PROJECT 10073 RECORD

1. DATE - TIME GROUP 20 August 65 21/0315Z	2. LOCATION Pease AFB, New Hampshire
3. SOURCE Military	10. CONCLUSION RADAR: A/C VISUAL: Satellites, ARCTURUS, A/C KC-97 on local flight asked to observe area and reported nothing unusual (Negative sighting).
4. NUMBER OF OBJECTS One or more	
5. LENGTH OF OBSERVATION 30 Minutes	11. BRIEF SUMMARY AND ANALYSIS Multiple objects observed described as a high fast moving A/C, Orbiting Satellite, a low altitude slow moving light. One object tracked on Radar. Radar track was of an object approximately 7 miles NW of Pease AFB tracked to a position of 2 miles NE, indicating SE flight and regarded by the Watch supervisor as a light A/C. On the night of 24 Aug the Satellite ECHO was observed and considered identical to one of the objects observed on the night of 20 August. The object observed by Tower personnel with BX at 310 deg azimuth and disappearing at 310 deg azimuth 30 minutes later is regarded as ARCTURUS. Disappearance reported as instantaneous and motion Northerly slow. This object characteristic of an Astro report.
6. TYPE OF OBSERVATION Ground-Visual, Ground-Radar	
7. COURSE SE, Northerly, Stationary	
8. PHOTOS ☐ Yes XX No	
9. PHYSICAL EVIDENCE ☐ Yes XX No	

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

Tog p DIAGRAM

ES FAHRENHEIT AND CELSIUS

WIND SCALE

ICAO STANDARD ATMOSPHERE ALTITUDE

THOUSANDS OF METERS

THOUSANDS OF FEET

T TEMPERATURE SCALE

Users can assist in the improvement of DOD Weather Plotting Charts by reporting inaccuracies and omissions to the appropriate WEATHER SERVICE HEADQUARTERS, i.e. Hq Air Weather Service or Director U.S. Naval Weather Service

Form: DOD-WPC 9-16-1

(Formerly AWS-WPC 9-16-1)

HEADQUARTERS
817th COMBAT SUPPORT GROUP (SAC)
UNITED STATES AIR FORCE
Pease Air Force Base, New Hampshire 03803

REPLY TO
ATTN OF: BDOO

SUBJECT: Initial Report of Unidentified Flying Object (UFO) 15 SEP 1965

TO: AFCS (FTD)

The following report of an unidentified flying object is hereby submitted in accordance with AFR 200-2.

a. Description of the object.

(1) Irregular shaped light mostly round.

(2) Pea.

(3) White with occasional red shading.

(4) One.

(5) N/A

(6) No.

(7) No.

(8) No.

(9) N/A

b. Description of course of object.

(1) 310° level with tower.

(2) 310° 45° up.

(3) 310° 10° up.

(4) Northerly slow.

(5) Instantaneously.

(6) About 30 minutes.

c. Manner of observations.

(1) Ground visual, radar CPN-18.

(2) Binoculars.

(3) N/A.

d. Time and Date of sighting.

(1) 0315Z, 21 August 1965.

(2) Night.

e. Location of observer.

(1) 43 05N 70 49W Control Tower and Ramp area at Pease Air Force Base, New Hampshire.

f. Gray, James A., A1C, 1916th Comm Sq, Control Tower Operator, Reliable.

Jennings, Richard A., SSgt, 1916th Comm Sq, Control Tower Operator, Reliable.

Kessler, Robert H., 1st Lt, 1916th Comm Sq, PAPCON Watch Supervisor, Reliable.

g. See Attachment 1.

h. See Attachment 2.

i. Interception or identification action taken.

(1) A KC-97 aircraft flying locally was asked to observe the area of sighting. The crew reported negative sighting.

j. N/A.

k. Position title and comments of preparing officer: Major Charles L. Florer, Base Operations Officer, Pease Air Force Base New Hampshire.

Comments: I am convinced the observers did see an unusual light. This light was described in various manners ranging from "possibly a high, fast moving aircraft", " an orbiting satellite", "a low altitude slow moving light". The target tracked by the CPN-18 radar could easily have been a light aircraft. The statements of the PAPCON Watch Supervisor and the tower operator conflict as to the direction of travel, i.e., watch supervisor

"Tracked a UFO on radar from a position approximately seven miles Northwest of Pease to a position approximately two miles Northwest". This indicates a Southeasterly track. The tower operator states that his visual sighting "appeared to move very slowly to the North". The statement of weather conditions indicates that conditions were such that anomalous propagation could easily existed.

At 0105Z, 25 August 1965, the Echo Satellite was visible and precipitated several reports from airmen working on the flight line. One of these airmen stated to me that "there it is, that's the same thing we all saw last Friday night". I have observed the Echo Satellite numerous times and am certain that it was what we saw that time.

In conclusion, I believe that these sightings were nothing more than the observance of the Echo Satellite by persons who did not recognize it as such. The radar sighting, as previously noted, did not bear out the same track and was undoubtedly a light aircraft on a VFR flight.

