



SUNlite

Shedding some light on UFOlogy and UFOs

Many writers in our culture, from fanatics to hypocrites to sincere reporters, are not after all, committed to complete investigation and understanding of the subject, but to telling and selling a good story. Unfortunately, there is a selection effect: If a "flying saucer" story is investigated too completely and is found to be a misperception or hoax, its interest and sales value are reduced.

Dr. William Hartman

Volume 8 Number 4

July-August 2016



Holding the door

For the non-Game of thrones fan, this statement means nothing and I need to explain. This phrase appears in the program's episode called "The Door" and is the request given to a man (called "Hodor") to hold a door shut against a small army of "undead creatures" trying to kill him and his companions. As the undead creatures were breaking through and ripping the hero to shreds, his companions were allowed to escape. How many UFO proponents have stepped up and tried to "hold the door" against the craziness in UFOlogy? Skeptics are famous for trying to "hold the door" and demand better evidence but the number of "Hodors" in UFOlogy seems to be very low. Just look at some of the speakers and promoters that frequent the UFO conference circuit. While some are respectable, many represent the worst side of UFOlogy. It is mostly about entertainment and money. This means UFOlogy is just a business and not science. Even MUFON, which prides itself on "scientifically studying UFOs for the benefit of humanity", is more interested in business than science. They slapped their name on the "Hanger one" series because they were more interested in entertainment and money. The program paraded all sorts of wild tales in front of the camera and disguised them as facts. "Hanger one" was a farce and there are quite a few proponents, who recognized this but allowed it to happen anyway. When UFOlogical Hodors decide to take a stand and stop speaking at or attending these carnivals, then there might be some progress.

In May, I got a strange envelope in the mail. In it was the last issue of Saucer Smear. Was James Moseley speaking from the grave? I don't think so. A few years ago, one of Moseley's family had contacted me stating they wanted some money to send out the last issue. I gladly sent some money (I think it was \$10) but never received anything. I assumed that something happened to that individual so I was surprised to finally see the issue arrive. It contains most of the same stuff that Moseley was famous for. It was written in 2012 so the news is very old. For those readers who might be interested, I can provide a pdf via e-mail.

This issue contains some contributions by two individuals. I think readers will find Bob Bixler's take on the Puerto Rico UFO video interesting. While Mr. Bixler had this document posted on the Internet for six months, it only recently came to the attention of the PRRR. He was more than willing to allow me to publish the article here. The other contribution is from Roger Paquay concerning the Belgium UFO wave. While it is a brief, it is informative.

Finally, NARCAP has started issuing UFO challenges on Facebook. Apparently, it is meant to dare skeptics to explain their selected cases. Trying to explain one of these cases has been very frustrating because NARCAP's report was so poorly organized and they would not present any of the raw data to be examined. What we did discover was that NARCAP's conclusions ignored some obvious possibilities and got some facts/information wrong. Where have we seen that before?

Front: The Skylab 3 UFO is the subject of one of the articles in this issue. Thanks to James Oberg, I decided to look a little closer at some of the claims made about this UFO case. It seems that certain aspects of the case have been ignored by the case's promoters.

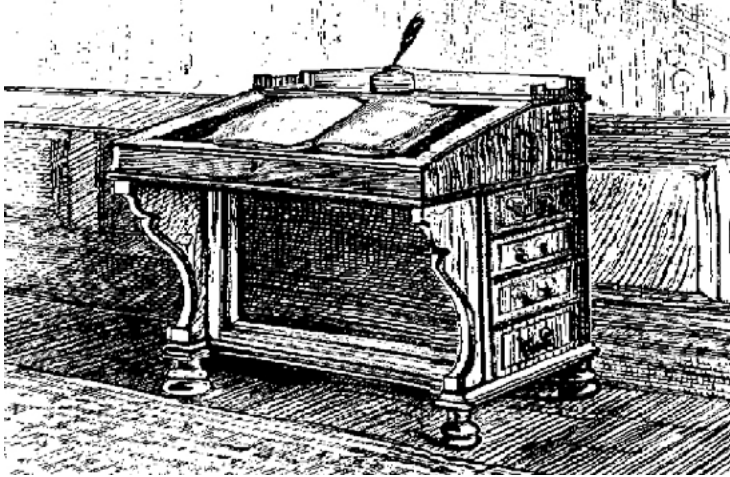
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HAPPY UFO DAY FOR ALL OF SUNLITE'S READERS!

Who's blogging UFOs?

Hot topics and varied opinions



James Oberg presented us with an interesting explanation for a series of sightings in northern China on June 18, 1982. After extensive research, he determined that a probable source was Kosmos 1379 conducting a "killer satellite" test.

Robert Sheaffer posted a book review of David Jacobs latest publication. In my opinion, Dr. Jacobs is a soul lost in his own little world of alien abductions and conspiracies. Does anybody in UFOlogy consider his present theories about alien hybrids plausible?

Ex-Astronaut Tom Jones says he does not believe in UFOs anymore. Jones states that, at one time, he was a UFO believer but his experience with NASA, and elsewhere, has turned him into a skeptic. Sounds like quite a few individuals I have met over the years.

The alien cosmic expo was another attempt at legitimizing UFO research. The organizers propped up the usual UFO

experts to present the evidence. I expected Stanton Friedman but the others had me wondering. Richard Dolan has sold his soul by appearing on Hanger 1 and making stupid statements during the "BeWitness" debacle. The rest of the group included more publicity hounds like Grant Cameron, Paul Hellyer, Steven Bassett, Nick Pope, and Grant Cameron. They even added abductee Travis Walton to the mix. All of these individuals were probably paid handsomely for their time. What was more funny was this line, "We are looking for skeptical yet open-minded journalists and academics to participate on a panel asking tough questions of some of the leading experts in the field of extra-terrestrials." In other words, they did not want to pay to have some real skeptics grill their experts so they hoped to get somebody from the media to toss softballs for free.

Gilles Fernandez put the 1965 Tulsa, Oklahoma UFO photograph under the spotlight. An important item that he discovered was that the painting "The red poet" by Clovis Trouille was not the source of the image. In SUNlite 7-2, I had mentioned that Tim Beckley reported that this 1949 painting had contained an exact replica of the UFO photograph taken in 1965. Little did I know that the artist tended to update his paintings every so often. RSRG member "Nablator" managed to examine a catalogue of the artists work from 1965. "The red poet" is there but it contained no UFO in the image. This means that, after seeing the image in magazines, Trouille apparently added the UFO to his painting. Gilles also discovered that two other paintings contained the UFO image. While Gilles makes a case for this still being a hoax, it is now clear that the source of the hoax image is not "The red poet".

This article about an ex-US Navy third class radioman telling alien stories amused me. Of course, he is anonymous and, of course, his career was quite colorful. This included a stint with the US Navy Seals and US Army. After being referred to as a "Naval officer", the gentleman claimed to have seen dozens of documents proving that aliens visited the earth. He also had access to Rendlesham documentation, which was a focus of the story. As an ex-USN veteran, I consider this story highly dubious. While Radiomen have access to classified information, third class petty officers (an E-4) usually do not have access to documents that are not part of their duties. Like all other classified documents, it is a case of a "need to know". Why would a very low ranking enlisted man have access to documents involving the discovery that UFOs were piloted alien spaceships? With MUFON becoming involved, I am sure it will be promoted heavily as a true story. In my opinion, the instant this person claimed to have being involved with Seals and the Army, warning flags should have been raised. He is probably just another UFO charlatan unless he can demonstrate that his claims are true.

Robert Sheaffer allowed Dan Plazak to write an article about Silas Newton's foray into the oil business. It turns out that Newton was not a very good oil explorer and he was not a very good businessman. Mr. Plazak is a Denver geologist, who presented the case against Newton with plenty of documentation and pointed out that Frank Scully's book was nothing more than an exaggeration at best.

Kevin Randle took time off from Roswell to write about the Mantell incident. He points out that there are a lot of things wrong with the narrative given by Ruppelt and some other UFO writers. Randle wrote a report over a decade ago concluding the object was a balloon (and later sightings after sunset were Venus). There are still those, who believe that it was not a skyhook balloon but most of their arguments are based on how they interpret the data. The Skyhook balloon seems to be the best explanation for what Mantell died chasing.

Paul Dean wrote about how the military used the OPREP3 system to file UFO reports. From this evidence, he implies that this was some sort of reporting channel used by the military to study/evaluate UFO reports without the civilian population being aware of it. He is correct that the military has used the OPREP3 reporting system to log UFO reports but his conclusions appear to be biased by his own beliefs that the US government continues to study UFOs. The OPREP3 system is a method by which military com-

Who's blogging UFOs? (Cont'd)

mands rapidly inform the upper chain of command of events that have occurred, which are significant and may involve negative media attention. This includes anything ranging from incidents involving nuclear weapons to personnel being arrested for drunk and disorderly. If somebody reports UFOs at a military base, the upper chain needs to be informed especially if the media is aware of it. What Dean does not seem to mention is that, in all of these OPREP3 reports, there seems to be little interest by the chain of command in investigating them. Any investigation was probably local with little being learned about them otherwise there would be more messages being transmitted. To add to his conspiracy viewpoint, Dean proclaimed, *Researchers are well aware that the Secretary of the USAF, Robert C. Seamans, Jr, famously announced, on the 17th of December, 1969, that no US military agency will continue the reporting, or receiving of reports, of UFO events....* I think his interpretation of the press release is inaccurate. From what I have read, it only announced that Blue Book would cease collecting and investigating UFO reports. It did not say that commands would not report events to the upper chain of command that might represent potential incursions into US (or military) air space by unknown aircraft. One can call them UFOs, unknown helicopters, flying monkeys, or something else. It is just common sense that the military would show interest until it was determined that they were, or were not, a threat. What Dean fails to prove is that there is a central organization that is investigating these UFO reports. As a result, the point of his articles appears to be speculation based on a desire to believe in a "cosmic watergate" of some kind.

