PROJECT 10073 RECORD

1. DATE - TIME GROUP 7 Oct 65 07/0833Z	2. LOCATION See - Film #2 [redacted] 7-3745-342 also - Film #1 7-3746-341 Edwards AFB, Calif.
3. SOURCE Military	10. CONCLUSION 1. Visual: Astro (STARS/PLANETS) BALLOON 2. Radar: Other (RETURNS DUE TO ATMOSPHERIC CONDITIONS)
4. NUMBER OF OBJECTS 7 to 12	
5. LENGTH OF OBSERVATION 4½ hours	11. BRIEF SUMMARY AND ANALYSIS Tower operator first noticed flashing lights. Objects appeared to have elev of between 020 and 045 deg and az of 050 to 075 deg. Of the 7 objects reported visually, 4 persisted longer. These objects seemed to be in formation and they varied in their flight paths. Their main change was in alt. They appeared to hove and then rise in a near vertical direction. These objects looked like all the other stars and after a while they just seemed to blend in with the other stars. The other 3 objects just gradually faded from view after a short time. Radar contacts came foom relatively dispersed areas. All the contacts obtained were difficult to hold because of slow speeds involved. The height finding radar similarly had little luck in giving valid changes in alt. There was no overall discernible pattern to the flight paths of the objects when considered as a whole.
6. TYPE OF OBSERVATION Ground-Visual, Radar	
7. COURSE Hovering, Stationary	
8. PHOTOS ☐ Yes ☐ No Radar Scope Photos	
9. PHYSICAL EVIDENCE ☐ Yes ☒ No	

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

NOTE (TAPES + SCOPE PHOTOS IN SPECIMEN FILE) 5 Tapes: 7-3745-350
See - Film No. 1 7-3745-341
Film No. 2 7-3745-342

[redacted] UNCLASSIFIED

TDEW/UFO

Radar Film of UFO [redacted] 3 January 1966

TDEED
Attn: Mr. Vincent Bryant

Attached letter, AIR FORCE FLIGHT TEST CENTER, Edwards AFB, California, dated 21 December 1965 and Radar Film. Request your evaluation by endorsement as soon as possible.

HECTOR QUINTANILLA, Jr, Major, USAF
Chief, Project Blue Book

2 Atchs
1. Ltr AIR FORCE FLIGHT TEST CENTER
2. Radar Film

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DEPARTMENT OF THE AIR FORCE
HEADQUARTERS FOREIGN TECHNOLOGY DIVISION (AFSC)
WRIGHT-PATTERSON AIR FORCE BASE, OHIO 45433

REPLY TO ATTN OF: TDEED

SUBJECT: Evaluation of Radar Scope Photos

TO: TDEW/UFO

1. Reference is made to AFFTC letter of 21 December 1965, subject "UFO", file FTF, reporting abnormal visual and radar sightings. The following comments pertain to the radar observations:

a. It is impossible to make a thorough evaluation of this report and nomenclature of the radar in use, frequency of the radar, type of scope presentation (PPI, RHI, etc.), range scale (scope), and changes in operation made during the observations, if any. The following comments are, therefore, based on general radar conditions which may or may not be valid in this particular case.

b. The variations in the scope presentation are so extensive that it is practically impossible to determine normal fixed targets from changing ones. Many large, indistinct returns which are similar to returns from land masses or clouds appear, move, and disappear at random. Evaluating the photographs with the limited knowledge we have of the conditions, it appears that there are literally dozens of changing returns. The questions which naturally arise are:

(1) Is this weather radar?

(2) Was the antenna filt angle varied?

(3) Was MTI or other circuit variations switched in or out during the observations?

c. It appears obvious that considering the large number of targets, the length of time observed, the general lack of appreciable speed in azimuth, and the randomness of their activity, these targets were not material targets, such as aircraft, balloons, space vehicles, etc. This leaves a number of other possible sources which will be commented on individually and briefly.

