# SUNtice

Shedding some light on UFOlogy and UFOs

...one was most definitely Venus! The latter case should be read by all UFO investigators. It is a fantastic example of how persuasive the planet Venus can be as a nonscreened UFO. Police officers in 11 counties were "taken in" by this planet. It is a case of particular value to psychologists and, one is tempted to say, to those responsible for hiring policemen.

Dr. J. Allen Hynek - The UFO Experience

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Cover: Venus dominated the evening sky in December and probably produced quite a few UFO reports. It was so bright that one can see its reflection in the lake.

Left: The section of the National Defense Act concerning the establishment of a group to collect and analyze UAP reports.

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# Going back to the past

On November 23rd, the <u>Department of Defense (DOD)</u> announced the formation of the "Airborne Object Identification and Management Synchronization Group" (AOIMSG). They are the successor to the Navy's UAP task force (UAPTF). The purpose of the AOIMSG seems to be to identify any objects seen in "special use airspace". They are also to evaluate if they pose a threat to national security or airspace safety. This appears to have been an attempt by the DOD to water down an <u>amendment to the National Defense Authorization Act requiring the formation of the Anomaly Surveillance, Tracking, and Resolution Office (ASTRO?)</u>, which was to last until 2026. That amendment also required the formation of "The Aerial and Trans medium Phenomena and Advisory Committee" (ATPAC?) by October of 2022 (also to last 6 years). The Committee would have consisted of 20 members. While many of the usual suspects were there (FAA, NASA, NAS, etc.), I noticed that two of the members were to come from the Scientific Coalition for Unidentified Aerial Phenomena Studies (What used to be the Scientific Coalition for UFOlogy) and three members from the "Galileo Project" (which has added Chris Mellon and Luis Elizondo as "research affiliates"). However, in the final bill, it seems that ASTRO and ATPAC were removed.

I suspect that the DOD did not desire to have outside individuals (especially UFOlogists, who could not be objective) telling them how to study UAP/UFO reports or chasing after aliens.

What does this mean to the UFO community? I am not sure what to think at this point but I worry that it will become another project Blue Book. It will discover objects that can be identified and others that they cannot. They will also come under public pressure every time a video leaks out or rumors spread from personnel, who are associated with a potential "incident". Any claim made by this group, other than "alien spaceship" or "Unidentified", will quickly be seized upon by UFO promoters that it is just a continuation of the government cover-up that has been happening since 1947. I do not think the program will even address past cases, including all the videos promoted by the "To The Stars Academy" (TTSA). They probably will want to work with fresh information only and not waste their time with old data. Of course, this will produce more complaining from the UFO community when they will be whining "What about....?". For the UFO community, this is "win-win" and for the DOD it is "lose-lose". UFO promoters can talk about overwhelming evidence and get a lot of publicity. Meanwhile, the DOD is going to have to find a way of handling this public relations nightmare without looking like they are covering up. Unless there is absolute proof of something unknown to science, sooner or later, the DOD will eventually reach the conclusion that this is a waste of time and resources. Wasn't that one of the reasons Project Blue Book was shut down?

I want to thank Chris Clarke for his article about the Aguadilla video. His analysis confirms what others have written about the event. To me, I think there are some nagging questions about the video (which I mentioned in my original article in SUNlite 7-6) but nothing that makes me change my opinion that this could be a balloon driven by the wind. I doubt this will change the mind of those supporting this video as evidence of something extraordinary but I gave Clarke a chance to make his case for those who are still "on the fence" in what the object in the video might have been.

# WEEDING OUT THE WEINGTEIN COTOLOG

#### January 27, 1994 - Kazakhstan Republic<sup>1</sup>

94.01.27 | night | Kazakhstan | 45° N / 55° W | A | a Tajik Airlines B-747SP | a brilliantly luminous object with a contrail | | 01 | 02

This entry is a bit frustrating for several reasons. The source information are from Richard Haines' and Richard Hall's files. We also have no time, which makes it difficult to analyze. Examination of the Hall's <u>UFO Evidence Volume 2</u> gives us this entry:

January 27, 1994 Kazakhstan Republic Tajik Airlines B-747 pilot Brilliantly luminous UFO circled, made sharp turns, contrail-like effect.<sup>2</sup>

The footnote gives us a source as a CIA telex cited by Dr. Richard F. Haines. I found the telex at the CUFON website. The Date-time-group was 31 January 0258Z and the text reads:

- 1. TAJIK AIR CHIEF PILOT, AMCIT ED RHODES, AND HIS TWO AMERICAN PILOT COLLEAGUES REPORTED JANUARY 29 THAT, ON JANUARY 27, THEY HAD ENCOUNTERED A UFO WHILE FLYING AT 41,000 FEET IN THEIR BOEING 747SP AT LAT 45 NORTH AND LONG 55 EAST, OVER KAZAKHSTAN. THEY FIRST ENCOUNTERED THE OBJECT AS A BRIGHT LIGHT OF ENORMOUS INTENSITY, APPROACHING THEM FROM OVER THE HORIZON TO THE EAST AT A GREAT RATE OF SPEED AND AT A MUCH HIGHER ALTITUDE THAN THEIR OWN. THEY WATCHED THE OBJECT FOR SOME FORTY MINUTES AS IT MANEUVERED IN CIRCLES, CORKSCREWS AND MADE 90-DEGREE TURNS AT RAPID RATES OF SPEED AND UNDER VERY HIGH G'S. CAPTAIN RHODES TOOK SEVERAL PHOTOS WITH A POCKET OLYMPUS CAMERA AND WILL SEND COPIES TO THE EMBASSY AND THE TAJIKISTAN DESK (LOWRY TAYLOR) IN THE DEPARTMENT, IF THEY COME OUT. AFTER SOME TIME, THE OBJECT ADOPTED A HORIZONTAL HIGH-SPEED COURSE AND DISAPPEARED OVER THE HORIZON.
- 2. AS IT WAS DARK WHEN THE OBJECT WAS OBSERVED, THE CREW WERE UNABLE TO DISCERN ITS SHAPE. THEY DESCRIBED THE LIGHT IT EMITTED AS HAVING A "BOW WAVE" RESEMBLING A HIGH-SPEED PHOTO OF A BULLET IN FLIGHT, IN WHICH A VERY SMALL OBJECT GIVES OFF A MUCH LARGER TRAILING WAVE OF HEAT/LIGHT. SOME FORTY-FIVE MINUTES AFTER THE INITIAL SIGHTING, AS THE SUN WAS RISING, THE AIRCRAFT FLEW UNDER THE CONTRAILS WHICH THE OBJECT HAD LEFT BEHIND. THE PLANE WAS MAKING OVER 500 KNOTS. RHODES ESTIMATED THE ALTITUDE OF THE CONTRAILS AT APPROXIMATELY 100,000 FEET, NOTING THAT THERE IS TOO LITTLE AIR/MOISTURE AT THAT EXTREME ALTITUDE TO ENABLE THE CREATION OF CONTRAILS BY THE PROPULSION MECHANISMS OF ORDINARY AIRCRAFT WHICH MIGHT BE ABLE TO REACH THAT HEIGHT. THE PATHS OF THE CONTRAILS REFLECTED THE MANEUVERS OF THE OBJECT, I.E., CIRCLES, CORKSCREWS, ETC.
- 3. TO OUR SUGGESTION THAT THE OBJECT MIGHT HAVE BEEN A METEOR ENTERING AND SKIPPING OFF THE EARTH'S ATMOSPHERE, RHODES AND HIS CREW WERE ADAMANT THAT THEY HAD SEEN THOUSANDS OF "FALLING STARS" AND OTHER SPACE JUNK ENTERING THE ATMOSPHERE IN THEIR YEARS OF FLYING PASSENGER AIRCRAFT FOR PANAM. THIS, THEY INSISTED, WAS NOTHING LIKE A METEOR. ON THE BASIS OF ITS SPEED AND MANEUVERABILITY, RHODES EXPRESSED THE OPINION, WHICH HIS CREW SEEMED TO SUPPORT, THAT THE OBJECT WAS EXTRATERRESTRIAL AND UNDER INTELLIGENT CONTROL.
- 4. COMMENT: WE HAVE NO OPINION AND REPORT THE ABOVE FOR WHAT IT MAY BE WORTH.3

There is no additional information and there seems to be little follow-up by Haines. The photographs noted in the description have never surfaced, which makes one question the source. Did the photographs not turn out or did they show something that could be explained? After all, the event was visible for 45 minutes and some of that time was around sunrise. It should have not been difficult to obtain good photographs of the event unless he did not know how to use the camera.

#### **Analysis**

This TELEX is missing a time for the event but it does provide us some information about direction and approximate time of night. They were looking towards the east, which indicates the plane was probably flying in that general direction. The time of night was probably around the beginning of nautical twilight because, 45 minutes after the initial sighting, they state the sun was rising.

The telex does give us some important information about the flight. It states that the aircraft was a Boeing 747SP owned by Tajik airlines. There was only one such aircraft in Tajik's inventory. It was called the "Snow Leopard" and flew from London to Delhi (via Dushanabe), Karachi or Yerevan. It left London on Monday, Thursday, Friday, Saturday, and Sunday and arrived at their destination on the following day. The pilot stated it was 27 January but that was a Thursday. In order to be in the region on that date, the plane would have had to leave on Wednesday night. Since there was no flight leaving London on Wednesday, it means the plane took off on Thursday the 27th and the actual date of the sighting was 28 January.



This brings us to the most likely source of the sighting. From the Astronautix website we discover there was a Progress M-21 launch from Baikonur at 0212 GMT on 28 January.<sup>5</sup> The launch time was 0712 local time (Baikonur) and sunrise at 0812. Nautical twilight began at 0704 Baikonur time. The location of the aircraft was west of Baikonur making the launch being visible to the east of the aircraft.

This is all consistent with what the TELEX describes. While it was 60 minutes before local sunrise, and not 45, the times given appear to have been estimates and not precise measurements. The aircraft was in the vicinity of Baikonur and the description given matches those of pre-dawn/post-sunset rocket launches. The fact that no launch was mentioned at the time of the UFO sighting indicates their UFO was the rocket launch itself.

#### Conclusion

Once again, we see a case being promoted by UFO proponents as something significant but closer examination reveals an explanation. It is disappointing that they only relied upon a single Telex and, apparently, performed no further follow-up. The pilot is even named in the Telex and one would think that somebody would have tried to contact him. Either they did contact him and he gave no additional information or they did not contact him at all. If they did contact him, why didn't they produce the photographs? I suspect they would only show images of a rocket launch or nothing at all otherwise they would have found their way into UFO periodicals. Their failure to appear in the UFOlogical record says a lot about this case.

In my opinion, all of the information indicates that what was seen was probably the Progress M-21 launch. The description is typical for rocket launches during nautical twilight and the pilot did not report seeing the launch as well as the UFO. This case should be removed from the Weinstein catalog and classified as "Probably Progress M-21 rocket launch".

