

PROJECT 10073 RECORD CARD

1. DATE 26 April 1963		2. LOCATION 27N 150W (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> ☐ Insufficient Data for Evaluation ☐ Unknown	
3. DATE-TIME GROUP Local _____ GMT 27/0613Z		4. TYPE OF OBSERVATION ☐ Ground-Visual ☐ Ground-Radar ☒ Air-Visual ☐ Air-Intercept Radar			
5. PHOTOS ☐ Yes ☒ No		6. SOURCE Civilian Northwest Airlines			
7. LENGTH OF OBSERVATION not reported		8. NUMBER OF OBJECTS one		9. COURSE south	
10. BRIEF SUMMARY OF SIGHTING Satellite like object in N to S orbit observed from airline flight 25. Speed and altitude of object unknown.				11. COMMENTS ECHO data not available. Object assumed orbital by observers. Case evaluated as satellite on limited data. on 26 Apr 1963 at 0613Z at 3644 W. Not in position for satellite (ECHO).	

SMB 3186

DEPARTMENT OF THE AIR FORCE
STAFF MESSAGE BRANCH
UNCLASSIFIED MESSAGE

I N C O M I N G

A853KHD638

OO RUEAHQ RUECW RUWGALB

DE RUHLKH 4

AF IN : 53210(27 Apr 63) S/wj

ZNR

INFO: NIN-9, XOP-1, XOPX-4, SAF-OS-3, DIA-25,
DIA/CIIC-2 (45)

O 270649Z

FM 326 AIR DIV KUNIA FACILITY HAWAII

TO RUHLKM/PACAF HICKAM AFB HAWAII

RUHPQ/COMHAWSEAFRON PEARL HARBOR

INFO RUEAHQ/CSAF USAF WASH DC

RUECW/SECNAV WASH DC

RUWGALB/CINCNOAD ENT AFB COLO

RUHPA/CINCPAC CAMP H M SMITH HAWAII

RUHAFS/CINCUSARPAC FT SHAFTER HAWAII

RUHPB/CINCPACFLT PEARL HARBOR HAWAII

RUECW/CNO WASH D C

RUAUAZ/CIMUSJAPAN FUCHU AS JAPAN

RUAMCR/CIMUSKOREA SEOUL KOREA

RUAGFL/COMUSTDC TAIPEI TAIWAN

RUCSBR/CINCSAC OFFUTT AFB NEBR

RUHPD/COMASWFORPC FORD ISLAND HAWAII

BT

UNCLAS/HADOC-D Q REPORT

2. NORTHWEST 25

3. ONE SATELLITE LIKE OBJECT

4. 27 N 150W

5. 0613Z

6. ALTITUDE UNKNOWN

7. NORTH TO SOUTH ORBIT

8. SPEED UNKNOWN

BT

NOTE: Advance copies del to DIA AND NIN.

April, 1963: No argument on any of these except Case 23, which was very possibly Echo's since wrong date was used by Moody in looking up Echo. The zebra time is April 27, not April 26. At the time of observation, Echo was west 180 and north 20--more like west 178. From the air over the Pacific this would bring Echo within the limits of observation.

SATELLITE 196C DITA 1 FOR OTHER LATITUDES									
EQUATOR S-A		SOUTH-NORTH		NORTH-SOUTH		SOUTH-NORTH		NORTH-SOUTH	
TIME	LONG.	LAT.	TIME	LONG.	HT.	BEAR.	TIME	LONG.	HT.
(UT)	(E)		CORR.	CORR. (M)	(N-E)	(N-E)	CORR.	CORR. (M)	(N-E)
APRIL 21, 1963									
1 20.4	241.19	47.4	28.8	-82.69	877	90.0	28.8	-82.73	877
2 18.0	270.37	45.0	23.7	-80.87	890	72.5	33.9	-104.55	867
3 11.4	290.56	40.0	19.4	-45.54	902	60.8	38.0	-119.88	861
4 5.7	328.74	35.0	16.5	-35.90	911	54.1	41.0	-129.54	859
5 2.1	357.93	30.0	13.9	-28.57	919	49.4	43.4	-136.89	858
6 57.5	27.71	20.0	9.0	-17.79	934	43.7	48.4	-148.21	840
7 52.9	56.29	0.	0.	0.	940	39.9	57.0	-165.57	876
8 47.2	85.48	-20.0	-9.1	17.25	980	43.7*	-49.7	147.86	905
9 43.8	114.66	-30.0	-14.0	28.57	986	49.4*	-44.9	136.57	923
10 39.0	143.45	-35.0	-16.8	35.83	987	54.0*	-42.2	129.24	927
11 34.4	173.03	-40.0	-20.0	45.44	987	60.8*	-39.1	119.61	945
12 29.7	202.72	-45.0	-24.3	60.73	983	72.4*	-34.8	104.31	959
		-47.4	-29.6	82.49	974	90.0*	-29.6	82.54	974

