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UFO ENCOUNTER II

Sample Case Selected by the UFO Subcommittee of the AIAA

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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 refered 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 URE's 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.

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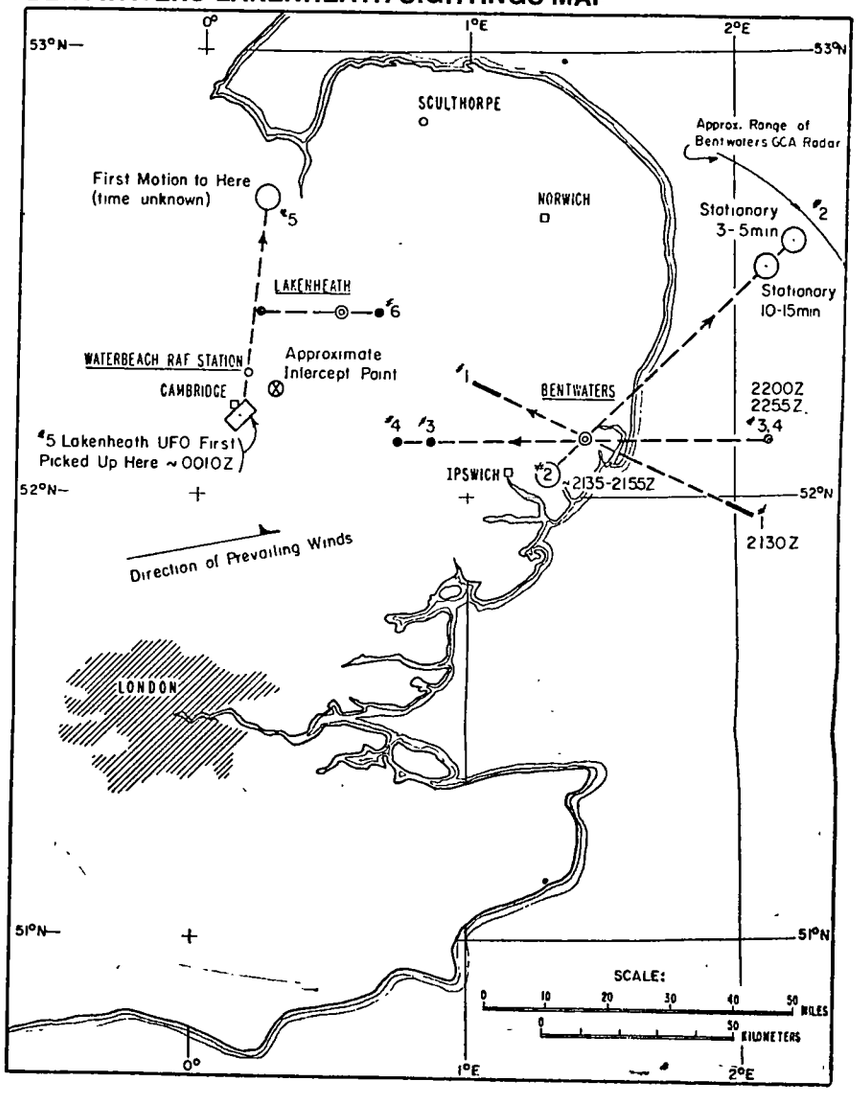
3. At 2200Z another URE (No. 3 in map) was picked up about 30 mi. east of Bentwaters and tracked to a point about 25 mi. west of the station; the tracking period was about 16 sec. The radar operator estimated the apparent speed of this URE to be "in excess of 4000 mph" but the time and distance figures 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

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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 stationary 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 manuvers, 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.

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to get behind him and I couldn't. It's the damnedest 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 overflew 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 vibrating 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.

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1956 AUG. 13-14 ENG.

Case 2

Greenwich

Summer 1956

Investigator: Staff

Abstract:

At least one UFO was tracked by air traffic control radar (GCA) at two USAR-RAF stations, with apparently corresponding visual sightings of round, white rapidly moving objects which changed directions abruptly. Interception by RAF fighter aircraft was attempted; one aircraft was vectored to the UFO by GCA radar and the pilot reported airborne radar contact and radar "gunlock." The UFO appeared to circle around behind the aircraft and followed it in spite of the pilot's evasive maneuvers. Contact was broken when the aircraft returned to base, low on fuel. The preponderance of evidence indicates the possibility of a genuine UFO in this case. The weather was generally clear with good visibility.

Background:

The existence of this very interesting radar-visual case was first brought to the attention of the project staff in winter 1968 by the receipt of an unsolicited letter from one of the principal witnesses, a retired USAF non-commisioned officer who was the Watch Supervisor at the GCA station on the night in question. This letter is rather well written, and since it forms the most coherent account of this UFO case, it is reproduced below in its entirety.

> Reference your UFO Study: you probably already have this item in your file, but, in case you don't, I will briefly outline it and you can contact me for full details if you want them.

I retired (20 years service)...from the USAF. I have placed my name, rank, and serial number at the top of the page if you want to check on my authenticity. I was an Air Traffic Controller throughout my service career and utilized radar the last 16 years in the control of Air Traffic. I won't bother listing the types and locations, although I could supply all this if needed.