#### Notes and references

- 1. Weinstein, Dominique F. <u>Unidentified Aerial Phenomena</u>: <u>Eighty years of pilot sightings</u>. NARCAP. February 2001. P. 34
- 2. Hall, Richard H. The UFO Evidence: Volume 2 . Scarecrow Press. Kindle Edition. P. 155
- 3. Klotz, Jim. "U.S. State Department "UFO documents reviewed and released 7 February 2000." The Computer UFO Network. Available WWW: <a href="https://www.cufon.org/cufon/staterepts.htm">https://www.cufon.org/cufon/staterepts.htm</a>
- Baldwin, James Patrick. "The Story of Snow Leopard Part One: The Aircraft and the Operation". <u>JPB TRANS CONSULTING, LLC</u>. Available WWW: <a href="https://jpbtransconsulting.com/2013/08/06/the-story-of-snow-leopard-part-one-the-aircraft-and-the-operation/">https://jpbtransconsulting.com/2013/08/06/the-story-of-snow-leopard-part-one-the-aircraft-and-the-operation/</a>
- 5. "1994 Space History Chronology". Astronautix. Available WWW: http://www.astronautix.com/1/1994chronology.html

# January 9, 1953 - Northern Japan

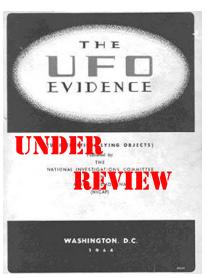
January 9, 1953--Northern Japan. Pilot and radar observer of an F-94 jet interceptor saw and tracked a rotating UFO. Air base Commander, Col. George W. Perdy, stated there was "remarkable corroboration as to description of the cluster of lights by people widely separated who hadn't so much as talked to one another.<sup>1</sup>

There is no notation to any other section or additional information.

#### **Probable source of information**

Because most of NICAP's sources seem to come from newspapers, I searched the newspaper archive and found the probable source of the information for this entry. On January 21st, an article from the Associated Press (AP) appeared in multiple newspapers across the country describing several incidents over northern Japan. The first aircraft intercept mentioned involved Col. Donald J. M. Blakeslee:

The intelligence report said Blakeslee closed on the object after extinguishing all the lights on his aircraft "to make certain he was not getting some reflection from his canopy surface. When all lights were out, he noticed no change in the appearance or brilliance of the object and its color scheme."



The object increased speed and vanished in 30 seconds. Blakeslee made a second approach, five minutes later, with all lights on. This time the object disappeared in five seconds.

The report noted this as "a tangible point of coincidence," but did not speculate whether Blakeslee's lights could have been seen from the object.

It also pointed out that Blakeslee, not knowing the size of the object, had no way of knowing how close he got to it.<sup>2</sup>

The second sighting involved an F-94 with a radar contact:

The air force said a rotating cluster Jan. 9 near an air base in northern Honshu" was observed visually by a pilot of an F-94 jet interceptor for approximately one minute . . . Radar contact for approximately two minutes was verified by both members of the crew". The F-94 carries a radar observer.

The report called the object "a light that appeared to continuously change in color from red to white to green."

The pilot, Lt. Melvin E. Conine (hometown unavailable) said, "I immediately turned into the light but lost sight of it shortly after ... I searched the area but made no further contact."

The radar observer, Sec. Lt. Walter D. Lawley, Jr., of Tuscaloosa, Ala., said the radar "blip was unlike regular return usually gotten from another aircraft, being very weak and fuzzy instead of sharp. The radar set was in good condition both before the pickup and after." <sup>3</sup>

There seems to be some confusion about the dates. There are references in the article to events that happened on 29 December 1952. This involved a B-26, a fighter jet, and ground observers. These were discussed in SUNlite 8-6 and Blue Book had determined the likely source to be the planet Venus. I agreed with that conclusion. Additionally, the narrative mentions that Blakeslee's event transpired on the night of those observations instead of January 9.

#### **Blue Book file**

Blue Book has a file for this date from Northern Japan. This is the sighting from the AP account mentioning Lt. Conine. Missing from the file is an intelligence report from the date or any mention of Colonel Blakeslee's incident. Further searching found an intelligence report in the March 31, 1953 Honshu folder referencing Blakeslee's FLYOBRT of 31 December 1952<sup>4</sup> and the description of his actions on December 29 mirrors what the AP story states about Blakeslee.<sup>5</sup> This indicates that Blakeslees actions were on 29 December. The second sighting by Blakeslee happened on his return to base after chasing Venus and was towards the South-southwest and not the western sky. It might have been the star Fomalhaut setting. It is difficult to say with such a brief sighting or more information. In any case, it seems the only sighting on 9 January was the Lt. Conine attempted intercept.

The file lists the following particulars about the event6:

- The time was at 0950Z (1850 local time).
- The interception attempt was made near Misawa AFB in Japan.
- The object changed from red to white to green. The visual sighting lasted one minute.
- The radar contact was a weak fuzzy return and lasted two minutes.
- The F94 was at 35000 feet altitude, IAS 220 knots, and heading at 360 degrees magnetic.
- At 24000 yards (about 11.8 NM), the aircraft picked up the target at a position angle of port 20 degrees and an elevation angle

of -10 degrees.

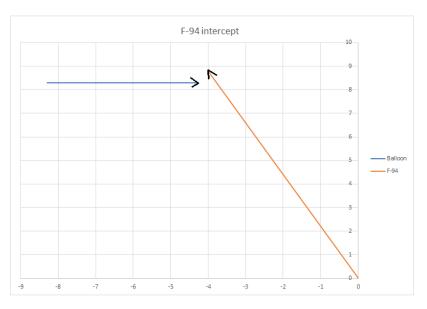
- The pilot turned to 335 degrees heading and then saw the target visually.
- The object was still at 20 degrees port (remaining constant) but the elevation angle began to increase in the negative direction.
- The radar locked on at 5000 yards.
- The radar contact broke at 200 yards with the target at 20 degrees to port and elevation angle of -40 degrees.
- The aircraft lost the contact once it overshot the target.
- Winds at 30000 feet were 90 knots from 270 degrees and 130 knots from 280 degrees at 35000 feet.

Blue Book concluded that this was a possible balloon launched from Misawa AFB 50 minutes prior to the event.

#### **Analysis**

The Blue Book file is missing some pertinent data like the actual location of the aircraft at the time of the intercept. The news reports indicated it was near an airbase in Northern Japan. Misawa matches that description but we still don't know how far from

the base or what direction to see if the Misawa balloon could have caused the sighting. However, the reported behavior does appear to match that of a balloon. The combined closure of wind and the aircraft is about right for an aircraft passing over a balloon. Using the data available I made an approximate intercept course (both axes are in NM from the F-94s initial location). I assumed the winds were moving at about 120 knots from 270 degrees azimuth. For the F-94, I corrected the Indicated Air Speed of 220 knots at 35000 feet to a true air speed of about 290 knots. Because the object was always 20 degrees to port, I made an assumption that the original 20 degrees to port was when the plane was on a bearing of 335 degrees magnetic and not 360 degrees. Additionally, the target was estimated at 24000 yards, which is about 11.8 nm. I then simply plotted the paths of the aircraft and balloon using the courses and estimated speeds in 30 second increments. The end result was that, after two minutes, the two paths got close enough to accept the explanation of a balloon being the source of the event.



As I had already stated, the other sightings mentioned in the AP story/NICAP's best evidence, happened on 29 December and was covered in SUNlite 8-6.

#### **Conclusion**

There is no good reason to dismiss the possibility that the source of the 9 January 1953 F-94 intercept attempt was a balloon. It should be removed from the best evidence category.

#### Notes and references

- 1. Hall, Richard M. (Ed.) <u>The UFO evidence</u>. The National Committee on Aerial Phenomena (NICAP). New York: Barnes and Noble.1997. P. 133
- 2. "Saucer sightings over Northern Japan". Reno Evening Gazette. Reno, Nevada. January 21, 1953. P. 2
- 3. ibid.
- 4. Air Intelligence Information Report IR-13-53. 2 April 1953. P. 3. Available WWW: https://www.fold3.com/image/6384496
- 5. <u>27th fighter wing air intelligence information report</u>. 31 December 1952. P. 3-4 Available WWW: <a href="https://www.fold3.com/image/9542669">https://www.fold3.com/image/9542669</a> and <a href="https://www.fold3.com/image/9542666">https://www.fold3.com/image/9542666</a>
- 6. "Case file Misawa AFB 9 January 1953". Fold 3 web site. Available WWW: https://www.fold3.com/image/9543791

# THE 701 CLUB: CASE 11419: GRAND HAVEN/HOLLAND, MICHIGAN FEBRUARY 27, 1967

on Berlinner's describes the case as follows:

Feb. 27, 1967; Grand Haven, Michigan. 8:19 p.m. Witnesses: Sheriff Grysen, wife and others. Large white light, with smaller red and green lights seen to the sides. Made almost instantaneous 90° turn to left, shot out over road and stopped, moving too fast to follow. Sighting lasted 1 hour, 11 minutes. <sup>1</sup>

Sparks' entry is basically a repeat of Berlinners and adds nothing in the way of new information.<sup>2</sup>

#### The Blue Book file

Desides the Blue Book file, there were some local media reports in the Newspaper archive. However, they were not very informative. Blue book's record card states that this was partially explained as Venus and an unidentified. There were multiple witnesses seeing the object. The bulk of information comes from a typed report made by William T. Powers (an engineer from Hynek's observatory). There is a timetable in the case file, which can give us an idea on the sequence of events. The names are mostly redacted but not completely and, in two instances, there was no redaction. There are other mention of the witnesses in the case file and it is not difficult to determine which witnesses were which. I put in the likely names in parentheses.

20:19 - XXXX (Wassink) was called by dispatcher. XXXX(Heerspink) hears call and sees object to SW.

20:20 - XXXX (Sheriff Grysen)overhears call; sees object to west. XXXX(Wassink) starts north, XXXX (Heerspink) watches object to SW.

20:22 - XXXX(Wassink) sees object to NW. XXXX (Sheriff Grysen) goes outside to look at object in west, returns indoors and calls office.

20:25 - XXXX (Wassink) turns down Riley street; Heerspink drives up cedar street. XXXX (Sheriff Grysen) gets coat, not watching.

20:27 - XXXX (Sheriff Grysen) goes outside again: first object gone, second suddenly appears. XXXX (Heerspink) sees object suddenly move to position over road. Wassink still driving toward object in west.

20:35 - XXXX (Wassink) loses object behind dunes: XXXX (Heerspink) arrives at final position, sees object in west. XXXX (Sheriff Grysen) still watching object in NW.

20:36 - XXXX (Heerspink) loses object - faded or moved down behind trees.

20:37 - XXXX (Sheriff Grysen) sees object disappear suddenly with instantaneous motion to the south.

20:40 - XXXX (Wassink) arrives at lakeshore: nothing visible

21:00 - XXXX (Heerspink) sees objects to south.

21:30 - XXXX (Posma) and XXXX (Blair) report UFO in middle of county: XXXX (Heerspink) sees in binoculars.<sup>3</sup>

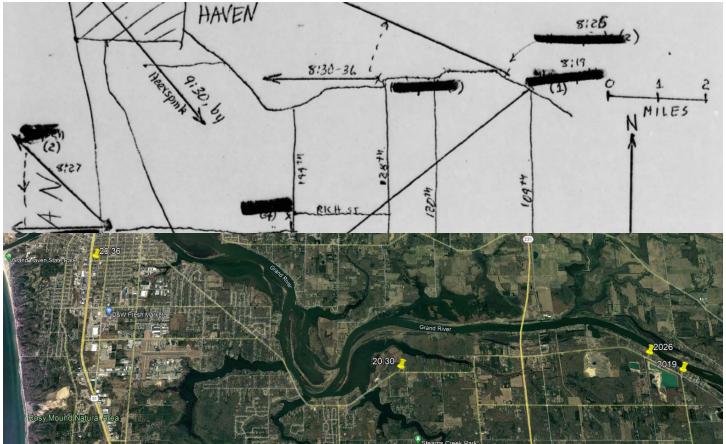
#### **Analysis**

The main source of this sighting appears to be the planet Venus. At the time of Powers' investigation, one of the witnesses stated they had seen Venus as well as the UFO. However, he may also have been "primed" to state this because a local astronomer had already suggested they had seen Venus before the investigator arrived. Additionally, this witness stated Venus was higher in the sky and slightly south of his object. He may have been confusing some other celestial object as being Venus. Despite this statement by this witness, it seems likely that Venus was the source of much of the reports here. Venus set in the west around 20:43 and the disappearance of the object a few minutes before this should not be dismissed as just coincidence. It makes Venus a likely candidate for many of the reports before 20:40. However, there are aspects of these observations that need to be addressed.

