PROJECT 10073 RECORD CARD

1. DATE
24 Dec 52

2. LOCATION
DALLAS, TEXAS

3. DATE-TIME GROUP
Local 24/1215CST
GMT 24/1315Z

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

5. PHOTOS
☒ Yes
☐ No

6. SOURCE
Radar Operators

7. LENGTH OF OBSERVATION
30 min

8. NUMBER OF OBJECTS
One

9. COURSE

10. BRIEF SUMMARY OF SIGHTING
Object observed on AN/APG-41 radar scope of B-36 a/c 40 miles E to 80 NE of Dallas, Tex., at 40,000' on decent to 15,000', where it disappoared from scope. Object was observed intermittently for period of 30 minutes. No visual sighting was made. No air traffic was observed during electronic sighting.

11. COMMENTS
1. This report should be sent to Mr. [redacted], ATIAE, for ATIC radar analysis as soon as scope photos arrive.
2. Lt [redacted] has first-hand info and should be interrogated upon returning to WADC.
3. Conflict in report on weather conditions.

12. CONCLUSIONS
☐ Was Balloon
☐ Probably Balloon
☐ Possibly Balloon
☐ Was Aircraft
☐ Probably Aircraft
☐ Possibly Aircraft
☐ Was Astronomical
☐ Probably Astronomical
☐ Possibly Astronomical
☒ Other FALSE RETURNS
☐ Insufficient Data for Evaluation
☐ Unknown

75

DRAWINGS
See HOOK COMMENT. SPURIOUS RETURNS
INCL 3 ea

ATIC FORM 329 (REV 26 SEP 52)

1. Atsi
2. Atsia
3. C. files

ATIC

O

WPGØ93

YDA151

WYD117

WDC18Ø

WWCØ93

CBC196

JWFAF 35

RR JEPHQ JEDWP JEDEN 333

DE JWFAF 6B

R 3Ø2Ø3ØZ ZNJ

FM AF PLANT REPRESENTATIVE CONVAIR FTW

TO JEPHQ/DIR OF INTELLIGENCE HQ USAF WASH DC

JEDWP/AIR TECHNICAL INTELLIGENCE CENTER WRIGHTTTESO AFB OHO

JEDEN/CG ENT AFB COLO

JEDWP/CG AMC WRIGHT PATTERSON AFB OHIO

INFO JWFAF/CO SOAPD FTW

/[redacted]/ SORF-12-149-E AT UNCLASSIFIED

A-2C. SOAPD FOR SOF.

SUBJ FLYOBRPT. THE FOLG INFO IS SBMD IAW AFL 2ØØ-5 29 APR 52.

/1/ OBJECT NOT SEEN VISUALLY.

/2/ PHENOMENON SIGHTED AT 1215 24 DEC 52 INTERMITTENTLY FOR

PD OF APRX 3Ø MIN.

/3/ P ENOMENON DETECTED BY RADAR SET SIMILAR TO AN/APG-41 W/ ALO

INSTLD ON NOSE OF B-36 EQUIP FLT TEST ACFT. PHENOMENON DETECTED AT

ALT OF 4ØØØØ FT ACFT SPEED 18Ø MILES PER HR INDICATED. PHENOMENON

WAS DETECTED AT SAME RELATIVE PSN BY AN/APS-23. FOR DESCRIPTION OF

AN/APG-41 AND ALG SEE TO NO CO-16-3Ø-APG-41-3.

ROUTING

JOINT MESSAGEFORM

COMMUNICATIONS CENTER NO.

UNCLASSIFIED

SPACE ABOVE FOR COMMUNICATIONS CENTER ONLY

FROM: (Originator)

CG ATIC

TO: AF PLANT REPR.SENTATIVE
CONVIR FT WORTH TEXAS

INFO:

DATE-TIME GROUP	SECURITY C[redacted]
051330Z JAN 52	

PRECEDENCE FOR:	ACTION	INFORMATION
	ROUTINE	

☐ BOOK MESSAGE ☒ ORIGINAL MESSAGE

☐ MULTIPLE ADDRESS CRYPTOPRECAUTION ☐ YES ☒ NO

REFERS TO MESSAGE:

IDENTIFICATION	CLASSIFICATION

FROM: ATOIT-ATIAA-12-14-E

Reference your FLIGHT SORF-12-149-E concerning airborne electronic sighting of unidentified aerial object. Project Blue Book desires photos taken by radar set photo camera at the earliest possible date.

In reply cite Project Blue Book.

ATIAA-5 File

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

UNCLASSIFIED

SECURITY CLASSIFICATION [redacted] PAGE 1 OF 1 PAGES

DRAFTER'S NAME (and signature, when required)

LT R.H. OLSSON/vs

RELEASING OFFICER'S SIGNATURE

SYMBOL	TELEPHONE	OFFICIAL TITLE
ATIAA-5	65365	ROBERT E. [redacted], MAJOR, USAF AIR ADJUTANT GENERAL

DD FORM 1 MAY 49 173 REPLACES WD AGO FORM 11-168, 15 JUN 1945, AND WD AGO FORM 0999, 1 APR 1946, WHICH MAY BE USED.

16—58923-2 ☆ U. S. GOVERNMENT PRINTING OFFICE : 1950—O-875946

1. JAN 53 13 03 Z

91C

1 ATIAA
2 ATI
3 Central Files ATIC

RC122
WPE085
WYA225
WJC072
CBC203
JWFAF 24
RR JEDWP
DE JWFAF 7B
R 131720Z
FM AF PLANT REPRESENTATIVE CONVAIR FTW
TO JEDWP/CG ATIC WRIGHT PATTERSON AFB OHIO
INFO JWFAF/CO SOAPD FTW
SORFE-1-78-E ATIC FOR PROJECT BLUEBOOK. SOAPD FOR SOIP. URMSG AFOIN-ATIAA-12-14-E. ONE /1/ POSITIVE TRANSPARENCY COPY OF 0-15 FILM TAKEN OF RADAR "B" AND "C" SCOPES WHILE RADAR WAS TRACKING UNIDENTIFIED AERL OBJ 24 DEC 52 SENT VIA AIR MAIL 13 JAN 53. ORIG FILM WILL BE RTND BY WADC REPRESENTATIVE AS REFERRED TO IN WRITTEN REPT. FOR EXPLANATION OF "B" AND "C" SCOPES CONTACT WCLGL-1 MR A J WINNELL ARMT LAB TP 26235.
13/1736Z JAN JWFAF

1:06

cy1

ROUTING

JOINT MESSAGEFORM

COMMUNICATIONS CENTER NO.

UNCLASSIFIED

SPACE ABOVE FOR COMMUNICATIONS CENTER ONLY

FROM: (Originator)

CG ATIC

TO: AF PLANT REPRESENTATIVE
CONSOLIDATED VULTEE A/C CORP FT WORTH TEX

INFO:

DATE-TIME GROUP	SECURITY CLASSIFICATION
161330Z JAN 53	[redacted]
PRECEDENCE FOR: ACTION ROUTINE	INFORMATION
☐ BOOK MESSAGE	☒ ORIGINAL MESSAGE
☐ MULTIPLE ADDRESS	CRYPTOPRECAUTION ☐ YES ☒ NO
REFERS TO MESSAGE:	
IDENTIFICATION	CLASSIFICATION

FROM: AFOIN-ATIAA-1-2-E

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

ATIAA-5

ATIC has received your AF Form 112 and one positive transparency copy of 0-15 film relating to airborne electronic detection of unidentified aerial object over Dallas, Texas, area 24 Dec 52. We find incident extremely interesting and appreciate your prompt action and thorough reporting. The film and accompanying report are undergoing a radar analysis to determine if any known phenomenon might have caused the unusual radar returns.

Project Blue Book would appreciate any further data you have concerning (1) the altitude of the cloud deck below the sighting a/c; (2) the direction of the cloud bank from the a/c estimated to be 40 miles away; and (3) any additional information as to the identity of the participating F-84s.

Also request that you notify Lt [redacted] that when he returns to Wright

UNCLASSIFIED

S[redacted]

SECURITY [redacted] PAGE 1 OF 2 PAGES

ROUTING

JOINT MESSAGEFORM

COMMUNICATIONS CENTER NO.

UNCLASSIFIED

SPACE ABOVE FOR COMMUNICATIONS CENTER ONLY

FROM: (Originator)

CG ATIC

DATE-TIME GROUP JAN 53 | SECURITY CLASSIFICATION [redacted]

PRECEDENCE FOR: | ACTION | INFORMATION

☐ BOOK MESSAGE | ☐ ORIGINAL MESSAGE

☐ MULTIPLE ADDRESS | CRYPTOPRECAUTION ☐ YES ☐ NO

REFERS TO MESSAGE:

IDENTIFICATION	CLASSIFICATION

TO:

INFO:

Field, if no satisfactory explanation of the sighting has come about, Project Blue Book personnel would be desirous of interrogating him.

In reply cite Project Blue Book.

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

COORDINATION:

ATIAA _____

ATIA _____

UNCLASSIFIED

SECURITY [redacted] PAGE 2 OF 2 PAGES

DRAFTER'S NAME (and signature, when required)
LT R.H. OLSSON/vb

RELEASING OFFICER'S SIGNATURE
ROBERT E. KENNEDY, MAJOR, USAF

SYMBOL ATIAA-5 | TELEPHONE 5365

OFFICIAL TITLE AIR ADJUTANT GENERAL

DD FORM 173 REPLACES NME FORM 173, 1 MAY 49

16—53933-3 ☆ U. S. GOVERNMENT PRINTING OFFICE

[redacted]

1. Ofc
2. Ofcr
3. C. files

RD151

WPC137

WYD156

CBA111

JUFAF 30

RR JEDWP

DE JWFAF 58

R 222200Z

FM AF PLANT REPRESENTATIVE COSHOCTON

UNCLASSIFIED

TO CG ATIC WRIGHT PATTERSON AFB OHIO

/R [redacted] SORFE-1-145-E FOR PROJECT BLUE BOOK. URMSG

AFOIN-ATIAA-1-3-E. /1/ CLOUD DECK BELOW SIGHTING A/C APRX 10 000

FT ALT. /2/ INFO NOT AVAL ON THIS ITEM /3/ F-345 WERE FR BERGSTROM

AFB.

22/2210Z JAN JWFAF

UNCLASSIFIED

[redacted]

ROUTING

JOINT MESSAGEFORM

COMMUNICATIONS CENTER NO.

UNCLASSIFIED

SPACE ABOVE FOR COMMUNICATIONS CENTER ONLY

FROM: (Originator)

CG ATIC

TO: AF PLANT REPRESENTATIVE
CONSOLIDATED VULTEE A/C CORP
FT WORTH TEXAS

INFO:

DATE-TIME GROUP	SECURITY CLASSIFICATION
211930Z JAN 53	[redacted]

PRECEDENCE FOR:	ACTION	INFORMATION
	ROUTINE	

☐ BOOK MESSAGE ☒ ORIGINAL MESSAGE

☐ MULTIPLE ADDRESS CRYPTOPRECAUTION ☐ YES ☒ NO

REFERS TO MESSAGE:

IDENTIFICATION	CLASSIFICATION

FROM: AFOIE-ATIAA-1-9-E

ATIAA-5 File

Concerning the electronic sighting of 24 Dec 52 over Dallas, Texas, ATIC finds that before a suitable analysis can be made it will be necessary to obtain prints from the original 0-15 film. The negative copy you have forwarded us unfortunately lacks enough detail.

Therefore, ATIC would appreciate your forwarding 8"x 10" glossy prints of every third frame of the original film.

In reply cite Project Blue Book.

COORDINATION:

ATIAA _____

ATIA _____

[redacted] UNCLASSIFIED UNCLASSIFIED [redacted]

PAGE 1 OF 1 PAGES

DRAFTER'S NAME (and signature, when required)	RELEASING OFFICER'S SIGNATURE
LT R.H. OLSSON/vs	

SYMBOL	TELEPHONE	OFFICIAL TITLE
ATIAA-5	65365	ROBERT E. KINSELY, MAJOR, USAF AIR ADJUTANT GENERAL

DD FORM 1 MAY 49 173 REPLACES WD AGO FORM 11-168, 15 JUN 1945, AND WD AGO FORM 0990, 1 APR 1948, WHICH MAY BE USED.

