

PROJECT 10073 RECORD CARD

1. DATE 3 April 1963		2. LOCATION 32.32N 177.20W (Pacific)		12. CONCLUSIONS ☐ Was Balloon ☐ Probably Balloon ☐ Possibly Balloon ☐ Was Aircraft ☐ Probably Aircraft ☐ Possibly Aircraft ☐ Was Astronomical ☐ Probably Astronomical ☐ Possibly Astronomical ☒ Other <u>satellite</u>	
3. DATE-TIME GROUP Local _____ GMT 04/0857Z		4. TYPE OF OBSERVATION ☐ Ground-Visual ☒ Air-Visual ☐ Ground-Radar ☐ Air-Intercept Radar			
5. PHOTOS ☐ Yes ☒ No		6. SOURCE Military			
7. LENGTH OF OBSERVATION not reported		8. NUMBER OF OBJECTS one		9. COURSE East	
10. BRIEF SUMMARY OF SIGHTING CIRVIS report of possible satellite. Size of pin.				11. COMMENTS ECHO data not available. Object considered to be possible satellite by reporting officials. At 0817Z ECHO (Radar) observed it. It was the only object seen. The satellite to the north of the SP. As it became its satellite motion. Case evaluated as ECHO I.	

DEPARTMENT OF THE AIR FORCE
STAFF MESSAGE BRANCH
UNCLASSIFIED MESSAGE

INCOMING

AF IN : 16854 (3 Apr 63) D/Ho

SMB D 158 U INFO : NIN-9, XOP-1, XOPX-4, SAFOS-3, ARMY-2, NAVY-2,
ZCZCHQA897ZCQJA815 CMC-8, JCS-35, OSD-15, CIA-11, NSA-7, DIA-20,
DIA-CIIC-2 (118)

**** 00 RUEAHQ

DE RUHLKH 4

O 030925Z

FM 326 AIR DIV JUNIA FACILITY HAWAII

TO RUHLKM/PWCAF HICKAM AFB HAWAII

RUHPQ/COMHAWSEAFRON PEARL HARBOR HAWAII

INFO RUEAHQ/COFS USAF WASHINGTON DC

RUWGALB/CINCNOAD ENT AFB COPO

RUHPHQKCINCPUR CAMP H M SMITH HAWAII

RUHAFS/KINCUSARPAC FT SHAFTER HAWAII

RUHPB/CINCPACFLT PEARL HARBOR HAWAII

RUUAUZ/COMUSJAPAF FUCHU AS JAPAN

RUAMCR/COMUSKOREA SEOUL KOREA

RUAGFL/COMUSTDC JCB33 TAIWAN

47#05/COMASWFORPAC FORD ISLAND HAWAII

RACSBP/CINCSAC OFFUTT AFB NEB

RUECW/CNO WASHINGTON DC

RUECW/SECNAV WASHINGTON DCN

RUHPHH/HAWSEAFRON KUNIA TUNNEL ANNEX

AF GRNC

BT

UNCLAS/C I R V I S/ POSSIBLE SATELLITE SIGHTED. HEADING

WAS EASTBOUND. OBJECT WAS SIGHTED BY A NAVY A/C AT

A POSITION 32 DEG 32 MIN NORTH, 177 DEG 20 MIN WEST

04/0857Z. SIZE OF A PIN. NO EVALUATION.

BZ

NOTE : ADVANCE COPIES DELIVERED TO DIA, NIN AND XOPX.

