

PROJECT 10073 RECORD

1. DATE - TIME GROUP 29 Jun 47	2. LOCATION Las Cruces, N. M.
3. SOURCE Civilian	10. CONCLUSION BALLOON
4. NUMBER OF OBJECTS One	
5. LENGTH OF OBSERVATION 30 seconds	11. BRIEF SUMMARY AND ANALYSIS observer sighted a sphere on disc heading east at a rapid speed
6. TYPE OF OBSERVATION Ground-Visual	
7. COURSE East	
8. PHOTOS ☐ Yes ☒ No	
9. PHYSICAL EVIDENCE ☐ Yes ☒ No	

~~SECRET~~
CHECK-LIST - UNIDENTIFIED UNKNOWN ASSIGNED

Incident # 90

1. Date 29 June 1947
2. Time 1:00 and 1:30 P. M.
3. Location Highway 17 between Las Cruces, N. M. & White Sands V-2 firing grounds
4. Name of observer Mr. [redacted], Mr. [redacted], Mr. [redacted], & Mrs. [redacted]
5. Occupation of observer Mr. [redacted] - Admin Assist in Rocket Sonda Section NER
Mr. [redacted], NER Rocket Sonda high altitude spectrograph scientist, &
6. Address of observer N/S Mr. [redacted], Telemetering supervisor
7. Place of observation highway 17 - ground
8. Number of objects 1
9. Distance of object from observer N/S
10. Time in sight 30 seconds
11. Altitude between 8,000 and 10,000 ft
(Mr. [redacted] put little credence in the estimates)
12. Speed rapid velocity
13. Direction of flight northerly direction
14. Tactics horizontal flight
15. Sound N/S
16. Size N/S
17. Color N/S
18. Shape uniform - no protuberances such as wings of a plane
19. Odor detected N/S
20. Apparent construction N/S
21. Exhaust trails Mr. [redacted] thought at one time there were vapor trails
22. Weather conditions sunlight
23. Effect on clouds N/S
24. Sketches or photographs None
25. Manner of disappearance receded until lost from sight
26. Remarks: (over)

DOWNGRADED AT 12 YEAR
INTERVALS; NOT AUTOMATICALLY
DECLASSIFIED. DOB DIR 5200.10

UNCLASSIFIED

Mr. [REDACTED] who was driving the car noticed the object first. He called it to the attention of the other occupants. Mr. [REDACTED] thereupon opened the window nearest him and observed the object moving at an unknown rapid velocity at an unknown altitude (which he estimated at 10,000 ft) and which Mr. [REDACTED] thought was between 8,000 and 10,000 feet. When first sighted the object was to their right and forward of the automobile at an unstated elevation and apparently moving horizontally in a Northerly direction such as to cross the highway from right to left. The object was seen by all the occupants of the machine. Mr. [REDACTED] could observe no details other than the shape was uniform with no protuberance such as the wings of a plane. It was too distant to enable stereoscopic visualization. There was some solar specular reflection which seemed to change in intensity as the object receded until lost from sight (after an estimated 30 seconds from the time first noticed.) Mr. [REDACTED] could not explain how it disappeared except that he thought the reflection angle could have changed abruptly. The sun was to the rear of the automobile. Mr. [REDACTED] thought at one time he saw vapor trails.

Incident #90 -- between Las Cruces, New Mexico & White Sands V-2
firing grounds -- 29 June 1947

The information given here is insufficient for any definite conclusion to be drawn, but it is not impossible that the object observed was meteoric. The estimated time in sight is quite long, however, and, if a meteor, the object should have had a pronounced vapor trail. The "solar specular reflection which seemed to change in intensity" could, of course, have been light from the meteor itself, blended with daylight.

Once again, it is unfortunate that more detailed observations were not made.

