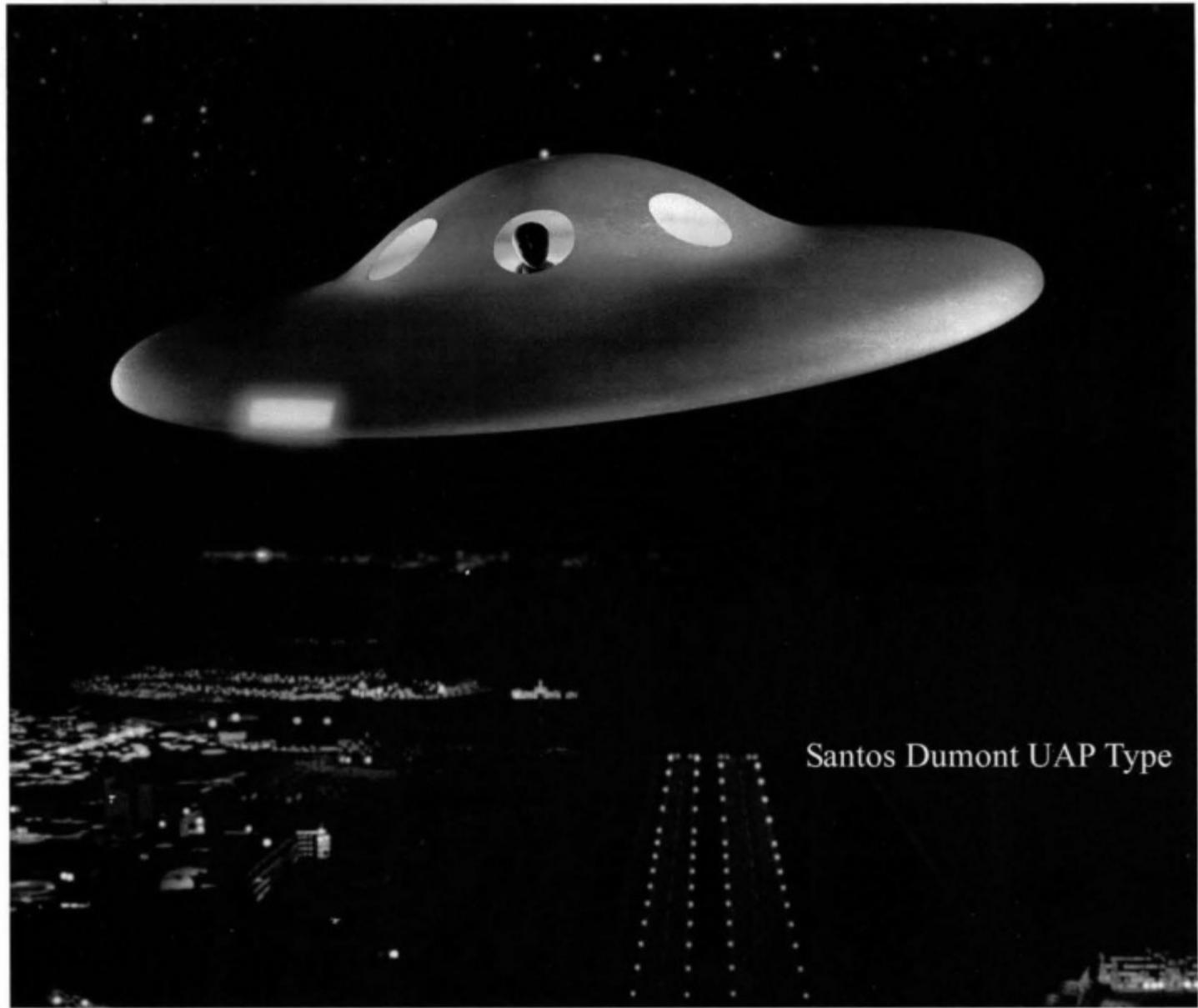


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Santos Dumont UAP Type

AIRPLANE PACING IN RIO

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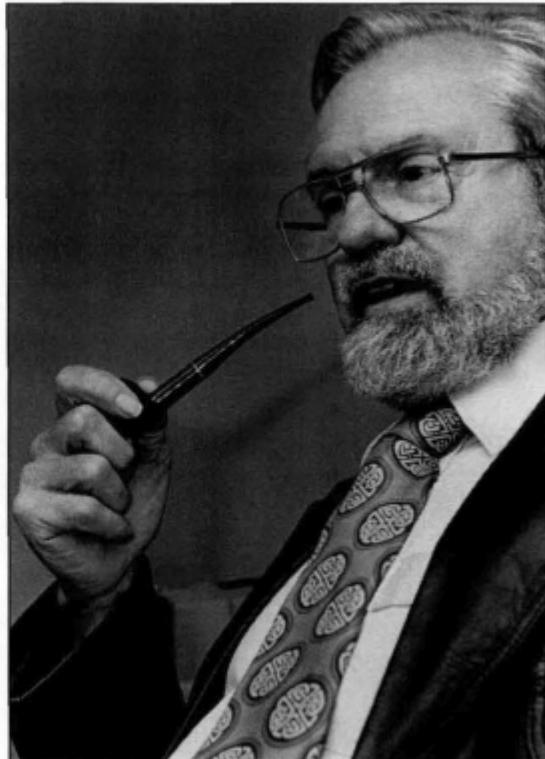
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AIRPLANE PACING IN RIO <i>by Richard F. Haines</i>	3
DEFENDING UFOs <i>by Thomas E. Bullard</i>	7
UFO EXPERIENCERS IN WESTERN NEW YORK <i>by Philip Haseley, Isabel Beehler, and Kathryn Shorey</i>	14
REVIEW: THE MYTH AND MYSTERY OF UFOs <i>by Bill Murphy</i>	20
THE END OF IUR <i>by Mark Rodeghier</i>	36

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AIRPLANE PACING IN RIO

BY RICHARD F. HAINES

While on the downwind leg of the pattern to runway 20L at the Santos Dumont airport in Rio de Janeiro, Brazil, four men (all rated pilots) on board a single-engine Cessna airplane watched as a "huge star" approached them on their right side. The date has tentatively been identified as October 5, 1971.

The object descended to their altitude and slowed rapidly to their air speed. It also smoothly changed its direction of flight to fly parallel with them at an estimated distance of about 30 meters. It looked like an "inverted dish" with a small rounded protrusion centered on its upper surface. This protrusion contained a number of what later were called round or oval windows. What appeared to be the head of a person was seen in one window looking at them. The unidentified aerial phenomenon (UAP) was seen for about 85 seconds. Then the object descended at a high velocity toward the water's surface—passing in front of and above the airplane—to a point near the south end of the runway, turned sharply 90° left without any hesitation and disappeared from sight in several more seconds on a bearing of about 200° toward a well-known landmark called Pão de Açúcar (Sugarloaf Mountain). No electromagnetic effects were noted and the UAP was not detected by airport radar nor seen from the tower. None of the witnesses talked about the event after landing.

The reporting witness judged this encounter to be a flight safety matter because "there was undue interference with our traffic, as this object, which I consider as a ship, might have run into us. [This is] serious and dangerous." This report presents further details and commentary on the event and its investigation. The strange object remains unidentified at this time.

WITNESSES

Witness A. The reporting witness was Chief Flight Instructor José Américo C. Medeiros (age approximately 23 at the time). He was piloting from the left-front seat of the airplane. He was one of five instructors employed by Pegasus School

of Aviation-RJ at Santos Dumont Airport and had 600 hours flight time in this model Cessna. He was a II Training Course Instructor and had already received his commercial license (CFI-II). He also had flown this model Cessna to or from at least six other airports in Brazil. He waited until 2007, after he had retired, to report the incident to avoid professional complications. However, he did write to his parents about it fairly soon after the event. He dropped the subject entirely after that. He went on to become a captain for VASP airlines.

Witness B. Celso M. was a rated instructor pilot taking instruction in order to be qualified as an instructor in the Aeroclube do Rio Grande do Sul. He sat in the right-front seat. Now retired, he later became a pilot for Varig.

Witness C. Paulo César G. was on board the airplane to gain general familiarization and aviation experience. He sat in the right-rear seat. Witness A met him often after the event because he was a student pilot in the school of aviation. He died during an airplane crash in the 1970s.

Witness D. Orlando R. was a student enrolled in the Pegasus school. He sat in the left-rear seat and came along for general familiarization reasons. Witness A also met him often after the event because he was also a student pilot in the school. He is now retired from flying.

As far as Witness A knows, the other three witnesses had never seen a UAP before or after this incident. Figure 1 is a drawing of the cabin arrangement and location of each of the four men.

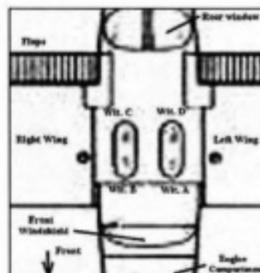


Fig. 1. Cabin seating, Cessna 172.

FLIGHT PATH RECONSTRUCTION

It is instructive to reconstruct this aerial encounter for several reasons. First, to evaluate the possibility that it qualified as a flight safety incident. Second, perhaps something of scientific or technical value may result from it. Finally, to explore the possibility that there could have been a reason for the UAP to approach this single-engine airplane. The reporting Witness A had arranged to take the three other student pilots up

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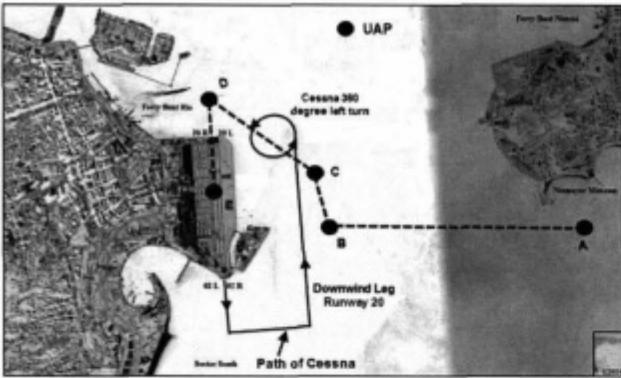


Fig. 2. Annotated illustration of airplane and UAP flight paths prepared by Witness A.

for a nighttime training flight that consisted of a number of touch-and-go approaches. Their flight originated from the Santos Dumont Airport soon after midnight, after all commercial flights had ceased.

Witness A prepared an illustration (Figure 2) that shows the airport locale, principal landmarks that are referred to

in this report, and most importantly, the approximate flight paths of the airplane (solid line) and UAP (dashed line) approaching from the right side.

The standard left-hand traffic patterns used at Santos Dumont airport are shown in Figure 3. These fixed-wing flight paths shown here have not changed since the 1970s. Also, note that the bridge to Niterói was not yet built.

Position A. At Position A in Figure 2, the UAP was seen approaching from the direction of Niterói, a bearing of about 115° from the airport. Its initial distance could not be determined; it descended about 40° or 45° relative to the horizontal.

When the UAP was first seen, the airplane was flying level at 1,000 feet altitude (mean sea level) near the start of the downwind portion of the airport's left-hand traffic pattern, traveling north. It had an airspeed of about 70 mph. Flaps were up (0°), until reaching the base leg of the pattern. Engine rpm was probably between 2,200 and 2,450.

Witness A recalled that Witness C (Celso M.), sitting in the right-back seat, had turned to the right to look at the approaching light continuously. He seemed both shocked and curious by what he was seeing.

Position B. At Position B the UAP had reached the same

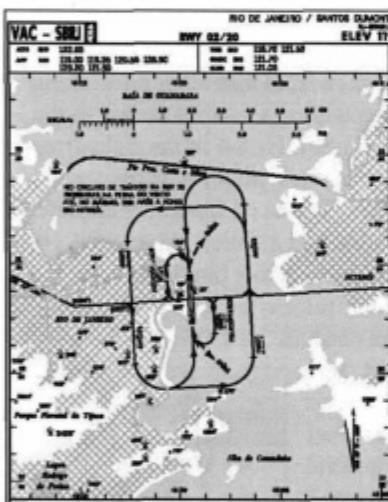


Fig. 3. Present-day landing traffic patterns at Santos Dumont Airport.

altitude as the airplane and smoothly and quickly changed its direction of flight in order to fly parallel with the Cessna and only about 20–30 meters distant. It did not bank during this turn. As shown in Figure 7, the object flew with its leading edge depressed about 5° below its flight path at all times. At no time was vapor, steam, smoke, or any other type of trail seen coming from the UAP. Witness A estimated that the UAP flew parallel with the airplane for about 10 seconds. Witness A provided several relative and absolute estimates of the size of the UAP that are presented later.

The Cessna's altitude was 1,000 feet, its airspeed was 80 knots or slightly more, and its wings were level between Positions B and C. Everyone was looking at the strange object flying beside them.

Position C. When the UAP was approaching Position C, the Cessna was abeam a point between half to three-quarters the (downwind) length of the runway. At position C the UAP changed its direction of flight abruptly (without banking) to the left. The UAP suddenly crossed in front of the airplane and disappeared briefly behind the airplane's nose. To their relief, it soon reappeared at a lower altitude on their left-hand side. Witness A estimated that its velocity along this segment was between 120 to 140 knots. It continued to descend toward an area that was recognized easily; it is known as Praça XV (Square 15), part of Terminal City boat dock area, a ferry terminal that carries passengers between Rio de Janeiro and Niterói across the bay. Its location relative to the airport runways is shown in Figure 4. The UAP accelerated as it descended to an estimated altitude of about 150 m (500 feet).

After the UAP changed its direction of flight and descended toward Position D, the Cessna continued on a heading of 020 degrees (downwind leg) for an unknown but short distance while maintaining 1,000 feet altitude. Witness A estimated the slant range between the airplane and the UAP upon reaching Position D to be about 2,000 meters.

Position D. The UAP unexpectedly and instantaneously changed its direction of flight again at Position D in Figure 2. It did not stop or pause there but accelerated very quickly on a new heading of about 200° ($\pm 10^\circ$) toward Sugarloaf Mountain. As the UAP approached and then departed from Position D, it did not appear to change in any manner (luminance, shape, or attitude). Witness A remarked that

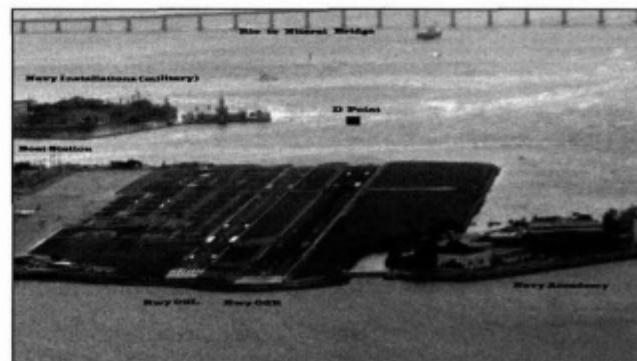


Fig. 4. Aerial photo of airport and boat terminal today.

it was a 100% rigid body and it was "as if it was entering another dimension."

As the UAP reached Position D, Witness A recalls that he kept the UAP in sight until it "changed directions and sped away. It was a VFR [Visual Flight Rules] night and full of ground references." Almost immediately, Witness A radioed the tower and asked permission to abort his landing and carry out a 360° (full circle) left-hand turn. This he did after receiving permission. The Cessna continued to maintain 1,000 feet altitude. The circular flight path in Figure 2 represents the full orbit that the Cessna made so that its occupants might possibly catch a glimpse of the UAP again and also avoid a possible collision should it return. Later, Witness A explained, he flew in a full circle "because I was trying to find [where the] UAP had gone."

Except for Witness A, who radioed the tower while in the traffic pattern to ask whether they knew of any other air traffic in the immediate area, no one on board the airplane said anything at all even after they had landed, exited the airplane, and walked to a telephone. Witness A believed that everyone was surprised by the approach of the UAP. Witness A said that he remembers the controller asking him during the flight, "*Onde, onde?* [where, where?]" in an excited voice. He said this "in reference to my warnings about the presence of a *disco voador* [flying saucer]" flying from Position A to D in Figure 2 and descending.

The UAP was visible during this interval because it was silhouetted against runway and other airport ground lights. Witness A mentioned that the UAP appeared "white gray."

Witness A was not sure where the UAP was after it had disappeared. It was in sight for no more than two seconds after leaving D. He wondered whether the UAP had possibly entered another dimension. He said its departure was somewhat similar to "lightning."

Witness A said that he heard no sonic boom or any other unusual noise at any time, nor did he recall feeling any air turbulence. After completing one full circle off the end of the runway he landed on Runway 20L and taxied to his final tie-down destination.

Position E. The point marked Position E in Figure 2 represents not only the approximate direction that the UAP was flying toward but also approximately where it disappeared from sight.

POSTFLIGHT EVENTS

After completing all of the usual postflight aircraft activities, the four men proceeded to the administration building where Witness A telephoned the tower (as the senior instructor in charge) about what had just happened. The other three men were present and remained calm and silent throughout the phone call. None of them said anything at all during this time. Witness A believes that no official report was made about this event. Witness A wrote, "I remember [that the] DAC personnel [were] astonished or curious with the event but didn't ask any questions."

When Witness A was asked if he ever talked about UAP

with his pilot friends before this night flight he answered, "We never talked about [it] before that night. [It was] not a popular subject."

Witness A said that he slept well the night after the aerial encounter and did not experience unusual sensations of hunger or thirst or have bad dreams within many days after the event. However, in 1997 or 1998 he began to have recurring dreams that involved UAP. Neither he nor the other three men exhibited sunburn symptoms after this event.

According to some aviation colleagues of Witness A, Witness B later told them that he saw something that night but didn't go into any details. Interestingly, Witness B happened to be the senior captain of a commercial flight from Brazil to Rome on which Witness A's son was going to fly. Upon phoning Witness B at that time Witness A asked him, "Did you remember that UAP back in the 1970s? Are you sure what we encountered?" He replied, "Do you have any doubts about what we sighted?"

I asked Witness A whether he was able to contact Witness D in order to ask him some questions. He answered, "I did, but he never answered my emails or tried to phone me. He's in bad health."

Airplane. Cessna 172 Model I, registration no. PT-BRO, was sold in 1968. At the time of the sighting, it was owned and operated by Pegasus School of Aviation at the Santos Dumont Airport. Figure 5 shows this model of airplane from the left side. It is a single-engine, high-wing, four-place airplane that is 26' 11" long with a 36' 2" wingspan.



Fig. 5. Side view of Cessna 172.

Locale, weather, and approximate date. At the time of this incident Santos Dumont Airport was one of two airports serving the Rio de Janeiro region. It mainly supported domestic flights. Galeão International Airport (now Antonio Carlos Jobim International Airport) served international (as well as some domestic flights). The runways were built on landfill and protruded into Guanabara Bay. It is located at 22° 54' 37.7" S., 43° 09' 47.3" W. Figure 6 shows its runways, parking areas, and other details. Its ICAO designation is SBRJ.

Its main runway (02R–20L) is 1,323 meters long and 42 meters wide. A parallel auxiliary runway (02L–20R) is 1,260 meters long and 30 meters wide. In the 1970s, Santos Dumont was the only airport serving all of the international airlines flying to and from Rio de Janeiro.

Witness A remembers that this incident took place either in the spring or summer of 1971 because the weather

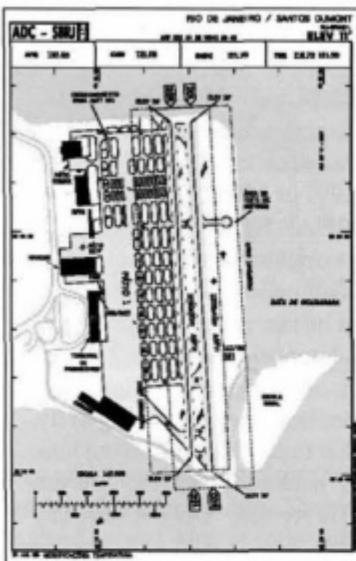


Fig. 6. Scale drawing of Santos Dumont Airport today.

the witness work with a professional artist to generate more accurate reproductions of the appearance of the UAP, and (5) having the witness and hypnotist crosscheck the present report for accuracy. Witness A was very cooperative throughout these activities. In the following section we shall focus mainly on the more interesting characteristics of the UAP.

