PROJECT 10073 RECORD CARD

1. DATE
4 July 1963

2. LOCATION
Hamilton, Montana

3. DATE-TIME GROUP
Local 935PM
GMT 05/0435Z

4. TYPE OF OBSERVATION
☒ Ground-Visual ☐ Ground-Radar
☐ Air-Visual ☐ Air-Intercept Radar

5. PHOTOS
☐ Yes
☒ No

6. SOURCE
civilian

7. LENGTH OF OBSERVATION
not reported

8. NUMBER OF OBJECTS
one

9. COURSE
easterly

10. BRIEF SUMMARY OF SIGHTING
Observers looking at Moon and Stars. Observed object that looked like star in flight. Compared object to ECHO.

11. COMMENTS
At 3.55Z ECHO crossed the Equator heading NE at 240 deg W (120 deg E) and would reach it's orbital peak 26.2 min later about 150 deg W (40 deg to the west of Montana. ECHO would be heading SE at the time of the sighting and visible toward the West from the sighting position. Case evaluated as ECHO I.

12. CONCLUSIONS
- ☐ Was Balloon
- ☐ Probably Balloon
- ☐ Possibly Balloon
- ☐ Was Aircraft
- ☐ Probably Aircraft
- ☐ Possibly Aircraft
- ☐ Was Astronomical
- ☐ Probably Astronomical
- ☐ Possibly Astronomical
- ☒ Other Satellite ECHO I
- ☐ Insufficient Data for Evaluation
- ☐ Unknown

ATIC FORM 329 (REV 26 SEP 52)

ANACONDA
BUILDING MATERIALS
COMPANY

YARDS SERVING WESTERN MONTANA

Hamilton, Montana

National Space Administration
Washington, D. C.

Dear Sirs:

I am inquiring into what I viewed at 9:35P.M. on the evening of the 4th of July. A friend and myself were watching a fireworks display with binoculars from a distance. When they were completed I asked him if he had ever looked at the moon through binoculars and he said that he hadn't. He was quite surprised to see the moon jump up as close as it did with 7 x 50 binoculars. He then asked me how the stars looked with them, as I had the glasses again at that time, and I said I doubt if it made them any more than just brighter. I picked out what I thought was the brightest star at random and viewed it through the binoculars. I thought my eyes were deceiving me, but after close observation,,the star that I had picked out was moving stedily across the sky. He watched and said yeas, that it was moving and I could then make it out with my naked eye. It was on an approximate 45° tangent in relationship with the horizon and moving from West to East in the Southern Hemisphere. It looked exactly like the the balloon that in an earlier year reflected light back to earth. I had heard nox mention of this on the radio or read of it in the paper, so I would be interested in knowing what this object was, that is if you don't mind going to the trouble of checking back. I thought that this was pure luck the way that I happened to spot it in the first place. Curiosity has nagged at me until I had to write this letter and find out what it was I was looking at. Thank you very much for the trouble it might take you to find this information out for me.

Sincerely yours,

05 03552 240.85
-137.52
SE→ 30°N → 103.W

OK

HEADQUARTERS
FOREIGN TECHNOLOGY DIVISION
AIR FORCE SYSTEMS COMMAND
UNITED STATES AIR FORCE
WRIGHT-PATTERSON AIR FORCE BASE, OHIO

REPLY TO
ATTN OF: TDEW

1 August 1963

SUBJECT: Request for UFO Information ([redacted])

TO: Hq USAF SAF-OI 3b (Mrs. Wells)
Wash 25 DC

1. Reference the attached letter f[redacted]n requesting information on unidentified flying objects. This letter is forwarded to your office for whatever action you deem necessary.

2. As [redacted] does not give his exact location at the time of the sighting, it is impossible to confirm that he saw Echo. Description of the object, however, does suggest that the sighting was caused by Echo.

3. It is suggested that a future Echo schedule for Mr. [redacted] area be sent to him.

FOR THE COMMANDER

Robert J. Friend Jr Lt Col

ERIC T. de JONCKHEERE
Colonel, USAF
Deputy for Technology and Subsystems

1 Atch
Ltr fm Mr. [redacted]

August 13, 1963

Dear Mr. [redacted]

Your letter to NASA concerning an unidentified aerial sighting has been forwarded to this office.

As you did not give the exact location at the time of the sighting, it is impossible to confirm that you saw a specific satellite, however, your description of the object does suggest that the sighting was caused by Echo.