In the Power's investigation report we read the following about the reported rapid motions described:

The most striking motions were those reported by XXXX (Grysen) (90 degrees to the left in a "snap of the fingers") and XXXX (Heerspink) (shot out over the road and stopped instantaneously). XXXX (Grysen) could not describe the motion - it was "too fast to follow". He said at one point that it "just disappeared, but I could not tell which way it went" - meaning that all motion information came at the instant of disappearance. He did not see it in motion. It left no streak of light. Under the circumstances, it is entirely reasonable to suppose that there was an involuntary impression of motion but no actual motion. The light simply went out.<sup>4</sup>

The first report of rapid motion was from Heerspink. According to Powers, Heerspink saw the object to his Southwest while driving along a straight road. Heerspink lost sight of the object and when he reached an address near 107th Avenue, the object suddenly moved in front of him. This recreation happened on 3 March and one has to question how accurate the position was. Powers states that it was not possible to see Venus at this location because of trees. According to Powers' time line, this happened at 20:27 but he puts the position of Heerspink around this location at 20:26.<sup>5</sup> At this point, Heerspink was driving WNW (azimuth 300 degrees). About a third of a mile past this position, the road turns to almost due west (azimuth 266 degrees). Heerspink may have been more focused on locating the object, because he had lost it, than paying attention to his exact position. In fact, the location given may have been where he lost the object because Powers noted one could not have seen Venus because of trees at that location. If this



happened, Heerspink, focused on trying to see the object again to his left, would not have paid much attention to the road changing direction and Venus would have appeared to have jump out in front of his vehicle as he made the turn. This effect has happened in the past when people pursue stationary lights in their vehicles. Confirming that Heerspink might have been following Venus is that the note in Powers' time line that states Heerspink arrived at his final position at 20:35 and the object was now in the West. One minute later, it faded away or moved down behind the trees. This is the exactly what Venus would have done.

The other observation of direction has to do with Sheriff Grysen. He reported seeing this object through his window to the west. This was very likely Venus. He then got his coat and went outside to a new position. While exiting the house, he noted that the object in the west was no longer visible through the window. Once outside, he now saw a new object that appears in the NW. It is interesting to note that Grysen lost sight of what appears to be Venus about fifteen minutes before the others and saw this second object after changing his location from inside to outside. He appears to have had an unobstructed view of the lake and Venus still should have been visible. It is also important to note that he lost sight of his object to the Northwest around the same time as the others lost sight of, what appears to have been, Venus. It seems possible that his going outside disoriented him to the point that he thought what he was looking at was a new object but, instead, was still Venus. He was just off in his direction of observation by 45 degrees in azimuth. As noted by Powers, Grysens' description of direction change by the object seemed more related to the light suddenly disappearing from view than actual motion.

If the object to the NW was not Venus, it is very possible that what was seen was an aircraft landing light. Holland/Grand Haven are on the east coast of Lake Michigan. To the West is Milwaukee (General Mitchell airport) and to the Southwest is Chicago (O'Hare and Midway airports). The distance is about 90-110 miles A plane taking off from one of these airports would have their landing lights on and turn them off after getting up to altitude and exiting the vicinity of the airport.

Another possibility of a light over the lake involves a Naval exercise. Naval Air Station Glenview was located in northern Chicago and they flew P-2 and P-3 patrol aircraft. These aircraft operated with a large spotlight to use during search missions. It is possible that the aircraft could have been operating out over the lake on a training mission. If the light was on for a few minutes and then turned off, it would appear to rapidly disappear. Blue Book apparently did not bother to check up on this possibility.

This brings us to the last set of sightings at 2100 and 2130. The amount of information surrounding these observations is very limited. At best, I would classify these as Insufficient information. All we know is that Heerspink saw some object(s) to the South or Southeast and two other deputies saw an object between them. We do not even know if they saw the same object or both saw separate objects that lay in opposite directions. To the South were the bright stars Rigel, Sirius, and Procyon. Even higher in the sky was the planet Jupiter. To the East-northeast, the bright star Arcturus was rising. All have been known to produce UFO reports. Were they involved in these three sightings? We don't know because there is just not enough information.

In the conclusion of his report, Mr. Powers wrote:

The appearance of those objects which are not identifiable with Venus is similar to that expected from aircraft landing lights. However, since no specific flights could be identified, this conclusion does not prove that the cause was in fact airplane landing lights. The existence of the similarity, however, makes it impossible to conclude that a definitely unconventional object was present. The objects remain unidentified, meaning neither known to be unconventional or known to be conventional.<sup>6</sup>

This is why the case is classified as unidentified. Powers left it open because he could not positively identify the aircraft involved. We don't know how thorough his search was and his approximate location of the aircraft was based on azimuth estimates of two witnesses, who may or may not have been accurate. The point is that if he states it had all the characteristics of a plane landing light then it could "possibly" have been one.

#### Conclusion

This case is challenging to produce a complete explanation because there may have been different objects observed. All of these objects can be classified as "nocturnal lights". The witnesses did feel that these objects had some apparent angular size but all indicated the object(s) was(were) smaller than the moon. This indicates that they were probably just bright point sources of light that gave the illusion of significant size. It seems likely that Venus was involved in some/most of the sightings. In the sighting to the Northwest, it is my opinion that it could either have been Venus or it involved a possible aircraft with a bright landing light/spotlight. Lastly, the final sightings at 2100-2130 should be classified as Insufficient data because, other than direction, there is not enough information to draw a conclusion. One cannot even draw the conclusion that they were looking at the same object. It is my opinion that the case can be classified as "probably Venus/possible aircraft/insufficient information" and should be removed from the list of the unidentifieds.

#### Notes and references

- 1. Berlinner, Don. "The Bluebook Unknowns". NICAP Available WWW: http://www.nicap.org/bluebook/unknowns.htm
- 2. Sparks, Brad. <u>Comprehensive Catalog of 1,700 Project Blue Book UFO Unknowns: Database Catalog Not a Best Evidence List –NEW: List of Projects & Blue Book Chiefs Work in Progress Version 1.30. Jan. 26, 2020. P. 322</u>
- 3. "Case file Grand Haven, Holland, Michigan 27 Feb 67". Fold 3 web site. Available WWW: https://www.fold3.com/image/9733688
- 4. ibid.
- 5. ibid.
- 6. ibid.

# A Method for Modeling Linear UAP Motion from Airborne Surveillance System Videos

# Written by Chris Clarke. November 2021

#### **Abstract**

**Background:** In recent years there have been numerous instances of unidentified objects being captured on video by airborne surveillance and targeting systems. These cases provide an excellent opportunity for further analysis due to the presence of metadata displayed as a text overlay on the video. The characteristics of the UAPs movement can often be deduced or inferred from what is observed in the video, however the nature of the Infrared imagery and parallax effect can be disorienting to the casual viewer. The availability of the associated camera metadata allows for an objective and analytical approach to be taken in order to determine the UAP's flight characteristics. The nature of the movement of these objects is often debated with the two main propositions –

- 1. That the object moved in a linear way, with a prosaic explanation, probably blown by the wind.
- 2. That the object moved in an extraordinary and inexplicable way

As point 1 provides an easily explicable answer to the question of the objects model, it should be thoroughly tested first for validity before moving onto explain the movement by extraordinary means.

<u>Aim:</u> This presentation aims to demonstrate a method for initially determining if an object captured on video from a moving airborne platform is moving as would be expected if it was being blown by the wind. If the object cannot be shown to be moving as if windblown, then further investigation into its movement is warranted. The presentation will go on to use the method to analyze a well known UAP case.

#### **Creating a model**

**The Simple Model:** The first step in analyzing the motion of an object is to create a model of the situation being investigated. In this case we are considering an aircraft flying over the earth with an unknown object also moving in free space. The model must include a number of variables that constantly change over the duration of the video:

- 1) The position of the aircraft (obtained from the metadata overlay)
- 2) The intersection of the bore-sight of the camera with the ground (obtained from the metadata overlay)
  - Aircraft
    Position 3
    Position 2
    Position 1

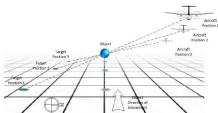
    Open to reaction of Movement over time

    Target
    Position 1

    Figure 1

    Aircraft
    Position 3

    Figure 1



- 3) The wind-speed and direction (obtained from weather reports)
- 4) The position of the object ( is an unknown variable and can be deduced from the other variables)

This initial model is a simple version in which the object and the aircraft follow a linear path at the same speed. It can be seen that the target position moves as the aircraft and object move. In this example the direction of movement is known as it is the same as the movement of the aircraft.

Using 3 lines of sight, and the aircraft's heading as a fourth, allows us to triangulate a common point along the direction of movement direction of movement is known as it is the same as the movement of the aircraft.

In order to calculate the objects path we can rotate to model so that the observer is now looking along the path of the object on the same heading as the aircraft. At this observation point the bore-sight lines are seen to intersect one common point. This allows us to confirm the direction of movement of the object, and to deduce if the object displays any change in altitude.

Furthermore we can measure the distance from the first point, through the second to the third point, which will give us the full linear distance of travel for the object.

Correlating this with the time that the camera imaged these points in the video metadata we can calculate the speed at which the object travels along the line.

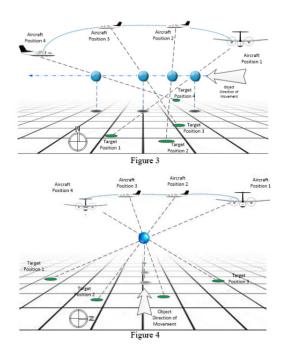
Of course this is a very simple example and real situations can be more complex. Surveillance aircraft tend to fly at speeds between 200 300 knots, and therefore are unlikely to follow a wind-blown object in this manner. They will tend to orbit around a slow moving object on order to keep them at a close distance and within their line of sight.

Modern electro-optic turrets are able to image in 360 so this does not impact the camera operators ability to track the object con-

tinuously. So lets now look at a more complex example in which the aircraft is moving in a circular flight path around an object that has a slow, linear motion.

#### Methodology

The Complex Model: In this example the model again shows an object moving linearly, but this time the aircraft is moving in a



circular orbit around the object. Throughout the orbit the surveillance system tracks the object. This creates a problem for the analysis as the motion of the aircraft is not parallel with the object, and therefore its direction of travel cannot be assumed to be the same. This problem is overcome by using a fourth line of sight to conclude the intersection point.

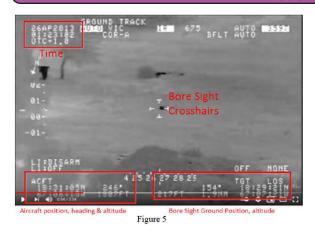
As in the first example, whenever the observers position is rotated to create an intersection of the four lines of sight, we can conclude that this is the direction of the line of the object's path. This method is shown in Figure 3 and Figure 4.

Again, as in the simple model, we can measure the distance from the first point, through each of the other points to provide the distance that the object travels during the time of the video.. Correlating this with the time that the camera imaged these points in the video metadata we can calculate the speed at which the object travels along the line

We can now determine the direction of travel and the speed that the object was moving.

<u>Validation of the Path:</u> To check that the result comports with the hypothesis that the object is 'windblown', we can compare the object's direction and speed with the local weather observations for the time of the sighting. If the object is simply being blown by the wind it should closely match the local wind conditions. Although, it should be noted that objects drifting on the wind at altitudes may differ slightly from the wind recorded at ground level.