APRIL 22, 1963									
0 25.1	231.40	47.4	28.9	-82.67	880	90.0	28.9	-82.71	880
2 20.5	260.58	45.0	23.8	-80.85	894	72.5	34.0	-104.53	868
4 15.8	289.77	40.0	19.7	-45.53	907	60.8	38.1	-119.87	861
6 11.2	318.95	35.0	16.6	-35.89	917	54.0	41.1	-129.52	857
8 6.6	348.13	30.0	13.9	-28.56	925	49.4	43.7	-136.87	856
10 2.0	377.32	20.0	9.0	-17.77	941	43.7	48.4	-148.20	856
11 57.3	46.50	0.	0.	0.	966	39.9	57.1	-165.56	870
13 52.7	75.69	-20.0	-9.1	17.25	984	43.7*	-49.7	147.87	898
15 48.1	104.87	-30.0	-14.1	28.51	988	49.4*	-44.9	136.57	917
17 43.4	134.05	-35.0	-16.8	35.83	988	54.0*	-42.2	129.24	927
19 38.8	163.24	-40.0	-20.0	45.44	987	60.8*	-39.1	119.61	940
21 34.2	192.42	-45.0	-24.3	60.72	982	72.4*	-34.9	104.31	955
23 29.6	221.60	-47.4	-29.6	82.49	971	90.0	-29.6	82.54	971

APRIL 23, 1963									
1 24.9	250.79	47.4	29.0	-82.65	884	90.0	29.0	-82.69	883
3 20.3	279.97	45.0	23.9	-80.84	899	72.5	34.1	-104.51	870
5 15.7	309.15	40.0	19.7	-45.52	913	60.8	38.2	-119.85	861
7 11.0	338.34	35.0	16.6	-35.88	924	54.0	41.2	-129.50	856
9 6.4	367.52	30.0	13.9	-28.55	933	49.4	43.8	-136.84	854
11 1.8	396.70	20.0	9.1	-17.76	948	43.7	48.5	-148.19	853
12 57.1	48.89	0.	0.	0.	972	39.9	57.1	-165.55	864
14 52.5	78.07	-20.0	-9.1	17.24	987	43.7*	-49.7	147.88	891
16 47.9	107.25	-30.0	-14.1	28.50	990	49.4*	-44.9	136.58	910
18 43.2	136.43	-35.0	-16.9	35.82	989	54.0*	-42.2	129.24	920
20 38.6	165.62	-40.0	-20.0	45.43	987	60.8*	-39.1	119.61	933
22 34.0	194.80	-45.0	-24.3	60.72	980	72.4*	-34.9	104.31	949
		-47.4	-29.6	82.49	967	90.0	-29.6	82.53	967

APRIL 24, 1963									
0 29.3	240.98	47.4	29.0	-82.63	888	90.0	29.0	-82.67	888
2 24.7	270.16	45.0	23.9	-80.82	905	72.5	34.1	-104.49	872
4 20.1	299.35	40.0	19.8	-45.50	919	60.8	38.2	-119.83	862
6 15.4	328.53	35.0	16.7	-35.87	930	54.0	41.3	-129.48	856
8 10.8	357.71	30.0	14.0	-28.54	939	49.4	43.9	-136.83	853
10 6.2	386.89	20.0	9.1	-17.76	955	43.7	48.6	-148.16	850
12 1.5	56.08	0.	0.	0.	978	39.9*	57.2	-165.53	858
14 56.9	85.26	-20.0	-9.2	17.24	990	43.7*	-49.6	147.89	884
16 52.3	114.44	-30.0	-14.1	28.50	991	49.4*	-44.9	136.58	903
18 47.6	143.62	-35.0	-16.9	35.81	989	54.0*	-42.2	129.25	914
20 43.0	172.81	-40.0	-20.1	45.43	986	60.8*	-39.1	119.61	927
22 38.4	201.99	-45.0	-24.3	60.71	977	72.4*	-34.9	104.31	944
24 33.7	231.17	-47.4	-29.6	82.49	962	90.0	-29.6	82.53	962