Selected details from the two hypnosis sessions are presented here briefly. Hypnotist Mario Rangel met Witness A for the first time on July 3, 2009, at the witness's home. The first hypnosis session was conducted that afternoon with all of the proceedings recorded. The second interview and hypnosis session took place mid-morning on July 4. During this second session, Witness A remembered that he had completed the preflight forms with the Civil Aviation Department (DAC) between 2231 to 2232 hours (local time) on October 5, 1971. He said this date was "very clear to him."

When asked to describe what he saw under hypnosis when he discovered the time and date of the incident, he wrote (in an email dated July 17, 2009), "I saw the old DAC desk administration with balcony (made of wood), two employees, a clock, old typewriter machines over [on] two tables, and a form where I signed 10/05/71, local flight. . . . I felt some smell that is consistent with old ivory buildings, as [at] Santos Dumont." He also said (under hypnosis) that he phoned the tower at 0032 hours after landing (October 6), or two hours later. Witness A estimated that the sighting occurred about 10–15 minutes before this time or at about 0017 hours. After this session (and no longer under hypnosis), Witness A narrated an overview of various remembered details of this aerial encounter and events after his landing. He was surprised and somewhat afraid at some things he learned from his subconscious; for example, a thin, brief pulse of red light that came from the UAP; the infinity symbol that was on its surface; and the fear he felt when he saw the being in the window.

was clear and cloudless. There was the normal influence of a coastal, nighttime wind off the sea at about 8 knots at 180°.

Research methodology and hypnosis. This case involved the use of several procedures to learn as much as possible about the incident: (1) requesting a full written narrative, (2) submitting a series of questions to clarify ambiguous details, (3) arranging for Witness A to be hypnotized to try to recover additional details, (4) suggesting that

Witness A remembered several other things. First, during the encounter Witness B in the right-front seat said, "I don't believe, I don't believe," as he looked at the UAP flying nearby. Secondly, Witness A had a fever three or four days after the sighting, along with a premonition of an airplane crash that was to occur at Niterói. A crash actually did occur on October 12, 1971, on Alameda São Boaventura, Niterói.

THE UAP

Through the use of many question-and-answer sessions conducted by email it was possible to learn some interesting details about this UAP. These details made it clear that the object could not have been a man-made vehicle or an astronomical body of some kind.

Witness A provided me with an outline drawing of the UAP with detailed comments (Figure 7). I was told that this was only the second or third time Witness A had tried to sketch the UAP since 2007 when he first came forward with the details of his experience. It is clear from the drawing that when first seen, the UAP looked like a "huge star on our right side at more or less 40 to 45 deg. above [the] horizon and maybe abeam Niterói City." It appeared somewhat larger than a point source of light, but it took on a definite outline shape as it approached.

Shape. Witness A was hypnotized and regressed back through this event. I provided a list of questions to be asked by the hypnotist (while Witness A was under hypnosis); a number of additional details emerged, one of which was a sketch of the UAP that the witness made while under hypnosis (Figure 8) and another made soon after leaving the hypnotized state (Figure 9).

Seen from the side, the object looked like an "inverted dish" with a small, rounded protrusion centered on its upper surface. The length-to-thickness ratio of this drawing is about

(continued on page 26)

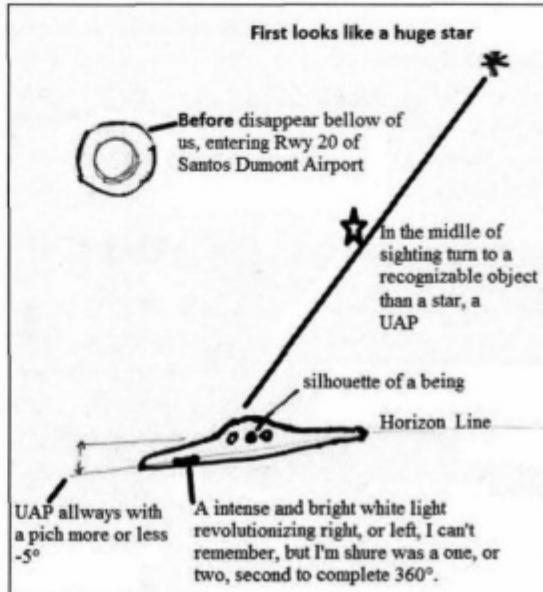


Fig. 7. UAP drawing by Witness A.

DEFENDING UFOs

BY THOMAS E. BULLARD

In the spring of 2010, James Carrion resigned as the international director of MUFON. I was sorry to see the departure of a leader who had brought new vigor to the organization and guided it toward a scientifically rigorous pursuit of ufology during his three-year tenure.

If the bare fact of his resignation was regrettable, the reasons behind this decision disturbed me more as I read them on his blog.¹ He told a story that many of us can relate to—after years of passive interest in ufology his curiosity drove him into active pursuit of answers, in his case joining MUFON and rising to the top of the organizational order. He hoped to discover the truth about UFOs through improved investigations and utilization of the case files; instead he learned enough truths about ufology to leave him disappointed and disillusioned. No Men in Black knocked on his door, no government agents conspired against him. They didn't have to.

What he found was that ufologists obscured understanding of UFOs with beliefs and agendas, falling prey to their own egos and the allurements of con artists as long as the lies, errors, and misinformation confirmed cherished expectations. Poor standards of evidence and delusions of ufologists corrupted even basic investigations, he concluded, so that existing files consist more of UFO mythology than UFO fact, while the myths are so firmly entrenched, so satisfying to believers' needs, that ufologists resist any change to better the situation.

Carrion's bleak assessment causes defensive reflexes to kick in, but much of what he says strikes closer to home than we would like to admit. For anyone interested in the subject, for anyone convinced that something truly unusual underlies the reports, a nagging question never falls silent: Why do UFOs get no respect?

The public loves them, the media adore them, millions of people see them. UFOs are popular, famous, and believed in, ufologists are cuddly and good-looking.... Okay, at least a few of them have two heads or three eyes. The intellectual disrepute of UFOs seems quite out of step with their glittering social status.

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These intriguing objects appeal to human curiosity, yet never attract a seriousness of interest commensurate with their possibilities. Scientists, academics, pundits, journalists, commentators, and the rest of the intellectual elite usually side with skeptics, comics, and everyday know-it-alls to poke fun at UFOs—enjoying them to be sure, but ultimately dismissing them without a fair hearing. The plain fact that the study of UFOs falls into the hands of amateurs or, at best, professionals working independently without any institutional base of support, speaks volumes about the lowliness of the subject. From the official viewpoint, ufology deserves nothing but scorn and its efforts amount to no more than the unsmiling recital of a joke by those who fail to get the joke.

By contrast, Leslie Kean's recent book, *UFOs: Generals, Pilots, and Government Officials Go on the Record*, presents a thundering back-to-basics reminder of why UFOs deserve careful and respectful attention. At heart the UFO mystery is about the anomalous experiences of eyewitnesses. Readers of Kean's book meet case after case of detailed and perplexing observations by witnesses with ample credentials for reliability, where easy conventional explanations are not apparent. Whatever these people saw, it cries out for serious investigation; but in an account that cuts to the truth with the sharp edge of a parable, she relates that when a "saucer" appeared over O'Hare Airport in November 2006, some people in the control tower were too busy laughing to go outside and see for themselves.²

Much blame for the negative responses to both the pursuit and the pursuers of UFOs must fall on the extravagant interpretations and unfounded claims so rampant in UFO belief. The proposal that UFOs are extraterrestrial spaceships or modern technology derived from captured alien models stakes a big claim against conventional understanding, but doubters see inadequate reason to trade a perfectly good worldview for such revolutionary alternatives. Conflict is bound to break out at this uneasy frontier. Moreover, ufologists have not built a step-by-step case to make their theories plausible. The doubters can reasonably question an exotic interpretation of UFOs when proponents have not even established the basic existence of an unconventional phenomenon, at least not to satisfactory standards for a critical audience.

One key weakness of UFO evidence lies in the inherent shortcomings of eyewitness reports. Most UFO evidence

consists of observational reports that lack the objectivity, instrumentation, predictability, replication, and controlled experimentation dear to science. The human instrument serves as the primary recorder, so most of the evidence consists not of hard data but of nothing more substantial than anecdotal testimony.

Scientists begrudge any sort of anecdotal evidence as scarcely evidential at all, and for good reason. Even the best observations are disappointing. They are ever fraught with possibilities for error, expectations, and excitement to distort the description until it bears little resemblance to the underlying event, even if the event really exists. The stringent requirements of science clash with the sloppy realities of UFO observation so that scientists have little incentive to explore such uncongenial territory.

For this discussion I want to emphasize another reason for the ill repute of ufology: the regrettable fate of UFO reports once they enter the record. Like Caesar's wife, a credible UFO record must stand above reproach. The very idea of a record implies a fixed and reliable body of facts, and even if the facts represent subjective impressions of fallible observers, we still expect to count on the record to preserve with accuracy whatever the witnesses have to say. We take for granted that we base our arguments for an unconventional UFO phenomenon on a solid foundation of facts.

A secondary expectation anticipates that if the record changes at all, it changes in the direction of improvement over time. In science, the give-and-take of observation, experiment, replication, criticism, and theory-building weeds out errors and approaches the truth by progressive approximations. The process is not perfect, but it is the most successful means of understanding natural phenomena ever devised by human thought. Ufology aspires to science, or gives lip service to that aspiration, so further investigation and critical analysis should expose hoaxes, highlight errors, and consider conventional alternatives. The cases that do not stand up will fall away, even if they are favorites; but the remainder will be the lean-and-mean record for a genuine anomalous phenomenon, and on this evidence ufology will take its stand.

These two expectations express the ideal. Turning to reality, the UFO record often fails on both counts. It swells in size but increases in confusion and contradiction as it grows, its path not a linear course of improvement but a circular motion with little progress, rarely examined and often riddled with errors. Where scientific evidence serves as a stable account of natural truth, UFO reports act as flexible, accommodating vessels of social and cultural truth, where supposed events bend this way and that to suit prevailing beliefs, wishes, and agendas. As a result, the "facts" cited and defended as the historical truth of ufology come to have more in common with myth than history as they purvey an idealized, even fictitious version of the UFO experience. On both accounts the UFO record loses any semblance of a scientific record, and much credibility as a foundation for meaningful argument.

Ufologists have little control over the inherent fallibility of observation. They can improve the quality of reports with skillful investigations, interrogations, and critical examinations, but the vicissitudes of eyewitness testimony will leave an inescapable softness at the core of UFO data.

On the other hand, ufologists have considerable control over the integrity of the UFO record. As its custodians they also have a responsibility to preserve that integrity. The reality is that UFO proponents often treat the record as a plaything of belief, and one of the great failures of the field is how seldom ufologists act as gatekeepers to close out falsehoods and secure the truth. If ufologists can't keep their facts straight, why should anyone take them seriously? Those inclined to skepticism find all the reason they need in this corruption, while it gives good cause even for open-minded people to pass negative judgment.

How then do we deal with the self-inflicted wounds that James Carrion warns us about? Some people trust in the long-awaited Day of Disclosure to cure all our ills, but like Millerites sitting on their rooftops in white robes awaiting the Second Coming, the outcome of such hope is most likely to be disappointment.

As an alternative to this passive approach, I propose a way for ufologists to take the initiative and establish a sound basis for argumentation. We cannot hope to overhaul the entire record at this late stage, but we can select the best of that record. That is, in place of reports that are spectacular or well-publicized or simply new and all too likely to resolve into conventional phenomena in the end, we concentrate only on examples with a proven track record, those strong in evidence and resistant to conventional explanation. If we adopt this approach we will still face critics with anecdotal evidence, but it will be the best of its kind, witness testimony with truly defensible quality. Our argument will gain strength if we adopt as our tactic to defend the defensible UFO cases.

First, let's consider three examples of what is wrong with the UFO record. The first exemplifies the zombie case, where a report duly discredited rises from the dead again and again. The second illustrates the too-good-to-be-true case, where ufologists have added fiction to genuine facts and created a splendid but fictitious story. And the third represents the case of honest errors, where witnesses (and ufologists) are convinced of the reality of a sighting but ignore plausible evidence for a conventional identity.

THE MULTIPLE CRASHES OF THE AURORA AIRSHIP

The phantom airship wave of 1896–1897 entered into UFO books as early as 1950 because it seemed to confirm that UFOs had sailed the skies before the first man-made aircraft ever got off the ground. A few accounts directly affirmed alien visitation 50 years before the first flying saucer report. On April 19, 1897, the *Dallas Morning News* printed a Texas airship story signed by S. E. Haydon that beat all its predecessors for sensational appeal. At 6 a.m. on the 17th:

early risers of Aurora were astonished at the sudden appearance of the airship.... It was traveling due north, and much nearer the earth than ever before. Evidently some of the machinery was out of order, for it was making a speed of only ten or twelve miles an hour, and gradually settling toward the earth. It sailed directly over the public square, and when it reached the north part of the town collided with the tower of Judge Proctor's windmill and went to pieces with a terrific explosion, scattering debris over several acres of ground, wrecking the windmill and water tank and destroying the judge's flower garden. The pilot of the ship is supposed to have been the only one on board, and while his remains are badly disfigured, enough of the original has been picked up to show that he was not an inhabitant of this world.

Mr. T. J. Weems, the United States signal service officer at this place and an authority on astronomy, gives it as his opinion that he was a native of the planet Mars.³

The Aurora story became widely known in 1966 when reporter Frank Masquelette wrote about the crash in the *Houston Post*. J. Allen Hynek took an interest and sought more information, asking William H. Driskill of Dallas to make inquiries in Aurora. Driskill met Oscar Lowry, who was a boy in 1897 and a resident certain to recall any event as memorable as an airship crash; but it was the hopes of ufologists that crashed when Lowry explained that the tale was a hoax by Haydon to bring a little publicity to the town, struggling to survive for several years since the railroad bypassed it. The yarn was riddled with errors, like Weems was not a signal officer but a blacksmith and Judge Proctor did not have a windmill.

The next year, an investigator combed the supposed crash site with a metal detector and found much junk but no scraps of spaceship. Local historian Etta Pegues confirmed that the story was a hoax, her conclusion confirmed by a resident who was a schoolgirl at the time and stated that no marvelous event occurred that year.⁴

All these nails in its coffin should have buried the story once and for all, but it rose again bigger than life in 1973. Bill Case, a reporter for the *Dallas Times-Herald*, publicized the story along with additions and errors, so that the Aurora crash suddenly became big news again. A party of UFO investigators arrived in town and headed for the cemetery to dig up the alien supposedly buried there, only to meet local residents unhappy with the idea and bearing shotguns to back up their objections. Meanwhile several old residents came forward to say they had heard of the crash from parents or friends who saw the wreckage. Brawley Oates, the current resident of the property that once belonged to Judge Proctor, became an outspoken advocate, attributing his severe rheumatoid arthritis to drinking water contaminated by the crash.⁵

Visits to Aurora by Kevin Randle and folklore graduate student Michael H. Simmons turned up less favorable evidence, like a readiness for younger residents to embrace the crash as an exciting and fashionable belief while oldtimers

knew nothing about the event and had no faith in it. A court order ended efforts to dig up any graves and the second surge of interest in the Aurora crash sank back to earth.⁶

Ufologists lost interest after the 1897 "Martians" resolved into hoaxes, but Aurora revived for a third time under the new constellation of ufological hopes configured by Roswell. As attention shifted to crash-retrievals in the 1980s, the search eventually expanded to alleged antecedents of Roswell, and in this capacity Aurora found its latest advocate in reporter Jim Marrs. His involvement began when he accompanied Bill Case to Aurora in 1973 and interviewed the three remaining residents who were born before 1897. One of them claimed that he saw an airship just prior to the crash. For Marrs, various supportive findings like a metal fragment with unusual properties and the 1897 airship wave itself combined sufficient circumstantial evidence to outweigh the contradictory testimony, leading him to conclude that the Aurora crash really happened and an alien spaceship was the cause. Fellow crash-retrievalists agree and Aurora holds a favored spot in their literature, the story repeated at conferences and in TV documentaries with enough nods and dramatizations to take on a convincing illusion of reality.⁷

A reasonable examination of the evidence leads to the opposite conclusion. Two of the three living witnesses said only that they heard their parents tell of the airship, which could mean that the adults simply repeated the newspaper story, while the man who said he was an eyewitness did not claim to see the crash, only an object in the sky, and he was all of six or seven years old in 1897. The metal fragments have no demonstrable relationship with 1897 and no tests by unbiased examiners confirm any unusual properties. In other words, the evidence in favor of a crash is slim indeed.

The negative evidence, on the other hand, is quite robust. Only the *Dallas Morning News* published an account of the Aurora crash, the story submitted by S. E. Haydon. Other papers copied the Dallas version, but no reporters went to Aurora to see for themselves. By contrast, interest in airships ran high enough in Iowa that a wood-and-canvas mockup hauled to the Waterloo fairgrounds one night attracted a

A Windmill Demolishes It.

Aurora, Wise Co., Tex.—Ap ril 17.—(To The News)—About 6 o'clock this morning the early risers of Aurora were astonished at the sudden appearance of the airship which has been sailing through the country.

It was traveling due north, and much nearer the earth than ever before. Evidently some of the machinery was out of order, for it was making a speed of only ten or twelve miles an hour and gradually settling toward the earth. It sailed directly over the public square, and when it reached the north part of town collided with the tower of Judge Proctor's windmill and went to pieces with a terrific explosion, scattering debris over several acres of ground, wrecking the windmill and water tank and destroying the judge's flower garden.

The pilot of the ship is supposed to have been the only one on board, and while his remains are badly disfigured, enough of the original has been picked up to show that he was not an inhabitant of this world.

Mr. T. J. Weems, the United States signal service officer at this place and an authority on astronomy, gives it as his opinion that he was a native of the planet Mars. Papers found on his person—evidently the record of his travels—are written in some unknown hieroglyphics, and can not be deciphered.

The ship was too badly wrecked to form any conclusion as to its construction or motive power. It was built of an unknown metal, resembling somewhat a mixture of aluminum and silver, and it must have weighed several tons.

The town is full of people to-day who are viewing the wreck and gathering specimens of the strange metal from the debris. The pilot's funeral will take place at noon to-morrow.

S. E. HAYDON.

Dallas Morning News,
April 19, 1897

huge crowd the next morning, with people flocking into town even after the "airship" makers confessed that it was a fake. Representatives from several nearby newspapers came to see the hoax and wrote independent articles for their respective papers.

Other cases of crashed airships remained one-article reports. The yarns were sensational but no one followed up—not for laziness or lack of curiosity but for lack of anything to see. A reasonable conclusion is that Aurora belongs to the same category.

A series of misconceptions about the culture of 1897 pervades the pro-Aurora argument. One defender accuses critics of "an obvious lack of understanding about the crudeness of life in 19th century rural Texas," with illiteracy assumed to be widespread. Another argument takes for granted that news traveled slowly: "It is inconceivable that there could have been any collusion between witnesses, and highly unlikely that people living in towns separated by several hundred miles, could have heard news or read accounts of happenings in other towns within the space of two or three days."⁸ Each of these assumptions is badly mistaken.

The 1900 census shows an illiteracy rate of only 11%,⁹ and people had plenty of newspapers to read in those days. Aurora did not have its own paper but Wise County, population 24,000, had 10 in 1897.¹⁰ The role of the small town as central commercial and social hub for rural communities drew people together on Saturday for market or Sunday for church, so that even people who did not read the papers had an opportunity to exchange news by word of mouth.

