIGHTING WAS
HORIZONTAL ECHELON IN BROKEN FORMATION. THIRD SIGHTING WAS A VERTICAL
ECHELON HOVERING WIHT LIGHTS MOVING AS INVERTED PENDULM. A FOURTH

SIGHTING WAS MADE BY B-36 GL TAIL RADAR. SIGHTING S WERE MADE 13 FEB

63 BETWEEN 0235 AND 0300 FOR A PERIOD OF 10 TO 15 MIN. THE OBS WAS

AT CONVAIR E OF THE FLTLINE FACING ESE. RELIABLILTY OF OBS IS F-6.

OBS WAS MR J V RUTH 1205 GRACE ST WEATHERFORD TEX. WEATHER AND WIND

CONDITIONS AT TIME WAS CLEAR. SHORTLY AFTER SIGHTING A B-36 APPROACHED

FROM THE WEST.

DOWNGRADED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS.
DOD DIR 5200.10

UNCLASSIFIED

cy 15

14/0137Z FEB JWFQB

UNITED STATES

IR-11-53

0835 it
0900 LUNCH

FLYCBRPT

UNCLASSIFIED

TEXAS

7TH BOMB WING, CARSWELL AFB, TEXAS

18 February 1953

13 February 1953

F-6

2nd Lt Charles F. Springer

Mr. J. [redacted]; [redacted]
Weatherford, Texas; Pno: [redacted]

AF Ltr 200-5; 19th Air Division Message 7A2 544, DTG 132335Z Feb 53

F-6 Annex

1. At 0235 on the morning of 13 Feb 1953, Mr. [redacted] visually observed 3 very bright lights traveling across the sky over Fort Worth, Texas.

2. The lights were first observed approximately 500 feet apart and appeared stacked in vertical echelon.

3. The lights were next observed in a steep climb and attained an altitude of 20,000 feet very rapidly.

4. Mr. [redacted] then picked up blips on the tail GL AFG-41 Radar on B-36 aircraft 310, station 47, at Convair, Fort Worth Division.

5. Mr. [redacted] observed only two of the 3 original lights on the AFG-41. There was a considerable amount of "snow" but the closer blip was distinguished easily.

6. Besides Mr. [redacted], 8 other members of Department 76 at Convair witnessed this incident.

APPROVED:



EDWARD RATKOVICH
Major, USAF
Director of Intelligence

1

Sketch of Radar Return (3 copies)

DOWNGRADED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS.
DOD DIR 5200.10

2
12 12

7th Bomb Wing, Carswell AFB, Tex

2

2

1. At 0235 on the morning of 13 Feb 1953, Mr. [redacted] visually observed 3 very bright lights traveling across the sky over Fort Worth, Texas. The weather was clear and calm. These unidentified objects were traveling from east southeast toward the observer at a moderate rate of speed (cruising speed of an F-86). The 3 lights had the same intensity as the rotating beacon at Carswell AFB. All 3 lights were of similar intensity, and white in color except the center light which was bluish-green. These lights were observed for a period of 10 to 15 minutes until disappearing out of sight.

2. The lights were first observed approximately 500 feet apart and appeared stacked in vertical echelon. The lower light suddenly accelerated a distance of 1500 feet and came to a complete stop. In sequence the other two lights duplicated this maneuver. After assembling in original formation, these 3 lights repeated the same maneuver only ending up in horizontal echelon. These maneuvers appeared to take place over a distance of 2 miles and at an altitude at or below 4,000 feet. After the 3 lights came to a standstill in a third maneuver they were arranged in a vertical echelon; then with the center light acting as a pivot the 2 outer lights maneuvered in a swinging motion resembling the motion of a kite's tail.

3. The lights were next observed in a steep climb and attained an altitude of 20,000 feet very rapidly. (merely a visual estimate - not to be taken as true value)

4. Mr. [redacted] then picked up blips on the tail (GL AFG-41) radar on B-36 aircraft 310, station 47, at Convair, Fort Worth Division. The lapse of time between visual and first radar sighting was an estimated 2 minutes. The lights were observed at a maximum azimuth 80 degrees to south, between 45-60 degrees vertical angle, between 8-10,000 yards on etchings. On a 2-2 1/2 multiplier, this distance would be approximately 16,000 yards. A sketch of the radar presentation received is attached as an inclosure. *or approx 9 miles away*

5. Mr. [redacted] observed only two of the 3 original lights on the (AFG-41). There was a considerable amount of "snow" but the closer blip was distinguished easily. A check for ground returns was made and none was received. Mr. Ruth attempted to pick up these lights on three different radar sets of other aircraft with negative results. ||

6. Besides Mr. Ruth, 8 other members of Department 76 at Convair witnessed this incident. They are listed below.

Name	Address	Phone
[redacted]	[redacted]	
[redacted]	[redacted], Tex	NO 8432
[redacted]	[redacted], Tex	SU 5403
[redacted]	[redacted], Fort Worth, Tex	LA 0783
[redacted]	[redacted], Fort Worth, Tex	NO 4852
[redacted]	[redacted], Fort Worth, Tex	WE 3558
[redacted]	[redacted], Fort Worth, Tex	WI 1300
[redacted]	[redacted], Fort Worth, Tex	

