



ORBITER

The New England Aerial Phenomena Report

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IN THIS ISSUE

Page #2 - "Attacking The UFO Problem" - Orange Balls Of Light, by Greg Long.

Page #3 - "The Foo Fighter Mystery" - reproduction of American Legion Magazine article (Dec. 1945).

Page #5 - Reports of rare and peculiar meteors/bolides ect. reproduced from Nature and Monthly Weather review.

Page #6 - Reproduction of Scientific American and Nature articles on unusual atmospheric and electrical phenomena.

Page #7 - Newsclipping - "UFO Hunters form an Odd Subculture" (New Hampshire Sunday News, 12/25/88).

RADIO/TV LOG

Feb 1, 1989 - NBC "Unsolved Mysteries" aired a segment on the Face on Mars.

Feb 2, 1989 - WBZ radio Boston carried an incident on their daily newscasts of a pressurized gasline burst in the town of Lynnfield, MA. Some of the evacuated residents, who were awakened by the noise of escaping gas, reported they first thought it was a "UFO landing".

CASE REPORT

Dozens Report Seeing UFO Along Route 93
(Eagle Tribune Article - 02/13/89)

Were Martians sightseeing in the Merrimack Valley Friday night? Or was the UFO hovering over Route 93 really the Fuji Film Co. blimp, or an Air Force helicopter, as some officials speculate? No one seems to know for sure.

What is known is that a slow-moving circular object with flashing white and green lights was indeed spotted by dozens of people from Reading, MA. to Derry, NH.

Residents who reported the unidentified flying object to area police said they saw it between 6 and 7:30 Friday night, and numerous cars on Route 93 at the time stopped to watch. Massachusetts state police trooper Greg Ambrose said he was at the scene of a car accident near the New Hampshire border when he spotted the object up above.

"It was probably the Fuji Film blimp", Trooper Ambrose said. "It had electronic numbers and graphics on the side, and that's what the blimp has. You don't usually see blimps at night or in the Northeast this time of year, and that's why it seems odd". Frank Nacadora, a security guard for the New York based Fuji Photo Film USA who answered the phone last night, said he believed the company blimp has not been in operation for at least two years. "I think it only circles around Manhattan, anyway", Mr. Nacadora said.

Air Force Capt. Eric Deutch, stationed at Pease Air Force Base in Newington, NH. speculated that the object could have been a military helicopter known as "the Jolly Green Giant" - a big green helicopter with lights on all sides.

"Those helicopters can look pretty scary at nighttime", he said. Eleven year old Jenny Tucarella, a sixth grader at St. Patrick school in Lawrence, said she saw the UFO as she drove with her mother and other friends and relatives near Route 93 Friday.

"It looked like dishes piled on top of each other hovering over us", said Miss Tucarella, daughter of Ann Cellamara, of Newton St, Lawrence. "We stopped in the middle of the road to watch it. A car pulled over next to us and asked if we saw it, too. Then we watched it move real slow behind the trees, and then we lost it.

The UFO is in fact an aerial advertising plane - Nighttime Skywriting - owned by Malcom and Barbara Schute of Londonderry, NH. They were paid \$600 Friday night to fly above Route 93 between 6 and 8 p.m. to blink an advertisement for a Boston company. (cr. S. Firmani)

ATTACKING THE UFO PROBLEM: ORANGE BALLS OF LIGHT

In 1981 I launched a sustained, long-term study of sightings of UFOs on the Yakima Indian Reservation in south-central Washington state. I was drawn to the Reservation because of Bill Vogel's serious, decade-long effort of documenting the mystery there. (Vogel was the Chief Fire Control Officer for 30 years; he died in spring 1985.)

The 1.25-million acre Reservation lies at the eastern foothills of the Cascade Mountains. Kenneth Arnold observed nine flying objects on June 24, 1947, just northwest of the Reservation while flying near Mount Rainier in search of a downed military transport plane. The metallic-appearing objects were hurtling southward above the backbone of the majestic Cascades. They disappeared just beyond Mount Adams at the Reservation's far southwestern boundary.

I discovered when working with Vogel's reports, and during my many interviews of Reservation witnesses, that the predominant UFO seen and photographed on the Reservation was an orange sphere (or ball) of light. These very luminous, burning spheres (some also yellow, white or red) were observed hovering or moving slowly above or along ridges, hills or buttes.

Soon I discovered that Harley Rutledge in southeast Missouri had observed similar balls of light from 1973 to 1981 in the Piedmont area of Missouri. Eventually my research uncovered similar sightings of these balls of light (BOLs) in other areas around the United States. For example, the classic book *The Utah UFO Display* by Frank Salisbury documents many orange BOL sightings. Interestingly, almost every Allied pilot of World War II who reported a "foo fighter" described it as an orange sphere. Most recently, orange spheres have appeared in the night skies of Ashdown/Foreman, Arkansas and Wytheville, Virginia during highly publicized flaps in fall 1987 and winter 1988. The well-investigated case of orange spheres in Boxboro, Massachusetts, in October 1985, confirms the existence of this particular type of UFO. Currently, British ufologists are accumulating orange BOL reports and other evidence of nocturnal lights in the Pennine mountain region of northern England. And my research shows that orange BOLs are appearing in other countries around the world as well. Orange BOLs are a well-documented, international phenomenon.

What are they? The question is best asked within the context of the central debate of the UFO mystery: *Specifically, are the BOLs an alien technology (an airborne craft), or a natural phenomenon akin to plasmas or ball lightning?* The latter supposition is a fair one considering the similarities of BOLs to ball lightning: the spherical or globular shape, the orange, red or white colors and the often-reported low altitude.

Yet in contrast, BOLs are large--if apparent size estimates provided by witnesses can be trusted. And clearly the Yakima BOLs were seen in dry, quiet weather many miles away (up to 60 miles in some cases). (Ball lightning favors

thunderstorms). Even at great distances, the BOLs are unmistakable, measuring many feet in diameter and unarguably do not demonstrate the characteristics of manmade or common natural atmospheric or astronomical phenomena.

In addition to ball lightning, my research has fingered these most common BOL "impostors" (or Identified Flying Objects):

- The moon.
- Burning plastic balloons (Ann Druffel was plagued by these for years in Los Angeles).
- Meteors (typically short-lived and scribing long, high trajectories).
- White aircraft landing and take-off lights modified to orange or amber "ball" shapes through haze and other optical distortion (landing lights always appear fuzzy and ragged, unlike the clean, well-defined edges of true BOLs).