Dean followed up his reporting about OPREP-3s with a third installment. His major point in that article was a quote from a Dr. Armen Victorian, who was told by the Office of the secretary of defense that *"OPREP-3 reports containing information relating to unknown objects near US military installations are considered extremely sensitive, and thus not releasable"*. Dean does not present the source of this information other than stating that a colleague saw the document twenty years ago, which brings into question the reliability of the source. In a private e-mail, Dr. David Clarke pointed out that Dr. Victorian is not the individual's real name, which is Habib Azadehdel. He has had a "checkered past" and we do not even know if the document was authentic. At best, the quote is hearsay. At worst, it could have been a fraudulent document. That being said, I am not sure what context the statement was made. What is an "unknown object"? Are we discussing unidentified aircraft? If that was the case, one would think the military would be "sensitive" about incursions into their air space. However, the second half of the statement about them being "not releasable" is false because Dean presents us with OPREP-3s that were released regarding such events. That, in itself, should bring into question the "Dr. Victorian document" that Dean is presenting as something significant.

Jack Brewer exposed George Filer's use of a George H. W. Bush quote about UFOs as being poorly researched. Filer simply copied the quote from a web site, which got the story from a web site that publishes satirical and fictional stories. They even state this on their web page. Jack did us a favor but I don't think that Filer will correct the mistake. Various UFO groups and bloggers will repeat the quote from "Filer's files" as if it were factual.

Exopolitics guru, Victor Viggiani decided to reveal that he had acquired many declassified NORAD documents that conclusively showed that NORAD tracked and attempted to intercept "unknown targets". My first thought about this was, "Wow! Mr. Viggiani has found evidence that NORAD is doing their J-O-B!" After looking at what has been presented so far, I see nothing that indicates that what was tracked or observed was anything exotic. Some UFO proponents seem to think that the USAF/NORAD had to stop performing one of their primary functions (monitoring and defending US Air Space against potentially hostile aircraft) the instant they closed Blue Book because they are not supposed to investigate "unidentified targets". The real truth is that the end of Blue Book meant that the USAF simply stopped collecting and investigating UFO reports. They did not stop investigating unidentified aircraft that might present a threat.

I think Curt Collins made the most profound statement when discussing this revelation within a Facebook group:

The best goldstrike ufology ever hit was Government documents. It's a win every time. If there's an ambiguous term, it's proof. If something is blacked out, it's proof. If there is NO document released, it's proof of a multinational truth embargo, a veritable Cosmic Watergate!

To me, this sums up many of the attitudes in UFOlogy. Various individuals in UFOlogy have wildly speculated about released documents in the past and they always have a conspiracy tone to them. Of course, this is what Exopolitics is all about. It might play well for the UFO crowd but, outside of that circle, it appears that they are just a bunch of crackpots.

Gilles Fernandez took a closer look at the Ruwa, Zimbabwe school yard sighting case. According to UFOlogical history, there were sixty, or more, children (ages 5-12), who saw the UFO land in the woods near the school. Strangely, no adults saw this landing occur, which makes one wonder about the story as told. Gilles points out that the investigators of the case, who had a strong interest in UFO reports, had a tendency to prime the children to say what they wanted them to say. The event happened just a few days after a mass sighting over South Africa that was later explained to be the Cosmos 2290 rocket. Is it possible that the publicity surrounding that event might have got some of the children thinking about UFOs? In the interviews on Gilles' entry, some of the children use the word UFO indicating they are aware of the acronym and its meaning to most people (aka alien spaceships).

The Roswell Corner

The Roswell slides debacle turns one with no surrender in sight

Jaimie Maussan celebrated the one year anniversary of the Roswell slide reveal with a special program where he continues to proclaim that the body in the image is not a mummy. In that video, he admitted that he paid Anthony Bragalia \$5000 for finding the evidence about the mummy that was at Mesa Verde. This sort of came as a surprise to Shepherd Johnson, who filed the FOIA that released the documents. One wonders if Mr. Bragalia even considered giving credit (and part of the reward) to Johnson or the Hadl's, who had a slide showing the mummy when it was at Montezuma's castle in the 1950s. Maybe he donated the entire sum to the "American Indian children's charity", which he stated he would contribute to back in May of 2015. Then again, he may have simply pocketed the money as compensation for wasting his life away foolishly defending the slides for several years.

Speaking of looking like a fool, Maussan continues to present the opinions of Rios and Zalce as the final word on the Roswell slides. The problem with these two individuals is that they are a pair of overzealous promoters, who are afraid to admit they are wrong. When Rios tried to defend his case in a forum of skeptics, he refused to explain anything and simply cut and pasted images from his blog. It indicated he could not defend his arguments and he flat out refused to enter a debate on how they determined the length of the body. Skeptics attempted to demonstrate he ignored the problems of perspective when making the measurements. When his arguments for this measurement failed, he left the forum.

The same video has Tom Carey stating he is "puzzled" about how the slide could be deblurred by the RSRG and not by his experts. He ignores the possibility that his experts were not properly motivated to deblur the placard. If they wanted the slide to be an alien body, the last thing they wanted to do is discover that placard said it was something else. The same could be said for the experts used by Maussan and Carey to identify the body. They all said it can't be a mummy and it is 3.5 to 4 feet tall. Careful examination of the image indicates the body is smaller than that but those measuring the body don't understand the rules of perspective. The same can be said for the experts he relies upon. Carey added that Richard Dobles was the best Anthropologist he ever met. He must have not met many anthropologists because Dobles record as an anthropologist is very limited. There is nothing in his resume' to indicate that he is a premier expert in his field.

Some people simply made their stories up?

Kevin Randle points out that the testimony of Jack Towbridge was unreliable and probably fabricated. When Christopher Allen commented about how witness testimony had become contaminated by the Roswell story becoming widely known, Kevin Randle responded with

But we know that some people embellished their tales, some tried to tell us the truth as they best remembered it, and some just made it the hell up.

Ouch! That one statement says a lot. One has to wonder how many people either embellished their stories or simply made them up.

Howard McCoy and Roswell

Kevin also decided to discuss the impact of Colonel Howard McCoy's statements in Secret correspondence that indicated he knew nothing about Roswell. The conflict is that McCoy should have known about Roswell since he was at the location, where the debris was supposedly being examined. Randle correctly points out that McCoy never considered the possibility that the public was going to be able to see these memos and letters. Therefore, McCoy was being honest and not trying to conceal his knowledge about the fact that UFOs were alien spaceships. The comments in Randle's blog presented us with excellent examples of the conspiracy mindset that is Crashology. The main argument was that the Roswell crash was so secret that nobody (including Presidents and high ranking officers) knew anything, and that those that did, could never mention it in any correspondence. Of course, it did not prevent privates, sergeants, secretaries, and low ranking officers from becoming involved or having knowledge of what transpired. In some cases, they freely exchanged that information with others without concern for any "death threats" for revealing such information. It appears that certain people have invested themselves in the Roswell myth so much that they can convince themselves of anything based purely on speculation.

Wanted: Dead or alive - The Ramey Memo reward

Somebody is offering \$10,000 for an accurate reading of the Ramey document. I am not sure what standards will apply to determine if the memo is "read" correctly. In my opinion, the only way to determine if it has been correctly read is to have experts, outside of UFOlogy (both pro and con), agreeing with the conclusions. I doubt the technology exists, or will exist, that allows an accurate reading of the document but anything is possible. I am not going to hold my breath on this one.

Puerto Rico UFO video update

The Scientific Coalition for UFOlogy (SCU) stated they were going to release an updated report to address issues raised in SUNlite and elsewhere on February 1. Five months have passed and the SCU team has spent a lot of time on air and in conferences discussing the case but they still have yet to get around to addressing the questions raised. The SCU still won't even publicly admit that certain mistakes were made in their original paper or address Lance Moody's simulation of a balloon matching what was seen in the video. This brings into question the SCU's version of "peer review". The mistakes in the paper (specifically the frames 711 and 712 analysis) should have been caught. This indicates that the peer review was probably done by the authors themselves, which is not what "peer review" is. It is almost as embarrassing as the Roswell slides being deblurred. The promoters of that event also proclaimed that "due diligence" had been performed. It is amazing how confirmation bias can convince people that they are always right and others are just "naysayers", who don't know what they are talking about.

In June, the PRRR became aware of a report by Mr. Bob Bixler, which was written six months ago. He concluded that a balloon is a plausible explanation, which is in agreement with what I had published in SUNlite 7-6. Thanks to Lance Moody, I was able to talk to Bixler via E-mail and the resultant discussion was interesting. He stated that Robert Powell had asked him to look at the case last December and he responded with this report. This was about a month after SUNlite had published the PRRR's work to date on the video. Was this a coincidence or was there a motive for Powell to ask for somebody with Bixler's qualifications to examine the video? Only Powell knows for sure. I appreciate Mr. Bixler's willingness to share this information and his report.

2013 Aguadilla Puerto Rico analysis of an Infrared video showing Unidentified Anomalous Phenomenon captured by the Department of Homeland Security

by

Bob Bixler

Johnstown, CO

January 9, 2016

rev. June 16, 2016

SUMMARY

This video is a good example of inaccurate visual perception leading to false conclusions. What appears to be an aerial object moving rapidly from right to left throughout the video turns out to most likely be a small object simply slowly drifting with the wind. This misperception is due to the plane (and camera) circling around this object causing the background in the video to move rapidly in relation to the object being tracked.

This report shows that the object was about 1-2 ft. in size and remained over land throughout the video while descending from 1,000 ft. to 700 ft. in elevation over several minutes while drifting with the wind. Combining this with the IR signature characteristics suggest that this is a container of hot air that is cooling but a drone or bird are also possibilities.

Discerning moving object detail from a moving plane through a highly refractive atmosphere is quite difficult when the object size is 1-2 ft. and a mile or more away. This situation could help explain the double images, shape changes and loss of heat signature of the object in sections of the video.

METHODOLOGY

This is a problem in 4 dimensional geometry. The plane mounted infrared camera is moving in 3D space over time and changing directions while taking video of an unknown object moving in different directions in 3D space over time. Not only is the plane moving but the camera is moving in its mounts on the plane.

The camera constantly displays and records time (UTC+1)/date and plane heading, altitude and coordinates. Also it records a ground track identified by the central crosshairs and shows plane to ground distance, crosshair azimuth in relation to the plane's coordinates, crosshair altitude at ground level and crosshair coordinates. Camera zoom factor is also shown.

The problem is that nothing other than infrared signature or image is displayed for the unknown object (hereafter referred to as "object"). This means that object location, size and speed cannot be directly measured but must be inferred by the relationship of object screen size and object screen position to that of background objects while all these parameters are changing with time.

