

PROJECT 10073 RECORD CARD

1. DATE 13 March 1963		2. LOCATION 4.35N 176.41W (Pacific)		12. CONCLUSIONS ☐ Was Balloon ☐ Probably Balloon ☐ Possibly Balloon ☐ Was Aircraft ☐ Probably Aircraft ☐ Possibly Aircraft ☐ Was Astronomical ☐ Probably Astronomical ☐ Possibly Astronomical ☐ Other _____ ☒ Insufficient Data for Evaluation ☐ Unknown	
3. DATE-TIME GROUP Local _____ GMT 13/1645Z		4. TYPE OF OBSERVATION ☐ Ground-Visual ☐ Ground-Radar ☒ Air-Visual ☐ Air-Intercept Radar			
5. PHOTOS ☐ Yes ☒ No		6. SOURCE Military			
7. LENGTH OF OBSERVATION 5 minutes		8. NUMBER OF OBJECTS one		9. COURSE East	
10. BRIEF SUMMARY OF SIGHTING CIRVIS report of small object with no visible sign of propulsion in flight from West to East. Appeared at 40 dgr elevation in West & sighting duration 5 minutes. Disappeared by fading. Object very high & speed very fast. Sighting from C-121.				11. COMMENTS Direction wrong for satellite. Should be NE or SE since sighting near the equator. Duration consistent with satellite or a/c. since sighting was fm air, if object were a/c it would be at extreme altitude to prevent some feature from being identified. Insufficient data for evaluation. Possible error in direction, in which case object was ^{Possibly} likely satellite. (Not Echo)	

3/16452
DEPARTMENT OF THE AIR FORCE
STAFF MESSAGE BRANCH
UNCLASSIFIED MESSAGE

INCOMING

AF IN : 47156 (13 Mar 63) L/des

INFO : NIN-9, XOP-1, XOPX-4, SAFOS-3, ARMY-2, CMC-8, JCS-35, OSD-15,
CIA-11, NSA-7, DIA-20, DIA/CIIC-2 (118)

D 270

DE RUHLKH 9

ZNR

U 131905Z

FM 326 AIR DIV KUNIA FACILITY HAWAII

TO RUHLKM/PWCAF HICKAM AFB HAWAII

RUHAC/COMALSEAFRON KODIAK ALASKA

RUWSPG/COMWESTSEAFRON SAN FRANCISCO CALIF

RUHPQ/COMHAWSEAFRON PEARL HARBOR HAWAII

INFO RUEAHQ/COFS USAF WASHINGTON DC

RUWGALB/CINCINORAD ENT AFB COLO

RUHPHQKCINCPAC CAMP H M SMITH HAWAII

RUHAFS/KINCUSARPAC FT SHAFTER HAWAII

RUHPB/CINCPACFLT PEARL HARBOR HAWAII

RUUAZ/COMUSJAPAF FUCHU AS JAPAN

RUAMCR/COMUSKOREA SEOUL KOREA

RUAGFL/COMUSTDC TAIPEI TAIWAF

RUHPD/COMASWFORPAC FORD ISLAND HAWAII

RUCSBR/CINCSAC OFFUTT AFB NEB

RUECW/CNO WASHINGTON DC

R ECW/SECNAV WASHINGTON DCN

AF GRNC

BT

EUNCLAS HADOC-D 0500C I R V I S

1. CIRVIS REPORT

2. C-121

3. SMALL OBJECT A. ONE OBJECT B. SIZE OF PIN, NO VISIBLE PROPULSION
SIGHTED

4. APPEARED 40 DEGREES OVER WESTERN HORIZON 4.35N 176.41W

. 13/1645Z HELD FOR 5MIN., FADED AT 13/1650Z

6. VERY HIGH

7. WEST TO EAST

3. VERY FAST

9. NEGATIVE

BT

NOTE: ADVANCE COPY TO XOPX, NIN, DIA/CIIC.

SATELLITE 1960-107A-1									
EQUATION									
TIME	LONG.	LAT.	TIME	LONG.	LAT.	TIME	LONG.	LAT.	TIME
1963	1963	1963	1963	1963	1963	1963	1963	1963	1963
MARCH 10, 1963									
1 24.3	88.72	-47.4	29.0	-82.64	90.0	29.0	-82.64	90.0	29.0
2 14.0	92.72	-45.0	23.9	-80.77	914	23.9	-80.77	914	23.9
3 11.3	102.91	-45.0	23.9	-80.77	914	23.9	-80.77	914	23.9
4 20.4	112.52	-40.0	19.7	-45.49	924	19.7	-45.49	924	19.7
5 16.5	151.32	-35.0	16.6	-35.86	934	16.6	-35.86	934	16.6
6 11.3	180.91	-30.0	13.9	-28.54	944	13.9	-28.54	944	13.9
7 11.3	210.91	-20.0	9.0	-17.26	949	9.0	-17.26	949	9.0
8 11.3	240.91	-10.0	0.0	0.0	959	0.0	0.0	959	0.0
9 11.3	270.91	-0.0	-9.0	17.26	964	-9.0	17.26	964	-9.0
10 11.3	300.91	-10.0	-14.0	28.54	969	-14.0	28.54	969	-14.0
11 11.3	330.91	-15.0	-16.7	35.86	974	-16.7	35.86	974	-16.7
12 11.3	360.91	-20.0	-19.9	45.45	979	-19.9	45.45	979	-19.9
13 11.3	390.91	-25.0	-24.1	60.72	984	-24.1	60.72	984	-24.1
14 11.3	420.91	-30.0	-29.4	82.55	989	-29.4	82.55	989	-29.4