Once I extracted these IFOs from a mass of report summaries provided by Robert Neeley, an interesting dimension of the puzzle arose: *What are orange BOLs doing amid reports (emanating from the same locale) of other nocturnal lights, Sasquatch (Bigfoot) reports and sightings of structured craftlike objects?*

Stan Gordon states that in the early 1970s he received reports of Sasquatch in the vicinity or during the same general timeframe of aerial orange BOLs. On the Yakima Indian Reservation, Vogel found himself too busy with UFOs to pursue the many local Sasquatch reports that came his way once Reservation citizens discovered he was the local investigator of strange phenomena.

On the Reservation as well, Daylight Discs and decidedly solid-appearing objects displaying classic rapid ascents and descents, high speed and intelligent-seeming maneuvering and control were reported. Rutledge documents similar-behaving objects among the mostly nocturnal-light UFOs in Piedmont, Missouri. In Wytheville, Virginia, local investigator Danny Gordon has seen both large, definite-appearing craft as well as orange spheres. Why (Linda Howe hints) were orange spheres seen during cattle mutilations in 1975-76 in Colorado? And Eddie Bullard reports that, although a very small percentage, abductees have reported orange UFOs right before a missing time experience. (Budd Hopkins alludes to the presence of an orange UFO in *Missing Time* and *Intruders*.)

Is there a clue to the root of the UFO mystery in this particular, oft-repeating UFO: the orange BOL and other orange UFOs with curved shapes--orange ovals, classic "saucers," discs? I quote from a letter received from a European investigator: "...I could not even imagine I would ever get to see so many of these orange objects through the years, and neither could I imagine the large percentage of photographs of orange objects that I would keep in my personal files."

The Foo Fighter MYSTERY

By Jo Chamberlin

DURING THE last months of the war the crews of many B-29s over Japan saw what they described as "balls of fire" which followed them, occasionally came up and almost sat on their tails, changed color from orange to red to white and back again, and yet never closed in to attack or crash, suicide-style.

One B-29 made evasive maneuvers inside a cloud, but when the B-29 emerged from it, the ball of fire was following in the same relative position. It seemed 500 yards off, three feet in diameter, and had a phosphorescent orange glow. No wing or fuselage suggesting an aerial bomb or plane was seen. The ball of fire followed the B-29 for several miles and then disappeared just as mysteriously as it had appeared in the same light over Fujiyama.

Some B-29 crews said they could readily lose the ball of fire by evasive maneuvers, even though the ball kept up with them at top speed on a straight course; other B-29 crews reported just the opposite.

Nobody could figure it out.

Far to the south, a B-24 Liberator was at 11,000 feet over Truk lagoon, when two red lights rose rapidly from below, and followed the B-24. After an hour, one light turned back. The other kept on—sometimes behind, sometimes alongside, sometimes ahead about 1,000 yards, until daybreak when it climbed to 15,000 feet and stayed in the sun, like a Jap fighter taking game, but never came down. During

the flight, the light changed from red to orange, then white, and back to orange, and appeared to be the size of a basketball. No wing or fuselage was observed. The B-24 radioed island radar stations to see if there were any enemy planes in the sky.

The answer was: "None."

A curious business, and one for which many solutions have been advanced, before the war was over, and since. None of them stand up. The important point is: No B-29 was harmed by the balls of fire, although what the future held, no one knew. The Japanese were desperately trying to bolster up their defense in every way possible against air attack, but without success. Our B-29s continued to rain destruction on Japanese military targets, and finally dropped the atomic bomb.

Naturally, U. S. Army authorities in Japan will endeavor to find the secret—but it may be hidden as well as it appears to be in Europe. The balls of fire continue to be a mystery—just as they were when first observed on the other side of the world—over eastern Germany.

This is the way they began.

At ten o'clock of a November evening, in late 1944, Lt. Ed Schlueter took off in

The riddle of the balls of fire encountered by our night-flying planes over Germany and,

later, over Japan

Sketch by RAYMOND CREEKMORE

his night fighter from Dijon, France, on what he thought would be a routine mission for the 415th Night Fighter Squadron.

Lt. Schlueter is a tall, competent young pilot from Oshkosh, Wisconsin, whose hazardous job was to search the night sky for German planes and shoot them down. He had done just this several times and had been decorated for it. As one of our best night fighters, he was used to handling all sorts of emergencies. With him as radar observer was Lt. Donald J. Meiers, and Lt. Fred Ringwald, intelligence officer of the 415th, who flew as an observer.

The trio began their search pattern, roaming the night skies on either side of the Rhine River north of Strasbourg—for centuries the abode of sirens, dwarfs, gnomes, and other supernatural characters that appealed strongly to the dramatic sense of the late A. Hitler. However, at this stage of the European war, the Rhine was no stage but a grim battleground, where the Germans were making their last great stand.

The night was reasonably clear, with some clouds and a quarter moon. There was fair visibility.

In some respects, a night fighter plane operates like a champion boxer whose eye sight isn't very good; he must rely on other senses to guide him to his opponent. The U. S. Army has ground radar stations, which track all planes across the sky, and tell the night fighter the whereabouts of any plane. The night fighter flies there, closes in by means of his own radar until usually he can see the enemy, and if the plane doesn't identify itself as friendly, he shoots it down. (Continued on page 31)

Or, gets shot down himself, for the Germans operate their aircraft in much the same way we did, and so did the Japanese.

Lt. Schlueter was flying low enough so that he could detect the white steam of a blacked-out locomotive or the sinister bulk of a motor convoy, but he had to avoid smokestacks, barrage balloons, enemy searchlights, and flak batteries. He and Ringwald were on the alert, for there were mountains nearby. The inside of the plane was dark, for good night vision.

Lt. Ringwald said, "I wonder what those lights are, over there in the hills."

"Probably stars," said Schlueter, knowing from long experience that the size and character of lights are hard to estimate at night.

"No, I don't think so."

"Are you sure it's no reflection from us?"

"I'm positive."

Then Ringwald remembered—there weren't any hills over there. Yet the "lights" were still glowing—eight or ten of them in a row—orange balls of fire moving through the air at a terrific speed.

Then Schlueter saw them far off his left wing. Were enemy fighters pursuing him? He immediately checked by radio with Allied ground radar stations.

"Nobody up there but yourself," they reported. "Are you crazy?"