As the crosshairs generally tracked the object the crosshair ground coordinates and crosshair ground distance were the key to solving this problem. This information was combined with the plane's position to construct sight lines from the plane (camera) to the crosshair ground position. This was done at multiple times throughout the video using Google Earth and is shown in the attachments.

screen scale error = $9.8 * (3/83 + 0.2/8.5) = 0.6 \text{ ft/cm}$

white building = 2.2 nm (nautical miles) from plane (Google Earth)

At 1:22:38 the plane to object distance at the point of the early intersecting sight lines was 1.4 nm (nautical miles) and the object screen size was $0.25 \pm 0.05 \text{ cm}$. The actual object size would be $0.25 \text{ cm} * (1.4 \text{ nm} / 2.2 \text{ nm}) * 9.8 \text{ ft/cm} = 1.6 \text{ ft}$. Error is $1.6 * (.05 / .25 + .05 / 1.4 + .05 / 2.2 + .6 / 9.8) = 0.5 \text{ ft}$. The same exercise at the 1:22:48 point is $0.30 \text{ cm} * (1.2 \text{ nm} / 2.2 \text{ nm}) * 9.8 \text{ ft/cm} = 1.6 \text{ ft}$. Error here is $1.6 * (.05 / .30 + .05 / 1.2 + .05 / 2.2 + .6 / 9.8) = 0.5 \text{ ft}$.

These results indicate that the object is about 1 to 2 ft. in size.

INFRARED SIGNATURE VARIABILITY

This video is set to "black hot" meaning that the display shows hot/warm objects as dark. The "halo" effect of a white border around a black hot body is a common artifact in IR imaging and is only mentioned in passing.

What needs to be addressed are:

1. double images seen at 1:22:41, 1:22:46 and 1:24:42-51
2. variation in image shape in many sections of the video
3. loss of heat signature (very light colored or no image) at 1:23:57 -1:24:01 and 1:24:18-30 and 1:25:06-on

A possible explanation is provided by the combination of these factors:

1. atmospheric inhomogeneity in density and humidity due to:
 - a. ocean / land heating and cooling differentials
 - b. early evening heating and cooling differentials after the sun sets
 - c. warm surface temperature (79 deg. F)
 - d. wind (12-18 mph @ ENE)
2. high humidity (74% at ground), scattered clouds and possible fog
3. a small object far away (approaching a point source of IR radiation)
4. moving object
5. rapidly moving plane and camera
6. high refractive index of infrared radiation in many materials
7. changing nature of heat source (such as candles burning up or hot gas cooling)
8. changing nature of object due to breakup or burnup
9. greater refraction of shorter wave radiation (warmer object) compared to longer wave radiation (cooler ground, background objects and water)

The basic problem is attempting to discern moving object detail from a moving plane through a highly refractive atmosphere when the object size is 1 to 2 ft. and it is a mile or more away. The camera used has a cost of around \$1,000,000 with the laser range finder. It appears that the limiting factor in observing the object in this case is atmospheric refraction and not the camera. This may cause the image horizontal size to be slightly larger than the image vertical size. On the other hand this asymmetry may be representative of the actual object.

Some or all of the 9 factors above could lead to image shimmering and signal variability, mirages (double mirages) and signal loss. Clouds and fog attenuate infrared to some degree and if significant enough could possibly cause complete signal loss. Complete signal loss through otherwise transparent materials is demonstrated in principle here:

<http://physicscentral.com/experiment/askaphysicist/physics-answer.cfm?uid=20101216091531>

As both the object and plane are both moving through changing air densities and humidities so does the sight line between them. This greatly compounds the changing refractive effect of the atmosphere compared to a fixed observer and fixed object such as starlight. Due to the speed of the plane the changes in object appearance could be quite sudden as different air characteristics are rapidly encountered along the sight line from plane to object.

A suspected cause of IR signal loss in this case would also be cooling of the hot air inside the container which is providing lift. This hot air could have been injected prior to lift off of the object or could be generated in flight by candles or other heat sources which may burn out in flight. It's possible that the object burned up toward the end of the video or just cooled.

Other possibilities are that the object is a drone or bird but the balloon explanation seems more likely due to object flight path which is explained by wind drift and the gradual descent of the object.

A NARCAP case challenge

On April 30th, Ted Roe, of the National Aviation Reporting Center on Anomalous Phenomena (NARCAP), posted a UFO (not UAP) challenge on Facebook. He wanted people to explain some photographs taken by an amateur photographer of a UAP appearing near an aircraft back in 2005.¹



Several members of Gilles Fernandez' Facebook group "UFO Pragmatism" saw the challenge and discussed the event. We noted several anomalies that indicated the story was not as good as indicated in the NARCAP report and some mistakes were made.

The case

The report in question involves an amateur photographer, who was photographing the evening sky at the Montebello open space preserve, near Palo Alto, California. The date was July 3, 2005 and the time was 2031 PDT. Using his Canon digital SLR (A Rebel XT), the witness managed to record some images of an airplane that, according to him, was flying eastward towards Santa Cruz. The initial photograph was a wide angle image with the plane visible to the north of the observer.²



Seeing something odd, the witness then zoomed in and managed to record a bright dot that was traveling in the opposite direction of the aircraft. According to NARCAP, this was something truly anomalous that could not be explained.

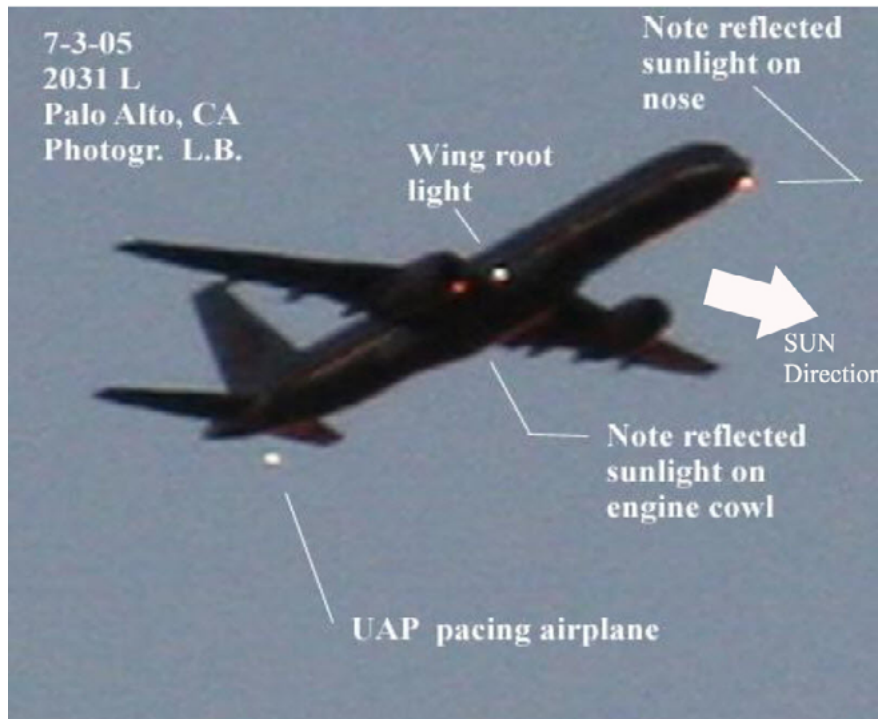
NARCAP interviewed the witness and made all sorts of measurements from the photographs. They determined that the plane traveled north of the observer from an azimuth of 315 degrees to 030 degrees.³ In addition to the wide angle image, the witness provided three images taken with a 135mm lens showing the aircraft and the UAP. These photographs were the centerpiece of their report.



What is wrong with this picture?

When our group chose to examine the report, several explanations were proposed but something caught everyone's eye that made us question the analysis. The photographs of the airplane do not appear to match the description of what the witness stated happened. Even more of an issue is that NARCAP never noticed these problems and seemed to have blindly accepted the story told by the witness.

NARCAP makes much of the 135mm photographs of the plane pointing out where the different parts of the aircraft are. They even note the speck of reflected sunlight on the front of the aircraft's nose. However, they ignored how the sun was illuminating the aircraft when they accepted the witness testimony that the plane was flying East or Southeast and was north of the photographer's location.



At the time of the event, the sun was setting in the west. Had the plane being flying to the East or SouthEast, the plane's tail section and part of the starboard side of the aircraft would have been illuminated by the sun. Instead, as one can see in photograph #2⁴, the port side of the plane is illuminated by the setting sun. This means the plane would have had to have been flying in a northerly direction (NW, N, NE) and be to the west or southwest of the observer. This contradicts what the witness stated and the path proposed by NARCAP. We do not even know if this was the same aircraft shown in the wide angle image taken a few seconds prior to this.

Wondering if there was confusion, several of the group tried to contact NARCAP on their Facebook page hoping to get access to the RAW images or, at least, the EXIF data, which was missing from the report. NARCAP claims that there are copyright concerns and would not provide the images or the EXIF data!⁵ While I can see not providing the images, I don't understand how the EXIF



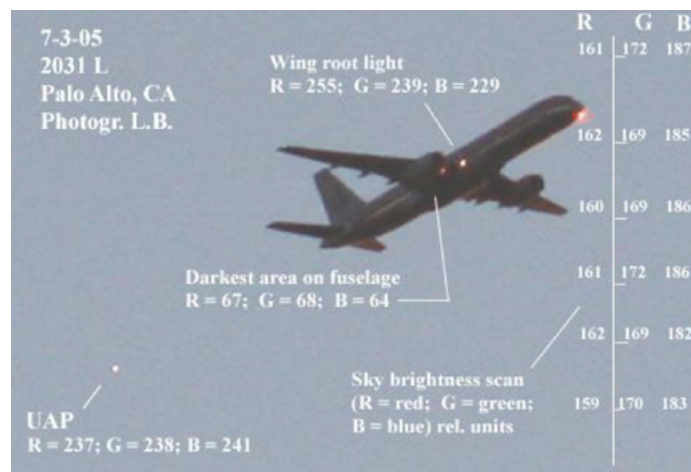
data could fall under the copyright protection. One would think that Dr. Richard Haines would have looked at the EXIF data and published it.

The reason we wanted to see the EXIF data was to see if the times for the photographs were in the same sequence as the published information. It seems that there appeared to be serious problems with what the witness described and what the photographs showed. This is indicative of a possible hoax.