#### **Modeling real world examples**



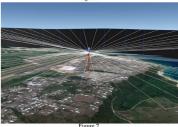
The Aguadilla UAP: In 2013 a video was recorded that is reported to show an unknown object maneuvering over Aguadilla Airport on the island of Puerto Rico. A subsequent analysis of the video to suggested that the object showed extraordinary characteristics and could not be described with a simple explanation.. The Video shows the footage of the event as recorded using the Infra-Red camera in an L-3 Wescam MX-15 surveillance turret mounted on a US Department of Homeland Security DHC-8 aircraft. Metadata associated with the video such as the aircraft position, altitude and heading along with the time is overlaid as text onto the picture.

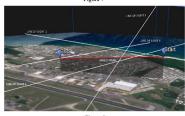
In the center of the video are the Bore Sight Cross-hairs, which indicate the line of sight projected from the aircraft along the center of the field of view of the camera. This bore sight-line is used to calculate the Bore Sight Position (sometime called "Target Position")data by intersecting the line

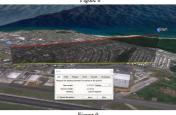
with a digital model of the earth's surface. This Ground Target position is also displayed on the overlay. These pieces of data allow us to recreate a model as previously described. The metadata has been extracted from each frame of the video and is available for download from the Internet.

#### **Applying real world examples**









| Speed | = Distance / Time | Direction of travel | = 236.9 ° | |
= 1173 m / 209 s | Equivalent Wind | = 236.9 ° - 180 |
= 20.2 kph | = 12.5 cmb | = ENE |

Modeling in Google Earth: Using the metadata available in the screen overlay we can extract the Lat and Long and Altitude points for the aircraft flight path. Similarly we can extract the Ground Target points for the camera's line-of –sight throughout the video.

The metadata can be visually modeled using the Google Earth application. This image shows the Aguadilla area of Puerto Rico, with the aircraft flightpath and the 35 lines of sight from the camera to the ground drawn in 3-dimensions. The lines-of-sight span time codes 01:22:08 to 01:24:57 which is a total of 209 seconds. This gives us an overall view of the recorded event and a large sample of the lines of sight, from which we can make observations and deductions.

Now that the model has been created we are able to rotate the position of the observer to a point where all of the lines-of-sight intersect, just as was shown previously in the model. This allows us to determine the potential line of motion of the object. This line of motion, or vector, will have a direction component and a velocity component, which is calculated by dividing the length of the line and the time between the object being at the first and last points on the line.

In this image the number of lines of sight has been reduced to four for clarity. A vector can now be drawn from the intersection of the first camera line-of-sight with the object motion line-of-sight, towards a similar intersecting point on the last line-of-sight. This new line, shown in red, is an approximation of the linear path that the object may have taken. It has been labeled here with Start and End, and shows that it moved in a southwest direction, starting at an altitude of 305m (1000 ft) and ending at an altitude of 210m (689 ft).

Using the Line Measure tool in Google Earth we can determine the length and direction of the object's track. This image shows that the track was 1.173 km on a bearing of 237°, which is equivalent to the cardinal direction WSW. We also know that the time for the object to move from the Start to the End point is 209 seconds. Using the simple equation "Speed equals distance traveled divided by time taken", we can calculate that the object moved at 12.5 mph. The Google Earth line measure tool showed that the direction of travel was WSW, which would correlate to a ENE wind, which blows from a bearing of 57°.

#### Validation of the calculated velocity and direction

**Review Historical Weather Data:** The calculated velocity and direction must now be checked to see if it correlated with the recorded wind speed and direction at the time of the sighting. The historical weather data can be obtained from weatherunderground. com. For the time of the Aguadilla video the weather records show that the wind at ground level was between 050° and 060° and between 11 and 12 knots (21.3 kph). The direction ENE is a compass bearing of 67°.

Time interval: from 04/26/2013 20:00 to 04/26/2013 22:59 UTC

TJBQ, Aquadilla, Rafael Hernandez Airport (United States).

WMO index: 78514. Latitude 18-30N. Longitude 067-08W. Altitude 72 m.

METAR/SPECI from TJBQ, Aquadilla, Rafael Hernandez Airport (United States).

SA 26/04/2013 22:50-> METAR TJBQ 262250Z 06010G14KT 10SM SCT020 SCT040 26/21 A3001 RMK RWY08 ATIS W=

SA 26/04/2013 21:50-> METAR TJBQ 262150Z 06011KT 10SM SCT020 SCT040 28/21 A3000 RMK RWY08 ATIS V=

SA 26/04/2013 20:50-> METAR TJBQ 262050Z 05012KT 10SM SCT020 SCT040 28/21 A2999 RMK RWY08 ATIS U=

Figure 10

Comparing the recorded weather data we can see the that the calculated movement of the object generally comports with the recorded wind speed and direction and the expected movement.

#### Movement deduced using Google Earth = 067° at 20 kph

#### Expected Movement if blown by the wind = $055^{\circ}$ at 21 kph.

Comparing the recorded weather data we can see the that the calculated movement of the object generally comports with the recorded wind speed and direction and the expected movement. This suggests that it is highly likely that the object seen in the Aguadilla video was a lighter than air object that was being propelled by the wind at the time.

#### **Summary**

Method Recap: This paper has set out a method that can be used to deduce the flight path of airborne objects that have been recorded by the videos systems of Airborne Surveillance Systems. This method is only possible with the availability of the on screen overlay showing the aircraft and ground track metadata, and the availability of locally recorded historical weather data. Additionally the method is only applicable to objects with movements that indicate that they could be blown by the wind, i.e. a slow moving linear path. The method uses the overall view of the recorded event and the lines of sight to show where there linear path could be deduced. This linear path is then measured in length and direction to calculate the velocity and heading that an object on this path would have. This velocity and direction is then compared with the recorded wind speed and direction at the time. An assessment then can be made as to whether or not the deduced motion, and the motion seen in the video, is concordant with the weather conditions, and therefore give a good indication as to whether the object is extraordinary or not.

Assessment of the Aguadilla UAP: This presentation reviewed the UAP case that was recorded in Aguadilla, Puerto Rico in 2013. It shows, using the metadata in the video and the historical weather data, that the model created using the method in this presentation supports the hypothesis that object's movement was slow and linear. Additionally the linear movement was as would be expected for an object that was drifting with the wind.

**Comparison with other assessments:** There have been numerous other assessments that have concluded similar findings after analyzing the Aguadilla video. The first of these to come to prominence was Ruben Lianza's report from 2017 which suggested that the object was likely to have been a Chinese Lantern launched from a nearby wedding venue. The method shown here demonstrates that his hypothesis is compatible with a detailed model of the event.



#### **Acknowledgments and References**

- 1. Source for aircraft track and bore-sight coordinates: https://www.abovetopsecret.com/forum/thread1081830/pg1
- 2. Original Aguadilla video on YouTube
- 3. <a href="http://www.astronomyufo.com/UFO/SUNlite8">http://www.astronomyufo.com/UFO/SUNlite8</a> 4.pdf
- 4. <a href="http://www.astronomyufo.com/UFO/SUNlite7\_6.pdf">http://www.astronomyufo.com/UFO/SUNlite7\_6.pdf</a>
- 5. http://www.ogimet.com/display\_metars2.php?lang=en&lugar=TJBQ&tipo=ALL&ord=REV&nil=SI&fmt=html&ano=2013&mes=04&day=26&hora=20&anof=2013&mesf=04&dayf=26&horaf=22&minf=59&send=send

# **Project Blue Book case review: July-December 1964**

This is the latest edition of the Project Blue Book case review covering July through December 1964. Like the previous evaluations, I tried to examine each case to see if the conclusion had merit. I added comments to help clarify the explanation or if I felt it was not correct or adequate.

### **July 1964**

15	Sacramento, CA	Unreliable report	Insufficient data. Positional data missing.
14	Odessa, TX	Unreliable report	Agreed. 14-year old Witness made report 4 months after event. Possible aircraft. Echo made pass around time of witness event.
14	Pacific	Satellite	Agreed. Echo 2
14	Pacific	Satellite	Agreed. Echo 2
13	Pasadena, CA	Meteor	Agreed. Possible daylight fireball.
13	Texarkanna, TX	Unreliable report	Insufficient data. No duration/positional data for sightings. It is possible these were sightings of aircraft and satellites (Two rocket bodies were visible during the sighting).
13	Vandenberg, CA	Balloon	Agreed
12	Chicago, IL	Satellite	Agreed. Echo 2
12	San Antonio, TX	Moon	Agreed
11	Buckley, IL	Aircraft	Agreed
11	New Iberia, LA	Star/Planet	Agreed. Probably Arcturus.
10	Washington DC  Mankato, MN	Balloon Insufficient data	Possibly Echo2. Echo 2 made a pass very similar to the one described but 15 minutes after the time listed.
	Belleville, IL	2. Inversion	inversion possible causing false radar target. Visual sighting possibly Vega.
10	Ten Sleep, WY  Cape Girardeau, Jackson, MO/	Meteor  1. Insufficient data	Agreed. Radar contact unrelated to visual sighting. Temperature
8	Rapid City, SD	Meteor	Agreed.
8	Kelleen, TX	Aircraft	Agreed. Second sighting could have been Echo 1.
7-9	Hazelton, ID	Aircraft	Possible Echo 2 sightings. Echo 2 made passes approximately at the time in question. Witness gave time for only one date and not all three.
7	Roeland Park, KS	Aircraft	Agreed
5	Pacific	Insufficient data	Possible meteor
5	Winchester, VA	Insufficient data	Possibly Vega. 16-year old witness stated it was a star in motion towards north but was mostly visible overhead for 30 minutes. Seen from moving car going north at 55mph.
4	Clearwater, FL	Flare drop	Agreed
2	Dayton, OH	Aircraft	Agreed
2	Pacific	Insufficient data	Satellite. SA-5 rocket body.
1	Frankfort, IN	Insufficient data	Possible aircraft
1	Bridgeport, CA	Aircraft	Agreed
1	Denver, CO	Meteor	Agreed
Jul	Mason, OH	Meteor	Agreed
Jul-Sep	Fosterdale, NY	Misinterpretation of conventional objects	Agreed. 7/29 - Echo 1. 7/30 - possible aircraft & Echo 2. 8/3 - Echo 1. 8/7 - Possible aircraft and Echo 1. 8/8 - Echo 2. 8/24 - Meteor
Date	Location	BB explanation	My evaluation

