1. DATE - TIME GROUP 12 May 53 13/0415Z	**2. LOCATION** Pacific Northwest, Washington and Oregon States
3. SOURCE Military	**10. CONCLUSION** RADAR INTERFERENCE DUE TO INVERSION Inversion effects on all Radar in area.
4. NUMBER OF OBJECTS Not Stated	
5. LENGTH OF OBSERVATION 2 Hours, 21 Minutes	**11. BRIEF SUMMARY AND ANALYSIS** Several unidentified blips occurred on radar sets, both airborne and ground. A/c attempted interception. None of the 5 a/c could make visual contact. Tempture inversion noted.
6. TYPE OF OBSERVATION Air-Intercept Radar Ground-Radar	
7. COURSE Varied	
8. PHOTOS ☐ Yes XXNo	
9. PHYSICAL EVIDENCE ☐ Yes XXNo	

FORM
FTD SEP 63 0-329 (TDE) Previous editions of this form may be used.

SEATTLE

SIXPENCE WHITE # 2

TACOMA

JC KC LC MC NC PC QC

PRONTO RED

B-97-G

ELLMSBUR

YAKIMA

JB KB LB MB NB PB QB

TILLAMOOK, OREGON
BALLOON RELEASED
MONDAY EVGNING

PORTLAND

JA KA LA MA NA PA QA

TILLAMOOK BALLOON
50,000'
0530Z

EUGENE

JQ KQ LQ MQ NQ PQ QQ

JP KP LP MP NP PP QP

AF548375

Incl # 3

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IN KN 125°LN 122°PN 121°QN

146°

14 May 1953

LISTING OF PLOTS OF UNKNOWN TRACKS B - 14 - G AND THE INTERCEPT PLOTS OF PRONTO WHITE AND PRONTO BLUE WITH COORDINATES AND TIMES (Z)

VIOLATOR TRACK		FIGHTER TRACK	
Georef Grid	Time	Georef Grid (Pronto White)	Time
1. KB 4848	0456Z	1. NC 1919	0515Z
2. KB 4853	0500Z	2. NC 0120	0516Z
3. KB 4555	0504Z	3. MC 4822	0519Z
4. KC 3902	0511Z	4. MC 0932	0524Z
5. KC 3209	0515Z	5. MC 0135	0525Z
6. KC 2218	0527Z	FADED AT	0531Z
FADED AT	0536Z		
		(Pronto Blue)	
		1. NC 2015	0534Z
		2. NC 0115	0535Z
		3. MC 5020	0538Z
		4. MC 3221	0540Z
		5. MC 2022	0541Z
		6. LC 4823	0545Z
		7. LC 3030	0546Z
		8. LC 2030	0547Z
		9. LC 1530	0548Z
		10. LC 1030	0549Z
		11. LC 0132	0550Z
		12. KC 4838	0551Z
		13. KC 3035	0553Z
		14. FADED	0556Z
		15. KC 1050	0606Z
		16. KC 3050	0610Z
		17. KC 4852	0612Z
		18. KC 5854	0614Z
		19. LC 1549	0618Z
		20. LC 3242	0622Z
		21. LC 5038	0624Z
		22. LC 5938	0626Z
		23. MC 1032	0627Z
		24. MC 1930	0628Z
		25. MC 2530	0629Z
		26. MC 3824	0630Z
		27. MC 4721	0631Z
		28. NC 0219	0633Z
		29. NC 1018	0634Z
		30. NC 2017	0635Z
		FADED AT	0636Z

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127° 126° 125° 123° 122° 121°

