

(13) **SECRET**
(CLASSIFICATION)

COUNTRY (1) U.S.A.	REPORT NO. (2)	(LEAVE BLANK) (3) AF543159																																																										
AIR INTELLIGENCE INFORMATION REPORT																																																												
SUBJECT (4) Report of Unusual Flying Objects																																																												
AREA REPORTED ON (5) Keeweenaw Peninsula, Michigan	FROM (Agency) (6) 665th AC&W Squadron, Calumet, Michigan																																																											
DATE OF REPORT (7) 20 April 1953	DATE OF INFORMATION 20 April 1953 (8)	EVALUATION (9) B-2																																																										
PREPARED BY (Officer) (10) Capt. Russell H. Kline, Intel. Officer	SOURCE (11) "Personnel 665th AC&W Squadron"																																																											
REFERENCES (Control number, directive, previous report, etc., as applicable) (12) Utilization of AF Form 112 (Air Intelligence Information Report) Form 123 AFL 200-5																																																												
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.) (14)(Summary) See Sect 11 - Capt. James W. Dorgan, 665th AC&W Squadron, Calumet, Michigan Phone 31 or 8. Chief Controller A/2c Richard G. Hetrick, 665th AC&W Sqdn., Calumet, Michigan Phone 21 or 8 Radar Observer A/1c Billy F. Conway, 665th AC&W Squadron, Calumet, Michigan Phone 21 or 8 Radar, Observer Crew Chief. On 20 April 1953 between 0118Z and 0215Z a series of targets were sighted by the 665th AC&W Squadron, Calumet, Michigan. The plots originated approximately 50 miles out from the station, from 050° clockwise to 251°. Speed was from 1800 miles per hour to 8,400 miles per hour. Targets are believed to be interference from shipborne radar, originating on Lake Superior. The following information is the track numbers and respective plots. <table border="1"><thead><tr><th colspan="2"></th><th colspan="2">TRACK</th><th colspan="2"></th><th colspan="2">TRACK</th></tr><tr><th></th><th>TIME (Z)</th><th>Georef Coord.</th><th>NO</th><th></th><th>TIME</th><th>Georef-Coord.</th><th>NO</th></tr></thead><tbody><tr><td rowspan="10">20 Apr 53</td><td rowspan="5">0118 Z</td><td>DD 5013</td><td rowspan="5">T-1-T</td><td>0121:30</td><td>DC 2122</td><td rowspan="5">T-2-T</td></tr><tr><td>ED 0019</td><td>DC 4012</td></tr><tr><td>ED 1212</td><td>0122 DC 5921</td></tr><tr><td>ED 3019</td><td>0122:30 EC 1510</td></tr><tr><td>ED 4919</td><td>EC 3115</td></tr><tr><td rowspan="5">0119:30</td><td>FD 0016</td><td>0123 EC 4805</td></tr><tr><td>FD 1315</td><td>0123:15 FC 0900</td></tr><tr><td>FD 2920 Fade</td><td>0123:30 FB 2555</td></tr><tr><td></td><td>FB 4951</td></tr><tr><td></td><td>0124 GB 1540 Fade</td></tr><tr><td rowspan="6">0125Z</td><td rowspan="6">EB 0027</td><td rowspan="6">T-3-T</td><td>0127</td><td>DB 0830</td><td rowspan="6">T-4-T</td></tr><tr><td>0125:15</td><td>DB 1109</td></tr><tr><td>0125:30</td><td>DB 4905</td></tr><tr><td>0125:45</td><td>EA 0538</td></tr><tr><td>0126:00</td><td>EA 1534</td></tr><tr><td>0126:15</td><td>EA 3713 Fade</td></tr></tbody></table>					TRACK				TRACK			TIME (Z)	Georef Coord.	NO		TIME	Georef-Coord.	NO	20 Apr 53	0118 Z	DD 5013	T-1-T	0121:30	DC 2122	T-2-T	ED 0019	DC 4012	ED 1212	0122 DC 5921	ED 3019	0122:30 EC 1510	ED 4919	EC 3115	0119:30	FD 0016	0123 EC 4805	FD 1315	0123:15 FC 0900	FD 2920 Fade	0123:30 FB 2555		FB 4951		0124 GB 1540 Fade	0125Z	EB 0027	T-3-T	0127	DB 0830	T-4-T	0125:15	DB 1109	0125:30	DB 4905	0125:45	EA 0538	0126:00	EA 1534	0126:15	EA 3713 Fade
		TRACK				TRACK																																																						
	TIME (Z)	Georef Coord.	NO		TIME	Georef-Coord.	NO																																																					
20 Apr 53	0118 Z	DD 5013	T-1-T	0121:30	DC 2122	T-2-T																																																						
		ED 0019		DC 4012																																																								
		ED 1212		0122 DC 5921																																																								
		ED 3019		0122:30 EC 1510																																																								
		ED 4919		EC 3115																																																								
	0119:30	FD 0016	0123 EC 4805																																																									
		FD 1315	0123:15 FC 0900																																																									
		FD 2920 Fade	0123:30 FB 2555																																																									
			FB 4951																																																									
			0124 GB 1540 Fade																																																									
0125Z	EB 0027	T-3-T	0127	DB 0830	T-4-T																																																							
			0125:15	DB 1109																																																								
			0125:30	DB 4905																																																								
			0125:45	EA 0538																																																								
			0126:00	EA 1534																																																								
			0126:15	EA 3713 Fade																																																								
1 cys- Director of Intelligence, Headquarters USAF, Washington 25, D.C. 1 cys- Chief, Air Technical Intel. Center, ATTN: ATIAA-2c Wright-Patterson AFB, Ohio																																																												
DISTRIBUTION BY ORIGINATOR 1 cy - CG, ADC, Ent AFB, Attn: Deputy for Intelligence 1 cy - CG, EADF, Stewart AFB, Attn: Director of Intelligence 1 cy - CG, 30th Air Division, Willow Run Airport, Belleville, Michigan ATTN: Director of Intelligence 1 cy - Info cy., 4706th Air Def WG. ATTN: Director of Intelligence																																																												

