2

ATIC NO. —

NP NO. —

SUPPLEMENTARY NO. —

DATE OF PHOTO —

TIME OF SIGHTING —

WHAT Fireball

WHERE Star

FLIGHT PATH S to N to NW

NO. IN GROUP 1

WEATHER —

PHOTOS — SKETCHES —

(Sent 1239

DATE OF INFO 24 Oct 1948

LOCATION Phoenix, Ariz.

SOURCE Female Civilian

DATE RECD BY ATIC —

COLOR Green

SPEED Very slow

ALTITUDE —

DURATION OF SIGHTING 75 min.

TYPE OF OBSERVATION Ground

EVALUATION —

JAH Brecon

(Supersedes ATIC Form 329
(2 Jan 52)

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HEADQUARTERS UNITED STATES AIR FORCE
THE INSPECTOR GENERAL
OFFICE OF SPECIAL INVESTIGATIONS

REPORT OF INVESTIGATION

FILE NO. 24-8	DATE 4 Jan 49
REPORT MADE BY JACK L. BOLING	
REPORT MADE AT DO #17, Kirtland AFB, N. M.	
PERIOD 22-24, 29 December 1948	
OFFICE OF ORIGIN DO #17, Kirtland AFB, N. M.	
STATUS PENDING	

TITLE

UNKNOWN

(Aerial Phenomena)

CHARACTER
SPECIAL INQUIRY

REFERENCE Report, S/A NAFFZIGER, 17th District OSI, 13 Dec 48 - Report, S/A BOLING, 17th District OSI, 22 Dec 48.

SYNOPSIS

24 Oct 48 Phoenix, Ariz

Additional sightings of "fireballs" reported from Phoenix, Arizona, and Hood River, Oregon. Negative check for reports made south and east of Albuquerque. Concurrent sightings reported from Los Alamos, New Mexico; bearings obtained and ground track plotted. Negative check made with observer on duty at night at Navy Project, Las Cruces, New Mexico. Report made by Dr. LA PAZ giving his findings.

24 Oct 48
11 Dec 48
20 Dec 48

DOWNGRADED AT 3 YEAR INTERVALS;
DECLASSIFIED AFTER 12 YEARS.
DOD DIR 5200.10

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APPROVED
Doyle Rees
DOYLE REES
Lt Col, USAF
DISTRICT COMMANDER

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AFOSI FORM 4
23 JULY 48

[redacted]

16—56438-1 U. S. GOVERNMENT PRINTING OFFICE

KAFB 3609

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DETAILS:

1. This is a joint investigation by the writer, S/A MELVIN E. NEEF, EDGAR J. BETHART, and ROBERT R. JOHNS.

AT ALBUQUERQUE, NEW MEXICO

2. Letter from Miss [redacted] to Dr. J. HUGH PRUETT, Professor of Astronomy, University of Oregon, dated 3 November 1948, was provided by Dr. LINCOLN LA PAZ. This letter indicates that Miss PETERSON saw a "very strange star or fireball" on the night of 24 October 1948 over Phoenix, Arizona. Description extracted from letter follows:

Color: Green
Course: East to west, with erratic side motions
Speed: Very slow (estimated 75 minutes to cross sky)
Remarks: Seemed to be affected in course and brilliance by stars; moved off course to north and south in zig-zag; faded as it went further west, then flared up and disappeared.

3. Lead sheets were transmitted to Williams Air Force Base Detachment, 17th District OSI, for interview with Miss [redacted] to develope precise details as to course and elevation. (Inclosure #1)

4. Letter from [redacted], Sun Publishing Company, Hood River, Oregon, to Dr. PRUETT, undated, was provided by Dr. LA PAZ. This letter refers to the sighting of a blue-white flash of light, accompanied by a loud noise, at 1930 hours, 11 December 1948. A summary of the letter from BIRD follows:

