

HEADQUARTERS UNITED STATES AIR FORCE THE INSPECTOR GENERAL OFFICE OF SPECIAL INVESTIGATION REPORT OF INVESTIGATION		FILE NO. 24-15	DATE
TITLE UNUSUAL OBJECT <i>streak across the Boise, Idaho Sky</i>		REPORT MADE BY MERLE L. CLEVELAND	
		REPORT MADE AT DO #20, McChord AFB, McChord	
		PERIOD 21 Feb 49	
		OFFICE OF ORIGIN DO #20, McChord AFB	
		STATUS CLOSED	

CHARACTER **SPECIAL INQUIRY**

REFERENCE **Ltr, Hdqs Idaho ORC Instructor Group, AMORI 319.1 dated 21 Dec 48**

SYNOPSIS

Investigation requested by District Commander, DO #20, McChord AFB, Wn., predicated upon information received from Hq Idaho ORC, Boise, Idaho, in reference to sighting of Unusual Object at Boise, Idaho, by employees of local weather bureau. Investigation revealed that MAYNARD L. ROGERS saw an unusual object streaked across the Boise sky at 0720 hours 18 Dec 48 and described Object as being a meteor which left a grayish smoke trail. No known aircraft were in the sky at the time of sighting, and weather conditions were clear. Positive identification of Object was not possible.

CLASSIFICATION CANCELLED
BY AUTHORITY OF THE DIRECTOR OF SPECIAL INVESTIGATION
BY **KURT K. KUNZE, Capt, USAF**
Historian
DATE **8 DEC 1975**

DISTRIBUTION	ACTION COPY FORWARDED TO	FILE STAMP
CG, Air Materiel Command 2 copies OSI Hdqs File	CG, Air Materiel Command	24
	APPROVED <i>[Signature]</i> G. C. HARTMAN Captain, USAF	
	UNCLASSIFIED DISTRICT COMMANDER	

DETAILS:

1. This investigation was requested by the District Commander, DO #20, McChord AFB, McChord Field, Washington, predicated upon information received from Hq Idaho ORC, Boise, Idaho, which invited attention to a newspaper article printed in the "Idaho Statesman", Boise, Idaho, on 18 December 1948. Said article stated that local weather-bureau employees sighted an unusual object at 0730 hours on 18 December 1948, described as a ball of fire which left a trail of smoke across the sky.

AT BOISE, IDAHO

2. The writer interviewed Mr. MAYNARD L. ROGERS, Meteorological Aide, United States Weather Bureau, Municipal Airport, Boise, Idaho, on 21 Feb 49. ROGERS, an employee of the Bureau since July 1938, had only minor experience as a meteorologist prior to his employment. Informant previously served in the Armed Forces from 1940. He declared that he sighted the object on 18 December 1948 from 0720 hours to 0730 hours (MST), from Boise Municipal Airport as he was driving from his home to work. The distance from his home to the Weather Bureau is 3.2 miles. ROGERS, enroute to the weather bureau, drove on a road which borders the east end of the airport. He did not stop but continued to drive as he watched the object. He declared that he saw the object all during the time he drove one and 3/4 miles of the 3 miles. ROGERS placed the coordinates at 43 degrees, 24 minutes North; 116 degrees, 06 minutes West, as the location of the object upon first sighting it, and followed it to a point placed at 43 degrees, 41 minutes North; 115 degrees, 49 minutes West. The flight of the object was in a straight line to the northeast. He judged the altitude to be at 8,000 feet above the terrain when he sighted the object. The object descended toward the earth at a 45 degree angle. ROGERS was approximately 15 miles from the object when first sighting it and last saw the object 25 miles away. Informant stated that the altitude, coordinates, distance, and angle of descent are argumentative. ROGERS described the object as being a brilliant fire-orange color, as the sun may appear on a hazy day. The object grew in brilliance as it traveled to a point where it appeared white-hot. The shape of the object was round and looked like a big ball of fire, with flames sweeping back over the aft part of the object. He suggested that the size of the object was approximately the same as the moon, as the moon appears directly overhead. ROGERS indicated that the size was very difficult to determine. There appeared to be no variation in its speed, and the object was traveling fast. He was unable to estimate the speed. The object left a trail of deep gray smoke such as used by sky writers, with the exception of color. The width of the trail was approximately four times as wide as the object at the base of the object. The trail fanned out behind. Informant was unable to detect any odor. The trail broke up in the winds approximately one hour after he sighted the object. No noise was noted as informant was driving his car. The smoke trail formed a straight status cumulus cloud prior to its being disseminated by the wind. Other than the smoke trail, there were no clouds in the sky. Informant stated he lost sight of the object as he made a left turn to the west. He believed the object was in sight for approximately four minutes. Mr. ROGERS' attention was drawn to the object by the light it produced. Sunrise was at 0813 hours. Informant believed the object to be a meteor.

~~CONFIDENTIAL~~

3. Mr. E. H. JONES, Chief Meteorologist, United States Weather Bureau, Municipal Airport, Boise, Idaho, was interviewed and stated that he sighted the smoke trail in the sky at approximately 0750 hours, on 18 December 1948 from the roof of the hangar which houses the Weather Bureau and United Airlines at Boise Municipal Airport. His attention was drawn to the smoke trail by Mr. ROGERS. The smoke was dark gray in color and started from the base of a thin cloud layer at 20,000 feet. The trail descended toward the earth at a 30 degree angle with a slight arc. The smoke trail dissipated 20 minutes after informant sighted it. The trail disappeared behind a range of mountains 30 miles northeast of Boise. Informant judged the coordinates to be from 43 degrees, 36 minutes North; 116 degrees, 11 minutes West to 43 degrees, 49 minutes North, 115 degrees, 58 minutes West. The mountain range is approximately 6,000 feet high. He did not see the object itself, only the smoke trail. He declared that after hearing Mr. ROGERS describe the object, informant was of the opinion that the object was a meteor. Mr. JONES has been a meteorologist for the past 20 years. JONES stated that Mr. ROGERS has been employed as a Meteorologist Aide since July 1948 and that he has not had previous experience in Weather Bureaus. Informant often questions Mr. ROGER's judgment in relation to altitude and distance.

4. Mr. EDWARD J. MONAGHAN, pilot, Idaho Fish and Game Department, 605 Bannock St., Boise, Idaho, was interviewed. He stated that he has been a commercial pilot for the past ten years, and his work has been flying for the Fish and Game Department on such jobs as game counts, distributing food for game animals, hunting coyotes, etc. MONAGHAN stated that he sighted the smoke trail in the sky at 0715 hours, on 18 December 1948, from his home at 1709 Bannock St., Boise, Idaho. The trail started from a cloud base at 25,000 feet. The cloud was three miles long and one-half mile wide and almost directly overhead. The trail descended toward the earth at a 50 degree angle and disappeared behind a mountain range 15 miles northeast of Boise. Informant judged the trail to be 10 to 15 feet wide at the cloud base and tapered down to seven feet before it disappeared behind the mountains. There was no opening in the cloud which would indicate that an object had passed through it. The trail began to break up and drift in the wind approximately 40 minutes after he first sighted it at 0715 hours. Informant watched the smoke trail for approximately five minutes, then called the Weather Bureau at Boise Municipal Airport. Mr. ROGERS answered the phone and informed MONAGHAN that he had seen the object. (Mr. ROGERS verified that MONAGHAN called the Bureau and that they had discussed the phenomenon) MONAGHAN stated that the smoke trail was white in color and appeared as a vapor trail left by an aircraft. Informant placed the coordinates in practically the same position as JONES.

5. The records of the United Air Lines, Empire Airlines, and Idaho National Guard, housed at Municipal Airport, Boise, Idaho, were checked and revealed that no aircraft arrived or were dispatched from the airport between 0600 hours and 0900 hours on 18 December 1948.

~~CONFIDENTIAL~~

6. Mr. David Johnson, newspaper reporter, "Idaho Statesman", Boise, Idaho, was interviewed and stated that he wrote the story printed in the "Statesman", entitled, "Weather Observers Sight Fiery Orb with Trail of Smoke in Sky", which appeared in the edition dated 18 December 1948. He declared that the information was obtained from Mr. JONES and Mr. ROGERS of the United States Weather Bureau at Boise Municipal Airport. Informant stated that he had obtained no additional information regarding the sighting of the aerial phenomenon, and he knew of no other person other than Mr. ROGERS who had actually seen the fire ball.

7. HARRY L. BERGEY, Chief Airport Traffic Controller, Civil Aeronautics Administration, Municipal Airport, Boise, Idaho, was interviewed, and he advised that VILAS H. BRANT was on duty in the control tower from 0100 hours to 0800 hours, 18 December 1948. Informant had questioned BRANT in reference to the sighting of the unusual object, and he had stated that he did not see the object nor did he see the smoke trail. Informant declared that only aircraft making instrument landings or take-offs for the field are required to file flight plans with the Traffic Controller, and no such flight plans were on file in informant's office, for 18 December 1948. No records are maintained of visual landings or take-offs from the airport.

8. The following information was extracted from the daily weather report dated 18 December 1948, on file at the United States Weather Bureau, Municipal Airport, Boise, Idaho:

Sunrise:	0813 hours
Sunset:	1710 hours
Temperature (Fahrenheit) from 0600 to 0900 hrs:	10 $\frac{1}{2}$
Max. Temperature, at 1520 hours	30
Min. Temperature, at 0846 hours	10
Cloudiness (0-10) from 0600 to 0900 hrs.	0
Wind Direction:	SE
Wind Movement (M.P.H.) from 0600 to 0900 hrs:	8

9. Other aerial phenomena have been sighted in the vicinity of Boise, Idaho and were described as meteors by local newspapers. On 6 January 1949 an Object, described as a Fiery Meteor, fell near Union, Oregon; and on 4 August 1948, Mr. J. B. McCULLOUGH observed a fire ball in the vicinity of North Powder, Oregon. Investigations are being made in reference to the sighting of these unusual objects.

CLOSED

Kirtland Air Force Base
Kirtland Field, New Mexico
28 February 1949

TO: District Commander
17th District OSI (IG) USAF
Kirtland Air Force Base
Kirtland Field, New Mexico

FROM: Security Division
17th District OSI (IG) USAF
Kirtland Air Force Base
Kirtland Field, New Mexico

RE: Aerial Phenomena (24-8)

MEMORANDUM FOR FILE:

On 24 February 1949, a meeting was held in the Office of the Security Division, 17th District OSI. The following were present:

Dr Lincoln LaPaz, University of New Mexico
Major William H. Godsoe, Fourth Army
Captain Melvin E. Neef, Office of Special Investigations
Captain Roger J. Groseclose, Air Material Command
First Lieutenant Howard W. Smith, Air Material Command
Special Agent Jack L. Boling, Office of Special Investigations

The topic of discussion was the relation of the anomalous luminous phenomena observed in the Santa Fe -- Las Vegas -- West Texas area to Project "Grudge", formerly Project "Sign".

A definite form, developed by Project personnel, was provided for the compilation of data pertaining to future observations. It was specifically requested that complete data, rather than a reduction thereof, be forwarded, so that all scientific branches might study the original figures and description.

The establishment of observation posts for accurate study and location of the phenomena was strongly recommended by Major Godsoe, and concurred in by the AMC representatives. These observation posts should be three in number, each equipped with eight cameras (for complete sky coverage) and two operators. A transit would be provided so that immediate, accurate readings may be taken.

The AMC representatives said that Professor Hineck, the present scientific advisor for Project "Grudge", was to leave the Project to return to academic duties at Ohio State University. It was recom-

CLASSIFICATION CANCELLED
BY AUTHORITY OF THE DIRECTOR OF SPEC INV
BY KURT K. KUNZE, Capt, USAF
Historian

8 DEC 1975

DATE

UNCLASSIFIED

~~SECRET~~

MEMORANDUM FOR FILE: Aerial Phenomena (24-8), 28 February 1949

mended and tentatively agreed that a request be forwarded for a contract to be offered the University of New Mexico, so that Dr LaPaz could devote full time to the analysis and evaluation of data pertaining to both the overall project and the local manifestations.

Dr LaPaz recommended a detailed ground search, supplemented by air search, of the impact areas where any fragments which may exist should be found. These areas have been roughed out and are being further refined. All present concurred.

MELVIN E. NEEF
Captain, USAF
Division Supervisor

~~SECRET~~

~~SECRET~~

Fourth Army
Intelligence Liaison Office
Box 234, Sandia Base
Albuquerque, N. M.

18 February 1949

REPORT OF TRIP TO LOS ALAMOS, NEW MEXICO, 16 FEBRUARY 1949, BY COMMANDER RICHARD S. MANDELKORN, U.S.N., RESEARCH AND DEVELOPMENT DIVISION, SANDIA BASE.

Subject: Project "Grudge".

1. On 16 February, a conference was held at Los Alamos to consider the so-called green fireball phenomena which commenced about 5 December 1948. The following were present:

For Los Alamos:

Mr. N. E. Bradbury
Mr. Marshall Holloway
Mr. Fred Reines
Mr. John Manley
Mr. Edward Teller
Mr. Elmo Morgan (AEC)
Mr. Sidney Neuberger (Security)
Mr. Maxwell (AESS)
Mr. Hoyt

For the Fourth Army:

Major William A. Godsoe
Major Wynn

For the U. S. Air Force:

Captain Neef

For the University of New Mexico:

Dr. Lincoln LaPaz

For Sandia Base:

Commander Richard Mandelkorn

CLASSIFICATION CANCELLED
BY AUTHORITY OF THE DIRECTOR OF SPEC INV

BY KURT K. KUNZE, Capt, USAF
Historian

8 DEC 1975
DATE

2. Captain Neef opened the meeting by saying that the problem was being presented to Los Alamos scientists in hopes that they would be able to indicate some mode of attack on the problem and offer some explanations for the phenomena observed. He stated that this question had been classified military SECRET under the name, Project "Grudge", and that the investigation was now the primary responsibility of USAF, Air Materiel Command, T-2. He then turned over the discussion to Dr. LaPaz.

A COPY

Incl. # 8

~~SECRET~~

UNCLASSIFIED

15102

~~SECRET~~

Report of Trip to Los Alamos, 16 Feb 49 (Cont)

18 February 1949

3. Dr. LaPaz stated that he had been assisting the Military for the past two months at their request in the investigation of the subject problem, and went on with the general discussion of phenomena attending normal meteorite fall, postulating the following important characteristics:

- a. Random path of fall.
- b. Color and intensity variations in light emitted.
- c. Sound.
- d. Frightened animals.

4. Dr. LaPaz then went on to discuss the number of observers reporting the subject phenomena and the diversity of their backgrounds, including commercial airlines' pilots, military pilots, special intelligence agents, Los Alamos personnel (Mr. Hoyt), and himself, as well as various and sundry previously uninformed citizens.

5. Dr. LaPaz then described the "Starvation Peak Incident" which he observed himself, detailing the following characteristics which indicate that the phenomenon can not be classified as a normal meteorite fall:

- a. Initial bright light (no period of intensity increase) and constant intensity during the duration of the phenomenon.
- b. Yellow-green color (about 5,200 angstroms).
- c. Essentially horizontal path.
- d. Trajectory traversed at constant angular velocity.
- e. Duration about two seconds.
- f. No accompanying noise.

6. Since about 5 December 1948, there have been more than ten incidents analogous to the "green fireball" described, and some twenty more presenting minor deviations to the above, which should be considered in connection with them. In addition, there have been a number of normal shooting stars and meteors observed.

7. There ensued a general discussion in which it was brought up that the majority of the observers whose reports were here under consideration were not subject to previous psychological influences or prior knowledge as to what they should look for. Furthermore, "seeing" conditions for meteor observation throughout the continental United States were at least

~~SECRET~~

~~SECRET~~

Report of Trip to Los Alamos, 16 Feb 49 (Cont.)

18 February 1949

average during December, January, and February, yet no green fireballs have been reported in any other areas. They seemed to be confined to the Los Alamos, Las Vegas, and West Texas triangle.

8. Mr. Teller then took over the discussion and showed that a material object travelling with the velocity of the subject phenomenon (about eight miles per second) would have to have a mass of about twenty grams, assuming all the kinetic energy could be converted to light, under the assumption that the light output is in the vicinity of 10^{14} ergs per second. He then went on to show that the shock wave produced by the passage of an object of these dimensions or greater passing through the atmosphere at a height of eight to ten miles (the observer figures) with a velocity of eight miles per second would produce a loud noise easily audible ten kilometers from the source. No sound has been observed. Therefore, Mr. Teller has the tentative opinion they are not material objects passing through the air. We should look to electronics and optics for an explanation rather than in the field of hydrodynamics. In any event, it was apparently agreed by those present that it was almost incredible that a large object such as a guided missile or informer vehicle could pass through the atmosphere at a height of eight miles at a velocity of seven to eight miles per second without producing a loud noise which would have been audible to observers. Mr. Bradbury demurred so far as the electronic explanation was concerned, saying if it were assumed that the answer lay in that region, many more difficult problems would have to be solved.

9. The following action seems in order:

a. Recalculation of the data outlined by Mr. Teller with a more accurate treatment to verify his tentative conclusions.

b. The establishment of well-equipped and organized observation stations to give as thorough photometric and photographic coverage as is possible in the geographic area involved.

c. Assuming that Mr. Teller's theories are borne out by recalculation, declassification of the Project to permit participation and thinking by scientists throughout the country.

10. Dr. LaPaz and Captain Neef have fruitlessly attempted to obtain information from a meteorite observers' group now at White Sands, said to be performing work under contract for the Navy. Commander Mandelkorn offered to assist them in their endeavor to enlist the services of the group for observations in connection with Project "Grudge".

11. Conclusion: It is my belief that these phenomena, *particularly if there are any further incidents, are deserving of serious consideration

*See next page.

~~SECRET~~

~~SECRET~~

Report of Trip to Los Alamos, 16 Feb. 49 (Cont.)

18 February 1949

until their source and meaning have been satisfactorily explained. Although Mr. Teller's discussion tends to disprove the hypothesis that guided missiles or informer vehicles are responsible, there is cause for concern of the continued occurrences of unexplainable phenomena of this nature in the vicinity of sensitive installations.

*Captain Neef reports blue fireball visible from Sandia at 0530, 17 February 1949, and a yellow-orange cigar-shaped light at 1759, visible until 1806, 17 February.

RICHARD MANDELKORN,
Commander, U.S.N.

Copy furnished:

Fourth Army, G-2 --Major William A. Godsoe (2)

USAF - Captain Neef

USAF FOFAE - Brig. Gen. Howard G. Bunker

A COPY

~~SECRET~~

~~SECRET~~

CONFERENCE
ON
AERIAL PHENOMENA

Held at 1300, 16 February 1949, in conference room P-162, Los Alamos Scientific Laboratory, Los Alamos, New Mexico. Present:

4th Army:

Major Winn
Major Godsoe
Captain Neef

AFSWP:

Commander Mandelkorn

University of New Mexico:

Dr. LaPaz

FBI:

Mr. Maxwell

USAEC, SFOO:

Mr. Morgan
Mr. Newburger

University of California:

Dr. Bradbury
Dr. Holloway
Mr. Hoyt
Dr. Manley
Dr. Reines
Dr. Teller

Mr. Newburger opened the conference and stated that the subject of Aerial Phenomena was classified Secret within the meaning of AR 380-5 and comparable appropriate regulations of the Navy and Air Forces, and that all personnel at this meeting were properly cleared. Mr. Newburger then introduced Captain Neef, who briefly outlined the purpose of this meeting.

Captain Neef: It all started back in December, 1948, when we first received some reports from some airline pilots that these green fireballs were sighted. At this stage we had no idea what to do with it or what it was. We approached Dr. LaPaz who has been assisting us, gratis, since that date. Almost over two months now that he has been assisting us, so in order to have you get the facts as they are to a scientist, I'll let Dr. LaPaz explain these things as we have found them. Then you can give us your opinion from there; that is what we are interested in.

Dr. LaPaz: I would like to review what is observed in the case of a conventional meteorite fall. Not that I have any hopes of saying anything you don't already know, but because I regard the observational evidence observed by the conventional meteorite falls as providing the necessary background for what is now observed. Meteorite falls (for next minute or two, Dr. LaPaz's comments on record drowned out by noise from ditch digger immediately outside conference room)....Because of sound phenomena primarily, the fall of a large meteorite will cause great fright among human beings necessarily but primarily among animals, of all kinds. The fact follows, by a meteorite

A COPY

CLASSIFICATION CANCELLED
BY AUTHORITY OF THE DIRECTOR OF SPEC INV
BY KURT K. KUNZE, Capt, USAF
Historian

8 DEC 1975

DATE

~~SECRET~~
UNCLASSIFIED

~~SECRET~~

Page 2

falling into the earth, is as you would expect, one at random - in azimuth and elevation. If the radiant white is known, you can predict the minimum angle with respect to the plane of the horizon at which the meteorite path has been observed. There is no choice, as far as the....for direction when meteorites fall in at random. I'd like to contrast now, at this time, this fact with what has been observed by some individuals here at the conference and by many of the AESS inspectors, UAL pilots, special agents, goodness knows how many other categories of people. I choose to describe the only one of the incidents that I was personally a witness to. It is the only one of the incidents that I am in a position to vouch for on the basis of experience, dating from 1915, as a member of the American Meteor Society, was most certainly not a conventional meteorite fall. It was the so-called Starvation Peak incident on the night of December 12, 1948. Time of observation was around 9:02 P.M., plus or minus 30 seconds. This fireball appeared in full intensity instantly - there was no increase in light. Its color, estimated to be somewhere around wave length 5200 engstroms, was a hue green, or yellow green, such as I had never observed in meteor falls before. The path was as nearly horizontal as one could determine by visual observation. We have a photograph which might be some liters of departure from horizontal. The trajectory was traverse at, I am inclined to believe, constant angular velocity. Just before the end of the path there was the very slightest drooping of the path, that is the green fireball broke into fragments, still bright green.

Dr. Teller: And all this time the intensity was approximately constant?

Dr. LaPaz: All the time, as far as I could determine. The eye, of course, is admittedly a very crude photographer.

Dr. Teller: How long did the phenomenon last?

Dr. LaPaz: Almost exactly two seconds. We have in the reports here, I brought the complete file with me and would be glad to circulate them, duration measures in relation to all observations. Few of these, however, I believe, were determined under as favorable circumstances as the duration of the Starvation Peak incident. Possibly I should go back and review the situation a little bit. Because some report, issued by the AESS, would certainly suggest that I was primarily responsible for starting this whole matter. I am glad that Captain Neef corrected that impression. Actually, I was on an investigation in regard to the green fireball observed on the night of December 5th at the time the December 12th incident occurred. As a result I was keyed up; I was watching; I had a stop watch with me and a transit. We got into position and made measures, transit measures, on azimuths and elevation readings; that is, we made a duration check, certainly within not more than two or three minutes after the incident occurred. To that extent, I believe, it is possibly the best observed of any incident up to the time of the January 30th fall.

~~SECRET~~

Dr. Manley: How did you have time to use the transit?

Dr. LaPaz: The transit was in the back of the car. The moment the car was parked at the side of the road, we yanked the transit out and set it up and began measurements. We were in motion at the time but we were able to get a very good check of what we observed at the time on the road near Starvation Peak. We had a clear view of the sky to the Northwest and the West, and the object was so low over the horizon it was possible to compare it not only to the stars with which I am familiar, but with respect to mountain peaks that were also visible. To continue, that duration was about two seconds. This is when I say that 90% of the duration determinations have been made in the case of the green fireballs have given durations right in that vicinity. Whereas you take, say, 100 ordinary meteor observations you will find the widest diversions in durations. You could take the same lesson as observed by 100 people - possibly that's a better example - and there would be wide variations in the estimates of duration.

Dr. Manley: Did you correlate the azimuths with.....?

Dr. LaPaz: No. There is an azimuth factor here which I am going to talk to you about, that relates to the choice of direction. Both our observations are single station observations, so that it becomes impossible from the observation measure to determine the real path of the fireball in the atmosphere. There have been only three cases where that path was determinable. One, as I recall it, was that of December 12, another December 20, and finally, of course, the very large fall on January 30, 1949. I'll give you some particulars on the paths. I do want to observe, however, that even our station observations present a puzzling characteristic to the meteorists. If you plot what are called, by meteorists, the admissible protozons for a green fireball that has been observed, you will find that they give, on the average, an approach almost to the North, come down from the North, they are restricted to ? . Now what about the real paths? I gave some indications as to the altitude at which meteorites normally disrupt full....and come down. That relates to the lowest...of the path. The green fireballs are unusual in this respect: probably that they are horizontal or nearly so, or that their horizontal path is traversed very low down in the atmosphere. In the case of the real paths for which we have been able to make determinations so far, those are graphical determinations, as we have not taken the trouble to use Chablis (?) methods or....because the observations are regarded as necessarily too rough for mathematical niceties. Those paths are traversed at elevations between 8 and 10 miles. I defy you to find anywhere among meteorists, examples of conventional meteorites that move over long horizontal paths reserving nearly constant angular velocities and therefore, on the average, constant linear velocities, at elevations of the order of 8 to 10 miles. There is a good deal of evidence that may be of value in the complete reports that are available here, but since this is an introduction I would like to summarize at this stage: the fireball which I personally witnessed on the night of December 12, 1948, was not, in my opinion, a conventional meteor fall. Since the majority of the green fireballs

~~SECRET~~

~~SECRET~~

Page 4

have been reported to me, both before and after this December 12th occurrence, possess almost all the properties which I personally observed on the night of December 12th, I feel that in all probability they are not themselves conventional meteor falls. Now, the easy way out of this is to conjure up an unconventional type of....meteorite, which comes in practically parallel to the surface of the earth and is somehow endowed with the property against the very great atmospheric resistance that is experienced on a level, it reserves nearly constant velocity over paths say of the order of 25 to over 100 miles, as in the case of the green fireball on January 30th. It should also have the property that it is a very remarkable hue of green, not heretofore observed, to my knowledge, in the case of any conventional meteor falls. And finally, and this possibly is the most implausible feature of all, that although it produces light visible at distances of the order of 400 miles, it doesn't make a sound. In the case of January 30th fall, due to the fact that there had been a large number of military personnel alerted, we were able to obtain observations within a minute after the fall occurred and pursued the investigation over a distance of 1,600 miles - in Texas mud primarily! - in some ten days' time interviewing literally hundreds of people, we saw not one substantiated account of noise produced by the meteorite fall.

Dr. Teller: May I ask how many people have seen this one big meteorite?

Dr. LaPaz: That is difficult to say. (record blank for short period).....
.Finally, in the interrogation of such persons, we invariably interview them as individuals. We tried a family of 8 the first night, as Major Godsoe will recall, interviewing....and it became apparent at once that there was some sympathetic influence and we broke it off after I think the third or fourth observation and thereafter interviewed separately. If you were to search, however, the independent observations of those who were widely separated, possibly stations of the order of 100, there were probably 100 different stations reporting.

Dr. Teller: What area did that cover?

Dr. LaPaz: All of New Mexico, all the Western half of Texas. I have a map here with some indications of possibly the extent of that.

Hoyt and Bradbury: Wasn't that Sunday the 24th?

Dr. LaPaz: No, it was definitely Sunday the 30th. The newspapers have very helpfully concealed most of the relevant facts relating to this fireball. First, they described it as a fireball, second, they ...(record blank for few seconds).
interfered with OSI and wasn't able to do that this time. This is the field map and will give in various colors, dots and pencil dashes, etc. all of the observations obtained on the Texas search.

Dr. Teller: All relate to one fall?

Dr. LaPaz: Yes. These lines are drawn from points of observation. The center,

~~SECRET~~

~~SECRET~~

Page 5

as you see, of points of appearance is somewhere Southwest of Amarillo or Southwest of Amarillo. The disappearance point is in the vicinity of Lubbock, Texas. At the time this was drawn, before I was able to make out transit measures in the vicinity of Albuquerque, this was the best apparent path of the fireballs. These other ink lines are independent, made by other groups of observers working on the same problem. (record blank again for short time) This transit, unfortunately, had a needle with a bent piston and it was not discovered until much later that we were getting faulty records. Independently, I have re-determined, using the best equipment available at the University, the lines of sight at all points where the faulty transit had been used. I have plotted on this map only observations that I made personally or such observations as I have every reason to believe were made by experienced personnel, for example UAL flyers, who took the trouble to make measures, or possibly civil engineers.

Dr. Teller: You mean these people right afterwards or shortly afterwards took an instrument and tried to measure it?

Dr. LaPaz: That's right.

Dr. Teller: This is the point where it disappeared?

Dr. LaPaz: And normally, all you will get is the point where it disappears, because the average man is aware of the fact that when he is not warned, he makes a very inaccurate observation. Having been warned by the appearance of the fireball, his attention is fixed and he watches where it bursts, where it explodes, where it disappears. So I say this is a much better determination. This beginning point, although you notice the....of line here, is reasonably satisfactory.

Dr. Teller: Are these points here observers of the test, locations of those observations?

Dr. LaPaz: Usually a dotted circle like that indicates a reported sound observation. We use this symbol: a circle is a report, whether or not the observation includes azimuth of elevation, light appearances; is indicated by the presence of a cross. If it is blacked out, both light and sound were heard. Now every one of those things has been disproved. In the area where the end point was located, oil well drilling was underway, dynamite blasting in connection with setting up of rigs, some nitro being used apparently to shatter.....in every case we were able to exclude the possibility that the noises reported actually were tied in with the meteorite fall. At least let me say, in my opinion, those noises were excluded. In certain cases, independently, that was confirmed by a visit of Lt. Ryan of the Roswell Group or the OSI. For instance, the best case of all, near Amherst ?, or noise - the observer, it's true, was only a ten-year old boy, but he wrote a very intelligent letter, and it is well known that children, like animals, are more sensitive to sound than people who have listened for too many years, say, to the radio. It appeared conceivable that he had actually made a sound observation, but Lt. Ryan went to Amherst ? found that even three members of the

~~SECRET~~

~~SECRET~~

Page 6

family were not able to confirm his observation of noise and no one in the town, some 300 or 400 persons I think in all were estimated to have been visited, no one at all had heard a sound, so I think that Mike probably heard the same dynamite blast as had been reported by Miss Winson Didpasture - I didn't take that name out of the funny papers, it actually exists.

(continued examination of the maps with minor interrogations concerning markings.)

Dr. LaPaz: With one exception, in the case of Roswell, there are two types of sound associated with meteorite falls and, I assume, associated with the motion of any very high velocity projectile or missile through the air. There are what physicists would call reasonable sounds, and while he would not acknowledge it, simultaneously with the appearance of a meteorite, you hear a meteorite, the physicist will refuse to believe the observation. Nevertheless, there is a tremendous volume of evidence indicating that these anomalous sounds occurred. Anyone who does field work in the search for meteorites will come across possibly 10% of the observers who say that, although my attention was attracted by hearing, a whining noise, a whistling noise, I looked up and there was the fireball. In other words, this anomalous sound apparently attracts attention to the occurrence. I have an article by Brandon...one of the sons of the man who first investigated the great crater out in Arizona, and a chap by the name of Hart ? with whom I am not personally acquainted by a physicist apparently at Princeton, in which they attempt to justify the occurrence of anomalous sound. They express it roughly in this fashion. Electromagnetic radiation is set up by

(Dr. Teller excused to answer the phone)

Dr. LaPaz: You wouldn't believe it anyway! However,...electromagnetic radiation is rectified somehow by the...changed into sound that can be heard and, therefore, you can hear the meteorite at the same time you see it fall. In the case of the Roswell observation apparently that occurred. We have a group of five men - there were near a steel smokestack - and every last one of them swears that they heard at the same time they were watching the green fireball go by, a noise like, say, a gasoline blowtorch. That is certainly not an ordinary explosives sound. One more thing in connection with the noises. In every other meteorite fall, any one meteorite fall that I have investigated, - that covers many years - I have never yet found an occasion of a detonating fireball, without meteorites coming down at all, in which there was not some evidence of alarm of animals. Chickens will fly around to try to get under cover. Dogs will howl and try to get into the house. Horses will run away. In the case of the Texas fall, in spite of the tremendous area in which the light was observed, we found not a single case in which the animals were disturbed. We knew of the case of a farmer who had, in sunny Texas, a pond with a five-inch layer of ice, who reported that a meteorite had fallen through the ice on that pond, had broken a hole. Captain

~~SECRET~~

SECRET

Page 7

Neef here put on a pair of rubber boots and very thoroughly searched the pond without finding a meteorite. Even in that case there was no evidence of alarm by the animals. I believe with that summary, I'd better cease operations and have you ask questions.

Question: How many observed falls?

Dr. LaPaz: I'd like to classify those into three groups. I would say that there are ten instances that definitely merit the most serious consideration. They are strictly analogous to the green fireballs of the night of December 12. On top of that, there must be something of the order of twenty more which are so well reported, from Los Alamos for example, that although the green fireballs observed showed small..the nature of the fireball....many observations of observers who paid practically no attention to the sky at any other time in their lives and now when they see a really bright light, they report it. You will find a great many instances of bluish-white fireballs. In my opinion, those falling vertically and leaving trails, are simply ordinary shooting stars. Of high intensity, that is, what we call fireballs, a blue light, are not in any sense to be associated with the green lights. Those three categories then.

Dr. Manley: ?

Dr. LaPaz: In the case of the two green fireball paths, determined from Los Alamos observations, in one case the Starvation Peak incident, we have an East-West motion, and then also a motion exactly parallel to....In other words, these two real paths show, I think they are the only two of the first category that show any real departure from the.....It is possible to explain that. It is quite evident that we have no case of assurance that both groups of observers, the observers at Starvation Peak and the observers at Los Alamos, saw the same point of....so that if we were to merely ask what are the limits within which such real paths might fall, it turns out that it might be as short as 12 miles instead of being 25 miles long, and in that case it would be directed almost directly to the North; it would come down very nearly within 2 degrees, 5 degrees say, of the North. In the case of the Texas observations, whereas I have indicated and the maps show, we have many observations by trained observers, motion is clearly almost directly North to South. I have been informed that there are reasons for regarding theout here (ditch digger)..and you notice that this passes reasonably close to Lubbock. The same is true of the two earlier fireballs, those of December 12 and December 20. They both passed - one passed centrally over Los Alamos and the other about six miles North of the center, but this would not be true....(ditch digger). One point that possibly should have been mentioned earlier is this: I was the more interested when Captain Neef came to my office and brought the December 5th incident to my mind because very much earlier I had been contacted first by...White, Director of Texas Observers, from a Dr. Pruitt, Director of Northwestern Section, City Section, of the Meteor Society, I had been informed that earlier occurrences of bright green fireballs, not too far from the Hanford area. When Captain Neef came in with reports of green fireballs near Las Vegas and particularly when he disclosed that there was a Los Alamos near Las Vegas - the real Los Alamos - it had much interest.

SECRET

Dr. Holloway: Are there any reports of these from other installations, such as Troy, New York, or places like that?

Dr. LaPaz: I raised that question and I know of no other cases. I mean to say the areas from which these reports come, as in one, for such evidence asthey do not relate to the green fireballs; they relate to the daylight occurrence of horizontal moving, bright white objects - some in Memphis, Tennessee in May, 1948 - that is not too far from Oak Ridge. They relate to the Hanford area as far as the Pruitt observations go, and to the observations that I've mentioned here in the Las Vegas-Los Alamos area.....A very curious thing has come to light during these investigations. I published not long ago an article in Science Illustrated on the recovery of the.....Town meteorite. The time that fell, February 18, 1948, the rumor got around somehow in Northern Kansas and Southern Kansas that it was a Russian bomb, and it was aimed at the geographical center of the United States which is not very far from.....Apparently, a great many people gave credence to that rumor and were delighted when we finally recovered meteorites up there and proved it wasn't anything but an ordinary meteorite fall. Incidentally, it did not have the characteristics of the green fireball we're talking about here. There was an air transport pilot who made a most curious observation while flying near Cherbourg on January 16, 1946. His observation was the observation of a bouncing meteor. After what I've been telling you about the green fireballs, you probably think it not unreasonable that a meteorite should bounce but to the meteorological mind that seems very hard to swallow. The interest is that one of your own persons here at Los Alamos, one and confirmed at least in part by four other persons, saw one of the green fireballs come down and then glide off horizontally. The bouncing meteorite is manually explained by having it form, say sinusoidal motion lying in about the plane at which the observer was looking so that he first saw the high point of the curve or the peak. The next time it was at the peak, it was so far away that the altitude was very low, which will give you the appearance of a bouncing meteorite. I offer that as a possible explanation. Of course, he may have landed in Paris before he made the Cherbourg flight and then we should disregard the testimony entirely!

Mr. Newburger: Dr. LaPaz, you mentioned, I believe, at one of our other meetings that they had compared the color of this with certain metals?

Dr. LaPaz: That's right. Initially we could only ask them what they thought it looked like. And we got such interesting responses that we eventually carried around a spectrum chart and allowed everybody to make his own choice. Of course, the use of the spectrum chart was unnecessary if they have a color like one lady who had around her neck a green scarf which she assured me had exactly the same hue, but normally not having such things to look at, they were pleased to have the chart to look at. They will choose, in 90% of the cases, category 1 and category 2 a wave length which corresponds to something between 4900 and possibly 5300. Most of them will fall very close to 5218 which is about the color you get when you have copper salts in the Bunsen

~~SECRET~~

~~SECRET~~

burner. I checked with Dr. Regener on that and asked him if an alloy had been used, like, say, copper beryllium, if there would be any change in that hue, and he has assured me there would not. He said it would still give approximate appearance of beryllium copper.....You will find in probably 1350 of the 1500 only the merest trace of copper occurrence. There are a few meteorites like.....in South Dakota, where little veins of copper have been found, making up possibly .4 of 1%.

Dr. Bradbury: Is this true of all meteorites?

Dr. LaPaz: It's true in any category. Even in the irons, the presence of copper is very hard to detect, very little...(ditch digger). I don't know whether you gentlemen could suggest an easy way to obtain green fireball spectra or not.

Dr. Teller: What is the geographical solution of this?

Dr. LaPaz: Another man would probably answer that best of all.

(Looked at more maps with some talk that was not audible.)

Mr. Hoyt confirmed the green hue of the green fireball he had seen on the night of December 30, 1948. (Record dead for minute or two)

Mr. Hoyt: I would have said approximately as far above the mountain as the floor of the valley was below the top of the mountain. I felt that would give me somewhere in the neighborhood of 20,000 feet or thereabouts. It was about 5 minutes to 6 on my way up here. I have a feeling that it had a downward path. I mean it was going South.