MARCH 27, 1963

SATELLITE 1960 JOTA 1, ECHO 1

These predictions are based on orbital elements revised on March 25, 1963.
 $T =$ March 26.0, times are in days, U.T.
 Argument of perigee = $252.48 + 4.78 (t-T)$
 Right ascension of ascending node = $227.83 - 3.7968 (t-T)$
 Expected average magnitude = +1

Inclination = 47.72509
 Eccentricity = 0.004977
 Semi-major axis = 7.057969 megameters
 Mean anomaly (Rev.) = $0.1762 + 12.462332 (t-T) + 3.56 \times 10^{-5} (t-T)^2$

SATELLITE 1960 JOTA 1 FOR OTHER LATITUDES											SATELLITE 1960 JOTA 1 FOR OTHER LATITUDES										
EQUATOR S-N		LAT.	SOUTH-NORTH				NORTH-SOUTH				EQUATOR S-N		LAT.	SOUTH-NORTH				NORTH-SOUTH			
TIME (UT)	LONG. (W)		TIME CORR.	LONG. CORR.	HT. (MI)	BEAR. (N-E)	TIME CORR.	LONG. CORR.	HT. (MI)	BEAR. (N-E)	TIME (UT)	LONG. (W)		TIME CORR.	LONG. CORR.	HT. (MI)	BEAR. (N-E)	TIME CORR.	LONG. CORR.	HT. (MI)	BEAR. (N-E)
MARCH 30, 1963																					
0 25.1	133.00	47.4	29.1	-82.03	951	90.0*	29.1	-82.03	951	90.0*	0 36.2	133.37	47.4	29.0	-82.65	949	90.0*	29.0	-82.65	949	90.0*
2 20.8	162.79	45.0	23.8	-60.64	949	72.3*	23.8	-60.64	949	72.3*	2 31.6	162.56	45.0	23.7	-60.64	945	72.3*	23.7	-60.64	945	72.3*
4 16.0	191.99	40.0	19.6	-45.44	946	60.7*	19.6	-45.44	946	60.7*	4 27.0	211.75	40.0	19.5	-45.45	940	60.7*	19.5	-45.45	940	60.7*
6 11.4	221.19	35.0	16.5	-35.84	942	54.0*	16.5	-35.84	942	54.0*	6 22.5	240.99	35.0	16.4	-35.85	936	54.0*	16.4	-35.85	936	54.0*
8 6.8	250.36	30.0	13.5	-28.53	938	49.4*	13.5	-28.53	938	49.4*	8 17.9	270.19	30.0	13.7	-28.54	931	49.4*	13.7	-28.54	931	49.4*
10 2.2	279.58	20.0	8.9	-17.27	931	43.7*	8.9	-17.27	931	43.7*	10 13.3	299.34	20.0	8.9	-17.28	923	43.7*	8.9	-17.28	923	43.7*
12 57.7	138.77	0.	0.	0.	918	39.4	0.	0.	918	39.4	12 8.7	328.54	0.	0.	0.	910	39.4	0.	0.	910	39.4
14 53.1	167.97	-10.0	-8.9	17.28	909	41.7	-8.9	17.28	909	41.7	14 4.1	357.73	-10.0	-8.8	17.29	904	41.7	-8.8	17.29	904	41.7
16 48.7	197.17	-30.0	-13.7	28.55	906	49.4	-13.7	28.55	906	49.4	16 59.6	386.93	-30.0	-13.6	28.56	901	49.4	-13.6	28.56	901	49.4
18 43.4	226.36	-45.0	-16.5	35.85	904	54.0	-16.5	35.85	904	54.0	18 55.0	416.12	-45.0	-16.3	35.89	900	54.0	-16.3	35.89	900	54.0
20 38.8	255.56	-60.0	-19.6	45.44	903	60.7	-19.6	45.44	903	60.7	20 50.4	445.32	-60.0	-19.4	45.50	901	60.7	-19.4	45.50	901	60.7