While the transmission of news was not nearly as instantaneous as it is today, the case of the Waterloo airship illustrates that rapid communication by telegraph and telephone had become a fact of life. Newspapers also had a network of correspondents to feed matters of local interest to the editorial office, while drummers (traveling salesmen) came and went bearing news, rumors, and urban legends. And lest anyone doubt that news can pass by hearsay with speed and effectiveness, remember the Great Fear of 1789, when rumors that the king's troops were ravaging the countryside spread panic over large areas of rural France in a short period of time without any help from the improved communications available in 1897.

Far from being in an isolated backwater cut off from or disinterested in the news of the day, the people of Aurora had ample access to accounts of airships appearing around the country. By the same token, if anything of extraordinary interest happened in Aurora, the news would circulate far and wide through many channels and lead to numerous follow-ups. In Haydon's story of an airship crash we see the influence of the airship reports rampant in the news; in the absence of follow-ups we see evidence for the absence of a real event.

Another misunderstanding applies current standards of journalistic integrity to an age with standards of its own. The argument runs that "people of this time and place . . . were extremely conservative in nature, skeptical by necessity, and

most unlikely to take off on flights of fancy. There would simply be nothing to be gained from concocting a story concerning . . . an 'airship.'" "The most likely result of such a story . . . would have been shunning by the community as the 'village idiot' or as the 'town drunk.'"¹¹

In fact these assumptions land very wide of the mark. The local newspaper of the 19th century was not just a source of news, it was also a source of entertainment. A well-established tradition of hoaxes and tall tales enlivened the pages of facts, with a traveling salesman named Joe Mulhatton building a national reputation as a tall-tale teller in the late 19th century with yarns about the return of the Star of Bethlehem and meteorites bearing hieroglyphic writing. "Nature faking" was a stock practice in small-town newspapers when news ran scarce or a little excitement seemed in order. This sort of faking was so common that writers sometimes referred to airship reports as material for the "snake editor," a code term for hoax stories that readers readily understood.

The great airship wave was rife with hoaxes, some in the form of practical jokes as local residents sent up a kite with a paper lantern attached to the tail, or a fire balloon (hot air balloon). In other cases the hoaxes were "literary" or newspaper fakes.

Kansas farmer Alexander Hamilton told the famous story of a giant airship manned by strange beings stealing a calf from his barnyard, his reputation as a truthful and veracious citizen affirmed by an affidavit from a long list of prominent citizens of the county. When editors printed the story, they treated it with ample humor, and Hamilton confessed the hoax with plenty of tongue in cheek in response to an editor's letter. Later inquiries learned that Hamilton and the prominent citizens who vouched for his character belonged to the same Saturday-afternoon liars' club.

What these examples illustrate is a lively culture of newspaper humor where hoaxes and tall tales played an accepted part in everyday journalism. In a time when everyone knew his neighbor face to face, a man's reputation for honesty did not suffer on account of humor and imagination where snakes or airships were concerned—and in fact a good tale-teller stood to gain esteem as a worthy entertainer. The upshot for Aurora is that Haydon could very well have faked his story and no one would shun or disparage him because of it. If anything, the people of 1897 would have a good laugh on the people of today for our dour cluelessness about the fashionable styles of humor in that era.

Perhaps the single most damning indictment against a genuine crash at Aurora is the failure of that alleged event to leave a historical trail. In *Pioneer History of Wise County* (Decatur, Tex., 1907), lifelong resident Cliff D. Cates relates 50 years of local history in extensive detail, yet in 471 pages he says nothing about the airship crash, then a mere 10 years old.

By contrast, in my own home town the old-time residents preserved important local events like train wrecks, fires, and bank robberies in oral tradition as significant history. An airship crash should stand out as memorable beyond any

mundane occurrences; yet it left no trace, incomprehensible for a real event but only to be expected for a yarn devoid of substance.

The third incarnation of Aurora suffers the same fatal flaw as its predecessors—in the end the story is nothing but a story. An overwhelming accumulation of evidence refutes it and only by selecting a few doubtful claims to the exclusion of many unquestionable facts can defenders build their case.

Most serious ufologists recognize Aurora as a hoax, but the general practice of resurrecting justly buried cases is all too common in ufology and a blemish on the entire field. Whether the reason is irresponsibility of the few, an unchallenged wish, or an unexamined error in the record, the fault itself makes ufology appear to be sloppy and uncritical at best, at worst pseudoscientific and bent on saving a belief.

MALMSTROM: THE WAY IT DIDN'T HAPPEN

The UFO events at Malmstrom Air Force Base in Montana on November 7, 1975, stand among the most spectacular incidents in the literature. Amid a series of intrusions at northern-tier Strategic Air Command bases that autumn, an orange-lighted UFO the size of a football field hovered over a nuclear missile silo at Malmstrom. Alarms sounded and Sabotage Alert Teams rushed off to investigate, but when confronted with the unnerving giant disk hovering ahead, these well-armed soldiers refused an order to approach it. The UFO soon began to rise and radar picked it up. Two jet interceptors pursued the object but it played an apparent cat-and-mouse game by blinking out as the jets drew near, only to re-light after they circled and departed. The object then rose into the starry night and disappeared from radar at 200,000 feet. Next morning when inspection teams checked the missile, they discovered that the targeting computer had undergone mysterious reprogramming during the time the UFO hovered nearby.¹²

This version of the 1975 Malmstrom incident enjoys widespread circulation on the internet and in print. Even authoritative references like Richard Hall's *UFO Evidence: Volume II* and the *UFO Briefing Document* distributed to Congress present the story in this impressive form. Such a striking case offers persuasive reason to accept the reality of UFOs—and so it should, except for one small detail: This familiar version of the story never happened.

A series of puzzling intrusions did indeed occur at air bases in Maine, Michigan, North Dakota, Montana, and Ontario during two autumn weeks in 1975, though the events became known to the public for the first time only three years after the fact, as one of the first ufological fruits of the Freedom of Information Act. Documents reveal UFO sightings at Malmstrom not just on one occasion but every night from November 3–10.¹³

On the night of November 7, an officer reported a sound like a helicopter and an aircraft with red and white lights hovering 10–15 feet off the ground. Alerts from four missile sites described a large object variously said to be red, orange,

Subject: Unidentified Sightings

1. 0308 EST PONECON from NORAD Command Director: at 0253 EST Malmstrom AFB Montana received seven radar cuts on the height-finder radar at altitudes between 9,500' and 15,500'. Simultaneously ground witnesses observed lights in the sky and the sounds of jet engines similar to jet fighters. Cross-tell with FAA revealed no jet aircraft within 100NM of the sightings. Radar tracked the objects over Lewistown, Montana at a speed of seven (7) knots. Two F-106 interceptors from the 24th NORAD Region were scrambled at 0254 EST and became airborne at 0257 EST. At the time of the initial voice report personnel at Malmstrom AFB and SAC sites K1, K3, L3 and L6 were reporting lights in the sky accompanied by jet engine noise.

2. 0344 EST PONECON, same source:

Objects could not be intercepted. Fighters had to maintain a minimum of 12,000' because of mountainous terrain. Sightings had turned west, increased speed to 150 knots. Two tracks were apparent on height-finder radars 10–12 NM apart. SAC site K3 reported sightings between 300' and 1,000' while site L-4 reported sightings 5NM NW of their position. Sightings disappeared from radar at position 4650N/10920W at a tracked speed of three (3) knots.

*Memorandum from Brig. Gen. Wilman D. Barnes,
National Military Command Center, November 8, 1975,
on the Malmstrom AFB incident.*

or yellow, and it illuminated the driveway near a Launch Control Facility, according to a report from around 5 a.m. An hour later, security team members turned binoculars on objects bearing small lights, while another team observed a UFO that seemed to extrude a tube-like formation. All the unidentified objects appeared to ascend as the sun rose.

Unusual sightings resumed on the night of November 8 when radar detected objects at altitudes from 9,500 to 15,600 feet, traveling at speeds ranging from almost stationary to 150 knots. Several security teams reported a lighted object at an altitude of 300–1,000 feet and the sounds of a jet. Two F-106 interceptors searched for the intruders from 1:00 until 1:50 a.m., breaking off the hunt after the loss of ground radar contact and failure to spot anything from the air. At least one security team reported that the mystery lights went out when the jets approached and came on again once the jets departed. According to another team, about 3 a.m. the lighted object increased speed to high velocity as it ascended and became indistinguishable from the stars.¹⁴

What happened at Malmstrom is not easy to determine from the terse entries in the military logs. Venus and Jupiter probably account for some of the reports, and objects ascending as the sun rises is a typical description of stars or planets fading with the dawn. The intrusions at other air bases may have led to a heightened level of alert and prepared security personnel to mistake helicopters or the F-106s for intruder aircraft. Less persuasive are skeptics' proposals that birds were responsible for the radar returns, and that contrast between the jet exhaust from the interceptors and astronomical bodies explains the seemingly purposeful dimming of the UFO. Beyond any doubt those two nights were eventful, but any final solution to the nature of the UFO or UFOs eludes us in the confusion.

What is not at all doubtful are the sharp differences between the documented version of the Malmstrom events and the version now accepted as standard in the UFO literature. The popular version condenses the events of two nights into one dramatic climax, makes the UFO more clear-cut than it really was, and adds colorful details like the frightened

security guards, high-altitude radar tracking, and missile tampering. How did these changes come about? For once the answer is not wrapped in mystery but plainly documented and easy to follow.

An epidemic of alleged cattle mutilations plagued western states, Montana among them, during the same time as the Malmstrom intrusions. Filmmaker Linda Moulton Howe had no interest in such matters in 1975, but her brother phoned her one night with an excited report of UFO-related hearsay from Malmstrom. He told her that a giant UFO shone a brilliant light on one of the missile silos, security guards refused to approach the object, jets attempted to intercept it, and radar followed the departing UFO to 200,000 feet. The next day, crews discovered that targeting information had changed in the computer for the missile approached by the UFO. In 1979 Howe began the research on cattle mutilations that led to her prize-winning documentary, *A Strange Harvest*, first broadcast in 1981. She also began to connect UFOs with mutilations and in 1980 published an article relating the rumors she had heard from Malmstrom, acknowledging them as hearsay but offering them as perhaps another piece of the puzzle.¹⁵

The full story of Malmstrom and other air base intrusions of 1975 first became widely known in 1984 when Lawrence Fawcett and Barry J. Greenwood published *Clear Intent*, a book based on the FOIA discoveries of Citizens against UFO Secrecy. Fawcett and Greenwood relied mainly on primary documents but mixed in the rumors for their treatment of Malmstrom, even beginning the chapter on this case with the more sensational version. The authors specified that Howe repeated hearsay and subsequent findings failed to back it up, then dedicated most of their discussion to the documents; but while the truth is all there, the favored history has overwhelmed the genuine history.¹⁶ Compared with the clear-cut and spectacular rumors, the real record conveys the tumult and uncertainty of the case but fails to satisfy curiosity with firm answers or to please readers with the persuasive UFO evidence that many no doubt desire. The fiction makes the better story and this is the version that most readers appear to have taken home.

The distinction between the documented events and the rumored events runs through the literature for anyone to see. Fawcett and Greenwood point out the differences in the versions, and interested readers can explore the original texts in a collection of reproductions issued by CUFOS, *Documents Describing UFO/Helicopter Overflights of U.S.A.F. Bases in 1975*. Howe makes it clear in her book, *An Alien Harvest*, that her brother passed the rumors along to her.

A well-versed student of UFO history may recognize some elements of the 1975 story in another intrusion at Malmstrom on the night of March 16, 1967. In the earlier case, one security patrol reported a red glowing object parked just above the gate to a missile site and a man suffered injury during the encounter, while members of another patrol decided not to fire at a UFO. Ten missiles went off alert in quick succession. FOIA documents confirm that a

group of ICBMs became inoperative and extensive technical examinations uncovered no reason for the failure, leading the Strategic Air Command to term the incident "cause for grave concern." Ample documentation supports the missile failures but evidence for the role of UFOs remains tenuous, based on later witness interviews. The only documented reference describes UFOs as a rumor without foundation, and one security team stated that no unusual aerial activity took place.¹⁷ Here again the documented and the undocumented "facts" do not match up to support the UFO claims. What does seem certain is the transfer of motifs from the 1967 case to the 1975 case as floating rumors reshaped the latter Malmstrom story.

The Malmstrom incidents show that a congenial fiction can replace actual facts to become the standard version, repeated without question even after the errors became part of the public ufological record. Important UFO stories sometimes exist in two versions: one is neat, coherent, persuasive, memorable, and largely fictitious; the other is messy, inconclusive, tantalizing, and true to the uncertainties of human experience. It comes as little surprise that the fictitious version holds more appeal. At the same time, it is hard to imagine a more corrosive situation, where proponents trust the false account in good faith while opponents recognize it as a myth. When faulty stories taint the record, both enemies and potential friends of ufology find legitimate reason to toss out all UFO accounts as untrustworthy.

LIGHT ON THE PHOENIX LIGHTS

Nothing rings of truth like eyewitness testimony. Both ufologists and the general public assume that honest reports from careful observers picture real events pretty much as described. This faith clashes with the scientific fact that a great deal can go wrong even in eyewitness accounts. They present a personal version of an observation wherein human factors can distort each description and shape it in a way that may differ dramatically from another description based on a different perspective. The example of the Phoenix Lights illustrates how tangled a seemingly straightforward matter like witness accounts can become.

On the evening of March 13, 1997, hundreds, perhaps thousands, of Arizonans watched multiple lights in "V" or arc-shaped formations flying across the sky. Most of the observations came from the city of Phoenix and occurred between 8:00 and 10:30 p.m. Many witnesses, among them Arizona Governor Fife Symington III, described the lights as attached to a dark rigid object, usually characterized as an enormous V or boomerang-shaped craft. Video recordings of the lights lent them additional credibility and provided news media with the visuals to run the story on TV, so that the Phoenix Lights became one of the most celebrated UFO stories of recent years.¹⁸

The numerous reports that poured into collecting centers for UFO sightings like NUFORC and MUFON left the appearance that multiple sighting events occurred that



Artist's conception of the Phoenix Lights UFO witnessed by Tim Ley.

night between 5:30 p.m. and 2 a.m. over many locations in the state. Out of all the confusion two incidents, both from Phoenix, stood out as the most widely viewed. The first occurred around 8:00–8:45 p.m. when five lights in a V formation and apparently attached to a chevron-shaped craft passed over the city from the northwest; the second followed at 10:00–10:30 p.m. when lights in an arc pattern appeared to the north and winked out one by one, an event captured by many video recorders.

More impressive than sheer quantity is the careful reporting of an eyewitness, Tim Ley, who watched one of the UFOs pass over his home in North Phoenix on March 13 and posted on the internet an account of his observations, impressions, and feelings:

About 8 p.m. the author's son pointed to a small arc of five lights in the sky that seemed to float slowly toward the witnesses. The pattern soon resolved into an "A" shape as the lights grew gradually larger. He thought at first of military helicopters, but "[b]y the time it got about a mile away we had finally decided it was definitely one huge structure. . . . At this point, especially because of its apparent immense size and slow speed, it began to dawn upon us that this was not anything we were even remotely familiar with. . . . It was a real UFO.

"I commented that the lights had to be connected together, as no separate flying lit objects in our world could maintain such perfect symmetry. By now it was about a half a mile away . . . and at that point, we could then clearly see the distinct outline of its dark shape as it moved across the background of stars which were above and beyond it. . . .

"As it approached closer it was overwhelmingly large, spread out over a couple of blocks. . . . The length of the arm passing over us was probably about 700 feet long.

"My conclusion is that this object was traveling approximately 30 mph. . . . My first impression was that it was about 100 feet up in the air. . . . There was absolutely no sound coming out of the object. . . . It was so quiet that our dogs in the back yard didn't even bark.

"Somehow I was 'feeling' the craft in my nervous system; and so was my family. It was as if there was some type of field extending beyond the edge of the structure, and we could sense it. . . . The kids were out in the street . . . and pointed out to my wife and I how strangely the stars looked, almost as if looking through a very thick glass with the slight distortion of the light as it passed through, caused by the thickness itself and a wavering effect caused by the motion of the craft.

"I continued to stay focused on [the light], but then I noticed the perfectly squared-off end of the dark structure as it went by right after the light, the dark shape clearly visible to us against the background of stars and slightly lighter sky."

The last light then "seemed to split into two lights, one above the other. . . . Both lights remained white but took on a slight reddish amber cast and it seemed that I was seeing the light through a kind of transparent waviness like a mirage." The witness watched until the craft became lost in the aircraft traffic and glare over Phoenix.

"These 'visitors' deliberately allowed their technology to be seen and even videotaped . . . for some reason. They did not 'show' themselves to the military or any 'official' group. Rather, they communicated to the people. My understanding is that these visitors are here to help our world."¹⁹

Like many observers, Tim Ley described the early-evening UFO as a V-shaped object bearing lights. Like many other people, he had strong feelings of awe and a sense that he had seen something not of this world. He also provided illustrations of the object flying overhead, cementing in the mind's eye the image of a distinct craft with the shape and artificial appearance of a carpenter's square.

The skeptics take an altogether different view of the March 13 events, rereading the 8 o'clock sightings as a flight of jets passing over Phoenix and the 10 o'clock lights as flares over a military test range north of the city. All other supposed UFOs resulted from different perspectives and descriptions of these two events, confusion over timing or a readiness to associate some mundane appearance to the so-called UFO once it became newsworthy. A commonplace illusion was responsible for the appearance of a V-shaped craft behind the visible lights, while most of the videos show nothing more than the distant flares.²⁰ Ufologists moved rather quickly to agree with the skeptics about the 10 p.m. events. Optical physicist Bruce Maccabee undertook a detailed analysis of these reports and concluded that they were, indeed, military flares beyond the mountains.²¹

The earlier sightings of a giant V-shaped object with lights flying over the city have become the Phoenix Lights of interest, defended by numerous witnesses, including the former governor, as a genuine UFO rather than anything conventional like flares. At least one videotape showing the five lights of this alleged object exists and adds evidence that something really did fly over the city. Tony Ortega, a

(continued on page 30)

UFO EXPERIENCERS IN WESTERN NEW YORK

BY PHILIP HASELEY, ISABEL BEEHLER, AND KATHRYN SHOREY

After 60 years, the investigation of the UFO mystery is desperately in need of new directions. Despite the collection of overwhelming numbers of case reports, flap investigations, and government inquiries both public and covert, we do not have a satisfactory model for understanding the complexities of this puzzling phenomenon. Effort certainly has not been lacking. Statistical studies of UFO reports from several national populations and government and military data have received analysis and critical scrutiny. Surveys of the public's UFO experiences by polling organizations and national media both here and abroad have been ongoing since 1947. For the past three decades, research on the psychosocial characteristics of alien abductees has held center stage in ufological research and discussion.

Most notable and controversial was the national survey of UFO and abduction-related phenomena conducted by the Roper organization with analysis by Budd Hopkins, David Jacobs, and Ron Westrum (1992). It was an important and pioneering step in quantifying and seeking patterns in what was previously a remarkably obscure and secretive aspect of human experience. Nonetheless, much of what UFO investigators know remains in the category of common knowledge, poorly quantified and impossible to study comparatively. This is nowhere more true than in the study of local and regional populations, which have received virtually no attention from UFO researchers.

This is surprising because studies of local populations are a staple of disciplines as diverse as political science, human genetics, epidemiology, and evolutionary biology among many others. These studies often reveal enormous variation in the objects of interest, as well as key clues unlocking the nature of phenomena that are invisible in the averaging wash of a broader survey. Many problems of interest in ufology,

such as UFO hot spots, relations to ecological variables, electromagnetic field effects, and tectonic forces can be profitably studied in no other way.

This report focuses on one such local population, the residents of Niagara County, New York. One major purpose of the research was to obtain a statistical portrait of the UFO experiences of the adult residents of Niagara County. Additionally, we sought patterns of association between the characteristics of UFO encounters and the demographic and familial factors of the witnesses themselves. Thirdly, we focused our attention on six factors that have been linked to the abduction experience and analyzed their relationship to variables in the UFO encounter itself and among the reporting witnesses. The data for this analysis came from the administration of a survey developed by the researchers and collected by student interviewers during 2008–2009.

