

PROJECT 10073 RECORD CARD

1. DATE 22 Jun 62		2. LOCATION Hallet Station, Antarctica		12. CONCLUSIONS ☐ Was Balloon ☐ Probably Balloon ☐ Possibly Balloon ☐ Was Aircraft ☐ Probably Aircraft ☐ Possibly Aircraft ☒ Was Astronomical Meteor ☐ Probably Astronomical ☐ Possibly Astronomical ☐ Other ☐ Insufficient Data for Evaluation ☐ Unknown	
3. DATE-TIME GROUP Local _____ GMT 22/0303Z to 0325Z		4. TYPE OF OBSERVATION ☒ Ground-Visual ☐ Ground-Radar ☐ Air-Visual ☐ Air-Intercept Radar			
5. PHOTOS ☐ Yes ☒ No		6. SOURCE Military			
7. LENGTH OF OBSERVATION 2 secs		8. NUMBER OF OBJECTS one		9. COURSE NNW-SSE	
10. BRIEF SUMMARY OF SIGHTING An obj leaving a smoke or vapor trail was observed fm Detachment Alpha, Antarctica. The obj was rptd to be brighter than a first mag star, white in color & to have moved fm a bearing of 340dgr to 345dgr at an elev of 7dgr. The duration of this sighting was approx 2 secs. This obj was probably a very bright meteor known as a fireball. Fireballs are a rare class of meteor, brighter than -3.0 mag, usually multicolored, often leaving a very evident trail & are of relatively long duration. The trails left by these meteors appear as smoke during daylight hrs & during darkness display many colors. Trails left by fireballs have been used to study winds in the upper atmosphere, fifty mile zone, by such eminent astronomers as Dr. Fred Whipple, Harvard & Dr. Charles P. Olivier, University of Penn. Since these trails may persist for 1/2 hr or more, it is not unusual for them to be distorted by these winds.				11. COMMENTS	

REPTD 2202

1. 220250Z

FM DET ALFA ANTARCTIC SUPPACTY

TO COMNAVHURPFOR ANTARCTICA

INFO COMANTARCTIC SUPPACTY

HALKAT SEA

BT

UNCLAS.

1. UNUSUAL PRECKMENA REPORT. REPORTING IDENTIFICATIONS NOT AVAILABLE.

2. SMOKE OR VAPOR TRAIL OBSERVED BEARING 340 DEGREES TO 345 DEGREES TRUE. ELEVATION ANGLE SEVEN DEGREES. TIME 220303Z TO 220325Z.

3. FIRST OBSERVED BY NAVAVIATOR AT 220303Z AS BRILLIANT WHITE LIGHT BRIGHTER THAN FIRST ORDER MAG STARS WHICH WERE THEN VISIBLE, PERISTING ABOUT TWO SECONDS MOVING ON APPARENTLY DESCENDING ARC AT RAPID RATE OF SPEED AND LEAVING DENSE BLUE WHITE SMOKE OR VAPOR TRAIL CLEARLY VIS AGAINST CLEAR EMILANT

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SKY UNTIL 220325Z. OTHER OBSERVERS, INCLUDING FIRST-CLASS AIR CONTROLMAN OBSERVED IT TO TRAVEL FROM NEW TO ONE IN AN "S" R CONFIG THEN CIRCLE TO NORTH.

4. WINDS ALOFT FROM MERCURIO DURING TWO HOURS EARLIER WERE LESS THAN 20 KNOTS FROM 200 DEGREES TRUE BELOW 35000 FEET AND 40 KNOTS FROM 250 DEGREES TRUE OR LESS BELOW TROPOPAUSE AT 6650 FEET. MAX WINDS OF 35 TO 40 KNOTS FROM 250 TO 270 DEGREES TRUE OBSERVED BETWEEN 40000 AND 50000 FEET. HYPOTHESIS THAT DISTINCTLY CURVED CONFIG CAUSED BY WINDS REASONABLE ONLY IF TRAIL FORMED ABOVE TROPOPAUSE AT 40000 TO 50000 FEET. CIRCULAR PATTERN CONTRARY TO EXPECTED BEHAVIOR UNDER CONDITIONS WHERE WIND SHEER

WOULD IMPROVE CT. TRAIL DISSIPATED PROGRESSIVELY FROM NEW TO ONE WITH LAST PORTION VISIBLE SWIMMING AND RECODING TO NORTH. HEIGHT ESTIMATED MORE THAN 25000 FEET DISTANCE MORE THAN 40 MILES.

5. VEHICLE SEARCH MADE NORTH OF HUT POCKET. NOTHING UNUSUAL OBSERVED.

6. ABOVE DEFINITELY NOT SEEN THROUGH BOTTOMS OF WHISKY GLASS.

13

22/2350Z

EMV555EWZ932HAA085

PP SSEWCA SSEWFG SSEUGM SSEUJL SSEWTZ

DE SSEWHA 24F

P 281540Z

FM AFSSO CONAD

TO AFSSO USAF

AFSSO AFIC

DET 2, 9TH AEROSPACE

AFSSO ACIC

AFSSO FTD

ZEN AFSCC

ZEN TUSLOG DET 8

ZEN DIRNSA

ZEN CIA

ZEN

U N C L A S S I F I E D FROM 1 AERO OOPS-C 275F. RELEASABLE OUTSIDE
SSO CHANNELS. AFSSO USAF FOR DIA/CIIC (DIAAP 3A3) ATTN: MR R.
BAUNLER, FTD FOR TD-A2. AFIC FOR AFCIN 3HX. NSA FOR A41 AND
SPG. CIA FOR OSI MR JONES. UPON RECEIPT OF THIS MESSAGE,
FUTURE CORRESPONDENCE ON 1962 A-BETA, SPADAT OBJECT NUMBER 315,
WILL BE UNCLASSIFIED. HOWEVER, ALL FREQUENCIES ASSOCIATED WITH THIS
OBJECT WILL REMAIN CLASSIFIED SECRET.