22 34.2	284.76	-75.0	-23.5	60.73	902	72.3	-23.5	60.73	902	72.3	22 45.8	474.51	-75.0	-23.5	60.72	902	72.3	-23.5	60.72	902	72.3
24 29.6	313.95	-87.4	-28.7	82.73	902	90.0*	-28.7	82.73	902	90.0*	24 41.2	503.71	-87.4	-28.0	82.73	904	90.0*	-28.0	82.73	904	90.0*
MARCH 31, 1963																					
1 25.0	133.18	47.4	29.0	-82.03	951	90.0*	29.1	-82.03	951	90.0*	1 36.7	133.90	47.4	29.0	-82.65	948	90.0*	29.0	-82.65	948	90.0*
3 20.8	162.79	45.0	23.8	-60.64	949	72.3*	23.8	-60.64	949	72.3*	3 32.1	162.80	45.0	23.7	-60.65	944	72.3*	23.7	-60.65	944	72.3*
5 16.0	191.99	40.0	19.6	-45.44	946	60.7*	19.6	-45.44	946	60.7*	5 27.5	191.79	40.0	19.5	-45.46	938	60.7*	19.5	-45.46	938	60.7*
7 11.4	221.19	35.0	16.5	-35.84	942	54.0*	16.5	-35.84	942	54.0*	7 22.9	221.59	35.0	16.4	-35.86	934	54.0*	16.4	-35.86	934	54.0*
9 6.8	250.36	30.0	13.5	-28.53	938	49.4*	13.5	-28.53	938	49.4*	9 18.3	240.99	30.0	13.7	-28.54	929	49.4*	13.7	-28.54	929	49.4*
11 2.2	279.58	20.0	8.9	-17.27	931	43.7*	8.9	-17.27	931	43.7*	11 13.8	270.19	20.0	8.9	-17.28	921	43.7	8.9	-17.28	921	43.7
13 57.7	138.77	0.	0.	0.	918	39.4	0.	0.	918	39.4	13 9.2	299.34	0.	0.	0.	909	39.4	0.	0.	909	39.4
15 53.1	167.97	-10.0	-8.9	17.28	909	41.7	-8.9	17.28	909	41.7	15 5.6	328.54	-10.0	-8.8	17.29	901	41.7	-8.8	17.29	901	41.7
17 48.7	197.17	-30.0	-13.7	28.55	906	49.4	-13.7	28.55	906	49.4	17 0.0	357.73	-30.0	-13.6	28.57	900	49.4	-13.6	28.57	900	49.4
19 43.4	226.36	-45.0	-16.5	35.85	904	54.0	-16.5	35.85	904	54.0	19 55.4	386.93	-45.0	-16.3	35.89	900	54.0	-16.3	35.89	900	54.0
21 38.8	255.56	-60.0	-19.6	45.44	903	60.7	-19.6	45.44	903	60.7	21 50.9	416.12	-60.0	-19.4	45.50	901	60.7	-19.4	45.50	901	60.7
23 34.2	284.76	-75.0	-23.5	60.73	902	72.3	-23.5	60.73	902	72.3	23 46.3	445.32	-75.0	-23.5	60.72	902	72.3	-23.5	60.72	902	72.3
25 29.6	313.95	-87.4	-28.7	82.73	902	90.0*	-28.7	82.73	902	90.0*	25 41.7	474.51	-87.4	-28.0	82.73	904	90.0*	-28.0	82.73	904	90.0*
APRIL 1, 1963																					
0 30.7	143.99	47.4	29.0	-82.03	950	90.0*	29.0	-82.03	950	90.0*	0 41.7	143.28	47.4	28.9	-82.66	947	90.0*	28.9	-82.66	947	90.0*
2 26.1	172.90	45.0	23.8	-60.64	947	72.3*	23.8	-60.64	947	72.3*	2 37.1	172.90	45.0	23.7	-60.67	943	72.3*	23.7	-60.67	943	72.3*
4 21.5	201.99	40.0	19.6	-45.44	945	60.7*	19.6	-45.44	945	60.7*	4 42.5	201.99	40.0	19.5	-45.48	937	60.7*	19.5	-45.48	937	60.7*
6 16.9	231.07	35.0	16.5	-35.84	941	54.0*	16.5	-35.84	941	54.0*	6 47.9	231.07	35.0	16.4	-35.89	932	54.0*	16.4	-35.89	932	54.0*