At approximately 1930, a brilliant blue-white flash of light was seen from Hood River, Oregon, about five miles south and slightly east. This is nearly directly over Pine Grove, a small Oregon town. Most witnesses said that it might have been lightning, but did not look like any lightning that they had ever seen. It looked more like the rapid burning of a flare. A loud noise, like thunder, accompanied the flash. One witness said that the light moved to the northwest, but no others saw the movement. The center of the flash seemed to be round and white, something like a fluorescent light, or a searchlight, and was concentrated. The weather was cold, with light rain and snow; no lightning or thunder was observed. Radio interference was strong at the time of the flash and for a few seconds later. (Inclosure #2)

5. Lead sheets were transmitted to 20th District OSI for interviews directed toward getting more details from BIRD, and obtaining further statements.

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6. The writer made inquiries in the following New Mexico towns on 22, 23 and 24 December, with negative results: Belen, Scholle, Abo, Mountainair, Willard, Encino, Vaughn, Pastura, Santa Rosa, Dilia, and Palma. Several persons contacted had heard of the phenomena near Las Vegas, New Mexico, but no one had seen or heard of any celestial phenomena in the area covered, which lies south of Las Vegas and south and east of Albuquerque.

AT LOS ALAMOS, NEW MEXICO

7. The following two reports were furnished Special Agent MELVIN E. NEEF by Lieut. EARLE D. HIGHTOWER, Atomic Energy Security Service (AESS). Reporting individuals were on jeep patrol and made simultaneous sightings while seated in their jeep. Transit readings were made by Dr. LA PAZ from the position of sighting by [redacted]

Report by Inspector [redacted]

At about 2054, 20 December 1948, in company with Inspector [redacted], a falling light was observed at a great height moving toward the earth at a 45-degree angle; this angle decreased as the light fell, until it disappeared on about a 20-degree angle. When first seen the light appeared to be white, but later seemed to be broken, and to have a flat red core, with the broken parts being red; the light trail seemed to be white. It seemed to fly as though under control, and finally disappeared behind Point Eagle. (Inclosure #3)

Report by Inspector [redacted]

At 2054, 20 December 1948, the object described below was seen. It travelled from west to east, maybe a little south. It was in an almost flat trajectory and its decline was at about 20 degrees to the horizon. The angle of elevation was some 30 degrees. It moved at a high speed, finally disappearing behind Point Eagle. Total time of visibility was about one and one-half seconds. The object was an intense blue-white light about the size of a basketball with a faint light trail behind it. Two smaller objects about the size of a baseball, the same color and intensity as the main body, trailed in tandem, at intervals of about three times the diameter of the main body. The size of the main body was about one-fourth the size of the moon. (Inclosure #4)

8. Statements from Lieut. [redacted] and Mr. [redacted] (written), Physical Security Section, Los Alamos, were obtained by Special Agent NEEF and Dr. LA PAZ on 29 December 1948. [redacted] and [redacted] reported concurrent sighting of the phenomena observed by [redacted] and [redacted]. Description as to color, speed, trajectory, and distance, as well as time, agreed with report by WILSON above. Transit readings were made by Dr. LA PAZ from location of sighting by [redacted] and [redacted]. A report was prepared by Dr. LINCOLN LA PAZ, meteoriticist, University of New Mexico, who has cooperated in this investigation, giving

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his findings and conclusions on the latest sightings. This report provided Special Agent NEEF, 30 December 1948. (Inclosures #5 and #6)

9. Report of Inspector JOHN D. HARDIE, AESS, relative to sighting of fireball on 28 December was provided Special Agent NEEF by Lieut. [redacted]. This report indicates that at 0431, 28 December 1948, [redacted] saw a white light, like a falling star, descending in a vertical path. It was not falling as fast as a falling star, so [redacted] continued to watch. After several seconds, at an estimated altitude of 6000 feet, the object disappeared with a greenish flash, lighting up a small cloud between itself and [redacted]. Direction of travel was apparently north to south, with perhaps a slight deviation. (Inclosure #7)

AT LAS CRUCES, NEW MEXICO

[redacted] Agents EDGAR J. BETHART and ROBERT R. JOHNS interviewed Mr. [redacted], Las Cruces Auto Court, Las Cruces, New Mexico, on 23 December 1948. [redacted] is connected with Navy Project Task D, Nord 8555, which requires that he and his associates, [redacted] maintain a watch on the skies for about 95% of the time at night. [redacted] denied seeing any unusual phenomena during the period 1-15 December. Arrangements were made for photographs of the night sky taken in connection with CARROLL's work to be furnished 17th District OSI.