[redacted], Colonel, USAF
Base Commander

3 Atch
1. Statement, UFO Sighting, 1Lt Kessler, RAPCON
2. Statement, Weather Conditions, SSgt Wieber, Weather Forecaster
3. Statement, UFO Sighting, A1C Gray, Control Tower Op

S T A T E M E N T

UFO Sighting

I, 1LT Robert H. Kessler, Watch Supervisor RAPCON, on 20 August 1965 at about 2330L tracked a UFO on radar from a position approximately seven miles Northwest of Pease to a position approximately two miles Northwest of Pease. The radar return was good, and appeared to be the size blip a light aircraft would produce. Speed was slow to moderate and sporadic at times. The Control Tower had visual contact with the object. At about 2345L another target similar in size and speed was observed to follow the same track. Speed was steady. Tower did not acknowledge visual sighting. At approximately 0000L a KC-97 was vectored to the area but observed nothing unusual. Boston Center was contacted and reported no aircraft under their control were in that vicinity at the time of the sightings. There were no further sightings by Tower or RAPCON.

Robert H Kessler

ROBERT H. KESSLER, 1st Lt, USAF
Watch Supervisor, RAPCON

STATEMENT OF WEATHER CONDITIONS

The following were the weather conditions from 2300L 20 August 1965 to 0100L 21 August 1965 at and in the vicinity of Pease Air Force Base.

1. Winds Aloft over PSM (estimated):

5,000'	300/10	30,000'	280/90
10,000'	260/20	40,000'	270/90
14,000'	280/30	50,000'	260/50
20,000'	280/50		

2. Surface observations at PSM (local daylight saving time)

2300L	Clear	30		61/50	3107	008	Sc E
0000L	Clear	30	190	61/49	3606	009	207 80
0100L	Clear	30		59/49	0000	011	

3. There were no Thunderstorms in the area.

4. The average vertical temperature gradient from the surface to 8500' was 3 deg C/1000'. (see attached skew T log P diagram)

5. The following is a summary of the weather and atmospheric conditions in the vicinity of Pease Air Force Base on the night of 20 August 1965.

A ridge of High pressure existed to the west of Pease with general direction of movement towards the east. Skies were generally clear with a scattered layer of strato-cumulus having dissipated within the hour prior to the sighting of the U.F.O. The strato-cumulus was based at an estimated 5500'. Thin broken cirrus clouds were observed at PSM two and one half hours after the sighting. These clouds were in all probability on the low horizon at the time of the sighting. The air mass over PSM was typical of that preceding the movement of a High pressure ridge into our region. A dry unstable layer existed between the surface and 8500'. A subsidence inversion with a temperature gradient of 4 deg C/1000' existed between 8500' and 9300'. The combination of the above ingredients would indicate the potential for entrapment of dust and haze particles at and below the inversion. The inversion appeared to exist well to the west of PSM as well as in the local area. Due to the composition of the atmosphere that night anomalous propagation could easily have existed. Reflective objects or light sources could have shown up at or below the base of the inversion.

Richard W Nieber

RICHARD W. NIEBER
SSgt, USAF
Weather Forecaster

S T A T E M E N T

UFO Sighting

I, A1C James A. Gray, AF14631462, did observe on the night of 27 August 1965 at approximately 2330 local a UFO Northwest of Pease Air Force Base as to the altitude and distance they were hard to determine. The object appeared to move very slowly to the North. The object was observed for approximately one half (½) hour then disappeared. In coordinating with RAPCON it was determined radar was picking up a UFO in the same vicinity.

James A. Gray

JAMES A. GRAY, A1C, USAF
AF14631462

Form: DOD-WPC 9-16-1

SKEW T - LOG P ANALYSIS		
TIME	TIME	
AIRMASS ANALYSIS		
TYPE BOUNDARY ——— FT. TYPE BOUNDARY ——— FT. TYPE	——— FT. ——— FT.	
FREEZING LEVEL(S)		
INVERSIONS		
FRONTAL		
RADIATION		
SUBSIDENCE		
TROPOPAUSE		
L.C.L.		
C.C.L.		
L.F.C.		
SIGNIFICANT WIND		
MAX.		
MIN.		
LEVELS OF SHEAR		
STABILITY		
INDEX TO	INDEX TO	
TO	TO	
TO	TO	
CLOUDS		
TYPE		
AMOUNT		
BASES		
TOPS		
ICING		
TYPE		
SEVERITY		
BOUNDARIES		
CONTRAILS		
PERSISTENCE		
HEIGHT		
TURBULENCE		
DEGREE		
HEIGHT(S)		
MAX WIND GUSTS		
HAIL SIZE		
TEMPERATURES		
MAX.		
MIN.		
CUMULUS CLOUD FORMATION AT TEMP_____ TIME_____		
DISSIPATION OF LOW LEVEL INVERSION AT_____ TIME_____		
REMARKS		
FORECASTER	FORECASTER	

EXPLANATION

ISOBARS are straight, horizontal brown lines. The heights of the pressure surfaces in the ICAO Standard atmosphere, below the pressure values on the left, are in parentheses ( ) for values in feet and brackets [ ] for meter values.