And no enemy plane showed in Lt. Meiers' radar.

Lt. Schlueter didn't know what he was facing—possibly some new and lethal German weapon—but he turned into the lights, ready for action. The lights disappeared—then reappeared far off. Five minutes later they went into a flat glide and vanished.

The puzzled airmen continued on their mission, and destroyed seven freight trains behind German lines. When they landed back at Dijon, they decided to do what any other prudent soldier would do—keep quiet for the moment. If you tried to explain everything strange that happened in a war, you'd do nothing else. Further, Schlueter and Meiers had nearly completed their required missions, and didn't want to

chance being grounded by some skeptical flight surgeon for "combat fatigue."

Maybe they had been "seeing things."

But a few nights later, Lt. Henry Giblin, of Santa Rosa, California, pilot, and Lt. Walter Cleary, of Worcester, Massachusetts, radar-observer, were flying at 1,000 feet altitude when they saw a huge red light 1,000 feet above them, moving at 200 miles per hour. As the observation was made on an early winter evening, the men decided that perhaps they had eaten something at chow that didn't agree with them and did not rush to report their experience.

On December 22-23, 1944, another 415th night fighter squadron pilot and radar-observer were flying at 10,000 feet altitude near Hagenau. "At 0600 hours we saw two lights climbing toward us from the ground. Upon reaching our altitude, they leveled off and stayed on my tail. The lights appeared to be large orange glows. After staying with the plane for two minutes, they peeled off and turned away, flying under perfect control, and then went out."

The next night the same two men, flying at 10,000 feet, observed a single red flame. Lt. David L. McFalls, of Cliffside, N. C., pilot, and Lt. Ned Baker of Hemat, California, radar-observer, also saw: "A glowing red object shooting straight up, which suddenly changed to a view of an aircraft doing a wing-over, going into a dive and disappearing." This was the first and only suggestion of a controlled flying device.

By this time, the lights were reported by all members of the 415th who saw them. Most men poked fun at the observers, until they saw for themselves. Although confronted with a baffling situation, and one with lethal potentialities, the 415th continued its remarkable combat record. When the writer of this article visited and talked with them in Germany, he was impressed with the obvious fact that the 415th fliers were very normal airmen, whose primary interest was combat, and after that came pin-up girls, poker, doughnuts, and the derivatives of the grape.

The 415th had a splendid record.

The whole outfit took the mysterious lights or balls of fire with a sense of humor. Their reports were received in some headquarters with smiles: "Sure, you must have seen something, and have you been getting enough sleep?" One day at chow a 415th pilot suggested that they give the lights a name. A reader of the comic strip "Smoke Stover" suggested that they be called "foo fighters," since it was frequently and refutably stated in that strip that "When there's foo, there's fire."

The name stuck.

What the 415th saw at night was born out in part by day. West of Neustadt, a P-47 pilot saw "a gold-colored ball, with a metallic finish, which appeared to be moving slowly through the air. As the sun was low, it was impossible to tell whether the sun reflected off it, or the light came from within." Another P-47 pilot reported "a phosphorescent golden sphere, 3 to 1 feet in diameter, flying at 2,000 feet."

Meanwhile, official reports of the "foo fighters" had gone to group headquarters and were "noted." Now in the Army, when you "note" anything it means that you neither agree nor disagree, nor do you intend to do anything about it. It covers everything. Various explanations were offered for the phenomena—none of them satisfactory, and most of them irritating to the 415th.

It was said that the foo-fighters might be a new kind of flare.

A flare, said the 415th, does not dive, peel off, or turn.

Were they to frighten or confuse Allied pilots?

Well, if so, they were not succeeding—and yet the lights continued to appear.

Eighth Air Force bomber crews had reported seeing silver-colored spheres resembling huge Christmas tree ornaments in the sky—what about them?

Well, the silver spheres usually floated, and never followed a plane. They were presumably some idea the Germans tried in

Quasar is short for quasi-stellar astronomical object, usually emitting strong radio waves, the most distant observable objects in space.

Aluminum is the second most abundant element in the Earth's crust, after silicon.

CONT' page 4

the unsuccessful effort to confuse our pilots or hinder our radar bombing devices.

What about jet planes?

No, the Germans had jet planes all right, but they didn't have an exhaust flame visible at any distance.

Could they be flying bombs of some sort, either with or without a pilot? Presumably not—with but one exception no one thought to be observed a wing or fuselage.

Weather balloons?

No, the 415th was well aware of their behavior. They ascended almost vertically, and eventually burst.

Could the lights or balls of fire be the red, blue, and orange colored flak bursts that Eighth Air Force bomber crews had reported?

It was a nice idea, said the 415th, but there was no correlation between the foo-fighters they observed and the flak they encountered. And night flak was usually directed by German radar, not visually.

In short, no explanation stood up.

On Dec. 31, 1944, AP reporter Bob Wilson, was with the 415th and heard about the foo-fighters. He questioned the men until 4 a.m. in the best newspaper tradition until he got all the facts. His story passed the censors, and appeared in American newspapers on January 1, 1945, just in time to meet the customary crop of annual hangovers.

Some scientists in New York decided, apparently by remote control, that what the airmen had seen in Germany was St. Elmo's light—a well-known electrical phenomenon appearing like light or flame during stormy weather at the tips of church steeples, ships' masts, and tall trees. Being in the nature of an electrical discharge, St. Elmo's fire is reddish when positive, and blueish when negative.

The 415th blew up. It was thoroughly acquainted with St. Elmo's fire. The men sort of, "Just let the sons come over and fly a mission with us. We'll show 'em."

Through January, 1945, the 415th continued to see the "foo-fighters," and their conduct became increasingly mysterious. One aircrew observed lights, moving both singly and in pairs. On another occasion, three sets of lights, this time red and white

in color, followed a plane, and when the plane suddenly pulled up, the lights continued on in the same direction, as though caught napping, and then sheepishly pulled up to follow.

The pilot checked with ground radar—he was alone in the sky.

This was true in every instance foo-fighters were observed.

The first real clue came with the last appearance of the exasperating and potentially deadly lights. They never kept the 415th from fulfilling its missions, but they certainly were unnerving. The last time the foo-fighters appeared, the pilot turned into them at the earliest possible moment—and the lights disappeared. The pilot was sure that he felt prop wash, but when he checked with ground radar, there was no other airplane.

