

SUNlite

Shedding some light on UFOlogy and UFOs



Hope clouds observation.

Frank Herbert - Dune (Reverend Mother Gaius Helen Mohiam)

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Project Blue Book version 3.0

Cover: This is an image I took of a high altitude balloon back in 2017. It appeared as a bright star in the evening sky and slowly drifted southward. A high altitude balloon was a possible source for this issues UFO evidence under review.

Left: The Fourth of July may will probably produce UFO reports generated by Chinese lanterns. Last Fourth of July, I saw several of these drift by at my dark sky site waiting for the sky to clear. A fellow amateur astronomer was “mystified” by their appearance and wondered what they were!

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In my opinion, [the announcement that NASA is going to conduct some form of UFO research](#) was one of the biggest recent headlines for UFOlogy. For an entity that has had problems with their space program, I have to ask the question, “Why jump into this mess?” I suspect this was a political move and not a scientific one. Reports indicate that the “UFO team”, led by astrophysicist David Spergel, has a budget of about \$100,000. That level of funding indicates it may just involve a review of the best available data and little more than that. This kind of review will result in explanations for some/many/a majority of the reports but there are some they will not be able to explain. They might even suggest explanations for these or leave them “unidentified”. However, like the recent reports from the Department of Defense (DOD)(Blue Book version 2.0), they are not going to say these “unidentifed” represent alien spaceships. [This is very similar to what multiple scientific panels examining the UFO evidence have concluded in the past.](#) After publishing this result, what NASA does next will be important. If they decide to increase funding, they will march down the path of Blue Book (version 1.0). This will be a poor choice since it will end up in NASA (like the DOD) getting stuck in the UFO quagmire. It will become a public relations nightmare as UFO groups demand answers to each video/case that catches their attention. This brings to mind what George Santayana once said, “Those who cannot remember the past are condemned to repeat it.”

While discussing UFO cases on James Easton’s UFO research list, somebody used the infamous Stanton Friedman quote, “Don’t bother me with the facts, my mind is already made up”. My response to this was, “Facts are things that can be proven to be true. It is fact that people report seeing these things. It is also a fact that people are often mistaken about what they report. You are confusing facts and evidence. Unfortunately the evidence for these massive UFOs are just stories and nothing more than that.” The poster, who had experienced their own UFO sighting in the past, remarked that if I did not believe, why was I on the UFO research list? My interest in the subject involves a search for better evidence and higher standards of investigation. These are lofty goals that any UFO proponent should desire. What appears to be missed in these discussions is the fact that UFOs only exist because people report seeing things they cannot identify. Seventy years of UFO research has produced one fact. Eyewitnesses often misinterpret what they see. They can, consciously or unconsciously, add details to their sighting that did not actually exist, which make the sighting more spectacular. Even though these witnesses may honestly believe they know what they saw, what they actually saw may be something different than what they reported. It is this kind of suspect data that is the major source of UFO evidence. Because of its nature, it is not good enough to draw the conclusion that something “unknown to science” is behind these reports.

I would like to thank Oliver Smith for his interesting article. It is brief but informative. I have never been a big fan of UFO cases that come from sources before the 20th century. Many of them are second or third hand stories, which were recorded by individuals, who had their own personal beliefs affecting how they interpreted the observations. To me, that makes them less than compelling and not worth my time to examine closely.

WEEDING OUT THE WEINSTEIN CATALOG

August 20, 1991 - West of Tula¹

91.08.20	02:10	Russia	West of Tula	A	two airliners crews	a huge luminous spherical object, near-collision with one plane				253
91.09.08	14:00	USA	East of Pittsburgh, Pennsylvania	A	B727	a formation of three saucers flying at terrific				253

This entry relies on the Timothy Good's book, "Alien Update". There appears to be no other source.

The sighting

Surprisingly, the description in Good's book is very informative. We know the time, approximate location, direction of observation, and approximate elevation of the object. We even have a sketch and reference to a constellation of stars :

At 1:35 a.m. on August 20, 1991, Aeroflot flight 2523 took off from Voronezh Airport, heading for St. Petersburg. One of the passengers on board was Igor Yadigin, the aviation mechanic whose story of a close encounter near voronezh airport is described earlier.

At about 2:05 a.m., one of the crew members invited Yadigin to the flight deck. As he entered, Igor was shaken by an extraordinary sight in the sky (Fig. 11.2).

The jet was flying at an altitude of about 10,000 meters. To the right could be seen a sphere-like object, emerald in color. The sphere was surrounded by a milky white hemisphere, through which the stars were visible. Above and to the left of his viewpoint could be seen the Great Bear constellation. From the central sphere, a beam of light extended to the ground. In the estimation of the crew members, the diameter of the central sphere was about 400-800 meters and it was stationary at a distance of not less than 50 kilometers. Igor and the crew members then noticed the navigation lights of a jet, which was changing its course to avoid the sphere. In Igor's opinion, the size of the jet was that of a grain compared to a plate. The total duration of the sighting was about fifteen minutes, after which the apparition simply vanished....²

If we are to believe the book, the sighting happened around 2:05 AM and not 2:10 AM. It appears the report and sketch were made from memory so one has to consider either time to be just an approximate value.

Analysis

The first thing to note is the time given is local time. If it were UTC, it would have been after sunrise. The area of Tula is UTC +3, which means that the Universal time (GMT) was actually 2305-2310 on the 19th of August.

The second thing to note is that the plane was flying north towards St. Petersburg. Also to the north was the Plesetsk Cosmodrome. Not surprisingly, there was a launch just before the sighting.

1991 August 19 - . 22:55 GMT - . Launch Site: Plesetsk. Launch Vehicle: Topol!³

The Topol missile was a three stage solid fuel ICBM. The third stage ends its burn about 180 seconds after launch but the rockets have been known to create [long duration exhaust halos like the one observed from the ISS in 2013](#).



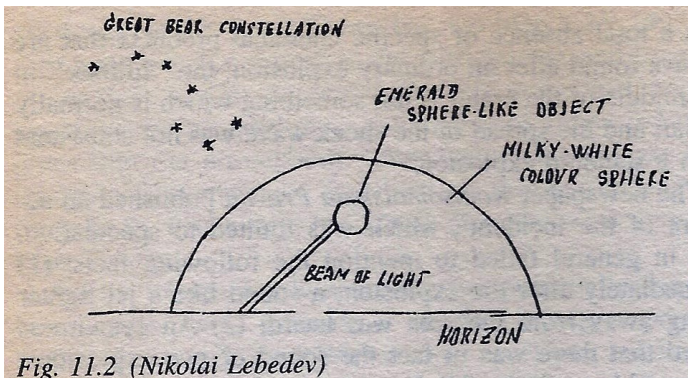


Fig. 11.2 (Nikolai Lebedev)

The rough azimuth of the object shown in the sketch⁴ would have been around azimuth 45 degrees based on the position of Ursa Major (The pointer stars, Dubhe and Merak, were both at azimuth 4 degrees). The azimuth of Plesetsk Cosmodrome was about 10 degrees at a distance of 600 miles. In the sketch, the orientation of the constellation of Ursa Major was incorrect (One has to go back to about 3-4 hours to achieve this orientation) but one has to remember, this sketch was probably done from memory. It does provide us with the general direction of the UFO. Assuming the trajectory of the missile was eastward (most of these missiles were launched towards the Kura Peninsula on the Pacific coast), it would have appeared over the horizon further to the east than Plesetsk. To be visible from that distance, it would have had to have been at an altitude of 120-150 miles.

Sunrise for Plesetsk was around 4:30 AM and nautical twilight began around 2:15 AM. This would indicate that the sun could illuminate any cloud around the vehicle and produce the "twilight effect" that can produce spectacular displays involving rocket launches.

Conclusion

The time of the Topol missile launch being within ten to fifteen minutes of the sighting cannot be ignored. The aircraft was looking in the direction of the launch site and the object had the characteristics of a Topol missile launches in a pre-dawn sky. The only possible reason to reject the explanation is the distance but rocket launches have been seen from this distance before especially when the "twilight effect" is a factor. This case can be explained as a Topol missile launch test and removed from the catalog.

Notes and references

1. Weinstein, Dominique F. Unidentified Aerial Phenomena: Eighty years of pilot sightings. NARCAP. February 2001. P. 54
2. Good, Timothy. Alien Update. HarperCollins. New York, NY. 1995. P. 181-2
3. "1991 Space History Chronology". Astronautix. Available WWW: <http://www.astronautix.com/1/1991chronology.html>
4. Good, Timothy. Alien Update. HarperCollins. New York, NY. 1995. P. 182

August 1, 1952 - Sharonville/Bellefontaine, Ohio

August 1, 1952--Sharonville, Ohio. Brilliant white disc observed at low altitude. Others reported oval object. [XII]¹

Section XII is not helpful. There is an entry with very little information and no source:

*Brilliant, milk-white disc flying slowly, with "tendency to wobble."*²

There is also an entry for Bellefontaine, Ohio on the same date.

*USAF jet pilots climbed toward hovering UFO which accelerated and disappeared at high speed.*³

Bellefontaine is only 85 miles to the North-Northeast of Sharonville (which is on the north-eastern edge of Cincinnati). One has to wonder if the two cases might be related.

Source of information

Because most of NICAP's sources seem to come from newspapers, I attempted to find information from the usual sources. I could not find any mention of a sighting at Sharonville in either Loren Gross' history or the newspaper archive. Loren Gross does mention the Bellefontaine incident:

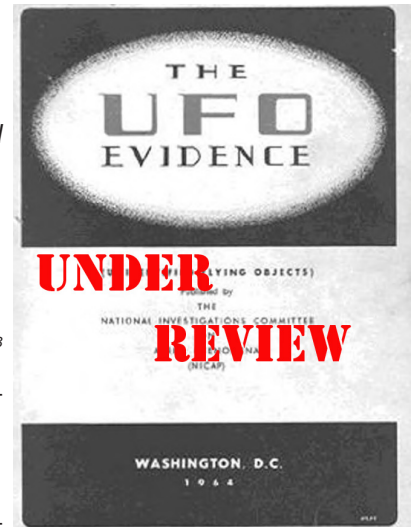
Excitement picked up in the Ohio region at 10:45 a.m. August 1st when a strange object sailed by. Ground observers called it a mysterious glowing sphere, and, when it was picked up by the 664th AC&W radar site near the city of Bellefontaine, the scope operators measured its speed (erroneously as it turned out) as 400 mph. Jets were scrambled to intercept. Visual contact was achieved by the pilots before they lost track of it. At the time the Air Force was baffled by the object, but later an investigation nailed down a balloon explanation.⁽⁵²⁾ It was just a case of a radar operator making a bad calculation but the incident had unfavorable effects on the UFO investigation. The story of the jet chase leaked to the press when the two pilots involved, Major James B. Smith and Lt. Donald J. Homer, talked to a reporter and admitted they had got a look at the UFO although not a clear one. The following day the story appeared in the New York Times with the reporter's comment that it was: "... the first time pilots checking~flying saucer reports here had made such a positive statement."⁽⁵³⁾ The Times also reported in the same article that: "The Air Technical Intelligence Center, in charge of 'flying saucer' investigations, immediately banned the two pilots from commenting further on their experiences and ordered a ban' on pictures of the two."⁽⁵⁴⁾ ⁴

This leaves us with project Blue Book as a source of information that might shed light on the matter.

