PROJECT 10073 RECORD CARD

1. DATE	2. LOCATION		12. CONCLUSIONS
13 May 1955 3. DATE-TIME GROUP Local 14/0230Z	Duluth, Minne 4. TYPE OF OBSERVATION D Ground-Visual		D Was Bolloon D Probably Balloon D Possibly Balloon D Was Aircraft Probably Aircraft
S. PHOTOS O Yes Xii No	6. SOURCE Military	XXAir-Intercept Radar	D Was Astronomical D Probably Astronomical D Possibly Astronomical
7. LENGTH OF OBSERVATION 4-5 minutes	8. NUMBER OF OBJECTS One	9. COURSE	D , Other
10. BRIEF SUMMARY OF SIGHTING		11. COMMENTS	
Two AF pilots on A/I mis	sion locked on		le and evaluation is incident by WADC. s ∜c/

DISPOSITION FORM

EVAL! POS

FILE NO.

SUBJECT

Air Intelligence Information Report

TO AFOIN-LEA ATTN Capt Hardin FROM WCLOF-2

DATE OF A S 1 COMMENT NO. 1 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.
 - 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 eigcraft 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 HO's scope.
- c. It is doubtful that the pilots indicator or the RC's scape 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 miselignment 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 Op dtd 21Jun55

2. 1st Ind fr 4602d Air Intel Ser Sq(ADC) dtd 1Jun55 w/2 incls Weapons Guidance Laboratory

Mr. Husten N. 23 - 1. 23A.

AIR TECHNICAL INTELLIGENCE CENTER WRIGHT-PATTERSON AIR FORCE BASE OHIO

15 JUN 1985

SUBJECT: (Uncl) Request for Additional Information

TO:

Commander

515th Air Defense Group Duluth Municipal Airport

Duluth, Minnesota

397. Befferd

- Reference AF Form 112, subject: UFOB, dated 17 May 1955 and originated by the Intelligence Officer, 11th Fighter Interceptor Squadron.
- 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 <u>intermittent</u> or steady.

FOR THE COMMANDER

MARY CASTORM 1st Lt. USAF Assistant Adjutant

FIS-I (17 Mey 1955)

lst Ind

2 1 JUN 1955

5. 1. 1 de 1163

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

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

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

FOR THE CONSISTER:

CART H. BJORKETED

Adjutant

HEAD WATERS 515th AIR TITES GROUP DULUTH UNGCIPAL AIRTO TO DULTT, MINESOTA

IS-I

2 6 MAY 125

SUBJ CT: Transmittal of Intelligence Information

0:

Commander
Air Defense Command
Ent Air Force Dese
Colorado Oprings
Colorado
ArTM: Director of Intelligence

Transmitte horseith, in secondance with AF. 200-2, is .F Form

112 and 212 (II), UTOB Laport.

FOR THE COLLEGE DEEP

2 Incls

 Air Intell Info Rept (3 Cys) (Lt Rapp)

2. Air intell Info Rept (3 Cys) (Lt Holten) Paretex L'Helsen

Adjutant

B/Ltr Hq 515th ADEFORU, 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 .UIN 1955

TO: Commander ATIC, ATTN: ATIA-5, Wright Patterson Air Force Pase, Dayton, Chio

- 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 CONSIANDER:

2 Incls n/c RAT L JONES Major USAF Adjutant

AF	FORM	112	
4.00	BOVED 1	HINE	1948

(CLASSIFICATION)

COUNTRY	REPORT NO.	(C.EA	VE BLANK)	
United States				
	LLIGENCE IN	FORMATION	REPORT	
sunter PCB				
AREA REPORTED ON THE MINISTER A		In F. I.S.	(ITAILLEE)	
DATE OF AUTOMY 1955	LO ay 1955		A-2	
PREPARED BY (Open) HAPP 2/Lt. Asst. I	ntell. Officer	Air Crow Hope	ort	
REFERENCES (Control number, direction, previous report, etc.,	as applicable)			
SUMMARY: (Enter conclus summery of report. Give Hynifte	ence in final one-emirace per a	graph. List incicoures at lose	r left. Begin text of report on AF	Form (15—Port II.)
In accordance with AFF of an unidentified flying ob- and rader observer) made the training mission. The inexp were considered significant	ject by an air observations lainable speed	crew of this up by radar while and maneuvers	it. The aircrew on a routine might perfor od by the	(pilot
Appro	wing Officer:	DAVID M. HOI lst Lt. Intelligence	BAP,	
		incolligence	GILIGST	
n e				
* **,				
			2	
EISTRIBUTION 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, DY OTHER THAN UNITED STATES AIR FORCE AGENCIES, EXCEPT BY PERMISSION OF THE DIRECTOR OF

45SIFICATION)