16—58023-2 ☆ U. S. GOVERNMENT PRINTING OFFICE : 1950—O-875946

1953 FEB 5 10:25

ATIC

NR 1 Atic
2 Atiae
3 Files

RD129

WPB138

WYB207

CBD042

JWFAF 31

RR JEDWP

DE JWFAF 2B

R 041740Z

FM AF PLANT REPRESENTATIVE CONVAIR FTW

TO CG ATIC WRIGHT PATTERSON AFB OHIO

SORFE-2-22-E FOR PROJECT BLUEBOOK URMSG AFOIN-ATIAA-1-9-E 8 X

10 GLOSSY PRINTS OF 8-15 FILM FORWARDED THIS DT.

04/1915Z FEB JWFAF

UNCLASSIFIED

AIR FORCE PLANT REPRESENTATIVE
CONVAIR—FORT WORTH
SOUTHERN AIR PROCUREMENT DISTRICT
P. O. BOX 371 G. A. P. NO. 4
FORT WORTH, TEXAS

IN REPLY ADDRESS BOTH ENVELOPE AND COMMUNICATION TO AIR FORCE PLANT REPRESENTATIVE, ATTENTION:
SORF

9 January 1953

SUBJECT: FLYOBRPT

THRU: Commanding Officer
Southern Air Procurement District
ATTN: SOI
3309 Winthrop, P. O. Box 9038
Fort Worth 7, Texas

THRU: Commanding General
Air Materiel Command
Wright-Patterson AF Base, Ohio

TO: Director of Intelligence
Headquarters USAF
Washington 25, D. C.

Attached hereto, as Inclosure 1, is FLYOBRPT Report submitted in accordance with par 7, AFL 200-5.

FOR THE AF PLANT REPRESENTATIVE:

JACK M. ROGERS
Lt. Colonel, USAF
Deputy AF Plant Representative

1 Incl
Air Intelligence Information Report, AF Form 112 w/4 Incls (in quad)

Cy to:
Chief, ATIC, W-PAFB

IF ENCLOSURE NUMBER ..... IS WITHDRAWN (OR NOT ATTACHED), THE CLASSIFICATION OF THIS CORRESPONDENCE WILL BE CANCELLED IN ACCORDANCE WITH PAR. 25E, AFR 205-1.

1st Ind SOIS/SW/sw

Hq, SOAPD, 3309 Winthrop, P. O. Box 9038, Fort Worth, Texas 13 Jan 53

TO: Commanding General, Air Materiel Command, Wright-Patterson AF Base, Ohio

UNCLASSIFIED

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

[redacted]

C 7214

[redacted]
(CLASSIFICATION)

AF FORM 112—PART I
APPROVED 1 JUNE 1948

UNCLASSIFIED

COUNTRY	REPORT NO.	(LEAVE BLANK)
USA	I	

AIR INTELLIGENCE INFORMATION REPORT

SUBJECT
FLYOBRPT

AREA REPORTED ON	FROM (Agency)
FORT WORTH - DALLAS, TEXAS	AFPR, GAP #4

DATE OF REPORT	DATE OF INFORMATION	EVALUATION
6 JANUARY 1953	24 December 1952	

PREPARED BY (Officer)	SOURCE
D. V. STOUTENBURG, 2nd Lt., USAF	

REFERENCES (Control number, directive, previous report, etc., as applicable)
AIR FORCE LETTER NO. 200-5; TWX CITE NO. SORF-12-149-E, 30/2030Z/DEC 52

SUMMARY: (Enter concise summary of report. Give significance in final one-sentence paragraph. List inclosures at lower left. Begin text of report on AF Form 112—Part II.)

1. At 1215 hours CST, 24 December 1952, while conducting a flight test of an Automatic Gunlaying Radar set similar to one half of an AN/APG-41 equipped with automatic target acquisition (short title is either ATA or ALO) installed in the nose of the armament flight test B-36 No. 44-92054, an unseen phenomenon was detected and tracked intermittently by the ATA of the AGL Radar set for a period of approximately 30 minutes. The phenomenon was also detected at the same time and approximate position in space by the AN/APS-23 navigation radar installed on the B-36. The B-36 aircraft had completed a portion of a flight test plan which called for simulated attacks by an F-84 fighter. On 24 December two fighters (F-84's) participated in the simulated attack, and they had left the area a few minutes earlier to return to their base. The fighters were being used to evaluate the ATA portion of the AGL Radar set. The AGL radar operator had complained of what he thought was noise. It later became apparent that this "noise" was the same phenomenon as was detected and tracked a few minutes later by both radar sets. The flight plan and report are attached as inclosures 1 and 2.

2. Although nothing could be seen by any of the members of the crew, the following facts dictated that this report be submitted:

a. The phenomenon was detected by both radar sets.

b. Its behavior of attempting to remain 2000 to 4000 yards in front of the B-36 during descent from 40,000 to 15,000 feet was unexplainable, and seemed to indicate that something intelligent was guiding it.

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

4 INCLS.
1. Flight Test Plan dtd 12 Dec 52
2. Report of Test Flight dtd 24 Dec 52
3. Statement by AN/APG/41 operator
4. Statement by AN/APS-23 operator

DISTRIBUTION BY ORIGINATOR

C-6305
Encl 1

UNCLASSIFIED

NOTE: THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE ACT, 50 U. S. C.—31 AND 32, AS AMENDED. ITS TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW. IT MAY NOT BE REPRODUCED IN WHOLE OR IN PART, BY [redacted] AIR FORCE AGENCIES, EXCEPT BY PERMISSION OF THE DIRECTOR OF INTELLIGENCE, USAF.

[redacted]
(CLASSIFICATION)

C-3319

16—55569-1 U. S. GOVERNMENT PRINTING OFFICE

DISPOSITION FORM

SECURITY CLASSIFICATION (If any)
UNCLASSIFIED
[redacted]

FILE NO.	SUBJECT (UNCLASSIFIED) Airborne Electronic Sighting of Unknown Phenomenon Project 10073

TO ATIAE
ATTN: Mr. James

FROM ATIAA-5

DATE 16 Jan 53

COMMENT NO. 1
Lt Olsson/jos
65365/B263D/PD23

1. ATIAA-5 requests that the inclosed incident of 24 Dec 52, Ft. Worth, Texas, be reviewed and that, if possible, either an analysis or, if the total information is too inadequate, an opinion be given as to the cause of this electronic sighting.

2. One positive transparency copy of 0-15 film picturing some of the phenomenon encountered by the B-36 is also inclosed.

3. If inclosure 1 is withdrawn (or not attached), the classification of this correspondence will be downgraded to UNCLASSIFIED in accordance with paragraph 25E, AFR 205-1.

2 Incls
a/s

E. W. GREGORY, II, Major, USAF
Chief, Aircraft and Propulsion Branch
Technical Analysis Division
Air Technical Intelligence Center

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

UNCLASSIFIED

[redacted]

AF FORM 112—PART II
APPROVED 1 JUNE 1948

[redacted] (CLASSIFICATION)

UNCLASSIFIED

AIR INTELLIGENCE INFORMATION REPORT

FROM (Agency)	REPORT NO.	PAGE 1 OF 2 PAGES
AFPR, GAP #4		

1. Object not seen visually. Whenever the AN/APG-41 radar would lock on (a function of the ATA), and track the phenomenon, all available personnel then would visually search the area in front of the aircraft in the direction and distance indicated by the AN/APG-41. Nothing could ever be seen. The AN/APS-23 operator would then search the space in front of the B-36, and would always detect the phenomenon. The signed statements of both radar operators are attached as inclosure No. 2 and 3.

2. Phenomenon sighted at 1215 CST (1815Z), 24 Dec 52, intermittently for a period of approximately 30 minutes. The exact time (CST) shown on the photographs referenced in paragraph 8 is 12:52:39 to 12:53:07. These photographs were taken of the AN/APG-41 indicator "B" and "C" scopes during one of the periods when the AN/APG-41 Radar set was tracking the phenomenon.

3. Phenomenon detected by Radar set similar to AN/APG-41 w/ALO installed on nose of B-36 equipment flight test aircraft. Phenomenon was detected at same relative position by AN/APS-23. For description of AN/APG-41 and ALO (C-899/APG antenna control) see TO No. CO AN 16-30APG-41-3. The AN/APG-41 indicator was equipped with an O-15 camera which photographed the B and C scopes, a data card, a frame counter, and a clock. The data card contains six lights, one indicating when the radar set detects a target. Another is energized when the radar set locks on a target, and another is energized when the Mitchel movie camera is taking pictures. The Mitchel camera was mounted on the nose turret, and boresighted to the tracking line of the AN/APG-41 antenna. The turret is slaved to the antenna, and follows in azimuth and elevation. Although the light on the O-15 film indicated that the Mitchel camera was running, unfortunately the Mitchel film was developed through normal channels and the frames which were taken at the time the phenomenon was being tracked were rendered useless by poor developing techniques and nothing distinctive could be found on the film.

4. Phenomenon observed 40 miles East of Dallas, Texas, to 80 miles Northeast of Dallas on both North and South headings at 40,000 ft., and on descent to 15,000 ft. in the area surrounding Lake Dallas. Phenomenon was no longer detected below altitude of 15,000 ft. Phenomenon was tracked at distance of 2,000 to 4,000 yards range appearing intermittently at different azimuth locations plus or minus 30° and minus 5° to minus 15° elevation. Although an intensive visual search was made phenomenon was not seen by the pilot or any crew member.

The phenomenon was present during the period of time when the F-84 fighters were making simulated attacks against the B-36. It was determined later that the inferior performance from the AN/APG-41 was obviously due, at least partially, to the same type of phenomenon that was detected and tracked for 30 minutes after the fighters left the area to return to their base (Bergstrom AFB).

The AN/APG-41 operator's signed statement (Incl. 3) and the AN/APS-23 operator's signed statement (Incl. 4) give further details.

5. Both radar operators have been operating and flight testing their respective equipment for several years. Radar set AN/APG-41 was instrumented with an O-15 camera (described in 3 above). The O-15 film was not clear, but does indicate presence and trackability of phenomenon.

[redacted] UNCLASSIFIED

[redacted]

16—55870-1 U. S. GOVERNMENT PRINTING OFFICE

The scope face of the AN/APG-41 indicator was slightly out of focus, and the pictures that Mr. [redacted], the operator, took in search do not show the phenomenon clearly. A description ~~and sketch~~ of the search presentation of the phenomenon on the "B" scope is included as part of the AN/APG-41 operator's statement (Incl. 3).

6. Weather conditions. Immediate area was clear, nearest cloud formations were approximately 40 miles distant (at the same altitude). There was a cloud deck below the B-36 at a low altitude.

7. AN/APS-23 presentation of phenomenon was similar to recent AF release of PPI photographs of sightings made over Washington, D. C.

The AN/APS-23 operator's statement gave the details of what he saw on his PPI scope.

8. Photographs of AN/APG-41 scope are available. These are the 0-15 films referred to and discussed in 3 above. These and the Mitchel film referred to in 3 will be retained by Lt. [redacted] and will be available upon his return to Wright-Patterson AFB, Ohio, in February. His office is in the Armament Laboratory, Building 22, Post 28A, Phone 20121 or 26235, and the office symbol is WCLGL-1.

9. Maneuvers were made by the B-36 aircraft to prove trackability of the phenomenon. By observing the AN/APG-41 antenna position while tracking the phenomenon it was determined that during the B-36 maneuvers the Phenomenen remained on its same apparent course and speed.