Other problems with the report appeared after closer examination. The numbering of the images appears to be wrong. Photograph #2 is listed as frame 4 of 8 and photograph #4 is listed as 2 of 9!⁶ Photograph #3 has no "frame number" but examination by the group revealed that it appears to be the same image as photograph #4 shown in a different scale. I rescaled photograph #4 and over-laid it on #3 and got this result:



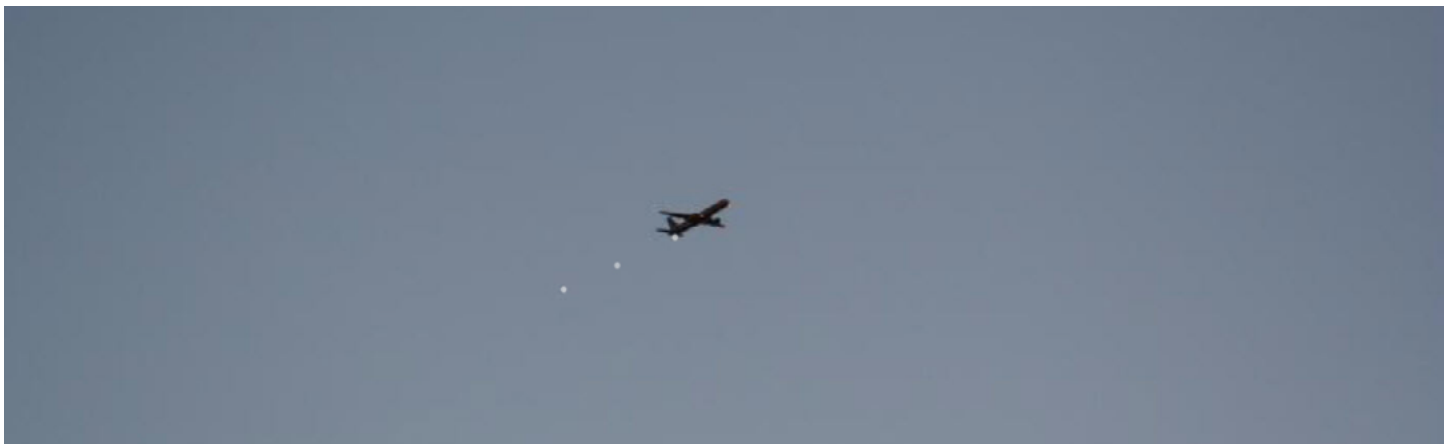
This indicates that they are the same photograph. Another image in the report, which is listed as coming from figure 4 (photograph #3) verifies this because it shows the UAP in a different location.⁷ How could a scientific paper, that has undergone peer review, allow such an error to appear?



With the three images of the UAP complete, we can see the actual displacement of the UAP between photographs:

Photograph #	Distance from tail of aircraft to UAP in airplane lengths
2	0 plane lengths
3	0.8 plane lengths
4	1.7 plane lengths

The UAP also appears to be traveling in a linear direction away from the aircraft (location for photograph #3 UAP is approximate).



This demonstrates that the UAP was moving away from the aircraft at the same rate and in the opposite direction the plane was moving. It seems possible, based on this information, that the displacement may have been more to do with the plane's motion and not the UAP itself.

A lack of proper analysis?

Without the raw data (the original images), it is hard to compute the angular distances as well as test the conclusions of NARCAP. Since NARCAP chose not to calculate these values or present measurements so others could reproduce the work, we are stuck with using cropped images that are difficult to evaluate.

NARCAP states that at the time of photograph #1, the plane was at a 40 degree angle of elevation.⁸ We are also told that this photograph was taken using a 28mm lens. A 28mm lens has a vertical field of view (FOV) of about 30 degrees.⁹ If the plane was at a 40 degree elevation, it would be impossible for the plane to be in the same FOV as the horizon, which means NARCAP did not bother to check up on the value provided by the witness. In photograph #1, the plane is only about 1/3rd of the FOV above the horizon, which is about 10 degrees.

NARCAP also states that the plane was 8211 feet from the camera.¹⁰ They don't show how they calculated this but it appears to be based solely on the estimates by the witness. In photograph #4, the plane's size is about 4.3% of the full horizontal frame shown. A 135 mm lens has a horizontal FOV of 10 degrees.¹¹ This means the plane was about 0.43 degrees across. While the plane is not being seen from a right angle, an approximate distance can still be calculated. A Boeing 757 is 179 feet long, which means the distance to the plane was approximately 24000 feet. This is much further away than 8211 feet.

Another value that should have been determined by NARCAP was how fast the UAP was moving relative to the aircraft. By using the plane's length and physical size in the image, one can compute the approximate speeds of the object as it is separating from the plane.

The report states that the camera was using burst mode, which produces approximately one frame per second.¹² This is not correct. According to the Canon Rebel XT manual (as well as other sources), the actual frame rate for the camera in "burst mode" is three frames per second!¹³ This means that each frame is approximately 1/3rd of a second apart. Since the Boeing 757 is 179 feet long, the distance traveled between photographs 2 and 3 would be:

$0.8 * 179 \text{ feet} / 0.3 \text{ sec} = 477 \text{ feet per second or roughly } 325 \text{ mph.}$

We don't know the plane speed but we can estimate it based on the plane's apparent pitch angle. Looking at the image, it appears that the plane is in a climb. Below 10,000 feet, climbing speed for a 757 is about 250 knots indicated air speed.¹⁴ Indicated air speed is not the same as true air speed but this can be converted using an on line calculator.¹⁵ For a 5000 foot altitude, the plane would be flying at 275 knots true air speed (about 316 mph). This means the UAP would have to be flying in the opposite direction at about 9 mph IF it were at the same distance as the aircraft. If it were closer to the camera, it would be traveling much slower. With such a slow speed, one can assume it is possible that the UAP was essentially stationary in between photographs and that the separation had more to do with the aircraft's motion than the UAP moving in the opposite direction.

What we appeared to have discovered is that there was little effort by NARCAP to evaluate the evidence properly and multiple errors have been made. Is this really a reliable UFO/UAP case when the hard data was apparently ignored in favor of the anecdotal report?

The witness

In an effort to obtain the information our group desired, I sent a letter to the witness (one of the Facebook group had found a potential address) because there was no e-mail address. I encouraged the witness to contact me so we could ask him questions about the photographs. He never responded. I can only assume the person I mailed the letter to was not the witness, the witness moved, or the witness did not want to discuss the matter for their own personal reasons. It was hoped that he could resolve the problems with the supposed path of the aircraft and the imagery sequence since NARCAP was unwilling/unable to provide the information upon request.

It might be important to note that the witness was not just a stray photographer, who had no interest in UFOs/UAPs prior to taking these photographs. He specifically mentioned listening to "Coast-to-Coast AM" and being aware of the National UFO Reporting Center for a significant period of time prior to submitting these UFO photographs for examination:

...the only reason I even thought to photograph what I was seeing was hearing Mr. Davenport on Coast-to-Coast AM for years now.¹⁶

Is it possible that he was preconditioned to present a UFO report when he thought he saw something extraordinary? Is it possible that preconditioning might also tend to embellish details and get facts wrong?

Possible explanations

Several in our group thought the white object was the planet Venus. With Venus stationary and the plane in motion, the object would appear to go in the opposite direction of the plane. My only problem with the Venus explanation was that the planet Venus was not that bright and only about 24 degrees from the sun at the listed date and time of the photographs.

I originally thought the object might be a hot pixel and the plane's motion made the object appear to go in the opposite direction. Without the full frames being available, this theory could not be tested but after examining all the images, this explanation seems unlikely.

A very possible candidate is that it was a small balloon. NARCAP states that the winds do not support a balloon hypothesis because

they were blowing to the east and the object moved to the west. The object's direction of movement is based on what the witness told them and not what we see in the photographs. Since less than a second separated the three photographs, one would see very little motion associated with an object being blown by the wind unless it was within a few hundred feet of the camera. As stated previously, if the UAP was a balloon floating relatively stationary in the sky and was closer to the camera than the plane, the plane's motion would probably create all of the displacement seen between the three photographs.

Without more data, it is difficult to come up with a firm conclusion. Based on what we can determine from the photographs, the witness' story is suspect as is the analysis in the report. Failure to share the raw information from the images indicates that NARCAP was never interested in giving those answering the challenge a fair opportunity to do so.

NARCAP challenge = NARCAP failure?

In my opinion, this report appears to contain editing errors and was poorly researched. The lack of EXIF data being provided, getting the images wrong, and failing to do simple angular calculations indicates some pretty poor analysis. Either the report was sloppily written or the analysis was specifically written so the reader only saw information that supported the desired conclusion. Issuing a challenge to a report with so many flaws indicates that NARCAP did not conduct a thorough review of what was presented. If NARCAP was trying to promote the case as proof of UAPs being something under intelligent control, they failed and, instead, appeared to expose their research as flawed.

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THE SKYLAB 3 UFO

Some recent e-mail exchanges had me wondering about the Skylab 3 incident that was promoted on Paul Kimball's top ten UFO Events film. Those writing about the incident give us a one-sided interpretation of what was reported. Discussions with James Oberg revealed that there are some things that were not considered.

The incident

On September 20, 1973, at approximately 1645 GMT, the Skylab 3 astronaut crew was in the wardroom of the station and noticed a bright red "satellite" visible through the window. According to the crew's initial comments to CAPCOM, at 2106 GMT, they had seen a "huge" satellite a few orbits before. Jack Lousma stated, "...it was reflecting in red light, and oscillating at, oh, considering its period of brightest to dimmest, about ten seconds. It led us into sunset..."¹ Owen Garriot took four photographs of the object and that was the end of the story until the debriefing a few weeks later.

During the debriefing, the story changed. The crew now stated that the object went into shadow after Skylab by five seconds or so indicating the object was trailing the space station.² This is the story that has been repeated by the UFOlogists but is it accurate?

The photographs

There were four photographs of the UFO, which were taken by Owen Garriot. He used a Nikon F camera specifically designed for use on the station.³ The camera had two lenses. One was a 55mm and the other was a 300mm. The camera was a manual type where the astronaut would adjust the aperture settings and exposure time based on the light meter visible in the viewfinder. Exposure time could be as fast as 1/1000th of a second and as slow as 1 second. There was also a "T" setting, which is the same thing as the "bulb" setting found on most cameras. The camera also had a motor drive to advance the film but it could also be advanced manually.