The pilot continued on his way, perturbed, even angry—when he noticed the lights far to the rear. The night was clear, and the pilot was approaching a huge cloud. Once in the cloud, he dropped down two thousand feet and made a 30 degree left turn. Just a few seconds later he emerged from the cloud—with his eye peeled to the rear. Sure enough, coming out of the cloud in the same relative position was the foo-fighter, as though to thumb its nose at the pilot, and then disappear.

This was the last time the foo-fighters were seen in Germany, although it would have seemed fitting, if the lights had made one last gesture, grouping themselves so as to spell "Guess What" in the sky, and then vanishing forever.

But they didn't.

The foo-fighters simply disappeared when Allied ground forces captured the area East of the Rhine. This was known to be the location of many German experimental stations. Since V-E day our Intelligence officers have put many such installations under guard. From them we hope to get valuable research information—including the solution to the foo-fighter mystery, but it has not appeared yet. It may be successfully hidden for years to come, possibly forever.

The members of the 415th hope that Army Intelligence will find the answer. If it turns out that the Germans never had anything airborne in the area, they say, "We'll be all set for Section Eight psychiatric discharges."

Meanwhile, the foo-fighter mystery continues unsolved. The lights, or balls of fire, appeared and disappeared on the other side of the world, over Japan—and your guess as to what they were is just as good as mine, for nobody really knows.

The orange BOLs are everywhere. In fact, their pattern runs so strongly through the UFO literature and UFO reporting channels, that they deserve closer scrutiny. Do these orange spheres perform a particular operational function if they are a technological device? Does a burning, circular canopy of orange light cloak a metallic object as the craft is in flight? Or could the orange BOLs actually be natural plasma forms, or Unidentified Atmospheric Phenomena as Jenny Randles suspects? Curiously, the Pulaski fault runs through Wytheville, Virginia. Curiously, in November 1987 during the local flap there a low-level quake struck in Carroll County (days before this quake Gordon and friend Roger Hall sighted a yellow ball of light near Sand Mountain).

Either the orange spheres are a natural, tectonically derived phenomenon, the startling presence of which triggers misinterpretation by local viewers of manmade and astronomical bodies; in effect, we must trot out the hoary "hysteria" and "mass delusion" hypothesis to account for the craft that appear "mixed up" with the natural, correctly viewed and accurately reported orange spheres. Or the orange spheres are one of many different types of true UFOs; or one manifestation of many different manifestations which the UFO phenomenon is capable. Or finally—and I toss out this hypothesis as a wild idea: the orange spheres are an intelligence capable of knowing the work of UFO researchers and appears in faulted, earthquake-prone areas during tectonic strain buildup periods and release to function as a red herring, while other UFOs carry out their operations. In effect, orange spheres muddy the waters, deceive and exploit natural phenomena to mask their continual project of surveillance, display, approach, and if we are to believe Budd Hopkins and others, their abduction program.

More work is required. To this end, I turn to serious UFO investigators and researchers. I require as much well-documented data as possible. Among this is: photographic evidence; high quality reports from investigative files; newsclippings; and other source material documenting the orange sphere. Most important, wherever possible, are multiple reports from one limited sighting area. This should include reference to other sightings of other objects from the same area. In this way, I can test the hypothesis that non-orange BOLs are misinterpretations of other natural and manmade objects. Also, a large enough data base can serve to test the tectonic strain theory of UFOs (I have quick access to maps of local faults and quake activity).

With abduction reports the rage today, I realize orange spheres may be ho-hum for some. Yet the persistence of this phenomenon, backed by the best photographic evidence I know of, and the inter-consistency of sighting details from report to report, convinces me that a focused, microscopic study of this type of UFO can tell us much about the UFO phenomenon. If nothing else, I am willing to demonstrate that science can be applied to the UFO mystery. Help! Surely someone's listening out there?! Please write me at: 10755 S.W. Murdock Ln., Apt. G-12, Tigard, Oregon 97224.

Greg Long

Monthly Weather Review - March 1894
REMARKABLE METEORS.

By Lieut. FRANK H. SCHOFIELD, U. S. NAVY.

The following report, as kindly communicated by the editor of the Pilot Chart, is dated U. S. S. Supply, at sea, latitude 36° 20' north; longitude 127° 36' west, February 28, 1904:

1. I have the honor to report that three somewhat remarkable meteors were observed from this ship at 6:10 a. m. (Greenwich mean time 3 hours 13 minutes) February 28, 1904, in latitude 35° 58' north, longitude 128° 36' west.
2. The meteors appeared near the horizon and below the clouds, travelling in a group from northwest by north (true) directly toward the ship. At first their angular motion was rapid and color a rather bright red. As they approached the ship they appeared to soar, passing above the clouds at an elevation of about 45°. After rising above the clouds their angular motion became less and less until it ceased, when they appeared to be moving directly away from the earth at an elevation of about 75° and in direction west-northwest (true). It was noted that the color became less pronounced as the meteors gained in angular elevation.
3. When sighted, the largest meteor was in the lead, followed by the second in size at a distance of less than twice the diameter of the larger, and then by the third in size at a similar distance from the second in size. They appeared to be travelling in echelon, and so continued as long as in sight.
4. The largest meteor had an apparent area of about six suns. It was egg-shaped, the sharper end forward. This end was jagged in outline. The after end was regular and full in outline.
5. The second and third meteors were round and showed no imperfections in shape. The second meteor was estimated to be twice the size of the sun in appearance, and the third meteor about the size of the sun.
6. When the meteors rose there was no change in relative positions; nor was there at any time any evidence of rotation or tumbling of the larger meteor.
7. I estimated the clouds to be not over one mile high.
8. The near approach of these meteors to the surface and the subsequent flight away from the surface appear to be most remarkable, especially so as their actual size could not have been great. That they did come below the clouds and soar instead of continuing their southeasterly course is also equally certain, as the angular motion ceased and the color faded as they rose. The clouds in passing between the meteors and the ship completely obscured the former. Blue sky could be seen in the intervals between the clouds.
9. The meteors were in sight over two minutes and were carefully observed by three people, whose accounts agree as to details. The officer of the deck, Acting Boatswain Frank Garvey, U. S. Navy, sighted the meteors and watched them until they disappeared. He sent a messenger to me who brought an unintelligible message. When I arrived on the bridge the meteors had been obscured for about one-half of a minute.

BARE ELECTRICAL PHENOMENON AT SEA.