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[redacted]

d. Clouds. Apparently can be ruled out, because the report infers a relatively clear night, and clouds normally do not appear and disappear so rapidly.

e. Operator error. No evidence or indication of this. Photos rule this out, as does coincident visual sightings.

f. Jamming. Normal jamming doesn't look like this. Visual sightings appear to rule this out.

g. Interference (man-made, or other radar). Doesn't normally look like this on the scope. Visual sightings would seem to eliminate this.

h. Equipment malfunction. Highly unlikely, primarily because of visual sightings, and also due to randomness of the returns.

i. Anomalous propagation. Although there evidently was no temperature inversion during the period, anomalous propagation is the most likely candidate for this situation, and could conceivably explain the visual sightings as well. Since light and radar waves are both electromagnetic in nature, variations in the density of the atmosphere, clouds of charged (ionized) particles, etc., probably would affect the radar returns, and possibly could cause visual returns as well. The appearance (size, shape, movement) and randomness of the radar returns are all characteristic of anomalous returns.

2. The attached photo prints illustrate graphically the radical changes in the scope presentation referenced in paragraph 1 (b). The clock (reflected) is an indication of the time involved.

3. Conclusions. It is concluded that the only logical explanation of these sightings is that there were radical variations in the atmosphere during this period which resulted in both visual and radar sightings. It is also concluded that it is beyond the realm of probability that these targets are material targets.

Vincent D. Bryant

VINCENT D. BRYANT
Defensive Electronics Division

1 Atch
Radar Return Photographs

UNCLASSIFIED [redacted]

7 OCT 65

HEADQUARTERS
AIR FORCE FLIGHT TEST CENTER
AIR FORCE SYSTEMS COMMAND
UNITED STATES AIR FORCE
EDWARDS AIR FORCE BASE, CALIFORNIA 93523

AD INEXPLORATA

REPLY TO ATTN OF: FTF

21 Dec 1965

SUBJECT: UFO

TO: FTD (TDFC)
Wright-Patterson AFB Ohio

1. The following report of UFOs is submitted per para. 14, AFR 200-2 and 200-2A:

a. DESCRIPTION OF OBJECTS:

(1) All objects had the general shape and appearance of stars.

(2) The largest appeared to be twice the size of an ordinary star. The others were the same size as stars which would make them about the size of a pinhead when held at arms length.

(3) The objects were the same color as stars.

(4) There were from 7 to 12 objects involved.

(5) There was no discernible formation with one exception. Three of the objects appeared to be in what might roughly be described as an inverted "V".

(6) The objects that were held visually appeared to be flashing red, green and white lights at one time or another.

(7) None

(8) None

(9) One of the objects was reported as "pushing a small cloud" in front of it. This is the one object that could be explained. It was a weather balloon.

b. DESCRIPTION OF COURSE OF OBJECTS:

(1) The Edwards tower operator first noticed flashing lights from these objects in the normal course of his duties.

(2) The first and most prominent of these objects was originally sighted at an elevation of 010° and an azimuth of 062°. The other objects

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cancelled) (~~changed~~ to

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appeared to have an elevation of between 020 and 045° and azimuths of 050 to 075°. It is impossible to determine just which of the radar contacts correlate with the visual sightings. There were reports of up to 12 radar contacts from relatively dispersed sites. LAADS received reports at various times from San Pedro, Laguna, March AFB, and Boron. All were able to show contacts in the area under consideration at one time or another during the 4½-hour period. The duration of most of these contacts was very short. The three contacts which eventually figured in the decision to scramble were U090, U091, and U092. LAADS did hold these contacts in a close enough proximity to those under visual observation that there is a possibility that they were the same.

(3) Of the seven objects reported visually, four persisted longer than the others. The brightest, most prominent of these was last seen flashing at an elevation of approximately 050° and an azimuth of 135°. The other three were in what might roughly be described as an inverted "V" and were last seen flashing at an elevation of 035° and azimuths of from 140 to 150°. The remaining three, which were visible for a shorter period of time, disappeared at approximately 045° elevation and in the vicinity of 060 to 090° azimuth.

(4) The objects varied in their flight paths. A general statement might be made that their main change was in altitude. There were definite changes in azimuth but these were relatively small. The four digits seen most clearly appeared to hover, then rise in a near vertical direction. Only a general statement about the radar tracks is possible. All the contacts obtained on search radar were difficult to hold because of slow speeds involved. The height finding radar similarly had little luck in giving valid changes in altitude. There was no overall discernible pattern to the flight paths of objects when considered as a whole.