The exact exposure time and lens used is difficult to determine since it was apparently not recorded on the data sheet for the photographs. Brad Sparks and Bruce Maccabee assume the photographs were taken using a 300mm telephoto lens and a 1/500th second shutter speed because that was the shutter speed setting for photographs preceding the event.⁴ However, as a photographer, I disagree with this conclusion.

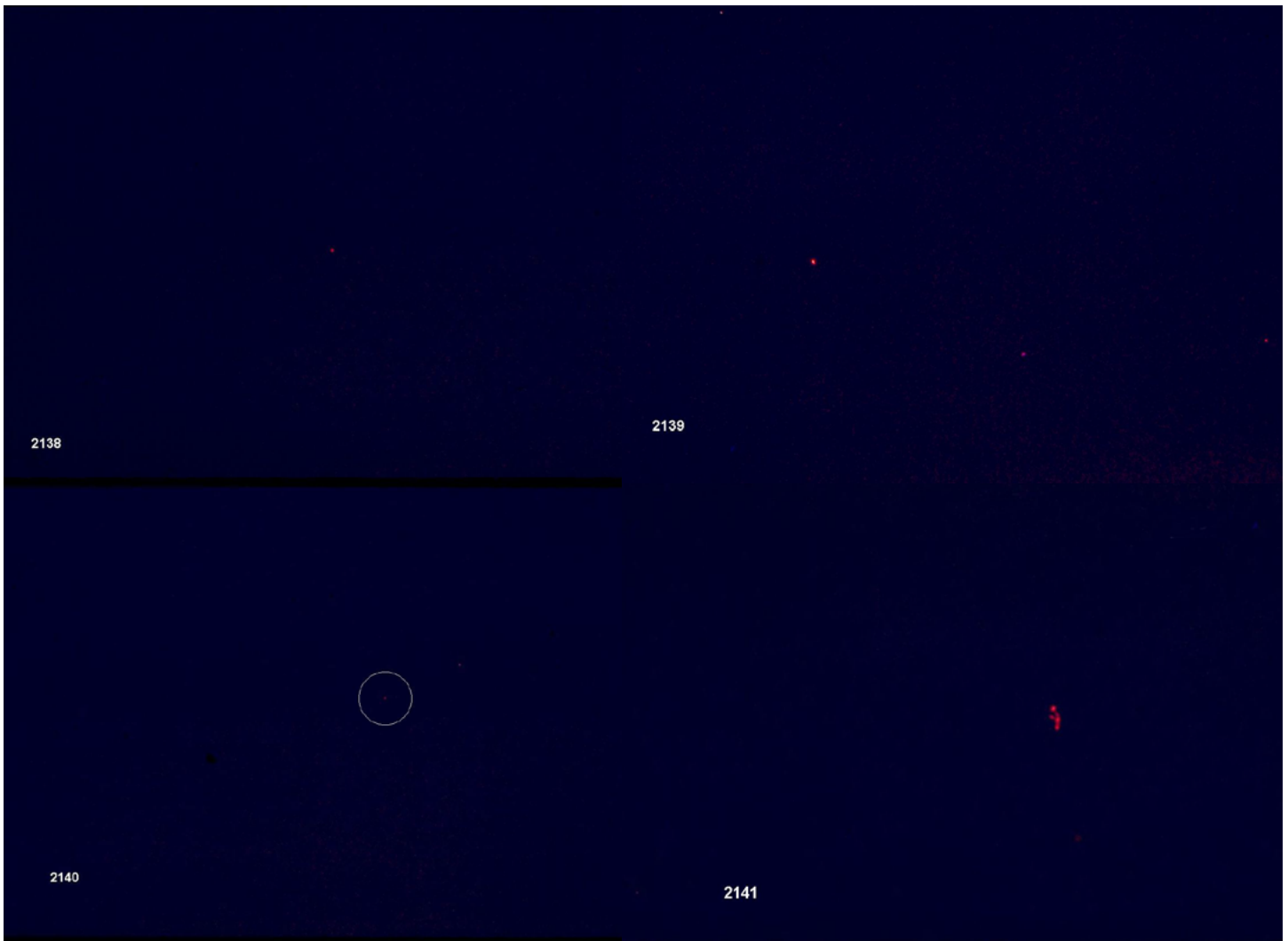
Any experienced photographer (the astronauts were not amateurs and were trained in photography), would recognize photographing an object in darkness would mean that a longer exposure time would be required. Under these conditions, the light meter in the camera would be unable to compute an accurate exposure time based on a point source of light. This means the astronaut would have relied upon their experience/knowledge to select the shutter speed. If I were photographing such an object with a film camera, I would have taken several images using a range of exposures with the aperture wide open. This would especially be true if I were using a telephoto lens.

Since we don't know the actual exposure time or lens, we have to assume that Garriot would have attempted to use a specific exposure time and then bracketed that exposure time. There seems to be evidence of this since one of the photographs (2140) appears to be underexposed, where the light is barely recorded on the film. The other images show varying brightness for the object.⁵ The one image that is the prize for UFO proponents is the last image (2141). It shows an interestingly shaped object that looks like a squiggly line (see next page).

Image 2141

In my opinion, this image is the result of photographing a point source with a long exposure time. The action of pressing the shutter and trying to keep the camera still during the exposure resulted in the resultant "squiggle". Maccabee disagrees because he feels that the effects of weightlessness and the use of a short exposure time would have prevented such an effect. One can not conclude that Garriot used the same exposure time as the previous daylight image without better evidence. Such a conclusion assumes that Garriot was nothing more than an amateur shutterbug that did not think about what he was photographing. If he did try and compensate for photographing a point source in darkness, he would have shot the photographs using much longer shutter times than 1/500th of a second. As a result, the potential for induced vibration by the operator pressing the shutter or not holding



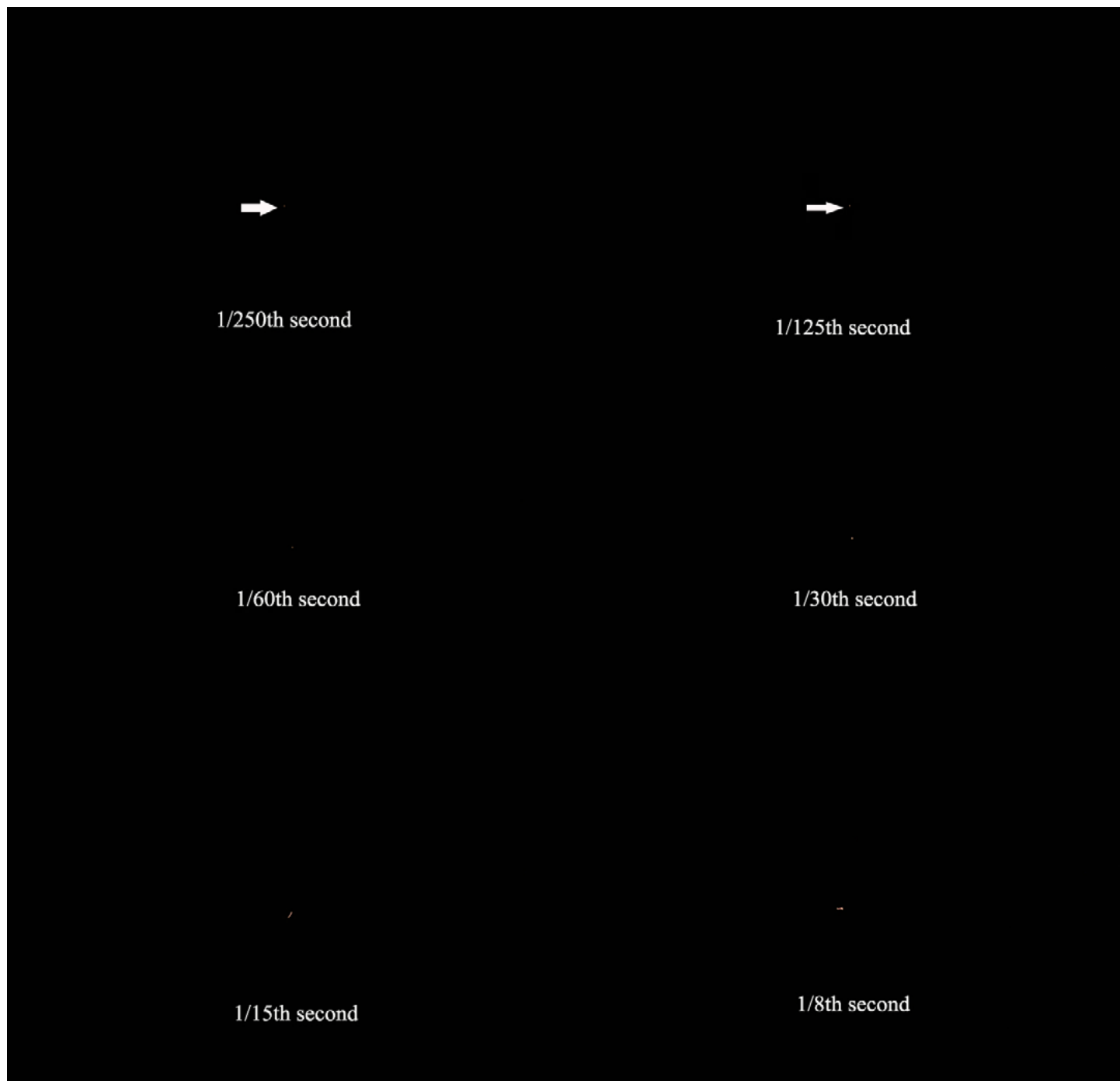


the camera still would be possible.

While discussing this with James Oberg, he presented me with an image taken from the space station showing a similar “squiggle” photograph of a point source.⁶



In an effort to duplicate the results of the camera with a bright point source, I used my Nikon D5000, with a 180mm fixed focal length lens, to take photographs of the planet Mars (about magnitude -1.8). In an attempt to duplicate the equipment used, I stopped the lens down to 5.6 (the normal f-stop for a 300mm telephoto lens) and set the ISO to 200. I hand-held the camera but attempted to hold it steady by propping my elbows on a fixed surface. Despite this extra effort, I still induced motion on several photographs. The results can be seen on the page. The top image shows Mars under vary exposure settings from 1/250th to 1/8th of a second exposure. The planet exhibited vibration from pressing the shutter button starting at 1/30th of a second. The motion was easily noticeable at 1/15th and 1/8th of a second. Interestingly, the image is a point source in the faster exposures but faint, requiring the arrows, just like the Garriot photos.



