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### **GHOST ROCKETS**

At 11 P.M. on January 18, 1946, as an American C-54 transport plane was passing over rural France at 7000 feet, the pilot observed what he took to be a brilliant meteor at 35 degrees above the eastern horizon. The object fell and was lost to view—but only momentarily. To the witness' astonishment the "meteor" ascended, then "described a tiny hyperbola of perhaps one degree altitude and fell again from sight" (Gross, 1988).

Whatever the phenomenon was, it clearly had not been a meteor. Soon Europeans and others would call such phenomena "ghost rockets" and ascribe them to secret Soviet experiments with captured German V-2 missiles. Many of the "rockets" would be meteors, but none, so history attests, were missiles from Russia, which then possessed only a primitive missile technology. A summary of some of the more interesting sightings follows:

Aerial sightings. Landskrona-Pasten, Sweden, May 24: At 2 A.M. witnesses saw a wingless cigar-shaped object which spurted "bunches of sparks" from its tail. Three hundred feet above the ground, it was moving at an "ordinary airplane's speed" in a southwestern direction (Morgon-Tidningen, May 25). Katrineholm, Sweden, May 31: A giant, wingless, metallic cigar was seen on the eastern horizon at 11:43 A.M. It traveled swiftly at 1000 feet altitude, leaving a rumbling sound as it executed a turn toward the west. Sala, Sweden, and Helsinki, Finland, June 9: At the former location a huge light with a long, fiery tail plunged earthward, and shortly afterwards an explosion sounded. At 10:17 P.M. a rocket-shaped light passed over Helsinki at 1000 feet; smoke trailed behind it, and a rumbling sound accompanied it. Its afterglow lighted the sky for 10 minutes (Gross, op. cit.). Jarna, Sweden, July 9: A silver-white object "having a shape like a glass flask in a thermos" descended from high in the afternoon sky (Morgon-Tidningen, July 10). Turku City, Finland, July 9: At 3:25 р.м. a bright red, rocketlike object with a short trail shot from south to north across a cloudless sky. The phenomenon was so bright that it "cast shadows on the ground" (Hietamaki, 1976). Stock-

holm, Sweden, July 10: A blue-colored flying cigar half the apparent width of the full moon and 10 or 12 times its length passed over the city at 2:30 P.M. (Svenska Dagbladet, July 10). Ortviken and Sundsvallsbo, Sweden, July 18: Observers at the first location and, soon afterwards, the second saw a silvery cylinder without a smoke trail passing at a moderate speed and at less than 1000 feet altitude. It was traveling first toward the west but then altered its course toward the northwest (Swedish Home Service Radio, July 18). Stockholm, early August: A meteorologist studying clouds through a telescope noticed a luminous object on the horizon. Within 10 seconds it had come into view. It was, he said, "at least 90 feet long. The body was torpedo-shaped and shining like metal." It had a "tapered tail that spewed glowing blue and green smoke and a series of fire balls" (New York Times, August 11, and Christian Science Monitor, August 14). Skane, Sweden, August 5: A fast-moving, silent, circular object glittered in the sun as it headed toward the south-southwest at a high altitude (Goteborg Handel & Sjofarts Tidning, August 5). Central and southern Sweden, August 11: Between 9 and 10 P.M. hundreds of persons saw "ghost bombs" which flew from south to north, giving off a brilliant blue-white light. Sometimes two of the objects were seen flying together, and some witnesses reported that smaller silver "balls" came out of the larger objects, which were variously described as "cylinders" and torpedoes "with a wide nose" and "fire-spurting tail" (Svenska Dagbladet, August 12). Denmark, August 13: During the afternoon a troop of Boy Scouts observed a rocket-shaped object traveling at high speed, about 1800 feet overhead. They reported it had small wings and fins on the side and a blue-white smoke streaming from its bottom. At one point it altered its course by 35 degrees, then went back to its original course (Doubt 16, 1946). Karlskrona, Sweden, August 13: At 8 P.M. a cigar-shaped object flew 150 feet overhead. A mere five feet long, it emitted a faint green light and trailed smoke from the rear (Goteborg Handel & Sjofarts, August 14). Copenhagen, August 18: Six persons saw an object flying just above the rooftops. It looked like a cigar and was nine feet long. "At the nose we could see some small spheres," they said; "a bluish light was produced at the rear" (Stockholm Dagens Nyheters, August 19). Sweden, August 24: A Norwegian student and a Swedish friend were boating on a river

(because of press censorship of ghost-rocket sightings, the exact location was undisclosed) when a light approached them from the southeast. The Norwegian reported that "it resembled the full moon, perhaps a little more elliptical. The light emitted was very intense" and was "bluish on the brim of the object. As it passed immediately overhead, it grew so bright you could see as well as on a sunny day! ... [I]t released four 'stars' which fell silently to the ground and on landing grew dark. As these 'stars' were released, the fireball too grew dark and after a few seconds we were able to see in the dark again. We could observe an oblong rocket passing us in a perfectly horizontal trajectory about 900 feet above the ground.... [I]t was about 10 feet long" (Aftenposten [Oslo], August 24). Northern Greece, September 1-2: Numerous persons saw rocket-shaped objects flying overhead in the late-night and early-morning hours. In one case a rocket appeared to fall into the sea (Chicago Daily Tribune, September 6). Lorraine, France, mid-September: Two "luminous globes" flying in a straight line left "glowing wakes." They "were watched for a long time" and "could not in any manner have been confused with lights of an airplane or a shooting star" (Le Figaro [Paris], September 14). Castanheira, Portugal, September 18: Two greenish globes, one following close behind the other, flew over the city. September 22, Florence, Italy: At 3:15 A.M., amidst a flurry of ghost-rocket sightings all over the country, an object maneuvered over the city, remaining visible for 90 seconds and at one point making an abrupt turn (Portland Oregonian, October 1).