Inclosures for Complete Distribution:

1. Letter from [redacted] to Dr. Pruett
2. Letter from [redacted] to Dr. Pruett
3. Report of Inspector [redacted]
4. Report of Inspector [redacted]
5. Report of [redacted]
6. Report of Dr. [redacted]
7. Report of Inspector [redacted]

- PENDING -

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[redacted]

[redacted]

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INCLOSURE #1

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[redacted]
Phoenix, Ariz.
November 3rd

Dear Dr. Pruett:

On October 24th I noticed a very strange star or fireball in the Eastern sky. It was green and my first impression was that it was a plane. It moved very slowly South and slightly North as if it wasn't certain of which way to go. It slowly changed its course to N.West.

Being very curious about the star, I watched it very closely, without taking my eyes away once.

It took at least 75 minutes to cross over Phoenix. The star seemed to be drawn to other stars, and when it came close to them, it would become very bright.

Everytime the star would light up and leave the other star, it would be dimmer. Finally, we could hardly see it. When I thought it had completely disappeared, it suddenly became very bright and fell apart.

From here in Phoenix, I can point out just where the fireball travelled, but it is rather difficult on paper but it did start in the east and end up N.West.

If there is anything else I can tell you that you would like to know concerning the fireball, I will be very happy to tell you.

Yours truly,

/[redacted]

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[redacted]

[redacted]

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INCLOSURE #2

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THE SUN PUBLISHING CO.
HOOD RIVER COUNTY SUN - [redacted], Publisher
HOOD RIVER, OREGON

(no date)

Dr. J. Hugh Pruett
1832 Longview Avenue
Eugene, Oregon

Dear Sir:

240

I am writing you in regard to a rather startling occurrence on Saturday evening, December 11, which no one has been able to explain locally to either my own or several other interested people's satisfaction.

At about 7:30 p.m. in the evening, according to most witnesses, a brilliant blue and white flash of light flared for an instant at a point about five miles south of Hood River and slightly east. Most witnesses said that the light "might have been lightning" but most also agreed that they had never seen any lightning exactly like it, since it was more like a rapid burning of a flare than a bolt or sheet of lightning. Most also agreed as to the location, which is about directly over a small community called Pine Grove, marked on the accompanying map. A loud noise, such as might have been made by thunder was heard by everyone in the lower valley and across the river on the Washington side. The light, apparently either reflected or moving through a light fog that was over most of the Valley at the time, was said by one witness on the Washington side to move northwest towards Mount Adams, but this was the only witness to indicate that the light moved at all.

I was reading at home at the time and the flash was directly east of my window----I seem to have been the only person to have seen the flash actually originate--the rest apparently saw only reflections or a diffused flash. The center of the flash, which, by the time between it and the first sound, must have been between one and four miles away, was itself round and almost completely white, somewhat like a fluorescent light might be or a faraway searchlight. It seemed to flash, unlike lightning which diffuses its light at the edges and does not beam itself.

Weather conditions were cold, with a light rain and snow falling. A cold front was moving in at the time according to weather reporters. There were no further nor had there been previous flashes or thundering. Radio interference was strong at the time of the flash and a few seconds afterwards. Practically everyone, including those indoors, heard the thundering noise which rolled off the hills somewhat like artillery fire for several seconds.

No reports from the east valley indicated anything had fallen nor have any since then brought to light any reason for the disturbance.