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 OTHER THAN UNITED STATES AIR FORCE AGENCIES, EXCEPT BY PERMISSION OF THE DIRECTOR OF INTELLIGENCE, USAF.

SECRET
(CLASSIFICATION)

SECRET
(CLASSIFICATION)

AIR INTELLIGENCE INFORMATION REPORT

2

FROM (Agency)			REPORT NO.			PAGE 2 OF 2 PAGES		
TIME (Z)	Georef Coord.	TRACK NO.	TIME (Z)	Georef Coord.	TRACK NO.			
0129	CB 2115	T-5-T	0131	CB 0015	T-6-T			
0129:20	CA 3158		0131:20	CA 0052				
0129:30	CA 3938		0131:45	BA 5527				
0129:45	CA 4112		0132	BA 5000	Fade			
0130	CA 4500	Fade						
0132:45	BB 4507	T-7-T	0134:30	BB 1112	T-8-T			
0133	BA 3045		0134:45	AA 5851				
0133:15	BA 1520		0135	AA 3527	Fade			
0133:30	BA 1500	Fade						
0135:45	AB 0032	T-9-T	0138	AB 1527	T-10-T			
0136	QB 3110		0138:20	QB 4115				
0136:15	AA 0550		0138:30	QB 1408				
0136:30	QA 3532		0138:45	AA 2952	Fade			
0136:45	QA 5918	Fade	0139	AB 1045	T-11-T			
			0139:15	PB 3829				
0144:30	AA 4050	T-12-T	0139:45	PB 0020	Fade			
0144:40	AA 0515		0145:20	AB 4905	T-13-T			
0145	QA 4500	Fade	0145:45	AA 0045				
			0146	QA 2920	Fade			
0214:45	DB 5331	T-14-T						
0215	EB 1119							
0215:15	FA 0450	Fade						

In accordance with AFL 200-5 Paragraph c, dtd 20 April 1952, the following information is submitted.