On September 9 the British Air Ministry's Directorate of Intelligence (Research) summarized the major features of the ghost-rocket phenomenon:

The majority of observations over Scandinavia refer either to light phenomena, or to bright, shining, luminous or fiery balls, or else, to cylindrical or cigar-shaped objects, sometimes with a bright light in the tail, occasionally in the nose. The following are some examples of descriptions given by observers: (a) Like a glowing iron rod, thicker and red light in front, turning to orange at the back. Two meters long at 200-300 meters range. (b) Magnesium-like light in front; behind that a section narrowing conically, partly lighted by a yellowish light coming

from the back. The yellowish light dropped bright particles. Visible 15 seconds. (c) White core surrounded by bluish green color, the size of a full moon. Four stars spurted off and were extinguished, after which the ball of fire died out and a black, roughly oblong, pointed object, 1.5 meters long[,] went on with a pale red coloration behind. No wings or tail, no sound. (d) Shining ball with long bluish white tail dying out over the horizon. (e) Oblong torpedo-shaped object more than one meter long with pale yellowish point, blue shimmering tail, more than 0.5 meters long. (f) Black object followed by flame with very bright light. (g) A rocket about 5 meters long and dark colored, flying at height of about 1,000 meter speed estimated at 1,000 kilometers per hour. (h) Missile observed through binoculars for 2 minutes. Length estimated as 2 meters. Said to be glowing all over, and the body gave out a clear flashing flame, like a short tail behind it. Trajectory was uneven, sometimes up a little, sometimes down a little, in an irregular manner. Looked like burning torpedo with no wings, tail or propulsion unit (Gross, op. cit.).

Crashes and traces: In many cases witnesses reported seeing the ghost rockets crash both on land and in water (Liljegren, 1986). Debris was recovered in some instances, with results that were either ambiguous or quickly subjected to secrecy. Some examples follow. Ockelbo, Sweden, July 9: A silver cigar traveling close to the ground was seen at 2:35 P.M. According to a press account, "It tumbled right down against the ground and was gone in a few moments" (Morgon-Tidningen, July 11). Lake Barken, Sweden, July 9: An object which was changing color from blue to green came rapidly out of the northeast and plunged into a deep section of the lake about 350 feet from the witness. Mockjard, Sweden, July 9: A "silver-colored" star descended toward Mount Landholm with a whistling sound. As it came down 175 feet away, apparently about to hit the mountainside, the intense light it cast temporarily blinded the observer, so he could not see the collision. A powerful burning smell lingered for 15 minutes (Svenska Dagbladet, July 11). Bjorkon, Sweden, July 10: A brilliantly glowing projectile trailing luminous smoke was seen to crash into

a bathing beach. Witnesses found a shallow crater a little over a yard in diameter. A mass of slaglike material, some of it reduced to powder (which burned the hands when touched), was found at the site and collected into bags. A while later a newspaper reporter who searched the beach found a "burned-brown object with a hollow cylinder. In color and consistency this object was like most of the other objects picked up. The cylinder had a diameter of about 20-30 meters." Military personnel claimed all of the material, which was subsequently analyzed, at first with inconclusive results. Later investigators said it appeared the material had been on the beach for some time; probably, they added, no ghost-rocket crash had ever taken place (Svenska Dagbladet, July 11, and Morgon-Tidningen, July 12). Lake Mjosa, Norway, July 18: Two "missiles" flying close together plunged into the lake, causing the water to splash several feet into the air. The objects had come in from just over the trees, were eight feet long, and had wings set three feet from the nose. The objects looked like those depicted in "pictures of the German flying bomb [the V-1]," according to a British Intelligence report. As they traveled they made a whistling sound, and their wings "fluttered as if they had been made of cloth." They did not explode when they hit the water (Gross, op. cit.; Oslo Aftenposten, July 20; Svahn and Liljegren, op. cit.). Lake Kolmjarv, Sweden, July 19: At noon a gray-colored, seven-foot-long rocket with wings crashed into this long and narrow lake. The crash was observed by witnesses on the shore. A three-week search by soldiers and others failed to uncover any wreckage, though the search was hampered by deep mud on the lake bottom (Svahn and Liljegren, 1984; Liljegren and Svahn, 1987). Oslo, Norway, July 28: During the night sections of the city were shaken by two violent explosions which seemed to have taken place in the air. An "intense white light" accompanied the blasts. A press account noted: "It is generally assumed that the noises were caused by rockets, but that they burst into such small fragments that they practically disappear" (London Daily Telegraph, July 29). Southern Sweden, August 12: A cigar-shaped object about five feet long and trailing smoke barely cleared the roofs of houses in a seaport town. It continued out to sea and seemed to come down on an islet. Two men went out to investigate, but the islet was too large and overgrown with thickets to make a

thorough search possible (Svenska Dagbladet, August 14). Malmo, Sweden, August 16: A passing missile produced an enormous explosion which shook or broke many windows. Some witnesses thought they saw fragments of the object falling to earth (Manchester Guardian, August 17). Southern Sweden, mid-October: Two persons on a lake shore heard a sound reminiscent of a "flock of birds." They saw a dart-shaped object with small wings and a "ball-shaped tip" coming in over the trees. It crashed into the water just past the shoreline and exploded (Svenska Dagbladet, October 21).