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[redacted]

[redacted]

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I am writing to you in hopes that you may be able to surmise what the disturbance might have been and also to let you have what information we could gather. As a correspondent for one of the press services I was naturally interested in it. I am further interested in your comments on it, even though I realize that the information is not complete enough to make any deductions possible.

Do you have an observer for your meteor society in the Valley? I would be interested in having his name if you do.

Thank you for your time and interest in this matter.

Sincerely,

/S/ [redacted]d

[redacted]

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[redacted]

[redacted]

COPY.

INCLOSURE #3

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TO: Captain J. P. Shea
FROM: [redacted]
SUBJECT: Observations

This report is being made in writing at the request of Lt. O. E. Strang.

It will be divided into three parts: 1. Observations, 2. Recommendations, 3. A map indicating the point of my observations. The third part of this report will not be submitted now, but will be given later when a map is available to make this map accurate.

Inspector [redacted] and myself, being on patrol for the Reconnaissance Section AESS, arrived at Point Eagle 2050, December 20, 1948. We had driven up the road as far as it extended and was safe under the circumstances, and were sitting in the jeep with it headed in the general direction of the road at this point. The direction in which we were headed as well as all directions in this report will be referred to with some degree of accuracy from the map which will be submitted later to make this report complete.

As I was sitting in the jeep I observed a falling light in the sky at approximately 2054. At first it appeared to be a white light moving at about 45 degrees to the earth. It seemed to first be at a great height and to approach the earth at a continuing decreasing angle until it went out of my vision at about a twenty degree angle behind Point Eagle. I called the attention of Inspector [redacted] to this falling light and he too observed it and has also been requested to make a report on his observations. I continued to observe this phenomenon. According to my first observations it appeared to be a white light, clear and unbroken, falling very visibly through the night. However, as I observed this light more closely it changed in appearance. It seemed now to be broken instead of a clear stream. Its color basicly changed also. It now seemed to have a red flat core, its broken parts were red, its stream of light left seemed however to be white. Its form seemed to grow more concrete and seemed to be something besides just a white unbroken moving light. It seemed to have a flat base, leaving a broken red trail on each side. Where it had appeared at a great height it was now nearer the earth. Where its angle of glide had been 45 degrees, it now appeared to have an angle of twenty degrees glide, and reminded me very much of an airplane in flight. It seemed to fly through the air as if controlled and not to fall straight to the earth as an uncontrolled object normally would. It was moving very very swiftly. It finally disappeared behind Point Eagle.

At 2056 Headquarters was notified of our observations and the angle of movement of this light. We were told to stand by and later to 10-21 Headquarters. We returned to Station 340 to make the call, found there Lt. [redacted] and Mr. [redacted] of Physical Security who had also observed the same things we did from a different Point. Captain Shea was there also. We made verbal reports to them as well as to you. We returned to Headquarters to find a suitable map to make

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[redacted]

our observations more accurate from a descriptive point and to make a written report of our observations.

These are my recommendations. It is my understanding and has been my observation that this light is of concern to the Security Service. Attempts have been made to observe it more closely. As a means of observing this more closely, of finding out what it is, and what happens to it, I would suggest that attempts be made to observe it from the air and from the land. To observe it from the air I would suggest these means. These suggestions are made with the impressions that this thing has been observed before about the same times and probably can be observed again. First the Air Forces of the Department of Defense have excellent Photographic Planes. These are fast and make good photographs. These could operate safely at night. This thing if of any importance to the defense of our country would necessitate no small means of detection but should enlist all our resources for its proper observations and understanding. Also the Air Forces have small observing planes that might be used. The Civil Air Patrol might be used. Certainly some attempts should be used to observe and find out about this thing from the air. It appears in the air. It disappears in the air. It might damage some of our Atomic Installations eventually if it is not a natural thing and man controlled. Also attempts should be made by our own personnel to observe this thing. Patrol 405 of the Reconnaissance section could be at this Point Eagle about the expected time of appearance each night. It might even be important enough to place other patrols at points of observations until this thing is understood and known about. Also in future attempts to observe this thing radio silence should be observed under all conditions by participating personnel until the thing is sighted. However, it might be better if nothing is said over the radio in the future about it. Radio conversation, if this thing is man controlled, may give a clue to those controlling it that attempts are being made to observe it and may make difficult a discovery or an understanding of its nature. The use of radar may also aid in its discovery.