Niagara County is located in the extreme northwestern corner of New York State. Bounded to the north by Lake Ontario and to the west by the Niagara River, it shares a common boundary with southern Ontario, Canada. Primarily a rural county, it has a steady tourist base visiting the largest of its three cities, Niagara Falls, to view its natural wonders. The 2010 census recorded a resident population of approximately 220,000 with an adult (18 and over) population of about 165,000. It has a rich history of UFO events, going back to November 13, 1833, when at 2 a.m. "a large luminous body, like a square table, was seen nearly in the zenith, remaining for a time nearly stationary; and from this were emitted large streams of light" (Olmsted, 1834).

As is true of Lake Erie to the southwest, Lake Ontario has been continuously associated with unusual lights and unidentified craft, hovering, diving, and emerging from its depths. The massive Niagara Power Project and the now defunct Bell Aerospace plant in Niagara Falls, an important cog in the Mercury and Gemini space programs, were of regular interest to UFO visitors in the 1960s and early 1970s. Niagara County has had its share of close encounters, rumors of crashed saucers and abduction episodes. Along

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the lake shore, unidentified light phenomena continue to be so common as to strike many residents as hardly worthy of comment.

METHODS

Our analysis is based upon four independent data samples collected in four consecutive semesters in 2008–2009 by student volunteer researchers. These volunteers were recruited from the primary author's "Introduction to Cultural Anthropology" classes at Niagara County Community College. Each semester a new group of volunteers were trained in basic interview techniques, reading nonverbal cues, and administration and use of our prepared survey form. Students drew their interviewees heavily from their workplaces, school meeting places, local malls, and friends known through parents and other relatives. The survey focused both on demographic and UFO experiential factors.

Five of the questions were borrowed with minor modifications from the 1992 national survey. We thank the late Budd Hopkins for permission to use these questions. The survey questioned interviewees about vivid UFO dream experiences, paranormal light experiences, and paranormal sleep paralysis with "presence" experiences. Questions about extended missing-time episodes and puzzling wounds or scars of undetermined origin were also included. We chose to add a question about witness reports of "bodily transport through solid objects" as a sixth factor. All six are part and parcel of UFO abduction stories, though the transport factor is much rarer than the other factors. This factor seems entirely characteristic of abduction stories and lacks the ambiguity of reference and context surrounding the Hopkins survey questions about "flying through the air" and "out of body" experiences.

We also surveyed residents concerning kin members and their UFO experiences. A series of questions concerned with the physical circumstances of the witnesses' UFO experience and the characteristics of the UFO were added in the last three semesters of data collection.

Lack of funds and access to experienced research personnel made the use of student interviewers the best alternative for data collection. Each semester's sample, though independently collected by different volunteers, is what is disparagingly called a "convenience" sample with unknown deviations from random sampling. Inference from such samples to a larger population is statistically questionable. We therefore will base our claims upon the consistency of our results across multiple samples independently taken. We do offer the use of chi-square (χ^2) testing as a measure of the extent of deviations from chance proportions.* When

* χ^2 is a statistical test that measures the strength of an observed association between two categorical factors and their values. When you crosstabulate two factors, the χ^2 test measures the overall numerical difference between the observed number in each cell and what would be expected by chance alone. The larger the χ^2 value, the greater the deviation from chance expectations. The associated probability estimate (P value) measures the likelihood that a χ^2 value as large as or larger than the calculated χ^2 could be purely due to chance. So the lower the P value, the smaller the likelihood

small sample or cell size precluded the use of χ^2 tests, we used Fisher's Exact Test where possible.

We have also created a randomly drawn sample from our full data set which closely matches the proportions of the Niagara County population in sex, age, race, and education. We call this 1,000-case sample the Niasamp. Results consistent with those in our semester samples would further confirm our analyses in a sample that is not biased for any of the demographic variables pertaining to our study population.

Note: In reporting our results we will use the phrase "UFO experiencer" to mean a UFO witness or UFO observer, not an abductee.

RESULTS

In our survey we found no notable relationship between UFO experience and any demographic factor except age. We found that individuals over age 45 were significantly more likely to report UFO encounters than younger individuals. This may be purely due to a longer life and greater opportunity, but it may be that younger interviewees were more reluctant to reveal their experiences to like age peers who interviewed them.

Some of the basic demographic features of the full sample are presented in Table 1. UFO witnesses constitute 16.7% of our full sample. This is higher than in earlier national surveys, which range from 7 to 14%. We believe this reflects a genuinely higher frequency of unidentified light phenomena observed over Lake Ontario and the Niagara River. However, we cannot overlook that Niagara County has a surprisingly high amount of air traffic despite its rural nature. A commercial airport and an Air Force base are located in Niagara Falls, and the county is in close proximity to Buffalo and Toronto International Airports. There are numerous smaller regional and private airports on both sides

Table 1. Demographic Features of the Survey Samples (N = 2837)

Sex	Age		
Male	49.8%	18–29	30.3%
Female	50.2%	30–44	25.4%
		45–59	22.3%
		60+	21.2%
		Not identified	0.7%
Education	Racial/Ethnic Identification		
Non-high school graduate	14.3%	European American	65.9%
High school graduate	29.1%	Hispanic American	6.8%
Some college	30.0%	African American	13.7%
College graduate*	24.6%	Asian American	3.5%
Not identified	2.1%	Native American	6.1%
		Other	0.9%
		Not identified	3.2%

* All college graduates, whether from two-year or four-year colleges, included in this category.

The observed deviation is due to chance. The accepted significant probability value is $p = .05$ or less or 5 chances in 100. If that is so, an observed association between two factors is also unlikely to be due to chance at that probability or level of significance.

Table 2. Percentage of Survey Participants Who Experienced Each of 6 Abduction-Related Factors by Number of UFO Experiences

Interviewee with:	UFO dreams	Paranormal lights	Paranormal sleep	Missing time	Transport	Puzzling wounds/scars
No UFO experiences	12.3%	13.1%	13.3%	8.4%	1.1%	15.6%
1 or 2 UFO experiences	33.5%	32.8%	30.8%	20.0%	5.2%	30.3%
3 or more UFO experiences	53.7%	60.9%	43.0%	38.8%	9.0%	46.3%

1. UFO witnesses as a group are significantly more likely to experience each of the six abduction-related factors than nonwitnesses ($p < .001$).
2. Witnesses with three or more sightings are significantly more likely to experience four (UFO dreams, paranormal lights, missing time, puzzling wounds/scars) of the six factors than UFO witnesses with one or two sightings ($p = .002$ or less).

Table 3. Percentage of Spouses and Biological Relatives with UFO Sightings among UFO Witnesses and Nonwitnesses

	Spouse with UFO sighting	Biological relative with UFO sighting
UFO witnesses	15.4%	39.8%
Nonwitnesses*	3.0%	9.4%

- * Includes interviewees answering "don't know" or giving no response.
1. UFO witnesses more likely to have a spouse with UFO experience ($p < .000$).
 2. UFO witnesses more likely to have biological family members with UFO experience than nonwitnesses ($p < .000$).

of the border. This offers opportunities for misidentification that are an unknowable percentage of the total.

A primary question is: How do UFO witnesses differ from nonwitnesses in their experience of the six factors discussed earlier? These six factors are reported in witnesses and nonwitnesses alike, but not with the same frequency. As Table 2 illustrates, the percentage of UFO witnesses experiencing these abduction-related factors are much higher than nonwitnesses. This is true whether the witnesses have had just one or two sightings or whether they have had three or more sightings. Taken as a group, UFO witnesses are significantly more likely to experience all six of these factors ($p < .001$).

Moreover, UFO witnesses with three or more sightings were more likely than witnesses with just one or two encounters to experience four of these factors. These include UFO dreams, paranormal light encounters, missing time episodes, and puzzling wounds or scars. A fifth, paranormal sleep experiences, borders on statistical significance as well ($p = .077$).

The difference between these two groups of UFO witnesses can be seen in another way. Witnesses with two or fewer UFO encounters who had at least one experience of a factor numerically exceeded chance expectations by 95.5%, averaged over all six factors. That same average for witnesses with three or more UFO encounters was 276% greater than chance expectation. These results were not affected by statistical control for any demographic factor, and they were significant in all four semester samples, in the Niasamp, and in our full data set.

UFO EXPERIENCE AND FAMILY ASSOCIATIONS

Among our other findings were associations between kinship and marriage relations and the UFO experience. Our analysis indicates UFO witnesses were much more likely to have biological family members who have had UFO encounters than nonwitnesses (Table 3). This is indicated by the over 30% difference between UFO witnesses and nonwitnesses who have biological relatives with UFO sightings. All cat-

Table 4. Percentage of Various Biological Relatives with UFO Sightings among UFO Witnesses and Nonwitnesses

Witness category	Relatives with UFO Sightings			
	Grandparent or parent	Sibling	Children	Multiple relatives*
Nonwitnesses	4.3%	2.4%	2.3%	0.4%
1 or 2 sightings	12.1%	14.0%	7.4%	4.9%
3 or more sightings	13.4%	7.5%	14.9%	11.9%

* Multiple relatives of differing biological relationship to the witness.

1. UFO witnesses with 1 or 2 sightings and UFO witnesses with 3 or more sightings significantly different from nonwitnesses at $p = .000$ and $p < .000$, respectively.

egories of relatives contributed to these differences. Both categories of UFO witnesses are notably higher in percentage and statistically different from nonwitnesses over all categories of relatives (Table 4).

There are also appreciable and significant differences between the two UFO witness categories. There are considerably larger numbers of UFO witnesses with one or two sightings with a UFO witness sibling. The data, however, also reveal there are substantially greater numbers of UFO witnesses with three or more sightings with children or with multiple biological relatives with UFO experiences. These results were significant for three of the four semester samples, and the Niasamp as well.

We also found that UFO witnesses were much more likely to have a spouse who was a UFO witness than were nonwitnesses (Table 3). However, we did not find that witnesses with three or more encounters were significantly more likely to have UFO reporting spouses than were witnesses with one or two encounters ($p = .262$). The overall difference between witnesses and nonwitnesses was significant for all four semester samples, the Niasamp, and the full data set. All of these results were unaffected by statistical control for demographic factors.

UFO FACTORS AND OBSERVER DISTANCE

Accurate distance estimation even with recent observation is always a matter of doubt. After a passage of time, the matter often becomes an exercise in frustration. However, we did find some associations between UFO distance from the viewer and our six UFO related factors.

We previously reported that our UFO witnesses were far more likely to experience these factors than nonwitnesses. We also have found that witnesses whose closest encounter was 500 feet or less (the Hynek definition of a CE1 report) were significantly more likely to report missing time episodes and transport experiences than those whose

encounters were at distances greater than 500 feet ($p = .05$ and $.025$ respectively). There were also excesses of close encounter witnesses reporting paranormal light encounters and UFO dream experiences that did not reach statistical significance.

DISTANCE AND VIEWING TIME

Relationships were also explored between distance and time of day of the observation. When distance was broken down into three categories (500 feet or less, 500 feet to one mile, greater than 1 mile), a significant association was found between distance and the time of the observation ($p = .015$).

The result was primarily due to a 37% excess of witnesses with daytime encounters at 500 feet or less and a 51% excess of witnesses with dawn or dusk encounters with objects at 500 feet to 1 mile. The latter were in considerable excess in two of the three semester samples where data were collected and in the Niasamp and the full data set.

INDIVIDUAL CLOSE ENCOUNTERS

One of the more interesting and puzzling results concerned the number of objects seen in an observer's closest encounter and its association with the six UFO-related factors. Experiencers who observed more than one unidentified in their closest encounter had a far higher likelihood of experiencing five of these six factors than those whose closest encounter involved a single object. The lone exception, puzzling wounds and scars, is still very near the accepted level of significance ($p = .077$). To illustrate further, Table 5 compares one-object observers to multiple-object observers for all six factors in our three semester samples. In 16 of the 18 factor/sample combinations, there was an excess of multiple-object observers who had that experience. In 11 of 18, these are statistically significant excesses.

Similarly, in our Niasamp sample, three of six factors

Table 5. Observed Excess/Deficiency of Witnesses Who Viewed Multiple UFOs in Their Closest Encounter Compared to One Object Witnesses

Test Factor	Sample ¹				
	0809	0901	0909	Niasamp	Full data
UFO dreams	+	+	+	+	++
Paranormal lights	++	+	+	++	++
Paranormal sleep	++	+	+	+	++
Missing time	++	+	++	++	++
Transport	-	+	+	+	++
Puzzling wounds	++	+	-	+	+

* Excess is significant at $p = .05$ or less.

+ Witnesses with multiple UFO closest encounter exceed chance expectations.

- Witnesses with multiple UFO closest encounter equal to or less than chance expectations.

¹ Data on object number not collected for 0801 sample.

Table 6. Percentage of UFO Witnesses with Entity Encounters vs. UFO Witnesses without Entity Encounters for Abduction-Related Factors and Object Numbers

	Witnesses with entity encounters	Witnesses without entity encounters	P value for difference
Paranormal sleep episodes	63.6%	29.5%	.022
Missing time episodes	72.7%	21.0%	<.001
Puzzling wounds or scars	63.6%	34.0%	.055
Closest encounters / two or more objects	72.7%	32.5%	.009

show significant excess of multiple-object observers and all factors do show some excess of those observers who have had the factor experience.

Hopkins, Jacobs, and Westrum used five of these factors as markers for the abduction experience. It may be that a multiple object encounter may also be an alert signal for possible abduction experiences. Its usefulness will need to be tested against a variety of abduction witnesses and their stories. However, it is interesting to note the multiple object observation seems more closely associated with these six marker factors than other possible precursors to abduction that we have examined. We note that having a sighting at less than 500 feet and seeing a structured craft, both of which are experiences we might expect to be frequently reported by abductees, have a significant relationship with two and one of the factors, respectively. Multiple object encounters are significantly associated with 5 of 6 of the factors.

ENTITY ENCOUNTERS

Our interviewees reported only a few entity encounters. These included 11 definite encounters and 35 individuals who were "unsure" whether they had ever had such an encounter. After considerable debate, we decided to treat the unsures as witnesses without an entity encounter. These points certainly make a degree of caution advisable when assessing this analysis. (*Editor's note:* The proportion of entity encounters is consistent with past studies of the distributions

of various types of cases. Entity encounters are very rare, even more so today).

Nevertheless, an interesting pattern emerges when we compare UFO witnesses with and without entity encounters (Table 6). The percentages of witnesses with an entity encounter who have had paranormal sleep episodes, missing time periods, and puzzling wounds/scars greatly exceeds the comparable percentages for witnesses without an entity encounter. These differences are statistically significant. Those witnesses with paranormal light experiences also show an excess of entity encounters that bordered on levels of significance ($p = .071$). Although not testable due to small numbers, witnesses with both a transport experience and an entity encounter were 312% in excess of random expectations.

We also discovered a link between entity encounters and the number of objects that were witnessed. In their closest encounter, witnesses with entity encounters were significantly more likely to have seen two or more objects than a witness without an entity encounter (72.7% to 32.5%).

A difficulty with the Roper Poll analysis we hoped to overcome was a lack of data and analysis concerning time concurrence between possible abduction related factors and UFO experiences. In our view it definitely matters if these paranormal episodes occur in the same time frame as a UFO sighting, if they are in fact related to abduction. To remedy this, we asked UFO witnesses if they remembered a paranormal sleep episode, a missing time period, or a transport experience within 12 hours of a UFO sighting. For

Table 7. Percentage of Entity Encounter Witnesses vs. UFO Witnesses without Entity Encounters* for Time-Concurrent Abduction-Related Factors

	Witnesses with entity encounters	Witnesses without entity encounters*	P value for difference
Time-concurrent paraspell episodes	27.3%	6.1%	.031
Time-concurrent missing time episodes	36.4%	7.6%	.009
Time-concurrent puzzling wounds or scars	27.3%	7.3%	.048

* Includes interviewees who responded with "not sure."

the puzzling wound/scar factor, a three-day interval during which the blemish was discovered was the point of reference.

We found that the percentages of witnesses with entity encounters was much higher than for witnesses without entity encounters for three time-concurrent factors (Table 7). Our data indicate a significant association between entity encounters and paranormal sleep episodes, missing time experiences, and puzzling wounds and scars. This appears to indicate these factors are more likely to occur at or near the time of an entity encounter than expected by chance alone.

We believe that witnesses with these four factors—paranormal sleep episodes, missing time, transport experiences, and puzzling wounds/scars—time-concurrent with UFO sightings would be the most likely candidates to have experienced abduction. The frequency of such individuals in our survey data was 0.176% (5 individuals). This would be the most conservative estimate of abduction taken from our sample data. This is comparatively a much smaller figure than the 2% possible abductees calculated from the Roper Poll data. (*Editor's note:* This smaller percentage would still yield an abductee population of about 350,000 among U.S. adults.)

SUMMARY AND CONCLUSION

We have found that these six test factors have a highly significant link to the UFO experience in our Niagara County samples. UFO witnesses were significantly more likely to experience all six of these UFO-related factors than nonwitnesses. Those witnesses who had three or more encounters had significantly greater likelihood of having UFO dreams, paranormal light encounters, missing time episodes, and puzzling wounds and scars than witnesses with one or two encounters. We found UFO experiencers were significantly more likely to have biological relatives and spouses who were experiencers. UFO witnesses with 3 or more sightings were much more likely to have children and multiple biological relatives with their own sightings. UFO witnesses with two or fewer sightings had a higher percentage of siblings with sightings than witnesses with three or more experiences.

We also found that close encounter witnesses (500 feet or less) were significantly more likely to experience missing time episodes and transport experiences than witnesses of a UFO at a greater distance. Also, daytime encounters of 500 feet or less and dawn or dusk encounters at distances between 500 feet and one mile were in considerable excess over chance proportions.

Additionally, we found that witnesses whose closest encounter featured multiple objects were statistically much more likely to experience five of the six UFO related factors than single object witnesses. The abduction-related markers are much more closely associated with multiple object observations than measures such as distance 500 feet or less or viewing of a structured craft. Again, these findings are consistent over our various samples tested and in our full data set.

Although entity encounters were rare, they did yield

interesting information. Witnesses with entity encounters had a higher likelihood of paranormal sleep episodes, missing time periods, and puzzling wounds or scars than UFO witnesses without a remembered entity encounter. This remained true even among witnesses with time concurrence between their sighting and these three test factors. Entity encounter witnesses were also more likely to have a closest encounter that involved two or more objects than other witnesses. Additionally, a conservative estimate of abduction frequency for our sample (0.176%) was calculated based upon our four time concurrent factors.

This study illustrates again the separate status of the repeater UFO witness, in this case those with three or more encounters. Our personal experiences as UFO investigators have linked these witnesses with a host of paranormal phenomena. The strong association found between paranormal light encounters and sleep paralysis/presence episodes in these multiple-encounter witnesses reinforces this connection. These are phenomena that are linked to other paranormal experiences, notably apparitional and Old Hag encounters. We would suggest that UFO experiences are part of a greater "paranormal complex" whose boundaries are not confined to abductees or even UFO witnesses collectively. The American research community has to date pursued the investigation of UFO links to the paranormal with the greatest of reluctance. This is understandable since fears that ufology might be carried yet further to the margins of scientific respectability are not without foundation. We speculate that uneasiness about the continued viability of the much treasured extraterrestrial hypothesis may also be at work here. Nonetheless, it is necessary to pursue the data wherever it takes us if progress is to be made. Greater interaction with the researchers and findings in other areas of paranormal research would be most fruitful, we believe.

We are certainly aware of some of the deficiencies of this study. The use of inexperienced student interviewers to collect data and sampling that isn't random is far from ideal. Nonetheless, the samples were independently collected, large in size, and for our most important findings, consistent in what they indicate. We trust that others will take the study of local populations further and improve on our work. We can, with forethought, carry out an informative and systematic set of local studies directed toward answering all kinds of UFO research questions. Ufology can go forward, adding with each new study collective weight and coherence to the case for UFO reality.

