

PROJECT 10073 RECORD CARD

1. DATE 26 April 1963	2. LOCATION 27N 150W (PACIFIC)		12. CONCLUSIONS <input type="checkbox"/> Was Balloon <input type="checkbox"/> Probably Balloon <input type="checkbox"/> Possibly Balloon	
3. DATE-TIME GROUP Local _____ GMT 27/0613Z	4. TYPE OF OBSERVATION <input type="checkbox"/> Ground-Visual <input type="checkbox"/> Ground-Radar <input checked="" type="checkbox"/> Air-Visual <input type="checkbox"/> Air-Intercept Radar		<input type="checkbox"/> Was Aircraft <input type="checkbox"/> Probably Aircraft <input type="checkbox"/> Possibly Aircraft	
5. PHOTOS <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. SOURCE Civilian Northwest Airlines		<input type="checkbox"/> Was Astronomical <input type="checkbox"/> Probably Astronomical <input type="checkbox"/> Possibly Astronomical	
7. LENGTH OF OBSERVATION not reported	8. NUMBER OF OBJECTS one	9. COURSE south	<input checked="" type="checkbox"/> Other <u>satellite</u> <input type="checkbox"/> Insufficient Data for Evaluation <input type="checkbox"/> Unknown	
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 <del>ECHO data not available.</del> Object assumed orbital by observers. Case evaluated as satellite on limited data. on 26 Apr 1963 classed as satellite AT 0613Z AT 3844 W. DOT IN POSITION WITH SATELLITE (ECHO)		

'SMB B186

DEPARTMENT OF THE AIR FORCE  
STAFF MESSAGE BRANCH  
UNCLASSIFIED MESSAGE

A853KHD638

I N C O M I N G

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/CINCNORAD 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

RUUAZ/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

NOTE: Advance copies del to DIA AND NIN.

BT

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 IDIA 1  
FOR OTHER LATITUDES

EQUATOR S-A		LAT.	SOUTH-NORTH				NORTH-SOUTH				
TIME (UT)	LONG. (E)		TYPE CORR.	LONG. CORR. (M)	HT. (M)	BEAR. (N-E)	TIME CORR.	LONG. CORR. (M)	HT. (M)	BEAR. (N-E)	
APRIL 21, 1963											
1	20.4	241.19	47.4	28.8	-82.69	877	90.0	28.8	-82.73	877	90.0
2	18.0	270.37	45.0	23.7	-80.87	890	72.5	33.9	-104.55	867	107.5*
3	11.4	290.56	40.0	19.4	-85.54	902	60.8	38.0	-119.88	861	119.2*
4	5.7	328.74	35.0	16.5	-85.90	911	54.1	41.0	-129.54	859	125.9*
5	2.1	357.93	30.0	13.9	-88.57	919	49.4	43.4	-136.89	858	130.5*
6	0.0	372.11	20.0	9.0	-17.29	934	43.7	48.4	-148.21	840	136.3*
7	0.0	387.29	0.	0.	0.	940	39.9	57.0	-165.57	826	140.0
8	0.0	392.47	-20.0	-9.1	17.25	980	43.7*	-49.7	147.86	805	136.3
9	0.0	407.65	-30.0	-14.1	28.51	988	49.4*	-44.9	136.57	817	130.6
10	0.0	422.83	-35.0	-16.9	35.83	989	54.0*	-42.2	129.24	820	126.0
11	0.0	438.01	-40.0	-20.0	45.43	987	60.8*	-39.1	119.61	833	119.2
12	0.0	453.19	-45.0	-24.3	60.72	982	72.4*	-34.9	104.31	849	107.6
13	0.0	468.37	-47.4	-29.6	82.49	974	90.0*	-29.6	82.54	871	90.0

APRIL 22, 1963

0	25.1	231.40	47.4	28.9	-82.67	880	90.0	28.9	-82.71	880	90.0
1	20.5	260.58	45.0	23.8	-80.85	894	72.5	34.0	-104.53	868	107.5*
2	15.8	289.77	40.0	19.7	-85.53	907	60.8	38.1	-119.87	861	119.2*
3	11.2	318.95	35.0	16.6	-85.89	917	54.0	41.1	-129.52	857	125.9*
4	6.6	348.13	30.0	13.9	-88.54	925	49.4	43.7	-136.87	856	130.5*
5	2.0	377.31	20.0	9.0	-17.27	941	43.7	48.4	-148.20	856	136.2*
6	0.0	392.49	0.	0.	0.	966	39.9	57.1	-165.56	870	140.0
7	0.0	407.67	-20.0	-9.1	17.25	984	43.7*	-49.7	147.87	898	136.3
8	0.0	422.85	-30.0	-14.1	28.51	988	49.4*	-44.9	136.57	917	130.6
9	0.0	438.03	-35.0	-16.9	35.83	989	54.0*	-42.2	129.24	927	126.0
10	0.0	453.21	-40.0	-20.0	45.44	987	60.8*	-39.1	119.61	940	119.2
11	0.0	468.39	-45.0	-24.3	60.72	982	72.4*	-34.9	104.31	955	107.6
12	0.0	483.57	-47.4	-29.6	82.49	971	90.0	-29.6	82.54	971	90.0

