

‘Exeter Incident’ Solved!

A Classic UFO Case, Forty-Five Years ‘Cold’

One of the great unsolved UFO cases—which provoked endless controversy between True Believers and Doubting Thomases—has at long last succumbed to investigation. The 1965 Exeter mystery is now explained.

JAMES MCGAHA and JOE NICKELL

It has been considered “one of the best-documented UFO accounts on record” (*APRO Bulletin* 1965) and “one of the most spectacular and best-corroborated UFO close encounters of all time” (Davenport and Geremia 2001). What journalist John G. Fuller would subsequently relate in his book *Incident at Exeter* (1966) began in the early hours of a September morning in 1965 near a small town in southeastern New Hampshire. It has never been satisfactorily explained—until now.

Exeter Incident

The story begins at 12:30 AM on September 3, 1965, at Exeter, New Hampshire. A policeman cruising on Route 101 came upon a woman parked beside the road. She told him excitedly that a flying object with red flashing lights had chased her for some distance. She pointed to a bright light on the horizon. The policeman, Eugene Bertrand, watched it for a short time and, unimpressed, left after reassuring the woman there was nothing to worry about.

Then at 2:24 AM, eighteen-year-old Norman Muscarello burst into the Exeter police station, “white, and shaking.” He had been hitchhiking along Route 150 toward his home in Exeter when he saw what he called “the Thing,” as big as or bigger than a house (Fuller 1966, 11). As Muscarello (1965) later described it in a signed statement:

A group of five bright lights appeared over a house about a hundred feet from where I was standing. The lights were in a line at about a sixty-degree

angle. They were so bright, they lighted up the area. The lights then moved out over a large field and acted at times like a floating leaf. They would go down behind the trees, behind a house and then reappear.

Muscarello then described what would prove to be a powerful clue to the UFO’s identity:

[The lights] always moved in the same sixty-degree angle. Only one light would be on at a time. They were pulsating: one, two, three, four, five, four, three, two, one. They were so bright I could not distinguish a form to the object. I watched these lights for about fifteen minutes and they finally disappeared behind some trees and seemed to go into a field. At one time while I was watching them, they seemed to come so close I jumped into a ditch to keep from being hit.

Bertrand drove with Muscarello to the site just before 3 AM. The two walked into the field, and Bertrand himself witnessed the lights Muscarello had described. He stated, “At one time

they came so close I fell to the ground and started to draw my gun.” The officer stated that there were “five bright red lights”; indeed they were “extremely bright and flashed on one at a time.” He added that “The lights were so bright, I was unable to make out any form” (Bertrand 1965). The pair ran to the police car. Bertrand radioed Patrolman David Hunt, who arrived and also witnessed the lights, which finally moved away, eastward, toward the ocean (Fuller 1966, 14).

Over the next several weeks, some sixty reports of UFOs followed in the area around Exeter. The case resulted in an article in *Look* magazine (February 8, 1966), the book by Fuller (expansively subtitled *The Story of Unidentified Objects over America Today*), and a host of articles, entries in UFO encyclopedias (e.g., Clark 1998, 364–67), and discussions in books (e.g., Hynek 1977, 154–66), as well as lectures, radio shows, and television documentaries.

J. Allen Hynek—the astronomer who began as an admitted “outright ‘debunker’” but became, by the late 1960s, a true believer in the reality of “the UFO phenomenon”—considered the case “a fine example of a Close Encounter of the First Kind” (1977, 1, 154), terminology he created. Hynek observed that the Pentagon was unable to explain the September 3, 1965, Exeter phenomenon and that “the scientific establishment” (a phrase dear to true believers) “in failing to deal with the evidence” was, like the Pentagon, “actually admitting that it has no explanation” (Hynek 1977, 165–66).

In short, the object was still an *unidentified* flying object, implying that the mystery indicated something momentous. Skeptics were, of course, skeptical.