7-3712-1

[REDACTED]

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[REDACTED]

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Incident # 90

1. Date 29 June 1947
2. Time 1:00 and 1:30 P. M.
3. Location Highway 17 between Las Cruces, N. M. & White Sands V-2 firing grounds
4. Name of observer Mr. ~~James H. Dyer~~, Mr. ~~John H. Dyer~~, Mr. ~~Charles H. Dyer~~, & Mrs. ~~James H. Dyer~~
5. Occupation of observer Mr. ~~James H. Dyer~~ - Admin Assis in Rocket Sonde Section NER
Mr. ~~James H. Dyer~~, NER Rocket Sonde high altitude spectrograph scientist, &
6. Address of observer N/S Mr. ~~James H. Dyer~~, Telemetry supervising
7. Place of observation highway 17 - ground
8. Number of objects 1
9. Distance of object from observer N/S
10. Time in sight 30 seconds
11. Altitude between 8,000 and 10,000 ft
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UNCLASSIFIED

ARMY LIAISON OFFICE
NAVY DEPARTMENT
NAVAL RESEARCH LABORATORY
WASHINGTON 25, D. C.

UNCLASSIFIED

18 July 1947

SUBJECT: Interview of Person Reporting Unidentified Aerial Object

TO: Asst Chief of Air Staff-2
Collection Branch, AAF
Washington 25, D. C.

1. At the request of Lt. Col. G. D. Garrett, AAF A-2, the undersigned has interviewed this date Mr. [REDACTED] Administrative Assistant in the Rocket Sonde Section, NRL, who had previously released information to the press regarding an aerial object which he stated he saw at White Sands, New Mexico, 29 June.

2. Substance of the interview is as follows:

At between 1:00 and 1:30 p. m. Sunday, 29 June 1947, Mr. [REDACTED], in the company of the following: Mr. [REDACTED], NRL Rocket Sonde Section telemetering supervisor; Mr. [REDACTED], NRL Rocket Sonde high altitude spectrograph scientist; and Mrs. [REDACTED], wife of the latter, was proceeding along Highway 17 in a North-Easterly direction from Las Cruces, New Mexico to White Sands V-2 firing grounds in an automobile driven by Mr. [REDACTED]. At some time between those given and about one-third of the distance from Las Cruces Mr. [REDACTED], who was driving the car, noticed the subject device and called attention to the other occupants. Mr. [REDACTED] opened the window nearest him and observed the object moving at an unknown rapid velocity at an unknown altitude, which he estimated at about 10,000 feet, and which Mr. [REDACTED], who also observed it through an open window, estimated at between 8,000 and 10,000 feet, although the former puts little credence in the estimates.

When first sighted the object was to the right and forward of the automobile at an unstated elevation and was apparently moving horizontally in a Northerly direction such as to cross the highway from right to left. The object was observed by all persons in the automobile. Mr. [REDACTED] stated that he could not observe any details of the object other than that its shape was uniform, with no protuberances such as the wings of an airplane. It was too distant to enable stereoscopic visualization. There was apparently some solar specular reflection which seemed to change in intensity as the object receded until it was lost from sight after an estimated 30 seconds from the time first noticed. He could not explain how it disappeared except perhaps that the reflection angle may have changed abruptly. There were apparently no clouds or visibility obstructions at the time. The sun was to the rear of the automobile. Mr. [REDACTED] thought that at one time he saw vapor trails.

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Ltr. ALO, NRL, 18 July 47 to Asst Chief Air Staff-2, Collection Br., AAP,
subj: "Interview of Person Reporting Unidentified Aerial Object" #90
Jone

3. This interview was made in the presence of Dr. [REDACTED],
Acting Rocket Sonda Section Head, who said that Mr. [REDACTED] had recently
been in the Navy and is familiar with the appearance of the majority of
aircraft types and with meteorological balloons. Mr. [REDACTED] also stated
that none of the occupants of the car were intoxicated.

WILLIAM P. MELLEN
Major, Air Corps
AMC Liaison Officer

UNCLASSIFIED

ADDRESS REPLY TO
DIRECTOR, NAVAL RESEARCH LABORATORY
WASHINGTON 25, D.C.
SUBJECT TO
Code 110

ARMY LIAISON OFFICE
NAVY DEPARTMENT
NAVAL RESEARCH LABORATORY
WASHINGTON 25, D.C.