Blue Book file⁵

Blue Book has a file for the Bellefontaine case but there is no mention of Sharonville. There is a mention of a Sharonville sighting in August 1953 in the Blue Book files. It had no specific date and appears to have come from Leonard Stringfield's Civilian Research, Interplanetary Flying Objects (CRIFO). It is listed as "INFO", which meant it was for information only and not evaluated. As noted by Gross, Blue Book eventually evaluated the Bellefontaine event as a balloon. Details from the file were:

- At 1515Z, Wright Patterson AFB radar spotted a radar target 20 miles to the North-Northwest. Its course was 240 at a speed of 400 knots. This target was consistent in course and speed until it faded off scope.
- At 1555Z, two airborne F-86s, which were within 10 miles of that position, were vectored towards the contact.
- The F-86s made two attempts to reach the contact. They reached 48,000 feet but then fell off in altitude. They estimated the object was at 50,000-70,000 feet.
- One of the F-86s activated their gun camera and obtained an image of the object. They recorded a fuzzy small image that was round. Estimates of size, based on the estimated distance from the aircraft, were 24-40 feet in diameter.
- The object was described as silver and round.
- At 1613Z, the F-86s returned to base as they were low on fuel.
- Object was last seen 5 miles Northwest of Springfield, Ohio. This is about 25 miles south of Bellefontaine.
- In the radar data sheet, the radar operator wrote, "The target intercepted was not the target on the PPI scope it must have been flying the same course at the same time."



- Several of the documents, in their conclusion, ruled out a balloon because the radar contact moved against the wind and a speed too high for a balloon.
- In the comments on the record card, it states that the original radar contact was an aircraft from Cleveland and that the pilots chased a research balloon. There is no documentation in the folder, which positively demonstrates that these explanations are correct.

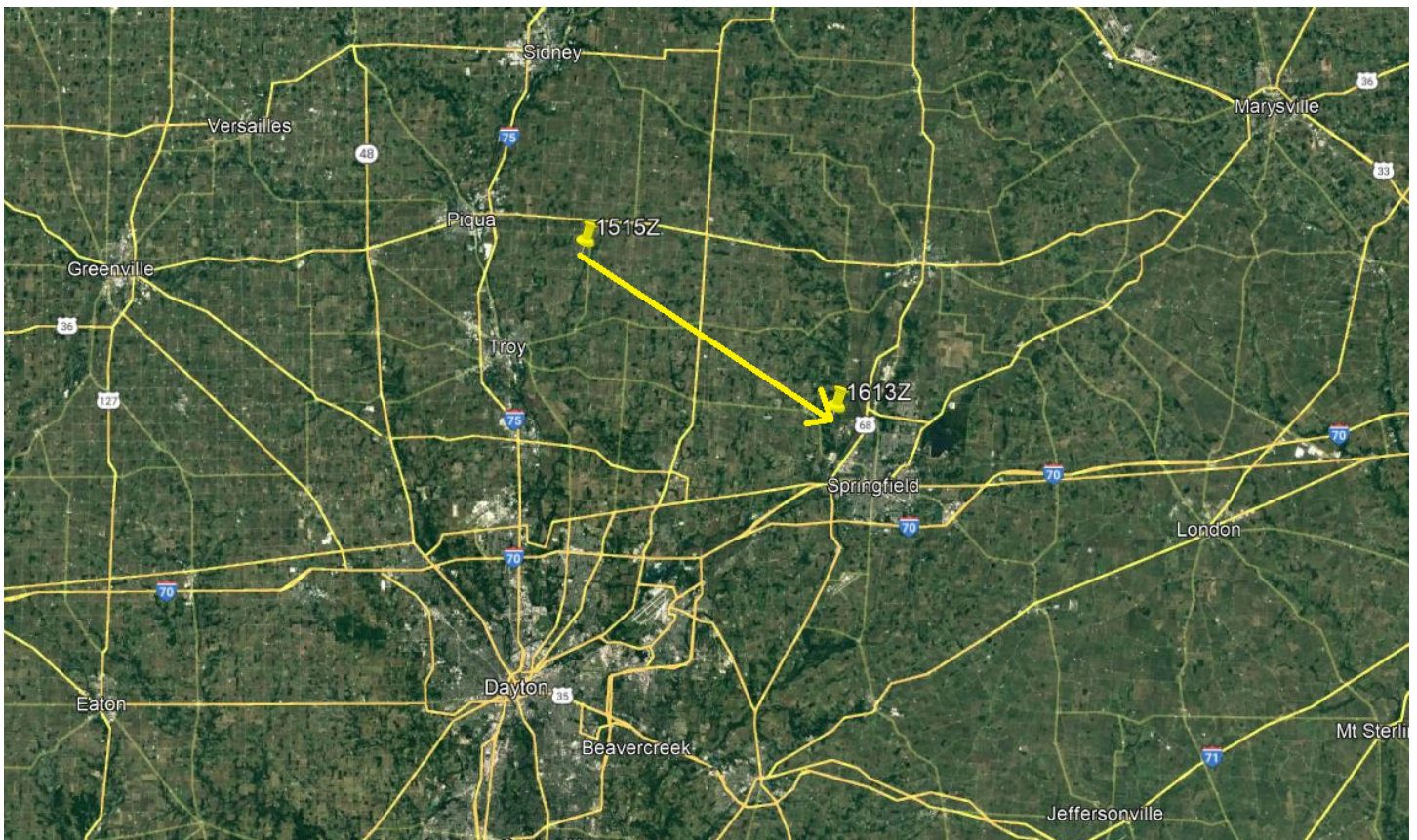
Analysis

According to Stratocat, there was a research balloon launched at 1312 Central Time (no time zone was listed but it appears they were using local time) on July 29 from Minnesota.⁶ It was eventually recovered in Merignac, France between 2100Z 2 Aug - 0030Z 3 Aug. On the morning of July 30 (around 0400), LaCrosse, Wisconsin had a strong signal from the transmitter. It had the balloon at 39,000 feet and the transmitter indicated the payload may have dropped. There is no additional information beyond this other than the balloon's recovery.

If the payload dropped, balloon probably rose above 39,000 feet and loitered in the stratosphere. Winds measured from Rantoul, Illinois above 50,000 feet were about 30 knots from the WNW⁷ but the winds above that have been known to be slower and can reverse direction in the summer. The balloon remained airborne and would eventually move eastward. A trajectory to the East-Southeast towards Ohio is not unrealistic. On the morning of the 1st, it could have been over Ohio. The pilots reported it was roughly 50-70,000 feet altitude at the time they pursued it. At some point, the balloon could have descended and caught some high speed winds. Dayton had speeds of 54-79 knots from the NW at 10,000-14,000 meters for the afternoon of the 1st.⁸ Radionsonde data above 10000 meters was missing in most of the Northeast soundings but Rome, New York, had winds at 14,000 meters being 106-123 knots from the WSW on the afternoon of the 1st.⁹ Since the balloon came down in France (4000 miles) sometime on the evening of the 2nd/morning of the 3rd (France time), the time between the Ohio sighting and arrival in France was 29-32.5 hours. That computes to an airspeed of about 123-138 mph (about 107-120 knots). While these speeds are a little higher than the two values I was able to obtain, it is possible for high speed winds of these type to exist. What the wind speeds were over the Atlantic is difficult to say but wind speeds in the 120-140 knot range, or even higher, are possible. Therefore, it is possible for this balloon to have been seen in Ohio on the morning of the 1st and reached France 29-32.5 hours later.

It is also possible that it was some other balloon. Three days prior to the balloon launched on the 29th, Minnesota launched a Project Gopher balloon. There is no data from that flight. It could have still been airborne on August 1st. There is also the possibility that it was some weather balloon that had drifted into the area from another location or some other research balloon that is not part of the Stratocat database, which is incomplete.

It seems likely that the first radar contact was just an aircraft. It flew at a consistent speed and course and faded away off the scope.



The radar operator even pointed out that the radar contact he tracked and what the pilots chased were two different objects. The pilots saw their target in the initial location of where the radar target was. However, when they returned to base the target did not follow a track to the West-Southwest. In the one hour period, this object went about 15 nautical miles towards the East-Southeast. Contrary to what the investigating officer wrote, this IS consistent with the winds around 52,000 feet which were from the North-west (azimuth 315) and at a speed of 15 knots.¹⁰

Conclusion

Since we have no source for the Sharonville, sighting, I would classify that as insufficient information. If the case is the August 1953 CRIFO case, that is also insufficient information because there is no specific date listed. Additionally, the Blue Book files, other than listing this sighting in August 1953, has no other information in its files. If there was a sighting from Sharonville on August 1, 1952, it is possible they might have seen the same research balloon but that probability seems low based on the distances involved (about 60 miles) and the apparent track of the balloon. If any reader has the details of the August 1, 1952 sighting from Sharonville, I would be interested in seeing it an amending this entry in the next issue. Meanwhile, the Bellefontaine case was probably a high altitude balloon of some kind with the initial radar contact being from an aircraft. This case is not “best evidence” and should be removed from the list.

Notes and references

1. Hall, Richard M. (Ed.) The UFO evidence. The National Committee on Aerial Phenomena (NICAP). New York: Barnes and Noble. 1997. P. 132
2. Ibid. P. 153
3. ibid P. 149
4. Gross, Loren UFOS: A history. August 1952. P 16.
5. “Case file - Bellefontaine, Ohio 1 August 1952 “. Fold 3 web site. Available WWW: <https://www.fold3.com/image/6998302>
6. Department of Physics University of Minnesota. Progress Report on Research and Development in the field of High Altitude Plastic Balloons for the period June 15, 1952 to December 22, 1952 with the Office of Naval Research. Minneapolis, Minnesota. 1953. Page II-37-38
7. National Oceanic and Atmospheric Administration (NOAA). NOAA/ESRL Radiosonde Database. Available WWW: <https://ruc.noaa.gov/raobs/>
8. ibid.
9. ibid.
10. ibid.