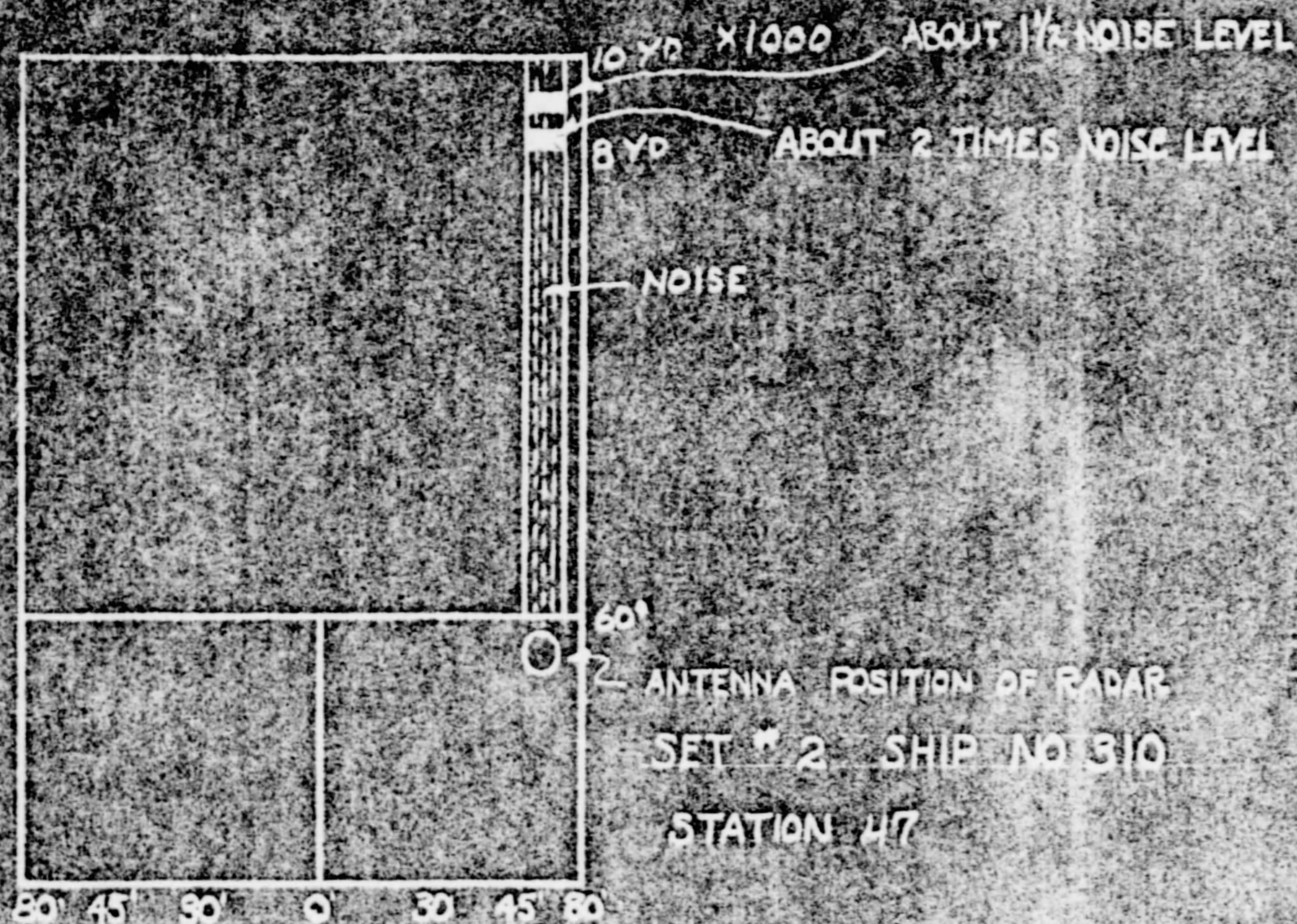
COMMENTS of preparing officer:

Mr. Ruth is employed by Convair, Fort Worth Division, Department 76. His total radar experience is 4 years. He has approximately 3 months experience with the AFG-41, 2 1/2 years with the AFG-32A on ship 84 from its engineering stage.

Charles F. Springer

CHARLES F. SPRINGER, 2nd Lt, USAF, Asst Cpnal Intel

APG 41 IN TRACK WITH LR SWITCH ON



UNCLASSIFIED

RECEIVED AT BUREAU ENTRENCHMENT
ON 10/10/50 10:10 AM 10/10/50

RECEIVED AT BUREAU ENTRENCHMENT

RECEIVED AT BUREAU ENTRENCHMENT

ROUTING

JOINT MESSAGEFORM

COMMUNICATIONS CENTER NO.

UNCLASSIFIED

FROM: (Originator)

COMDR ATIC

TO:

COMDR CARSWELL AF BASE TEXAS

INFO:

RESTRICTED

FROM: AFOIN-ATIAE-7-16-E

FOR 19th Air Division

DATE-TIME GROUP

161845 Z JUL 53

PRECEDENCE
FOR:

ACTION

INFORMATION

ROUTINE

☐

BOOK MESSAGE

☒

ORIGINAL MESSAGE

☐

MULTIPLE ADDRESS

CRYPTOCARECAUTION

☐☒

NO

REFERS TO MESSAGE:

IDENTIFICATION

7A2 644

CLASSIFICATION

Reurmsg 7A2 644 0835Z 13 Feb 53, radar-visual sighting of unidentified objects.

Mr. ~~Johnston~~, ~~McDuffee~~, and ~~Johnson~~ making radar sighting from B-36.

ATIC has received Electronics Data Sheet submitted by your Base. Additional questions which arise follow: 1) Were the 2 radar blips moving? 2) Did they change size rapidly? 3) If moving, was the speed variable? 4) Did they appear and disappear, then reappear at a new location? 5) Were they sharp returns compared to known aircraft targets? The above is needed to analyze radar portion of sighting.

In reply cite Project Blue Book.

COORDINATION:

DOWNGRADED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS.
DOD DIR 5200.10 OFFICIAL FILE COPY

ATIAE-5 R. Olsson DATE 16 July 53
Lt Olsson
ATIAE H. B. Johnston DATE 16 July 53
Lt H. B. Johnston
ATIA Col W. M. McDuffee DATE 16 July 53
Col McDuffee

ATIAE-5
Office of Record
Project 10073

UNCLASSIFIED

DRAFTED NAME (Signature, when required)

Lt R. M. Olsson/jos

RELEASING OFFICER'S SIGNATURE

OFFICIAL TITLE ROBERT C. BROWN, Major, USAF
Adjutant

SYMBOL

ATIAE-5

TELEPHONE

65365

PAGE 1 OF 1 PAGES

DD FORM 173

1 OCT 49

REPLACES NME FORM 173, 1 MAY 48
WHICH MAY BE USED.

16-55923-3 ★ U. S. GOVERNMENT PRINTING OFFICE

COORDINATION

INSERT
ORGNL CODE AND
FULL SIGNATURE

UNCLASSIFIED

In reply refer to
AFOIN-ATIAE-5

R.M. OLSSON/jos/65365

9 JUN 1953

SUBJECT: (Uncl) Unidentified FLYOBRPT 13 February 1953

TO: Commanding Officer
19th Air Division
Carswell Air Force Base
Fort Worth, Texas

1. Your station's unidentified object report involving radar detection for the above date has been received by the Air Technical Intelligence Center and reviewed by its electronics personnel.