16	Albuquerque, NM	Rock	Agreed.
16	Chicago, IL	Satellite	Agreed. Echo 2 (GMT listed is off by one hour)
16	15 miles S Houghton Lake, MI	UNIDENTIFIED	UNIDENTIFIED
17	Berea, OH	Balloon	Echo 2 sighting. BB gave incorrect Zulu time (witness specified EDT and not EST).
17	Dayton, OH	Meteor	Agreed.
17	Lincoln Park, MI	Meteor	Agreed
17	Vermillion, OH	Satellite	Agreed. Possibly Transit 2A rocket.
17	Pacific	Balloon	Possible meteor
17	Pacific	Insufficient data	Possible meteor
18	Gainesvillle, GA	Grass	Agreed. Oil ring on grass.
18	Dayton, OH	Satellite	Agreed. Echo 2.
18	Lynn, MA	Balloon	Possibly Echo 2 and aircraft. BB Zulu time did not incorporate DST. Witness reported object going SW and then NNE. First part was possible aircraft going SW. Echo 2 then came out of SW and was confused to be the original object.
19	Dayton, OH	Satellite	Agreed. Echo 2.
19	New Carlisle, OH	Satellite	Agreed. Echo 2.
19	Oregon area	Meteor	Agreed
19	Washington DC	Aircraft	Agreed
19	Dayton, OH	Satellite	Agreed. Echo 2.
20	Buckley ANG base, CO	Parachute Flare	Possible meteor. Duration listed as 2 minutes but description matches meteor.
20	Clinton, IA - Littleton, IL	UNIDENTIFIED	UNIDENTIFIED
20	Brigham, UT	Birds	Agreed
20	Fayetteville, NC	Satellite	Agreed. Echo 2.
20	Yahatz, OR	Satellite	Agreed. Transit 2A rocket body
21	Waldorf, MD	Venus/Mars	Agreed
21	Pacific	Satellite	Agreed. Transit 2 rocket body
21-22	Holt, MI	Aircraft	Agreed
22	Pacific	Satellite	Agreed. Echo 2.
Last wk July	Kissimee, FL	Insufficient data	Agreed. No specific date.
23	Coudersport, PA	Insufficient data	Agreed. No time listed.
23	Sayre, OK	Satellite	Agreed. Echo 1.
23-4	Cleveland, OH	Satellite	No case file
24	Langley AFB, VA	Missile activity	Not missile activity. Possible aircraft from Navy base in Norfolk/VA beach (Oceana NAS). Course was in that direction. Report states GCA tracked objects for five minutes but no data available about speed or altitude.
24	Lakewood, AR	Balloon	Agreed
24	Dayton, OH	Satellite	Agreed. Echo 2.
24	Pacific	Flare	Insufficient data. BB identified as flare because that was how it was reported. Duration not listed and description is brief.
25	Pacific	1. Aircraft	1. Agreed.
		2. Satellite	2. Agreed. Echo 1.
25	Ft. Huachuca, AZ	1. Balloon	1. Agreed.
		2. Satellite	2. Agreed Echo 2.
	<u>,                                      </u>		<u> </u>

25	Pickstown, SD	Satellite	Agreed. Echo 2.
25-31	Franklin, OH	Satellite	Agreed. Multiple observations of Echo 1 and 2 satellites.
26	Dayton - Franklin, OH	Satellite	Agreed. Echo 2.
26	Marietta, OH	Insufficient data	Possible aircraft
26	Kansas City, MO	Satellite	Agreed. Echo 1.
26	Baltimore, MD	Satellite	Agreed. Echo 1.
26	Cresco, IA	Birds	Agreed.
26-7	Whitesboro, NY	Satellite	Agreed. Echo 2 for both observations.
26 Jul-8 Aug	Bronx, NY	Satellite	Agreed. Multiple observations of Echo 1 and 2 satellites.
27	Norwich, NY	UNIDENTIFIED	UNIDENTIFIED
27	Rooxbury, NY	Meteor	Agreed.
27	Laredo AFB, TX	Satellite	Agreed. Echo 2.
27	Dayton, OH	Satellite	Agreed. Echo 2.
27	Denver, CO	UNIDENTIFIED	UNIDENTIFIED
28	Kansas City, MO	Satellite	Agreed. Echo 1.
28	Kansas City, MO	Jupiter	Jupiter did not rise until 0600Z (sighting 0430Z) and in the East (sighting in SW). Antares
28	Lake Chelan, WA	1. Aircraft	Possibly Arcturus
		2. Ground lights	
28	Pacific	Satellite	No satellite visible. Observation location near Baja coast. Possible aircraft.
28 Jul - 2 Aug	Miami, FL	Satellite	Agreed. Multiple observations of Echo 1 and 2.
29	Pacific	Satellite	Agreed. Echo 1.
29	Cleveland, OH	Aircraft	Agreed.
29	Cleveland, OH	Insufficient data	Agreed. Witness wrote a brief letter stating they had seen two objects. No additional information. Did not return form that was mailed to them.
29	Franklin, MA	Insufficient data	Agreed. No specific time or positional data.
29	Dayton, OH	Satellite	Agreed. Echo 2.
29 Jul - 8 Aug	Kansas City, MO	Spica	Probably Arcturus (description is object in west. Both stars visible Arcturus is brighter of two.)
29	Celina, OH	Satellite	Agreed. Echo 1.
29	Washington, MO	Aircraft	Agreed.
29	Wilbur, WA or Los Angeles, CA	Satellite	Agreed. Echo 2 made pass for both locations.
29-31	Binghampton, NY	<ol> <li>Aircraft</li> <li>Satellite</li> <li>Meteor</li> <li>Stars/planet</li> </ol>	Agreed. Multiple sightings in file. Some well documented while others are not. Agreed that some are aircraft, some appear to be meteors, and one appear to be observations of Echo 1. No specific sighting can be attributed to stars/planets. Young boy sightings of landings/exotic craft can be probably explained as over active imaginations. Photographs are not clear but appear to be star trails or satellites.
30	Dayton, OH	Satellite	Agreed. Echo 1.
30	Ft. Huachuca, AZ	1. Balloon	1. Agreed
		2. Satellite	2. Agreed. Echo 1.
		3. Insufficient data	3. Possible aircraft.
30	Kansas City, MO	Satellite	Agreed. Echo 1.
30	Dayton, OH	Satellite	No case file
	· · · · · · · · · · · · · · · · · · ·		

31	Kansas City, MO	Satellite	Agreed. Echo 2.
31	Folsom, CA	Satellite	Agreed. Echo 1.
31	Pacific	Satellite	Agreed. Echo 1.

# August 1964

Date	Location	BB explanation	My evaluation
Aug	Calumet, MI	Satellite	Insufficient data. No date.
Aug	Oxnard, CA	Venus/Jupiter	Agreed multiple sightings of objects in the early AM. Some appear to be Venus and others appear to be Jupiter. Both were in same region of sky but Jupiter rose before Venus by several hours.
Aug	Mansfield Center, CT	Satellite	Insufficient data. No date. Report made four months later.
Aug	Fort Bragg, NC	Insufficient data	Possible meteors
1	Pacific	Satellite	Agreed. Echo 1.
1	Pacific	Satellite	Agreed. Echo 1.
1	Dayton, OH	Aircraft	Agreed.
1	Middleboro, MA	Meteor	Agreed
2	Pacific	Satellite	Agreed. Echo 1.
2	Miamisburg, OH	Satellite	Agreed. Echo 1.
2	Frankfort, IN	Aircraft	Agreed
2	Kansas City, MO	Fomalhaut	Possibly Saturn
2	San Jose, CA	Aircraft	Agreed
2	Pacific	Satellite	Agreed. Echo 2.
3	Dayton, OH	Insufficient data	Agreed. No time, duration, or course.
3	Pittsfield, MA	Meteor	Agreed
3	Ogdensburg, NY	Satellite	No case file
3	Pacific	Satellite	Agreed. Echo 2.
4	Little Silver, NJ	Balloon	Possibly Altair
4	Pacific	Satellite	Agreed. Echo 1.
4	Pacific	Satellite	Agreed. Echo 1.
5	Rickets Glen, PA	Meteor	No case file
5	Wilkes Barre, PA	Insufficient data	Brief (15 seconds) daylight sighting of stationary object that disappeared. Possible balloon.
5	Brookville/Long Island, NY	Insufficient data	Agreed. No course given but may have been Echo 1.
5	Wilkes Barre, PA	Satellite	No case file
5	Fort Worth, TX	1-2. Misinterpretation of conventional objects. 3-4. Star	Report is confusing. First two sightings appear to be meteors. Third sighting may have been Saturn. Fourth sighting could have been Echo satellite. Witness gave same time for four sightings. Echo was 30 minutes after time given.
5	Fort Worth, TX	Satellite	Insufficient data. Witness did not give positional information. Could have been Echo 1 or 2. Both made passes over region within 30 minutes of sighting.
6	Wilkes Barre, PA	Insufficient data	Possible meteor.
6	Lakeland, FL	Satellite	Agreed. Echo 1.
8	Middleton, OH	Venus/Stars	No case file
8	Pacific	Insufficient data	Possible meteor.
8	Ridgefield, NJ	Satellite	Agreed. Echo 1.

Colorado Springs/Denver, CO   Insufficient data   Possible birds. Film did not show anything in focus.	:ss)
Pacific	?ss)
10PacificSatelliteNo case file11Parker, INJupiterAgreed12Uniontown, PAJupiterAgreed12Las Vega, NMMeteorsAgreed.12Shawnee Mission, KSInsufficient dataPossible aircraft12Brekkens Corner, MTMoonAgreed (identified by Dr. Hynek after interview with wither13South Peabody, MASatelliteNo case file14PacificSatelliteNo case file14Kettering, OHSatelliteNo case file14Kettering, OHAircraftNo case file14Brigham City, UTSatelliteNo case file14Johnston IslandInsufficient dataPossible meteor14Dayton, OHSatelliteAgreed. Echo 1.15San Saba, TXSatelliteInsufficient data. No time listed.15New York City, NYUNIDENTIFIEDUNIDENTIFIED15Yosemite Park, CAUNIDENTIFIEDUNIDENTIFIED15Highland Park, NJAircraftAgreed.16Dayton, OHInsufficient dataPossible balloon17West Macon, GAAircraft w/bannerAgreed.18Littleton, COReflectionAgreed. Probably Aircraft.18Denver, COAircraftAgreed18Las Vegas, NMInsufficient dataPossible meteor.18PacificSatelliteAgreed. Transit 2A rocket.	255)
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12 Shawnee Mission, KS Insufficient data Possible aircraft 12 Brekkens Corner, MT Moon Agreed (identified by Dr. Hynek after interview with wither 13 South Peabody, MA Satellite No case file 14 Pacific Satellite No case file 14 Kettering, OH Satellite No case file 14 Kettering, OH Aircraft No case file 14 Brigham City, UT Satellite No case file 14 Johnston Island Insufficient data Possible meteor 14 Dayton, OH Satellite Agreed. Echo 1. 15 San Saba, TX Satellite Insufficient data. No time listed. 16 New York City, NY UNIDENTIFIED UNIDENTIFIED 17 Yosemite Park, CA UNIDENTIFIED UNIDENTIFIED 18 Highland Park, NJ Aircraft Agreed. 19 Dayton, OH Insufficient data Possible balloon 10 West Macon, GA Aircraft w/banner Agreed. 11 Dayton, OH Insufficient data Possible balloon 12 West Macon, GA Aircraft w/banner Agreed. 13 Denver, CO Reflection Agreed. Probably Aircraft. 14 Denver, CO Aircraft Agreed 15 Denver, CO Aircraft Agreed 16 Dayton, OH Insufficient data Possible meteor. 17 Agreed 18 Las Vegas, NM Insufficient data Possible meteor. 18 Denver, CO Aircraft Agreed 19 Agreed. Probably Aircraft.	255)
12 Brekkens Corner, MT Moon Agreed (identified by Dr. Hynek after interview with wither 13 South Peabody, MA Satellite No case file 14 Pacific Satellite No case file 14 Kettering, OH Satellite No case file 14 Kettering, OH Aircraft No case file 14 Brigham City, UT Satellite No case file 14 Johnston Island Insufficient data Possible meteor 14 Dayton, OH Satellite Agreed. Echo 1. 15 San Saba, TX Satellite Insufficient data. No time listed. 15 New York City, NY UNIDENTIFIED UNIDENTIFIED 16 Dayton, OH Insufficient data Possible balloon 17 West Macon, GA Aircraft Agreed. 18 200 mi. E of Dover (Atlantic) UNIDENTIFIED UNIDENTIFIED 18 Littleton, CO Reflection Agreed. 18 Denver, CO Aircraft Agreed 18 Las Vegas, NM Insufficient data Possible meteor. 18 Pacific Satellite Agreed. Transit 2A rocket.	ess)
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18     200 mi. E of Dover (Atlantic)     UNIDENTIFIED     UNIDENTIFIED       18     Littleton, CO     Reflection     Agreed. Probably Aircraft.       18     Denver, CO     Aircraft     Agreed       18     Las Vegas, NM     Insufficient data     Possible meteor.       18     Pacific     Satellite     Agreed. Transit 2A rocket.	
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18     Denver, CO     Aircraft     Agreed       18     Las Vegas, NM     Insufficient data     Possible meteor.       18     Pacific     Satellite     Agreed. Transit 2A rocket.	
18     Las Vegas, NM     Insufficient data     Possible meteor.       18     Pacific     Satellite     Agreed. Transit 2A rocket.	
18 Pacific Satellite Agreed. Transit 2A rocket.	
19 Wilbur, WA Satellite Agreed. Echo 1.	
19 Salt Lake City, UT Insufficient data Agreed. No time (other than night), duration, or positional	l data.
19 Nunn, CO Balloon Agreed.	
19 Teaneck, NJ Satellites Agreed. Echo 1 for main sighting. Subsequent sightings of specific times and course (insufficient data).	jave no
19 Waco, TX Jupiter <b>No case file</b>	
19 Pacific Meteor Agreed	
20 Pacific Satellite Agreed. Echo 1.	
20 Pacific Satellite Agreed. Echo 2.	
21 Moses Lake, WA Hoax Agreed.	
22 Littitz, PA south of Carmel, Meteor Agreed (Daylight meteor) UOR, CT	
23 Fairborn, OH Stars/planets <b>No case file</b>	
24 Drexel Hills, PA Satellite Agreed. Echo 1.	
24 Portales, NM Jupiter Agreed.	
25 Dayton, OH Venus Agreed.	
25 Lynn, MA Aircraft Agreed	
25 Littleton, MA Aircraft Agreed	
26 Pacific Satellite Agreed. Echo 2	