JF KF LF MF NF PF QF

JE KE LE ME NE PE QE

JD KD LD MD ND PD QD

JC KC LC MC NC PC QC

JB KB LB MB NB PB QB

JA KA LA MA NA PA QA

JQ KQ LQ MQ NQ PQ Q

VACOUVER

VICTORIA

SEATTLE

TACONA

PORTLAND

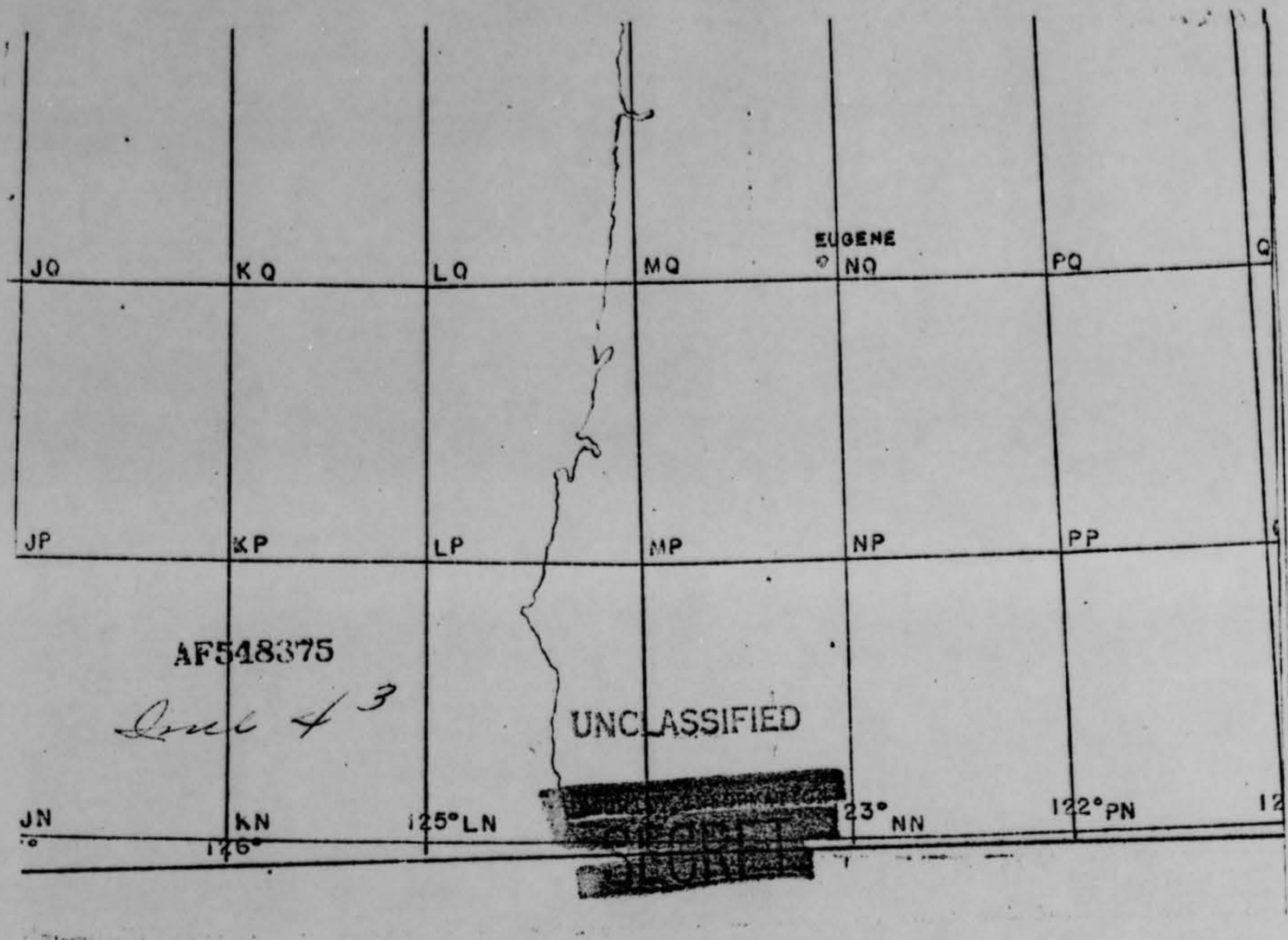
EUGENE

PRONTO BLUE

B-14-G

PRONTO WHITE

UN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By Auth of CG
Initial ___
Date ___