Echo predictions for Helena, Montana, are attached. I hope this information will be of some help to you.

Sincerely,

Attachment
Echo Predictions
13-19 Aug 63

MASTON M. JACKS
Major, USAF
Public Information Division
Office of Information

Mr. [redacted]
[redacted]
Hamilton, Montana

SATELLITE 1960 IOTA 1
FOR OTHER LATITUDES

EQUATOR S-N TIME (UT)	EQUATOR S-N LONG. (W)	LAT.	SOUTH-NORTH TIME CORR.	SOUTH-NORTH LONG. CORR.	SOUTH-NORTH HT. (MI)	SOUTH-NORTH BEAR. (N-E)	NORTH-SOUTH TIME CORR.	NORTH-SOUTH LONG. CORR.	NORTH-SOUTH HT. (MI)	NORTH-SOUTH BEAR. (N-E)
				JUNE 30, 1963						
1 11.0	177.84	47.5	26.7	-83.21	883	90.0•	26.8	-83.26	883	90.0•
3 6.0	206.95	45.0	21.7	-61.09	813	72.2•	32.0	-105.34	955	107.8•
5 1.1	236.05	40.0	17.7	-45.86	764	60.7•	36.3	-120.48	1010	119.4•
6 56.2	265.17	35.0	14.8	-36.22	731	54.0	39.5	-130.03	1047	126.1•
8 51.2	294.28	30.0	12.4	-28.86	707	49.4	42.4	-137.30	1077	130.7•
10 46.3	323.39	20.0	8.0	-17.49	674	43.8	47.0	-148.46	1121	136.5
12 41.4	352.50	0.	0.	0.	655	40.0	51.1	-165.51	1161	140.3
14 36.5	21.62	-20.0	-8.0	17.48	691	43.8	-48.1	148.37	1141	136.5
16 31.5	50.73	-30.0	-12.4	28.84	731	49.4	-42.9	137.17	1105	130.7
18 26.6	79.84	-35.0	-14.7	36.20	759	54.0•	-40.0	129.91	1079	126.1•
20 21.7	108.95	-40.0	-17.8	45.83	796	60.7•	-36.7	120.37	1045	119.4•
22 16.8	138.06	-45.0	-21.8	61.04	849	72.2•	-32.4	105.25	993	107.8•
		-47.5	-27.0	83.14	921	90.0•	-27.0	83.19	921	90.0•
				JULY 1, 1963						
0 11.8	167.17	47.5	26.8	-83.21	868	90.0•	26.7	-83.28	868	90.0•
2 6.9	196.28	45.0	21.6	-61.11	800	72.2•	31.9	-105.37	940	107.8•
4 2.0	225.39	40.0	17.7	-45.88	752	60.7	36.1	-120.52	996	119.4•
5 57.0	254.50	35.0	14.8	-36.24	721	54.0	39.3	-130.07	1035	126.1•
7 52.1	283.61	30.0	12.4	-28.87	698	49.5	42.2	-137.34	1066	130.7•
9 47.2	312.72	20.0	8.0	-17.49	665	43.8	46.9	-148.51	1113	136.5
11 42.3	341.83	0.	0.	0.	646	40.0	51.1	-165.57	1160	140.3
13 37.3	10.94	-20.0	-8.0	17.48	682	43.8	-48.3	148.27	1140	136.5