Dr. LaPaz: But it was not strictly horizontal?

Mr. Hoyt: No.

Dr. LaPaz: We have some discrepancies in that regard. 95% of the observations indicate a very nearly horizontal path. One from Fort Worth, Texas, which was not made by.....but measured by them, indicates an elevation of 6 degrees at the beginning and $2\frac{1}{2}$ to 3 degrees at the end.

Mr. Hoyt: That's what I would have said, but remember that the ridge would give you the sensation that it was taking a downward path. Duration - at the time I would say it was approximately 3 seconds.

Comdr. Mandelkorn: How does the calculated velocity of these objects compare with the known velocity of meteorites?

Dr. LaPaz: Apparently very much lower; that is, more than the ordinarily observed meteorite falls. First, to observe in the cast of an actual meteorite fall you have a relation of the velocity from the auricle of...atmosphere down to the impact velocity which may be very...but it isn't fair to compare the velocity of the green fireballs to the impact velocity of...(ditch digger and everyone talking at once)... Not with the trajectory velocity of the meteorite which is the same as the velocity of the fragments that fall from the meteorite. After a meteorite..the fragments fall about like a bomb. Their resistance just about balances out the....and as a result, they come down with about the velocity of a falling bomb, a little less because they do not have the same ballistic coefficient.

~~SECRET~~

~~SECRET~~

Dr. Bradbury: This is not an excluded ? direction like the....?

Dr. LaPaz: Due to the fact that they have a curve, and practically all times during which darkness is with us, why they tend to come in from that direction?

Dr. Bradbury: Would it be a shower?

Dr. LaPaz: That was my first explanation, as a matter of fact. Geminete showers with a maximum of December 10 to December 12. The first evidence that I had was Sgt. Kinsley's report on December 2 and since often the forerunners of the showers will...I thought we were talking about Geminete showers except that I never observed a green Geminete. Matter of fact, a check of observations made at that time found that there were 414 observations since 1915 and there wasn't a single one, Geminete or non-Geminete, for which any hue of green was mentioned. Later, for instance on the night of December 12, you could watch the Geminete come down..and notice that they came in at high angles to the horizontal, whereas the green fireballs,...incidentally, we have another interesting piece of evidence there - Dr. Sherman Smith from the University - I mention an observation that he made on the same night. The time of the observation is in dispute. According to Dr. Smith it was probably as late as 10:50. He had to wait for a long time, he said, for his wife to pick him up after the concert was over. Mrs. Smith, however, times it around 10:10. Whatever the time, within one hour or say an hour and a half after the green fireball and the horizontal path were observed, we have another extremely bright blue fireball come out of the Geminete rays. I mention this because some of the first persons to concern themselves with this problem suggest that the green fireballs were simply abnormally bright Geminetes. Apparently you can have very large Geminete falls of the color estimated by a trained..... checked with the spectrum charts...is quite distant, I assure you, from the green fireballs.

Comdr. Mandelkorn: How good is the coverage of the observers of the American Meteor Society as far as the top-half of the United States is concerned?

Dr. LaPaz: It depends a good deal upon overcast conditions. I would say, however, that this year the Eastern half of the country has offered phenomenal observing conditions. One of my reasons for withdrawing from Ohio State was that after 13 years there I had given up hope of ever seeing a meteorite shower because during the season of maximum intensity of the falls we had heavy overcast, snow and so forth. On the other hand, this year they're had reasonably open skies. I have obtained no reports from people in that part of the country. We thought we had a definite check because Harvard College has now installed a photographic meteor station near or possibly inside the White Sands Proving Ground. Since the 12th of December, you correct me if I exaggerate here, we have been trying to determine the color and other characteristics of the ten or 12 brightest meteors observed at that station. We still don't know what they saw. We know they were operating and they made some photographs, but Captain Neef can probably tell you the red-tape channelization impedimenta that has dropped out any determinations better than I can.

~~SECRET~~

~~SECRET~~

Page 11

Captain Neef: Well, it's one of those things; it's a Navy contract and they are not at liberty to divulge what they find, so we have to go through Washington, the Bureau of Ordnance, to get the information.

Comdr. Mandelkorn: I believe I can get that information; as a matter of fact, I feel very certain that I can. Just a matter of approach.

Dr. LaPaz: I feel certain if I had contacted Dr. Fred Whipple, for example, I could have obtained it, but his other occupations keep him away from that installation. And actually I felt as a meteorist, it might be wise to have OSI appeal for information rather than to ask for it directly.

Captain Neef: They did tell us they weren't using films which were going to be susceptible to these colors.

Dr. LaPaz: But, of course, they are making constant visual observations and if you were able to determine visual observations 100 miles from Los Alamos don't reveal the occurrence of bright green fireballs, I think it would be significant. I don't know why they should avoid the Southern-half of the State.

Comdr. Mandelkorn: Let us say if these had been at extremely high altitudes, they would have been visible from White Sands without any question.

Captain Neef: This one of the 30th definitely was visible from White Sands because Commander Holloman ? and his wife and one of his assistants and his wife saw it from there.

Dr. LaPaz: On the other hand, you have evidence like that of Professor Talbot ? now in charge of the optical trajectory section down there, an experienced astronomer, a member of the American Meteor Society. I talked with him about this, and he has observed nothing out of the ordinary. I don't think anybody, I mean in the line of green fireballs, in this area has been observing as much as he does. I don't see how he could miss sighting some of these.

Question: What explanation do you have for this?

Dr. LaPaz: The only explanation is the one I gave in the beginning and had my ears promptly boxed for. I think these are defensive manoeuvres of some higher U. S. Command and they are practising in the neighborhood of the regions they are going to defend, so naturally your localization of light near the atomic bomb installations, but boy, am I scolded for that! Even Dr. Kaplan of the FAD ? tells me no, no, the FAD would know all about it, and they don't have any facts.

Dr. Bradbury: Is this the physicist Kaplan?

Dr. LaPaz: Yes. Kaplan is my old boss. He was chief of the operational analysis section when I was....director there.....During Kaplan's visit

~~SECRET~~

~~SECRET~~

to the University of New Mexico, where he was lecturing, we called a conference with Major Godsoe and other interested parties. He gave a brief resume of the observations that had been made to date. Now, Kaplan is one of the charter members of the American Meteor Society, and he said certainly these could not be conventional meteorite falls. He, of course, mentioned as other people do who have not gone into it more thoroughly, the possibility of abnormal types of meteorite falls, that might come in from a peculiar direction or might droop at very low level, but I don't think he was able to explain the absence of sound.

Dr. Teller: Did I understand you correctly that the velocity of the object appears to be some 50 kilometers per second?

Dr. LaPaz: No. In the case of the green fireballs something between 3 miles per second and 12 miles per second. Depending, you see, if you choose one ruled map or another. For example, let me illustrate how that affects the velocity determination. This is the one I think possibly best represents the observations of the case of the fireball of December 12. That is the path I assume the Los Alamos observers saw the same point of the curves that the Starvation Peak observers did, likewise to the point of disappearance. If we deny that possibility, the path might shorten to this dotted line (Dr. LaPaz worked on maps with Dr. Teller, explaining paths.) Dropping from 25 to something between 11 and 12 miles. The January 30 observation gave us our first long path.

Dr. Teller: How long was it?

Dr. LaPaz: The first observations we had here indicated...That was because of errors in the determination of the azimuth at the point of beginning, made due to the faulty transit they used. But that's correct that the path runs over 100 miles.

Dr. Teller: And how long does it take?

Dr. LaPaz: Duration estimates range from 5 to around 14 seconds. I think that a 10 second average is about the best, that would give about 10 miles per second.

Dr. Bradbury: Green is not an unknown color in meteors?

Dr. LaPaz: If I were to rewrite the report that I first presented on that subject, instead of saying "rarely observed" this color green, I think I would now say "never observed". You sometimes see green, Dr. Bradbury, but it is a blue-green. The blue-green color is rare, but it is observed. For instance, Dr. Sherman Smith's observation was essentially a blue-green, but on the blue side.

Dr. Bradbury: What other colors do you see in meteors?

~~SECRET~~

~~SECRET~~

Page 13

Dr. LaPaz: Whites chiefly. If you look closely and without interference from outside lights, yellows, oranges and reds.

Dr. Bradbury: But it's apparently a yellowish-green we're talking about here. If you can see a bluish-green, you can also see yellows and whites.

Dr. LaPaz: There is some defect, possibly in the vision, that requires a pretty high intensity in that yellow-green before it's noted in a meteor fall.

Dr. Bradbury: Looks like green?

Dr. LaPaz: Yes it does, that's perfectly true. Now here's a peculiar property of those yellow-green fireballs - some people will refer to them as red. The only explanation that I can think of is they report afterwards that they see what is an exposure to a very green-bluish light rather than the light itself - I don't know if that is correct. And, incidentally, due to your observation, I don't know how to explain the inability of meteor observers to report this renegade color, but I simply know it doesn't occur. You go through long lists, like those of the American Meteor Society, you will find, I imagine, not 1 in 100 where a green is mentioned. Even in the case of the ? showers, where you have large numbers of very bright colors - let me recall something that all of you must have seen. The....shower of October 9, 1946 - anyone here who saw that? There were large numbers of extremely bright fireballs at that time. Kaplan himself recalled that they were blue, maybe blue-green, but never yellow-green. And I observed those under very favorable circumstances - we were flying at about 20,000 feet in a B-29. We had no absorption effects at all. They definitely did not show hues of green.

Dr. Bradbury: You mentioned the noise problem also. The noise occurs only when the meteor itself blows up, breaks up?

Dr. LaPaz: No, that isn't strictly true. You have, in addition to the hollow sound, the normal sound of the breakup of the.....you have headwind; you're near the path. You get a real shock; for instance, we have....apparently broken up by that headwave, shock wave, in the case of the Norden County Falls. And then from the turbulence and reflections all the way along the path, you will have a rumbling which may endure not for the matter of a tenth of a second, but for minutes, and they're real rough.

Dr. Bradbury: But these occur fairly close to the trajectory?
No.

Dr. LaPaz:/ In the case of the Norden County Falls again, they were heard clear down to....City. Shakes buildings that far away. The....Falls were heard up to 300 miles from the point of impact.

Dr. Bradbury: Large number of observations.....

Dr. LaPaz: No, there again I checked very carefully because I was concerned. I am trying desperately to give a logical explanation to the absence of sound.

~~SECRET~~

~~SECRET~~

Page 14

I have found in the literature only three cases where no detonations, no rumblings were reported. One of these is the Belgium observation in 1855, and I think should be discounted because meteorists hardly existed at that time. Some falls occurred and were not reported at all. The other two are reasonably recent observations - one in 1921 and one in 1922. They occurred, however, in the deep South where negroes, I think, were the only observers. Even there, the whizzing of the meteorites as they fell through the air, was reported. I know of no case of an actual meteorite where at least the whizzing of the falling body coming down through the air has not been reported.

Dr. Bradbury:.....?

Dr. LaPaz: Meteorite falls, I believe that was the way you phrased it? In the case of a shooting star, of course, you never hear a thing because the entire mass is very kindly vaporized before it gets, say, within 50 miles of the earth.....Not only noises, but accompanied by such noises that persons or animals are really frightened out of their wits. For example, we have a beautiful case where 2 horses killed themselves - in the Norden County Falls - they may have been felled by meteorites, but I'm inclined to think that the noise frightened them until they dashed into a ditch...Animals go crazy.

Comdr. Mandelkorn: Do you think it unusual no fragments are found?

Dr. LaPaz: I certainly do. And I think it unusual, not only in the case of the green fireballs, but in view of the fact that a great fall, like the...fall of October 30, 1947, wherefor the first time we detected a bit of the interest on the part of the military, there too we recovered nothing. October 30, 1947, about 4:48 in the afternoon there was, what appeared to be, a tremendous meteorite fall over the reservation area - the Four Corners Area. We got there within a very few hours, had excellent observations, went back time and again, exhausted ground search, CAP people in airplanes, we had a radio centered, we had radio controlled jeeps and a lot of people out walking around - not a trace. I can't give you a color on that because....

Comdr. Mandelkorn: Ordinarily, when phenomena of that nature occurs, you are able to recover some material?

Dr. LaPaz: Yes, some material is recovered almost always. If proper search is conducted by Gill Field Corps of Intelligence Unit; Dr. Lansberg of the Research and Development Board, very kindly interested himself in the problem and the air searchers resulted not even in the discovery of a broken branch. The region is heavily forrested. If branches had been broken, I think they would have been detected. I haven't classified that particular fall, however, with the green fireballs and for this reason: that left a train. Another thing which I might have mentioned - a normal meteorite fall....will produce a long enduring train visible by day and night. Luminous by night and by day, illuminated by the sun.

~~SECRET~~

~~SECRET~~

Page 15

In the case of the irons, it will be very faint, but it'll be there if you look for it. In the case of the Four Corners Fall, that train was observed and I'm inclined to believe that it might have been a conventional meteorite fall. In the case of the green fireballs, to my knowledge, no such train has been observed. That question is always asked of people - did you observe a long enduring train; their replies were always negative.

Comdr. Mandelkorn: Then you would say there were 10 incidents which are analogous to the green fireballs, with reports checked by a sufficient number of independent observers, that there is no doubt whatsoever of their occurrence?

Dr. LaPaz. That's right.

Comdr. Mandelkorn: Then there are 20 with some deviations, two of these probably are related to the green fireballs.....

Dr. LaPaz: I believe two of those incidents I mentioned occurred before the 5th of December. A very remarkable one of the 4th of August - note that that again is very close to the time of.....meteor shower....From late in July on and my report will be producing quite a number of these....., but it is physically impossible with this particular observation from near.....Oregon.....

Dr. Bradbury: Then their directions were wrong?

Dr. LaPaz: As a matter of fact, we can't tell because they were single observations. Maybe I should pass that letter around, but it is, I believe, the first detailed report on what might be characterized as a typical green fireball. After the Oscar.... incident of January 1, 1948, was merely a remarkable green flash, which might have had some other interpretation.

(Dr. LaPaz showed some letters around the table, and there was general talk not able to be picked up individually)

Major Godsoe: The basic purpose of this meeting is: we want you to find a meteor!

Mr. Newburger: Have the military - anyone from the National Defense establishment - given us anything? Sent out any conjectures about this thing?

Major Godsoe: No, most of the military authorities think we are crackpots; that is, except for the Army Air Force, which is taking an active interest in details.

Mr. Newburger: The Air Force does have the primary interest in this gadget?

Major Godsoe: Yes, the Air Force is the gathering, reporting agency for this phenomenon.

~~SECRET~~

~~SECRET~~

Page 16

Comdr. Mandelkorn: I'd like to remove that temporary statement about the Armed Forces Special Weapons Project; we aren't laughing...(record blank for minute or two)

Dr. Bradbury: None of us are experts in this field, so we essentially have to believe what we are told. I suppose if you try to look for logical explanations, there are probably some.

Dr. LaPaz: I would like to ask one question here - unless you feed power into a body moving into a horizontal path, can it preserve essentially a horizontal trajectory? A plane does it; meteorites don't do it; shows curves as the energy falls off. This thing apparently ignores air resistance and gravity and goes blissfully on its way.....

Dr. Teller: As far as straightness of the path is concerned, if you have a meteorite that you have observed for 10 seconds, and in these 10 seconds it has gone a distance of 100 miles, it will have fallen in this distance $1/3$ of a mile and now I should like to dare any observer to tell a curvature of this kind - because you are completely unprepared for the phenomenon.

Dr. LaPaz: As it slows down, it curves toward the bottom.

Dr. Teller: But apparently before it has happened, slowed down too much or exploded or something, and then it has disappeared. Now the...point is, of course, if it has no power it will slow down, but I do not know how quickly you would have to estimate that; furthermore, the rate at which it slows down will depend very much on the question whether it has been at a 10 mile altitude or a 20 mile altitude.

Dr. LaPaz: The elevation estimates are very concordant on these, and I doubt that you will be able to change that elevation of 8 to 10 miles by very much. These are the real path observations that I have mentioned.

Dr. Teller: Well, can you say....do you think anything can be said about that?

Dr. LaPaz: I doubt it. The eye, of course, is not a good speedometer. You can't detect a change. At least, I did not in the one observation that I made, and no such change has been reported. In the case of those who observed the green fireballs say that near the end of the Texas fireball path of January 30 it was noted that the fragments moved out leisurely to the point at which there was apparently less velocity, as shown by them on the green fireball itself. May I mention, however, that in the case of the normal meteorite fall that curvature in the path, the transverse vertical, is one of the most apparent. You see that in the case of any large, ordinary detonation fireball fall even though it may not produce...there is a tendency to curve.

Dr. Teller: What about total light...How does the brightness compare to the brightness of the meteorites that come from a meteor?

~~SECRET~~

~~SECRET~~

Page 17

Dr. LaPaz: In the case of the Texas fall, this is very rough; I didn't see it, I can only base an estimate say on the comparisons that were made with the moon as to size and total intensity. In the case of the Texas fall it would certainly be comparable to - it was one of the brightest observed fireballs in total intensity....In the case of the Starvation Peak incident, we can compare it with Venus which was conveniently located, and it certainly was of stellar magnitude minus 4, possibly a little brighter. That comparison was made almost immediately after the observation.....

Mr. Hoyt: It was very bright and clear that night....

Dr. Teller: You saw it at 6 o'clock?

Mr. Hoyt: At five minutes to six. Very, very clear that night.

(ditch digger - in between ditch digger, a few coherent remarks:)

Dr. Manley: In 1945 or 1946 I observed practically the same thing as in this letter. We thought it was a roman candle. Definitely light green in color. I am still worried about the fact that they don't report any green color in these falls.

Dr. Bradbury: Lack of noise, lack of....., the lack of these things would be equally astounding for any material object.

Dr. LaPaz: Dr. Kaplan suggested the possibility of the same sort of phenomenon that he could produce experimentally in his laboratory...and he tells me under certain conditions he can produce a globe or lamps of yellowish-green light..... He conjectured for a minute that that might have some relation - an artificial aurora.

Comdr. Mandelkorn: As long as you brought that up, Maj. Johnson has a letter I obtained from Gen. Bunker which may be pertinent. Gen. Bunker transmitted the information you've heard to the Air Materiel Command, and in reply received a letter from an Air Force General who recently returned from Alaska. I'll let Dr. LaPaz read this.

Dr. LaPaz: This is closely related to what I was talking about. It begins: "Dear Bunker: Received your interesting phenomena of 1 February and promptly turned it over to Howard...now saddled with the responsibility of clues. Regard as coincidental that on dates you mention Gen. Carroll was in Fairbanks, Alaska, and on his return related that he had never seen before in his life such a beautiful technical display of Northern Lights. Maybe what these people have seen is a reflection from the.....of these pyrotechnics. So far as we know, it is still phenomena and not material. Best Regards, Paul".

~~SECRET~~

~~SECRET~~

Page 18

Dr. LaPaz: May I make the observation that if you look in the chapter by..... you'll find that in Alaska where this observation was reported, there are very few times at this season of the year when you can't see an aurora.

Dr. Teller: I have the feeling that it is.....either a discovery in physical psychology or.....

Dr. LaPaz: I thought that psychological element would come in here!

Dr. Teller: Here is a slightly irrelevant question - you brought in the flying discs. What is the connection?

Dr. LaPaz: I didn't bring in the flying discs.

Mr. Newburger: I brought in the matter of the flying discs because the Air Force, as I understand, now have classed the flying discs and these fireballs into one category.

Captain Neef: ...The only indication we have is a letter from MAC in Washington Saturday where they indicated the old project Sign is now project Grudge, which includes the phenomena observed in New Mexico. They knew of this meeting and were going to send a representative.

Dr. LaPaz: I just asked Mr. Hoyt a moment ago how he would compare the brilliance of this object with that of an aircraft flare. He said they were of comparable magnitude. I think that was definitely ruled out...

Dr. Teller: I understood that a reasonable explanation of the flying discs - and I suppose that it is generally known - is that they are meteorological balloons.... I understand that in quite a number of cases there have been very close directions established....I must say that from what you have said it certainly sounds like everything else but meteors. The thing that impresses me is your evidence of the horizontal flight. Meteors do not usually come in like that...

(mumbled talk between Drs. Bradbury and Teller)

Captain Neef:.....Change of direction such that we haven't been able to follow it up yet. One of our men was returning Sunday night when our tower operator saw this object to the Southwest from Kirtland Field and.....Arizona reported it was Southeast from them. From the Kirtland tower it was a bronze color. The time checks, but from....Arizona it was green until it turned straight down and veered going.....

Dr. LaPaz: Dr. Teller, may I mention this one other instance that shows maybe why I have more concern than is merited by the evidence I am able to present. I deal with Vic Regener and I know that the physicist doesn't like to work with anything that can't be photographed. I share that view but a meteorist is not available sometimes to photograph shooting stars, even the conventional type. During the war I was acting as Director of the Ohio Section of the American Meteor Society and all at once we began to get reports of large numbers of stationary fireballs; not moving. The burst

~~SECRET~~

~~SECRET~~

Page 19

was there, but no motion. Now one who observes normal conventional fireball falls is aware of the fact that not 1 out of say 500 shows actual fixity; there is always motion. So, this looks very, very strange. Of course, you all know what those stationary fireballs turned out to be. They were the self-destructive devices on Japanese paper balloons operating. You had a hydrogen filled sphere with a two-crown mask of magnesium flash-light powder. And when the magnesium and the hydrogen went off together, you could see it for a long way. We got stationary fireballs but they certainly were not meteoritic. My experience since I was suspected of psychological apparitions at the time I reported these stationary fireballs to, for example, Dr. Kamplan, my experience with...led me to be very cautious about taking my concern...but at the same time I feel that we shouldn't be too hasty in giving a natural explanation to these green fireballs.

Dr. Teller:....but I would like to ask, these phenomena are apparently quite bright, more luminous than normal meteorites?

Dr. LaPaz: Well, the January 30th one was; I would say that about the one I saw on December 12. That was a very bright fireball, but not extraordinarily so.

Dr. Teller: What is the chance of getting pictures?

Dr. LaPaz: I refer to the one attempt that was made on the night of December 19. We set up a photographic patrol - the AESS, as you probably know, has been interested in this problem. They brought a lot of speed graphics and so on and set them up. Mr. Maxwell, a member of the group..., and they were able, I think the night before, to photograph a bright Geminid. But on the night of the 19th nothing was observed. The next night, however, the night of the 20th there was an incident which I believe might have been photographed, but by that time the equipment had been disbanded and nothing was obtained. I should think, with proper coverage, say 10 to 15%, of these should record themselves provided you do not use green insensitive...and film such as the.....

Dr. Teller: Is there any possibility of having a wide coverage of the sky triggered by a photo cell?

Dr. LaPaz: I have discussed that, for example with Dr. Reneger, who has been very much interested in the apparatus, and his answer is more or less in the negative. I understand that Cornell University - Gartline of Cornell - has produced some sort of photo-electric triggering device which has been used in this connection. I wrote him about it, asking for reprints or instructions, but never received a reply.

Question: Do you think you are going to find film sensitive to this green color fast enough? We have some that can't be left out over 12 hours.....

~~SECRET~~

~~SECRET~~

Conference on AERIAL PHENOMENA

Page 20

Dr. LaPaz: It should be possible ...The conventional meteor cannot be photographed at the present time. The so-called meteorschmitts that Harvard College is now having produced at very great expense, they expect to go down to the 4th and possibly fainter. With one of those, a bright green fireball might be photographed, but they are not available...

Mr. Newburger: Does anybody know if there were any experiments carried out in Europe, prior to the war when our last best information came from over there, along this line?

Dr. LaPaz: Not to my knowledge. I raised that question with Dr. Kaplan and he gave me some rather surprising information. Dr. Kaplan had attended the IAU meetings in Syria ? and the Russians had a large representation there. Sufficiently large, as a matter of fact, to beat down the proposal that the IAU appoint an international committee to investigate the so-called.... meteorite crater produced in the fall of 1947, February 12. On the contrary, at the Oswald, I think it was, conference of the International Geophysical Union, none of the Russian geophysicists were present. Kaplan's interpretation was that they feel so far ahead of us that they didn't think they could learn anything, and they were taking the precaution that no leak occurred.

Mr. Newburger: Were the Germans experimenting in any phase that was possibly connected with it?

Dr. LaPaz: Well, they had the so-called stations in space ...might have some attachment to it.

Comdr. Mandelkorn: You don't have any record of experiments.

Dr. LaPaz: No, no knowledge of experiments. I have the belief that no country in the world has there been meteoritics developed as it has in Russia in recent years. Recently, the Academy of Science of the USSR has been issuing a so-called meteoritic, an extraordinary publication - very little work of the caliber being done by the Russians has been conducted in the United States. Apparently, there it has big support; here, it is an individual matter. Until we had some military interest in meteoritics, we were never able to found even an institute in meteoritics in the United States. The one in New Mexico is an outgrowth of application of meteoritics to determine, say, ballistic coefficients for shells of unconventional design like the proximity fuze shell with the radio in its nose, and that sort of thing. That's where we got a start. Apparently, the Russians got that earlier and have full-fledged state support.

Dr. Holloway: How much interest would the military have if they found out these things were landing all over the country, Canada, Hawaii, etc.?... Have you contacted people in the East?

Dr. LaPaz: Olivia, C.C. Olivia, President of the AMERICAN Meteor Society, King, Leonard, Pruitt, Kaplan, etc. Most of them have been observing; Kaplan, I imagine, has not, because he is now preoccupied with laboratory

~~SECRET~~

~~SECRET~~

Conference on AERIAL PHENOMENA

Page 21

experiments. I think that if anyone of the UCLA Institute of Geophysics had been observing, it would have gotten to Kaplan's ears.... There are two great advantages to this area; first, you have clear skies at night and can observe them as they come down, and second, (record blank for a minute or two).

Dr. Holloway:..... this was before the war. They had a telephone network which covered a fair section of the East there.... a network so that your observations.... I mention this to indicate, I don't know what he is doing now, but at least they may have a group of people who have been observing. May not be in a position to... green fireballs, but they might have seen them.

Dr. LaPaz: My one attempt to contact.... and unfortunately I did not approach him again for information, but someone acquainted with him should certainly ask if they have observed any of this sort of thing there.

Comdr. Mandelkorn: Well, wouldn't phenomena of this nature have been reported to the Society, no matter where they occurred?

Dr. LaPaz: Yes, I would think so. For example, you can consult the so-called meteor notes of the American Meteor Society, and popular astronomy, they are published from month to month with the President, C. C. Olivia, Director of the Florida Observatory at the University of Pennsylvania. I've been through those very carefully. There's one single solitary case of a fireball which by one of the observers - a doubly observed fireball - so it was possible for me to.... in which one of the observers mentions a green color. Not this peculiar yellow-green which most people in that work find unusual, and in the case of that the elevation determined is of the order of, oh 199 kilometers from the beginning point and roughly 100 for the end, so I think it is only an ordinary fireball; nothing unusual about it. That was the only case I found.

Comdr. Mandelkorn: According to recent records, where the observation conditions in other parts of the country satisfactory? At least part of the time?

Dr. LaPaz: Well, I infer from the fact that we have had so much trouble out here and the East has been bragging about its climatic advantages; that probably during the recent months, they have had good observancy. I haven't attempted a full scale check on that.

Comdr. Mandelkorn: Let's put it this way then: Have there been a sufficient number of fireballs reported in the last 60 days in other parts of the country to lead us to infer that had some of these occurred, they would have been reported?

Dr. LaPaz: I think that definitely is true. To my knowledge, as far as the contacts I've had with Olivia and so on, there was nothing out of the normal noticed in the East, and in the South, shall we say as far up as White Sands. Whether the Harvard Observatory setup observed anything peculiar or not, I don't know. We tried right away to get that information. We were told by the gentleman in charge down there, I'm sure this will be interest to you, that

~~SECRET~~

~~SECRET~~

Conference on AERIAL PHENOMENA

Page 22

it was impossible to make an estimate of the approximate wave and engstroms without detailed spectroscopic equipment, which he did not possess. So whether the Captain actually cut out the spectrum charts and sent them to him or not, I don't know, but it was considered.

Dr. Bradbury: Well, we're not coming up with any bright ideas for you very fast.

Mr. Newburger: No, but as long as we have the problem presented to you, maybe by thinking on this, you will come up with an idea!.... Of course, you know our entire connection with started with Madelyn Gwynn Merchant back in 1946!

Dr. LaPaz: Except for the flying discs, nothing that you could say would cause me greater embarrassment! I have actually had communications from Madelyn myself.

Dr. Teller: Your statement of the absence of sound when this thing has gone apparently overhead at the distance of 10 miles, within earshot of people.

Dr. LaPaz: That seems incomprehensivle, doesn't it, Dr. Teller? I'm glad to hear you say that because that has been my feeling from the beginning. And we tried desperately to get confirming evidence whenever sounds were mentioned. No reports have been obtained.

Dr. Teller: I must say that the admission in which one could get.... typical phenomenon is something in the light of...

Dr. LaPaz: Kaplan told me he was going to get out one of his old blow pressure tubes and begin experimenting as soon as he returned from the UCLA, to see if he could duplicate in any way the descriptions we have given him.

Dr. Holloway: What sound does a P-2 make when it goes overhead?

Dr. LaPaz: I can tell you what they make when they come down.

Comdr. Mandelkorn: I can tell you what they make when they go overhead at the height of about 1,000 yards. But anything manmade that passes overhead at the height of 8-10 miles, at this speed, could be inaudible.

Dr. Teller: You think it could be?

Comdr. Mandelkorn: I think it could be. The only .

Dr. Teller: Even if it went at the speed of 10 miles per second?

Comdr. Mandelkorn: Well,

Dr. Teller: You see, at that time, the....begins to come up.

Dr. LaPaz: You bet it does.

~~SECRET~~

~~SECRET~~

Dr. Bradbury:.....

Dr. Teller: You have to get a shock wave out of it. With a very small object the shock wave would be smaller than....I have not made calculations on it, but it's just common sense...

Dr. LaPaz: I would like to ask a question. Isn't it true in the case of the so-called light movement that you have very intense, luminous effects off them without noise?

(talk between Drs. Bradbury and LaPaz too fast and too jumbled to be transcribed.)

Comdr. Mandelkorn: From what Dr. Teller said apparently a solid object converging with the atmosphere horizontally at about 8 to 10 miles altitude, it's incredible that it wouldn't be accompanied by some sort of sonic phenomenon.

Dr. Teller: I would like to repeat that to try to get an estimate of the size of the object, that it would have to have in order to get sound effects, is not an easy thing, but offhand I would say - this is what I would expect - that you get a very small object, as small as an inch or smaller.

Dr. LaPaz:.....

Dr. Teller: If I remember correctly, the intensity, the amount of energy that goes into a shock wave is proportional to the square of the velocity. The velocity that you have here proportional to the square of the velocity and of course, is proportional I should think probably to the square of the linear dimensions of the object that you have. Now you have 10 miles per second... velocity of the object that you have. Now you have 10 miles per second... velocity you have 20 miles per second, so this could be, on that count, **ten** times fainter - the sound would be ten times fainter. On the other hand, a meteorite that you will hear, I think,..... that much across....

(too much cross talk)

Dr. Teller: **That is something** we could do right away. Now I do not know, tried to get from you information on brightness, but I would like to ask again some details...

Dr. LaPaz: The brightest meteorite fall in history, of which we have historical record, was the... fall in 1908, June 20....estimates the power, the light power, of that was of the order of 10^{18} - 10^{19} ergs per second. In the case of the Texas fall it was probably not 100,000th as bright.

~~SECRET~~

~~SECRET~~

Dr. Teller: Now let's try to get a check of this.

(Dr. Teller then spent approximately the next twenty minutes or so figuring on the blackboard - estimating light, speed, kinetic energy, shock wave, etc.)

Dr. Teller: If I can just believe everything I have heard and put it together with what I theoretically believe in, it ought to be a material body - might be an electron phenomenon.

Dr. LaPaz: You see why I'm puzzled, Dr. Teller. Nothing like this, to my knowledge, has ever been observed in the case of meteorite drops.

Dr. Teller: If you go to a group like UCLA or some other place where they have a good sound laboratory, they ought to be able to take the absence of sound observations - that is definitely incompatible, assuming that you know that there are... and assuming that they have heard no sound from this, they ought to be able to work an upper range upon the sight of the object which has been moving, and from these figures I would be inclined to believe the object could probably not have a heat ? or something like 1 cubic centimeter. One centimeter in dimension, and that in turn would not have given the blinding effect, if it was a material object.

Dr. Bradbury: Wait a minute, I think you've left out something in light effects - you don't have to worry about kinetic energy. You can get your light from chemicals as well.

Dr. Teller: That is correct.

Mr. Newburger: This seems to wind up the meeting.

Dr. Bradbury: Still don't feel that the meteor stuff is out. The puzzling thing is the long horizontal path; also absence of noise is puzzling.

hgc

~~SECRET~~

~~SECRET~~

Fourth Army
Intelligence Liaison Office
Box 234, Sandia Base
Albuquerque, N. M.

18 February 1949

REPORT OF TRIP TO LOS ALAMOS, NEW MEXICO, 16 FEBRUARY 1949, BY COMMANDER RICHARD S. MANDELKORN, U.S.N., RESEARCH AND DEVELOPMENT DIVISION, SANDIA BASE.

Subject: Project "Grudge".

1. On 16 February, a conference was held at Los Alamos to consider the so-called green fireball phenomena which commenced about 5 December 1948. The following were present:

For Los Alamos:

Mr. N. E. Bradbury
Mr. Marshall Holloway
Mr. Fred Reines
Mr. John Manley
Mr. Edward Teller
Mr. Elmo Morgan (AEC)
Mr. Sidney Neuberger (Security)
Mr. Maxwell (AESS)
Mr. Hoyt

For the Fourth Army:

Major William A. Godsoe
Major Wynn

For the U. S. Air Force:

Captain Neef

For the University of New Mexico:

Dr. Lincoln LaPaz

For Sandia Base:

Commander Richard Mandelkorn

2. Captain Neef opened the meeting by saying that the problem was being presented to Los Alamos scientists in hopes that they would be able to indicate some mode of attack on the problem and offer some explanations for the phenomena observed. He stated that this question had been classified military SECRET under the name, Project "Grudge", and that the investigation was now the primary responsibility of USAF, Air Materiel Command, T-2. He then turned over the discussion to Dr. LaPaz.

A COPY

Encl #8

~~SECRET~~

3. Dr. LaPaz stated that he had been assisting the Military for the past two months at their request in the investigation of the subject problem, and went on with the general discussion of phenomena attending normal meteorite fall, postulating the following important characteristics:

- a. Random path of fall.
- b. Color and intensity variations in light emitted.
- c. Sound.
- d. Frightened animals.

4. Dr. LaPaz then went on to discuss the number of observers reporting the subject phenomena and the diversity of their backgrounds, including commercial airlines' pilots, military pilots, special intelligence agents, Los Alamos personnel (Mr. Hoyt), and himself, as well as various and sundry previously uninformed citizens.

5. Dr. LaPaz then described the "Starvation Peak Incident" which he observed himself, detailing the following characteristics which indicate that the phenomenon can not be classified as a normal meteorite fall:

- a. Initial bright light (no period of intensity increase) and constant intensity during the duration of the phenomenon.
- b. Yellow-green color (about 5,200 angstroms).
- c. Essentially horizontal path.
- d. Trajectory traversed at constant angular velocity.
- e. Duration about two seconds.
- f. No accompanying noise.

6. Since about 5 December 1948, there have been more than ten incidents analogous to the "green fireball" described, and some twenty more presenting minor deviations to the above, which should be considered in connection with them. In addition, there have been a number of normal shooting stars and meteors observed.

7. There ensued a general discussion in which it was brought up that the majority of the observers whose reports were here under consideration were not subject to previous psychological influences or prior knowledge as to what they should look for. Furthermore, "seeing" conditions for meteor observation throughout the continental United States were at least

~~SECRET~~

SECRET

Report of Trip to Los Alamos, 16 Feb 49 (Cont.)

18 February 1949

average during December, January, and February, yet no green fireballs have been reported in any other areas. They seemed to be confined to the Los Alamos, Las Vegas, and West Texas triangle.

8. Mr. Teller than took over the discussion and showed that a material object travelling with the velocity of the subject phenomenon (about eight miles per second) would have to have a mass of about twenty grams, assuming all the kinetic energy could be converted to light, under the assumption that the light output is in the vicinity of 10^{14} ergs per second. He then went on to show that the shock wave produced by the passage of an object of these dimensions or greater passing through the atmosphere at a height of eight to ten miles (the observer figures) with a velocity of eight miles per second would produce a loud noise easily audible ten kilometers from the source. No sound has been observed. Therefore, Mr. Teller has the tentative opinion they are not material objects passing through the air. We should look to electronics and optics for an explanation rather than in the field of hydrodynamics. In any event, it was apparently agreed by those present that it was almost incredible that a large object such as a guided missile or informer vehicle could pass through the atmosphere at a height of eight miles at a velocity of seven to eight miles per second without producing a loud noise which would have been audible to observers. Mr. Bradbury demurred so far as the electronic explanation was concerned, saying if it were assumed that the answer lay in that region, many more difficult problems would have to be solved.

9. The following action seems in order:

a. Recalculation of the data outlined by Mr. Teller with a more accurate treatment to verify his tentative conclusions.

b. The establishment of well-equipped and organized observation stations to give as thorough photometric and photographic coverage as is possible in the geographic area involved.

c. Assuming that Mr. Teller's theories are borne out by recalculation, declassification of the Project to permit participation and thinking by scientists throughout the country.

10. Dr. LaPaz and Captain Neef have fruitlessly attempted to obtain information from a meteorite observers' group now at White Sands, said to be performing work under contract for the Navy. Commander Mandelkorn offered to assist them in their endeavor to enlist the services of the group for observations in connection with Project "Grudge".

11. Conclusion: It is my belief that these phenomena, *particularly if there are any further incidents, are deserving of serious consideration

*See next page.

SECRET³

~~SECRET~~

Report of Trip to Los Alamos, 16 Feb. 49 (Cont.)