The maneuvers consisted of turns, climbs, and dives (to the extent of the B-36's capabilities). The G-41 antenna and turret would move with respect to the B-36 so that they pointed towards a point in space traveling a path parallel and more or less coinciding with the path the B-36 had departed from. The phenomenon descended at the same rate as the B-36 and maintained a distance of 2000 to 4000 yards ahead of the B-36. Whenever the B-36 established a new heading so that the phenomenon was entirely out of the search sector of the G-41 antenna, the G-41 would not detect anything for a period of several seconds up to 2 or 3 minutes. Then suddenly the phenomenon would reappear and the G-41 would again detect and lock on it. See the AN/APG-41 operator's statement (Incl. No. 4) for details.

10. No air traffic was observed in the Dallas area at the time of the electronic sighting.

[redacted]

C O N V A I R
FORT WORTH DIVISION
ENGINEERING FLIGHT TEST

12
XX December 1958

FLIGHT TEST PLAN

AIRPLANE NO. 51 (AF 54-92054) FLIGHT NO XXX
70

TEST:

I (A-1) Flow Control Boom Susceptibility (F.T.I. #2-1-18).

II Transonic Turbulence Operational Investigation (F.T.I. #1-1-26).

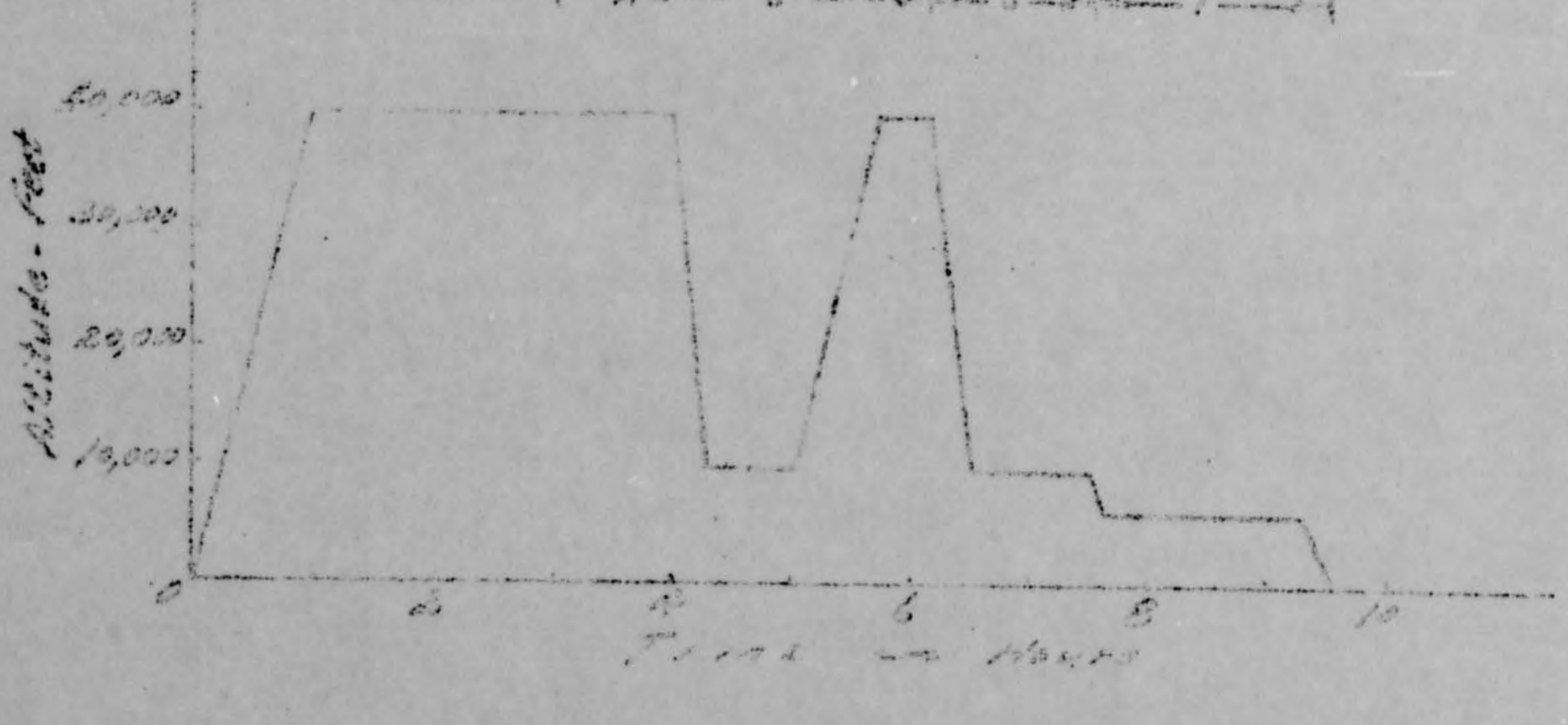
III (A-2) Evaluation of Bode Radio (F.T.I. #4 5.45)

IV (A-3) Flight Test of ARN-6 Radio Compass Fixed Antenna (F.T.I. #4 & 20-5)

V Pressure Reynolds Number Effects Calibration (F.T.I. #2.4-5).

VI Evaluation of Recoverable Armament Boxes (F.T.I. #1-1-26).

PROFILE.



BY L. Bellemare
LEO BELLEMARE

APPROVED R. V. Noble
R. V. NOBLE
SR. FLIGHT TEST GROUP ENGR.

APPROVED H. L. Shaw
USAF

C-635

PROCEDURE

Part A - Separation at Mach Number at 40,000 Ft.

1. Initial Visual Sighting

The fighter will fly head-on at the bomber at 40,000 ft. A 10 pole camera and flexible tubing on the nose heading. The fighter will pull away from the bomber as far outward as is accomplishable with the Mitchell camera.

RUN NO.	RANGE (YDS.)
1	1000
2	1500
3	2500
4	3500

Configuration:

B-36 V10: 150 MPH
Computer: On
Armament: Turret

Data to be recorded:

Wire recorder
Mitchell Camera
G-45 Camera
Photo panel
Oscillograph
PENNANT notice

2. Determination of Target Acquisition and System Tracking Accuracy at 40,000 Ft. PA

The fighter will attack the body of the B-36 at 40,000 Ft. PA following the previously courses below. The nose radar control will acquire as soon as possible after detection. Nose Radar Configuration: T/R (MX/APG-5) with ATA

PROJECT NO. (Cont'd)

RUN NO.	ALTITUDE (MSL)	MACH NO.	ATTACK DIRECTION (From B-36) Elevation	Azimuth
5	1000	.5	0°	45
				315
				45
				45
				45
				45
				45
				315
				45
				315
				45
				315

F O R T W A Y N E
FORT WORTH DIVISION
SUBJECT: [illegible]

12
/ December 1952

MANEUVER

Extending at current until turret is in stow position.

Pick up current from stow position. Fire salvo crashing diagonally or first burst, and return to stow position.

Hard burst; fire salvo crashing diagonally.

Widen burst; fire salvo crashing diagonally.

Pick up turret from stow position with sight at broadside. Run turret into aft end then forward azimuth limits, then let turret stow from broadside. Turret should be at -30° during run.

Pick up turret from stow position with sight at broadside. Run turret into upper and then lower elevation limits, then let turret stow from lower elevation limit at broadside position.

Pick up turret at stow position with sight at stow position. Proceed to run the turret up the forward contour limit to the broadside position. Take current to the aft limit and run turret up the rear contour limit. Let turret stow from broadside.

Take turret up contour limit - high speed paper run.

Take turret to broadside position and approximately -30° in elevation and proceed to drive the system out. The sight should be moved rapidly in a small circular motion.

4. Subject to the [illegible] turret

5. Prior [illegible] after system is "standby"

C O M B A T
BOAT WORTH DIVISION
SQUADRON FOUR TEST

[illegible] December 1952

MANEUVERS (CODE 2)

PART B - TACTICAL MANEUVERING UNDER CONTROL IN RESTRICTED AREA
WORTH #1 (CODE 21)

TURN NO.	SIGNAL	MANEUVER
1.	Take [illegible] the WAR position.	
2.	Open up from the WAR position.	
3.	DAC	Take [illegible] at normal speed to new position
4.	WAL	Pick up turret from new position, fire while rounding on turret bridge, and continue to new position
5.	WAR	Pick up turret from new position, fire while rounding on turret bridge.
6.	WAL	Pick up turret from new position, fire while rounding on turret bridge.
7.	WAL	Pick up turret from new position with sight at broadside. Run turret into upper and then lower elevation limits, then let turret stop from lower elevation limit at broadside position.
8.	WAL	Pick up turret at new position with sight at new position. Proceed to run the turret up the forward portion limit to the broadside position. Then return to the aft limit and run turret up the rear portion limit. Let turret stop from broadside.
9.	DAL	Take turret down rear limit at high speed position.
10	WAL	Take turret to broadside position and approximately +30° in elevation and proceed to drive the system out. The sight should be moved rapidly in a [illegible]

PART C

After a

of ammunition

ammunition

burst

ammunition

ammunition

gun stoppage

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the gun for

temperature (solid firing)

PART D - Evaluation of Armor-Piercing Ammunition Boxes at 30,000 Ft. PA

Expend one belt burst ammunition at 40,000 ft. PA until rounds counters show 150 or more rounds remaining in each gun. Descend to 10,000 ft. PA and expend armor-piercing ammunition aboard in the guns, and conduct a cruise climb to 30,000 ft. PA. At 30,000 ft., expend all the belt burst ammunition.

PART E - Evaluate Inboard Aircraft Configuration at 10,000 Ft. PA

Descend to 10,000 ft. PA and maneuver the airplane in clean configuration as the following maneuvers are accomplished. When the speed is stabilized, record the following data.

RUN NO. INSTRUMENT READINGS

C O N F I D E N T I A L

NAVE NORTH DIVISION

ENGINEERING FLIGHT TEST

PROCEDURE MEMORANDUM

12

Dated: December 1952

TO: RC-130 Aircraft

10 Crew (2 Pilots, 2 Flight Engineers

PART C - Gun Firing Ammunition Accountability at 40,000 Ft.

After a cold soaked take-off at 40,000 ft. FA; expend complete of ammunition according to the in-flight gunnery procedure, with gunners in their turrets that are going to fired with most burns given simultaneously and that the gunners watch the gun muzzles rather than the sights during actual firing. Automatic chargers and automatic firing in turrets to be on all turrets. If gun stoppage occurs fire on the operative gun before attempting any hold-back operations. The hold-back switch will be operated at least two and no more than five times in attempting to clear the guns for further firing. Measure the CAM RR and MAR RR gun temperature (wait 5 min).

PART D - Evaluation of Removable Ammunition Boxes at 40,000 Ft. FA

Expend the tail turret ammunition at 40,000 ft. FA until rounds counters show 150 or more rounds remaining in each gun. Descend to 10,000 ft. FA., link the spare ammunition aboard to the guns and conduct a routine climb to 40,000 ft. FA. At 40,000 ft. expend all the tail turret ammunition.

PART E - Turbine Exposed Thermal Calibration at 10,000 Ft. FA

Descend to 10,000 ft. FA and stabilize the airplane in clean configuration at the following indicated airspeed. When the speed is stabilized, extend the six turbos and record the data.

RUN NO.

30

CONFIDENTIAL

365

MEMORANDUM FOR [redacted]

At 1:30 PM on 15 January 1953, Lt [redacted] called WADC for Lt [redacted] to set up a possible interrogation.

Lt [redacted] was advised that Lt [redacted] would be at Convair, Ft. Worth, Texas, until the latter part of January. Told his office to have him call me as soon as he arrived.

Was the weather good or bad? Certain areas around Dallas had bad weather on 24 Dec 52.

Weather records from 0900Z at Ft. Worth will be requested from Asheville Weather Central to determine if temperature inversions or any distrubing weather phenomenon could have affected the radar sets on the B-36.

An explanation of scope photo can be obtained from WADC - indicated in inclosed TWX.

Two radar sets were:

1. AN/APG-41 = gun laying radar - possibly 40 mile range
2. AN/APS-23 = navigation

Ike Polhamus

Osmon

G. I. Davis

Garlington

Rodgerson

Keller

B.L.Woods

2nd Lt.
Stoutenburg

Andrews

Gabriel

Farish

Holbrook

Johnson

C O N V A I R
FORT WORTH DIVISION
ENGINEERING FLIGHT TEST

24 December 1952

REPORT OF TEST FLIGHT

B-36D AIRPLANE NO. 53 (AF#51-5205) SYS. NO. 70

FLIGHT DATE: 24 December 1952 DURATION: 3 Hours
(Max. Alt.: 40,000 Ft.)

