

Multiple Reports

PROJECT 10073 RECORD CARD

1. DATE 12-20 August, 1960		2. LOCATION Red Bluff Area, California		12. CONCLUSIONS ☐ Was Balloon ☐ Probably Balloon ☐ Possibly Balloon ☐ Was Aircraft ☐ Probably Aircraft ☐ Possibly Aircraft ☐ Was Astronomical ☐ Probably Astronomical ☐ Possibly Astronomical ☒ Other <u>Inversion, Reflection</u> ☐ Insufficient Data for Evaluation ☐ Unknown	
3. DATE-TIME GROUP Local _____ GMT <u>Various Times</u>		4. TYPE OF OBSERVATION ☒ Ground-Visual ☐ Ground-Radar ☐ Air-Visual ☐ Air-Intercept Radar			
5. PHOTOS ☐ Yes ☒ No		6. SOURCE Civilian			
7. LENGTH OF OBSERVATION <u>Various</u>		8. NUMBER OF OBJECTS - - -		9. COURSE - - -	
10. BRIEF SUMMARY OF SIGHTING Numerous reports of unidentified objects from the Red Bluff area from the 1 to 20th of August. Most objects were elliptical and surrounded by glow. Lights variously described as red. Initial reports had red lights at end. One report had five white lights between two red lights. See case file for descriptions.				11. COMMENTS In view of all available evidence in the case, it is concluded that the effects associated with the inversion layer present were responsible for the numerous reports.	

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AFC IN-4E2x

23 NOV 1960

Congressional Request for Summary of UFO Sighting
(Mr Robert Smart, House Armed Services Committee)

SAFOI-3d (L/Col Tacker)

- 4E2x
1. The summaries contained in this correspondence are of the UFO sightings which occurred in the Red Bluff, California area between 12-20 August 1960. These summaries and the associated ATIC analysis are forwarded per telephone requests by L/Col Tacker, SAFOI-3d and L/Col J. Boland, SAFLI on 16 November 1960. Information concerning these sightings was requested from SAFLI by Mr Robert Smart, House Armed Services Committee.
 2. On 13 August 1960 at 2345 hours PST, two California highway patrolmen, [REDACTED] and [REDACTED] observed an unidentified flying object while patrolling 13 miles south of Red Bluff, California. The two officers stated that the object suddenly appeared directly in front of their patrol car and their first impression was that it was an aircraft about to crash. The officers leaped from their car in order to be in a better position to act after the expected crash. When outside of their car both officers were immediately struck by the absence of sound, but assumed the aircraft was without power. As the object approached within 200-300 feet of the ground it suddenly reversed itself, and at high speed gained approximately 500 feet of altitude, where it came to a complete stop. The officers described the object as surrounded by a glow, and at each end of the round or elliptical object there were red lights. At times there were approximately five white lights visible between the red lights. Officer Scott's impression was that the object was sweeping the area with red light beams and estimated that six or seven sweeps were made. He further stated that it appeared to take positive action to avoid his shining the red light of the patrol vehicle upon it. Both officers described the motion as abrupt, but generally toward the east and reported that they followed in their vehicle. As they followed and watched the object, it was approached by a similar object. Finally both objects disappeared below the eastern horizon. Upon return to the Tehama County Sheriff's Office, it was determined that two deputies and the night jailer had also experienced seeing the object and their impressions were the same as the two patrolmen.
 3. On 17 August 1960, at 1930 hours PST, Mr [REDACTED], [REDACTED], Red Bluff, California was driving up Belle Hill Road with his wife and son toward what is commonly called Hog Back Road. Mr [REDACTED] reported that he and his family sighted a bright metal-like object at approximately tree top level which was flying in a northerly direction. Mr [REDACTED] stated that the object was approximately three to

four miles away and the first impression was that it was a large helicopter. When Mr [REDACTED] and his family reached the spot where they thought the object to be, they sighted it approximately one-half mile away and approximately 100 feet below them. The object appeared to immediately pick up speed, rising out of the canyon and passing over the road in front of the family. It dropped from sight for a few moments and was then seen traveling up a branch canyon. The object was described as completely round and approximately 35 to 50 feet in diameter. When it rose from the canyon and passed over the road it appeared to have a light near the nose. The light had a reddish purple hue. The object was reported to have a second light which was located on the back. The second light appeared as a narrow bluish band. The object was estimated to have a speed of 25-30 miles per hour.