28 July 1947

SUBJECT: Flying Saucers

TO: Asst. Chief of Air Staff-2
Collection Branch, AAF
Washington 25, D.C.

Supplemental to that contained in a letter to your office, dated 18 July 1947, re interview with Mr. [REDACTED] who purports to have seen an unidentified flying object, the following additional information was obtained on 21 July from [REDACTED] who was mentioned in that letter as having also seen the object.

[REDACTED] reports the object to have been either a silvery sphere or disc, which he would have taken to be a meteorological balloon except for the fact that it was travelling at a much higher velocity than the automobile and approximately in the same direction. The automobile was moving about 60 mph. There was little, if any, surface wind.

When first seen at an elevation of about 45° it appeared about of the same size as the sun. He could hear nothing above the noise of the car. He saw no smoke or contrails.

Its motion was apparently all horizontal. Its aspect did not change so far as could be observed during the time of observation. He thought it disappeared by simply becoming too small to see.

W. H. Miller
WILLIAM H. MILLER
Major, Air Corps
AMC Liaison Officer

100-2490
100-2490

JULY 8, 1947

Missile Expert Reveals Seeing 'Flying Saucer'

Naval Lab Expert Tells of Seeing Craft

By WILLIAM J. BRADY

A Naval Research laboratory guided missiles expert yesterday described a "flying saucer" he and two fellow-scientists had observed June 29 near White Sands, New Mex., but admitted his unofficial report to Army officers there drew only fishy-eyed stares.

Glare in the Sky

Dr. C. J. Zohn, 400 block Mellon St. S.E., was in New Mexico to observe a V-2 launching test for the Navy. Four days before the test, he and Curtis C. Rockwood, also attached to the research laboratory, and John R. Kauke, stationed at the White Sands testing area, were driving a short distance from the launching site.

"Kauke suddenly spotted a

(Turn to Page 4, Col. 6)

glare in the sky," Zohn said. "We all looked up and saw a silvery disc whirling through the unclouded sky.

"We watched the thing for near-

officials developed the following theories about the skyaming objects:

1. They may be a mirage induced by mass self-hypnosis, similar to the sea serpents often reported spotted from sea coast towns. A Navy guided missiles expert recalled a sky phenomenon reported during the air war in Europe.

American pilots said they saw "floating balls of fire" which disappeared in a flash or puff of smoke. A thorough investigation uncovered no basis for the reports.

2. The flying saucers are optical illusions, the result of tricks the eyes play upon the brain. Some authorities said the discs might be reflections from near-by airplanes or the sun mirrored by clouds.

Doubt Alien Missile

So far as is known, no guided missile has been developed which can travel more than 300 miles under its own power. For this reason, Army and Navy officers doubted the objects, if they do exist, were launched from any foreign country.

Dr. F. Zwicky, astrophysics professor at California Institute of Technology, writing in the current issue of Ordnance, a publication of the Army Ordnance association, a semi-official group of industrialists and others interested in military weapons,

said scientists were preparing to shoot "artificial meteors" to explore the secrets of the skies.

These mock meteors, however, would be launched from rockets to escape the gravity of the earth, and never return. Scientists explained they could never be mistaken for "flying saucers."

THE EVENING STAR, Washington, D. C.
MONDAY, JULY 7, 1947.

'Saucer' Seen by Rocket Expert; Flight Over Desert Described

D. C. Navy Research Worker Says Flying Disc
Was Unlike Any Guided Missile He Has Seen

An eye-witness account of a flight of a "flying saucer" came today from a Naval Research Laboratory rockets expert here as aircraft were alerted along the West Coast in the hope of locating one of the discs and solving the mystery.

The rockets expert, Dr. C. J. Zohn, who disclosed today that he had spotted one of the speeding discs on a recent Navy mission to New Mexico, said it looked like no guided missile he had ever studied.

On the other hand, Lester Barlow, internationally known explosives inventor, advanced the theory at Stamford, Conn., that the "flying saucers" were probably radio-controlled flying missiles being tested in the west by military authorities.