Official concerns and conclusions. On June 13, 1944, a Backebo, Sweden, farmer was plowing when an explosion threw him and his horses to the ground. In the days and weeks that followed, Swedish Air Force investigators collected 10,000 pieces (two and a half tons) of the device that had caused the explosion. From them Allied scientists learned that the Germans had a new missile: the V-2. Thus when the ghostrocket scare occurred two years later, authorities, not illogically, concluded that the Russians were conducting experiments with the V-2s they had captured from the German rocket base at Peenemunde, now in Stalin's hands. On June 12 the Swedish Defense Staff ordered all military personnel to report sightings of unusual flying objects to headquarters. Soon U.S. military intelligence personnel were expressing concern about the state of Soviet rocket development, but Wernher von Braun, formerly Hitler's chief rocket expert and now working on American missile technology, said that the Soviets had captured few of the best German scientists and engineers. It would be a long time, he thought, before the Russians had anything spectacular (McGovern, 1964).

On July 11 the American embassy in Stockholm sent a message to Washington noting that a member of the staff had seen a mysterious object that very afternoon. The writer suggested that the Soviets might be seeking to intimidate the Swedes. By now the Swedes had formed a "ghost rocket committee" composed of members of the Research Institute of National Defense, Air Administration, Defense Staff, the Naval Administration, and the Defense Radio Institute. Col. Bengt Jacobson, the chairman, was to report the group's findings to Gen. Nils Soderberg, chief of Sweden's Air Force.

Swedish military investigators had no trouble identifying the cause of many reports: meteors. But other reports were more difficult to account for; the sightings were so frequent, and the descriptions so specifically of structured craft, that natural explanations were not applicable. Norway's military was initially skeptical, however, laying the reports to the variety of landing lights on high-altitude aircraft. But soon, after its own Air Force personnel saw the "ghost bombs," it would rescind its dismissal of the reports and begin a policy of press censorship. By mid-July the Swedish military were demanding that newspapers in their country not publish the precise locations of sightings. Teams of investigators were kept busy checking sites of alleged crashes, and a Defense Staff spokesman told the newspaper Morgon-Tidningen (July 25) that possibly the "flying bombs which are seen crossing Sweden both with a western direction and in a directly opposite direction are taking a round trip over the country in order then to return to their place of origin.... [T]hat they are meteors in every case is a theory which has been rejected without further ado." In one month, July, official sources counted 500 reports.

In August, after the Swedish Defense Staff requested new radar equipment, Gens. James H. Doolittle and David Sarnoff arrived to discuss the matter with government and military officials, who told them that on several occasions they had tracked the mysterious objects on radar. That same month Swedish Lt. Lennart Neckman of the Defense Staff's Air Defense Division saw something that was "without the slightest doubt ... a rocket projectile" (Dagbladet, August 8). By now, according to the New York Times (August 12), tensions in Stockholm were "near the boiling point." The Swedish Army, according to a mid-month Reuters dispatch, suspected that "Russian technicians are experimenting with new weapons in the Baltic provinces or elsewhere." On August 14 the New York Times reported that Undersecretary of State Dean Acheson was "very much interested" in the reports; so, though the fact was not publicized at the time, was U.S. Air Force Intelligence. British Intelligence launched an investigation under the direction of R. V. Jones, an expert on V weapons. Jones was skeptical because no unambiguous wreckage had been found, but members of his staff were convinced that the sighting

reports were of missiles (Gillmor, 1969). Before the month was out, the Danish military, like their Swedish counterparts, were so alarmed that they asked their own national press not to reveal precise details or sighting locations.

On August 27 Ossian Goulding of the London Daily Telegraph wrote that it was not just the Scandinavians, the British, and the Americans who were concerned about the missile reports; so were the people whom widespread suspicion held accountable for the ghost rockets. Goulding related that a "member of the Swedish Communist Party with whom I had some contact while serving The Daily Telegraph in Stockholm during the war, stated that he and his fellow members are under orders to report through official party channels all available details of the rockets' flights gathered from eyewitnesses or by personal observation. The time they are seen, direction, height, and estimated speed, and especially any landings, are to be reported instantly." Such reports would go quickly to Soviet officials. For their part the Soviets were vehemently denying any responsibility for the sightings, charging that such accusations were an "anti-Soviet slander" and part of an imperialist plot to "poison the international atmosphere" (New York Times, September 4). In view of what little the West knew about Soviet rocket technology in 1946, the Soviets were logical suspects, but in fact they were innocent. Almost all the captured German rocket technology and rocket experts had gone to the United States, and it would be a long time before the Russians would catch up with the West in this area.

On October 10 the Swedish Defense Staff went public with an estimate of the situation. "Most of the observations are vague and must be treated very skeptically," it said. "In some cases, however, clear, unambiguous observations have been made which cannot be explained as natural phenomena, Swedish aircraft, or imagination on the part of the observer. Echo, radar, and other equipment registered readings but gave no clue as to the nature of the objects." Fragments alleged to be of the missiles had proven to be nothing more than ordinary coke or slag. Twenty percent of all the reports were of weapons from an unknown foreign power (Gross, op. cit.). The Swedish government was taking defensive measures, and on

the twenty-third the United States approved the sale of 90 P-51 aircraft to the Swedes.

Five days later the Belgium Defense Minister told reporters that Belgian ghost-rocket reports from late September had been investigated and explained.

The Swedish ghost-rocket committee held its last meeting on December 1 and released an official report on the twenty-third. It said, in part:

Information has been received chiefly from four sources: (a) visual observations; (b) radar trackings; (c) radio observations; (d) reports from special sources.... Incidents were reported throughout the entire country with a concentration in the middle of Sweden.