'Solutions'

Not surprisingly, the Exeter incident provoked many speculations as to what the UFO might have been. Here are some of the proposals:

Astronomical bodies. As shown by a folder in the files of Project Blue Book (the U.S. Air Force's UFO evaluation operation, 1952–1969), the Pentagon considered—and rejected—the possibility of “astro-stars/planets.” Supposedly, the witnesses had merely seen “stars and planets twinkling” due to a temperature inversion (a meteorological phenomenon in which a layer of warm air is trapped above cold night air and thus is capable of causing visual distortions) (Clark 1998, 365). The totality of evidence was incompatible with that hypothesis, leading Hynek (1977, 154) to declare, “The astronomical evaluation is completely untenable.”

Glare of airport landing lights. One air force officer hypothesized that the Exeter sighting merely resulted from the glare of landing lights at nearby Pease Air Force Base, a Strategic Air Command (SAC)/North American Air Defense Command (NORAD) bomber

base. This possibility was tested by having both the runway marker lights and the approach strobes turned off and on during a fifteen-minute period, but observers saw no effect from the Exeter site (*UFO Phenomenon* 1987, 103–104).

An Air Force Operation. Blue Book suggested the incident might have been caused by planes from a SAC/NORAD training exercise dubbed “Big Blast,” which occurred on September 2–3, 1965. Blue Book noted that “the town of Exeter is within the traffic pattern utilized by Air Traffic Control in the recovery of these aircraft at Pease AFB [Air Force Base], N.H.” The exercise was active—according to Blue Book's chief (Quintanilla 1965)—between midnight and 2 AM. However, Bertrand noted that he and young Muscarello had witnessed the flashing UFO “nearly an hour after two a.m. which would eliminate the Air Force Operation Big Blast” as an explanation (qtd. in Clark 1998, 366). Hynek (1977, 154) concurred.

Advertising plane. Newspapers in the Exeter area ascribed the lights to “a flying billboard”—an ad plane—owned by the Sky-Lite Aerial Advertising Agency of Boston. The *Amesbury* (Massachusetts) *News* thus claimed the UFO “has finally been identified!” But alas, that plane was on the ground be-

tween August 21 and September 10, and furthermore it bore no red flashing lights, instead having “a rectangular sign carrying white flashing lights” (Fuller 1966, 51).

Corona discharge from power lines. The late UFO skeptic Philip J. Klass agreed that the eyewitnesses had indeed seen something unusual, but he speculated that “the Exeter UFOs” (including the one seen by Muscarello and the two police officers) might have been “power-line coronas,” that is, clear-weather plasmas (luminous clouds of ionized air) that were generated by electrical charges emanating from high-tension power lines (Klass 1968, 12–25). This clearly did not explain the original Exeter incident, and Klass later backed away from his “plasma UFOs” theory (see Clark 1998, 366).

Prank with lighted kite. Skeptical UFO buff Martin Kottmeyer (1996) weighed in with the notion that a prankster flew a kite, most likely “a large box kite” with “five strobe flashers linked to a sequencer” that “hung along the kite-line rather than a tail” (thus accounting for the observed sixty-degree angle). However, not only is the kite hypothesis cut from whole cloth, but the imagined prankster seems to have gone to considerable effort for such a deserted place and time.



Figure 1. A U.S. Air Force KC-97 refueling tanker like this one became an unintentional UFO, sparking the “Exeter Incident” of September 3, 1965.



Figure 2. On the underbelly of the KC-97 are [closest to the camera] a set of three high-intensity lights and [farther from the viewer] the five red panels of sequencing lights. (These were described by eye-witnesses as “five bright red lights” that “flashed on one at a time,” specifically “pulsating: one, two, three, four, five, four, three, two, one.”)

Other objects. Still other possible candidates were proposed—helicopter, balloon, civilian plane—but nothing seemed likely.

As Jerome Clark summed up in his *The UFO Encyclopedia* (1998, 366) after noting the case had received much notoriety, “The attention ensured that this particular close encounter of the first kind would be remembered in a way few have been. Still, by any standard the sighting remains puzzling and impressive.”