8 12.3	260.27	30.0	13.5	-28.53	935	49.4*	13.5	-28.53	935	49.4*	8 53.3	260.27	30.0	13.7	-28.55	927	49.4*	13.7	-28.55	927	49.4*
10 7.8	289.46	20.0	8.9	-17.27	927	43.7*	8.9	-17.27	927	43.7*	10 58.8	289.46	20.0	8.9	-17.28	919	43.7	8.9	-17.28	919	43.7
12 3.2	318.66	0.	0.	0.	914	39.4	0.	0.	914	39.4	12 14.2	318.66	0.	0.	0.	907	39.4	0.	0.	907	39.4
14 58.8	147.85	-10.0	-8.9	17.28	905	41.7	-8.9	17.28	905	41.7	14 19.6	347.85	-10.0	-8.8	17.29	900	41.7	-8.8	17.29	900	41.7
16 54.1	177.05	-30.0	-13.7	28.55	903	49.4	-13.7	28.55	903	49.4	16 25.0	377.05	-30.0	-13.6	28.57	899	49.4	-13.6	28.57	899	49.4
18 49.5	206.24	-45.0	-16.5	35.85	902	54.0	-16.5	35.85	902	54.0	18 30.4	406.24	-45.0	-16.3	35.89	900	54.0	-16.3	35.89	900	54.0
20 44.8	235.44	-60.0	-19.6	45.44	902	60.7	-19.6	45.44	902	60.7	20 35.9	435.44	-60.0	-19.4	45.50	900	60.7	-19.4	45.50	900	60.7
22 40.2	264.64	-75.0	-23.5	60.73	902	72.3	-23.5	60.73	902	72.3	22 41.3	464.64	-75.0	-23.5	60.72	902	72.3	-23.5	60.72	902	72.3
24 35.6	293.83	-87.4	-28.7	82.73	903	90.0*	-28.7	82.73	903	90.0*	24 46.7	493.83	-87.4	-28.0	82.73	905	90.0*	-28.0	82.73	905	90.0*
APRIL 2, 1963																					
1 31.2	143.99	47.4	29.0	-82.03	950	90.0*	29.0	-82.03	950	90.0*	1 42.1	143.99	47.4	28.9	-82.66	946	90.0*	28.9	-82.66	946	90.0*
3 26.6	172.90	45.0	23.8	-60.64	947	72.3*	23.8	-60.64	947	72.3*	3 47.5	172.90	45.0	23.7	-60.67	941	72.3*	23.7	-60.67	941	72.3*
5 22.0	201.99	40.0	19.6	-45.44	945	60.7*	19.6	-45.44	945	60.7*	5 52.9	201.99	40.0	19.5	-45.48	935	60.7*	19.5	-45.48	935	60.7*
7 17.4	231.07	35.0	16.5	-35.84	941	54.0*	16.5	-35.84	941	54.0*	7 58.3	231.07	35.0	16.4	-35.89	929	54.0*	16.4	-35.89	929	54.0*
9 12.8	260.27	30.0	13.5	-28.53	935	49.4*	13.5	-28.53	935	49.4*	9 63.7	260.27	30.0	13.7	-28.55	923	49.4*	13.7	-28.55	923	49.4*
11 8.2	289.46	20.0	8.9	-17.27	927	43.7*	8.9	-17.27	927	43.7*	11 69.1	289.46	20.0	8.9	-17.28	917	43.7	8.9	-17.28	917	43.7
13 3.6	318.66	0.	0.	0.	914	39.4	0.	0.	914	39.4	13 74.5	318.66	0.	0.	0.	905	39.4	0.	0.	905	39.4
15 59.0	147.85	-10.0	-8.9	17.28	905	41.7	-8.9	17.28	905	41.7	15 79.9	347.85	-10.0	-8.8	17.29	900	41.7	-8.8	17.29	900	41.7
17 54.3	177.05	-30.0	-13.7	28.55	903	49.4	-13.7	28.55	903	49.4	17 85.3	377.05	-30.0	-13.6	28.57	899	49.4	-13.6	28.57	899	49.4
19 49.7	206.24	-45.0	-16.5</																		