2. It was found that insufficient radar data existed for an explanation of this sighting and, therefore, ATIC is forwarding the inclosed Electronics Data Sheet. This Center realizes that the subject sighting took place four months ago; however, if the radar personnel involved can remember the facts of the sighting, ATIC requests that they fill out this form.

3. With the information provided by this form the Air Technical Intelligence Center feels that a logical explanation can be made for the incident.

FOR THE COMMANDING GENERAL

1 Incl
Elec Data Sheet

COORDINATION:

BARBARA P. HANAWALT
1st Lt., USAF
Asst. Adjutant

ATIAE-5

Lt Olsson R.M. Olsson Date 5 June 53

ATIAE

Lt Col Johnston H. Johnston DATE 5 June 53

ATIA

Col McDuffee J. A. Colburn DATE 5 June 53

ATIG

Lt Hanawalt _____ DATE _____

DOWNGRADED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS.
DOD DIR 5200.10

UNCLASSIFIED

OFFICIAL FILE COPY

DESIGNATE AUTHD OFFICE OF RECORD

UNCLASSIFIED

ELECTRONICS DATA SHEET
(GROUND RADAR)

The purpose of this questionnaire is to provide technical data for evaluating the report of an unusual radar target or track. It is requested that it be completed as accurately as possible.

When not filled in, the form is Unclassified. The reporting officer will use his own judgement as to what degree of classification is required.

It is preferred that the answers to the questions be typewritten, however, if it will expedite the completion of the form, the answers may be printed in ink. If additional space is needed, use reverse side of form.

1. STATION OBSERVING TARGET:

CONVAIR ACFT PLANT

Organization

FORT WORTH, TEXAS

Location

2. DATE OF THIS REPORT:

29 June 1953

Day

Month

Year

3. DATE TARGET OBSERVED:

13 FEB 53 Local Time ☐Day Month Year Z Time ☐

Time-Local 0235 CST Time-Z 0835

4. NAME, RANK AND ORGANIZATION OF REPORTING OFFICER:

THOMAS SMITH, CAPT

HQ Sq 7th Bomb WG

CARSWELL AFB, TEXAS

5. EXACT LOCATION OF STATION (COORDINATES):

6. OBSERVER DATE (LIST EACH OBSERVER):

	Name	Rank	Duty	No. of Years Exp. in Radar
A.	[REDACTED]	CIVILIAN	ELECTRONIC TECH	4 yrs
B.	[REDACTED]	CIVILIAN	" "	2 yrs
C.	[REDACTED]	CIVILIAN	ARMAMENT INSPECTOR	2 yrs
D.				
E.				

7. WAS A VISUAL SIGHTING MADE BY ANY PERSONNEL OF THE STATION? ☒ YES ☐ NO

IF SO, GIVE NAME AND RANK OF ALL PERSONNEL MAKING A VISUAL SIGHTING AND A BRIEF DESCRIPTION OF WHAT THEY SAW: [REDACTED]; [REDACTED]; [REDACTED]; [REDACTED];

[REDACTED], and [REDACTED], all Third Shift workers at Convair Aircraft Plant, Fort Worth Division, Texas.

Approx 0235 Hrs CST, 13 Feb 53, observers saw three bright lights in the sky at a distance of approx 2 miles and altitude between 1,000 and 4,000 feet. The lights were stacked vertically and moved from SE to SSE direction, with the outer two lights occasionally shifting position so that they appeared to swing like a pendulum on the center light. They gained altitude as they moved and suddenly appeared to accelerate at a tremendous speed away from the observers and disappeared. The outer lights were greenish-cast in color and the center light was white. No sound was heard. The weather was CAVU at time of sighting.

UNCLASSIFIED

Action

ATIC

1953 JUL 22

08:41

JEDMH A12
JWFQB 120
RR JEDWP
DE JWFQB 09C

UNCLASSIFIED

PARAPHRASE NOT REQUIRED. SEE CRYPTO-CENTER
BEFORE DECLASSIFYING

3. Atia
4. R. File

FM COMDRADIV 19 CARSWELL AFB TEX
TO COMDR ATIC WRIGHT PATTERSON AFB DAYTON OHIO
[REDACTED] 7DI 1416. PROJ BLUE BOOK, REF URMSG
AF0IN-ATTAE-7-16-E. REQD INFO IS AS FOL. BLIPS WERE AT EXTREME RANGE
OF RADAR AND OPR COULD NOT TELL WHETHER THEY MOVED IN RANGE BUT THEY
DID NOT MOVE IN AZIMUTH. BLIPS DID NOT CHANGE SIZE. BLIPS
DISAPPEARED INTO NOISE AND DID NOT REAPPEAR. RADAR OBS THEN
ATTEMPTED TO PICK THEM UP ON TAIL RADAR OF ANOTHER B-36 ACFT
UNSUCCESSFULLY. RETRNS OF NEAREST BLIP WERE VERY SHARP COMPARED TO B-36
TGT. OTHER BLIP WAS JUST ABOVE THE NOISE LEVEL OF THE RADAR.

JUL JWFQB

DOWNGRADED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS.
DOD DIR 5200.10

UNCLASSIFIED

10

733-8472-

UNCLASSIFIED

8. HAVE YOU HEARD OF ANYONE NOT AT THE RADAR STATION MAKING A VISUAL SIGHTING AT APPROXIMATELY THE SAME TIME THE RADAR CONTACT WAS MADE? ☐ YES ☒ NO
IF SO, GIVE NAME AND ADDRESS.

9. RADAR SCOPE PHOTOS:

- IS RADAR EQUIPPED WITH A SCOPE CAMERA? ☐ YES ☒ NO
WAS CAMERA OPERATIONAL? ☐ YES ☒ NO
WERE SCOPE PHOTOS TAKEN? ☐ YES ☒ NO
WERE PRINTS OF THE SCOPE PHOTOS FORWARDED TO THE
AIR TECHNICAL INTELLIGENCE CENTER? ☐ YES ☒ NO

10. TRACK DATA:

- WHAT WAS THE NUMBER OF THE TRACK? _____
WAS A PERMANENT PLOT MADE OF THE TRACK AT THE TIME OF THE OBSERVATION? ☐ YES ☒ NO

11. WERE AIRCRAFT SCRAMBLED TO INTERCEPT THE TARGET? ☐ YES ☒ NO
IF SO, WERE THE AIRCRAFT BEING OBSERVED ON THE SCOPE AT THE SAME
TIME AS THE TARGET? ☐ YES ☒ NO

12. WERE ANY NEARBY RADAR INSTALLATIONS QUERIED WHETHER THEY HAD OBSERVED
THE SAME TARGET OR TRACK? ☒ YES ☐ NO
IF SO, WHICH STATIONS? Carwell AFB GCA. This radar was not operating at the
time of sighting.

