S. DYLELL

Air Intelligence Information Report WCLOF-2

AFOIN-4E4 ATIN Capt Hardin UEC 1 ft Habrien/hvt 27166/H22/F231

- 1. Reference is made 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

 1st Ind fr 4602d Air Intel Ser Sq(ADC) dtd lJun55 w/2 incls WILLIAM D. JONES Lt. Colonel, USAF Chief, Fighter Systems Branch Weapons Guidance Laboratory

ELECTRONICS BRANCH Office of Record

A 91	•	ATIAE5/Capt C.A. wm/69216	Hardin
ATI		" III 0 32 10	;
SEN STORY		15 JUN 1955	
		10 001 1885	
ATIM-1			
	ncl) Request for Additional	Information	
1			
	mander 5th Air Defense Group		
Du	luth Municipal Airport	m.	
	luth, Minnesota		
and and at not	erence AF Form 112, subject:	UFOB, dated 17 May 1955	- E .
ATIMS Squadron.	ed of the HiteHillenics Offic	er, inth Fighter invercep	
2 70	order to facilitate an accur		
request the	crew of aircraft #32525 be r	e-interrogated as to wheth	er
ATIMX or not the t	erget return was intermitten	t or steady.	
FOR THE			į
POR THE	COMMANDER		
ATIR			
		ALBUT CTON	
		MARY L. STORE 1st Lt. USAF	
ATIS		Essistant Acid	
 			,
ATIA			
1 a.W. Drupperd 756T. A	E-5-		
R. F. James AZ		man age	Y 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Mont of 4	\$ 20		
	Aug.		
	4.		
OTHERS			
	• **	PERMTEMP	RETENTION PERIO
	JUN 15 0 3 3 8 . 55	DESTROY	
	JUK 15 11 0 200	RETIRE	
ATIC FORM 144 (REV 1 FEB 55)	ROUTING AND COORDINATION	EU E MITHORITY	
tener say (next b F Day va)	MULIANITA COOKDINATION		

PERMTEMP	RETENTION PERIOD
DESTROY	
RETIRE	
FILE AUTHORITY	