



Special Research Report Stephenville, Texas

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Stephenville Lights: A Comprehensive Radar and Witness Report Study
Regarding the events of January 8, 2008
4pm to 8pm
by Glen Schulze and Robert Powell

Introduction	2
Definitions	3 - 4
Executive Summary	5 - 7
Radar data and how it was obtained	8 - 10
Description of radar, physical location, and capabilities	11 - 13
Empirical correlation of radar and capabilities	14 - 18
Weather conditions Jan.8, 2008 & description of the area	19
Evaluation of military aircraft activity	20 - 30
Evaluation of unknown aircraft activity	31 - 45
1. Witness testimony	
2. Radar based information	
Conclusion	46 - 47
Bibliography	48
Appendix	49 -76

I. INTRODUCTION

This report presents the results of a lengthy and detailed analysis made into the sightings of an unidentified flying object on the evening and night of January 8, 2008, in the Dublin-Stephenville area of north Texas. Radar data from five different radar sites as well as witness testimony was reviewed in an attempt to understand what did and did not occur on the night of January 8. The Executive Summary will contain the basic overview of the results of this analysis, the authors' opinions and conclusions to this report. Following the Executive Summary will be the detailed radar results and witness testimony. The primary authors of this report are Glen Schulze and Robert Powell.

Glen Schulze received his BSEE from Washington University in 1952. While in the U.S. Army he was assigned to White Sands Proving Grounds (WSPG). There, he participated in evaluating and improving a five antenna site Cooperative Chain Radar System for tracking high performance long range missile launches. His contributions to the WSPG radar system resulted in earning a letter of commendation from the Commanding General of the USA 4TH Army. In the 1960s Mr. Schulze provided a major service to the CIA/NSA in the successful recording of high powered Russian radar signals arriving at the Caribbean Island of Antigua after being reflected from the surface of the moon. In the 1970s Mr. Schulze was instrumental in the successful demonstrations of recording and reproducing radar antenna return signals at the FAA Atlantic City Labs for accident investigations which eventually led to the FAA incorporating the tape recording of all FAA radar antennas around the US. In the mid 1990s Mr. Schulze began evaluating FAA radar signals obtained from FOIA requests for FAA antennas positioned at JFK, DFW, Logan Boston, Newark, O'Hare, LAX, San Diego and Sky Harbor Phoenix. He has evaluated over 3 million radar return signals from various FAA antenna sites. Mr. Schulze has flown extensively on over fifty USN P3 and USAF ARIA aircraft flight exercises as a civilian crew supernumerary responsible for the collection and recording of critical DOD and NASA data. Mr. Schulze was also involved in radar analysis of the breakup of TWA flight 800, and is a Life Member of the IEEE Professional Engineering Society.

Robert Powell is the current Director of Research at MUFON. He received his BS in Chemistry from Southeastern Oklahoma State University in 1976. He worked in the semiconductor field from 1978 to 2006, where he gained experience in device physics, statistical analysis, and relational algorithms used to improve the performance of semiconductor chips. During that time he participated in the development of MOSTEK corporation's first CMOS based semiconductors. At Advanced Micro Devices (AMD), during the 1980s, he was responsible for the early development of the flash memory chips that are now used in cameras, PCs, memory sticks, and other electronic products. During the 1990s he was a manager responsible for quality control methods used in AMD's manufacturing and engineering sites and was the manager of a state of the art chemical analysis laboratory. From 2001-2003, he was the manager of AMD's research group, the Analytical Development Lab. The group consisted of two scientists with PhDs in Laser Physics & Physical Chemistry, two engineers with Masters in Electrical Engineering, and two technicians. The group was responsible for developing new techniques for use in failure analysis of semiconductor circuits at nanoscale dimensions of 45-90 nanometers. This included research on near field optical microscopy, terahertz frequencies for visualization through materials, atomic force microscopy, and joint work with several leading universities. Mr. Powell is a joint holder of four patents related to these areas of research. He is also an amateur astronomer.

II. DEFINITIONS AND TERMINOLOGY

AOI Airspace of Interest is a cube of airspace representing an area of radar interest that is analyzed.

ARIA Apollo Range Instrumentation Aircraft

ARTCC An Air Route Traffic Control Center is an FAA center responsible for high altitude traffic as it passes between airport departures and approaches.

Astronomical Twilight Time period when the sun is at 12 to 18 degrees below the horizon. Sky illumination is undetectable and all stars are now visible.

AWACS An Airborne Warning and Control System aircraft is designed to maintain surveillance, command, and control of other aircraft during a battle.

Carswell AFB and NASJRB Both of these are terms that refer to the military air base in Ft. Worth. Formerly call Carswell, now officially the naval air station joint reserve base with units from the air force, marines, and Texas AF Reserves operating from there.

CBP Customs and Border Patrol

Civil Twilight Time period when the sun is less than 6 degrees below the horizon. Only the brightest stars and planets are visible.

FAA The Federal Aviation Administration is the Federal government agency responsible for developing and operating a system of air traffic control and navigation for both civil and military aircraft.

FOIA The U.S. Freedom of Information Act (FOIA) is a law ensuring public access to U.S. government records. FOIA carries a presumption of disclosure; the burden is on the government - not the public - to substantiate why information may not be released. Upon written request, agencies of the United States government are required to disclose those records, unless they can be lawfully withheld from disclosure under one of nine specific exemptions in the FOIA. This right of access is ultimately enforceable in federal court.

FTW Primary and secondary radar unit located in Ft. Worth, Tx.

MARSA Military Assumes Responsibility for Separation. See appendix for detailed description.

MOA Military Operating Area is a defined area allowing for military practice drills.

MTR Military Training Route is a defined and narrow air route used by an airbase to travel through civilian airspace to reach a MOA.

MUFON Mutual UFO Network is a non-profit organization created in 1969 with its mission being the scientific study of UFOs for the benefit of humanity.

NM Nautical Mile is equal to 1.15 statute miles.

NWS National Weather Service

Primary Radar & Skin-Paint Both terms refer to radar detection based on reflection of the radar beam off an object.

QOO Secondary radar unit only, located in Anson, Texas, near Abilene.

QAZ Primary and secondary radar unit located in Azle, Texas, near Ft. Worth.

QYS Primary and secondary radar unit located in Rogers, Texas, near Temple.

Redact The act of removing sensitive information by blacking it out.

RSR Primary and secondary radar unit located in Rock Springs, Texas, east of Dallas.

Secondary Radar The detection of an aircraft based on a beacon signal being emitted from the aircraft.

Transponder & Beacon Both terms refer to a system that emits a signal from an aircraft to a secondary radar antenna.

USPA Unaffiliated Skin-Paint aircraft are unidentified aircraft of interest that are not using transponders.

UTA Unaffiliated Transpondered aircraft are aircraft of interest that have transponders but are not part of the 10 jets from CAFB.

III. EXECUTIVE SUMMARY

This report deals specifically with radar as well as witness sightings of an unidentified object seen on January 8, 2008, between the times of 6pm to 9:30pm. This unidentified object was seen by multiple individuals in the skies near the Texas cities of Dublin and Stephenville. What makes this sighting unusual is that radar data has been obtained that provides precise information on the location of all military and commercial aircraft in the airspace of interest (AOI) at all times during 4pm to 8pm on January 8, 2008. Additionally, data was obtained that indicates unidentified aircraft without transponder beacons which were not military jets, were found in the same compass direction and time frame as cited by the witnesses. These sightings occurred on a cloudless evening with 10+ miles visibility, no wind, and temperatures in the upper 40s. This report concentrates on the events of January 8th and contains much more substantiated information than has been reported in the media during the 5 months following these sightings.

Data to support this report was obtained from ten different Freedom of Information requests to the FAA, the National Weather Service, all nearby military bases, the U.S. Customs & Border Protection Services, and the 21st and 30th Air Force Space Wing Commands. The NWS and the FAA were very responsive in their FOIA replies. The FAA provided 2.8 million radar returns that covered 4pm to 8pm and that were extracted from five different radar sites. Additionally, Carswell AFB provided the logbook of the 457th Fighter Squadron. Most of the logbook was manually blacked out. (This group flies the F-16C/D, also known as the Fighting Falcon.) The remainder of the FOIA requests, were returned with almost identical statements, as follows: *"We have found no records responsive to your request."* This is the reply given to the straight forward questions, *"Did you have aircraft flying within 50 miles of Stephenville on January 8, 2008 and ?"* Apparently, it is difficult to answer "yes" or "no" to those questions.

Witness testimony was obtained from MUFON's investigations into these sightings. This investigation began in Dublin on January 19, 2008. Seventeen different reports were obtained regarding sightings on January 8th. This is a very large number of sightings to occur during only one day and within a four hour period of time. Eight of these reports provided sufficient detail to identify a time and direction of the sighting of the object. Witnesses in these reports included a constable, a chief of police, a private pilot, and a former air traffic control operator. Those reports also provided enough information to calculate a gross approximation of the object's size and altitude.

The authors of this report first verified the quality of the radar data. The data was correlated between radar sites to determine accuracy between radar, ability of the radar to accurately measure the speed of known aircraft, and to determine the various radars' minimum detection altitude capability. (Unfortunately, the FAA primary radar do not measure size of an object.) The results of this work indicated that the Ft. Worth based radar, antenna FTW, was the most sensitive of the five radar sites in the area of Dublin-Stephenville. Good correlation was obtained between radar antennas and a minimum detection altitude of 2500-3000 feet in the Dublin-Stephenville area. This limit is caused by earth curvature as the distance from the radar site increases.

The first step in the radar analysis was to determine the extent of military activity and the location of military aircraft operating in the area of Dublin-Stephenville. The authors began with an examination of the redacted logbook from Carswell AFB. The logbook shows a sortie of four aircraft leaving at 6:00pm and another sortie of four aircraft leaving at 6:15pm, with both sorties returning at 7:30pm and 7:45pm respectively. Radar data shows take offs of 5:52pm and 6:15pm with returns of 7:14pm and 7:27pm. Radar data also shows a 9th and 10th jet leaving Carswell at 6:29pm and returning at about 8:00pm. These last two flights are most likely the two rows redacted in the logbook after the entries for the other 8 jets. There are two more rows redacted after the 9th and 10th flight, but it is difficult to tell if those flights took place. Also appearing on the logbook are 10 redacted rows which appear to be flights on the same day and prior to the eight flights already mentioned. These

additional 10 earlier flights cannot be verified because the radar data from FOIA requests is only from 4pm to 8pm. It is reasonable to assume that aircraft from Carswell from earlier flights may have also been in the area. All of the 8 jets identified on this logbook and the two redacted flights, flew into the Dublin-Stephenville area. This logbook highlights a high level of military aircraft for this area over a time period of less than two hours.

The radar data shows a total of ten jets from CAFB traveling through the Dublin-Stephenville area. The ten jets consist of two sorties of four aircraft and a final sortie of two aircraft. The lead aircraft in each sortie had an active transponder with the other three aircraft without transponders, following close behind. Altitudes of all aircraft with transponders varied between 15,000 feet to 17,000 feet when these aircraft flew over the Dublin-Stephenville area. The location of all these aircraft, have been identified during the entirety of their flights. The first eight aircraft participated in military maneuvers in the Brownwood MOAs. No unusual flight changes were seen until the aircraft left the MOA on their return to CAFB. Two jets in each sortie turned on a new transponder beacon and then veered to the east of the normal Military Training Route by 15 to 30 miles. These jets encroached into civilian airspace and the reason for their diverted path is not known. Flights 9 and 10 initially left Carswell to the north at 6:29pm and flew to a MOA in south central Oklahoma. They departed their MOA at around 7:28 and rather than return to CAFB, they headed south. They did not travel to the Brownwood MOA but instead made a loop around Comanche, Dublin, and Stephenville before returning to CAFB. It is odd why these aircraft flew this circuit far to the south prior to returning to base and why these two aircraft were redacted in the CAFB logbooks.

Radar also shows what appears to be an AWACS (Airborne Warning and Command System) aircraft in the area of interest. An aircraft using transponder code 1462 was altitude profiled and ground track profiled for the full 4 hour time period, during which time it produced a ground track best described as a modified racetrack course formed by several precise 180 degree north/south turns as if it were on a search or monitoring mission. Its altitude was 41000 feet for most of this time period. This is consistent with the high altitude mission of a military aircraft such as an AWACS. Only such military aircraft can afford to fly for over four hours at high altitude and go nowhere in particular. Using radar, an AWACS aircraft can detect other aircraft at distances of 250 miles. We can only speculate on its purpose. One purpose may have been to monitor the F-16 training exercises in the MOA. However, that does not explain why it was in the area of interest for over 4 hours while the ten military jets were in the MOAs and MTRs for only 70 minutes.

Six witnesses in four different instances between the times of 6:00pm to 6:25pm reported an unknown flying object near Stephenville. Radar detected an unknown target in the same area. The object was described as very bright, large, and silent. Two of the four reports indicated the object moved at a very high rate of speed and was also stationary at times. One witness only saw a stationary object and one only saw the object moving at high speed. These reports came from witnesses located with different perspectives of the object. The witnesses were located to the southeast in Selden and Chalk Mtn, to the southwest near Lake Proctor, and to the west near Gorman. Because these sightings came at about the same time and from very different locations and distances, it would be difficult to assign a single explanation to all four reports. Some of the explanations circulated in the media, such as a commercial airliners or military jets, are simply not tenable. The glint of sunlight on a commercial jet cannot be seen from four different angles due to the varied locations, nor can it explain an object that remains stationary. The military F-16s in the area maintained standard flight paths at elevations of 16,000-17,000 feet. One sortie of four jets flew over the Dublin-Stephenville area between 6:14-6:15pm and another sortie of four jets at 6:23-6:25pm. Only two of the four witnesses were close enough to Stephenville to have seen the jets. The closest witnesses to the jets were in Selden. They would have seen them taking up only 0.08 degrees of sky or about 38 times smaller than the unknown object as described by the witness. Radar detected an unknown object 7 miles due north of Selden at 3 seconds after 6:15pm. Radar detected a second unknown object 20 seconds later that was northwest of the first detection and about 9 miles north of Stephenville. This movement mimics what the primary Selden witnesses saw when they described the object coming in from the northeast then moving to north of their position and then to the northwest of

their position, before becoming stationary to the west. If the two unknown objects picked up on radar are one and the same, then the object moved at about 2100 mph. The Selden witnesses also indicated that the unknown object returned and was being chased by jets at very low altitude. These chase jets do not show up on radar. If their altitude was below 2000 feet, as described by the witnesses, then they would have been too low to be detected by the nearest FAA radar.

Another group of four witnesses saw the object between 6:40pm to 7:15pm in the Dublin area, with the final sighting at 9:30pm near Comanche. There were two radar tracks of an unknown object during this time period. The witness at 6:40pm saw an object in the sky to the southwest that she described as two large glowing amber lights similar in size and color to what you would see if behind a school bus at night. She saw the object in a stationary position for just a few seconds and then it disappeared. Radar detected a slow moving object 11 miles to the west-southwest of her position at 6:51pm and then 6 miles southwest of her position at 7:02pm. This object had no transponder and was tracked on radar for over an hour. Most of the time, the object was either stationary, or moving at speeds of less than 60mph. At 7:32pm, the object was tracked accelerating to 532mph in 30 seconds and then slowing to 49mph only 10 seconds later. It is possible that some of this speed variation could be due to imprecision with the radar. This is covered in more detail in the main body of this document. The authors are not aware of any publicized military craft capable of traveling at very low speeds for extended periods of time, accelerating rapidly to such a high speed, and then suddenly decelerating in what might best be described as a controlled crash. The closest capability would be a Harrier type jet, but it would not be able to maintain slow speeds for such extended periods of time nor decelerate so rapidly. Much more important than the possible sudden acceleration shown by the object is its trajectory heading. This object was traveling to the southeast on a direct course towards the Crawford Ranch, also known as President Bush's western White House. The last time the object was seen on radar at 8:00pm, it was continuing on a direct path to Crawford Ranch and was only 10 miles away. During this entire episode of over an hour, there is no indication that any of the military jets reacted to this unknown aircraft, that was without a required transponder, and that was headed directly to the Western White House.

At 7:15pm a constable saw an unknown object south of his home. His home is located 4 miles southwest of Dublin. He described the object as two amber lights that were initially stationary. This is similar to the description given by the witness at 6:40pm. He then described the lights as changing to a random movement of 9 to 11 white lights overhead that then departed at a very fast rate of speed to the northeast. Radar detects an object at 7:20pm only 2.8 miles south southwest of the constable's home and traveling slowly in a southeastern direction. This matches very well with the time and direction of the constable's sighting. At 7:26pm, radar shows the object suddenly veering to the north at 1900 mph and then returning a minute later to continue on its southeastern course. It is possible that the radar detection of an object to the north was coincidental in time and was not the same object as was traveling to the south of the constable's home. However, the object traveling north matches the constable's description of a fast moving object traveling towards the northeast. This object finally disappeared from radar at 7:35 about 10 miles southeast of the constable's home.

The last time the object was seen on January 8th was by a former air traffic controller to the west of downtown Comanche. His description of the object was very similar to the constable's. He saw multiple lights moving around in a random fashion for almost a minute and then they disappeared as if someone turned off a light switch. 10-15 minutes later he saw military jets in the same area that he compared to the unknown object as raisins to a grapefruit. The FOIA radar data obtained by the authors only covered through 8pm, thus this sighting could not be confirmed with radar. However, due to its similarity to the previous sightings and the quality of the witness, this report is definitely noteworthy.

The findings and conclusions of the executive summary are the same as the conclusions in the detailed report and can be found near the end of this document.

