

THE FIFTH HORSEMAN OF THE APOCALYPSE

UFOS: A HISTORY

1956 August

SUPPLEMENTAL NOTES

By

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“UFOs are the Fifth Horseman of the Apocalypse.”

--- Dr. Lincoln La Paz

“Supplemental Notes” consist of material under consideration for any revision of the original UFO history volume covering this time period.

? August. London, Ontario, Canada. (between 1:30 and 2:00 a.m.)

"The objects flew independently, tracing a pattern of apparently purposeless flight over a wide area. Then they made a rendezvous and flew in a diamond formation to the horizon."

"Two planes wrecked—a coincidence?"

According to a news story:

"What about flying saucers? Over recent months, official Ottawa had almost forgotten the controversial flying discs. But a few nights ago, they gave a pre-dawn air show over London.

"The latest reports were unusually interesting. They were telephoned between 1:30 and 2:00 a.m., by upwards of 40 spectators in a half-hour into St. Thomas radio station, which remains on the air 24 hours a day. Significantly, they all came from the area surrounding Western University. Some of the callers were members of Western University staff not ordinarily credulous individuals.

"All the informants reported seeing the same things—four silvery disc-shaped flying objects high in the sky in a northwesterly direction. The objects flew independently, tracing a pattern of apparently purposeless flight over a wide area. Then they made a rendezvous and flew in a diamond formation to the northwestern horizon, into which they disappeared. The duration of their maneuvers was approximately 40 minutes.

"The radar screen of the London district RCAF station at Centralia recorded nothing. Nor has anything been reported to RCAF headquarters here. The National Research Council, always on the alert for flying saucers, has no leads.

"There's still a further curious coincidence. Flying saucers have been sighted over London before. And the last time was when Earth was in about the same relatively close proximity to Mars as now. Furthermore, during the last appearance, a jet plane was reported missing from the Centralia air station and subsequently was found wrecked. The same thing happened this time.

"It's the sort of mystery which pure coincidence alone may be sufficient to explain, but which remains intriguing. The official explanation is that the Londoners saw weather balloons. But that explanation simply raises the question of why the Londoners should see the balloons only rarely. They're going up all the time. Then there are the strangely portentous accompaniments of earth's nearness to Mars and the missing RCAF aircraft." (xx,)

(xx.) St. John's, New Brunswick, Canada. *Telegraph-Journal*. 3 August 56.

? August. Portland, Oregon. (about 1:30 a.m.)

Orange, umbrella-like object.

A Mr. Zimmerman testified:

"I can not remember the day of the month, but it was in August of 1956. I had worked the 5:00 p.m. to 1:00 shift at the National Biscuit Company [plant security]. The time was around 1:30 a.m. I was half way between Stark and Division Streets,

when all at once a bright orange object shaped like an umbrella appeared off to my left no more than 75 feet away, and 100 feet up. It appeared to be large enough to hold six or seven people. I at first was terrified. It was flying parallel to my car. I immediately cranked down my window to hear any sound as this was eerie to me, and I wanted to hear it's noise to prove what I saw was real. It made no sound whatsoever. When I reached Division Street I must turn left to go to 153rd Avenue, the street I live on. As I turned, the object disappeared behind a large three story house on the corner of 148th; and Division, and was waiting for me on Division around the corner. By now I was really afraid and I raced my 1955 Fairlane up to 90 miles per hour. The object stayed even with me just up and out of the range of the telephone poles. Then all at once it headed up on a slight angle, and disappeared from sight. I only had two blocks to get home. I immediately related my discovery to my wife who some months earlier had come home from work around midnight and all out of breath had told me of seeing an object to the letter of what I had seen. I laughed her to scorn. I then called our local Army Air Force Base, I gave them my name and address and they said they would call on me the next day. They never did." (xx.)

(xx.) Letter: To: National Investigations Committee on Aerial Phenomena. From: Walter Charles Zimmerman, S.E. 148th. St., Portland, Oregon. Date letter written: 18 March 59. NICAP files. CUFOs archives. Photocopy in author's files.

? August. Near Americus, Georgia. (10:15 p.m.)

Space scientist Charles Kohlhasse sees hovering UFO. (See clipping on page 3)

1 August. Macomb County, Michigan. (night)

People flood police switchboards. (See clipping on page 4)

1 August. Muskegon, Michigan. (about 8:20 p.m.)

"Size of a dinner plate."

A news story states:

"A flying saucer in the vicinity of their home about 8:20 p.m. yesterday was reported to sheriff's officers by Terry Bird, 3026 McArthur road and a neighbor, Genivere Dennison. They described the thing as about the 'size of a dinner plate, silver with a bright yellow border.' They said it circled the house several times.

"Deputy Russell Barrett, who was on desk duty, said he received no other calls from the vicinity." (xx.)

(xx.) Muskegon, Michigan. *Chronicle*. 2 August 56.

2 August. Coleman, Michigan. (about 1:30 a.m.)

"White hot" UFO sighting

UFO hovers nearby, threatens to explode

One summer night when Charles Kohlase was still in college, he and his father watched a UFO moving across a cornfield near their home in Georgia for about ten minutes.

"However, the UFO was close enough to be seen well for only about two minutes," said Kohlase.

"Being of a scientific discipline, I do not believe in 'flying saucers'. And yet, what I saw did look like a large 'flying saucer' of a diameter of 30 to 50 feet and a thickness of 5 to 15 feet.

"It is my opinion that the object was solid, that it contained an energy source that was the cause of the object's luminosity, and that it was under control. I will always remember and be impressed by this UFO sighting."

Now a space scientist, Kohlase is reluctant to discuss the sighting with the media for fear of seeing some sensational headline such as "Space expert believes UFOs are of extraterrestrial origin."

Which would be nonsense, of course, for the only claim he makes is that he saw a UFO- whatever that may be. He does not know what it was or

where it came from. Here is his story:

"I returned home one evening in August 1956 from a six-week midshipman summer cruise on a destroyer. I was a college student at Georgia Tech and was enrolled in the Naval ROTC program."

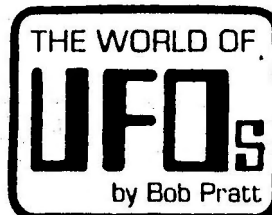
His home was 3 miles south of Americus, Ga. It was about 10 p.m. when he arrived and found his father watching television. His stepmother was out playing bridge.

UFO seen in sky

Part of the cruise had been spent on navigation and locating stars. His father, an amateur astronomer and a civilian pilot, suggested they go outside and see how well he could locate stars.

Their house sits in a dense grove of trees, so they walked to a cornfield 200 yards away and for 15 minutes Kohlase tried to find stars his father named. Then they spotted something.

"We noticed over the far end of the field a light moving parallel to the horizon and blinking on about every 10 seconds for a duration of 2 or 3



seconds. The light appeared to be going back and forth, left to right, above the trees about the width of the field.

"We soon began to lose interest and decided to return to the house. Then we looked again and the light wasn't moving back and forth any more. It seemed to be coming slowly toward us, pulsing off and on.

"It kept coming and finally stopped at a place that was about a 45-degree angle of elevation to us. It emitted no sound and no exhaust.

White hot UFO

"Then the first thing happened that really scared us. This thing just turned a brilliant white hot. I shouldn't say hot because I didn't feel any heat from it, but it was extremely bright.

"I crouched down covering my face with my arms in anticipation of a possible explosion. I was convinced that this whatever it was, maybe an airplane was about to blow up in a trillion pieces.

"But nothing happened. There was no noise. This brilliant whiteness began to dull, to tone down to about a blacksmith's horseshoe red, like when you pull a piece of iron out of the fire.

"For the first time I could see its outline. It appeared to be a saucer shaped object 30 to 50 feet in diameter that was between 50 to 100 yards away.

"Then it began to move very slowly back in the other direction. When it got fairly far away, it looked more spherical than it did saucer shaped.

"This object continued moving until it got back over the tops of the distant pine trees. Then two other lights somewhere in the distance rose up from the other side of the trees. The three objects then moved off the southwest and disappeared in a minute or so."

Kohlase, who is the mission design manager of the Voyager space mission at the Jet Propulsion Laboratory, added:

"I went out for a couple of nights after the sighting and sat in a chair in the field, but I never saw anything again." (c) Bob Pratt 1981

Have any questions or comments about UFOs? Just write to: The World of UFOs, in care of this newspaper.

Saucers 'Fly' Through Skies

The skies over Macomb county spawned "flying saucers" last night.

Hundreds of persons flooded police switchboards to report strange lights hovering over the earth.

Four Selfridge Air Force jets were sent thundering into the darkness to investigate after an unidentified Ground Observer Corps volunteer had reported bright lights in the sky.

The pilots found nothing, said Selfridge public information officers.

Some persons were frantic. Others dazed. Many just wanted to know what "the darned thing" was.

Some said the lights were red. Others claimed they were white. A few swear they were both.

One, Miss Jessie Hickman of Utica, obviously versed in astronomy, said:

"I have observed the planet Mars and I know what it looks like. What I saw last night was not Mars. It doesn't have a light on top like the object I saw. I watched it for five minutes. It was fun."

Miss Hickman, a police dispatcher for the city of Utica, said she first observed the bright light when she went out duty about midnight.

"The object looked quite large and terribly bright," she said. "To the naked eye it appeared white, but observed through binoculars it appeared fiery red."

She said the object "jumped up and down," then moved slowly into the atmosphere, faded out, appeared west of Utica in a brilliant splash of light larger than any star and moved off into the distance.

Another observer, Joseph Ballor, owner of a gas station at New Haven, said:

"Me and Bill Middleton (New Haven policeman) were sitting talking about a quarter to 12 last night when a real scared guy came in.

"He pointed to the sky and we took a look. We saw a real bright light that kept changing color, moving real fast all different ways. Off to the west we saw another object that changed color and moved faster than the first one. We called the sheriff's office and state police."

Detailed to the Chaffee home when the reports first came in, Sheriff's Deputies Eldred Champine Jr. and James

Meakin also reported seeing the bright object.

"It looked mighty close because of its size, and shone real bright," said Champine. "It looked much closer than it really was. I didn't see it move around in relation to the movement of the car. We sure took a ribbing from the other officers when we reported in."

Said Meakin:

"When we first got there it seemed right on top of us, a very brilliant white object. I saw it move a couple of times.

It might have been an optical illusion."

"We used our spots to guide the jet planes which seemed to cut right across its pattern. The object looked no larger than an ordinary drinking cup. I didn't see it change color."

Another team of Macomb county deputies, John Kennedy and Robert Smith, observed a "strange, bright" light over the New Baltimore area around 1 a. m. At that time, said Kennedy, the object seemed to move quite high but toward morning had dipped "right over the city."

"It didn't change color or move course, just got lower," said Kennedy. "What puzzled us is how a light could stay on so long. It looked like the headlight of a car."

Troopers Charles Turner and David Gillette, of the St. Clair Police Post, said, however, the bright lights didn't change color nor did they move.

"They just seemed to hang in the sky east and west of New Haven. Later, one had moved north but then the one at the extreme west came blinking on and off."

Another observer, Miss Sally Chaffee, 14, 8580 Canal road, Utica, said she and several visitors saw what appeared to be a "big red light" moving in the sky.

"It seemed to fade, then come closer in greater brilliance," she said. "We got real scared. It moved around, sometimes slow and sometimes fast. We watched from 9 to midnight before it seemed to fade away."

Selfridge spokesmen said their official reports would term the phenomena "unidentified objects." They said the jet pilots could see nothing resembling objects such as reported by the public.

Weather officials said the lights may have been caused by a tri-layer temperature inversion last night.

This means that the temperature increases instead of decreasing with altitude, causing various layers of atmospheric density which reflects light.

This light refraction can give the illusion of rapidly moving brilliant objects at different altitudes. The density also distorts light reflections, "bending" light beams.

Dr. Orren Mohler, astronomer at the McMath-Hulbert Observatory operated near Pontiac by the University of Michigan, said the light objects spotted last night might have been the planet Mars.

He said Mars is now in the southern sky in direct opposition to earth and at its brightest.

"But Mars, unless there is atmospheric turbulence, rarely jumps around. It may seem to move around a little, too, if very near the horizon and seen when the light is right."

He said Mars, about 40 million miles away, is now at its closest approach to Earth.

What the people saw, he explained, was either an imaginary object or "bad seeing" of the planet.

Bright orange.

A press report states:

“A flying saucer-like object was sighted near Coleman about 1:30 a.m. Thursday. Miss Phyllis Maynard, 337 Beamish road, Sanford reported today.

“Miss Maynard said she noticed the object upon return from a drive-in theater. She said the object was ‘bright orange and as it turned on its side became smaller and disappeared into space.’

“She claimed the object was sighted about three miles north of Colman and was traveling in a northeasterly direction.” (xx.)

(xx.) Midland, Michigan. *News*. 3 August 56.

5 August. Near Caracas, Venezuela. (6:15 p.m.)

UFO descends out of the sky.

A letter directed to the editor of the newspaper *El Universal*:

“A professor [name withheld] reported that, at 6:15 p.m. on the fifth of August he was having a walk in the terraces behind the luxurious hotel Tamanaco, South East of Caracas in company with a friend, when he saw a luminous body descending from the skies at a great height, slowly, and leaving in it’s trail something like smoke; the body seemed to be falling over the suburbs of Santa Monica. Taken aback by the strangeness of the occurrence, no comments were made and they fixed their attention on the object. The apparent diameter was about 30 centimeters. It was circular-shaped and emitted sparks like a star [?]. It shown with extreme brilliancy and would remain still or stop it’s descent at times; then it shot away and was lost to sight on the northwestern horizon. The professor had this say: ‘It could not have been a meteor. It’s descent towards the earth was slow and vertical. It could not have been any meteorological balloon known to me. The way it shot away towards the horizon eliminated the possibility it was a plane and also no sound was heard.’ (xx.)

(xx.) Letter to the editor. Caracas, Venezuela. *El Universal*. 6 August 56. APRO files.

5 August. St. Louis, Missouri. (about 2:30 a.m.)

Hovered over Socony Mobil Oil Company, refinery, and other plants.

According to a press account:

“A woman resident of Centerville township has reported seeing a flying saucer. A woman living in Cahokia phoned East St. Louis police about 2:30 a.m. Sunday. She said that for about an hour she had been watching a large, bright object which looked like a flying saucer in the sky. She said it was circling the Centerville township area,

hovering around Socony Mobil Oil Company, refinery and other plants.

"The woman said she had called the sheriff's office. According to that office a woman called and said there was a star too close to her house. They told her there was nothing they could do about it." (xx.)

(xx.) Belleville, Illinois. *Advocate*. 7 August 56.

6 August. Near? Pittsburg, California. (about 10:30 p.m.)

See "saucer" or something.

The local paper reorted:

"Three Pittsburg youths today joined the ranks of persons claiming to have seen 'flying saucers' or something.

"This latest report comes from three 16-year-old boys. Frank Belleci, Horace Slinio and Anthony Barraco described thusly by Belleci, spokesman for the trio:

" 'We were heading home from Livermore on the Curry Creek Road about five miles off the Marsh Creek Road about 10:30 last night when we spotted a moving object.