On the next page are cropped sections (no zoom) of three 1/8th of a second exposures of the planet Jupiter (taken in twilight) and Mars. The resultant "squiggles" are indicative of how camera motion can produce a variety of shapes/lines when using long exposure times. I tried to keep my arms steady on all of these shots but I have never been very successful in taking hand-held images at 1/8th of a second. I don't think it would matter if it were a weightless environment since the action of a pressing the shutter button and the resultant motion of the mirror during the exposure would still induce some blur.



James Oberg's statements

On Robert Sheaffer's web site, he has commentary by James Oberg regarding the Skylab 3 UFO. After describing the case, Oberg states:

Within the past two years I've met face-to-face with Garriott and Lousma, for other purposes, but discussed the sighting with them. I've also discussed it by phone with Bean [who lives in Houston, but I'm not a frequent visitor at his home studio], but read his book's account of the sighting. I first met these men in the 1970s when I went to work at the Johnson Space Center, and have stayed in touch over the years. To my knowledge, neither Maccabee nor Sparks has ever contacted them directly.

The interpretation of the object's dimming at sunset at a different time than Skylab dimmed, as an indicator of the object's actual large range, is flawed on two counts. First, the interpretation requires assumptions of the object's altitude and other orbital characteristics that are merely convenient guesses and cannot otherwise be corroborated. Second, the assumption that there is no other possible explanation for the difference in dimming time than large physical separation showing up as different sunset times, is incomplete.

There is another common illumination phenomenon that allows objects near a space vehicle to move into or out of sunlight, that is totally independent of orbital sunrise/sunset. That is shadowing by the observing spacecraft, an optical phenomenon seen on some space shuttle TV downlinks of water dumps and views of other small drifting nearby objects shed by the shuttle. This alternative explanation was not, as best I recall, discussed or eliminated by Maccabee and Sparks.

The prosaic explanation of the dot as a nearby Skylab-shed piece of debris is supported by three arguments:

- 1. Similar Skylab-shed small debris was observed on all three Skylab missions, mostly as dots transiting the solar disk during observations using the station's solar telescope.*
- 2. The wardroom window through which this particular object was observed was on the down-sun side of the station, and during the sunset phase of each orbit the station was casting an invisible umbra extending hundreds of meters down-sun. Because the station had already crossed the Earth's terminator, the surface below was in darkness and hence not reflecting sunlight back up into this shadow zone [as happens during most of every daylight pass] so anything in that zone would not be illuminated and would not be visible. Something moving near the station -- originally away from it but quickly into a possible parallel or closing path -- could move from sunlight into this zone and appear to vanish.*
- 3. The long duration of the observation, measured in minutes, eliminates the possibility of it being an independent satellite in any different orbit. This is because satellites in crossing orbits have such high relative velocity that the angular velocity is too large even for most eyeball detection, much less minutes of patient watching. Note that here I am conceding Maccabee's argument from the Gemini-11 case that the 'UFO' could not have been the Soviet 'Proton' satellite because it remained in visual and camera range too long [I now favor Sparks's view that the crew observed a bundle of surplus spacewalk tools jettisoned manually a few hours earlier]. I also can report an independent search of known large satellites in orbit at that time [including classified vehicles whose orbital data was released decades later] and agree that no other independent satellite affords an explanation of the sighting. But Skylab-shed debris was never observed from the ground [too small], and not tracked.*
- 4. Less powerful is another argument, that an object of the actual physical size postulated by Maccabee and Sparks would have been a bizarre naked-eye object of discernable angular size in the skies of Africa as it passed directly across that continent, yet to my knowledge no UFO reports remotely related in appearance, timing, or direction, have ever been found.*

Considering the known visual stimuli engendered by the Skylab vehicle, the particular illumination conditions of the 'sunset shadow', and the unanimous testimony of all three witnesses as verified by three of the four photographs taken, I see no compelling case to believe the fourth image is anything but a camera or processing artifact.⁷

I believe that Oberg was mistaken about Maccabee/Sparks not contacting the astronauts because, in Maccabee's article, he states

that Sparks did speak to Garriot about the incident but the best he could get from him was the fact that Garriot counted a certain way to get his time estimate correct.

The rest of Oberg's arguments need to be considered. Probably the most interesting point he raised was that it would be impossible for the object to be trailing Skylab because the wardroom window did not normally point towards the sun. Considering the darkness of the background, it seems he is correct but I wanted to make sure.

The orientation of Skylab

The Skylab station had to generate electricity using its solar panels. This required the space station to position itself so it was facing the sun:

Two precise control systems permitted the astronauts to orient the workshop to collect experimental data and to position Skylab so that its solar arrays faced the Sun.⁸

This image on the demonstrates how the station would orient itself during its orbit so it could photograph the Earth's surface.⁹

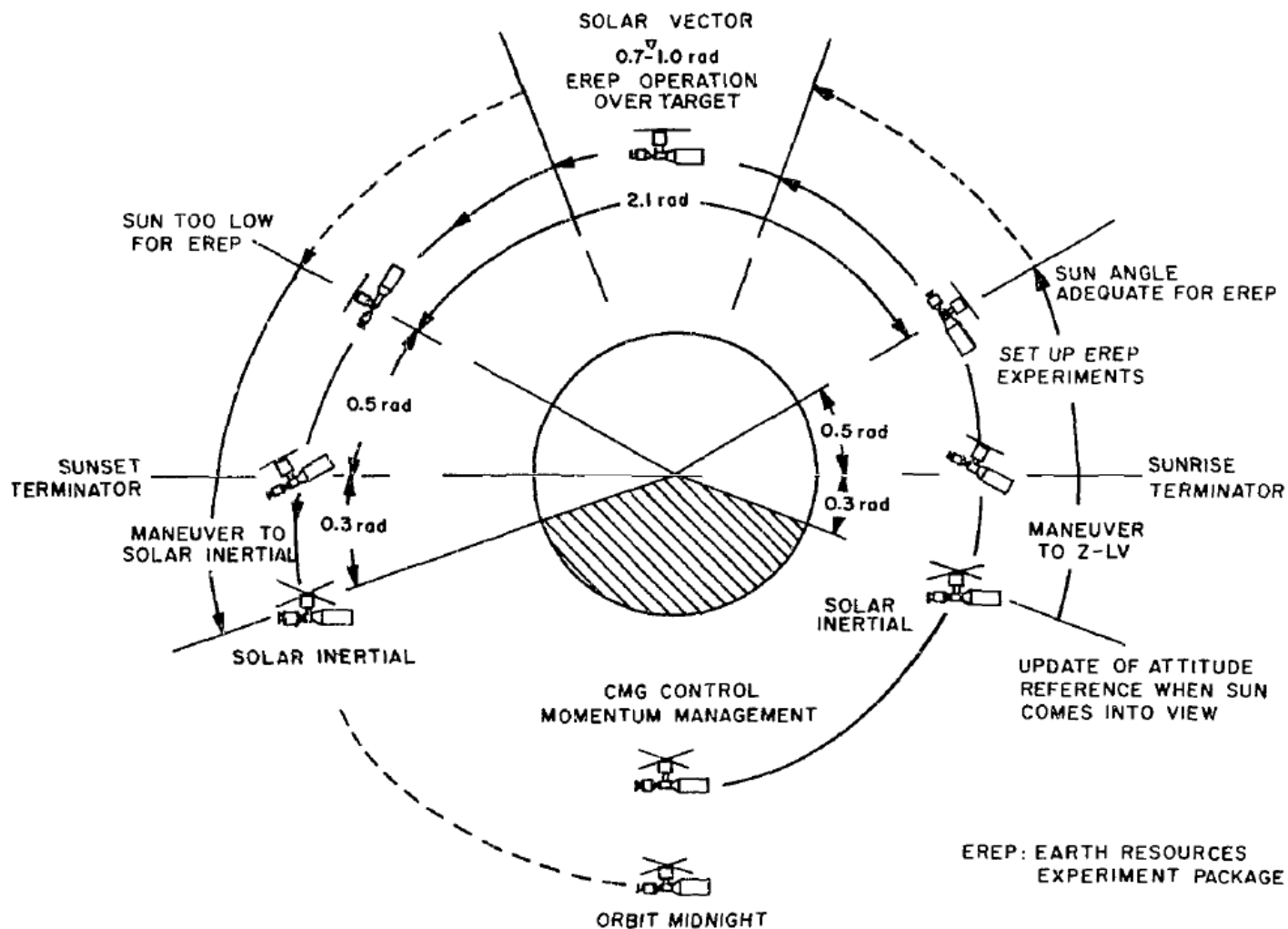
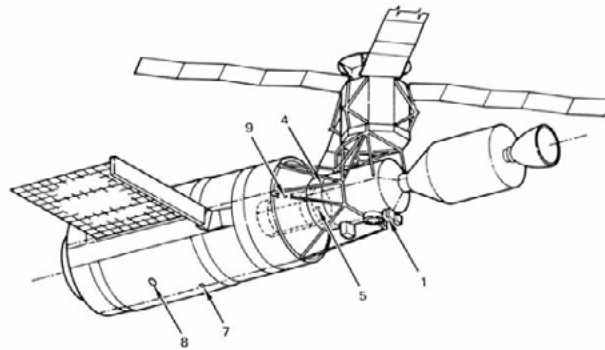
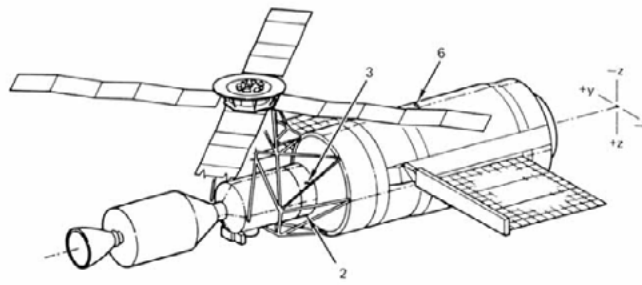


FIGURE 11. EARTH RESOURCES MANEUVER SEQUENCE

The Wardroom window's location

One can see the various viewing window locations in the image on the next page.¹⁰ The wardroom window (#8) was on the opposite side of the ATM. Based on what we know about the normal orientation of the craft as it passed into Earth's shadow, it appears that Oberg is correct. The astronauts were viewing in the eastward direction and not the westward as proposed by Sparks and Maccabee. This introduces many other possibilities not considered by those, who consider this evidence of some exotic craft.