IV. RADAR DATA AND HOW IT WAS OBTAINED

Freedom of Information Act (FOIA) requests were sent to all governmental and military bases with access to logbooks, witnesses, and radar data, to the events that took place on January 8th in the Dublin-Stephenville area. Copies of these FOIA requests and the replies are in the appendix. The radar data FOIA was sent out to the FAA on January 16th and the remaining FOIA requests were sent out within the first 2-3 three weeks of the event and went out to the following organizations:

The Federal Aviation Administration, Ft. Worth, TX.

The National Weather Service, Ft. Worth, TX.

The Dept of the Air Force, 30th Space Wing, Vandenberg, CA

The Dept of the Air Force, 21st Space Wing, Peterson AFB, CO

Dyess Air Force Base, Abilene, TX.

Sheppard Air Force Base, Wichita Falls, TX.

10th Air Force, Naval Air Station Joint Reserve Base, Ft. Worth, Tx.(also known as Carswell AFB)

4th Marine aircraft Wing, Naval Air Station Joint Reserve Base, Ft. Worth, Tx.

U.S. Customs and Border Protection, Washington, D.C.

Dept of the Army, Ft. Hood, TX.

Radar data was received from both the Federal Aviation Administration and the National Weather Service. The FAA quickly responded to a FOIA sent on January 16 and mailed out the completed results within 5 weeks. The FAA was also very helpful in answering questions and was very responsive in all of their communications. The FAA provided approximately 2.8 million radar returns that were on a CD containing 139 megabytes of data. This data was received in PC standard text format and covered over 4 continuous hours of time (4pm to 8pm CST) and had been collected and recorded from each of 5 different radar antennas located near and around the DFW airport airspace. The text data was converted into Microsoft Excel format and the analysis was completed using Excel routines. The Fort Worth ARTCC deserves high praise and an offer of deep appreciation for their rapid and compliant response to this important FOIA.

The NWS was also very quick to respond to the FOIA request. Their data is not as valuable for analysis of aircraft as the radar data from the NWS is based on Doppler radar that initiates a data signal collection only once every 10 minutes in clear weather and once every 5 minutes during inclement weather.

The authors of this report invested and dedicated several hundred hours in the analysis of the radar data that was obtained. A later report will be written to detail the steps used in the development of this report. But for now, the analysis consists of the following basic steps:

1. Initiation of a FOIA to government agencies.
2. Followup and re-initiation of FOIAs where applicable.
3. Conversion of radar data into a usable format.
4. Familiarization with radar data as each FAA region has slightly different FOIA data reporting formats.

5. Understand the types of radar used and their capabilities.
6. Screen data to areas of interest and evaluate data quality.
7. Evaluate flight patterns, flight origination, and flight destination of all military aircraft using military aircraft with transponders.
8. Manually screen the data for all military aircraft flying without the use of transponders and hopefully abiding by the MARSAs guidelines. (See copy of MARSAs in the appendix.).
9. Evaluate radar for unknown objects based on the time and location of witnesses testimony.
10. Create radar graphs based on the above findings.

There was no radar information provided by any of the United States military branches that defend this nation. It is to be expected that not every military department contacted would have information relative to this investigation. The Marine response from Ft. Worth and the Air Force response from Dyess both seemed to be forthright responses. (See the Appendix for copies of FOIAs and responses to the FOIAs.) However, it is not reasonable to believe, that not a single military base or military facility had any radar data on unknown aircraft in the Dublin-Stephenville area. Could they have not at least provided radar data confirming that there were not any unknown aircraft detected in the area? Instead the responses are almost the same; FOIA after FOIA request; *"We have found no records responsive to your request."* This catch phrase is used so often that it is clear to be the standard operating procedure for the military when answering a request under the Freedom of Information Act. What does that phrase mean? That phrase is not even a "no". It is basically a refusal to provide any information. Enough said on that topic for now. Those organizations that would be expected to have radar information on aircraft in the Dublin-Stephenville area are noted next.

Ft. Hood's reply to their FOIA was, *"There are no responsive records to fill your request."* This statement was made even though a radar installation exists on the base. Ft. Hood is within 70-80 miles of the area of interest, routinely operates with helicopters in the Brownwood Military Operating Area (MOA) and should be able to detect known and unknown aircraft operating in that area. Robert Gray AAF has a fully instrumented airfield tasked with the primary mission of providing training and deployment of III Corps and Fort Hood personnel and equipment. The airfield is capable of handling the world's largest military and civilian aircraft, covering approximately 3,800 acres within the fenced area. The airfield has one 10,000' x 200' runway with an equal length parallel and four connecting taxiways to the west side and two connecting taxiways to the east. The Larkin Terminal, Aerial Port of Embarkation (APOE) was dedicated July 1986. The installation ATC Radar Approach Control (ARAC) is also located on the airfield, providing air traffic control services for Robert Gray AAF, Hood AAF, civilian facilities and assigned airspace.⁽¹⁾

The United States Air Force 21st Space Wing replied to a request for radar information with, *"A thorough search by the 21st Space Wing did not locate any records responsive to your request."* The United States Air Force has had responsibility for the Naval Space Surveillance System since 2004, when the Navy turned over operation of this radar surveillance grid to the Air Force. NavSpaSur consists of nine radar sites stretching between southern California and Georgia at the 33rd parallel and comprises a radar "fence" capable of detecting basketball-sized objects in orbit as high as 7,500 miles above Earth. The system's network of field stations produces a "detection fence" of electromagnetic energy roughly 5,000 nautical miles long that extends across the continental U.S. and portions of the Atlantic and Pacific Oceans.⁽²⁾ Yet despite this capability, the Air Force reply indicated no data of any unknown aircraft in the vicinity. Later we will see that there were unknown aircraft based on FAA radar data.

The Customs and Border Protection Department, who is charged with protection of our borders by the Dept of Homeland Security, did not even respond to a FOIA sent on Jan. 30,2008, and a follow

up FOIA sent on Feb. 20, 2008. In order to protect our borders and intercept low flying drug trafficking planes, CBP have aircraft with radar capable of tracking low flying aircraft. As part of Homeland Security, they have an obligation to be aware of any unknown aircraft that could pose a threat to our nation. Yet this organization felt free to not even reply to either FOIA that was certified mailed to them.

The Dyess AFB response to their FOIA was quite interesting. When asked if they had aircraft in the Stephenville area, they replied that they had none of the records requested and that Carswell NAS in Ft. Worth should be contacted because they indicated that Carswell had jurisdiction over that surrounding area. A request was sent back to Dyess requesting clarification of that statement. They were asked, *“Does your reply mean that there were no aircraft from Dyess AFB in the air during the time and location in question, or does your reply mean that Carswell Naval Air Station would be the controlling authority that would answer that question regarding aircraft from Dyess AFB?”* A direct answer to the question was not provided. Instead, Dyess AFB responded with the following, *“If you are trying to seek information regarding aircraft(s) that were flying in the area of Stephenville, Texas, during the date and time that you specified, then you need to contact the Carswell Naval Air Station...”*

The 10th Air Force, based in Ft. Worth, Texas, at the Naval Air Station Joint Reserve Base, formerly known as Carswell AFB, did provide a blacked out flight record to establish that they had aircraft in the Dublin-Stephenville area from the 457th fighter squadron. This document will be discussed later. In terms of any radar images from their aircraft in the area, they replied with, *“The recording cartridge in use (referring to radar on board aircraft) have a limited storage capacity. When full, older missions are recorded over. Due to this limitation, all the Digital Recording Cartridge files from 8 Jan 08 have been overwritten.”* It is difficult to understand why the radar files would be overwritten when Major Karl Lewis of NASJRB was contacted by the media on Jan. 10th. He was asked about the Air Force's knowledge of anything happening in the area. At that time he said there were no aircraft from Carswell in the area. Two days later he recanted that statement and indicated that there were 10 jets in the area from Carswell. Obviously, the Air Force should have known that the radar data on the 10 jets sent into the area was already of public interest. It is reasonable to believe that they knew it would be needed to settle the controversy of whether jets were in the area and whether any unknown flying object was detected on radar. So why was the radar information from all ten jets erased?

As will be shown later, unidentified aircraft of some type, were in the Dublin-Stephenville area. In light of the catastrophe that occurred on September 11, 2001, the question goes beyond, “What did the people in Dublin and Stephenville witness on January 8, 2008?” The question becomes, “Is our government capable of detecting, identifying, and protecting us from unidentified aircraft, be they plane, helicopter, or whatever, within our own borders?”

V. DESCRIPTION OF RADAR, PHYSICAL LOCATION, AND CAPABILITIES

The entire United States geographical map area, up to an altitude of more than 41,000 feet altitude, is covered by a vast array of FAA radar antennas. Over a third of these long range ARSR-3 and ARSR-4 modern antenna systems could fail or be destroyed by some catastrophe and the entire US would still be adequately protected by the remaining operational FAA antenna systems. The responsibility for 24 by 7 monitoring of US airspace is adequately met and achieved by over 20 FAA Air Route Traffic Control Centers, ARTCC, each with usually 12 or more long range antenna systems and each radar with a range coverage of 200 NM or better. The Denver ARTCC located in Longmont, CO is responsible for monitoring the airspace over portions of at least six states. The Ft Worth ARTCC is responsible for all of Texas plus portions of adjoining states and controls operations from radar data from 17 antenna sites.

Supplementing the long range ARTCCs, the FAA has over 40 major short range radar facilities using the ASR-9 or more modern ASR-11 antenna systems each with a radar range of 60 NM. These facilities are responsible for airport Terminal Radar Control, TRACON, and aircraft movement monitoring and control operations during airport departures and arrivals. For overlapping coverage backup and redundancy each major TRACON will have multiple antennas separated judiciously onto nearby ground locations. NY TRACON has 5 antenna sites, Southern California TRACON has over 12 antenna sites and DFW TRACON has 4 antenna sites. Every one of the well over 150 FAA TRACON short range ASR antennas could fail and the US airspace would still be 100 % monitored by the long range ARTCC antenna sites.

The closest ARTCC to Stephenville is Fort Worth ARTCC and the closest TRACON is DFW TRACON, with collectively 20 FAA antenna sites between them. At any moment in time over 5 FAA antennas are scanning and monitoring the airspace over Stephenville Texas. Unfortunately, the phrase "flying beneath the radar" comes into play for the Stephenville area as standard FAA radar systems cannot usually monitor the airspace down to ground level.

The typical FAA TRACON radar antenna site is usually located directly on airport property and begins to receive reliable radar returns from A/C operations between 300 and 800 feet of altitude. This more than adequate altitude coverage is not expected to be matched by the ARTCC radars because these long range facilities usually do not acquire traffic control responsibility until the A/C reach 14,000 to 16,000 feet altitude. A single ARTCC filtering algorithm can instantly be activated and eliminate all low altitude radar returns from the ARTCC monitoring screens for congestion relief. If not eliminated by an altitude filter the ARTCC radar systems can reliably receive radar returns from A/C below 1000 feet or even lower if the radar range to the target is not excessive.

In addition to ground clutter affecting when airborne targets can drop below radar coverage, earth curvature effects come into play. At a distance of 50 to 60 NM radar range the earth curvature can totally prevent tracking a target at an elevation of 2500 to 2700 feet or less. The nearest FAA antennas are over 55 statute miles from Stephenville and radar coverage was therefore not expected to be provided below 2700 feet from any of the nearest FAA antenna sites.

Two separate Stephenville Radar FOIA requests were sent to the FAA and asked for radar returns for a 4 hour period from 4 PM to 8 PM local time from 1) the five closest ARTCC radar antennas, and 2) the five closest TRACON antennas. The FAA responded promptly with over 2.5 million radar returns from the 5 closest ARTCC antennas, identified by italics in the following chart.

FORT WORTH CENTER RADAR ANTENNAS

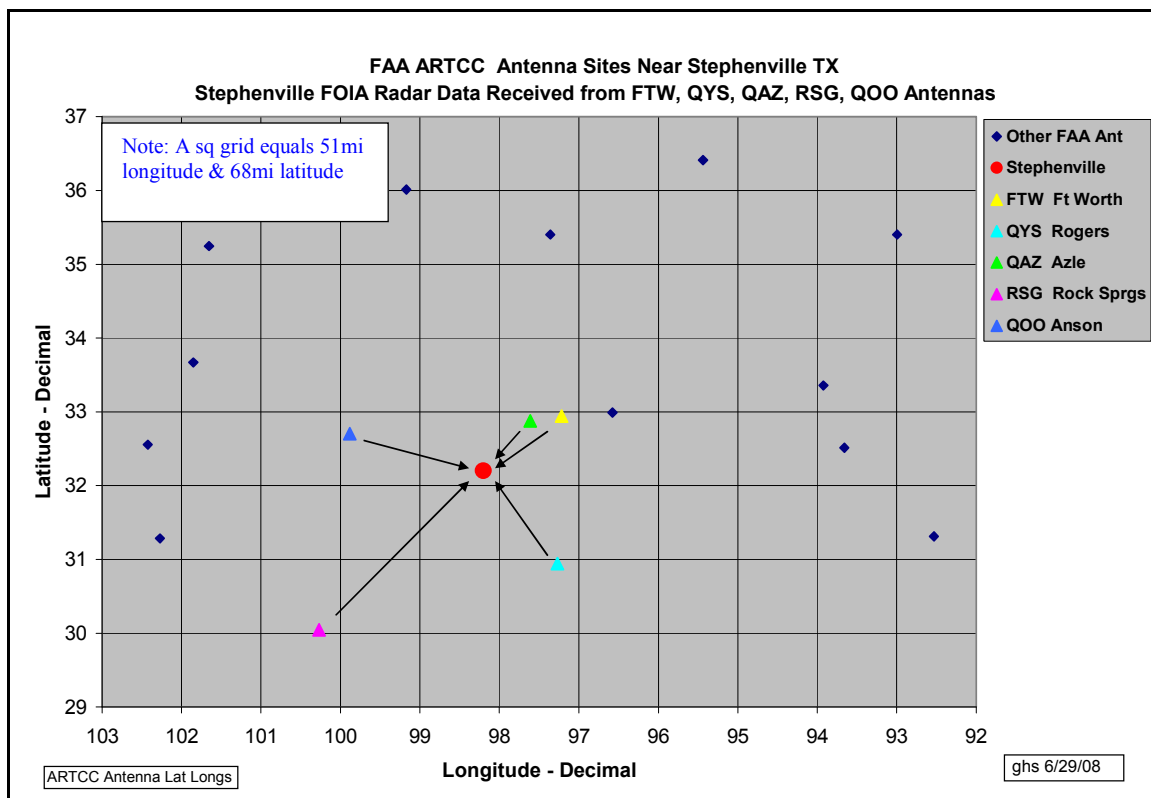
Site ID	Location	Lat	Long
FTW	FT. WORTH, TX	32 56 40	097 13 13
OKC	OKLAHOMA CTY, OK	35 24 08	097 21 34
TXK	TEXARKANA, AR	33 21 35	093 55 22
QXS	ODESSA, TX	32 33 15	102 25 40
AEX	ALEXANDRIA, LA	31 18 51	092 31 50
AMA	AMARILLO, TX	35 14 50	101 39 20
QAF	AFTON, OK (CHELSEA)	36 24 38	095 26 11
QOO	ANSON, TX	32 42 17	099 52 49
QOT	PUTNAM, OK	36 00 52	099 10 18
QYS	ROGERS, TX	30 56 37	097 16 06
QLB	LUBBOCK, TX	33 40 06	101 51 12
RSG	ROCK SPRINGS, TX	30 02 48	100 16 04
QOM	KING MOUNTAIN, TX	31 17 07	102 16 22
QAZ	AZLE, TX	32 52 38	097 36 34
QSK	SACHSE, TX	32 59 24	096 34 41
QXR	RUSSELVILLE, AR	35 24 10	092 59 39
BAD	BARKSDALE AFB, LA	32 3 048	093 39 33

However, no FAA radar data was received from the separate TRACON FOIA request but data from one TRACON short range antenna site QAZ was surprisingly and well received from the ARTCCC FOIA request.

DFW TRACON ANTENNAS

DFWE	32 52 36.91691N	97 00 53.21464W	676.38 Ft elevation
PA2 (AZL)	32 52 38N	97 36 34W	1112 Ft elevation
MI2 (QAZ)	32 59 23.71799N	96 34 41.15285W	637.98 Ft elevation
DFWW	32 55 20.49N	97 02 37.81W	704 Ft elevation

The locations of the five FAA ARTCC radar antenna sites providing responsive Stephenville FOIA data are shown on the following lat long grid map.



The Stephenville FOIA requests were written with specific radar parameters identified as follows:

“We request the subject radar return data set documentation format follow the unofficial but prevalent NTSB established radar tabular format as follows, with one radar return per tabular line including but not limited to:

- a) raw ASR antenna radar return azimuths in degrees to three decimal places after the decimal point,
- b) raw ASR antenna radar return ranges in nautical miles to three decimal places after the decimal point,
- c) time of ASR radar return in days, hours, minutes and seconds to two decimal places after the decimal point,
- d) transponder codes (secondary returns only),
- e) transponder altitudes (secondary returns only),
- f) ASR run lengths in 1 to 7 steps (primary returns only),
- g) ASR antenna site designator code number”

The Stephenville FOIA response from the Ft Worth ARTCC was prompt, totally responsive in requested detail and provided the investigators with over 2.5 million high quality radar returns which appeared to be unedited and unadulterated.

VI. EMPIRICAL CORRELATION OF RADAR AND CAPABILITIES

Of the five FAA radar stations, the ones with the most valuable information were those of closest proximity to Dublin-Stephenville and with the capability to detect aircraft without a beacon, or so called "skin-paint" radar targets. Those were QAZ and FTW in the Fort Worth area and QYS near Temple, Texas. Correlation work was done comparing the radar's accuracy of tracking known jet aircraft in the area, ability of the radar to accurately measure the speed of known jet aircraft in the area, and empirical calculations of the radar's minimum altitude detection capability in the direction of Dublin-Stephenville.