" 'The object was close and we got an even better look at it though a pair of binoculars we had in the car. Through the binoculars, we could tell it was no plane, that it had a 'glow' and was circular in shape.

" 'It was moving about, then stopped and suddenly streaked off as it were in a position southeast of Marsh Creek Springs. All three of us watched it,' Belleci concluded.

"The sheriff's office said it had received no reports of 'mysterious objects' in the sky last night." (xx.)

(xx.) Pittsburg, California. *Post Dispatch*. 7 August 56.

(xxi.)

6 August. Durham, North Carolina. (1:30 a.m.)

Circular burned patches. (See clipping)

7²/₈ August. Gower, Missouri. (3:45 a.m. Zulu)

Halo effect. Moved with great maneuverability and speed.

An Air Intelligence Information Report contained the following information:

"Two women GOC observers in Gower, Missouri, sighted

More Fiery Objects Falling From Sky Burn Lawns In City

The second Durham resident in 24 hours today reported that some falling object had seared patches of grass near her home.

Mrs. J. C. Hilton of 1210 Wall St., reported this morning that about 1:30 o'clock this morning she was aroused by a hissing noise outside her home. She said she looked out but saw nothing.

Going outside to the yard, she said, she found where a circular patch of green grass had been seared to a yellowish brown, apparently by some hot object which had fallen on the lawn. Mrs. Hilton said that a closer look around the yard revealed two more such burned patches—one near the back doorstep and the third a short distance away. The first patch was the largest and deepest, giving the impression that the object had bounced after striking, thereby burning the other, smaller patches.

No fragments or other signs of a solid object were found near the patches, which were between five and six feet apart. Mrs. Newman Reeves, of 608 Primitive St. reported yesterday morning that her 10-year-old daughter, Menda, had called her about 10:50 p. m.—shortly after retiring to bed—and reported that she had just seen a "ball of fire" fall in a neighbor's yard at the corner of Primitive and Elizabeth Streets.

Mrs. Reeves said that yesterday morning, "out of curiosity," she walked over to the neighbor's yard and found there a burned patch of grass "about the size of a saucer." Mrs. Reeves said that there were no fragments or other signs of a solid object left in the vicinity of the burned patch of grass.

DURHAM, N. C., SUN
Circ. O. 21,980

AUG 7 1956

an unidentified flying object at 080345Z August 1956 while on duty. Object appeared to be a bright red in color which alternately moved in the east laterally to the observers and stood still. Observation continued for approximately 28 minutes, during which time the women called their husbands to come to the post and witness the event. Object disappeared 'with great speed' into the east and left a 'halo' effect. The follow-up investigation consisted of a thorough personal interview with sources and telephone checks with standard agencies and other possibly knowledgeable sources connected with this sighting." (xx.)

(xx.) *Air Intelligence Information Report*, by Capt. La Verne W. Poland. Detachment 2, 4602D AISS. Date of report: 22 August 56. Photocopy in author's files.

9 August. Willsboro, New York. (about 1:30 a.m.)

"A white flash bathed the lake in light."

According to a press account:

"At about 1:30 a.m., Mr. and Mrs. Fred Smith of Albany and John C. Voss of Spring Valley, N.Y., all three guests at the Camp of the Pines, a lakeside resort, decided to try some night fishing.

"It was 'pitch black,' they said, so dark that they had trouble finding a white, keg-shaped buoy in front of the camp.

"Then, suddenly, a white flash 'bathed the lake in light.'

"It lasted for about 30 seconds, they reported, and appeared to emanate from a basketball-shaped object that gave off a fiery red aura.

"The campers said that the object then took off in a northeasterly direction over Vermont, rapidly contracting in size.

"They emphasized that during the entire display there was no noise." (xx.)

(xx.) Milwaukee, Wisconsin. *Milwaukee Journal*. 27 August 56. p.25.

10 August. New Plymouth, New Zealand. (about 9:30 p.m.)

She heard her dog howling.

The local paper printed:

"A strange spinning object in the heavens near New Plymouth was reported by a resident living in the Port Taranaki area last night. She said that she and three members of her family watched it for several minutes before it was obscured by cloud.

"The resident, who telephoned the *Taranaki Daily News* about 9:30 p.m., described the object as shedding a golden glow and said it could be seen from her home in Paritutu Road.

"Other people living in nearby Paritutu Road also saw the object.

"The woman said her attention was first attracted by her dog growling. She went out to quiet the animal and saw it looking at the sky. At the same time other people in

the neighborhood were looking up and shouting about the object.

"The object appeared to be spinning and at times leaving a trail of haze that partly obscured it. She said it was high up to the west and over the sea, about the size of a dinner plate, round, but flattish on top and bottom.

"Several people in the area watched it before it was obscured by cloud, but they could still see its reflection for some time against the cloud." (xx.)

(xx.) Taranaki, New Zealand. *Taranaki Daily News*. 11 August 56.

11 August. "Saucer base" in the Antarctica? (See clipping below)

11 AUG 1956 "TIMES"

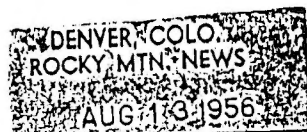
Space Visitors in Antarctica

LONDON, Friday (A.A.P.-Reuter).—Sighting of three cigar-shaped objects over a Wellington, N.Z., suburb on June 30 could mean that "beings from another planet" were setting up a base in Antarctica in preparation for "an invasion of the earth."

A report, prepared by Dr. Bernard H. Finch, collating observations by flying saucer enthusiasts all over the world, said this.

12 August. Denver, Colorado. (night)

Hovered over downtown for five minutes. (See clipping below)



Similar to Pueblo, Durango Phenomena

on 8-12

2 Report Flying Saucer Over Denver

A mysterious oval disk, blazing with white lights, appeared in the sky over Denver early Sunday to add fuel to the current flying saucer season.

It had the same general description as the curious football-shaped craft, brilliantly illuminated, which was sighted by a Durango weatherman last Wednesday.

And both resembled the unidentified flying objects which the Ground Observer Corps spotted in May over Pueblo for six successive nights.

ONLY TWO WITNESSES

Only reported witnesses of the saucer which hovered over downtown for five minutes were Mrs. Mary M. McCaffrey of Tacoma, Wash., and her 13-year-old son William.

The two were gazing west from the window of their room on the eighth floor of the Cosmopolitan Hotel when they saw the saucer move east from the mountains.

"It was bigger than the largest airplane and the edges were very clearly defined," Mrs. McCaffrey told *The News Sunday*.

"It had blazing white lights, and we could see it very plainly. It stopped fairly low in the sky and remained stationary for several minutes.

"Then it moved west in the same path as it approached. We watched it until it moved out of

sight."

POSITIVE IT WAS SAUCER

Mrs. McCaffrey and William said they were "fascinated but not frightened." And they were positive the strange object was a saucer.

"We've seen enough space films and read enough science fiction stories to know what a saucer should look like," Mrs. McCaffrey stated.

The most popular time for visits from the nebulous sky objects is July and August, according to the Air Force, which keeps records on flying saucers.

The saucer season coincides with the annual summer meteor showers. And also with Mars' summer position in the sky.

But Weatherman Malcolm Dayton of Durango was convinced that the object he saw in the sky last week had nothing to do with Mars.

Dayton watched the mysterious shape for nearly an hour through powerful field glasses. He described it as a bluish-red, football-shaped craft, which moved with phenomenal speed.

He said "one side was pushed in, and the blue-red radiation was occasionally obscured by a steam-like haze."

A fighter plane was sent from Kirtland Air Force Base in Albuquerque to investigate the phenomenon, and later reported it as "an unusually bright light reflected from Mars."

13/14 August. Lakenheath/Bentwaters case. Various documents. (See pages 9-30)

UFO ENCOUNTER II

Sample Case Selected by the UFO Subcommittee of the AIAA

By G. D. THAYER

National Oceanic and Atmospheric Administration

The Lakenheath England, Radar-Visual UFO Case, August 13-14, 1956

Introduction

The following story—a second example of the type of observation which forms the core of the UFO issue—has been selected by the UFO Subcommittee of the AIAA for publication not only because of its puzzling content, but also because of the multiplicity of observations. The author, a former member of the "Condon Committee" (University of Colorado UFO study team), discusses the case, but does not offer an explanation. The same was true for the first case, published in the July 1971 A/A, where the principal observers were highly qualified professionals making sightings in their line of duty. Both case studies are intended to give the reader a flavor of the observational residue material which underlies the UFO controversy. We hope he will give it his independent assessment as engineer or scientist.

On a pleasant August evening in 1956, the night-watch supervisor at the Lakenheath, England, Radar Air Traffic Control Center (RATCC), a U.S. Air Force noncommissioned officer, was startled by a telephone call from the Bentwaters GCA (Ground Controlled Approach) radar installation (see map) asking, "Do you have any targets on your scopes traveling at 4000 mph?" Thus began one of the strangest and most disturbing radar-visual UFO episodes on record.

There is a very large, confusing report on the Lakenheath-Bentwaters incident in the U.S. Air Force Project Bluebook files (Project Bluebook

was the name of the U.S. Air Force UFO investigation). At least three separate times unidentified radar echoes (UREs) were tracked by the GCA unit at Bentwaters before the telephone contact with Lakenheath; and although these are highly interesting events in themselves, they did not involve confirmatory visual and airborne radar contacts. A detailed account of these first three radar contacts can be found in an earlier paper by James McDonald (FSR 16, "UFOs over Lakenheath in 1956," 1970, pages 9-17). "Scientific Study of Unidentified Flying Objects" (Bantam Books, 1969; hereafter referred to as the "Condon Report") contains no account of these because the pertinent Bluebook files were obtained too late for inclusion. The Condon Report does contain an independent account of the primary incident at Lakenheath, as reported by the night-watch supervisor, *not* found in the Bluebook file; this separate report forms the most coherent account of the events at Lakenheath.

Following a brief description of the events at Bentwaters based on the Bluebook file, the Lakenheath incident will be described here based mainly on the night-watch supervisor's account.

Account of Observations

The four events at Bentwaters GCA (see map for plots of these radar tracks) took this order:

1. At 2130Z a URE (No. 1 in map) was picked up on the Bentwaters AN/MPN-11A GCA radar about 25-30 mi. to the ESE. (Note that Z time—zero meridian time—or GMT, is also local time in the Lakenheath-Bentwaters area.) This URE moved steadily on a constant azimuth heading of 295 deg until

contact was lost about 15-20 mi. to the WNW of Bentwaters. The radar operator estimated the apparent speed of the URE as 4000 mph; but the transit time of 30 sec yields an estimate of 4800-6000 mph, and the operator's estimate of 5-6 mi. covered by the URE between PPI sweeps (2 sec apart) gives an estimate of 9000-10,800 mph. "The size of the blip when picked up was that of a normal aircraft target. [It] diminished in size and intensity to the vanishing point before crossing the entire radar screen."

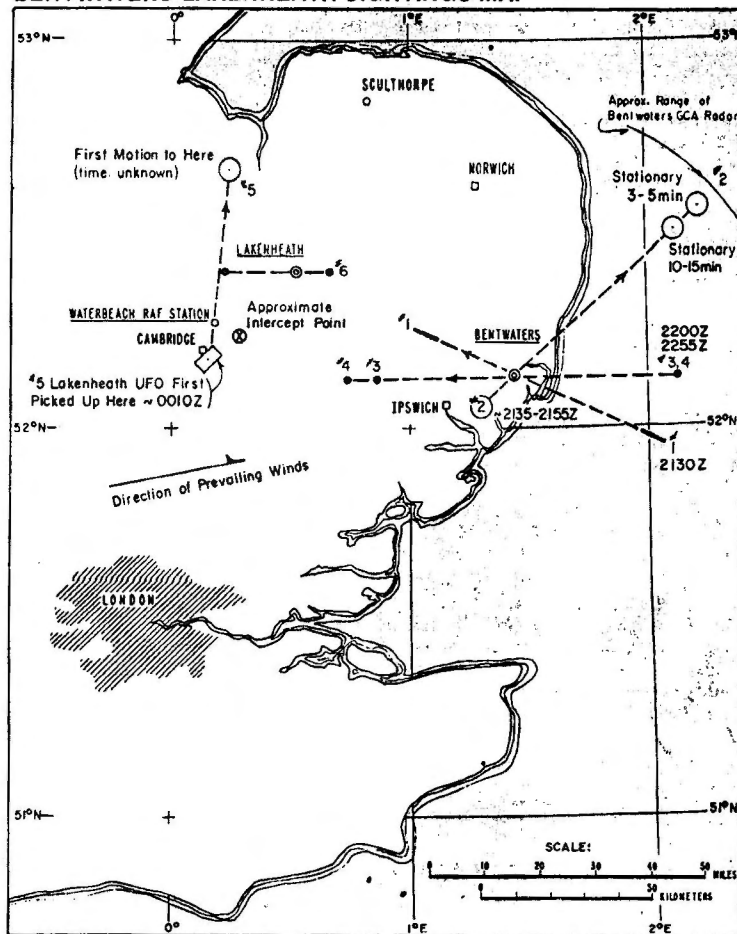
2. A "few minutes later," say roughly 2135Z, a group of 12-15 UREs was picked up on the PPI about 8 mi. SW of Bentwaters (No. 2 in map). These echoes "appeared as normal targets," and "normal checks made to determine possible malfunctions of the GCA radar failed to indicate anything was technically wrong." These UREs appeared to move as a group toward the NE at varying speeds reported as 80-125 mph. The group covered a "6-7-mi. area" on the scope. These echoes "faded considerably" at a point 14 mi. NE of Bentwaters, but were tracked to a point about 40 mi. NE of Bentwaters when they merged into a single strong echo "several times larger than a B-36 return under comparable conditions." This single echo remained stationary at the point 40 mi. NE of Bentwaters for 10-15 min., then moved to the NE for 5-6 mi., stopped again for 3-5 min., and finally moved out of range (50 mi.) of the radar at 2155Z. The average apparent speed of the URE group for the time it was in motion can be readily calculated as between 290 and 700 mph (58 mi. in 5-12 min.—again differing from the operator's estimate.

3. At 2200Z another URE (No. 3 in map) was picked up about 30 mi. east of Bentwaters and tracked to a point about 25 mi. west of the station; the tracking period was about 16 sec. The radar operator estimated the apparent speed of this URE to be "in excess of 4000 mph" but the time and distance figures indicated a speed of roughly 12,000 mph. All the returns "appeared normal, except for the last, which was slightly weaker than the rest." The radar operator indicated that the "[return] disappeared . . . by rapidly moving out of the GCA radiation pattern." No further UREs are mentioned in the Bluebook report on the Bentwaters incident; and considering the confusion prevailing in reported times in Bluebook reports and the similarity of the reported tracks and speeds, possibly this URE and No. 4, which instigated the phone call to Lakenheath, may in fact be the same.