1. Radar sighting only, appeared as a normal target except for speed. No abrupt maneuvers were noted. Several individual targets were noted.
2. Time of sighting was between 0118Z and 0215:15 on 20 April 1953.
3. Manner of sighting was Electronic, Speed was between 1800 mph to 8,400mph depending on the target. Type aircraft was unknown, targets believed to be interference from shipborne radar.
4. Location of Observervation was at the 665th AC&W Squadron Operations.
5. Experience of Radar Observers: Conway, Billy F. A/lc AF15298169, 3 Years experience in radar operations. Hetrick, Richard G. A/2c AF13364788, 2 and 1/2 years in radar operations, Gebo, John T/SGT AF 21284191, 3 Yrs Radar Maint.
6. Weather 19 Miles from station, E 2000ft Overcast 15 Mi Vis. DP 21 Temp 31 Winds from the North West at 8 Knots.
7. Northern lights were clearly visible during this period.
8. No photographs were taken, no physical evidence taken.
9. No interception action taken, due to no fighters assigned to this Squadron.
10. Location of other air traffic in the area at the time:
Track no. A-66-T Ident. TCA# 2 ALT. 17,000ft. Time. 0114Z Position. CC0918
Track no. X-12-T Ident. VC1489 ALT. 8,000ft. Time. 0112Z Position CC3657.

Russell H. Kline
RUSSELL H. KLINE
Captain, USAF
Intelligence Officer

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 OTHER THAN UNITED STATES AIR FORCE AGENCIES, EXCEPT BY PERMISSION OF THE DIRECTOR OF INTELLIGENCE, USAF.

SECRET
(CLASSIFICATION)
SECURITY INFORMATION

INTELLIGENCE DATA
IT MAY NOT BE REPRODUCED IN WHOLE OR IN PART BY OTHER THAN UNITED STATES AIR FORCE AGENCIES EXCEPT BY PERMISSION OF THE DIRECTOR OF
31 AND 35 AS AMENDED. ITS TRANSMISSION OR THE REVELATION OF ITS CONTENTS IN ANY MANNER TO AN UNAUTHORIZED PERSON IS PROHIBITED BY LAW.
NOTE: THIS DOCUMENT CONTAINS INFORMATION AFFECTING THE NATIONAL DEFENSE OF THE UNITED STATES WITHIN THE MEANING OF THE ESPIONAGE ACT, 20 U. S. C.



Intelligence Officer
Capt. USAF
RUSSELL H. KRINE

Track no. X-15-L Ident. ACJ480 VFL 8'00014. Time. 0115Z Position 0020Z.
Track no. V-00-L Ident. LCV 5 VFL 11'00014. Time. 0115Z Position. 00018
10. Location of other air traffic in the area at the time:
a. No interception action taken, due to no interceptors assigned to this assignment.
b. No broadcasts were taken, no broadcasts evidence taken.
c. No intercepting interceptors were observed during this period.
Mines from the mine field of 8 knots.
d. Mines from 10 miles from station, E 500014 overcast 12 mi alt. DB SJ Lamb 21
5 and 15 knots in radar observations, zero, 10 mi alt. VFL 51584101, 2 lbs radar mine.
e. Experience in radar observations. Hefrick, Hefrick C. V/50 VFL 2204188.
f. Experience of radar observations. Comma, B. V/50 VFL 2508100, 2 lbs
g. Location of observations was at the radar VFL 2508100 observations.
Interference from airborne radar.
depending on the radar. The aircraft was unknown, targets revealed to be
h. Number of aircraft was electronic, speed was between 1800 mph to 8'4000mph
i. Time of aircraft was between 0115Z and 0512:12 on 50 VFL 1022.
aircraft maneuvers were noted. General investigation targets were noted.
j. Radar aircraft only, observed as a normal radar except for speed. No
information is submitted.
In accordance with VFL 500-2 Paragraph c, 4th 50 VFL 1022, the following

0512:12	EV 0420	Large			
0512	EB 1110				
0514:42	DB 2221	L-14-L			
			0140	OV 5050	Large
0142	OV 4200	Large	0142:42	VV 0042	
0144:40	VV 0212		0142:50	VB 4002	L-12-L
0144:30	VV 4020	L-15-L			
			0130:42	LB 0050	Large
			0130:42	LB 2850	
0130:42	OV 2018	Large	0130	VB 1042	L-11-L
0130:30	OV 2225				
0130:12	VV 0220		0128:42	VV 5025	Large
0130	OB 2110		0128:30	OB 1408	
0132:42	VB 0025	L-8-L	0128:50	OB 4112	
			0128	VB 1251	L-10-L
0132:30	BV 1200	Large			
0132:12	BV 1250		0132	VV 2251	Large
0132	BV 2042		0134:42	VV 2821	
0135:42	BB 4201	L-1-L	0134:30	BB 1115	L-8-L
0130	OV 4200	Large			
0130:42	OV 4115		0135	BV 2000	Large
0130:30	OV 2228		0131:42	BV 2251	
0130:50	OV 2128		0131:50	OV 0025	
0130	OB 5112	L-2-L	0131	OB 0012	L-2-L
		MO.			MO.
TIME (Z)	Geomet Coord.	LBVCK	TIME (Z)	Geomet Coord.	LBVCK