ISOTHERMS (°C) are the straight, equidistant brown lines running diagonally upward from left to right.

DRY ADIABATS are the slightly curved brown lines that intersect the 1000 mb. isobar at intervals of 2°C. and run diagonally upward from right to left. The Dry Adiabats for the overlap portion of the pressure range are labeled with two values. (See below.)

SATURATION ADIABATS are the curved green lines that intersect the 1000 mb. isobar at intervals of 2°C. diverging upward and tending to become parallel to the dry adiabats.

SATURATION MIXING RATIO (in gm. per kg.) is represented by dashed green lines. The values appear between the 1000 and 950 mb. lines.

THICKNESS (in hundreds of geopotential feet and meters) of the layers 1000-700, 1000-500, 700-500, 500-300, 300-200, 200-150, 150-100, 100-50, and 50-25 mb. is represented by numbers and a graduation along the middle of each layer. The thicknesses are obtained from the virtual temperature curves by the equal area method, using any straight line as a dividing line.

HEIGHT (in geopotential feet or meters) above mean sea level, or station level, of the 1000 mb. surface is obtained from the nomogram in the upper left hand corner by drawing a straight line from the temperature scale (°F) or (°C) through the point p, (mean sea level or station pressure) on the pressure scale, and reading height on the appropriate height scale.

ICAO STANDARD ATMOSPHERE SOUNDING is indicated by a thick brown line.

The saturated adiabats and isopaths of saturation mixing ratio are computed by use of vapor pressure over a plane water surface at all temperatures.

Extension of chart to 25 mb. has been accomplished by overlap with pressure indicated in brackets [180] at 400 mb. and [25] at 150 mb. Dry adiabats for the overlap are labeled in parentheses ( ).

APPROXIMATE VIRTUAL TEMPERATURE may be obtained from the formula $T_v = T + \frac{w}{6}$ where T_v is virtual temperature in °C, T is free air temperature in °C, and w is mixing ratio in grams/kilogram. For purposes of thickness computation, use the mean temperature of the layer for T and use the mean mixing ratio of the layer for w.

Black dots (along wind scale line) indicate the levels for which wind data are reported and plotted. The open circles ○ indicate the mandatory pressure levels at which wind data are also entered.

All heights used in this diagram are in geopotential feet and meters.

PUBLISHED BY THE AERONAUTICAL CHART AND INFORMATION CENTER
UNITED STATES AIR FORCE
ST. LOUIS, MO. 63118
JUNE 1964 (ACIC) BASE 10

606 NUMBER — PWM STATION

0000Z TIME (GCT) — 21 AUG 65 DATE (GCT)

NUMBER

TIME (GCT)

Form: DOD-WPC 9-16-1

SKEW T - LOG P ANALYSIS	
TIME	TIME
AIRMASS ANALYSIS	
TYPE BOUNDARY _____ FT. TYPE BOUNDARY _____ FT. TYPE	_____ FT. _____ FT.
FREEZING LEVEL(S)	
INVERSIONS	
FRONTAL	
RADIATION	
SUBSIDENCE	
TROPOPAUSE	
L.C.L.	
C.C.L.	
L.F.C.	
SIGNIFICANT WIND	
MAX.	
MIN.	
LEVELS OF SHEAR	
STABILITY	
INDEX TO TO TO	INDEX TO TO TO

CLOUDS						
TYPE						
AMOUNT						
BASES						
TOPS						

ICING	
TYPE	
SEVERITY	
BOUNDARIES	
CONTRAILS	
PERSISTENCE	
HEIGHT	
TURBULENCE	
DEGREE	
HEIGHT(S)	
MAX WIND GUSTS	
HAIL SIZE	
TEMPERATURES	
MAX.	
MIN.	

CUMULUS CLOUD FORMATION AT TEMP_____ TIME_____

DISSIPATION OF LOW LEVEL INVERSION AT_____ TIME_____

REMARKS

FORECASTER	FORECASTER

EXPLANATION

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HEIGHT on geopotential feet or meters above mean sea level or station level of the 1000 mb. surface is obtained from the nomogram in the upper left-hand corner by drawing a straight line from the temperature scale (°F) or (°C) through the point of mean sea level or station pressure on the pressure scale, and reading height on the appropriate height scale.

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Black 50% wetting wind scale line indicates the levels for which wind data are reported and plotted. The open circles ○ indicate the mandatory pressure levels at which wind data are also entered.

All heights used in this diagram are in geopotential feet and meters.

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UNITED STATES AIR FORCE
ST. LOUIS, MO. 63118
JUNE 1964 (ACIC) BASE 100

606 NUMBER — PWM STATION

00007 TIME (GCT) — 21 AUG 65 DATE (GCT)

NUMBER

TIME (GCT)