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AF FORM 112—PART I
APPROVED 1 JUNE 1948

COUNTRY	REPORT NO	[illegible]
USA Utah	IR-2540-2-53 160353	AF 548375

AIR INTELLIGENCE INFORMATION REPORT

Attch 1

SUBJECT		
Unknown Tracks		
AREA REPORTED ON		FROM (Agency)
Pacific Northwest ← 13/0415Z		Headquarters, 25th Air Division (Defense)
DATE OF REPORT	DATE OF INFORMATION	EVALUATION
16 May 53	13 May 53	A-1
PREPARED BY (Officer)		SOURCE
Major Neil A. Vosburgh, USAF		25th Air Division (Defense)

REFERENCES (Control number, directive, previous report, etc., as applicable)

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.)

A summary of operations and investigative action with conclusions is submitted on Unknown Tracks B-14-G and B-97-G 13 May 1953.

NEIL A. VOSBURGH
Major USAF
Director of Intelligence

IR (4 incls)
1cy

4 INCLS.
1. Statement - Tate
2. Statement - Rodgers
3. Overlay of Trk B-97-G
4. Overlay of Trk B-14-G

IN: [illegible] ATIC

DISTRIBUTION BY ORIGINATOR

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22 June 53

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AF FORM 112—PART II
APPROVED 1 JUNE 1948

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AIR INTELLIGENCE INFORMATION REPORT

FROM (Agency)	REPORT NO.	PAGE 1 OF 3 PAGES
Hqs. 25th Air Division (Def)	IR-25AD-2-534 160553	

SECTION I (B-97-G) 13 MAY 1953

1. Target B-97-G, originating in Pacific ADIZ in KB 5255 at 0415Z hours, heading 340° with 6,000 feet altitude and estimated 90 knots ground speed. Altitude and ground speed remained same throughout course.

2. Pronto Red (1 AI aircraft) was scrambled at 0433Z and was unsuccessful - he could not get a visual on the unknown.

3. Sixpence White (2 Non-AI aircraft vectored in on target) were also unsuccessful.

4. Inclosure #1 is a statement by Captain S. D. Tate and Inclosure #2 is a statement by 2nd Lt D. L. Rodgers. Officers were Pronto Red crew.

5. GCI Director was Captain D. V. Jensen, Station P-57.

6. Inclosure #3 is a chart containing diagram of the activity. Also included is location of balloon mentioned in Section III, paragraph 4, this report.

SECTION II (B-14-G) 13 MAY 1953

1. Target B-14-G, originating in Pacific ADIZ in KB 4848 at 0456Z hours, heading 340° with 6,000 feet altitude and estimated 80 knots ground speed. Altitude and speed remained same throughout course.

2. Pronto Blue (1 AI aircraft) scrambled at 0528Z hours and Pronto White (1 AI aircraft) scrambled at 0508Z hours. Captain D. Jarrett (Pronto Blue) and 1st Lt A. Young (Pronto White) both of 317th Fighter Interceptor Squadron were Intercept Pilots. Pronto White had to abort due to radar trouble. Pronto Blue searched area but could not find the Bogie.

3. GCI Director was Captain D. V. Jensen.

4. Inclosure #4 is a chart containing diagram of the activity.

SECTION III OTHER PERTINENT FACTORS

1. In answer to query, Coast Guard vessels reported sea swells as moving on a course of 050° with swells 9½ feet high having sharp breaking crests moving in at 8 second intervals. Surface winds from North at 4 knots. No visuals on unknowns by three Coast Guard vessels in area. Did see and hear jets.

2. Coast Guard, Navy, RCAF and AMIS were coordinated with. All reported no air activity in area. MST reported large vessel in area which was located by radar.