4. According to the Bluebook report on the Lakenheath incident, the Bentwaters GCA radar, at 2255Z, picked up a URE 30 mi. east (of Bentwaters) moving to the west at an apparent speed of "2000 to 4000 mph." In the map shown at right, the track of the URE appears identical with No. 3 except for the vanishing point. This URE then "disappeared on scope 2 mi. east of station and immediately appeared on scope 3 mi. west of station . . . it disappeared 30 mi. west of station on scope." If the word "immediately" means that the URE was picked up on the same PPI sweep, after 180 deg. rotation from east to west, it would imply that the apparent motion covered 5 mi. in 1 sec, an inferred speed of some 18,000 mph. At this rate the URE would have covered the 60 mi. track in about 12 sec (6 PPI sweeps). As pointed out, this may have been URE No. 3 from the Bentwaters Bluebook report, which is estimated at 12,000 mph, although the reported times are different.

At this point, someone at the Bentwaters GCA station called the Lakenheath RATCC station asking the night-watch supervisor there if he had any "4000-mph targets" on his scopes and describing the track of URE No. 4. The caller stated that the control tower at Bentwaters had reported seeing "a bright light passing over the field from east to west at terrific speed at about 4000-ft altitude," while at the same time the

BENTWATERS-LAKENHEATH SIGHTINGS MAP



pilot of a C-47 aircraft flying over the station at 4000-ft altitude reported a "bright light streaked under his aircraft traveling east to west at terrific speed." The Lakenheath watch supervisor, although admittedly skeptical of this report, "immediately had all controllers start scanning the radar scopes . . . using full MTI (moving target indicator), which eliminated entirely all ground returns."

Shortly after this search began, one of the controllers noticed a stationary echo on the scopes at an indicated position 20-25 mi. SW of Lakenheath (No. 5 in map). Note the position of this initial contact on the map; it is almost directly in line with the path of UREs 3 and 4 from the Bentwaters report. Although the MTI should have eliminated the return from any target moving at

less than 40-50 knots, the radar personnel could detect "no movement at all" from this URE. The watch supervisor called the GCA unit at Lakenheath to see if they had the same echo on their scope and "they confirmed the target was on their scope in the same location." As the Lakenheath RATCC personnel watched this URE, it suddenly began moving in a NNE direction at a speed that they subsequently calculated to be 400-600 mph. In their words "there was no . . . build-up to this speed—it was constant from the second it started to move until it stopped."

The watch supervisor contacted local AFB command personnel and kept them informed of the happenings from this point on. The URE made several changes in direction always in a straight line, always at

about 600 mph with no acceleration or deceleration apparent—the changes varying in indicated length from 8 to 20 mi., with stationary episodes of 3-6 min intervening.

There were visual sightings at Lakenheath during this time, but the reports of these are confusing and inconclusive. Perhaps of greater significance are the investigating officer's statements that "two radar sets [Lakenheath GCA and RATCC] and three ground observers report substantially the same," and "the fact that radar and ground visual observations were made on its rapid acceleration and abrupt stops certainly lend [credence] to the report."

After "about 30-45 min," or 2340 to 2355Z, the RAF "scrambled" a de Havilland "Venom" night fighter aircraft to investigate the Lakenheath UFO.

(At this point, the account of the Lakenheath night-watch supervisor and that of the Bluebook report diverge. First, the watch supervisor says the aircraft was from a field near London and was picked up on the RATCC radar inbound from the southwest at a range of 30-45 mi. from Lakenheath. According to the Bluebook file, the fighter took off from Waterbeach RAF station (see map), which is only 20 mi. SW of

Lakenheath and well within radar range—given as 50-60 mi. for targets at 5000 ft or above. Second, the watch supervisor relates that the Venom was vectored to the then stationary URE (No. 5) at a position about 16 mi. SW of Lakenheath, and that this was the aircraft's first and only contact with any UFO. According to the Bluebook account, "the a/c flew over Lakenheath and was vectored to a radar target 6 mi. east of the field (No. 6). Pilot advised he had a bright white light in sight and would investigate. At 13 mi. west [of Lakenheath] he reported loss of target and white light [N.B.—this implies that the pilot had the unknown on his airborne radar as well as having had visual contact]. Lakenheath RATCC vectored him to (presumably) another target 10 mi. east of Lakenheath and pilot advised target was on radar and he was "locking on." This target would be URE No. 5, identified by the watch supervisor as being about 16 mi. SW of Lakenheath. Except for this discrepancy, the account of the Lakenheath watch supervisor agrees with the Bluebook file from here on in virtually every detail.)

The Venom fighter was vectored by the RATCC radar to the sight of the URE, which (according to the night-watch supervisor) was station-

ary at the time at 15,000-20,000 ft about 16 mi. SW of Lakenheath. Shortly after Lakenheath told the pilot the URE was one-half mile dead ahead of the interceptor, the pilot radioed, "Roger. . . I've got my guns locked on him." (The pilot refers to a radar fire-control system.) This pilot later told a U.S. Air Force investigator that the URE was "the clearest target I have ever seen on radar." There was a brief pause after the Venom pilot said he had gunlock on the URE and then he said, "Where did he go? Do you still have him?" The Lakenheath RATCC informed him that the URE had made a swift circling movement and had gotten behind the Venom. The pilot then confirmed that the target was behind him and said that he would try to shake it. Since no tail radar is mentioned, the pilot presumably saw the UFO behind him.

The pilot of the Venom interceptor tried numerous evasive maneuvers, but he was unable to lose the URE, which the Lakenheath RATCC radar continuously tracked as a distinct echo behind the aircraft echo; this implies that the separation was greater than about 500 ft. According to the Bluebook report, "Pilot advised he was unable to 'shake' the target off his tail and requested assistance." After about 10 min., the first Venom pilot, who reportedly sounded "pretty scared," said that he was returning to base because he was running low on fuel. He asked Lakenheath RATCC to tell him if the URE followed him on the radar scopes. According to the Lakenheath watch supervisor, the URE appeared to follow the Venom only a "short distance" as the pilot headed SSW toward London [or Waterbeach], and then it resumed a stationary aspect.

A second Venom was vectored by Lakenheath RATCC toward the position of the URE; but before he got close enough to pick up anything, he radioed that he was experiencing engine malfunction and was returning to his base. The following conversation was monitored by the Lakenheath watch supervisor between the two Venom pilots:

Number 2: "Did you see anything?"

Number 1: "I saw something, but I'll be damned if I know what it was."

Number 2: "What happened?"

Number 1: "He—or it—got behind me and I did everything I could

BENTWATERS-LAKENHEATH URE/UFO CONTACTS August 13-14, 1956.

No.	Time	Radar contacts	Visual contacts	Remarks
1	2130 Z	Bentwaters GCA, AN/MPN-11A.	Not confirmed.	Not AP.
2	~2135—2155 Z	Bentwaters GCA.	Not confirmed.	Possible AP.
3	2200 Z	Bentwaters GCA.	Not confirmed.	Not AP; possibly same as No. 4.
4	2255 Z	1. Bentwaters GCA.	2. Bentwaters control tower. 3. C47 a/c at 4000 ft over Bentwaters. Apparently same time as radar contact.	Not AP; No. 5 could have been same "object."
5	0010—0330 Z	1. Lakenheath RATCC, CPS-5. 2. Lakenheath GCA, CPN-4. 3. Venom airborne, A-1. All coincidental at various times (airborne contact when a/c was on scene).	Ground observations not confirmed. 4. Pilot of Venom made visual contact coincidental with the three radar contacts.	Not AP or radar malfunction; may have been No. 4 from Bentwaters.

to get behind him and I couldn't. It's the damndest thing I've ever seen."

The pilot of Venom Number 1 also stated that he had radar gun-lock for several seconds so "there was something there that was solid."

Following this strange "chase," the URE did not immediately disappear from the Lakenheath RATCC radar. In the words of the night-watch supervisor, "The target made a couple more short moves, then left our radar coverage in a northerly direction—speed still about 600 mph. We lost target outbound to the north at about 50-60 mi., which is normal if aircraft or target is at an altitude below 5000 ft (because of the radiation lobe of that type radar [a CPS-5])." The time of loss of contact was not given by the watch supervisor; according to the Blue-book file the time was about 0330Z.

The night-watch supervisor also stated "all speeds in this report were calculated speeds based on time and distance covered on radar. This speed was calculated many times that evening. . . ."

Discussions

The interpretations and analyses that have been made of this intriguing UFO incident are almost as numerous as the investigators themselves. The investigating U.S. Air Force officer wrote: "My analysis of the sightings is that they were real and not figments of the imagination. The fact that three radar sets picked up the targets simultaneously is certainly conclusive that a target or object was in the air. The maneuvers of the object were extraordinary; however, the fact that radar and ground visual observations were made on its rapid acceleration and abrupt stops certainly lend [credence] to the report. It is not believed these sightings were of any meteorological or astronomical origin." We quote this statement, although these are hardly the words of a careful, scientific investigator.

J. Allen Hynek, the well-known UFO consultant to the Air Force, wrote in part: "It seems highly unlikely, for instance, that the Perseid meteors could have been the cause of the sightings, especially in view of the statement of observers that shooting stars were exceptionally numerous that evening, thus implying that they were able to distinguish the two phenomena. Further, if any credence can be given

to the maneuvers of the objects as sighted visually and by radar, the meteor hypothesis must be ruled out."

The Condon Report in its analysis of this incident states: "In conclusion, although conventional or natural explanations certainly cannot be ruled out, the probability of such seems low in this case and the probability that at least one genuine UFO was involved appears to be fairly high." The meaning of this last statement (by the present author) has puzzled some later investigators; in this context a "genuine UFO" was meant to imply precisely that; there was a material object, it was flying (in the sense of moving through the air), and it was (obviously) unidentified. Hence, the conclusion that there was a "genuine UFO" was not meant to imply, for example, that the UFO was necessarily of extraterrestrial origin.

In Chapter 5 of the Condon Report, "Optical and Radar Analyses of Field Cases," the analysis of this report concludes with: "In summary, this is the most puzzling and unusual case in the radar-visual files. The apparently rational, intelligent behavior of the UFO suggests a mechanical device of unknown origin as the most probable explanation of this sighting. However, in view of the inevitable fallibility of witnesses, more conventional explanations of this report cannot be entirely ruled out."

Philip Klass (private communication) believes that the Lakenheath RATCC radar was malfunctioning because of a faulty MTI unit; he feels that once the radar evidence has been explained, the rest can be accounted for by either confusion of witnesses or conventional causes.

The reader may draw his own conclusions as to which of the above "explanations" seems the most likely. However, a few things are worth pointing out in summary:

1. The possibility that meteors might have accounted for these events seems to be easily ruled out, and it was so discounted by early investigators.

2. Visual mirage is ruled out by the large angles (i.e., simultaneously seen over a control tower and under an aircraft) at which the UFOs were observed and by the manner and directions of movement.

3. Anomalous propagation of radar seems equally unlikely as an over-all explanation. All but No. 2

of the UREs at Bentwaters were apparently moving either almost opposite to or across the prevailing winds, ruling out ground objects seen by partial reflections from moving elevated inversions (or other layered structures). Such reflections produce false targets that appear to be at twice the range and twice the height of the reflecting layer, and appear to move in the direction of the prevailing wind but at an apparent speed twice as great. Thus the group of echoes (No. 2) observed from 2135 to 2155Z moved generally from the SW (exact azimuth not given) at "80-125 mph," commensurate with winds of 40-63 mph from the same direction. The actual winds are given as 260 deg/45 mph at 10,000 ft and 260 deg/63 mph at 16,000 ft. Although the reported stationary episodes of the merged echoes at the two points shown on the map would, taken at face value, rule out the moving-layer reflection hypothesis, there remains a possibility that this may have been the cause of the No. 2 URE contact at Bentwaters. This hypothesis can be ruled out, however, for the other URE episodes at Bentwaters, and particularly for those at Lakenheath.

The "disappearance" of URE No. 4 as it overflowed the Bentwaters GCA station was mentioned in the Condon Report as being "suggestive of AP" [anomalous propagation], and so it is. The elevated-layer partial reflection phenomenon that causes this type of AP involves a reflection coefficient that is typically proportional to the inverse sixth power of the elevation angle of the radar beam (cf. Wait, 1962; Thayer 1970). Thus caused by a moving layer, if such a false target appears to approach the radar site, the signal will drop below the noise level when the beam elevation exceeds some critical angle; the false target will often reappear on the other side of the radar when the beam angle once more drops below the critical value. With a fixed-elevation PPI display radar, this results in a "zone of invisibility" around the site with a radius on the order of 5-15 mi. in which the target disappears.

Two additional factors seem to point to AP as a possible cause for URE No. 4:

1. Radar operators who are familiar with their sets will not normally report the "disappearance" of a target unless they do not expect it,

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which would preclude targets that enter the radar's normal "blind zone" (if it has one).

2. The target was "lost" at 2 mi east but reacquired at 3 mi. west, an asymmetry that is possible with AP but not usual with radar "blind zones."

However, a strong factor argues against the AP hypothesis in this instance: the URE was moving almost opposite to the prevailing winds. In addition, because of the apparent speed of the URE, it should have reappeared about 3.5 mi. west of the radar on the second PPI sweep after "losing" it 2 mi. east (on the first sweep it should have been almost over the radar, and probably not visible to it), so that the "asymmetry" can be assigned to the "digital" sampling by the PPI sweep-scan display. It is therefore most *unlikely* that URE No. 4 was caused by AP, a conclusion also reached in the Condon Report.

The Lakenheath episode (URE No. 5) is even more unlikely to have been caused by AP. That the complicated, stop-and-go maneuvers described by the Lakenheath night-watch supervisor could have been caused by AP returns, and at that on two different radars operating on different frequencies and scan rates, is almost inconceivable. Ghost echoes have often been observed that will appear to "tail" an aircraft echo—sometimes the radar will even track a jet-exhaust plume—but such echoes never stop following the aircraft and become stationary, as did the Lakenheath URE.

In summary, although AP may possibly have been a factor in the No. 2 Bentwaters sighting, it is not possible to assign the rest of the events reported to propagation effects, even aside from the visual confirmations.

Possible malfunction of radar equipment, and especially possible malfunction of the MTI on the Lakenheath RATCC radar, has been suggested as a cause of these UREs. It is true that a malfunctioning MTI unit could conceivably produce false echo behavior similar to that observed at Lakenheath. However, the coincident observation of the URE by the Lakenheath GCA radar, a different type, and later by the Venom's airborne radar, seems to rule out this hypothesis. The detection of an apparently stationary target while the radar was on MTI is not as surprising as it seems. A vi-

brating or rapidly rotating target will show up on MTI radar even if it is not otherwise in motion.

Thus, none of the conceivable "simple" explanations for the events at Bentwaters and Lakenheath seems to hold up under investigation. Moreover, the credibility of the accounts is increased by the number of redundant radar and visual contacts made coincidentally. The table on page 62 summarizes these redundancies, which are seen to be present primarily for events No. 4 and 5 (Bentwaters URE-UFO No. 4 and the Lakenheath UFO).

One slightly disturbing aspect of these contacts is that the Lakenheath RATCC radar operators failed to "pick up" Bentwaters UREs 1 through 4, even though they should have been well within range. (A target at 5000 ft, for example, should have been visible anywhere west of the coastline in the vicinity of Bentwaters). Note that URE No. 1 was headed almost directly at Lakenheath at the time it was lost by Bentwaters GCA. Of course, it is possible that the radar did pick up these objects and that, for various possible reasons, the operators did not notice or report them.