BIBLIOGRAPHY

Basterfield, Keith. "Abductions: The Australian Experience," in Andrea Pritchard, et al., eds. *Alien Discussions: Proceedings of the Abduction Study Conference*. Cambridge, Mass.: North Cambridge Press, 1994.

Basterfield, Keith, Vladimir Godic, Pony Godic, and Mark Rodeghier. "Australian Ufology: A Review." *Journal of UFO Studies* 2 (1990): 19-44.

(continued on page 25)

REVIEW

The Myth and Mystery of UFOs, by Thomas E. Bullard.
Lawrence, Kans.: University Press of Kansas, 2010.
ISBN 978-0-7006-1729-6. 417p.

It is hard to praise this book adequately, for *The Myth and Mystery of UFOs* must rank as one of the most significant contributions to ufology in recent memory. Thomas E. (Eddie) Bullard's book should both inform and provoke considerable reflection in those involved in the field, as it sheds light on an aspect of the UFO experience ill-considered previously. But *The Myth and Mystery of UFOs* deserves attention beyond the confines of UFO studies—and more specific than the standard general audience of literate readers—it should appeal to folklorists, historians, anthropologists, and psychologists, and to those interested in the history of ideas and their impact upon popular culture. The folkloric aspects of ufology are significant and comprehensible and worthy of study by the mainstream academic community, just as UFO religions are grist for the mill of religious scholarship and the psychology of UFO reporters commands a wider area of discussion.

The folkloric component to ufology was recognized as early as 1950 in an article in *Hoosier Folklore*, whose author warned that UFOs could become the mid-century mystery story successor to the Loch Ness monster and a favorite of those civilians who were suspicious of uniformed authority (Peckham, 1950). Eight years later, Carl Jung probed deeply into the psychological implications of UFOs with his *Flying Saucers: A Modern Myth of Things Seen in the Skies*. Some may not wish to elevate the UFO myth to the status level of a Greek mythology, as in no way as central to our civilization (Halperin, 2011), and for now the point must be conceded. However, UFO narratives do possess mythic characteristics shared with other folkloric themes. Running a search for "UFOs" in the archives of JSTOR, a repository of 1,000 academic journals, is instructive—UFOs pull 2,540 hits, about a quarter of those garnered for "Fairies." Given the different spans of time humans have been fascinated by these two different topics, clearly even academics have found UFOs worthy of their scholarly efforts.¹

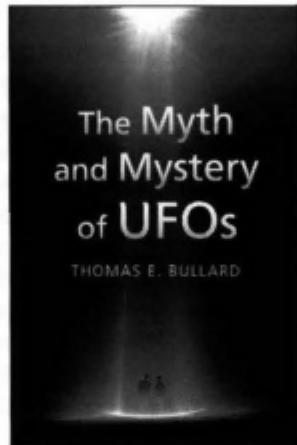
What is also misunderstood by many—perhaps exemplified by *Library Journal* placing its review of the book under the category of Parapsychology (Jones, 2010)—is that *The Myth and Mystery of UFOs* is not really about UFOs. Nor is it about UFO percipients, nor even is it that much about the larger group of people who are drawn into the study of UFO topics, these latter surveyed by sociologist Charles Emmons

(1997) and religious scholar Brenda Denzler (2001). The book deals with how people think and talk about UFOs. Bullard has produced a comparative study of long-running cultural themes and patterns, revealing important shaping influences on UFO discourse. "It would not stretch the truth too far to say that current knowledge of UFOs is mainly a structure of beliefs about UFOs, more responsive to human concerns, ordered according to cultural patterns, and expressive of ethnocentric assumptions than reflective of a physical phenomenon" (pp. 11–12).

Bullard focuses on the human process of processing UFO experiences, whatever they at base may be. In this he expands upon and updates his seminal article in the *Journal of UFO Studies* (Bullard, 1991). There as well as here he asks both ufologists and others—in 1991 folklorists in particular, in 2010 the wider scientific/academic community—to focus not on the question of the ultimate reality of what is perceived, but to look at the human reaction to UFOs, a perspective that "frees UFOs from intellectual isolation and relates them into their sociocultural context" (Bullard, 1991, p. 1).

Bullard traces the stages UFO accounts take from apprehension of a core phenomenon to collective integration and influence upon future perceptions. We really do not study UFOs directly, but must almost always encounter them through what they leave behind, which more often than not is a puzzled witness. In the beginning is the Event—"a possible phenomenon that exists independent of witnesses," as Bullard puts it (p. 10)—but the first human involvement is the Experience of a UFO, whether that UFO exists in objective reality or in a subjective world. Next, Memory comes in, as the experience travels through the human sensory bank into the memory of the witness. This stage is followed by some sort of Understanding—how the witness makes sense of what he/she has experienced. After this comes Communication, wherein the witness relates the understanding they have gained through some sort of narrative to others.

But it gets worse as we move from Communication through Social Reception, as multiple recipients reinterpret what they have heard from the witness; yet bear in mind that this is not merely a degenerative process, but one of construction, as well, as interpretations and new meanings may be added. The end of the developmental chain is Cultural Representation, where the narrative becomes part of the collective knowledge of the subject. And the process is circular, because this shared conception of UFOs, built over the years by the accretion of reinterpreted UFO stories,



becomes a part of the background that most future UFO witnesses will possess. The penetration of the received view is considerable; Bullard notes that Gallup Polls have shown UFOs enjoy a higher recognition rating than even recently retired Presidents. The effect is that "Every UFO story belongs to a mythic world that informs the narrator what UFOs and stories about them should be like" (p. 284). Given this layer upon layer of mediation and distortion, it might at first seem a wonder that there is a coherent picture of UFOs.

Bullard also draws a clear and convincing picture of the different groups drawn into the web of the UFO subject (pp. 15–18). Scientific Ufologists employ a scholarly approach to in-depth case investigations and other forms of evidence to test whether there is an unknown phenomenon, and do not concern themselves with questions of purpose or meaning. There is a larger group of Explorers, who are long on enthusiasm and shorter on rigor, who seek to prove their own theories. Interested Followers are the folks who don't do much original research but do read a lot and attend conferences, and who are in a real sense the backbone of ufology, for they fund most of its activities.

On the other side of the ufological fence are Skeptics and Critics. Skeptics lump UFOs in with any number of other interests as detrimental to science and debunk UFO reports, often without giving the evidence a fair shake. If these people have their way, forever more will "UFOs, monsters, ghosts, and ESP belong to a motley band of misfits encamped outside the gates of science, begging for admittance that never comes" (p. 264). Critics are people who at least claim to be open-minded, but whose standards for acceptance of UFOs and certain UFO cases have not yet been met.

Between these near-polar opposites in the UFO interest spectrum reside other groups. Experiencers are most concerned, for they have had an actual UFO encounter, while Insiders claim to be tapped into some special information that is available to few others. Bullard also identifies categories of Activists, Specialists, and Interlopers. Agree with Bullard on some of his finer points or not, it seems that these perspectives and their holders are represented in almost every major UFO issue, organization, and event. The fact that these characterizations can be so clinically drawn does provide some basis for understanding why some of us think and act the way we do. Such insight can be useful in navigating our way through emotional situations when perspectives and their adherents clash.

What Bullard selects as the normative view or collection of thoughts about ufology may also discomfit those of us who like to consider themselves Scientific Ufologists, for a focus on the ETH to the near-exclusion of other explanations for UFOs, a passion for conspiracy theories, and a love-hate psychological relationship with technology stand out to the author as central aspects of popular UFO thought: "Majority opinion typically clusters into a narrow band of understandings of UFOs as mechanical devices, extraterrestrial spaceships known as such by a government that hides the truth" (p. 19). But Bullard's defense of his choices is credible:

These are the views of the large fraction of the interested Followers who actually buy most of the books and magazines, who read the newsletters and troll the websites, and who attend UFO meetings.² The material consumed by this UFO mainstream can be collected and studied objectively. Bullard makes an interesting point here that the history of popular ufology can be accurately followed by reviewing the papers from the Mutual UFO Network (MUFON) annual symposia.

The Myth and Mystery of UFOs begins with the O'Hare incident of November 7, 2006—not merely because it is relatively recent, but because it exemplifies how UFO events have both an inner story regarding just what happened on a given day and place, and an outer story of how people respond to UFO reports in such varied yet standardized ways. "Or, to frame the question in briefer terms, why are UFOs at once so popular and so despised?" (p. 4). Bullard then explains his research process and how the thinking about UFOs can be understood as creation of a myth. Pages 38–51 are central to this latter discussion, deserve to be read with care, and perhaps necessitate an attempt at treatment here.

Acknowledging the poverty of typical dictionary-style definitions of myth and even more the simplistic common view of "a made-up story," Bullard surveys and finds wanting the numerous differing views of scholars in varied fields, arguing that "A single clear essence no longer exists for a term with so many popular and scholarly usages" (p. 41). So Bullard provides a listing of the characteristics of myth that most help us understand its relationship to UFOs. "A myth is, at heart, a narrative text about events." "As a mode of expression myth exchanges an idiosyncratic for a collective representation"—in other words, the historical aspects of a personal UFO narrative will get recast, their essential parts becoming bound up into a prescribed way to tell a story that has both artistic and archetypal elements, full of more fundamental meaning. This meaning in turn makes myths something more important than mere facts; it gives them both an intellectual and an emotional appeal that a "just the facts, Ma'am" bare account usually lacks.

There are more characteristics to myth. Myths possess an accretive power, drawing themselves into relationship with other metamorphosed narratives and their respective interpretative content, creating in the process a whole alternative world. Along the way some of the initial kernel of fact is lost, but the product is better than verisimilitude, because (to the mythmakers) it shows the world as it should be. Myths ultimately resolve themselves into recognizable patterns of events and understandings, recurrent themes and plots, which to a suspicious observer will seem, well, somewhat suspiciously repetitive. So, while myths have their own logical structure and appeal to many logical people, so long as they lack absolute proof, they do not enjoy consensus or official status. UFOs as myth remain a somewhat subversive potential change agent, one to be contested against by the official line.

Bullard's treatment of the post-Arnold era demonstrates

how key characteristics of UFO knowledge have emerged and developed into a mythology. The Formative Years (1947–1963) introduced most UFO story types, motifs, and themes; during the Era of High Strangeness (1964–1974) there was a widening tolerance for strangeness and a climax in the conflict between official and unofficial views. Chasing the Next Big Thing (the late 1970s–1980s, a time of high-profile claims of crashes and abductions) saw a shift of interest from the UFO phenomenon to its implications; while the 1990s to the present (Uforia without UFOs) created the situation whereby the cultural image and political implications of UFOs have become more important than the UFOs themselves. Non-ufologists will of course find this history of immense value, for it clarifies what must be to intelligent outsiders a bewildering landscape, but even ufologists should find it a useful summary.

Having begun *in media res* to present first the more recent history to his readers, Bullard then travels back to prehistory to develop and follow the evolution of three explanatory frameworks humans have erected to interpret UFO observances, as well as other remarkable events. First was the focus on supernatural intervention—messages from the gods or glimpses of a parallel Otherworld. With the 18th century rise of the scientific worldview, an unusual manifestation of standard natural events became the prevailing solution for anomalies. As the 19th century coursed on and the potential for human flight was perceived, strange aerial phenomena sometimes were explained as man-made flying machines or even extraterrestrial spaceships. One might suggest that these categories contained elements of powerful themes in the wider area of human thought: cosmologies, travelers' tales, and the doctrine of the plurality of worlds.

Bullard devotes separate chapters to several important themes of UFO myth: the relationship of humans to the Otherworld, including alien abductions and their similarities to tales of the Otherworld Journey; the collection of emotion-laden narratives about "Space Children"; the extremes of positive and negative expectations created about UFOs, paralleling the wider realm of current human fears; and UFO narratives as theatre for the conflict of Self and Other. Jean-Bruno Renard has made an interesting case that for the last century the image of the Other, especially in the Western world, has taken shape around the opposed yet complementary figures of the Wild Man and the Extraterrestrial (Renard, 1984).³ Here Bullard most ventures into territory unfamiliar to ufologists and his folkloric training is most welcome. Though he acknowledges he is painting with a broad brush and that exceptions to his characterizations do occur, Bullard succeeds in showing how thought in these areas expresses cultural themes well-defined and even hoary with age.

It is unnecessary to posit an external, event-level reality behind UFOs to follow Bullard's reasoning: "The similarities between UFO stories and cultural ideas apply to human expressions and not necessarily to any underlying phenomenon" (pp. 284–285). He does note (p. 253) that

"Psychosocial explanations permit an experiential basis for UFO narratives," although these triggering events will not be extramundane, but rather the usual suspects such as Venus or airplanes misidentified or perceived, sleep paralysis, hypnotic suggestion, etc. Since the focus of this study is not on UFOs but on UFO narratives, and operating from a predominantly psychosocial perspective, Bullard could have quit here. Indeed, a scholarly agnosticism is exactly what some folklorists preach.⁴

But Bullard goes further. At the outset of the book he has confessed his positive viewpoint on the objective reality of UFOs, an openness that may immediately color the reception that the remainder of the work gets by outside readers. But, perhaps because he feels the need to address his more ambivalent or skeptical audience, Bullard argues that efforts to explain all UFO events away are not completely successful, and that a residue of truly mysterious accounts remains. For example, less than 50% of abduction narratives include material that can be equated with sleep paralysis, and many abduction narratives are generated without the dubious aid of hypnosis. Bullard then makes a case that at least some UFO reports are worth consideration by scientists. Parts of the book's last chapter, along with the very brief consideration given to Roswell, generate a disproportionately large amount of reaction from non-ufologist reviewers of the book, somewhat detrimental to their consideration of the book's main thrust.

The Myth and Mystery of UFOs should be appreciated by all readers for the meticulous approach the author has followed in its research and writing, as well as for its insights and conclusions. Bullard shows control over a wide variety of sources. To name one, Bullard's early interest in science fiction stands him in good stead as he discusses that branch of popular literature and its effect on ufological development and how present-day culture has sought to integrate its understandings of the Other. His basic premises seem at least to this historian hard to question. I find his arguments logical, his conclusions measured, and not extrapolating beyond the evidence, which is more often than not based upon non-ufological sources.

Bullard has been accused of writing as an academic, which seems only fitting for a book published by an academic press (the University Press of Kansas). But it is clear that he has worked long on his prose to choose the best words to convey his thoughts, largely avoiding the jargon that characterizes any specific field of discourse. Try reading some of the excellent articles mentioned in the References Cited at the end of this review, to appreciate such restraint. And I think that, as with Thomas S. Kuhn's *The Structure of Scientific Revolutions* and Steven J. Dick's *The Biological Universe: The Twentieth-Century Extraterrestrial Life Debate and the Limits of Science*, it's useful to flex one's intellectual muscles once in a while and renew one's acquaintance with a few very good words that don't get enough currency in common parlance. While the sentences sometimes may run long and the words are pregnant with allusions, encouraging

the thoughtful reader to ponder additional points the author could adduce in his arguments, his paragraphs develop his thinking in an orderly manner.

Memorable and pithy statements abound. For instance, early on Bullard expresses the crux of his argument with: "The UFOs that soar in social space may little resemble their counterparts in outer space" (p. 12). And occasionally Bullard cannot resist a *bon mot* or two, as in evaluating one explanation for the object reported by a police officer and civilian at Exeter, New Hampshire, in 1965: "for a string of reasons the kite hypothesis fails to fly" (p. 38). If *The Myth and Mystery of UFOs* rivals the best work that the field of ufology has so far turned out and is on the intellectual level of the better books on ancient history that I read in graduate school, it trumps all but a few of them in the liveliness of its prose.

The book is carefully documented with endnotes; animate readers who care to examine a resource know where to go. The select bibliography is similarly impressive and useful; the illustrations, though relatively few, are well chosen. Perhaps this next is a minor point, but the high quality of proofreading in this book is rare, even outside the field of ufology, and this attention to accuracy demonstrates great care that one independent reader whom I read online, and this quality practitioner also, find refreshing.

Bullard has established that how humans apprehend and explain UFOs is a subject intrinsically worthy of study, no matter what the ultimate explanation(s) of UFOs may be. He has shown that UFO narratives by and large come to be framed in terms of themes common to humanity, though variants can express the specific cultural values of different groups. Bullard has also fulfilled one requirement that an area of study needs to meet should it desire ever to take its place as an accepted discipline: that is, the ability to shed light on other fields of discussion. The study of UFO narratives provides comparisons to be made with serious treatments of other types of narratives.

Readers will likely find points that challenge their own ways of thinking about UFOs. Bullard notes his arguments with other respected ufologists about whether an *Outer Limits* television episode influenced Barney Hill's description of part of his abduction experience (pp. 275–278). His suggestion that ufologists need to understand the dissemination of ideas better—that they have a narrow understanding of the mechanism of cultural influence (pp. 278–279)—will likely further irritate those same colleagues, at least a little. Bullard's adherence to psychosocial process in the book and his belief that "Perhaps the basic and most successful insight of the psychosocial approach is that UFOs conform to cultural antecedents" (p. 269) will perhaps rankle many ufologists, and he recognized in his 1991 *JUFOS* article (p. 1) that "Any effort to connect unidentified flying objects with folklore is almost certain to offend UFO believers." Perhaps most fundamentally unsettling is the realization that so many filters intervene between the perception by a UFO witness and its final integration into the common thought stream of

society—for it etches in stark relief the fact that we almost never study UFOs directly.

Bullard's contention that ufology is a pseudoscience may elicit a reflexive negative response in some, but his arguments hold considerable worth. He notes: "Many believers have listened to one another for so long that they take such ideas [sweeping assertions by disclosure advocates] as beyond doubt and see no need to waste more time on evidence or proof. Where science grows brick by brick out of demonstrable, tested, and confirmed propositions, pseudoscience builds castles in the air out of loud and confident but insubstantial assertions" (p. 268). I would prefer the term "protoscience" to "pseudoscience," on the premise that 60-plus years is but an early moment in the development of the field, and that it took chemistry a long time to divorce itself from alchemy, just as astronomy labored mightily to wrest itself from its early association with astrology. But perhaps I am being too optimistic.

The author is surely correct in stating that "Hynek chided scientists for judging UFOs by the tautological guiding principle that seems to read, 'It can't be: therefore it isn't,' but popular ufology deserves equal blame for a guiding principle that seems to read, 'It might be: therefore it is.' The result is a field riddled with uncritical, self-confirming, and fallacious reasoning" (p. 266). Further, the ufological climate is unlikely to improve very soon, and Bullard (p. 77) quotes Alan Hendry's prescient 1979 warning that "Unless we develop drastically new ideas and methodologies for the study of the baffling UFO cases and the human context in which they occur, we will watch the next thirty years of UFO report gathering simply mirror the futility and frustration of the last thirty years."

Ufologists should find food for thought in Bullard's assertions of mainstream ufology's smugness and its adherence to its own program of paradigms (p. 282).⁵ The conceptual models of reality that exist in popular ufology not only define the avenues of inquiry that are seen as appropriate, but discourage the expression of variant viewpoints even within the field. I remember attending a MUFON International Symposium presentation during which the speaker was audibly hissed for his unpopular assertions. I have elsewhere equated success in popular ufology as measured not by the merits of one's research or the rigor of his or her conclusions, but by the ability to draw a crowd. Yes, ufology is "a fine mess, crowded with charlatans, true believers, gullibility, and unsubstantiated claims," as Bullard labels it (p. 24).