RESULTS:

1. Evaluation of Nose Radar System

A total of five nose attacks were made at 40,000 ft. PA. Cursory inspection of the data indicates that either adjustments affecting maximum detection were not adequate, or that the AFA unit is more sensitive to noise in the nose than in the tail position. In any event, performance of the system was not adequate for defense of the nose of the airplane.

2. Thyratron Controller Operational Investigation

Half of the planned tests at 40,000 ft. PA were accomplished on the controllers. No data while firing were obtained. Data were obtained for the CAL turret only, as the LAL turret would not extend.

DISCUSSION:

All other tests were cancelled because of unsatisfactory weather conditions at the test sites.

1. Evaluation of Nose Radar System

The fighter was obtained on an instrument clearance from its base thereby only allowing approximately 30 minutes for testing with the B-36; then the mission cancelled any additional flights. Four nose attacks were made at closure rate of approximately 940 MPH; of the four attacks, two attacks resulted with no target acquisition, one attack resulted in detection at 5,000 yards, with a temporary lock-on at 4,200 yards thereupon lock-on was lost and the target never reacquired. The other high closure nose attack produced a simultaneous maximum detection and automatic target acquisition at 5,000 yards. At a lower closure rate of 760 MPH, the target was detected at 5,000 yards but the AFA unit did not acquire the target until 1,000 yards range, whereupon it released the target almost immediately.

CONFIGURATION:

ARMAMENT

Upper forward turrets were again operative and contained the removable ammunition box installation.

CONFIGURATION (Cont'd)

ARMAMENT

The upper aft gun heaters were disconnected and guns lubricated with special oil 53019.

Tail radar ALO and G-15 camera was removed and installed in the nose radar system.

Set chrome guns were installed.

The thyratron controller was reinstrumented for the fourth time to obtain base line data at high paper speed.

Nose radar instrumentation was calibrated.

GENERAL

The alleron have been re-covered with new fabric.

BY _____ APPROVED _____
Ike Rollands
Flight Test Engineer

R. W. Miller
Sr. Flight Test Group Engr.

Project No. ZK-471

Distribution: Normal plus

W. M. Stevenson
J. D. Samuelson
B. S. Dohuak
C. R. Cummitt
S. O. Ohmbrak
John Ford (GI)
Lt. D. Stoutenburg (2)

SUBJECT: FLYOBRPT

Statement by AN/APG/41 operator on 24 day December 1952, Convair flight on ship 44-92054, type B-36

While flight testing AN/APG/41 radar on nose of B-36 054, 12-24-52, I encountered a spurious target during work with fighter aircraft. Thinking that it might be cloud trouble, I asked pilot (C. I. Davis) what kind of cloud cover we had around us. His remarks were "not a cloud in 40 miles." At this time the fighters were dispatched to return to their base. The spurious target again triggered the ALO and made a very firm lock on. At this point I asked the APS-23 operator for confirmation on target. He confirmed that he had seen spurious target at same azimuth position and possibly same range. By this time the target had appeared several times in a pop in and pop out manner at the same range 2000 to 4000 yds but varying in aximuth of 60° to the right or left of the hose of the ship. To assure myself I asked the pilot to maneuver the ship after lock on to prove trackability. This showed target to be very stable and trackable. At this time we had spent some 30 minutes with the target and when we started to descend the target stayed with us down to about 15,000 ft. At this point ground return was triggering my system, and the target was no longer seen. This target did not look like normal return that you get from other aircraft. The only thing that I have ever seen to resemble it was spent 20 MM shell cases which I have tracked before on the APG/41 tail system in same ship.

W. C. Osmon
APG/41 Operator
Dept. 76, Convair

W C Osmon

SUBJECT: FLYOBRPT

Statement by AN/APS-23 operator, 24 December 1952, Convair flight on ship 44-92054, type B-36.

The APS-23 with C-412 control in lieu of a computer is used as search radar on this airplane. At the time I was requested to aid in detecting the phenomenon I was in search position 40,000 ft. altitude and 36 mile range. I had previously determined also that in level flight, search condition, the best ground return was obtained with -7 to -9 degree antenna tilt. I then reduced range to the stop position which removed the five mile range mark from the scope, and upon this fact I estimated my maximum range on the scope at 4.5 miles. I next switched to Sector-Scan selecting a 120 degree arc dead ahead and by moving antenna tilt to zero position on scale the described targets began to appear. I then found my best target range from zero to +4 degrees. Since the targets were in the same proximity as the AN/APG-41 had indicated, I did not change altitude. In almost every instance I would see the target on my scope by the time the AN/APG-41 had detected and locked on. The AN/APG-41 operator would call out range of lock on, and my range would be comparable to his. On one occasion I detected a second target farther out (approximately one mile), and on several occasions I could see another target 30 to 45 degrees either side of the one he was locked on. On one occasion I switched back to search picked up the target aft of the airplane, and followed it out of 4.5 mile range. These targets were very sharp and with RF gain could be tuned very bright. However, they were unusual in the fact that they did not track in from the edge of the scope but would appear on the scope at a range of two to four miles. They also might remain constant for several sweeps, and then the next sweep they would be gone. Several sweeps later they might reappear. They would disappear at the same time the AN/APG-41 would unlock.

We next checked to see if the two sets were mutually interfering with each other by turning the AN/APS-23 to stand-by position, and alternately turning the AN/APG-41 to stand-by. No interference was observed.

R. O. Garlington

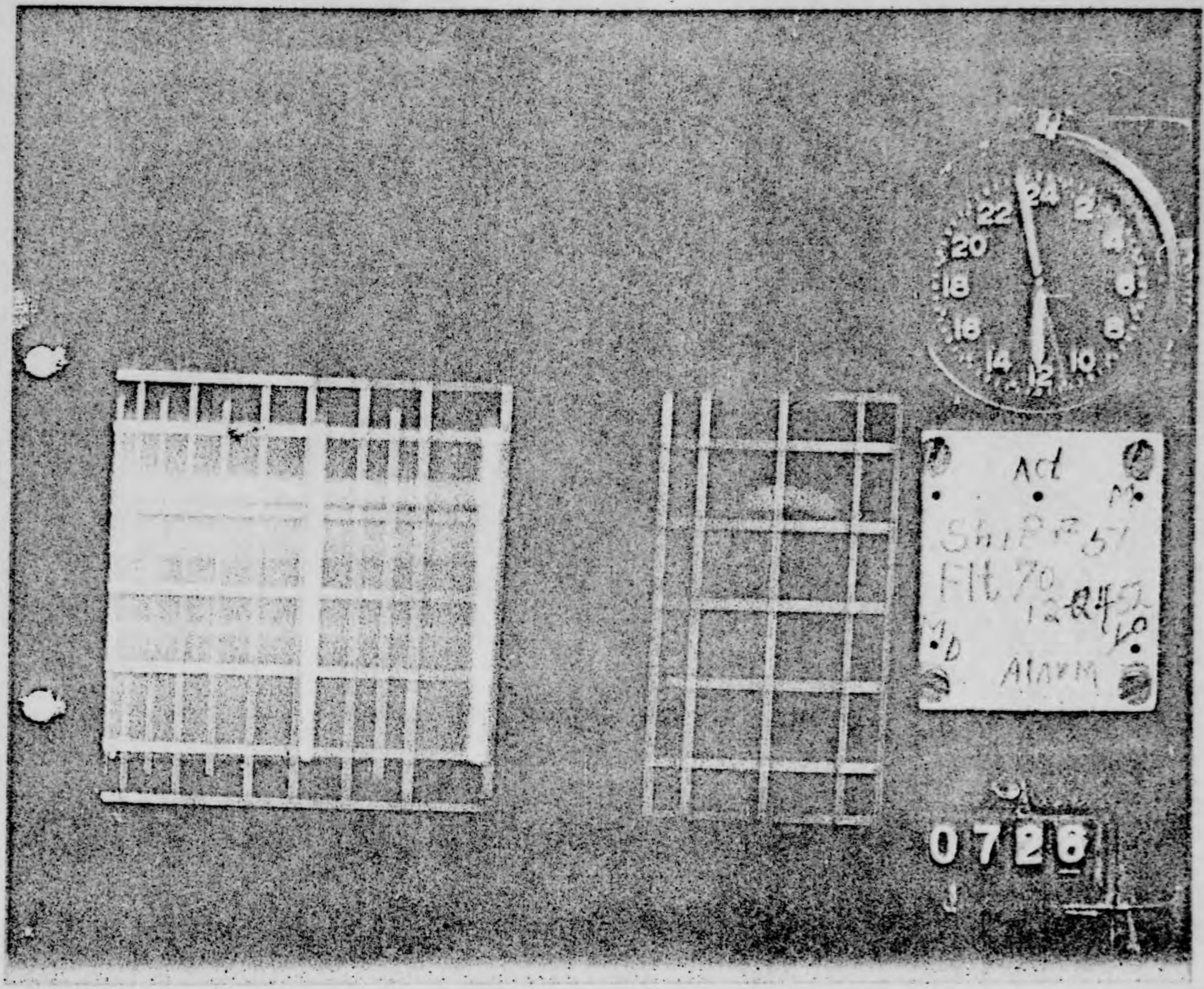
R. O. CARLINGTON
AN/APS-23 Operator
Dept. 12-1

C-635

This CASE INCLUDES

Twenty Six (26) 8"X10"

photos.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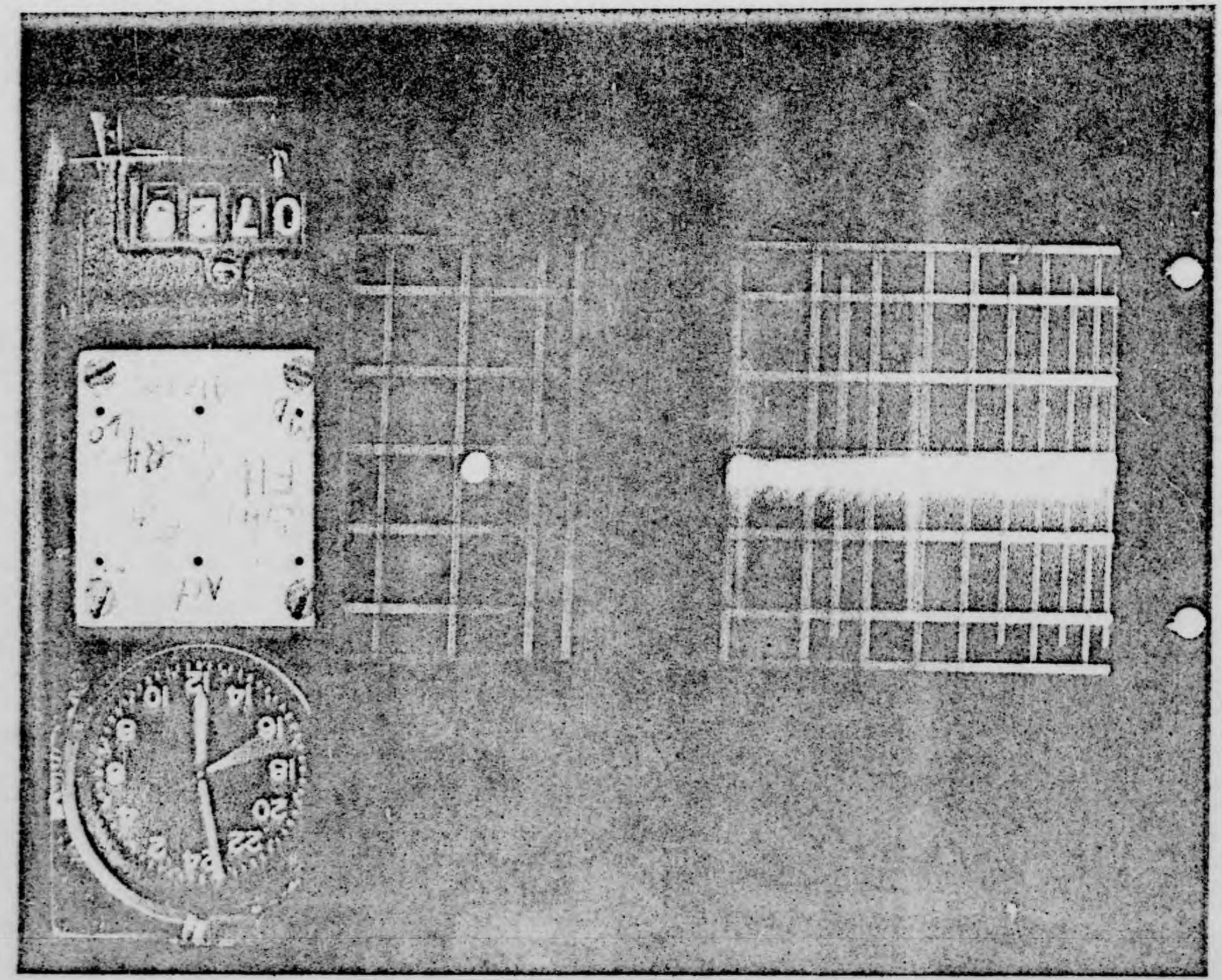