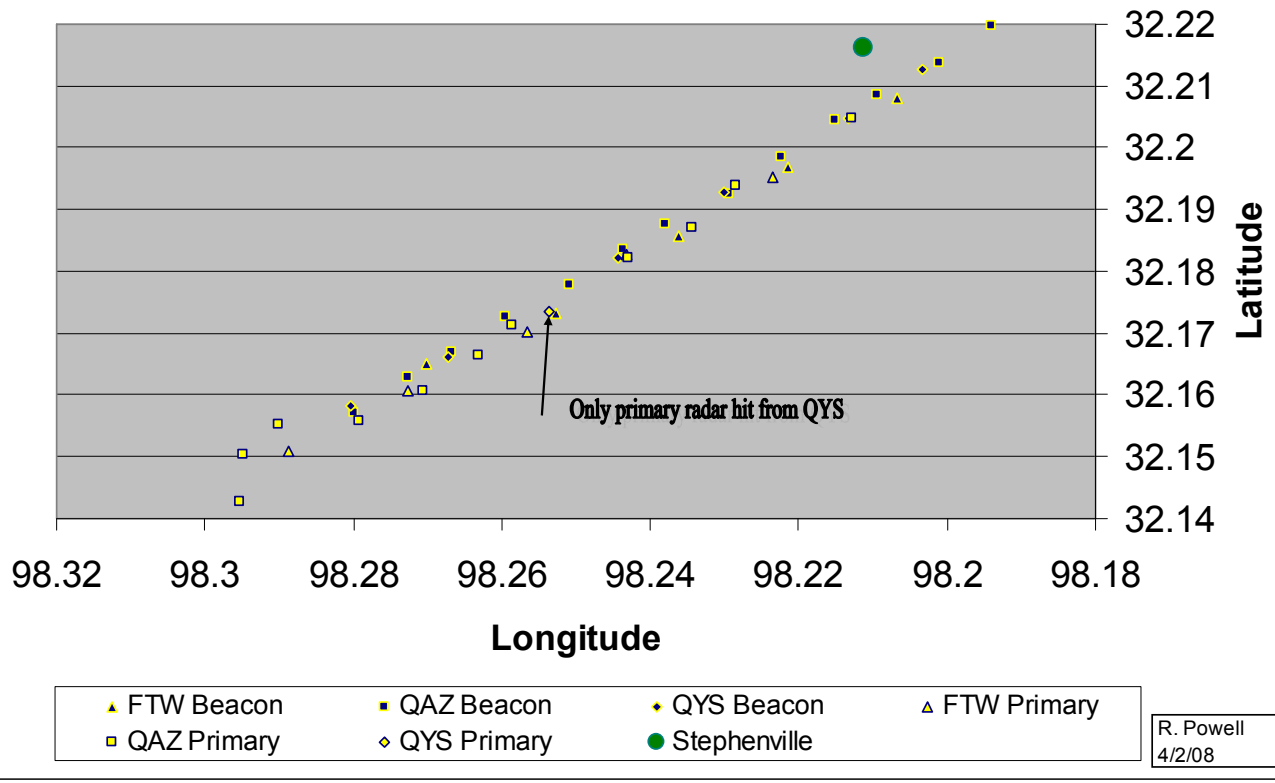
The data, supplied by the FAA, was in a text format, and was converted into an excel format so that it could be more easily analyzed. The data consisted of the following information:

1. Identification of the radar and its location.
2. The date and time was in Universal Coordinated Time, aka Greenwich Mean Time.
3. The time of each radar sweep was in approximate 10 second cycles for antennas FTW and QYS and in 4.7 second cycles for antenna QAZ, and was reported to the nearest tenth of a second.
4. An indicator if an object on radar had either a transponder code or if it was being detected by primary radar, aka skin-paint.
5. Range to the object in nautical miles and rounded to the nearest 1/8 of a mile.
6. Azimuth heading to the object in degrees.
7. Altitude of all objects with transponders and their corresponding transponder I.D.
8. Longitude and latitude calculated for each object based on its range and azimuth.
9. Strength of the radar signal was indicated in multiples of 4 with 7 different scales used from 4 to 28.

Before using the FAA calculated latitude and longitude values for this investigation, they were mathematically verified as being in agreement with the raw antenna azimuth and range data values.

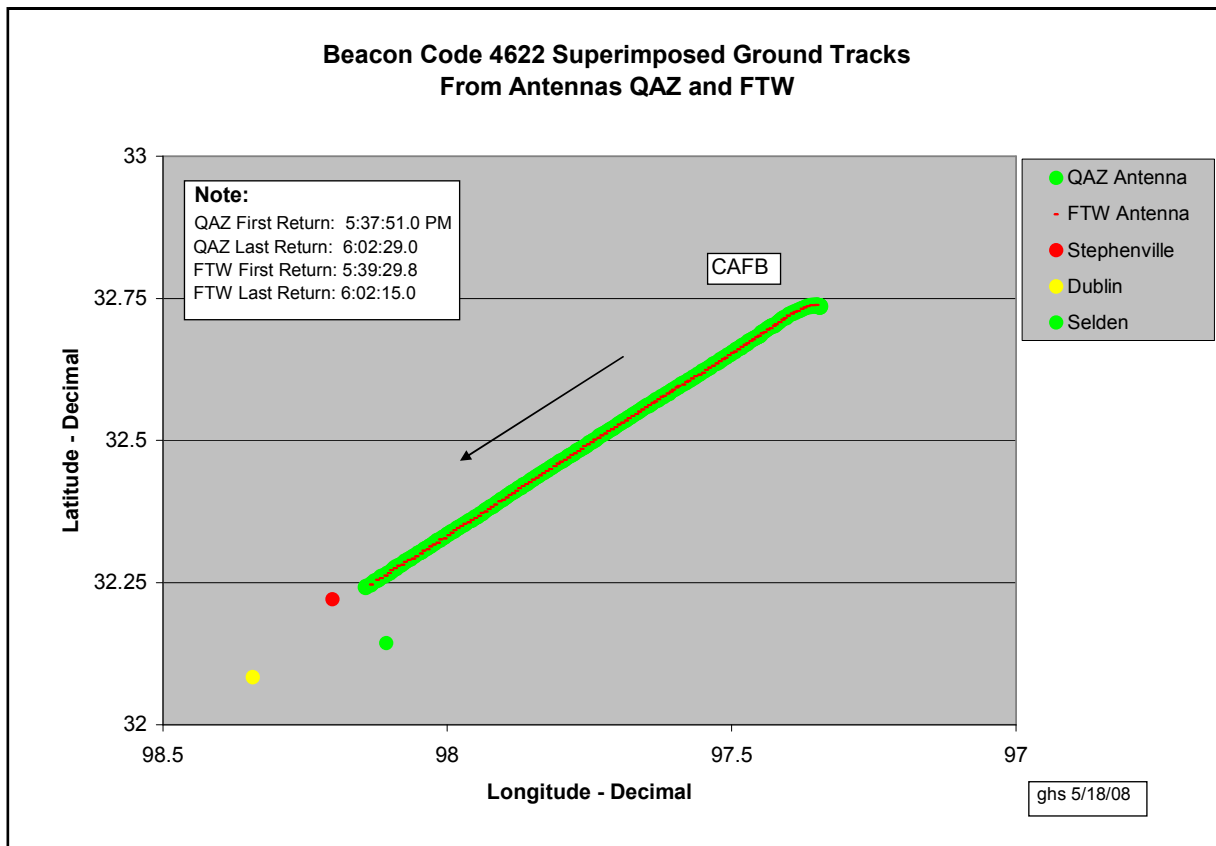
An Air Force jet from NASJRB flying under beacon code 5216 was used as the test case to determine accuracy between the radar. This allowed for verification of both skin-paint and beacon capabilities because another NASJRB Air Force jet without beacon was accompanying the primary jet. The radar correlation was done when these jets were southwest of Stephenville between 7:00pm and 7:01pm and flying at an altitude of 15300 feet. In graph #1-1 it can be seen that all three radar do a very good job of tracking 5216's beacon emission, which are the solid green shapes. The yellow shapes represent the tracking of the companion aircraft accompanying 5216, which is not emitting a beacon. The primary radar at QAZ (54 miles distant) and FTW (70 miles distant) accurately track the aircraft. However, the primary radar at QYS (89 miles distant), only picks up this aircraft on one radar sweep out of six sweeps during this time period.

Correlation of Primary and Secondary Radar from FTW(70mi dist), QAZ(54mi dist), QYS(89mi dist) with Beacon 5216 & accompanying jet from 7pm to 7:01pm



Graph #1-1

This same accuracy between the QAZ and FTW radars is also demonstrated at lower altitudes on a slow flying plane using beacon code 4622. The radar correlation was done using radar returns from a plane that flew from Ft. Worth towards Stephenville between 5:38pm and 6:02pm and that was flying at an altitude of 2700 feet. In graph #1-2 the QAZ radar trace is shown using large green squares and the FTW radar traces are easily seen by the use of red dashes. Both traces overlay well and indicate good correlation between these two radar systems.

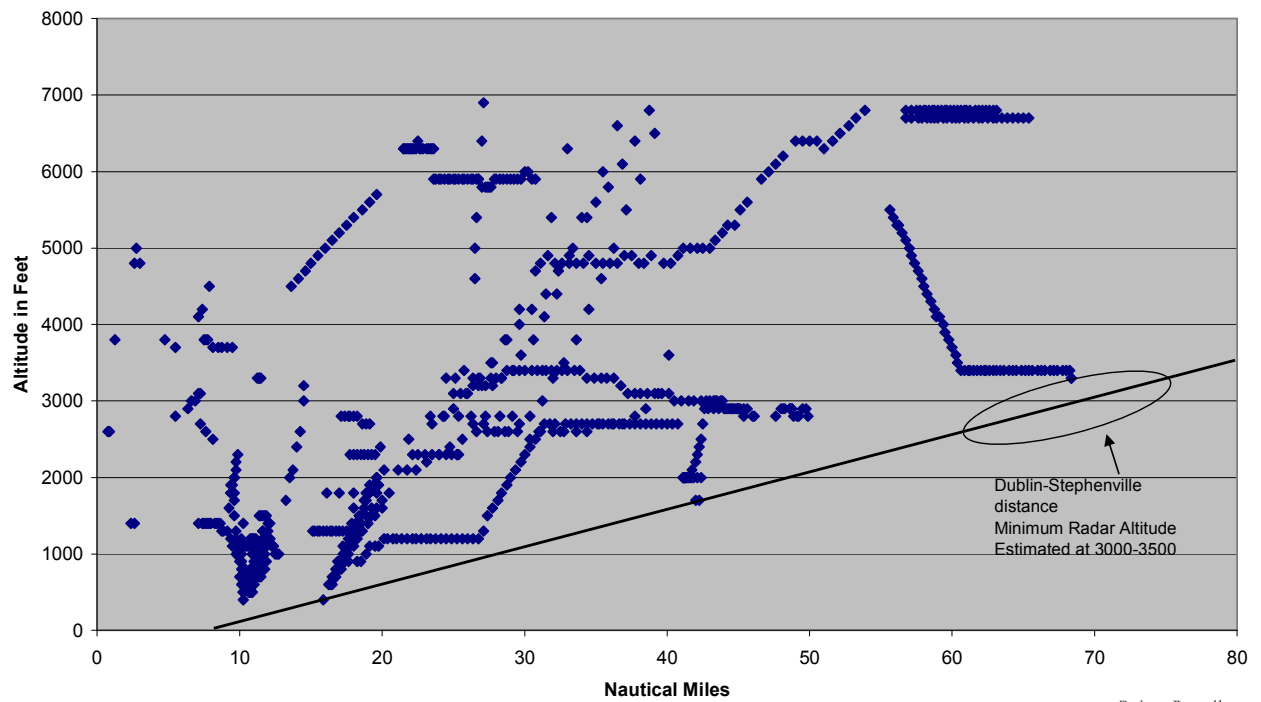


Graph #1-2

The ability to use radar data to accurately measure the speed of known jet aircraft in the area is demonstrated using the same data that created Graph #1-1. The speed of the jet is determined by taking its longitude and latitude coordinates between two different points in time. The distance between the longitude and latitude coordinates is calculated using the Haversine formula, and then along with the time coordinates, the speed of the aircraft is calculated using $d / (t_2 - t_1) = v$. Using an approximate 30 second time delta, the FTW radar indicates a speed of 423mph for the jet using beacon 5216. The QYS radar indicates a speed of 417mph and the QAZ radar a speed of 430mph. This is a very good correlation between radars with no more than a 3% variance. The calculation was also done using the original range and azimuth values provided by the FAA and the resulting values were the same.

The various radars' minimum altitude detection capability is important information as it provides information as to the minimum altitude of unknown objects that are detected by primary radar. This information was empirically calculated for the QYS, FTW, and QAZ radar by looking at secondary radar of aircraft that are in the same direction as Dublin-Stephenville. This is done because the minimum altitude that the radar can detect can be affected by the frequency of the signal, azimuth due to the tilt of the radar, the change in elevation of the terrain, the curvature of the earth, etc. The filtered data is then plotted in terms of distance vs altitude that allows us to see the minimum altitude that FAA radar can detect in the Dublin-Stephenville area. The following graphs (#1-3, #1-4, and #1-5) indicate that of our three main radar sites, the FTW and QAZ radar have the best capability and are able to detect aircraft down to 2500-3000 feet in the Dublin-Stephenville area. Unfortunately, the QAZ radar's maximum range is reached just south of the Stephenville area and drops off near the Dublin and Selden areas. The FTW radar is the most sensitive radar for this geographical area and will be the primary radar used in analysis.

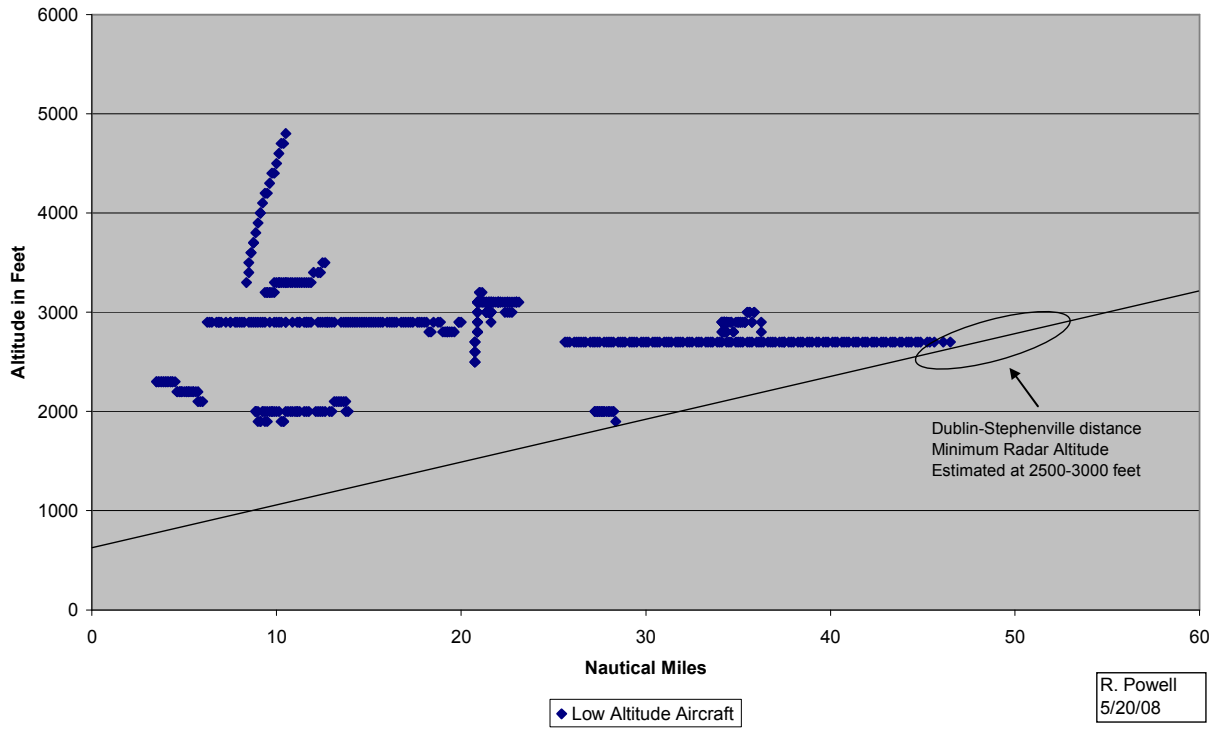
FTW Radar; Azimuth 215-225
Altitude vs Distance



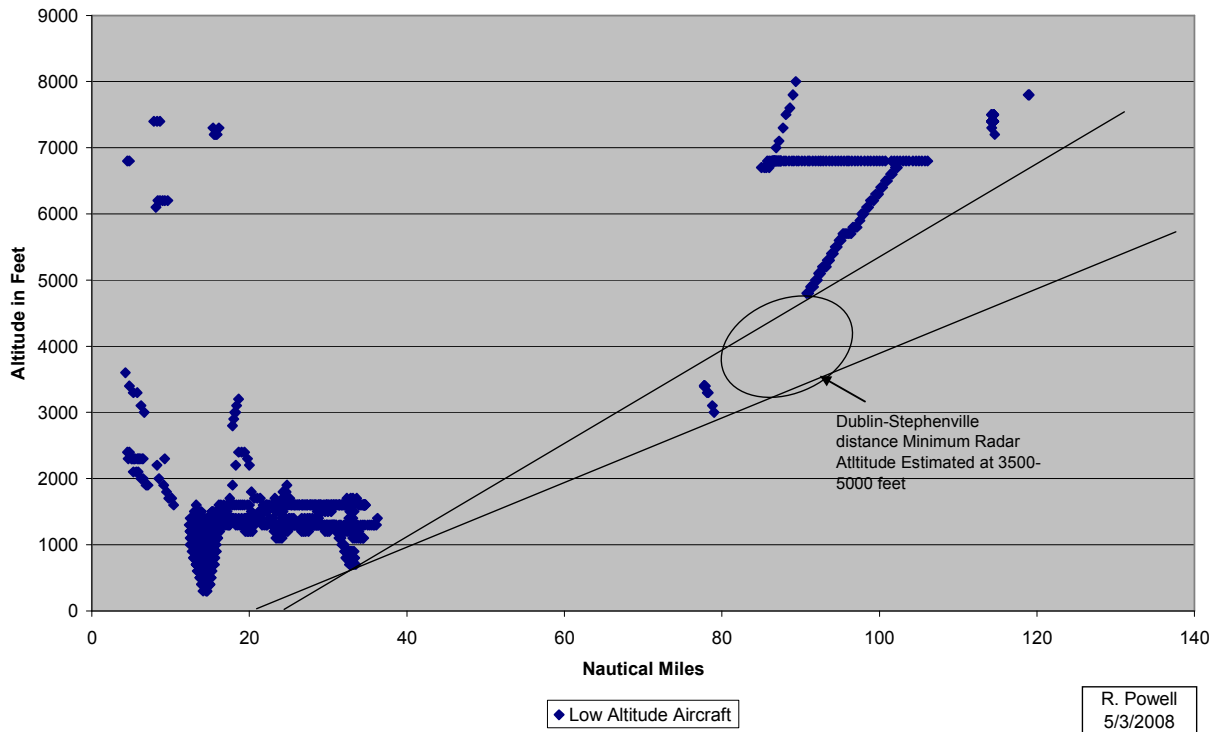
Robert Powell
5/3/2008

Graph #1-3

**QAZ Radar; Azimuth 200-230
Altitude vs Distance**



**QYS Radar Data; Azimuth 320-330
Altitude vs Distance**



VII. DESCRIPTION OF AREA AND WEATHER CONDITIONS ON JAN. 8, 2008

The geographic area where the sightings on January 8th took place is about 60 miles southwest of Ft. Worth, Texas, and is just a few miles to the northeast of the Brownwood Military Operating Area (MOA), shown in image #1 below. Dublin lies just on the northeast corner of that MOA range. The area is based on an agricultural economy and is renowned for its dairy industry. The entire population of Erath County which includes Stephenville, Dublin, and Selden was 34,000 people in 2005. The terrain is mostly flat with elevations between 1000-1500 feet. Sightings reported by witnesses to MUFON during this four hour period include an area bounded by Stephenville, Selden, Dublin, and Comanche, Texas.