Those conscious of abduction experiences may find it difficult to maintain detachment in following the book's discussion, especially in the smoothing of the portrayal of the alien captor into an ambiguous figure, averaging out the completely negative experiences of one abductee with the ambiguous or even ultimately positive interpretation presented by another claimant. But Bullard's process here reflects the literature, the narratives, within the UFO community, a Budd Hopkins perspective being balanced by that of a John Mack. And it is hard to imagine one more qualified

than Bullard to draw this characterization. Indeed, throughout *The Myth and Mystery of UFOs* Bullard evinces great sympathy for abductees, a genuine feeling maintained constantly throughout his years of studying these people. However they deal with their experiences and whatever the ultimate reality of those experiences may be, abductees ultimately suffer caricaturization from both sides of the ufological spectrum. On the one hand, abductees are condemned by many psychologists and skeptics as deviants despite numerous rigorous studies that prove the contrary; they are marginalized even by some ufologists as the “redheaded stepchild,” an embarrassment or discomfort they would rather forget; and religious zealots suggest they should be stoned. On the other hand, transmuted into so-called “experiencers” (a term that does not distinguish abductees from every other UFO witness, while “abductee” in its Latin derivation connotes the outstandingly major element of the abduction narrative), abductees often become something more than human, “the new shamans to heal the psychic crisis of modern times and lead all mankind to spiritual awareness” (p. 144). Bullard’s treatment respects and preserves the essential humanity and personal worth of the abductee.

There are a few instances where I thought the account given aspects of the far-ranging UFO subject was too summary: the Kinross case (p. 217); the apparent contradiction of emphasis of many abductees undergoing a lifetime of abductions (p. 144), and of the alien captors being quick to reject the aged (p. 271); and the doubly biologically startling tale of wealthy businessmen and government officials changing themselves into boa constrictors in the Cameroon (p. 186). While there was proper focus on people creating UFO narratives by using established cultural themes to explain an unusual experience, I at least missed enough of the tone exemplified in Dr. Hynek’s expression of the initial witness “escalation of hypotheses,” the (here paraphrased): “It’s a bird; it’s a plane; it’s . . . well, a UFO.” These different practices both accord with Bullard’s assertion that “Understanding something new always requires associating it with something old, fitting aspects of the strange into categories of the familiar” (p. 283), and in his 1991 *JUFOS* article (p. 46) Bullard favorably instances the work of Hufford and others supporting the fact that “witnesses are not necessarily credulous or naïve when confronted with a strange event.”

The Myth and Mystery of UFOs reminds us that an intelligent UFO proponent can write an intelligent book on a subject that is drowned by noise created by numerous less-than-serious treatments. It proves that aspects of ufology can be studied as rigorously as any topic in a mainstream area such as religion or mythology. Those within the UFO discussion can expect to learn much about outside academic disciplines, while non-ufologists may come to respect while they learn about the viewpoints and the work of many of the more prominent ufologists on all sides of the opinion spectrum. As one example, Rojcewicz (1987, p. 148) suggests that “With a better understanding of the UFO experience in general, the student of belief materials is more likely to

perceive the numerous continuities between UFO-related phenomena and various folk traditions.”

While favorable and even notably respectful, reviews of this book have often been rather incomplete, telling us more about the knowledge and attitudinal makeup of the reviewers than what the book was about. Reviewers with little UFO background or current interest extol Bullard’s courage, comment upon the book’s erudition, or remark that “Those interested in the UFO phenomenon will find tons of interesting material to ponder and a different way of looking at it” (Jones, 2010); they may exaggerate the treatment given Roswell or the Kary Mullis episode. One reader says the book is not about UFOs, while another claims that it is only about UFOs; Bullard becomes a near-total skeptic by one account, a purveyor of the most extreme flights of UFO fancy in another. In this reactive recasting of the book and its message, the central mythmaking point of *The Myth and Mystery of UFOs* is borne out in an unintentional, but powerful, way.

The Myth and Mystery of UFOs thrusts ufology into the mainstream of intellectual discussion, though perhaps at the cost of aggravating some UFO adherents. But the work deserves a far wider reception than it appears to have gained so far, especially in the field of social science. Why hard science avoids UFOs has long been discussed, but Ron Westrum (1977) has made an interesting observation in this regard. Westrum (p. 292) suggests that a 1967 article by Polanyi offers “a persuasive rationale for the dismissal of experimental results that violate our current scientific convictions.” The argument is that such results often are caused by experimental errors, and the cost/benefit calculation is such, especially in the case of “the uncontrolled experiments of non-scientists,” that efforts are better spent in less controversial areas, those less likely to attract the scorn of colleagues. Westrum is undoubtedly right to bring this up. Yet the number of sound and substantive reports by sound and substantive people cries out for serious study. The meteorites of a few centuries past and the Hessdalen Lights of the current era show that such opportunities exist to learn about the physical world. As Bill Chalker states in a review of the Bullard book, “Something of substance remains, which should be examined by mainstream science” (Chalker, 2010).

And the social sciences need to get involved, as well. Hynek knew the social importance of the overall UFO experience. In the academic realm there is potential benefit; Dewan (2006, p. 185) suggests ways in which psychologists and sociologists as well as folklorists can profit from studying such anomalous accounts, noting that historians, philosophers, and religious scholars have begun to take notice. But there is more of importance residing here. In his conclusion Bullard warns us that the UFO myth “has social consequences since it reinforces a disturbing medley of paranoid beliefs and irrational ways of thinking” (p. 313). Perhaps even more fundamentally, *The Myth and Mystery of UFOs* has shown that studying the ways people think about

UFOs can contribute to the greater understanding of the inner workings of the human mind as it comes to grips with the wider world, and perhaps the wider universe, outside itself.—Bill Murphy.

NOTES

1. www.jstor.org. *Star Trek*, however, trumps UFOs, to the tune of 3,643 mentions.
2. It might be worth considering how far this extends to UFO communities outside the United States.
3. Renard, 1984, pp. 64+. Renard notes (p. 68) that from antiquity onward the notion of the “plurality of inhabited worlds” existed, really coming into its own with a larger public with the birth of modern science in the 17th century. Renard also has interesting things to say about the double image of the Extraterrestrial as a positive being knowing fabulous scientific truths, perhaps even of human origins or humankind’s ultimate end (p. 77), and as a “degenerate . . . who has neither moral conscience nor feelings” (p. 75). Expressions of these ET opposites are easy to find in popular modern literature and cinema, and get bound up in the ambiguous human response to technology.
4. See Dewan, 2006, p. 185: “As Linda Degh has argued, it is not necessary or even prudent for the folklorist or anthropologist to determine whether such phenomena as UFOs belong to the natural or supernatural world. Of particular relevance to these scholars are the beliefs that arise out of such encounters.”
5. Particularly valuable is the section on “Interpreting Reality,” pp. 678–682, in Tumminia, 2002.

REFERENCES CITED

- Bullard, Thomas E. “Folkloric Dimensions of the UFO Phenomenon.” *Journal of UFO Studies*, new ser., 3 (1991): 1–57.
- Chalker, Bill. “UFOs, History, Myth and the Sacred.” In *The Oz Files*, December 7, 2010, online at theozfiles.blogspot.com/2010/12/ufos-history-myth-and-sacred.html.
- Denzler, Brenda. *The Lure of the Edge: Scientific Passions, Religious Beliefs, and the Pursuit of UFOs*. Berkeley: University of California Press, 2001.
- Dewan, William J. “‘A Saucerful of Secrets’: An Interdisciplinary Analysis of UFO Experiences.” *Journal of American Folklore* 119, no. 472 (Spring 2006): 184–202.
- Emmons, Charles F. *At the Threshold: UFOs, Science and the New Age*. Mill Spring, N.C.: Wildflower Press, 1997.
- Halperin, David. “The Myth is the Mystery”: Reflections on Annie Jacobsen’s *Area 51*. The Revealer, A Daily Review of Religion and the Media, July 1, 2011, online at therevealer.org/archives/6940.
- Jones, Mary E. “Social Sciences Reviews.” *Library Journal*, October 15, 2010, online at www.libraryjournal.com/lj/jinprintcurrentissue/886911-403/social_science_reviews_october_15.html.csp.
- Peckham, Howard H. “Flying Saucers as Folklore.” *Hoosier Folklore* 9, no. 4 (1950): 103–107.
- Renard, Jean-Bruno. “The Wild Man and the Extraterrestrial: Two Figures of Evolutionist Fantasy.” *Diogenes* 32 (1984): 63–81.
- Rojcewicz, Peter M. “The ‘Men in Black’ Experience and Tradition: Analogues with the Traditional Devil Hypothesis.” *Journal of American Folklore* 100, no. 396 (1987): 148–160.
- Tumminia, Diana G. “In the Dreamtime of the Saucer People: Sense-making and Interpretive Boundaries in a Contactee Group.” *Journal of Contemporary Ethnography* 31 (2002): 675–705.
- Westrum, Ron. “Intelligence about Anomalies: The Case of UFOs.” *Social Studies of Science* 7, no. 3 (1977): 271–302. The Michael Polanyi article is “The Growth of Science in Society,” *Minerva* 5, no. 4 (1967): 533–545. ♦

UFO EXPERIENCERS—continued from page 19

- Dennett, Preston. *UFOs over New York*. Atglen, Pa.: Schiffer Books, 2008.
- Hopkins, Budd, David Jacobs, and Ron Westrum. *Unusual Personal Experiences: An Analysis of the Data From Three National Surveys*. Las Vegas, Nev.: Bigelow Holding, 1992.
- Kelly-Romano, Stephanie. “A Report on the Demographics and Beliefs of Alien Abduction Experiencers.” *Journal of UFO Studies*, new ser., 9 (2006): 1–20.
- Nelson, Bill. *The UFO Conspiracy*. Lewiston, N.Y.: Hyman Publications, 1976.
- Olmsted, Denison. “Observations on the Meteors of November 13th, 1833.” *American Journal of Science and Arts*, ser. 1, 25 (1834): 363–411, at 391.
- Rodeghier, Mark, Jeff Goodpaster, and Sandra Blatnerbauer. “Psycho-Social Characteristics of Abductees: Results from the CUFOS Abduction Project.” *Journal of UFO Studies*, new ser., 3 (1991): 59–90.
- Schuessler, John. “Public Opinion Surveys and Unidentified Flying Objects: 50+ Years of Sampling Public Opinions,” January 2000, online at www.mufon.com/MUFONNews/znews_publicopinion.html.
- Statistical Package for the Social Sciences, Version 15. Chicago: SPSS, 2006.
- U.S. Census Bureau. “Profile of General Demographic Characteristics: 2000—Niagara County, New York.” factfinder2.census.gov. Retrieved June 2, 2008.
- Vassar College Statistical Computation Package, online at faculty.vassar.edu/lowry/VassarStats.html. ♦

MORE MYTH AND MYSTERY

For another review of Thomas E. Bullard’s *Myth and Mystery of UFOs*, see Jenny Diski’s perspective in the *London Review of Books*, November 17, 2011, at www.lrb.co.uk/v33/n22/jenny-diski/what-might-they-want. She calls Bullard “a surprisingly restrained advocate of little green men.”

AIRLINE PACING—continued from page 6

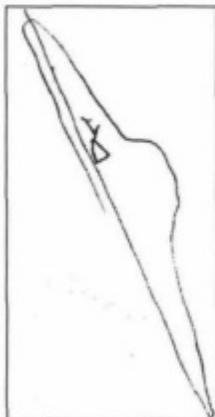


Fig. 8. Sketch of UAP made under hypnosis.

5:1. This protrusion included a number of round or oval windows or otherwise illuminated even-spaced areas emitting homogeneous white light. Witness A was not certain how many windows there were but described them as appearing similar to a porthole on a ship. His notation, "silhouette of a being," was included.

According to the hypnotist, Witness A made the sketch of Figure 8 on a small piece of paper using a pencil. However, his lines were very light (*tenue*) and had to be darkened. The length-to-thickness ratio of the UAP in this drawing is about 6:1. He drew a triangle (as shown) as well as another triangle (something like a bow tie) and said this symbol represented an infinity (∞) sign or marking that he saw on the object. This symbol never appears again in any later drawings. In an email to the hypnotist dated July 22, 2009 (after his hypnosis session),

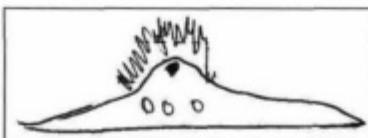


Fig. 9. Refined sketch of UAP made after hypnosis session was over.

Witness A wrote, "I felt safer in shaping the [UAP outline] image without the . . . red light and without the symbol. . . . I decided to preserve [the details of my] conscious [recall] that were with me for many years. The subconscious part scares me, as it sounds fantastic, and makes me question why steps were taken to [go] so deep in my memories."

Later in the afternoon of the same day and after Witness A had come out of hypnosis, he was asked to redraw the shape of the UAP. This resulted in Figure 9, which does not include the bow-tie symbol but does include a dark, round spot near the top of the cupola and jagged lines above it, which he said were supposed to represent a green light coming from it. The length-to-thickness ratio of the UAP in this drawing is about 5:1.

ARTISTIC RENDERINGS OF THE UAP

I encouraged Witness A to locate and work with an artist to try to recreate an accurate image of the object he saw. This he did with some success, but not before several revisions were made. The progression of these drawings illustrates the fact that Witness A took this task very seriously. He did not approve the earlier drawings because they did not match his visual memory of the UAP. Here are these drawings in the order they were made with comments.

Figure 10 is the initial drawing prepared by artist L. M. Witness A returned it to L. M. with the comments appended as shown (see text within small white boxes); he mailed a copy to me on July 24, 2009. Notice the highly

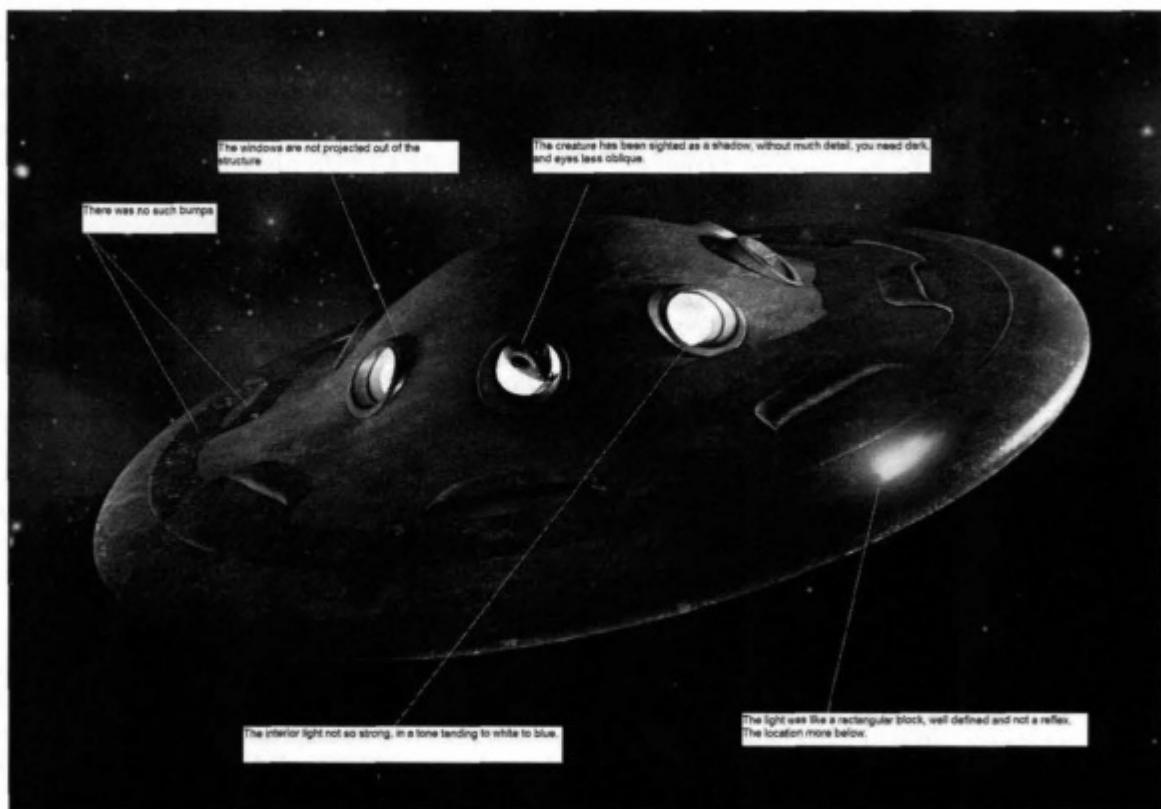


Fig. 10. First color illustration of UAP by artist L. M.



Fig. 11. Initial color illustration by artist P. B.

detailed and stylized domed saucer the artist had prepared, as well as its inclined orientation. Apparently it was too far from what had actually been seen to be accepted. The next drawing (Figure 11) was made by a second artist, P. B., who produced another representation of the UAP as seen from the side with a highly detailed head located within the center window (as in Figure 10).

The same artist reworked his earlier drawing by added fairly accurate airport ground details for Santos Dumont Airport (Figure 12). It was created sometime just before August 1, 2009. Again, note the required corrections given to the artist by the witness. Witness A wrote, "Everything else is very close to real, and nothing more needs to be modified."

Nevertheless, in the final approved color drawing (shown on the cover) artist P. B. has deleted much of the ground detail and made the other changes requested of him. Note

the 5° inclination of the left-hand side of the object as it is flying level (toward the left in this illustration). Also note the lack of facial detail in the head as compared with Figure 10. The measured length-to-thickness ratio of the last three drawings was about 3.5:1, which is considerably stubbier than Figures 7–9 for some reason.

In summary, we can interpret the systematic progression of details in these four color drawings as supporting the assertion that witness A knew quite accurately what he had seen and would not accept anything else. If true, this might add to the overall reliability of this case.

OTHER FEATURES OF THE UAP

Light. In Figures 7 and 11–13 a very intense, small, white, light source is shown on the (left-hand) underside of the



Fig. 12. Second color illustration by artist P. B.

UAP. When I asked Witness A whether this light seemed to brighten and dim as if it was a rotating beacon he replied that it stayed at the "same intensity, as I remember." He also recalled that the motion of this light was "constant." It did not ever slow down, pause, stop, or speed up but seemed to slide continuously across the bottom edge.

In later correspondence, Witness A described the intense, white light as emitted from an area about one-tenth the width of the UAP; this area traveled along the lower edge of the disc every one or two seconds and seemed to be attached to the surface of the object. It isn't known if this was a fixed area of light on a continuously rotating base (moving through repeated 360° continuous revolutions) or only an area of light that somehow translated over the surface of a nonrotating object. When asked about this Witness A replied, "I really don't know.... The image would be like [seeing] something moving on a TV screen, but with accuracy, because it was there and was not a [TV] projection." What is known is that the position of the several windows did not move at any time relative to the body of the object; that is, they did not rotate to one side as if the whole object were rotating.

The UAP always maintained a small pitch angle of about 5° down at its leading edge as it flew parallel with the airplane (also in level flight). Witness A said that when the UAP turned from its radial approach to flying parallel with them it did not bank at any time. Likewise later, when it turned left to descend toward the boat pier area labeled "Ferry Boat Rio" in Figure 2, it didn't bank or pitch down. No type of flashing lights, wobble, or other signal of communication was noticed on the UAP by Witness A.

Size. Because it is important to gain some general idea of the size of the UAP, Witness A was asked several times to provide different relative and absolute estimates at various times during the sighting. In his first estimate, he recalled that when seen flying parallel with him the "UAP filled about two-thirds of the [horizontal] width of the window" above the right-hand door. This airplane window is 32.7 inches wide (D) at its midpoint and its surface is about 28 inches from the eyes (d) of a person sitting in the left-front seat and turned to face the right side. Letting $a = \text{one-half the angular width of the right-hand window}$, then $\tan a = d/D = 0.584 = 30^\circ 17' \text{ arc}$. Then the full window width = $60^\circ 34' \text{ arc}$. If the UAP appeared to fill about 66% of this window's width it would subtend an angle of about 40° arc . An object with an angle this large at 15 meters away would be 35.8 feet long and at 30 meters distance would be 71.6 feet long.