1000 1000

26/2135Z JUN

335-AS SGT Forecure AS SPADATS
DECAT
6246021 Decayed on 7th
1100+2300
EXT 6774

36
02
30033

NEW ZEALAND

Another photograph

The Auckland Star in its February 3 issue carried this interesting story: "A photograph at the D.S.I.R. auroral station Lauder, confirms that Mr. C. B. Taylor, who was at Cape Hallett last June, saw a 'mystery object' travelling across the sky.

"A scientist at the station, Dr. M. Galsen, said tonight that a long-exposure photograph taken on the all-sky camera showed the object's train.

"It was not a meteor, and there were no reports of a satellite burning out in that area at the time.

"We are puzzled by it," he said."

The Cape Hallett incident was originally reported in the review in its September-October, 1962, issue. As Lieut. Holden comments in his letter to us, the photograph must have been under detailed scientific study for a long time, from June, 1962, to January, 1963.

TD-E/Lt Col Friend

Unidentified Flying Objects Sighted in the
Antarctic

3 August 1962

Hq USAF
SAFOI-3b (Major Hart)
Wash 25 DC

OFFICIAL FILE COPY

1. On 7 June 1962 at 0105Z witnesses at Hallett Station, 72-20 S and 170-00 E observed an object which they described as brighter than a first magnitude star. This object was sighted on a true bearing approximating 250° from Hallett Station. The elevation was reported to be approximately 30° and the object was observed for more than five minutes. This sighting probably resulted from the misidentification of the planet Jupiter due to distortion of that body by inconsistencies in the atmosphere. The reported azimuth of the object and that of the planet at the time of the sighting are very nearly the same. The witnesses reported the object moved slowly in a southerly direction which is the same as the apparent motion of Jupiter when viewed from Hallett Station at this time and date. At the time of the sighting Jupiter was the brightest astronomical object, -2.0 magnitude, which could be seen from Hallett Station. Jupiter's elevation at the time of the sighting was less than five degrees, far from the thirty degrees reported by the witnesses. It is the FTD opinion that the witnesses estimate of the elevation was in error for they indicated that the object passed behind a mountain peak and as far as can be determined the nearest mountain peaks have elevations of less than five degrees when measured from Hallett Station. It is probable that a strong inversion was present in the area at the time of the sighting and that mirage effects associated with this condition contributed to the sighting.

2. On 22 June 1962 at 0303 Z an object leaving a smoke or vapor trail was observed from Detachment Alpha, Antarctica. The object was reported to be brighter than a first magnitude star, white in color and to have moved from a bearing of 340° to 345° at an elevation of 7°. The duration of this sighting was approximately two seconds. This object was probably a very bright meteor known as a fireball. Fireballs are a rare class of meteor, brighter than -3.0 magnitude, usually multicolored, often leaving a very evident trail and are of relatively long duration. The trails left by these meteors appear as smoke during daylight hours and during darkness display many colors. Trails left by fireballs have been used to study winds in the upper atmosphere, fifty mile zone, by such eminent astronomers as Dr. Fred Whipple, Harvard and Dr. Charles P. Olivier, University of Pennsylvania. Since these trails may persist for half an hour or more, it is not unusual for them to be distorted by these winds.

It is concluded that a fireball and the trail it generated was responsible for the UFO sighted from Detachment Alpha on 22 June 1962.

3. On 7 July 1962 at 1115Z an intense light was observed from Hallett Station. This light was first observed from the roof of a building, and the observer stated that he thought at first it was a flare. He reported that the light was as large as a basketball and when it passed over the station he noticed two smaller lights appearing to the rear and the side of the main object. The smaller lights were of lesser intensity and they maintained the same relative position throughout the sighting. The object left a clearly visible trail. The lights were traveling from WSW to ENE. At 10° above the eastern horizon the objects gave off a brilliant flash and disappeared over the horizon. The object sighted by these witnesses was probably a bolide. Bolides possess the same characteristics as fireballs and in addition are heard to make noise, usually a whistling, rumbling or series of explosions or is heard or seen to explode. There is the very remote possibility that this was the re-entry of the U.S. satellite Alpha-Beta I. This satellite decayed between 1100Z and 2300Z on 7 July 1962. Decay during revolution number 234 could have resulted in a display similar to that described by the Hallett Station witnesses. It was concluded that this object was probably a bolide because: (1) Revolution number 234 was the earliest computed for the decay of the satellite and it probably decayed nearer to the mean of the computed time limits; (2) The path of the satellite would have been more from the SW to the NE as viewed from Hallett Station, if it did not lose its orbital characteristics due to re-entering; and (3) Though the witnesses provided only a limited description of the object they sighted, the characteristics are much closer to those of a bolide.

4. FPD is not aware of any United States or foreign activities which could account for the unidentified flying objects sighted in the Antarctic on 7 and 22 June 1962 and 7 July 1962. Further there is no evidence available which indicates that these phenomena were due to other than natural causes.

FOR THE COMMANDER

Robert J. Friend Lt Col 3 Aug 62

EDWARD K. WERN
Colonel, USAF
Deputy for Science
and Components