In 1956, ... (I can't remember the exact date or month), I was on duty as Watch Supervisor at... [GCA A] in the Radar Air Traffic Control Center. It was the 5:00 p.m. to midnight shift. I had either four or five other controllers on my shift. I was sitting at the Supervisor's Coordinating desk and received a call on the direct line (actually I'm not sure which line it was). Anyway, it was... [GCA B] calling and the radar operator asked me if we had any targets on our scopes travelling at 4,000 mph. They said they had watched a target on their scopes proceed from a point 30 or 40 miles east...to a point 40 miles west of...[GCA B]. The target passed directly over...[GCA B] RAF Station (also an USAF Station). He said the tower reported seeing it go by and it just appeared to be a blurry light. A C-47 flying over the base at 5,000 feet altitude also reported seeing it as a blurred light that passed under his aircraft. No report as to actual distance below the aircraft. I immediately had all controllers start scanning the radar scopes. I had each scope set on a different range-from 10 miles to 200 miles radius of...[GCA A]. At this time I did not contact anyone by telephone as I was rather skeptical of this report. We were using

full MTI on our radar, which eliminated entirely all ground returns and stationary targets. There was very little or no traffic or targets on the scopes, as I recall. However one controller noticed a stationary target on the scopes about 20 to 25 miles southwest. This was unusual as a stationary target should have been eliminated unless it was moving at a speed of at least 40 to 45 knots. And yet we could detect no movement at all. We watched this target on all the different scopes for several minutes and I called the GCA Unit at ...[A] to see if they had this target on their scopes also. They confirmed the target was on their scope in the same geographical location. As we watched, the stationary target started moving at a speed of 400 to 600 mph in a north, northeast direction until it reached a point about 20 miles north northwest of ...[A]. There was no slow start or build-up to this speed--it was constant from the second it started to move until it stopped.

I called and reported all the facts to this point, including...[B] GCA's initial report, to the ...Command Post... ...I also hooked in my local AFB Commanding Officer and my Unit (AFCS Communications Squadron) Commander on my switchboard. And there could have been others hooked in also that I was not aware of. I repeated all the facts known to this point and continued to give a detailed report on the target's movements and location. 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---no build-up in speed at all---these changes in location varied from 8 miles to 20 miles in length---no set pattern at any time. Time spent stationary between movements also varied from 3 or 4 minutes to 5 or 6 minutes (possibly even longer as I was busy answering questions---listening to theories, guesses, etc. that the conference line people were saying). This continued for some time. After I imagine about 30 to 45 minutes, it was decided to scramble two RAF interceptors to investigate. This was done I believe by ... Air Force calling the RAF and, after hearing what the score was, they scrambled one aircraft. (The second got off after as I will mention later.)

The interceptor aircraft took off from an RAF Station...and approached...[A] from the southwest. Radio and radar contact was established with the RAF intercept aircraft at a point about 30 to 35 miles southwest...[and] inbound to...[A]. On initial contact we gave the interceptor pilot all the background information on the UFO, his (the interceptor's) present distance and bearing from...[A], the UFO's (which was stationary at the time) distance and bearing from...[A]. We explained we did not know the altitude of the UFO but we could assume his altitude was above 15,000 feet and below 20,000 feet, due to the operational

characteristics of the radar (CPS-5 type radar, I believe). Also we mentioned the report from the C-47 over . . . [B] that relayed the story about the light which passed below him. His altitude was 5,000 feet.

We immediately issued headings to the interceptor to guide him to the UFO. The UFO remained stationary throughout. This vectoring of the intercept aircraft continued. We continually gave the intercept aircraft his heading to the UFO and his distance from the UFO at approximately 1 to 2 mile intervals. Shortly after we told the intercept aircraft he was one-half mile from the UFO and it was twelve-o'clock from his position, he said. "Roger, ...I've got my guns locked on him." Then he paused and said, "Where did he go? Do you still have him?" We replied, "Roger, it appeared he got behind you and he's still there." [There were now two targets; one behind the other, same speed, very close, but two separate distinct targets.]

The first movement by the UFO was so swift (circling behind the interceptor); I missed it entirely, but it was seen by the other controllers. However, the fact that this had occurred was confirmed by the pilot of the interceptor. The pilot of the interceptor told us he would try to shake the UFO and would try it again. He 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. [Note: Target resolution on our radar at the range they were from the antenna (about 10 to 30 miles, all in the southerly sectors from... [A])

would be between 200 and 600 feet probably. Closer than that we would have got one target from both aircraft and UFO. Most specifications say 500 feet is the minimum, but I believe it varies and 200 to 600 feet is closer to the truth and, in addition, the tuning of the equipment, atmospheric conditions, etc., also help determine this figure.]

The interceptor pilot continued to try and shake the UFO for about ten minutes (approximate--it seemed longer both to him and us). He continued to comment occasionally and we could tell from the tonal quality he was getting worried, excited and also pretty scared.

He finally said, "I'm returning to Station, ...[A]. Let me know if he follows me. I'm getting low on petrol." The target (UFO) followed him only a short distance, as he headed south southwest, and the UFO stopped and remained stationary. We advised the interceptor that the UFO target had stopped following and was now stationary about 10 miles south of...[A] He rogered this message and almost immediately the second interceptor called us on the same frequency. We replied and told him we would advise him when we had a radar target, so we could establish radar contact with his aircraft. (He was not on radar at this time, probably had just taken off and was too low for us to pick him up, or too far away--we had most of the scopes on short range, so we could watch the UFO closely on the smaller range.) The number two interceptor called the number one interceptor by name (Tom, Frank--whatever his name was) and asked him, "Did you see anything?" Number one replied,

"I saw something, but I'll be damned if I know what it was." Number two said, "What happened?" Number one said, "He (or it) got behind me and I did everything I could to get behind him and I couldn't. It's the damndest thing I've ever seen." Number one also made a remark at this time to number two, that he had his radar locked on whatever it was for just a few seconds so there was something there that was solid. Number one then switched frequencies to his home base frequency. We gave number two the location of the UFO and advised him that we still didn't have him on radar, but probably would have shortly. He delayed answering for some seconds and then finally said, . . . [A] _____ (Identification aircraft call sign)--can't remember what call sign these aircraft were using. Returning home, my engine is malfunctioning." He then left our frequency.

Throughout this we kept all the agencies, . . . advised on every aspect, every word that was said, everything.

We then inquired what action they wanted to take. They had no more suggestions and finally they told us to just keep watching the target and let them know if anything else happened. 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 to 60 miles, which is normal if aircraft or target is at an altitude below 5,000 feet (because of the radiation lobe of that type radar). We notified . . . Air Division Command Post and they said they'd tell everybody for us.