The second angular size reference is found in Witness

A's statement that a small coin 4 millimeters in diameter held 72 centimeters from the eye would appear to be the same angular size as the UAP at position D (Figure 2). This works out to an angle of 19' arc. Using the estimated slant range distance to the UAP provided by Witness A of about 2,000 meters (6,562 feet), the UAP would be 18.2 feet in width.

A third angular size reference was also provided. The witness said, "it seems to me that the UAP (at Position D) was one-third of the width of Runway 20R at Santos Dumont Airport. Since the runway is 42 meters (137.8 feet) wide the UAP would have been 14 meters (46 feet) in length.

An absolute size reference provided was that of a "limousine." Two standard and stretch limousines were found on the internet measuring 10 feet and 20 feet long, respectively.

These size and angular estimates are summarized in Table 1.

Although it is a well-known fact that visual size estimates are notoriously poor when the identity of the object that is seen is not known and its distance is large, the calculated size of the present UAP is relatively consistent to a first order of magnitude. It ranges from 10 to 72 feet with a mean of 33.6 feet, considering all six of the above estimates. When the smallest and largest estimates are deleted the mean is still 30 feet.

Head in window. Perhaps the most interesting, controversial, and bizarre aspect of this report is Witness A's claim that he saw a rather large humanoid-like head in one of the windows. Following are his statements regarding this particular detail:

1. "The size of the head was about one-half the height of the window."
2. The words "silhouette of a being" drawn in Figure 7.
3. "At one of the windows there was a being, also similar with known [familiar] images, like the profile photo of that (found in the UFO) community, that observed us with tranquility, without curiosity, but with attention."
4. "I saw a shadow in his face, as big eyes."
5. "My attention was caught by its head, with encephalic bones of large dimensions, and its oblique eyes, big."
6. "I didn't have much time to look [at it] but the head was larger than that of humans. Although it had been observed for a short [span of] time I realized that [the] being looked [at] us attentively." The visual background for this head was perhaps the interior of the craft; "it was illuminated by a white light, similar to our home electronics."

I asked Witness A several questions about this "being" to try to clarify what he saw. It was clear that he had been

Table 1. Summary of UAP size estimates

Number	ANGular ABSolute	UAP Location (see Figure 2)	Estimated Distance	Calculated UAP Angular Width	Calculated UAP Linear Width
1	ANG	B-C	15-30 meters	40°	35.8 feet, 71.6 feet
2	ANG	D	2000 meters	19'	18.2 feet
3	ABS	B-C	—	—	10-20 feet
4	ANG	D	2000 meters	—	46 feet



Fig. 13. Witness A, José Américo C. Medeiros, with his flying buddies in 1967 (on the right) and in 2008 (inset).

exposed to various pictures of alien beings in the entertainment media after 1971 and he admitted that what he saw looked like "... what we see today in films and the internet." But he also said that he "had not seen any similar looking alien face or head before or soon after this event in 1971."

DISCUSSION

In addition to the question of the identity of this UAP is a more important and immediate question about aviation safety. When I first wrote to Witness A in late 2008 he said that he did not consider this encounter to have been a safety matter because the "UAP did not [display] hostile movements." However, upon more careful reflection in June 2009 he wrote, "But I think now that there was undue interference on our traffic, as this object [which I consider as a ship] might have run into us. [This is] serious and dangerous."

I asked Witness A why he wanted to tell his story now, some 39 years later. He replied, "I like to share such experiences as a testimony of something [that is] mysterious and nothing similar to that produced by human knowledge."

A surprising amount of additional information was retrieved from the witness by asking him a number of questions over a period of nine months. He answered every one in a neutral manner and based only on facts he had provided earlier.

Witness A prepared a brief summary of this sighting that was published in *Revista UFO*, issue 147. Two other brief articles were also published (Américo C. Medeiros, 2009; Poian, 2009).

CONCLUSIONS

This in-flight encounter with a strange yet now familiar flying object is hard to place in the category of a natural phenomenon that we don't yet understand. If all of the features described here are approximately accurate, we are confronted by: a rigid body that is self-propelled and accurately guided through the air relative to an independently moving vehicle (the Cessna airplane), a geometrically symmetrical body involving some

form of energy supply to account for the interior illumination and the constantly rotating, intensely white "beacon" light. A modern-day remotely piloted aeroform (unmanned aerial vehicle) might explain this sighting; however, there were very few flying in the early 1970s. Until further data can be found, this UAP must remain unidentified.

REFERENCES

Américo C. Medeiros, José, "Encontro nos céus: Comandante aposentado de companhias aéreas brasileiras reveia espantosas experiências com UFOs," *Revista UFO*, no. 147, November 2008, online (requires login) at www.ufo.com.br/artigos/encontro-nos-ceus/.

Américo C. Medeiros, José, "Experiente piloto relata experiências vividas ao longo de sua carreira," *Fatos Ufológicos*, December 29, 2009, online at fatosufologicos.wordpress.com/2009/12/29/58/.

Buhler, Walter, "UFO on the Sea near Rio," *Flying Saucer Review* 17, no. 3 (May/June 1971): 3–7, online at www.waterufo.net/item.php?id=412.

Poian, Paulo R., "Experiente comandante expõe para a *Revista UFO*: Suas experiências com UFOs," Ponto de Vista: Lígia Leal, December 24, 2009, online at opontodevisitadeligialeal.blogspot.com/2009/12/experiente-comandante-expoe-para.html.

Sign Historical Group, "Inventory of Material from the Files of the Late Dr. Olavo T. Fontes," online at www.project1947.com/shg/fontesinv.html. ♦

ALIEN TRACES ON THE MOON?

Hundreds of thousands of pictures of the moon will be examined for telltale signs that aliens once visited our cosmic neighborhood if plans put forward by scientists go ahead. Paul Davies and Robert Wagner at Arizona State University argue that images of the moon and other information collected by scientists for their research should be scoured for signs of alien intervention. The proposal aims to complement other hunts for alien life, such as the Search for Extraterrestrial Intelligence, which draws on data from radiotelescopes to search for messages beamed into space by alien civilizations.

"Although there is only a tiny probability that alien technology would have left traces on the moon in the form of an artifact or surface modification of lunar features, this location has the virtue of being close, and of preserving traces for an immense duration," Davies and Wagner write in "Searching for Alien Artifacts on the Moon," published online November 23, 2011, in *Acta Astronautica*.

The scientists focus their attention on NASA's Lunar Reconnaissance Orbiter, which has mapped a quarter of the moon's surface in high resolution since mid-2009.—*The Guardian* (UK), Dec. 25, 2011.

DEFENDING UFOs—*continued from page 13*

writer who published the results of his investigations in the *Phoenix New Times*, found an alternative explanation for these sightings as a formation of jets flying at high altitude. His conclusion was not just supposition. Ortega backed it with some telling evidence. A young amateur astronomer with a 10-inch reflector on a Dobsonian mount observed the formation at 60x magnification and easily resolved each light into a pair of lights attached to the wings of aircraft. This observer was experienced in observing passing aircraft and the flexible mounting of his instrument made such tracking easy.

A second strand of evidence in favor of jets is a progression of reports of a V-shaped formation from Prescott at 8:15 to Tucson about 8:45, meaning the formation flew at a jet-like speed of 400 miles per hour. A video of the V formation showed the lights moving in relation to one another, behavior appropriate for a formation of separate aircraft rather than a single rigid structure, once again confirming the conventional identity of the lights.²²

Applying Ortega's explanations to Tim Ley's description, the witnesses saw the lights of the aircraft and mistook the high-altitude formation for a single object at low level. This error would account for the apparent low speed and unitary movement of the lights, also the lack of sound. The contrast effect of lights against a dark sky created the illusion of a dark V-shaped object connecting the lights. At one point the witnesses apparently resolved the double lights of the aircraft with the naked eye, while jet contrails passing across the stars could account for an appearance as if they were distorted through thick glass. The human reactions result from the excitement of the experience and emotional response to an encounter with the unknown—feelings that went far in many cases to seal personal convictions that the lights originated in something unearthly, but cannot lend any material support to that conclusion.

What were the Phoenix Lights? The visible sign of alien visitation? Or aircraft and flares, expectations and excitement, mixed together and read in terms of a popular belief? The witnesses speak from experience and fill their testimony with emotional sincerity as they present the imagery of a vast, clear-cut otherworldly machine passing overhead at little more than treetop height. All human appeal sides with the witnesses, but the obligations of science require a dispassionate evaluation based on evidence and probable causes.

What the witnesses feel about their experience tells us nothing about the phenomenon, only about their subjective response to it. Feelings are not evidence. The observational matter of the case is ambiguous and able to fit both conventional and unconventional explanations. Eyewitness descriptions are subject to distortion under the influence of what others have to say, and of course a great deal has been said about the Phoenix Lights by the news media, ufologists, and other interested parties in addition to the witnesses. A literature has built up and solidified favorite versions of

events as the truth of the matter, when in fact those versions select and emphasize and interpret the observations to create a representation more or less distinctive from the immediate record. The facts are not necessarily factual. They come to us in a story that is true to some people but not necessarily the truth of objective reality, and certainly subject to legitimate disagreement.

DEFENDING THE UFO RECORD

No one can say with absolute certainty what the Phoenix Lights were. The skeptics have not presented ironclad proof any more than the ufologists have, and anyone looking to support one explanation over another can find evidence enough and uncertainties enough to press for a chosen preference. Yet no matter how convincing the witnesses may be and how desirable their interpretations may sound, the fact still remains that the skeptics' evidence holds more factual substance. In this case, the skeptics have not had to ignore inconvenient evidence to make their solution fit. Piece by piece the observational facts and the subjective responses fall into place as reasonable parts of a conventional explanation. It rates as the better answer in any impartial evaluation of opposing attempts to understand the Phoenix events.

What the skeptics have in their favor, then, is the better argument. It may not be the right answer, but in a case like this where neither side can prove its position for a certainty and the decision must depend on plausibility, the skeptics win the exchange. They do not have to rely on majority opinion or emotion, neither do they resort to contriving an explanation that just might work if every stretch of the imagination applies. The skeptics offer an answer that covers the evidence, is plausible, makes sense, and does not introduce unconventional events.

A proper case for a genuine UFO requires a resounding victory for the pro evidence against the con and the Phoenix Lights present nothing of the sort. The proponents have an understandable wish to preserve such a spectacular case and overlook its weaknesses, though this practice reinforces a negative image of ufologists as defenders of belief rather than truth. Even if the proponents are right, the damage has already been done.

Is this to be the fate of all UFO sightings, to be forever on the losing side of a debating contest? Much of the rhetoric of skepticism follows a familiar strategy: Aim first for definitive evidence against a case, but lacking that, argue for possibilities on a scale that ranges from the probable to the scarcely credible. If all else fails, rely on any conventional solution however improbable it may be and how poorly it fits the report, on the grounds that the answer must be conventional and therefore even a bad solution is better than one that allows the unknown. This strategy defends the status quo and deflects any obligation to confront UFO reports as possible indicators of unconventional phenomena. In most cases the skeptics will be right—the majority of UFO reports turn out to be conventional after all. Even ufologists accept

this hard reality, but they also believe, with good reason given the quality of some reports, that once all the conventional dross washes away there is still some gold left in the pan.

So how do ufologists bring forward the reports that truly support an unconventional phenomenon? How can ufologists back their conviction that such reports exist when, on the one hand, so much of the UFO record is corrupt, and on the other, the skeptics as defenders of the conventional argue from a position of strength? Skeptics can repeat their usual strategy and be right most of the time. If ufologists counter with their seemingly well-established cases, the skeptics can demonstrate that some of those cases fall apart under close examination or at least stand open to reasonable doubt. The rest of the cases then appear tarnished by association. As a result, ufology appears to have a tenuous foundation and loses still more credibility when ufologists pay no attention to the weaknesses of discredited cases and return to them without a question or even with indignation that critics express their doubts.

The defensible case serves as a remedy, or at least a partial remedy, for this quandary. If ufologists want to confront their opposition, whether the professional skeptic or the well-intentioned doubter, they need strong and reliable instances of UFOs that truly live up to the name. In short, ufologists can best champion their cause if they rely on the defensible UFO cases. A defensible case needs to be rich in detail, unusual in content, and reported by reliable witnesses, preferably more than one. Enough information to "do some science" with the report, like determine the distance, size, and speed of the object, adds greatly to the value of the case. Auxiliary evidence like photographs or radar tracking is of course desirable. Beyond being a good UFO report at face value, the case should pass the test of a rigorous investigation to rule out, insofar as possible, human error and conventional causes for the observation. A further test for the case is critical attention—let the skeptics have at the report and do their best to explain it; if they find no solution, or if their answer is flimsy speculation with poor fit to the reported facts, then the case is a worthy one. It has faced and weathered all challenges; it qualifies as a defensible case.

A few examples will illustrate the sort of thing we're looking for.

The Robozero Marvel. On August 15, 1663, most inhabitants of the Russian village of Robozero, southwest of Belozersk in Vologda Oblast, had gathered in the local church. About noon a noise drew the people outside to see a ball of fire passing from north to south over a nearby lake. An hour later the fireball returned, moving from south to west, then it returned a third time and appeared larger than before. The object was enormous, being some 140 feet in diameter (imagine a sphere with the height of a 12–13 story building), and hovered low over the lake for an hour and a half, with blue smoke emerging from the sides and two beams of fire or light projecting from the front. Several peasants in a boat tried to approach the object but turned back when the heat became too great. The object illuminated the lake

II. — Государю архимандриту Никитѣ, го-
сударю старцу Матею, государю келарю
старцу Павлу, и государемъ старцомъ со-
борнымъ Кирилловъ монастыря, виши, госу-
дары, работячекъ Ивашко Ржевской, Авгу-
ста въ . . . день, чесломъ бѣть. Виши, госу-
ди, монастырскіе вотчины Лозы, села Анту-
шева, дёревни Мысу крестьянинъ Левка Фе-
доровъ сказываъ мнѣ: въ нынѣшнемъ дѣ во

The beginning of the Robozero account.

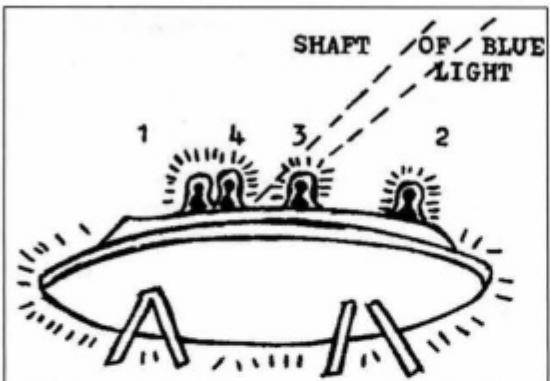
down to its bottom 30 feet below the surface, and the fish swam away toward the shore. A rusty material seemed to cover the water underneath the object until it finally flew off to the west, though whether this appearance was due to the fiery light of the object or to some material dropped from it is unclear.²³

Historical cases have the disadvantage of no living witnesses to interview, but in a rare change from most old reports, this one received an on-site investigation by a church official at the order of his superiors. He spoke with witnesses and wrote a report for the church authorities. The letter still survives and was published in the *Historical Acts of the Archaeographical Commission* in 1842, long before modern ideas of UFOs could contaminate the description.

In this case we can be certain that the report is real and not a modern hoax. Also certain is the inherent strangeness of the object, since it (or others like it) came and went three times over several hours, hovered over the lake for an extended time, and manifested exceptional size. This object gave off enough heat to drive off boatmen and perhaps fish in the lake as well. No meteor would travel back and forth, hover for an hour and a half, or have fiery emissions emerging from the front. Ball lightning is not a possibility, either, since the sky was clear on this day. An attempt to explain the Robozero events as a train of meteors ignores the different directions of the object or objects, the hovering, and the fact that the earth turns so that meteors in a train would not pass over the same spot on earth over a period of hours. The Robozero Marvel differs strikingly from other accounts of prodigies and wonders in Russian historical literature, to stand apart in a way suggestive of a genuine extraordinary event with little or no reshaping by stereotypical beliefs of the time.

With no earthly aircraft or recognizable natural phenomenon to explain this sighting, it qualifies as a truly mysterious anomaly. Here is a report with extensive and puzzling detail describing an enormous object behaving like a controlled aircraft hundreds of years ago. The case is both defensible and worthy of defending as a real UFO.

The Father Gill Sightings, Boianai Mission, Papua New Guinea. Near sunset on June 26, 1959, Rev. William Gill, an Anglican missionary in the Australian Territory of Papua and New Guinea, saw a disk-shaped object with four leg-like projections underneath, hovering high overhead. Some three dozen of his parishioners also witnessed this craft, and some of them later provided drawings of what they saw. During the



This sketch by Father Gill shows the craft and occupants as they appeared from the position of observation. One to four "men" were clearly seen.

45 minutes this object was visible, four human-like figures appeared on top surrounded by illumination and seemed to do some kind of work. The object ascended into the clouds at about 7:30 p.m. The following night about 6 p.m. the craft reappeared with its four occupants again working on its top. Once more a crowd gathered to watch, and when Gill waved at the men on board, they waved back. Gill went to dinner at 6:30 and then conducted a church service, during which time the UFO disappeared.²⁴

Significant because the UFO was close at hand (seemingly five times the width of the moon in extension), and because occupants not only appeared but responded to people on the ground, this case has also gained value from the integrity of the chief witness. Rev. Gill never enlarged or embellished his story, but stuck by it over the remaining 40 years of his life as a truthful account of what he saw. The UFO looked mechanical and conformed to no known aircraft design—in other words, it was quite literally an unidentified flying object. Gill mistook several planets passing in and out between broken clouds as distant additional UFOs, and readily accepted the conventional explanation when it was pointed out to him, but these errors do nothing to distract from the value of his close-encounter report.²⁵

Skeptics like astronomer Donald H. Menzel worked hard to explain this case. He identified the object as the planet Venus, a bright evening star at the time, and proposed that the image appeared distorted because Gill was not wearing his glasses. The other witnesses, being natives, did not count because they simply agreed with him. Gill responded that he was indeed wearing his glasses and saw a brilliant star in addition to the UFO, while the native witnesses were far from uneducated and considerably more independent-minded than the astronomer thought.

Philip J. Klass found it strange that Gill left for dinner and proposed that the story was a well-intended hoax to satisfy a fellow missionary with an interest in UFOs, but Gill explained that he had watched the UFO for considerable time over two nights and had no reason to think that anything more would happen. At the time he assumed the object was a military aircraft of some sort and only in retrospect did

he realize how extraordinary his observation really was.²⁶

Martin Kottmeyer suggested that Gill saw a brightly lighted squid-fishing boat close to shore. The lights reflected off the rigging gave the appearance of laser-like beams of light angling skyward, and the occupants were simply crewmen going about their duties. He speculated that conditions on the water surface gave rise to a mirage-like looming effect, whereby reflections increased the apparent thickness of the vessel and the horizon disappeared as sea and sky became indistinguishable. Though Kottmeyer offers a (more) subtle explanation responsive to the facts of the case, his hypothesis requires a smooth water surface more common on lakes than on the sea close to shore. His solution also strains against Gill's statement that the object was located at a high angle in the sky. Even granting that observers often overestimate angles of elevation, the fact remains that the witnesses in this case should know if they were looking up rather than out across the sea. The argument also requires that the UFO be out from shore if it is truly a fishing boat, but with the help of Bill Chalker I was able to question Rev. Gill himself about this issue, and he answered that the object indeed hovered over land.²⁷

J. Allan Hynek called the Gill case a classic and it makes regular appearances on lists of the best-ever UFO cases even 50 years after the fact. A case becomes a classic for good reason—in this case, multiple reasons of inherent quality of the sighting and the witnesses, and not least because the best skeptics in the business have tried without success to knock it down. The Gill sighting retains its mystery in spite of all the efforts expended on it and thereby qualifies as an eminently defensible case.