(5) Three of the objects held visually just gradually faded from view. The four objects that were seen most clearly; i.e., the very bright object and the three in an inverted "V" seemed to take their place among the stars and persisted, looking like all the other stars, until dawn. These objects possibly faded like the others and were replaced in the eyes of the observers by stars that happened to be in the area of last sighting.

(6) Again the objects were visible for varying lengths of time. The first observation took place at 0833Z (0133 PDT). The four most prominent objects flashed for about two hours. As mentioned above, these objects persisted until dawn although they ceased flashing after two hours. The other three objects were visible for approximately 30 minutes.

c. MANNER OF OBSERVATION:

(1) The objects were observed both visually and electronically from the ground. Search, height finding, and approach radar all held the objects.

(2) All ground observers used 7x50 binoculars.

(3) N/A

d. TIME AND DATE OF SIGHTING:

(1) 7 October 1965, 0133Z

(2) Night

e. LOCATION OF OBSERVERS:

(1) The observers were located at base operations, Edwards AFB, Calif.

f. IDENTIFYING INFORMATION ON OBSERVERS:

(1) Darryl Clark, Capt, 329th FIS, George AFB, Calif., pilot. Capt. Clark is an alert pilot with Det. 1 at Edwards AFB. He happened to be on duty and was called upon to observe the activity. His observations were all made from the ground.

(2) Charles A. Sorrels, SSgt, 1925 Communications Sq, AFCS, tower operator.

(3) Forrest S. Honer, SSgt, Hq Sq Section, 6510th AB Group, Edwards AFB, dispatcher.

(4) Keith C. Peneau, A2C, Det. 21, 6th Weather Wg, weather observer.

All these observers are proficient in their particular jobs and could be classified as very reliable.

g. WEATHER AND WINDS--ALOFT CONDITIONS AT TIME AND PLACE OF SIGHTINGS:

(1) All observers agree that weather was clear and visability good.

(2)

Altitude (ft.)	Wind Direction in Degrees	Wind Velocity in Knots
Surface	300	2
6,000	350	15
10,000	060	20
16,000	060	5
20,000	360	15
30,000	050	40
50,000	360	15
80,000	330	5

(3) Clear

(4) 35 miles

(5) None

(6) None

(7)

Altitude	Temp. in Degrees Centigrade
6,000	+21
10,000	+13
16,000	-1
20,000	-11
30,000	-37
50,000	-59
80,000	-54

h. ANY OTHER UNUSUAL ACTIVITY OR CONDITION:

(1) None

i. INTERCEPTION OR IDENTIFICATION ACTION TAKEN:

An F-106 was scrambled from George AFB at 1209Z (0509 PDT). The aircraft was controlled throughout its search on a visual basis by the Edwards tower. By the time the aircraft was scrambled the activity was just about over. The objects that were held visually had ceased flashing and had taken on the appearance of ordinary stars as mentioned earlier. Radar contact was gone or was of insufficient duration to be used in

vectoring the aircraft. Passes were made through the area at 15,000, 20,000, and 40,000 ft. The only thing out of the ordinary reported by the pilot was reflection of red lights from the dry lake bed near Edwards. He felt that these were reflections from something other than the beacons in the area.

j. During the period of the sightings there was no air traffic nor were there balloon releases that might have been mistaken for the objects.

k. COMMENTS:

It was approximately 1000Z (0300 PDT) when I arrived at Edwards base operations. The activity level had subsided by that time but the tower operator still claimed to hold flashing lights on two of the four objects under observation. I was able to observe the objects but I cannot positively say that I saw flashing lights. The objects looked like ordinary stars. One of the objects pointed out was very brilliant but not so brilliant as to preclude its being a star. At times a couple of the objects did seem to flicker but I certainly saw no distinct intermittent flashing. I should mention here that what I observed was at the tail end of the activity and according to the observers was not representative of what they had seen earlier.

