PROJECT 10073 RECORD CARD

1. DATE 13 May 1955 3. DATE-TIME GROUP Local GMT 14/0230Z	Duluth, Minne 4. TYPE OF OBSERVATION Ground-Visual Air-Visual		000 00	Was Balloon Probably Balloon Possibly Balloon Was Aircraft Probably Aircraft XPossibly Aircraft		
5. PHOTOS D Yes X & No	6. SOURCE Military		000	Was Astronomical Probably Astronomical Possibly Astronomical		
7. LENGTH OF OBSERVATION 4-5 minutes	8. NUMBER OF OBJECTS	9. COURSE	000	Insufficient Data for Evaluation Unknown		
10. BRIEF SUMMARY OF SIGHTING		11. COMMENTS				
Two AF pilots on A/I mis	sion locked on		is	and evaluation incident by WADC.		

ATIC FORM 329 (REV 26 SEP 52)

SECURITY CLASSIFICATION (If any)

DISPOSITION FORM

EVAL! POSS.

FILE NO.

SUBJECT

Air Intelligence Information Report

TO AFOIN-LEA ATTN Capt Hardin

FROM WCLGF-2

1 CCOMMENT NO. 1 DATENTA LtHannen/hvt 27166/B22/P23A

- 1. Reference ismade to AF Form 112, Subject, "UFOB," dated 17 May 1955 and originated by the Intelligence Officer, 11th Fighter Interceptor Squadron.
 - 2. Weapons Guidance Laboratory comments on referenced report are as follows:
- a. Based on the vectoring and range data contained in the report, a plot (Figure I) of the intercept shows that the target could have been an aircraft of similar performance to modern jet aircraft. During the intercept the target was executing a tight turn to starboard.
- b. For a portion of the targets turn to starboard, the interceptor and target were flying approximately parallel (Figure I.D) at about the same velocity. With the target at 35 degrees starboard and flying parallel to the interceptor, the target would appear as a stationary return on the RO's scope.
- c. It is doubtful that the pilots indicator or the RO's scope could be used to accurately measure the 1000 knots reported speed of the target as it was going out in range. The maximum opening range rate that can be observed from the range rate gap on the pilots indicator is 200 knots. The fire control system specification requires that the system should be able to measure range rate from 1200 knots closing to 200 knots opening range rate.
- d. Another possible explanation of the reported speed of the target as it went out in range is that the interceptors radar jumped lock. For a short period of time and with a slight misalignment of the system, the radar could appear to be locked onto the target while actually the radar had jumped lock. Under these conditions, the return on the scope could move in such a manner that the RO would believe that the return was a target.
- e. The reported elevation angles of the target as it was going out in range at 1000 knots are considered to be approximate, as only the approximate elevation. angles of the antenna are indicated by the position of the elevation marker at the right edge of the RO's scope. Also, because the indicated elevation angle is measured with respect to the interceptor heading and not with respect to ground coordinates, a diving or climbing attitude of the interceptor would result in a corresponding increase or decrease of the elevation angle.

2 Incls

1. 1st Ind fr 515th Air Def Gp dtd 21Jun55

2. 1st Ind fr 4602d Air Intel Ser Sq(ADC) dtd 1Jun55 w/2 incls Lt. Colonel, USAF Chief, Fighter Systems Branch

Weapons Guidance Laboratory

15 JUN 1985

AIR TECHNICAL INTELLIGENCE CENTER
WRIGHT-PATTERSON AIR FORCE BASE
OHIO

SUBJECT: (Uncl) Request for Additional Information

TO:

Commander

515th Air Defense Group Duluth Municipal Airport

Duluth, Minnesota

398. Deppend

- 1. Reference AF Form 112, subject: UFOB, dated 17 May 1955 and originated by the Intelligence Officer, 11th Fighter Interceptor Squadron.
- 2. In order to facilitate an accurate analysis of the report, request the crew of aircraft #32525 be re-interrogated as to whether or not the target return was intermittent or steady.

FOR THE COMMANDER

MARY STORM

1st Lt. USAF

Assistant Adjutant

FIS-I (17 May 1955)

1st Ind

2 1 JUN 1955

HEADQUARTERS, 515TH AIR DEFENSE GROUP, Duluth Municipal Airport, Duluth Minnesota

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

Crew of aircraft #32525 report that target return was steady for full period of scope coverage.

FOR THE COMMANDER:

Capt., USA

Adjutant

HEAD WATE S 51.5th AI. TIPE S GROUP DULUTH UNECEPAL TRIOT DUL TI, MIMIESULA

15-1

9 6 MAY 1251

SUBJECT: Transmittal of Intelligence Information

Commander 0: Air Defense Command Ent Air Force Base Colorado Springs Colorado ariw: Director of Intelligence

Transmitte herewith, in accordance with AFL 200-2, is IF Form

112 and 112 (II), UTOB Leport.