AF Form Part II

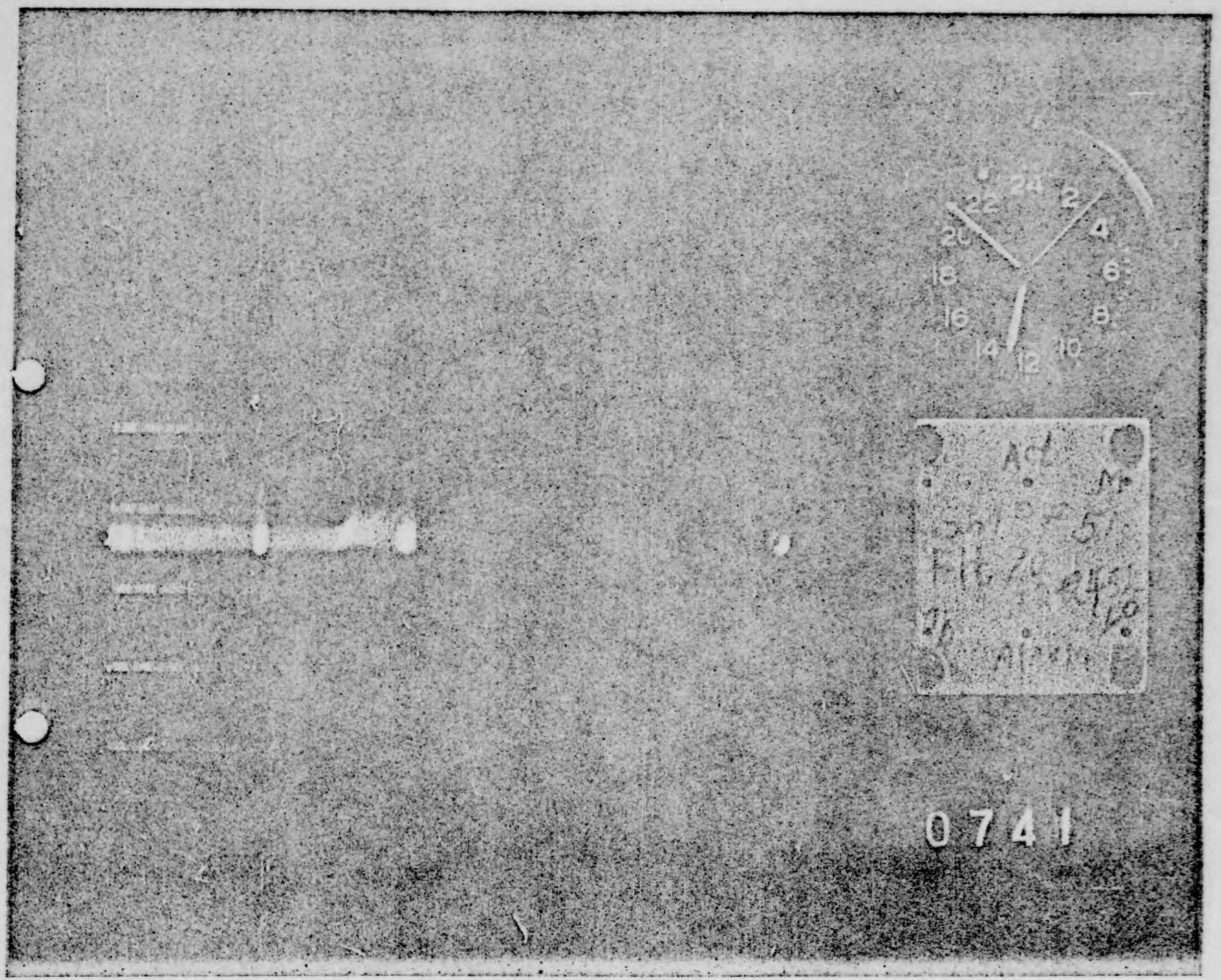
Ref. T.T. cite no. SORF-12-149-E ; 30/20302/Dec 52

Subject : FLYOBRT

(1) Object not seen visually. The AN/APS-23 radar would locked on (a function of the ALO) and track the phenomenon. All personnel looking were able visually search the area in front of the aircraft in the direction and distance indicated by the AN/APS-23 operator. Nothing could be seen. The AN/APS 23 operator was asked to search the space in front of the B-36 and he reported detecting the phenomenon. The signal comments of both radar operators are attached as inclosure no. 3.

(2) Phenomenon sighted at 1215 CST. (1815 Z), 24 Dec 52 intermittently for a period of approximately 30 minutes. The exact time shown on the photographs referenced in paragraph (8) is _____ to _____. These photographs are pictures taken of the AN/APG-41 indicator "B" and "C" scopes during a period when the AN/APG-41 was tracking the phenomenon.