The Los Angeles Air Defense Sector made tapes of most of the conversations that took place during the incident. These tapes are time consuming and much of the information is not very enlightening. I have included as an attachment a cataloging of the more important points on the tape. If a recorder with a revolution counter is set at 000 before playing a side, the numbers listed in the attachment will provide easy access to the important positions of the tape. I have tried to label the tapes in the most logical sequence should anyone wish to follow the whole incident. There are a few events, however, which do not follow the chronological pattern. In listening to the tapes, you will find that the azimuths given in the report differ slightly from those quoted by the observers. I have corrected azimuths using charts and the reference points given.

There are two portions of the taped conversation which necessitate elaboration. The first of these concerns an eigth object held visually (mentioned only briefly in the body of the report). I saw this object quite clearly myself. It was said by those who saw the earlier activity to be representative of what they had seen. There were two exceptions in that it flashed only white/red, showing no green, and that it displayed more lateral movement. Generally, however, it behaved as the others had. This object turned out to be the 1200Z (0500 PDT) weather balloon released from Edwards. Although this was the only balloon release during the period under study, I think it may be significant that these objects behaved somewhat like balloons.

The other portion of the taped conversation that needs further elaboration deals with a seemingly unrelated report. After the activity had ended, LAADS received a phone call from L.A. Center (FAA) at Palmdale. The supervisor had been called by an employee of the telephone company who, in turn, had talked to a waitress at a restaurant to whom a customer had related a wild story. At this point, you can see how far from the alleged original source the report had come. The source was reported to have been traveling on a desolate stretch of Highway 138 between Victorville and Lancaster when he spotted a bright red object hovering near the road. It crossed the highway passing over his car, paralleled the highway, and then went straight up at a high rate of speed. I have never been able to locate the man who related the story to the waitress. Mr. Don Meredith, an employee of Pacific Telephone, was the man who talked to the waitress. I contacted him several times, but he was never able to provide the name of the man who sighted the object. He did say that he understood that the man had been drinking and that he had been visiting a girlfriend in Victorville after telling his wife that he had to work. This supposedly is the reason the original source is reluctant to raise his hand and come forward with his story. Mr. Meredith claims not to know who the man is even though he was able to provide the above information about him.

I am very skeptical of this portion of the incident. People at the telephone company knew all about the night's activity since conversations were passed over their lines. I am even more inclined to consider it a hoax after talking with Mr. Meredith. While he was very cooperative, he seemed to blow his small part in the happenings out of proportion.

As I mentioned earlier, the radar contacts are impossible to sort out and definitely pin to the objects being held visually. At one point there were three of the objects on which near agreement was reached by the tower operator and radar operator. The radar net, through LAADS, was originally queried by the Edwards tower operator. Until that time they held nothing unusual in the area. Included in the material being forwarded are two rolls of 35mm radar scope photos from the L.A. Air Defense Sector. The cameras were on from 0947Z (0247 PDT) to 1240Z (0540 PDT). Unidentified tracks were carried under the following numbers: U090, U091, U092, U103, U104 and U105. At the height of the flashing activity, a civilian aircraft did pass very near the area at 14,000 ft. The pilot was queried by FAA and reported that he had seen nothing unusual.

In summary, no one in the Air Defense Sector could provide a plausible explanation, nor did they seem overly concerned once the incident was over. Their experience and the sources of information available to them provided

no help. There seems to be no question that they did have radar control at several sites. The ground observers claim definitely to have seen flashing lights for which they could offer or find no explanation. Everyone concerned at both LAADS and Edwards seems convinced that something unusual occurred.

1. EXISTENCE OF PHYSICAL EVIDENCE:

There are radar scope photos which indicated unidentified contacts were held. These scope photos are being forwarded as a part of this report.

FOR THE COMMANDER

JOHN D. BALENT, Capt, USAF
Technical Evaluation Officer
Deputy for Foreign Technology

4 Atch
1. Tape catalogings
2. List of abbreviations
3. 3 Magnetic tapes
4. 2 Rolls 35mm microfilm (C)
withdrawn
atch #4

ATTACHMENT 1

TAPE 1 - SIDE 1

000 (Edwards Tower Operator) Reports closest object has area of 2 ordinary stars.

024 (Tower Operator) Speaks of 4 flashing objects.

040 (Tower Operator) Biggest object has moved.