MARCH 11, 1963

0 29.6	54.12	-47.4	29.0	-82.64	901	29.0	-82.64	901	29.0
1 29.0	83.32	-45.0	23.9	-80.77	914	23.9	-80.77	914	23.9
2 29.0	112.52	-40.0	19.7	-45.49	924	19.7	-45.49	924	19.7
3 29.0	141.71	-35.0	16.6	-35.86	934	16.6	-35.86	934	16.6
4 29.0	170.91	-30.0	13.9	-28.54	944	13.9	-28.54	944	13.9
5 29.0	200.11	-20.0	9.0	-17.26	949	9.0	-17.26	949	9.0
6 29.0	229.31	-10.0	0.0	0.0	959	0.0	0.0	959	0.0
7 29.0	258.51	-0.0	-9.0	17.26	964	-9.0	17.26	964	-9.0
8 29.0	287.71	-10.0	-14.0	28.54	969	-14.0	28.54	969	-14.0
9 29.0	316.91	-15.0	-16.7	35.86	974	-16.7	35.86	974	-16.7
10 29.0	346.11	-20.0	-19.9	45.45	979	-19.9	45.45	979	-19.9
11 29.0	375.31	-25.0	-24.1	60.72	984	-24.1	60.72	984	-24.1
12 29.0	404.51	-30.0	-29.4	82.55	989	-29.4	82.55	989	-29.4

MARCH 12, 1963

1 30.2	73.71	-47.4	29.0	-82.64	905	29.0	-82.64	905	29.0
2 29.7	102.91	-45.0	23.9	-80.77	918	23.9	-80.77	918	23.9
3 29.1	132.11	-40.0	19.7	-45.49	927	19.7	-45.49	927	19.7
4 28.5	161.31	-35.0	16.6	-35.86	934	16.6	-35.86	934	16.6
5 28.0	190.51	-30.0	13.9	-28.54	940	13.9	-28.54	940	13.9
6 27.4	219.71	-20.0	9.0	-17.26	949	9.0	-17.26	949	9.0
7 26.9	248.91	-10.0	0.0	0.0	957	0.0	0.0	957	0.0
8 26.3	278.11	-0.0	-9.0	17.26	964	-9.0	17.26	964	-9.0
9 25.7	307.31	-10.0	-14.0	28.54	969	-14.0	28.54	969	-14.0
10 25.2	336.51	-15.0	-16.7	35.86	974	-16.7	35.86	974	-16.7
11 24.6	365.71	-20.0	-19.9	45.45	979	-19.9	45.45	979	-19.9
12 24.0	394.91	-25.0	-24.1	60.72	984	-24.1	60.72	984	-24.1
13 23.4	424.11	-30.0	-29.4	82.55	989	-29.4	82.55	989	-29.4

MARCH 13, 1963

0 35.5	64.12	-47.4	29.1	-82.63	909	29.1	-82.63	909	29.1
1 30.9	93.32	-45.0	23.9	-80.77	921	23.9	-80.77	921	23.9
2 26.4	122.52	-40.0	19.7	-45.49	929	19.7	-45.49	929	19.7
3 21.8	151.72	-35.0	16.6	-35.86	936	16.6	-35.86	936	16.6
4 17.2	180.92	-30.0	13.9	-28.54	941	13.9	-28.54	941	13.9
5 12.7	210.12	-20.0	9.0	-17.27	949	9.0	-17.27	949	9.0
6 8.1	239.32	-10.0	0.0	0.0	959	0.0	0.0	959	0.0
7 3.6	268.52	-0.0	-9.0	17.26	964	-9.0	17.26	964	-9.0
8 0.0	297.72	-10.0	-14.0	28.52	969	-14.0	28.52	969	-14.0
9 0.0	326.92	-15.0	-16.7	35.84	971	-16.7	35.84	971	-16.7
10 0.0	356.12	-20.0	-19.8	45.45	978	-19.8	45.45	978	-19.8
11 0.0	385.32	-25.0	-24.1	60.72	982	-24.1	60.72	982	-24.1
12 0.0	414.52	-30.0	-29.3	82.58	987	-29.3	82.58	987	-29.3