On 9 July and 11 August, luminous phenomena were observed at the same time over almost all of Sweden. It is possible that these phenomena were of a celestial nature, and if they are excluded, approximately 50 percent concern luminous phenomena and the rest concern observations of "real" objects. These objects are mainly of two different types: (a) "spool-shaped" without any wings or stabilizing surfaces (42 percent), (b) "spool-shaped" and provided with wings (8 percent)....

Approximately 100 impacts have been reported, together with fragments from 30 of these. All have been investigated by the Defense Research Institution. It has been impossible to make certain that any of the objects originated as parts of projectiles or rockets; they have generally been attributed to other sources....

Despite the extensive effort which has been carried out with all available means, there is no actual proof that a test of rocket projectiles has taken place over Sweden. The committee has therefore been forced to decide that the investigation has been unsuccessful and that it was useless to continue to activity in its present form and with the present limited resources. Even if the main part of the report can be referred to as celestial phenomena, the committee cannot dismiss certain facts as being merely public imagination (*ibid.*).

Records of the committee's investigations remained classified until May 1983.

Ghost rockets in retrospect. The UFO wave that erupted in the summer of 1947 consisted mostly of sightings of daylight discs ("flying saucers"), though objects that, if they had been seen a year earlier, would have been called ghost rockets were also observed; on July 3, for example, near Charlottestown, Prince Edward Island, Canada, a farmer saw a rocket-shaped device, moving at "tremendous speed" and 10,000 feet altitude and followed by a white exhaust flame and a long plume of smoke (Bloecher, 1967). Yet reports of daylight discs are hard to find in 1946 accounts of the ghost-rocket scare. Nor do such accounts mention close encounters of the third kind (reports of UFO occupants). Nonetheless two interesting stories came to light many years later. Their value as evidence would be greater, of course, if they had been reported during the scare, before years of publicity about UFOs and their occupants had a chance to shape memories or spark imaginations. But if true, they link ghost rockets indisputably to the anomalous aerial phenomena that appeared in their wake.

On April 17, 1971, Sjaellands Tidende, a Slagelse, Denmark, newspaper, published a letter from Hans Sorensen of Jyderup. Sorensen wrote: "In the summer of 1946, I was cycling on the way from Jyderup toward Kalundborg. A couple of kilometers outside Viskinge toward Kalundborg, I suddenly noticed something odd ... so I stopped in a clear spot so as to see better. Then I saw three thingamajigs fitting the descriptions of UFOs. They flew vertically overhead.... They were like polished mirrors on top, and in profile almost like a flat and deep saucer. The underside was uneven and dull gray. That was in July, in calm weather. It was about 2 P.M., and the sun was behind me. As I stood there, several people came up, and we concurred that there were no sounds, such as a normal aircraft would make."

Another alleged 1946 incident was related to spacescience writer Eugen Semitjov, who reported it in a 1971 issue (number 44) of the Swedish magazine Allers. Semitjov's informant was Gosta Carlsson, a prominent industrialist. A fuller account appeared the next year in England's *Flying Saucer Review* (Fredrickson, 1972). The event allegedly took place just outside Angelholm, a town about 60 miles to the north of Malmo in southern Sweden. Carlsson had gone for a walk and was returning to his home in the twilight. To guide his way he put on a forehead lamp. At that point, he said, "I saw a light among the trees ... coming from an open space in the forest a short distance away." As he approached:

I saw that in the farthest end of the open ground there was a disc-shaped object with a cupola. The cupola seemed to be a cabin with oval windows. Above it there was a mast, almost like the periscope of a submarine. Beneath the disc there was a big oblong fin which stretched from the center to the edge of the underside. There were also two metal landing legs. A small ladder reached to the ground from a door beside the fin.

The object was approximately 53 feet in diameter and 13 feet from top to bottom at the middle. I know this because I measured the marks on the following day. There were a lot of holes around the edge of the disc, like those of a turbine, and jet-beams darted from the holes which burned the grass when the object departed. The light came from the mast. It was about 17 feet in height, and three antennae were suspended from its top. Lower down something like a lampshade was hanging. It was shining with a strange purple light which covered not only the whole object but also the ground a couple of feet beyond it. The light was flowing and pulsating from the "lampshade" like water from a fountain. Where the light hit the ground I could see a sparkling effect.

On the ground, beyond the area of the light, a man in white, closely-fitting overalls was standing. He seemed to be some sort of guard. He raised his hand toward me. It was a gesture that could not be misunderstood, so I stopped. I was less than 30 feet from him. He was approximately as tall as I am, maybe a few inches shorter, but he was thinner than me. There were others like him, but the strange thing was that nobody said a word. It seemed as if they had just finished repairing a window, because they put their tools away and looked at me.

Everything was silent. The only thing I heard was the sound from the guard when he walked on the grass. There were three men working at the window, and two more were standing along-side. There were three women as well, and one more came out of the object later. On the far side there was another guard. In all I saw 11 persons.

They all wore short black boots and gloves, a black belt around the waist, and a transparent helmet. The women had ashen-colored hair, but I could not see the hair of the men as they wore black caps. They were all brown-colored, as if sunburned.

I went a few steps closer, but then the guard raised his hand again. After that I stood still. The guard had a black box on his chest which was suspended by a chain around his neck. It looked like an old black camera. He turned it toward me, and I thought he was going to take a picture of me, but nothing happened, except that I thought I heard a click from my forehead lamp. The lamp did not work after that, but that may have been purely coincidental. When I returned home I found that the battery had run out, although it was a new one.

It seemed as if the "cheese-dish cover" of light stood like a wall between us. I think it was created to isolate them from our world and atmosphere. One of the women came out of the cabin with an object in her hand. She went to the edge of the wall of light and threw the object beyond the area of light. At the same time I heard her laugh.