Conclusions

In conclusion, with two highly redundant contacts—the first with ground radar, combined with both ground and airborne visual observers, and the second with airborne radar, an airborne visual observer, and two different ground radars—the Bentwaters-Lakenheath UFO incident represents one of the most significant radar-visual UFO cases. Taking into consideration the high credibility of information and the cohesiveness and continuity of accounts, combined with a high degree of "strangeness," it is also certainly one of the most disturbing UFO incidents known today.

Bibliography

1. Condon, E. U., Project Director, and D. S. Gillmor, Editor, "Scientific Study of Unidentified Flying Objects," Bantam Books, New York, 1968.
2. McDonald, J. E. (1970), "UFOs over Lakenheath in 1956," *Flying Saucer Review*, Vol. 16, No. 2, pp. 9-17.
3. Thayer, G. D. (1970), "Radio Reflectivity of Tropospheric Layers," *Rad. Sci.*, Vol. 5, No. 11, pp. 1293-1299.
4. Wait, J. R. (1962), "Electromagnetic Waves in Stratified Media," Pergamon Press, Oxford, pp. 85-95.



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LUNAR AND PLANETARY LABORATORY

8 October 1966

Dr. James McDonald
Institute of Atmospheric Physics
Campus

Dear Jim:

As I told you Wednesday evening by phone, I was terribly sorry to have missed your Wednesday colloquium; but I was present on your Thursday presentation except for a brief interruption when I was called away. I could not stay for the discussion, however, because of an appointment immediately following.

Since you have asked my opinion on these matters from time to time, let me summarize them here. It is apparent that many of the UFO reports have not been analyzed with the necessary scientific competence so that the explanations offered are sometimes wide off the mark. Obviously, stars or planets cannot explain many of the phenomena reported. On the other hand, just because six or seven terrestrial explanations made before appear wanting, it does not follow that the extraterrestrial explanation is now the least unsatisfactory. Incidentally, the assumption of multiple simultaneous missions to the U. S. from distant planets is rather extraordinary after we have gained some experience with the cost of a single planetary mission to another planet every two years. Remember: only one earth has an oxidizing atmosphere!

I would draw a comparison with the law of conservation of energy in classical physics. One would certainly not challenge the validity of this law on the basis of fragmentary observations by unskilled observers made during intervals that are often only matter of seconds. If one wanted unusual explanations, I would rather favor the supposition that the ghosts of the Aztecs or Incas are returning to this continent.

In other words, while you are right criticising the superficial treatment some of these phenomena have been given in the past, a conclusion so extraordinary as yours would require a scientific backing many orders of magnitude stronger than available. In my judgment the only defensible position a scientist can take here is that there are unexplained (terrestrial) atmospheric phenomena.

Sincerely yours,

A handwritten signature in dark ink, appearing to read "G. Kuiper".

Gerard P. Kuiper

GPK:ie

NORTHWESTERN UNIVERSITY
EVANSTON, ILLINOIS 60201

DEPARTMENT OF ASTRONOMY

LINDHEIMER ASTRONOMICAL RESEARCH CENTER

September 11, 1970

Dr. James McDonald
Department of Atmospheric Sciences
The University of Arizona
Tucson, Arizona 85721

Dear Jim:

I have been going over your Lakenheath article in the FSR. I have gotten out my files on the case and, incidentally, if you are still interested in the names that were razor-bladed out of your copy, the A/2c was John L. Vaccars, Jr. and the Technical Sergeant was Elmer L. Whenry. The names of the two interceptor pilots were First Lieutenant Charles V. Metz and First Lieutenant Andrew C. Rowe. Incidentally, also, I personally dismissed the meteor hypothesis immediately as is pointed out in the Condon Report, page 255 of the Bantam Edition.

However, all that aside, maybe you have some information that I don't have about the case, namely the thing that would tie down the passage of an object from east to the west, directly over Bentwaters, simultaneously visually sighted by the tower operators and by the pilot overhead at 4,000 feet. In the letter to Condon, all we have is a third-hand statement. The writer states, "He said the tower reported seeing it go by..." So the writer is telling us that he heard from somebody else that the tower operator told him.

Now the Bentwaters report which covers the period 2120Z to 2220Z says nothing about an object passing directly overhead, although Vaccars indicates that at 2130, for a period of 30 seconds, he saw something go from 25 to 30 miles east-southeast of Bentwaters and fly on a constant course of 295 degrees to 15 to 20 miles west-northwest of Bentwaters. This would indicate that it passed overhead, but nothing is said of the object disappearing from the scope which would mean that it did not pass directly overhead, for it would have disappeared for a short time if that were the case.

The Lakenheath Report states that at 2255, Bentwaters sighted an object 30 miles east of station and that this object did disappear 2 miles east of station and then appeared 3 miles west of station. But now comes the catch: "Tower personnel at Bentwaters reported to GCA that a bright light passed over the field east to west at terrific speeds and at about 4,000 altitude". But at no place is it indicated that this was at 2255. The next paragraph goes on, "At the same time, pilot and aircraft at 4,000 feet..." That "at the same time" seems to me to refer not to 2255 but to the time the Tower personnel reported the bright light passing over the field.

TO: Dr. James McDonald
 September 11, 1970
 Page Two

Have you in any way been able to establish that the radar and visual sightings were indeed simultaneous? This would be a most important point in this whole thing and I, indeed, hope that you can. Nothing in my records, however, really pins this down.

I wonder whether the 2255 might in itself be in error? It seems that with all the things going on at Bentwaters from 2120 to 2220, that Lakenheath would certainly have been alerted earlier than 2255. Yet, the letter to Condon indicates that Lakenheath was not alerted until they had sighted the target going directly over them. Two points: why would have Bentwaters waited so long to alert Lakenheath and secondly, why is not the 2255 observation (if it is real) appearing in the report from Captain Holt and approved by Major Bixel? In that report it is stated, "Most significant are the reports of three sources of UFO beams tracked on the Bentwaters GCA radar". It seems to me that it would have been much more significant to have reported the simultaneous visual radar sighting because a visual object swooping by at low altitude and observed from the ground and from and below an aircraft, and simultaneously tracked on radar would have been far more significant than the radar alone sightings between 2120 and 2220. What do you think?

If the 2255 should, indeed, be 2155, it would tie in with the first period of Bentwaters sightings (if there were two periods) but why in this case would not Captain Holt have mentioned it?

Any light that you can shed on this most important case would be appreciated.

I am pleased that you did mention in your article my memorandum which strongly urged "that further information on the technical aspects of the original observation be obtained, without loss of time..." Needless to say, nothing whatever was done and you would have had to know Captain Gregory and his totally warped personality (his one and only aim in life was to become Major) and he certainly was not going to do anything whatever to go against the Pentagon which had been told in no uncertain terms by the Robertson Panel that there was nothing to the whole subject. But then, you never have understood this and probably never will. Or perhaps you are beginning to understand somewhat as you note that your serious, strong, and I might say even emotional attempts to have the military and the scientific establishment take the subject seriously, have not exactly met with outstanding success. And yet the climate for acceptance today is, in my opinion, an order of magnitude more favorable.

One thing I will always have to thank you for and that is the day you came to my office and pounded the desk and said, "Allen, how could you sit on this data for 18 years and not let us know about it?". It was like a revelation to me. Here at last was finally one real scientist who was taking the subject seriously! Up to that point, I was becoming obsessed with the idea that "everybody was out of step but Johnny" and it was a great spiritual uplift to find at long last, another scientist seriously looking at it. I

TO: Dr. James McDonald
September 11, 1970
Page Three

will freely admit that I originally approached the subject very skeptically for the first decade or so, largely because, as you well know, Blue Book data were so abysmally poor and no attempt was ever made to upgrade them, even when I repeatedly suggested this. So, despite your criticisms, I do have much to thank you for and I hope we may work together productively in the future.

Sincerely yours,



J. Allen Hynek
Director

JAH/al
CC: Charles Bowen

MEMORANDUM FOR RECORD

SUBJECT: (C) Evaluation of Lakenheath Reports

1. The original Lakenheath reports and the preliminary evaluations made by ATIC were submitted to the undersigned for examination, evaluation and comment. Writer requested permission to discuss these with Dr. F. L. Whipple, Harvard University, and director of Smithsonian Astronomical Observatory, in view of the fact that sightings occurred at the time of Perseid meteors and Dr. Whipple is a world-recognized authority on meteors. Following comments will accordingly be invited to cover the three points separately.

2. It is to be regretted that so unusual a sighting report did not contain more factual material on which to base an evaluation. The Lakenheath report is one of the more unusual UFO reports, involving electronic and visual observations and subsequent pursuit by fighter plane. Yet, report does not state whether it was definitely established that visual and electronic sightings referred to same object, or even if they occurred precisely simultaneously. Further, report does not give exact weather information which might enable one to charge weather conditions, with any precision relative to "anomalous propagation" such as frequently occurs with radars.

3. It would be of extreme value to have independent statements from the various observers both at Bentwaters and Lakenheath. Report states that observers were traffic controllers and intelligence specialists. An analyst would be greatly aided by having independent statements from such highly trained observers, as the original report indicates the observers were.

4. The implication of the original report is that the objects were sighted simultaneously by ground-visual, air-electronic and ground-electronic means. Yet, report nowhere states stellar magnitude of visual sightings or nature of radar blips. Angular rate of motion of objects is likewise not included.

5. With the above in mind, the preliminary reports submitted by Capt. Gregory covers the case as well as it possibly could, under the circumstances. The present writer, upon more detailed examination of the report, and accepting the implications of the original report in the absence of specific statements, is led to differ somewhat from preliminary report. It seems highly unlikely, for instance, that the Perseid meteors could have been the cause of the sightings, especially in view of the statement of observers that shooting stars were exceptionally numerous that evening, thus implying that they were able to distinguish the two phenomena. Further, if new credence can be given to the maneuver of the objects as sighted visually and by radar, the meteor hypothesis must be ruled out.

CLASSIFICATION CHANGED TO UNCLASSIFIED, EFFECTIVE 15 MARCH 1968, UNDER THE AUTHORITY OF AFR 205-1, PARA 2-176 (ii), BY MAJ HECTOR QUINTANILLA, JR.

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SUBJECT: (C) Evaluation of Lakenheath Reports (Cont)

6. Meteors, however, as pointed out by Capt Gregory, can lead to radar returns because of the ionization of the gases in their trail. Accordingly, it would be extremely important to know whether the Bentwaters and Lakenheath radars have ever in the past observed meteors on their scopes and, if so, how such returns differ from the blips reported here.

7. Dr. Whipple and the writer discussed the Lakenheath incident at length and Dr. Whipple pointed out immediately the statement that "radars reported these facts to occur at later hours than the ground observers". This statement needs clarification inasmuch as it contradicts other portions of the report which indicate that at least at certain times visual and radar sightings were simultaneously.

8. Dr. Whipple stated that as far as the report at hand is concerned, no obvious physical solution is suggested. He deplored the inadequacy of the typical UFO report as a scientific document. He further stated that the nature of such reports is not likely to change and urged that if the Air Force was serious in its attempts to resolve this problem, both scientifically and in the public mind, that the Air Force do more than continue its passive investigational attitudes. He suggested that, as in any scientific procedure, facts are the raw material from which one must work and that in general the investigator in any particular case must assume an active roll in the obtaining of scientific data. In short, Dr. Whipple asked the writer whether the Air Force had ever considered or was now considering the possibility of initiating, for a limited time, an actual sky patrol by photographic and visual means of precisely those areas from which the maximum UFO reports originate. The writer responded that this had indeed been suggested in the past but that because of considerations of expenses and of possible public misinterpretation, it was abandoned.

9. Dr. Whipple urged that a more modest proposal of the same general type be considered at this time. For instance, an area from which numerous reports have come in might be patrolled by a dozen or so "fish eye" cameras, operating automatically, which would give a total record of all bright moving objects at night within a given area or sector. A simple timing device would suffice to yield the angular rate of objects motion so that fire balls (bright meteors) could be distinguished from airplanes and from other astronomical objects.

10. The present writer submits that it might be of considerable, potential use to the Air Force to be able to state, at some future time, that a careful patrol of an area "rich in UFO reports" had been patrolled and nothing of a mysterious character photographed. This would be especially true if, during the time of patrol, UFO reports from untrained observers continued to come in from that area.

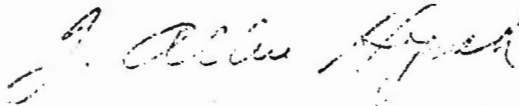
11. The Lakenheath report could constitute a source of embarrassment to the Air Force, and should the facts, as so far reported, get into the public domain, it is not necessary to point out what excellent use the several dozen

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SUBJECT: (C) Evaluation of Lakenheath Reports (Cont)

UFO society^{ies} and other "publicity artists" would make of such an incident. It is, therefore, of great importance that further information on the technical aspects of the original observations be obtained, without loss of time from the original observers.



Dr. J. Allen Hynek
Smithsonian Astrophysical Observatory
USAF UFO Scientist-Consultant
17 October 1956

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UFOs and the CONDON REPORT

James E. McDonald
 Institute of Atmospheric Physics
 The University of Arizona

(Material prepared for the Medical Students Colloquium, University of Arizona College of Medicine, January 30, 1969.)

2. August 13-14, 1956, Lakenheath RAF Station, England (Case 2, Bantam 163-164, 248-256)

The Report terms this "the most puzzling and unusual in the radar-visual files." It is a complex case, and I shall have to study the original Project Bluebook case-file before I shall be satisfied on certain details on which the Condon Report leaves me confused. The following summarizes the more clear-cut features of the case report.

Control tower personnel at RAF Station C (so designated in Report, evidently Bentwaters RAF Station) sighted a glowing object moving from west to east over the airfield at an altitude estimated at several thousand feet. Simultaneously, a radar unit at Station C tracked an unknown travelling westward at 2000-4000 mph, and the pilot of a C-47 flying at 4000 ft above C reported concurrently that "a bright light streaked under his aircraft travelling east to west at terrific speed." The time of these events was evidently 2257 on the 13th (see below for still earlier sighting at Station C); the whole series of sightings extends over about 5-6 hours.

RAF Station C alerted RAF Station B (which I infer to be Lakenheath RAF Station and will hereafter so designate it). The report filed with Project Bluebook evidently was prepared at Lakenheath, by USAF personnel stationed there and involved in at least the radar-tracking aspects of the incident. (The Condon Report quotes verbatim from portions of what appears to be the teletype transmission of the UFO report from Lakenheath, filed according to the standard form stipulated in USAF Regulation 200-2. Unfortunately, readers are not told that they can eliminate a large amount of the confusion in interpreting the array of answers to unstated questions on pp. 253-4 of the Bantam edition by merely turning to pp. 824-5, where the standard Air Force format is given.)