18 February 1949

until their source and meaning have been satisfactorily explained. Although Mr. Teller's discussion tends to disprove the hypothesis that guided missiles or informer vehicles are responsible, there is cause for concern of the continued occurrences of unexplainable phenomena of this nature in the vicinity of sensitive installations.

*Captain Neef reports blue fireball visible from Sandia at 0530, 17 February 1949, and a yellow-orange cigar-shaped light at 1759, visible until 1806, 17 February.

RICHARD MANDELKORN,
Commander, U.S.N.

Copy furnished:

Fourth Army, G-2 --Major William A. Godsoe (2)

USAF - Captain Neef

USAF FOFAE - Brig. Gen. Howard G. Bunker

A COPY

~~SECRET~~

~~SECRET~~

CST

PRIORITY

Hq USAF
AFCSI

73231

21 February 1949

Captain Koch

XXX

COMGEN Kirtland AFB New Mexico

PRIORITY

51694

Pass to District Commander, 17th OSI District from AFCSI reur OSI 2 110

dtd 18 February 1949

Advise this office soonest instructions and/or equipment furnished
you by Air Materiel Command regarding aerial phenomena.

CLASSIFICATION CANCELLED
BY AUTHORITY OF THE DIRECTOR OF SPECIAL INVESTIGATION
BY KURT K. KUNZE, Capt, USAF
Historian
3 DEC 1975
DATE

24 185 46

PRIORITY

~~SECRET~~

OSI 2 110 1s CM IN 4712 (19 Feb 49)

HANDLE AS _____
CORRESPONDENCE
PARAGRAPHS 511 AND 60 (4)
AR 380-5.

WILLIAM M. TURNER, Lt. Colonel, USAF

AFCSI

UNITED STATES AIR FORCE
THE INSPECTOR GENERAL

FEB 23 10 06 AM '49

OFFICE OF
SPECIAL INVESTIGATION

~~SECRET~~
UNCLASSIFIED

~~Confidential~~

SUMMARY OF INFORMATION

Date: 9 March 1949

Preparing Office

Fourth Army Intelligence Liaison Officer, Sandia Base, Albuquerque, New Mexico

Subject:

Unidentified Flying Light Phenomena

Summary of Information

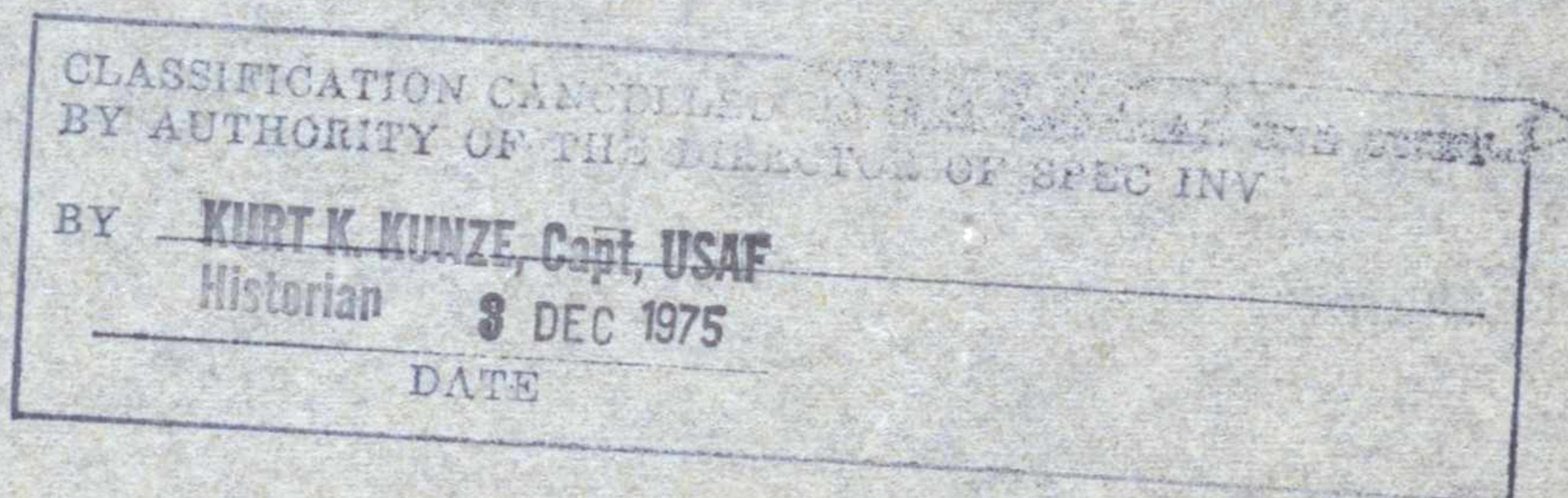
1. An unidentified flying light was observed in New Mexico on 8 March, 1949, at 1835 hours. Observations are reported from:

Kirtland AFB control tower
Los Alamos, AEC Project.

2. (a) Kirtland AFB reports luminous object, blue white in color in northwest horizon. Descent vertical, exploding before reaching earth. No sound indicated.

(b) Los Alamos guard station #106 reports luminous object, greenish white in color, west of southwest. Direction of flight southeast on horizontal plane. Altitude at or below partial cloud cover. Duration of sighting 2 to 4 seconds. Speed slower than meteor or falling star. No noise heard.

(c) Los Alamos guard station #103 reports luminous object, greenish white with billowy white flaming tail. Seen west of southwest by observer, gliding in a 60° downward angle. Was at altitude of cloud layer. Speed undetermined but described as floating or lazy manner. Observed for 2 to 4 seconds. No noise heard.



Form 568

UNCLASSIFIED

HEADQUARTERS UNITED STATES AIR FORCE THE INSPECTOR GENERAL OFFICE OF SPECIAL INVESTIGATIONS REPORT OF INVESTIGATION		FILE NO. 24-9	DATE <i>AR 11 1949</i>
TITLE PROJECT "SIGN" <i>Ambridge Pa. seen on 20 Dec 48</i>		REPORT MADE BY TONEY ZEVRAIS	REPORT MADE AT DO #3, 1612 S. Cameron St., Harrisburg, Pa.
		PERIOD 10, 24 Feb - 2, 3 Mar 49	OFFICE OF ORIGIN DO #3, 1612 S. Cameron St., Harrisburg, Pa.
CHARACTER SPECIAL INQUIRY		STATUS CLOSED	
REFERENCE Letter from DO #5, Wright-Patterson AFB, Dayton, Ohio, dated 3 Jan 49, File 5D 24-4			
SYNOPSIS <p>Investigation predicated from information received from Technical Intelligence Division, Hq, AMC, Wright-Patterson AFB, Dayton, Ohio regarding the sighting of unidentified aerial phenomena near Ambridge, Pa., by CHARLES WERNER and PETER HILDEBRAND during the week of 20 December 1948. At 0130 hours 17 December 1948, WERNER and HILDEBRAND sighted several unidentified spherical objects approaching high above the horizon from the north, and before reaching a point directly overhead, made a sharp 90° turn towards the west and faded from view while still high above the horizon. Greater Pittsburgh Airport, Coraopolis, Pa. Weather Sequence at 0130 hours 17 December 1948, indicated visibility clear (1 1/2 miles) fog and smoke. Wind from west, 12 miles per hour. Military and civilian flight records disclosed no flights over Ambridge at 0130 hours 17 December 1948. References contacted concerning character of WERNER and HILDEBRAND disclosed no derogatory information, and both are considered good, sober citizens whose veracity has never been doubted.</p>			
CLASSIFICATION CANCELLED BY AUTHORITY OF THE DIRECTOR OF SPEC INV KURT K. KUNZE, Capt, USAF BY Historian 3 DEC 1975			
DISTRIBUTION		ACTION COPY FORWARDED TO DATE	FILE STAMP
CG, AMC, Wright-Patterson AFB (Action Copy)	2	CG, AMC, Wright-Patterson AFB, Dayton, Ohio	<div style="text-align: center;"> 24 / 85 47 UNITED STATES AIR FORCE THE INSPECTOR GENERAL MAR 15 5 18 PM '49 OFFICE OF SPECIAL INVESTIGATIONS <i>Handwritten initials and signatures</i> </div>
DO #5, WP AFB	2		
Hq, OSI	2	APPROVED <i>Michael G. Frisch</i> MICHAEL G. FRISCH Major, USAF DISTRICT COMMANDER	
File	2		

REPORT OF INVESTIGATION		HEADQUARTERS UNITED STATES AIR FORCE THE INSPECTOR GENERAL OFFICE OF SPECIAL INVESTIGATIONS	
TITLE		FILE NO.	
CHARACTER		REPORT MADE BY	
REFERENCE		REPORT MADE AT	
SYNOPSIS		PERIOD	
		OFFICE OF ORIGIN	
		STATUS	
<p>CLASSIFICATION CANCELLED BY AUTHORITY OF THE INSPECTOR GENERAL</p> <p>BY _____ DATE _____</p> <p>ACTION COPY FORWARDED TO _____</p> <p>FILE STAMP _____</p>			
DISTRIBUTION		APPROVED	
		DISTRICT COMMANDER	



~~CONFIDENTIAL~~

24-9

DETAILS:

1. This investigation was requested by Commanding General, Hq, AMC, Wright-Patterson AFB, Dayton, Ohio, Technical Intelligence Division, regarding the sighting of unidentified aerial phenomena by CHARLES WERNER and PETER HILDEBRAND during the week of 20 December 1948.

AT FREEDOM, PA.

2. This is a joint investigation of Special Agent HARRY H. PERKY, Jr. and the writer.

3. On 10 February 1949, Mr. CHARLES WERNER, 1000 6th Avenue, Freedom, Pa., was interviewed in his home and stated in substance that on 17 December 1948 at approximately 0130 hours while working as a yardmaster in the railroad yard of the Spang-Chalfant Corporation, which is on the north side of Ambridge, Pa., he sighted what appeared to be a formation of spherical objects, approximately the dimension of a late full moon. These objects were first sighted at a 45° angle above the horizon to the north. The objects appeared to be moving at a high rate of speed towards the south. At this time the topmost object appeared to dive beneath the formation and accomplish a sharp 90° turn to the right. This maneuver was followed by the rest of the formation. The objects then disappeared very high above the horizon towards the west where they faded from the view of the observer. All movements appeared to be definite as in controlled flight. The objects seemed to be whitish or luminescent and no exhaust vapors or flames were evidenced. At the time of this sighting, the sky was clear, moonlit, and visibility according to the observer, was excellent. It was estimated the objects were visible for approximately thirty (30) seconds and appeared to be rotating around their axes. No lights other than the overall luminescence of the object were apparent and no antennae, wings, fins, projections, propellers, slots, ducts or openings were visible. At the time of the sighting WERNER was standing near a railway switching locomotive and therefore could not definitely state whether or not there was any noise emanating from the objects. WERNER stated he has no hobbies as his family and position take up most of his time. WERNER, upon request and to the best of his ability, drew a rough sketch of the objects which is inclosed with this report as Exhibit "A", and at a later date mailed to this office a page from an unnamed magazine, depicting objects similar to the ones he sighted, which is attached hereto as Exhibit "B".

NOTE: WERNER appeared to be an intelligent, conscientious, reliable, sober family man.

AT NEW BRIGHTON, PA.

4. On 24 February 1949, Mr. PETER HILDEBRAND, R.D. #2, Marion Hill, New Brighton, Pa., was interviewed in his home and stated in substance that on 17 December 1948 at approximately 0130 hours, while working as conductor in the railroad yards of the Spang-Chalfant Corporation, Ambridge, Pa., his attention was attracted by a shout from the night yardmaster, CHARLES WERNER, who was

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

24-9

pointing up into the sky. HILDEBRAND, who at the time, was atop a freight car, immediately looked up towards the direction indicated by WERNER and sighted what appeared to be a group of eight (8) white objects, approximately 45° above the horizon moving up the river from Rochester, Pa. towards Ambridge. (The Ohio River between Rochester and Ambridge flows from south almost directly north, consequently objects would be moving towards the south). The objects which resembled wheels turning around hubs were traveling at what appeared to be a high rate of speed. The objects suddenly dove, changed positions, and executed a sharp 90° turn to the right fading from view towards the west while still high above the horizon. HILDEBRAND estimated the time objects remained in his view as approximately thirty (30) seconds. The objects were solid, white, rotating wheels and approximately the size of a high full moon. The weather during this period was clear. In view of the fact that HILDEBRAND was standing on a freight car close to the switching engine, he could not state if noises of any type were emanating from the objects. The objects appeared to be definitely under control and no antennae, wings, fins, projections, propellers, slots, ducts, or openings were visible and did not leave a vapor trail nor were there signs of exhaust. HILDEBRAND could not make a definite statement concerning the speed, size, or altitude of the objects. HILDEBRAND has no hobbies other than his automobile as he stated he is entirely occupied by his family and job.

NOTE: HILDEBRAND is the father of three (3) children and appears to be well settled, honest, and a conscientious person.

AT CORAOPOLIS, PA.

5. On 24 February 1949 the weather sequence for Greater Pittsburgh Airport, Coraopolis, Pa., for 0130 hours 17 December 1948 was obtained as follows:

0130 17 December 1948 GRP Sequence, clear, 1 1/2 miles visibility (fog and smoke) pressure 190 millibars, 33°F, dew point 31°F, winds from west at 12 mi per hr, altimeter 30.07. Pressure rising 3/100 millibars. No precipitation in last 12 hours. Maximum temp. 57°F. Winds aloft for this period could not be obtained from GRP.

AT MCKEESPORT, PA.

6. On 2 March 1949 the winds aloft for Allegheny County Municipal Airport, McKeesport, Pa., was obtained from U.S. Weather Bureau, Municipal Airport, Allegheny County, for the following times and dates:

2200 16 Dec 48	2000 MSL 260° 7 mph
	3000 MSL 270° 9 mph
	4000 MSL 270° 8 mph
	5000 MSL 270° 7 mph
	6000 MSL 270° 8 mph

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

24-9

0400 17 Dec 48 2000 MSL 270° 29 mph
3000 MSL 260° 30 mph
4000 MSL 280° 29 mph
5000 MSL 270° 36 mph
6000 MSL 270° 45 mph
7000 MSL 270° 53 mph
8000 MSL 260° 71 mph
9000 MSL 270° 72 mph

7. On 2 March 1949 Mr. JOHN M. DAVIS, Chief, Aircraft Communications, Allegheny County Municipal Airport, McKeesport, Pa., was interviewed concerning radio contacts made with aircraft in flight in the Pittsburgh area on 17 December 1948. Radio contacts are as follows:

0015 17 Dec 48 AF 8801 5 min NE Pitts at 5000 VFR
0023 AF 8801 over GRP at 3000 VFR
0201 NAN 47172 over Pitts 8000 VFR

8. On 2 March 1949 Mr. HENRY A. HUDSON, Tower Operator, Allegheny County Municipal Airport, McKeesport, Pa., was interviewed and the following information regarding incoming and outgoing flights of aircraft was obtained:

	<u>Incoming</u>	<u>Outgoing</u>
17 Dec	0025 TWA 3011 fr LaGuardia	0025 Capital 74 to Washington
	0031 Capital fr Washington	0028 Capital 22 to Washington
	0159 Capital fr Newark	0100 TWA 3011 to St. Louis
	0215 Capital fr Newark	0111 TWA 1031 to Columbus
		0116 TWA 1433 to Columbus

AT CORAOPOLIS, PA.

9. On 2 March 1949 a check of the files of the Airway Communication Service, Greater Pittsburgh Airport, Coraopolis, Pa., for 17 December 1948, revealed the following information regarding incoming and outgoing flights of military aircraft:

<u>Incoming</u>	<u>Outgoing</u>
0029 B-25 fr Cleveland	0153 C-45 to Middletown

Radio check-in call C-45 at 0220 enroute from Orchard Place to Bolling AFB. There were no local flights from GRP after 1800 16 December 1948.

AT AMBRIDGE, PA.

10. On 24 February 1949 Mr. E. L. CRANE, Industrial Relations Supervisor, Spang-Chalfant Corp., Ambridge, Pa., was interviewed in his office regarding CHARLES WERNER and PETER HILDEBRAND. CRANE stated in substance that although he never had occasion to have personal contact with either of the men, he

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

24-9

could definitely state that from the viewpoint of employer-employee relationship their work, character, and integrity were beyond reproach. Each man has been employed in the freight yards for over twelve (12) years and on no occasion have given cause for suspension or reprimand. Both are considered good, solid American citizens and typical family men of the community. Physically and mentally, both men are in excellent condition due to the nature of their work, which necessitates coordination and good eyesight as their work in the switchyards is at night.

11. On 24 February 1949 Mr. PAUL MARTIN, Yardmaster, Spang-Chalfant Corp., Ambridge, Pa., was interviewed in his office and stated he is personally acquainted with both men for over twelve (12) years, both as a friend and supervisor. WERNER is night yardmaster under MARTIN, and HILDEBRAND is a car conductor, responsible for the shifting and making up of freight cars in and out of the Corporation's yards. MARTIN stated that in his estimation, both men are good, sober, citizens whose veracity he would never doubt, and on no occasion has he had cause to mistrust or reprimand either man.

AGENCY

12. On 24 February 1949 the following agencies were checked with negative results:

Police Department, New Brighton, Pa.
Constable, Freedom, Pa.

Inclosures:

FOR CG, AMC, WRIGHT-PATTERSON AFB, DAYTON, OHIO

1. The signed statements of PETER HILDEBRAND and CHARLES WERNER, dated at Beaver County, Pennsylvania, 3 March 1949.
2. Exhibit "A" - a rough sketch of the objects drawn by CHARLES WERNER.
3. Exhibit "B" - a page from an unnamed magazine depicting objects similar to the ones sighted by CHARLES WERNER.

FOR DISTRICT OFFICE NO. 5, WRIGHT-PATTERSON AFB, DAYTON, OHIO

Copy of statement of PETER HILDEBRAND and CHARLES WERNER, dated at Beaver County, Pennsylvania, 3 March 1949.

FOR HQ, OSI, WASHINGTON, D.C.

Copy of statement of PETER HILDEBRAND and CHARLES WERNER, dated at Beaver County, Pennsylvania, 3 March 1949.

CLOSED

5

~~CONFIDENTIAL~~

COUNTY OF DEAVEN
STATE OF PENNSYLVANIA)

MAR 3 1949

As requested by Mr. Harry H. Perry, Jr. who has identified himself as a Special Agent of the Office of Special Investigations, Inspector General, USAF, and in the presence of Mr. Toney Zevrais, who has also identified himself as a Special Agent of the Office of Special Investigations, Inspector General, USAF, I, Charles Werner, 1000 6th Avenue, Freedom, Pennsylvania, do make the following statement:

On 17 December 1948, at approximately 1:30 A. M. while working as Yardmaster in the railroad yard of the Spang-Chalfont Corporation, Ambridge, Pennsylvania, I sighted what appeared to be a formation of spherical objects, approximately the dimensions of a late full moon. I first sighted these objects above the horizon to the north, at a 45° ANGLE approximately 200 15" W. Longitude and 400 30" N. Latitude. The objects appeared to be moving at a high rate of speed in a southerly direction until almost directly overhead. At this time the topmost object appeared to dive beneath the formation and accomplish a sharp 90° turn to the right, this maneuver being followed by the rest of the formation. The objects then disappeared very high above the horizon towards the west where they faded from my view. All movements of the objects appeared to be definite as in controlled flight. The objects seemed to be whitish or luminescent and no exhaust vapors or flames were evident. At the time of my sighting the sky was clear, moonlit, and visibility was excellent. These objects were visible for approximately 30 seconds and ^{DID NOT APPEAR} ~~appeared~~ to be rotating around their axis. No lights other than the overall luminescence of the objects were apparent and no antennae, wings, fins, projections, propellers, slots, ducts or openings were visible at the time of the sighting. I was standing near a railroad switching locomotive and therefore could not definitely state whether or not the objects made any noise.

Charles R Werner
CHARLES WERNER

DEPARTMENT OF THE ARMY
STAFF MESSAGE CENTER
INCOMING CLASSIFIED MESSAGE

WmJ

~~SECRET~~
PRIORITY

PARAPHRASE NOT REQUIRED

From: CO Kirtland AFB Albuquerque New Mexico
To: CSAF Wash DC attn Dir of Spec Investigations
Nr: OSI-1-13C 23 Feb 49

No instructions and/or equipment furnished this office by Air Materiel Command. Were advised by Air Materiel Command that representative would attend conference here 16 Feb 49. No representative attended.

CLASSIFICATION CANCELLED
BY AUTHORITY OF THE DIRECTOR OF SPEC INV
BY KURT K. KUNZE, Capt, USAF
Historian
8 DEC 1975
DATE

1751

ACTION: AF

USAF

DIST

ACTION

CM IN 5549 (24 Feb 49)

~~SECRET~~ mes/D
RC 5/24

CSI

24 185 45
UNITED STATES AIR FORCE
THE INSPECTOR GENERAL

FEB 24 1 12 PM '49

OFFICE OF
SPECIAL INVESTIGATIONS

UNCLASSIFIED

ACTION COPY

COPY No.

PRIORITY

Hq USAF
AFCSI

73231

21 February 1949

Captain Koch

XX

CONGEN Kirtland AFB New Mexico

Pass to District Commander, 17th OSI District from AFCSI reur OSI 3 110
dtd 18 February 1949

Advise this office soonest instructions and/or equipment furnished
you by Air Materiel Command regarding aerial phenomena.

CLASSIFICATION CANCELLED	
BY AUTHORITY OF THE DIRECTOR OF SPECIAL INVESTIGATIONS	
BY	KURT K. KUNZE, Capt, USAF
	Historian
	3 DEC 1975
DATE	

OSI 2 110 is ON IN 4712 (19 Feb 49)

WILLIAM M. TURNER, Lt. Colonel, USAF

24	185-	44
AFCSI		
UNITED STATES AIR FORCE		
THE INSPECTOR GENERAL		
OFFICE OF SPECIAL INVESTIGATIONS		

UNCLASSIFIED

AFCSI

Feb 24 1949
BTK

DEPARTMENT OF THE ARMY
STAFF MESSAGE CENTER
INCOMING CLASSIFIED MESSAGE

PARAPHRASE NOT REQUIRED

SECRET
PRIORITY

From: COMGEN Kirtland AFB New Mexico
To : Dept of the Air Force for CSUSAF attn Director of
Special Investigations, Office of The Inspector
General Wash DC; COMGENAMC WP AFB Dayton Ohio
Nr : OSI 2 11C 18 February 1949

Refile 24-8, subj, unknown aerial phenomena, time 1757
17 Feb 49, location west of Albuquerque, 6 degrees above horizon;
color, red yellow; duration 6 to 9 minutes; shape, elliptical;
size, length diameter of full moon, width, one third diameter
of full moon; trajectory, west to east climbing three degrees
make definite turn to south, observer, Civil Engineering
Professor Univ of New Mex, Military Guards Sandia Base,
including Officer of Guard. Local sensitive installations
concerned. Scientific personnel and equipment unavailable
this office. Dr La Pax only consultant engaged full time
academically at Univ New Mex. Request assistant and or
advice. Please reply.

USAF

DIST

ACTION

CSI

INFO

GIN

OPO

ODC

OOP

MRD

MDC

1741

CLASSIFICATION CAN BE DELETED BY AUTHORITY OF THE SECRETARY OF DEFENSE	
BY KURT K. KUNZE, Capt, USAF	DATE 3 DEC 1975
BY Historian	

ACTION: AF

INFO : ID, PO

CM IN 4712

(19 Feb 49)

RC 1/19

SECRET

UNITED STATES AIR FORCE
THE INSPECTOR GENERAL

FEB 21 9 36 AM '49

OFFICE OF
SPECIAL INVESTIGATIONS

ACTION COPY

UNCLASSIFIED

COPY No.

15



~~CONFIDENTIAL~~

CSP

PRIORITY

Hq USAF
AFCSI

72231

3 February 1949

Mr. Koch

XXX

CONGENAMC Wright-Patterson AFB Dayton Ohio

PRIORITY

CONGENAMC pass to MCIAXO-3 From AFCSI 51074

Following information received this date from CO Kirtland AFB New Mexico: "subject; unknown, aerial phenomena, file number 24-8. Sighting of identical object reported at 2255Z 30 Jan 49 by aprx 30 people. Estimate at least 100 total sightings. AEC, AFSWP, 4th Army, local commanders perturbed by implications of phenomena. Sighting reported from El Paso, Albuquerque, Alamogordo, Roswell, Socorro, and other locations. All appear to be same object at different points of trajectory. Unless instructed to contrary this office will make all out investigation with view to location of impact point if any." CO Kirtland AFB has been advised by this headquarters to conduct investigation and to keep your office informed of results.

24 196 43 X
UNITED STATES AIR FORCE
THE INSPECTOR GENERAL

FEB 4 10 01 AM '49

CONFIDENTIAL

HANDLE AS _____
CORRESPONDENCE
PARAGRAPHS 511 AND 60 (4)
AR 380-5.

CLASSIFICATION CANCELLED
BY AUTHORITY OF THE DIRECTOR OF SPECIAL INVESTIGATION

BY KURT K. KUNZE, Capt, USAF
Historian

9 DEC 1975

DATE

AFCSI

UNCLASSIFIED

CONFIDENTIAL

PRIORITY

5107A

CONFIDENTIAL

HANDLE AS
CORRESPONDENCE
PARAGRAPHS 511 AND 60 (4)
AR 280-8

CLASSIFICATION CANCELLED BY AUTHORITY OF THE DIRECTOR OF SEC LIA	
DATE	BY
FEB 3 23 10 24 49	DEC 1949

FEB 4 10 01 AM '49

CONFIDENTIAL

~~CONFIDENTIAL~~

CSI

PRIORITY

Hq USAF
AFCSI

PRIORITY

72231

3 February 1949

Mr. Koch

XXX

DISTRICT COMMANDER 17th OSI DISTRICT (IG) Kirtland AFB New Mexico

51073

From AFCSI reur OSI-1-9C

PRIORITY

Reurad OSI-1-9C dated 31 January 1949 authorization to proceed with investigation granted. This office transmitting information contained your message to Headquarters Air Materiel Command, Attention: MCIA XO-3. Request you keep that office informed of results as well as Headquarters OSI

--	--	--

UNITED STATES AIR FORCE
THE INSPECTOR GENERAL

OSI-1-9C is CM IN 121 (2 Feb 49)
FEB 4 10 01 AM '49

OFFICE OF
SPECIAL INVESTIGATIONS

WILLIAM H. TURNER, Lt Colonel, USAF

PRIORITY

~~CONFIDENTIAL~~
HANDLE AS
CORRESPONDENCE
PARAGRAPHS 511 AND 60 (4)
AR 380-5.

CLASSIFICATION CANCELLED
BY AUTHORITY OF THE DIRECTOR OF SPEC INV
KURT K. KUNZE, Capt, USAF
BY Historian
8 DEC 1975
DATE

~~CONFIDENTIAL~~

UNCLASSIFIED

DEPARTMENT OF THE ARMY
STAFF MESSAGE CENTER
INCOMING CLASSIFIED MESSAGE

PARAPHRASE NOT REQUIRED

~~CONFIDENTIAL~~
PRIORITY

From: CO Kirtland AFB New Mexico

To: Chief of Staff USAF attn Dir of Special Investigations
Officer of the Inspector General

Nr: OSI-1-9C

31 January 1949

Reference previous reports, subject; unknown, aerial phenomena, file number 24-8. Sighting of identical object reported at 2255Z 30 Jan 49 by aprx 30 people. Estimate at least 100 total sightings. AEC, AFSWP, 4th Army, local commanders perturbed by implications of phenomena. Sighting reported from El Paso, Albuquerque, Alamogordo, Roswell, Socorro, and other locations. All appear to be same object at different points in trajectory. Unless instructed to contrary this office will make all out investigation with view to location of impact point if any. Request reply.

CLASSIFICATION CANCELLED ~~CONFIDENTIAL~~ USE ONLY
BY AUTHORITY OF THE DIRECTOR OF SPEC INV

BY KURT K. KUNZE, Capt, USAF

Historian

3 DEC 1975

DATE

ACTION: AF

UNITED STATES AIR FORCE
THE INSPECTOR GENERAL

INFO: ID, FEB 2 3 40 PM '49

CM IN 321

OFFICE OF
SPECIAL INVESTIGATION

(2 Feb 49)

~~CONFIDENTIAL~~ dgk/B

RC 5/1

USAF

DIST

ACTION

CSI

INFO

CPM

1705

UNCLASSIFIED

COPY No.

15

~~CONFIDENTIAL~~

HEADQUARTERS UNITED STATES AIR FORCE THE INSPECTOR GENERAL OFFICE OF SPECIAL INVESTIGATIONS REPORT OF INVESTIGATION		FILE NO. 24-8	DATE 11 February 1949
TITLE Aerial Phenomena		REPORT MADE BY PAUL L. RYAN	REPORT MADE AT DO #17, Kirtland AFB
		PERIOD 31 Jan, 1-5 Feb 1949	OFFICE OF ORIGIN DO #17, Kirtland AFB
		STATUS RUC	
		CHARACTER Special Inquiry	
		REFERENCE Telephone call from Hq 17th Dist OSI, Kirtland AFB, on 31 Jan 49	
SYNOPSIS <p>Acting on telephonic instructions received from DO #17, Kirtland AFB, Kirtland Field, New Mexico, on 31 January 1949, in which Mr. CHARLES NAFFZIGER, JR., Administrative Supervisor, advised that a peculiar light or aerial phenomena had been observed at 1755 hours, 30 January 1949, in the vicinity of Walker AFB, Roswell, New Mexico, and that Sgt EDWARD P. McCRARY, a tower control operator of Walker AFB, be contacted for information. The following action was taken: A check with Police Department, Sheriff's Office, Municipal Airport, the Continental, Pioneer, and Charter Service Air Lines in Roswell, New Mexico, was made to determine if any of these agencies had received any reports pertaining to this phenomena. Results negative. Eight persons who had witnessed this aerial phenomena were interviewed at Walker AFB, and grid coordinates with an engineer's transit reading of azimuths and elevations was taken at points of observation on Walker AFB. An almost house-to-house search was conducted East of Roswell by OSI and Dr. LINCOLN LA PAZ of the University of New Mexico for all possible witnesses. This search extended throughout southeast New Mexico and West Texas. The search for additional information extended North of Roswell to Clovis, New Mexico, and South of Roswell to a point about fifteen miles South of Artesia, New Mexico. In Artesia, this questioning elicited the information that about the approximate date of the appearance of this meteor (interviewees could not recall the exact date), a noise resembling somewhat the sound made by the robot bombs utilized by Germany against England</p>			
DISTRIBUTION CO, DO #17 (Action Copy) 4 OSI Hq 2 File 2	ACTION COPY FORWARDED TO CO, DO #17, Kirtland AFB		FILE STAMP CLASSIFICATION CANCELLED BY AUTHORITY OF THE DIRECTOR OF SPEC INV BY KURT K. KUNZE, Capt, USAF Historian 8 DEC 1975 DATE
APPROVED <i>Doyle Rees</i> DOYLE REES Lt. Colonel, USAF DISTRICT COMMANDER			

AFCSI FORM 4
23 JULY 48

~~CONFIDENTIAL~~

UNCLASSIFIED

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

~~CONFIDENTIAL~~

in 1944 was heard by two men. An aerial and ground search conducted in the vicinity of Lamesa, Texas, for physical evidence was negative. A report from a ten year old boy in Amherst, Texas, reporting a sound accompanying with the aerial phenomena, was obtained.

DETAILS:

1. A telephone call from Mr. CHARLES NAFFZIGER, Administrative Supervisor, DO #17, Kirtland AFB, Kirtland Field, New Mexico, on the morning of 31 January 1949, instructed this office to ascertain the azimuth, elevation, and direction of a peculiar light observed near Walker AFB at 1755 hours, 30 January 1949, by Sgt EDWARD P. McCRARY.

2. This is a joint report of Special Agents JACK B. WILLIAMS, LEWIS S. RICKETT, and the writer.

AT ROSWELL, NEW MEXICO

3. The Municipal Airport, Sheriff's Office, and Police Department of Roswell, New Mexico, were contacted on 31 January 1949 and advised that no report had been received in their agencies of an aerial phenomena the preceding day. The Continental, Pioneer, and Charter Service Air Lines stated on this date that no flares had been utilized by any of their personnel in or near Roswell.

AT WALKER AFB, ROSWELL, NEW MEXICO

4. Sgt RAYMOND D. PLATT, AF 12254077 (MOS766); Sgt EDWARD P. McCRARY, AF 18141615 (MOS 552); S Sgt DONALD J. McKENNA, AF 19244055 (MOS 561); Cpl WILLIAM J. BRYANT, AF 14268902 (MOS 552); and Pvt ROGER M. JOHNSON, AF 31271834 (MOS 552), all of 1900-4 AACS Detachment, Walker AFB, Sgt DANIEL SULLIVAN, AF 11108867 (MOS 213); and JAN MEOLI, Special Agent of Office of Special Investigations, Walker AFB, Roswell, New Mexico, were interviewed on 31 January 1949 and the following facts obtained: On 30 January 1949 at 1755 hours, a blue-green light resembling a flare was observed travelling on a horizontal line. This light came out of the North headed South at an estimated altitude of 2,000 feet, moving slowly, and disappeared in the vicinity of SE Walker Air Force Base. To some observers, this phenomena disappeared in its entirety while other statements mentioned a disappearance as a disintegration into a shower of smaller lighted fragments such as a shower of sparks. The only sound accompanying this object was heard by Sgt McCRARY, who described it as a high pitched whining noise similar to that of a blowtorch. All of these observers sighted this light from a position West of it while facing East.

5. Obtaining the services of an engineer's transit, the following information was secured by making a reading from points of observation:

First observed at 52° magnetic.
Last observed at 87½° magnetic.
Elevation of 22°.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

The following grid coordinates were secured:

- a. Center of Walker AFB: 104° 31½' W
33° 18' N
- b. Control Tower (reading from center of WAFB: 75' N
5470' W
- c. Tennis Courts: 1125' N
5630' W
- d. Base Theater: 1925' N
5060' W

6. An interview with Cpl JOHN G. THADEN, AF 1320658 (MOS 778), 1900-4 AACCS Detachment, Walker AFB, Roswell, New Mexico, on 1 February 1949, elicited information identical with the other observers.

7. On 2 February 1949, an attempt was made to contact any person who might have observed this phenomena from the East or facing West. This questioning continued for about forty (40) miles East of Roswell with negative results.

8. Special Agent RICKETT continued this search throughout Southeast New Mexico and West Texas from 1400 hours, 2 February 1949, to 2400 hours, 5 February 1949, in the company of Dr. LINCOLN LA PAZ of the University of New Mexico. All information obtained during this part of the investigation was retained by Dr. LA PAZ and will be incorporated into his report to OSI.

AT CLOVIS, NEW MEXICO

9. Acting on information relayed to the OSI from a Major GODSOE of Sandia Base stating the Sheriff at Clovis, New Mexico, had information pertaining to a meteor landing on a farm in the vicinity of Clovis, an attempt on 2 and 3 February 1949 to locate this farm in Clovis met with negative results. Questioning of persons and law enforcement agencies enroute to and in Clovis did not produce any information of a pertinent nature. The Sheriff at Clovis stated that he knew nothing of the meteor.

AT ROSWELL AND ARTESIA, NEW MEXICO

10. On 4 February 1949, a search was conducted South of Roswell to a distance of approximately fifteen (15) miles South of Artesia, New Mexico, to determine if possible the extent of observation of this aerial phenomena. Mrs. NELL ALBERTS, 506 West Main Street, Artesia, New Mexico, was questioned as to a light observed by her, and it was ascertained that she had witnessed this phenomena. A noise resembling a racing motorcycle was heard in the vicinity of Artesia on or about 30 January 1949 about 0530 hours. The people hearing this noise stated its duration was about three (3) minutes. Mr. WAYNE McAFEE and ROBERT D. PORTER, Allen Oil Company, East Main Street, Artesia, New Mexico, stated they had been separated by a distance of about three (3) miles at this time and both heard the noise. No directions, altitude, or speed was obtained because of the difficulties of locating a sound in the air. Both observers stated

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

positively that the sound was not emanating from an aircraft. When questioned as to the sound, McAFEE revealed the fact that as a soldier in the European Theater of Operations during the war, he had observed and heard many robot bombs (buzz bombs). According to McAFEE, the sound he heard was somewhat like the noise produced by these bombs.

AT AMHERST, TEXAS

11. In accordance with instructions from Dr. LA PAZ on 5 February 1949, in Lamesa, Texas, a trip was made to Amherst, Texas, for the purpose of interviewing Master MIKE DUFFY, the ten (10) year old son of Mr. M. DUFFY, President of the First National Bank, Amherst, Texas. An interview with this family confirmed the fact that young DUFFY had witnessed the aerial phenomena, with the added information that he had heard a rumbling noise emanating from it. The best description offered by this ten year old boy was its similarity to a short roll of thunder. No other member of this family had seen or heard anything out of the ordinary; this is explained by the fact that the boy was playing outdoors with his dog. No mention was made by DUFFY as to any peculiar actions on the part of this dog during the observation. DUFFY'S position when he observed this light was facing South. A highway running North and South is located about a mile and a half to the West of his home. No railroad was observed South of his home. Approximately thirty (30) other persons questioned in this small town had not seen or heard anything with the exception of Miss PATSY CLEMENT, Clerk, First National Bank, Amherst, Texas. Miss CLEMENT stated that she was in a car heading South about twenty (20) miles North of Amherst on Highway 51 when she observed this red and blue light. Its direction at this time was South of her. An interrogation of Miss CLEMENT elicited information identical to the description of the phenomena. Mr. and Mrs. HAROLD CLEMENT (parents of Miss CLEMENT) were in the car and also witnessed the light. No sound was heard by these persons.