0024 VFL 2508100, Intercept.		PAGE 5	OF 5	PAGES
FROM (Agency)	REPORT NO.			

AIR INTELLIGENCE INFORMATION REPORT

SECRET

RADAR OBSERVATION DATA SHEET

I. QUESTIONS REGARDING DETECTING RADAR EQUIPMENT

1. What type radar equipment is involved?
AN/FPS-3 (Search)
2. Has there been any recent maintenance difficulties? If so, describe.
None
3. What type modulator (i.e., spark gap, hard tube, etc.) is used in the radar equipment?
Thyratron
4. Was the AFC (automatic frequency control) circuit of the receiver operating properly?
Yes
5. Has interference from another radar set been observed recently, and are personnel familiar with the effects caused by an interfering signal?
Yes
6. What type indicators, "A scope", "B scope", etc., were used to follow the target?
PPI
7. What was the radar scan rate?
5 RPM Normal. Was Changed frequently during detection of unusual activity.
8. What was the approximate frequency of the transmitter?
1312 mcs

II. GENERAL QUESTIONS

1. What were the general weather conditions at the time unidentified target was observed?
3 miles visibility, snow, overcast.
2. What weather data from nearby U.S. weather stations is available on temperature vs altitude, humidity vs altitude, and wind velocity vs altitude?
CMX 0130Z 20 apr. 53. E 2000 Overcast, 15 Mi. Vis. DP. 21 Temp. 31. Winds NW 8
3. Was the target observed by any other nearby radar equipments? If so, give details.
No.
4. Are the operator and the supervisor familiar with the effects of anomalous (duct-effect) propagation as they pertain to this type radar?
Yes.

ADC Form 123
20 October 1952

AF543159

Page 1 of 3

SECRET
SECURITY INFORMATION

SECRET

(USE REVERSE SIDE OF SHEET IF MORE SPACE IS REQUIRED)

5. Has anomalous propagation been observed to extend the range of ground clutter by this radar at this site, and did this condition exist during or near the time that unknown target was observed?
Average amount of clutter. No other Unknown aircraft were in the area
6. What effects of rain storms and lightning have been observed on this radar?
Usual scope weather, Nothern light were clearly visiable during this period.
7. Were any checks made to determine if unknown target could have been one of our own aircraft? Yes.

8. Was any interception attempted? If so, give details.
No.

9. Was a visual and/or Auditory observation made simultaneously with scope observation? If so, give detailed description.
No.

III. SPECIFIC TARGET QUESTIONS

1. Did any technical personnel observe the unknown target on the Radar Scope? Have they been questioned thoroughly? What was their opinion?
Yes, interference, but of unknown origin, possible shipborne radar.
2. Was a permanent record "track" made of the target positions as they appeared on the indicators? If so, attach to this report. (Plot on back of page 1.)
Yes. see attached report. on back page 1.
3. At what range, azimuth, altitude, and time was the target observed?
Neg altitude was recorded, could not train height finded on track long enough to obtain altitude.
4. How did the target appear in size and shape as compared with conventional aircraft targets? Same, very defined, sharp. Same as normal target.
5. Was the target of consistent size, or did it change rapidly?
Consistent.
6. Was the speed of the target constant or variable? Explain.
Constant
7. Did the target appear "fuzzy" or clear and sharp as compared with a known aircraft target? Sharp, very defined.