13. WAS THE TARGET OBSERVED ON SEARCH RADAR? ☒ YES ☐ NO
IF SO, WHAT IS THE NOMENCLATURE OF THE EQUIPMENT? APG-41A Gunlaying Radar
(Tail-mounted on B-36 acft)

14. WAS THE TARGET OBSERVED ON HEIGHT FINDING RADAR? ☐ YES ☒ NO
IF SO, WHAT IS THE NOMENCLATURE OF THE EQUIPMENT? _____

15. HAVE THERE BEEN ANY RECENT MAINTENANCE DIFFICULTIES? ☐ YES ☒ NO
IF SO, DESCRIBE. _____

16. WHAT TYPE MODULATOR (I.E., SPARK GAP, HARD TUBE, ETC.) IS USED IN THE RADAR EQUIPMENT?
Hard Tube

17. WAS THE AFC (AUTOMATIC FREQUENCY CONTROL) CIRCUIT OPERATING PROPERLY? ☒ YES ☐ NO
COMMENTS: _____

18. HAS INTERFERENCE FROM ANOTHER RADAR SET BEEN OBSERVED RECENTLY: ☐ YES ☒ NO
COMMENTS: _____

UNCLASSIFIED

UNCLASSIFIED

19. ARE PERSONNEL FAMILIAR WITH THE EFFECTS CAUSED BY AN INTERFERING SIGNAL? ☒ YES ☐ NO
COMMENTS: _____

20. ARE PERSONNEL FAMILIAR WITH THE EFFECTS OF ANOMALOUS PROPAGATION (DUCTING EFFECTS) AS THEY PERTAIN TO THIS TYPE OF RADAR? ☒ YES ☐ NO

21. HAS ANOMALOUS PROPAGATION (DUCTING EFFECT) BEEN OBSERVED TO EXTEND THE RANGE OF THE GROUND CLUTTER OF THIS RADAR AT THIS SITE? ☐ YES ☒ NO
COMMENTS: _____

22. WAS ANOMALOUS PROPAGATION (DUCTING EFFECT) EXTENDING THE RANGE OF THE GROUND CLUTTER AT THE TIME THE TARGET WAS OBSERVED? ☐ YES ☒ NO
COMMENTS: _____

23. HOW DID THE TARGET APPEAR IN SIZE AND SHAPE AS COMPARED TO CONVENTIONAL AIRCRAFT TARGETS?
About three times the size of a B-36.

24. PERFORMANCE OF TARGET:

- | | | | |
|--------------------------------------|-------------------------------------|--|--------------------------|
| a. REMAINED CONSISTENT IN SIZE | ☒ | CHANGED SIZE RAPIDLY | ☐ |
| b. SPEED WAS CONSTANT | ☐ | SPEED WAS VARIABLE | ☐ |
| c. FOLLOWED CONSISTENT TRACK | ☒ | APPEARED, DISAPPEARED, THEN REAPPEARED IN NEW LOCATION | ☐ |
| d. FUZZY COMPARED TO AIRCRAFT TARGET | ☐ | SHARP COMPARED TO KNOWN AIRCRAFT TARGET | ☐ |
| e. SAME AS AIRCRAFT TARGET | ☒ | | |

25. WERE OTHER TARGETS (KNOWN) OBSERVED IN THE SAME GENERAL AREA, AT APPROXIMATELY THE SAME TIME AND AT THE SAME ALTITUDE AS THE UNUSUAL TARGET? ☐ YES ☒ NO
IF SO, DESCRIBE. _____

26. WHAT TYPE INDICATORS ("A" SCOPE, "B" SCOPE, ETC.) WERE USED TO FOLLOW THE TARGET?
"B" scope

DESCRIBE THE SIGNAL: Two blips.