Evidently ground observers at Lakenheath saw two luminous objects, which are described as round white lights, equal in angular size to a golf ball at arm's length. (Here is a good example of the needless confusion created by failure to refer the reader to AFR 80-17 in the Report Appendix; most readers will mistakenly think the ground observers described the actual size as about that of a golf ball, since they will be unaware of the "arm's length" stipulation built into that particular question of the standard form.) No discernible details were seen by the ground observers, but they noted the unusual feature that the luminous object was "traveling at terrific speeds and then stopping and changing course immediately." They remarked that

the "flight path was straight but jerky with object stopping instantly and then continuing", a pattern also observed on radar. For example, "(Lakenheath) Radar Air Traffic Control Center observed object 17 miles east of Station making sharp rectangular course of flight. This maneuver was not conducted by circular path but on right angles at speeds of 600-800 mph. Object would stop and start with amazing rapidity."

When first sighted visually by Lakenheath ground personnel, the objects were at an estimated altitude of 2000-2500 feet and were on a SW heading, when suddenly "object stopped and immediately assumed an easterly heading." (The switch from singular to plural is painfully typical of the shortcomings of many Bluebook reports filed under AFR 200-2.) The report next notes that, at a later time (unspecified), Lakenheath tracked the unknown from a point 6 miles W to a point about 20 miles SW "where target stopped and assumed a stationary position for five minutes." That target next began moving northwesterly, came in to within 2 miles of the Station, and again stopped. "GCA reports three to four additional targets were doing the same", so there were evidently as many as four or five unknown objects airborne near Lakenheath during this incident.

The references to GCA, "ground-controlled approach", that run through the report are confusing, since a GCA radar is not a search or tracking radar, but a fixed-beam glide-path radar. Without seeing the original Bluebook report, I am uncertain as to how to interpret this point of confusion. My guess is that the CPS5 search radar and not the CPN4 GCA radar provided the key data. I suspect that, in most of the passages where "GCA" appears, one should read "ATC", for "air traffic control". At least part of this confusion is evidently due to those who prepared the Condon Report because they state that the USAF non-commissioned officer who first called this incident to their attention in early 1968 was the "Watch Supervisor at the GCA station", whereas his own letter makes clear he was "Watch Supervisor...in the Radar Air Traffic Control Center" at Lakenheath.

In that non-com's letter, quoted at length on Bantam pp. 248-251, he describes how, at one point, he and his radar operators watched the previously stationary target start moving at a speed of 400 to 600 mph to the NNE until it reached a point about 20 miles NNW of Lakenheath. He comments that "There was no slow start or buildup to this speed, it was constant from the second it started to move until it stopped." "The target made several changes in location, always in a straight line, always at about 600 mph and always from a standing or stationary point to his next stop at constant speed." The non-com also recalled a very puzzling feature that is confirmed in the Bluebook report on the case: Although the search radars had full MTI (Moving Target Indication), designed to remove all stationary targets plus those moving at speeds below some lower limit that was evidently about 40 knots for these radars, the MTI did not take out the blip of the unknown(s) during seemingly stationary hovering periods that

varied from about 3 to 6 minutes. (Could this have been due to high-speed but small-amplitude motions not resolvable on radar?)

The Bluebook report, summing up the radar and ground-visual data comments: "The fact that three radar sets picked up the targets simultaneously is certainly conclusive that a target or object was in the air. The maneuvers of the object were extraordinary; however, the fact that radar and ground-visual observations were made on its rapid accelerations and abrupt stops certainly lend credence to the report."

The non-com's letter describes the successive stages of airbase-alert over these unknowns, culminating in RAF decision to scramble Venom interceptors, a step also spelled out in the Bluebook report. The first of two Venoms (Mach 0.8 single-jet DeHaviland fighter flown by the RAF in 1949-62 period) was vectored in on one of the UFOs. The pilot radioed that he had a "bright white light in sight", but, as he moved to within about a dozen miles of it, the light suddenly disappeared. Next, Lakenheath ATCC vectored him to another target 10 miles east of the Station. The pilot reported that he had the unknown on his airborne radar and that he was locking on. But, after brief lock-on, the unknown disappeared from the pilot's radar screen. His radio query to ATCC radar controllers as to what had happened was answered with the information that the unknown had taken up a position on the tail of the aircraft. The non-com's letter states that several of his radarmen saw (on radar) the unknown swing around at very high speed to take up the pursuing position. He further emphasizes that, to try to break the tail-chase, the Venom pilot "tried everything -- he climbed, dived, circled, etc., but the UFO acted like it was glued right behind him, always the same distance, very close, but we always had two distinct targets," as the pilot continued for an estimated 10 minutes to try to elude the unknown. The Bluebook report puts that portion of the incident more briefly: "RATCC requested pilot acknowledge this chase. Pilot acknowledged and stated he would try to circle and get behind the target. Pilot advised he was unable to 'shake' the target off his tail and requested assistance. One additional Venom was scrambled from the RAF Station. Original pilot stated, 'clearest target I have ever seen on radar.'" The RAF first pilot, low on fuel, started back to his home field. "The target (UFO) followed him only a short distance, as he headed SSW, and the UFO stopped and remained stationary", the non-com states.

The second Venom was vectored towards the UFO, but failed to make contact before developing some mechanical malfunction that necessitated a return to base. The Bluebook report states that, at RAF Station C, where the first unknown was detected shortly before midnight, "three other radar targets...behaved in a similar manner and intercept attempts made from 2130 to 2215 GMT by an American T-33 jet aircraft were fruitless." (Note those times. They seem to imply that, at least an hour before Station C alerted Lakenheath at 2255 GMT, one or more unknowns had been radar-tracked near C and that intercept was attempted prior to alerting Lakenheath. Evidently this entire UFO incident lasted over five hours.)

The discussion of the foregoing UFO incident in the Condon Report, after considering but rejecting anomalous radar propagation as an explanation of such a sequence, ends in the concession of "the probability that at least one genuine UFO was involved" here. In another discussion of the same case within the Condon Report (Bantam p. 164), it is suggested that "the apparently rational, intelligent behavior of the UFO suggests a mechanical device of unknown origin as the most probable explanation of this sighting." I concur; but I must ask how, with a case such as this before him, Condon could say that there's nothing of any scientific interest in the UFO problem.

I believe that nothing in today's aerospace technology, here or abroad, can account for performance characteristics of the type observed near Lakenheath by ground and airborne visual observers and by ground and airborne radar that night. Yet cases equally puzzling have lain in the Bluebook files for even longer than the 12 years during which the Lakenheath case has been gathering dust there, and I can vouch for the fact that the Condon Project had still other Air Force cases similarly puzzling in nature, yet omitted them from its final Report (for example, the Fukuoka, Japan, Oct. 15, 1948, F-61 radar-visual case that I have discussed at last year's Congressional UFO Symposium). A case like Lakenheath cries out for scientific attention, yet Condon proposes that the Air Force, the government, and the scientific community ignore such cases. Has he really studied his own Report?

The Lakenheath case, as well as the 1957 B-47 case discussed below, were not known outside of Air Force circles prior to their appearance in the Condon Report. Evidently Air Force UFO consultant J. A. Hynek was aware of the Lakenheath case, since his views on possible role of the Perseid meteors are cited in the Bluebook report on the case (Bantam, 255). But, to my knowledge, no other students of the UFO problem had ever heard of this interesting case; and the Texas B-47 incident was not even known to Hynek, apparently, since no report was even filed at Bluebook by ADC after that Air Force incident. The fact that these two very impressive Air Force-related UFO cases have been made public via the Condon Report seems to me only one of numerous considerations arguing quite strongly against any suspicions that the Condon Project is part of a high-level coverup. I reject that hypothesis and view lack of interest in the UFO problem and a documented prior judgment, not cloak-and-dagger work, as the primary factors shaping the negative final conclusions and recommendations of the Condon Report.

Testimony of a Fighter Controller (Probably Freddy Wimbledon).

FSR Vol. 24, No. 1
June 1978

"Mail Bag"

instructions to their subordinates; if so, I am not aware of the terms of those instructions.

6. There has been a great deal of rumour of British Governmental official action in regard to UFOs nearly all of which is without adequate foundation and is mostly spurious or, at best, exaggerated.

The letter from a UFO investigator encloses photostats of pages 38 and 39, 42 and 43 from John Keel's book, 'UFOs: Operation Trojan Horse.' It claims that a general officer of the Army was appointed by the Air Ministry to fill an established vacancy in a UFO study project. This implies Treasury sanction; it suggests that in the middle of the War against Germany when we had our hands full and it was far from certain that we could survive, the Air Ministry was concerned that a UFO menace existed: it most certainly was not. The letter names a general who is not included in my earliest 'Who's Who' of 1955. So, unless he died meanwhile, he did not exist in the British Army. I think you will form the impression which I formed that here is one more case of a wild and baseless rumour being pursued by serious investigators. I trust that UFO investigators will, in future, check their facts by means other than appealing to me! Yours faithfully,

Victor Goddard,
Meadowgate,
Brasted,
Westerham, TN16 1LN
August 10, 1978.

UFOs over Lakenheath

Dear Sir,—Although the Blue Book and Condon reports, and subsequent reports by Dr. J.E. McDonald appeared a long time ago, my attention has only recently been drawn to them. This is a pity, as an awful lot of genuine UFO investigators have been misled for several years.

I will not concern myself with the early reports of random sightings prior to 23.00 hours on the nights of 13/14 August 1956 as that was the time I went on duty, and the officer I relieved had reported nothing unusual.

What does concern me, however, is the subsequent report made by the Watch supervisor on duty at Lakenheath RTCC. Admittedly the statements were made after a lapse of some years, which could account for the fiction.

Point 1. The *Venom* night fighter was never at any time under the control of Lakenheath RTCC, so was not vectored onto the target by them.

Point 2. At no time did the pilot say, "Roger ... I've got my guns locked on him."

Point 3. *Venom* No. 1 did not return to base short of fuel.

Point 4. At no time did the pilot of *Venom* No. 1 hold an airborne conversation with the pilot of *Venom* No. 2. This conversation according to the report was "...monitored by the Lakenheath Watch Supervisors." This was impossible because the radio frequency channel in use by the RAF pilots would neither be known nor be available to that Supervisor. Only I and my Interception Team would know that frequency.

Here are the true facts:—

I was Chief Controller on duty at the main RAF Radar Station in East Anglia on the night in question. My duties were to monitor the Radar picture and to scramble the Battle Flight, who were on duty 24 hours a day, to intercept any intruders of British airspace not positively identified in my sector of responsibility.

After this length of time I cannot confirm whether it was a moonlight night or not, but I remember Lakenheath USAF Base telephoning to say there was something "buzzing" their airfield circuit. I scrambled a *Venom* night fighter from the Battle Flight through Sector and my Controller in the Interception Cabin took over control of it. The Interception Control team would consist of one Fighter Controller (an Officer), a Corporal, a tracker and a height reader. That is, 4 highly trained personnel in addition to myself could now clearly see the object on our radar scopes. I also took the precaution of manning a second Interception Cabin to monitor and act as "backup" to the first.

The report speaks of the pilot being alone and using the airborne radar, which is another nonsense, as the *Venom* night fighters carried a pilot and a Radar Operator/Navigator who sat, very cramped with his AI Radar, to the right of the pilot.

After being vectored onto the trail of the object by my Interception Controller, the pilot called out, "Contact", then a short time later, "Judy" which meant the Navigator had the target fairly and squarely on his own radar screen and needed no further help from the ground. He continued to close on the target but after a few seconds, and in the space of 1 or 2 sweeps on our scopes, the object appeared behind our fighter. Our pilot called out, "Lost Contact, more help," and he was told the target was now behind him and he was given fresh instructions.

I then scrambled a second *Venom* which was vectored towards the area but before it arrived on the scene the target had disappeared from our scopes

and although we continued to keep a careful watch was not seen again by us.

I am highly suspicious of many facets of the early reports by the GCA operators at Bentwaters and Lakenheath, being thoroughly conversant with "angels", A.P. and spurious responses which are prevalent in that area, but the fact remains that at least 9 RAF ground personnel and 2 RAF aircrew were conscious of an object sufficiently "solid" to give returns on Radar.

Naturally, all this was reported and a Senior Officer from Air Ministry came down and interrogated us. [P.S. My name is known to the Editor of *FSR*], to whom I have spoken, but for obvious reasons is not for publication.

R.A.F. Fighter Controller (Rtd.)

Aime Michel on Hypothesis

Dear Sir,—After reading your Editorial in *FSR* Vol. 23, No. 5 (February 1978) may I suggest a simplified classification of the hypotheses concerning the UFOs?

1) We have, on the one hand, the hypotheses advanced by the ufologists: parallel worlds, phantoms, ETH, etc.

2) On the other hand we have the statements made by the astronomers who speculate about life in the Universe without taking the UFOs into their consideration, and basing their thinking solely on their own knowledge of the Universe. (1)

The result of the speculation of these astronomers is that they end up envisaging phenomena of a "magical" type, with a "very high strangeness index," occurring within the environment of the Earth. We might quote for example T.B.H. Kuiper of the Jet Propulsion Laboratory, who says:

"Curiously, if the UFO phenomenon is approached from the point of view of looking for evidence of extra-terrestrial visits, it is precisely the "strangest" reports, close encounters of the second and the third kind, which are the most easily understood." (2)

(I hope you appreciate this word "curiously"! — A.M.)

Thus, this gives us two categories of UFOs:—

- The UFOs of the ufologists, which are still totally undefined and unexplained, and,
- the UFOs envisaged by the astronomers — UFOs which are interpreted entirely within the

of UFO believers and their mass suicide tragedy). This claimed that the U.S. government ended all interest in UFOs in 1969 when, very plainly, that can only be characterized as a lie.

Although Condon's report was used to close down the USAF Blue Book, the 1000-page study itself makes fascinating reading. At least one-third of the cases it reviewed were rated to be unexplained by the largely skeptical scientists after 2 years of research into them. Undoubtedly, the one they rated the most highly was this extraordinary affair in August 1956 in East Anglia.

Gordon Thayer, the radar expert and optical physicist who studied it most thoroughly, was no UFO believer. But of this episode he writes, "...this is the most puzzling and unusual case in the radar/visual files. The apparently rational, intelligent behavior of the UFO suggests a mechanical device of unknown origin as the most probable explanation of this sighting."

Condon's overall conclusions even added that "the probability that at least one genuine UFO was involved appears fairly high."

Even if this case were unique in the final Colorado University report—and it is not—nobody can read those words and say, as some have tried to do, that the Condon investigation disproved UFO reality. Their 2-year study provided some of the best positive evidence for a genuine mystery.

When news of the East Anglia "night of the UFOs" reached the British UFO community from the U.S. 14 years after it had happened, our own investigations soon turned up two significant leads.

First, a group of civilian witnesses, who had seen a jet aircraft and a glowing light in close proximity on the ground, was traced. From all that can be ascertained, this appears to have been the same event. The ground sighting occurred at Ely in Cambridgeshire and that location fits in with the details known about the flight of the intercept mission. The UFO was described, as by all the other witnesses to it, as an orangey-yellow or white fuzzy light.

The next breakthrough came in 1978 after the retirement of Squadron Leader Freddy Wimbledon. He decided to tell of his role in a major case. That case turned out to be this one. Wimbledon confirms that he was the man who ordered the intercept mission after the radar and visual sightings had been reported to his office. He was at first concerned about the possibility of an enemy attack but says that no conclusion could be reached about the outcome of the intercept once the results were assessed.