18-8550-3 U. S. LOWERWAY PRINTS

AIR INTELLIGENCE INFORMATION REPORT

ГЮМ (Артсу)	REPORT NO.	1
		PAGE 2 OF 3 PAGES
UFO3	(Format from AFR 200-2)	OF PAGES
(1.)	Description: (a) Not discernable (radar sighting) (b) " " " " " (c) " " " " " (d) One (e) N/A (f) None discernable (g) " " (h) " " (i) " "	
(2)	Description of course: (a) Unusual characteristics of return on soo (b) Level and 45 degrees starboard. (c) 30 degrees above and 60 degrees starboard (d) (Statement of observers) Object came in starboard, level. We were heading 45 degrees can be used to be used of turned 45 degrees starboard and locked of moved over to 20 degrees starboard at on turned over to 20 degrees starboard at on turned port again about 30 degrees and be starboard. Still reading level, object about 35 degrees (no more than 33 degrees target was down from 8 miles to 6 miles apilot began flying the dot. Target contributed and time-to-go circle decreased from 10 seconds. On RO's scope terget came about 30 seconds. On RO's scope terget came about 4 of,000 yards and stopped dead. In range faster than it came in (staying board), and went from 6,000 yards to 8 m from level to 30 degrees above. Pilot's about 8 or ten seconds to about 20 second target started going out in range, we (to straight and level flight with a constant knots at 26,000 feet. We took a hard powas at about 9 miles (30 degrees above) about 10 miles (35 degrees above). Estiindication was going out in range, accommand pilot's and no's cape ience in runni 1,000 knots. (e) Refer to "d" (f) 4 to five minutes	d. In at 15 miles, 45 degrees grees straight and level, with ing it was target aircraft, we object on hots scope. Target al of turn. At 8 miles we exist hoved over to 35 degrees then came down the scope at as and no less than 33 degrees). At 35 degrees starboard when sinued down at 35 degrees star- com 20 seconds to go to 8 or straight down 35 degrees star- It immediately began going out (very close to 35 degrees star- ailes. Elevation dot then soved time-to-go circle went from als. From the point where the the interceptor) were in at true airspeed of about 375 ort turn when this indication and it went off the scope at imated speed at time target ding to scope interpretation
(3)	lanner of observation:	
	 (a) Air-electronic: AFG-40; AFA-84 (b) Hone (c) F-89D, 32525, 26,000 feet, 045 degrees of last heading, 375 knots, Duluth. 	original heading, 030 degrees
(4)	(a) 14/0230Z (b) light	
(5)	Latitude: 47 degrees 071 North	

HOPE: THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN PUR MANAGEMENT AND U.S. C.—
IT MAY NOT BE REPRODUCED IN WHOLE OR IN PART
INTELLIGENCE, USAF.

Longitude: 93 degrees 07! West

AIR INTELLIGENCE INFORMATION REPORT

FROM (Apmop)	REPORT NO.			
lith F.I.S.		PAGE 3	o, 3	PAGES
(6) Observers: (a) N/A (b) Middleton, Charle lith FIS, Pilot Completely reliab	(Interceptor)			

- (7) Weather:
 - (a) 6lear (b) Surface: 90/08 240/16 6,000: 270/07 10,000: 16,000: 260/20 290/20 20,000: 30,000: 300/30 280/25 50,000: 80,000: 290/08

Fisher, Donald G., 2/Lt. 11th FfS, Radar Observer Completely Reliable

- (c) Clear (d) 15 plus (e) None
- (8) No information as to any unusual activity has been received.
- (9) Refer to 2d
- (10) Northwest at about 50 miles there were two aircraft running interceptions.

(COSSIDERIOR)

- (11) Prepared by the Assistant Intelligence Officer, 11th F.I.S.
 No suggestions given as to the possible cause of the sightings.
- (12) None

INTELLIGENCE, USAF.

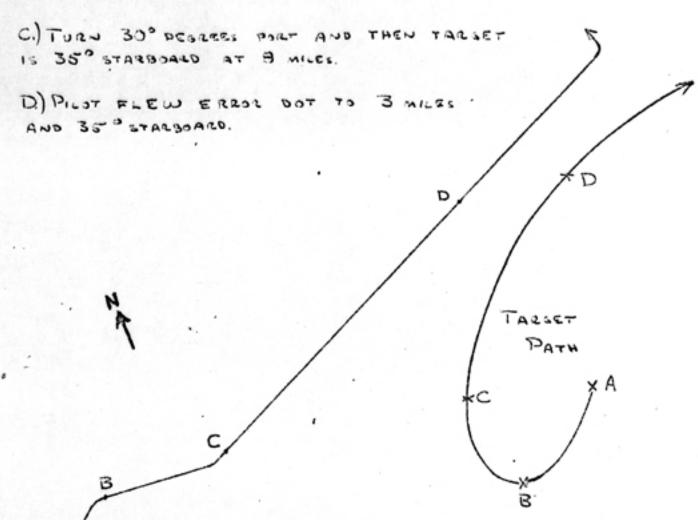
EDWARD A. RAPP

Asst. Intell. Officer

		76974
GÝC.DATE	SUBJECT	SHEET NO OF
CHKD. BY DATE		JOB NO.
***************************************	***************************************	***************************************

A. TAZGET PICKED UP AT 15 MILES, 45 "STARBOAZO

13.) ASSUMED IS SECOND DECISSION TIME AND TURN 45" STARBOARD, TARGET THEN 20" STARBOARD.



ENTERCEPTOR'S

FIGURE I GRAPHICAL INTERPRETATION OF
AIR INTELLIGENCE INFORMATION REPORT