APRIL 23, 1963

1	24.9	250.79	47.4	29.0	-82.65	884	90.0	29.0	-82.69	883	90.0
2	20.3	279.97	45.0	23.9	-80.84	899	72.5	34.1	-104.51	870	107.5*
3	15.7	309.15	40.0	19.7	-85.52	913	60.8	38.2	-119.85	861	119.2*
4	11.0	338.34	35.0	16.6	-85.88	924	54.0	41.2	-129.50	856	125.9*
5	6.4	367.52	30.0	13.9	-88.53	933	49.4	43.8	-136.84	854	130.5*
6	1.8	396.70	20.0	9.0	-17.26	948	43.7	48.5	-148.19	853	136.2*
7	0.0	411.88	0.	0.	0.	972	39.9	57.1	-165.55	864	140.0
8	0.0	427.06	-20.0	-9.1	17.24	987	43.7*	-49.7	147.88	891	136.3
9	0.0	442.24	-30.0	-14.1	28.50	990	49.4*	-44.9	136.58	910	130.6
10	0.0	457.42	-35.0	-16.9	35.82	989	54.0*	-42.2	129.24	920	126.0
11	0.0	472.60	-40.0	-20.0	45.43	987	60.8*	-39.1	119.61	933	119.2
12	0.0	487.78	-45.0	-24.3	60.72	980	72.4*	-34.9	104.31	949	107.6
13	0.0	502.96	-47.4	-29.6	82.49	967	90.0	-29.6	82.53	967	90.0

APRIL 24, 1963

0	29.3	240.98	47.4	29.0	-82.63	888	90.0	29.0	-82.67	888	90.0
1	24.7	270.16	45.0	23.9	-80.82	905	72.5	34.1	-104.49	872	107.5*
2	20.1	299.35	40.0	19.8	-85.50	919	60.8	38.2	-119.83	862	119.2*
3	15.4	328.53	35.0	16.7	-85.87	930	54.0	41.3	-129.48	856	125.9*
4	10.8	357.71	30.0	14.0	-88.54	939	49.4	43.9	-136.83	853	130.5*
5	6.2	386.89	20.0	9.1	-17.26	955	43.7	48.6	-148.16	850	136.2*
6	1.5	416.07	0.	0.	0.	978	39.9*	57.2	-165.53	858	140.0
7	0.0	431.25	-20.0	-9.2	17.24	990	43.7*	-49.6	147.89	884	136.3
8	0.0	446.43	-30.0	-14.1	28.50	991	49.4*	-44.9	136.59	903	130.6
9	0.0	461.61	-35.0	-16.9	35.81	989	54.0*	-42.2	129.25	914	125.9
10	0.0	476.79	-40.0	-20.1	45.43	986	60.8*	-39.1	119.61	927	119.2
11	0.0	491.97	-45.0	-24.3	60.71	977	72.4*	-34.9	104.31	944	107.6
12	0.0	507.15	-47.4	-29.6	82.49	962	90.0	-29.6	82.53	962	90.0