099 (Tower Operator) Elevation of brightest star is 45°.

118 (LAADS) Measured heights from Boron are 8,000 ft.

132 (LAADS) Speak of speed changes.

(San Pedro) At first pick-up object was held at 030° azimuth and has now changed to 060°.

150 (San Pedro) Object has azimuth of 070° and range of 40 miles.

158 (San Pedro) Track numbers of U091 and U092 have been assigned - U091 has gone from 20 miles south of Edwards to 20 miles south of Ontario at measured height of 4,500 ft.

163 (San Pedro) U092 is 10 miles SE of Victorville at 6,600 ft.

177 (LAADS) Boron is not able to pick up either target.

192 (Tower Operator) Has had good visual contact for over 2 hours.

208 (Tower Operator) Most prominent object has azimuth of 135° at 15-20 miles - it is very high and getting dimmer.

222 (LAADS) That azimuth looks good but we hold contact at 40-50 miles.

226 (Tower Operator) Estimate second object at an azimuth of 050°.

240 (LAADS) Second object didn't check out.

246 (Tower Operator) Hold 3 objects in a row at 145°.

252 (LAADS) Have two objects (090° and 1450°) but not the other.

270 (San Pedro) Have one 065° at 40 miles from Edwards.

285 (Tower Operator) One at 135° azimuth is much brighter and higher than the others.

328 (Tower Operator) Large bright one is left and above the other three (Relative arrangement looked like this:

* * *

348 (Capt. Clark, Det. 1, Alert Pilot at Edwards) Look like stars to me. He is going to take another look. (Edwards Tower) Also look for the "phantom city" (The tower people claim that they see city lights at a distance every clear night. There is supposedly no town there. This had nothing to do with the night's activity.)

Tape 1

369 (Edwards Tower) LAADS has confirmed two of the objects. Tower operator states they now look like stars.

388 (LAADS) Going to scramble a F-106 in 30 minutes (1115Z (0415 PDT)).

411 (Edwards Tower) From measurement with weather instrument, bright object has moved $\frac{1}{2}^{\circ}$ in 6 minutes.

443 (Edwards Tower) Have new one coming North to South that is going to pass over runway. (They go on at this point talking about this object. This is the object that turned out to be the weather balloon released from Edwards.

587 (Edwards Tower) Still have visual contact with five objects. (This number includes the weather balloon which at that time was still unidentified).

590 to end tape (This is all discussion about scrambling the aircraft and getting it into position).

TAPE 1 - SIDE 2

000 (LAADS) Aircraft has a contact at 220°.

009 (Edwards Tower) There's a light out there.

027 (LAADS) Aircraft has lost contact.

(Edwards Tower) This contact just seemed to be a light - no flashing like the others. (Evidently this was a star).

100 (LAADS) Aircraft has contact 120° at 16,000 ft.

(Edwards Tower) That's it.

109 (Edwards Tower) Aircraft converging on object.

(LAADS) There is no radar contact.

118 (Ed Tower) Object looks like it is rising.

125 (Ed Tower) Interceptor has gone past and is too low.

136 (LAADS) Aircraft is climbing to 40,000 ft.

234 (LAADS) Possible contact on search radar at 075°, 10 miles.

(Ed Tower) Have one at 075° and high.

242 (LAADS) Can't get object on height.

300 (Ed Tower) Aircraft is passing over the tower and is still low at 40,000 ft.

323 (LAADS) Aircraft reports "Looks like one bright shiny star.

370 (Ed Tower) Only one that can be made out flashing is at 120°.

(LAADS) Possible contact there.

390 (San Pedro) Has possible contact over Edwards at 16,000 ft.

413 (San Pedro) Target has disappeared - unable to establish track.

434 (LAADS) Aircraft has flashing target 120° from Edwards.

461 (Ed Tower) Have what aircraft is looking at, but doesn't appear as the others did.

521 (LAADS) Aircraft has come up with negative visual results on search.

553 (LAADS) Only thing pilot saw were reflections off ground that appeared to be flashing. Pilot knows beacons and this didn't appear to be a beacon.

573 (LAADS) Aircraft went through area at 15,000, 20,000, and 40,000 ft. with negative results.