THE 701 CLUB: CASE 2006 - CHICASAW AND BROOKLEY AFB, ALABAMA. AUGUST 28, 1952

Don Berliner's describes the case as follows:

Aug. 28, 1952; Chickasaw and Brookley AFB, Alabama. 9:30 p.m. Witnesses: USAF control tower operators, officer from USAF Office of Special Investigations, and others. Six objects, varying from fiery red to sparkling diamond appearance, hovered, flew erratically up and down for 1 hour and 15 minutes.¹

Sparks' entry is more thorough:

Aug. 28, 1952. Chickasaw (30°45' N, 88°4' W) and Brookley AFB (30°38' N, 88°5' W), Mobile, Alabama. 9:30-10:20 p.m. 3 civilians in Chickasaw reported to duty officer USAF Capt. at Brookley AFB seeing multiple red stationary and maneuvering objects to the S and one moving from S to W, all over the direction of Brookley. AFOSI agent arrived in Chickasaw at 9:50 to investigate and saw the same 4 objects to the S and SW estimated 8-12 miles distance, one fiery red object stationary for 15 mins then drifted 15°-20° to the right then stationary again. Radar operator visually spotted red-green object over Chickasaw to the N. USAF duty officer and control tower operators saw one object to the SW at 240° azimuth to the right and lower than the moon [which was at about 214° azimuth 22° elevation], and another object to the W at 280° azimuth at 10°-20° elevation the latter was confirmed by GCA's MPN-1 radar as a stationary target at 280° azimuth 4 miles range 4,000 ft altitude [= 11° elevation]. AFOSI officer, and others saw one object explode, one do a figure-8 maneuver, etc., 4-6 objects larger than a star or planet varying from fiery red, redblue, red-green and sparkling diamond appearance, a civilian AF employee saw a flat oval shape. (Sparks; Berliner; cf. Hynek-CUFOS-Willy Smith files)²

The Blue Book file³

There were many witnesses involved and many objects reported. It probably is best to break up the file into each individual witness. The first witnesses were a Mr. Owens, an unnamed man, and his wife. Their observations were:

- At 2130, the witnesses observed an object 60 degrees above the southern horizon. It was "fire engine red and twinkled to a crystal blue". It was weaving back and forth, dimmed and flickered out. It was observed in the direction of Brookley field.
- At approximately 2135, the Mr. Owens noted a second object that was "Crystal blue and red" that would dim and then brighten. It was visible in the southwest and just above the tree tops/houses. The witness also stated that it was "as red as could be". The color of the object would then change to a "bronze blue".
- Owens called the field and, at 2150, a Mr. Robinson showed up at the door.
- They went out to the back porch and saw another object. It was also low in the sky above the houses but it was not as bright as the other objects. It was in the western sky.
- Mr. Owens noted that the first two objects were near some black clouds and somebody noted that they appeared to shine through them.
- After Mr. Robinson left, Mr. Owens saw another object but gave no direction. It looked like a comet or star. It was flashing and appeared to explode.
- He thought these objects might be stars or planets but then determined that stars/planets don't behave this way.
- Owens noted he had seen objects like this since they had moved into their home on July 5th.
- The other man's story was similar with some variations. He stated there were three objects that formed a triangle.
- The objects appeared to jump about. One object appeared to be stationary "at times" and would then shoot over to the western horizon "at times". The impression was that the object would then return to the original position after shooting to the horizon.
- The man's observation of the object seen when Mr. Robinson arrived was that it looked like two objects. One was red and the other was blue. It also appeared to be a figure eight shape. He then made the statement that it might have been a star but it was strange.
- Mrs. Owens reported seeing the first object to the south but it disappeared. Another object was low to the south over the houses. It disappeared as well. Two other objects were to the Southwest.
- She was present when Mr. Robinson appeared and noted the object he observed. She observed it blinking blue and red.
- Mrs. Owens also mentioned it could not be a star because "It blinked". It changed colors would fade out and then reappear.
- She mentioned that they had seen these objects before.

The next witness was Special Agent Charles Robinson, who had come from the base to investigate:

- He stated he arrived at 2200 and saw four objects between due south and to the southwest.
- One of these objects appeared as two lights. The top was green and the bottom was red. They flashed on and off like they were

a neon flasher.

- The fourth object blinked regularly and alternated color between blue-green and red.
- This fourth object was stationary but then moved slowly 15-20 degrees before becoming stationary again.
- Mr. Robinson left Chickasaw for the base at 2220. All of these objects were still visible.
- When he arrived at Brookley AFB, these objects could no longer be seen.

The next witness was the Officer of the day, Captain William Edwards.

- He received the call from Owens at 2130.
- Captain Edwards alerted base personnel and the radar operators of a UFO being reported.
- He went to the tower at 2145 and, at 2150, the tower observer pointed out an object visible at 280 degrees azimuth with an angle of elevation of 10-20 degrees. It was stationary for 20 minutes and appeared to be larger than a bright star or planet. The color changed from bluish-green to red.
- Ground Control Approach (GCA) radar reported a stationary target at an azimuth of 280 degrees and distance of 4 miles.

The GCA operator, Airman second class Charles Goetz, made the following observations:

- He was originally told to look north but saw nothing on his AN/MPN-1 radar.
- Goetz then saw the target at 280 degrees and four miles. He described it as "not too definite a shape" and stationary.
- He watched it for 30 minutes and then they started up the AN/CPN-4 radar. It saw nothing but ground clutter.
- Airman Goetz stopped watching at 0030. He did not mention if the target disappeared or not. All he could state was that it did not change position or shape.

The control tower operator was Airman second class Whittaker. His comments were similar to the Officer of the day and GCA operator with some additional information:

- The GCA operator reported a second object at 240 degrees azimuth.
- Whittaker observed an object to the right of the moon and below it (note: He is the only person to mention seeing the moon!).
- An Air Force B-29 flying to Maxwell AFB was asked to look for UFOs. They failed to report anything back. Either their messages did not reach the tower or they saw nothing to report.

Another control tower operator was Airman third class Edward Smith.

- He stated that the first saw the object to the Northwest.
- The object then appeared to move to the Southwest. However, Smith did not see it move. It apparently simply faded out in one location and appeared in another.
- The object appeared to zig-zag.
- The object appeared to come closer and then recede before it faded out.

The staff NCO was Staff Sergeant Robert Calkins. He reported:

- Around 2100, he, and two others, saw a bright white object to the west. It was brighter than the nearby stars.
- Sergeant Calkins also noted the GCA operator reporting an object to the southwest. He also reported that the same operator reported three other stationary targets at 4,000 feet.
- Calkins also noted the object he observed was to the right of the moon.
- While Calkins noted there were clouds in the region but he indicated they did not interfere with observing stars.

Somebody from Base and Transient section, driving westward at 2130, saw the UFOs as well:

- She saw two objects. They were stationary and appeared brighter than wingtip lights.
- They moved downward to the south and then disappeared after two minutes.

Additional information provided by the base Adjutant's and intelligence officer's reports:

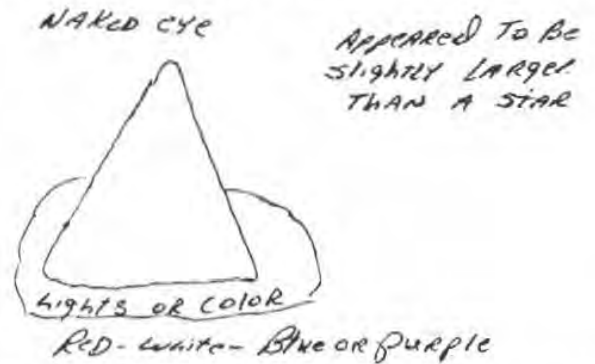
- Weather conditions were 6/10ths Strati-Cumulus clouds.
- The B-29 took off at 2245

Captain R.L. James commented on the radar contact on 19 September. He stated, "Reported radar sighting is considered to be insignificant, due to the fact that only one weak stationary target was observed."

Analysis

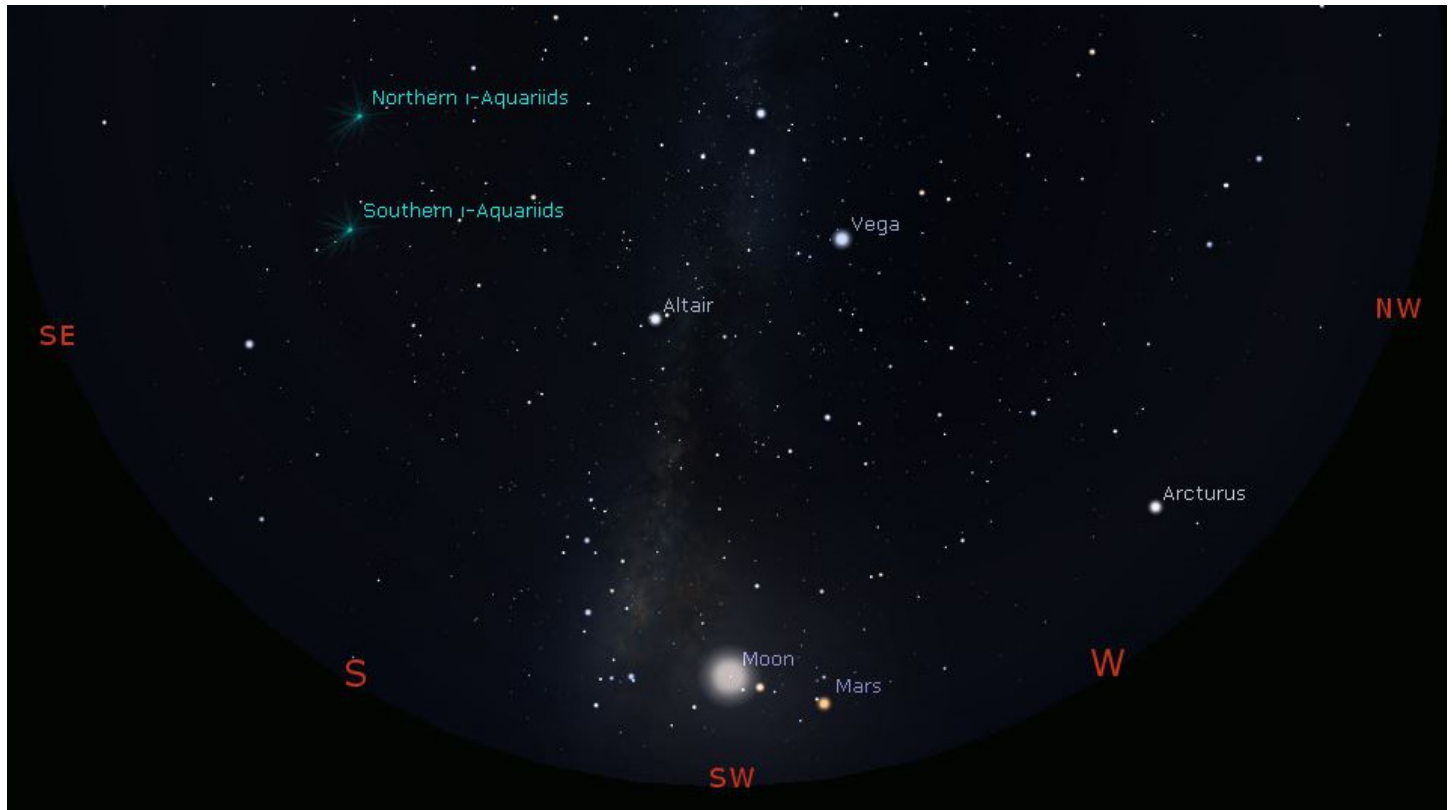
As one can see, the sightings are a bit confusing. However, there are potential explanations for most, if not all, of the sightings. All of the descriptions about the colors changing back and forth are consistent with scintillating stars. Seeing stars as two objects is also not that unusual. Allan Hendry mentions all sorts of interpretations of star shapes. This description was accompanied by a sketch made by police witnesses:

In many reports, the atmosphere distorted a bright star's image to an apparently larger size, as large even as the full moon. In most of these reports, the effect is usually short-lived, and the false image quickly settles down again to a point source. In other reports, however, witnesses claimed they could see a shape even though they described the apparent size of the star as normal. Included among these shapes are: discs and discs with domes ("like two plates put together"-- case 332; "elongated, big as a distant plane"--case 377; "dome on top and bottom"- for one and a half hours in case 332) , domes, "a plate with a hole in the center," vertically oriented small triangles, ovals, a football . . . even "teacups," "Mexican sombreros," and "bananas as large as the moon, shrinking back down to a star." People have seen "spikes," "beams," "appendages," and sparkles shooting out in all directions from bright stars. In case 602, a woman kept in touch with a sympathetic controller for hours at the local airport as she watched stars forming shapes like the letters "V" and "M." The controller couldn't see the shapes, but a pilot in the area confirmed that there were unusual atmospheric conditions. In two cases, one star was seen to split up into two (and three) close lights and rejoin again.⁴ (Hendry -28)



Naked eye view of a star, sketched by one of several police witnesses. The officers were shown the same stars in the sky the next night by field investigator Ed Wilbanks.

Based on this information, it seems that it is possible that the objects described by the witnesses could just have been scintillating stars.



The following approximate azimuths and elevations existed for stars, planets, and the moon for 2130 CST:

Object	Azimuth	Elevation	Magnitude
Altair	191	67	0.75
Arcturus	286	11	0.1

Mars	237	9	0.1
Antares	229	12	1.0
Moon	225	13.5	First Quarter
Vega	299	69	0.0
Fomalhaut	142	17	1.15

The following approximate positions were for 2220 CST:

Object	Azimuth	Elevation	Magnitude
Altair	220	62	0.75
Arcturus	292	1	0.1
Mars	243	0.5	0.1
Antares	236	4	1.0
Moon	232	6	First Quarter
Vega	295	59	0.0
Fomalhaut	152	23	1.15

The first object observed by the Owens was to the south and 60 degrees in elevation. Altair matches that position.

The second object reported by Mrs. Owens was also to the south but low. Fomalhaut was low in the Southeastern area of the sky. Since it was only visible for a few minutes, It is possible that Fomalhaut was the source and it had disappeared behind a cloud.

The two objects that were consistently being mentioned to the southwest were very probably Antares and Mars. The Tower personnel all stated that one of these objects was to the right of the moon. This matches the position of Antares.

It is interesting that the only people who mentioned the moon were the tower personnel. That brings in the possibility that the moon may have also have been involved but most of the descriptions involved changing colors, that are associated with scintillating stars. The moon could have been masked by clouds and might partially peak out giving the indication of another object being visible.

The object seen to the west was very likely Arcturus. Arcturus, Capella, and Sirius are bright first magnitude stars that are often reported as UFOs. Other first magnitude stars are reported as UFOs in the Blue Book files but none so much as these three.

The intelligence officer's report mentions six objects but I think that many of these are duplicate/confusing reports which gave the impression of more objects than those actually observed.

Most of the disappearance and reappearance observations can be attributed to the partly cloudy sky conditions that existed in the area. I have seen stars disappear behind cloud banks when the clouds are not even visible because they are so dark. I suspect that effect was in play here.

The individual, who was driving, seems to have seen some lights but it is not clear if any motion was due to the car moving or the lights moving. We don't have a precise direction of observation either. She was driving west but if they were looking to the Southwest, they would have seen the same stars and interpreted them as UFOs as well.

It is important to note that most of the observations of these objects ceased about the same time that three of the stars/planets were beginning to set or had set. Robinson had reported he left the Owen's house around 2220 CST and the objects were still visible but had disappeared after he returned to Brookley field. The intelligence officer's report stated the events ended at 2245, when the B-29 left but the time noted by Robinson appears to have been more accurate as to when the events terminated.

	Mars	Arcturus	Antares	Moon
Set time	2222 CST	2227 CST	2242 CST	2258 CST
Azimuth	244	293	239	237

As for the radar contact, it seems like it had little to do with the visual sightings. As noted by Captain James, it was a single stationary target and could have been some form of ground target that nobody had noticed previously or a false target due to local conditions. All the other radar targets reported by tower personnel were not mentioned by the GCA operator. He had stated that there was only one target and the rest were ground clutter. Therefore, it seems likely he was reporting targets to the tower that he later evaluated as ground clutter.

Conclusion

This case is challenging to produce a complete explanation because there may have been different objects observed and reported in various locations in the sky. It seems that stars and planets were the primary source for most, if not all, of these reports. Cloud interference and auto kinetic effect gave the illusion of rapid motion of these objects. I would classify this case as probably stars/planets and remove it from unidentified status.

Notes and references

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3. "Case file - Chickasaw, Alabama 28 August 1952". Fold 3 web site. Available WWW: <https://www.fold3.com/image/6382686>
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Chariots and Soldiers in the Sky: Judaea (66 CE)

Oliver D. Smith

Josephus, *The Wars of the Jews* (6. 297-299). Translation by H. Thackeray (1926)

The ancient historian Josephus in his *The Wars of the Jews* (6. 297-299) claimed in 66 CE (a few days after Passover) an extraordinary phenomenon in the sky occurred throughout the land of Judaea: "chariots were seen in the air and armed battalions hurtling through the clouds and encompassing the cities". This description of chariots and armed soldiers moving through the clouds cannot be dismissed as a hallucination or imaginary since Josephus was adamant there were multiple eyewitnesses who corroborated the observation. It is impossible there were literal chariots or soldiers moving through the clouds, but some ufologists who are proponents of the ancient astronaut hypothesis have argued extra-terrestrials and their spaceships can explain the phenomenon (Steiger 1978, p. 12). Aside from the implausibility of this idea, Josephus says the celestial chariots and armed soldiers extended across the whole country of Judaea in the sky ("throughout all parts of the country") which is difficult to explain in terms of spaceships.

Hallinan (1991, p. 743) notes the chariots and soldiers could have been a natural meteorological phenomenon but rules out auras because they are not sufficiently bright to see in the daytime (Josephus is clear the phenomenon had occurred before sunset). Although Stothers (2007, p. 84) claims the phenomenon "does not seem to have been an aurora, cloud patterns or meteors" an unusual cloud shape known as mammatus can explain the phenomenon. Mammatus clouds have unusual pouch-like hanging protrusions and these can stretch for hundreds of miles across the sky. The Glossary of Meteorology defines mammatus (or mamma) clouds as "...hanging protuberances, like pouches, on the under surface of a cloud" (Glickman 2000, p. 471). These clouds seem to be the most parsimonious explanation for the celestial chariots and soldiers (see figs. 1-4); the description by Josephus of the chariots "hurtling through the clouds" match these protrusions in the sense of pareidolia. The fact mammatus clouds are known to extend across the sky for many miles also explains the phenomenon being observed throughout the whole land (country) of Judea as well as "encompassing" overhead its cities. Mammatus clouds are a rare phenomenon, but they have been observed over Israel in recent years (Bucknick, 2014).



Mammatus clouds: (top left), photo by National Severe Storms Laboratory, Oklahoma, May 26 1985; (top right), photo by United States Air Force Academy, Colorado Springs, Colorado; (bottom left), photo by Anton Yankovyi, Himalayas, Nepal, April 19 2010; (bottom right), photo by Sascha1405, Berlin, March 11 2021.

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Project Blue Book case review: September-December 1965

This is the latest edition of the Project Blue Book case review covering September through December 1965. 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.

September 1965

Date	Location	BB explanation	My evaluation
Sep	Rehoboth, MA	Misinterpretation of conventional objects	Insufficient data. No date given. Possible meteor sighting.
1-30	Ellington AFB, TX		See Addendum
Sep	Fayetteville, AR	Insufficient data	Agreed. No negatives submitted for evaluation. No report form. No specific date.
1	Pittsburgh, PA	Insufficient data	Agreed. 12-year old witness with minimal information in report. Possible mistake in duration.
1	Chicago, IL	Satellite	Agreed. Cosmos 44.
1	Yellow Springs, OH	Satellite	Aircraft. Echo 2 made pass at time in question but witness reported object going in opposite direction.
1	Manistee, MI	Aircraft Photo: Insufficient data	Agreed. Photos were never developed. Witness volunteered to send undeveloped roll but did not send it in original letter. Never sent roll to BB.
1	Bakersfield, CA	Aircraft	Agreed
2	Nebraska Missile Site	Jupiter	Agreed
2	Chicago, IL	Satellite	Agreed. Possibly Injun 3.
2	Laredo AFB, TX	Aircraft	Agreed
2	Dayton, OH	Satellite	Agreed. Cosmos 44 Rocket Body
2	Biloxi, MS	Satellite	Agreed. Cosmos 44.
2	Clearmont, IA	Satellite	Agreed
2-3	Exeter, NH	UNIDENTIFIED	UNIDENTIFIED
3	Portland, IN	Stars/Planets	Agreed. Possibly Jupiter.
3	Moraine, OH	Jupiter	Agreed
3	Columbus, OH	Insufficient data	Agreed. Witness reported by phone. No additional information for evaluation. Possible aircraft observation.
3	Laredo, TX	Aircraft	Agreed
3	Waynesville, OH	Meteor	Agreed
3	Damon, TX	UNIDENTIFIED	UNIDENTIFIED
4	Tampa, FL	Satellite	Agreed. Cosmos 44.
4	Ozone Park, NY	Satellite	Agreed. Cosmos 44.
4	Laredo, TX	Insufficient data	Possibly Echo 2
4	Cleveland, OH	Advertising Aircraft	Agreed
4	Conway, NH	Satellites	Aircraft
4	Pittsburgh, PA	1. Meteor 2. Reflection	1. Reflection of city lights on clouds 2. Reflection of city lights on clouds
4	Ketchikan, AK	Meteor	Agreed
4	Pike County, MO	Helicopter	Case file missing
5	Corpus Christi, TX	Aircraft	Agreed. Note: Record card lists insufficient data. Summary sheet indicates aircraft.