Capt. C. D. Swart, of the Dutch bark "J. P. A.," makes the following report of a remarkable phenomenon observed by him at 5 p. m. March 10, 1887, in N. 37° 39', W. 57° 00':

During a severe storm saw a meteor in the shape of two balls, one of them very black and the other illuminated. The illuminated ball was oblong and appeared as if ready to drop on deck amidst ships. In a moment it became as dark as night above, but below, on board and surrounding the vessel, everything appeared like a sea of fire. The ball fell into the water very close alongside the vessel with a roar, and caused the sea to make tremendous breakers which swept over the vessel. A suffocating atmosphere prevailed, and the perspiration ran down every person's face on board and caused everyone to gasp for fresh air. Immediately after this solid lumps of ice fell on deck, and everything on deck and in the rigging became iced, notwithstanding that the thermometer registered 19° Centigrade. The barometer during this time oscillated so as to make it impossible to obtain a correct reading. Upon an examination of the vessel and rigging no damage was noticed, but on that side of the vessel where the meteor fell into the water the ship's side appeared black and the copper plating was found to be blistered. After this phenomenon the wind increased to hurricane force.

Monthly Weather Review March 1887

ANOTHER phenomenon of a similar kind is recorded as follows by a correspondent of the Birmingham Morning News.

The people living near King's Sutton, Banbury, say that about one o'clock on Saturday they saw something like a haystack revolving through the air, accompanied by fire and dense smoke. It made a noise resembling that of a railway train, but very much louder, and travelled with greater rapidity. It was sometimes high in the air, and sometimes near the ground. It passed over the estate of Colonel North, M.P., Sir W. R. Brown, Bart., and Mr. Leslie Melville-Cartwright, whose park wall it threw down to the foundation in several places, and at one place for upwards of sixty yards. A man named Adams was breaking stones, and a minute before he was standing under a tree that was torn up by the roots and the branches scattered in every direction. Two or three trees near him were torn up, and one of them, the largest beech on Sir William Brown's estate, which tore up with it twelve or fifteen tons of earth. For a distance of nearly two miles, hedges, rails, trees, hovels, and ricks have been knocked down or injured. A whirlwind followed the fire-meteor, and carried everything before it. Stones from the walls knocked down were carried forty yards away, and the water in a pond disappeared on the passage of the phenomenon. After travelling about two miles the meteor seemed to expend itself, and disappeared all at once. There was a heavy fall of rain at the time, and a vivid flash of lightning just before. The direction taken by the meteor was from south to north, and it travelled almost in a straight line.

Nature Dec. 12, 1872 112

PARIS

Academie des Sciences, Aug 7.—M. Faye in the chair. Notice was given of the death of M. Lecocq, a correspondent living in Clermont Ferrand, the author of valuable pamphlets and papers on the geology of Central France. M. Lecocq was, however, a very active and clever physicist, and started many theories of his own. He was a Professor in the University, and his loss will be very deeply felt by his friends.—Two different papers were sent describing a bolide which was seen on the 15th of August, and which is most extraordinary, as it was visible during twenty minutes by Marseilles observers. The course was most irregular and zig-zag. Leverrier supposed that two different bolides might have been seen at Marseilles and at the other stations, as the descriptions do not agree. The fact of remaining visible during so long a time at Marseilles is astonishing, and M. Leverrier is at a loss to account for it. The phenomenon will be more fully investigated. This is also the case with a paper sent by M. W. de Fonvielle, describing the fall of a thunder-bolt on August 3rd 1904, on the kitchen of a convent situated in Paris, at 250 yards from the National Observatory, where the astronomers felt a great shock. A gas-burner was lit under very curious circumstances. The explosion was very long and very strong, and it is supposed the lightning was shaped like a sphere falling from the clouds. M. Dumas showed the interest of elucidating a phenomenon of so much importance for public safety, as ignition of gas may be the secret cause of many fires. The committee is composed of M. Dumas and M. Jamin, professor to the Sorbonne. Special experiments and inquiries will be made at the expense of the Academy. M. Fonvielle will be an auxiliary member of the committee.—M. Delaunay read a paper on the Observatory during his administration, and showing that observations of small planets will be made with greater zeal than on former years.—A letter was read from M. Angström, the Swedish physicist, maintaining that each gas has its own spectrum in spite of the differences exhibited by previous experiments. The learned physicist shows that in each case where differences were found, it is possible to explain it by extraneous matters, mixed with the substance submitted to the experiment. The importance of this memoir is obvious.—M. Bert, who was formerly the Prefect of the North during the investment of Paris, sent a paper on the death of fishes living in fresh water when immersed in sea water. These fishes are literally suffocated by a singular effect of desiccation, the exosmose is very active, principally when their skin is clothed with large scales. The phenomenon is quite extraordinary when observed on frogs, which lose the greater part of their weight, and are almost as much dried up as if they had been salted alive.

This has since been done.
Nature Aug 24, 1871 339

M. Bert will examine the action of fresh water on sea-fish, which is not so rapid. These sea-fish are too heavy for fresh running water, and are found generally to remain at the bottom of the water. On the contrary, fresh water fish always swim at the top of salt water.

A Remarkable Meteor

A REMARKABLE meteor was seen in Western Australia on February 1 this year. The following account has been forwarded to me by Mr. S. Worsley Clifton, Collector of Customs at Fremantle:—

"A small black cloud on a clear day appeared in the east, travelling not very swiftly towards the north-west, which burst into a ball of fire with an apparent disk the size of the full moon, blood-red in colour; it left a train of black or dark-coloured vapour across the heavens which was visible for three-quarters of an hour. No sound was heard, sky perfectly clear, and thermometer 100° F. in the shade." ROBT. J. ELLERY
Observatory, Melbourne, April 16

Nature March 1875

ON February 5, at 6.45 p.m., a meteor of unusual size and appearance was observed near Arvika, in Sweden. An observer who happened at the time to be passing a lake—Glasfjorden—states that he first observed the meteor high on the horizon, going from south-east to north-west, when, after about eighteen seconds, it suddenly changed its course to south-east. During its progress to north-west, calculated at eighteen seconds, the meteor made several digressions from its plane, while its size varied from that of an ordinary star to that of the sun, sometimes emitting a white, at others a yellow light, and at times discharging showers of sparks. At the point of changing its direction, when it was so near the surface of the lake that its path was reflected therein, it possessed a distinct tail, and with this adjunct it passed out of the range of sight in a south-easterly direction, after being observed for nearly fifty seconds.