3. Neah Bay could at no time paint the unknowns but was painting friendly aircraft.

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AIR INTELLIGENCE INFORMATION REPORT

FROM (Agency)	REPORT NO.	PAGE 2 OF 3 PAGES
Hqs, 25th Air Division (Def)	IR-25AD-2-53W 160553	

4. Moby Dick Project at Tillamook was checked for balloon activity. One balloon was released at Tillamook on Monday evening and moved to ND 5010 Tuesday A.M. It hovered there at 55,000 feet for few hours until pressure area switched and balloon moved in opposite direction to LA 5000 at 0530Z hours, 13 May 1953.

5. Wind was from NE at 5,000 feet, 20 knots.

6. A Coast Guard radio operator at Westport, Washington reported receiving CW transmissions on 500 kcs that were very weak and unintelligible. Transmissions were intermittent lasting from 30 seconds to 1½ minutes, beginning just prior to 0500Z hours and ending shortly after 0600Z hours. They were also heard by Department of Transport, Port Hardy Radio Range Station, Vancouver Island. No bearing could be obtained due to weak signal. The FCC monitoring station at Portland was queried as to receipt and reported negative; however, they had been monitoring 500 kcs. The Coast Guard radio operator reported that he thought that there were three different transmitters involved in the signals he was receiving and that it sounded like they were using a technique that can be utilized for homing to effect a rendezvous.

7. Major Deckert, Operations Officer of 317th Fighter Interceptor Squadron was sent out in a B-25 around 2300 hours PST. He searched within a 200 mile radius for surface vessels capable of launching or carrying small aircraft. All ships located were determined to be friendly. Visual surveillance was accomplished on several ships after daybreak. On headings of 210° Major Deckert received what is considered to be sea return on radar. On reciprocal (030) he received no pickup. On 210° he was flying directly into (against) the 9½ feet high swells. The swells were crested, thus forming a cup sufficient enough to reflect the radar energy. On the reciprocal course the aircraft was flying with the swells, the crests breaking away from him. This would appear to explain that there would not be enough surface at proper angle to reflect the radar energy.

8. There were numerous fishing boats in the area which were painted by the AI interceptors, the B-25 and by P-44. AC+W

SECTION IV DISCUSSION

1. A study of the alignment of plots provided by station P-57 on these tracks and the report from personnel at the station that the blips looked normal and did not resemble wave blips, leads one to conclude that these were airborne objects. This conclusion can be further substantiated when considering that the sea swell was running in a direction that would result in a very shallow contact angle between the beamed energy and the face of the swells in the vicinity of the unknowns. Therefore, little or no radar energy would be reflected back to the receiving system of the ground station. This conclusion is further substantiated by the results obtained from AI radar when on certain headings during this time period.

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2. The fact that station P-44 was unable to pick up these tracks when they were within the surveillance capability of their station refutes the conclusion, to some extent, that these were airborne objects. P-44 had completed their weekly maintenance that morning and the set was painting friendly air traffic and numerous fishing boats and some ocean vessels.