4. On 17 August 1960 at approximately 2100 hours local, [REDACTED], Dept of Correction, Mrs [REDACTED], Forest Look-Out, and Miss [REDACTED] sighted an unidentified flying object from the forestry look-out at Inskip Mountain. The object was described as a dull red light above the horizon. The object was reported to have faded and reappeared several times in gradual cycles. The object was reported to be generally stationary. At approximately 2130 hours another object was sighted which was similar to the first; however, it appeared to be moving from right to left at a constant elevation.

5. As evidenced by Exhibits I and M of attachment #1 to this document, there were many sightings of UFO's in the California area between 12-20 August 1960. These exhibits also confirm the fact that the circumstances surrounding these sightings were generally the same.

6. This case was brought to the attention of AFIC on 16 August 1960 by a telephone call from L/Col L. Tacker, SAFOI-3d. On this date a TWX (Atch #2) was sent to McClelland AFB, California requesting a full and detailed investigation in accordance with the provisions of AFR 200-2, dated 14 September 1959.

7. On 16 August 1960, AFIC made telephone contact with the 859th Radar Squadron (SAGE) (AFC), Red Bluff Air Station, Red Bluff, California. The 859th is tied in with the Portland Air Defense Sector, Adair Air Force Base. Major LeRoy of the Radar Station reported that nothing had appeared on their scopes which called for a scramble between 12-16 August 1960. Contact was again established with the 859th on 17 November 1960, and at this time Major LeRoy denied having informed patrolmen [REDACTED] and [REDACTED] that an unidentified object was on the scope of his unit on the night of the sighting. The Radar Unit at Red Bluff is a SAGE station. The equipment at Red Bluff is only monitored at that station and is tied in to the Portland Air Defense Sector, which has the identification and intercept responsibility. Major LeRoy informed the California Highway Patrol that his station had no capability for identification, but that in view of the fact that no scramble had occurred, no unidentified object was on the scope.

The major stated that the officers were not convinced that his information was all true.

8. For further support of the data collected during the investigation of this case ATIC obtained from the Air Weather Service (AWS) at Asheville, North Carolina the WBAN Forms 31 (Adiabatic Charts) for the Red Bluff, California area covering the period 8-24 August 1960. The weather stations at Red Bluff, Chico, and Redding, California are second order stations. These second order stations observe on a limited schedule, generally daylight hours, and do no complete adiabatic charts. The most representative records available for determining the vertical temperature gradient for Red Bluff are the Adiabatic Charts from Oakland, California and Medford, Oregon. Red Bluff is located almost exactly half way between these two cities, 165 miles from Oakland and 155 miles from Medford. Since the general weather for Oakland, Red Bluff, and Medford was the same, it is safe to assume that interpolation will give a representative picture of the vertical temperature gradient at Red Bluff. The Adiabatic Charts indicate that a strong temperature inversion was prevalent in the entire northern California area during the period of the sightings.

9. The conclusion of ATIC is that the sightings which occurred in the Red Bluff area were due to atmospheric refraction. It is an impossible task to determine what the exact light source was for each specific incident, but the planet Mars was the most probable culprit in the instance of the highway patrolmen. The planet at the time of the sighting was just below the horizon and probably hove into view due to the refraction of its light by the atmosphere. A contributing factor to the sightings could have been the layer of smoke which hung over the area in a thin stratiform layer. This smoke came from the forest fires in the area and hung in a layer due to the stable conditions associated with the inversion.

10. The usual occurrence in nature is for the temperature of the atmosphere to decrease as altitude increases. This change in temperature with altitude is known as the "lapse rate." In some cases, however, instead of decreasing with altitude the temperature actually increases and the condition is termed an "inversion."