Perceptions

People misperceive—especially when they suddenly encounter something that is unknown, is seen under adverse conditions, and frightens them. Recall that at Exeter the unidentified lights were so bright that witnesses could not

make out the shape of the UFO. Not knowing the craft’s size, its altitude, or its distance from the viewer—that is, with multiple unknowns—a witness has no basis for estimating any of these factors. And Exeter witnesses were indeed afraid: a woman who felt she was being chased by a UFO had pulled off the road; a teenage witness arriving at the police station was white and shaking; and one officer admitted he almost shot at the bright lights.

Consider that even something as distant as a meteor hundreds of miles away, passing out of sight behind trees, can seem to have landed in a nearby woodland—a common illusion. The brightness of the Exeter UFO’s lights (greater than that of a mere airplane and ultimately providing a clue to its identity) probably made the craft seem much closer than it really was.

Consider, too, that something that is frightening tends to loom large in one’s consciousness. Chad Marsolek of the University of Minnesota, an expert in memory distortion, describes a “weapon-focus effect.” This may cause an eyewitness who is focusing on something frightening (such as the barrel of a gun) to lose focus on other elements. As it happens, when people view a disturbing image they tend to be confident of their accuracy—even when their memory is wrong (Marsolek 2010).

All of these issues apply to the Exeter incident. However, much of what the eyewitnesses described was still accurate, as we shall see presently.

Solved!

For forty-five years the incident at Exeter remained unsolved. Then, while we were working together on some ongoing UFO research, one of us (Joe Nick-

ell), an investigator and science writer, recalled the cold case to the other (James McGaha), an astronomer and former military pilot. We brainstormed the case, shared sources, and discussed details—soon agreeing that one particular element held the key to the solution. We might call it (with homage to Hardy Boys’ mysteries) “The Clue of the Sequencing Lights.”

As it happens, the military pilot of our team has actually docked with a craft like the UFO at Exeter, and he recognized the sequencing lights for what they surely were: those on a U.S. Air Force KC-97 refueling plane. To check his memory and obtain photos (figures 1–3), he visited an aerospace museum. Like seeing an old friend, he gazed on a mothballed KC-97 tanker (figure 1) whose fuselage is arrayed with a row of five red sequencing lights (figure 2). These would reflect onto the refueling boom (figure 3), which (according to the flight manual) when lowered is inclined at sixty-four degrees.

Just this type of craft operated out of Strategic Air Command bomber bases like that of Pease AFB and, indeed, would surely have been involved in a SAC/NORAD training exercise like that dubbed “Big Blast” of September 2–3, 1965. But what about the “fact” that this exercise—which was ongoing in the skies over Exeter at the time of the first sightings—had supposedly ended about an hour before Muscarello and officer Bertrand had their “close encounter”?¹ It seems quite apparent that, although the particular exercise was reportedly over, there were still planes in the sky. Bertrand and Hunt, in fact, witnessed a B-47 jet at about the time the UFO disappeared (Fuller 1966, 67). Perhaps it had just refueled.

The airborne refueling process of the KC-97 is both interesting and relevant. Briefly, it involved the KC-97 making long circuits of the rendezvous area. As the jet to be refueled began to approach, the boom was lowered and the receiver (sequencing) lights were turned on. However, when the jet was in very close proximity, the receiver lights were turned low; otherwise their extreme brightness would temporarily

blind the approaching pilot. (The sequencing stopped as the aircraft hooked up.) There would be some jockeying as the two planes connected, and all of this could look exceedingly strange to an observer on the ground.

Thus, on one of its long passes the slow-moving KC-97 could have seemed to be “chasing” the first eyewitness on Route 101. It was subsequently seen by young Muscarello and, later still, Bertrand, with its boom down at its characteristic angle. This boom, which bore its own small wings (again, see figure 3), would actually flutter in the air currents (except when specifically being controlled by the boom operator), which no doubt explains eyewitness Muscarello’s statement that the UFO “acted at times like a floating leaf.” Most notable were the tanker’s five red lights, which were flashing—in the sequence accurately described by the two witnesses—one, two, three, four, five, four, three, two, one. The extreme brightness of the lights, rendering other features of the object indistinguishable from the ground, is further corroborative evidence of the UFO’s identification as a KC-97 refueling plane.