FOR THE COLL DEP

2 Incls

1. Air Intell Info

Lept (3 Cys) (Lt Lapp)

2. Air 'atell Info Lept (3 Cys) (Lt Holtan)

2nd Lt.,

Adjutant

B/Ltr Hq 515th ADEFGRU, Duluth Mun Aprt, Minn, FIS-I, 26 May 55, Subj: Trans of Intel Info

AISOP (26 May 55)

1st Ind

HEADQUARTERS, 4602D AIR INTELLIGENCE SERVICE SQUADRON (ADC), Ent Air Force Base, Colorado Springs, Colorado 1 JUN 1955

TO: Commander ATIC, ATTN: ATTA-5, Wright Patterson Air Force Base, Dayton, Chio

- 1. The inclosed preliminary UFCB report is transmitted for your information. The nature of this sighting is such that your organization is probably better equipped to handle it.
- 2. This organization checked with the 3rd Weather Group, ADC, resulting in no indication of weather phenomena at the time and location of sighting which might help to explain this report.

FOR THE COMMANDER:

2 Incls

RAY L. JONES Major USAF Adjutant

AF FORM	112
APPROVED 1	

(CLASSIFICATION)

United States			
	TELLIGENCE II	NFORMATION	4 REPORT
BJECTFOB			
REA REPORTED ON NIMIESOTA		FROM (August) F. I.S.	(IMPELLIGENCE)
TE OF REPORT 1955	DATE OF INFORMATION BY 1955		EVALUATION A-2
EPARED BY (Officer) RAPP 2/Lt. Asst.	Intell. Office	Sounce Crew Her	ort.
EFERENCES (Control number, directive, previous report,			
		eromanh. The inclosures of lo-	wer left. Begin text of report on AF Form 118—Part II.)
and radar observer) made training mission. The instead were considered significan	object by an aiche observations explainable spec	rerew of this used by radar while and maneuvers essitate this r	e on a routine night performed by the object report.
	or overig orrect;	DAVID H. HO lst Lt. Intelligend	DLTAN USAF, ce Officer
INCLS.			
ISTRIBUTION BY ORIGINATOR			

THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE ACT, 50 U. S. C.—
AND 32, AS AMENDED. ITS TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW.
TED IN WHOLE OR IN PART, BY OTHER THAN UNITED STATES AIR FORCE AGENCIES, EXCEPT BY PERMISSION OF THE DIRECTOR OF

'~ ASSIFICATION)

18-66589-2 U. S. GOVERNMENT PRINTIP

AIR INTELLIGENCE INFORMATION REPORT

ROM (Agency)					REPORT N				-					
non (riginey)				15 8.1	REPORT						2		2	
	1								1	PAGE	~	OF	3	PAGES
UFOB	(Form	at from	AFR 200-	.2)										
(1.)	(a) (b) (c) (d) (e)	n One	ernable " cernable " " "		dar s	ighti	ing)							
(2)	(a) (b) (c) (d)	Unusual Level at 30 degre (State at 260 kno turned at moved of turned about 3 Target pilot b board at in rang board t in rang board t in rang toard t indicat and pil 1,000 l	of course character above to 2 port aga fly and time- nds. On e faster and went and went to 3 or ten at and le at 26,000 about 9 to miles chois. The started at and le at 26,000 about 9 to miles chois. The started at and le at 26,000 about 9 to miles chois and went to 3 to 1 to 1 to 1 to 1 to 1 to 1 to	erist grees e and bserv l. deg cated es st line line line line line line line line	star (60) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (ers) (e	coard de coa	d. es state estate ading hoard le setate pel, 38 6 greet pel, 38 6 greet ped inds renge th a char char char char char char char cha	delieving to 8 Pilot' O second above, accombance of a second	rd. n at egree ing object of the structure of the structu	es st it was ct on f tur et no nd de ad de ad de immed ry cl immed ry cl inter turn inter turn it at turn it at turn it at turn it at turn it at turn inter it at turn it at it at turn it at turn it at it it at it it at it at i	raight arginates to some down liately lose to airspe when went a scope when went a scope	tand in set air scope. The scope. The starbe star	craft Craft Craft Craft Craft Cope Cope Cope Cope Cope Cope Cope Cope	t, we get egrees egrees at grees). when star- or star- ng out s star- n noved from e the egrees at at a star- n noved from e the egrees at a star- n to a star- n
(3)		Mone F-89D,	bservati ectronic 32525, eading,	: AF	00 fee	et, O)45 d	egrees	ori	ginal	L head	ing, 08	30 de	grees

- (a) 14/0230Z (b) Hight (4)
- Latitude: 47 degrees 07! North Longitude: 93 degrees 07! West (5)

(12)

None

AIR INTELLIGENCE INFORMATION REPORT

FROM (Agency)		REPORT NO.		
llth	F.I.S.		PAGE 3	3 PAGES
(6)	Observers: (a) N/A (b) Middleton, Charles 11th FIS, Pilot Completely reliable Fisher, Donald G., 11th FIS, Radar Of Completely Reliable	(Interceptor) le , 2/Lt. bserver		
(7)	Weather: (a) 6lear (b) Surface: 90/08 6,000: 240/16 10,000: 270/07 16,000: 260/20 20,000: 290/20 30,000: 300/30 50,000: 280/25 80,000: 290/08 (c) Clear (d) 15 plus (e) None			
(8)	No information as to	any unusual activity h	nas been received.	
(9)	Refer to 2d			
(10)	Northwest at about 50	miles there were two	aircraft running inte	rceptions.
(11)		tant Intelligence Offi		