11. In passing from one medium to another of different densities or different densities of the same medium, waves of radiant energy are refracted or bent from their original straight line course, except when entering at 90° to the surface separating the two media. The bending is explained by the fact that the waves travel at different speeds in media of different densities. This, in effect, means that a person can in fact look around a corner, or a curve when there are an infinite number of layers of slightly different densities next to each other, as in the atmosphere. Due to the fact that light of different wave lengths (colors) bend at different angles, white light is separated into color bands (spectrum) ranging usually from red to violet. The longer wave lengths (red) being bent less than the short (blue). This secondary effect of refraction is called dispersion.

12. In addition to the usual results of atmospheric refraction, special optical effects known as mirages may occur when there are strong temperature contrasts in adjacent layers of air. Mirages fall into two general categories termed "inferior" and "superior." The most common mirage is the inferior type, occurring when the temperature profile is following the normal pattern of decreasing with altitude. However, for the condition to occur, a layer of extremely warm air must exist near the surface with relatively cooler and, therefore, denser air above it. Convection would normally occur under these conditions, but usually has not begun due to lack of turbulence and the slow transfer of heat due to conduction and radiation. These conditions cause the light which reaches the eye to be less curved than normally, and in some extreme conditions to actually be curved in the opposite direction. The effect of inferior mirages is to shorten the distance to ones apparent horizon (see Atch #3). In this type of mirage a distant object is sometimes seen inverted and below the real object. This is the type of mirage which is so familiar to persons on deserts. The water they see being an inverted image of the sky. An everyday experience with a mirage of this type is the wet appearance of known to be dry highways. The wet spot remaining some distance ahead of the car. These mirages are called "inferior" because the image is below the real object. When the opposite temperature conditions occur, a cold layer of air with warmer air on top (inversion), the conditions produce a superior mirage. These mirages tend to increase the distance to our horizon and their effects are much more startling than inferior mirages. When these conditions occur a person can actually see objects which normally would be below his horizon. Sometimes the images will be highly magnified or extremely distorted. This mirage is called a superior mirage because the image occurs above the actual object. In this explanation reference has been made to layers of air, but it should be understood that the transition from one layer to the next is not abrupt. There is mixing and a gradual change in the refractive power of the air, and the effects seen in mirages are due to this continuous variation.

13. A number of the witnesses mentioned that the object they observed was moving at some approximate speed. The speeds most commonly mentioned were centered around about 35 miles per hour. It should be noted that these witnesses were riding in cars and that this is probably the speed at which they were driving. It is a common characteristic of mirages that the image remains a constant distance from the observer in order that the geometry associated with the phenomena remains fairly consistent. Mirages of water holes seen in the desert are constantly out of reach. It is probable that the witnesses' estimates of speed were reached by the fact that the object appeared to keep pace with their cars.

14. It is quite probable that reports of all of the sightings which occurred in California during the period 12-20 August 1960 did not reach ATIC. It is, therefore, impossible to make an accurate estimate as to how many sightings actually occurred and what percentage were

due to the inversion. It is possible that some were due to other causes such as "hysteria" and the "get into the act" attitude of some people. However, in view of all available evidence in this case, it is concluded that the effects associated with the inversion were responsible for the sightings which occurred in the Red Bluff, California area between 12-20 August 1960.

FOR THE COMMANDER:

J. C. Evans
PHILIP C. EVANS
Colonel, USAF *11/22/60*
Deputy for Science and Components

3 Atch:

1. File of UFO Sightings
2. Cy TWX, 16 Aug 60 to
McClellan AFB, Calif
3. Diagram of effects of mirages

COORDINATION:

AFCIN-LE2x *Robert Friend Major* Date *18 November 60*
AFCIN-LE2 *H. J. McTigue* Date *22 Nov 60*

TAB

A	IR 112 dtd 23 Aug 60 w/14 Inclosures
B	Investigative Data
C	Weather Data
D	Taped Interview with Principal Witnesses on 16 Aug 60
E	Extracts from UFO Publications