Nature March 1873

Comment: note the trajectory and angulation on these meteor reports. Also note the change of course in the bottom right hand article.

THE KENTUCKY SHOWER OF FLESH.

At last we have a proper explanation of this much talked of phenomenon. Dr. L. Brandeis writes to the Sanitarian, for May -

In 1537, while Paracelsus was engaged in the production of his "elixir of life," he came across a very strange-looking vegetable mass, to which he gave the name of "Nostoc."

The want of rapid transportation, combined with the perishable nature of the substances fallen, have hitherto prevented a complete and exhaustive examination. The specimens of the "Kentucky shower," however, reached this city well-preserved in glycerine, and it has been comparatively easy to identify the substance and to fix its status. The "Kentucky wonder" is nothing more or less than the "Nostoc" of the old alchemist. The Nostoc belongs to the confervae; it consists of translucent, gelatinous bodies, joined together by thread-like tubes or seed-bearers. There are about fifty species of this singular plant classified; two or three kinds have even been found in a fossil state. Like other confervae, the Nostoc propagates by self-division as well as by seeds or spores. When these spores work their way out of the gelatinous envelope they may be wafted by the winds here and there, and they may be carried great distances.

Wherever they may fall, and find congenial soil, namely, dampness or recent rain, they will thrive and spread very rapidly, and many cases are recorded where they have covered miles of ground, in a very few hours, with long strings of Nostoc.

On account of this rapidity of growth, people almost everywhere faithfully believe the Nostoc to fall from the clouds, and ascribe to it many mysterious virtues. The plant is not confined to any special locality or to any climate; sown by the whirlwind, carried by a current of air, in need of moisture only for existence and support, it thrives everywhere. Icebergs afloat in mid-ocean have been found covered with it. In New Zealand it is found in large masses of quaking jelly, several feet in circumference, and covering miles of damp soil; and in our own country it may be found in damp woods on meadows, and on marshy or even gravelly bottoms.

All the Nostocs are composed of a semi-liquid cellulose and vegetable proteins. The edible Nostoc is highly valued in China, where it forms an essential ingredient of the edible bird-nest soup. The flesh that was supposed to have fallen from the clouds in Kentucky is the flesh-colored Nostoc (N. carneum of the botanist); the flavor of it approaches that of spring-chicken legs, and it is greedily devoured by almost all domestic animals.

Such supposed "showers" are not rare, and are entirely in harmony with natural laws. In the East Indies the same Nostoc is used as an application in ulcers and scrofulous disease, while every nation in the East considers it nourishing and palatable, and uses it even for food when dried by sun heat.

Sci Am Supp

7/1/76

A Snake Rain.

The Kentucky meat shower, which attracted so much attention recently, has now been supplemented by a rain of live snakes in Memphis, Tenn. Thousands of little reptiles, ranging from a foot to eighteen inches in length, were distributed all over the southern part of the city. They probably were carried aloft by a hurricane and wafted through the atmosphere for a long distance; but in what locality snakes exist in such abundance is yet a mystery.

Scientific American 2/10/87

Ball Lightning

On Saturday night, the 17th inst., an instance of this form of lightning came under my observation.

The day had been hot, the thermometer registering a temperature of about 71° F. in the shade during the middle of the day, which was bright and clear. In the evening, however, a cool haze or mist spread rapidly over the landscape, while the temperature had fallen to about 68° F. This haze was very much denser and more analogous to the smoke-fog of a town than I have ever observed in the country at this time of year, yet the air did not seem particularly damp or chill.

About 9 p.m. frequent flashes of sheet-lightning occurred, with rumblings of distant thunder at intervals, both of which continued more or less up to midnight, about which time, the mist having somewhat cleared off, I saw when returning home, apparently about a quarter of a mile ahead, a ball or globe of fire of considerable size descend slowly from the clouds, and when near to or touching the earth suddenly disappear, its disappearance being accompanied by two slight but quick concussions, which may have been an explosion and its echo. The fire-ball could not have been visible more than five or six seconds. I cannot ascertain that any damage was done by it.

As this somewhat rare and curious phenomenon seems to be manifesting itself at this period, accompanying the thunderstorms we are having (see NATURE, vol. xxii, p. 193), may I be permitted to suggest that those interested in electrical science should be on the alert to observe any repetition of the occurrence with its concomitant circumstances? W. F. SMITH
Sutton Valence, Kent

Comment: Here we have some weird observations. The snake rain is very odd. Why just snakes if the phenomena was caused by a hurricane or tornado? Why didn't other small creatures get caught up in the phenomena?

Very peculiar electrical phenomena in the bottom right article. The top right article is most interesting in that the phenomena was observed by numerous people miles apart.

Visions in the Clouds.

Displays of aurora borealis are evidently infrequent in Delaware, Maryland, and Virginia. The local papers of the latter part of September and the first week in October contain numerous references to marvelous visions in the clouds, and exhibit a mediæval condition of popular intelligence in the rural districts scarcely less marvelous. The Warrentown (Va.) Solid South says: "A number of reliable and responsible people, whose names we can give, about a week ago, saw an apparition in the heavens, about 10 o'clock P.M., of white robed figures, which were supposed by those who saw them to be angels. It is all the talk of the people in and around the villages of New Baltimore and Buckland." The Richmond Dispatch, of the 7th, prints a note from Mr. M. C. Grady, of Fredericksburg, Va., dated 5th inst., in which he says: "Many persons in this community claim to have witnessed a most alarming sight in the heavens some nights since, just before daybreak. The heavens are said to have been lighted, and vast numbers of soldiers appeared, uniformed, armed, and drilling. Who else saw it, and what is the explanation? Could it have been a mirage?"

Similar observations were made further north. A Wilmington, Del., dispatch says: "The people in this vicinity are greatly excited over what they believe to be supernatural manifestations. A little girl, some three weeks ago, living in the village, saw after nightfall, before the moon was fairly up above the horizon, platoons of angels slowly marching and countermarching to and fro in the clouds, their white robes and helmets glistening in the light. At intervals the heavenly visitors would dance mournfully. Her father also saw the spectacle. Monday night, two weeks ago, William West, a farmer living near Georgetown, the county seat, saw bands of soldiers of great size, equipped in dazzling uniforms, their muskets shimmering in the pale, weird light that seemed to be everywhere, marching with military precision up and down, and presenting arms. The vision lasted long enough to be seen by a number of West's neighbors. Many people living near Laurel, many miles away, situated in the lower end of the Peninsula, saw the same extraordinary phenomena. A few go as far as to say that they distinctly saw in the midst of the soldiers, and conspicuously by reason of his size and commanding presence, the hero President himself, with every feature distinctly and vividly portrayed. In Talbot county the illusion was seen by numbers."