Wimbledon does recall that one of the aircraft used the correct security codes to identify a radar lock on (the code word was "Judy"), and he believes it had a visual sighting with an object that at first appeared in front of them and then, in an instant, flew directly behind!

However, the real fortune in this case came in January 1996 when I scoured the newly released data in the PRO at Kew. I came upon a note about the case that the MoD UFO office had constantly stated it knew nothing about. "You tell us about this one, we don't tell you" was how one MoD civil servant had put it to me when I quizzed her about their

failure to find any evidence regarding such undeniably powerful events. Whatever the MoD chose to say, there was a memo dated May 2, 1957, buried away and hard to find. It was easy to miss because it was only part of an Air Ministry briefing given to a senior politician who was about to answer questions tabled in the House of Commons about UFOs. The questioner was an MP in whose constituency there had just been sightings.

The briefing file from the Air Ministry advises that there had been three UFO encounters during the previous year (which included August 1956) whose presence had been detected by radar. Very brief comments were given about each one, but it was sufficient to indicate that one was the Lakenheath/Bentwaters affair. Yet, interestingly, it suggested there was no visual contact from the intercepting aircraft, which did not gel with the American report of Squadron Leader Wimbledon's recall.

Of course, there must have been a larger file from which this memo was once prepared, and so the MoD clearly did have a report on the case in 1957. What has happened to it since then we do not know. Nevertheless, using all of this information, other data from the PRO, the resources of the BBC—for whom I was then making a TV documentary—and, it has to be said, a very liberal dose of good luck, one of the crew of the intercept was found. He was a now retired RAF officer, and I went to Kent to interview him. He agreed to put his testimony on film.

Even better news was that he had kept in touch with his old colleagues, and, within days, we had located two of the other three crew members aboard the two-man Venom aircraft involved in the intercept. One of these, the other navigator, also agreed to put his statement on camera. The missing crew member (one of the pilots) had emigrated some years before and was not traced.

Eventually, with the help of the BBC and the kind disposition of the USAF, I met up with both navigators back at Lakenheath and they were able to relive the incident. They had been scrambled from another base but flew over Lakenheath and Ely during the intercept. They did not recognize the name of Freddy Wimbledon; but this is not surprising, as he was not stationed on their base but was the night battle center commander for the whole of East Anglia that August evening, and the two jets simply responded to his launch order that had been issued from a remote protected bunker. Remember, at the time, there were fears that World War III was imminent!

We can be completely sure that these three men were aboard the correct aircraft, because both crews had retained their logbooks and these gave full accounts of their movements on the night of August 13–14 at just after midnight when the intercept occurred.

What was really fascinating was that none of these men were aware of the significance of the case. After filing routine reports upon landing, they had not been debriefed in any unusual manner. They had not been interviewed by the staff from any UFO project. In fact, until I told them that

their intercept was hailed as one of the classic cases of UFO history, they did not even appreciate that they had been in pursuit of a UFO at all! They just considered it a peculiar radar target.

The aircrew agreed that this had been an unusual intercept, and they had all remembered it very well over the 40 years. It had been unusual because they were sent to intercept a target over land, when in all other instances the object detected by radar was still out over the North Sea, picked up by radar on its way towards the U.K. "Normally, if we were being sent to intercept while something was flying over Cambridge, it would already be way too late!" one navigator explained. Another oddity was the height of the mission. Spy planes do not come in under 4000 feet over land, as this object was doing. It would make them far too vulnerable to being shot down. The RAF crews had never before or since been sent on a mission so close to the ground.

There were a number of discrepancies between their accounts and the official version provided in the USAF files. But they all agreed with each other, so I am confident this is the correct sequence of events.

Neither aircraft developed a malfunction and had to leave the area. One Venom was launched first and saw nothing, so it returned to base. However, the second jet picked up the object before the first had left the area and, thus, it heard the intercept being described and participated indirectly in that sense.

The second Venom did indeed have a radar intercept of the target, but the navigator says that he never saw anything visually. Unfortunately, the pilot concerned has not been interviewed, and it is possible that he did see the object. But the other three witnesses seriously doubt that idea because he never mentioned the fact to them either during the mission or at any time afterwards. Was he perhaps the source of the claims about a visual encounter and is his subsequent silence evidence that he was the only crew member effectively gagged? Given the other men's stories, I find this unlikely.

As for the nature of the target, they came upon it while it was stationary and at no time did it move at speed to fly behind them, as the USAF record claims. Rather, what appears to have occurred is as follows: "We flew towards the object and, because it was stationary and we were moving so fast, the thing was behind us before we could react. We kept flying in circles attempting to home in on the target, but this was not possible. Eventually, low on fuel, we had to return to base."

There is an obvious source of confusion here. The UFO did appear to move from the front to the rear of the aircraft "in an instant," but not because of any intent on its part. It was, as a consequence of the target, hovering dead still in the sky combined with the fast closing speed of the RAF jet.

I did ask the crews whether they thought the target could have been a weather balloon hanging in midair. This would probably have been invisible in the dark. They noted it had been a very clear and well-illuminated

night, and although a balloon was not impossible, they did not think they would have missed it. Also, the radar target was very strong and solid—not like a balloon at all. Finding one at 4000 feet that was neither rising nor falling also seemed to them to be rather unlikely.

However, what probably convinced them most that this case was more significant than a balloon was the information conveyed by the USAF ground staff at Lakenheath, which was guiding them by radio during the mission. "They kept telling us about the remarkable motions of the radar target before we had arrived. It was clear that they had never seen anything like this and that it had moved from the North Sea to its hovering position too fast for a balloon."

I also added that Philip Klass, an aviation journalist from Washington, D.C., who has written a number of skeptical books about UFOs, had suggested that the Venom pilot (he erroneously thought it was a single-seater aircraft) had mistaken the light of Orford Ness lighthouse off the coast 20 miles east of Ipswich. This brought great amusement as well as more sober comments, such as "But he has never talked to us" and "We were nowhere near Ipswich" or "We did not even see anything and this thing was 4000 feet up in the air." I am fairly confident that we can rule out Klass's attempted interpretation.

While these aircrews may not have been aware of the importance of that night, it certainly had an impact at the MoD. Ralph Noyes was not working for the air chief marshal by now and his new role had no direct contact with UFO data. But he heard about this case. He could hardly not have done so because, he says, "It was all over the MoD. Everyone was buzzing about that night." Furthermore, he states that:

Coastal radar had picked up the objects and, at first, they were moving at 4000 mph. A response simply had to be made. Our first response was to check if the radar was showing false returns. It was not. The Venom was the fastest jet aircraft we had at the time. Two aircraft were simultaneously aloft and detected these objects on their own aircraft radar, and the pilot supposedly had a visual sighting. A game went on for 30 minutes. One object came to a dead halt and then made rings round our aircraft.

Noyes reported this account from personal experience before members of the aircrew were traced, and you can see how his recall of the matter generally fits in with their subsequent testimony. You can also see why the matter was so significant to battle-hardened MoD sources. It had multiple radar trackings from the ground, and visual sightings from the ground looking up and from the air looking down. The chances of some kind of illusion being responsible appear negligible.

Noyes states:

Those events certainly caused a major inquiry and the Ministry buzzed with this story for weeks. Inquiries were held. Nobody was found to be to blame. Nobody had mishandled equipment. No damage had been done. No expla-

nation was found. Something had gone on and we did not know what. We had to assume retrospectively that it was a defense threat.

And yet, the MoD would have you believe that only 5 years later it destroyed all its records about this incident and now knows absolutely nothing about it.

You might find it even harder to believe this claim when you realize that 2 weeks later something similar happened all over again. Only this time, it occurred in broad daylight.

(xx.) Randles, Jenny. *UFO! Danger in the Air*. Sterling Publishing Company, Inc.: New York, N.Y., 1998. pp.50-54. (For "something similar," as mentioned by Randles, see the date: 30 August 56)

14 August. Annapolis, Maryland. (shortly before 8:00 p.m.)

Hovered over the Naval Academy. "They looked like little dishes on which you would serve cake or pie."

A news story from Annapolis said:

"Three teen-aged volunteers at the Waterwitch Fire Department early last evening saw objects they consisted to be flying saucers, and an Annapolis housewife and Naval Academy employee who saw them agreed with the boys.

"James E. Chance, 18-year-old Annapolis High School student, said he saw four silver discs with reddish overcasts [?] shortly before 8 o'clock cavorting in the sky above the Naval Academy. His observations were supported by John Jarrell, 16, and Jerry Cerrone, 16.

"Agreeing with them was Mrs. Ethel M. Paul, 19 East Street, to whose house they rushed to get a better look. 'They looked like little dishes on which you would serve cake or pie,' she said.

"Harry F. May, 65-year-old Naval Academy employee who was sitting on his porch at the time at 24 East Street, also reported seeing the objects. He said there were only three of them, however, and their color was white.

" 'They looked like great big plates,' he said.

"May reported that the objects appeared to be 'just fooling around and not making any noise. They were flying in a straight line, with one in front of the other.'

“But Mrs. Paul’s 22-year-old son, William A. Paul, who last year served seven months in the Air Force, had some doubts.

“ ‘It’s pretty hard to say what they were,’ he observed. ‘They were probably jets although I didn’t see a vapor trail. I did think I could see the outline of the stabilizer. But they were so very high and far away it was difficult to say. They could have been 20 miles away.

“Paul advances the theory that the objects were probably brilliant reflections of the sun.

“Chance said he called the Pentagon in Washington almost immediately after the boys saw them to report the findings to an officer concerned with unidentified flying objects. The objects made a check to see whether they were jets in the area, but Chance did not learn his findings. Later he called back to check with Chance on any other persons who might have seen them.

“Chance reported that three of the objects were flying slowly in a line with one beneath it. The boy’s attention was called to them at 7:57 p.m., he said, when they heard a roar and looked up to see the cause.” (xx.)

(xx.) Annapolis, Maryland. *Capital*. 15 August 56.

13 August. Manchester, England. (5:00 p.m.)

Framed between the slope of two roofs at Barton Power Station.

The English press reported:

“Was the red, glowing object which Paul Porcher saw low in the sky over Eccles last night a flying saucer—or an optical illusion?

“Mr. Porcher, of Franklin Avenue, Flixton, Manchester, is a photographer with Manchester Oil Refinery Ltd., Old Trafford.

“He said: ‘It was 5 p.m. I came out of the darkroom at work and glanced up. I saw the object framed between the slope of two roofs at Barton Power Station.

“ ‘It was about 50 yards across and 250 to 300 feet up. It seemed to have bevelled edges and was shaped like a cup upside down on a saucer.

“ ‘It remained stationary for about 15 seconds and then moved very fast toward Eccles. There was no noise and it was red in colour.

“ ‘I am not claiming to have seen a flying saucer. It may have been a reflection or an optical illusion.’

“Winton meteorologist Mr. G.S. Wood commented: ‘The formation of the clouds at that time mean that what Mr. Porcher saw could not have been a reflection of the sun on the cloud. The fact that it remained stationary for some time rules out the possibility of it being a meteor. It could not have been a comet, either, since it appeared so near.

“ ‘But this does not in itself mean that it was an optical illusion. I never rule out the possibility of flying saucers in these cases.’” (xx.)

(xx.) Manchester, England. *Evening Chronicle*. 14 August 56.

14 August. Cortland, New York. (2:00 a.m.-3:35 a.m.)

Guitarist spots reddish objects.

The Cortland paper published:

"Lynn Strauff, Cortland musician, and his brother have reported some unidentified flying objects over the city. The first in many months.

"On August 14 at 2 a.m. they spotted two faint reddish objects the size of the brightest star—comparable to Mars at this time of year.

"According to Lynn the objects came into view one at a time from the south and appeared to move over the city at 10 o'clock high. During their flight across the field of view Strauff claims they 'would come to a dead stop and get very bright at intervals.

" 'One flicked off its lights and again appeared further along the course it was following. During the time of these sightings, we saw several planes go over,' Lynn said. "They compared in no way with the objects. There was no sound or blinking lights noticeable with the UFO's—except for the one flicking off for several seconds.'

"The climax came at 3:35 a.m. when the two brothers started down the hill from which they were watching toward Cortland. David said he noticed one lone star which appeared to be just over the city.

" 'We stopped and watched this star-like object which in a minute or so began to move very slowly toward the south. All of a sudden we saw two more come into view and fall into a wide-spread line formation. Then three more appeared—making a total of six—all moving slowly in a long, fairly straight line formation toward Ithaca,' Lynn said.

" 'At this point we drove on home, awakened my mother and we all went to the outskirts of the city in time to see this same row of lights moving well into the south,' he continued.

"During their flight, he reported, each one in turn seemed to get very bright then return to its normal brilliancy. The line of lights seemed to bend once in a while.

" 'We watched this display until it was practically out of sight. There seemed to be intelligence behind these lights which looked very much like a formation of very bright stars, and could easily have been mistaken for them had they not been moving and pulsating,' Lynn said.

"He also said there was no sound noticeable during any of the time he and his brother saw the objects." (xx.)

(xx.) Cortland, New York, *Democrat*. 24 August 56.

14 August. Sir Winston Churchill.

American UFOlogist Leonard Stringfield informed New Zealand's Harold Fulton on August 14th an interesting letter had arrived:

"Forgot to tell you I got an answer from Sir Winston Churchill several weeks ago. Of course he could not venture an opinion on the subject of saucers, but said

that he hoped that I could understand his position. Naturally, I do, for his words would make screaming headlines anytime. I personally respect Churchill very much and was indeed surprised to get an answer. Don't published this fact, however, as it may lead to sour publicity and cause the top brass embarrassment—thus they may never loosen up and talk.

"Got a letter from Argentine government—sec'y of Air—requesting *Orbit*. [Stringfield's UFO publication]. Something must be behind their interest and it seems to show that 'other' governments have had some odd experiences." (xx.)

(xx.) Letter: To: Harold Fulton. From: Leonard H. Stringfield, 1017 Britton Ave., Cincinnati 27, Ohio. Date: 14 August 56. Photocopy in author's files.

20? August (1957?) Near Minneapolis-St. Paul (?), Minnesota (I can't find Hinkley or White Bear on large scale maps but White Bear Lake is just north of Minneapolis-St. Paul where, one assumes, the State Fair would be held—L.E. Gross) (about 11:30 p.m.)

Huge object glowing amber-red.