Conditions in this area on January 8th were clear with no clouds throughout the time that sightings occurred in this area. Visibility was greater than 10 miles. Fahrenheit temperatures were in the upper 40s and the winds were calm at ground level. Skewt plots from radiosonde data indicated the following winds at higher altitudes.⁽⁶⁾:

2,000-5,000 feet	winds out of the east	30-35 mph
5,000-10,000 feet	winds out of the northeast	50-55 mph
10,000-50,000 feet	winds out of the northeast	60-75 mph

Sunset was at 5:44pm, civil twilight at 6:10pm, and astronomical twilight was at 7:10pm.⁽³⁾

BROWNWOOD M.O.A.



Image #1

VII. EVALUATION OF MILITARY ACTIVITY IN THE AREA

A. Detailed Radar Return Findings in The Stephenville Airspace of Interest

Airspace Of Interest The Stephenville Airspace of Interest, AOI, was selected by the investigators to be approximately a cube of airspace volume centered over the ground centroid formed by the north central Texas towns of Stephenville/Dublin/Selden and the USAF Brownwood Military Operations Area, MOA. This airspace volume is approximately 140 miles East to West by 100 miles North to South from near ground level to 45,000 feet in altitude. This large airspace volume was adequately scanned by at least 5 FAA rotating radar antennas which provided high quality radar returns, both primary and secondary, for the full 4 hour period from 4 PM to 8 PM local CST on January 8, 2008. Because of the radar horizon and line of sight limitations from the earth curvature, the low level altitude coverage of the FAA radars varied from minimums of 300 feet to 2700 feet in the AOI. A total of 16 airborne radar targets in the AOI came under close scrutiny during this investigation.

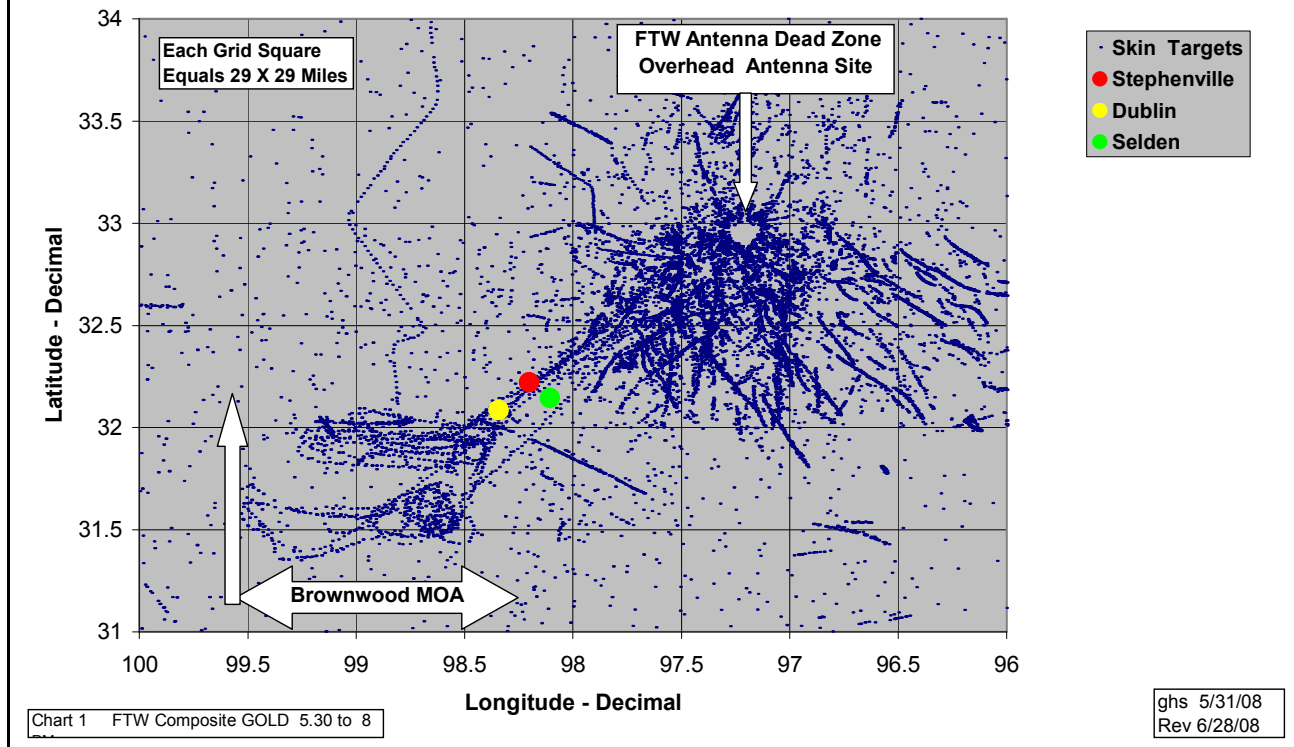
Radar Returns Graphing Format The millions of radar returns investigated for this report cannot possibly be absorbed and reviewed without the benefit of converting the most important tabular lines of radar returns into graphical charts. Inspection of these graphs can at a glance greatly increase the understanding and comprehension of the all-important FAA radar data available to be analyzed.

The most prevalent and common 2D graph format the investigators have chosen to use is a presentation of the ground tracks of the 16 targets discovered using decimal longitude as the X axis and decimal latitude as the Y axis. Statute mile scales are also shown, with a 1 degree longitude by 1 degree latitude square grid equal to 51 by 68 statute miles respectively. Altitude profile plots for the beaconsed targets are sometimes shown as a smaller insert graph in the upper left or upper right corner of the ground track graph. These altitude plots use arrival times of the radar returns in sequence as the X axis and altitude in feet as the Y axis. Colored legends are used when necessary to differentiate between different targets on the same graph. The FAA source antenna and the time period covered by the individual graphs are noted in the graph title and annotated time stamps are shown on the various graphs when appropriate. Graph Nos. appearing in the text are accentuated to make them more easily relocated for reference.

When both Primary and Secondary radar returns are shown on a single graph they will be properly identified. Primary radar returns are also referred to as skin paint returns as they are RF reflections returned to the FAA transmitting antenna by the metallic skin of the target. Secondary radar returns are also referred to as beacon returns as they are a different frequency RF signal returned by the answering target's transponder to the FAA transmitting/receiving antenna. The last few target beacon returns forming a ground track are usually enhanced in size emulating the blooming and decaying persistence of a typical FAA ATC scanning radar screen. Only the Secondary beacon returns carry the targets ID code number and the targets altitude. All FAA radar returns, regardless of type, consist of the targets azimuth angle in degrees, target range in nautical miles, NM, and the hours, minutes and seconds when the radar return was received.

Graph 2-1 shows the massive number of just primary -- i.e., skin paint -- radar returns in and near the AOI for two and one half hours, 5:30 to 8:00 PM, from just the FTW antenna. This Global View Graph, of primarily the southwest quadrant three of the FTW antenna radar data available for analyses, is included primarily to convey the massive number of FAA radar returns received by FOIA request.

**FTW Antenna 5:30 to 8:00 PM Global View 8 January 2008
All Skin-Paint Returns**



Graph #2-1

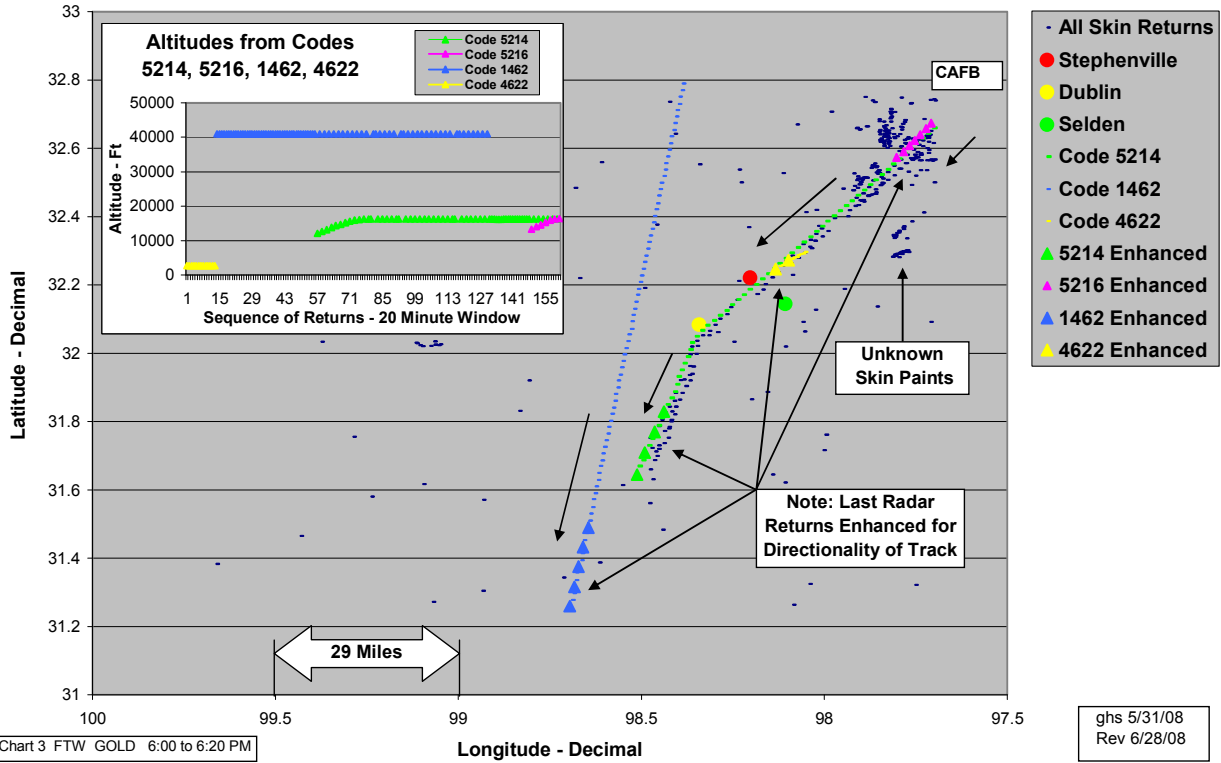
Graphs 2-1 to 2-6 in time aggregates show the 16 targets of interest in and near the AOI after their radar returns have been found and extracted from the entire 2.5 million data returns. These targets are identified by beacon codes when available. These six graphs display either 20 or 30 minute snapshots of radar tracking returns on a non overlapping time basis from 5:30 to 8 PM. It is suggested the novice reader initially derive only a global view impression from these six graphs as detailed discussions of the targets found on each graph will be provided in the following paragraphs along with a display of each graph as it is described.

Graphs 2-7 to 2-14 are customized Graphs designed to graphically enhance and explain a particular target or targets behavioral characteristics, sometimes for targets outside the primary AOI.

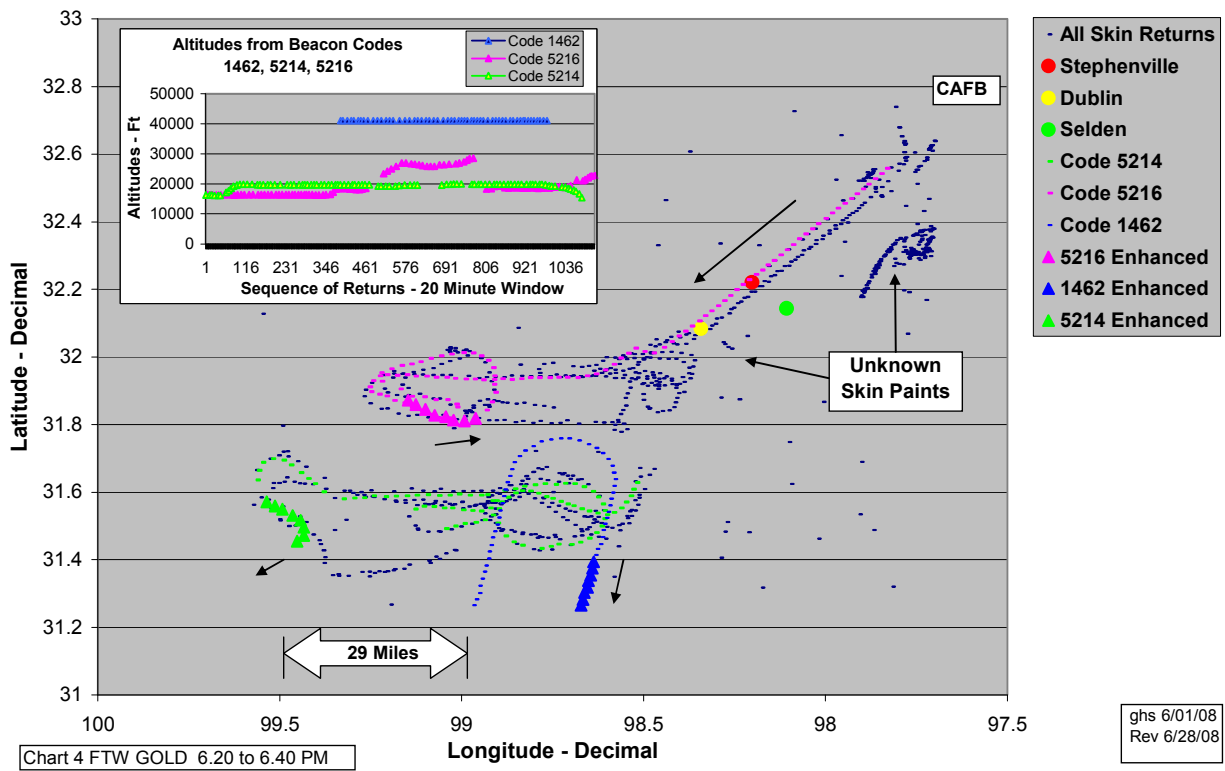
B. Ten Identified Military Jet aircraft Operating Out of Carswell Air Force Base,

CAFB Jets 1 to 8 Eight military jets (Identified as F-16s by CAFB) were found to have departed CAFB to the north between 6 and 6:20 PM and then sharply turn southwest toward the Brownwood Military Operations Area, MOA. These 8 jets all transited southwest along the precise centerline of a well used and easily defined Military Training Route, MTR. Their flight paths took them directly over Stephenville in a straight-line heading to the MOA, arriving at the MOA about 20 to 30 minutes after takeoff from CAFB. (See graphs 2-2 and 2-3 on the next page.)