27. WHAT WAS THE RADAR SCAN RATE? 1 cycle in 3 seconds.

28. WHAT WAS THE FREQUENCY OF THE TRANSMITTER?

9245 Mcs

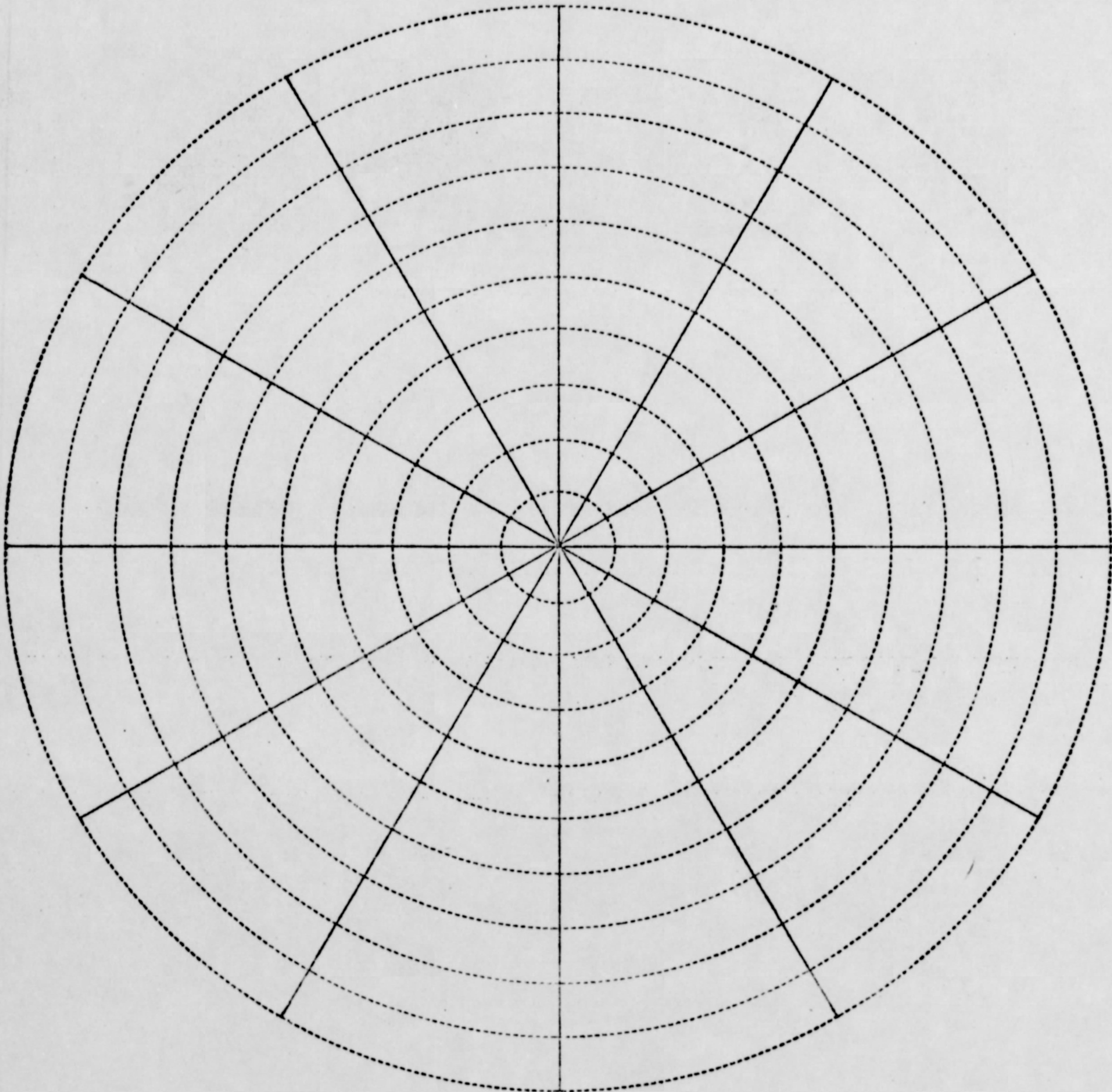
29. DID ANY OF THE OBSERVERS HAVE ANY OPINIONS AS TO THE NATURE OF THE TARGET? ☐ YES ☒ NO
IF YES, GIVE THEIR NAMES AND OPINIONS BELOW.

14
DOWNGRADED AT 3 YEAR INTERVALS.
DECLASSIFIED AFTER 12 YEARS.
DGD DIR 5200.10

UNCLASSIFIED

UNCLASSIFIED

30. IF SCOPE PHOTOS ARE NOT AVAILABLE, PLOT THE TARGET TRACK AS ACCURATELY AS POSSIBLE. GIVE THE TIME AND ALTITUDE (IF MEASURED) FOR EACH POINT PLOTTED. PUT THE NECESSARY RANGE SCALE ON THE DIAGRAM.



DOWNGRADED AT 3 YEAR INTERVALS
DECLASSIFIED AFTER 12 YEARS.
DOD DIR 5200.10

UNCLASSIFIED

UNCLASSIFIED

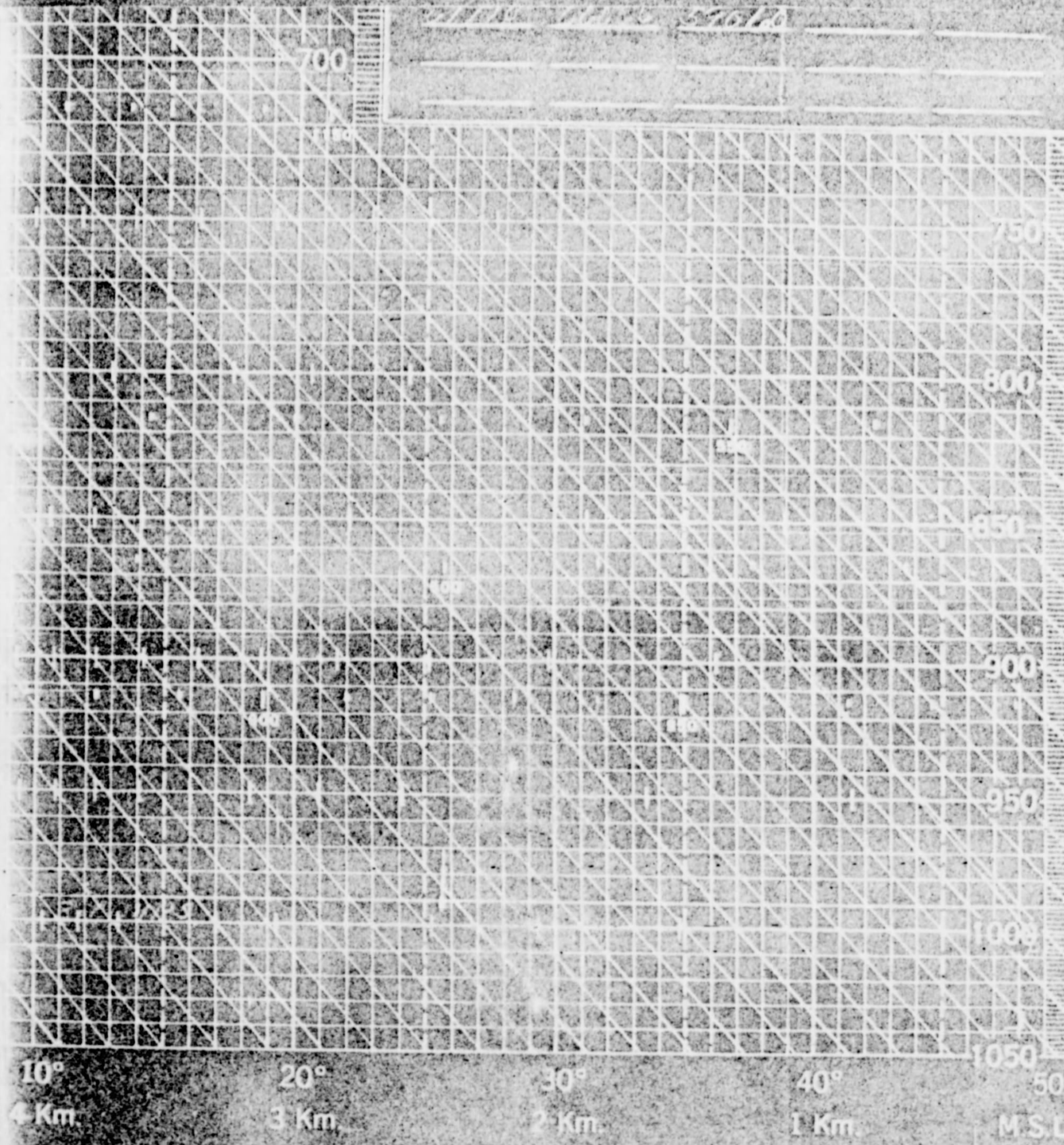
31. USE THIS SHEET FOR ANY COMMENTS, OPINIONS OR ADDITIONAL DATA NOT COVERED BY THE QUESTIONS.