15 32.5	40.04	-30.0	-12.5	28.84	721	49.4	-43.0	137.12	1116	130.7
17 27.5	69.15	-35.0	-14.8	36.21	749	54.0•	-40.1	129.87	1083	126.1
19 22.6	98.26	-40.0	-17.9	45.82	787	60.7•	-36.9	120.33	1058	119.4•
21 17.6	127.37	-45.0	-21.9	61.02	843	72.2•	-32.5	105.21	1007	107.8•
23 12.7	156.48	-47.5	-27.1	83.11	916	90.0•	-27.1	83.16	916	90.0•
				JULY 2, 1963						
1 7.8	214.61	47.5	26.8	-83.24	852	90.0•	26.8	-83.31	852	90.0•
4 57.9	243.82	45.0	21.8	-61.14	785	72.2•	31.7	-105.40	924	107.8•
6 53.0	272.93	40.0	17.8	-45.90	739	60.7	36.0	-120.56	980	119.4•
8 48.0	302.04	35.0	14.8	-36.24	710	54.0	39.2	-130.12	1020	126.1•
10 43.1	331.15	30.0	12.3	-28.87	689	49.5	42.0	-137.39	1053	130.7•
12 38.2	0.26	20.0	8.0	-17.49	663	43.8	47.1	-148.57	1103	136.5
14 33.2	29.37	0.	0.	0.	657	40.0	50.8	-165.63	1158	140.3
16 28.3	58.48	-20.0	-8.0	17.48	705	43.8	-48.6	148.21	1154	136.5
18 23.4	87.59	-30.0	-12.5	28.83	742	49.4	-43.3	137.07	1126	130.7
20 18.4	116.70	-40.0	-18.0	45.86	822	60.7•	-40.3	129.82	1103	126.1
22 13.5	145.81	-45.0	-22.0	61.00	879	72.2•	-32.7	105.17	1023	107.8•
		-47.5	-27.2	83.09	952	90.0•	-27.3	83.13	952	90.0•
				JULY 3, 1963						
0 8.6	174.92	47.5	26.5	-83.28	837	90.0•	26.5	-83.33	838	90.0•
2 3.6	204.02	45.0	21.5	-61.14	772	72.2•	31.6	-105.43	909	107.8•
3 58.7	233.13	40.0	17.6	-45.90	729	60.7	35.8	-120.59	966	119.4•
5 53.8	262.24	35.0	14.8	-36.24	701	54.0	39.0	-130.16	1006	126.1•
7 48.8	291.35	30.0	12.3	-28.87	682	49.5	41.8	-137.44	1040	130.7•
9 43.9	320.46	20.0	8.0	-17.50	659	43.8	46.9	-148.62	1093	136.5
11 39.0	349.57	0.	0.	0.	659	40.0	56.6	-165.69	1156	140.3
13 34.0	18.68	-20.0	-8.1	17.47	713	43.7	-48.8	148.15	1159	136.5
15 29.1	47.79	-30.0	-12.5	28.82	763	49.4•	-43.5	137.02	1135	130.7
17 24.2	76.90	-35.0	-15.1	36.16	795	54.0•	-40.5	129.77	1114	126.1
19 19.2	106.01	-40.0	-18.0	45.78	836	60.7•	-37.2	120.24	1084	119.4
21 14.3	135.11	-45.0	-22.1	60.98	893	72.2•	-32.8	105.13	1037	107.8•
23 9.4	164.22	-47.5	-27.4	83.05	967	90.0•	-27.4	83.10	967	90.0•