Minot Air Force Base, North Dakota, October 24, 1968. Shortly after midnight a series of lighted objects began to appear over this base, and at 3 a.m. a large reddish-orange object flew over Minuteman missile sites. Ground control contacted an approaching B-52 at 3:30 a.m. and requested that the crew report anything unusual. At 4 a.m. the radar navigator picked up an object recorded with a blip size larger than a tanker and approaching at several thousand miles per hour. The crew prepared to eject but the object stopped suddenly and then fell away, while both radio systems aboard the aircraft went dead until the plane was within 10 miles of the landing field. Once radio contact resumed, ground control requested a flyover of the place where the object seemed to land. While flying at 1,000 feet the crew spotted a large oval object on the ground, glowing like molten steel or lava, with a crescent-shaped structure projecting from one end.

A total of 14 people on the ground witnessed UFO activity and weather radar picked up unknown returns. Radar on the B-52 registered an object of exceptional size and photographs of the screen confirm this; observers on the plane also confirm the high speed of the object, the unusual failure of both communications systems at the same time, and the large, glowing structured object on the ground. Any flight of unidentified objects over nuclear-armed ICBMs, any situation that might provoke a crew to bail out of a multi-million dollar

aircraft over populated territory, surely meets the definition of serious in even the most discriminating dictionary. The B-52 crewmen were exceptionally qualified observers, since they held instructor status in their respective specialties. Government documents and interviews of 15 witnesses by filmmaker Thomas Tulien and James Klotz of the Computer UFO Network confirm the facts in this remarkable case (see www.minotb52ufo.com for details).

Project Blue Book did not bother with an investigation but they offered answers all the same. The ground sightings were due to the star Sirius and the B-52, they said, while the airmen saw nothing but the star Vega, then low on the horizon, as a barn-sized object directly below them on the ground. Some sort of plasma or ball lightning created false radar images, disrupted communications, and contributed to the visual sightings, while a temperature inversion added to visual and radar distortions.²⁸

No evidence supports any aspect of this hodgepodge explanation, but it stands as the official response to one of the most provocative UFO cases in the literature. This Minot incident exemplifies both a defensible case for an unknown phenomenon and an example of how a feeble attempt at conventional explanation can pass, by virtue of official inertia rather than innate worth, as a meaningful solution.

The Southern Illinois Police Case, January 5, 2000. At 4 a.m. a man in Highland, Illinois, not far from St. Louis, saw a bright star moving toward him. As the light neared and passed, the man saw that it was attached to a rectangular object the apparent size of a football field, with rows of windows along the side and red lights underneath, while lights like windows covered the rear. The witness notified local police and an officer in the nearby town of Lebanon picked up the dispatch about 4:15. A massive triangular object with a large white light at each corner soon appeared to the Lebanon officer, silent and blotting out the stars as it passed, and he watched the object appear to pivot in mid-air as it changed direction.

Several miles to the southwest in the town of Shiloh, an officer spotted an arrow-head shaped object just as it departed from Lebanon, bearing three bright lights and red and green lights at the rear. At 4:29 an officer in Millstadt became the next to report the triangular object with three bright lights and a luminous rear. He attempted to photograph the object with a Polaroid camera, though the cold of the morning interfered and he obtained only one image of poor quality. An officer in Dupo also spotted lights high in the sky soon after the Millstadt sighting, though his sighting may not be related to the others.²⁹

The local Air Force base reported that its radar was not operational and no military traffic was in the air. Suspicions immediately fell on Venus, then at its brightest as a morning star, but the planet had not yet risen when the first sighting began and the photograph, poor as it is, shows more than one light. The witnesses describe an object with multiple lights and crossing the sky in a short period of time, with neither assertion in keeping with the appearance of the planet. As

often as Venus has been guilty of deceiving observers, in this case she seems innocent; and either the military is lying and had, in fact, some remarkable aircraft out for an early morning tour of the countryside, or several honest police officers observed a remarkable UFO with a configuration similar in each description. The identity of the object may be open for dispute, but the claim that the witnesses saw something more than a star or planet qualifies as a defensible proposition.

THE VALUE OF DEFENSIBLE UFOs

A crashed saucer or a suitably remarkable piece of physical evidence tops every ufologist's wish-list for proof that UFOs exist. We do not have that indisputable evidence. What we have instead are the less substantial evidence of experiential reports, with all their shortcomings and inconclusiveness, and a gut feeling that all these reports add up to something of ultimate interest. The question then becomes how to make the best of a bad situation, how to turn evidence that is inherently low-grade by scientific standards into advantageous support for our argument. The solution proposed here calls for ufologists to single out a limited number of exceptional cases for presentation to the public, friend and foe alike, as defensible examples of an unknown phenomenon.

Let it be said that defensible cases are not just desirable in ufology, they are obligatory. The bottom line of UFO argument consists of a simple assertion—that at least one report from witnesses describes an unknown phenomenon with certain unconventional properties. Sooner or later ufologists have to present such a case or they have no argument. Moreover, the credibility of the case depends not just on remarkable content suggestive of a genuine UFO, but on the ability of the testimony to further scientific investigation and withstand critical examination—that is, to be an evidential description of a phenomenon rather than just a good story. Whether or not UFOs stand a chance of graduating from popular belief to scientific subject depends ultimately on the quality of individual cases, so finding examples that are defensible as true UFOs meets a fundamental requirement for establishing UFO reality.

An appeal to defensible cases will not in itself solve the UFO mystery. Such preference uncovers no new facts and adds no value to the chosen cases. They are as good as they are, and merely ringing them loudly enough to call cowboys to dinner will not improve their intrinsic worth. Though emphasis on cases of defensible quality serves scientific purposes, it is not a scientific tool but a rhetorical tactic. It takes a public relations approach, not in the sense of a snake-oil salesman hawking pseudoscience but in the sense of clearing away distractions and confusions to expose the best evidence for a core phenomenon. Any science does no less and ufology stands to further its cause by showing off its most substantial cases.

Communicating the news that a mystery exists is not a sideline or afterthought but a vital task for the field. Ufologists have to persuade the public, not just the part willing to

believe but also the parts resistant UFO evidence; and on this front we have fought poorly. An indiscriminate bombardment with substantial and questionable cases alike wins some support but entrenches many people in doubts that harden into convictions, so that rejection of UFOs becomes what folklorist David Hufford calls a “tradition of disbelief,” a counterbelief so taken for granted that its adherents no longer question it.³⁰ UFOs are doubly damned, so to speak, since a tradition of disbelief condemns them without evidence, while glaring faults allow doubters to extend their rejection to the entire UFO record with good conscience. Without some measure of acceptance UFOs will remain a cultural belief and nothing more. No science will get done, no interest from elite brokers of knowledge like academics and mainstream media will ever stir to life.

Any science of ufology begins with concrete cases having substantive content—cases that suggest interesting events and that do not fall apart on close inspection but become more puzzling under it. The Phoenix Lights case appears impressive on the surface but it is, in the end, counterproductive. It carries emotional persuasiveness, but instead of lending scientific support to an unknown phenomenon, it serves the skeptics’ cause by revealing the fallibility of eyewitness testimony. In terms of defensibility the case is a three-sided fort, strong from the front and sides but subject to attack and defeat from the rear. Much of the UFO record reflects similar gaps, so that selective emphasis on strange aspects of a description makes UFOs out of reports while selective emphasis on shortcomings and alternate possibilities turns the alleged UFO into something conventional. No wonder ufology remains at a stalemate when too many reports appear unknown from one perspective and conventional from another, when even some “showpiece” cases suffer from uncertainty that undercuts their mystery and robs them of leverage to change doubters’ minds.

What we want are cases that close the defensive perimeter. The right ones have in their favor high interest and information content, support for objectivity like multiple witnesses and instrumental evidence, absence of evident and exploitable vulnerabilities. Such a case throws the burden of proof onto the critics and challenges them to confront the possibility of a genuine unknown, calling for anyone with integrity to respond with more than an intellectual reflex. Easy dismissals and armchair alternatives do not work and the facts lay bare the inadequacy of conventional answers. This, then, is the ideal of the defensible case. It stands on its own merits as simply too good to reject, too provocative to ignore. In reality no case however good will convince anyone with a mind dead set against UFOs, but even a partial victory is still a victory, and the failed attack of a skeptic or a doubter’s pause of curiosity still counts as a worthwhile outcome.

A commitment to defensible cases imposes strenuous obligations on ufologists. They must select cases with care and discipline because the credibility of the field will depend on these choices. Completely ideal examples are rare, with

the Minot case coming closest to fulfilling every requirement while the Robozero and Papua New Guinea reports are less than perfect, since they lack instrumental support and have to depend on eyewitness testimony, impressive as it is. Harder to swallow is how many cases ufologists are obliged to reject. The extensive record narrows indeed when a clear description and sterling character no longer bestow evidential value on an eyewitness’s account. For a field wherein the sheer bounty of reports has long counted as a major strength, this limitation seems cramped and unfair, a waste of many cases with appealing prospects as genuine anomalies. The tradeoff emphasizes quality over quantity. Numbers alone prove nothing and skeptics rightly reference the “bundle of sticks” fallacy, where accumulation of weak cases adds no strength to the argument whereas one indisputable case proves the point.

As a side benefit of this approach, ufologists have to take a critical look at the UFO record in choosing their cases. Too often ufologists praise the virtues of one case until it comes under attack then jump to another without acknowledging the strengths and weaknesses of the former exemplar. This unwillingness to engage in meaningful dialogue reinforces the skeptical image of ufology as a club of true believers rather than a society with scientific intentions, but in many instances the abandoned case is indefensible after all, not necessarily false but lacking the right evidence to withstand criticism.

If ufologists dig in to defend a case, it needs to be a good one. Superficial glamour will not do; only real substance will count. They must make certain that, unlike Malmstrom, all facts are truly factual; and unlike the example of the Phoenix Lights, they have considered its pros and cons with an impartial eye, in effect crossexamining the reports to see if they can spot the gaps that, surely, the skeptics will see. The UFO record as written is not good enough. It will betray us in confrontations with opponents and cannot be trusted without a case-by-case review, but this necessary proactive step will allow ufologists to cull the most substantive examples from others that were set down without critical examination, with wishes and hopes rather than evidence for support, thereby handing the opposition an easy victory. Defensible cases require ufologists to become the toughest critics of UFOs.

The selection process calls for a degree of cooperation uncommon in ufology. We need consensus that a chosen case is worthy of defense, since it will become representative of the best we have and ufologists will stake much on it. Some informal lists of best cases have appeared in the past and most ufologists probably carry some personal favorites in mind to cite as prime examples of real UFOs, but personal preferences make risky choices even when well-informed, and especially in the internet age, anyone can go public with an opinion no matter how ill-informed.³¹ A formal collection of defensible cases requires more rigorous formulation, with broad input, informed deliberation, and searching debate. Anyone involved in firsthand investigation of a case would have an important say, so would experts in certain aspects

like photographic evidence, when appropriate. A call to the community at large for any reason to discredit the case would tap the knowledge and ideas of the rank and file. A panel of established ufologists could then pass judgment and major ufological organizations finally stamp their approval on the case. The course of this procedure would be to introduce a likely candidate and then have it run the gauntlet of investigators, experts, active ufologists, organizational representatives, and anyone with something to add. While no one person would hold dictatorial authority to veto a case, no objection could be ignored and would require careful consideration and evaluation—and always, sound reasons—leading to acceptance or override. In the end a chosen case would bear the seal of the best authority that ufology can muster and provide a UFO that the field as a group is willing to stand behind and fight for.

This sort of formalized procedure would give ufology an unprecedented deliberative structure similar to peer review in the sciences. Such efforts would replace a catch-all collection of largely unexamined accounts with a record-within-the-record of well-vetted examples defensible as evidence for a genuine unknown. A solution will probably emerge for some cases even when they make the list, and if the skeptics are right after all, every case will. In one grim sense, the pursuit of defensible cases does promise a solution of the UFO mystery—if skeptics can knock down the acknowledged best cases then no quantity of inferior examples will remedy the situation. Either there are no UFOs or insufficient evidence exists to bridge the divide between belief and science, and either way we can pack up and go home because ufology is a futile exercise. On the other hand, if skeptics cannot find meaningful solutions for cases of superior quality, then ufologists gain a solid basis for all their purposes, whether debate, persuasion, or science.

Given the checkered nature of the current record, ufologists have urgent need for a collection of best cases. They allow the field to put its best face forward to the public and dispute with meaningful evidence for UFOs as unknown anomalies, while the discipline to identify suitable examples and argue from defensible positions improves the image of ufology as an organization dedicated to the mature, thoughtful study of its subject matter. Our best hope to learn more about UFOs will come from studies based on the most reliable cases. One way to think of defensible cases is to regard them as a starting point for scientific ufology since, for example, with a collection of reliable cases we can get on with the task of looking for patterns in the reports, necessary work for establishing a unitary phenomenon but confused when poor-quality cases clutter the sample.

This approach is ultimately quite conservative. It does not promote any origin or speculate on purposes and meanings, neither does it treat the more sensational or controversial aspects of the record, like abductions or Roswell. True or false, the more spectacular UFO experiences attract too much controversy to allow a consensus or prove very inviting to outsiders already skittish about the subject in general. The

extraterrestrial hypothesis may seem inseparable from UFOs and acceptance of one means acceptance of the other, but here we must walk before we can run. If we once establish the basic point that an interesting phenomenon exists, we will have done a good day's work and attention to other concerns can follow.

An appeal to defensible cases is a simplistic idea that requires no sophisticated theory, no additional funding, and nothing as miraculous as governmental goodwill. This approach serves as a tactic to gain a foothold among the doubters and as a bootstrap method to overcome some of the self-deception and cumulative error that afflict the ufological record, to improve the image and practice of ufology. In the end, defensible cases have the goal and the potential to show that UFOs are intriguing enough to deserve attention after all.

Which cases would you choose as the defensible best?

NOTES

1. James Carrion, "Goodbye Ufology, Hello Truth," *Follow the Magic Thread*, April 5, 2010, online at followthemagicthread.blogspot.com/2010/04/goodbye-ufology-hello-truth.html.
2. Leslie Kean, *UFOs: Generals, Pilots, and Government Officials Go on the Record* (New York: Harmony Books, 2010), 65–72.
3. "The Great Aerial Wanderer," *Dallas Morning News*, April 19, 1897, p. 5.
4. Jerome Clark, "Crashes and Retrievals of UFOs in the Nineteenth Century," in *The UFO Encyclopedia: The Phenomenon from the Beginning*, 2d ed. (Detroit: Omniographics, 1998), 261–263.
5. Hayden Hewes, "The UFO Crash of 1897: Aurora Astronaut Update," *Official UFO* 1, no. 5 (January 1976): 29–31.
6. Kevin D. Randle, *Crash: When UFOs Fall from the Sky* (Franklin Lakes, N.J.: New Page Books, 2010), 24–25; Michael H. Simmons, "Once Upon a Time in the West," *Magonia*, no. 20 (August 1985): 3–7.
7. Jim Marrs, "The Very First UFO Crash Retrieval?" in *2nd Annual UFO Crash Retrieval Conference Proceedings*, Nov. 12–14, 2004, Las Vegas, Nevada (Broomfield, Colo.: Wood & Wood Enterprises, 2004), 23–30.
8. Marrs, 25, 28; James L. Choron, "The Aurora Incident," *Texas Escapes Online Magazine*, August 5, 2004, online at www.texasescapes.com/Paranormal/Aurora-Incident.htm.
9. National Assessment of Adult Literacy, "120 Years of Literacy," online at nces.ed.gov/NAAL/lit_history.asp.
10. N. W. Ayer & Son's *Newspaper Annual*, 1898, p. 1240, online at lcweb2.loc.gov/diglib/vols/loc.gdc.sr.sn91012091.00143501930/page.pdf?start=470.
11. Choron.
12. *The UFO Phenomenon* (Alexandria, Va.: Time-Life Books, 1987), 129–130.
13. Lawrence Fawcett and Barry J. Greenwood, *Clear*

Intent: The Government Coverup of the UFO Experience (Englewood Cliffs, N.J.: Prentice-Hall, 1984), 16–56.

14. *Documents Describing UFO/Helicopter Overflights of U.S.A.F. Bases in 1975* (Evanston, Ill.: Center for UFO Studies, n.d.).

15. Linda Moulton Howe, *An Alien Harvest* (Littleton, Colo.: Linda Moulton Howe Productions, 1989), 23–24; Linda Moulton Howe, *Glimpses of Other Realities v. 2: High Strangeness* (New Orleans: Paper Chase Press, 1998), 78–87.

16. Fawcett and Greenwood, 27–31.

17. Robert Salas and James Klotz, *Faded Giant: The 1967 Missile/UFO Incidents* (North Charleston, S.C.: Booksurge Publishing, 2004), 16–23.

18. Kean, 247–264; William F. Hamilton, “Mass Sightings in Arizona,” *MUFON UFO Journal*, no. 349 (May 1997): 3–6, 14; Richard F. Motzer, “The Phoenix Lights: The Real Investigation,” *MUFON UFO Journal*, no. 351 (July 1997): 3–6.

19. Tim Ley, Phoenix Lights UFO, online at phoenix-lights.blogspot.com.

20. Phoenix Lights. Wikipedia, en.wikipedia.org/wiki/Phoenix_Lights.

21. Bruce Maccabee, “Report on Phoenix Light Arrays,”

Dr. Bruce Maccabee Research Website, online at brumac.8k.com/phoenixlights1.html.

22. Tony Ortega, “The Phoenix Lights Explained (Again),” eSkeptic, May 21, 2008, online at www.skeptic.com/eskeptic/08-05-21/.

23. Thomas E. Bullard, *The Myth and Mystery of UFOs* (Lawrence: University Press of Kansas, 2010), 122–123; *Akty istoricheskie, sobranye i zdanye Arkheograficheskoi komissieiu*, vol. 4 (St. Petersburg, Russia: Arkheograficheskoi komissieiu, 1842), 331–332, online at babel.hathitrust.org/cgi/pt?id=umn.31951p00828434a;seq=345.

24. Clark, “Gill CE3,” in *The UFO Encyclopedia*, 449–450.

25. “Papua/Father Gill Revisited,” *International UFO Reporter* 2, no. 11 (November 1977): 4–7; 2, no. 12 (December 1977): 4–7.

26. Clark, 451–452.

27. Martin Kottmeyer, “Gill Again,” *Magonia*, no. 54 (November 1995): 11–14.

28. Bullard, 291–292.

29. Bullard, 93–94.

30. David J. Hufford, “Traditions of Disbelief,” *New York Folklore Journal* 8 (1982): 47–55. ♦



CUFOS classics: Nov. 1976, Nov. 1979, May/June 1986, Mar./Apr. 1990, Aug. 2008

THE END OF IUR

CUFOS has published the *International UFO Reporter* more or less continuously since 1976, making it one of the longest-running UFO publications still in existence. There were two high points of circulation, one in the late 1970s, and then a second in the mid-1980s. Since then, the number of CUFOS Associates has slowly declined, and more rapidly beginning in the late 1990s, coinciding with the rise of the internet as well as numerous cable television programs devoted to UFO subjects.

In the past decade, several UFO groups have closed, such as SOBEPS in Belgium. That they produced a quality publication and did good work did not inoculate them against the decreased public interest in and support for the serious study of the UFO subject. BUFORA in the UK has not ceased operations, but it no longer issues a regular publication for these same reasons.

The CUFOS board has been monitoring these trends for many years and understands that a wider audience can be reached through the internet and other electronic formats. The number of Associates who receive *IUR* has reached that tipping point where producing a print publication no longer makes economic sense (truthfully, we passed this point a while ago but soldiered on out of inertia and a stubborn commitment to print).

Accordingly, we must announce that this issue of *IUR* will be the last one produced in hard copy. Whether or not there will be an electronic version of *IUR*, and if so, its format and frequency, is still to be decided. We are using this change as an opportunity to rethink how we provide information to the public, and our valued Associates and supporters. We thank all of our readers, our contributors, and our varied production and editorial teams who made *IUR* what many consider the best English-language UFO publication in history.

—Mark Rodeghier, CUFOS Scientific Director