The inventor said he felt certain that "quite a number" of such flying missiles had been produced and "were in early stages of perfection." He said they were capable of flying in squadrons and being controlled "from remote points."

Government sources have denied any tests are being conducted that might be the answer to the mystery that has baffled the Nation since June 25. An Army Air Forces

spokesman said the AAF believes "there's something to this" but is completely mystified as to just what.

Dr. Zohn said he had gone to New Mexico for a V-2 test, but he emphasized that he saw the "flying saucer" four days before the test and that it had nothing to do with any Navy experiments.

He said he was crossing the desert with three other men, two of them scientists, on June 29 when he spotted the object traveling north at an altitude of about 40,000 feet.

Dr. Zohn described it as very bright and silvery with no projections. Since he was not sure it was revolving and his view of it was two dimensional, Dr. Zohn said as far as he could tell it was elliptical in shape and flat.

"It was traveling away from us at a uniform rate of speed," he reported. "It was clearly visible and then suddenly, it wasn't there. It didn't go behind a mountain range. It simply disappeared."

Dr. Zohn said the sun was behind him when he saw the object about 1:30 p.m. and he had a clear view of it.

He was sure at the time, he said, that it was not a meteor. While he

See FLYING SAUCERS, Pg. A-3.

Flying Saucers

(Continued From First Page.)

did not discount completely the possibility of a guided missile, he pointed out that he had worked on the V-2 rockets and that the disc was unlike any guided missile he had ever seen.

Dr. Zohn is stationed at the Naval Research Laboratory here and lives at 440 Mellon street S.E.

APPENDIX F

3610th Electronics Station

Analysis of Project Grudge Reports

AIR MATERIEL COMMAND
3160 Electronics Station
Cambridge Field Station
239 Albany Street
Cambridge 39, Mass.

AOT/BS

April 18, 1949

000.52

In reply address
both communication
and envelope to the
Commanding Officer
and attention of
following office
symbol. ERE

SUBJECT: Analysis of Project "Grudge" Reported Incidents

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

1. Reference is made to the letters from your Headquarters to this station of 22 November 1948, 6 December 1948, and 14 January 1949. Subjects: "Project 'Sign' ", requesting that reported incidents 1 through 172 be analyzed to determine whether or not these might have been caused by balloons launched by these laboratories.

2. A listing has been compiled of all balloons launched by these laboratories and its contractors for special atmospheric research purposes, from the first such launching to No. 101 on 17 November 1948. Each of these launchings has been compared with the reported incidents 1 through 172. Factors of comparison were date of launching and date of recovery with respect to date of reported incidents; place of launching and place of recovery with respect to the place of reported incidents, and possible deviations from the known flight path with respect to the place of reported incidents. So that your office may make an independent analysis, three copies of the launching list are inclosed.

a. Incidents No. 5 through No. 16 reported on 4 July 1947 throughout Oregon, Idaho and Washington gave, in general, descriptions of clusters or groups of objects. The 3 July 1947 balloon launching No. 8 at Alamogordo was a cluster of balloons and was not recovered, and so might be suspected of being the cause of these reports. However, although not recovered, this flight was terminated in the New Mexico Tularosa Valley only a few miles northwest of Alamogordo. That the balloons were downed was determined both by airplane spotting and by radio direction finding upon the balloon telemetering instruments. Recovery of the balloons and instruments was prevented by the impassability of the terrain.

b. Balloon release No. 11 of 7 July 1947 could compare with respect to date with incident No. 1 through No. 4, and again with incident No. 40. This balloon flight was again a cluster.