FTW Antenna 6:00 to 6:20 PM 8 Jan 2008
 All Skin-Paint Returns and Beacon Codes 5214, 5216, 1462, 4622



FTW Antenna 6:20 to 6:40 PM 8 Jan 2008
 All Skin-Paint Returns with Beacon Codes 5214, 5216, 1462



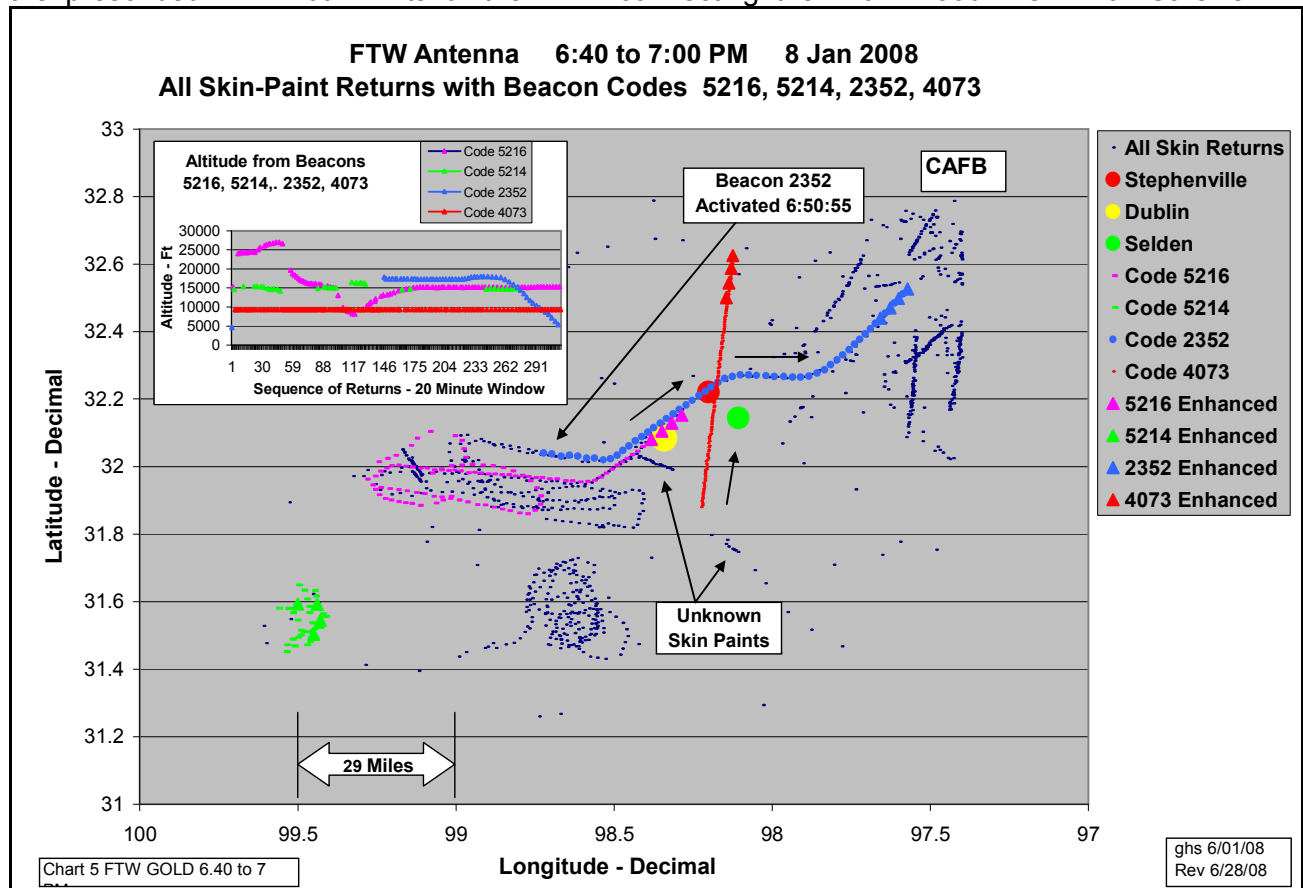
Graphs #2-2, #2-3

The altitudes of these 8 jet aircraft when passing over Stephenville and the center of the AOI were approximately 15,000 ft above ground level, AGL. These altitudes were provided by the transponder beacon codes 5214 and 5216 from the 2 lead aircraft, and the assumption that their trailing six aircraft were in close formation. Each of the two lead and beaoned aircraft led a loosely formed sortie of 4 jets with the 3 trailing jets transponder beacons purposely muted in apparent agreement with FAA/DOD MARSA procedures, i.e., Military Assumes Responsibility for Separation. When military aircraft are in a sufficiently close formation only the lead aircraft is required to have an active transponder.

The first 4 jet sortie that departed CAFB near 6 PM, led by beacon 5214, arrived at the southernmost Brownwood MOA (Brownwood 2 East) near 6:25 PM and performed a number of coordinated and intricate aerial maneuvers all at altitudes above 15,000 ft.

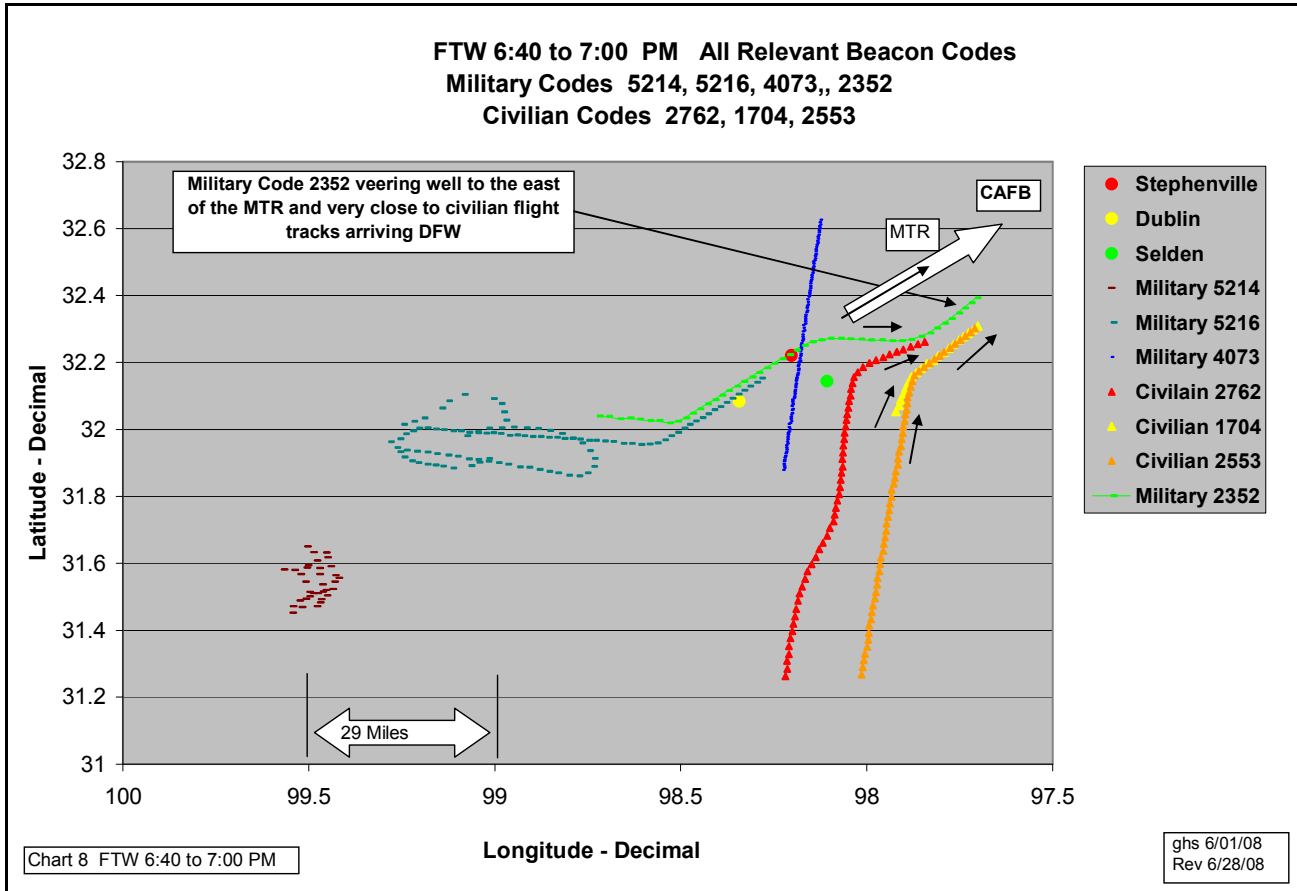
The second 4 jet sortie that departed CAFB near 6:15 PM, led by beacon 5216, arrived at the northernmost Brownwood MOA (Brownwood 1 East) near 6:35 PM and performed a number of intricate aerial maneuvers all at altitudes above 15,000 ft., except for the lead beacon code 5216 aircraft briefly descending down to below 9,000 ft.

Two New CAFB Beacons Activated During High Level Flight Two initially un-beaoned aircraft from the second departing sortie were the first to depart either Military Operating Area and return to CAFB after a very short period of maneuvering time in the northern MOA. (See Graph 2-4) As they broke away from their originally lead beaoned aircraft the new lead CAFB jet activated his beacon code at 6:50:55 PM set to 2352. After having just achieved heading alignment with the MTR centerline leading back to CAFB this lead jet increased airspeed and veered sharply to the right and east for approximately 25 to 30 NM with the trailing second jet in rather loose formation; 2 NM to the rear. This eastward bearing ground track took these 2 CAFB jets close to and probably beyond the prescribed NM width limits of the MTR connecting the Brownwood MOA with Carswell AFB.



Graph #2-4

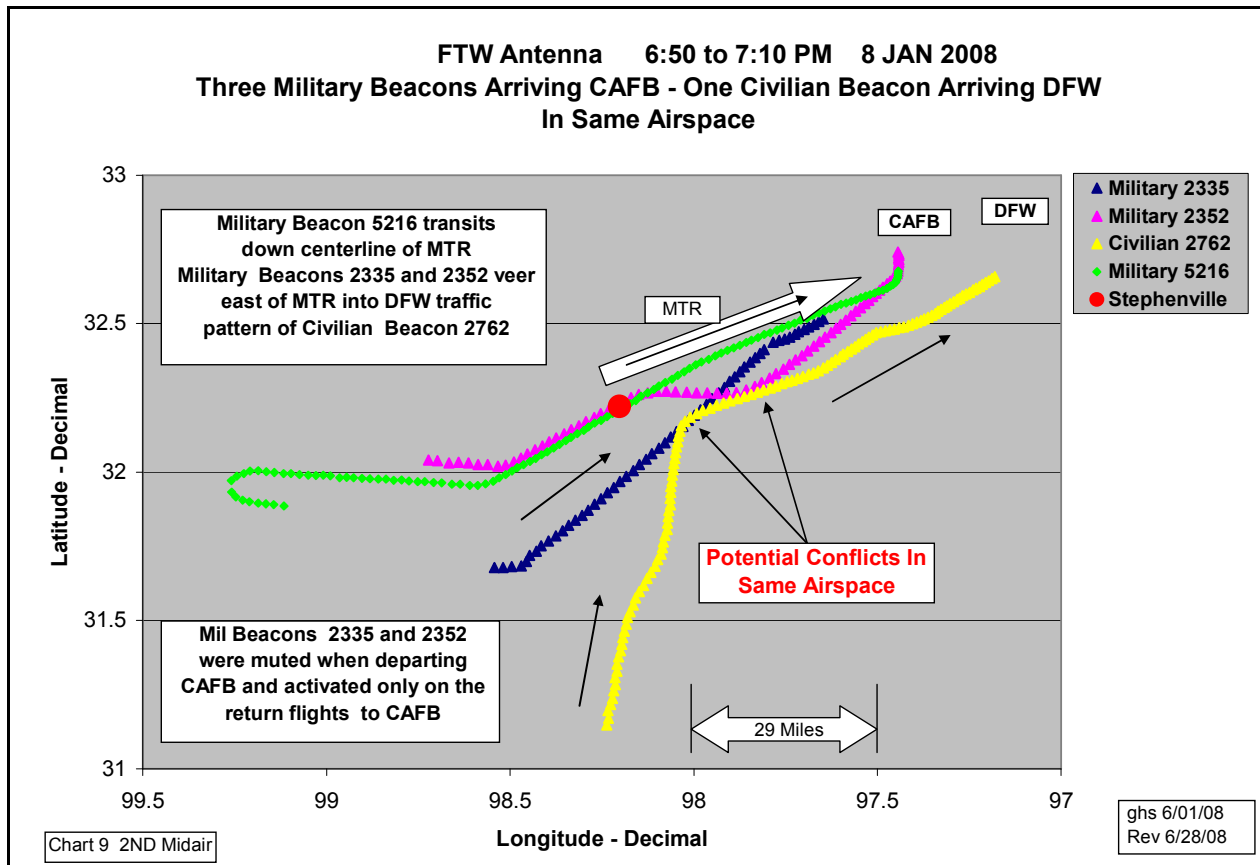
Their ground tracks closely approached the ground tracks of two to three civilian aircraft preparing to land at DFW from the southwest. (See Graph 2-5, below). After a few minutes of their veering to the east from the MTR centerline they again turned northward toward CAFB. These 2 returning aircraft passed near Stephenville and Selden and the center of the AOI between 2,700 and 15,000 ft AGL.



Graph #2-5

A similar sortie disbandment took place with the last 2 aircraft in the first 4 jet sortie that departed CAFB near 6 PM and trained at the Brownwood South MOA. Two of the trailing aircraft in the first departing sortie broke away from their lead aircraft and returned as a separate sortie to CAFB with the new lead aircraft activating beacon code 2335 at 7:00:41.

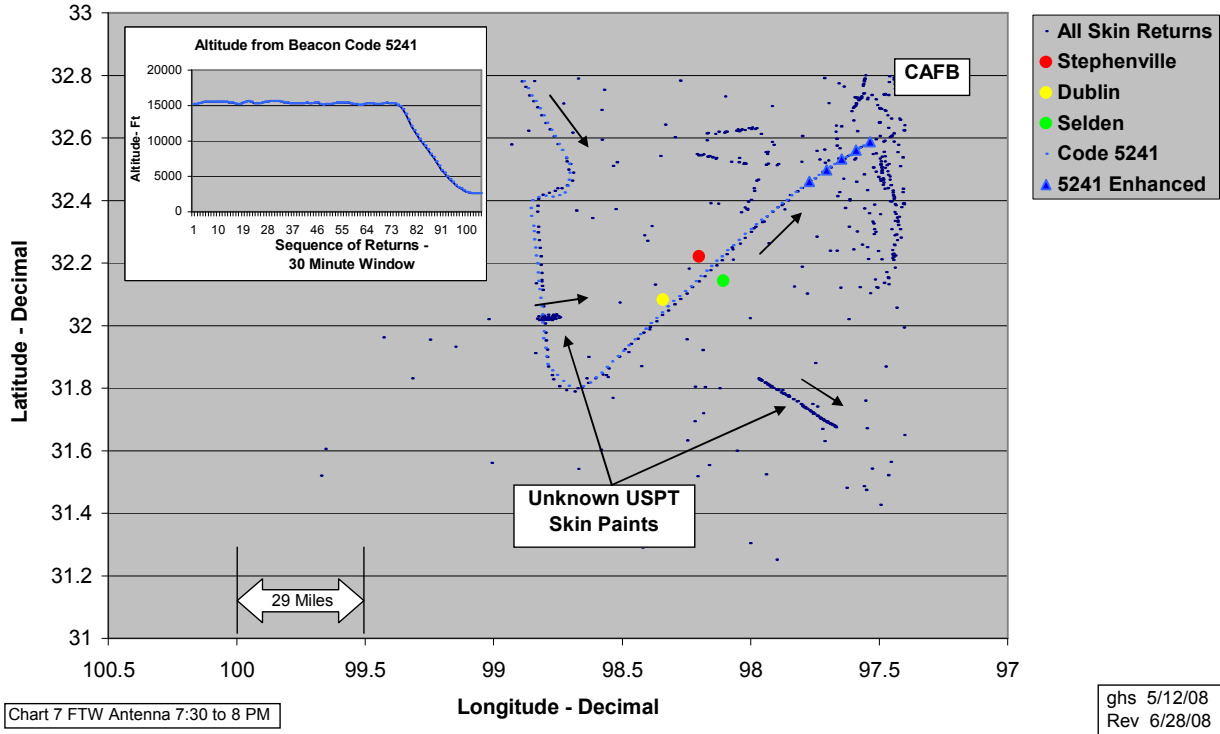
These 2 returning aircraft did not proceed directly to the MTR centerline but elected to return to CAFB via a ground track transiting 11 to 15 NM east of the usual MTR centerline, but still remained separated from all but one of the civilian aircraft ground tracks. These 2 returning aircraft passed near Stephenville and Selden and the center of the AOI between 2,700 and 15,000 ft AGL. (See Graph 2-6, below.)