This also indicates that the statements made by the astronauts in their debriefing were incorrect as to the location of the satellite relative to the station. One has to consider the fact that the debriefing occurred roughly two weeks after the event and the potential exists they "misremembered" the details. It now appears that the statements made by the astronauts to CAPCOM just hours after the event were the most accurate.



Port Angular Locations

Port No.	Window Name	Location
1.	S190 Experiment Window	On +z Axis
2.	Airlock Module Window	37.5 deg Off +z Toward -y
3.	Airlock Module Window	37.5 deg Off -y Toward -z
4.	Airlock Module Window	37.5 deg Off -z Toward +y
5.	Airlock Module Window	37.5 deg Off +y Toward +z
6.	Solar Scientific Airlock	0.14 deg Off -z Toward +y
7.	Antisolar Scientific Airlock	4.3 deg Off +z Toward -y
8.	Wardroom Window	25.9 deg Off +z Toward +y
9.	EVA Hatch Window	45 deg Off -z Toward +y

Which shadow did the object disappear into?

The disappearance of the object into shadow has always been interpreted as being the shadow of the earth. However, with the object being ahead of Skylab, another possibility exists. The space station would be casting its own shadow and it could have been what caused the object to disappear. If that was the case, the object could have been smaller and closer to the station than estimated.

A mysterious satellite?

Why wasn't this object tracked if it was something large in orbit? The Space Detection and Tracking System (SPADATS) monitored everything in orbit during the 1970s. If there was some object of significant size near the Skylab space station, they would have recorded it. The same could be said for ground based observers. In this instance, the Skylab space station would have been visible to ground based observers in Africa. Nobody reported seeing a bright object moving across the sky with Skylab on that date. Since there seems to be no record of any mysterious satellite moving with the station, it indicates the object was not that large.

Space debris?

James Oberg has suggested that what was seen was space debris from the station itself. The fact that the object appears to have been pacing Skylab in a similar orbit supports that possibility. The source may have been a bit of reddish foil found on the parasol deployed by the Skylab 2 on May 26th or the second sun shade deployed by the Skylab 3 crew on August 7th. Something like that reflecting sunlight might appear red. Since the astronauts mentioned that the object was changing its location relative to the station, then the object would no longer be in position to be seen again on the following orbit.

Conclusion

The promotion of the event by UFOlogists downplayed, or ignored, the possibility the shape was due to the photographer pressing down on the shutter mechanism while using a relatively long exposure time. They also seem to have "cherry picked" the testimony, which supports an exotic explanation instead of the testimony that supports a more prosaic answer.

While no positive identification can be made with the information available, there seems to be enough information to suggest what was seen was a piece of debris floating in a similar orbit. This is more likely than some form of exotic craft that was investigating the space station.

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BELGIAN WAVE 1989-1991 FINAL CONCLUSION

Since 29 November 1989 to April 1991 numerous witnesses were collected by SOBEPS about observations that were said to be UFOs.

I did think about this problem and I tried to define criterions who permit to analyze the data coming from the witnesses.

The first criterion, the most important, is to distinguish between "objective data" and "subjective data".

The second criterion is to submit to calculus the numerical estimations made by the witnesses in order to detect coherence or contradiction. These numerical data may not be separated from the other elements in the witness to avoid apparent coherence.

In the subjective data you have to place: estimations of speed, of distance, of acceleration, stationarity, position above a building far away, shapes who are more often being imagined than really seen.

In the objective data you may find: real measurement of the apparent diameter (angular diameter) that is the only data who can be determined by one unique witness, the positions of the lights and their colour, the lack of noise or a noise level higher than the noise of the auto engine or the noise of the city.

The duration of the observation is also an objective data if it was measured during the observation (not if determined a few days after). Same remark for the apparent observation and the duration of the observation. Also angular displacement of the observation and his duration.

The radar detections, very few, could be considered as objective but you have to take in account false detections impossible to eliminate because due to various physical causes.

All the numerical data, objective or subjective, must be used in calculus to determine or test their coherence.

In the observations, made in good faith by the witnesses, I could find the enormous influence from the medias on the people behaviour and on the result of their insistence on the abnormal nature from what they observe. The parallelism between the mass of media data in the newspapers and the number of UFOs declarations is evident. The statistic study of the Belgian wave shows a highly meaningful correlation coefficient of + 0,95. This result does not take in account the effect of Radio and TV who were also speaking of the observations.

Why the media did not inform about the scientific methods to obtain usable data?

After having examined many cases of the Belgian wave and consulted the two SOBEPS books « Vague d'ovnis sur la Belgique », VOB1 and VOB 2, my conclusions were "There is no proof that ET engines have flied above Belgium during the 17 months, November 1989 to April 1991."

What I discovered is that in the SOBEPS analysis is that the witnesses declarations were considered as "objective data" but they were "subjective data".

All the witnesses, whatever their social and educational level, said they were able, without making measures, to estimate distances, speed, accelerations, altitude, positions above far away points or above buildings, to restore the timing of the observation days after, to give the azimuth of the observation, and so one. The use of social or educational high level was added to improve the description of the observation but it is a false argument!

The fact to accept these data as objective conduct to false conclusions.

Numerous witnesses declarations show that people are confusing "apparent move" with "real move", "apparent speed" with "real speed". They give dimensions for an engine by comparing it to a nearby object omitting to take account of the fact they are at different distances.

They estimate dimensions in other cases by comparing to the Moon but they overestimate largely the Moon and this conduct to overestimate dimensions and to underestimate the distances. This conduct to false estimations for the speed and to conclude to a nearby observation that in fact is far away.

In the photographic data they omit to take in account the angular diameter of the lens and the angular diameter of the object, (that is the same the angular diameter of the picture on the film layer). In the dark they do focus on a short distance believing they focus

on infinity. This give flat picture without details or no picture at all.

And moreover the principal picture from the Belgian wave on the cover of VOB1 and VOB 2 was a hoax. This fact is hidden by SOBEPS and Cobeps. Why?

And moreover the witnesses immediately assert that what they see cannot be a plane or a planet or a star, so they conclude for engine with extraordinary capacities that cannot be terrestrial engines without having really analyzed the observations.

All these remarks may be done for the cases in other country than Belgium.

My general conclusion is there are too many types of confusion in this problem.

The UFO problem seems to be more a fact of society than a real UFO problem.

R. PAQUAY

Physicist

July 11, 1959

NICAP summarizes the event in their chronology:

July 11, 1959--Pacific Ocean, 900 miles NE of Hawaii. Pan American Airways crews, other pilots, watched UFO with satellite objects make sharp turn. [X]¹

Section X gives us the following testimonies:

Capt. George Wilson, Pan American Airways, gave the following account: "While flying a Boeing Stratocruiser at 20,000 feet on a 224 degree heading [about 900 nautical miles northeast of Honolulu] a large and bright light appeared on the horizon at 11 o'clock position [58W]. The large bright light was flanked by 3 or 4 smaller lower magnitude lights in a line below, behind and to the left of the main vehicle. The lights passed from 11 o'clock to 10 o'clock position, the formation made an abrupt right turn and disappeared to the south."

The co-pilot, Richard Lorenzen, and Flight Engineer Bob Scott, also saw the UFOs. Lorenzen commented that "the rate of closure with us was much greater than any I had ever experienced before. It was not until the object turned that I was able to distinguish the smaller lights associated with it."

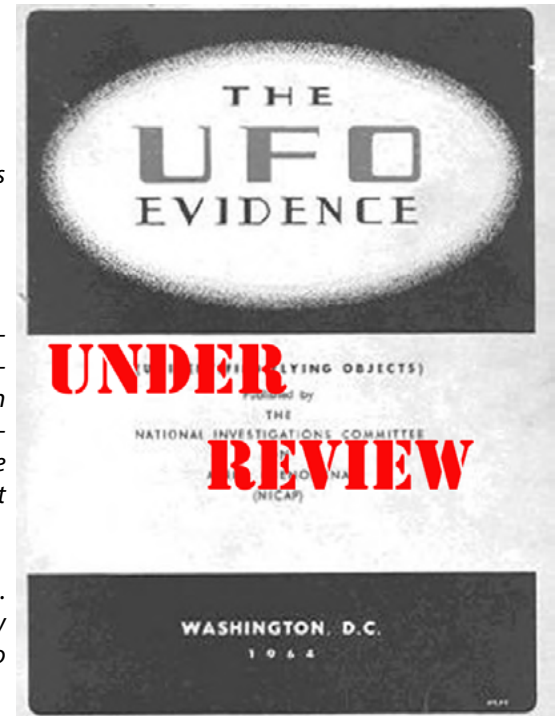
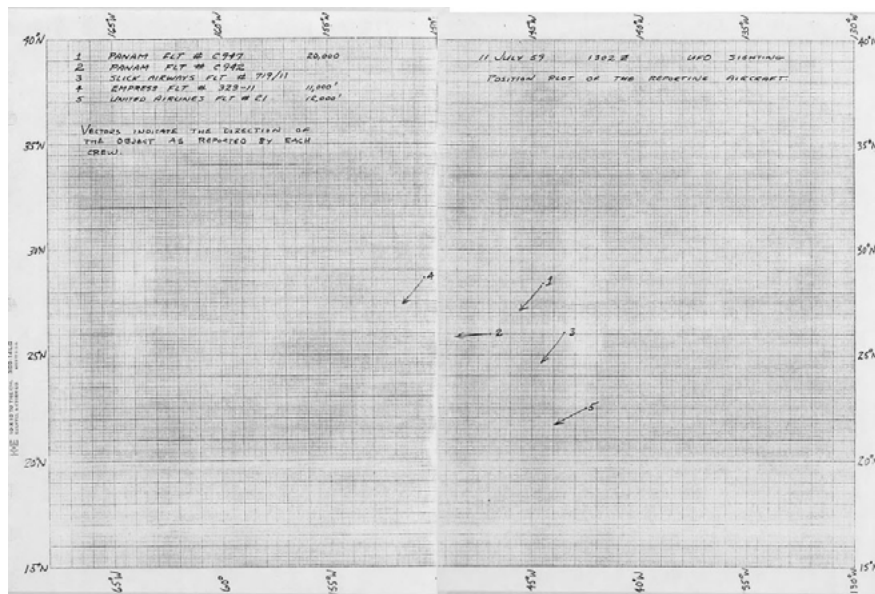
First Officer D. W. Frost, on another Pan American flight in the vicinity, reported essentially the same phenomenon. The UFOs were also observed by Air Force bomber crews, a Slick Airways plane, and a Canadian Pacific airliner. Capt. Lloyd Moffait, pilot of the Canadian airliner, told the press: "You can take it from me they were there. I never saw anything like it in my life and there are four of us who saw the same thing at the same time."²

NICAP reports they were unable to interview the Air Force crews as to their accounts of the event. A look at the Blue Book file might present those interviews as well as other information not obtained by NICAP.