SMC

A

CLASSIFICATION

COUNTRY OF ACTIVITY REPORTING U.S.A.		REPORT NO.	(Leave blank)	
AIR INTELLIGENCE INFORMATION REPORT				
COUNTRY OR AREA REPORT CONCERNS Yehama County, California		DATE OF INFORMATION 13 Aug 60	SRI STATUS (If applicable) SRI NO. _____ CANCELED/COMPLETE SRI NO. _____ CANCELED/INCOMPLETE SRI NO. _____ ADDITIONAL INFORMATION ON (Date) _____ ACTIVE	
ACTIVITY SUBMITTING REPORT Provost Marshal Division McClellan AFB, California		DATE OF COLLECTION 18-21 Aug 60		
PREPARING INDIVIDUAL Duane K. Bilsland		DATE OF REPORT 23 Aug 60		
NAME OR DESCRIPTION OF SOURCE Personal interviews		EVALUATION Reliable		
REFERENCES (BAIR Subject, previous reports, etc., as applicable) Original Report				
SUBJECT (Descriptive title. Use individual reports for separate subjects) U.F.O.				
SUMMARY (Give summary which highlights the salient factors of narrative report. Begin narrative text on AF Form 112a unless report can be fully stated on AF Form 112. List inclosures, including number of copies) Two California Highway Patrolmen, [redacted] and [redacted] on, were in their patrol cars 18 miles south of Red Bluff, California, when they spotted a football-shaped object the size of an airliner one and one-half miles away, 200 feet above the ground. It seemed to have a row of horizontal lights and something on the end that made a red beam that seemed to sweep the ground. The sightings began at 2645 PST, 13 August 1960.				
14 INCLS (Exhibits "A" thru "M")				
9				
DISTRIBUTION BY ORIGINATOR (Except USAF and file. Indicate Dupl M/oz and copies w/o inclosures, if applicable)				
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SUPPLEMENT TO AF FORM 112

ORIGINATING AGENCY

Provost Marshal Division
McClellan AFB, California

REPORT NO.

PAGE 1 OF 2 PAGES

1. On 18 August 1960 the Provost Marshal, McClellan AFB, California, received TWX AFUCIN-4E2X 8-2488-E, dated 17 August 1960. At 1455 hours, 18 August 1960, the undersigned explained for Red Bluff, California, and upon arrival reported to Major Malden J. LeRoy, Commanding Officer, 359th Radron, Red Bluff AFS, California.

2. The investigation of the incident was being conducted by 1/Lt David E. Snyder, AO-3017204, of that station. Lt. Snyder had taken a written statement from California Highway Patrolmen [REDACTED] and [REDACTED]. That statement (2 copies) a sketch and a newspaper article by and concerning these Patrolmen is attached as Exhibit "A."

3. In addition, Lt Snyder had extracted all information associated with the incident which had been recorded in the Red Bluff Air Force Station Operational Log. Those extracts are attached as Exhibit "B."

4. Exhibit "C" is additional information of a general nature which Lt Snyder had secured.

5. At 1830 hours, 18 August, the undersigned interviewed Patrolmen [REDACTED] and [REDACTED] and was able to develop the additional information attached as Exhibit "D."

6. Local inquiry succeeded in locating various residents who had witnessed the appearance of UFO previous to or on the same date the Highway Patrol Officers had reported seeing the one in question. Attached to this report are statements and sketches by [REDACTED]

and [REDACTED], respectively tabbed as exhibits "E" thru "I." Received on 23 August via mail was additional statement by additional persons which is included herewith as Exhibit "I-2."

7. The undersigned interviewed each of the above persons and based on a personal opinion formed through observation of credibility, responsibility and reputation, concluded that an unidentified object and/or objects of similar physical appearance, whether real or imaginary, were observed by various solid citizens of Tehama County California.

8. Based upon allegations by the citizenry that UFOs had been appearing nightly in the area north and east of Red Bluff, California, the undersigned established a vigil in the Inskip Look-Out tower on the night of Friday, 19 August 1960, between the hours of 1830-0200. No objects were observed.