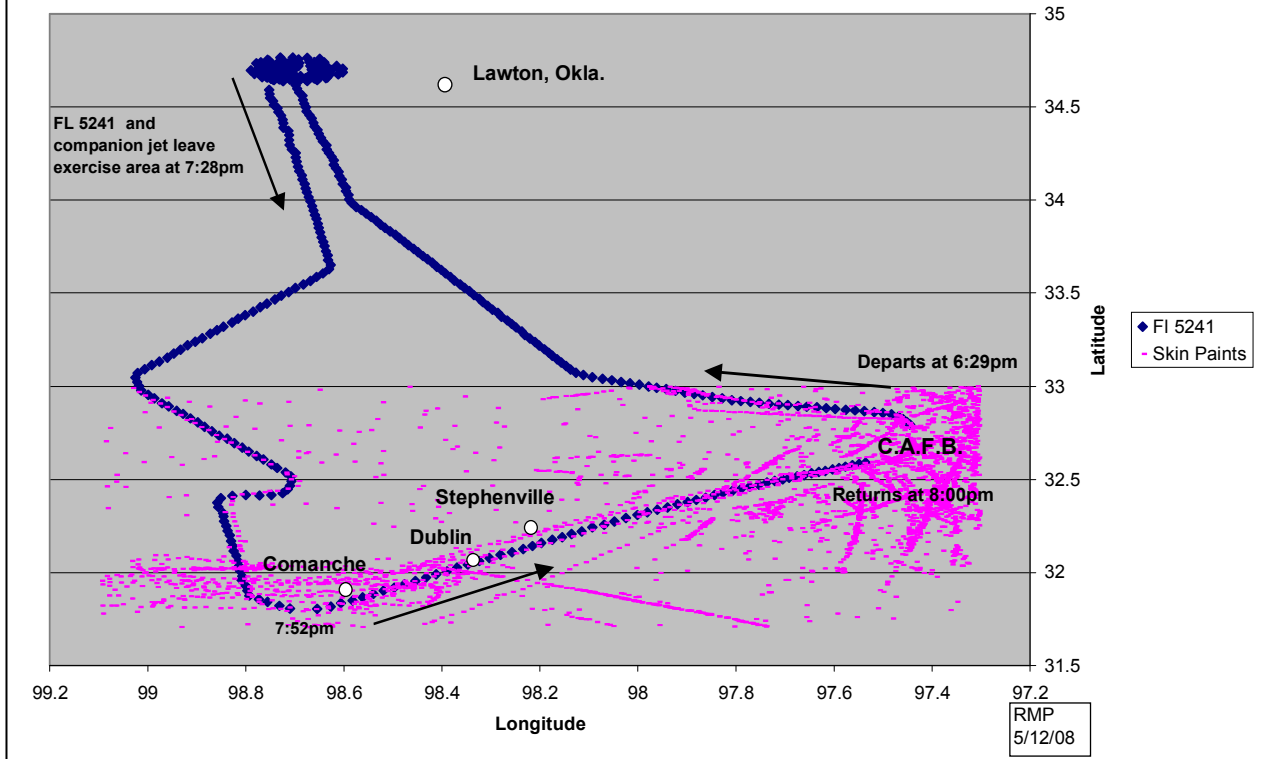
Graph #2-6

CAFB Jets 9 and 10 A 9th and 10th military jet departed CAFB to the north near 6:30 PM and transited to a MOA in southern Oklahoma (well north of our primary AOI), with the lead aircraft transmitting beacon returns on code 5241. (See graphs 2-7 and 2-8 on the next page.) These 2 aircraft remained in loose formation for their entire flight and returned to CAFB using only beacon 5241 throughout. Their maneuvers in the Oklahoma MOA were limited to simple and non-intricate concentric circular patterns. Their return to CAFB was not direct as they traveled far to the south, and made a loop around the Dublin-Stephenville area. It seems an odd occurrence that these two planes were diverted to the south after completing their maneuvers in Oklahoma. They then used the same southwestern MTR, between Stephenville and CAFB to return to base. Their return altitudes over Stephenville and the AOI center near 7:40 PM was between 2,700 and 15,000 ft AGL and their ground tracks were within 1 to 2 NM east of the MTR centerline.

Chart 7 FTW Antenna 7:30 to 8 PM 8 Jan 2008
All Skin-Paint Returns with Beacon code 5241

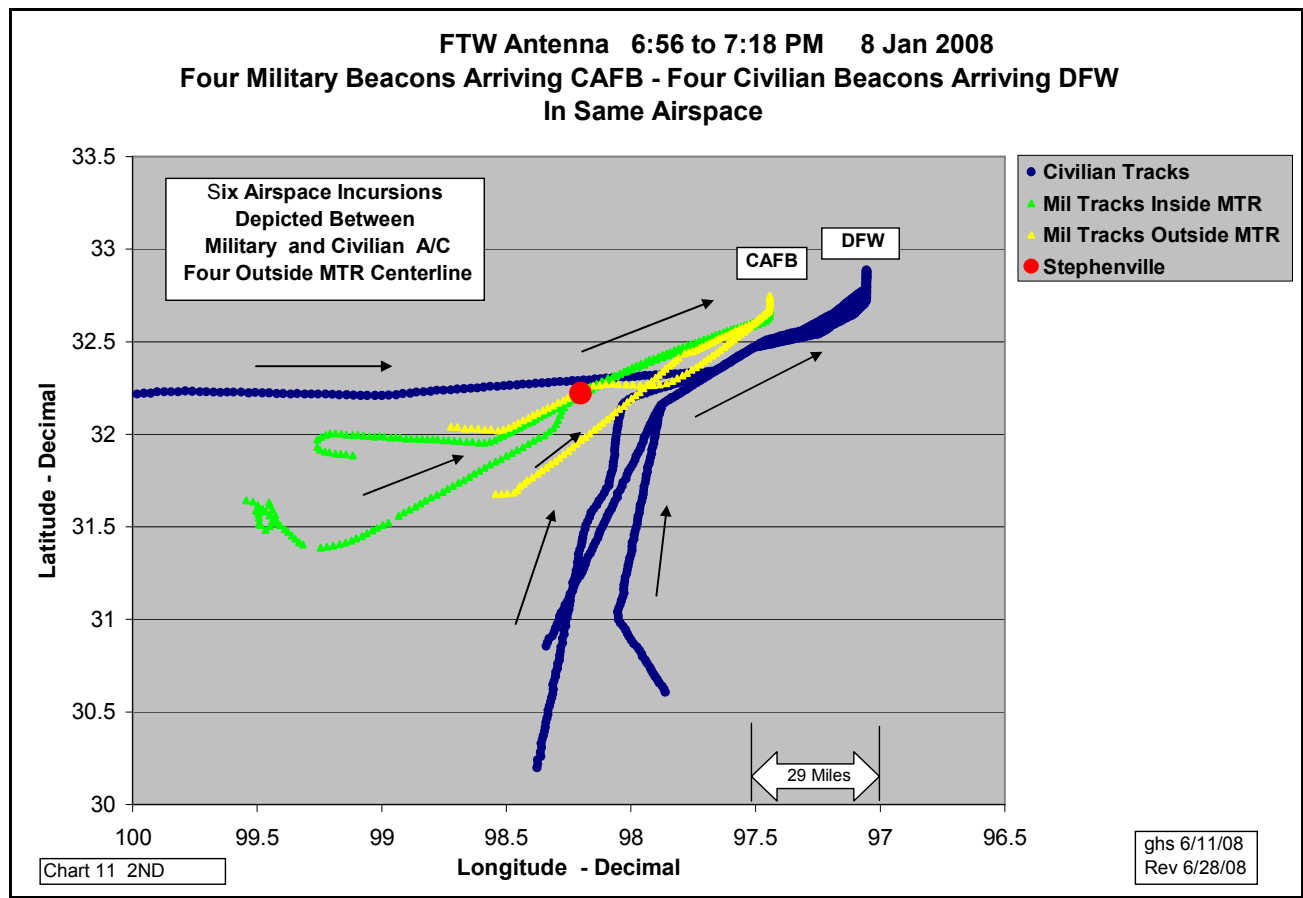


FTW Radar; FL 5241 and skin paints



All 10 of these CAFB affiliated jet aircraft were substantially radar ground tracked and altitude profiled for the complete duration of their training flights commencing at 6 PM and terminating shortly after 8 PM. Altitude profiles for the 5 CAFB trailing jets without beacons have been assumed to be between 2,700 and 15,000 feet when returning to CAFB. Although these 5 trailing jets have been skin tracked throughout their entire flights we cannot be totally sure of their altitudes other than they never dropped below the radar horizon.

The return ground tracks of these 10 jet aircraft returning back to CAFB are most interesting as 4 of these 10 aircraft veered and transited to the east of the prescribed MTR centerline by 15 to 30 NM appearing to create an airspace incursion into DFW arriving flight traffic patterns. (See Graph 2-9 below.)



Graph #2-9

CAFB Logbook Now that the military jets have been identified on radar, let's examine the redacted logbook from Carswell AFB that was obtained through a FOIA. A copy of this logbook is in the appendix. The logbook shows a sortie of four aircraft leaving at 6:00pm and another sortie of four aircraft leaving at 6:15pm, with both sorties returning at 7:30pm and 7:45pm respectively. Radar data shows take offs of 5:52pm and 6:15pm with returns of 7:14pm and 7:27pm. These times match up quite well as the logbook appears to be anticipated arrival and departure times to the nearest quarter hour. Radar data also shows a 9th and 10th jet leaving Carswell at 6:29pm and returning at about 8:00pm. These two flights are most likely the two rows redacted in the logbook after the entries for the other 8 jets. There are two more rows redacted after this 9th and 10th flight, but it is difficult to tell if those flights took place. Also appearing on the logbook are 10 redacted rows which appear to be flights on the same day and prior to the eight flights already mentioned. These additional 10 earlier flights cannot be verified because the FOIA radar data is only from 4pm to 8pm. It is possible that aircraft from Carswell's earlier flights may have also been in the area. All of the 8 jets identified on this logbook, the two redacted flights, and possibly earlier flights, flew into the Dublin-Stephenville area. This logbook highlights a high level of military aircraft for this area over a time period of only two hours.

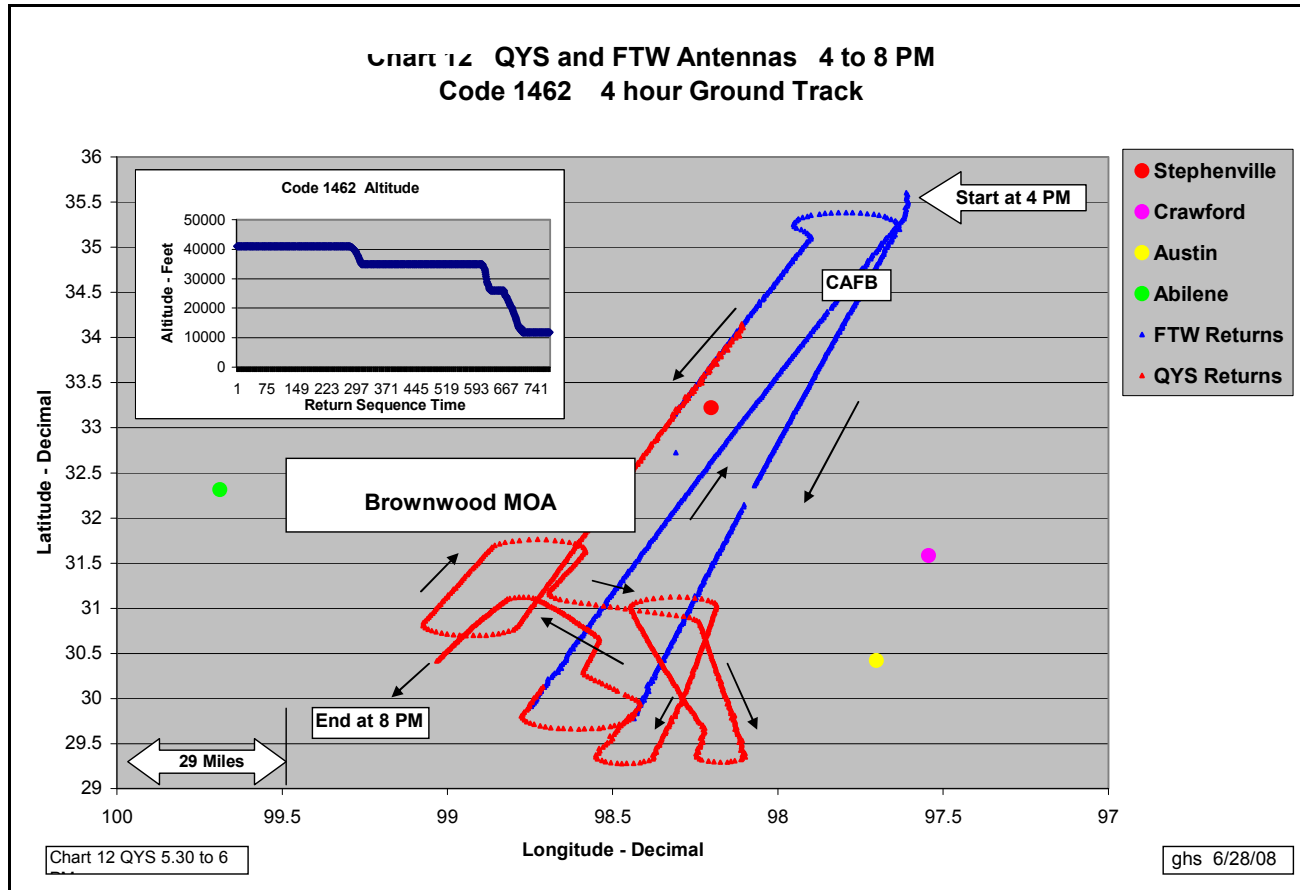
C. Three Unaffiliated Transpondered aircraft

Three apparently separate and Unaffiliated Transpondered aircraft, UTAs, were detected and tracked by FAA radar in the AOI during the 4 hour period from 4 PM to 8 PM, emitting beacon codes 1462, 4073 and 4622.

The airborne source of transponder beacon code 1462 was altitude profiled and ground track profiled for the full 4 hour time period, during which time the airborne target both directly entered, departed and repeatedly approached our AOI, always at altitudes between 35,000 and 41,000 ft AGL.

Near the end of the 4 hour period, beacon code 1462 departed the AOI to the southwest at a gradually decreasing altitude down to below 15,000 ft at 8 PM. During this continuous four hour period the source aircraft emitting code 1462 produced a ground track best described as a modified and expanded racetrack course formed by several precise 180 degree NS turns as if it were on a search or monitoring mission. The altitude profile and ground track of beacon code 1462 is consistent with the high altitude mission of a military aircraft such as an AWACS, Airborne Warning And Control System. The AWACS radar (an AN/APY-1 or AN/APY-2) has a range of more than 200 miles (320 kilometers) for low-flying targets and farther for aerospace vehicles flying at medium to high altitudes. The radar combined with an identification friend or foe subsystem can look down to detect, identify and track enemy and friendly low-flying aircraft by eliminating ground clutter returns that confuse other radar systems.⁽⁵⁾ Only such military aircraft can be expected to fly for over four hours at high altitudes and flying nowhere in particular. The USAF AWACS has an 8 hour mission on-station capability and are home based at Tinker AFB, Oklahoma. (See graph 2-10 for the path of the potential AWAC.)

Note: Earth curvature effects and "flying beneath the radar" scenarios cannot seriously occur during high altitude AWACS missions



Graph #2-10

The second UTA, emitting beacon code 4073, transited through the AOI at a constant near northerly heading at an altitude of 8,900 ft AGL and at a constant airspeed of approximately 145 mph. (See graph 2-4). This beacon source was present in the AOI from approximately 6:40 to 7:05 PM, flying straight-line north northeast and crossed the MTR centerline directly over Stephenville. Its operation and speed were consistent with that of a light plane or helicopter.

The third UTA, emitting beacon code 4622, arrived in the AOI from the northeast transiting directly down the centerline of the MTR but at a very low altitude. Code 4622 was first acquired at 400 ft AGL over the city of Ft Worth. (See graph 2-11) This UTA target gradually gained altitude reaching 2,700 ft AGL when it suddenly disappeared from two FAA radar screens within a 20 second period. The airspeed of the source of beacon 4622 was in the range of a light plane or helicopter, approximately 140 to 150 MPH, and was early on tracked from 5:38 to 6:02 PM. The disappearance of this beacon signal within a 20 second time period from two of the nearest FAA radars is consistent with the altitude of the source aircraft operating below FAA antenna altitude tracking minimums. This loss of radar tracking would be expected by earth curvature line-of-sight and radar horizon considerations at a radar range of 50 to 60 NM. This important beacon of opportunity provided hard evidence of the low level altitude limitations of 2,700 feet when the FAA radars scanned the Stephenville airspace at 50 to 60 NM distance.

QAZ Antenna 5:38 to 6:02 PM
Code 4622 Complete Beacon Ground Track
Beacon Drops Below Radar at 2700 Ft Altitude Near Stephenville

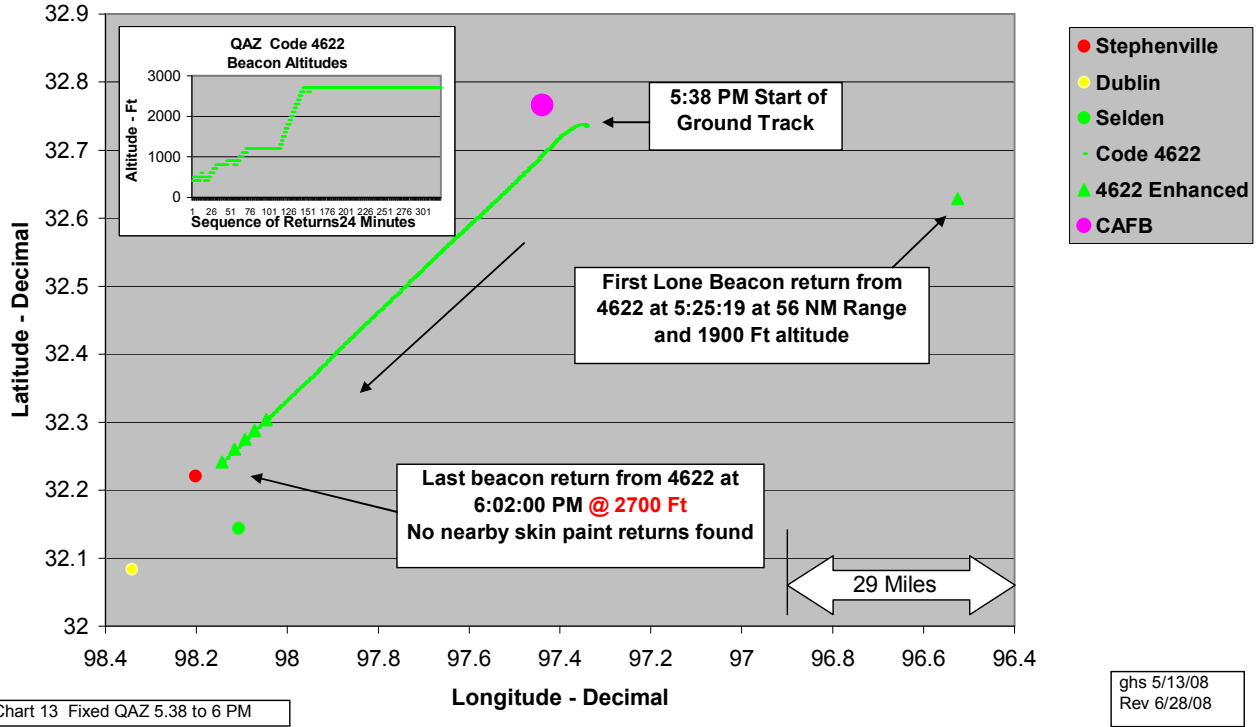


Chart 13 Fixed QAZ 5.38 to 6 PM

ghs 5/13/08
Rev 6/28/08

Graph #2-11

IX. EVALUATION OF UNKNOWN AIRCRAFT ACTIVITY IN RELATION TO WITNESS TESTIMONY

Although this report is primarily driven by radar analysis, it is critical that the witness testimony of January 8th be tied in, and when appropriate, related to the radar data. 17 reports were obtained by MUFON regarding unknown objects seen during the time frame of 6pm to 10pm on the night of January 8, 2008, and of those 17, this report will look at the 8 best witness(s) reports that help identify the location(s) and size of the object. It is recognized that witness testimony is not perfect and often contains errors. The number of reports in this investigation from varied geographical locations and from a narrow time window of four hours helps minimize those errors. The number of witnesses and their testimony eliminate any reasonable explanations related to meteors, helicopters, jet aircraft, flares, balloons, blimps, etc. These witnesses include a constable, a chief of police, a former FAA air traffic controller, and a private pilot. However, for privacy reasons, the names of all the witnesses have been withheld but may be released at a later date. The exact latitude and longitude is rounded in the literature when the sighting location is an individual's home. However, the exact latitude and longitude is used in all calculations. Although not a direct witness, it would be appropriate to highlight Angelia Joiner, a former news reporter for the Stephenville Empire Tribune, as having been very instrumental in bringing many of these witnesses forward.