I made out a written report on all this, in detail for the officers in charge of my facility, and was told that unless I was contacted later for further information, he would take care of it. I don't know if a CERVIS report was submitted on this or not--I heard no more about it.

All speeds in this report were calculated speeds based on time and distance covered on radar This speed was calculated many times that evening and although this happened quite awhile ago, the basic elements are correct.

Fig. 1 shows a map of the contact as drawn by the witness.

Investigation:

Since this case was discovered so late in the project, investigation was limited to a follow-up request for additional information from Project Blue Book, and analysis of the available details of the case by investigators familiar with radar and optical propagation anomalies.

Copies of the Project Blue Book files on the case were received in late August of 1968. A considerable amount of this material is reproduced below. One of the interesting aspects of this case is the remarkable accuracy of the account of the witness as given in the letter reproduced above, which was apparently written from memory 12 yr. after the incident. There are a number of minor discrepancies, mostly a matter of figures (the C-47 at 5,000 ft. was evidently actually at 4,000 ft.), and he seems to have confused the identity of location C with B; however, all of the major details of his account seem to be well confirmed by the Blue Book account.

There were ancillary sightings at . . . [C] besides those which instigated the UFO search by the . . . [A] GCA Unit but as subsequent airborne intercept attempts yielded neither radar nor visual contact, these accounts are not detailed below.

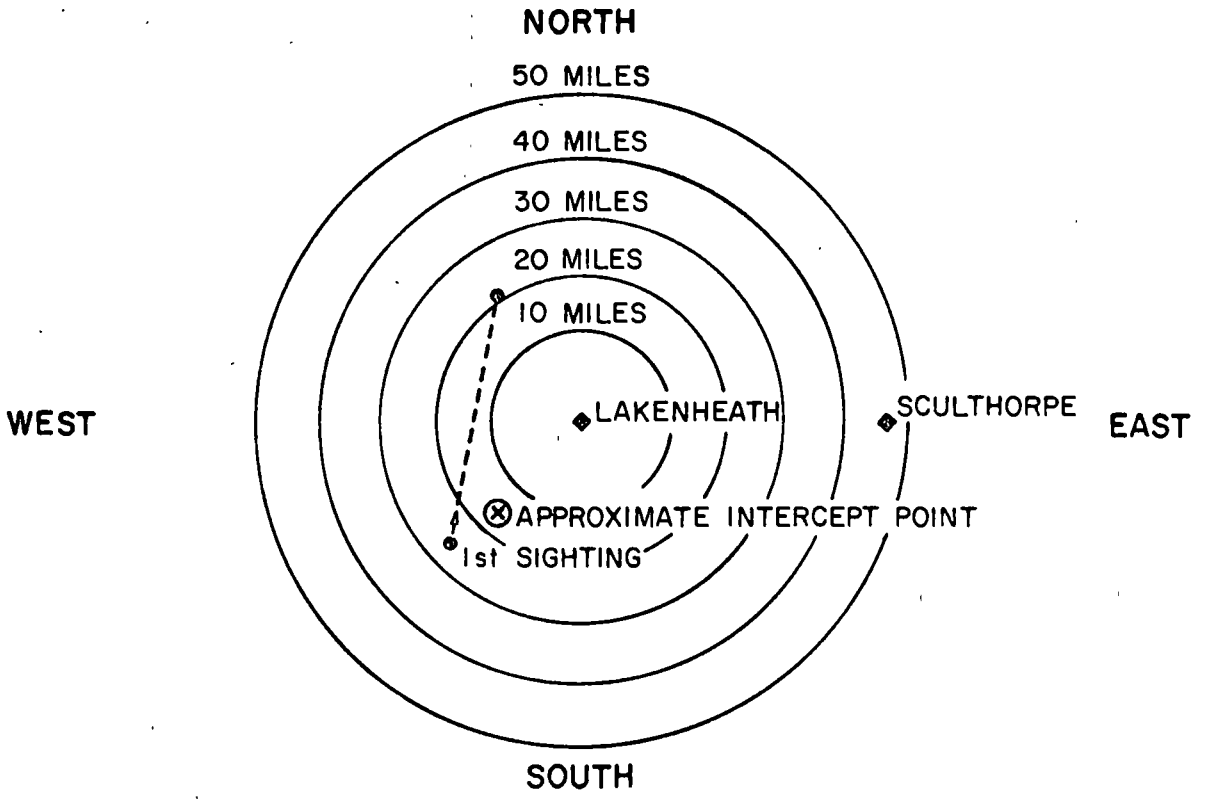
NORTH
50 MILES
40 MILES
30 MILES
20 MILES
10 MILES
WEST
LAKENHEATH
SCULTHORPE
EAST
APPROXIMATE INTERCEPT POINT
1st SIGHTING
SOUTH
FIRST SIGHTING ON RADAR
FIRST MOVEMENT AND STOPPING PLACE SEEN ON RADAR
INTERCEPT POINT BY RAF INTERCEPTOR - POINT ALSO AT WHICH RAF PLIOT REPORTED RADAR GUNSIGHT LOCKED ON UFO