EDWARD A. RAPP
2/Lt.
Asst. Intell. Officer

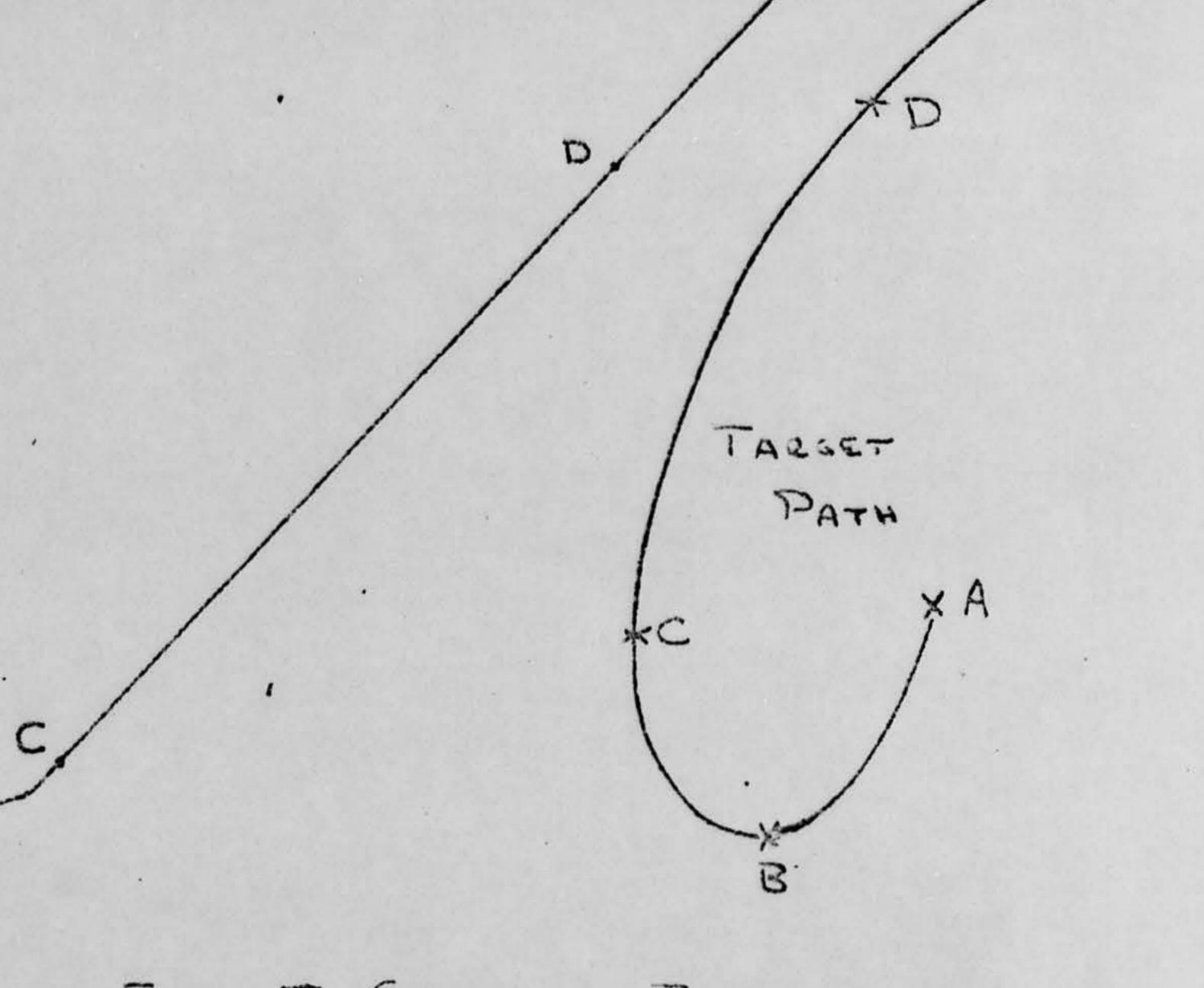
		8.6
BÝ C. DATE	SUBJECT	SHEET NOOF
GHKD. BY DATE	**********************************	JOB NO

A. TARGET PICKED UP AT 15 MILES, 45" STARBOARD

T3.) ASSUMED IS SECOND DECISSION TIME AND TURN 45° STARBOARD. TARGET THEN 20° STARBOARD.

C.) TURN 30° DEGREES PORT AND THEN TARGET

D) PILOT FLEW ERROR DOT TO 3 MILES .



INTERCEPTOR'S
FLISHT PATH

FIGUREIT GRAPHICAL INTERPRETATION OF
AIR INTELLISENCE INFORMATION REPORT