8-34560

Ltr, BRH, to CG, AMC, Subj: Analysis of Proj. "Grudge" Reported Incidents

The description of incident No. 49 is inconsistent with the appearance of Balloon No. 11. Also, in consideration of the prevailing upper winds, it is very unlikely that the balloons would have gone more than a few miles westward of Alamogordo, although it must be admitted that a long flight west of the launching point could not be ruled out as impossible.

c. Incident No. 47 compares somewhat in time with balloon launching No. 10 of 5 July 1947. However, balloon No. 10 although not recovered was known to have been downed northeast of Albuquerque, New Mexico. It was not recovered due to impassability of terrain. Incident No. 113 is a reasonable description of the 20 ft. plastic balloon and instruments used by these Laboratories. This incident was on the date of balloon release No. 46 of 9 April 1948 at Alamogordo. However, the time of the reported incident (1506 CST) is about 1/2 hour before the time of balloon release (1432 MST), thus the incident could not have been that balloon.

d. It is of interest to note that incident No. 122 was reported by an employee of these Laboratories who had considerable experience in the use of balloons of all kinds, and could have been depended upon to know the appearance and behavior of a balloon if it was this he saw.

e. Incident No. 163 bears a fair description of the appearance of a large plastic balloon in sunset light. The object's disappearance could be accounted for either by its movement into the earth's sunset shadow or by natural defocusing of the observer's eyes. This incident could possibly have been balloon release No. 75 or No. 76 or 20 and 21 July 48 from Alamogordo. Balloon No. 75 was recovered at Hollister, California, which is in the Monterey Bay area, on 22 July 1948 and could have easily had a trajectory which would have been within sight of the Los Angeles area. Balloon No. 76 was never recovered. It is possible that it had a trajectory similar to No. 75.

f. All other reported incidents from 1 to 172 do not seem to have reasonable comparison with balloons launched by these Laboratories.

3. The balloons used by these Laboratories are now somewhat standardized. They are 20 feet long, plastic, white in color, and hemisphere-on-cone in shape. Nearly all launchings are made at the Holloman AFB at Alamogordo, New Mexico. Two photograph prints are enclosed showing the appearance and size of these balloons. The larger photograph shows the typical flight appearance at any altitudes where it would be visible. It is hoped that this information may be of some use to you in identifying future reports of incidents.

Ltr, HHH, to CG, AMB, Subj: Analysis of Proj. "Grudge" Reported Incidents

4. It is believed that certain of the items in the questionnaire "Checklist-Undetermined Flying Objects" produce insignificant and unreliable data from an observer. These are: 9. Distance of object from observer; 11. Altitude; 12. Speed; and 16. Size. For any unfamiliar object beyond the focal range of the human eyes (about 60 ft.), these four factors are mutually inter-dependent and therefore indeterminate unless at least one of them (and some observed angles) are known. Directly asking an observer about these indeterminants not only gets unreliable data, but induces wild answers because the observer is led into making a statement about quantities for which he has no basis in fact. He will unconsciously assume knowledge of some one of these factors and so give incorrect information on all. That people (many of whom should know better) will arbitrarily give answers to two significant figures on these questions, which really cannot be answered at all, is proof of the unreliability of their information.

5. It is suggested that these four items on the questionnaire be replaced by questions which will yield answers possible of being independent facts in terms of the observer's best estimates of angles and time. From such data given by observers of the same object at two different places, a reliable calculated estimate could be made of the object's size, altitude, speed and path. These data should include:

a. An estimate of the angular size of the object. A quick but reasonable estimate can be made by comparing the angle subtended by the index finger held at arms length. The finger ($7/8$ " wide) of an average man held at $26"$ to $30"$ (arms length) will subtend an angle of approximately two degrees. In this way angular size from about $1/2^\circ$ to about 5° can be estimated.

b. The range of the object's flight in terms of the angle subtended by the observed path. If the object moves in a reasonably straight course it is important to observe the position at the beginning and the end of its course. After the flight has been completed a person can extend his arms toward the two points and also at 90° or 180° and by comparison estimate the angular extent of the flight. It is also important that information which will determine these directions relative to a compass point be given. If the angular course is associated with objects on the horizon, with roads, with the sun (if the time of day is also noted) or by the north star, the orientation can be rechecked at any later time.

c. The time required for the object to traverse the observed course. This is probably the most difficult estimate to make. Timing with a watch is the most satisfactory, but an observer is seldom prepared to do so. Seconds can be counted with good accuracy by saying,