Fig. 1

At 22557, ...[C] GCA sighted object thirty miles east of station traveling westerly at 2000-4000 mph. Object disappeared on scope two miles east of station and immediately appeared on scope three miles west of station where it disappeared thirty miles west of station on scope. Tower personnel at ....[C] reported to GCA a bright light passed over the field east to west at terrific speed and at about 4000 feet alt. At same time pilot in aircraft at 4000 feet alt. over....[C] reported a bright light streaked under his aircraft traveling east to west at teriffic speed. At this time....[C] GCA checked with RAF station.....[A] GCA to determine if unusual sightings were occurring ....[A] GCA alerted [the] AAA stationed at ....[A] and ....[B] GCA to watch for unusual targets. Following info is the observations made by this station radar, tower and ground personnel placed in format required by AFR 2000-2: 1. Description of object(s): (A) Round white lights (B) One observer from ground stated on first observation object was about size of golf ball. As object continued in flight it became a "pin point." (C) Color was white. (D) Two from ground observation undetermined number of blips appearing and disappearing on radar scopes. (E) No formation as far as radar sightings concerned. Ground observers stated one white light joined up with another and both disappeared in formation together. (F) No features or details other than the white light. (G) Objects as seen by ground observers and GCA radar have feature of

traveling at terrific speeds and then stopping and changing course immediately. 2. Description of course of objects: (A) Ground observers looked at sky and saw the object(s). RAF Station ....[A] GCA was alerted by ....[C] GCA to be on lookout for unusual targets. (B) Ground observers estimated objects were 20-2500 feet alt and were on a SW heading. Object stopped and immediately assumed an easterly heading. RAF Station ....[A] GCA and Air Traffic Control Center reports radar tracking from 6 miles west to about twenty miles SW where target stopped and assumed a stationary position for five minutes. Target then assumed a reading north westerly into the Station and stopped two miles NW of Station. ....[A] GCA reports three to four additional targets were doing the same. Radars reported these facts to occur at later hours than the ground observers. (C) Ground observers report no change in alt and objects disappeared on easterly heading. Radar sets stated no definite disappearance factors other than targets disappeared from scopes at approx 0330 GMT Aug 14. (D) Flight path was straight but jerky with object stopping instantly and then continuing. Maneuvers were of same pattern except one object was observed to "lock on" to fighter scrambled by RAF and followed all maneuvers of the jet fighter aircraft. In addition, ...[A] 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. (E) Objects simply disappeared. (F) Objects were observed intermittently by RAF Station....[A] radars from 140310 to 140330. 3. Manner of observation: (A) Ground-visual, air-electronic and ground-electronic. Ground-electronic equipment was TS-ID, CPS 5, and CPN4 radars. Air-electronic was A-1 airborne radar equipment in ....jet aircraft. Type of aircraft, Venom, operating out of RAF Station .... . 4. Time and date of sighting: (A) Summer 140010Z through 140330Z. (B) Night (sky clear and nin/th of clouds--moonlight). 5. Location of observers RAF Station ....[A] 52°24'N 0°33'E. 6. Weather and winds-aloft conditions at time and place of sightings: (A) Clear sky until 0300Z shortly thereafter scattered clouds at 3500 ft. (B) From midnight until 0600Z surface wind was 230 deg at 15 knots; 6000 ft 290 deg at 24 knots; 1000 ft 290 deg at 35 knots; 16,000 ft 290 deg at 45 knots; 20,000 ft 290 deg at 53 knots; 30,000 ft 290 deg at 62 knots; 50,000 ft 290 deg at 75 knots. (C) Ceiling unlimited. (D) Visibility from 0001Z to 04000Z was 10 nautical miles. (E) 1/10 of sky covered at 0300Z. 8. Ground observers report unusual amount of shooting stars in sky. Further state the objects seen were definitely not shooting stars as there were no trails behind as are usual with such sightings. 9. Interception was undertaken by one British jet fighter on alert by.... [A] sector control. Aircraft is believed to have been a Venom. The aircraft flew over RAF Station

....[A] and was vectored toward a target on radar 6 miles east of the field. Pilot advised he had a bright white light in sight and would investigate. At thirteen miles west he reported loss of target and white light. ....[A] RATCC vectored him to a target 10 miles east of .. ..[A] and pilot advised target was on radar and he was "locking on." Pilot reported he had lost target on his radar. ....[A] RATCC reports that as the Venom passed the target on radar, the target began a tail chase of the friendly fighter. 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." Target disappeared and second aircraft did not establish contact. First aircraft returned to home Station due to being low on fuel. Second Venom was vectored to other radar targets but was unable to make contact. Shortly afterwards, second fighter returned to home Station due to malfunctions. No further interception activities were undertaken. All targets disappeared from scopes at approximately 0330Z. 10. Other aircraft in the area were properly identified by radar and flight logs as being friendly. All personnel interviewed and logs of RATCC lend reality to the existence of some unexplainable flying phenomena near this air field on this occasion. Not an Air Base; however, the controllers are

experienced and technical skills were used in attempts to determine just what the objects were. When the target would stop on the scope. The MTI was used. However, the target would still appear on the scope. All ground observers and reports from observers at ....[C] agree on color. Maneuvers and shape of object. 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 credulance to the report. It is not believed these sightings were of any meteorological or astronomical origin.

The material on the ....[C] sightings given at the beginning of the preceeding account is typical; three other radar targets tracked by that station behaved in a similar manner and intercept attempts made from 2130 to 2215 GMT by an American T-33 jet aircraft were fruitless.

An analysis of this case from the viewpoint of possible anomalous propagation was made and appears in Chapter 7, Section VI.

Conclusions:

In view of the multiple radar sightings involved in this case, any conventional explanation for the occurrences reported would seem to require some sort of radar anomalous propagation. As pointed out in Chapter 7, the evidence for anomalous propagation in this case is rather uncertain. The temporary disappearance of the target as it appeared to overfly the ....[C] GCA is quite suggestive of anomalous propagation. The generally clear weather was conducive

to the formation of the atmospheric stratification that causes anomalous propagation, although it by no means follows that such formation would have actually occurred. In this connection, the apparent near-coincidence between the appearance of broken clouds (0330 GMT) and the disappearance of the radar targets (0330 GMT) could be significant.

On the other side must be balanced the generally continuous and consistent movements of the radar tracks reported by . . . [A], which are not at all typical of radar false targets caused by anomalous propagation. In addition, some of the maneuvers reported in the radar controller's letter to have been executed by the UFO are extremely unlikely to be duplicated by a false target, in particular stopping and assuming a new path after following the intercepting aircraft for some time. The comments of the Air Force officer who prepared the UFO message reproduced earlier are also significant.