This report examines witness testimony in chronological order of their sightings, with the realization that witness' estimated time of observation will vary. On the night of January 8, 2008, there were a total of 17 reports investigated that seemed to be tied to the same object. There is no indication of any sound from the object by any of the witnesses. Six of those reports described orange to reddish colored lights. Two of these involved witnesses who initially saw reddish lights that turned to white. Two of the reports involved bright white lights, three of fast moving bright white lights, and four reports of fading/brightening white lights. Four of the witnesses who saw bright white lights, described them as similar to a welder's arc. It's unusual to have different witnesses use as similar and as distinct a terminology as this. Three of the eight witnesses specifically mention the enormous size of the object and calculations based on testimony from the other witnesses support this description.

A. First set of sightings; 6:10pm to 6:25pm; witness testimony

The earliest sightings of the object occurred between 6:10pm and 6:25pm. There were four different reports received related to this time. The witnesses were at varied locations that were southeast, southwest, and west of the object. This variation in witness location helps in estimating the size and location of the object. Triangulation is not possible because it cannot be verified that any witness saw the objects simultaneously. However, due to the varied distances from Stephenville of the various witnesses, it is possible to make some reasonable estimates of the size of the object. A description of each witness's sighting will be provided and will be followed by relating this to radar information.

6:10pm; Chalk Mtn sighting Witness 'A' was interviewed on the phone with three follow up conversations. Witness 'A' was traveling in his truck on Hwy 67 just west of Chalk Mountain. His location was 32°09'12"N 97°55'W. He had left Bono, Tx. at 5:45 which is 30 miles from his location at the time of the sighting and he estimated that he saw the objects at about 6:10pm in the western sky at an elevation of about 10 degrees. He indicated that the sun had already set, there weren't any stars out yet, and there was still light in the sky. His travel time and amount of light in the sky supports the witness's estimation of a sighting at about 6:10pm. He saw two bright lights towards the west, which would have been in the direction of the Stephenville area, which was 17 miles to the northwest, and the Selden area, which was 11 miles to the west southwest. He described the lights as similar to welding arcs that were next to each other and stationary when he first saw them. He estimated each light to be the size of his little finger at arm's length. This would equate to about 1 degree. The two lights then split apart and moved very rapidly with one light moving to the north and the other to the

south. The lights moved so rapidly that the witness was not certain how far they had moved apart before disappearing, other than to say that they disappeared before they left his field of view within his truck windshield. That would put the lights' distance from each other at their time of disappearance at between 20-50 degrees.

6:15pm; Selden 1st Sighting The second report occurred at about the same time. Witnesses 'B'(a private pilot), 'C', and 'D', were located a mile from Selden, Texas, at 32°08'N 98°06'W. Their location was at a high elevation point of 1330 feet without obstructions. The surrounding terrain is at an elevation of 30-70 feet lower. One of those three witnesses ,('D'), has not been interviewed as he has avoided contact with everyone regarding this sighting. The pilot was interviewed on April 16, 2008, at the location of the sighting. Within various press reports, Witness B's initial time of observation has varied from *"the sun was behind me and was just setting"*(sunset was at 5:44pm) to *"I got there a little after 6pm. Just been there a moment when I saw lights coming from the east and going west"*. In meeting with the witness, the one portion that is clear about the time of the sighting is that there was still plenty of light left in the sky. The time could have been anywhere between 5:45pm to 6:15pm. One additional piece of information is that the witness indicates he left Glen Rose, Tx., at 5:15pm, and drove towards Selden. That is a 28-mile trip through county roads and he made one quick stop at a convenience store. This should have taken about 40-50 minutes, which would have the witness arriving at Selden at about 6pm.

Witness 'B' first saw the object in the north-northeast at an elevation of about 20 degrees. He described the object as completely silent and that it consisted of four very bright lights similar to the intensity of burning magnesium. This description was also verified by witness 'C'. He estimated the object's overall size as taking up about 3 degrees of sky. See image #2 below, which contains an actual photo of the

location of the sighting, but with an artist rendering of the object embedded in the photo as it appeared to the witness. In the actual sighting, due to the brightness of the lights, the witness could not tell if the lights were separate or part of one craft. The object moved at a high rate of speed and gradually slowed as it moved from north-northeast to northwest and finally coming to a stationary position in the west.

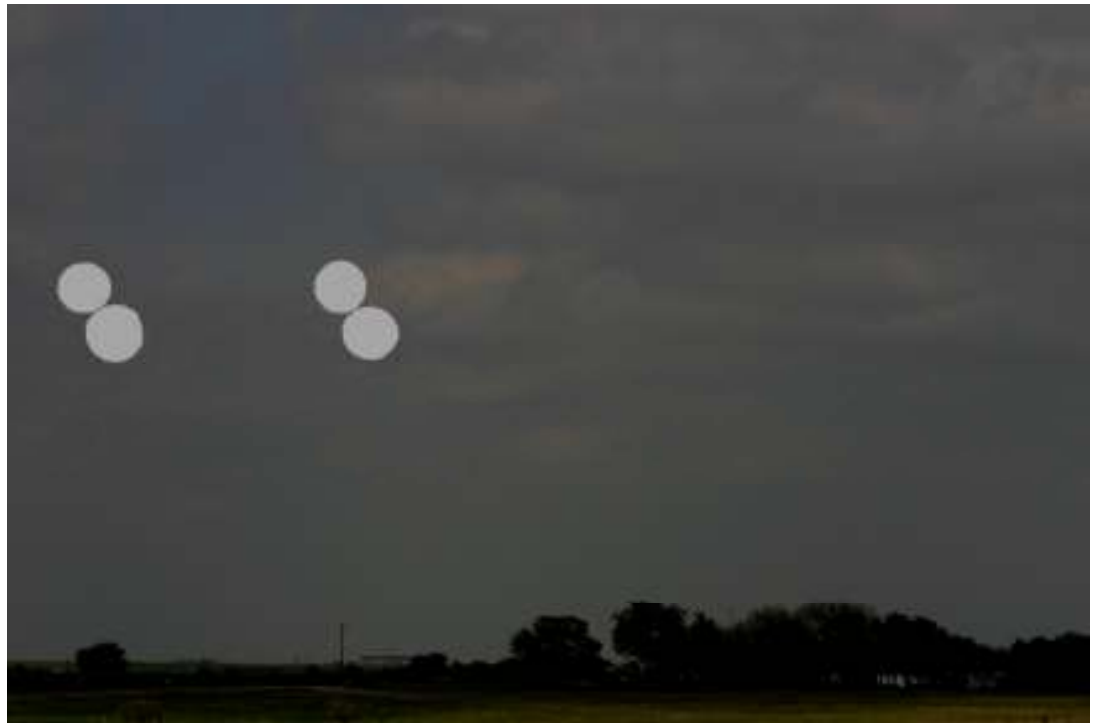


Image #2

By the time the object had reached the western location, its elevation had dropped to 10 degrees and its size had increased to cover about 6 degrees of the sky. The witness estimates that this took about three minutes. It was at this point that the witness saw 7 lights in an evenly spaced horizontal position. The seven lights then changed to an arc in the horizontal position, followed by all 7 lights aligning themselves vertically, and then two pair of lights in a vertical position. The object then emitted a bright white flame and disappeared.

6:25pm; Selden 2nd Sighting This sighting involves a repeat observation by the same witnesses just mentioned. One witness left the area and the other two went inside. They informed the fourth witness, Witness 'E', as to what they had seen and that Witness 'D' had left in his vehicle. Witness 'E', who had not seen this initial sighting, called Witness 'D' who informed them that the object was back and that he could see it from his truck.

Witnesses 'B', 'C', and 'E' returned outside. Witness 'B' estimated that about 10 minutes had elapsed since the first sighting and that it had begun to get dark but there was still some light outside. This last statement further supports the likely time as closer to 6:15pm rather than 5:45pm because 10 minutes after 5:45pm (sunset), it would not have begun to grow dark.

During the second sighting, the object was seen in the southwest at an elevation of only 8-10 degrees above the horizon. The object took up about 2-3 degrees of sky at its closest point. It was traveling from the southwest to the east and was being pursued by two jets that were about 3 seconds behind it. Witness 'B' estimated that each jet took up about 1 degree of sky at their closest point. He described the sounds of the jets as deafening. All three witnesses indicated that the jets were at low altitude. Witnesses 'B' and 'C' both indicated that they could see the jet's afterburners engaged. The object disappeared from view in the east and at that time was only about a degree above the horizon.

6:20pm; Gorman Sighting Witness 'F' is a chief of police who was traveling east on State Hwy 6 between Carbon and Gorman, Texas. He was 29 miles west of Stephenville when he saw an unusual grouping of lights in the direction of Stephenville. His location at the time was 32°13'17"N 98°42'00"W. He provided a very good witness description as follows:

"On Tuesday, January 8, 2008, at about 6:20 PM, I was driving east on State Highway 6 between Carbon and Gorman, Texas. On the stretch of road that I was on at that time, the road runs due East and West. When I was about a mile and a half from Gorman, I noticed a bright light in the sky, and I immediately thought that it was a flare dropped from a military aircraft in the Brownwood Military Operating Area. It is not unusual to see flares in that area."

"From my location, the light appeared to be in the direction of Stephenville, just slightly north of due east from my location. As I watched the "flare", it did not appear to decrease in altitude, as flares normally do... at least the ones I've seen do. Also, it was not decreasing in intensity as they normally do."

"Suddenly, the light went out and three other lights immediately came on. The three lights appeared to be equally spaced around where the first light was seen. In other words, the first light would have been near the middle of the triangle formed by the three lights. The uppermost light appeared to be at about the 11 o'clock position, the lower left light at about the 8 o'clock position, and the lower right light was approximately the 2 o'clock position. The three lights were of a lesser intensity than the first light. The lights were no more than 15 degrees above the horizon."

"A few seconds later, the three lights went off and a brighter "middle" light came back on... for only about three seconds. It appeared to be moving upward before the light disappeared again. The three lights, when on, occupied about one degree of my field of view. Not knowing exactly how far away the lights were, I formed no opinion as to size or distance between the lights."

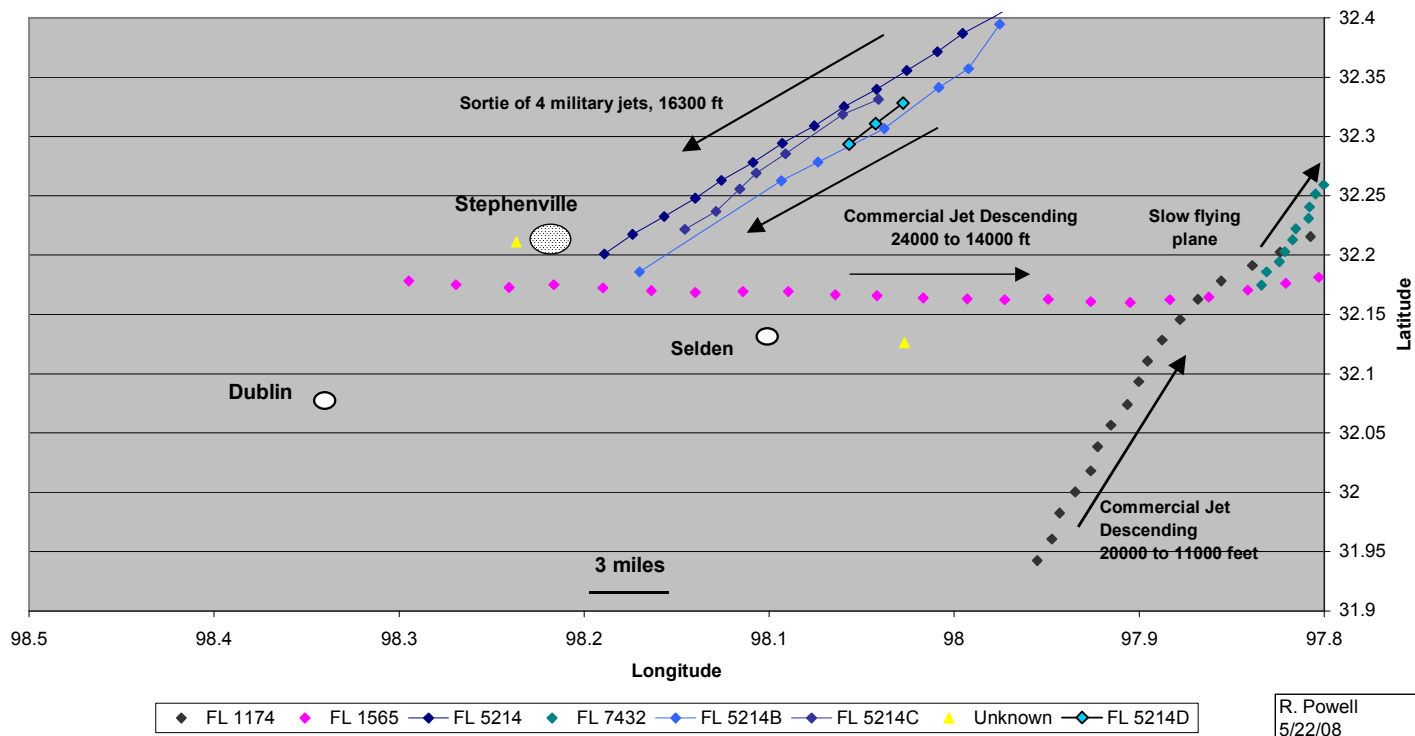
6:20pm; Lake Proctor Sighting The fourth report was from Witness 'G' who was located at his home 22 miles to the southwest of Stephenville near Lake Proctor and was able to see the Stephenville lights from his location. The witness's location was 32°00'N 98°28'W. Witness 'G' was interviewed in person and indicated that he saw the lights between 6:15pm to 6:25pm because he remembered that he was waiting for Inside Edition to come on TV at 6:30pm. He also indicated that it was dark enough that he needed to bring a flashlight when he went outside to check on his barking dogs. The witness saw what he first thought were aircraft in formation to the northeast towards Dublin. He described the brightness as brighter than the brightest star in the sky and that the lights were steady. There were 8-10 lights. However, there was no noise and the lights moved very rapidly in a

southerly direction from the object's location. The lights disappeared in 6-7 seconds. The witness indicated that both his dogs were scared. This is the only report of animal reaction to the object. It was difficult to get this witness to understand the concept of degrees in elevation and degrees of sky, so no reliable data is available.