(3) Phenomenon detected by Radar set similar to AN/APG-41 W/ ALO installed on nose of B-36 equipment flight test aircraft. Phenomenon was detected at same Relative Position by AN/APS-23. (For Description of AN/APG-41 and ALO (C-899/APG antenna control) re T.O. no. C.O AN 16-30APG41-3. The AN/APG-41 indicator was equiped with an O-15 camera which photographs the B and C scopes, a data card, a frame counter and a clock. The data card contains six lights, one indicating when the radar set detects a target, another is energized when the radar set locks on a target and another is energized when the Mitchel movie camera is taking pictures. The Mitchel camera was mounted on the nose turret and boresighted to the tracking line of the AN/APG-41 antenna. The turret is slaved to the antenna and follows in azimuth and elevation although the lights on the O-15 failed indicated the Mitchel camera was running, unfortunately the mitchel film was developed through normal channels and the frames which were taken at the time the phenomenon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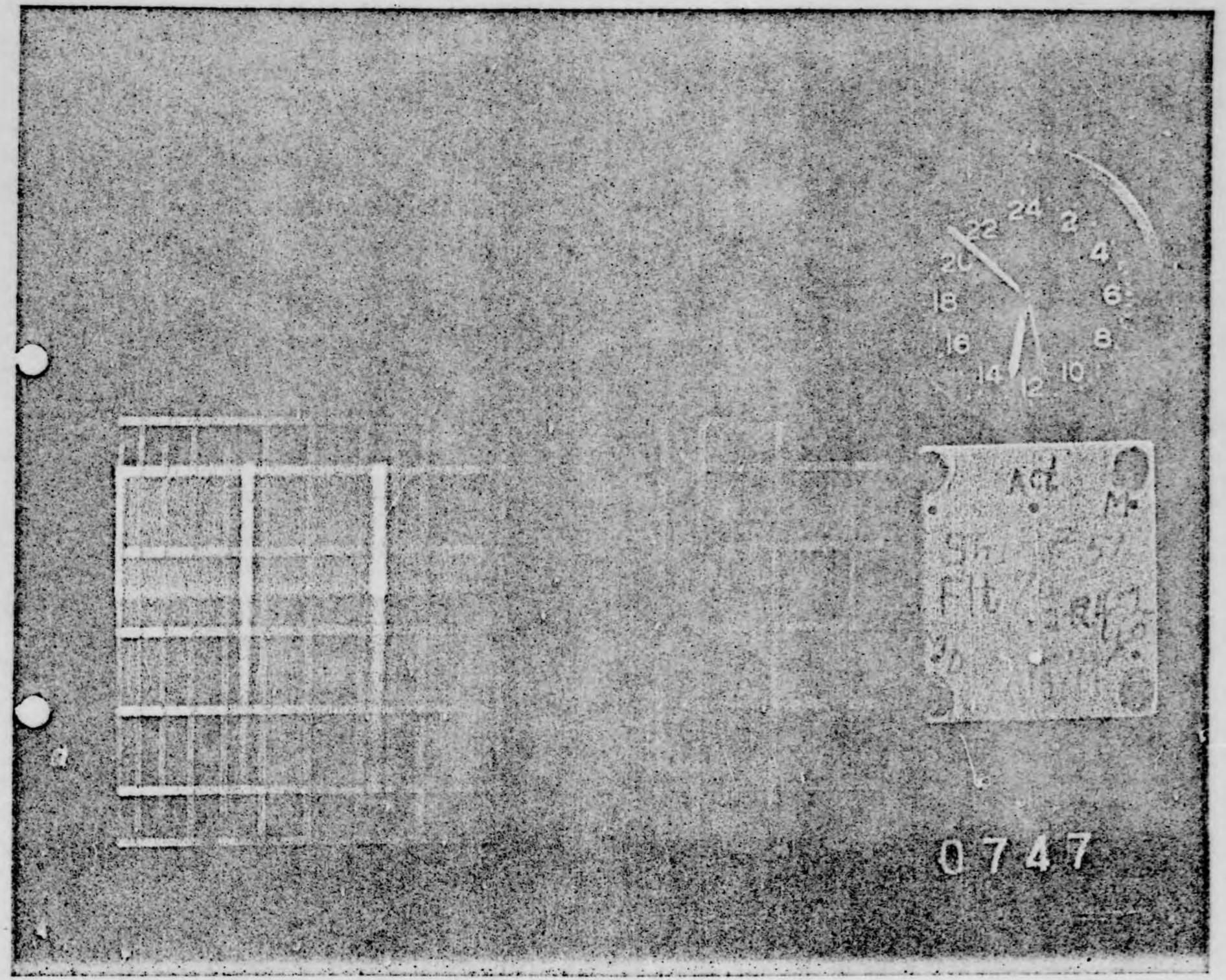
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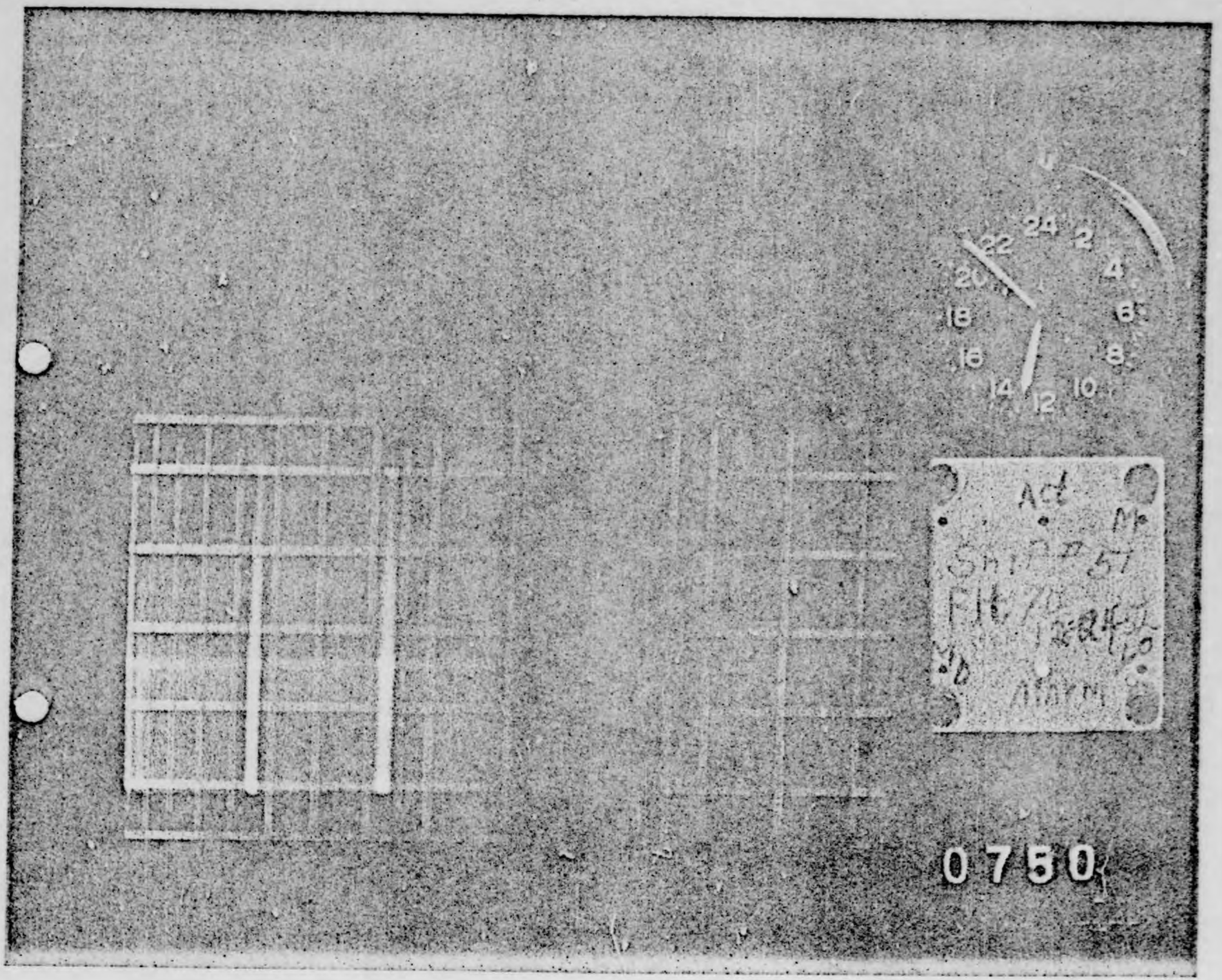
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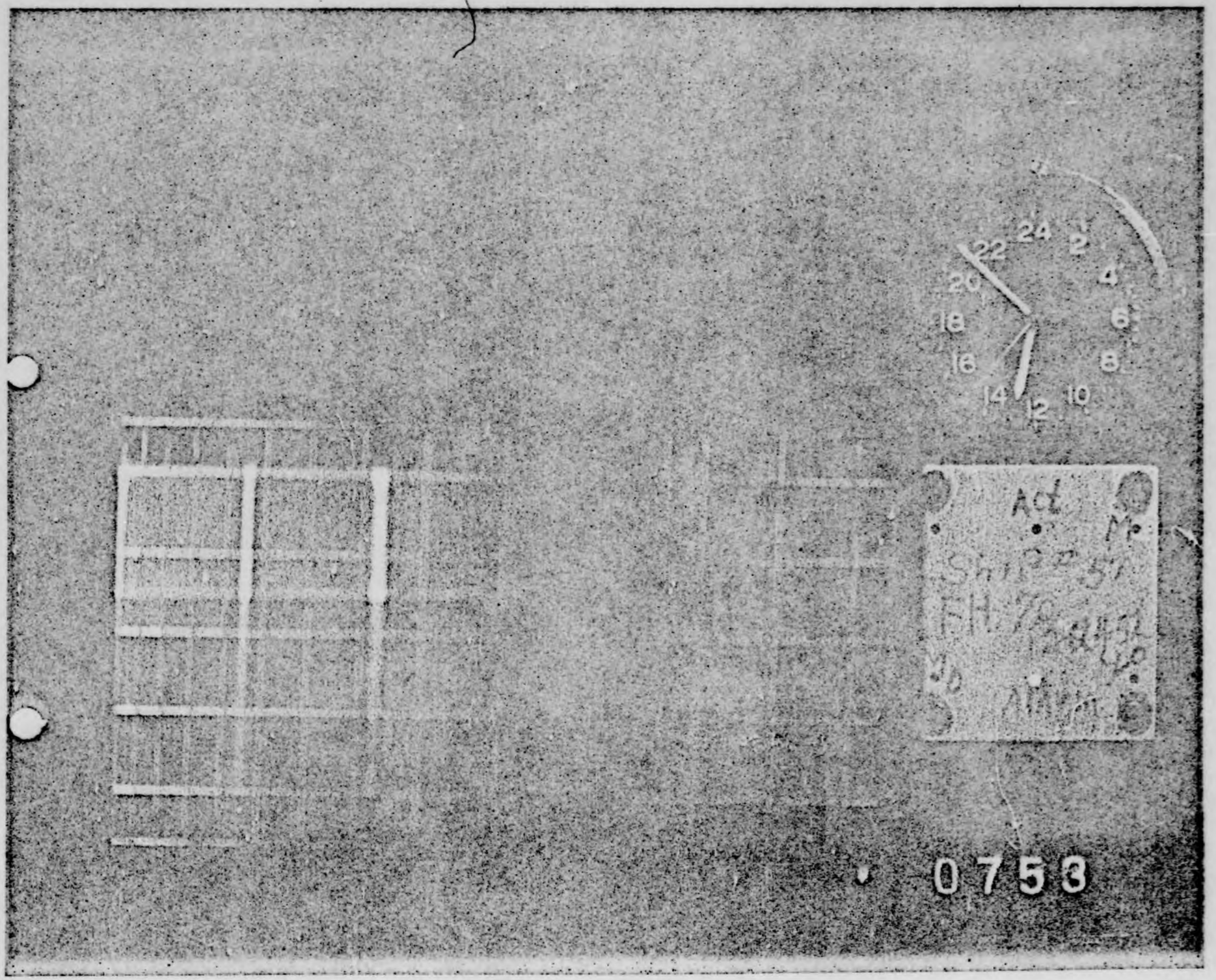
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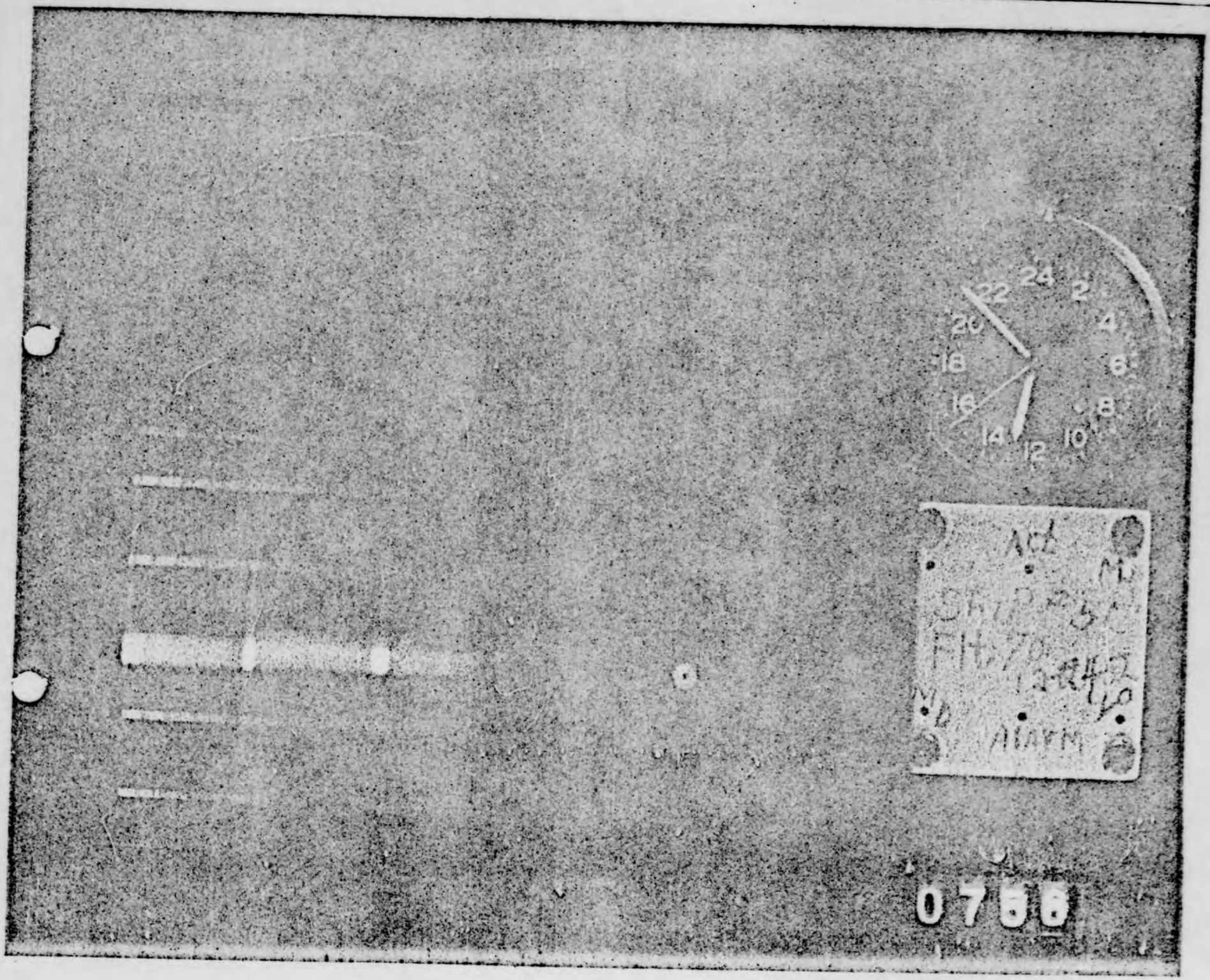
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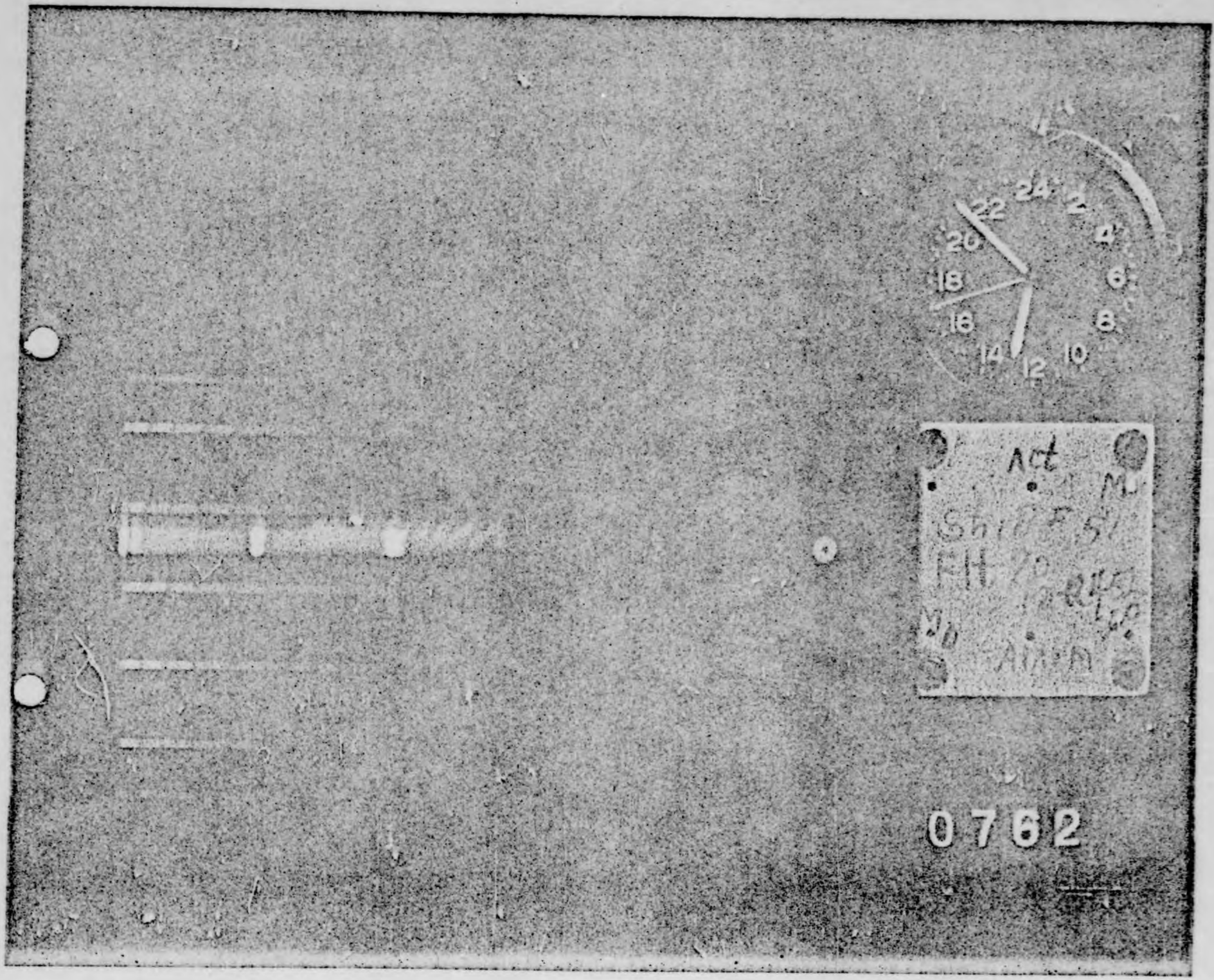
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was being tracked were rendered useless by poor developing techniques and marking distinctions could be found on the film.