Carlsson later retrieved the object, but when they examined it in 1971, investigators found nothing out of the ordinary about it. It was composed, in part, of silicon. Carlsson had changed its shape, and it now looked like a staff.

"I thought the disclike object could be some sort of military device," he said. "The whole scene seemed so strange. I never take alcohol, and I knew it was not a hallucination, but nevertheless I decided to go back to the seashore and from there return to the opening to see if the object was still present. I was aware of a

smell like that from ozone following an electrical discharge."

On his return half an hour later—he came back via a different route so that he could view the object from another angle—he observed a bright red light ascending into the air. The light was streaming out of the "turbine holes" of the craft, which had risen with a whining sound above the treetops. After reaching about 1400 to 1600 feet, it slowed down briefly and "wobbled." Then the red light grew rapidly brighter and turned to purple just before the object flew away at a tremendous rate of speed.

Another unusual sighting, said to have occurred on October 10, 1946, was given to Civilian Saucer Investigation of Los Angeles in 1952. A woman named Waltraut Anlauf related, "I was, at that time, telephone operator in a refugee camp at Friedland [West Germany] on the Leine river and was on night duty. At 4 A.M. the camp police phoned to ask me to look at the sky, since peculiar objects were visible. I saw small elongated flashes at great height. They looked like cigars and were white luminescent in front and bluish-white at the end. I was not able to count them, but there were about 10 objects per minute. Sometimes, there was an interruption of 10 minutes, and then new groups appeared. All objects were flying in the direction from north-east toward south-west (Finland to Spain). Only three or four objects crossed the constant stream of luminescent objects. Most of these objects were illuminated as long as I was able to see them; others flashed up briefly and then were invisible. The entire sighting lasted for about one hour" (Anlauf, 1952).

In the 1980s Swedish ufologists commenced the first serious retrospective investigation of the ghost-rocket wave, under the title Project 1946. Anders Liljegren and Clas Svahn of Archives for UFO Research (AFU) secured permission from the Swedish Secretary of War to examine the four volumes of "space projectile" documents in the Defense Staff's archives. After copying 1000 pages of material, Liljegren and Svahn sought out some of the witnesses to the more interesting reports. In 1984 Svahn interviewed both observers and military investigators of the July 19 ghost-rocket crash at Lake Kolmjarv. All remembered the incident vividly and were still puzzled by it. Karl-

Gosta Bartoll, in 1946 a lieutenant in the Air Force, led the official search. "There are many indications that the Kolmjarv object disintegrated itself," he told Svahn. "First of all, [witness Knut] Lindback saw a second cascade of water after the first impact and, secondly, an old lady living in a cottage near the crash site reported she had heard a muffled thunderclap. The object was probably manufactured in a lightweight material, possibly a kind of magnesium alloy that would disintegrate easily, and not give any indications on our instruments." Of the ghost rockets generally, Bartoll, who investigated other reports for the Air Force, said, "There was definitely no psychosis. What people saw were real, physical objects" (Svahn and Liljegren, op. cit.).

American ghost rockets. Sightings of phenomena comparable to ghost rockets were occurring in the United States in 1946, if we are to credit mostly retrospective testimony. For example, on April 5 Army Air Corps Capt. Jack E. Puckett, then serving as Assistant Chief of Flying Safety on the staff of Gen. Elwood Quesada, and the crew of his C-47 transport were "making a scheduled flight from Langley Field, Virginia, to McDill Field, Tampa, Florida. At approximately 6 P.M. while flying a C-47 at 4000 feet northeast of Tampa I observed what I thought to be a shooting star to the southeast over the Atlantic Ocean. My co-pilot, Lt. Henry F. Glass, and my engineer both observed this object at the same time.

"This object continued toward us on a collision course at our exact altitude. At about 1000 yards it veered to cross our path. We observed it to be a long, cylindrical shape approximately twice the size of a B-29, with luminous portholes." During the sighting, which lasted about three minutes, Puckett and crew noted a stream of fire shooting from the rear of the object; the stream was half the length of the UFO. Traveling at a speed Puckett estimated to be 2000 mph, the object eventually disappeared over the horizon (Puckett, 1957; "Rocket Craft," 1957). This UFO is strikingly similar to the one reported in the classic **Chiles-Whitted sighting** of July 1948.

In the fall, on a farm eight miles north of O'Neill, Nebraska, Gladys McCage, lantern in hand, and her four-year-old son went out to retrieve two milk buckets in the barn. On their way back they spotted a yellowish-orange light coming in from the northwest at a "terrific speed." As it got closer, its color changed to red. Soon it was hovering almost directly above the witnesses. "I panicked and so did my son who let go of my hand and [threw] himself face down upon the ground," Mrs. McCage recalled years later. "I don't know what happened at the time with the buckets and the lantern, but I grabbed my son and started running to the house, and the object took off fast and swung up into the sky northeast." The object was cigar-shaped and "huge ... it would have filled a football field.... [T]here were windows in this 'thing' and it [made] a terrible amount of noise.... I had a sensation like there was a 'vacuum' and I could have been pulled skyward but I didn't stand still to find that out. There was yellowish-blue green flame or fire shooting out near the back.... There were no wings; it traveled too fast for a plane in '46" (McCage, 1965, 1974).