- RUC -

4
~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

CS1

HEADQUARTERS UNITED STATES AIR FORCE THE INSPECTOR GENERAL OFFICE OF SPECIAL INVESTIGATIONS REPORT OF INVESTIGATION		FILE NO. 24-8	DATE 9 February 1949
TITLE SPECIAL INQUIRY (Aerial Phenomena) 30 January 1949		REPORT MADE BY EDGAR J. BETHART	
		REPORT MADE AT DO #17, Kirtland AFB	
		PERIOD 31 January; 1, 2, 3, 4, 8 February 1949	
		OFFICE OF ORIGIN DO #17, Kirtland AFB	
		STATUS REFERRED UPON COMPLETION	
CHARACTER SPECIAL INQUIRY			
REFERENCE Telephonic request from Captain MELVIN NEFF, on 31 January 1949.			
SYNOPSIS This investigation was requested by Captain MELVIN E. NEFF, 17th District OSI (IG) USAF. Seven (7) people were interviewed and six (6) readings were taken with a transit in an effort to locate the azimuth of the aerial phenomena.			
<div>CLASSIFICATION CANCELLED BY AUTHORITY OF THE DIRECTOR OF SPEC INV BY KURT K. KUNZE, Capt, USAF Historian 3 DEC 1975 DATE</div>			
DISTRIBUTION DO #17, Kirtland AFB 4 (Action Copy) OSI, Headquarters 2 File 2	ACTION COPY FORWARDED TO DO #17, Kirtland AFB		FILE STAMP 24-185-43 FEB 23 3 46 PM '49 OFFICE OF SPECIAL INVESTIGATIONS
APPROVED A. C-MURRELLE, II Captain, USAF Acting DISTRICT COMMANDER		UNCLASSIFIED	

~~CONFIDENTIAL~~

REPORT OF INVESTIGATION THE INSPECTOR GENERAL OFFICE OF SPECIAL INVESTIGATIONS HEADQUARTERS UNITED STATES AIR FORCE		TITLE SPECIAL INQUIRY (Aerial phenomena) 30 January 1949
FILE NO. 21-8	DATE 21 January 1949	CHARACTER SPECIAL INQUIRY
REPORT MADE BY TO WIT, KIRKMAN, JR.	REPORT MADE AT 31 January 1949	REFERENCE Report only request from Captain W. H. ... on 3 January 1949.
PERIOD 31 January 1949	OFFICE OF ORIGIN TO WIT, KIRKMAN, JR.	SYNOPTIC This investigation was requested by ... in (1) ... (2) were ... in ... of ... the phenomena.
STATUS PENDING	ACTION COPY FORWARDED TO FILE STAMP	DISTRIBUTION TO WIT, KIRKMAN, JR. (action copy) OSI, Headquarters 31
APPROVED [Signature] Captain, USAF Active District Commander		

CLASSIFICATION CANCELLED BY AUTHORITY OF THE DIRECTOR OF SEC INV
 BY _____
 DATE _____

~~CONFIDENTIAL~~

DETAILS:

1. This investigation is predicated upon a telephonic request by Captain MELVIN E. NEFF, 17th District OSI (IG) USAF on 31 January 1949 to obtain all pertinent data in connection with an aerial phenomena seen in the vicinity of Alamogordo, New Mexico on 30 January 1949, at approximately 1800 hours.

2. On 1 February Major JAMES C. PETERSEN, AO-561833, Adjutant, Holloman AFB, Alamogordo, New Mexico advised that on 30 January 1949 at approximately 1800 hours, he sighted a single bright green object in an Easterly direction. PETERSEN hesitated to estimate the altitude or distance of the object. PETERSEN described the object as a bright green ball of flame traveling in a Southerly direction, without evidence of smoke or a trail of any kind. PETERSEN advised that there were no clouds and that the object did not make any noise to his knowledge. PETERSEN advised that the object seemed "to fizzle out" in the air.

3. On 2 February 1949, the writer set up a transit at the approximate location where Jamor PETERSEN sighted the object and obtained the following readings:

Location: $33^{\circ} 56'$ North and $106^{\circ} 05\frac{1}{2}'$ West (Holloman AFB)

Object First Sighted: 55° Magnetic North and 3° elevation.

Object Last Sighted: 63° Magnetic North and $3\frac{1}{2}^{\circ}$ elevation.

4. On 3 February 1949, at the Office of Special Investigations, Holloman AFB, the writer interviewed Mr. WILFRED T. MARTIN, electronics technician with Boeing Aircraft Company, Holloman AFB, who advised that on 30 January 1949 at approximately 1800 hours, while in the vicinity of Tularosa, New Mexico, and in the company of Sgt. MAURICE C. ANTHON, AF-20923264, Holloman AFB, he saw a single, bright green ball of fire to the East. The ball of fire seemed to be traveling in a southerly direction. MARTIN believed the object to be at an elevation of about 15° but declined to make an estimate of his distance from the object. MARTIN advised that the ball was visible for approximately 10 seconds. MARTIN stated that there was no apparent exhaust to the object, nor were there any clouds in the sky. MARTIN stated that the object seemed to die out of its own accord and did not explode.

5. On 4 February 1949, Pfc IRA W. VAIL, AF-16214526, Weather Detachment, Holloman AFB, Alamogordo, New Mexico advised that he had seen a green ball of flame with a trail of some kind in an Easterly direction. VAIL described the object as traveling in a Southerly direction and added that the object was visible to him for approximately 6 seconds. VAIL described the object as being bright green and disappeared without an explosion but by merely seeming to burn out. VAIL advised that there were no clouds and no apparent wind, and that the object was soundless.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

The writer set up a transit at the exact location from where Pfc VAIL sighted the object and obtained the following readings:

Location: $33^{\circ} 56'$ North and $106^{\circ} 05\frac{1}{2}'$ West (Holloman AFB)

Object First Sighted: 38° Magnetic North 11° elevation.

Object Last Sighted: 75° Magnetic North and 3° elevation.

6. Mr. LEO B. ~~CARTER~~, 805 Virginia Avenue, Alamogordo, New Mexico was interviewed on 8 February 1949. Mr. CARTER advised that his position at the time of the sighting was approximately 3 miles South of Three Rivers, New Mexico, but that he was not positive inasmuch as a Mr. JOHN D. UNPHRESS, 411 - 13th Street, Alamogordo, New Mexico, was in the car with him and UNPHRESS believed that they were not at Three Rivers when the object was sighted. The description of the object by CARTER was that it was a longish object, green with a white flame in front. CARTER added that he saw the object for about 15 seconds. An attempt was not made to take transit readings with Mr. CARTER because of his indeterminate position at the time of his sightings. Other than the difference of the shape of the object, the description given by CARTER concurred with the other description noted herein.

AT TULAROSA, NEW MEXICO

7. Sgt. MAURICE C. ~~ANTHON~~, AF-20923264, Holloman AFB, Alamogordo, New Mexico was interviewed on 1 February 1949 and made the following statement;

"On the 30th of January 1949 at approximately 1800 hours, while in the company of Mr. WILFORD T. MARTIN of Boeing Aircraft, I observed an object that appeared to be traveling diagonally across in front of me, at an angle of 35 to 40 degrees above my line of sight. Its distance seemed very close and appeared to be traveling very slowly. The object was in my sight for approximately three or four seconds. The actions of said object during this time were as follows:

Gentle downward glide; bright burning (Green and yellowish light) a fizzling out and then a bright burning, and then appeared to die out. (This could have been the effects of its passing beyond my view).

My direction of travel was nearly due East, thus the object's direction was East-Southeast or Southeast. The weather at that time was clear and cold, no ground wind and no indications of upper winds. My location was West of Tularosa, New Mexico, beyond the railyards of the Southern Pacific Railroad."

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

8. On 1 February 1949, the writer set up a transit at the approximate location where Sgt. ANTHON sighted the object and obtained the following readings:

Location: $33^{\circ} 04'$ North and $106^{\circ} 02'$ West

Object First Sighted: 47° Magnetic North and $26\frac{1}{2}^{\circ}$ elevation.

Object Last Sighted: 65° Magnetic North and 26° elevation.

AT WHITE SANDS NATIONAL MONUMENT, NEW MEXICO

9. On 3 February 1949, the writer, accompanied by Mrs. ROBERT R. JOHNS, 1309 9th Street, Alamogordo, New Mexico and Mrs. EDGAR J. BETHART, 1205 $\frac{1}{2}$ michigan Avenue, Alamogordo, New Mexico, attempted to locate in the White Sands National Monument the spot from which the object had been sighted on 30 January 1949, at approximately 1755 hours. Because of the may devious turns of the road, only an approximate location could be established. Through the use of a transit the following readings were obtained: Location $33^{\circ} 49'$ North and $106^{\circ} 13'$ West.

a. Mr. EDGAR J. BETHART

First sighted object: 55° Magnetic North and 12° elevation.

Last sighted object: 60° Magnetic North and 10° elevation.

b. Mrs. ROBERT R. JOHNS

First sighted object: 68° Magnetic North and 20° elevation.

Last sighted object: 80° Magnetic North and 19° elevation.

c. Mrs EDGAR J. BETHART

First sighted object: 65° Magnetic North and 11° elevation.

Last sighted object: 72° Magnetic North and 8° elevation.

All of the above concurred in the description of the object as being a single, bright burning green object, which was in view approximately 3 seconds. Body had a gentle downward glide and seemed to fizzle out with the light becoming less intense and finally disappearing altogether. Angle of elevation was estimated above with transit and none would venture a guess as to the distance of the object. Original statements were to the effect that object appeared to be between the Base and the White Sands, located to the West of the Base.

- REFERRED UPON COMPLETION TO THE OFFICE OF ORIGIN -

~~CONFIDENTIAL~~

Security
WMD

**DEPARTMENT OF THE ARMY
STAFF MESSAGE CENTER
INCOMING CLASSIFIED MESSAGE**

**ORIGINAL
PRIORITY**

PARAPHRASE NOT REQUIRED

From: COMGENAMC Wright-Patterson AFB Ohio cite COWPPFSC

To: CO Flight Service Wash DC

Nr: AT-542

7 February 1949

Unidentified flying object report. *Ft Knox*

Location and time of sighting: Godman AFB Ft Knox Ky
7 Feb 1949 0250 eastern. Weather at the time: 0230
eastern weather clear 10 miles visibility 1016.3 MB, temp
31, dew point 29, wind west north west at 7, Kolzman
setting 29.99. 0330 eastern weather: clear 10 miles
visibility 1016.9 MB, temp 29, dew point 26, wind north
west at 4, Kolzman setting 30.01.

Names occupations and addresses of witnesses:
Sgt Donald E Ledbetter Tower Operator Fort Knox Ky, PFC
Richard G Dumphy Weather Observer Fort Knox Ky, PFC Richard
E Peterman Weather Observer Fort Knox Ky, Cpl Charles L
Rogers occupation unknown Fort Knox Ky.

Photographs of objects if available: none available.
Sketches of objects configuration: none. Object sighted:
number: 1. Shape: no report, size: no report, color: bright
green yellow red, speed: unknown, heading: south west from
Godman Field, maneuverability: object appeared to be rotating,
attitude, horizontal angle 242.5 degrees, vertical angle
03.6 degrees. Sound: no report, exhaust trail or not: none.
General remarks: at 0250 eastern bright object sighted south
west of Fort Knox Ky by weather observers. Traced on
Theodolite. Object appeared to be rotating with green,
yellow and red colors. The object were dimmer as time
passed. At 0310 eastern object disappeared in south west
completely after a series of bright flashes.

ACTION: AF

INFO : ID, PO

CM IN 1714

(8 Feb 49)

dwn/C

24 185 42
UNITED STATES AIR FORCE
THE INSPECTOR GENERAL

FEB 8 4 17 PM

OFFICE OF
SPECIAL INVESTIGATION

CLASSIFICATION CANCELLED
BY AUTHORITY OF THE DIRECTOR OF SPEC INV

KURT K. KUNZE, Capt, USAF

Historian

8 DEC 1975

COPY No.

22

~~CONFIDENTIAL~~

251

HEADQUARTERS UNITED STATES AIR FORCE THE INSPECTOR GENERAL OFFICE OF SPECIAL INVESTIGATIONS		FILE NO. 24-8	DATE 1 February 1949
REPORT OF INVESTIGATION		REPORT MADE BY Bernard H. Fowle	
TITLE "GREEN FIREBALL"		REPORT MADE AT DO #17, Kirtland AFB	
		PERIOD 31 January 1949	
		OFFICE OF ORIGIN DO #17, Kirtland AFB	
		STATUS PENDING	
CHARACTER <i>Biggs AFB Green Fireball</i>			
REFERENCE Telephonic instructions from District Office 17, OSI Kirtland AFB 31 January 1949			
SYNOPSIS Investigation requested by the District Commander, 17th District OSI (IG), Kirtland AFB, Kirtland Field, New Mexico. At approximately 1754 hours, 30 January 1949, a Green Fireball was sighted by the Control Tower operators at Biggs AFB and the Municipal Airport, El Paso, Texas, on a true bearing of approximately 50 degrees from the towers. The fireball was travelling approximately 4 degrees above the horizon in a northwest to southeasterly direction. After travelling approximately 5 degrees on the compass rose it broke into several pieces and disappeared.			
<div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"><p>CLASSIFICATION CANCELLED CONFIDENTIAL BY AUTHORITY OF THE DIRECTOR OF SPEC INV BY <u>KURT K. KUNZE, Capt, USAF</u> Historian 3 DEC 1975 DATE</p></div> <div style="text-align: right; margin-top: 20px;"><i>Feb b311</i></div>			
DISTRIBUTION CO, Kirtland AFB (Action copies) 4 Hqs, OSI 2 File 2		ACTION COPY FORWARDED TO Commanding Officer Kirtland Air Force Base Kirtland Field, New Mexico	
		APPROVED <i>A. C. Murrelle, II</i> A. C. MURRELLE, II Captain, USAF Actg. DISTRICT COMMANDER	
		FILE STAMP 24 185 41 UNITED STATES AIR FORCE THE INSPECTOR GENERAL FEB 6 12 11 PM '49 OFFICE OF SPECIAL INVESTIGATIONS	

~~CONFIDENTIAL~~

UNCLASSIFIED

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

FILE NO. _____
REPORT MADE BY _____
REPORT MADE AT _____
PERIOD _____
OFFICE OF ORIGIN _____
STATUS _____

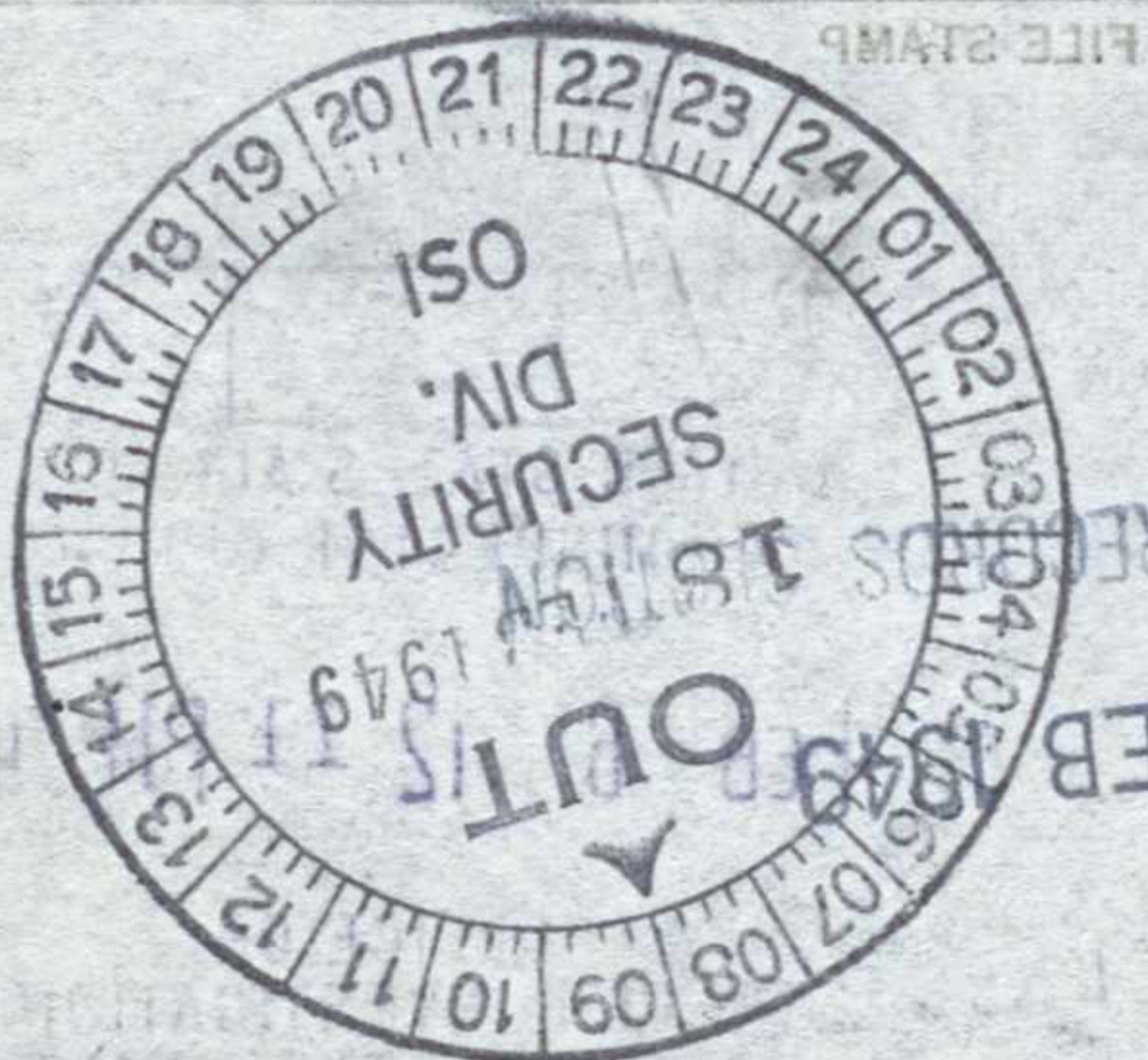
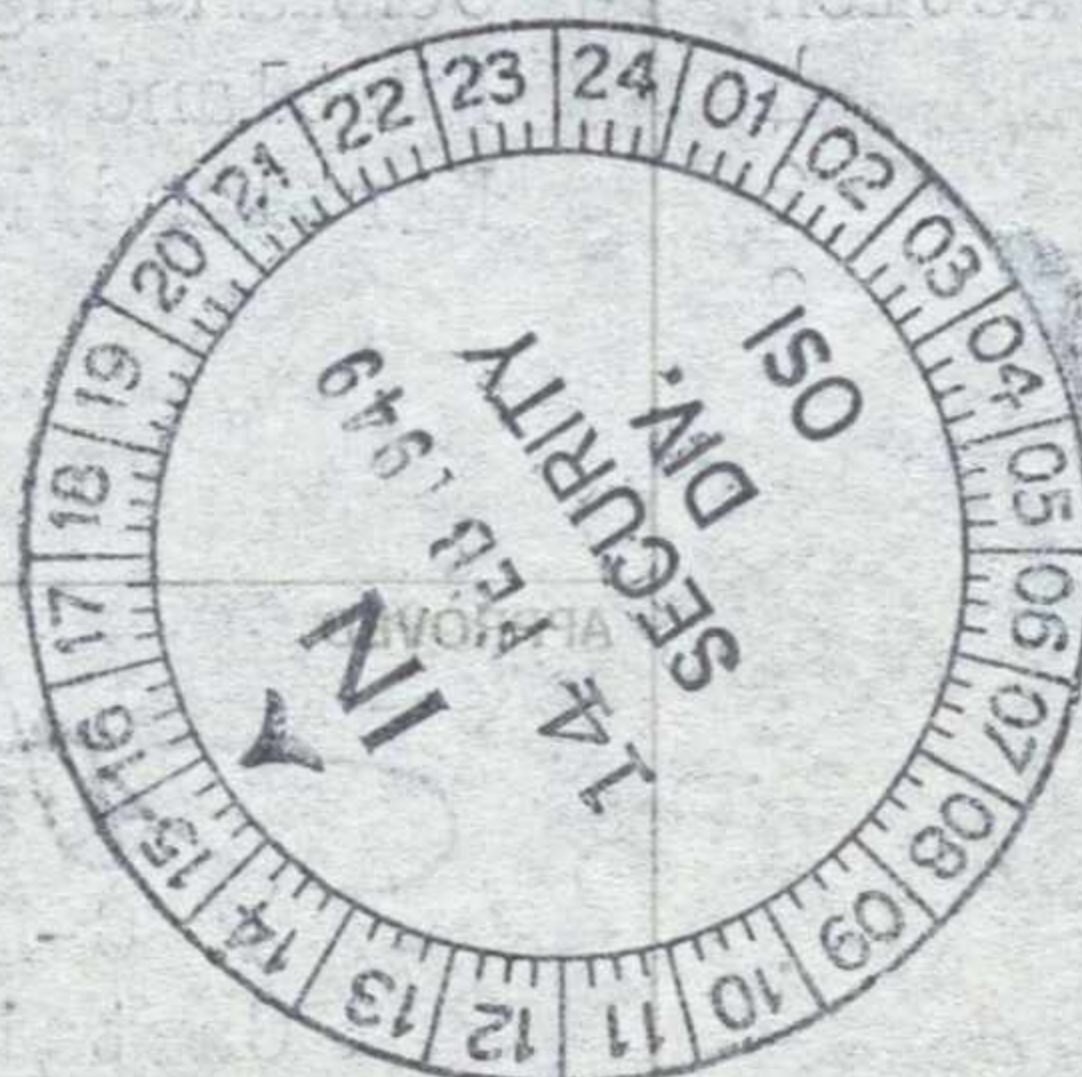
CHARACTER

REFERENCE

SYNOPSIS

Investigation requested by the District Commander, Fifth District OSI (11),
Hickam Field, Hawaii. As a result of this investigation, it was determined
that a certain individual was engaged in the control of lawless operations
at Hickam Field and the Hawaiian Islands. It was found that this individual
was approximately 50 degrees from the towers. The individual was found to
be approximately 100 feet above the ground in a position to observe the
airfield. It was found that this individual was approximately 5 degrees on the compass
into several places and directions.

CLASSIFICATION CANCELLED
BY AUTHORITY OF THE DIRECTOR OF SEC INV
BY _____
DATE _____



~~CONFIDENTIAL~~

DETAILS:

1. This investigation predicated by a telephonic request from the District Commander, 17th District OSI (IG), Kirtland AFB, Kirtland Field, New Mexico on 31 January 1949.

AT BIGGS AFB, TEXAS

2. On 31 January 1949 S Sgt MONTFORD H. BENSON, AF16 015 079, 1900th AACS Sqn, Biggs AFB and Pfc BILLIE C. ASHEY, AF16 280 635 of the 1900th AACS Sqn, Biggs AFB were interviewed relative to the Green Fireball they had seen on 30 January 1949 from the Control Tower, Biggs AFB, where they were on duty as Operators. They stated that between 1751 and 1754, 30 January 1949, they saw a green ball of fire on the horizon on a True Bearing of approximately 55 degrees from the Biggs Tower (Coordinates: 31-50N 106-23W). This ball of fire was approximately 3 to 5 degrees above the horizon travelling in a northwest to southeasterly direction. They stated that the ball of fire lost no altitude during its travel and at the end of travel it enlarged slightly, then disappeared quickly.

3. The reporting agent accompanied by the above named enlisted men took a transit to the control tower at Biggs AFB and with the aid of the above named men determined that the Green Fireball was first sighted at a true bearing of 55 degrees, and continued travel to a true bearing of 60 degrees. The elevation was determined to be 4 degrees above the horizon. Due to the fact that the time of the incident was just prior to nightfall the enlisted men could not be definitely sure of the exact locations. When asked if they knew of anyone else who had seen the Green Fireball, they stated that a Lt Colonel O. R. HANEY, AO-33748, 3310th Technical Training Wing, Scott Air Force Base, Scott Field, Illinois, and the tower operators at the El Paso Municipal Airport, had also seen it.

4. In an attempt to locate Lt Col HANEY it was learned that he had returned to his home station.

5. On 31 January 1949, Mr JOHN M. DUYKA, Jr., 201 Ramona Street, El Paso, Texas, Mr. ROBERT RIEDEL, 4415 Pershing Drive, El Paso, Texas, and Mr. HAROLD A. PARR, 3000 Idalia Street, El Paso, Texas, who are control tower operators at the El Paso Municipal Airport, were interviewed relative to the Green Fireball seen by them on 30 January 1949.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

DETAILS: (Continued)

They stated that they had seen a Green Fireball near the horizon at about 1800 on 30 January 1949. It commenced on a true bearing of approximately 45 degrees and ended on a bearing of approximately 50 degrees. It was above the horizon at approximately 4 degrees. The coordinates of the tower at the Municipal Airport, El Paso, Texas are 31-53N 106-24W. It was stated that the Fireball descended on approximately a 15 degree incline, then levelled off, gained momentum and broke into several pieces. As it broke up, it disappeared.

NOTE: In all cases during the interviews it was noted by the reporting agent that the people involved could not be specific as to their observations or descriptions either because of the lack of interest or failure to observe the incident very closely.

PENDING

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

op C 51

HEADQUARTERS UNITED STATES AIR FORCE THE INSPECTOR GENERAL OFFICE OF SPECIAL INVESTIGATIONS REPORT OF INVESTIGATION	FILE NO. 24-2	DATE 1 February 1949
	REPORT MADE BY HAROLD B. CHRISTENSEN	
	REPORT MADE AT DO #11, Tinker AFB, Oklahoma	
	PERIOD 25, 31 January 1949	
	OFFICE OF ORIGIN DO #17, Kirtland AFB, N. M.	
STATUS RUC		

CHARACTER
SPECIAL INQUIRY

REFERENCE
Ltr fr 17th OSI District, file 24-8, 20 January 1949

SYNOPSIS

Investigation requested by 17th District Office, Kirtland AF Base. On nights of 12 September, 5 and 12 December 1948, Mr. ~~HAROLD M. WRIGHT~~ observed a "green fireball" in southern Colorado. ~~WRIGHT~~, interviewed on 31 January 1949, stated "fireball" to be bright green and soundless. Unable to ascertain definite size, shape, speed, or altitude.

CLASSIFICATION CANCELLED
BY AUTHORITY OF THE DIRECTOR OF SPEC INV
BY **KURT K. KUNZE, Capt, USAF**
Historian
DATE **8 DEC 1975**

DISTRIBUTION DO #17, Kirtland AFB 4 OSI Hq 2 File 2	ACTION COPY FORWARDED TO DO #17	FILE STAMP <div data-bbox="1425 2058 1872 2616"><div>24 185 40</div><div>UNITED STATES AIR FORCE THE INSPECTOR GENERAL</div><div>FEB 4 5 21 PM '49</div><div>OFFICE OF SPECIAL INVESTIGATIONS</div></div>
	APPROVED Tyler M. Birch TYLER M. BIRCH Major, USAF Acting DISTRICT COMMANDER	

REPORT OF INVESTIGATION

OFFICE OF SPECIAL INVESTIGATIONS
THE INSPECTOR GENERAL
HEADQUARTERS UNIT

TITLE

CLASSIFICATION

BY

DATE

CLASSIFICATION CANCELLED BY AUTHORITY OF THE DIRECTOR OF SPEC INV

4-FEB 1949 5 11 PM '49

CIG MAIL & RECORDS SECTION

OUT
SECURITY
DIV.
OSI
17 FEB 1949

IN
SECURITY
DIV.
ISO
6 FEB 1949

4

DETAILS:

1. This investigation is predicated upon letter, 17th District Office of Special Investigations, Kirtland Air Force Base, Kirtland Field, New Mexico, dated 20 January 1949, stating MR. HAROLD M. WRIGHT, 315 Barfield Building, Amarillo, Texas, observed what he described as a "green fireball" upon three separate occasions.

2. Mr. WRIGHT was interviewed on 31 January 1949 and gave the following information:

On 12 September 1948, accompanied by Mr. Funk (initials unknown), a teacher at Moffat, Colorado high school, the first "fireball" was seen in the vicinity of Moffat, Colorado. It appeared to be a bright green falling star. On 5 December 1948, while traveling on U. S. Highway 160, in the vicinity of Blanca, Colorado, the "fireball" was again observed. Moving horizontally and westerly, at a very fast rate of speed, it once more appeared to be a bright green. WRIGHT stated that the "fireball" seemed closer and more brilliant than previously. It did not fall but "went out in midair." The "fireball" was last seen on 12 December 1948 in the vicinity of Monte Vista, Colorado, and again had the appearance of a bright green falling star. In the company of WRIGHT, at this time, was a Mr. CHARLES ELLIOTT, St. Louis Valley Cooperative, Monte Vista, Colorado. WRIGHT described this phenomena to the best of his ability but was unable to give concrete details regarding size, shape, location, etc.

3. During the interview, it appeared to this agent that WRIGHT was above-average in intelligence and that the "fireball" was not just a figment of his imagination.

4. Reference is made of radio reports in Oklahoma area stating "fireballs" were seen on night of 31 January 1949 in northern New Mexico.

- REFERRED UPON COMPLETION TO OFFICE OF ORIGIN -

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

C 51

HEADQUARTERS UNITED STATES AIR FORCE THE INSPECTOR GENERAL OFFICE OF SPECIAL INVESTIGATIONS		FILE NO.	DATE
REPORT OF INVESTIGATION		24-8	19 Jan 49
TITLE		REPORT MADE BY JACK L. BOLING	
<u>UNKNOWN</u> <u>(Aerial Phenomena)</u>		REPORT MADE AT DO #17, KIRTLAND AFB	
		PERIOD 6, 7, 17, 18 January 1949	
		OFFICE OF ORIGIN DO #17, Kirtland AFB	
		STATUS PENDING	
CHARACTER SPECIAL INQUIRY			
REFERENCE Reports of Investigation, DO #17, dated 13 and 22 Dec 48 and 4 Jan 49			
SYNOPSIS <p>Additional sighting on 5 December reported from Albuquerque. Sighting on 6 January 1949 reported from Los Alamos. Report of sighting from Kirtland Air Force Base, differing in several features from the usual received from Sandia Security. Unusual, unexplained sounds reported from Los Alamos. Sounds apparently originated in sky over station. No aircraft known to have been in area.</p>			
<div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: 80%;">CLASSIFICATION CANCELLED BY AUTHORITY OF THE DIRECTOR OF SPEC INV KURT K. KUNZE, Capt, USAF BY Historian 9 DEC 1975 DATE</div>			
DISTRIBUTION		ACTION COPY FORWARDED TO	
CO, Kirtland AFB (Action copies) (3 Incls) 4		CO, Kirtland AFB	
Hq, OSI (3 Incls) 2			
File (3 Incls) 2			
		APPROVED <i>Doyle Rees</i> DOYLE REES Lt Col, USAF DISTRICT COMMANDER	
		FILE STAMP 24 185 39 UNITED STATES AIR FORCE OFFICE OF THE INSPECTOR GENERAL JAN 31 5 22 PM '49 OFFICE OF SPECIAL INVESTIGATIONS FILE 165 <i>No DI prepared ELS</i>	

AFCI FORM 4
23 JULY 48

~~CONFIDENTIAL~~

UNCLASSIFIED

16-56488-1 U. S. GOVERNMENT PRINTING OFFICE

DISTRICT COMMANDER

APPROVED

31 JAN 1949

CIG MAIL & RECORDS SECTION

DISTRIBUTION

ACTION COPY FORWARDED TO

FILE SLIP

FILE

BA

BY AUTHORITY OF THE DIRECTOR OF RECORDS
CLASSIFICATION CANCELLED

STATUS

REFERENCE

CHARACTER

FILE

REPORT OF INVESTIGATION

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

STATUS

OFFICE OF ORIGIN

PERIOD

REPORT MADE BY

REPORT MADE BY

FILE NO.

DATE

~~CONFIDENTIAL~~

DETAILS:

AT KIRTLAND AIR FORCE BASE:

1. On 18 January 1949 Dr. LINCOLN LA PAZ provided a letter from one JOHN E. McNERNEY, student at the University of New Mexico, relevant to an observation of 5 December 1948. The information contained in this letter is summarized below:

At about 2000 hours, 5 December 1948, while walking along the west side of Varsity Village, a University housing area, McNERNEY saw a bright green "meteorite". The color was a brilliant green, as in a traffic signal or a neon tube. There was a definite area to the object; i.e., it was not merely a point of light. The size was very hard to determine, but was estimated at one third that of Venus when that planet is visible in the daytime. McNERNEY discounted any claim of accuracy as to the size, however, saying that he could not definitely say. The object appeared in the western sky, vertically to about five degrees. There was a definite corona or halo effect, but no sparks or trail were produced. The sky was hazy and there was some cloud cover at the time of the sighting, but McNERNEY did not recall the extent of the cloudiness. No stars were visible in the part of the sky where the "meteor" was observed.

NOTE: No other report of observation for 5 December gives a time element of 2000 hours. McNERNEY will be contacted by Dr. LA PAZ in an effort to obtain precise measurement of his observational angles.

2. A report of observation by Inspector EARL WILLIS, AESS, was provided by Lt. Col. JOHN A. CARROLL, Chief Inspector, AESS, Los Alamos, New Mexico on 17 January 1949. This report provided the following data:

Date: 6 January 1949	Color: Brilliant green
Time: 0310	Elevation: 3 to 5 degrees
Direction: Azimuth 30 degrees	Trajectory: Flat
Speed: Slower than a meteor	OP: Station 101

The object was visible for about two seconds, low in the sky to the northwest. It moved in a straight line at a high speed. It looked like a bright green incandescent light. No estimate of size could be made. Direction of movement was east to west, flew on a level course, disappearing behind the mountainous horizon to the west. (Inclosure 1)

3. On 7 January 1949 the Chief, Physical Security Branch, Sandia Base, New Mexico, (MATHEW J. DOYLE), forwarded a report of observation by Pfc. MEREDITH J. EVERITT, ASN 38 552 954, 8450th M.P. Group. EVERITT reported that on 6 January 1949, while guarding an aircraft near the Ordnance Area, Kirtland Air Force Base, he had observed a bright object travelling across the sky. The time was approximately 1730, and the sky was clear, providing a light blue background. The object was diamond shaped, about two feet long, bright white in color, and moving at a high rate of speed. Altitude was estimated at 1500 to 2000 feet, and distance travelled was estimated at 500 feet. There was no smoke or trail. Two other persons with EVERITT did not see the object. (Inclosure 2)

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

NOTE: Estimates such as "two feet long", and "1500 feet high" are not to be accepted as factual, due to the lack of any object for comparison.

4. Dr. LA PAZ transmitted a report to the District Commander, 17th District Office of Special Investigations, on 6 January 1949 relative to certain unexplained sound phenomena observed at Los Alamos. Pertinent summary of this report follows:

Anomalous sounds were heard at four different Security Stations at Los Alamos on the night of 30 December 1948. Three of these stations were visited in company with the AESS Inspectors who had heard the sounds. At Station 340 Inspectors HODGES, KRUG, and PIERCE were questioned. HODGES and KRUG said that at approximately 2010, 30 December 1948 they heard a sound as of a truck laboring up the hill. The sound was so definite that they went out to inspect the truck, but found the roadway empty. Timing of their movements indicates that the duration of the sound was some seven seconds. Then at about 2020, the sound was heard again and they went out to check with the same results. Timing of this set of movements gave a duration of eight and one-half seconds. This repetition of the occurrence made quite an impression on the inspectors and they discussed the matter for about a half-hour. Then a "Bogey" alarm was given over the communications net by Headquarters. KRUG had left just before the alarm came in and his place was taken by PIERCE. The noise was heard again at 2050 by HODGES and PIERCE. This time it was definitely an aerial noise. Both men said that an airplane motor came close to being the same type of sound, but neither would state definitely that the sound was wholly similar to that of an aircraft. Timing of movements showed a probable duration of 10 to 15 seconds for the aerial sounds. Azimuth and elevation readings were taken for each estimated position of the sound.

At Station 390, Inspector HERBERT MYERS was interviewed relative to the sounds reported by him. MYERS said that he had not heard the sounds reported at 2010, 2020, or 2050, but that about ten or fifteen minutes after the "Bogey" warning he and Inspector PUTNAM had heard a sound like heavy wagons on the roadway, and later a sound like the whistle noise made by some airplanes in flight. The time measurements were inconclusive. Azimuth and elevation readings were taken of the estimated position of the sound.

Inspectors HARRY S. WELLBORN and ARNOLD F. ROSS were interrogated at Station 350. According to WELLBORN, at approximately 2010 on 30 December he heard a noise which he believed to be the motor of a 140 horsepower Cub airplane. The sound lasted about 6 minutes. At about 2020 he heard the same noise again, this time for about two or three minutes. At about 2050 the same noise was heard. The "Bogey" alarm was then sounded by headquarters, and WELLBORN believes that his reports of the sounds were responsible for the alarm. ROSS thought that the first noise sounded like a light tank coming along the road. Azimuth and elevation readings were taken of the positions as indicated by WELLBORN.

Inspector ORVILLE BURNSWORTH who had been at Station 350 at 2010 was interviewed by telephone. BURNSWORTH said that the noise sounded like a Cub type aircraft orbiting directly overhead, then moving off to the northeast and resuming an orbit at very low altitude. Total time given by BURNSWORTH was 30 minutes.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

In his summary of the above interviews Dr. LA PAZ finds that the sounds were unlike normal aircraft sounds, that a Cub could not have operated at the altitude needed to conform with the figures given by the transit readings, that no heavy machinery or tanks had been operating, and two other Inspectors had heard similar sounds on the morning of 31 December at about 0540.

Calculations based on the transit readings indicate that the sound originated at a point with coordinates 106 degrees 17 minutes, 35 degrees 52 minutes.

5. AACS at Kirtland Air Force Base was checked by the writer and so far as their records show no aircraft were near Los Alamos during the times of the sound observations.

AT WALKER AIR FORCE BASE:

6. AACS at Walker Air Force Base was checked by Special Agent SHERIDAN W. CAVITT, and reported that no aircraft were shown near Los Alamos by their log during the critical times.

INCLOSURES

FOR FULL DISTRIBUTION:

1. Copy of report from Lt. EARLE D. HIGHTOWER, Operations Officer, Protective Force, AESS, Los Alamos, New Mexico, to Lt. Col. JOHN A. CARROLL, Chief Inspector, re sighting by Inspector EARL WILLIS, dated 7 January 1949. (Duplicate.)
2. Copy of report from MATTHEW J. DOYLE, Chief, Physical Security Branch, Sandia Base, New Mexico, to Director, Intelligence and Security Division, resighting by pfc MERIDETH J. EVERITT, Hq 8450th MP Group, dated 7 January 1949. (Duplicate.)
3. Copy of letter, Dr. LINCOLN LA PAZ, to Lt. Col. DOYLE REES, re sound phenomena at Los Alamos, New Mexico, dated 6 January 1949. (Duplicate.)