5	Corpus Christi, TX	Cloud	Possible sun dog. Silver object visible for 3.5 hours, which slowly moved west and was visible until close to sunset (report completed three months after event).
5	Dayton, OH	Satellite	Agreed. Echo 2.
5	Dayton, OH	Star/Planet	Possibly Echo 2. Only visible for 15 minutes and moving north before disappearing. Object visible on several nights. Echo 2 made passes over area around the same time period over multiple nights.
5	Corpus Christi, TX	Stars/planets	Agreed. Probably Vega.
5	MI, MN, Ontario area	Meteor	Agreed
5	Cheyenne, WY	Insufficient data	Multiple sightings. First sighting at 1920 was probably Venus. Sighting at 2145 is confusing and sounds like sightings of four objects at 15 minute intervals traveling very fast. No duration listed but could be possible meteors. Sighting at 2220 was also confusing and was possibly an aircraft.
5	Tacoma, WA	Satellite	No bright satellite passes. Possible aircraft
6	Fairborn, OH	Insufficient data	Agreed. Phone call with very little information other than they saw a UFO. Witness could not be contacted.
6	Leon, NY	Refueling op	Agreed
6	Long Beach/Northport/E. Setauket, NY	1. Echo 2 2. Photo (no image)	1. Agreed. Echo 2. 2. Agreed.
6	Dayton, OH	Insufficient data	Agreed. Witness called BB but provided little information and never completed a form.
6	Indianapolis, IN	Aircraft	Possibly Echo 2 satellite.
6	Colorado Springs, CO	Satellite	Agreed. Echo 2.
6	Alice TX	Satellite	Agreed. Echo 2.
6	Laredo, TX	Meteor	Agreed
7	Alexandria, LA	Satellites	Conflicting data. Time listed as 1305-1315Z but described as "Night". 1305-1315Z is after sunrise.
7-9	Tonawanda, NY	Meteor	Agreed. 12-year old could not remember date but description is of a probable meteor.
7	SW Ohio area	Meteor	Agreed
7	Menlo Park, CA	Meteor	Agreed
7	Tempe, AZ	Aircraft	Agreed
9	Walpole, MA	Meteor	Agreed
9	Dayton, OH	Satellite	Agreed. Cosmos 44 Rocket Body.
9	Laredo, TX	Aircraft	Agreed
9	LA/Tustin, Cyprus/Alhambra, CA	Meteor	Agreed
11	Sauk Center, MN	Aircraft	Agreed
12	Corpus Christi, TX	Balloon	Agreed.
12	Chicago, IL	Insufficient data	Contrail
12	Odessa, TX	Meteor	Agreed
13	Dayton, OH	Meteor	Agreed
14	Lyons, KS	Insufficient data	Agreed. Very limited information in letter sent to BB.
14	Corpus Christi, TX	Stars/planets	Agreed. Probably Arcturus.
15	Pittsburgh, PA	Solar Image	Insufficient data. Time listed is inconsistent with reported time of day.

15	Renton, WA	Insufficient data	Agreed. Witness was 13-year old girl. No directional information.
15 or 16	Rolla, MO	Stars/Planets	Insufficient data. Witness could not decide on date (15th or 16th) or time (7:00 or 8:00). Duration of both sightings was missing. Initial observation was probably a satellite (Echo 2 made passes on both nights in the time frames given). The second observation may have been Arcturus.
16	Baltimore, MD	Aircraft	Agreed. (15-year old)
17	Pacific	Satellites	Agreed. Echo 1 and Pegasus 2
17	Kettering/Dayton, OH	Satellite	Agreed. Echo 2. (14-year old)
18	Vashon, WA	Insufficient data	Possible fireball meteor
19	Yokohama, Japan	Aircraft	Pegasus 2 Satellite
19	Corpus Christi, TX	Arcturus	Agreed
20	Far East	Sirius	Agreed
20	Winston-Salem, NC	Conflicting report	Possibly Cosmos 76
20	Lebanon/Lewisburg/Dayton, OH	Satellite	Agreed. Echo 2 and possibly Centaur rocket body. Witnesses gave conflicting information about the direction (One of them was 14). This may be because they were confused by the form or they also saw the Centaur Rocket low in the south.
20	St. Petersburg, FL	Aircraft	Agreed
20-21	Indianapolis, IN	Satellites	Agreed. Two observations described by witness in phone call. The sighting on the 20th was possibly Cosmos 76. The sighting on the 21st was probably Echo 2.
21	Kettering, OH	Venus	Agreed
21	Brownfield, TX	Satellite	Agreed. This has all the characteristics of the Echo pass that was visible one hour prior to the event. Since the amount of information on this case is from one source (a report written by Captain Logan on 1 Oct), the possibility exists that the time listed could be in error by an hour.
22	Clover, MN	Balloon	Agreed
22	Landis, NC	Aircraft	Possible fragmenting fireball meteor (15-year old)
22	Rio Vista, CA	Venus	Agreed
22	Dunkirk, NY	Stars/Planets	Agreed. Possibly Arcturus but no positional data to verify.
22	Silver Springs, MD	Aircraft	Agreed
23	Tacoma, WA	Venus	Agreed
23	Bellbrook, OH	Aircraft	Agreed
23	New Orleans, LA	Stars/planets	Agreed. Probably Capella
23	Portland/Salem/Corvallis, OR	Meteor	Agreed. Report listed the event lasting minutes but known meteor was visible and description matches that of meteor. Report also listed speed as being faster than a jet.
24	Whiteman AFB, MO	Satellite	Aircraft
24	Washington, DC	Birds	Agreed
24	Dayton, OH	Insufficient data	Agreed. Report by 8-year old to mother, who did not see event. Duration suggests possible meteor.
25	Okinawa	Aircraft	Agreed
25	Cogan Station, PA	Capella	Agreed
25	Chisholm, MN	UNIDENTIFIED	UNIDENTIFIED
25	Rodio, NM	UNIDENTIFIED	UNIDENTIFIED
26	Middletown, NY	Arcturus	Agreed
26	Chicago, IL	Aircraft	Agreed

26	Licking County, OH	Aircraft	Agreed
27	Swanlake, NY	Balloon	Agreed
27	Pacific	Insufficient data	Agreed. No duration given.
27	Uganda, Africa	Satellites	1. Possible aircraft. 2. Apollo module 3. Insufficient data (no time listed for observation)
27	Goshen, NY	Unreliable report	Possible aircraft. Witness listed as unreliable as to opinion about UFOs and government cover-up.
27	PA, WV, OH, MD	1. Meteor 2. Gourd	1. Agreed 2. Agreed (physical specimen provided by witness)
27	Kent, WA	Capella	Agreed
27	Ellenville, NY	Aircraft	Agreed
29	Carson City, NV	Missile	Agreed. Atlas D missile test.

October 1965

Date	Location	BB explanation	My evaluation
Oct	Oklahoma Reports		Insufficient information. This appears to be in reference to events in Oklahoma in late July/Early August. The main sighting was discussed in last issue. A local UFO investigator sent a 6 page letter outlining various sightings during that time period to BB. Many of these do not have specifics and are little more than highlights. I tried to look at all the sightings but many appeared to be stars, meteors, aircraft, and satellites. Others had too little information for analysis.
Oct	Houston Reports		See Addendum
Oct	Northern Hemisphere	Comet Ikeya-Seki	Agreed.
Oct	Clarksburg, WV	Jupiter	Insufficient data. Witness reported in March of 1966. They gave no date or positional data. First sighting in the morning. Second sighting in the evening.
Oct 27- Jun 66	Anderson AFB, Guam	False Targets	Agreed
1	Glacier National Park, MT	Satellite decay	Meteor
1	Los Angeles, CA	Satellite	Agreed. Possibly Echo 2 Rocket body (15-year old)
2	Dayton, OH	Aircraft	Agreed
2	Keno AFS, OR	1. Aircraft 2. Meteor	1. Agreed 2. Agreed
2	Dayton, OH	Aircraft	Agreed. (11-year old)
2	Houston, PA	Debris in wind	Agreed. Possible balloons blown by wind
2	Monroe, NY	Satellite	Agreed. Possibly Echo 1.
2	South San Gabriel, CA	Insufficient data	Agreed. No positional data. Information from a phone call.
3	Independence, KY	Venus	Agreed
3	Cannon AFB, NM	Arcturus	Agreed (Based on azimuth given by witness. I suspect that Venus was the real source because of the brilliance of the object reported but the data says otherwise)
3	Pacific	Aircraft	Agreed
4	Rolla, MO	Satellite	Agreed. Cosmos 70.
4	McSherrytown and Hanover, PA	Stars/Planets	Agreed. Characteristics of astronomical object. Report by youth but contained no positional data to establish which object.
5	Wayen, PA	Stars/Planets	Agreed. Characteristics of astronomical object. Report contained no positional data to establish which object.