1. Visual observation was made of the target by the radar observers prior to observation on the APC-41A. And visual observation was being made at the same time as the radar observations. Azimuth of target was the same in both cases, and observers are certain that the visual target and radar target were the same object.

DOWNGRADED AT 3 YEAR INTERVAL
DECLASSIFIED AFTER 12 YEARS
DOD DIR 5200.10

UNCLASSIFIED

UNCLASSIFIED



1000	1000	1000
1000	1000	1000
1000	1000	1000

1000	1000	1000
1000	1000	1000
1000	1000	1000

1000	1000	1000
1000	1000	1000
1000	1000	1000

1000	1000	1000
1000	1000	1000
1000	1000	1000

WATER TEMPERATURE

WATER TEMPERATURE

Drawn by _____
 Verified by John J. [unclear]
 Inspected by _____

DATE AND RELEASE TIME				
	Year	Month	Day	Time
1000	1000	1000	1000	1000
1000	1000	1000	1000	1000
1000	1000	1000	1000	1000

AS E STOCK NO. 2000-701-436-510



Station: SAHEL AIR BASE, ALGERIA	
32° 46' E.	97° 21' E
Lat: _____ Long: _____	

DATA AS TRANSMITTED	OR TO 0.1°C OTHER DATA AS ENTERED ON WEAR-25 OR PUNCHED CARD	
TEMP	t (°C)	t
WIND	W	D.W.
CLIM	D (10 sec)	S (10 sec)

DT - Direction of Travel
 T - Temperature
 W - Wind Velocity
 D - Direction of Drift
 S - Speed of Drift

CHART NO. **425/UM**
 1 AUG 1951 - SIG C STOCK NO. 74507-425

REPLACES CHART NO. 425/UM, 1 SEP 49, WHICH MAY BE USED

U.S. GOVERNMENT PRINTING OFFICE

DATA BLOCKS

STATION	DATE	PRESSURE		TEMPERATURE		RELATIVE HUMIDITY		DEW POINT	WIND
		Observed	Red.	Observed	Atmos. Cor.	Observed	Indicated Correction		
1	1	30.0		59.0		75		55	
11	2	30.3		59.2	1.9	88	10.1	58	
12	3	30.5		59.7	1.2	112	1.5	64	
13	4	30.8		59.8	0.6	50	10.2	18.3	
14	5	30.7		59.9	0.5	29	10.1	5	
15	6	30.6		59.9	0.5	25	10.0	10.1	
16	7	30.5		59.9	0.5	10.6	10.5	10.1	
17	8	30.4		59.7	1.1	5.0	10.3	10.1	
21	9	30.6		59.8	1.1	13.9	10.1	16.5	
89	10	30.2		59.2	1.0	5.0	2.5	10.1	
99	11	30.8		59.7	1.0	11.9	10.9	10.1	
12	12	30.6		59.6	1.0	10.1	10.1	10.1	
13	13	30.5		59.4	1.0	10.1	10.1	10.1	
14	14	30.4		59.1	1.0	10.1	10.1	10.1	
15	15	30.1		59.5	1.0	10.1	10.1	10.1	
16	16								
17	17								
18	18								
19	19								
20	20								

CODED MESSAGE FOR TRANSMISSION

6/1/14	55281	55282	55283
6/1/14	55284	55285	55286
6/1/14	55287	55288	55289
6/1/14	55290	55291	55292
6/1/14	55293	55294	55295
6/1/14	55296	55297	55298
6/1/14	55299	55300	55301
6/1/14	55302	55303	55304
6/1/14	55305	55306	55307
6/1/14	55308	55309	55310

2015年12月11日

[illegible]