AT THIS POINT TAPE REVERTS TO BEFORE SCRAMBLE CONVERSATIONS

601 (Ed Tower) Gives 20,000 ft. as estimated altitude of bright object.

633 (Ed Tower) Appears all flashing red lights have stopped - gaining on bright object altitude.

644 (Ed Tower) Still seeing lights from objects (those in inverted "V").

654 (Ed Tower) Want someone else to confirm what I'm seeing.

686 (Ed Tower) Dispatcher, Sgt Honer, confirms.

690 (Ed Tower) Weatherman, A2C Pineau, using reference points, says objects rising.

702 (Ed Tower) At first sighting object was no higher than 5,000 ft.

724 (Ed Tower) Appeared to have small red lights like aircraft obstruction lights.

747 (Ed Tower) At one time held 7 objects.

753 (Ed Tower) The brightest is 45°-50° off the horizon - others about 30°.

777 (Ed Tower) Those to south are really blinking now.

785 (Ed Tower) Have the area of about 2 stars.

800 (Capt. Clark) Middle object of three in "V" is blinking.

807 (Ed Tower) Earlier big one blinked like that.

813 (Capt. Clark) Looks far away.

(Ed Tower) Are now, but at first were about 5,000 ft. over end of bomb run.

840 (Capt. Clark) Couldn't see movement.

850 (Ed Tower) Gained altitude twice and removed 5 or 6 miles to west.

852 (Ed Tower) Winds are above 2 knots westerly. That's the direction they're moving.

950 (San Pedro) Target U091 has moved from 030°, 80 miles, to 060° 50 miles from San Pedro.

TAPE 2 - SIDE 1

000 - 315 (This is overlap on saying same thing as Tape 1).

315 (Ed Tower) Capt. Clark, Det. 1, has also observed RAPCON have any contact.

652 (Ed Tower) See two new ones east of me.

707 (LAADS) Getting a paint just east of Edwards.

(Ed Tower) There should be two there.

730 (Ed Tower) They look the same as the first two I saw.

740 (Ed Tower) I've been observing them for almost three hours.

760 (Capt. Clark) I have more to the north of those over the rocket site. Can't make out specific red lights, but they are flashing.

780 (Ed Tower) Can see three more south, north, and right over Boron.

796 Boron is painting all kinds of data.

806 (LAADS) Do you see some just east of Edwards?

(Ed Tower) Yes, two just east.

887 (LAADS) U103 has been repositioned right over Boron.

955 (LAADS) Intercept aircraft is airborne at 09 (1209Z or 0509 PDT).

(Tape 2 - side 2 has nothing new. It is blank from 600 on).

TAPE 3 - SIDE 1

000 (This is the conversation between LAADS and L.A. Center concerning the bright red object which hovered over Calif. Highway 138. (see comments)

191 (March AFB Approach) Have a slow moving target about 18 miles north of Ontario.

443 (WD-3) (This is conversation dealing with the FAA query of a civilian aircraft passing through the area of activity. (see comments)

530 (WD-3) We've got one on the scope now at 12,000 ft.

545 (Ed Tower) Edwards tower can confirm 7 objects that have the same characteristics. Have observed them since 0833Z (0133) PDT)) and it is now 0949Z (0249) PDT)).

582 (Ed Tower) Tower operator explains to Capt. Clark, and ADC alert pilot, what he has seen.

TAPE 3 - SIDE 2

056 (Capt. Clark) Description of what he has seen.

130 (San Pedro) Three objects being painted.

305 (LAADS) Scope cameras were turned at 0947Z (0247) PDT)).

350 (LAADS) (During this portion of the conversation they are trying to decide whether to launch.

357 (LAADS) Reporting what pilot of scrambled aircraft had seen.

ATTACHMENT 2

LIST OF ABBREVIATIONS USED IN TAPED CONVERSATIONS

AL-01	Aircraft (F-106) scrambled
ASD	Air Surveillance Director
ASO	Air Surveillance Officer
IND-3-5	Intercept Director, Team 3, Position 5
LAADS	Los Angeles Air Defense Sector
SD	Senior Director
WDT-3	Weapons Director Technician, Team 3