5	Cupertino, CA	Missile	Agreed.
6	Pacific	Meteor	Agreed. Duration listed as 4 minutes but description is of a brief event. The four minutes may be due to the resultant ion trail left behind.
7	Century, WV	Insufficient data	Case file missing
7	Edwards AFB, CA	1. Stars planet 2. Balloon 3. Radar returns due to meteorological conditions.	1. Agreed. Witness was looking towards east and saw multiple objects, which faded around dawn. Jupiter, Capella, Procyon, Betelgeuse, Sirius, Aldebaran, Castor, and Pollux were all in the eastern sky. Because so many objects were reported and the positional data/times are limited, proper identification of which stars/planets were responsible is not possible. An officer came into the tower and looked at objects identified by tower operator and thought they were just stars. 2. Agreed. One sighting involved a balloon released from the base weather office. 3. Agreed. Most of the returns were erratic/random with no apparent track.
8	Manhattan, NY	Aircraft	Agreed
10	Taipei	Insufficient data	Agreed. Duration not listed.
10	Pacific	Insufficient data	Agreed. Witness reported two objects to Coast Guard. Both started in NNW. One going south and one going north. No duration given. Positional data minimal. Possible sighting of Echo 1 but unable to determine based on data available.
10	Huntsville, AL	Meteor	Agreed. This appears to be an observation of a daylight fireball.
10	Laredo, TX	Aircraft	Agreed
10	Miamisburg, OH	Aircraft	Echo satellite.
11	Chicago, IL	Aircraft	Agreed
12	Montgomery, NY	Helicopter	Agreed
13	Sceaux, France	Meteor	Aircraft
14	Over KI Sawyer AFB, MI	Venus	Agreed
14	New York, NY	Birds	Agreed
14	El Campo, TX	Aircraft	Agreed
14-19	Bexley, OH	Mars/Venus	Agreed. It is possible the red object next to the main object could have been Antares. Antares was slightly brighter.
15	Sunnyvale, CA	Meteor	Agreed
16	Churchville, NY	Not evaluated by BB but in Chicago folder.	Possible moon rise. Witness completed report in July 1966, which should classify as an unreliable report. Witness was in moving car and spotted object in direction of rising moon. Witness described object as a "semi-circle" with 8-10 spaces in the lower section. Moon was last quarter. While witness noted there was moonlight, they did not report objects location in relation to the moon, which would have been near the object.
16	Bexley, OH	Psychological	Possible meteor. Witness woke up at 3 AM and saw object move rapidly in the sky through her window.
17	Dayton, OH	Insufficient data	Possible aircraft
17	Dayton, OH	Stars/Planets	Conflicting data. One witness has object in West. The other has the object in the NE. Probably a star but cannot evaluate data without knowing which witness was more accurate.
18	Litchfield, NE	Balloon	Agreed

18	Corvallis, OR	Insufficient data	Agreed. Four different observers made different reports with details that were somewhat conflicting. It is possible they saw Jupiter through a gap in the clouds or that they saw an aircraft light. None of the observers filled out a sighting form.
19	Vero Beach, FL	Balloon	Agreed
20	Eastern US (Snow Hill, MD)	Balloon	Agreed
20	Baker, OR	Capella	Agreed
20	Tollamook, OR	Meteor	Agreed
21	Alamosa, CO	Meteor	Agreed
21	St. George, MN	Insufficient data	Agreed. Positional data missing/confusing. Witness implied he was looking north or northwest but description of object in relation to Venus and another star (probably Arcturus) implied he was looking west. Seen from moving car at times and other times car was stationary. Object's travel towards southeast was implied to be fast (speed estimate of 500 mph) but no duration given. Photograph was a copy and not original. It only showed a round light and no details. Exposure time and camera settings indicate a bright light source.
23	Alexander City, AL	Balloon	Agreed
23	Lone Prairie, MN	Psychological	Agreed. Witness reported seeing a rocket landed on the road, which caused his car to stop. There were small aliens that prevented him from approaching. They went back into rocket and it took off. There is a psychological aspect to this case but the actual source of the UFO may have been Venus setting.
23	Tacoma, WA	Venus	Agreed
24	Mollala, OR	Jupiter	Agreed
25	Dayton, OH	Venus	Agreed (16-year old)
25	Wheeling, WV	Unreliable report	Possibly Venus. Witness description appears to be distorted
25	Dayton, OH	Venus	Agreed
25	Luke AFB, AZ	1. Venus 2. Jupiter	1. Agreed 2. Agreed
27	Medway, OH	Jupiter	Agreed
27	Newton Center, MA	Balloon	Agreed
27	Colverdale, OH	Venus	Centaur Rocket Body.
28	Rolling Meadows, IL	Reflection from light source	Agreed. Witness only saw objects through windshield of car. Visible for only 30 seconds.
28	Miamisburg, OH	Venus	Agreed
28	Bayshore, NY	Aircraft	Agreed
29	West Milton, OH	Insufficient data	Agreed. Only information is memo for the record. No time listed and witness never returned report form.
29	Florissant, MO	Aircraft	Agreed
30	Rome, NY	Aircraft	Agreed
30	Overton, NV	Balloon	Agreed. Possibly research balloon launched from Chico, CA.
31	Amityville, NY	Venus	Agreed
31	Efland, NC	Capella	Agreed
31	Chicago, IL	Aircraft	Agreed

November 1965

Date	Location	BB explanation	My evaluation
Nov	Houston, TX		See Addendum

Mid Nov	Mexico	Reflections	Agreed. Slide showing spots that were not visible at the time the photographs were taken.
Nov	Cincinnati, OH	No evaluation but case file exists.	Insufficient data. Letter describing a sighting in November 1965. Letter was written in March of 1966 by 16-year old. At one point witness says sighting was at 7:30 AM and at end of letter, witness states it was 7:30 at night. Description lacking in specifics and without a date, cannot be evaluated.
1-15	Lake Erie, Canada	Venus	Agreed
2	Chicago, IL	Aircraft	Agreed
2	Rivergrove, IL	Advertising aircraft	Agreed
3	Belmont, IL	Venus	Agreed
3	Chicago, IL	Capella	Agreed
3	Union City, IN	Insufficient data	Agreed. Second hand report of 17-year old reporting to police officer. The only information was that there were three lights overhead with no noise.
3	Pacific	Meteor	Agreed
3-8	Sturgis, MI	Venus	Agreed
4	Middletown, OH	1. Aircraft 2. Unidentified	1. Agreed 2. Possibly Cosmos 54 rising and disappearing into earth's shadow.
4	Chicago, IL	Venus	Agreed
4	Des Plaines, IL	Advertising aircraft	Agreed
4	Dayton, OH	Aircraft	Agreed
5	Des Plaines, IL	Advertising aircraft	Agreed
5	Oxford, OH	Aircraft	Agreed
5	Bellingham, MA	1. Stars 2. Aircraft	1. Agreed (possibly Saturn) 2. Agreed
6	Park Meadows, PA	Aircraft	Agreed. 13 year old filled out form 2 months later.
7	Cape Hatteras Beach, NC	Sirius	Agreed
9	New York, NY	Insufficient data	Agreed. No direction given. This may have been Venus. Details are limited.
9	Dayton, OH	Venus	Agreed
9	Cleveland, OH	Aircraft	Agreed
9	Forestville, CT	Flares	Insufficient data. Witness suggested they looked like flares. No duration or direction of observation in letter to BB.
10	Chicago, IL	Advertising aircraft	Agreed
10	Barview, OR	Venus	Agreed. Weather conditions listed as overcast but object was low in west and witnesses stated it disappeared into clouds.
11	Anderson Creek, OR	Arcturus	Agreed
12	Chicago, IL	Aircraft	Agreed
12	Bull Creek, Pecos County, TX	Meteor	Agreed
12	Aberdeen, MD	1. Meteor 2. Metamorphic Rock	1. Agreed 2. Agreed
14	Middletown, OH	Venus	Agreed

14	Clinton, IN	Venus	Agreed
14	Iceland/Atlantic Ocean	Meteor	Agreed
15	Middletown, NY	Insufficient data	Vega (14 year old)
15	Brooksville, FL	Meteor	Agreed
15	Dunelin Causeway, FL	Chemical trails	Possible research balloon. Eglin rocket launches that produced chemical trails happened on following evening (16th). Ash Can Balloon launch from Goodfellow AFB on 11/14 was possible source.
15	Columbus, OH	Venus	Agreed
16	Neustadt, Germany	Missile/Rocket	Meteor
16	Pocatello, ID	Meteor	Agreed
16	Lutz, FL	Missile	Unreliable report. Witness was medicated for a toothache and saw objects. It is possible he saw 2 Echo passes but got directions and number of objects wrong.
16	Pacific	Insufficient data	Possible observations of Leonid meteor shower. The report is confusing because of the limited information provided. However, there are notes for the observation that give a track of the aircraft and resolve some of the questions about direction of observation. Aircraft reported six objects to SE moving left to right at "regular intervals" over an eight-minute time period. Leonid meteor shower active (1965 was a highly active Leonid meteor shower with Pacific observers reporting multiple fireballs being observed over short periods of time) and direction of travel originates back to Leonid meteor radiant that was rising in the east.
16	Dearborn, MO	Meteor	Agreed
17	Ellerbe, NC	Meteor Shower	Agreed. Observation of Leonid meteor shower.
17	Pacific	Missile	Meteor
17	Bedford, VA	Venus	Agreed
18	Buffalo, NY	Aircraft	Agreed. Description of vapor trails indicative of aircraft. 13 year old, who was not sure of date and only guessed at duration.
18	Bronx, NY	Birds	Agreed
18	Terrace Park, OH	Searchlights	Agreed.
18	Kathern, ND	Insufficient data	Possible meteor. Witness saw object for two seconds and saw it descend and return to original position. This could have been optical illusion created by short ion train left by meteor.
19	Indianapolis, IN	Aircraft	Agreed. Seen from moving vehicle giving illusion of erratic motion.
19	Garibaldi, OR	Lightning	Agreed
21	Jim Hogg County, TX	Aircraft	Agreed
25	Dallas, TX	Venus	Agreed
25	Tok Junction, AK	Flare	Possible meteor
26	Jonesboro, AR	Insufficient data	Agreed. The file only contains a letter with no positional data.
26	Phoenix, AZ	Birds	Agreed
27	Mt. Vernon, ME	Meteor	Agreed
29	Pacific	Meteor	ICBM test
30	Oak Park, IL	Meteor	Agreed

December 1965

Date	Location	BB explanation	My evaluation
Dec	LaCross, WI	Insufficient data	Agreed. No date.