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INCLOSURE #4

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OFFICE MEMORANDUM

UNITED STATES GOVERNMENT

Date: 20 December 1948

241-a

TO: Captain Shea

FROM: Inspector [redacted]

SUBJECT: Object seen on 405 Patrol

From 2050 to 2100 this date Inspector [redacted] and myself were at Pt. Eagle in the regular performance of the 405 patrol.

At 2054 we saw the object described below making a path thru the sky. The direction of travel was from West to East, possibly a trifle Southerly. The object was travelling in an almost flat trajectory and its decline formed an angle with the horizon of approximately twenty degrees. The angle of elevation from our point of observation was approximately thirty degrees. The object was moving at a very fast rate of speed and disappeared behind the mountain directly to the northeast of Pt. Eagle. Total time of visibility was about one and one-half seconds.

Description:

An intense blue-white light about the size of a basketball. As the object traversed the sky, there was a faint trail of light behind it, and two objects the size of a baseball separated from the main body. These objects were of the same color and intensity as the main body, and trailed behind it directly in its path at even intervals of distance equal to approximately three times the diameter of the main body. The size of the main body was approximately one quarter the size of the moon.

[redacted]
Security Inspector

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[redacted]

245

[redacted]

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ENCLOSURE #5 UNCLASSIFIED

[redacted] Director of Security

December 30, 1948

TIME: 2053

DATE: December 20, 1948

DIRECTION: Approximately southwest to northeast

SPEED: Slower than a meteorite (approximately 1500 m.p.h.)

COLOR: White, with a pale greenish tail

ALTITUDE: Questionable

POINT OF OBSERVATION: Route 4 - north of Bandelier cut-off

OBSERVER: [redacted]

STATEMENT BY OBSERVER:

At approximately 2053, December 20, 1948, while driving over State Route #4 toward the South Gate (Station 390), I observed what appeared to be, at first glance, a meteorite travelling from left to right, at right angles to the direction I was moving. However, the object seemed almost the size of a tennis ball and was colored a glaring white, similar to the color of white-hot steel in a smelting furnace. The ball had a small, conical shaped tail that appeared to be pale greenish in color, and this tail was not as clearly defined as the ball itself, seeming to be of a gaseous nature.

The object appeared to be travelling on a controlled, level course and was visible approximately a second and a half, disappearing from view behind the trees that bordered the road. As I made a sharp right turn on the road, the object was again visible for approximately a second, and this time it was considerably farther away. However, during this short second period I observed a small light to the right of the object, which appeared to be travelling with it. This smaller light was similar in appearance to a running light on an airplane, and it seemed to be reddish in color. The object and accompanying light disappeared from view behind the tops of more trees, and I was unable to catch another glimpse of it.

Inasmuch as this event occurred at night, and due to the terrain I was travelling over, it is difficult to state the exact direction in which the object was travelling. In addition, due to the above first mentioned condition, as well as having no idea as to the size of the object itself, it is equally difficult to judge the altitude of the object.

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COPY [redacted]

ENCLOSURE #6

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The University of New Mexico

Albuquerque

Institute of Meteoritics

December 30, 1948

To: Lt. Colonel Doyle Rees, Commanding Officer
District No. 17
Office of Special Investigations

From: Lincoln LaPaz, Director
Institute of Meteoritics

Subject; Anomalous luminous phenomena (Third Report)

In the second report of this series, a description was given of the real path through the atmosphere of the green fireball of 1948, December 12, $9^h\ 2^m$ (plus or minus 30^s). On the basis of corresponding observations made from one station near Starvation Peak, New Mexico, and a second station near Los Alamos, New Mexico, this fireball was found to have appeared near a point with the coordinates: latitude 35° 50' N, longitude 106° , 40' W, and to have disappeared near a point with the coordinates: latitude 35° 45' N, longitude 107° 05' W, traversing an almost horizontal path, at an elevation of about 10 miles above sea level, with a length of about 25 miles, at a velocity of approximately 10 miles per second. (The minimum path length consistent with the observations was found to be about 11 miles, the corresponding velocity then falling between 3 and 6 miles per second, depending on the duration adopted.)