9. At 2000 hours, Saturday, 21 August 1960, the undersigned was at the Sheriff's Office in Red Bluff, at which time an UFO was reported by Criminal Investigator [REDACTED] Red Bluff, California. The undersigned went immediately to the address and was shown a very distant round object having a reddish hue. The horizon was extremely smoky due to forest fires in the area. The object was observed for 30 minutes until hidden by smoke. At 0200 hours the same date contact was visually re-established and the object was identified as a star.

10. California Division of Forestry Maps of Tehama County were obtained and recordings of sightings indicated thereon. See Exhibits "J", "K" and "L."

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Provost Marshal Division
McClellan AFB, California

REPORT NO.

PAGE

2

OF

2

PAGES

11. An additional report of sightings of UFO was furnished by the California Highway Patrol Commissioners Office. Attached as exhibit "M."

12. Forwarded with this report is a tape recording of the conversation given by the two California Highway Patrolmen to the KBLF Radio Reporter in Red Bluff, California, on the morning following the sighting of the UFO 13 August 1960.


DUANE K. BILSLAND, Chief
Investigations and Inspection Section

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112a

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U. S. GOVERNMENT PRINTING OFFICE : 1958 - O-455216

21 - 31 AUGUST 1960 SIGHTINGS

<u>DATE</u>	<u>LOCATION</u>	<u>OBSERVER</u>	<u>EVALUATION</u>
21	Hachijo-Jima Island	USN	Satellite (ECHO I)
22	Dyrenville, Texas	[REDACTED]	Insufficient Data
22	NNW Lebreville, Africa	Military Air	Astro (METEOR)
23	Miamisburg, Ohio	[REDACTED]	Astro (METEOR)
23	Wichita, Kansas	[REDACTED]	UNIDENTIFIED
24	Sitka, Alaska	Northwest Airlines	Astro (METEOR)
24	McComb, Ohio	[REDACTED]	Astro (METEOR)
25	Uniontown, Ohio	[REDACTED]	Aircraft
25	Western Mediterranean	USN	Insufficient Data
25	Sioux Narrows, Ontario, Canada	[REDACTED]	Insufficient Data
25	N of Midway Island	Military Air	Satellite (ECHO I)
26	Andover, Massachusetts	[REDACTED]	Aircraft
26	Springville, New York	[REDACTED]	Aircraft
26	Elkhart Lake, Wisconsin	[REDACTED]	Aircraft
26	Shawano, Wisconsin	[REDACTED]	Aircraft
26	Stoughton, Massachusetts	[REDACTED]	Aircraft
27	Centerville, Ohio	Anonymous	Astro (ALTAIR)
28	Zaragoza AB, Spain	Military	Astro (METEOR)
29	Vicinity Taiwan	USN	Satellite (ECHO I)
29	Crete, Illinois	[REDACTED]	UNIDENTIFIED
29	Pontiac, Michigan	[REDACTED]	Insufficient Data
29	Dedham, Massachusetts	[REDACTED]	Insufficient Data
29	Blackwood, New Jersey	[REDACTED]	Insufficient Data
29	West Roxbury, Massachusetts	[REDACTED]	Astro (METEOR)
30	South Tewksbury, Massachusetts	[REDACTED]	Insufficient Data
31	Indianapolis, Indiana	[REDACTED]	Astro (MARS/STARS)
31	Yokohama, Japan	Unknown, Multi	Satellite (ECHO I)
31	Wilmington, North Carolina	[REDACTED]	Insufficient Data
31	Chicago, Illinois	[REDACTED]	Astro (CAPELLA)
31	Glenview, Illinois	Unidentified	Insufficient Data
31-6	David City, Nebraska	Multiple	Astro (REFRACTION OBJ)

ADDITIONAL REPORTED SIGHTINGS (NOT CASES)

<u>DATE</u>	<u>LOCATION</u>	<u>SOURCE</u>	<u>EVALUATION</u>
21	Rogersville, Pennsylvania	Newsclipping	
23	Eglin AFB, Florida	Newsclipping	
25	Holmstad, Sweden	Newsclipping	
31	Du Quain, Illinois	[REDACTED] (Ltr)	