SATELLITE 196C DITA 1 FOR OTHER LATITUDES									
EQUATOR S-A		SOUTH-NORTH		NORTH-SOUTH		SOUTH-NORTH		NORTH-SOUTH	
TIME	LONG.	LAT.	TIME	LONG.	HT.	BEAR.	TIME	LONG.	HT.
(UT)	(E)		CORR.	CORR. (M)	(N-E)	(N-E)	CORR.	CORR. (M)	(N-E)
APRIL 25, 1963									
1 29.1	260.15	47.4	29.1	-82.61	893	90.0	29.1	-82.65	893
3 24.5	289.32	45.0	24.0	-80.80	911	72.5	34.2	-104.47	876
5 19.8	318.50	40.0	19.9	-45.49	927	60.8	38.3	-119.80	864
7 15.2	347.68	35.0	16.7	-35.86	938	54.0	41.3	-129.46	857
9 10.6	376.86	30.0	14.0	-28.53	947	49.4	44.0	-136.81	852
11 5.9	406.04	20.0	9.1	-17.75	962	43.7	48.7	-148.13	847
13 1.3	435.22	0.	0.	0.	983	39.9*	57.3	-165.51	853
15 54.8	74.40	-20.0	-9.2	17.24	993	43.7*	-49.6	147.90	877
17 50.2	103.58	-30.0	-14.1	28.49	991	49.4*	-44.8	136.59	895
19 45.6	132.76	-35.0	-16.9	35.81	989	54.0*	-42.1	129.25	906
21 41.0	161.94	-40.0	-20.1	45.42	985	60.8*	-39.1	119.62	919
23 36.4	191.12	-45.0	-24.4	60.71	975	72.4*	-34.9	104.31	937
		-47.4	-29.6	82.49	957	90.0	-29.6	82.53	957

APRIL 26, 1963									
0 31.5	250.53	47.4	29.2	-82.59	898	90.0	29.2	-82.63	898
2 26.9	279.71	45.0	24.1	-80.79	918	72.5	34.3	-104.45	879
4 22.2	308.89	40.0	19.9	-45.48	934	60.8	38.4	-119.78	866
6 17.5	338.07	35.0	16.8	-35.85	945	54.0	41.4	-129.43	858
8 12.9	367.25	30.0	14.0	-28.52	954	49.4	44.1	-136.78	852
10 7.3	396.43	20.0	9.1	-17.75	969	43.7	48.8	-148.11	846
12 2.6	425.61	0.	0.	0.	988	39.9*	57.4	-165.49	848
14 58.3	75.79	-20.0	-9.2	17.23	994	43.7*	-49.5	147.92	870
16 53.7	104.97	-30.0	-14.1	28.49	991	49.4*	-44.8	136.61	888
18 49.1	134.15	-35.0	-16.9	35.81	987	54.0*	-42.1	129.27	899
20 44.5	163.33	-40.0	-20.1	45.42	981	60.8*	-39.0	119.63	912
22 39.9	192.51	-45.0	-24.4	60.71	969	72.4*	-34.8	104.32	930
24 35.3	221.69	-47.4	-29.6	82.49	951	90.0	-29.6	82.53	951

APRIL 27, 1963									
1 31.1	260.88	47.4	29.3	-82.57	905	90.0	29.3	-82.61	905
3 26.5	290.07	45.0	24.1	-80.77	926	72.5	34.4	-104.42	884
5 21.8	319.25	40.0	19.9	-45.46	942	60.8	38.5	-119.75	870
7 17.2	348.43	35.0	16.8	-35.83	953	54.0	41.6	-129.40	860
9 12.6	377.61	30.0	14.1	-28.51	962	49.4	44.2	-136.76	853
11 7.9	406.79	20.0	9.2	-17.74	976	43.7	48.9	-148.08	845
13 3.3	435.97	0.	0.	0.	993	39.9*	57.5	-165.47	844
15 59.7	76.15	-20.0	-9.2	17.23	995	43.7*	-49.4	147.94	863
17 55.1	105.33	-30.0	-14.2	28.49	989	49.4*	-44.7	136.62	880
19 50.5	134.51	-35.0	-16.9	35.80	984	54.0*	-42.0	129.28	890
21 45.9	163.69	-40.0	-20.1	45.42	977	60.8*	-39.0	119.64	904
23 41.3	192.87	-45.0	-24.3	60.71	964	72.4*	-34.8	104.33	922
		-47.4	-29.6	82.49	944	90.0	-29.6	82.54	944

MODIFIED ORBITAL ELEMENTS FOR EARTH SATELLITE 196C DITA 1

REFERENCE TIME 1963 Y. 4 M 13 D. 1 H 29.25 M UT
 INCLINATION 47.20 DEG.
 ASCENDING NODE 110.34 DEG. WEST
 PERIODE INTERVAL ONE DAY -18.02 MIN.
 ARGUMENT OF PERIGEE 85.85 DEG.
 RATE OF CHANGE 0.45413 DEG. PER PERIOD
 ANOMALISTIC PERIOD 115.517 MIN.
 RATE OF CHANGE -0.00017 MIN. PER PERIOD
 ECCENTRICITY 0.00957
 RADIUS OF PERIGEE 4835.6 MILES
 RADIUS OF APOGEE 4929.1 MILES
 RATE OF CHANGE -0.17 MILES PER DAY
 ASCENDING NODE 110.34 DEG.
 RATE OF CHANGE -3.26940 DEG. PER DAY
 LATITUDE OF PERIGEE 47.04 DEG.