An odd report from New Mexico features the familiar crash motif but also an unusually small object. At 2 P.M. on September 11, as Justin B. Rinaldi of Los Alamos was standing in a friend's backyard in Engle, he heard a loud whirring sound "like that of a strong gust of wind gushing through a pipe." As he looked up, he saw a small black object shoot overhead. Only two or three feet long, it "was pointed at one end and held a narrow body and what appeared to be fins on the tail end. It was traveling at a high rate of speed about 75 feet off the ground. I saw it hit a clump of trees at the Diamond A ranch house, and the branches parted like a great force had struck. I organized a search party, but not a trace of it was found" ("Flying Disc Tales," 1947).

Sequel. Ghost rockets returned to northern Europe in the early months of 1948. On February 25 the London Times reported that according to "Scandinavian visitors to this country," rockets emitting a bluish-green flame, "almost invariably seen at 9:30 A.M." and traveling at speeds estimated to be between 4500 and 6750 mph, had been observed at various heights, everywhere from just above treetop level to 25,000 feet. Unlike conventional missiles these left no trail in the sky. The sightings ended in March, but comparable objects would continue to be reported at various times around the world, in spite of the dominant image of UFOs as "flying saucers." For example, on

May 31, 1948, a Wilmington, North Carolina, woman sighted an "oblong object" trailing smoke and moving at an "awful high speed" as it came in from the northwest. Over the Cape Fear River it abruptly slowed down and veered off toward the east. An Air Force investigation ruled out the possibility that this was an airplane (Blue Book files; Gross, 1982).

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## GIANT ROCK SPACECRAFT CONVENTION

From 1953 to 1977, at Giant Rock in the desert of southern California between Lucerne Valley and Twenty-nine Palms, contactee **George Van Tassel** hosted a Spacecraft Convention at which contactees, their followers, and curiosity-seekers could meet, hear the interplanetary gospel, and spend money on literature and other metaphysical materials (includ-

ing, on one legendary occasion, packets of hair from a Venusian dog).

After World War II Van Tassel, an aircraft mechanic, moved himself and his family from Los Angeles to the quiet of the Mojave Desert. In 1952 he began channeling messages from extraterrestrials and soon was holding regular Saturday night meetings under Giant Rock, a 60-foot-high granite boulder. Later, acting on instructions from a spaceman named Solganda, he started work on the Integratron, a device intended to prolong life through cell-regeneration via electrostatic magnetic generator.

Possibly the most successful of the conferences were the first and the fifth (1958), both of which attracted some 10,000 persons. Even in slow years, however, the Giant Rock conventions were the most important gatherings for contactees and other figures on ufology's fringes. Besides Van Tassel, regular participants included such notables as Daniel Fry, Truman Bethurum, George Adamski, George Hunt Williamson, Orfeo Angelucci, Gabriel Green, Wayne Aho, and Frank Scully.

Even so cynical an observer as James W. Moseley, whose Saucer News was ordinarily caustically critical of contactee antics, acknowledged that the gatherings were colorful, entertaining, and harmless. At the 1960 convention Moseley was struck by the "wild cross-section of people who could be observed. For every serious person ... there were perhaps 10 True Believers of all types and descriptions. I doubt if any two people in the whole place could be found to agree entirely on any issue. Yet, there was a large amount of tolerance, as strangers went around introducing themselves to each other and trying to outdo each other in spouting their own views and theories" (Moseley, 1960).

Some mainstream ufologists, however, were uncomfortable with the attention newspapers and television paid to the gatherings, which in their view made all who were interested in UFOs look ridiculous. In 1959, for example, Los Angeles ufologists Idabel Epperson and Zan Overall distributed a press release which accused Van Tassel of promoting a quack longevity machine ("The CONVENTIONal Thing," 1959). Practical jokers launched balloons with attached flares to fool impressionable observers into

## GHOST ROCKETS

A t 11 p.m. on January 18, 1946, as an American C-54 transport plane was passing over rural France at 7000 feet, the pilot observed what he took to be a brilliant meteor at 35 degrees above the eastern horizon. The object fell and was lost to view—but only momentarily. To the witness' astonishment the "meteor" ascended, then "described a tiny hyperbola of perhaps one degree altitude and fell again from sight."

Whatever the phenomenon was, it clearly had not been a meteor. Soon Europeans and others would call such phenomena "ghost rockets" and ascribe them to secret Soviet experiments with captured German V-2 missiles. Many of the "rockets" would be meteors, but none, so history attests, were missiles from Russia, which then possessed only a primitive missile technology. A summary of some of the more interesting sightings of that year follows:

Aerial sightings. Sala, Sweden, and Helsinki, Finland, June 9: At the former location a huge light with a long, fiery tail plunged earthward, and shortly afterwards an explosion sounded. At 10:17 p.m. a rocket-shaped light passed over Helsinki at 1000 feet; smoke trailed behind it, and a rumbling sound accompanied it. Its afterglow lighted the sky for 10 minutes. Ortviken and Sundsvallsbo, Sweden, July 18: Observers at the first location and, soon afterwards, the second saw a silvery cylinder without a smoke trail passing at a moderate speed and at less than 1000 feet

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altitude. It was traveling first toward the west but then altered its course toward the northwest. Stockholm, early August: A meteorologist studying clouds through a telescope noticed a luminous object on the horizon. Within 10 seconds it had come into view. It was, he said, "at least 90 feet long. The body was torpedoshaped and shining like metal." It had a "tapered tail that spewed glowing blue and green smoke and a series of fire balls" (New York Times, August 11, and Christian Science Monitor, August 14). Central and southern Sweden, August 11: Between 9 and 10 p.m. hundreds of persons saw "ghost bombs" that flew from south to north, giving off a brilliant blue-white light. Sometimes two of the objects were seen flying together, and some witnesses reported that smaller silver "balls" came out of the larger objects, which were variously described as "cylinders" and torpedoes "with a wide nose" and "fire-spurting tail" (Svenska Dagbladet, August 12). Sweden, August 24: A Norwegian student and a Swedish friend were boating on a river (because of press censorship of ghost-rocket sightings, the exact location was undisclosed) when a light approached them from the southeast. The Norwegian reported that "it resembled the full moon, perhaps a little more elliptical. The light emitted was very intense" and was "bluish on the brim of the object. As it passed immediately overhead, it grew so bright you could see as well as on a sunny day! . . . [I]t released four 'stars' which fell silently to the ground and on landing grew dark. As these 'stars' were released, the fireball too grew dark and after a few seconds we were able to see in the dark again. We could observe an oblong rocket passing us in a perfectly horizontal trajectory about 900 feet above the ground. . . . [I]t was about 10 feet long" (Aftenposten [Oslo], August 24).