In an early Air Force investigation it was suggested that the visual sightings might have been caused by the Perseid meteors. However, as Air Force Consultant Dr. Hynek pointed out:

> 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.

Dr. Hynek also remarked:

> The statement that radars reported these facts to occur at later hours than the ground observers' needs clarification inasmuch as it

contradicts other portions of the report which indicate that at least at certain times visual and radar sightings were simultaneous.

In retrospect it appears that what the statement in question may have been meant to imply was that the radars *continued* to report target (s) after visual contact had been lost; the statement does not necessarily imply that no simultaneous radar-visual sightings occurred.

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.

1956 AUG. 13-14 ENG.

at 50,000 ft. and 270°/33 knots at 55,000 ft. the plotted track of the UFO is consistent with the observed upper winds. The blip was first "painted" at a 240° azimuth, which may explain where that quantity originated in the UFO movement report.

Conclusion: almost certainly a weather balloon. Note that the winds reported for the Wright-Patterson AFB 1000 LST show winds blowing first from the east, then from the SSE, ultimately from the west at higher altitudes. These winds were blowing in such a manner that it is conceivable that Wright-Patterson's own radiosonde balloon may have been the UFO in this incident.

76-B. Near Charleston, W. Va., 4 May 1966, 0340 LST. Weather: Severe thunderstorms in area. Pilot of a Braniff Airlines Boeing 707 flying at 33,000 ft. observed on his left side what appeared to be a fast-flying aircraft with landing lights. Braniff's airborne radar recorded this unknown. Pilot requested the radar operator at Charleston sector of Indianapolis ARTC to look for traffic at his 8:30 or 9:00 position, and the radar picked up a track in this position. Return made a sweeping turn and disappeared off scope to the southwest.

An American Airlines pilot flying 20 mi. behind the Braniff plane saw the object. It appeared to him to be a normal aircraft with landing lights. This pilot stated he had often seen such aircraft with lights during AF refueling missions.

Estimated speed of the unknown was 750-800 mph.. No unusual maneuvers were performed or any that were beyond known military aircraft capabilities at the time. AF explanation is that the unknown was an aircraft with landing lights on. This is consistent with the reported facts.

Case 2. Lakenheath, England, 13-14 August 1956, 2230-0330 LST. Weather: generally clear until 0300 LST on the 14th. (For details see Section IV.)

The probability that anomalous propagation of radar signals may have been involved in this case seems to be small. One or two details

are suggestive of AP, particulary the reported disappearance of the first track as the UFO appeared to overfly the Bentwaters GCA radar. Against this must be weighed the Lakenheath controller's statement that there was "little or no traffic or targets on scope," which is not at all suggestive of AP conditions, and the behavior of the target near Lakenheath -- apparently continuous and easily tracked. The "tailing" of the RAF fighter, taken alone, seems to indicate a possible ghost image, but this does not jibe with the report that the UFO stopped following the fighter, as the latter was returning to its base, and went off in a different direction. The radar operators were apparently careful to calculate the speed of the UFO from distances and elapsed times, and the speeds were reported as consistent from run to run, between stationary episodes. This behavior would be somewhat consistent with reflections from moving atmospheric layers -- but not in so many different directions.

Visual mirage at Bentwaters seems to be out of the question because of the combined ground and airborne observations; the C47 pilot apparently saw the UFO below him. The visual objects do not seem to have been meteors; statements by the observers that meteors were numerous imply that they were able to differentiate the UFO from the metoers.

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.

...13 Aug...
at Lakenheath, England.

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AF FORM 112—PART II
...

AIR INTELLIGENCE INFORMATION REPORT

...	13 Aug 56	PAGE 3 OF 4

Sgt [redacted] added that these objects appeared as normal targets on the PPI scope and that normal checks made to determine possible malfunction of the GCA radar failed to indicate anything was technically wrong. Sgt [redacted] estimates that the unidentified objects in this group moved at the rate of between 80 and 125 miles per hour. He computed this speed by using the range markers on the GCA scope.

Sgt [redacted] added that another UFO was sighted on the GCA radar at about 2200Z, 13 August 1956. This object was tracked on the radar screen for approximately 16 seconds. Course of the object being tracked was from about 30 miles east of Bentwaters to approximately 25 miles west of this station. Speed of this object was estimated to be in excess of 4000 miles per hour. All radar returns appeared normal on the scope for this object except for the last return which seemed slightly weaker than the rest. Sgt [redacted] explained that object suddenly disappeared off the radar screen by rapidly moving out of the GCA radiation patterns. Light conditions were night. Weather was clear with good visibility and light winds.

A/2C [redacted].

The following information pertaining to an Unidentified Flying Object sighted electronically on the Bentwaters GCA at 2130Z, 13 August 1956 was submitted by A/2C [redacted], GCA Operator, 126thth AACS Squadron, USAF Station Bentwaters, England.

Airman [redacted] indicated that he tracked one Unidentified Flying Object on the Bentwaters GCA screen for approximately 30 seconds at 2130Z, 13 August 1956. The size of the Blip when picked up was that of a normal aircraft target. The Blip diminished in size and intensity to the vanishing point before crossing the entire radar screen.

The unidentified flying object was picked up at an estimated 25 to 30 miles east south-east of Bentwaters and flew a constant course of 295° to the vanishing point on the scope which was 15 to 20 miles west north-west of Bentwaters at an undetermined altitude. Airman [redacted] estimated the speed of this object to be in the vicinity of 6000 miles per hour. This speed was calculated by comparing the speed of the object on the GCA scope with speeds that the operator is familiar with on the electronic simulator. A/2C [redacted] added that some idea of the speed of the object could be computed from the fact that each time the GCA antenna completed a revolution the Blip from this object moved 4 to 5 miles on the radar screen. The GCA antenna completes a revolution once every two seconds. The weather was reported as clear with unlimited visibility.