Blue Book's investigation

Missing from much of the NICAP report were specifics that should have been stated. For instance, how long was the event? What time was the event? Had they presented that information, the event would have sounded less impressive. The actual time of the event was around 1300Z. For the Pacific Ocean, near Hawaii, this is GMT -10 or -9 or about 0300-0400 local time. The sun had not risen indicating it was still dark. More important was the duration of the event, which was, according to Blue Book, only 3-15 seconds depending on the observer.

Unlike NICAP, Blue Book chose to plot the positions of the aircraft and directions of observations. The end result indicated they were looking at something very far away and not close.³



The data from the sighting indicates this was probably a bright fireball that had fragmented. The actual trajectory was probably a straight line and the pilots simply misperceived the apparent change in direction.

Explained?

The evidence suggests that the source of the sighting was possibly a bright fireball and not an alien spaceship. NICAP listed this event because of the "reliable witnesses" involved in the sighting and because it appeared in the media⁴. The one thing that has been learned about UFO reports over the past sixty years is that there is no such thing as a "reliable witness" and people can mistake ordinary events, like fireballs, as exotic ones. With the case having a probable explanation, it should be removed from the "Best Evidence" 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. 138.
2. ibid. P. 125.
3. "11 July 59 1302Z UFO sighting positional plot of the reporting aircraft". Fold 3 web site. Available WWW: <https://www.fold3.com/image/8407366> and <https://www.fold3.com/image/8407368>
4. "Air line pilot sights brilliant lights that suddenly sped away". The Herald Journal. Logan, Utah. July 12, 1959. P. 3

Air Line Pilot Sights Brilliant Lights That Suddenly Sped Away

SAN FRANCISCO (UPI) — A Pan American Airways pilot reported that a group of extremely bright lights approached his airliner at high speed over the Pacific yesterday before suddenly veering away.

Four other trans-Pacific airliner pilots also reported sighting the unidentified objects.

A Pan American spokesman here said the first report came from Capt. George Wilson, commander of a DCTC clipper en route from San Francisco to Honolulu, at 6:20 a. m. p.d.t.

"They were extremely bright lights, surrounded by small lights," Wilson said. "They approached us at approximately 21,000 feet altitude. They were closing in rapidly. The objects then headed south. After about 10 seconds all of the lights disappeared."

He said the Phenomena occurred at 6:02 a. m. p.d.t.

He was about 840 miles from Honolulu at the time.

Shortly after this report, two other Pan American pilots radioed that they had seen the same thing. Capt. Noble Sprunger, bound from Los Angeles to Honolulu, reported seeing the objects at 6 a. m., a little farther to the south from Wilson's position.

The other Pan American pilot who sighted the object was Capt. E. G. Kelley, who departed San Francisco for Honolulu a half hour ahead of Wilson, at 11:30 p. m. Friday.

The Pan Am spokesman here said pilots of a Canadian Pacific airliner and a Slick Airways cargo plane also reported seeing the objects. All were bound for Honolulu.

USU Trustees Reelect Executives

(Continued from page 1)

graduate teaching assistant at Brigham Young University in 1953-56 and a research and teaching assistant at the University of California in 1956-59. Is due to receive a Ph.D. at the University of California in September.

Wendell L. Pope, assistant professor in mathematics. A B.S. in mathematics at USU in 1956 when he was institutional valedictorian. M.S. in mathematics at Stanford University in 1958. He has three years industrial work experience, mostly with high speed computers.

Farrin Mangelson, research assistant in chemistry. Has been assistant professor at Snow College. Has a B.S. from the University of Washington and M.S. from USU.

Faye Y. Moser, research assistant in horticulture. Holds bachelor's and master's degrees in chemistry.

Roland Gene Murdock, research assistant in agronomy, has a B.S. degree and graduate work at USU

Joseph V. Wilson, research as-

701 CLUB CASE 1920: AUGUST 18, 1952 FAIRFIELD, CALIFORNIA

Don Berliner describes this event as:

Aug. 18, 1952; Fairfield, California. 12:50 a.m. Witnesses: three policemen. One object changed color like a diamond, and changed directions during the 30 minute sighting.¹

Brad Sparks suggests there might have been military witnesses:

Aug. 18, 1952. Fairfield, Calif. 12:50 a.m. 3 policemen saw an object change color from red-green-orange-blue, shaped like a diamond, and change directions [?] traveling in a straight line "sideways" [?] gaining altitude. Military witnesses [?]. (Sparks; Berliner; cf. Hynek-CU-FOS reveal; Jan Aldrich)²

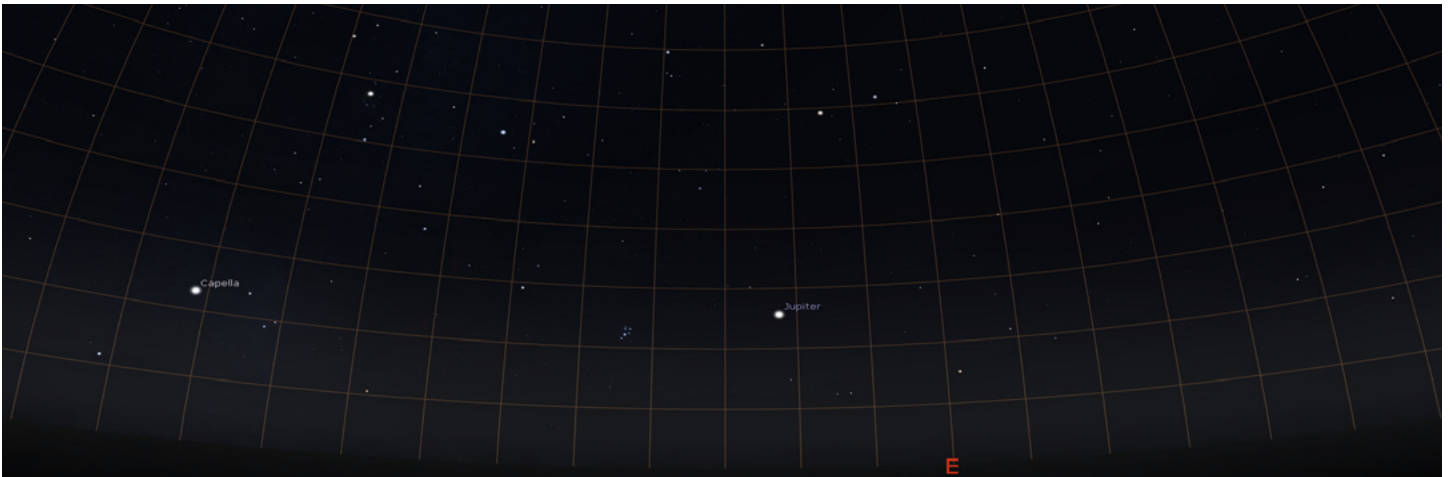
These summaries leave a lot to be desired. I hoped the Blue Book file would contain additional information.

The Blue Book file

As the Blue Book file is practically barren of good information other than one message, which gives us the description of the event. The rest of the file is just a record card and a worksheet that summarized the information from the message. The message gives us only a vague direction that, from Fairfield, the object appeared to be to the northeast of Travis AFB, which was east of town. This means the object was in the Eastern to Northeastern sky. The object appeared to gain in altitude in the 30 minutes of observation and moved towards the east. There appears to be no military witnesses associated with this event even though Travis AFB should have observers who saw the object.

Solution?

Anytime I read objects moving rapidly back and forth, changing colors, and "gaining/losing altitude" over a significant period of time, I begin to suspect that this was an astronomical object. This means it might have been a bright star or planet. On the date and time in question, there were two good candidates for the object. The first was the bright star Capella and the second was the planet Jupiter.



Planets don't change color as much as stars do but Jupiter was brighter and could catch the attention of the police officers. In my opinion, the object could be either Capella or Jupiter, which are common objects misidentified as UFOs. Based on the descriptions, if this were an astronomical object, Capella seems the more likely of the two. Both objects would slowly drift eastward in azimuth as they rose higher into the sky as one can see in the 0120 PDT image below (compare with 0050PDT image above).



Solved?

The lack of reports from Travis AFB indicates the object may not have been as significant as the police officers thought. Recall that Allan Hendry noted that police officers tended to mistake astronomical objects for UFOs:

*Scintillating stars were a favorite target of police witnesses.*³

This sighting was during the 1952 UFO wave and the resources that could be devoted to individual cases seems to have been limited. As a result, no follow-up was performed and the case ended up on the “unidentified” list because the witnesses were “reliable” police officers. With more information, we might be able to resolve it but we are stuck with what is in the file. In my opinion, this should be classified as possibly an astronomical object and not be listed as “unidentified”.

Notes and references

1. Berliner, Don. “The Bluebook unknowns”. NICAP. Available WWW: <http://www.nicap.org/bluebook/unknowns.htm>
2. Sparks, Brad. Comprehensive Catalog of 1,600 Project BLUE BOOK UFO Unknowns Available WWW: http://cufos.org/pdfs/BB_Unknowns-1.26.pdf
3. Hendry, Allan. The UFO Investigators Handbook. London: Sphere Books Ltd. 1980. P. 102