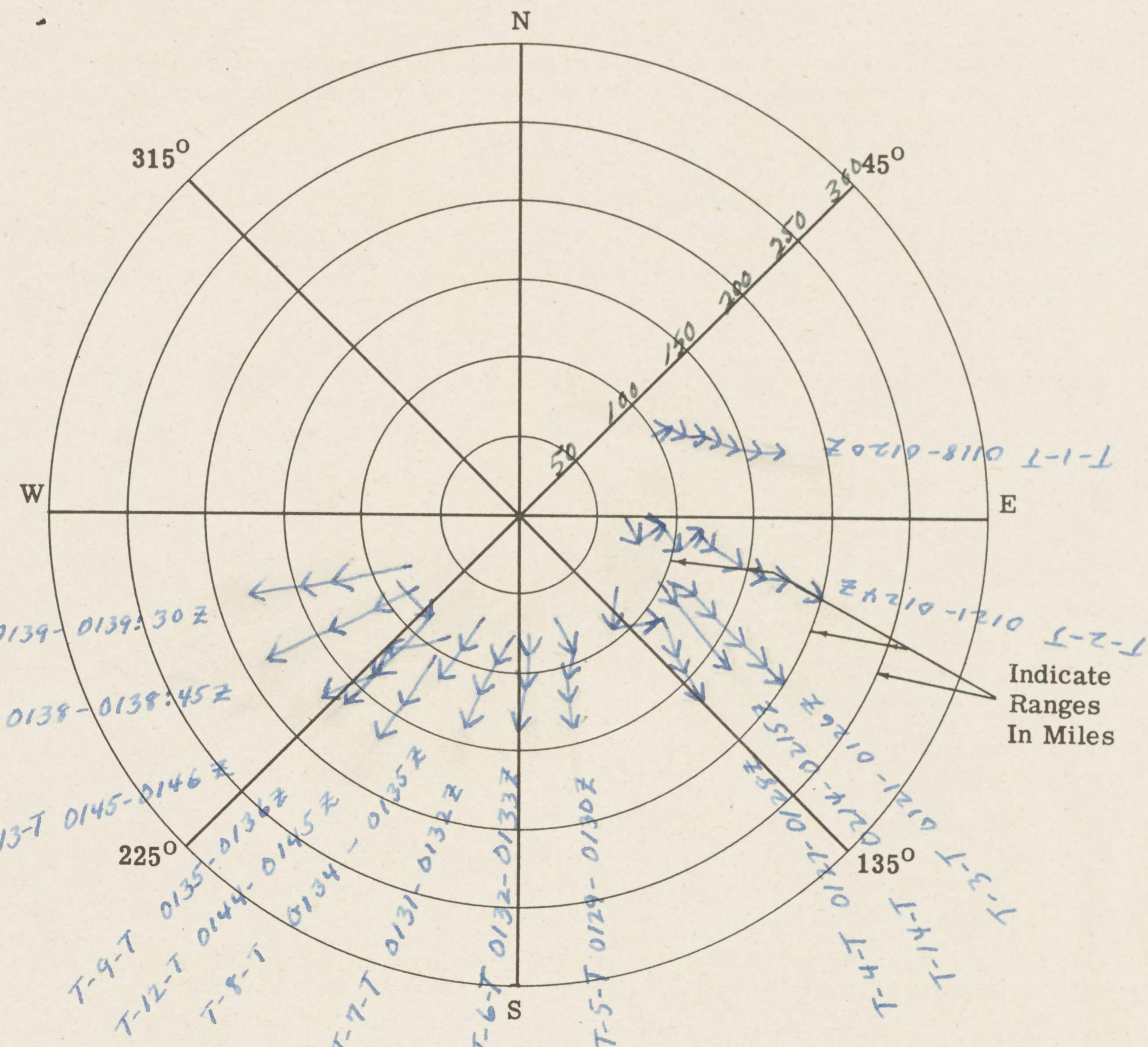
8. What other (aircraft) targets were observed in the same general area, altitude, and time as that of the unknown target?
Track No. X-12-T Ident. VC 1489 Alt. 8,000ft. Time. 0112Z, Position.-
CC 3657.
Track No. A-66-T Ident. TCA # 2 Alt. 17,000 ft. Time 0114Z Position. CC 0981

ADC Form 123
20 October 1952

SECRET
SECURITY INFORMATION

Page 2 of 3

SECRET



INSTRUCTIONS: PLOT TRACK OF TARGET, INDICATE RANGE AND AZIMUTH. GIVE TIME AT START AND END OF TRACK.

ADC Form 123
20 October 1952

SECRET
SECURITY INFORMATION

Page 3 of 3