SATELLITE 1960-107A-1									
EQUATION									
TIME	LONG.	LAT.	TIME	LONG.	LAT.	TIME	LONG.	LAT.	TIME
1963	1963	1963	1963	1963	1963	1963	1963	1963	1963
MARCH 14, 1963									
1 30.2	93.71	-47.4	29.1	-82.63	913	29.1	-82.63	913	29.1
2 31.5	122.91	-45.0	23.9	-80.77	926	23.9	-80.77	926	23.9
3 32.3	152.11	-40.0	19.7	-45.49	934	19.7	-45.49	934	19.7
4 32.8	181.31	-35.0	16.6	-35.87	938	16.6	-35.87	938	16.6
5 33.2	210.51	-30.0	13.9	-28.54	941	13.9	-28.54	941	13.9
6 33.7	239.71	-20.0	9.0	-17.27	947	9.0	-17.27	947	9.0
7 34.1	268.91	-10.0	0.0	0.0	954	0.0	0.0	954	0.0
8 34.5	298.11	-0.0	-9.0	17.26	956	-9.0	17.26	956	-9.0
9 34.9	327.31	-10.0	-13.9	28.53	954	-13.9	28.53	954	-13.9
10 35.3	356.51	-15.0	-16.6	35.85	951	-16.6	35.85	951	-16.6
11 35.7	385.71	-20.0	-19.8	45.44	946	-19.8	45.44	946	-19.8
12 36.1	414.91	-25.0	-24.0	60.75	944	-24.0	60.75	944	-24.0
13 36.5	444.11	-30.0	-29.2	82.57	940	-29.2	82.57	940	-29.2

MARCH 15, 1963

0 41.5	74.13	-47.4	29.1	-82.62	916	29.1	-82.62	916	29.1
1 46.9	103.33	-45.0	23.9	-80.77	928	23.9	-80.77	928	23.9
2 52.3	132.53	-40.0	19.7	-45.49	935	19.7	-45.49	935	19.7
3 57.8	161.73	-35.0	16.6	-35.87	938	16.6	-35.87	938	16.6
4 63.2	190.93	-30.0	13.9	-28.54	941	13.9	-28.54	941	13.9
5 68.7	220.13	-20.0	9.0	-17.27	947	9.0	-17.27	947	9.0
6 74.1	249.33	-10.0	0.0	0.0	954	0.0	0.0	954	0.0
7 79.5	278.53	-0.0	-9.0	17.26	956	-9.0	17.26	956	-9.0
8 84.9	307.73	-10.0	-13.9	28.53	954	-13.9	28.53	954	-13.9
9 90.3	336.93	-15.0	-16.6	35.85	951	-16.6	35.85	951	-16.6
10 95.7	366.13	-20.0	-19.8	45.44	946	-19.8	45.44	946	-19.8
11 101.1	395.33	-25.0	-24.0	60.75	944	-24.0	60.75	944	-24.0
12 106.5	424.53	-30.0	-29.2	82.57	940	-29.2	82.57	940	-29.2

MARCH 16, 1963

1 52.2	93.71	-47.4	29.1	-82.63	919	29.1	-82.63	919	29.1
2 57.6	122.91	-45.0	23.9	-80.77	928	23.9	-80.77	928	23.9
3 63.1	152.11	-40.0	19.7	-45.49	934	19.7	-45.49	934	19.7
4 68.5	181.31	-35.0	16.6	-35.87	938	16.6	-35.87	938	16.6
5 73.9	210.51	-30.0	13.9	-28.54	941	13.9	-28.54	941	13.9
6 79.3	239.71	-20.0	9.0	-17.27	947	9.0	-17.27	947	9.0
7 84.7	268.91	-10.0	0.0	0.0	954	0.0	0.0	954	0.0
8 90.1	298.11	-0.0	-9.0	17.27	956	-9.0	17.27	956	-9.0
9 95.5	327.31	-10.0	-13.9	28.54	954	-13.9	28.54	954	-13.9
10 100.9	356.51	-15.0	-16.6	35.86	951	-16.6	35.86	951	-16.6
11 106.3	385.71	-20.0	-19.7	45.48	946	-19.7	45.48	946	-19.7
12 111.7	414.91	-25.0	-24.0	60.75	941	-24.0	60.75	941	-24.0
13 117.1	444.11	-30.0	-29.2	82.60	932	-29.2	82.60	932	-29.2

MODIFIED ORBITAL ELEMENTS FOR EARTH SATELLITE 1960-107A-1

REFERENCE TIME 1963 Y 3 M 2 D 1 H 39.39 M UT
 INCLINATION 47.72 DEG.
 ASCENDING NODE (LONG.) 33.53 DEG. WEST
 PERIODE SWEEP INTERVAL ONE DAY -16.80 MIN.
 ARGUMENT OF PERIGEE 171.10 DEG.
 RATE OF CHANGE 0.27043 DEG. PER PERIOD
 ANOMALISTIC PERIOD 115.519 MIN.
 RATE OF CHANGE 0.00005 MIN. PER PERIOD
 ECCENTRICITY 0.01732
 RADIUS OF PERIGEE 4797.2 MILES
 RADIUS OF APOGEE 4966.6 MILES
 RATE OF CHANGE 0.04 MILES PER DAY
 ASCENDING NODE (R.A.) 150.29 DEG.
 RATE OF CHANGE -3.26440 DEG. PER DAY
 LATITUDE OF PERIGEE 38.74 DEG.