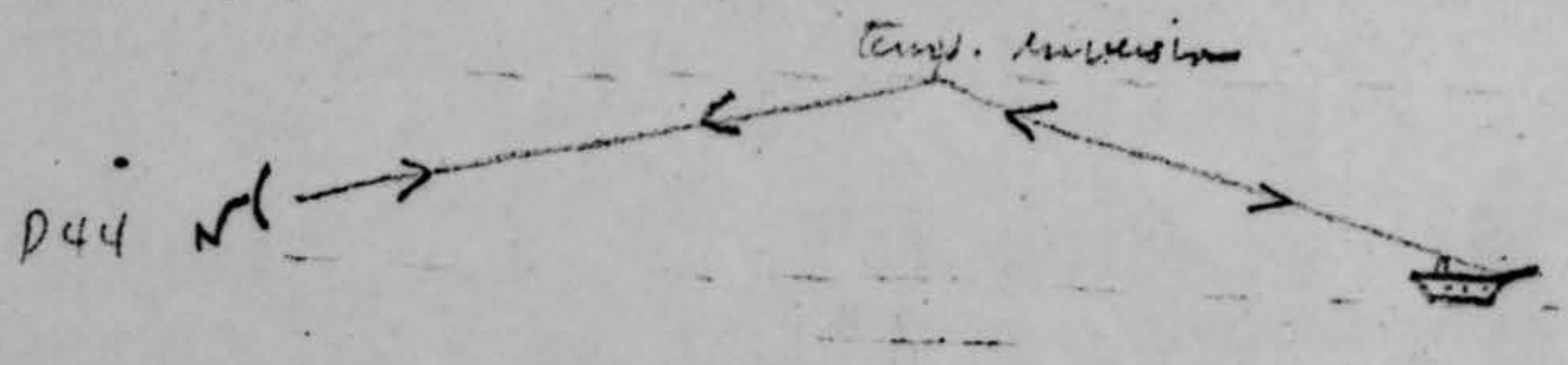
3. At 0400Z a radio sonde observation report from Tatoosh Island (Neah Bay) reported a six degree temperature inversion between 1500 and 1700 feet MSL. This factor accounts for P-44 receiving strong returns on ships well out to sea. It was determined during the research calibration tests conducted at P-57 by personnel from USAF, Research-Development Command and University of Texas, that unusual phenomena can and will occur during inversions which can have varied results on radar energy. The energy may be reflected, null areas may develop and blips may appear on scopes when actually no airborne object is present at that location. These specialists were unable to provide proven criteria, at that time, for practical application by the AC&W system. It is noted that site P-44 was below the level of the existing inversion and that if the inversion's altitude was 1500 to 1700 feet in the vicinity of P-57, that site equipment was above the inversion. Such a condition may have developed a null area for P-44 at the Bogey's altitude or P-57 may have been receiving energy reflected from a localized unusual atmospheric condition. Note Captain Tate's comments (Inclosure #1) about target's actions at 2000 feet.

4. The Westport Coast Guard station is located at LB 5253. The unknown tracks were within 50 to 100 miles of this station during the time the radio operator was receiving transmissions on 500 kcs. Coast Guard Headquarters at Seattle provided the ADCC information regarding these signals because of ADCC controller's previous request for reports of visual sightings by Coast Guard vessels known to be in vicinity of Track B-97. Portland FCC Monitor Station's inability to read signals on 500 kcs could be attributed to weak signal strength.

SECTION V CONCLUSION

1. This Headquarters is unable to further evaluate these tracks.

2. No firm conclusions can be reached as to identity of subject tracks.



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15—55870-1 ☆ U. S. GOVERNMENT PRINTING OFFICE : 1950—O 916332

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S T A T E M E N T

At approximately 0b33Z we (Pronto Red) were scrambled after an unknown -- Vector 270, A 20. When we were 15 miles past Shelton we contacted Chancellor and given a Vector of 250, Bogey 12 o'clock, 70 mi. At that time we heard Chancellor tryint to work Sixpence White onto the Bogey without success. Chancellor gave the Bogey's approximate altitude as 6 A, so when we were 20 miles out we started a descent to 5,000 feet. As we closed within 4 miles, my radio operator said he was picking up something that looked like ground return at that range; however, we found nothing. GCI again brought us in on the Bogey and the radio operator got intermittent contacts and although we throttled right back to 180 K, we overshot the target. The radio operator on the next pass determined that the target was slightly below us so we dropped down to 2,000 feet. We then got some good contacts plus lock-on and as we closed the target broke up into two or three targets, one passing to the port, one slightly starboard and one dead ahead. We closed to zero range and saw nothing. Due to the action and appearance of the targets, we determined that they were probably chaff. We spent over an hour in the area and got many contacts and lock-ons. As time passed the targets appeared to lose altitude and we looked for them on the surface of the water at 200 feet altitude, using our landing lights. The targets seem to have no movement of their own as we had a large over-take speed on all. If they had been solid targets, we would have seen or collided with some. Two boats in the area we picked up clearly and easily with our weapon.