27	Hondo AFB, TX	Stabilization on chute/piece of equipment	Agreed.
27	Webster, MA	Sun Dog	No case file
27	Pacific	Satellite	Agreed. Echo 2.
27	Dayton, OH	Arcturus	No case file
28	Citrus Heights, CA	Satellite	Agreed. Echo 1.
28 or 29	Littleton, MA	Meteor	No case file
29	Altus, OK	Aircraft	Agreed
29	Lone Pine, CA	1. Jupiter	1. Saturn
		2. Capella	2. Insufficient data (no positional information)
		3. Fomalhaut	3. Insufficient data (no positional information)
31	Western Springs, IL	Aircraft	No case file
31	Dayton, OH	Satellite	Agreed. Echo 1.

# September 1964

Date	Location	BB explanation	My evaluation
1	Guam	Meteor	Agreed
2	Webster, MA	Sun Dog	Agreed
3	Sparta, TN	Satellite	Agreed. Echo 1
3-4	Clovis, NM	Balloon	Agreed. Possibly Project Sirius balloon from Palestine, TX
4	Roswell, NM	Satellites	Insufficient data. Witness wrote letter on 4 September describing UFO with no time or specific date.
4	Glasboro, NJ	Hoax	Agreed
4	Cleveland, OH	Insufficient data	Possible birds.
4	Dayton, OH	Arcturus	Agreed
4	Brookfield, MA	Insufficient data	Unreliable report. Report filed in May 1965.
5	Sacto Area, CA	Psychological	Agreed. This was the Cisco Grove encounter documented in the Condon study. Either this is a hoax or the individual has some psychological issues.
5	West End, NJ	Insufficient data	Agreed. Durations missing. They could be satellites, aircraft, meteors, or birds.
5	Brenham, TX	Insufficient data	Possible meteor
5	Momenca, IL	Venus	Agreed
6	Dayton, OH	Satellite	Agreed. Nimbus 1 rocket. (Record card has time listed as 1030Z but report form listed it as 0430 AM EST, which is 0930Z)
6	Westfield, MA	Unreliable report	Agreed. Second hand report from Raymond Fowler for NICAP. Multiple UFOs reported with one mothership. It was visible for 8 hours.
6	Pacific	Satellite	Agreed. Atlas Centaur rocket body.
6	Macon, GA	1. Meteor	1. Agreed
		2. Star	2. Agreed. Probably Capella.
7	Whiteman AFB, MO	Insufficient Data	Possibly Antares
8	Jackson City/Kansas City, MO	Meteor	Agreed.
9	Boston, MA	1. Aircraft	1. Agreed
		w/banner	2. Agreed
		2. Searchlights	

10	Cedar Grove, NJ	UNIDENTIFIED	UNIDENTIFIED
11	Ulysses, KS	Debris in wind	Agreed.
12	Kent, England	Insufficient data	Possible aircraft
12	Kansas City, MO	Meteor	Agreed
13	Centerville, OH	Venus	Agreed
14-15	Houma, New Orleans, Baton Rouge, LA	Stars	Agreed. Photos show Betelgeuse and Capella.
20	Coldwater, OH	Aircraft	Agreed
21	Berea, OH	Aircraft	Agreed
21	Rapid City, SD	Meteor	Agreed
22	CA, NV, OR	Missile	Agreed
22	Red Bluff, CA	Insufficient data	Agreed. Object struck tree and fell to ground but no object recovered. It is suspected this was a wind borne object that was observed.
22-24	Reno, NV/Stead AFB, NV	1. Meteor	1. Agreed for 24 Sept 2000 sighting.
		2. Jupiter	2. Agreed
		3. Insufficient data	3. Agreed. No date/time/direction but it is possible this was Atlas launch on 22 Sept.
25	San Jose, CA	Unreliable report	Insufficient data. Witnesses observed object "land" and later depart. They did not see object physically landed. First observation sounds like meteor. Second object could have been aircraft going in opposite direction. Durations missing for landing/departure. Only duration of entire event listed (15 minutes).
26	Florence, OR	Insufficient data	Possible meteor
26	Springfield, OH	Insufficient data	Possible meteor
28	Soudan, MN	Aircraft	Agreed

## October 1964

Date	Location	BB explanation	My evaluation
1	Hillsboro, OR	Insufficient data	Possibly Cosmos 36
1	Kansas City, MO	Meteor	Agreed
1	San Jose, CA	Unreliable report	Witness mistook Jupiter for Venus. Aldebaran
4	Oahu, HI	Gouges in film	Agreed
4	Owego, NY	Aircraft	Agreed
7	Kahoka, MO	Searchlight	Agreed
9	Klamath Falls, OR	Aircraft	Agreed
12	Europe	Quartz	Agreed
14	Pacific	Satellite	Agreed. Echo 1.
16	Fairborn, OH	Venus	Agreed
19	Dayton, OH	Sirius	Agreed
23	Millersville, PA	Insufficient data	Possible meteor
23	Pacific	Satellite	Agreed. Echo 1.
23	Oakwood, OH	Insufficient data	Possible meteor observation
23	Westford, MA	Unreliable report	Agreed
24	Atlantic	Insufficient data	Possible satellite. Midas 4.
25	Dayton, OH	Meteor	Agreed
25	Pacific	Satellite	Agreed. Echo 2.

26	Pacific	Missile	Insufficient data. No missile launch on this date. Duration missing. Possible meteor.
26	Summitt, NJ	Unreliable Report	Agreed
28	Brainfield, MA	Unreliable report	Agreed
28	Pacific	Satellite	Agreed. Echo 2.
30	Ft. Jones/Mt. Shasta, CA	Insufficient data	Possible balloon
30	Beavercreek, OH	Moon Dog	Possibly Sirius
31	South Charleston, OH	Reflection	Agreed.
31	Fosterdale, NY	Insufficient data	Agreed. No description as to what was observed/photographed. Images look like star trails or time exposure (several seconds long) of satellite/plane at night.

## **November 1964**

Date	Location	BB explanation	My evaluation
Nov	Carmichaels, PA	Chaff	Agreed
Nov	Hancock, NY	Satellites	Insufficient data. Witness had no specific dates and only guessed at time. Multiple sightings on different dates. All sound like satellites.
1	Kirkwood, MO	Balloon	Possible contrail
2	Redwood city, CA	1. Film flaw	1. Insufficient data. Hard to tell from image. It could be a flaw
		2. Insufficient data	or an image of something.
			2. Possible aircraft
4	Pacific	Meteor	Agreed
4	Pacific	Satellite	Agreed. Echo 2
5	Junction City, KS	Insufficient data	Agreed. 12-14 year olds reporting object landing in ravine but nothing seen in ravine. No positional data/duration. Did not return either of two forms sent to them.
5	Dayton, OH	Betelgeuse	Agreed
5-20	St. Petersburg, FL	1. Satellites 2. Aircraft	Agreed. 11/5 - Echo 2. 11/6 - Echo 2. 11/7a - Possible aircraft or Abelstar rocket. 11/7b - Echo 2. 11/9a - Echo 2. 11/9b - Echo 1. 11/10 - Echo 2. 11/11 - Possible aircraft. 11/12 - Echo 1. 11/13 - Echo 2. 11/15 - Echo 1. 11/16 - Echo 2. 11/17 - Echo 2. 11/18 - Echo 2. 11/19 - Echo 2. 11/20 - Echo 2.
6	Pittsburgh, PA	Meteor	Agreed
6	Oklahoma City, OK	1. Meteor	1. Agreed
		2. Rock	2. Agreed
6	Pacific	Satellite	Agreed. Echo 2.
7	Braintree, MA	Insufficient data	Agreed. Witnesses sent letter but did not provide pertinent details and did not return form when sent.
7	Keene, ND	Meteor	Agreed
8	Pacific	Meteor	Agreed
8	Boca Raton, FL	Insufficient data	Possible birds
11	Hale, MI	Satellite decay	Possible meteor
13	Temple City, CA	Insufficient data	Possible meteor
13	Atlantic	Satellite	Agreed. Echo 2.
13	Shutesbury, MA	Aircraft	Agreed
14	Brooklyn, NY	Meteor	Agreed
14	Menomonee Falls, WI	UNIDENTIFIED	UNIDENTIFIED
15	Waldwick, NJ	Insufficient data	Possible aircraft