Ltr, ERM, to CG, AMC, Subj: Analysis of Proj. "Grudge" Reported Incidents

"one flying saucer; two flying saucers, three flying saucers" ---etc.
At a normal speaking speed. On the other hand it is not easy to count seconds and at the same time make all the other desirable observations. It must be remembered that when a person is excited his estimates of time are apt to be rather inaccurate.

d. Estimation of the elevation angle of the object. Almost all persons will overestimate elevation angles. This tendency can be reduced by the observer extending one arm vertically and the other horizontally to observe a 90° angle. The vertical arm can then be lowered to point to the observed object. In this way the observed angle can be compared with a 90° angle and a more accurate estimate obtained.

6. It is realized that it might not be possible for an observer to perform the operations suggested in the preceding paragraph, during the period the object is sighted. If he would immediately reconsider what he saw and then estimate such measurements, he should be able to give quantitative answers accurate to at least 25%. In interrogating observers, they should also be asked to reconstruct their observations and then estimate these same factors. It is suggested that instructions for making such quick and estimated observations be given to weather observers, control tower operators, civil police, forest and fire rangers, and other such people who might have good chance of seeing unidentified flying objects. If any information concerning unidentified flying objects is given to the public, instructions for reliable observation should be included.

7. This organization will be pleased to be of any further assistance required in connection with this matter.

FOR THE COMMANDING OFFICER:

3 Incls

1. List of balloons launched (in trip)
2. 8" X 10" photo print of plastic balloon
3. 4" X 5" photo print of plastic balloon

/s/ A. C. Trakowski, Jr.
A. C. TRAKOWSKI, JR.
Captain, USAF
Director, Base Directorate
for Geophysical Research

Dr HYNEK'S EVALUATIONS EXTRACTED FROM PROJECT GRUDGE REPORT.

INCIDENT INDEX

1. Astronomical

a. High probability:

#26, 27, 30, 31, 32, 33, 34, 48, 49, 59, 60, 66, 69, 70, 94,
95, 96, 97, 98, 101, 102, 103, 104, 116, 119, 132, 136, 140,
147, 148, 158, 174, 184, 185, 187, 197, 203, 204, 208, 216,
219, 238.

b. Fair or low probability:

#19, 20, 23, 24, 28, 35, 36, 46, 50, 63, 67, 80, 82, 93, 100,
112, 120, 121, 129, 130, 144, 153, 165, 166, 167, 175, 192,
199, 202, 205, 220, 230, 240.

2. Non-astronomical but suggestive of other explanations

a. Balloons or ordinary aircraft:

#3, 11, 22, 41, 42, 53, 54, 73, 81, 83, 91, 92, 113, 114, 115,
126, 131, 138, 141, 145, 155, 156, 157, 159, 160, 161, 163,
169, 171, 173, 178, 180, 182, 188, 190, 194, 195, 196, 198,
200, 201, 209, 210, 217, 222, 235, 237, 239.

b. Rockets, flares or falling bodies:

#4, 5, 6, 7, 8, 9, 12, 13, 14, 15, 16, 25, 56, 65, 78, 106, 107,
108, 109, 133, 170, 211, 218.

c. Miscellaneous (reflections, auroral streamers, birds, etc.):

#39, 89, 123, 124, 128, 146, 164, 181, 189, 214, 221, 231, 234.

3. Non-astronomical, with no explanation evident

a. Lack of evidence precludes explanation:

#38, 44, 45, 47, 55, 57, 72, 86, 87, 88, 90, 99, 110, 117, 118,
125, 127, 137, 139, 149, 150, 177, 179, 191, 206, 212, 213,
229, 232, 233.

b. Evidence offered suggests no explanation:

#1, 2, 10, 17, 21, 29, 37, 40, 51, 52, 58, 61, 62, 64, 68, 71,
75, 76, 77, 79, 84, 105, 111, 122, 135, 151, 152, 154, 162,
168, 172, 176, 183, 186, 193, 207, 215, 223, 224, 225, 226,
227, 236, 241, 242, 243, 244, 134.