(4) Phenomenon observed 40 miles E of Dallas, Texas to 80 miles N.E. of Dallas on both N and S. heading at 40,000 feet and on descent to 15,000 ft. in the area surrounding Lake Dallas. Phenomenon was no longer detected below altitude of 15,000 feet. Phenomenon was tracked at distance of 2,000 to 4,000 yards range, appearing intermittently at different azimuth locations, plus or minus 30° and minus 5° to minus 15° elevation. Although an intensive visual search was made phenomenon was not seen by the pilot or any crew member.

The phenomenon was present during the period of time when the F-86 fighters were making simulated attacks against the B-36. It was determined later that the inferior performance of the AN/APS-41 was obviously due, at least partially, to the same type of phenomenon that was detected and tracked for 30 minutes after the fighters left the area to return to their base (Bergstrom AFB).

The AN/APG-41 operator's signed statement (incl. 3) and the AN/APS 23 operator's signed statement (incl 4) give further details.

(5) Both radar operators have been operating and flight testing their respective equipments for several years. Radar set AN/APG-41 was instrumented with a 0-15 camera (described in (3) above). THE 0-15 film was not clear but does indicate presence and trackability of phenomenon. ~~The last sentence refers to the 0-15 film.~~ The scope face of the AN/APS-41 indicator was slightly out of focus and the pictures that the operator took in search do not show the phenomenon clearly. A description and sketch of the search presentation of the phenomenon on the scope is included as part of the AN/APG-41 operators statement (incl. 3)

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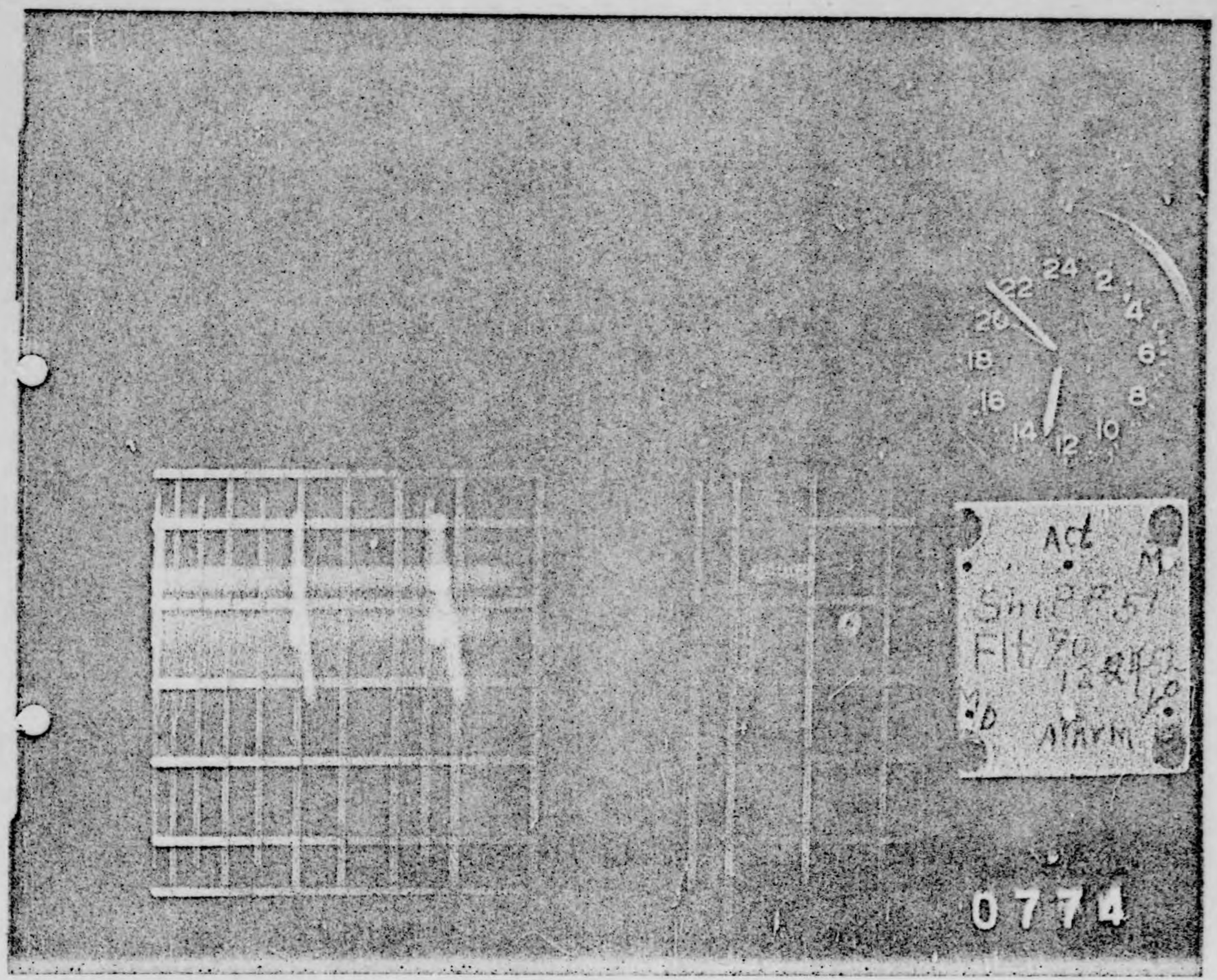
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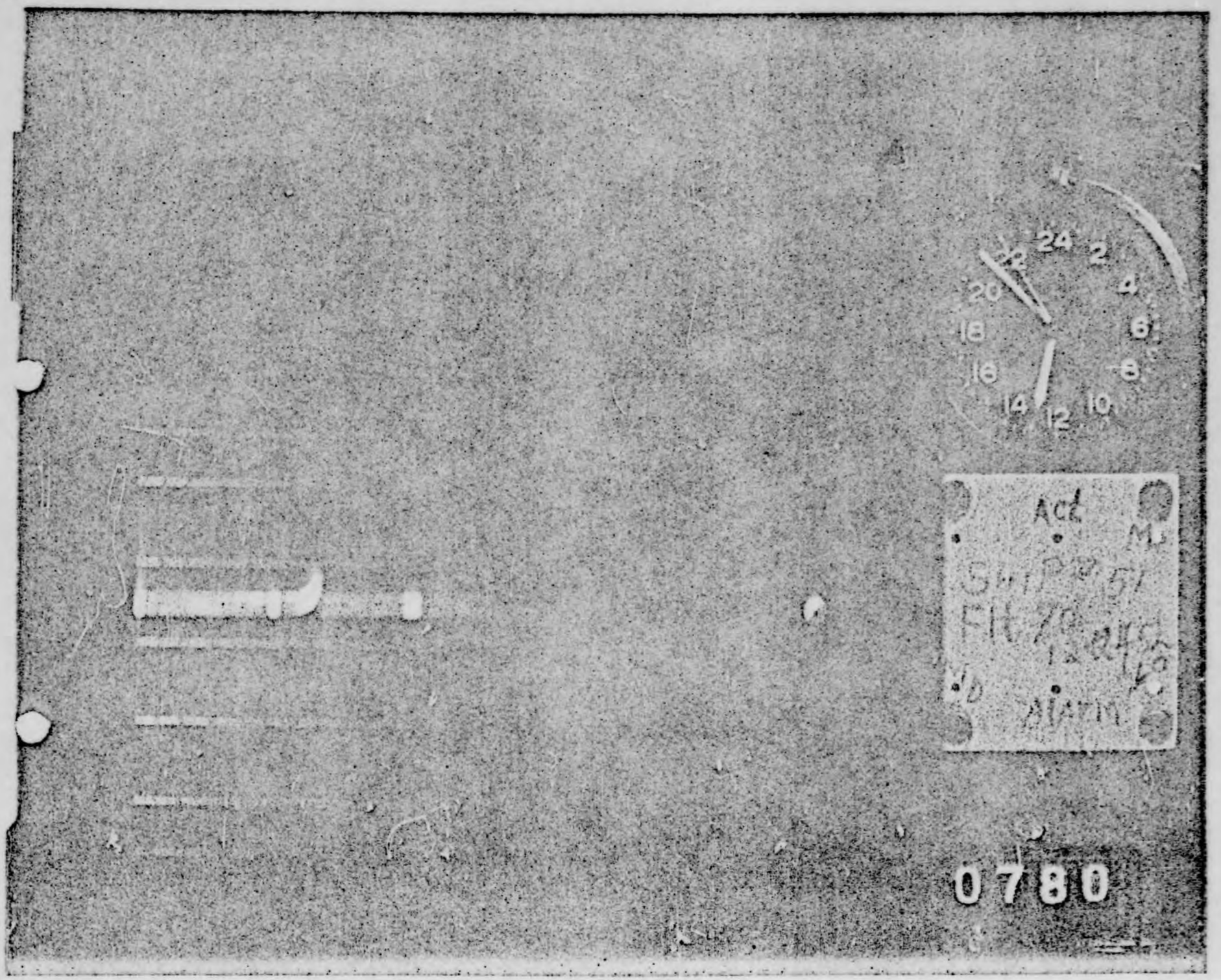
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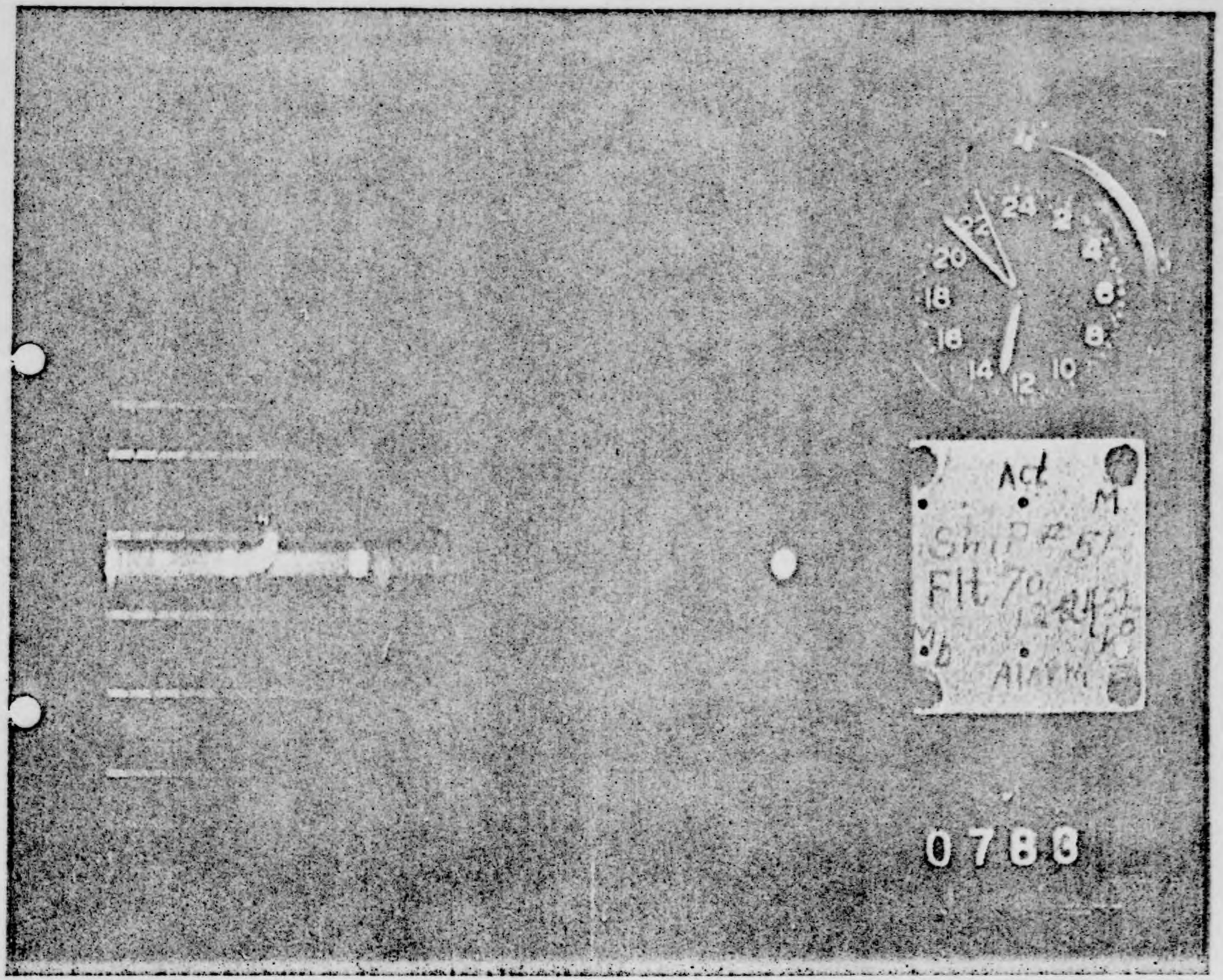
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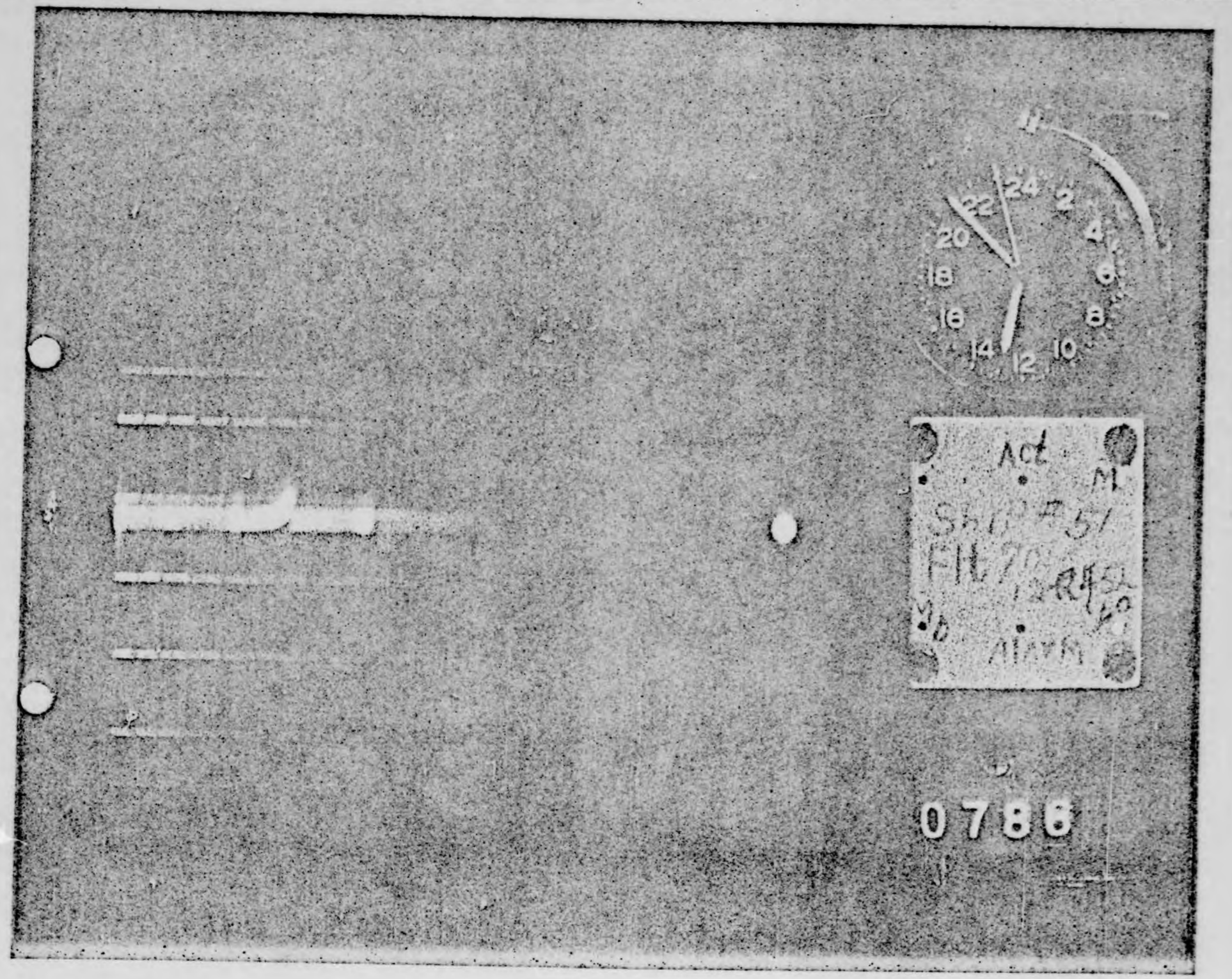
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(6) Weather conditions. Immediate area was clear, nearest cloud formations were apx. 10 miles distant (above same altitude). There was a cloud deck below the B-36 at about an altitude of 5,000 to 8,000 feet.

