

1. DATE - TIME GROUP 16 November 64 16/1440Z		2. LOCATION 75 Miles NW of Midway, Island	
3. SOURCE Military		10. CONCLUSION Astronomical (METEOR SHOWERS)	
4. NUMBER OF OBJECTS Multiple		No additional data received. Northern Taurids and Leonid Meteor showers active during this period. Leonids have a maximum display on 17 Nov. Sighting likely an observation of a meteor shower.	
5. LENGTH OF OBSERVATION 1440Z - 1555Z		11. BRIEF SUMMARY AND ANALYSIS Numerous green and yellow possible pyro display. First thought to be meteor shower. Flight in many directions.	
6. TYPE OF OBSERVATION Air-Visual			
7. COURSE Omni-Directional			
8. PHOTOS ☐ Yes ☒ No			
9. PHYSICAL EVIDENCE ☐ Yes ☒ No			

RETURN TO:

Director
Aerospace Studies Inst
ATTN: Archives Branch
Maxwell AFB, Alabama

K243.6012-1
15-30 Nov 1964

FORM
FTD SEP 63 0-329 (TDE) Previous editions of this form may be used.

INCOMING
MESSAGE

DEPARTMENT OF THE AIR FORCE
STAFF MESSAGE BRANCH

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AF IN : 36174 (16 Nov 64)

Pg 2 of 2

UNCLAS

A. JANAP 146D

1. CIRVIS REPORT

2. NAVY 43219

3. NUMEROUS GREEN AND YELLOW POSSIBLE
PYRO DISPLAY. FIRST THOUGHT TO BE
METEOR SHOWERS.

4. 75 MILES NORTH AND WEST OF MIDWAY ISLAND.

5. 161440Z - 1555Z $\longleftrightarrow$ 1 HR. 15 MIN.

6. EST. ABOVE ^{14,400}20,000

7. OMNI - DIRECTIONAL

8. UNKNOWN

9. NONE

16/1600Z

BT

NOTE: ADV CYS TO DIA, NIN & XOPX
XMITTED TO CIA PER HQ FORM 1392 #300.

SECRET

1003670

INCOMING
MESSAGE

16/1140Z
DEPARTMENT OF THE AIR FORCE
STAFF MESSAGE BRANCH

Acron Stover
UNCLASSIFIED

AF IN: 36174 (16 Nov 64) HO/am

INFO : NIN-7, XOP-1, XOPX-7, SAF-OS-3, JCS/OSD-1, CMC-9, NSA-7, DIA-15 (51

SMB B036

Pg 1 of 2

HQA844ZCCJD375

OO RUEAHQ

DE RUHPF B624 16/1655Z

ZNR

O 161655Z

FM COMBARFORPAC

TO RUHPHH/COMHAWSEAFRON

RUHLKM/CINCPACAF

RUHLKH/HADD KUNIA

ZEN/CINCNORAD

INFO RUECW/CNO

RUEAHQ/COFS USAF

RUHLHQ/CINCPAC

RUHLHL/CINCPACFLT

RUHLHS/CINCUSARPAC

RUHLKSA/PACAFBASECOM COMMAND CENTER HICKAM AFB

RUECW/SECNAV

BT

List of Annually Recurring Northern Hemisphere Meteor Showers

STREAM	Date at Maximum	Extreme Limits	Radial P.A. Declination / 1950	Vel. in Atmos. km sec-1	Hourly Rate at Maximum	Transit of Radiant LCC T. M.N. $\pm$ 00h
Quadrantids	Jan. 3	Jan 1-4	230 / 48	38.5	VISUAL 30	8h 28m
Aurigids	Feb. 9	5 Days(?)	75 / 42	----	5	19h 43m
Virginids	Mar 13	16 Days(?)	183 / 4	30.8	1 (?)	0h 49m
Lyrids	Apr 22	2 Days	270 / 33	48.4	5	3h 59m
Aquarids	May 4	10 Days	336 / 0	64	5	7h 36m
Arietids	June 8	May 29- June 18	44 / 23	38.0	--	9h 51m
Perseids	June 9	June 1-16	62 / 23	28.9	--	10h 59m
Taurids	June 30	June 24- July 6	86 / 19	31.4	--	11h 12m
Aquarids	July 28	July 24- Aug 7	339 - 17	40.5	10	2h 14m
Perseids	Aug. 12	July 29- Aug 17	46 / 58	59.2	37	5h 43m
Orionids	Oct. 22	Oct 18-26	94 / 16	65.5	13	4h 12m
Southern Taurids	Nov. 1	Oct 27- Nov 22	51 / 14	28.1	5	0h 40m
Northern Taurids	Nov 12	Oct 17- Dec 2	52 / 21	29.5	5	0h 1m
Leonids	Nov 17	5 Days	152 / 22	70.8	6	6h 22m
Geminids	Dec 13	Dec 7-15	113 / 32	35.9	55	2h 12m
Ursids	Dec 22	Dec 22-23	217 / 76	37.4	15	8h 24m
Periodic Stream						
Giacobinids	Oct 10 1959	1 Day	262 / 54	23.1	4200	16h 13m

The above taken from HANDBOOK OF GEOPHYSICS, Revised Edition, 1960, ARDC.