Lts [redacted] and [redacted]

On 30 August 1956 the following information was received from 1st Lt [redacted] and 1st Lt [redacted] concerning their aerial search for subject unidentified flying objects. Lts [redacted] and [redacted] are pilots assigned to the 512th Fighter Interceptor Squadron, Bentwaters, England. The above named officers indicated that they were returning to Bentwaters from a T-33 flight at about 2130Z, 13 August 1956. At this time they were vectored to the area east of Bentwaters to search for unidentified flying objects which were being tracked by the Bentwaters GCA. Lts. [redacted] and [redacted] stated that they searched the areas to the north-east, east, and south-east of Bentwaters for approximately 45 minutes. Altitude of flight was between 2000 and 5000 feet. Results of this aerial

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UNCLASSIFIED

13 Aug 56

Lakenheath

Box 9703
1125th FAG (ATIC)
Wright-Patterson A FB,
Ohio
26 November 1956

Dr. J. Allen Hynek
Smithsonian Astrophysical Observatory
60 Garden Street
Cambridge 38, Massachusetts

Dear Dr. Hynek:

Reference is made to my letter of 20 November 1956 in which I stated that I would send you the finalized material on the Lakenheath case. Inclosed you will find AF 112 on the final investigations regarding this sighting.

I am relieved to find that they carry it under an unclassified category. This, of course, helps us in both the discussion and transmittal aspects.

I have included a rough plot of the three radar and one visual observations of the sightings. This should be of some help for your review and comment. These sightings, in my opinion, cannot be considered as concurrent with respect to time. The separate report of each observer indicates three widely divergent tracks. An attempted intercept by American airplanes, which lasted for 45 minutes, produced no physical evidence of any UFO in the area. The visual observation leads me to believe that the observer was seeing Mars. Also, there appears to have been some contact (I do not wish to use the word "collusion") between the operator of two radar stations since they both state speed of exactly 4000 m.p.h.

I feel, therefore, that our original analyses of anomalous propagation and astronomical is more or less correct. I will consider this case closed upon receipt of your final comment, at which time I will make a compiled, final conclusion for the Air Force.

A word concerning our proposed visit. As things are now it seems improbable that any plans can be made before the middle of January.

Sincerely,

2 Incls

D Hynek

Military Activity Reporting: England	Report No: EB-1-56

1025624

AIR INTELLIGENCE INFORMATION REPORT

Country or Area Report Concerns: England	Date of Information: 13 August 1956	
Activity Submitting Report: 81st Fighter Bomber Wing	Date of Collection: 27 August 1956	SRI Status (If applicable): SRI No. Cancelled/Completed
Preparing Individual: Captain Edward L Holt	Date of Report: 31 August 1956	SRI No. Cancelled/Incomplete
Name or Description of Source: USAF Personnel, Bentwaters, England	Evaluation: B-3	SRI No. Active. Additional Information on (Date)

References (Cite Subject, previous reports, etc., as applicable)

Subject (Descriptive title. Use individual reports for separate subjects)

(Unclassified) Unidentified Flying Objects Reporting (UFOB)

Summary (Give summary which highlights the salient factors of narrative report. Begin narrative text on AF Form 112a unless report can be fully stated on AF Form 112. List inclosures, including number of copies)

Between 2120Z and 2220Z, 13 August 1956, Unidentified Flying Objects were reported observed visually and by ground electronic means by USAF personnel stationed at RAF Station Bentwaters, England.

Most significant are the reports of three courses of UFOBS tracked on the Bentwaters GCA Radar. These UFOBS flew courses as follows: 1 group of 12 to 15 UFOBS FROM a point 8 miles SW of Bentwaters to approximately 40-45 miles SE of Bentwaters at an estimated speed of 80 to 125 miles per hour; a single UFOB was tracked by the Bentwaters GCA from approximately 25 miles SE of Bentwaters to approximately 15 miles NW of Bentwaters at a speed estimated at more than 4,000 miles per hour; a third UFOB was reported as tracked by the Bentwaters GCA from approximately 30 miles E. of Bentwaters flying a westerly course to about 30 miles west of Bentwaters at an exceptionally high speed.

The GCA Operators making these radar sightingswere of the opinion that malfunctions of the GCA Equipment did not cause these radar sightings.

(19)

APPROVED:

Orville E. Bixel

ORVILLE E BIXEL
Major, USAF
Wing Intelligence Officer

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WARNING: This document contains information affecting the national defense of the United States within the meaning of the Espionage Laws, Title 18, U.S.C., Sections 793 and 794. Its transmission or the revelation of its contents in any manner to

The following information was obtained from USAF personnel assigned to RAF Station, Bentwaters, England concerning visual and radar sightings of Unidentified Flying Objects in the vicinity of their assigned station during the period 2130Z to 2220Z, 13 August 1956. The reliability of all the following sources of information is estimated to be usually reliable.

S/Sgt Wright.

On 27 August 1956 the following information concerning subject Unidentified Flying Objects was received from S/Sgt Lawrence J. Wright, Central Tower Shift Chief, 1264th AACS Squadron, RAF Station Bentwaters, England.

Sgt Wright indicated that his attention was first called to the object by its position, size and unusual color. He was also aware that the Bentwaters GCA was tracking Unidentified Flying Objects by radar at this time. Sgt Wright described the UFO as spherical and the size of a pin-head held at arms length. He sighted only one object which was described as amber color when first observed later changing to bluish-white. No discernable details or features were observed and no sound from the object was noted. Sgt Wright sighted the object from the Bentwaters Control Tower visually with the aid of 7 X 50 power binoculars. Time of his sighting was between 2120Z and 2220Z, 13 August 1956. He indicated that the object was first observed at about 10° elevation toward the south east. The object was in sight for approximately one hour during which time it intermittently disappeared and reappeared. At the time of the object's disappearance, it was located approximately 40° above the horizon in south south-easterly direction. Light conditions during sighting: dusk to night. Sgt Wright indicated that the sky was clear with unlimited visibility during the time of this observation.