(7) AN/APS-23 presentation of phenomenon was similar to recent AF release of PPI photographs of sightings made over Washington, D.C.

The AN/APS-23 operator's statement gave the details of what he saw on his PPI scope.

(8) Photographs of AN/APS-41 scope are available. These are the 0-15 films refered to in (3) above. These are the mitchel films refered to in (3) will be retained by Lt. A.V. Stoutenburg and will be available upon his return to WPAFB, Ohio in Feb. His office is in the Armament Laboratory, Building 22 post 18A phone 20121 or 26235 and the office symbol is WCLGL-1.

(9) Maneuvers were made by the B-36 aircraft to prove trackability of the phenomenon. By observing the AN/APS-41 antenna position while tracking the phenomenon it was determined that during the B-36 maneuvers the phenomenon remained on its same apparent course and speed.

The maneuvers consisted of turns, climbs, and dives (to the extent of the B-36's capabilities). The G-41 antenna and turret would move with respect to the B-36 so that they pointed towards a point in space travelling a path parallel and more or less coinciding with the path the B-36 had just departed from. The phenomenon descended at the same rate as the B-36 and maintained a distance of 2000 to 4000 yards ahead of the B-36. Whenever the B-36 established a new heading so that the phenomenon was entirely out of the

search sector of the G-41 antenna. The G-41 would not detect anything for a period of several seconds up to 2 or 3 minutes. Then suddenly the phenomenon would reappear and the G-41 would again detect and lock on it. See the AN/APG 41 operators statement (incl No. 4) and the aeronautical chart for details.

(10) No air traffic was observed in the Dallas area at the time of the electronic sighting.

The pilots and other crew members were constantly searching the area in which the G-41 indicator the phenomenon was present. If there was anything large enough, or not transparent enough, to see pilots and other crew members could not find it.

/4/ PHENOMENON OBSERVED 40 MILES E OF DALLAS TEX TO 80 MILES NE OF DALLAS ON BOTH N AND S HEADINGS AT 42000 FT AND ON DESCENT TO 15000 FT IN THE AREA SURROUNDING LAKE DALLAS. PHENOMENON WAS NO LONGER DETECTED BELOW ALT OF 15000 FT. PHENONENON WAS TRACKED AT DIS OF 2000 TO 4000 YARDS RANGE APPEARING INTERMITTENTLY AT DIFFERENT AXIMUTH LOCS PLUS OR MINUS 30 DEGREES AND MINUS 5 TO MINUS 15 DEGREE ELEVATION. ALTHOUGH AN INTENSIVE VISUAL SEARCH WAS MADE PHENOMENON WAS NOT SEEN BY THE PLT OR ANY CR/M.

/5/ BOTH RADAR OPRS HAVE BEEN OPRG AND FLT TESTING THEIR RESPECTIVE EQUIP FOR SERVEAL YRS. RADAR SET AN/APG-41 WAS INSTRUMENTED W/ AN 0/15 CAMERA. FILM WAS NOT CLEAR BUT DOES INDICATE PRESENCE AND TRACKABILITY OF PHENOMENON.

/6/ WEA CONDITIONS. IMMED AREA WAS CLEAR NEAREST CLOUD FORMATIONS WERE APRX 40 MILES DISTANT.

/7/ AN/APS-23 PRESENTATION OF PHENOMENON WAS SIMILAR TO RECENT AF RELEASE OF PPI PHOTOGRAPHS OF SIGHTINGS MADE OVER WASHINGTON D C.

/8/ PHOTOGRAPHS OF AN/APG-41 SCOPE ARE AVAL.

/9/ MANEUVERS WERE MADE BY THE B-36 ACFT TO PROVE TRACKABILITY OF THE PHENOMENON. BY OBSERVING THE AN/APG-41 ANTENNA PSN WHILE TRACKING THE PHENOMENON IT WAS DETERMINED THAT DURING THE B-36 MANEUVERS THE PHENOMENEN REMAINED ON ITS SAME APPARENT CRSE AND SPEED.

/10/ NO AIR TRF WAS OBSERVED IN THE DALLAS AREA AT THE TIME OF THE ELECTONIC SIGHTING.

30/2200Z DEC JWFAF

K

UNCLASSIFIED

[redacted]

DE JWFAF 6B

R 302038Z ZNJ

FM AF PLANT REPRESENTATIVE CONVAIR FTW

TO JEPHQ/DIR OF INTELLIGENCE HQ USAF WASH DC

JEDWP/AIR TECHNICAL INTELLIGENCE CENTER WRIGHTTTESC AFB OHO

JEDEN/CG ENT AFB COLO

JEDWP/CG AMC WRIGHT PATTERSON AFB OHIO

INFO JWFAF/CO SOAPD FTW

/[redacted]/ SORF-12-149-E AT UNCLASSIFIED

A-2C. SOAPD FOR SOF.

SUBJ FLYOBRPT. THE FOLG INFO IS SBMD IAW AFL 200-5 29 APR 52.

/1/ OBJECT NOT SEEN VISUALLY.

/2/ PHENOMENON SIGHTED AT 1215 24 DEC 52 INTERMITTENTLY FOR PD OF APRX 30 MIN.

/2/ PHENOMENON DETECTED BY RADAR SET SIMILAR TO AN/APG-41 W/ ALO

[redacted]