1-15	Houston, TX		See Addendum
1	Caracas, Venezuela	Satellite	Agreed. Saturn Rocket Body.
1	Norwalk, OH	Venus	Agreed
2	Santiago, Chile	Meteor	Agreed
2	Santa Susana, CA	Venus	Agreed
4	Aberdeen, SD	Stars/Planets	Agreed. No specific values other than three objects in SE quadrant. Probably Rigel, Sirius, and Procyon.
6	Cutoff, LA	Balloon	Agreed. Possible Ashcan balloon launched from Goodfellow AFB on 12/5.
7	Evanston, IL	Aircraft	Agreed
7	Lanham, MD	Balloon	Agreed.
7	Oak Grove, OR	Venus	Agreed. No direction given but description is consistent with Venus seen at dusk.
7	Rockaway, OR	Insufficient data	Agreed. Lack of positional data and direction of travel.
8	Tangent, OR	Insufficient data	Agreed. No time listed. Witness sent letter to BB but no form completed.
9	Waterford, PA	Moon	Agreed
9	IN, OH, PA, MI, Canada	Meteor	Agreed. Kecksburg Meteor. See SUNlite 3-6.
11	Vandalia, OH	Aircraft	Agreed
11	Albany, OR	Satellite	Agreed. Echo 2.
11	Hawaii	Aircraft	Agreed
11	Caracas, Venezuela	Insufficient data	Conflicting data. Time listed as 1130Z but conditions listed as night.
12	Lansing, MI	Aircraft	Venus (12-year old)
15	Dayton, OH	Stars/Planets	Agreed. Lack of direction to identify which star/planet. Information came from phone call.
15	Oregon Area	Missile	Agreed. Minuteman launch from Vandenberg.
15	Luke AFB, AZ	Satellite Decay	Agreed
16	Pacific	Meteor	Agreed. Duration listed as 3 minutes refers to resultant ion trail.
16	Alaska/Pacific	Meteor	Agreed
17	Sabina, OH	Aircraft	Agreed
17	Whittier, CA	Insufficient data	Agreed. File contains letter, which lacks positional data. No form completed.
20	Lacomb, OR	Aircraft	Jupiter and moons viewed through binoculars.
21	Pacific	Meteor	Agreed
21	Putnam, CT	Aircraft	Agreed
27	Houma, LA	Venus	Possible moon. Report from 16-year old. Telex contains confusing directions (object first seen in NE and disappearing in SE or SW). Report form indicates object was not to SE or NE but SW. Venus had already set but crescent moon was visible in the SW setting. Witness did not recall if moon was visible even though they were looking in the direction of the moon.
28	Beavercreek, OH	Venus	Agreed
28	Newark, OH	Vega	Venus. Witness implied motion to NW (which is where Vega was located) but was in moving car and indicated object was mostly in the west.
29	Atlantic	Satellites	Agreed. Echo2 and Cosmos 44 Rocket Body.

Houston, TX September-December

This is a collection of 105 reports produced by Ellington AFB in Houston, Texas. They were all placed in one file and had to be separated in order to properly evaluate them.

Date	Location	BB explanation	My evaluation
1 Sep	LaPort, TX	Capella	Rigel
1 Sep	NW of Houston, TX	Venus	Agreed
1 Sep	N of Houston, TX	Echo 2	Agreed
1 Sep	E of Houston, TX	Echo 2	Agreed
1 Sep	NW of Houston, TX	Aircraft	Agreed
1 Sep	S of Houston, N of Lake Jackson, TX	Echo 2	Agreed
1 Sep	NE of Houston, TX	Echo 2	Agreed
2 Sep	N of Houston, TX	Venus	Agreed
2 Sep	N of Houston, TX	Echo 2	Agreed
2 Sep	Houston, TX	Satellite	Agreed. Cosmos 44 or Echo 2 Rocket body.
2 Sep	NE of Houston, TX	Echo 2	Agreed
2 Sep	NW of Jacinto City, TX	Arcturus	Agreed
3 Sep	N of Houston, TX	Venus	Agreed
3 Sep	S of Houston, TX	Echo 2	Agreed
3 Sep	S to N of Houston, TX	Echo 2	Agreed
3 Sep	W of Houston, TX	Echo 2	Agreed
4 Sep	S of Houston, TX	Echo 2	Agreed
4 Sep	SW of Houston, TX	Venus	Agreed
4 Sep	S of Houston, TX	Echo 2	Agreed
4 Sep	NE of Pasadena, TX	Capella	Agreed
4 Sep	Genoa, TX	Capella	Antares
4 Sep	SE of Houston, TX	Insufficient data	Possible aircraft (14-year old)
5 Sep	SW of Houston, TX	Misinterpretation of conventional objects	Agreed. Satellite Echo 2, Centaur RB, and Cosmos 44 RB. Possible aircraft involved. (15-year old)
5 Sep	W of Houston, TX	Echo 2	Agreed
5 Sep	N of Houston, TX	1. Echo 2 2. Aircraft 3. Star	1. Cosmos 44 2. Satellites Saturn RB and Apollo module 3. Probably Vega
5 Sep	S of Houston, TX	1. Echo 2 2. Aircraft	1. Cosmos 44 2. Agreed (12-year old)
5 Sep	W of Houston, TX	Arcturus	Agreed
6 Sep	E of Houston, TX	Aircraft	Agreed
6 Sep	Pasadena, TX	Stars and Aircraft	Probably Saturn (13-year old)
6 Sep	Texas area	Stars	Agreed. Probably Vega, Antares, Arcturus, and Saturn.
6 Sep	Texas area	Possible meteor	Conflicting data. Witness refers to instantaneous motion but then listed duration as 3 minutes. (9-year old)
7 Sep	E of Houston, TX	Insufficient data	Possibly Saturn

7 Sep	E of Pasadena, TX	Echo 2	Agreed
8 Sep	Jacinto, TX	Echo 2	Agreed
9 Sep	Houston, TX	Echo 2	Agreed
9 Sep	NE of Houston, TX	Echo 2	Agreed
9 Sep	N of Houston, TX	1. Echo 2 2. Aircraft	1. Agreed 2. Apollo module
9 Sep	SW of Houston, TX (144)	Arcturus	Agreed
10 Sep	W of Houston, TX	Arcturus	Agreed
11 Sep	S of Houston, TX	Venus	Echo 2
12 Sep	W of Houston, TX	Venus	Agreed
12 Sep	SE of Houston, TX	Aircraft	Agreed
12 Sep	SW of Bellaire, TX	Echo 2	Agreed
10 Sep	S. of Pasadena, TX	Star/Planet	Agreed. Probably Antares.
12 Sep	NW of Houston, TX	Insufficient data	Venus (10-year old)
12 Sep	N of Houston, TX	Jupiter	Capella
13 Sep	SW of Houston, TX	Balloon	Agreed
13 Sep	S of Houston, TX	Probable Aircraft	Agreed
13 Sep	NW of Houston, TX	Probable Aircraft	Agreed
13 Sep	N of Pasaadera, TX	Possible Satellite	Agreed. Pegasus 2
13 Sep	NW of Houston, TX	Arcturus	Venus
14 Sep	SW of Houston, TX	Echo 2	3 objects reported. Echo 1, Cosmos 44, and Pegasus 2 all made passes. Echo 2 not visible yet.
14 Sep	N of Houston, TX	Echo 2	Agreed
14 Sep	E of Houston, TX	Star/Planet	Agreed. Probably Saturn.
14 Sep	N of Houston, TX	Insufficient data	Agreed. No positional data. Probably a scintillating star.
15 Sep	W of Jacinto City, TX	Echo 2	Agreed
15 Sep	Lake Charles, LA	Echo 2	Agreed
15 Sep	Lake Charles, LA	Aircraft	Insufficient information. No duration. Only information appears to be moving at a high rate of speed from East to West.
15 Sep	NE of Galera Park, TX	Aircraft	Agreed
14 Sep	NE of Houston, TX	Capella	Altair
16 Sep	SW of Freeway, TX	Insufficient data	Echo 2
16 Sep	NW of Houston, TX	Meteor	Agreed
16 Sep	S of Houston, TX	Meteor	Agreed
16 Sep		Meteor	Agreed
16 Sep	Houston, TX	Meteor	Agreed
17 Sep	SE of Houston, TX	Aircraft	Agreed
17 Sep	E of Houston, TX	Probable Satellite	Agreed. Pegasus 2.
18 Sep	SW of Houston, TX	Echo 1	Agreed
19 Sep	SW of Houston, TX	Venus	Agreed
19 Sep	SW of Houston, TX	Insufficient data	Conflicting data. Witness mentions object moving west to east but then indicates the objects are stationary.
19 Sep	SW of Houston, TX	Star/Planet	Echo 1
7 Oct	Houston, TX	Probable Aircraft	Possible meteor (around same time as cases 179 and 180 below)
7 Oct	Houston, TX	Meteor	Agreed

7 Oct	South Houston, TX	Meteor	Agreed
10 Oct	S of Houston, TX	Birds, insects, or debris	Agreed. Probably birds. (18-year old)
10 Oct	SW of Houston, TX	Venus	Agreed
10 Oct	SW of Houston, TX	Venus	Agreed (16-year old)
10 Oct	Houston, TX	Aircraft	Agreed
13 Oct	W of Houston, TX	Aircraft	Agreed
13 Oct	SW of Houston, TX	Capella	Agreed
17 Oct	Houston, TX	Possible Satellite	Agreed. Echo 1.
19 Oct	SW of Spring Branch, TX	Venus	Agreed
20 Oct	S of Houston, TX	Venus	Agreed
20 Oct	S of Houston, TX	Aircraft	Possible meteor
20 Oct	W of Houston, TX	Venus	Echo 1
23 Oct	Houston International Airport	Satellite	Agreed. Echo 1.
23 Oct	N of Houston, TX	Satellite	Witness may have been describing two satellites. Overhead was Echo 1. To the northeast was possibly Cosmos 76.
23 Oct	E of Pasadena, TX	Aircraft or Meteor	Possible meteor
26 Oct	S of Houston, TX	Venus	Agreed
31 Oct	SE of Houston, TX (196)	Ground light	Possibly Rigel
1 Nov	SE of Houston, TX (197)	Star/Planet	Saturn
2 Nov	SW of Houston, TX	Aircraft	Agreed
7 Nov	ESE of Cleveland, TX	Sirius	Agreed
22 Nov	SSW of Spring Branch, TX	Venus	Agreed
24 Nov	W of Houston, TX	Venus	Agreed
30 Nov	E of South Houston, TX (202)	Insufficient data	Possible aircraft
4 Dec	Big Dipper, TX (203)	Star/planet	Agreed. (16-year old). General location to the east given. Possibly Sirius.
5 Dec	N of Houston, TX	Star/planet	Agreed. Probably Vega and constellation of Lyra.
4 Dec	Wimberley, TX (205)	Venus	Agreed
6 Dec	Idlewood, TX	Venus	Agreed
9 Dec	League City, TX	Meteor	Agreed
10 Dec	N. of Houston, TX	Meteor	Agreed
12 Dec	SW of Houston, TX	Birds	Agreed
13 Dec	Conroe, TX	Aircraft or Satellite	Agreed. Echo 2 if time is off by 30 minutes. Otherwise aircraft.

Reclassification

I evaluated 356 cases in the Blue Book files from July through December 1964. In my opinion, 75 were improperly classified (about 21%). 15 (about 4% of the total number of cases/20% of the reclassifications) of these were originally listed as "insufficient information". This table describes these cases and how I felt they should have been classified.