the sky.  Pacific Satellite Agreed. Echo 2.  Shirley, MA Meteor Agreed.  Pilottown, LA Insufficient data Possible meteor  Myreed.  Pacific Satellite Agreed. Echo 1.  UNIDENTIFIED  Pacific Satellite No bright satellites visible. Possible aircraft.  Agreed. Photographs are of radar screen. Analysis shows object moving about 580 knots in a straight path.  Conflicting data Possible aircraft Agreed. Echo 1.  Agreed.	16	75 mi. W of Midway Is.	Meteor shower	Agreed. This appears to be a display of several Leonid fireballs. This was just two years before Leonid storm of 1966.
17 Cleveland, OH Insufficient data Agreed. Report made second hand from 10-12 year olds. 17 Atlantic Satellite Agreed. Echo 2. 18 Bridgewater, MA Aircraft Agreed. Report by 13-year old involving lights moving arour the sky. 19 Pacific Satellite Agreed. Echo 2. 19 Pacific Satellite Agreed. Echo 2. 10 Pacific Satellite Agreed. Echo 2. 11 Pacific Satellite Agreed. Echo 2. 12 Pacific Satellite Agreed. Echo 1. 13 Pacific UNIDENTIFIED UNIDENTIFIED 14 Pacific Satellite No bright satellites visible. Possible aircraft. 19 Pacific Satellite No bright satellites visible. Possible aircraft. 19 Pacific Satellite Agreed. Photographs are of radar screen. Analysis shows object moving about 580 knots in a straight path. 20 Lakeland, FL Conflicting data Possible aircraft 20 Pacific Satellite Agreed. Echo 1. 21 Pacific Satellite Agreed. Echo 1. 22 Pacific Satellite Agreed. Echo 1. 23 Pacific Satellite Agreed. Echo 1. 24 Pacific Satellite Agreed. Echo 1. 25 Pacific Satellite Agreed. Echo 1. 26 Honolulu, HI Balloon Agreed 27 Pacific Insufficient data Possible meteor 28 Pacific Insufficient data Possible meteor 29 Pacific Insufficient data Possible aircraft. 20 Pacific Insufficient data Possible aircraft.		Blue Hill, ME	Aircraft	, ,
17AtlanticSatelliteAgreed. Echo 2.17Bridgewater, MAAircraftAgreed. Report by 13-year old involving lights moving around the sky.17PacificSatelliteAgreed. Echo 2.18Shirley, MAMeteorAgreed.18Pilottown, LAInsufficient dataPossible meteor18PacificSatelliteAgreed. Echo 1.19PacificUNIDENTIFIEDUNIDENTIFIED19PacificSatelliteNo bright satellites visible. Possible aircraft.19AtlanticAircraftAgreed. Photographs are of radar screen. Analysis shows object moving about 580 knots in a straight path.20Lakeland, FLConflicting dataPossible aircraft20PacificSatelliteAgreed. Echo 1.22PacificSatelliteAgreed. Echo 1.23PacificSatelliteAgreed. Echo 1.24Honolulu, HIBalloonAgreed25PacificInsufficient dataPossible meteor28PacificInsufficient dataPossible aircraft.29PacificInsufficient dataPossible aircraft.29PacificInsufficient dataPossibly Nimbus 1 rocket.	17	Flint, MI	Insufficient data	Agreed. Missing specific data.
Bridgewater, MA  Aircraft  Agreed. Report by 13-year old involving lights moving aroun the sky.  Pacific  Satellite  Agreed. Echo 2.  Agreed.  Pilottown, LA  Insufficient data  Possible meteor  Satellite  Agreed. Echo 1.  Pacific  UNIDENTIFIED  Pacific  UNIDENTIFIED  Pacific  Agreed. Photographs are of radar screen. Analysis shows object moving about 580 knots in a straight path.  Conflicting data  Possible aircraft  Agreed. Echo 1.  Agreed. Photographs are of radar screen. Analysis shows object moving about 580 knots in a straight path.  Conflicting data  Possible aircraft  Agreed. Echo 1.  Satellite  Agreed. Echo 1.  Agreed. Echo 1.  Satellite  Agreed. Echo 1.  Agreed. Echo 1.  Agreed. Echo 1.  Satellite  Agreed. Echo 1.  Agr	17	Cleveland, OH	Insufficient data	Agreed. Report made second hand from 10-12 year olds.
the sky.  Pacific Satellite Agreed. Echo 2.  Shirley, MA Meteor Agreed.  Insufficient data Possible meteor  Begin Pilottown, LA Describe D	17	Atlantic	Satellite	Agreed. Echo 2.
18 Shirley, MA Meteor Agreed.  18 Pilottown, LA Insufficient data Possible meteor  18 Pacific Satellite Agreed. Echo 1.  19 Pacific UNIDENTIFIED UNIDENTIFIED  19 Pacific Satellite No bright satellites visible. Possible aircraft.  19 Atlantic Aircraft Agreed. Photographs are of radar screen. Analysis shows object moving about 580 knots in a straight path.  20 Lakeland, FL Conflicting data Possible aircraft  20 Pacific Satellite Agreed. Echo 1.  22 Pacific Satellite Agreed. Echo 1.  23 Pacific Satellite Agreed. Echo 1.  24 Pacific Satellite Possible meteor  25 Pacific Satellite Possible meteor  26 Honolulu, HI Balloon Agreed  27 Pacific Insufficient data Possible meteor  28 Pacific Satellite No Case file  29 Pacific Insufficient data Possibly Nimbus 1 rocket.	17	Bridgewater, MA	Aircraft	Agreed. Report by 13-year old involving lights moving around the sky.
18Pilottown, LAInsufficient dataPossible meteor18PacificSatelliteAgreed. Echo 1.19PacificUNIDENTIFIEDUNIDENTIFIED19PacificSatelliteNo bright satellites visible. Possible aircraft.19AtlanticAircraftAgreed. Photographs are of radar screen. Analysis shows ob ject moving about 580 knots in a straight path.20Lakeland, FLConflicting dataPossible aircraft20PacificSatelliteAgreed. Echo 1.22PacificSatelliteAgreed. Echo 1.23PacificSatelliteAgreed. Echo 1.26Honolulu, HIBalloonAgreed28PacificInsufficient dataPossible meteor28PacificSatelliteNo Case file28PacificInsufficient dataPossible aircraft.29PacificInsufficient dataPossibly Nimbus 1 rocket.	17	Pacific	Satellite	Agreed. Echo 2.
18PacificSatelliteAgreed. Echo 1.19PacificUNIDENTIFIEDUNIDENTIFIED19PacificSatelliteNo bright satellites visible. Possible aircraft.19AtlanticAircraftAgreed. Photographs are of radar screen. Analysis shows object moving about 580 knots in a straight path.20Lakeland, FLConflicting dataPossible aircraft20PacificSatelliteAgreed. Echo 1.22PacificSatelliteAgreed. Echo 1.23PacificSatelliteAgreed. Echo 1.26Honolulu, HIBalloonAgreed28PacificInsufficient dataPossible meteor28PacificSatelliteNo Case file28PacificInsufficient dataPossible aircraft.29PacificInsufficient dataPossibly Nimbus 1 rocket.	18	Shirley, MA	Meteor	Agreed.
19 Pacific UNIDENTIFIED UNIDENTIFIED 19 Pacific Satellite No bright satellites visible. Possible aircraft. 19 Atlantic Aircraft Agreed. Photographs are of radar screen. Analysis shows object moving about 580 knots in a straight path. 20 Lakeland, FL Conflicting data Possible aircraft 20 Pacific Satellite Agreed. Echo 1. 22 Pacific Satellite Agreed. Echo 1. 23 Pacific Satellite Agreed. Echo 1. 26 Honolulu, HI Balloon Agreed 27 Pacific Insufficient data Possible meteor 28 Pacific Satellite No Case file 29 Pacific Insufficient data Possible aircraft. 29 Pacific Insufficient data Possibly Nimbus 1 rocket.	18	Pilottown, LA	Insufficient data	Possible meteor
19PacificSatelliteNo bright satellites visible. Possible aircraft.19AtlanticAircraftAgreed. Photographs are of radar screen. Analysis shows ob ject moving about 580 knots in a straight path.20Lakeland, FLConflicting dataPossible aircraft20PacificSatelliteAgreed. Echo 1.22PacificSatelliteAgreed. Echo 1.23PacificSatelliteAgreed. Echo 1.26Honolulu, HIBalloonAgreed28PacificInsufficient dataPossible meteor28PacificSatelliteNo Case file28PacificInsufficient dataPossible aircraft.29PacificInsufficient dataPossibly Nimbus 1 rocket.	18	Pacific	Satellite	Agreed. Echo 1.
Aircraft Agreed. Photographs are of radar screen. Analysis shows object moving about 580 knots in a straight path.  20 Lakeland, FL Conflicting data Possible aircraft  20 Pacific Satellite Agreed. Echo 1.  22 Pacific Satellite Agreed. Echo 1.  23 Pacific Satellite Agreed. Echo 1.  26 Honolulu, HI Balloon Agreed  28 Pacific Insufficient data Possible meteor  28 Pacific Satellite No Case file  29 Pacific Insufficient data Possibly Nimbus 1 rocket.	19	Pacific	UNIDENTIFIED	UNIDENTIFIED
Ject moving about 580 knots in a straight path.  20 Lakeland, FL Conflicting data Possible aircraft  20 Pacific Satellite Agreed. Echo 1.  22 Pacific Satellite Agreed. Echo 1.  23 Pacific Satellite Agreed. Echo 1.  26 Honolulu, HI Balloon Agreed  28 Pacific Insufficient data Possible meteor  28 Pacific Satellite No Case file  29 Pacific Insufficient data Possible aircraft.  29 Pacific Insufficient data Possibly Nimbus 1 rocket.	19	Pacific	Satellite	No bright satellites visible. Possible aircraft.
20 Pacific Satellite Agreed. Echo 1. 22 Pacific Satellite Agreed. Echo 1. 23 Pacific Satellite Agreed. Echo 1. 26 Honolulu, HI Balloon Agreed 28 Pacific Insufficient data Possible meteor 28 Pacific Satellite No Case file 28 Pacific Insufficient data Possible aircraft. 29 Pacific Insufficient data Possibly Nimbus 1 rocket.	19	Atlantic	Aircraft	Agreed. Photographs are of radar screen. Analysis shows object moving about 580 knots in a straight path.
22PacificSatelliteAgreed. Echo 1.23PacificSatelliteAgreed. Echo 1.26Honolulu, HIBalloonAgreed28PacificInsufficient dataPossible meteor28PacificSatelliteNo Case file28PacificInsufficient dataPossible aircraft.29PacificInsufficient dataPossibly Nimbus 1 rocket.	20	Lakeland, FL	Conflicting data	Possible aircraft
23PacificSatelliteAgreed. Echo 1.26Honolulu, HIBalloonAgreed28PacificInsufficient dataPossible meteor28PacificSatelliteNo Case file28PacificInsufficient dataPossible aircraft.29PacificInsufficient dataPossibly Nimbus 1 rocket.	20	Pacific	Satellite	Agreed. Echo 1.
26 Honolulu, HI Balloon Agreed 28 Pacific Insufficient data Possible meteor 28 Pacific Satellite No Case file 28 Pacific Insufficient data Possible aircraft. 29 Pacific Insufficient data Possibly Nimbus 1 rocket.	22	Pacific	Satellite	Agreed. Echo 1.
28       Pacific       Insufficient data       Possible meteor         28       Pacific       Satellite       No Case file         28       Pacific       Insufficient data       Possible aircraft.         29       Pacific       Insufficient data       Possibly Nimbus 1 rocket.	23	Pacific	Satellite	Agreed. Echo 1.
Pacific     Satellite     No Case file       Pacific     Insufficient data     Possible aircraft.       Pacific     Insufficient data     Possibly Nimbus 1 rocket.	26	Honolulu, HI	Balloon	Agreed
28     Pacific     Insufficient data     Possible aircraft.       29     Pacific     Insufficient data     Possibly Nimbus 1 rocket.	28	Pacific	Insufficient data	Possible meteor
29 Pacific Insufficient data Possibly Nimbus 1 rocket.	28	Pacific	Satellite	No Case file
,	28	Pacific	Insufficient data	Possible aircraft.
	29	Pacific	Insufficient data	Possibly Nimbus 1 rocket.
29 Pacific Satellite Agreed. Echo 1.	29	Pacific	Satellite	Agreed. Echo 1.
30 Iceland Meteor Agreed.	30	Iceland	Meteor	Agreed.
30 Pacific Insufficient data Possible aircraft.	30	Pacific	Insufficient data	Possible aircraft.
30 Pacific Satellite Agreed. Echo 1.	30	Pacific	Satellite	Agreed. Echo 1.

## **December 1964**

Date	Location	BB explanation	My evaluation
Dec	Seward, PA	Meteor	Agreed
2	Pacific	Satellite	Agreed. Possibly Cosmos 44.
4	Near Iceland	Satellite	Agreed. Echo 2.
4	Baker, OR	Visual: Stars/planets	Visual: Agreed. Possibly Arcturus
		Radar: False targets	Radar: Agreed
5	Vero Beach, FL	Insufficient data	Possible meteor
6	Baker, OR	Meteor	Agreed
14	Falls Church, VA	Moon	Agreed
14	Needham, MA	Insufficient data	Agreed. Second hand report. No positional data.
18	Cudahay, WI	Unreliable report	Possible meteor
19	Pacific	Satellite	Agreed. Saturn rocket booster.
19-29	Patuxent River, MD	Radar Anomalies	Agreed
21	Harrisonburg, VA	Psychological cat- egory	Agreed

29	Cleveland, OH	Arcturus/Mars	Agreed. Witness not specific about azimuth to determine which. Both objects were about same magnitude.
29	Glen Falls, NY	Balloon	Contrail illuminated by setting sun

#### Reclassification

evaluated 293 cases in the Blue Book files from July through December 1964. In my opinion, 73 were improperly classified (about 25%). 39 (about 13% of the total number of cases/53% of the reclassifications) of these were listed as "insufficient information". This table describes these cases and how I felt they should have been classified.