**Crashes and traces.** In many cases witnesses reported seeing the ghost rockets crash both on land and in water. Debris was recovered in some instances, with results that were either ambiguous or quickly subjected to secrecy. Some examples:

Ockelbo, Sweden, July 9: A silver cigar traveling close to the ground was seen at 2:35 p.m. According to a press account, "It tumbled right down against the ground and was gone in a few moments" (Morgon-Tidningen, July 11). Lake Barken, Sweden, July 9: An object that was changing color from blue to green came rapidly out of the northeast and plunged into a deep section of the lake about 350 feet from the witness. Mockjard, Sweden, July 9: A "silver-colored" star descended toward Mount Landholm with a whistling sound. As it came down 175 feet away, apparently about to hit the mountainside, the intense light it cast temporarily blinded the observer, so he could not see the collision. A powerful burning smell lingered for 15 minutes (Svenska Dagbladet, July 11). Lake Mjosa, Norway, July 18: Two "missiles" flying close together plunged into the lake, causing the water to splash several feet into the air. The objects had come in from just over the trees, were eight feet long, and had wings set three feet from the nose. The objects looked like those depicted in "pictures of the German flying bomb [the V-1]," according to a British Intelligence report. As they traveled they made a whistling sound, and their wings "fluttered as if they had been made of cloth." They did not explode when they hit the water. Lake Kolmjarv, Sweden, July 19: At noon a graycolored, seven-foot-long rocket with wings crashed into this long and narrow lake. The crash was observed by witnesses on the shore. A three-week search by soldiers and others failed to uncover any wreckage, though the search was hampered by deep mud on the lake bottom. Southern Sweden, August 12: A cigar-shaped object about five feet long and trailing smoke barely cleared the roofs of houses in a seaport town. It continued out to sea and seemed to come down on an islet. Two men went out to investigate, but the islet was too large and overgrown with thickets to make a thorough search possible (*Svenska Dagbladet*, August 14). Southern Sweden, mid-October: Two persons on a lake shore heard a sound reminiscent of a "flock of birds." They saw a dart-shaped object with small wings and a "ball-shaped tip" coming in over the trees. It crashed into the water just past the shoreline and exploded (*Svenska Dagbladet*, October 21).

**Official concerns and conclusions.** On June 13, 1944, a Backebo, Sweden, farmer was plowing when an explosion threw him and his horses to the ground. In the days





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Karl-Gösta Bartoll investigates Lake Kolmjarv, Sweden, after reports of a UFO crash there in July 1946. (Fortean Picture Library) THE

and weeks that followed, Swedish Air Force investigators collected 10,000 pieces (two and a half tons) of the device that had caused the explosion. From them Allied scientists learned that the Germans had a new missile: the V-2. Thus when the ghost-rocket scare occurred two years later, authorities, not illogically, concluded that the Russians were conducting experiments with the V-2s they had captured from the German rocket base at Peenemunde, now in Stalin's hands.

On June 12 the Swedish Defense Staff ordered all military personnel to report sightings of unusual flying objects to headquarters. Soon U.S. military intelligence personnel were expressing concern about the state of Soviet rocket development.

By now the Swedes had formed a "ghost rocket committee" composed of members of the Research Institute of National Defense, Air Administration, Defense Staff, the Naval Administration, and the Defense Radio Institute. Military investigators had no trouble identifying the cause of many reports: meteors. But other reports were more difficult to account for; the sightings were so frequent, and the descriptions so specifically of structured craft, that natural explanations were not applicable. Norway's military was initially skeptical, however, attributing the reports to the variety of landing lights on high-altitude aircraft. But soon, after its own Air Force personnel saw the "ghost bombs," it would rescind its dismissal of the reports. In one month, July, Swedish official sources counted 500 reports.

In August, after the Swedish Defense Staff requested new radar equipment, Gens. James H. Doolittle and David Sarnoff arrived to discuss the matter with government and military officials, who told them that on several occasions they had tracked the mysterious objects on radar. That same month Swedish Lt. Lennart Neckman of the Defense Staff's Air Defense Division saw something that was "without the slightest doubt . . . a rocket projectile" (Dagbladet, August 8). The Swedish Army, according to a mid-month Reuters dispatch, suspected that "Russian technicians are experimenting with new weapons in the Baltic provinces or elsewhere." On August 14 the New York Times reported that Undersecretary of State Dean Acheson was "very much interested" in the reports; so, though the fact was not publicized at the time, was U.S. Air Force Intelligence. British Intelligence launched an investigation under the direction of R. V. Jones, an expert on V weapons. Jones was skeptical because no unambiguous wreckage had been found, but members of his staff were convinced that the sighting reports were of missiles.