T/Sgt Whenry.

T/Sgt Elmer L. Whenry, GCA Operator, 1264th AACS Squadron, RAF Station Bentwaters, England reported the following information relative to subject Unidentified Flying Objects.

Sgt Whenry stated that 12 to 15 unidentified objects were tracked by the Bentwaters GCA (AN-MPN-11A) between 2130Z and 2155Z, 13 August 1956. This group was picked up approximately 8 miles southwest of RAF Station Bentwaters and were tracked on the radar scope clearly until the objects were approximately 14 miles northeast of Bentwaters. At the latter point on the course of these objects, they faded considerably on the radar scope. However, the 12 to 15 objects were tracked to a point about 40 miles N.E. of Bentwaters. At the approximate 40 mile range individual objects in this group appeared to converge into one very large object which appeared to be several times larger than a B-36 aircraft due to the size of the Blip on the radar scope. At the time that the individual objects seemed to converge into one large object, the large object appeared to remain stationary for 10 to 15 minutes. The large object then moved N.E. approximately 5 or 6 miles then stopped its movement for 3 to 5 minutes then moved north disappearing off the radar scope.

Sgt Whenry stated that the 12 to 15 unidentified objects were preceded by 3 objects which were in a triangular formation with an estimated 1000 feet separating each object in this formation. The other objects were scattered behind the lead formation of 3 at irregular intervals with the whole group simultaneously covering a 6 to 7 mile area. Prior to consolidation into one object 40 miles N.E. of Bentwaters. Course flown by this group of objects had slight deviations from S.W. to N.E.

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Sgt Wheary added that these objects appeared as normal targets on the [illegible] scope and that normal checks made to determine possible malfunction of the GCA radar failed to indicate anything was technically wrong. Sgt Wheary estimated that the unidentified objects in this group moved at the rate of between 80 and 125 miles per hour. He computed this speed by using the range margins on the GCA scope.

Sgt Wheary added that another UFOB was sighted on the GCA radar at about 2200Z, 13 August 1956. This object was tracked on the radar screen for approximately 16 seconds. Course of the object being tracked was from about 30 miles east of Bentwaters to approximately 25 miles west of this station. Speed of this object was estimated to be in excess of 4000 miles per hour. All radar returns appeared normal on the scope for this object except for the last return which seemed slightly weaker than the rest. Sgt Wheary explained that object suddenly disappeared off the radar screen by rapidly moving out of the GCA radiation patterns. Light conditions were night. Weather was clear with good visibility and light winds.

A/2C Vaccare.

The following information pertaining to an Unidentified Flying Object sighted electronically on the Bentwaters GCA at 2130Z, 13 August 1956 was submitted by A/2C John L. Vaccare Jr, GCA Operator, 126th AACS Squadron, RAF Station Bentwaters, England.

Airman Vaccare indicated that he tracked one Unidentified Flying Object on the Bentwaters GCA screen for approximately 30 seconds at 2130Z, 13 August 1956. The size of the Blip when picked up was that of a normal aircraft target. The Blip diminished in size and intensity to the vanishing point before crossing the entire radar screen.

The unidentified flying object was picked up at an estimated 25 to 30 miles east south-east of Bentwaters and flew a constant course of 295° to the vanishing point on the scope which was 15 to 20 miles west north-west of Bentwaters at an undetermined altitude. Airman Vaccare estimated the speed of this object to be in the vicinity of 4000 miles per hour. This speed was calculated by comparing the speed of the object on the GCA scope with speeds that the operator is familiar with on the electronic simulator. A/2C Vaccare added that some idea of the speed of the object could be computed from the fact that each time the GCA antenna completed a revolution the Blip from this object moved 4 to 5 miles on the radar screen. The GCA antenna completes a revolution once every two seconds. The weather was reported as clear with unlimited visibility.

Lts Mets and Rowe.

On 30 August 1956 the following information was received from 1st Lt Charles W. Mets and 1st Lt Andrew C. Rowe concerning their aerial search for subject unidentified flying objects. Lts Mets and Rowe are pilots assigned to the 512th Fighter Interceptor Squadron, Bentwaters, England. The above named officers indicated that they were returning to Bentwaters from a T-33 flight about 2130Z, 13 August 1956. At this time they were vectored to the north - east of Bentwaters to search for unidentified flying objects which were being tracked by the Bentwaters GCA. Lts. Mets and Rowe stated that they searched the areas to the north-east, east, and south-east of Bentwaters for approximately 45 minutes. Altitude of flight was between 2500 and 5000 feet. Results of this aerial

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search were negative. Both officers reported that they observed a bright star on the horizon to the east of Bentwaters which might have been mistaken for an Unidentified Flying Object by the visual observer. Lt Rose also stated that a flashing beacon was flashing through a low haze along the east coast of England from the vicinity of the village of Orford.

Weather Report from the Bentwaters weather detachment for the period 21[illegible] to 22002, 13 August 1956 for the Bentwaters area follows:

Winds:

Surface - Direction 230° velocity 5 to 10 knots.
6000 ft - Direction 260°, velocity 30 knots.
10,000 ft - Direction 260°, velocity 40 knots.
16,000 ft - Direction 260°, velocity 55 knots.
20,000 ft - Direction 260°, velocity 70 knots.
30,000 ft - Direction 260°, velocity 90 knots.
50,000 ft - Direction 260°, velocity 40 knots.
ceiling: 25,000 ft
Visibility: 9 miles

No thunderstorms were located in the area of the sightings.

Several aircraft were in the Bentwaters area at the time of these sightings but these could not have been mistaken for the Unidentified Flying Objects.

No physical evidence of the sightings is available.