A letter to APRO states:

"On or about August 20, 1956 or '57 (It is hard to pinpoint the exact date now, but it was the first Monday of the Minnesota State Fair) I was driving home the last newsboy from the State Fair trip. I had a group of six boys to return home to towns from White Bear to Hinkley. At about 11:30 p.m., while nearing his home, we suddenly saw (and for awhile I considered it to be a false image of a so-called 'flying saucer') a large object 'coasting' in the sky along side of me, keeping at a perfect parallel to the ground. Since it was night, I was unable to get a positive perspective of this object, but guessed it to be about the size of a three-story house and about a half-block long! Then, it came to a stop and 'parked' right in the sky. By then, I had stopped the car also, and we both watched in amazement. I was able to get my wits about me again and looked at it in a more observing attitude. The fright somewhat left me too, since the object no longer appeared to be a threat. I was able to make a visual description of it in my mind so as not to forget what I was viewing. The shape of the object was 'impossible' to my estimation as it appeared too blunt to be able to travel as fast as it did when it left. Instead of the ends being tapered to a point, it appeared blunt, as the small end of an egg. There was a dome-like structure or bulge on the top about 2/3 as long as the over-all length, but in proportion to the entire structure, it was not very high. I was almost sure I was able to see inside of the dome, yet I saw nothing other than this huge blunt-shaped object, glowing in a definite amber-red, with a narrow haze encircling its entirety. When it left briefly, it was with such a burst of speed that I would estimate it reached its top speed after the initial thrust was made. I heard no noise at anytime during this sighting. I brought the boy home telling him, 'don't let it bother you...we saw an unusual reflection of some sort.' Later I felt I may have handled it incorrectly but he was so frightened I thought it best to minimize it then. About two hours later I was home, having decided to erase the incident from my mind, not even letting my wife know of it. She was awake and sensed something was wrong and thought I had experienced being at

the scene of an accident. I have driven close to a million miles by car in the past 20 years of newspaper work, about 1/4 of it being after dark. In all of this driving, I have not had any other experience that did not have a natural or logical explanation, and I would certainly like to find one for this." (See drawing by witness below) (xx.)

(xx.) Letter: To: Mr. Halstead. From: Joseph Belcastro
(no street address), Duluth, Minnesota. Date:
6 March 64. Photocopy in author's files.



21 August. North Hollywood, California. (night)

Unidentified "wild missile."

A short press account says:

"Valley police today still had not determined just exactly what it was that caused a number of telephone calls last night reporting a 'wild missile' seen cruising across the skies.

"They said they could not confirm any report of a missing missile.

"In the Sunset boulevard-La Brea area, callers said they saw a red-orange object overhead. The callers said the object appeared to be going up and down like an elevator." (xx.)

(xx.) North Hollywood, California. *Valley Times*. 22 August 56.

21 August. Passo Fundo, Rio Grande-do-Sul, Brazil. (3:00 p.m.) (See clipping)

Date of publication	8/23/56
Published at, City & State	Passo Fundo, Rio Grande do Sul, Brazil
Name of publication	O Jornal
Correspondent's name	Olavo Fontes

CLIPPING FROM O JORNAL, PASSO FUNDO, RIO GRANDE DO SUL, BRAZIL, AUGUST 21, 1956. The article describes the sighting of two flying saucers over the city of Passo Fundo at 3:00 P.M. on August 21, 1956. The objects were described as glowing, disc-shaped, and moving at slow speed. The sighting was reported by two members of the Night Police Patrol and two civilians.

TWO FLYING SAUCERS SIGHTED OVER PASSO FUNDO, RIO GRANDE DO SUL.

After a long lull in the reporting of unidentified flying objects, the first signs of a new outburst of spacecraft activity over Brazil are beginning now to appear.

On August 21, 1956, at 3:00 P.M., the city of Passo Fundo, Rio Grande do Sul was "visited" by two saucers. Flying at great height, the two brightly luminous crafts emitted a changing colorful light that made a magnificent effect on the sky. They came from the east moving at slow speed and stopped in space directly above the sleepy city. They hovered over it for fifteen minutes. All the observers described the crafts as two glowing, disc-shaped objects, very different from each other about the size. One of them was huge, but the other one was a lot smaller. They were noise-less and left no luminous trail when moving.

The sighting was reported by two members of the Night Police Patrol — Miguel Gomercindo and João B. Gomes; and by two civilians — Vites Xavier and Osmar C. Quintana.

At the end, the large saucer left silently the city towards the west and the little one disappeared into the north.

22 August. Fostoria, Ohio. (about 11:50 p.m.)

Hovered over the National Carbon Company.

The police were notified about this sighting:

"Weather wasn't the topic of conversation in Fostoria today. Instead, almost everyone was commenting on the latest 'flying saucer' report.

"Clarence Mericle, Findlay, a guard at the National Carbon Company, called the police department late Wednesday night and excitedly reported that he had just observed a strange object in the sky.

"He explained that at about 11:50 p.m. he was checking the gate at the company's new parking lot and noticed an unusual phenomenon in the sky above him.

"Mr. Mericle described the object as being approximately 60 feet in diameter and at an altitude of about 1,500 feet. He said it had an orange-colored glow and made a loud hissing noise.

"The object remained stationary for seven or eight minutes, he said, and then went straight up and out of sight." (xx.)

(xx.) Fostoria, Ohio. *Review-Times*. 23 August 56.

23 August. Covina, California. (night)

UFO spies on swimming party.

The local paper told its readers:

"A brightly-lit, unidentified object startled a group of four Baldwin Park youths on a night swimming party in the Covina Knolls area, as it flew over them twice.

"As described by Harold Medsen, 15, 13331 Waco Street, he noticed an intensely glowing, 'star-colored' ball of light while in swimming and jokingly remarked to his companions, 'there's a flying saucer.'

"A few moments later, the object began moving towards them, at low altitude, and made a swishing sound as it passed overhead. The object then raced back the way it had come.

"A few minutes later, as the boys stood outside the pool, it returned and repeated the same action, this time disappearing for good.

"Unnerved by the incident the youths hurried home to report it. Police were notified of the occurrence, the report was relayed to the Civil Defense officials.

"When pressed for a more accurate description, young Medsen could only estimate it as being 20-feet across. He said it would move slowly, and then increase speed until it was moving very fast." (xx.)

(xx.) San Gabriel Valley, California. *Daily Tribune*. 23 August 56.

27 August. McCleod, Alberta, Canada. (hour before sunset)

Estimates of optical power output.

In Dr. Peter Sturrock's *The UFO Enigma* there is this case study by Jacques Vallee:

"Case No.1: August 27, 1956.

"McCleod, Alberta, Canada.

"The witnesses in this case are Royal Canadian Air Force pilots who were flying in a formation of four F-86 Sabre jet aircraft. The planes were flying at 36,000 feet (about 11 km), headed due west over the Canadian Rockies, about an hour before sunset (Childerhose, 1958). As they were approaching a large thunderhead, R. J. Childerhose, the pilot in the second position (left side of the formation) saw a 'bright light which was sharply defined and disc-shaped' or 'like a shiny silver dollar sitting horizontal,' far below the planes but above the lower layer of clouds. It appeared to be 'considerably brighter than sunlight.'

"The sighting duration was variously quoted at 45 seconds (Childerhose, 1958) to three minutes. The pilot reported the observation to the flight leader, then took a photograph of it. That photograph, a Kodachrome color slide, was subsequently analyzed by Dr. Bruce Maccabee, who considered the hypotheses that the object was a cloud, a plasma phenomenon, or ball lightning (kugelblitz). We refer the reader to his recent article (Maccabee, 1999) while presenting here only a summary of his arguments.

"The cloud hypothesis was contradicted by two facts, namely the equal brightness of the object on both sides as opposed to the darker appearance of clouds away from the sunlight, and the fact that portions of the object were brighter than the brightest clouds.

"The plasma or ball-lightning hypothesis was mentioned by Philip Klass (1968) and by Martin D. Altschuler (1968). It is contradicted by the radiance of the object and the duration of the observation. [See Maccabee's calculations in Sturrock's book on page 220]...Maccabee finds a range 2.5×10^9 W (2,500 megawatts) to 3×10^{10} W (30,000 megawatts) for the power output within the spectral range of the film. As he rightly points out, however, 'the total power emitted over all frequencies might be much greater.'" (See picture below) (xx.)

(xx.) Sturrock, Dr. Peter.
The UFO Enigma.
 Werner Books,
 New York, N.Y.,
 1990.
 pp.217-220.



27 August. Clay, Kentucky. (2:00 a.m. - 2:20 a.m.)

Sudden ascents and descents. Triangular pattern.

Attorney Fred Bradley and his wife watched mysterious red light at 2:00 a.m. near Clay, Kentucky:

"The only visible part was a steady red light which seemed to fly in a triangular pattern and made sudden ascents and descents. I observed this object while driving for some four miles, and then I stopped the car and my wife and I watched it for approximately 20 minutes. I am positive it was not an aircraft or helicopter since I am familiar with the flight characteristics of both and neither of them could perform such maneuvers. The object appeared to be operating between ground level and 1,000 feet and was approximately three to six miles from us." (xx.)

(xx.) Letter: To: William Leet, Attorney, Security Trust Building, Lexington, Kentucky. From: Fred F. Bradley, Attorney, Seventh Floor, McClure Building, Frankfort, Kentucky. Date: 9 October 56.

27 August. Nelson, New Zealand. (12:20 p.m. - 12:50 p.m.)

Silver disc?

The Nelson paper informed its readers:

"A Nile Street resident, Mr. G. Ferguson, has reported observing an unidentified object in the sky over Nelson shortly after noon today.

"He described it as a silver disc clearly visible to himself and his family from 12:20 p.m. to 12:50 p.m. Viewed through a telescope the object appeared slightly larger but was still only a silver disc.

"Mr. Ferguson's attention was drawn to the sky by a Dakota aircraft which was circling over the city at the time. He said it appeared to circle around the object but the control tower at Nelson aerodrome has advised that no reports of anything unusual were received from the aircraft. They said it was the normal Nelson to Westport flight circling to gain height before it set a course for the West Coast.

"Mr. Ferguson said the object remained visible for half an hour after the plane had left. It did not move.

"He said he was particularly interested in the object because it resembled one seen by himself and a group of people at Cable Bay two years ago." (xx.)

(xx.) Nelson, New Zealand. *The Nelson Evening Mail*. 27 August 56.

Addendum:

"On immediate follow-up inquiries made by our Nelson representative, these additional details came to light: Mr. Ferguson said that through his three inch tele-

scope the object was round like a grapefruit and was surrounded by a glow. Our Nelson representative, who is also a keen amateur astronomer, checked on Venus with his six-inch reflector in the early morning and noted that that planet was showing a clear half-sphere shape." (xx.)

(xx.) *Official Quarterly Journal Civilian Saucer Investigation (N.Z.)*. Vol. 4, No.2. September-December, 1956. pp.13-14.

27 August. Juniata, Pennsylvania.
(10[9?]:55 p.m.)

BLUE BOOK "unidentified."

(See clipping to the right)

According to BLUE BOOK files the witness was Mrs. R.S. Pope of Juniata, Pennsylvania.

A drawing of the object by Mrs. Pope found in BLUE BOOK files is reproduced here.

PHILADELPHIA, PA., JOURNAL
Circ. D. 3,765
AUG 28 1956

Is it a Saucer?

Weird, Whirling Light Frightens Juniata Woman

A Juniata woman, just outside Altoona, is convinced today that flying saucers are real.

The woman, who requested her name be withheld, told the Altoona newspapers and television station of seeing a disc-like object that gave off a brilliant light last night.

She inquired of other persons had reported seeing the strange object, but was told that hers was the first and only report.

According to the woman, she stepped out on her back porch at 10:55 o'clock and a bright light immediately attracted her attention. She described it this way:

"In the center of my neighbor's yard, I saw a disc-like object about 2 or 3 feet in diameter about 4 feet above the ground. It was twirling like a top. Almost at the instant I looked at it, it started to rise rapidly.

"As it arose, it looked as though it had a plastic dome, but it rose so rapidly I couldn't be sure. A cold wind seemed to come from it and I felt as though I was freezing.

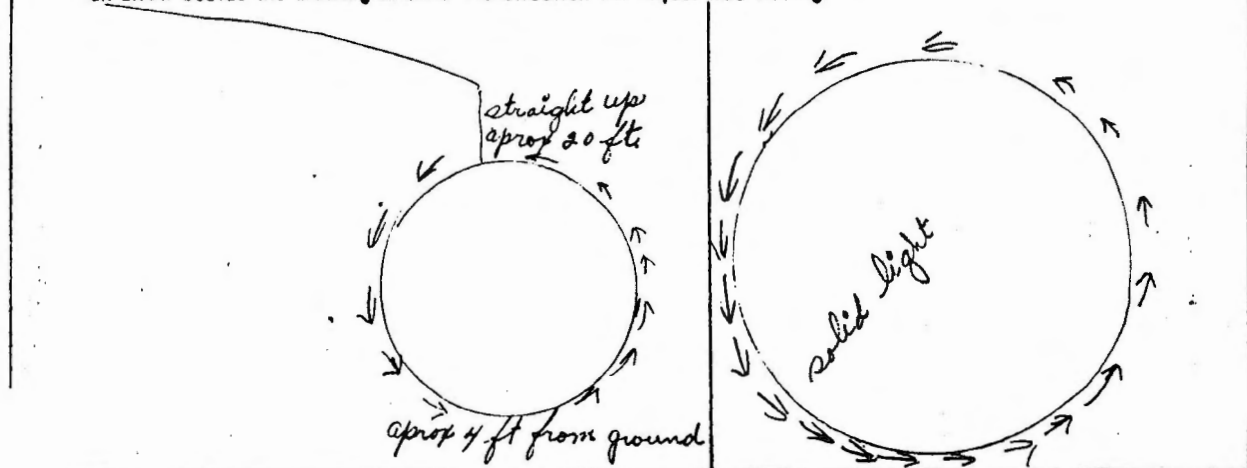
"The object rose to a height of about 20 feet. Both my yard and my neighbor's yard were as bright as day. I could see each blade of grass, the flowers, the trees and the fence railings. I never saw such a brilliant light. It wasn't white like a fluorescent light. More like a bright light globe.

"As it rose, the roof top hid it momentarily, then I saw it for a distance of about three blocks. As it went higher, it appeared to get smaller but it continued bright."

Newspapermen asked if she might have become cold from fright but she replied that although she was frightened that the chill she felt was more like a cold wind blowing on her than cold from fear.

The woman and her husband hooked up a long extension cord and used a 75 watt bulb to examine the yard but found no marks of any kind on the grass. The electric light did not show up the blades of grass, the colors of the flowers, or the fence 100 feet away as did the twirling light seen a short time before.

17. Draw a picture that will show the shape of the object or objects. Label and include in your sketch any details of the object that you saw such as wings, protrusions, etc., and especially exhaust trails or vapor trails. Place an arrow beside the drawing to show the direction the object was moving.



Dr. James McDonald's comments on the incident at Juniata:

"This particular case is an Air Force Unidentified, meaning that Project Bluebook did not attach to it any of the many types of conventional explanations used (sometimes reasonably) to account for UFOs reported to them. I first learned of it in T.M. Olsen's *Reference for Outstanding UFO Sighting Reports* (UFOIRC, Box 57, Riderwood, Md., 1966), and Olsen secured copies of the Bluebook file on this case. I located the witness by that means, and interviewed her by telephone on 2/28/68. She asked that I not use her name publicly, so I shall here only employ her initials, Mrs. R.S.P.

"She was 40 at the time of this 1956 incident. Stepping out into her backyard at 9:55 PM EST on 8/27/56 to get husband's overalls off the clothesline, she saw a brilliantly glowing object hovering only an estimated 15-20 feet away, and only a few feet off the ground. She admitted that her ability at distance and size estimates is not too good, but felt that the object was quite small, not over a few yards in diameter, and her preferred estimate was about one yard. It glowed with a blinding bluish light, illuminating the yard and hurting her eyes, Mrs. P. stated.