Why did the Pentagon not solve the case at the time? Perhaps in the welter of paperwork the clue we found so significant went unseen by anyone who could fully grasp its import and who had time to devote to the case. Naturally, everything is much clearer in hindsight.

We believe this solves the so-called incident at Exeter. As to the weeks of subsequent UFO reports in the vicinity, they were beyond the scope of our investigation. (See Fuller 1966; Sheaffer 1986, 111–19.) As our work shows, “cold cases” may be solvable with perseverance and some luck, keeping in mind that luck is most likely to come to those who go looking for it. ■

Acknowledgments

The authors wish to thank James Stemm, curator of the Pima Air and Space Museum, and Tim Binga, director of the Center for Inquiry Libraries, for their help with this investigative project.



Figure 3. Underneath the KC-97 is also a refueling boom (shown here in stowed position). When down, the boom is at an angle consistent with the sixty degrees an eyewitness reported (specifically sixty-four degrees, according to the flight manual). The sequencing lights would reflect onto the boom, which would flutter “like a floating leaf” when not controlled by the boom operator (note its small wings). [Photos by James McGaha]

Note

1. Hynek (1977, 154) misstated the situation when he wrote that “Operation Big Blast terminated more than an hour before the incident at Exeter began.” He should have said that the operation was in progress during the earlier sightings but had reportedly ended about an hour before Bertrand (1965) witnessed the UFO.

References

- APRO Bulletin*. 1965. Reprinted as “Exeter (New Hampshire) sightings” in Story 1980, 113–14.
- Bertrand, Eugene. 1965. Statement, full text in Hynek 1977, 158–59.
- Clark, Jerome. 1998. *The UFO Encyclopedia*, 2nd ed. (in two vols.). Detroit, Michigan: Omnigraphics.
- Davenport, Peter B., and Peter Geremia. 2001. Exeter (New Hampshire) sightings. In Story 2001, 170–72.
- Fuller, John G. 1966. *Incident at Exeter*. New York: G.P. Putnam’s Sons.
- Hynek, J. Allen. 1977. *The Hynek UFO Report*. New York: Dell.
- Klass, Philip J. 1968. *UFOs—Identified*. New York: Random House.
- Kottmeyer, Martin S. 1996. The Exeter file. *The REAL News*, Part I, 4(9) (September): 1, 5–6; Part II, 4(10) (October): 1, 6.
- Marsolek, Chad. 2010. Episode of *Monster Quest* (on “Mothman”). History Channel, aired February 10.
- Muscarello, Norman J. 1965. Statement, full text in Hynek 1977, 158.
- Quintanilla, Hector, Jr. 1965. Letter, reprinted in Hynek 1977, 161–62.

- Sheaffer, Robert. 1986. *The UFO Verdict*. Amherst, New York: Prometheus Books.
- Story, Ronald D. 1980. *The Encyclopedia of UFOs*. Garden City, New York: Doubleday.
- . 2001. *The Encyclopedia of Extraterrestrial Encounters*. New York: New American Library.
- The UFO Phenomenon* (Mysteries of the Unknown series). 1987. Alexandria, Virginia: Time-Life Books.



James McGaha, major, USAF retired, is a former special operations and electronic warfare pilot and now an astronomer and director of the Grasslands Observatory in Tucson, Arizona. He has frequently appeared as a UFO expert on such television shows as *Larry King Live*. He is a Committee for Skeptical Inquiry scientific consultant.



Joe Nickell, PhD, is a skeptical investigator and UFOlogist who has written extensively about extraterrestrial visitations in his various books, including *Entities* and *Tracking the Man-Beasts*. He contributed to *The Encyclopedia of Extraterrestrial Encounters* and coedited *The UFO Invasion*.