SATELLITE 196C IDIA 1  
FOR OTHER LATITUDES

EQUATOR S-A		LAT.	SOUTH-NORTH				NORTH-SOUTH				
TIME (UT)	LONG. (E)		TYPE CORR.	LONG. CORR. (M)	HT. (M)	BEAR. (N-E)	TIME CORR.	LONG. CORR. (M)	HT. (M)	BEAR. (N-E)	
APRIL 25, 1963											
1	20.1	260.11	47.4	29.1	-82.61	893	90.0	29.1	-82.65	893	90.0
2	15.5	289.29	45.0	24.0	-80.80	911	72.5	34.2	-104.47	876	107.5*
3	10.8	318.47	40.0	19.9	-85.49	927	60.8	38.3	-119.80	864	119.2*
4	6.2	347.65	35.0	16.7	-85.86	938	54.0	41.3	-129.46	857	125.9*
5	1.6	376.83	30.0	14.0	-88.53	947	49.4	44.0	-136.81	852	130.5*
6	0.0	391.01	20.0	9.1	-17.25	962	43.7	48.7	-148.13	847	136.2*
7	0.0	406.19	0.	0.	0.	983	39.9*	57.3	-165.51	853	140.0
8	0.0	421.37	-20.0	-9.2	17.24	993	43.7*	-49.7	147.90	877	136.3
9	0.0	436.55	-30.0	-14.1	28.50	991	49.4*	-44.9	136.59	895	130.6
10	0.0	451.73	-35.0	-16.9	35.81	989	54.0*	-42.1	129.25	906	125.9
11	0.0	466.91	-40.0	-20.1	45.42	985	60.8*	-39.1	119.62	919	119.2
12	0.0	482.09	-45.0	-24.4	60.71	975	72.4*	-34.9	104.31	937	107.6
13	0.0	497.27	-47.4	-29.6	82.49	957	90.0	-29.6	82.53	957	90.0

APRIL 26, 1963

0	21.5	250.33	47.4	29.2	-82.59	898	90.0	29.2	-82.63	898	90.0
1	16.9	279.51	45.0	24.1	-80.79	918	72.5	34.3	-104.45	879	107.5*
2	12.2	308.69	40.0	19.9	-85.48	934	60.8	38.4	-119.78	866	119.2*
3	7.6	337.87	35.0	16.8	-85.85	945	54.0	41.4	-129.43	858	125.9*
4	3.0	367.05	30.0	14.0	-88.52	954	49.4	44.1	-136.78	852	130.5*
5	0.0	381.23	20.0	9.1	-17.25	969	43.7	48.8	-148.11	846	136.2*
6	0.0	396.41	0.	0.	0.	988	39.9*	57.4	-165.49	848	140.0
7	0.0	411.59	-20.0	-9.2	17.23	994	43.7*	-49.5	147.92	870	136.3
8	0.0	426.77	-30.0	-14.1	28.49	991	49.4*	-44.8	136.61	888	130.6
9	0.0	441.95	-35.0	-16.9	35.81	987	54.0*	-42.1	129.27	899	125.9
10	0.0	457.13	-40.0	-20.1	45.42	981	60.8*	-39.0	119.63	912	119.2
11	0.0	472.31	-45.0	-24.4	60.71	969	72.4*	-34.8	104.32	930	107.6
12	0.0	487.49	-47.4	-29.6	82.49	951	90.0	-29.6	82.53	951	90.0

APRIL 27, 1963

1	21.1	269.88	47.4	29.3	-82.57	905	90.0	29.3	-82.61	905	90.0
2	16.5	299.07	45.0	24.1	-80.77	926	72.5	34.4	-104.42	884	107.5*
3	11.8	328.25	40.0	19.9	-85.46	942	60.8	38.5	-119.75	870	119.2*
4	7.2	357.43	35.0	16.8	-85.83	953	54.0	41.6	-129.40	860	125.9*
5	2.6	386.61	30.0	14.1	-88.51	962	49.4	44.2	-136.76	853	130.5*
6	0.0	400.79	20.0	9.2	-17.24	976	43.7	48.9	-148.08	845	136.2*
7	0.0	415.97	0.	0.	0.	993	39.9*	57.5	-165.47	844	140.0
8	0.0	431.15	-20.0	-9.2	17.23	995	43.7*	-49.4	147.94	863	136.3
9	0.0	446.33	-30.0	-14.2	28.49	989	49.4*	-44.7	136.62	880	130.6
10	0.0	461.51	-35.0	-16.9	35.80	984	54.0*	-42.0	129.28	890	125.9
11	0.0	476.69	-40.0	-20.1	45.42	977	60.8*	-39.0	119.64	904	119.2
12	0.0	491.87	-45.0	-24.3	60.71	964	72.4*	-34.8	104.33	922	107.6
13	0.0	507.05	-47.4	-29.6	82.49	944	90.0	-29.6	82.54	944	90.0

MODIFIED ORBITAL ELEMENTS FOR EARTH SATELLITE 196C IDIA 1

REFERENCE TIME 1963 Y. 4 M 13 D. 1 H 29.29 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 115.577 MIN.  
 RATE OF CHANGE -0.00017 MIN. PER PERIOD  
 ECCENTRICITY 0.00057  
 RADIUS OF PERIGEE 4835.6 MILES  
 RADIUS OF APOGEE 4920.1 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.