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

UNDEVELOPED LEADS

DISTRICT OFFICE NO. 17, KIRTLAND AFB

1. Will report on new sightings as they are made.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

Lt. Colonel John A. Carroll, Chief Inspector
Atomic Energy Commission Security Service

7 January 1949

Lt. Earle D. Hightower, Operations Officer, Protective Force, AESS

OBSERVATION OF PHENOMENA

TIME: 0310

DATE: 6 January 1949

DIRECTION: Azimuth of 30°

ELEVATION: Estimated 3° to 5°

TRAJECTORY: Flat

COLOR: Brilliant Green

POINT OF OBSERVATION: Security Station 101 (Patrol 406 passing thru 101)

OBSERVER: Inspector Earl Willis

SPEED: Slower than a meteorite

STATEMENT BY OBSERVER:

"The object was seen for a period of approximately two seconds, low in the sky to the northwest from a point just inside gate 101. It moved in a straight line at a high rate of speed. It appeared as a bright green incandescent light. No surmise could be made accurately as to its actual size or altitude. Direction of movement was East to West. Object apparently disappeared behind mountainous western horizon. Course appeared to be level without apparent angle of descent."

~~CONFIDENTIAL~~

C O P Y

~~CONFIDENTIAL~~

TO: Director, Intelligence & Security Division 7 January 1949
FROM: Chief, Physical Security Branch
SUBJECT: Reported Observation of Unidentified Light or Flare Moving Across the Sky on 6 January 1949

1. On 7 January 1949, the writer interviewed Pfc. Meredith J. Everitt, ASN 38552954, Headquarters, 8450th M.P. Group, concerning the unidentified light or flare which he had reportedly seen moving across the sky.

2. Pfc. Everitt advised that on 6 January 1949 he was guarding a C-97 airplane at the landing strip, located adjacent to the Ordnance Area, when at approximately 1730 hours he noticed a bright object travelling across the sky, from the Southeast towards the Northwest. He related that the object was diamond shaped, approximately two feet long, and appeared to be much brighter in its center than at the edges. He estimated that the object was approximately 1500 to 2000 feet in the air and travelled approximately 500 feet, horizontal to the earth's surface, before he lost sight of it. Pfc. Everitt was unable to estimate the speed of the object but stated that he has seen low flying jet planes, and that this object travelled much faster than the jets that he has observed. There was no smoke or other vaporous material visible to Pfc. Everitt around or following the object.

3. At the time Pfc. Everitt witnessed the object, he stated that the sky was clear, furnishing a light blue background, and that the object appeared to be a bright white light, with no other apparent visible color.

4. Standing guard with Pfc. Everitt were Sgt. Richard Wolesslegoe and Cpl. Wilson, and according to Pfc. Everitt, neither of the other men saw the object. Everitt explained that he called to Sgt. Wolesslegoe, who was standing at the other end of the plane, and told him to look at the object in the sky, but by that time it had disappeared.

5. Pfc. Everitt stated that he attended Flight School, under the G.I. Bill of Rights in Houston, Texas, during the year 1947, and that he has had some experience in observing aircraft.

/s/ MATTHEW J. DOYLE
Chief, Physical Security Branch
Intelligence & Security Division

~~CONFIDENTIAL~~

C O P Y

~~CONFIDENTIAL~~

THE UNIVERSITY OF NEW MEXICO
Albuquerque

January 6, 1949

Institute of Meteoritics

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

From: Lincoln LaPaz, Director
Institute of Meteoritics

Subject: Report of Anomalous Sounds Observed by AESS personnel at Los Alamos
on 1948, December 30

1. On 1949, January 5, Major C. L. Phillips., USAF, and the undersigned under the guidance of Lt. Earl D. Hightower, AESS, visited three of the four stations at which anomalous sounds were heard during the night of 1948, December 30. In the present preliminary report, a summary of the pertinent facts is given and, on the basis of azimuth and elevation readings taken at the three stations where sounds were heard simultaneously, an approximate determination is made of the location of the sound source in space.

2. At Station 340 statements were obtained from AESS Inspectors Hodges, Krug, and Pierce. According to Hodges and Krug, at approximately 2010 on December 30 they both heard what they first thought was a truck laboring up the highway below their station. The sound was so definite that they arose and went to the door to make the customary inspection, only to find that the roadway was empty. The sound terminated within a second or two after they opened the door and stepped outside. Repetition of their motions and conversation timed with a stop-watch showed that the sound endured approximately 7 seconds. About 10 minutes later, at approximately 2020, the same incident occurred again, both men rising from their chairs, opening the door, and stepping outside only to discover that the roadway was again empty. A stop-watch determination for this case gave a duration for the sound of 8.5 seconds. This second repetition of the unusual sound made a considerable impression on the inspectors involved and the matter was under discussion during the half hour that elapsed before a bogey alarm came in over communications at approximately 2050. By this time, Krug had left Station 340 and the third observation was made by Hodges and Pierce. According to these inspectors, the noise heard at approximately 2050 was definitely an aerial noise in contrast to the noises heard at 2010 and 2020. Neither man was willing to identify the noise as certainly originating from an airplane, although both agreed that the sound of a plane motor probably came closest to representing what they heard. A stopwatch determination indicated a duration of 10-15 seconds for the aerial noise. Because the inspectors felt that they made more accurate determinations of position for the second and third incidents than for the first, azimuth and elevation readings were taken only for the occurrences at 2020 and 2050. According to Hodges, the azimuth of the sound heard at 2020 was $43^{\circ} 27'$ and the elevation $-9^{\circ} 30'$; according to Krug,

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

To: Lt. Col. Doyle Rees

- 2 -

January 6, 1949

these quantities were $38^{\circ} 40'$ and -8° . According to Pierce, the azimuth of the sound heard at 2050 was $99^{\circ} 48'$ and the elevation $+8^{\circ} 30'$; according to Hodges, these quantities were $101^{\circ} 46'$ and $+14^{\circ} 30'$.

3. At Station 390 a statement was obtained from AESS Inspector Herbert Myers (his companion on the night of December 30, Inspector William Putnam, also heard the anomalous sounds, but Inspector Putnam was not available for interrogation on January 5). According to Inspector Myers, none of the sounds observed at Station 340 at 2010, 2020, and 2050 were heard at Station 390, but some 10 to 15 minutes after the bogey warning at 2050, both he and Putnam heard what first sounded like the rumbling of heavy wagons on a roadway and what later sounded like the whistling noise made by some airplanes while in flight. The duration of the sound as determined by a stop-watch measurement of Myers' actions in going outside, returning to the communications set, and again going outside, was 45 seconds. However, Myers reported that he listened to the sound probably for a minute or more after he went outdoors the second time. According to Myers, the azimuth of the sound heard at 2100-2105 was $42^{\circ} 00'$ and the elevation $+5^{\circ} 15'$.

4. At Station 350 statements were obtained from AESS Inspectors Harry S. Wellborn and Arnold P. Ross. According to Inspector Wellborn, at approximately 2010 on December 30, he heard a noise in the sky which he believed to be the motor noise of a 140 H.P. Cub. The duration of his first observation of the noise was estimated at about 6 minutes; at about 2020 he made a second observation of the same noise, the duration this time being only about 2-3 minutes. (So definite was the impression that the observed noise originated in an airplane flying over the prohibited area that a complete blackout was executed both during the first observation and the second in the hope that the lights on the plane would be observable. However, no visual contact whatever was established with the source of the noise.) At approximately 2050 a third observation of the same noise was made and so definite was the impression that an airplane was responsible that on this occasion a bogey warning was transmitted to all stations. It is the understanding of both Wellborn and Ross that information transmitted by them to Headquarters was responsible for issuance of the bogey warning. The duration of the third sound was estimated to have been approximately 2-3 minutes. Inspector Ross confirmed all of the statements made by Inspector Wellborn with this qualification: That Ross' first interpretation of the noise heard at 2010 was that it came from a light tank cruising on the high road coming into Station 350 from the north. The incongruity of confusing the noises of the heavier (225 H.P.) motor of a tank and the lighter (75 H.P.-140 H.P.) motor of a Cub type plane had been the subject of discussions between Inspectors Wellborn and Ross and they had resolved the issue by noting that even the light motor of a Cub would be laboring heavily in the high altitude where the night flight of December 30 is believed to have taken place. According to Inspector Wellborn, the azimuth of the sound heard at 2010 was $308^{\circ} 20'$ and the elevation $22^{\circ} 30'$; the azimuth of the sound heard at 2020 was $320^{\circ} 30'$ and the elevation $22^{\circ} 30'$; and the azimuth of the sound heard at 2050 was $334^{\circ} 20'$ and the elevation $22^{\circ} 30'$. Since Inspector Wellborn had had experience in the use of a transit, it is believed that these are unusually accurate azimuth determinations. Since it would not have been feasible to have set up the transit in the position occupied by Inspector Ross at the time he observed the sounds on December 30, no azimuth-elevation readings were made by him.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

Lt. Col. Doyle Rees

- 3 -

January 6, 1949

5. In addition to the men personally interviewed at Stations 340, 350, and 390, a telephone conversation was held with Inspector Orville Burnsworth, who had also heard the anomalous noises at Station 350. According to Burnsworth he first heard the noise (identified as the airplane motor of a Cub) at approximately 2010, at which time the noise to him seemed to be almost directly overhead at Station 350. The plane (noise) seemed to orbit this position for approximately 2 minutes, and then the plane (noise) slowly receded toward the northeast and continued to orbit at very low elevation in this direction for approximately another 38 minutes.

6. On the basis of all the interviews held, the following summarizing statements can be made:

6.1. Each man interrogated was asked if at any other time during his experience he had heard such noises as were heard on the night of December 30. Without exception, all answers to this question were in the negative.

6.2. Although six of the seven observers interrogated, in one way or another, associated the anomalous sounds with airplane noises, under questioning each man admitted that in certain respects the noises heard were unlike any plane noises he had ever heard. It was quite apparent that the men were attempting to describe very unusual sounds in terms of those aerial noises with which, as former Air Force flyers, they were best acquainted.

6.3. Since Weather Bureau reports indicate that the under surface of the overcast blanketing the Los Alamos area was at an elevation of approximately 13,000 feet, the identification of the noises observed with motor noises of a Cub type plane is obviously impossible. This impossibility had already occurred to all of the men interviewed, although they had estimated the under surface of the overcast to lie at a height of not more than 11,000-12,000 feet.

6.4. The existence of the overcast at once suggests the possibility that the noises observed were really surface noises originating in the operation of heavy machinery and reflected from the overlying cloud layer in such fashion as to simulate sounds of aerial origin. Lt. Hightower states that this possibility has been exhaustively investigated and is definitely ruled out. No heavy machines and none of the tanks stationed in the Los Alamos area were in operation during the interval when the noises were heard.

6.5. Another possibility which occurred to nearly everyone who heard the noises was that instead of originating in a low-flying Cub type plane, the sounds had their origin in a heavier motored plane flying above the overcast and presumably lost. This hypothesis is regarded as unacceptable for several reasons. In the first place, careful investigation has failed to reveal than any plane of the sort described was actually in flight over the Los Alamos area. In the second place, no radio distress signals or

~~CONFIDENTIAL~~

other attempts by the crew of the hypothetical lost plane to make a position location were observed. And finally, two AESS Inspectors (who had no knowledge of the anomalous sounds observed earlier on the night of December 30) reported precisely the same sort of anomalous sounds as heard at Station 370 at 0540 on the early morning of December 31. These sounds were heard for several minutes and were reported to have receded slowly toward the southeast.

7. If we assume that Stations 340 and 350 observed the same sound sources at 2010 and 2020, then these sources are found to project into points lying near the paved highway which leads up the mountain side to Station 340. On the basis of the elevation determinations made at Station 340, it is furthermore found that the first source would be about 400 feet lower in elevation than Station 340 and the second source approximately 1350 feet lower than this station. These differences in elevation would again seem to suggest that the sound sources may have been situated on or near the paved highway. However, the very careful observations made by an experienced transit man, Inspector Wellborn at Station 350, are entirely incompatible with the assumption that the sound source heard at 2020 was only some 1350 feet lower than Station 340. Actually, Wellborn's 2020 observation shows that this sound source was at an elevation of more than 11,000 feet above the horizontal plane through Station 350. It must therefore, have been approximately 10,000 feet ABOVE, not below, Station 340. This impossibly large discrepancy shows that our initial assumption is unacceptable and it therefore seems impossible to establish a concordance between observations made at Stations 340 and 350 PRIOR to the bogey warning, i.e., during the time when the observers at Station 340 heard the sound only from within their observation hut in contrast to the observers at Station 350, who made their observations in the open air. Had the observers inside the house at Station 340 actually heard a sound emanating from a source located high above them, in accordance with the condition imposed by Wellborn's open-air observation, what they heard might well have been so distorted by the structural materials surrounding them and by their predisposition to assign all noises to highway traffic sources that they would have been led to report such negative elevations as were measured for them at Station 340 on January 5.

8. In sharp contrast to the discordance noted in the observations preceding the bogey warning at 2050, the open-air observations made at and immediately following this warning show a quite satisfactory concordance. In fact, if we assume that all three stations, 340, 350, and 390 were listening to the same sound source at 2050 and shortly thereafter, then the actual elevation above sea level of this sound source as computed from the angular elevation observed at Station 340 is 11,280 feet, at Station 350 is 12,213 and at Station 390 is 10,196 feet. If we pair Stations 340 and 350, the projection of the sound source on the surface of the earth has approximately the coordinates $106^{\circ} 17' 35'' 52''$; while if we pair Stations 390 and 350, the coordinates of the projection of the sound source on the earth differ from the above by less than one-half minute in longitude and by less than a minute and a half in latitude. In view of the nature of the noise observed

~~CONFIDENTIAL~~

Lt. Col. Doyle Rees

- 5 -

January 6, 1949

and the delay between the time of observation and the time when transit measurements were made, it is felt that such a discrepancy in the projections is not surprising.

9. Unless some as yet undiscovered surface source of sound, which might have produced by reflection from the overcast such apparently aerial noises as were observed at Stations 340, 350, and 390 is uncovered, the facts set forth above would seem to prove that on December 30 between the hours of 2000 and 2100 some sound producing source was in motion in or possibly beyond the overcast above the Los Alamos area. Whether this could have been a conventional airplane or not must be decided by those who have access to experience and information not at the command of the undersigned.

(signed) LINCOLN LA PAZ
490106

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

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 ELLEN PETERSON, 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 PETERSON to develop precise details as to course and elevation. (Inclosure #1)

4. Letter from GENE H. BIRD, News Editor, 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.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

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 WILSON AND TRUETT.

Report by Inspector BUFORD G. TRUETT, AESS:

At about 2054, 20 December 1948, in company with Inspector W. D. WILSON, 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 WILLIAM D. WILSON, AESS:

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. CLIFFORD E. STRANG, AESS (oral), and Mr. GEORGE S. SKIPPER (written), Physical Security Section, Los Alamos, were obtained by Special Agent NEEF and Dr. LA PAZ on 29 December 1948. STRANG and SKIPPER reported concurrent sighting of the phenomena observed by TRUETT and WILSON. 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 STRANG and SKIPPER. A report was prepared by Dr. LINCOLN LA PAZ, meteoritist, University of New Mexico, who has cooperated in this investigation, giving

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

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. HIGHTOWER, AESS. This report indicates that at 0431, 28 December 1948, HARDIE saw a white light, like a falling star, descending in a vertical path. It was not falling as fast as a falling star, so HARDIE 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 HARDIE. Direction of travel was apparently north to south, with perhaps a slight deviation. (Inclosure #7)

AT LAS CRUCES, NEW MEXICO

10. Special Agents EDGAR J. BETHART and ROBERT R. JOHNS interviewed Mr. PHILLIP S. CARROLL, Las Cruces Auto Court, Las Cruces, New Mexico, on 23 December 1948. CARROLL is connected with Navy Project Task D, Nord 8555, which requires that he and his associated, RICHARD E. McCROSKEY maintain a watch on the skies for about 95% of the time at night. CARROLL 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 Miss Peterson to Dr. Pruett
2. Letter from Gene H. Bird to Dr. Pruett
3. Report of Inspector Truett
4. Report of Inspector Wilson
5. Report of Mr. Skipper
6. Report of Dr. LaBaz
7. Report of Inspector Hardie

* PENDING -

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~
COPY

INCLOSURE #1

1442 E. Polk St.
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,

/S/ Miss Ellen Peterson

COPY

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~
COPY

INCLOSURE #2

THE SUN PUBLISHING CO.
HOOD RIVER COUNTY SUN - John H. Travis, Publisher
HOOD RIVER, OREGON

(no date)

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

Dear Sir:

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.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

THE SUN PUBLISHING CO.
HOOD RIVER, OREGON

-2-

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/ Gene H. Bird

News Editor

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~
COPY

INCLOSURE #3

TO: Captain J. P. Shea
FROM: Inspector Buford G. Truett
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 W. D. Wilson 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 Wilson 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. Strang and Mr. Skipper 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

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

-2-

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.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~
COPY

INCLOSURE #4

OFFICE MEMORANDUM

UNITED STATES GOVERNMENT

Date: 20 December 1948

TO: Captain Shea
FROM: Inspector William D. Wilson
SUBJECT: Object seen on 405 Patrol

From 2050 to 2100 this date Inspector B. G. Truitt 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.

/s/ William D. Wilson
Security Inspector

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~
COPY

INCLOSURE #5

B. O. Wells, Director of Security

December 30, 1948

G. S. Skipper, Jr.

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: G. S. Skipper, Jr.
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.

~~CONFIDENTIAL~~

INCLOSURE #6

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 AESS 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 Strang and Skipper and 35° 55' ,106° 23' .7 for Wilson 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.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

Lt. Col. Doyle Rees

-2-

December 30, 1948

It is found that the fireball doubly observed by Messrs. Wilson, Truett, Strang, and Skipper 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 $35^{\circ} 56' N$, $106^{\circ} 30' W$, and those of the projection of E are $35^{\circ} 57' N$, $106^{\circ} 23' W$. 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 Truett 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 Messrs. Wilson, Truett, Strang, and Skipper was not a falling meteorite.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~
COPY

INCLOSURE #7

OFFICE MEMORANDUM

UNITED STATES GOVERNMENT

Date: 12/28/48

TO: Lt. E. D. Hightower
FROM: Insp. J. D. Hardie
SUBJECT: Unknown Object

At approximately 0431, this date, while looking east from Station 108 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/ John D. Hardie

JDH

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

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

AFCSI
Maj Cappucci/dr-7223
21 Dec 48

Office of Special Investigations
The Inspector General

24-

21 DEC 1948

SUBJECT: Sightings of Aerial Flares *Sightings of*
SPECIAL INQUIRY
TO: Commanding General, Air Materiel Command
Wright-Patterson Air Force Base, Dayton, Ohio

1. Forwarded herewith is one (1) copy of initial report of investigation regarding sightings of aerial flares or rockets.
2. There is also forwarded as inclosure two a letter from Dr. Lincoln La Paz, Director of the Institute of Meteoritics, University of New Mexico and Director of Southwest Section of American Meteor Society, stating his opinion of the aerial flares. Dr. La Paz has been associated with the Operations and Analysis Division, Headquarters, USAF, and is well known to Dr. H. E. Landsberg, Executive Director, Committee on Geophysics and Geography, Research and Development Board, Pentagon Building, Washington, D. C. It is also noted that Dr. La Paz has been cleared by Headquarters, Air Materiel Command for employment on USAF classified contracts (Incl. 3).
3. The OSI District Office at Kirtland Air Force Base has been instructed to keep this Headquarters informed of any new developments regarding this matter. It is requested that your Headquarters evaluate the information contained in the attached report of investigation and advise this office of your conclusions and any action desired by OSI.

BY COMMAND OF THE CHIEF OF STAFF:

CLASSIFICATION CANCELLED
BY AUTHORITY OF THE DIRECTOR OF SPEC INV

BY KURT K. KUNZE, Capt, USAF
Historian

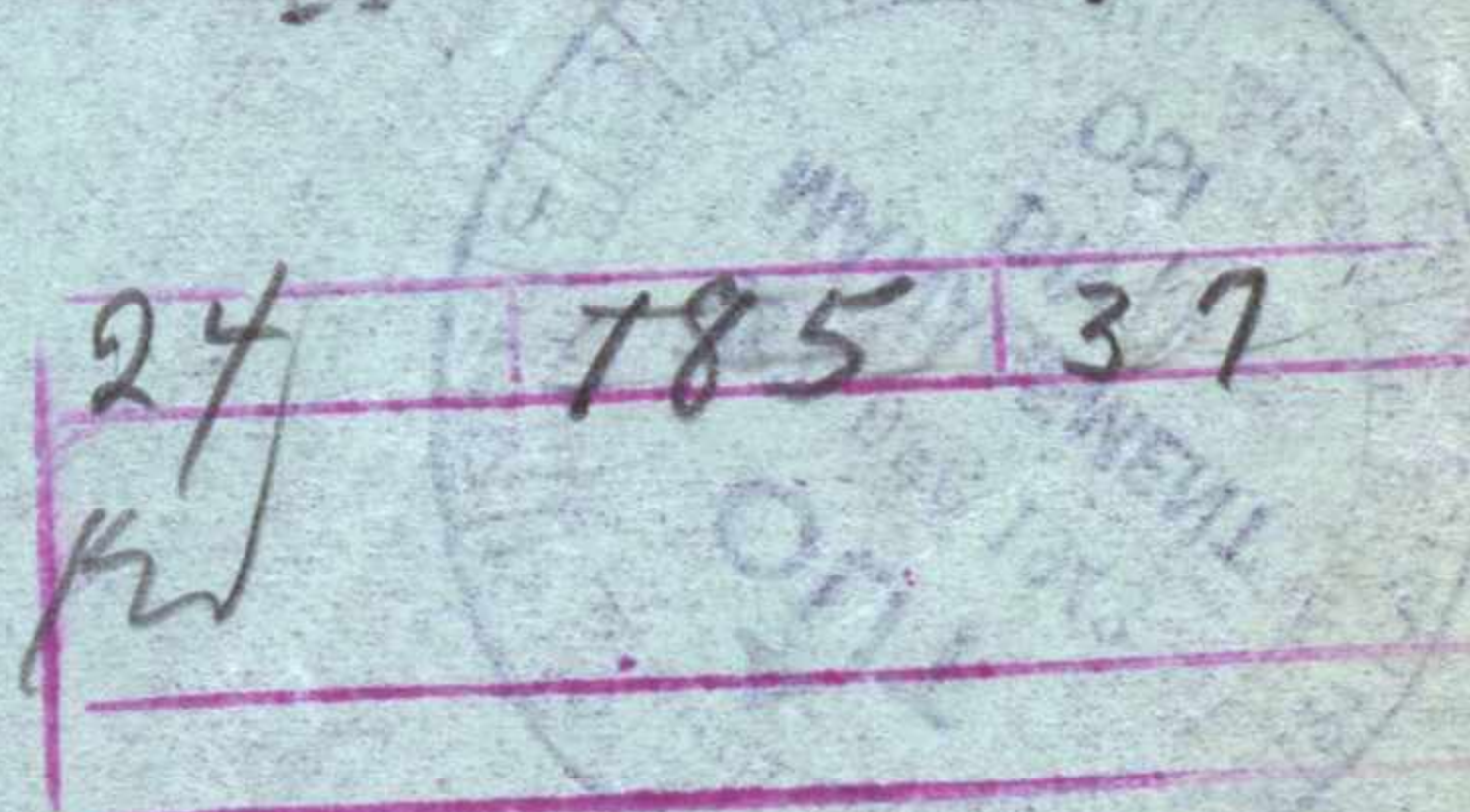
DONALD B. WHITE
Major, USAF

8 DEC 1975

DATE Executive, Special Investigations
The Inspector General, USAF

3 Incls.

1. Cy of Rpt of Invest.
dtd 13 Dec 48
2. Cy of Ltr fr Dr. La Paz
dtd 13 Dec 48
3. Cy of Ltr fr MCIMXC,
AMC, 21 Jan 48



OFFICE SYMBOL	1. AFC SI	2. AFOIR-CO	3.	4.	5.
GRADE AND SURNAME OF COORDINATING OFFICERS	<i>Maj Cappucci</i> <i>Col Kunkin</i> <i>Don</i>	<i>Lt Col SWM-Kunkin</i>			

UNCLASSIFIED

~~CONFIDENTIAL~~

2013-03-14

1. The first part of the document is a letter from the President of the United States to the Congress, dated January 3, 1862. It is a message of condolence to the people of the State of California, who have been afflicted by a severe drought and famine. The President expresses his sympathy for the suffering and his hope that the Congress will take prompt action to relieve the distress.

is found in the following table (1) and is shown in the following table (2).

1992-1993

CLASSIFICATION CANCELLED
BY AUTHORITY OF THE DIRECTOR OF FBI/DOJ

DATE 10/10/85

BY [Signature]

10/10/85



OFFICE SYMBOL	AFOSI	AFOSI-60	
GRADE AND BRANCH OR COORDINATING OFFICERS	<i>[Handwritten signature]</i>	<i>[Handwritten signature]</i>	<i>[Handwritten signature]</i>

CS1

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON

THE INSPECTOR GENERAL USAF
17th DISTRICT OFFICE OF SPECIAL INVESTIGATION
KIRTLAND AFB, KIRTLAND FIELD, NEW MEXICO

File No. 24-8

DR/MEN/meb
13 December 1948

SUBJECT: UNKNOWN (~~Aerial Phenomena~~)

TO: Chief of Staff
United States Air Force
Washington 25, D. C.
ATTENTION: Director of Special Investigations
Office of The Inspector General, USAF

1. Forwarded herewith are two (2) copies of the initial Report of Investigation (24-8), subject: Unknown (Aerial Phenomena). (Inclosure #1). It will be noted from this report that there has recently been observed unexplained aerial phenomenon in the general vicinity of highly restricted areas in New Mexico.

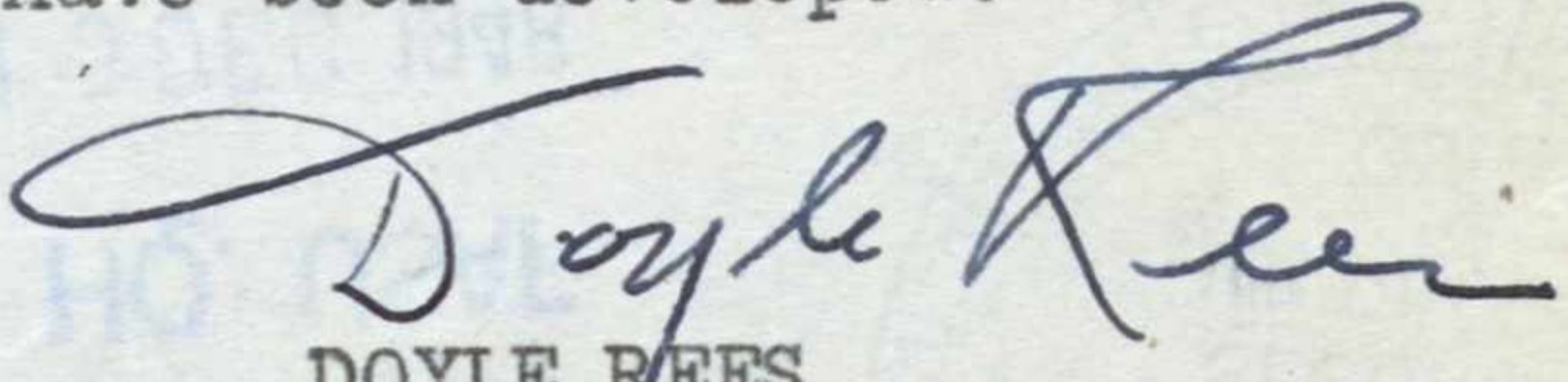
2. There is also forwarded as Inclosure #2, a letter from Dr. Lincoln La Paz, Director of the Institute of Meteoritics, University of New Mexico, and Director of Southwest Section of American Meteor Society. Dr. La Paz has been associated with the Operations and Analysis Division, Headquarters, USAF, and is well known to Dr. H. E. Landsberg, Executive Director, Committee on Geophysics and Geography, Research and Development Board, Pentagon, Building Washington, D. C.. Dr. La Paz has been cleared by Headquarters, Air Materiel Command, Wright-Patterson Air Force Base, for employment on works covered by USAF contracts classified Secret or Top Secret (see inclosure #3).

3. The investigative personnel of this office are not qualified to evaluate the significance of these occurrences. Therefore, Dr. La Paz, an expert in the field of Meteoritics, was consulted.

4. It is requested that this District Headquarters be immediately advised as to action desired by this office and the method of proceeding, after the designated undeveloped leads have been developed.

3 Incls

- 1 - Rpt of Inv re Subj
- 2 - Ltr fr Dr. Lincoln La Paz
- 3 - Ltr fr AMC, Wright-Patterson AFB


DOYLE REES
Lt Col, USAF
District Commander

DEPARTMENT OF THE AIR FORCE
UNITED STATES AIR FORCE
WASHINGTON

THE INSPECTOR GENERAL
1st DISTRICT OFFICE OF SPECIAL INVESTIGATION
4th FLOOR, AIR FORCE BUILDING
WASHINGTON, D.C.

13 December 1948

File No. 3-3

Subject: Unexplained (Aerial Phenomena)

To: Office of the Inspector General, USAF
Director of Special Investigations
Washington 25, D.C.
United States Air Force
Office of Staff

1. Forwarded herewith are two (2) copies of the initial report of investigation (S-3), subject: "Unexplained (Aerial Phenomena)". (Inclosure 1). It will be noted that the report contains a description of a reported unexplained aerial phenomenon in the general vicinity of highly restricted areas in Mexico.

2. There is also forwarded a letter from Mr. Lincoln, Director of the Institute of Statistics, University of New Mexico, and Director of the Section of American Meteorological Society, who has been associated with the Operations and Analysis Division, Headquarters USAF, and is well known to Mr. J. J. Landis, Executive Director, Committee on Unexplained and Aerial Phenomena, Research and Development Board, Pentagon, Building 3, Room 3000. Mr. Landis has been closely associated with the work of the Committee on Unexplained and Aerial Phenomena, Research and Development Board, Pentagon, Building 3, Room 3000.

3. The investigative personnel of this office are not qualified to evaluate the significance of these occurrences, and are, therefore, referred to the field of statistics, and are requested to be immediately

4. It is requested that the field office be immediately advised as to action desired by the field office in connection with the investigation of the above mentioned unexplained aerial phenomenon.

CIG MAIL & RECORDS SECTION

15 DEC 1948

HQ. USAF



~~CONFIDENTIAL~~

CS/

HEADQUARTERS UNITED STATES AIR FORCE THE INSPECTOR GENERAL OFFICE OF SPECIAL INVESTIGATIONS REPORT OF INVESTIGATION		FILE NO 24-9	DATE 17 January 1949
TITLE <u>AERIAL PHENOMENA</u>		REPORT MADE BY MICHAEL J. NERI	REPORT MADE AT DO #2, 67 Broad St., New York 4, N. Y.
		PERIOD 14 January 1949	OFFICE OF ORIGIN DO #17, Kirtland AFB, New Mexico
		STATUS REFERRED UPON COMPLETION	
		CHARACTER SPECIAL INQUIRY	
REFERENCE TWX, 13 January 1949, from DO #17, Kirtland AFB, New Mexico, file no. 24-8			
SYNOPSIS <p>Mr. RICHARD L. KRUSE, First Officer on a C-54 for Pan American Airways, sighted a brilliant, white object on 18 January 1946 which fell from north to south, at an angle of 20 to 25 degrees from the vertical, and instantly reappeared or ricocheted to describe a hyperbolic curve approximately one degree in altitude. It was in sight for a total of almost three seconds. KRUSE demonstrated his ability to accurately estimate short time intervals. The names of the two or three individuals to whom this incident was described could not be recalled.</p>			
<div style="border: 1px solid black; padding: 5px; text-align: center;">CLASSIFICATION CANCELLED BY AUTHORITY OF THE DIRECTOR OF SPEC INV BY KURT K. KUNZE, Capt, USAF Historian DATE 9 DEC 1975</div>			
DISTRIBUTION	ACTION COPY FORWARDED TO		FILE STAMP
CO, Kirtland AFB (Action Copies) 4 DO #17, Kirtland AFB 2 Hq OSI 2 File 2	Commanding Officer Kirtland Air Force Base New Mexico		<div style="border: 1px solid black; padding: 5px; text-align: center;">24 185 36 UNITED STATES AIR FORCE THE INSPECTOR GENERAL JAN 24 3 47 PM '49 OFFICE OF SPECIAL INVESTIGATIONS UNCLASSIFIED <i>(no DI prepared - ELS)</i></div>
	APPROVED		
	WALLACE B. SCHOLTES Lt Col, USAF DISTRICT COMMANDER		

~~CONFIDENTIAL~~

DETAILS:

1. This investigation was predicated upon the receipt of a TWX from DO #17, Kirtland Air Force Base, New Mexico, which requested that Mr. RICHARD L. KRUSE, 59 Peony Road, Hicksville, L.I., N.Y., be questioned concerning the sighting of an unusual object on 18 January 1946.

2. On 14 January 1949, Mr. RICHARD L. KRUSE, First Officer for the Pan American Airways, was interviewed in his home at 59 Peony Road, Hicksville, L.I., N.Y. Mr. KRUSE attended Michigan State Normal College, Ypsilanti, Michigan, from 1940 to 1942. In July 1942, KRUSE enlisted in the USAAF as an aviation cadet and was separated as a Captain in August 1945. His Army Serial Number was C-661498. While on terminal leave, during July 1945, he obtained employment with the Pan American Airways as a pilot, which position he has held to this date. On 18 January 1946, the date during which subject object was sighted, KRUSE was flying from Santa Maria, Azores, to Paris, France, for the Africa-Orient Division of the Pan American Airways, which was under contract to the Air Transport Command. At the time of sighting, he was midway between Brest and Paris.

3. During this interview, KRUSE furnished the following information:

a. WEATHER CONDITIONS AT TIME OF SIGHTING - KRUSE was alone in the cockpit of a C-54 type aircraft and was flying at an altitude of between 7 to 9,000 feet. The sky was crystal clear above a layer of broken clouds whose tops were at 5,000 feet. This layer of clouds extended to the horizon in all directions.

b. TRAJECTORY OF FIRE BALL - The object appeared at a point due east, approximately 35 degrees above the horizon, using the plane and a point directly beneath the object as the base of a triangle, and fell from north to south at an angle of 20 to 25 degrees from the vertical. The object fell out of sight beneath the clouds approximately two seconds after it was initially sighted and reappeared instantaneously, i.e., a fraction of a second, and travelled in a hyperbolic curve over the clouds from north to south before it disappeared for the last time. During this second appearance, the maximum altitude achieved by the object was estimated to be approximately one degree above the horizon, using the plane and a point directly beneath the object as the base of a triangle. At this time, it was in sight for almost one second. He estimates that subject object was seen at a point on a line between Brest and Kharkov, Russia, instead of between Brest and Kiev, Russia, as previously reported.

c. DESCRIPTION OF FIRE BALL - KRUSE stated that the object's appearance was similar to that of a brilliant white flare which seemed to become more brilliant as it neared the earth's surface. The object was colorless and did not leave a comet-like trail.

- 2 -

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

d. SIZE - The size of the object could not be compared except with that of a star. KHUSE suggested that it might be compared with the appearance of the planet Venus during an unusually clear night.

e. METHOD OF ESTIMATION OF TIME FACTOR - Soon after the disappearance of subject object, KHUSE pointed toward the point from which it first appeared and traced its path downward toward the point of disappearance with his arm and timed this interval with his wristwatch. He reenacted this procedure during this interview and the imaginary fall was timed by the writer as having occurred in approximately two seconds.

f. TEST OF ABILITY TO ESTIMATE SHORT TIME INTERVALS - KHUSE was asked to estimate the time intervals between a series of taps on a chair which were timed with a wrist watch, i.e., one, three, two, four and two second intervals. KHUSE demonstrated his accuracy in that he estimated all of these intervals correctly.

4. Informant continued that he told possibly two or three pilots about this incident during later flights but, due to the fact that it was mentioned casually, he could not recall the names of any of these individuals. KHUSE stated that all pilots engaged in frequent night flights see numerous falling stars but he does not ever remember seeing one that ricocheted as subject object did.

5. At the time of sighting, the Captain of the aircraft from which the object was sighted was WILLIAM HESTER. Captain HESTER is presently employed by the Pan American Airways and flies out of Miami, Florida. Mr. KHUSE concluded that, at the time of sighting, he was not tired and consequently felt sure that he did not imagine the incident reported.