On August 27 Ossian Goulding of the *London Daily Telegraph* wrote that it was not just the Scandinavians, the British, and the Americans who were concerned about the missile reports; so were the people whom widespread suspicion held accountable for the ghost rockets. Goulding related that a

member of the Swedish Communist Party ... stated that he and his fellow members are under orders to report through official party channels all available details of the rockets' flights gathered from eyewitnesses or by personal observation. The time they are seen, direction, height, and estimated speed, and especially any landings, are to be reported instantly.

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Such reports would go quickly to Soviet officials, who were vehemently denying any responsibility for the sightings. In view of what little the West knew about Soviet rocket technology in 1946, the Soviets were logical suspects, but in fact they were innocent. Almost all the captured German rocket technology and rocket experts had gone to the United States, and it would be a long time before the Russians would catch up with the West in this area.

On October 10 the Swedish Defense Staff declared in a public statement, "Most of the observations are vague and must be treated very skeptically. In some cases, however, clear, unambiguous observations have been made that cannot be explained as natural phenomena, Swedish aircraft, or imagination on the part of the observer. Echo, radar, and other equipment registered readings but gave no clue as to the nature of the objects." Fragments alleged to be of the missiles had proven to be nothing more than ordinary coke or slag.

The Swedish ghost-rocket committee held its last meeting on December 1 and released an official report on the twenty-third. It said, in part:

Information has been received chiefly from four sources: (a) visual observations; (b) radar trackings; (c) radio observations; (d) reports from special sources. . . . Incidents were reported throughout the entire country with a concentration in the middle of Sweden.

On 9 July and 11 August, luminous phenomena were observed at the same time over almost all of Sweden. It is possible that these phenomena were of a celestial nature, and if they are excluded, approximately 50 percent concern luminous phenomena and the rest concern observations of "real" objects. These objects are mainly of two different types: (a) "spool-shaped" without any wings or stabilizing surfaces (42 percent), (b) "spool-shaped" and provided with wings (8 percent). . . .

Approximately 100 impacts have been reported, together with fragments from 30 of these. All have been investigated by the Defense Research Institution. It has been impossible to make certain that any of the objects originated as parts of projectiles or rockets; they have generally been attributed to other sources. . . .

Despite the extensive effort which has been carried out with all available means, there is no actual proof that a test of rocket projectiles has taken place over Sweden. The committee has therefore been forced to decide that the investigation has been unsuccessful and that it was useless to continue the activity in its present form and with the present limited resources. Even if the main part of the report can be referred to as celestial phenomena, the committee cannot dismiss certain facts as being merely public imagination.

Records of the committee's investigations remained classified until May 1983.

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American ghost rockets. Sightings of phenomena comparable to ghost rockets were also occurring in the United States. As early as June 1, 1945, a sighting of something very much like what would later be called a ghost rocket occurred over Morganton, North Carolina. At 7:30 p.m. observers saw a tube-shaped structure, of shiny aluminum appearance and five or six feet long, streaking toward the northwest, blue flame shooting from its rear. After it vanished in the mountains near Lake James, the witnesses heard an explosion.

On April 5, 1946, Army Air Corps Capt. Jack E. Puckett, then serving as Assistant Chief of Flying Safety on the staff of Gen. Elwood Quesada, and the crew of his C-47 transport were

making a scheduled flight from Langley Field, Virginia, to McDill Field, Tampa, Florida. At approximately 6 p.m. while flying a C-47 at 4000 feet northeast of Tampa I observed what I thought to be a shooting star to the southeast over the Atlantic Ocean. My co-pilot, Lt. Henry F. Glass, and my engineer both observed this object at the same time.

This object continued toward us on a collision course at our exact altitude. At about 1000 yards it veered to cross our path. We observed it to be a long, cylindrical shape approximately twice the size of a B-29, with luminous portholes.

During the sighting, which lasted about three minutes, Puckett and crew noted a stream of fire shooting from the rear of the object; the stream was half the length of the UFO. Traveling at a speed Puckett estimated to be 2000 mph, the object eventually disappeared over the horizon. This UFO is strikingly similar to the one reported in the classic **Chiles-Whitted sighting** of July 1948.

An odd report from New Mexico features the familiar crash motif but also an unusually small object. At 2 p.m. on September 11, as Justin B. Rinaldi of Los Alamos was standing in a friend's backyard in Engle, he heard a loud whirring sound "like that of a strong gust of wind gushing through a pipe." As he looked up, he saw a small black object shoot overhead. Only two or three feet long, it "was pointed at one end and held a narrow body and what appeared to be fins on the tail end. It was traveling at a high rate of speed about 75 feet off the ground. I saw it hit a clump of trees at the Diamond A ranch house, and the branches parted like a great force had struck. I organized a search party, but not a trace of it was found."

**Sequel.** Ghost rockets returned to northern Europe in the early months of 1948. On February 25 the *London Times* reported that according to "Scandinavian visitors to this country," rockets emitting a bluish green flame, "almost invariably seen at 9:30 a.m." and traveling at speeds estimated to be between 4500 and 6750 mph, had been observed at various heights, everywhere from just above treetop level to 25,000 feet. Unlike conventional missiles these left no trail in the sky.

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The sightings ended in March, but comparable objects would continue to be reported at various times around the world, in spite of the dominant image of UFOs as "flying saucers." For example, on May 31, 1948, a Wilmington, North Carolina, woman sighted an "oblong object" trailing smoke and moving at an "awful high speed" as it came in from the northwest. Over the Cape Fear River it abruptly slowed down and veered off toward the east. An Air Force investigation ruled out the possibility that this was an airplane.

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# GIANT ROCK INTERPLANETARY SPACECRAFT CONVENTION.

→ See Contactees and Van Tassel, George W.

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