Scientific American 11/15/87

THE Times Geneva correspondent writes under date June 20 that a remarkable electrical phenomenon occurred at Clarens on the afternoon of Thursday last. Heavy masses of rain-cloud hid from view the mountains which separate Fribourg from Montreux, but their summits were from time to time lit up by vivid flashes of lightning, and a heavy thunderstorm seemed to be raging in the valleys of the Avants and the Alliaz. No rain was falling near the lake, and the storm still appeared far off, when a tremendous peal of thunder shook the houses of Clarens and Tavel to their foundations. At the same instant a magnificent cherry-tree near the cemetery, measuring a metre in circumference, was struck by lightning. Some people who were working in a vineyard hard by saw the electric "fluid" play about a little girl who had been gathering cherries and was already 30 paces from the tree. She was literally folded in a sheet of fire. The vine-dressers fled in terror from the spot. In the cemetery six persons, separated into three groups, none of them within 250 paces of the cherry-tree, were enveloped in a luminous cloud. They felt as if they were being struck in the face with hailstones or fine gravel, and when they touched each other sparks of electricity passed from their finger-ends. At the same time a column of fire was seen to descend in the direction of Chatelard, and it is averred that the electric fluid could be distinctly heard as it ran from point to point of the iron railing of a vault in the cemetery. The strangest part of the story is that neither the little girl, the people in the cemetery, nor the vine-dressers appear to have been hurt; the only inconvenience complained of being an unpleasant sensation in the joints, as if they had been violently twisted, a sensation which was felt with more or less acuteness for a few hours after. The explanation of this phenomenon is probably to be found in Prof. Colladon's theory of the way in which lightning descends, as described in NATURE, vol. xxii, p. 65. The Professor contends that it falls in a shower, not in a perpendicular flash, and that it runs along branches of trees until it is all gathered in the trunk, which it bursts or tears open in its effort to reach the ground. In the instance in question the trunk of the cherry-tree is as completely shivered as if it had been exploded by a charge of dynamite.

Nature July 1880 209

UFO Hunters Form an Odd Subculture

(The government years ago gave up its search for unidentified flying objects, but there are still believers who spend nightly vigils on the lookout for aliens from other planets. One of the favorite UFO hunting grounds is in the Hudson Valley north of New York City. Here's what happened there on a recent autumn night. —editor)

By DAVID BAUDER
The Associated Press

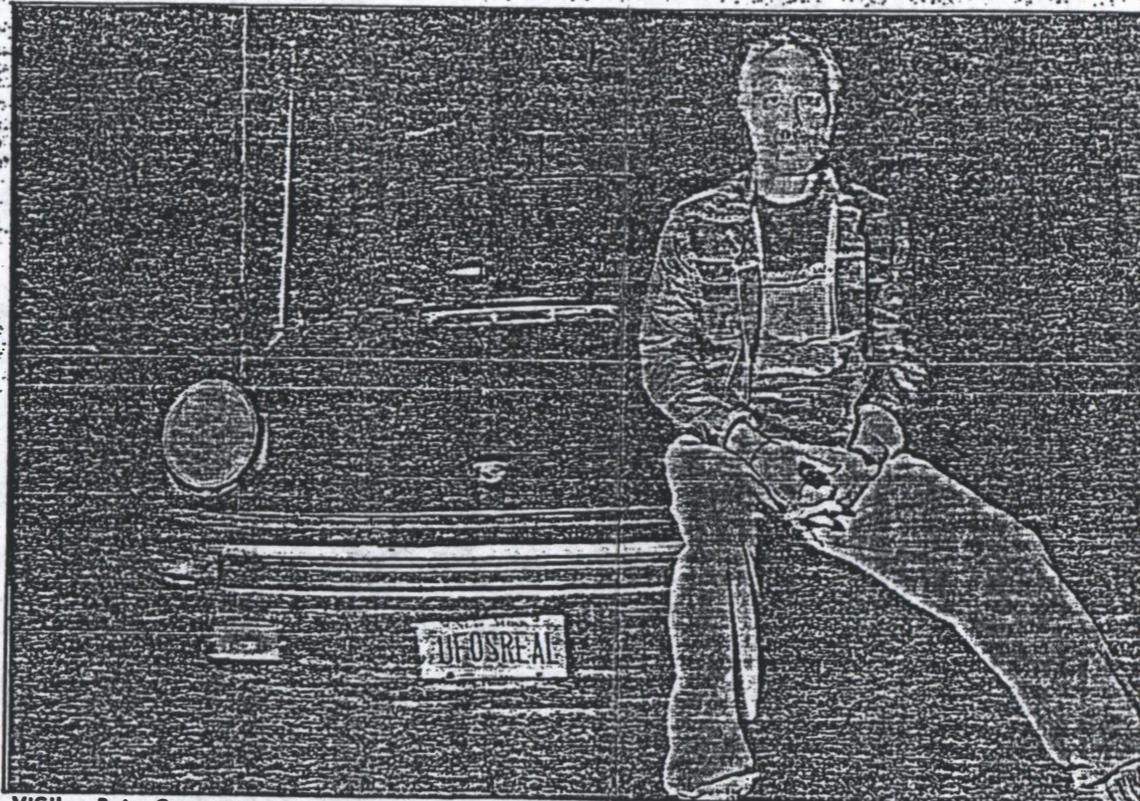
PINE BUSH, N.Y. — Clouds quickly fill the night sky, obscuring a nearly full moon. It's not a good night to find Whatever's Out There.

Still, a half-dozen people who've parked their cars on the shoulder of a country road in New York's Hudson Valley crane their necks to scan the sky. This is supposedly a prime area for spotting UFO activity, but the only things visible on this cool autumn evening are airplanes banking into nearby airports.

Peter Gersten waits suspiciously. The silver-bearded lawyer believes 99 percent of supposed UFO sightings are easily explainable, despite the vanity license plates on his Porsche that read UFOSREAL. He's devoted hundreds of hours to wresting UFO documents from the government, in court.