On the basis of corresponding observations of the greenish-white fireball of 1948, December 20, $8^h\ 54^m$ p.m. made by two pairs of Los Alamos observers, it has now become possible to work out another approximate real path. As will be apparent from the original accounts of the observations made by AZSS Inspectors William D. Wilson, Buford G. Truett, Clifford E. Strang, and Physical Security Inspector George S. Skipper, the fireball of 1948, December 20 was observed under less favorable conditions than the green fireball seen by five persons on the night of December 12. However, on the basis of the original accounts of the observers named above, of sketches supplied by these four individuals on December 29 and of transit observations made by Captain M. E. Neef and the undersigned on the same date at the points of observation (viz., 35° 48' .9, 106° 18' .4 for [redacted] and [redacted] and 35° 55' ,106° 23' .7 for [redacted] and Truett), it has been possible to establish reasonable concordance between various points on the fireball path as seen by the two groups of observers. Because of the very short baseline (only 8 miles long) between the two points of observation and the difficult conditions under which the fireball of December 20 was observed, it is my opinion that the real path derived from the December 20 observations deserves considerably less weight than that obtained from the December 12 observations.

[redacted] UNCLASSIFIED

It is found that the fireball doubly observed by [redacted] and [redacted] appeared at a height of at least 10 miles and descended at an angle of about 45° to the vertical (according to Truett's estimate) to a point C at an elevation of only 2.3 miles above the horizontal plane through the point from which Strang and Skipper observed. As the fireball approached the point C, its path levelled off and from C to its point of disappearance, E, the fireball followed a nearly horizontal path approximately 7.5 miles long moving with a velocity of between 3.75 and 7.5 miles per second, depending on the duration estimate adopted. The coordinates of the projection of C on the earth are 35° 56' N, 106° 30' W, and those of the projection of E are 35° 57' N, 106° 23' W. The forward extension of the fireball's trace on the earth, as determined by the above projections, passes some six miles to the north of the town of Los Alamos.

It should be noted that the descending branch of the path of the fireball was observed by Inspector [redacted] alone, but he was absolutely certain that his observation of this portion of the path was correct. It should also be noted that no sound was heard, although the distance from the observers to the fireball and from the fireball to the earth could have been only a few miles at most. I have no hesitancy in testifying that an object possessing the real path and the other peculiarities observed by [redacted], and [redacted] was not a falling meteorite.

[redacted]

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INCLOSURE #7

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OFFICE MEMORANDUM UNITED STATES GOVERNMENT

Date: 12/28/48

TO: Lt. E. D. Hightower

FROM: Insp. [redacted]

SUBJECT: Unknown Object

At approximately 0431, this date, while looking east from Station 103 towards Station 101 I noticed high in the sky what appeared to be a falling star, white in color, descending in a vertical path. My attention remained with the object when I noticed the rate of descent seemed to be slower than that of a falling star. After watching it lose altitude for several seconds, I saw it suddenly disappear with a greenish-tinged flash which momentarily illuminated a small cloud between the object and myself.

The object may also have been traveling east or west to some extent since I could not estimate that angle; however the object descended in a perfectly straight line with reference to North and South. At the time of the flash the object was a good distance east of Station 101 and at an estimated altitude of six thousand feet.

/S/ [redacted]

JDH

c/c Capt. R. I. Dowd, Duty Officer

2 of 3

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[redacted]

I&D