SATELLITE 1960 IOTA 1
FOR OTHER LATITUDES

EQUATOR S-N TIME (UT)	EQUATOR S-N LONG. (W)	LAT.	SOUTH-NORTH TIME CORR.	SOUTH-NORTH LONG. CORR.	SOUTH-NORTH HT. (MI)	SOUTH-NORTH BEAR. (N-E)	NORTH-SOUTH TIME CORR.	NORTH-SOUTH LONG. CORR.	NORTH-SOUTH HT. (MI)	NORTH-SOUTH BEAR. (N-E)
				JULY 4, 1963						
1 4.4	193.33	47.5	26.4	-83.30	822	90.0•	26.4	-83.35	822	90.0•
2 59.5	222.44	45.0	21.4	-61.15	759	72.2•	31.5	-105.46	892	107.8•
4 54.6	251.55	40.0	17.6	-45.90	717	60.7	35.7	-120.63	949	119.4•
6 49.6	280.66	35.0	14.7	-36.25	691	54.0	38.8	-130.20	991	126.1•
8 44.7	309.77	30.0	12.3	-28.88	674	49.5	41.6	-137.48	1026	130.7•
10 39.7	338.87	20.0	8.0	-17.50	655	43.8	46.7	-148.67	1082	136.5
12 34.8	7.98	0.	0.	0.	662	40.0	50.3	-165.75	1151	140.3
14 29.9	37.09	-20.0	-8.1	17.47	723	43.7	-49.0	148.09	1164	136.5
16 24.9	66.20	-30.0	-12.6	28.81	776	49.4•	-43.7	136.96	1144	130.8
18 20.0	95.31	-35.0	-15.1	36.15	809	54.0•	-40.7	129.72	1125	126.1
20 15.1	124.42	-40.0	-18.1	45.76	851	60.7•	-37.4	120.19	1097	119.4
22 10.1	153.52	-45.0	-22.2	60.95	909	72.2•	-33.0	105.09	1051	107.8•
		-47.5	-27.5	83.02	983	90.0•	-27.5	83.07	983	90.0•
				JULY 5, 1963						
0 5.2	182.63	47.5	26.3	-83.32	808	90.0•	26.3	-83.37	808	90.0•
2 0.3	211.74	45.0	21.4	-61.16	747	72.2	31.4	-105.49	877	107.8•
3 55.3	240.85	40.0	17.5	-45.91	707	60.7	35.5	-120.66	934	119.4•
5 50.4	269.96	35.0	14.7	-36.25	684	54.0	38.7	-130.24	976	126.1•
7 45.4	299.06	30.0	12.3	-28.88	668	49.5	41.5	-137.52	1012	130.7•
9 40.5	328.17	20.0	8.0	-17.50	652	43.8	46.5	-148.72	1070	136.4
11 35.6	357.28	0.	0.	0.	665	40.0	50.1	-165.80	1146	140.3
13 30.6	26.39	-20.0	-8.1	17.46	733	43.7	-49.2	148.04	1167	136.5
15 25.7	55.50	-30.0	-12.6	28.79	788	49.4•	-43.9	136.91	1151	130.8
17 20.7	84.60	-35.0	-15.2	36.13	822	54.0•	-40.9	129.66	1134	126.1
19 15.8	113.71	-40.0	-18.2	45.75	865	60.7•	-37.6	120.14	1109	119.4
21 10.9	142.82	-45.0	-22.3	60.93	924	72.2•	-33.1	105.05	1065	107.8•
23 5.9	171.93	-47.5	-27.6	82.98	998	90.0•	-27.6	83.03	998	90.0•
				JULY 6, 1963						
1 1.0	201.03	47.5	26.2	-83.35	793	90.0•	26.2	-83.42	793	90.0•
2 56.0	230.14	45.0	21.3	-61.17	734	72.2	31.3	-105.51	861	107.8•
4 51.1	259.25	40.0	17.5	-45.92	697	60.7	35.4	-120.70	918	119.4•
6 46.2	288.36	35.0	14.7	-36.26	676	54.0	38.5	-130.28	960	126.1•
8 41.2	317.46	30.0	12.3	-28.88	662	49.5	41.3	-137.57	997	130.7•
10 36.3	346.57	20.0	8.0	-17.49	650	43.8	46.3	-148.77	1057	136.4
12 31.3	15.68	0.	0.	0.	670	40.0	55.9	-165.86	1140	140.3
14 26.4	44.78	-20.0	-8.1	17.45	744	43.7	-49.5	147.98	1169	136.5
16 21.5	73.89	-30.0	-12.7	28.78	801	49.4•	-44.1	136.85	1158	130.8
18 16.5	103.00	-35.0	-15.3	36.12	837	54.0•	-41.2	129.61	1143	126.2
20 11.6	132.11	-40.0	-18.3	45.72	881	60.7•	-37.8	120.09	1120	119.4
22 6.6	161.21	-45.0	-22.4	60.90	941	72.2•	-33.3	105.00	1079	107.8•
		-47.5	-27.8	82.95	1014	90.0•	-27.8	83.00	1014	90.0•

MODIFIED ORBITAL ELEMENTS FOR EARTH SATELLITE 1960 IOTA 1

REFERENCE TIME 1963 Y 6 M 22 D 1 H 15.89 M UT
INCLINATION 47.27 DEG.
ASCENDING NODE (LONG.) 144.80 DEG. WEST
PRIME SWEEP INTERVAL ONE DAY -16.94 MIN.
ARGUMENT OF PERIGEE 336.51 DEG.
RATE OF CHANGE 0.27848 DEG. PER PERIOD
ANOMALISTIC PERIOD 115.172 MIN.
RATE OF CHANGE -0.00018 MIN. PER PERIOD
ECCENTRICITY 0.05051
RADIUS OF PERIGEE 4625.9 MILES
RADIUS OF APOGEE 5118.1 MILES
RATE OF CHANGE -0.13 MILES PER DAY
ASCENDING NODE (R.A.) 143.51 DEG.
RATE OF CHANGE -3.30020 DEG. PER DAY
LATITUDE OF PERIGEE-17.02 DEG.
READ-IN EXPECTED MAG. 41