Edward L. Holt.
EDWARD L HOLT
Captain USAF
Air Targets Officer

MEMORANDUM FOR RECORD

SUBJECT: (U) Perseids over England - Period 11-20 August 1956

1. The following information was derived after discussion with Captain Gregory on 14 August 1956 concerning the possibility of meteoric showers over England being mistaken for probably unidentified flying objects:

a. The Perseids are prominent and apparently could be quite spectacular over England.

b. The Perseids are at their visual peak between the 11th and 20th of August.

c. These meteors, in their individual flights, could appear to cross over at large angles to other meteors.

d. It is possible that individual meteor trails (ionized gases) may trace on radar scopes.

e. Although only limited information is given on these meteors could be an explanation to some of the sightings observed over Lakenheath and Bentwaters.

L. V. Robinson

Dr. L. V. Robinson
Air Science Division
27 August 1956

Capt. Mysterd points out that the Perseids have produced spectacular meteor showers in the past. While the exact dates are not known, sightings date back to 1950. Making note in 1950 indicates that the maximum interest was reached on the 13th & 14th of August. Capt. Gregory

MEMORANDUM FOR RECORD 21 Sept 56

SUBJECT: (U) Lakenheath-Bentwaters UFO Sighting - - Review and Comment by Dr. J. A. Hynek.

1. On 13 September 1956, at the Harvard Astrophysical Observatory, Cambridge, Massachusetts, Dr. Hynek and the undersigned held discussions regarding this case. All teletype messages and the various factors and aspects were treated in some detail.

2. Dr. Hynek was in agreement with the undersigned's comment to the SAC Commander in England and Headquarters USAFE, considering the many variables and other seemingly conflicting data involved in the UFO report.

3. Upon receipt of this sighting, Dr. Hynek was unavailable to review this report as one of the applicable USAF consultants normally required in cases of this kind. Dr. Hynek was en route to Harvard University from the U. S. Astronomical Society Conference held in Berkley, Calif.

4. The following action was taken in attempt to resolve this matter to a better conclusion:

a. Copies of all teletype messages from England were left in the custody of Dr. Hynek (deposited in safe for classified material assigned Dr. F. L. Whipple, Director of Astrophysical Observatory). A hand receipt signed by Dr. Hynek was obtained for the UFO case file.

b. Dr. Hynek will discuss the matter with Dr. Whipple who is now in Spain on IGY matters, and with Dr. Gerald Hawkins, British astrophysicist, now with the observatory in Cambridge. Dr. Whipple is considered the foremost authority on radio echoes and other radio-radar aspects of astronomical bodies in the world. With Dr. Hawkins participating as an interested party (the unusual UFO sighting being observed over England), the conference should produce something of note. This conference arranged by Dr. Hynek will be at no expense to USAF.

George T. Gregory

GEORGE T. GREGORY
Captain, USAF

Specimen page from document released to [illegible] Project Bluebook before release to [illegible] May 5, 1969. Specimen is from 13 August, 1956 case at Lakenheath, England.

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Sgt [redacted] added that these objects appeared as normal targets on the GCA scope and that normal checks made to determine possible malfunction of the GCA radar failed to indicate anything was technically wrong. Sgt [redacted] estimated that the unidentified objects in this group moved at the rate of between 80 and 125 miles per hour. He computed this speed by using the range margins on the GCA scope.

Sgt [redacted] added that another UFOB was sighted on the GCA radar at about 2220Z, 13 August 1956. This object was tracked on the radar screen for approximately 16 seconds. Course of the object being tracked was from about 30 miles east of Bentwaters to approximately 25 miles west of this station. Speed of this object was estimated to be in excess of 4000 miles per hour. All radar returns appeared normal on the scope for this object except for the last return which seemed slightly weaker than the rest. Sgt [redacted] explained that object suddenly disappeared off the radar screen by rapidly moving out of the GCA radiation patterns. Light conditions were night. Weather was clear with good visibility and light winds.

A/2C [redacted].

The following information pertaining to an Unidentified Flying Object sighted electronically on the Bentwaters GCA at 2130Z, 13 August 1956 was submitted by A/2C [redacted], GCA Operator, 126th AACS Squadron, RAF Station Bentwaters, England.

Airman [redacted] indicates that he tracked one Unidentified Flying Object on the Bentwaters GCA screen for approximately 30 seconds at 2130Z, 13 August 1956. The size of the blip when picked up was that of a normal aircraft target. The blip diminished in size and intensity to the vanishing point before crossing the entire radar screen.

The unidentified flying object was picked up at an estimated 25 to 30 miles east south-east of Bentwaters and flew a constant course of 295° to the vanishing point on the scope which was 15 to 20 miles west north-west of Bentwaters at an undetermined altitude. Airman [redacted] estimated the speed of this object to be in the vicinity of 6000 miles per hour. This speed was calculated by comparing the speed of the object on the GCA scope with speeds that the operator is familiar with on the electronic simulator. A/2C [redacted] added that some idea of the speed of the object could be computed from the fact that each time the GCA antenna completed a revolution the blip from this object moved 4 to 5 miles on the radar screen. The GCA antenna completes a revolution once every two seconds. The weather was reported as clear with unlimited visibility.

Lts [redacted] and [redacted]

On 30 August 1956 the following information was received from 1st Lt [redacted] and 1st Lt [redacted] concerning their aerial search for subject unidentified flying objects. Lts [redacted] and [redacted] are pilots assigned to the 512th Fighter Interceptor Squadron, Bentwaters, England. The above named officers indicated that they were returning to Bentwaters from a T-33 flight about 2130Z, 13 August 1956. At this time they were vectored to the north - east of Bentwaters to search for unidentified flying objects which were being tracked by the Bentwaters GCA. Lts. [redacted] and [redacted] stated that they searched the areas to the north-east, east, and south-east of Bentwaters for approximately 45 minutes. Altitude of flight was between 2000 and 5000 feet. Results of this aerial

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