"She asserted that she was too stunned to move for perhaps a minute or so, and then as she moved to change her viewing point, the object rose rapidly to about 20 feet above the backyard and shot off at high speed. Its only sound was a humming noise. She described a cold draft of air that seemed to blow out from its position though her admitted fright might suggest psychological explanations for this sensation. On its upper surface was something resembling a transparent dome, and the lower part she described as disc-like [Her drawing hasn't a disc appearance unless its supposed to be a top view].

"She inquired in the neighborhood as to whether anyone else observed it. The closest neighbor did not. Another party, she heard indirectly, had seen a lighted object at about that same time, but would not discuss it openly. Mrs. P. reported it to a local radio station, which passed it on to a local paper, and the paper contacted a nearby Air Force radar unit at Claysburg. Investigators came from the latter unit, interviewed Mrs. P., and filed a routine report to Project Bluebook at Wright-Patterson AFB, Ohio, where it was classified as Unidentified.

"Remarks: Single-witness cases of this type hinge entirely on the character and reliability of the one witness. Evidently the Air Force investigators who interrogated Mrs. P. shortly after the incident were favorably impressed. My feeling was that Mrs. P.'s ability to estimate distances were most uncertain; but on all of the more qualitative features she gave quite clear and quite straight-forward comment.

"This case was one of just over a hundred that I suggested the Condon Project check. Mrs. P. said that they sent her a form, but on mailing it to them she heard no more from them. This is in accord with a general neglect of past unexplained cases which various outsiders like myself urged the Condon Project to check; they actually checked very few. The point of concern in a case like this seems to be the casual failure of the Air Force to respond to such reports. Most are given some contrived explanation; others like this are conceded (on what appears almost a random basis) to be Unidentified but are forgotten like the rest. My question would be: Does the Air Force feel that objects answering to the description of this Unidentified phenomenon are readily explainable 'in terms of present-day science and technology?'"

(xx.)

(xx.) "1968 Aug. 27 Pa. AF Unknown. JEM talk Mansfield Pa, 5/15/69." CUFOS archives. Photocopy in author's files.

27 August. Calabozo, Venezuela. (about 11:30 p.m.)

Saucer fleet? "I felt my hair stand on end."

APRO's representative in Venezuela, Joe Rolas, forwarded to Coral Lorenzen a remarkable claim that appeared in the Spanish press on the 28th. The sighting occurred at the city of Calabozo which is located in the flat, cattle raising, part of the country. According to Rolas, the sighting took place during a period of "intense saucer activity." (If true, I have little info on the flap—L.E. Gross)

Rolas' translation of a newspaper clipping is reproduced below:

"A fleet of flying saucers, cruising the sky above Calabozo, in an east-westernly direction, was spotted last night approximately at 11:30 p.m. by a number of persons who went to the correspondent and told him all about it. Messrs. Leon Febres, Miguel Talavers, Jesus Prada y Temas Hernandez, stated that, while going home late in the night, they sighted 'strange contraptions' in a 'spinning-top-like' shape, which raced at a fantastic speed, leaving behind a wake of smoke, phosphorescent smoke, which vanished rapidly. Febres, with startled face stated that after finishing a 'belas criellas' game (a game with wooden balls, softball-size, which is played on the ground, like bowling) he was going home, when suddenly he noticed that in direction to a dark spot near his place, it lit up completely, as if daybreak time. 'I stopped startled—he said to the correspondent—and I couldn't step further, it was then when I saw, above my head, and floating in the space a sort of a gigantic disc. I felt my hair stand on end and I wanted to run away but my strength failed me up. Noiselessly the strange 'air-ship' soared at an amazing speed and remaining stationary in a fixed point, new, smaller saucers started to come out of it, which in a perfect formation flew westwardsly."

(xx.)

(xx.) Caracas, Venezuela. *La Calle*. 28 August 56. APRO files. "Joe Rolas" must must have been the "Joe" that did most of the translations of Venezuelan UFO reports for APRO. This report is also mentioned in the monograph *UFOs: A History* 1956 August, page 82, without a footnote.

Dicen Haber Visto Flotilla de Platos Voladores Sobre Calabozo

28 August. Cambuquira,
Minas Gerais,
Brazil. (6:30
a.m.)

Dr. Olvas Fontes forwards
another Brazilian UFO report
to American researcher
Robert Gribble. (See clipping
and translation)

FLYING DISC OVER CAMBUQUIRA
Horizonte, 1 (Da Sucursal) de
Cambuquira, a pitoresca e quase es-
quecida estância hidromineral, che-
gam-nos três notícias interessantes. A
primeira é um assunto de natureza
por assim dizer epidêmica. Faz vá-
rios dias, noticiamos que havia apa-
recido um estranho objeto a viajar
nos céus de Santana do Jacaré. E
diziam então que, aparecido um dia
em algum lugar, outros cer-
tamente seriam vistos em lugares di-
versos. Agora a coisa se repete em
Cambuquira.
No dia 28 último, às 6.30 horas,
o sr. Jorge Noronha e mais cinco
populares viram um objeto lumino-
so, em forma de disco, sobrevoan-
do a cidade, o que se deu duran-
te cinco minutos. O disco veio do
norte, em direção do noroeste, depois
de ligeira parada, como se estives-
se observando a cidade. Voava a
uma altitude aproximada de dois
mil metros e a esta altura tinha um
diâmetro de mais ou menos 30 cen-
timetros.
O fato correu logo e toda a po-
pulação passou o dia inteiro a exa-
minar o céu. Pensa-se logo em mar-
cianos, sobretudo agora que o pla-
neta se aproxima da Terra.

Olavo Fontes
Correspondents name
Correio Da Manhã
Name of publication

29 August.

High Point, North Carolina.
(between 3:30 - 4:00 p.m.)

Doctor is a saucer witness.

According to the local newspaper:

"High Point must have held a particular fascination for flying saucers pilots this week. That, at least, would explain the report of another UFO (Unidentified Flying Object) received here this morning, the second in two days.

"Two Ground Observer Corps lookouts atop the YMCA building sighted two 'large, round, silver-like' discs over the city Thursday morning. Today, Dr. M.A. Lackey of Archdale laid claim to a prior sighting.

"Dr. Lackey said he spotted a 'perfectly round object, something like a silver dollar' traveling eastward through the High Point sky between 3:30-4 p.m. Wednesday.

"The sphere, he said, was high up and easily seen to be going at a high rate of speed.

"It continued its eastward course for a time, he said, then swerved and shot straight up and out of sight, leaving a 'trail of light' behind.

FLYING DISC OVER CAMBUQUIRA, MINAS GERAIS.

On August 24, 1956, at 6:30 A.M., Mr. Jorge Noronha and five other Cambuquira residents sighted a luminous, disc-shaped object, which hovered for five minutes over the city directly overhead. The disc came from the north and crossed the sky toward the northwest after this brief stop "as if to watch the city". It was flying at a height of about two thousand meters and had an apparent diameter of about 30 centimeters. The glowing disc appeared to be noiseless and left the city moving slowly, straight toward the northwest. The event stirred the city and the population went all through the day watching the sky. But the disc did not come back.

"Dr. Lackey said that he was alone at the time, as he had just stepped out of his house." (xx.)

(xx.) High Point, North Carolina. *Enterprise*. 1 September 56.

Thomas Townsend Brown.

Initially Vice Chairman pro tempore, Brown would be NICAP's first director.

(Serving as Vice Chairman pro tempore during organizational period)

BROWN, THOMAS TOWNSEND — Physicist, biophysicist; born Zanesville, Ohio, on March 18, 1905. The Hill School, Pottstown, Pennsylvania; Doane Academy, Granville, Ohio; California Institute of Technology, Pasadena, California; Kenyon College, Gambier, Ohio; Denison University, Granville, Ohio; special courses (Navy), Bowdoin College, Brunswick, Maine.

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29 August. Bradford, Pennsylvania. (night?)

"There's something up there."

The local press reported:

"G.B. Cohan, local jeweler, last night said his family had seen 'something' up in the sky, the kind of thing we call a flying saucer.

"The object was spotted Wednesday afternoon by three-and-one-half year old Anita, the Cohan's daughter, who was playing outside their East Main Street residence.

"Mrs. Cohan joined her daughter to look at the object and confirmed that there was 'something up there.'

"As the family recalled, the object resembled two 'soup bowls' joined together, showing a 'lip' around the circumference.

"The Cohans said they couldn't judge the object's altitude, because of its unfamiliar shape. They said it hovered in the air for about a minute, and then shot skyward with a corkscrewing motion. They were facing east as they watched the object."
(xx.)

(xx.) St. Marys, Pennsylvania. *Press*. 31 August 56.

30 August. High Point, North Carolina. (about 10:00 a.m.)

GOC observers observe UFOs. (The day after the doctor)

According to a press report:

"Two unidentified flying objects were seen over High Point yesterday by two girls on duty at the Ground Observer Corps tower atop the YMCA building.

"Described as 'large, round and silver-like' the objects were seen clearly at approximately 10:00 a.m. yesterday by Margaret Spencer and Billie Joan Sanders.

"The silvery discs were noted first side-by-side at the point of a cloud over the western area of the city. Then, they separated, one moving off to the southwest, and the other moving away into the west.

"A report on the discs was made to the Air Defense Filter Center at Charlotte by Mrs. Mabel Grayson, secretary at the local Civil Defense office, who was notified of the incident by the two girls. When Mrs. Grayson reached the tower, however, the two objects had disappeared from view.

"The possibility that the objects were weather balloons was discounted by personnel at the Friendship weather station this morning. They stated balloons released by the bureau yesterday moved off in an east-northeasterly direction.

"The objects were seen first by Billie Joan. At the time, Margaret was reporting the flight of an airplane over the city to the filter center.

" 'They were round, silver objects,' Billie Joan said. 'One was larger than the other. They just appeared suddenly in the blue sky, at the point of a cloud. They were close together, but far enough apart that I could see them both. Then, they split

up. One went to the southwest, and the other went west.'

" 'They just came and went,' Billie Joan added. 'But we could see they were not planes.'

"Margaret said she glanced up from the telephone when Billie Joan asked her to look. 'There were two round objects, silver colored,' Margaret said. 'One of them was larger than the other. They were in the west, flying side by side. They were not very high up. Then, they separated, one going southwest and the other west. They seemed to just disappear.'

"The two girls were on duty in the tower yesterday morning from 8 o'clock until a few minutes after noon." (xx.)

(xx.) High Point, North Carolina. *Enterprise*. 31 August 56.

30 August. Cali, Columbia. (night)

"The most gigantic star ever seen."

A news story from South America informed the world:

"A strange celestial phenomenon was observed last night in Cali. A star of unusual proportions caused a great sensation. The citizens kept awake well until 1:00 in the morning. Stated by eye-witnesses the 'enormous' star flicked on and off almost every two minutes and had a pale pink trail, a comet-like tail. Nobody talked about 'flying saucers,' though opinions were divers. Some stated it was a 'comet,' others that it was the most gigantic star ever seen...." (xx.)

EXTRAÑO FENOMENO CE-
LESTE OBSERVADO EN
CALI 1956

BOGOTA, Agosto 31. — (France Presse). — Un extraño fenómeno celeste se observó anoche en Cali. Una estrella de proporciones inusitadas causó gran sensación. Los habitantes permanecieron a la expectativa hasta después de la una de la madrugada.

Afirmar los testigos que la enorme estrella "se prendía y se apagaba" casi cada dos minutos y tenía una estela rosada pálida, como la cola de un cometa.

Nadie habló, empero, de platillos voladores, aunque fueron diversas las opiniones. Unos decían que era un cometa, otros que la estrella más gigantesca nunca vista anteriormente.

(xx.) Bogota, August 31st, —(France Presse) Clipping and translation from APRO files. Translation probably by Joe Rolas.

30 August. Rio de Janeiro, Brazil. (night)

Abrupt, sharp turns.

A news report from Rio states:

"Since 1947 UFOs were sighted over Rio only three times (Nov. 16, and 20 and Dec. 11, 1954). For some unknown reason they seem to have little interest about that city. So, it was a surprise to many people when, on August 30, 1956, at night, a strange object was seen in the sky by hundreds of persons gathered in the streets of Botafogo and Flamengo Beach. It was described as a greenish glowing light, brighter than a star, that maneuvered for 15 minutes over the city before finally disappearing behind the Corcovado mountain. At first the watchers thought it could be an airplane. But soon its abrupt, sharp turns, its apparently great speed, and its altitude, made clear that it was not a plane. Groups of people formed along Flamengo and Botafogo beaches to watch the scene. Two 'Sear's' jobholders, at Botafogo beach, were the first to see the UFO;

they said it was 'a greenish pinpointed light' that crossed over the 'Sugar loaf' (a mountain), at great height, and started amazing maneuvers, moving very fast. It made three or four tight circles in space, then reversed course and came back in a straight line, at great speed, to its initial position in the sky, and started again maneuvering in circles. It repeated the same game during 15 minutes and then was gone. The 'light' was sharply outlined and definitely round in shape and moving very fast all the time, but the actual speed could not be estimated, not knowing the heights.

"Dr. Lelio Gomes, Director of the National Observatory, said to the press that 'the light did not attract the attention of his staff.' 'If it was moving, it was not a star; if it was not a star, we are not interested,' he concluded." (xx.)

(xx.) Newspaper not named. Probably forwarded and translated by Dr. Olvas Fontes to Robert Gribble. Robert Gribble files.

30 August. England, between the Isle of Wight and the mainland. (daytime)

RAF pilot Wilbur Wright.

Wright was a flight lieutenant flying Javelin jets out of Odiham field on the south coast of England. On August 30, 1956, Wright and his navigator named Wallington were flying over the Solent engaged in practicing intercepts with another fighter. Wright states:

"We were flying west in line astern before separating for interception. The other Javelin was the target aircraft. We each turned through 45 degrees in different directions, flying courses at 90 degrees to each other. We were using airborne radar with a range of over 20 miles and a height indication. I was flying 627 north-west before turning southwest for interception when I saw a disk-shaped object off my starboard wingtip. It was ahead of me. My navigator obtained a radar return at 19 miles. So I used my fingernail to get an estimate of the object's size. This led to a later calculation of the object's size having a diameter exceeding 600 feet.

"We turned north toward the object on our right wing, but it had apparently slowed right down and was now maintaining its position. The other Javelin had now caught up with me and was about half a mile behind. The second pilot confirmed both the visual and air radar sighting.

"We both banked steeply and confirmed the object was at 15 miles dead ahead on radar. It appeared slightly larger in visual size. At full power, we then closed the distance to 10 miles on air radar and the object was now clearly seen as a metallic gray in appearance. I obtained a second size estimate using my little finger and the windscreen, and the diameter of this thing was exceeding 1,000 feet. At eight miles, the object suddenly climbed vertically too fast for our radar to track, but I estimated its rate of climb at five miles per second. Soon after it vanished." (xx.)

(xx.) Randles, Jenny. *UFO! Danger in the Air*. Sterling Publishing Co., Inc.: New York, N.Y., 1998. pp.54-55.

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