S. D. TATE
Captain, USAF

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MAY 20 1953
WESTERN AIR DEFENSE FORCE

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STATEMENT

As soon as we were airborne I started checking the radar. The set looked good as the ground return was very sharp and distinct. After passing the coastline I picked up a large group of targets, close together making a continuous blob as ground return does. These targets were approximately 12,000 - 15,000 yards out. Chancellor continued to vector us on into the target and when we got into 6,000 - 8,000 yards the individual targets became distinct. They were below us, below 5,000 - 6,000 feet. We throttled right back to 180 - 200 knots and obtained a lock on, overtake over 100 knots. We then went into a hard port turn and broke lock, losing contact at approximately 400 - 500 yards. We flew through, around and locked on several of these contacts. We also made contact with a number of ships and experienced no difficulty getting a visual on them. We believe these contacts were chaff.

D. L. ROGERS
2d Lt USAF

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15 May 1953

LISTING OF PLOTS OF UNKNOWN TRACK B-97-G AND THE INTERCEPT PLOTS OF SIXPENCE WHITE 1 AND 2 AND PRONTO RED WITH COORDINATES AND TIMES (Z)

VIOLATOR TRACK		FIGHTER TRACK	
Georef Grid	Time	Georef Grid	Time
		(Sixpence White 1)	
1. KB 5255	0415Z	1. LC 4805	0430Z
2. KC 4801	0419Z	2. LC 1009	0434Z
3. KC 4309	0426Z	3. KC 5215	0436Z
4. KC 4012	0431Z	4. KC 3520	0438Z
5. KC 4115	0436Z	5. KC 4025	0439Z
6. KC 3518	0440Z	6. KC 3820	0442Z
7. KC 3323	0444Z	7. KC 3230	0448Z
8. KC 2229	0450Z	8. KC 2232	0455Z
9. KC 2033	0458Z	9. KC 3029	0501Z
10, KC 1438	0505Z	10. KC 1042	0507Z
11. KC 0849	0509Z	11. KC 2845	0509Z
FADED AT	0514Z	12. KC 5058	0510Z
		13. LD 0901	0511Z
		14. LD 2903	0513Z
		15. MD 1013	0518Z
		16. MD 4306	0521Z
		17. ND 1002	0524Z
		18. NC 4059	0527Z
		19. FADED AT	0531Z
		(Sixpence White 2)	
		1. LC 4805	0430Z
		2. MC 2535	0437Z
		3. MC 4038	0438Z
		4. MC 5840	0441Z
		5. NC 0650	0443Z
		6. NC 2056	0445Z
		7. ND 3303	0446Z
		8. FADED AT	0450Z
		(Pronto Red)	
		1. MC 1022	0446Z
		2. LC 3825	0450Z
		3. LC 1825	0451Z
		4. KC 5626	0455Z
		5. KC 2531	0457Z
		6. KC 1540	0501Z
		7. KC 1241	0507Z
		8. KC 0140	0515Z
		9. KC 0547	0528Z
		10. KC 1035	0535Z
		11. KC 1528	0537Z
		12. KC 1522	0539Z
		13. KC 2022	0541Z
		14. KC 0831	0543Z
		15. KC 0634	0545Z
		16. KC 2040	0548Z
		17. KC 3235	0550Z
		18. KC 4835	0551Z
		19. LC 0138	0553Z
		20. LC 1035	0554Z
		21. LC 5930	0600Z
		22. MC 1525	0603Z
		23. NC 0118	0607Z
		24. NC 1608	0611Z
		25. NC 2804	0613Z
		26. FADED AT	0614Z

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MAY 20 1953
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JD KD LD MD ND PD QD

JC KC LC MC NC PC QC

JB KB LB MB NB PB QB

JA KA LA MA NA PA QA

VACOUVER

CAN

UNITED

VICTORIA

SEATTLE

TACOMA

PORTLAND

YAKIMA

ELLMSBUR

BALLOON
55,000'
TUESDAY AM.

SIXPENCE
WHITE
#1

SIXPENCE
WHITE
#2

PRONTO
RED

B-97-G

TILLAMOOK, OREGON
BALLOON RELEASED
MONDAY EVGNING