6. KHUSE was advised that a reply will be forthcoming from Dr. LA PAX reference his letter of 4 January 1949.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

c 51

HEADQUARTERS UNITED STATES AIR FORCE THE INSPECTOR GENERAL OFFICE OF SPECIAL INVESTIGATIONS REPORT OF INVESTIGATION		FILE NO. 24-9	DATE 5 January 49
TITLE <i>UNKNOWN Albuquerque N.M. (Aerial Phenomena) of green light while flying</i>		REPORT MADE BY James J. Teachnor	
		REPORT MADE AT Hq 10th OSI Dist., Kelly AFB, Kelly Fld, Tex.	
		PERIOD 30 December 48, 3 January 49	
		OFFICE OF ORIGIN DO #17	
CHARACTER Special Inquiry		STATUS R U C	
REFERENCE Case Report 24-8, DO #17			
SYNOPSIS <p>Major Roger M. Carter, AO 40767 and Captain A. Goade, AO 55483 stated that: On 5 December 1948, flying at 10,000 feet on a heading of 245° magnetic, 25 miles North East of Albuquerque, New Mexico observed an intense green light at approximately 106° 27' West, 35° 04' North, length of observation two seconds. Weather at time was clear and cold with no moon. Description of light varies with individual observer.</p> <p>Madeline G. Merchant, undeveloped lead for DO #17 is subject on G-2 Section, Hq 4th Army. File reflects that Merchant associates with known Communists and is considered dangerous.</p> <p>Headquarters 4th Army is in receipt of letter from Director of Intelligence, Headquarters General Staff, Washington advising them to expect reports of such incidents as above during this period of the year. All such reports to be forwarded to AMC, Wright-Patterson Air Force Base.</p> <p>Biggs Air Force Base has not conducted any maneuvers with flares.</p>			
<div>CLASSIFICATION CANCELLED BY AUTHORITY OF THE DIRECTOR OF SPEC INV BY KURT K. KUNZE, Capt, USAF Historian 3 DEC 1975</div>			
DISTRIBUTION	ACTION COPY FORWARDED TO	FILE STAMP	
DO #17 2 OSI Hq. 2 File 2	DO #17	24 185 35 UNITED STATES AIR FORCE THE INSPECTOR GENERAL JAN 11 2 48 PM '49 OFFICE OF SPECIAL INVESTIGATIONS	
APPROVED <i>Robert E. Nance</i> ROBERT E NANCE Captain, USAF Acting DISTRICT COMMANDER			

AFCSI FORM 4
23 JULY 1948

~~CONFIDENTIAL~~

UNCLASSIFIED

~~CONFIDENTIAL~~

DETAILS:

AT SAN ANTONIO, TEXAS

1. This is a joint investigation of Special Agents Hiram W. Johnson, Reuben Strickland and the writer.
2. M/S R.G. Walton, AF 6299736, Randolph Air Force Base, interviewed 4 January 49 stated that he did not see a flare or light on the night of 5 December 1948.
3. Major Roger M. Carter, AO-40767, A-3, Air Training Command, Randolph Air Force Base, interviewed 3 January 49 by Special Agents Hiram W. Johnson, Reuben Strickland and the writer stated in substance: That on 5 December 1948, at approximately 2200 hours, C.S.T., while flying a C-47 aircraft at 10,000 feet on a magnetic heading of 247° , indicating 158 M.P.H. about twenty-five miles North East of Albuquerque he observed an intense green light. This light was approximately 500 feet above the plane and some two to five miles to the right. It appeared to be slightly east of Sandia Peak, $35^{\circ} 64'$ North, $106^{\circ} 27'$ West. Carter stated that he was looking at the peak mentioned when he first noticed the light. The impression gained was that of an ultra violet light being turned on. The light seemed to grow in intensity and then die out. The color was more green than blue. Estimated length of observation was from one to two seconds. No movement pertaining to the light was noted. The weather at the time was described as being a clear, cold and dark night.

Carter further stated that he was listening to the radio beam at the time and did not notice any radio interference.

4. Captain A. Goade, AO 55483, A-3, Flying Division, Air Training Command, Randolph Air Force Base was interviewed by Special Agents Hiram W. Johnson, Reuben Strickland and the writer on 30 December 48. Goade stated in substance that at approximately 2135 hours on December 5, 1948 while flying a heading of 230° magnetic, 15 miles North East of Albuquerque, he observed an intense green light estimated at $1\frac{1}{2}$ to 2 miles off the right wing of the airplane. The estimated location of the light would be $35^{\circ} 09'$ North, $106^{\circ} 27'$ West.

At the time of the observation Goade was flying co-pilot, in the right seat of a C-47 aircraft, altitude 10° , 500 feet. The light appeared to be 500 to a 1000 feet higher than the aircraft. Visibility was estimated at 30 to 40 miles, no overcast, no moon. Speed of the aircraft was 155-160 indicated.

Goade stated that the length of the observation was from 5-15 seconds and he gained the impression of a round green light, accompanied by sparks and a fading tail. The object seemed to describe a parabolic curve in relation to the earth.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

Captain Goade is a veteran of combat flying in the ETO and when pressed for a comparison of the intensity of the light described it as being more intense than the flare normally used in night photography or bombing. Goade stated that he had never seen anything similar to the phenomena noted and could offer no comparison.

5. On 3 January 1949 the files of the G-2 Section, Fourth Army, were checked. It was revealed that Madeline G. Merchant is the subject of an extensive file. The essence of the file is that Merchant has been active over a period of two years compiling facts on all reported aerial phenomena and writing letters to various Army area commanders regarding same. Further Merchant is known to correspond with Communist Front organizations and is considered dangerous.

6. Captain James C. Biddle, Executive Officer, Fourth Army CIC Detachment, Fort Sam Houston, Texas interviewed 3 January 1949 stated in substance that the Fourth Army is in receipt of a letter from the Director of Intelligence, Headquarters General Staff, Washington, D.C. advising them to expect reports of aerial phenomena during this period of the year and to report same to AMC, Wright-Patterson Air Force Base.

AT EL PASO, TEXAS

7. On 30 December 1948 it was ascertained that Biggs Air Force Base did not conduct any maneuvers involving flares.

REFERRED UPON COMPLETION

~~CONFIDENTIAL~~

CONFIDENTIAL

HEADQUARTERS UNITED STATES AIR FORCE THE INSPECTOR GENERAL OFFICE OF SPECIAL INVESTIGATIONS		FILE NO. 24-8	DATE 23 December 1948
REPORT OF INVESTIGATION		REPORT MADE BY SHERIDAN W. CAVITT	
TITLE UNKNOWN (Aerial Phenomena)		REPORT MADE AT DO #17, Kirtland AFB	
		PERIOD 16 and 22 December 1948	
		OFFICE OF ORIGIN DO #17, Kirtland AFB	
		STATUS REFERRED UPON COMPLETION	
CHARACTER Special Inquiry			
REFERENCE Report of Special Agent CHARLES HAFZIGER, JR., DO #17, Kirtland AFB, File No. 24-8, dated 13 December 1948.			
SYNOPSIS <p>On 16 December 1948, Mr. EARL WILLIAMS, Chief Dispatcher, Walker AFB, Roswell, New Mexico, was interviewed and it was found that no maneuvers involving aerial flares or similar signaling devices have been held by the 509th Bomb Group (M), Walker AFB. The only Walker AFB plane known to have approached anywhere near the vicinities cited in referenced report was a B-29 type aircraft piloted by 1st Lt. HEARTY FITCHKO, 393rd Bomb Squadron, 509th Bomb Group, on 5 November 1948. Lt. FITCHKO stated that his flight on 5 November was from Roswell, New Mexico, to Wendover AFB, Utah, and that the path of this flight was at approximately 20,000 feet and over the Albuquerque area. FITCHKO further disclaims shooting any flares at any time during this flight. Colonel JOHN D. RYAN, Commanding Officer, 509th Bomb Group, stated that no maneuvers had been held lately by the 509th Bomb Group. Major P. K. CARLTON, 509th Bomb Group S-3, stated that a check of the 509th Group Log of Missions indicated no recent maneuvers by the 509th Bomb Group other than a group mission to Dayton, Ohio, on 9 December 1948. None of the planes participating in this maneuver would have passed over or near the area in which the aerial phenomena have been sighted. None of the above interviewees had received reports of unusual flares or other aerial phenomena.</p>			
<div>CLASSIFICATION CANCELED BY AUTHORITY OF THE DIRECTOR OF SPEC INV BY KURT K. KUNZ, Capt, USAF Historian DEC 1975</div>			
DISTRIBUTION CO, KAFB (Action Copy) OSI Hq File	ACTION COPY FORWARDED TO CO, Kirtland AFB	FILE STAMP 24-18534 UNITED STATES AIR FORCE THE INSPECTOR GENERAL JAN 3 4 32 PM '49 OFFICE OF SPECIAL INVESTIGATIONS	
APPROVED DOYLE REES Lt. Colonel, USAF DISTRICT COMMANDER			

AFCSI FORM 4
23 JULY 48

CONFIDENTIAL

UNCLASSIFIED

16-56438-1 U. S. GOVERNMENT

[illegible]

~~CONFIDENTIAL~~

DETAILS:

AT WALKER AFB, ROSWELL, NEW MEXICO

1. On 16 December 1948, Mr. EARL WILLIAMS, Chief Dispatcher, Walker AFB, Roswell, New Mexico, was interviewed with reference to possible maneuvers by planes of the 509th Bomb Group or Walker AFB Base Flight Section between 1 November 1948 and 16 December 1948. WILLIAMS, after reviewing the Walker AFB Dispatch Records, stated no maneuvers have been held by the 509th Bomb Group which would entail the use of aerial flares or other similar signaling devices. During the period mentioned above, only one (1) Walker AFB plane is known to have been in the general vicinity of Las Vegas, Los Alamos, Santa Fe, or the Sandia Mountains. This plane, B-29 #6401, was piloted by 1st Lt. HEARTY FITCHKO, 393rd Bomb Squadron, 509th Bomb Group, Walker AFB, and was on a bombing mission from Roswell to Wendover AFB, Utah. Take-off was made at 0326 hours, 5 November 1948, and the path of this flight would have normally been over Albuquerque. WILLIAMS stated that there have been no reports by either 509th Bomb Group or Base Flight pilots or crew members of unusual lights or flares in the sky.

2. On 22 December 1948, 1st Lt. HEARTY FITCHKO, AO 680624, 393rd Bomb Squadron, 509th Bomb Group, Walker AFB, was interviewed regarding his flight from Roswell, New Mexico, to Wendover AFB, Utah, on 5 November 1948. FITCHKO stated: I took off in B-29 #6401 at approximately 0330 hours on a routine bombing mission to Wendover AFB. At about 0430 hours, my position was approximately 20,000 feet and over Albuquerque. The only flares aboard were red ones which, when fired, indicate trouble. There were no flares of any kind used on this mission and I would have known if one was shot, for the flare chute is in the navigator's compartment. This compartment is the only place where a flare can be released when the plane is pressurized as we were on this mission. I saw nothing unusual nor did anyone on my crew report seeing any flares or anything unusual during this mission. I questioned my crew on this date (22 December 1948) and received negative answers as to the sighting of anything unusual on the above mentioned flight.

3. Colonel JOHN D. RYAN, AO 21117, Commanding Officer, 509th Bomb Group, Walker AFB, Roswell, New Mexico, was interviewed on 22 December 1948 regarding any maneuvers or flights by planes of the 509th Bomb Group which would entail the use of aerial flares or lights. Colonel RYAN stated: To his knowledge, no 509th planes have used flares of any kind during the past several months. No one has reported to Colonel RYAN the sighting of unusual flares or lights in the sky.

4. On 22 December 1948, Major PAUL K. CARLTON, AO 35912, S-3, 509th Bomb Group, Walker AFB, Roswell, New Mexico, was interviewed. Regarding maneuvers or the use of aerial flares by the 509th Bomb Group,

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

Major CARLTON stated a check of the 509th Group Log of Missions indicates that the 509th Bomb Group flew a mission to Dayton, Ohio, on 9 December 1948. This mission, however, did not pass anywhere close to Albuquerque, Los Alamos, Las Vegas, or the Sandia Mountains. No flares have been scheduled for use by the 509th planes since June or July 1948, at which time the Group was flying missions over cities in the Pacific northwest. CARLTON'S office has received no reports regarding the sighting of flares or other unusual phenomena in the skies.

REFERRED UPON COMPLETION

-3-

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

CS1

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON

THE INSPECTOR GENERAL USAF
17th DISTRICT OFFICE OF SPECIAL INVESTIGATIONS
KIRTLAND AFB, KIRTLAND FIELD, NEW MEXICO

ACM/SLJ/mfw
22 December 1948

File No: 24-8

SUBJECT: UNKNOWN (Aerial Phenomena)

TO: Chief of Staff
United States Air Force
Washington 25, D. C.
ATTN: Director of Special Investigations
Office of The Inspector General USAF

1. Forwarded herewith are two (2) copies of the pending Report of Investigation (24-8), subject: UNKNOWN (Aerial Phenomena). It will be noted from this report that there have been additional observations of unexplained aerial phenomena in the vicinity of highly restricted areas in New Mexico.
2. The assistance of Dr. Lincoln LaPaz, Director of the Institute of Meteoritics, University of New Mexico, has been secured in preparing this report in view of the highly technical aspects of the investigation.
3. Additional reports of aerial phenomena have been received, and will be reported on in a subsequent report.
4. This office is providing Headquarters, Air Materiel Command, with copies of all reports of this investigation through the Commanding Officer, Kirtland Air Force Base.

FOR THE DISTRICT COMMANDER:

1 Incl
Rpt of Invest re Subj (dup)

A. C. Murrelle, II
A. C. MURRELLE, II
Captain, USAF
Acting Deputy District Commander

9

CLASSIFICATION CANCELLED	
BY AUTHORITY OF THE DIRECTOR OF SPEC INV	
BY	KURT K. KUNZE, Capt, USAF
	Historian
DATE	8 DEC 1975

24-165-33
24-530-33
atc 12
file
JB

~~CONFIDENTIAL~~

UNCLASSIFIED

DEPARTMENT OF THE ARMY
HEADQUARTERS, ARMY
WASHINGTON

THE SECRETARY OF THE ARMY
1000 DOWNEY BUILDING
WASHINGTON, D.C. 20315

File No. 100-100000

Subject: (Classification)

Office of the Director
Director of Special Investigations
Washington, D.C.

1. Forwarded herewith are two (2) copies of the report of the investigation (OSI-1) subject: (Classification). It is noted from this report that there have been no indications of any further activity in this matter.

2. The maintenance of the Lincoln Index, Director of the Department of the Army, has been secured in accordance with the report in view of the technical aspects of the investigation.

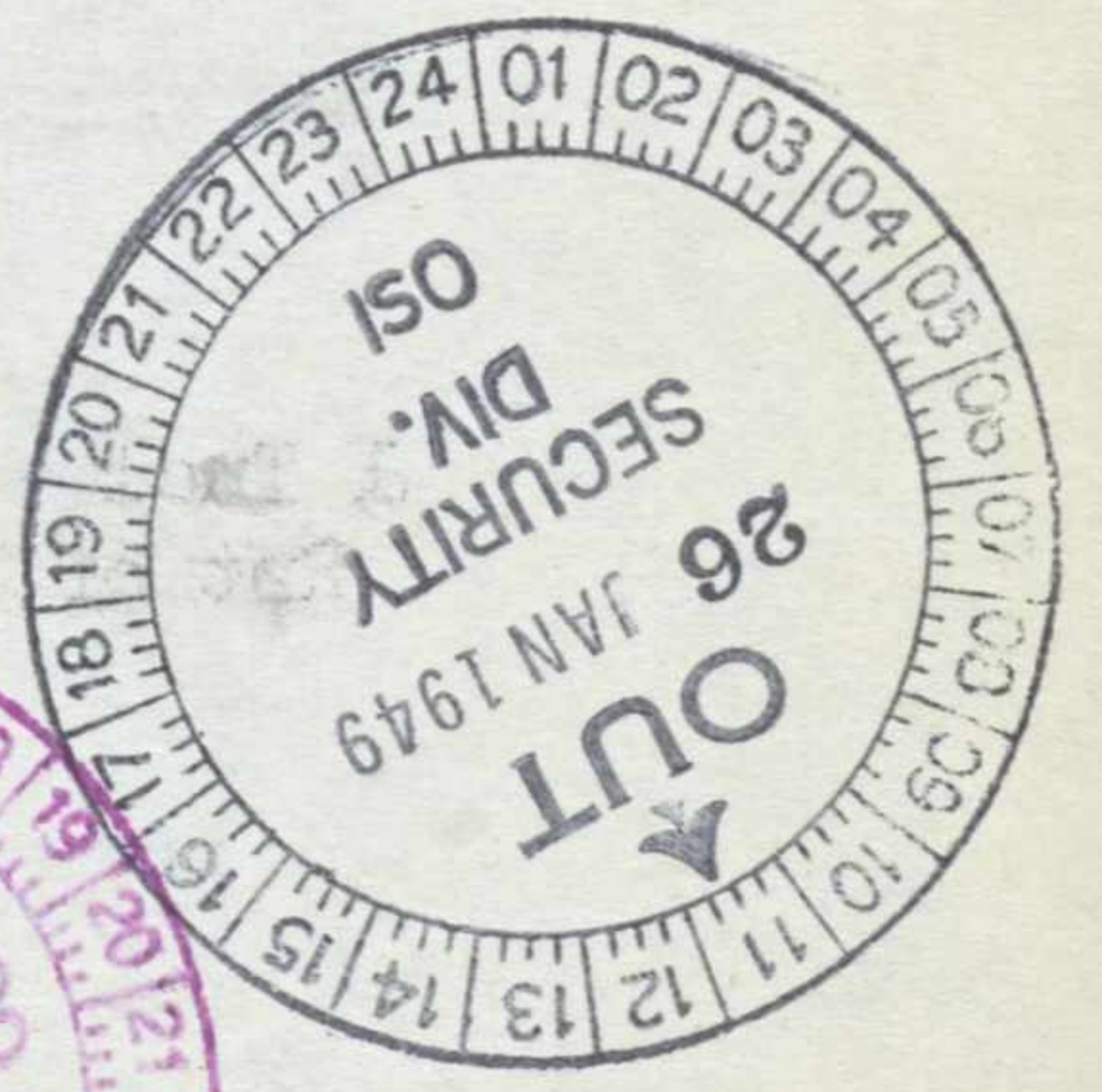
3. Additional reports of similar incidents have been received and will be reported on in a subsequent report.

4. This office is providing headquarters, the Federal Bureau of Investigation, and the Department of Justice with copies of all reports of this investigation through the forwarding office.

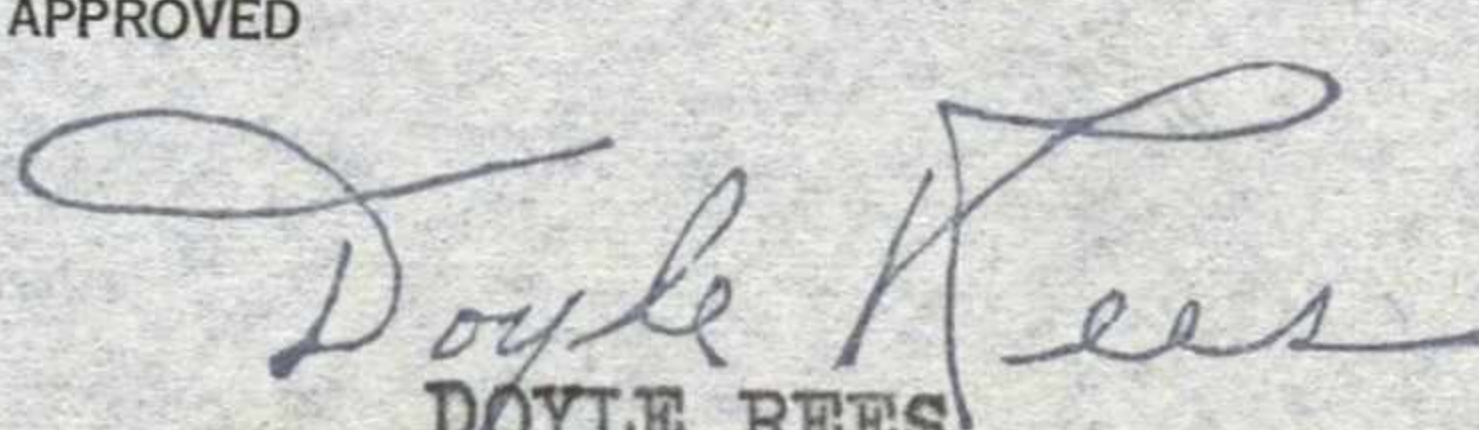
Very truly yours,
[Signature]



HQ. USAF
21 DEC 1948
MAIL & RECORDS



~~CONFIDENTIAL~~

HEADQUARTERS UNITED STATES AIR FORCE THE INSPECTOR GENERAL OFFICE OF SPECIAL INVESTIGATIONS REPORT OF INVESTIGATION		FILE NO. 24-8	DATE 22 Dec 48
TITLE UNKNOWN (Aerial Phenomena)		REPORT MADE BY JACK L. BOLING	
		REPORT MADE AT DO #17, Kirtland AFB	
		PERIOD 13-20 December 1948	
		OFFICE OF ORIGIN DO #17, Kirtland AFB	
		STATUS PENDING	
CHARACTER SPECIAL INQUIRY			
REFERENCE Report of S/A Naffziger, dated 13 Dec 48, DO #17, Kirtland AFB			
SYNOPSIS <p>Investigation requested by District Commander, 17th District OSI.</p> <p>Details of this report consist of report submitted by Dr. LINCOLN LAPAZ. The writer acted as an observer only during this phase of the investigation.</p> <p>Additional sightings of unexplained celestial phenomena were reported in this period. Accurate transit bearings were obtained where possible. Actual flight path plotted from north to south, with minor deviation. General data for all sightings appears to coincide. No known meteoric phenomena would give data coincident with that reported from observations.</p>			
DISTRIBUTION		ACTION COPY FORWARDED TO	
OSI Hq 2		CO, Kirtland AFB	
CO, Kirtland AFB 4			
(Action Copy)			
File 2			
		APPROVED	
		 DOYLE REES Lt. Col., USAF DISTRICT COMMANDER	
		FILE STAMP	

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

THE UNIVERSITY OF NEW MEXICO
ALBUQUERQUE

Institute of Meteoritics

December 20, 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 (continuation)

In accordance with your request, the present report has been prepared in order to summarize results obtained by investigations carried out in the interval, December 13-20.

1. The Observational Data. As far as can be determined, the first incident of the sort reported by many observers on December 5 occurred as early as 1948, January 1, (see copy of Oscar E. Monnig's letter, under date of January 7, to Mr. Al Schroeder), the second such incident, and one presenting much more striking resemblance to the December 5 - December 13 incidents, occurred on August 4, 1948, (see letter of October 22, written by J. B. McCullough to Dr. J. Hugh Pruett, Regional Director for the American Meteor Society, University of Oregon). Beginning on December 5 there was a sudden outburst of anomalous luminous appearances. The table given below lists date, hour of observation, name of observer; and, in parentheses, point of observation for each of the occurrences so far uncovered by investigations carried out under the general supervision of your office and the Institute of Meteoritics.

December 5:

7:30 p.m., Mary & John Smith (Las Vegas, N.M.)
9:05 p.m., Captain A. Goade, Pilot, and Major R. M. Carter,
Co-Pilot (Near Las Vegas, N.M.)
9:15 p.m., Mr. & Mrs. Lewis Martinez (Las Vegas, N.M.)
9:15 - 9:30 p.m., Mr. Roger Lewis (Las Vegas, New Mex)
9:15 p.m., Rev. & Mrs. C. M. Wallace (Near Lucy, N.M.)
9:27 p.m., Captain Goade and Major Carter (Near Albuquerque,
N.M.)
9:35 p.m., Mr. Ernest Van Lloyd, Pilot, and Co-Pilot James L.
Smith (Las Vegas, N.M.)
10:00 - 10:15 p.m., Mrs. Woodrow House (Near Las Vegas, N.M.)
10:20 p.m., Sgt. and Mrs. Frank Hensley (Near Levy, N.M.)
10:20 p.m., Mr. Frank Green (Temporary Santa Fe RR Station ONAVA,
N.M.)
11:15 p.m., George (Wm.?) Hirst (Near Las Vegas, N.M.)

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

To: Colonel Doyle Rees

December 20, 1948

December 6:

10:55 p.m., Mr. Joe Toulouse, Security Section, Sandia Base, Albuquerque, N.M. (Sandia Base)

December 7:

9:45 p.m., Inspector J. Cotteran, AEC Security Service, Los Alamos, N.M. (Los Alamos)

December 8:

6:33 p.m., Capt. John J. Stahl, Jr., Capt. Melvin E. Neef, Special Agents, OSI, Kirtland Field, N.M. (Near Las Vegas, N.M.)

December 12:

9h 2m plus or minus 30s p.m., Major C. L. Phillips, AF - CAP Liaison Officer, Kirtland Field; Lt. Allan Clark, Intelligence Officer, N. Mex. Wing CAP; Dr. Lincoln LaPaz, Director, Institute of Meteoritics, University of New Mexico (Near Starvation Peak, N.M.); and Inspectors Jeffers and McGuigan, AEC Security Service (Los Alamos, N.M.)

December 13:

9:30 p.m., Mr. & Mrs. Dennis Bradley, Las Vegas, N.M.

10:15 p.m., Robert Craig (From 20 miles east of Las Vegas on Highway 65).

December 14:

1:00 a.m., Mr. Mimo Sanchez (Wagon Mound, N.M.)

2. The Real Path of the Only Green Fireball so Far Observed at Two Separate Stations. Among the numerous observations so far made, there is only one pair of corresponding observations i.e., those made simultaneously by different groups of observers at widely separated stations. The only such observations are those obtained on the night of December 12 by one group of observers near Starvation Peak (Bernal, New Mexico - see report on incident of 1948, December 12, 9h 2m plus or minus 30s), and a second pair of observers stationed within the Los Alamos reservation. By graphic reduction of the simultaneously made observations, the following facts have been determined: The green fireball of December 12, 9h 2m plus or minus 30s appeared very near a point with the coordinates latitude $35^{\circ} 50'$, longitude $106^{\circ} 40'$ and disappeared near a point with the coordinates latitude

2
~~CONFIDENTIAL~~

To: Colonel Doyle Rees

December 20, 1948

35° 45', longitude 107° 5', traversing a nearly or exactly horizontal path with a length of very nearly twenty-five (25) miles at an altitude above the surface of the earth of approximately 8 to 10 miles, depending on the estimate of angular altitude employed in the reduction; the velocity with respect to the earth works out at between 8 and 12 miles a second, depending on the duration estimate used. It should be observed that the above results are obtained under the assumption that the points of appearance and disappearance of the fireball were seen simultaneously by both the Bernal and Los Alamos groups. In case this assumption is not fulfilled, the real path could very easily be no more than 10 to 12 miles long, the velocity with respect to the earth then working out at between 3 and 6 miles a second. While there is thus considerable uncertainty because of the lack of confirming azimuth observations from a third station, the concordance in the five (5) different estimates of angular elevation make it most unlikely that the linear height of the fireball was much less than 8 miles and much more than 10 miles. It is interesting to observe that the backward extension of the 25-mile path first given passes almost centrally across the Los Alamos reservation.

3. Significant Differences Between the Fireballs Observed in the Interval December 5-13 and Typical Meteors.

3.1 The horizontal nature of the paths of most of the December fireballs is most unusual. Genuine meteors are rarely observed to move in horizontal paths.

3.2 Again the very low height of the December fireball discussed in section 2 above sets it off in sharp contrast from the genuine meteors for which heights of the order of 40 or more miles are normally observed.

3.3 The velocity determined for the fireball of December 12 is much less than the velocities determined from typical meteors (and yet is considerably greater than the speeds of the V-2 Rockets or jet planes or of conventional flares).

3.4 In the case of meteorites that penetrate to as low levels as that determined for the fireball of December 12, the observed luminous phenomena are always accompanied by very violent noises. No noises whatever have been observed in connection with the various December fireballs so far investigated.

3.5 Genuine meteors normally show remarkable variations in brightness, beginning as fine thin hair lines, which are scarcely visible to the observer, and then brightening up to flash out near the end of their paths. In the case of the December fireballs most of the observers have reported that the green balls appeared almost instantly at their full brightness.

~~CONFIDENTIAL~~

To: Colonel Doyle Rees

December 20, 1948

3.6 In the case of genuine meteors the paths are directed toward all points of the compass with equal frequency. On the contrary in the case of the green fireballs, plots of admissible approach sectors show that there is a very pronounced tendency for the paths to come in from the north half of the sky.

3.7 The three groups of anomalous greenish luminous phenomena show a curious association with well known meteor showers, although none of these meteor showers normally produce extremely bright green fireballs, such as those recently observed. For example, the observation mentioned by Mr. Monnig appeared near the maximum of the Quadrantid shower of early January, Mr. McCullough's observation of August was near the time of the Persid shower and the December observations all fell in the interval covered by the Geminid shower. This relationship might indicate an attempt to render the green fireballs less conspicuous by causing them to appear only when there is considerable meteoric activity.

3.8 As noted in an earlier communication, the remarkably vivid green color reported for most of the December fireballs is rarely observed in the case of genuine meteors. By laboratory test this peculiar color seems to be identical with that given off by copper salts in the blowpipe flame. If this identification is correct, the wavelength of the radiation from the green fireballs is near $\lambda = 5218 \text{ \AA}$.

3.9 The duration estimates of between 2 and 3 seconds reported for the green fireballs are considerably longer than those (0.4 - 0.5 seconds) for the ordinary visual meteors, but shorter than the duration estimates invariably reported in the case of a genuine meteorite fall (5 to 30 seconds or even longer).

3.10 For none of the green fireballs has a train of sparks or a dust cloud been reported. This contrasts sharply with the behavior noted in case of meteoric fireballs—particularly those that penetrate to the very low levels where the green fireball of December 12 was observed.

4. On the basis of the various differences to which attention is called in section 3, the writer remains of the opinion that the fireball of December 12 was definitely non-meteoritic and that in all probability the same is true of most, if not all, the other bright green fireballs, which the OSI has had under investigation.

LINCOLN LAPAZ

This letter was in an envelope postmarked "Boise, Idaho, Dec. 6, 1948". Looks as though someone might have carried it in his pocket for several weeks.

~~CONFIDENTIAL~~

P. O. Box 2776
Boise, Idaho
October 22, 1948

Dr. J. Hugh ~~Pruett~~
c/o University of Oregon
Eugene, Oregon

Dear Dr. ~~Pruett~~:

Definitely I am not a "crank", or one subject to hallucinations.

In the Spokane Daily Chronicle dated October 15, I noticed a news item regarding a cluster of fireballs observed in the heavens during the early hours of August 18. This interests me as you will assume from the following story:

On August 4th, while traveling south on U. S. Highway No. 30, approximately two and one-half miles north of North Powder, Oregon, (it is regrettable that I cannot remember the exact time),* I was amazed to see in the heavens directly south of me, a fireball. This object appeared to come out of nowhere, but when first observed, was traveling in a horizontal line on an angle presumed to be northwest to southeast at an elevation above sea level of 5500' (absolute direction and elevation argumentative). It appeared to me - for a descriptive purpose - as having been ejected from a huge Roman candle, and this candle, by whatever power held, was on a horizontal plane with the earth. As the object in its trajectory, approximately five and one-half miles, became spent, it arched earthly in a natural down grade. As I recall it, this arc was equal to approximately 90 degrees. Immediately after reaching this "nth" degree of the arc, it extinguished itself. I do not recall that there was much of a meteor type tail, but the object did have a definite fluorescent glow circumventing itself. As to the color, I can best describe it by referring your observation after dark to a high tensity neon sign of green - perhaps on the light green side.

Reason for the ink insertions is that this letter is from dictation, and it was necessary for me to refer to personal records.

If you have any questions, please feel free to direct communications to me, and I will assure you that I will do my best in answering.

I also want to tell you that the foregoing was observed by another person accompanying me. I think you will realize that I will be interested in the outcome of your study.

Very truly yours,

/signed/ ~~J. B. McCullough~~

* Somewhere between 2 & 3 A. M.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~
MONNIG DRY GOODS COMPANY
WHOLESALERS
1621 Main Street
Fort Worth 1, Texas

1948, January 7

Mr. Al Schroeder
1109 Highland Avenue
Abilene, Texas

Dear Mr. Schroeder:

The brilliant blue green glow which you report as seen due west of you at 1:25 A. M. and again at 1:30 A. M. January 1st, could hardly be any kind of astronomical phenomena that I know of.

I am more inclined to think that it was either (1) some sort of disturbance of an electrical system such as transformers blowing out; or, (2) experiments at the White Sands Proving grounds which I believe are exactly in that direction from you.

I am sending a copy of this letter to Dr. Lincoln La Paz of the University of New Mexico at Albuquerque and if he is not under any restriction as to military secrets, perhaps he can tell us whether possibility number 2 applies. As to possibility number 1, Paul Atchison right there in Abilene, connected with the West Texas Utility Company, ought to be able to find out for us whether there was any kind of electrical trouble which I doubt could have been more than 10 or 15 miles away.

I note you say that the glow seemed to be fan shaped, originating from a large bell on the horizon, extending to the meridian, due west of you in a perfectly clear sky lasting about two seconds each and extremely bright blue green; also, that you heard no sound.

Yours sincerely,

/s/ ~~Oscar Monnig~~

oem-wl
copy to Dr. Lincoln La Paz

Mr. Paul Atchison

C
O
P
Y

~~CONFIDENTIAL~~

CS1

HEADQUARTERS UNITED STATES AIR FORCE THE INSPECTOR GENERAL OFFICE OF SPECIAL INVESTIGATIONS REPORT OF INVESTIGATION	FILE NO. 24-8	DATE 17 December 1948
	REPORT MADE BY EDGAR J. BETHART	
	REPORT MADE AT DO #17, Kirtland AFB	
	PERIOD 17 December 1948	
	OFFICE OF ORIGIN DO #17, Kirtland AFB	
STATUS REFERRED UPON COMPLETION		

TITLE

UNKNOWN
(Aerial Phenomena)

CHARACTER

SPECIAL INQUIRY

REFERENCE

Report of Special Agent CHARLES NAFFZIGER, JR. dated 13 December 1948.

SYNOPSIS

This investigation was originally requested by District Commander, 17th District OSI.

Colonel PAUL F. HELMICK, Base Commander, Holloman AFB, stated that Holloman AFB was not engaged in any maneuvers involving the use of any aerial flares or similar devices.

CLASSIFICATION CANCELLED
BY AUTHORITY OF THE DIRECTOR OF SPEC INV
BY Historian **KURT K. KUNZE, Capt, USAF**
DATE **3 DEC 1975**

24 185 32
UNITED STATES AIR FORCE
THE INSPECTOR GENERAL

DISTRIBUTION CO, Kirtland AFB (Action Copy) 4 OSI, Headquarters 2 File 2	ACTION COPY FORWARDED TO CO, Kirtland AFB	FILE STAMP DEC 28 1 33 PM '48 OFFICE OF SPECIAL INVESTIGATIONS
	APPROVED <i>Doyle Rees</i> DOYLE REES DISTRICT COMMANDER, USAF	UNCLASSIFIED

~~CONFIDENTIAL~~

<p>REPORT OF INVESTIGATION</p> <p>HEADQUARTERS UNITED STATES AIR FORCE THE INSPECTOR GENERAL OFFICE OF SPECIAL INVESTIGATIONS</p>		<p>FILE NO.</p> <p>DATE</p>	
<p>TITLE</p>		<p>REPORT MADE BY</p>	
<p>CHARACTER</p>		<p>REPORT MADE AT</p>	
<p>REFERENCE</p>		<p>PERIOD</p>	
<p>SYNOPSIS</p>		<p>OFFICE OF ORIGIN</p>	
<p>STATUS</p>		<p>STATUS</p>	
<p>CLASSIFICATION CANCELLED BY AUTHORITY OF THE BOARD OF REVIEW</p> <p>BY _____ DATE _____</p>			
<p>DISTRIBUTION</p>		<p>ACTION COPY FORWARDED TO</p>	
<p>APPROVED</p>		<p>FILE STAMP</p>	
<p>DISTRICT COMMANDER</p>		<p>SECURITY DIV. JAN 1949</p> <p>IN</p> <p>OSI</p> <p>21 DEC 1948</p> <p>HO USAF</p> <p>CIG MAIL & RECORDS</p> <p>DEC 28 1 33 PM '48</p>	

~~CONFIDENTIAL~~

DETAILS:

1. This investigation was originally requested by the District Commander, District #17, Kirtland Air Force Base, Kirtland Field, New Mexico.

AT ALAMOGORDO, NEW MEXICO

2. On 17 December 1948, the writer interviewed Colonel PAUL F. HELMICK, AG-21601, Base Commander, Holloman Air Force Base, Alamogordo, New Mexico, in his office, Headquarters Building, Holloman Air Force Base, New Mexico. HELMICK advised that Holloman Air Force Base did not do research work at night nor on Sundays, nor would the work involve the use of any lighting device or flare such as described in the report of Special Agent CHARLES NAFFZIGER, JR. Helmick added that he had been contacted by agents of the Federal Bureau of Investigation in relation to the same matter in their pursuance of the same investigation.

- REFERRED UPON COMPLETION TO THE OFFICE OF ORIGIN -

~~CONFIDENTIAL~~

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON

THE INSPECTOR GENERAL USAF
17th DISTRICT OFFICE OF SPECIAL INVESTIGATION
KIRTLAND AFB, KIRTLAND FIELD, NEW MEXICO

File No. 24-8

DR/MEN/meb
13 December 1948

SUBJECT: UNKNOWN (Aerial Phenomena)

TO: Chief of Staff
United States Air Force
Washington 25, D. C.
ATTENTION: Director of Special Investigations
Office of The Inspector General, USAF

1. Forwarded herewith are two (2) copies of the initial Report of Investigation (24-8), subject: Unknown (Aerial Phenomena). (Inclosure #1). It will be noted from this report that there has recently been observed unexplained aerial phenomenon in the general vicinity of highly restricted areas in New Mexico.

2. There is also forwarded as Inclosure #2, a letter from Dr. Lincoln La Paz, Director of the Institute of Meteoritics, University of New Mexico, and Director of Southwest Section of American Meteor Society. Dr. La Paz has been associated with the Operations and Analysis Division, Headquarters, USAF, and is well known to Dr. H. E. Landsberg, Executive Director, Committee on Geophysics and Geography, Research and Development Board, Pentagon, Building Washington, D. C.. Dr. La Paz has been cleared by Headquarters, Air Materiel Command, Wright-Patterson Air Force Base, for employment on works covered by USAF contracts classified Secret or Top Secret (see inclosure #3).

3. The investigative personnel of this office are not qualified to evaluate the significance of these occurrences. Therefore, Dr. La Paz, an expert in the field of Meteoritics, was consulted.

4. It is requested that this District Headquarters be immediately advised as to action desired by this office and the method of proceeding, after the designated undeveloped leads have been developed.

CLASSIFICATION CANCELLED
BY AUTHORITY OF THE DIRECTOR OF SPEC INV
KURT K. KUNZE, Capt, USAF
BY Historian

3 Incls

8 DEC 1975

DOYLE REES
Lt Col, USAF
District Commander

- 1 - Rpt of Inv re Subj
2 - Ltr fr Dr. Lincoln La Paz
3 - Ltr fr AMC, Wright-Patterson AFB

UNCLASSIFIED

24-185-31
40 28 Dec 48

~~CONFIDENTIAL~~

AFCSI

Maj Cappucci/dr-72231

21 Dec 48

Office of Special Investigations
The Inspector General

24-

SUBJECT: Sightings of Aerial Flares

SPECIAL INQUIRY

TO: Commanding General, Air Materiel Command
Wright-Patterson Air Force Base, Dayton, Ohio

1. Forwarded herewith is one (1) copy of initial report of investigation regarding sightings of aerial flares or rockets.