© 1999 by The McGraw-Hill Companies

BASELINE CHECK DATA

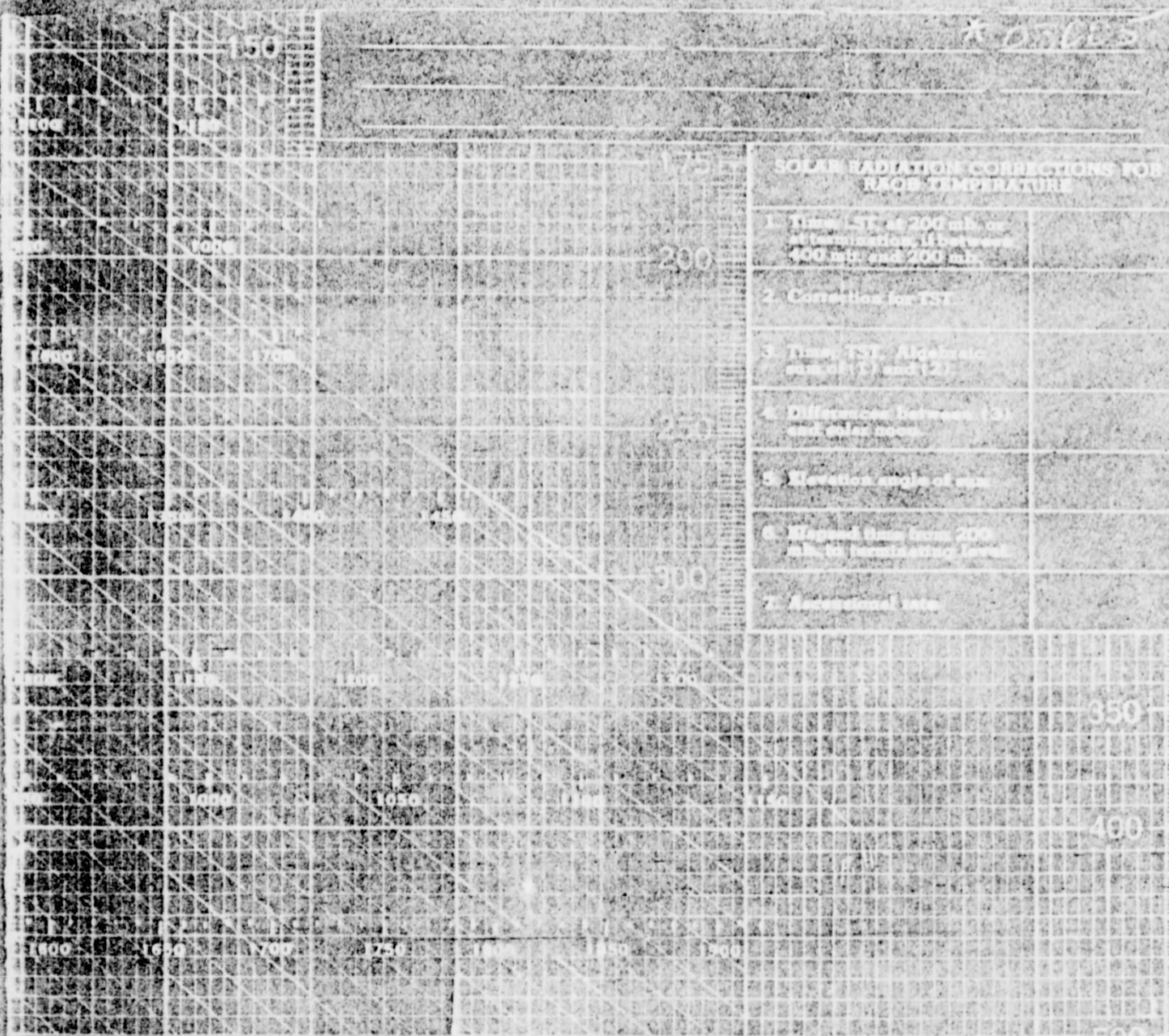
Time CCT	TEMPERATURE			RELATIVE HUMIDITY			
	Ordinate	Dry Bulb	Wet Bulb	Ordinate	Ratio	Cor Cor	Psychrometric

ADIABATIC
WBAN

9 Km -40° 8 Km -30° 7 Km -20° 6 Km -10° 5 Km 0°C



1000000 EN



SOLAR RADIATION CORRECTIONS FOR 12-GH ESTIMATION

1. Time of day (2400 min on standard time, 115°W)	
2. Correction for day	
3. Time of day (Algebraic sum of 1 and 2)	
4. Difference between (3) and standard time (2400 min)	
5. Time of day (4 min)	
6. Standard time (2400 min)	
7. Difference between (5) and (6)	

11		
12		
13		

14		
15		
16		

17		
18		
19		

UNCLASSIFIED

UNCLASSIFIED

30° 20° 10° 0° 10° (E) 20° 30°
Km 12 Km 11 Km 10 Km 9 Km 8 Km 7 Km 6 Km 5 Km

Drawn by

Verified by

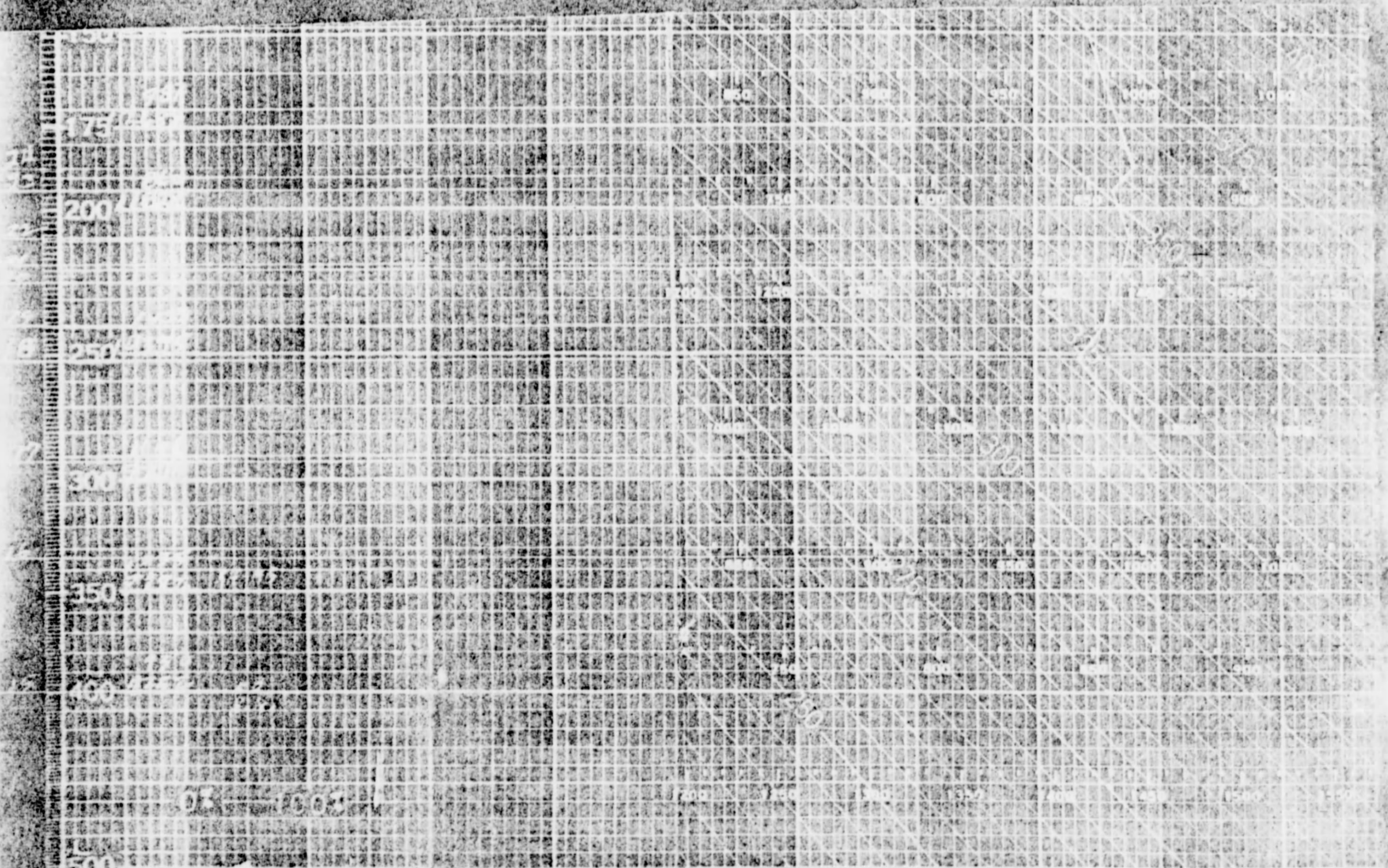
Inspected by

DATE AND RELEASE TIME

	Year	Month	Day	Time
DATE OF RELEASE				
TIME OF RELEASE				
Reference No.	Accession No.			