Most UFO watchers are more patient than the federal government. The U.S. Air Force canceled its surveillance program, Project Bluebook, on Dec. 17, 1969, almost five months after the Apollo 11 astronauts landed on the moon. Dr. Edward U. Condon of the University of Colorado recommended that the program come to an end after years of unconvincing research. But UFO searchers persist. Victoria Lacas waits expectantly. She's mad because most people abducted by aliens are unwilling victims, and she'd be more than happy to submit herself to experiments.

Linda Doern waits calmly. Linda and her husband, Peter, both real estate appraisers, admit to being fascinated by



VIGIL — Peter Gersten waits for UFOs on a dark Hudson Valley road. (AP)

psychic and other unexplained phenomena. An evening in Pine Bush, she jokes, "beats watching television."

Ellen Crystall waits excitedly. The self-described UFO photographer is the guardian of the field, where she claims to have seen aliens and dozens of unexplained lights. She's driven to this field from her New Jersey home hundreds of times since 1981 in the hope of making contact again.

"You missed it, Ellen," Gersten tells Crystall when her car pulls up a half-hour later than expected. "The mother ship was here. There used to be several more of us waiting."

Crystall dismisses the joke and checks the sky. It doesn't bode well. The aliens, whom she suspects are building an underground base in the Hudson Valley, don't seem to like clouds or rain, she says.

Whatever the reason, strange sightings seem commonplace in the Hudson Valley. Hundreds of people — not just those who go out looking for them — have seen things in the sky that can't be explained, says Philip Imbrogno, author of "Night Siege: The Hudson Valley UFO Sightings."

THIS PHOTO, TAKEN BY A PROMINENT RESIDENT who goes just by the name "Ed," shows what he says is a UFO hovering near the town of Gulf Breeze, Fla. Ed, has taken more than 30 pictures of a craft so fantastic and unfamiliar that many believe the pictures to be fake. (UPI)



** TRIVIA **

Q: The Air Force claimed that the Portage County Ohio police chased what two identifiable objects?

A: Venus and a satellite

Vigils on Lonely Roads Waiting for . . . Them

By R. Giordano

HUNTERS

These sightings caused a sensation in 1983 and 1984 in this area of New York City suburbs and farmland, stretching into western Connecticut. Reports have been less frequent since then, but still steady, Imbrogno says.

Most, if not all, can be easily explained, says Jeff Lehman, spokesman for the nearby Stewart International Airport. He says a group of pilots, whose identities are not known, enjoy fooling UFO fanatics by flying in close formation many evenings. It's not illegal, but it's annoying, he says.

"I don't see scaring people with aircraft as a game," he says.

Crystall believes. She says she saw something unusual at the cornfield off Searsville Road, 20 miles from Middletown, soon after she was first taken there by a magazine writer.

Gazing over a distant treeline while alone at the field one night, she spotted what appeared to be a craft drifting slowly to the ground. After seeing something flutter, almost like a moth, she shined a spotlight into a wooded area. She says she saw a 3/4-foot creature with a beige body and huge yellow eyes staring back at her.

"This thing had a worried look on its face and it totally threw me off," Crystall says. "I was panic-stricken. I could not utter a sound."

The blonde music student claims to have taken 800 photographs of UFOs. She says she holds no grudges against people who don't share her beliefs but confides, "I try to avoid them."

At a restaurant 20 minutes from Searsville Road, Crystall's friends passed the time waiting for dusk to turn to darkness. Ignoring quizzical looks from a waitress, they discussed landmarks in UFO history with the sort of insider's lingo that renders the conversation meaningless to anyone else.

Gersten, who has set up a hot line telephone number for UFO fanatics to keep up on the gossip, says he enjoys the mystery and glamour of UFOs.

"It seems like we're prisoners on this planet and we've lost the ability to explore," says Gersten, who fixes companions with a penetrating stare. Most people accept that UFOs exist, he says, "because we simply can't be the only people in the universe."

But he dismisses most reports of unexplained lights in the Hudson Valley. Most sightings are probably conventional airplanes, he says, adding that he has offered a reward for the mysterious group of pilots to come forward and identify themselves.

Gersten belongs in the "government conspiracy" camp of UFO followers, believing that secret military technology is being tested in the skies.

"Imagine a civilization 10,000 years more advanced than us," says the New York City lawyer. "Do you think they'd come here in spaceships?"

"Yes," opines Lacas, "because they want to investigate the inhabitants of Earth. The legal assistant and flower-child holdover is fascinated by the current UFO furor over abductions, during which people are supposedly "beamed up" by aliens for a quick examination.

Lacas calls herself an "abduction volunteer."

"This thing had a worried look on its face and it totally threw me off. I was panic-stricken. I could not utter a sound."

—Ellen Crystall

"I want to bring trinkets to trade," she says, fingering some jewelry, "because I want to make friends when I go on board."

For the Doerns, all aspects of the paranormal are fascinating. There's a lot more going on in the world than meets the naked eye, Linda says, but she understands why most people look at UFOs and psychic phenomena with abundant skepticism.

"There are a lot of strange people involved in it," she says. "I think it discredits it for a lot of people: It turns a lot of people off. I think you have to look beyond them and not let it deter you."

After the drive to Searsville Road, some participants note the "eerie strangeness" they feel while gazing at the sky. But when it's apparent most of the lights in the sky are either stars or airplanes, conversations drift to baseball and photography.

A car roars by the parked vehicles about every five minutes. From a nearby house a woman, partially hidden by curtains, peers out at the visitors to her neighborhood.

Crystall and her followers are well-known by Chief Daniel McCann and the rest of the Town of Crawford police department, which has jurisdiction over Pine Bush. He says he occasionally gets trespassing complaints, and Crystall has been chased off people's property once or twice, but she's usually good about telling authorities where she's going to be.

With the airport and a unit of the Air National Guard nearby, Crawford police are used to getting calls about strange things in the sky. Police have never seen any hard evidence of UFOs, but they don't always have an easy explanation for what people insist they see, McCann says.

The area's becoming somewhat of a tourist spot among the supernatural fans, McCann says.

"Ellen does say that she sees these things," he says. "I'm not going to dispute her. She probably has seen something. Who knows what they are?"

One of Crystall's companions points the flash of her camera at some shrubbery, hoping others notice the particles in the air she sees during the brief burst of light. What she claims is "angel dust" looks suspiciously like pollen.

It was the only unusual sighting of the night. As the hour grew late, the search for warmth became paramount and the evening ended in disappointment.

"It was a crummy night," Crystall concludes.