2. There is also forwarded as inclosure two a letter from Dr. Lincoln La Paz, Director of the Institute of Meteoritics, University of New Mexico and Director of Southwest Section of American Meteor Society, stating his opinion of the aerial flares. Dr. La Paz has been associated with the Operations and Analysis Division, Headquarters, USAF, and is well known to Dr. H. E. Landsberg, Executive Director, Committee on Geophysics and Geography, Research and Development Board, Pentagon Building, Washington, D. C. It is also noted that Dr. La Paz has been cleared by Headquarters, Air Materiel Command for employment on USAF classified contracts (Incl. 3).

3. The OSI District Office at Kirtland Air Force Base has been instructed to keep this Headquarters informed of any new developments regarding this matter. It is requested that your Headquarters evaluate the information contained in the attached report of investigation and advise this office of your conclusions and any action desired by OSI.

BY COMMAND OF THE CHIEF OF STAFF:

3 Incls.

1. Cy of Rpt of Invest.

dtd 13 Dec 48

2. Cy of Ltr fr Dr. La Paz

dtd 13 Dec 48

3. Cy of Ltr fr MCIMXG,

AMC, 21 Jan 48

DONALD B. WHITE

Major, USAF

Asst. Executive, Special Investigations
The Inspector General, USAF

CLASSIFICATION CANCELLED	
BY AUTHORITY OF THE DIRECTOR OF SPEC INV	
BY	KURT K. KUNZE, Capt, USAF
	Historian
	3 DEC 1975
	DATE

AFCSI

UNCLASSIFIED

~~CONFIDENTIAL~~

CLASSIFICATION CANCELLED
BY AUTHORITY OF THE DIRECTOR OF SEC INV
BY _____
DATE _____

~~CONFIDENTIAL~~

HEADQUARTERS UNITED STATES AIR FORCE THE INSPECTOR GENERAL OFFICE OF SPECIAL INVESTIGATIONS REPORT OF INVESTIGATION		FILE NO. 24-8	DATE 13 Dec 48
TITLE UNKNOWN (Aerial Phenomena)		REPORT MADE BY CHARLES NAFFZIGER, Jr.	
		REPORT MADE AT DO #17, Kirtland AFB	
		PERIOD 6 - 9 December 1948	
		OFFICE OF ORIGIN DO #17, Kirtland AFB	
		STATUS PENDING	
CHARACTER SPECIAL INQUIRY			
REFERENCE None, this is an initial report.			
SYNOPSIS <p>Investigation requested by District Commander, 17th District OSI.</p> <p>Telephonic report received from Security Officer at Kirtland Air Force Base, Kirtland Field, New Mexico, on 6 December 1948, advised that an Air Force Pilot had observed an unidentified object similar to a green flare on 5 December 1948, at 2105 hours, west of Las Vegas, New Mexico, and again at 2127 hours on the east slope of the Sandia Mountains near Albuquerque, New Mexico. A commercial pilot reported a similar incident at 2135 hours west of Las Vegas, New Mexico.</p> <p>Pilot of C-47, AF-9921, is identified as Captain A. GOADE, AO-55483. Captain Pilot of Pioneer Flight No. 63 is identified as Mr. ERNEST VAN LLOYD.</p> <p>New Mexico State Police, Santa Fe, New Mexico, were contacted and had no information to offer reference unusual aerial phenomena.</p> <p>Mr. K. D. FLOCK, Forest Supervisor, Santa Fe National Forest, Santa Fe, New Mexico, stated he has received no reports of incidents of this type during the current year. However, in the summer of 1947 a Mrs. MADELINE G. MERCHANT had made numerous reports to him concerning unusual aerial manifestations in the area from Tierra Amarilla to Los Alamos, New Mexico.</p>			
DISTRIBUTION		ACTION COPY FORWARDED TO	FILE STAMP
CO, KAFB (Action Copy) (1 Incl) 4		CO, Kirtland AF Base	
OSI, Hq (1 Incl) 2			
10th District OSI (1 Incl) 2			
Holloman AFB Det (1 Incl) 1			
Walker AFB Det (1 Incl) 1			
File 2		APPROVED  DOYLE REES Lt. Col., USAF DISTRICT COMMANDER	

SYNOPSIS (Continued)

Chief MATT O'BRIEN, Chief of Police, Las Vegas, New Mexico, stated he had received no prior reports of unusual occurrences of this type.

Patrolman NOLAND UTZ, New Mexico State Police, Las Vegas, New Mexico, stated he had heard a rumor concerning aerial fliers in the neighborhood of Las Vegas.

Mrs. JOSEPH MARSHALL, Office Manager, Las Vegas Flying Service, Las Vegas, New Mexico, stated no night flying conducted from Watson Airport, Las Vegas, and she had heard no rumors concerning aerial flares.

Mr. J. D. MILLER, Chief Aircraft Communicator, CAA Municipal Airport, Las Vegas, New Mexico, stated he had heard of no incident of this nature and, in particular, had received no information from any aircraft on 5 December 1948.

Mr. JOHN J. NEWMAN, Mr. K. C. FRANCIS, Mr. C. T. RICH, and Mr. ROY W. TOLLIVER, Aircraft Communicators, CAA, Las Vegas, New Mexico, all stated no previous reports or knowledge of unusual aerial phenomena. These individuals were alerted to report future incidents to the proper investigative agency.

Mr. BILLIE R. WATSON, Manager Pioneer Air Lines, Las Vegas, New Mexico, stated he had heard only a rumor from one of his pilots and knew of no unusual incidents regarding flares or lights in the Las Vegas area. Mr. WATSON stated he would report future incidents to Mr. MILLER of CAA.

Mr. WILLIAM BRAINARD, Ranger, Las Vegas, New Mexico, stated he had no knowledge of any incidents of this type and will submit any future reports to Mr. FLOCK in Santa Fe.

Special Agents STAHL and NEEF observed an intense green light in the sky at approximately 13,500 feet altitude near Las Vegas, New Mexico, on 8 December 1948. Agents were unable to identify this object and could not estimate distance or size, since no other object was visible on which to base the comparison.

Col. WILLIAM P. HAYES, stated he has observed an unusual phenomena, bright, white in color, similar to a miniature sun somewhat larger, larger than a basketball, on three (3) different occasions in the vicinity of Vaughn, New Mexico. First observation was made late in 1947; second observation on 3 or 4 November 1948; third observation on 25 November 1948.

Dr. LINCOLN LA PAZ, Director, Institute of Meteoritics, University of New Mexico, stated that phenomena being investigated could not be explained by him, nor could they be considered as meteors. Dr. LA PAZ

SYNOPSIS (Continued)

mentioned three (3) previous anomalous incidents, the Memphis, Tennessee, incident of 7 May 1948; the Texas Observers' incident of 1948, 7 January, and the very remarkable "fireball" fall of 1948, 31 May, 3:42 a.m., MST, across the Los Alamos reservation which was probably meteoritic, but from which no meteorites have been secured in spite of careful search. Dr. LINCOLN LA PAZ personally witnessed the occurrence of a similar incident on 12 December 1948, at Las Vegas, N. M. A statement by Dr. LA PAZ is inclosed.

Col. HAROLD A. GUNN, Base Commanding Officer, Kirtland Air Force Base, Kirtland Field, New Mexico, advised that he knew of no maneuvers being conducted within this area.

Major WILLIAM P. GODSOE, 4th Army Intelligence Liaison, Sandia Base, Albuquerque, New Mexico, advised that he knew of no maneuvers being conducted within this area.

Mr. JOSEPH H. TOULOUSE, EEC Security, Sandia Base, observed a green flare directly over Sandia Base at 2255 hours, 6 December 1948.

~~CONFIDENTIAL~~

DETAILS:

AT ALBUQUERQUE, NEW MEXICO

1. This investigation predicated upon verbal request District Commander, 17th District Office of Special Investigations (IG) USAF, Kirtland Air Force Base, Kirtland Field, New Mexico.

2. This is a joint investigation of Special Agents JOHN J. STAHL, Jr., HERMAN E. MUNROE, MELVIN E. NEEF, and the writer.

3. On 6 December 1948, Captain JOSEPH HANLEN, Security Officer, Kirtland Air Force Base, Kirtland Field, New Mexico, reported the following incidents:

At 2130 hours, 5 December 1948, a C-47, Number AF-9921, enroute from Lowry Air Force Base, Denver, Colorado, to Williams Air Force Base, Chandler, Arizona, reported his position to the Control Tower, Kirtland Air Force Base, as being approximately ten (10) miles east of Albuquerque. Pilot stated that he had seen a green flare arise from the ground to an altitude of approximately five hundred (500) feet on the east slope of the Sandia Mountains. This incident occurred at about 2127 hours. Pilot stated that he had seen the same type of flare at approximately 2105 hours just west of Las Vegas, New Mexico. No other information was offered by this pilot.

At 2300 hours, 5 December 1948, the Control Tower, Kirtland Air Force Base, contacted Pioneer Air Flight #63, which had just completed a flight from Tucumcari, New Mexico, to Las Vegas, to Santa Fe, to Albuquerque, New Mexico. Captain of this flight stated he had seen a green light just west of Las Vegas at approximately 2135 hours. Pilot stated he had believed the light to be a shooting star at first, but, upon questioning, stated the opinion that the light was too near the ground to have been a shooting star. Pilot suggested that the light could have been a Very Pistol flare.

At 2320 hours, 5 December 1948, Captain VAN LLOYD, pilot of Pioneer Flight #63, reported by telephone to Kirtland Air Force Base Control Tower, stating that when he first saw the light it appeared to be coming straight toward his airplane and added that he had attempted to jerk the airplane from its course to avoid the light. VAN LLOYD said that the light appeared to be coming straight to the ship, then trailed off to the ground. The light was pale green and had a pale green trail. Captain VAN LLOYD said he was hesitant about reporting such incidents since they are generally not accepted.

4. On 6 December 1948, ERNEST VAN LLOYD, Captain and Pilot, JAMES L. SMITH, Co-pilot, and ELIZABETH CONNER, Flight Hostess, all

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

civilians, Pioneer Flight #63, were interviewed by S/A MELVIN E. NEEF. This interview was conducted at Pioneer Airline Operations, Kirtland Air Force Base, Kirtland Field, New Mexico. VAN LLOYD and SMITH advised that at 2135 hours, 5 December 1948, they were approaching Las Vegas, New Mexico, in a C-47 type airplane at an altitude of 9,000 feet, with a compass heading of 272 degrees. They observed directly ahead and slightly above their altitude, in the vicinity of the Montezuma Mission, a phenomena which first appeared as a bright white flash, then an object came into view which was described as being a whiteish, orange color. This object at first appeared to be coming directly toward their airplane, then arched downward and disappeared from sight. This object was in view for only a few seconds and no estimate could be made of the size or distance of the object. Both VAN LLOYD and SMITH were of the opinion that it would have been impossible for anyone in the passenger compartment to have observed this phenomena. Miss CONNER stated that she did not observe this object and added that to the best of her knowledge all of the passengers were asleep.

NOTE: It is to be noted that there is a discrepancy in the color of Capt. VAN LLOYD's initial report and that obtained by interview.

5. On 9 December 1948, Colonel WILLIAM P. HAYES, Infantry, Civilian Component Affairs Officer, New Mexico Military District, was interviewed in his office, Building T-25, Kirtland Air Force Base, Kirtland Field, New Mexico. This interview was conducted by S/A JOHN J. STAHL, Jr., S/A MELVIN E. NEEF, and the writer. Colonel HAYES advised that he had first observed an unusual aerial phenomena during the latter part of 1947. This occurred in the vicinity of Vaughn, New Mexico. The phenomena appeared to be approximately four or five hundred feet above the ground when first observed and descending slowly and steadily in a vertical manner toward the earth. The object appeared to be slightly larger than a basketball, bright white in color, like a miniature sun. Upon reaching a point approximately two hundred feet above the surface of the earth, the object appeared to explode although no noise was apparent. Colonel HAYES stopped his automobile and got out to watch the object. At this time the explosion, or disintegration, appeared to be taking place some forty to sixty yards distant, and still no noise was noticed. At this time the fragments assumed a fiery red color and descended toward earth like numerous sparks, being extinguished before touching the ground. Colonel HAYES stated that he was on Highway #60 at this time, near a railroad and separated from the vicinity where the fragments were landing by a fence. Colonel HAYES did not cross the fence or investigate further.

6. Colonel HAYES advised that on either 3 or 4 November 1948, and again on 23 November 1948, he observed two similar phenomena as described previously. These observations were in the same vicinity of the original phenomena on Highway #60, near Vaughn, New Mexico. All three of these incidents occurred at approximately 2200 hours. Col. HAYES

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

also advised that as far as he knew no maneuvers were being held by the National Guard or the Reserve Units in New Mexico.

NOTE: Colonel HAYES did not report any of these incidents, but upon receiving information of similar occurrences having been observed, did volunteer the information contained in this report.

7. On 9 December 1948, Dr. LINCOLN LA PAZ, Director, Institute of Meteoritics, University of New Mexico, Albuquerque, New Mexico, was interviewed in his office by Special Agent MELVIN E. NEEF. Dr. LA PAZ produced his credentials which indicated that during the 2nd World War he was Technical Director, Operations Analysis Section, Hq., 2nd Air Force, and is closely associated in an official capacity with Dr. H. E. LANDSBERG, Executive Director, Committee on Geophysics and Geography, Research and Development Board, Pentagon, Washington, D. C. In connection with this capacity he has a secret and a top secret clearance by the Air Materiel Command, Wright-Patterson Air Force Base, Ohio.

8. Dr. LA PAZ explained the behavior of meteors and stated that these phenomena being investigated could not be explained or be considered as meteors. He advised, in view of the unexplained Memphis, Tennessee, incident, the occurrence at Los Alamos, New Mexico, and the proclaimed meteorites fall in Russia, that has not been explained, that the present phenomena should be investigated and an attempt be made to identify them.

9. On 13 December 1948, Dr. LA PAZ gave a statement concerning an incident, which he witnessed at 9:03 p.m., on 12 December 1948. Dr. LA PAZ's statement is inclosed as Incl. No. 1.

10. On 11 December 1948, Major WILLIAM P. GODSOE, 4th Army Liaison Intelligence Officer, Sandia Base, New Mexico, advised S/A M. C. NEEF, that there were no maneuvers in this area, and no experiments involving the use of rockets or flares.

11. On 12 December 1948, Col. HAROLD A. GUNN, Base Commander, Kirtland Air Force Base, Kirtland Field, New Mexico, was interviewed by S/A MELVIN E. NEEF. Col. GUNN advised that he knows of no aerial maneuvers, and feels that in the event that there were, he would be so advised.

AT CHANDLER, ARIZONA

12. On 7 December 1948, S/A HERMAN E. MUNROE, reported from Williams Air Force Base, Chandler, Arizona, that Air Force C-47, Number AF-9921, was piloted by Captain A. GOADE, AO-55483. The co-pilot was determined to be Major R. M. CARTER, AO-40767, and the Flight Engineer was M/Sgt. R. G. WALTON, AF-299736 - (unknown in its entirety). All of the above personnel were reported to be permanently stationed at Randolph Air Force Base, San Antonio, Texas, and were enroute from San Antonio,

~~CONFIDENTIAL~~

Texas, to Williams Air Force Base, Arizona. Aircraft and crew departed for Mather Air Force Base, California, before an interview could be conducted.

AT SANTA FE, NEW MEXICO

13. On 8 December 1948, Captain K. K. MILLER, New Mexico State Police, State Police Headquarters, Highway 85, Santa Fe, New Mexico, was interviewed reference possible previous reports concerning unusual aerial phenomena, flares, lights in the sky, etc. Captain MILLER stated no reports had been received by his office from any of the State Police stationed throughout the state of New Mexico.

NOTE: Captain MILLER stated that he would report any incidents of this type to the State Police Office in Albuquerque and request that they contact the Office Of Special Investigations, Kirtland Air Force Base, Kirtland Field, New Mexico.

14. On 8 December 1948, Mr. K. D. FLOCK, Forest Supervisor, Santa Fe National Forest, Federal Court House Building, Santa Fe, New Mexico, was interviewed reference possible previous reports concerning unusual aerial phenomena, flares, lights in the sky, etc. Mr. FLOCK stated that he had received no reports of incidents of these types during the current year; however, in the summer of 1947, a woman named MADELINE G. MERCHANT (LEAD) P. O. Box 263, Santa Fe, New Mexico, had reported unusual aerial manifestations to him on numerous occasions. Mrs. MERCHANT, a writer, and her husband were prospecting throughout the State of New Mexico, and on at least five different occasions, during a period of five to six weeks, Mrs. MERCHANT had visited Mr. FLOCK and reported having observed objects which she described as being "cigar-shaped with a glowing tip" in the sky. No information was available as to the altitude, size, speed, or frequency of these objects. Mrs. MERCHANT stated that she had personally observed these objects from Tierra Amarilla, New Mexico, to Los Alamos, New Mexico. Mrs. MERCHANT is believed to have contacted the military security personnel at Los Alamos Atomic Energy Commission (LEAD) installation, and also to have contacted the Governor of New Mexico reference her observations. It is not believed that Mrs. MERCHANT is now residing at Santa Fe.

15. Mr. FLOCK stated that he had alerted his Forest Rangers to watch for unusual lights or objects in the sky, but to date had received no reports from them. Mr. FLOCK recommended that WILLIAM BRAINARD, Forest Ranger, Las Vegas, be contacted for a report of possible activities of this nature in the Las Vegas area.

NOTE: Mr. FLOCK was unusually cooperative and security-conscious. Mr. FLOCK stated that he would discreetly alert his Rangers again and have them report to him all incidents of this nature immediately. These reports will be transmitted in turn to the Office of Special Investigations, Kirtland Air Force Base, Kirtland Field, New Mexico. Mr. FLOCK stated also that he would be glad to cooperate by permitting members of the Office of Special Investigations to make use of temporarily inactive fire towers, or ranger stations, upon request.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

AT LAS VEGAS, NEW MEXICO

1. On 8 December 1948, Mr. Matt O'BRIEN, Chief of Police, Sixth and University, Las Vegas, New Mexico, was interviewed reference reports of unusual aerial phenomenon. Chief O'BRIEN stated that he had received no reports of this nature and added that this was the first he had heard of possible occurrences in the vicinity of Las Vegas. Chief O'BRIEN recommended that NOLAND UTZ, State Police, on duty in Las Vegas, be contacted.

2. On 8 December 1948, Patrolman NOLAND UTZ, New Mexico State Police, San Miguel County Court House (Old Town), Las Vegas, New Mexico, was interviewed reference reports on unusual aerial phenomenon. Mr. UTZ stated he had received no reports of this nature and added that only on one occasion had he overheard a conversation about aerial flares in the neighborhood of Las Vegas. This conversation occurred during a meeting of several enforcement agents and Mr. UTZ stated he had no idea who had mentioned the subject. Mr. UTZ stated if he received reports of this type he would report same to the proper Federal agency. Mr. UTZ said that possibly a man named "HOUSE" who was flying a plane locally and doing advertising with a loud speaker attached to the plane could throw some light on the flares claimed to have been seen in the vicinity of Las Vegas.

3. On 8 December 1948, Mrs JOSEPH MARSHALL, Office Manager, Las Vegas Flying Service, Watson Airport, East County Road, Las Vegas, New Mexico, was interviewed reference reports of flares observed at night in the vicinity of Las Vegas. Mrs. MARSHALL stated that she was the wife of JOSEPH MARSHALL, Owner of Las Vegas Flying Service. Mrs. MARSHALL stated that business was unusually slow at the Watson Airport, due to the near-abolishment of training of student pilots under the G.I. Bill. No flying is conducted at night from this air field. Mrs. MARSHALL added that possibly information could be obtained from the local newspaper office and added that she had heard no reports on flares in the Las Vegas area.

NOTE: Contact was not made with the local newspaper due to a desire of keeping publicity about this investigation to a minimum.

4. On 8 December 1948, Mr. J. D. MILLER, Chief Aircraft Communicator, Department of Commerce, Civil Aeronautics Administration (hereinafter referred to as C.A.A.), Box 1029, Municipal Airport, Las Vegas, New Mexico, was interviewed reference possible previous reports of unusual aerial phenomenon. Mr. MILLER stated he had heard of no incident prior to this interview and added that he was very much interested in events of this nature. Mr. MILLER stated he had received no information from any aircraft on 5 December 1948. A check of the C.A.A. records for this date verified this statement. Mr. MILLER stated that beginning immediately he would alert his Aircraft Communicators to report promptly incidents of this nature to him. These reports would in turn be reported to the Office of Special Investigations, Kirtland AFB, Kirtland Field, New Mexico. If the reports appear to necessitate immediate investigative action, a report will be made to a Federal agent residing in Las Vegas. Mr. MILLER requested that four of

~~CONFIDENTIAL~~

his six Aircraft Communicators, on duty at time of interview, be interviewed collectively and informed briefly of the type of reports desired and the necessity for reporting such incidents immediately to Mr. MILLER.

5. On 8 December 1948, Mr. JOHN J. NEWMAN, Mr. K. C. FRANCIS, Mr. C. T. RICH, and Mr. ROY W. TOLLIVER, Aircraft Communicators, C.A.A. Municipal Airport, Las Vegas, New Mexico, were interviewed collectively and informed of the investigation being conducted relative to unusual aerial phenomena. None of these men had received previous reports of this nature. All of these men agreed to maintain this information on a discreet basis and to handle the information as being highly classified. Permission was granted to these four communicators to brief the two communicators absent at this time reference the information desired. The two men absent were listed as Mr. IRWIN L. MERICLE and Mr. ROBERT L. BISH. The four communicators interviewed stated that the only night flying at Municipal Airport, Las Vegas, was by the two commercial airlines located there: Pioneer Airlines and Continental Airlines. It was pointed out that a Mr. LLOYD BIBLE, Owner-Manager of a flying school located on Municipal Airport was not licensed to make night flights and was not authorized to permit his students to fly at night. It was further noted that Mr. WOODROW HOUSE, owner of a Piper Super Cruiser used for advertising purposes in the vicinity of Las Vegas, was not licensed to fly at night.

6. On 8 December 1948, Mr. BILLY R. WATSON, Manager, Pioneer Airlines, Municipal Airport, Las Vegas, New Mexico, was interviewed reference reports on unusual aerial phenomenon. Mr. WATSON was interviewed in his home, 816 Fourth Street, Las Vegas, New Mexico, and stated that with the exception of a rumor from one of his Pioneer pilots (Mr. VAN LLOYD) he had heard of no unusual incidents regarding flares or lights in the sky in and around the Las Vegas area. Mr. WATSON stated that he would stay on the alert in an attempt to gather any future information from pilots or crew members of Pioneer Airlines, but added that he did not feel like confiding in his two assistants, since they were very youthful and would undoubtedly disclose information regarding this investigation. Mr. WATSON stated that a Mr. W. R. McGOVERN, home address, 1001 Sixth Street, Las Vegas, Manager of Continental Airlines was presently out of town but was due to return on Friday, 10 December 1948. Mr. WATSON, upon being requested to do so, stated he would discreetly brief Mr. McGOVERN as to the nature of reports desired, and would impress Mr. McGOVERN as to the confidential classification of this investigation. Mr. WATSON concluded by stating that any information he obtained, and information obtained by Mr. McGOVERN, would be reported to Mr. MILLER of C.A.A. for subsequent transmittal to the proper investigative agency.

7. On 8 December 1948, Mr. WILLIAM BRAINARD, Ranger, Santa Fe National Forest Service, Federal Post Office Building, Las Vegas, New Mexico, was interviewed reference possible previous reports of unusual aerial phenomenon. Mr. BRAINARD stated that at no time in the past since his assignment to Las Vegas in February 1948 had he received any report or observed any incident regarding occurrences of this nature. Mr. BRAINARD said he would report any future incidents of this type to Mr. FLOCK in Santa Fe, for subsequent transmittal to the investigative agency concerned.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

AT LAS VEGAS, NEW MEXICO

This is a joint investigation conducted by Special Agents JOHN J. STAHL, Jr. and MELVIN E. NEEF.

At 1745 on 8 December 1948, Special Agents STAHL and NEEF, both rated pilots, took off from Kirtland Air Force Base, Albuquerque, New Mexico, in a T-7 type aircraft. At 1833 while flying at an indicated altitude of 11,500 feet, mean sea level, approximately 5,000 feet above terrain, a strange phenomenon was observed. The exact position of the aircraft at the time of the observation was 35° 31' North - 104° 51' West, approximately twenty (20) miles east of the Las Vegas, New Mexico, radio range station. At the time of the observation the aircraft was flying on a compass course of 90°, the indicated air-speed was one hundred sixty (160) miles per hour and the ground speed was approximately one hundred ninety miles per hour. Special Agent STAHL was flying as pilot and seated on the left side of the cockpit. Special Agent NEEF was flying as co-pilot and was seated on the right side of the cockpit. Special Agent NEEF first observed the phenomenon and a split second later Special Agent STAHL saw it. At an estimated altitude of 2,000 feet higher than the airplane or 13,500 feet above mean sea level a brilliant green light was observed coming toward the airplane at a rapid rate of speed from approximately 30° to the left of course, from 60° ENE, to 240° WSW. The object was similar in appearance to a burning green flare of common use in the Air Forces. However, the light was much more intense and the object appeared to be considerably larger than a normal flare. No estimate can be made of the distance or the size of the object since no other object was visible upon which to base a comparison. The object was definitely larger and more brilliant than a shooting star, meteor or flare. The trajectory of the object when first sighted was almost flat and parallel to the earth. The phenomenon lasted approximately two (2) seconds at the end of which the object seemed to burn out. The trajectory then dropped off rapidly and a trail of glowing fragments reddish orange in color was observed falling toward the ground. The fragments were visible for less than a second before disappearing. The phenomenon was of such intensity as to be visible from the very moment it ignited and was observed a split second later. It was not possible for the phenomenon to have been visible for longer than a split second before observation.

Weather at flight altitude was as follows: Ceiling unlimited, visibility, a minimum of seventy-five (75) miles, the wind, 30 miles per hour from 310°. The moon, in the first half, was approximately half way to its zenith and south, or to the right of course. The 1815 weather observation at Las Vegas, New Mexico, was clear, 30 miles visibility, temperature 30°, due point 17°, the wind from the NE at 6 miles per hour, the altimeter setting 30.06 inches of mercury. After the occurrence the aircraft remained in the same vicinity for approximately one and one-half hours but no further phenomena were observed.

On 9 December 1948, Special Agent STAHL accompanied by a crew chief took off from Kirtland Air Force Base at 1635 and flew to the area where the phenomenon had been observed the previous evening. A careful search of the terrain, both where the phenomenon was observed and in the direction from

~~CONFIDENTIAL~~

which it had appeared, was made. The terrain is barren and rough, and scarred by numerous dry washes and shallow canyons. Two or three widely separated buildings, apparently small ranch houses were noticed in the area. It appears that the land may be used for limited cattle raising. There are no indications of cultivation. The aircraft remained in the vicinity for several hours after sunset but no further phenomenon was observed. The weather conditions at flight altitude were high scattered cirrus clouds above 25,000 feet and visibility in excess of 40 miles.

On 11 December 1948, Mr. JOSEPH H. TOULOUSE, A.E.C. Security Representative, Sandia Base, gave Special Agent NEEF the following statement:

Statement

At approximately 2255 the evening of 6 December 1948, I observed a definite greenish flare in the sky almost directly overhead at Sandia Base. At the time of the flare I was driving west on D Street and had made the Stop sign at the Main Street. The flare appeared in the upper right hand corner of the windshield of the car slightly to the northwest.

The flare was approximately one-third the diameter of the moon and a slight arch ensued falling from east to west. The flaming tail appeared during this arch. The entire phenomenon lasted possibly two to three seconds after which it vanished.

Joseph H. Toulouse
A.E.C. Security
Sandia Base

INCLOSURES

FOR CO, KIRTLAND AFB:

Signed statement of Dr. LINCOLN LA PAZ dated at Albuquerque, New Mexico, 13 December 1948.

FOR OSI, HQ., WASHINGTON, D.C.:

Signed statement of Dr. LINCOLN LA PAZ, dated at Albuquerque, New Mexico, 13 December 1948.

FOR DO #10, KELLY AFB:

Signed statement of Dr. LINCOLN LA PAZ, dated at Albuquerque, New Mexico, 13 December 1948.

FOR HOLLOMAN AFB DET:

Signed statement of Dr. LINCOLN LA PAZ, dated at Albuquerque, New Mexico, 13 December 1948.

FOR WALKER AFB DET:

Signed statement of Dr. LINCOLN LA PAZ, dated at Albuquerque, New Mexico, 13 December 1948.

~~CONFIDENTIAL~~

UNDEVELOPED LEADS

DISTRICT OFFICE #17, KIRTLAND AFB

AT SANTA FE, NEW MEXICO

Will interview Mrs. MADELINE G. MERCHANT, Box 263, reference reports made by her to Mr. FLOCK, Forest Supervisor, Santa Fe National Forest, during the summer of 1947. Any recent activities concerning aerial phenomenon observed by Mrs. MERCHANT will be obtained.

AT LOS ALAMOS, NEW MEXICO

Will interview the Chief of the Security Section, Los Alamos Atomic Energy Commission installation reference reports made to that organization by Mrs. MADELINE MERCHANT in 1947 and possibly in 1948. Will further ascertain from the Chief of Security if any other reports of unusual aerial phenomenon have been reported to the Los Alamos Atomic Energy Commission installation.

AT WALKER AIR FORCE BASE

Will determine if that base has been engaged in any maneuvers involving the use of any aerial flares or similar devices.

AT HOLLOMAN AIR FORCE BASE

Will determine if that base has been engaged in any maneuvers involving the use of any aerial flares or similar devices.

DISTRICT OFFICE #10, SAN ANTONIO, TEXAS

AT SAN ANTONIO, TEXAS

Will interview Captain Goade, Major Carter and M/Sgt Walton concerning the flares, meteors or phenomenon observed by them at Las Vegas and on the eastern slope of the Sandia Mountains, New Mexico, on 5 December 1948, while enroute from Lowry AFB, Denver, Colorado, to Williams AFB, Chandler, Arizona.

AT EL PASO, TEXAS

Will determine whether or not Biggs AFB has been engaged in aerial maneuvers involving the use of aerial flares or similar devices.

- PENDING -

~~CONFIDENTIAL~~

INCLOSURE NO. 1 TO INVESTIGATIVE REPORT #24-8, 17th DISTRICT OSI.

Report on incident of 1948, December 12, 9h. 2m. + 30s., seen from Starvation Peak (Bernal), New Mexico. (Approximately 15 miles south and 4 miles west of Las Vegas, New Mexico.

The report of this incident should be prefaced with a statement of the fact that beginning on evening of December 9th, and as a direct result of the conference held on afternoon of December 9th with S/A Melvin E. Neef, the writer began systematic observations of the Geminid meteor shower, the only one of the recognized annual meteor showers active at this time. In spite of the quite unusual nature of the observation reported to me by S/A Neef (and of similar observations made known to me at the conference called by Col. Doyle Rees on December 11th), I felt certain that the observed phenomena somehow must be connected with the Geminid meteors which reach their maximum activity between December 10th and 12th, but are frequently seen in considerable numbers as early as December 3 - 4. However, visual observations made between the evening of December 9th and the morning of December 12th only served to confirm a statement made on December 9th to S/A Neef, viz., that the Geminids are not one of the showers producing numbers of extremely bright fireballs (of also Fletcher Watson, Between the Planets, Harvard Books on Action Series, p. 136 (1941)), and that I did not recall ever having seen a green Geminid fireball although bluish and bluish white Geminid had occasionally been noted. This latter impression was checked after my observations of December 9 - 12 were completed by an analysis of the colors assigned to all meteors both Geminid and non-Geminid that I have observed during periods of Geminid activity since December 1, 1915. A total of 414 such meteors had color reported and none of these were tabulated as either green or greenish.

With the above preface, I proceed to an account of the incident of December 12. Shortly before 9 on the evening of this date a staff car driven by Lt. Allan Clark of Sandia Base left Las Vegas headed for Santa Fe. Clark had as passengers Major C. L. Phillips and the undersigned. Phillips was in the back seat and I was in the right front seat. Just before reaching Bernal, New Mexico, the car passed through a cut and came out on a down slope facing approximately westward. On emerging from this cut a clear view to the right toward the north and northwest was afforded. I was watching the sky as I had been since darkness fell and my attention was directed to an area about 15° west of X-Cygni when, by indirect vision I became aware of a very bright green ball (apparent angular diameter 5') to the right of the area in the center of my field of view, moving from east to west very low on the horizon. Jerking my eyes to the right and pointing with my right hand I shouted, "Look", four times. (The fact that I point and repeated the word 4 times has been checked by both of my companions and reenactment of my motions and speech, timed by an Elgin AF stopwatch within 5m after the moment of appearance of the green ball, furnished measures of the duration of this fireball, ranging from 2.1 seconds to 2.3 seconds.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

The path of the green ball was almost exactly horizontal (Altitude estimated as only 3 or 4 degrees) until just a tenth of a second or so before it disappeared. During the last one or two tenths of a second of its visibility a slight but definite curvature downward developed in its path. From the very beginning the ball was very bright. Immediate comparison with Sirius (at a much greater altitude than the green fireball) indicates that during all but the last one or two tenths of a second of the fireball's visibility it was at least of apparent magnitude -4 (minus four). Just as curvature in its path developed the magnitude of the fireball rose slightly and it broke up into three or four smaller, but still bright green fragments which disappeared almost instantly.

Lt. Clark stopped the car the moment the fireball disappeared, spun it around and drove back into the cut; then turned and parked at the exact point where I first yelled "Look". Here the time as read immediately from a watch I had set at noon on December 12 with the master clock in the Santa Fe RR Station at Las Vegas, New Mexico, was 9h. 3m. as nearly as could be determined. Assuming that Clark's maneuvers with the car took between half a minute and a minute and a half the actual time of appearance was between 9h. 1m. 30s. and 9h. 2m. 30s. I believe the earlier of these times is the more probable.

At the point where Lt. Clark stopped, an arrow was scratched in the shoulder of the roadway directed toward the point where the green fireball disappeared and white rocks were used to border this arrow. While performing this operation and for many minutes thereafter we stood outside the car and listened for meteoritic detonations or rumblings, but absolutely nothing was heard. (There was no appreciable interference from traffic noise.)

At approximately 9:50 p.m., we reentered the staff car and drove first to Santa Fe (where we futilely attempted to get in touch with night guards on duty at New Mexico State Prison in the hope of obtaining an additional line of sight to the point where the green ball had disappeared); and then to Los Alamos where I reported to Col. Carroll and other security officials what we had observed. Through their aid it was determined that what was unquestionably the same green ball seen by us had also been observed by at least two of the night guards at Los Alamos.

During the entire night of the 12th, meteors of all magnitudes from the first to the fifth and of various colors (with white and yellow predominating and with no evidence of green) were occasionally seen emanating from the Geminid radiant. This radiant was well above the horizon even at the time of the Starvation Peak incident. Consequently, the apparent paths of the meteors from the radiant appeared as luminous arcs of great circles diverging from the radiant point and passing downward to intersect the horizon under angles always large and for the most part approaching 90°, in value. In the sharpest contrast, the path of the bright green fireball seen from near Starvation Peak was very nearly, if

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

Incl No. 1 to Investigative Report #24-8 (Cont)

not exactly, parallel to the horizon. This green fireball certainly did not emanate from the Geminid radiant.

Subject to discovery that a new (non-Geminid) meteoric radiant emitting numerous very bright fireballs of a vivid green color (deeper and richer than the green of the beacon at the New Municipal Airport south of Santa Fe, New Mexico) has suddenly become active during the first half of December, I am now convinced the various "green Flare" incidents reported to the O.S.I. are not meteoric in nature.

This is a written statement given by Dr. La Paz in his own words.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

HEADQUARTERS
AIR MATERIEL COMMAND

Wright Field, Dayton, Ohio

MCIMXC

21 Jan 1948

Institute of Meteoritics
University of New Mexico
Albuquerque, New Mexico

ATTENTION: Dr. Lincoln LaPaz

Gentlemen:

Reference is made to the secrecy agreement executed by your company and to the personnel security questionnaires submitted for persons within your organization who require access to classified information in connection with the submission of a bid or the performance of a contract for the Air Materiel Command.

Consent as required by AR 380-5 for employment on work covered by United States Air Force contracts classified secret or top secret, is hereby GRANTED in the case of the following one United States citizen (s):

LaPaz, Lincoln Dr.

Very truly yours,

/s/t/ J. F. McCLENDON
Colonel, USAF
Adjutant General

CLASSIFICATION CANCELLED	
BY AUTHORITY OF THE DIRECTOR OF SPECIAL INVESTIGATION	
BY	KURT K. KUNZE, Capt, USAF
	Historian
DATE	3 DEC-1975

~~CONFIDENTIAL~~

UNCLASSIFIED

Inc # 3

*Security
DOB*

DEPARTMENT OF THE AIR FORCE
STAFF MESSAGE DIVISION
INCOMING CLEAR MESSAGE

DEC 14 10 53 24H

EJA 86

EUB174

WFA293

WBA298

PP JEP

FM UWBK 16/HQ 17TH DIST OSI KIRTLAND AFB ALBUQ NM 141615Z
TO CHIEF OF STAFF USAF WASH D C ATTN DIR OF SPEC INVESTIGATIONS OFC
OF THE INSPECTOR GENERAL USAF

AF GRNC

AQQ-OSI-12-4 PD REF YOUR RESTRICTED TELETYPE 13 DECEMBER 1948 PD INITIAL
REPORT ON UNUSUAL AERIAL PHENOMENA PAREN FLARES PAREN TRANSMITTED
VIA AIR MAIL TO YOUR HQS AS OF 1715 HOURS 13 DECEMBER 1948 PD REPORT
SHOULD REACH YOUR HEADQUARTERS THIS DATE END

CFN AQQ-OSI-12-4 13 1948 1715 13 1948

*File 24 -
(14)
Hj*

ACTION: CSI

AF IN

CLASSIFICATION CANCELLED
BY AUTHORITY OF THE DIRECTOR OF SPEC INV
KURT K. KUNZE, Capt, USAF
BY Historian
3 DEC 1975
DATE

RCW/ejt

ACTION COPY

24	185	30
<i>file</i>		

UNCLASSIFIED

16-55889-1 U. S. GOVERNMENT PRINTING OFFICE

Declassification Authority: NND 923007

~~CONFIDENTIAL~~

9th OSI District
Barksdale AFB, La.