Date	Location	Reclassification	Reason
7/1	Frankfort, IN	Insufficient data	Possible aircraft
7/2	Pacific	Insufficient data	Satellite. SA-5 rocket body.
7/5	Winchester, VA	Insufficient data	Possibly Vega. 16-year old witness stated it was a star in motion towards north but was mostly visible overhead for 30 minutes. Seen from moving car going north at 55mph.
7/5	Pacific	Insufficient data	Possible meteor
7/7-9	Hazelton, ID	Aircraft	Possible Echo 2 sightings. Echo 2 made passes approximately at the time in question. Witness gave time for only one date and not all three.
7/10	Mankato, MN	Insufficient data	Possibly Echo2. Echo 2 made a pass very similar to the one described but 15 minutes after the time listed.
7/13	Texarkanna, TX	Unreliable report	Insufficient data. No duration/positional data for sightings. It is possible these were sightings of aircraft and satellites (Two rocket bodies were visible during the sighting).
7/15	Sacramento, CA	Unreliable report	Insufficient data. Positional data missing.
7/17	Berea, OH	Balloon	Echo 2 sighting. BB gave incorrect Zulu time (witness specified EDT and not EST).
7/17	Pacific	Balloon	Possible meteor
7/17	Pacific	Insufficient data	Possible meteor
7/18	Lynn, MA	Balloon	Possibly Echo 2 and aircraft. BB Zulu time did not incorporate DST. Witness reported object going SW and then NNE. First part was possible aircraft going SW. Echo 2 then came out of SW and was confused to be the original object.
7/20	Buckley ANG base, CO	Parachute Flare	Possible meteor. Duration listed as 2 minutes but description matches meteor.
7/24	Langley AFB, VA	Missile activity	Not missile activity. Possible aircraft from Navy base in Norfolk/VA beach (Oceana NAS). Course was in that direction. Report states GCA tracked objects for five minutes but no data available about speed or altitude.
7/24	Pacific	Flare	Insufficient data. BB identified as flare because that was how it was reported. Duration not listed and description is brief.
7/26	Marietta, OH	Insufficient data	Possible aircraft
7/28	Kansas City, MO	Jupiter	Jupiter did not rise until 0600Z (sighting 0430Z) and in the East (sighting in SW). Antares
7/28	Lake Chelan, WA	1. Aircraft	Possibly Arcturus
		2. Ground lights	
7/28	Pacific	Satellite	No satellite visible. Observation location near Baja coast. Possible aircraft.
29 Jul - 8 Aug	Kansas City, MO	Spica	Probably Arcturus (description is object in west. Both stars visible Arcturus is brighter of two.)

7/30	Ft. Huachuca, AZ	1. Balloon	1. Agreed
		2. Satellite	2. Agreed. Echo 1.
		3. Insufficient data	3. Possible aircraft.
Aug	Calumet, MI	Satellite	Insufficient data. No date.
Aug	Mansfield Center, CT	Satellite	Insufficient data. No date. Report made four months later.
Aug	Fort Bragg, NC	Insufficient data	Possible meteors
8/2	Kansas City, MO	Fomalhaut	Possibly Saturn
8/4	Little Silver, NJ	Balloon	Possibly Altair
8/5	Wilkes Barre, PA	Insufficient data	Brief (15 seconds) daylight sighting of stationary object that disappeared. Possible balloon.
8/5	Fort Worth, TX	1-2. Misinterpretation of conventional objects. 3-4. Star	Report is confusing. First two sightings appear to be meteors. Third sighting may have been Saturn. Fourth sighting could have been Echo satellite. Witness gave same time for four sightings. Echo was 30 minutes after time given.
8/5	Fort Worth, TX	Satellite	Insufficient data. Witness did not give positional information. Could have been Echo 1 or 2. Both made passes over region within 30 minutes of sighting.
8/6	Wilkes Barre, PA	Insufficient data	Possible meteor.
8/8	Pacific	Insufficient data	Possible meteor.
8/9	Colorado Springs/Denver, CO	Insufficient data	Possible birds. Film did not show anything in focus.
8/10	Pacific	Insufficient data	Possible meteor.
8/12	Shawnee Mission, KS	Insufficient data	Possible aircraft
8/14	Johnston Island	Insufficient data	Possible meteor
8/15	San Saba, TX	Satellite	Insufficient data. No time listed.
8/16	Dayton, OH	Insufficient data	Possible balloon
8/18	Las Vegas, NM	Insufficient data	Possible meteor.
8/29	Lone Pine, CA	1. Jupiter	1. Saturn
		2. Capella	2. Insufficient data (no positional information)
		3. Fomalhaut	3. Insufficient data (no positional information)
9/4	Roswell, NM	Satellites	Insufficient data. Witness wrote letter on 4 September describing UFO with no time or specific date.
9/4	Cleveland, OH	Insufficient data	Possible birds.
9/4	Brookfield, MA	Insufficient data	Unreliable report. Report filed in May 1965.
9/5	Brenham, TX	Insufficient data	Possible meteor
9/7	Whiteman AFB, MO	Insufficient Data	Possibly Antares
9/12	Kent, England	Insufficient data	Possible aircraft
9/25	San Jose, CA	Unreliable report	Insufficient data. Witnesses observed object "land" and later depart. They did not see object physically landed. First observation sounds like meteor. Second object could have been aircraft going in opposite direction. Durations missing for landing/departure. Only duration of entire event listed (15 minutes).
9/26	Florence, OR	Insufficient data	Possible meteor
9/26	Springfield, OH	Insufficient data	Possible meteor
10/1	Hillsboro, OR	Insufficient data	Possibly Cosmos 36
10/1	San Jose, CA	Unreliable report	Witness mistook Jupiter for Venus. Aldebaran
10/23	Millersville, PA	Insufficient data	Possible meteor
10/23	Oakwood, OH	Insufficient data	Possible meteor observation

10/24	Atlantic	Insufficient data	Possible satellite. Midas 4.
10/26	Pacific	Missile	Insufficient data. No missile launch on this date. Duration missing. Possible meteor.
10/30	Ft. Jones/Mt. Shasta, CA	Insufficient data	Possible balloon
10/30	Beavercreek, OH	Moon Dog	Possibly Sirius
Nov	Hancock, NY	Satellites	Insufficient data. Witness had no specific dates and only guessed at time. Multiple sightings on different dates. All sound like satellites.
11/1	Kirkwood, MO	Balloon	Possible contrail
11/2	Redwood city, CA	1. Film flaw	1. Insufficient data. Hard to tell from image. It could be a flaw
		2. Insufficient data	or an image of something.
			2. Possible aircraft
11/8	Boca Raton, FL	Insufficient data	Possible birds
11/11	Hale, MI	Satellite decay	Possible meteor
11/13	Temple City, CA	Insufficient data	Possible meteor
11/15	Waldwick, NJ	Insufficient data	Possible aircraft
11/18	Pilottown, LA	Insufficient data	Possible meteor
11/19	Pacific	Satellite	No bright satellites visible. Possible aircraft.
11/20	Lakeland, FL	Conflicting data	Possible aircraft
11/28	Pacific	Insufficient data	Possible meteor
11/28	Pacific	Insufficient data	Possible aircraft.
11/29	Pacific	Insufficient data	Possibly Nimbus 1 rocket.
11/30	Pacific	Insufficient data	Possible aircraft.
12/5	Vero Beach, FL	Insufficient data	Possible meteor
12/18	Cudahay, WI	Unreliable report	Possible meteor
12/29	Glen Falls, NY	Balloon	Contrail illuminated by setting sun

#### **Summary**

The big problem with the files from this time period is that the records for the entire month of August were poorly copied. Many were difficult to read and quite a few are missing or too difficult to locate. I suspect that has to do with the poor copies. I found a great deal of the files in the Illegible section. I could not locate 20 case files total (16 for the month of August).

Echo 1 and 2 accounted for 79 confirmed/possible sightings (about 27%). Other bright satellites/space debris accounted for thirteen more UFO reports. In total, objects in orbit produced almost a third of the UFO reports during this time period (about 31%).

There continued to be a significant number of sightings by witnesses 16-years and younger. Some of the younger sightings appear to be more active imagination than careful observations. There was also a few submissions made by "collectors" of UFO reports in their region. The end result was having dozens of reports being lumped together in one file. Many were Echo 1 and 2 satellite observations.

I found the UFO landing/alien reports particularly troublesome. There were several during the time period and one has to wonder how much influence the Zamora incident had on these stories. All but one can be attributed to hoax or overactive imaginations of young boys. The most significant one was from Harrisonburg, Virginia in December. The case file and investigation could have been more thorough. It did not help that a local UFO group, who had their own beliefs to confirm, performed an investigation before Blue Book sent Sergeant Moody to investigate. A lot of the newspaper stories and information in the file were from those individuals. The story, like most UFO landings, is hard to believe without convincing evidence that something actually landed and took off from the area. Apparently, while UFO proponents had found high levels of radiation, they did not see any marks of significance on the ground. They also complained about how Sgt. Moody conducted his survey. If accurate, then Moody really did not perform a good survey. Based on my experience in the Navy Nuclear Power Program, I wasn't impressed with the way either survey was performed. One would expect a survey map be completed rather than random readings being performed. What were the normal background levels outside of the area and was there a specific concentration at a given location? We don't know. In fact, the UFO investigator claimed they had to clean off the probe because the probe was reporting high radiation levels when it should not. He

also stated that the radiation levels above the ground were something like 17-18 mR/hr. This kind of radiation level is awful high and that was over a week after the landing. If it was really that high then, the levels that existed at the time of the landing could have been extremely high and dangerous. That brings me to the question of why didn't the UFO group make a second survey to measure potential half-lives? Why were no soil samples taken to be analyzed? All of this makes one question exactly what the true radiation levels were. Moody also noted that the road the event occurred upon was well traveled during the day. The event happened during the normal evening commute, so it seems unlikely that this witness was the only person who saw the landing/passage of such a large UFO (80-90 feet tall and 100 feet wide). The UFO investigator mentions finding witnesses around town but these were vague and could have been copy-cat reports following all the media attention. The bottom line is that the sole physical evidence that the object landed were these radiation readings, which may, or may not, be accurate. This leaves Blue Book's explanation that it was nothing more than a psychological issue related to the witness or the possibility it was a hoax/made up story. For it to be a mistaken identity case, it would have required an overactive imagination, which might belong in the psychological category. It was Dr. Hynek, who seems to have given the psychological explanation in a letter on February 23, 1965. In that letter, after talking to the witness, Hynek wrote; "I think we need a psychiatrist here". Heft it with that classification because of the lack of solid physical evidence of the landing.

As usual, a lot of the reports have a lot to be desired. Far too many have important information missing and make them difficult, if not impossible, to analyze. It is no wonder that Blue Book classified so many UFO reports as "Insufficient information/data".

The process of analyzing all of these reports can be tiresome. 1965-1967 are years with large numbers of sightings. I will attempt to perform the standard six month analysis but I would like to limit the number of sightings reviewed to about 300-400 per issue. This may mean that I can only do 4-5 month periods in the future. It depends on how much time I have on my hands so readers will have to be patient. I foresee this project being completed by 2025.

#### References

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