Date	Location	Reclassification	Reason
Sep	Rehoboth, MA	Misinterpretation of conventional objects	Insufficient data. No date given. Possible meteor sighting.
1	Yellow Springs, OH	Satellite	Aircraft. Echo 2 made pass at time in question but witness reported object going in opposite direction.
1 Sep	LaPort, TX	Capella	Rigel
4	Laredo, TX	Insufficient data	Possibly Echo 2

4	Conway, NH	Satellites	Aircraft
4	Pittsburgh, PA	1. Meteor 2. Reflection	1. Reflection of city lights on clouds 2. Reflection of city lights on clouds
4 Sep	SE of Houston, TX	Insufficient data	Possible aircraft (14-year old)
5	Corpus Christi, TX	Cloud	Possible sun dog. Silver object visible for 3.5 hours, which slowly moved west and was visible until close to sunset (report completed three months after event).
5	Dayton, OH	Star/Planet	Possibly Echo 2. Only visible for 15 minutes and moving north before disappearing. Object visible on several nights. Echo 2 made passes over area around the same time period over multiple nights.
5	Cheyenne, WY	Insufficient data	Multiple sightings. First sighting at 1920 was probably Venus. Sighting at 2145 is confusing and sounds like sightings of four objects at 15 minute intervals traveling very fast. No duration listed but could be possible meteors. Sighting at 2220 was also confusing and was possibly an aircraft.
5	Tacoma, WA	Satellite	No bright satellite passes. Possible aircraft
5 Sep	N of Houston, TX	1. Echo 2 2. Aircraft 3. Star	1. Cosmos 44 2. Satellites Saturn RB and Apollo module 3. Probably Vega
5 Sep	S of Houston, TX	1. Echo 2 2. Aircraft	1. Cosmos 44 2. Agreed (12-year old)
6	Indianapolis, IN	Aircraft	Possibly Echo 2 satellite.
6 Sep	Pasadena, TX	Stars and Aircraft	Probably Saturn (13-year old)
6 Sep	Texas area	Possible meteor	Conflicting data. Witness refers to instantaneous motion but then listed duration as 3 minutes. (9-year old)
7	Alexandria, LA	Satellites	Conflicting data. Time listed as 1305-1315Z but described as "Night". 1305-1315Z is after sunrise.
7 Sep	E of Houston, TX	Insufficient data	Possibly Saturn
9 Sep	N of Houston, TX	1. Echo 2 2. Aircraft	1. Agreed 2. Apollo module
11 Sep	S of Houston, TX	Venus	Echo 2
12	Chicago, IL	Insufficient data	Contrail
12 Sep	NW of Houston, TX	Insufficient data	Venus (10-year old)
12 Sep	N of Houston, TX	Jupiter	Capella
14 Sep	SW of Houston, TX	Echo 2	3 objects reported. Echo 1, Cosmos 44, and Pegasus 2 all made passes. Echo 2 not visible yet.
15	Pittsburgh, PA	Solar Image	Insufficient data. Time listed is inconsistent with reported time of day.
15 or 16	Rolla, MO	Stars/Planets	Insufficient data. Witness could not decide on date (15th or 16th) or time (7:00 or 8:00). Duration of both sightings was missing. Initial observation was probably a satellite (Echo 2 made passes on both nights in the time frames given). The second observation may have been Arcturus.
15 Sep	Lake Charles, LA	Aircraft	Insufficient information. No duration. Only information appears to be moving at a high rate of speed from East to West.
14 Sep	NE of Houston, TX	Capella	Altair
16 Sep	SW of Freeway, TX	Insufficient data	Echo 2

18	Vashon, WA	Insufficient data	Possible fireball meteor
19	Yokohama, Japan	Aircraft	Pegasus 2 Satellite
19 Sep	SW of Houston, TX	Insufficient data	Conflicting data. Witness mentions object moving west to east but then indicates the objects are stationary.
19 Sep	SW of Houston, TX	Star/Planet	Echo 1
20	Winston-Salem, NC	Conflicting report	Possibly Cosmos 76
22	Landis, NC	Aircraft	Possible fragmenting fireball meteor (15-year old)
24	Whiteman AFB, MO	Satellite	Aircraft
27	Uganda, Africa	Satellites	1. Possible aircraft. 2. Apollo module 3. Insufficient data (no time listed for observation)
27	Goshen, NY	Unreliable report	Possible aircraft. Witness listed as unreliable as to opinion about UFOs and government cover-up.
Oct	Clarksburg, WV	Jupiter	Insufficient data. Witness reported in March of 1966. They gave no date or positional data. First sighting in the morning. Second sighting in the evening.
1	Glacier National Park, MT	Satellite decay	Meteor
7 Oct	Houston, TX	Probable Aircraft	Possible meteor (around same time as cases 179 and 180 below)
10	Miamisburg, OH	Aircraft	Echo satellite.
13	Sceaux, France	Meteor	Aircraft
16	Churchville, NY	Not evaluated by BB but in Chicago folder.	Possible moon rise. Witness completed report in July 1966, which should classify as an unreliable report. Witness was in moving car and spotted object in direction of rising moon. Witness described object as a "semi-circle" with 8-10 spaces in the lower section. Moon was last quarter. While witness noted there was moonlight, they did not report objects location in relation to the moon, which would have been near the object.
16	Bexley, OH	Psychological	Possible meteor. Witness woke up at 3 AM and saw object move rapidly in the sky through her window.
17	Dayton, OH	Insufficient data	Possible aircraft
17	Dayton, OH	Stars/Planets	Conflicting data. One witness has object in West. The other has the object in the NE. Probably a star but cannot evaluate data without knowing which witness was more accurate.
20 Oct	S of Houston, TX	Aircraft	Possible meteor
20 Oct	W of Houston, TX	Venus	Echo 1
23 Oct	N of Houston, TX	Satellite	Witness may have been describing two satellites. Overhead was Echo 1. To the northeast was possibly Cosmos 76.
23 Oct	E of Pasadena, TX	Aircraft or Meteor	Possible meteor
31 Oct	SE of Houston, TX (196)	Ground light	Possibly Rigel
25	Wheeling, WV	Unreliable report	Possibly Venus. Witness description appears to be distorted
26 Oct	S of Houston, TX	Venus	Agreed
27	Colverdale, OH	Venus	Centaur Rocket Body.
31 Oct	SE of Houston, TX (196)	Ground light	Possibly Rigel
Nov	Cincinnati, OH	No evaluation but case file exists.	Insufficient data. Letter describing a sighting in November 1965. Letter was written in March of 1966 by 16-year old. At one point witness says sighting was at 7:30 AM and at end of letter, witness states it was 7:30 at night. Description lacking in specifics and without a date, cannot be evaluated.
1 Nov	SE of Houston, TX (197)	Star/Planet	Saturn

4	Middletown, OH	1. Aircraft 2. Unidentified	1. Agreed 2. Possibly Cosmos 54 rising and disappearing into earth's shadow.
9	Forestville, CT	Flares	Insufficient data. Witness suggested they looked like flares. No duration or direction of observation in letter to BB.
15	Middletown, NY	Insufficient data	Vega (14 year old)
15	Dunelin Causway, FL	Chemical trails	Possible research balloon. Eglin rocket launches that produced chemical trails happened on following evening (16th). Ash Can Balloon launch from Goodfellow AFB on 11/14 was possible source.
16	Neustadt, Germany	Missile/Rocket	Meteor
16	Lutz, FL	Missile	Unreliable report. Witness was medicated for a toothache and saw objects. It is possible he saw 2 Echo passes but got directions and number of objects wrong.
16	Pacific	Insufficient data	Possible observations of Leonid meteor shower. The report is confusing because of the limited information provided. However, there are notes for the observation that give a track of the aircraft and resolve some of the questions about direction of observation. Aircraft reported six objects to SE moving left to right at "regular intervals" over an eight-minute time period. Leonid meteor shower active (1965 was a highly active Leonid meteor shower with Pacific observers reporting multiple fireballs being observed over short periods of time) and direction of travel originates back to Leonid meteor radiant that was rising in the east.
17	Pacific	Missile	Meteor
18	Kathern, ND	Insufficient data	Possible meteor. Witness saw object for two seconds and saw it descend and return to original position. This could have been optical illusion created by short ion train left by meteor.
25	Tok Junction, AK	Flare	Possible meteor
29	Pacific	Meteor	ICBM test
30 Nov	E of South Houston, TX (202)	Insufficient data	Possible aircraft
11	Caracas, Venezuela	Insufficient data	Conflicting data. Time listed as 1130Z but conditions listed as night.
12	Lansing, MI	Aircraft	Venus (12-year old)
20	Lacomb, OR	Aircraft	Jupiter and moons viewed through binoculars.
27	Houma, LA	Venus	Possible moon. Report from 16-year old. Telex contains confusing directions (object first seen in NE and disappearing in SE or SW). Report form indicates object was not to SE or NE but SW. Venus had already set but crescent moon was visible in the SW setting. Witness did not recall if moon was visible even though they were looking in the direction of the moon.
28	Newark, OH	Vega	Venus. Witness implied motion to NW (which is where Vega was located) but was in moving car and indicated object was mostly in the west.

Summary

This time period was almost as trying as the July-August time frame. Like last review, Ellington AFB in Houston collected a mass of reports that had to be addressed separately. There was also the "Oklahoma case file" that did not exist the way the Ellington case file did. The file was apparently based on an October letter from a UFO group that listed a bunch of sightings from August of 1965. After trying to spend a significant amount of time figuring out these sightings, I chose to label them as insufficient information since the listing of sightings without specific details makes it hard to analyze them. At first glance, they appeared to be identifiable as stars, aircraft, satellites, meteors, and other known objects. However, there really was not enough information to identify them properly.

There were some interesting/puzzling cases. The most interesting was the St. George Minnesota case (21 October) but the witness' description of the event is inadequate for evaluation. The photograph, while interesting, only shows a bright light source. You can't tell much more than that. Had the witness filled out the sighting form, one could probably have made a proper evaluation. Unfortunately, they did not and I had to leave it as insufficient information.

F.E. Warren AFB in Wyoming produced another practically useless UFO report that contained multiple sightings and very little in the way of details. While I presented potential solutions for that entry, I believe that it could have been easier to analyze them if the base UFO officer did his job properly. No UFO sighting forms were completed (or at least not submitted to BB) and the only thing presented was a two page summary and some maps (all of which were poorly copied).

Satellites continue to be a major contribution to the IFO list in all these cases. I counted sixty-four satellite explanations. That is almost 18% of the total number of cases evaluated. As usual, Echo and Echo 2 were the biggest contributors.

Next review, I will be covering the first four months of 1966.

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