APR 15 1958

24-225 *checked*

(U)
SUBJECT: UNIDENTIFIED FLYING OBJECT
Sighted by WARREN J. KNAPP (Civilian),
0720 Hours, 10 April 1958, CST

TO: Commander
Lake Charles Air Force Base
Louisiana

1. The following information, obtained in accordance with the provisions of AFR 200-2 dated 5 February 1958, confirms that which was verbally furnished Lt. Colonel JOHN B. WOODYARD, AO 789425, Operations Staff Officer, Lake Charles Air Force Base, Louisiana, at 1700 hours, 10 April 1958, by the OSI Detachment Commander, Lake Charles Air Force Base:

a. Description of the Object:

- (1) Teardrop shaped
- (2) Compared in length to the diameter of a pea held at arms length, and it was approximately 1/5th as thick as its overall length.
- (3) Bright silver around the edges and in the center it was a bluish silver color.
- (4) One (1).
- (5) N/A.
- (6) No discernible features or details other than the shape and color.
- (7) No trail, exhaust or smoke.
- (8) No sound.
- (9) No other pertinent or unusual features.

b. Description of Course of Object:

- (1) A chance glance into the sky above nearby buildings first attracted attention of observer to object.
- (2) 30-35 degree elevation and 0 degree (due north) azimuth.
- (3) Approximately same elevation as when first sighted (possibly 2-3 degrees less, as the object did have a slight appearance of decreasing elevation), and 30 degree azimuth upon disappearance.
- (4) Straight and level flight, with a possible slight decrease in elevation.
- (5) Object disappeared toward the east, behind a building, at approximately 30 degree azimuth.
- (6) Object was visible for approximately 2-3 seconds.

CLASSIFICATION CANCELLED
BY AUTHORITY OF THE DIRECTOR OF SPEC INV
BY KURT K. KUNZE, Capt, USAF
Historian

3 DEC 1975
DATE

UNCLASSIFIED

~~CONFIDENTIAL~~

cc: Dir OSI (USAF)

CONFIDENTIAL

CS1

HEADQUARTERS UNITED STATES AIR FORCE THE INSPECTOR GENERAL OFFICE OF SPECIAL INVESTIGATIONS REPORT OF INVESTIGATION		FILE NO. 24-6	DATE FEB 24 1949
TITLE <u>PROJECT "SIGN"</u>		REPORT MADE BY ARMIN F. HEROLD, JR	
		REPORT MADE AT DO # 19, Fairfield-Suisun AFB	
		PERIOD 26 January 1949 4 February 1949	
		OFFICE OF ORIGIN DO # 5, Wright-Patterson AFB	
		STATUS CLOSED	
CHARACTER Special Inquiry			
REFERENCE Rpt of Investigation, S/A Armin F. Herold, Jr., dated 20 January 1949, File No. 24-6			
SYNOPSIS			
<p>Interview of THATCHER's supervisor and fellow employee revealed that they believed THATCHER's loyalty, integrity and character to be above reproach. No derogatory information was revealed in a check of local law enforcement agencies on either ROBERT THATCHER or the Teachers' Union (A.P.L.), San Francisco, California; in which THATCHER was interested. This object was not sighted by any employees of the air lines or personnel of the Air Force operating in the Bay Area.</p>			
<div style="border: 1px solid black; padding: 5px; text-align: center;">CLASSIFICATION CANCELLED BY AUTHORITY OF THE DIRECTOR OF SPEC INV BY KURT K. KUNZE, Capt, USAF Historian 8 DEC 1975 DATE</div> <p style="text-align: center;">CLOSED</p>			
DISTRIBUTION	ACTION COPY FORWARDED TO		FILE STAMP
DO # 5 (Action Copies) 2 CG, AMC 2 OSI Hqs 2 Files 2	2 Commanding General 2 Air Materiel Command 2 Wright-Patterson Air Force Base 2 Dayton, Ohio ATTN: Intelligence Department, MCIA XO		<div style="text-align: center;">24-185-29 MAR 4 1949 14 AM FILE BJK</div>
<div style="border: 1px solid black; border-radius: 50%; padding: 10px; text-align: center;">OASD GEN INTEL MVB T.S. 1949 IM</div>	<div style="border: 1px solid black; border-radius: 50%; padding: 10px; text-align: center;">OASD GEN INTEL MVB T.S. 1949 IM</div> <div style="border: 1px solid black; padding: 5px;">APPROVED  JOHN S. SHOPE Colonel, USAF DISTRICT COMMANDER</div>		

UNCLASSIFIED

REPORT OF INVESTIGATION		HEADQUARTERS UNITED STATES AIR FORCE THE INSPECTOR GENERAL OFFICE OF SPECIAL INVESTIGATIONS	
TITLE		REPORT MADE BY	
CHARACTER		REPORT MADE AT	
REFERENCE		PERIOD	
SYNOPSIS		OFFICE OF ORIGIN	
		STATUS	

CLASSIFICATION AUTHORITY OF THE
BY AUTHORITY OF THE
DATE

ACTION COPY FORWARDED TO

Distribution

(Action Copies)



STANDARD FORM NO. 64-10001

~~CONFIDENTIAL~~

19D OSI 24-6

DETAILS:

AT SAN FRANCISCO, CALIFORNIA

1. Mr. L. A. HAWKINSON, Principal, Francisco Junior High School, Powell and Francisco Streets, San Francisco, California, and Mrs. NELLIE P. PETERSON, Dean of Girls, Francisco Junior High School, were interviewed and stated in substance that THATCHER's loyalty to the Government was above question in their estimation and his integrity and character were of the best. THATCHER is not known to drink heavily nor is his imagination known to be flamboyant. Further THATCHER is one of the better teachers in that he is conscientious, observant and able to handle and understand the younger people. Neither knew of any derogatory information concerning THATCHER. In the course of these interviews it was revealed that THATCHER is very interested in the Teachers' Union (A.F.L.) which is attempting to gather strength in San Francisco. A check of this Union revealed that out of approximately 3,000 teachers in San Francisco, only about 200 are members of the Union. There was no derogatory information available concerning the Teachers' Union (A.F.L.), San Francisco, California.

2. A check with the American Airlines, Pan American Airlines, Western Airlines, Mills Field, California; Operations, Hamilton Air Force Base; and Operations, Alameda (Navy), California, failed to reveal any reports of a strange object's being sighted on the night of 29 November 1948.

3. A check of the records and files of the following agencies were made with negative results in regard to ROBERT THATCHER:

G-2, 6th Army, Presidio of San Francisco, California
F.B.I. Field Office, San Francisco, California
Harper-Knowles Agency (Western Research Institute), (Civilian Subversive Files Source)
Criminal & Subversive Files, Police Department, San Francisco, California

CLOSED

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

5D-OSI/JWF/fmm

CS1

HEADQUARTERS UNITED STATES AIR FORCE THE INSPECTOR GENERAL OFFICE OF SPECIAL INVESTIGATIONS REPORT OF INVESTIGATION		FILE NO. 5D 24-4	DATE 15 February 1949
TITLE PROJECT "SIGN"		REPORT MADE BY Special Agent ARTHUR LITTON	
		REPORT MADE AT DO #5, Wright-Patterson AFB, Dayton, O	
		PERIOD 26 January 1949 thru 6 February 1949	
		OFFICE OF ORIGIN DO #5, Wright-Patterson AFB, Dayton, O	
		STATUS CLOSED	
CHARACTER SPECIAL INQUIRY			
REFERENCE Telephone call from Captain B. Sneider, Technical Intelligence Division, HQ AMC, to Major Farrell, 5D-OSI, on 21 October 1948			
SYNOPSIS <p>This investigation was requested by Captain B. Sneider, Technical Intelligence Division, HQ AMC, whose Section is charged with the investigation of unidentified aerial objects. At 1630 hours on 16 January 1949, Mr. PAUL BRANNON of Paris, Kentucky, saw a walnut shaped object emerging from behind a cloud, which object remained in sight for less than a minute. A "tube of light" remaining behind the object was photographed by Mrs. BRANNON, wife of Mr. PAUL BRANNON. Also at 1630 hours on 16 January 1949, Mr. HAROLD L. WHITE of Paris, Kentucky, noted a vapor streak building up for approximately 3 minutes, and which appeared to be climbing. At 1630 hours on 16 January 1949, a Mr. DAVID ISGRIG of Paris, Kentucky, also saw a vapor trail, the source of which was not visible from the ground.</p> <p style="text-align: center;">CLOSED</p>			
<div>CLASSIFICATION CANCELLED BY AUTHORITY OF THE DIRECTOR OF SPEC INV BY KURT K. KUNZE, Capt, USAF Historian 3 DEC 1975 DATE</div>			
DISTRIBUTION CG, AMC (MCIAXO-3) Action Cys Hq OSI 5D-OSI File	ACTION COPY FORWARDED TO CG, AMC, ATTN: MCIAXO-3		FILE STAMP 24 185 28 UNITED STATES AIR FORCE THE INSPECTOR GENERAL FEB 18 4 48 PM '49 OFFICE OF SPECIAL INVESTIGATION UNCLASSIFIED
APPROVED H. B. GIBSON Colonel, USAF DISTRICT COMMANDER			

CONFIDENTIAL

5D 24-4

15 Feb 49

DETAILS:

AT PARIS, KENTUCKY

1. Mr. PAUL BRANNON, 147 E. Main Street, Paris, Ky., was interviewed on 26 January 1949 and stated, in substance, that at approximately 1630 hours on 16 January 1949, he was proceeding in his automobile in a southwesterly direction, towards Paris, Ky., accompanied by his wife, Mrs. IRENE BRANNON, and his niece, Miss ELIZABETH FRITZ, 620 West Short St., Lexington, Ky. Mrs. BRANNON called his attention to the sunlight reflected on the clouds in the western sky, and as he gazed into the sky, his attention was attracted to a walnut shaped object emerging from behind a cloud. Sight of this object emerging from obscurity into reflected light was maintained for less than one minute. Attention was then focused on a "tube of light" that remained behind as the object moved across the sky. Mrs. BRANNON made four exposures of the "tube of light" during its progress. Mr. BRANNON described the course of the object as steady and as though some object on an outward sweeping arc had crossed his field of vision at a great distance from the earth. The fourth and last exposure of the "tube of light" fully extended, as published in the Nicholas County Star and the Kentuckian-Citizen, is attached hereto as Exhibit "A". The photograph is accompanied by an article written by Mr. PAUL BRANNON. Specific answers to essential elements of information, furnished by Mr. BRANNON, is attached hereto as Exhibit "B".

2. Mr. HAROLD L. WHITE, 211 Doyle St., Paris, Ky., was interviewed on 26 January 1949, and stated, in substance, that he was in the yard of his residence about 1630 hours on 16 January 1949 and on one occasion when he gazed at the sky, he noted a "vapor streak" building up. The streak was forming in a manner similar to that used in ejecting smoke in "sky writing." The building up process was observed for a period of approximately three minutes and then was lost behind the clouds. The streak formed on a bearing between ten and twenty degrees south of east, and appeared to be climbing during the period of motion observed. The altitude of the "vapor streak" was not less than 15,000 feet and appeared to be at an angle of approximately 70 degrees from the horizon. Mr. WHITE stated that he had seen numerous "vapor streaks" from both the air and ground during his period of service as a paratrooper in the European Theater and had given the sight no further consideration. Specific answers to essential elements of information, furnished by Mr. WHITE, is attached hereto as Exhibit "C".

3. Mr. DAVID ISGRIG, 118 East Main Street, Paris, Ky., was interviewed on 26 January 1949 at the Paris Airport, and stated in substance, that he was standing in front of the Operations Office of the Airport about 1630 hours on 16 January 1949, and someone in the immediate vicinity mentioned that a vapor trail was forming in the sky. On looking in the indicated direction, he saw a "vapor trail" building up between 25,000 and 30,000 feet over a formation of Cirrus clouds and moving in a southeast direction. The position of the

CONFIDENTIAL

~~CONFIDENTIAL~~

5D 24-4

15 Feb 49

"vapor trail" was at an angle of approximately fifty degrees from the horizon when first observed. The source was not visible from the ground due to the altitude of the trail. The speed, in Mr. ISGRIG's estimation, based on time required to traverse horizon to horizon, was greater than a gasoline propelled craft, and he automatically thought the trail was formed by an Army or Navy jet propelled craft. Mr. ISGRIG stated that he was familiar with "vapor trails" from both the air and ground and he had seen innumerable such trails during his service as a B-24 Pilot in the European Theater. Mr. ISGRIG further stated that he is presently employed as Manager of the Paris Airport. Specific answers to essential elements of information, furnished by Mr. ISGRIG, are attached hereto as Exhibit "D". Attached hereto as Exhibit "E" is an unsworn statement furnished by Mr. DAVID ISGRIG, in support of the above interview.

WEATHER CHECK:

AT LOUISVILLE, KENTUCKY

4. A review of the files by the Officer in Charge, Weather Detachment, Godman AFB, on 3 February 1949 indicated the teletype sequence of weather as of 1630 hours, 16 January 1949 to be as follows:

FTK-S13 E54342R-F 173/47/47↓14/003/CNDS/CHGBL 0V0/0 2326 0 2167

A review of the files made by the Officer in Charge, Weather Detachment, Godman AFB, on 3 February 1949 indicated the Winds Aloft Report of 16 January 1949, to show winds 60 miles per hour, southwest, at 20,000 feet increasing to 100 miles per hour at 35,000 feet.

AT LEXINGTON, KENTUCKY

5. A review of files made by the weather office, Lexington Airport on 6 February 1949 indicated the teletype sequence of weather as of 1630 hours of 16 January 1949 to be as follows:

LEX E30-0015 169/64/54'9/002/E250-0

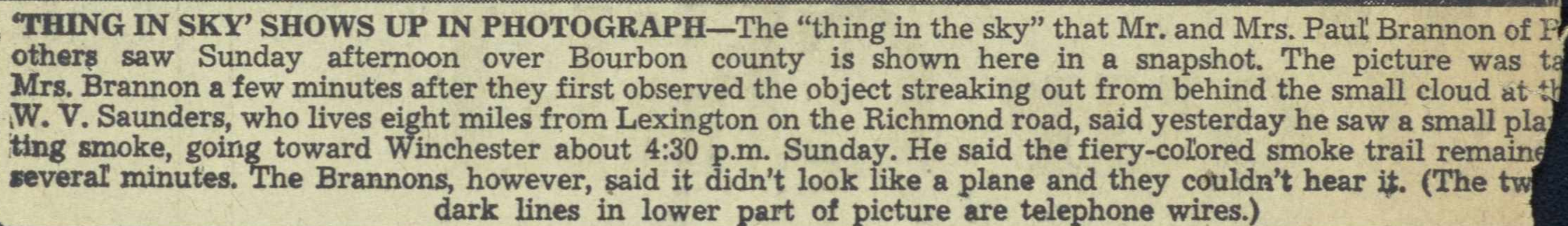
A check of the files of the weather office, Lexington Airport on 6 February showed the winds aloft on 16 January 1949 to be southwest, 35 miles per hour at 10,000 feet increasing to 60 miles per hour at 20,000 feet and 60 miles per hour southwest, at 20,000 feet increasing to 100 miles per hour at 35,000 feet.

GENERAL WEATHER CHECK FOR STATE OF KENTUCKY

6. The weather reports for 16 January 1949 showed conditions in the State of Kentucky to be generally overcast with rain. Occasional breaks occurred in the overcast at which time the ceiling was estimated at 3,000 feet. Winds aloft showed a velocity of 35 miles per hour at 10,000 feet progressing to 100 miles per hour at 35,000 feet.

CLOSED

~~CONFIDENTIAL~~



By Paul Brannon

That was Sunday. This is Wednesday. Without attempting to raise the hackles on the backs of authoritative necks, I still must maintain that I am yet not wholly convinced by any explanation so far offered as to an exact identity of the "thing."

Was It Jet Plane?

It has been a jet.
It has been, as

Space Ship Or Rocket?

I still don't know, as I have said, what the "thing" I saw was. All I did was just see it. Being strictly a horse-artilleryman of the First World War, I am not prepared by a scientifically developed sense of smell to tell offhand what an unusual object is unless I have seen it and, many times as in this case, even when I have seen it.

For all I know, the "thing" I saw, apparently in the act of leaving these mundane parts, may have been a space-ship returning to Al Capp's Pincus II having kidnapped various

The dark cloud formation at the bottom of the picture was a part of the sunset which first attracted my attention to the higher cloud from behind which the object, which is now, in some quarters at least still a matter of conjecture, first protruded.

Protruded is a word used here advisedly for that is exactly what the object did. The moment or so before it had not been there. When I first saw it, it protruded a few inches or a few million miles, again for all I know, from behind the cloud.

Facetiously but for another line or so, if Superman, in an impish mood, had suddenly

HAPPEN HERE

PHYSICIAN Strikes, it comes quietly
are children who cannot walk
N YOU FOR HELP.

Your Child

YOU NEED HELP?

...give them something to...

Your Guess

Continued from Page Three

ordinary length of fluorescent-light tubing and had upped and awayed to the cloud to have sunk a few inches as an anchor and to have allowed the remainder of the tube to stick out at the angle maintained in the picture, this energetic man of steel would have been able to have produced as closely as I can tell the exact position, coloring, structure and inclination of what I saw when I first saw it.

The tubing, in some manner common to Superman's antics, would need to remain the same size in defiance of the distance involved and the current kept on to give the color the object had when first observed by me.

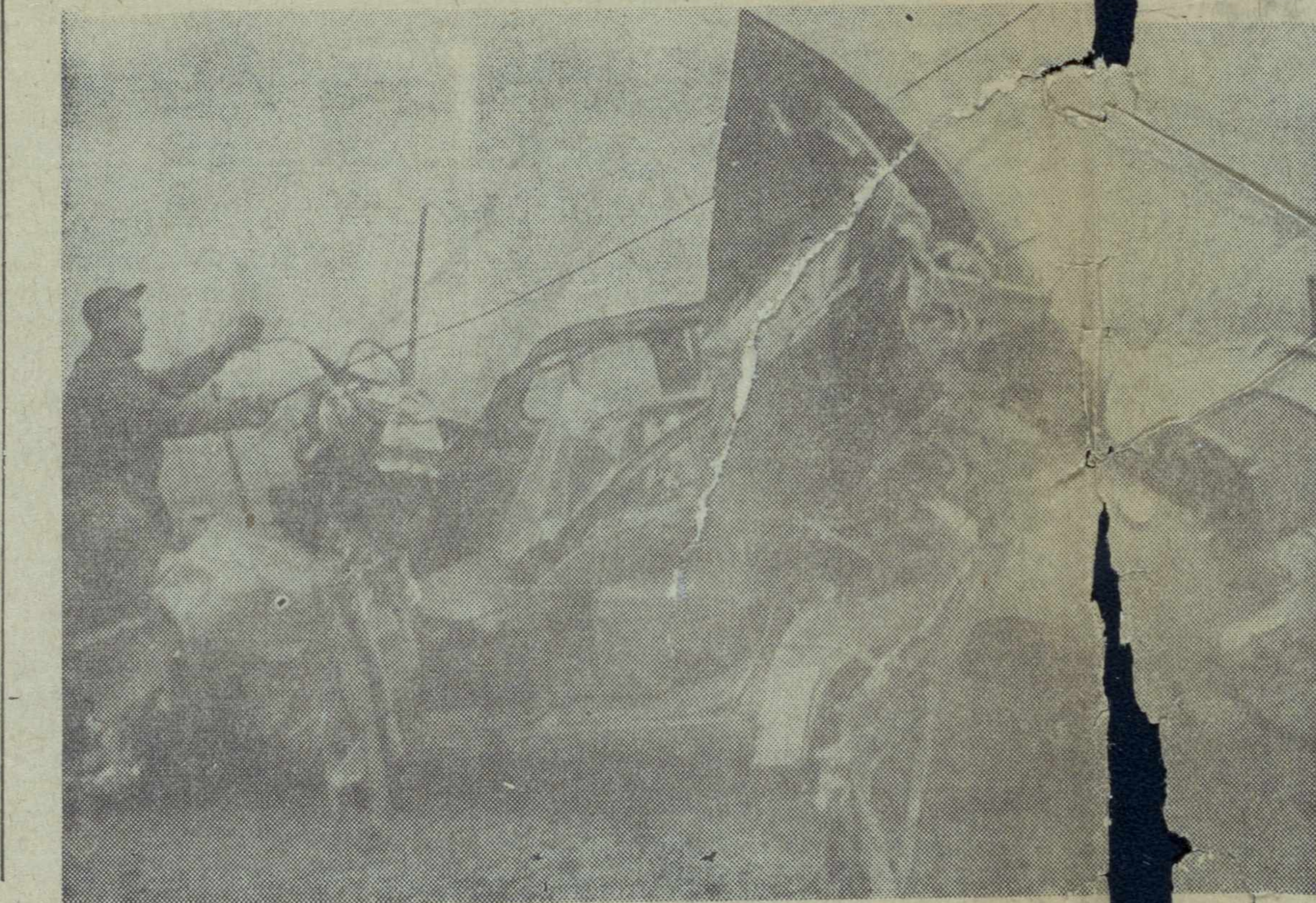
Never having before seen a tube of fluorescent lighting protruding from behind a cloud, I called to my wife, who had been looking around for something to photograph all through a drive we were taking, to get a picture of what appeared to me to be something in the way of a phenomenon to put it as mildly as a newspaper man should. She took four shots, one of which appears above this article.

Now I'm Serious

A moment after we had taken stances at the side of the North Middletown pike leading to Paris and about four miles away from the Bourbon county capital, I was more amazed that the already amazing tube was slowly lengthening.

As I watched its slow steady flow of progress on an upward course, I saw with my own eyes a dark object pushing its way, apparently, through the leaden-blue skies of a near-evening winter day. I saw it barring optical illusions to which I am not accustomed.

What I saw was about the size of a small, hulled, black walnut. It seemed to be plowing its way through the sky. It left in its



CAR IN FATAL CRASH NEAR PARIS—This car was the one driven by R. Frank Collier, 72-year-old Bourbon county farmer and landowner, when it and a coal truck collided January 18 on the Clintonville road. Collier was killed instantly and the car was thrown under the truck by impact of the crash. George Lucky, Paris garageman, removes the wreckage from the highway.

wake the streamer which first appeared as a commonly-seen fluorescent lighting fixture.

As we watched, it continued its course slowly upward and outward. It held inexorably all through its passage, as seen by members of my party, to a straight line as precise as any ever drawn on a drafting board.

Shortly, a minute or so after first observed by me, the black object could be seen no more. Its unhurried, undeviating journey through the heavens was marked by its wake, now, in that part left far behind, changed to first an orange color and then to red. Only after the color had become red, did that part of the wake or streamer

which first came upon my vision become ragged along its edges.

It Made No Noise

There was absolutely no noise except those purely of the ground under our feet where

vehicles passed me to time during minutes the spectacle

As you look at the picture shown at the top of this article, the upward course

of the "thing in the sky" is more clear when it is realized that the object which made the streamer penetrated on into the vast blue as it into infinity.

It seemed to have bored a hole in the sky into which it had disappeared. The entire streamer remained in the sky from the point behind the cloud to the point past which the eyes could no longer follow it for some 15 minutes.

Then the lowering sun removed its support in coloring the wake of the strange object and the whole vanished almost at once.

It had taken the object about 10 minutes to traverse the sky as its passage is shown in the picture. The time was not clocked but is my own estimate.

It had gone up the bowl of the sky just in the same manner that an unhesitant but unexcited house-fly would crawl up the wallpaper in your home. If you will look at your clock, I can give you the angle of its course by placing the little cloud at the figure 4 and the place that the object entered the blue canopy at the figure 10.

Didn't Scare Me

Because the object which caused the great streak in the sky was definitely moving out and away from the earth there was no sense of fear experienced by those in my group. Rather we were transfixed with wonderment. The "goose-pimples" of my wife were those, she said, of enthrallment because of the un-

usual beauty of the unparalleled scene she beheld and not those of fright. It was, indeed, awe-inspiring. To have seen a great streamer created by something which pushed its way, apparently, across the sky is not an ordinary thing to a country editor. Not by a long shot. But then, I have never seen a real jet plane except in the movies. I had no impression of such a plane at the time I watched this "thing in the sky." Letters from widely-separated places in the country give impressions of others and are printed on this page.

My Own Impressions

It must have been a jet plane. That's what those in the know readily said after seeing something in the sky Sunday and, in some cases, after seeing nothing. If it was a jet plane, it is certainly all right with me. I'm all for jet planes, bigger, better and faster. For my part, however, I must admit that I'm still not impressed—not by glib and too ready answers of the technicians. Some of 'em didn't see the thing at all; some of 'em, maybe, didn't see what I saw. I'm still open for more proof.

The impressions, at first impulse and which remain with me to some degree, more or less, that I did get were those which have to do with time and space. Time measured by eons. Space, by light years. Of the marvel of the vast unknown, of unlimited reaches, of the hurtling of immeasurable weights, of eternity and the quiet of a late

Deaths

ENDICOTT

Charles Edward Endicott, 59, died Sunday at the home of his sister, Mrs. W. T. Sutton in Lexington. A native of Bourbon county, he was a son of J. M. and Lydia Tevis Endicott.

Survivors include one sister, Mrs. Sutton; one half-sister, Mrs. William Hickerson, Maysville, and two nephews.

Funeral services were held Tuesday morning at 10 o'clock at the Davis Funeral Home with Rev. J. S. Piner officiating.

the home of her sister, Mrs. C. H. Alexander in Lexington. A daughter of the late Alice Snapp and R. H. Mattox, she was a native of Nicholas county.

Survivors include one son, James Russell Delaney of Paris; four sisters, Mrs. S. T. Chipley, Mrs. Jmaes R. Grinnell, Paris; Mrs. C. R. Alexander, Lexington, and Mrs. Harry Bosshammer of Covington.

Burial was in the Paris cemetery.

Pallbearers were Cletis Chipley, James Grinnell, W. F. Sparks, Roy Doyle, Jake Conner and Thornton Swinford.

Letters To
The Editor

Paris, Kentucky
January 17, 1949

To the Editor:

Amen to your editorial of last week urging enforcement of the traffic regulations without discriminations!

Why should not the same

Sale

JANUARY 29
10 P. M.

sale on the premises

Stairway to Future



New York's newest glittering background photos is the Stainless Steel Stairway. Here are shown three pre-bright lights to go on. Life, Vogue and have started the trend and Mayfair's lev

and society
a famous
magazines
has saved

Down Memory Lane

Thirty Years Ago

The first wounded Bourbon county soldier to return from France is Private Frank Taylor who arrived yesterday to visit with his parents, Mr. and Mrs. J. P. Taylor of North Middletown.

Report From
Tobacco Warehouses

The Bourbon Tobacco Warehouse sold Friday 218,010 pounds of tobacco for \$90,828.64 an average of \$41.66. The Independent Warehouse sold a total of 199,535 pounds of tobacco at an average of \$42.12. The Bourbon Tobacco Warehouse sold a total of 276,940 pounds at an average of \$43.14.

The birthday of General Lee the greatest military leader of the South was observed here by a parade and a luncheon served to the guest of honor—the members of the John Morgan Chapter Confederate Veterans and a few invited guests. After the luncheon the guests assembled in the Confederate room where a program was enjoyed with Mrs. J. T. VanSant, president of the chapter, presiding.

Clay-Roseberry

Miss Alice Rogers Clay and Lt. Hiram Roseberry were married at the Paris Christian

his home on Cypress street.

Mr. and Mrs. William Wilder of Louisville have arrived for a visit with Mr. and Mrs. George W. Wilder on Cypress street.

Mr. and Mrs. William S. Jones entertained with a dinner party at their country home at North Middletown in compliment to their son Capt. Robert Jones and his bride.

Sixty Years Ago

The eclipse of the moon was witnessed by very few here last Wednesday night owing to the late hour when it could be witnessed favorably, it being after 11:30. Seven-tenths of the moon was obscured, but the sight was a very pretty one, the sky being clear and bright, giving an excellent view of the entire eclipse.

E. P. Lowry and Charles Fithian have leased the opera house and the management of the hall will hereafter be in their charge.

Bourbon Banks

The five banks of Paris show individual deposits to the amount of \$439,305.61. Millersburg bank showed deposits of \$200,000 and the North Middletown bank showed the amount of \$47,125.

City School Burned

At 12:30 yesterday the City school building was discovered to be on fire from an inward source. The fires supposedly to be extinguished by the janitor started the blaze which demolished the building. The loss is estimated to be \$10,000 and the insurance only \$6,000. The School Board and the City Council have rented a warehouse of Capt. Thomas and will soon have school in operation again.

North Middletown High school and has been employed at Sears Roebuck Co. here for the past year.

The bridegroom graduated from the Paris High school and attended radio and television school in Louisville. He served two and one-half years in the Navy. He is now employed with the O. & L. Stores in Louisville, where the young couple will make their home.

Births

BARNETT

A son was born Sunday in Hackensack, N. J., to Mr. and Mrs. Stanley Barnett. Mrs. Barnett was formerly Miss Mary Williams of New Jersey. Mr. Barnett is the son of Mr. and Mrs. John Barnett of Paris.

MILLS

A son was born Sunday at the Massie Memorial hospital to Mr. and Mrs. Wesley Mills.

BARNETT

A daughter was born Sunday to Mr. and Mrs. Willard Barnett at their home. Mrs. Barnett is a daughter of Mr. and Mrs. D. L. Miles.

WILLOUGHBY

A son was born January 14 at Good Samaritan hospital, Lexington, to Mr. and Mrs. Malcolm Willoughby of Lexington. Mrs. Willoughby was formerly Miss May Ballard of Paris and Mt. Sterling.

A Schine Theatre
PARIS
Paris, Kentucky

TODAY And SAT.

WITH DISNEY'S
SO DEAR TO MY HEART

Added through
RKO Radio
Pictures, Inc.

ADDED FEATURETTE

5D 24-4

~~CONFIDENTIAL~~
EXHIBIT "A"

~~CONFIDENTIAL~~

PROJECT SIGN

ESSENTIAL ELEMENTS OF INFORMATION

1. Date of sighting: 16 January 1949
2. Time of sighting: 1630 hours.
3. Where sighted:
 - a. Ground
 - (1) Town: Paris, Kentucky.
 - (2) Approximately three (3) miles northeast of Paris, Ky.
 - (3) Sighted from automobile - progress observed from ground.
 - (4) Map coordinates not known.
4. Number of objects: one (1).
5. Distance of object from observer:
 - a. Horizontal or Lateral distance could not be estimated.
 - b. Angle of elevation from horizon: 40-50 degrees.
 - c. Altitude: Could not be estimated.
6. Time in sight: Object observed for approximately one (1) minute. "Tube of light" observed for approximately fifteen (15) minutes.
7. Appearance of object:
 - a. Color: Dark (Occasionally referred to as black).
 - b. Shape: Referred to as both bullet shaped and the shape of a hulled black walnut.
 - c. Construction: Not determined.
 - d. Size: Appeared about the size and shape of a walnut.
8. Direction of flight: General west to east direction.
9. Tactics or maneuvers: Movement steady. Apparently climbing on a 30 to 40 degree angle during period observed.
10. Evidence of exhaust: Object left behind a ribbon or trail, similar to that of a neon tube. Various colors were reflected in the tube due to the setting sun.
11. Effect on clouds: None observed.
12. Lights: Reflected light of sun.
13. Support: None observed.
14. Propulsion: None observed.
15. Control and stability: None observed.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

PROJECT "SIGN"

ESSENTIAL ELEMENTS OF INFORMATION

16. Air ducts: None observed.
17. Speed: Could not be estimated.
18. Sound: None.
19. Radio antenna: None observed.
20. Manner of disappearance: Passed beyond field of vision of observer.

RELATIVE TO THE OBSERVER

1. Name: Mr. Paul Brannon.
2. Address: 247 East Main St., Paris, Ky.
3. Occupation: Publisher of the Nicholas County Star and the Kentuckian-Citizen.
4. Place of Business: The Kentuckian-Citizen, 147 E. Main St., Paris, Ky.
5. Hobbies: None.
6. Ability to determine color, speed of moving objects and size at a distance could not be ascertained.
7. Reliability: Reported to be completely reliable by three neighbors and the Sheriff of Bourbon County, Ky.
8. Observers attention originally drawn to sunset. Attention further arrested by a dark walnut shaped object appearing from behind a cloud and leaving a neon like tube of light behind it.
9. Witnesses:

Mrs. Irene Brannon
247 E. Main St.
Paris, Ky.

Miss Elizabeth Fritz
620 W. Short St.
Lexington, Ky.

10. Comments of interrogator: Mr Brannon appeared to be above average in intelligence and of sound character. Due to harrassing by friends and fellow newsmen, Mr. Brannon has assumed a slightly belligerent attitude with respect to the "Thing in the sky". He has adopted the attitude that he knows what he saw and has not been convinced by any explanation offered to date.

~~CONFIDENTIAL~~
EXHIBIT "B"

~~CONFIDENTIAL~~

PROJECT "SIGN"

ESSENTIAL ELEMENTS OF INFORMATION

1. Date of sighting: 16 January 1949.
2. Time of sighting: 1630 hours.
3. Where sighted:
 - a. Ground
 - (1) Town: Paris, Ky.
 - (2) Sighted from central part of Paris, Ky.
 - (3) Sighted from yard.
 - (4) Map coordinates not known.
4. Number of Objects: One (1).
5. Distance from observer:
 - a. Horizontal distance: Not estimated.
 - b. Angle of elevation from horizon: Seventy (70) degrees.
 - c. Altitude: Not less than 15,000 feet.
6. Time in sight: Approximately three (3) minutes.
7. Appearance of object: "Vapor trail" similar in effect to sky writing was observed. Source of "vapor trail" was not determined.
8. Direction of flight: Bearing ten (10) to 20) degrees south of east.
9. Tactics of maneuvers: Flight steady- appeared to be climbing.
10. Evidence of exhaust: none observed.
11. Effect on clouds: None.
12. Lights: Reflected light of sun.
13. Support: None observed.
14. Propulsion: None observed.
15. Control and stability: Not observed.
16. Air ducts: None observed.
17. Speed: Could not be estimated.
18. Sound: None.
19. Radio antenna: None observed.

~~CONFIDENTIAL~~
PROJECT "SIGN"

ESSENTIAL ELEMENTS OF INFORMATION

20. Manner of disappearance: Behind clouds.

RELATIVE TO THE OBSERVER

1. Name: Harold L. White.
2. Address: 211 Doyle St., Paris, Ky.
3. Occupation: Manager of Jewelry store.
4. Place of business: Ellis Jewelers, Paris, Ky.
5. Hobbies: None.
6. Ability to determine color, speed and size at a distance not ascertained.
7. Reliability: Business associates in vicinity and Sheriff Office report Mr. White to be completely reliable.
8. Attention was drawn to object through an unplanned glance at the sky and recognized a sight seen previously in the European Theater.
9. Witnesses: None.
10. Comments of interrogator: Mr. White appears to be of average intelligence and of good character. He appears to be disgusted with the publicity given, to what he considers to be only the "vapor trail" of an aircraft flying at high altitude.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

PROJECT "SIGN"

ESSENTIAL ELEMENTS OF INFORMATION

1. Date of sighting: 16 January 1949.
2. Time of Sighting: 1630 hours.
3. Where sighted:
 - a. Ground:
 - (1) Town: Paris, Ky.
 - (2) Sighted from Paris Airport, two (2) miles north of Paris, Ky.
 - (3) Sighted from ground.
 - (4) Map coordinates not ascertained.
4. Number of objects: One (1).
5. Distance from observer:
 - a. Horizontal distance: Not estimated.
 - b. Angle of elevation from horizon: Fifty (50) degrees.
 - c. Altitude: 25,000 to 30,000 feet.
6. Time in sight: Three (3) to five (5) minutes, from horizon to horizon.
7. Appearance of object: "Vapor trail", source not determined.
8. Direction of flight: Southeast.
9. Tactics or maneuvers: Flight steady.
10. Evidence of exhaust: None observed.
11. Effect on clouds: None.
12. Lights: Reflected light of sun.
13. Support: None observed.
14. Propulsion: None observed. Believed jet due to speed in traversing horizon to horizon.
15. Control and Stability: Not observed.
16. Air ducts: None observed.
17. Speed: Not estimated.
18. Radio antenna: None observed.
20. Manner of disappearance: Faded from view beyond horizon.

~~CONFIDENTIAL~~
EXHIBIT "D"

5D 24-4

~~CONFIDENTIAL~~

PROJECT "SIGN"

ESSENTIAL ELEMENTS OF INFORMATION

RELATIVE TO THE OBSERVER

1. Name: David Isgrig
2. Address: 118 East Main St., Paris, Ky.
3. Occupation: Manager, Paris Airport.
4. Place of business: Paris Airport.
5. Hobbies: Model aircraft.
6. Ability to determine color, speed and size at a distance not ascertained.
7. Reliability: Neighbors and Sheriff's Office report Mr. Isgrig to be completely reliable.
8. Attention drawn to vapor trail by an unnamed individual at the airport.
9. Witnesses: Names of those present could not be recalled at time of interview.
10. Comments of interrogator: Mr. Isgrig appears to be of above average intelligence and of good character. He is disgusted at the publicity given to the incident.

~~CONFIDENTIAL~~

~~CONFIDENTIAL~~

PARIS AIRPORT
Aircraft Sales & Service
Ruddles Mill Road
Paris, Kentucky.

26 Jan 1949

At approximately four thirty (4:30) P. M. on January 16, 1949, my attention was called to a vapor trail. It was building up at approximately 25-30,000 feet over a formation of Cirrus clouds and moving in a south east direction. Its position was at an angle of about 50 degrees to the horizon when first observed. Due to the altitude of said formation, its source was not visible from the ground.

(Sgd) David Isgrig
DAVID ISGRIG
Manager

CERTIFIED TRUE COPY:

Arthur Litton
ARTHUR LITTON,
Captain, USAF.



~~CONFIDENTIAL~~

5D 24-4

EXHIBIT "E"

UNCLASSIFIED