STOCK NO. 2600-701-636-515

151 0-1100



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

JANUARY 1951	
12-45 N	9-10-2-1

DATA AS TRANSMITTED	D. P. TO D. P. C. OTHER DATA AS ENTERED ON WBAN-13 OR RUNCHED CARD	
1000	1000	1000
11.00	11.00	11.00
0.00	0.00	0.00

1000	1000
11.00	11.00
0.00	0.00

CHART NO. 26/DM
1 SEP 49 - 116 C STOCK NO. 74507-26

REPLACES CHART NO. 26/DM, 1 SEP 49, WHICH MAY BE USED

DATA BLOCK B

CONF. CHECK	LEVEL NO.	PRESSURE		TEMPERATURE				RELATIVE HUMIDITY		DEW POINT	REMARKS
		Baralt	86	Original	Room (192)	Correction	Corrected	Original	Including Correction	°C	

SIGNIFICANT LEVELS

1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45											
46											
47											
48											
49											
50											

GOOD MESSAGE FOR TRANSMISSION

1											
2											
3											
4											
5											
6											
7											
8											
9											
10											
11											
12											
13											
14											
15											
16											
17											
18											
19											
20											
21											
22											
23											
24											
25											
26											
27											
28											
29											
30											
31											
32											
33											
34											
35											
36											
37											
38											
39											
40											
41											
42											
43											
44											
45											
46											
47											
48											
49											
50											

CONSTANT PRESSURE DATA

PUNCHED CARD NO. 1

PUNCHED CARD NO. 2

PUNCHED CARD NO. 3

ADIABATIC CHART

WEAVER

Mo

90°

80°

70°

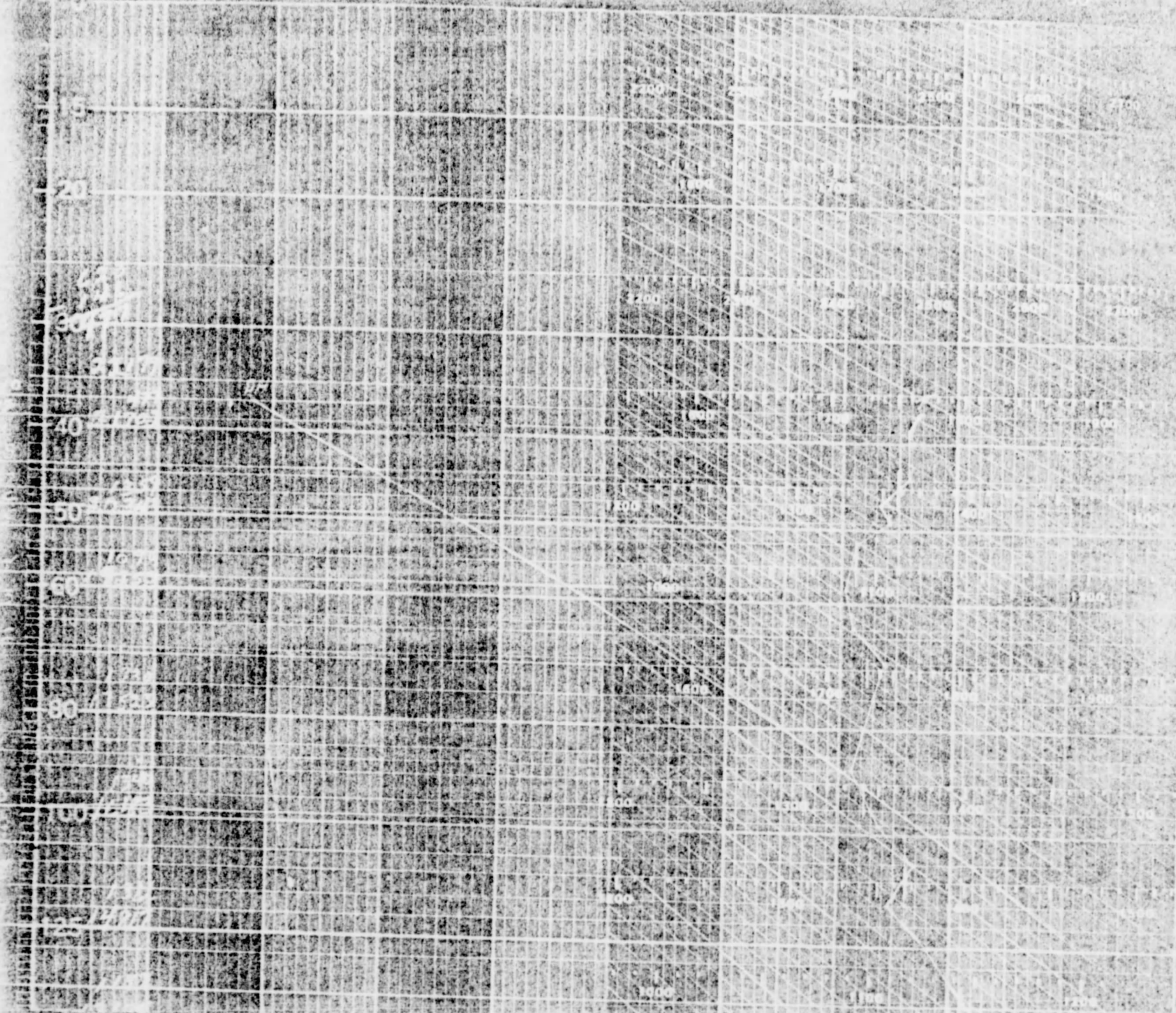
60°

50°

40°

30°

20°



This case includes two (2) 16" x 16"
photocopy charts.