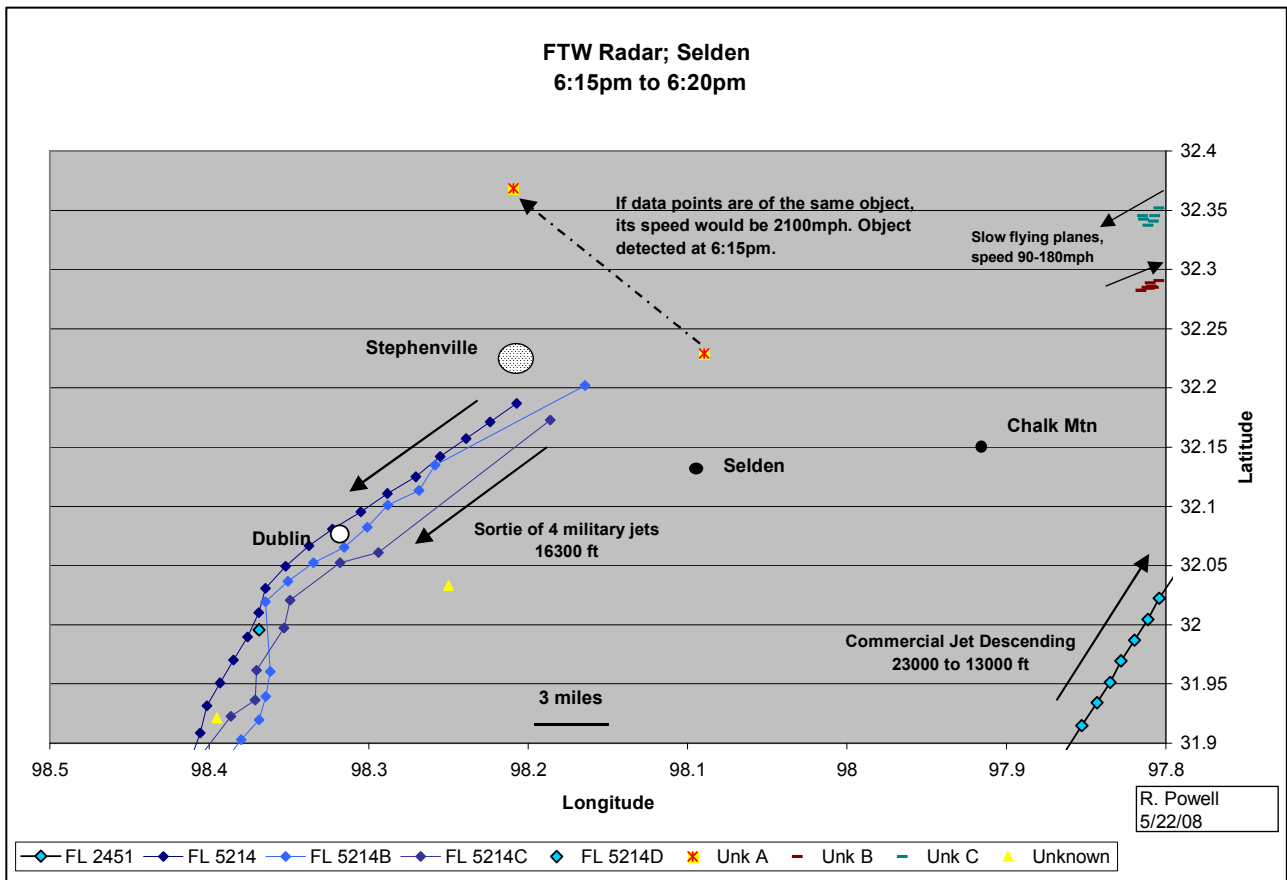
B. First set of sightings; 6:10pm to 6:25pm; relation to radar data

At 6:15 pm, the first sortie of four jets from Carswell AFB had just begun to reach Stephenville directly from the northeast. Based on radar data, these jets were flying at 16300 feet and at about 520mph. See Graph #4-1 that reflects what the FTW radar saw between 6:10 and 6:15pm. The graph shows the location of the witnesses in Selden, the military jets, and all commercial jet activity in the area at the time. Using the known altitude of the jets, the latitude and longitude of the Selden witness and the jets, and the fact that an F16 is 49 feet in length, and trigonometry, it can be determined as to what these aircraft would have looked like to an individual in Selden. The closest military jet would have been 6.75 miles slant range from the witness. This is calculated using Pythagoras' Theorem, $c^2 = a^2 + b^2$ where 'a' is the known altitude of the jets from radar and 'b' is the known ground distance between the jets and the witness based on radar provided latitude and longitude coordinates. Each jet would cover less than .08 degrees of sky. This is determined by using the formula, $\text{sine}(\text{angle } A) = (\text{opposite side}) / (\text{hypotenuse})$. $\text{Sin } A = (49 \text{ ft}) / (6.75 \text{ miles} \times 5280 \text{ ft}) = 0.001375$. Solving for the arc sine gives 0.0788 degrees. And the same technique can be used to calculate that the jets would have been at an elevation of 27 degrees to the northwest. In this case the opposite side of the angle is the altitude of jets rather than their size. $\text{Sin } A = (16300 \text{ ft}) / (6.75 \times 5280 \text{ ft}) = 0.45735$ which results in an angle of 27.22 degrees. The military jets would have been visible, but hardly something to catch one's attention. The unknown object was described by the witness as being 3 degrees in size, or 38 times the apparent size that the jets would have been. The object was described as silent, traveling at a high rate of speed, and then coming to a stationary stop; not a quality of either a military or commercial jet.

FTW Radar; Selden
6:10pm to 6:15pm



Just seconds after 6:15pm, an unusual object shows up on radar. See Graph #4-2 below, which reflects what the FTW radar saw between 6:15pm and 6:20pm. A commercial jet is in the lower right portion of the graph, unknown slow flying craft to the upper right, and the first sortie of military jets are shown departing in the lower left portion of the graph. Before progressing, it is important to explain what is happening with radar. The FTW radar antennas sweeping the area every 10 seconds and records a target longitude and latitude, based on range and azimuth, for all objects detected during the sweep. The two points that you see labeled as Unknown 'A' on the graph are 20 seconds apart in time, in close proximity to each other, and show up as identical and weak skin paint radar reflection levels of 4 on the FAA radar, which uses a scale of 4,8,12,16,20,24,28 units representing reflection intensity of the object. If there wasn't witness testimony, then these two radar data return points would normally be considered an unusual coincidence of points in time and location, and not likely to be real. However, in this case the radar hits are in the same direction that all four witnesses were looking when they saw the object. See Image #3 on the next page. It shows the radar track in bright yellow just northeast of Stephenville, and the positions of all the witnesses as well as the direction in which they saw the object. The curved arrow, that begins to the east of Stephenville and ends to the west, represents the path of the object as described by the witnesses in Selden. Bear in mind that the radar track only represents two locations from radar, separated by 20 seconds, and with an arbitrary straight line drawn between them. It doesn't tell you where the object was before or after the two radar hits, or even that it traveled in a straight line. And remember, this object has been described as moving rapidly and coming to a stop. Each witness may have seen the object at various times during the short time it was in the area. One witness was east of the target in Chalk Mtn. His location is represented by the pin head near Chalk Mnt and the direction he saw the object is represented by the arrow. Another witness was southwest of the target near Lake Proctor, and the final witness was due west of the object near Gorman. The location of these witnesses is also represented by a pin head and a white arrow represents the direction in which they saw the object. With witness testimony from different directions from the object's location and that corresponds to what was seen on radar, these radar points have to be considered as potentially linked. And if they are linked...they represent an object that traveled at a



minimum of 2,100mph. Velocity was calculated using longitude and latitude coordinates to obtain distance and the radar's actual time returns. $(d_2 - d_1) / (t_2 - t_1) = v$.

Let's first examine the radar information from the vantage point of the witness that was near Chalk Mtn. The object first appears on radar as due west of Chalk Mtn, the same direction that the witness saw two bright objects move apart and travel to the north and south. So if the object on radar was what the Chalk Mtn witness saw, then the distance, size, and altitude for the object can be calculated using the same formulas and techniques

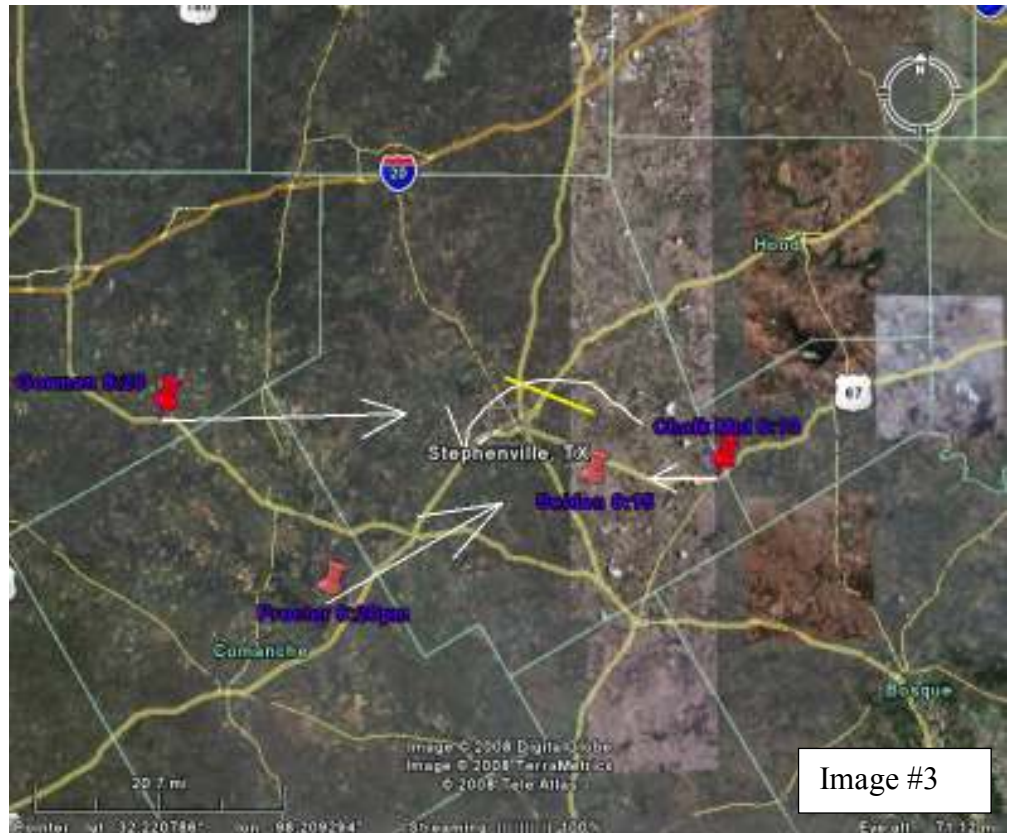


Image #3

that have been previously discussed. Its distance when it first appeared on radar would be 11.38 miles from the witness. Its actual size depends on the witness's accurate estimate of its apparent size. The witness indicated that each object displaced 1.0 degree of sky. Since most witnesses will overestimate the apparent size of an object, a range of 0.5-1.0 degrees will be used in the calculation. This gives a size for the object of between 524 feet and 1,048 feet. Since the witness indicated the object was at an approximate 10 degree elevation, and if we calculate using an error of plus or minus 5 degrees in the witness's estimate of the elevation, the altitude of the object would have been somewhere between 5,300-16,700 feet.

Now let's examine the radar information in relation to the first of the two sightings that occurred near Selden. As mentioned earlier, it is not clear whether from the primary witness's direct testimony as to whether he saw the object at 5:45pm, 6:00pm, or 6:15pm. Travel time tends to indicate it was after 6:00pm. Based on how closely his testimony ties into the radar data, the 6:15pm time is likely. The first radar hit occurs north-northeast of the witness's location. Recall that the witness saw an object in the north-northeast that moved very rapidly to the northwest and then to the west where it became stationary. And the second radar hit is to the northwest of the witness. So let's calculate size and altitude based on the radar information and what the witness described. The distance based on known latitude and longitude locations of the object on radar and the witness indicate the object's closest approach, as it passed by, was 6.6 miles. The witness indicated that the object displaced 3 degrees of sky. As with the previous witness we will halve the apparent size so that we look at a range of 1.5-3.0 degrees. This gives a size for the object of between 912 and 1,825 feet. The object was seen at an elevation of 20 degrees. A witness error factor of plus or minus 5 degrees will again be used. This set of numbers gives a possible altitude range of 9,300 feet to 16,200 feet.

The Gorman sighting, which provided an excellent witness description, also matches well with what appeared on radar. Depending on which of the two radar tracks is used, the witness was between 30.4 and 35.7 miles from the object. The witness indicated that the set of lights occupied one degree of his field of view. Using the two distances as a range, the apparent size of the object, and assuming that the apparent size could have been smaller (0.5 to 1.0 degree), the resulting size of the

object is between 1,400 feet and 3,300 feet. The object was seen at an elevation of “no more than 15 degrees above the horizon” according to the witness. In this case, it makes sense to assume that errors in the estimated elevation would only be less than the witness’ estimate. So we will use 10-15 degrees elevation and a distance range of 30.4 to 35.7 miles. The object’s altitude based on this calculation is 28,000 feet to 51,000 feet.

The Lake Proctor sighting does not provide any useable data from which reasonable calculations can be made. However, it does establish that the line of sight of the object in question matched up with its radar location.

So, what can be concluded from the radar track shown on graph #4-2 and the witness’ testimony? It is clear that the size of the object and its altitude cover a wide range, but that is to be expected from testimonies from multiple witness. What is clear is the following:

1. The object that shows up at 6:15pm on radar, matches up directionally with what four witnesses saw between about 6:10pm and 6:20pm on January 8, 2008
2. The high rate of speed seen by the witnesses from Selden, Chalk Mtn, and Lake Proctor is supported by the radar data, which calculates a minimum velocity of 2100 mph. The lack of high velocity in the object from the perspective of the Gorman witness may be due to the point in time that it was observed as the object was seen both stationary and moving at a high rate of speed.
3. The object is large. The smallest calculated value of the object’s size was 524 feet. This supports the impression of all the witnesses.
4. Little can be said about the altitude of the object other than all the calculations indicate that it was of sufficient altitude to be detected by primary radar.

The last item to discuss, related to the 6:10pm to 6:25pm sightings is the 2nd Selden sighting. The three witnesses report the object returning 10 minutes later from the southwest and moving to the east. They also report the objects being chased by two military jets. There is no radar data to support this second sighting. Neither an unknown object, nor jets show up on radar to the southwest of Selden during any time from 5:30pm to 7:00pm. However, calculations of the jets’ altitude based on the witness testimony would indicate that they were below the minimum detectable radar altitude for the FAA radars. Using the size of the F-16 for the jet, it would be 49 feet in length. The witness estimated that the jets took up about a degree of sky. Again using the witness error factor, we will do calculations based on the jets apparent size being between 0.5 to 1.0 degrees. Based on this, their distance would be between 2,800 feet to 5,165 feet, or ½ to 1 mile away. Their altitude would be 400-1000 feet, which is below the altitude ceiling for radar detection from the FAA radars. This calculation is also supported by the witness statement that the jets’ sound was deafening. At that distance an F-16 would generate a very loud 80-90 decibels of noise and would be about 10 decibels louder if the afterburners were engaged.⁽⁴⁾

So where did the chase jets come from? Carswell AFB out of Ft. Worth can be monitored for low level flights due to the proximity of radar units in that area. We know based on radar data that no low level flights came out of that air base between 4pm and 8pm. So if they were from that air base then they must have left before 4pm, maintained very low altitude flight for several hours, and flew below radar near Selden. This is a possibility that cannot be discounted. The CAFB logbook (see appendix) shows what appears to be a set of 10 flights prior to the 10 aircraft that have been documented on radar. Only the Air Force knows the truth behind the redacted logbook. Another possibility is Dyess AFB in Abilene. It is only 70 miles to the west, but it is believed to possess only B-1 bombers and not any fighter aircraft. If fighters came out of Dyess then they were temporarily stationed there. Sheppard AFB is located in Wichita Falls about 90 miles to the north and has F-16 aircraft. If they came out of Sheppard AFB at low altitude, they could avoid populated areas and FAA radar could not have picked them up on their flight to Stephenville. The other possibility is that the witnesses did not see any jets at low altitude. But the three witnesses seem credible as a quick

investigation revealed two other witnesses who heard what they believed were jets at very low altitude. A private pilot in Hico, about 17 miles to the southeast of Stephenville, indicated that he heard sonic booms on January 8th and judged the jets to be low due to the high sound level. He also indicated that on other days, he has visually seen military jets flying at a few hundred feet coming from the Ft. Worth area and traveling to the southwest towards the Brownwood MOA. An employee of Clark Field airport in Stephenville, indicated that on January 8th he heard military jets that were so low and loud that they caused him to go outside and look for the jets. This occurred at his home in DeLeon which is 18 miles to the southwest of Stephenville. He described the loudness of the jets as similar to when he was at a military air show. He did not see the jets when he went outside because the trees around his home obscure much of his view of the sky. This witness also indicated that he has seen military jets on other days travel directly over his home and at very low altitude. He indicated that his little finger extended would not be able to cover one of the jets. Using trigonometry, the size of an F-16 at 49 feet, and that the jets would have covering more than 1 degree of size, the altitude would have been less than 2,800 feet. Together, all of these witnesses, indicate that it is plausible to believe that there may have been military jets operating below radar in the vicinity of Dublin-Selden-Stephenville in the early evening of January 8, 2008.

C. Second set of sightings; 6:40pm-7:15p and 9:30pm; witness testimony

The next set of sightings took place between 6:40pm and 7:15pm with a final sighting at 9:30pm. These four sightings are as interesting as the earlier sightings, although they are spaced farther apart in time. Weather conditions were still the same as earlier in the evening.

6:40pm; Alexander Sighting Witness 'H' was interviewed on the phone due to family illness and her desire for privacy. She was traveling south from Stephenville on County Road 914 and was just north of Alexander. The time was about 6:40pm. She was below the hill, prior to the intersection of Hwy 6, when she saw the lights. Her location was 32°03'54"N 98°12'15"W. She indicated that the lights scared her because they were close to her and caused her to move her car toward the road's shoulder. When initially seeing the lights, her first thought was that two planes were about to collide until she realized that the lights were stationary. She described the lights as two very bright red lights slightly to the right of being directly in front of her. She said they were similar in brightness to a school bus at night when it is directly in front of your car. There may have been two fainter white lights near each of the red, but she wasn't sure. She indicated that each light was larger than a quarter held at arm's length, which would equate to about 3 degrees. They were separated in distance by about the width of her outstretched arms which would be about 40 degrees. She estimated the lights to be slightly less than halfway up the sky or 35-40 degrees above the horizon. The witness did note that it was a little difficult to judge elevation because of the hill in front of her. By the time the witness reached the top of the hill, the lights simply disappeared. She did not see them move away. She never heard any noise. The total time of her observation was just a few seconds. During this time the witness's car was pointed to the southwest. Since the two lights were 40 degrees apart and slightly to her right, they would have spanned the southwestern to western portion of the sky.

6:45pm; Cisco Sighting Witness 'I' was interviewed on the phone two different times. His sighting occurred at his home near the intersection of I-20 and CR-425, which is not far from Cisco, Texas. His location is about 50 miles northwest of the Dublin area. It is interesting that he was able to see the lights in the Dublin-Stephenville area from this distance. His location corresponds to 32°23"N 99°08'W. He recalls that the time was about 6:45pm. He described the time of day as the sun having set and no color was left in the sky, which is in line with a time of about 6:45pm. The witness was outdoors and facing south when he saw a bright orange amber flickering light to the SE. He described the light as much brighter than the brightest star. Over a 15-30 second time period, he saw five of these lights in a row almost parallel to the ground but slightly tipped to the diagonal. As one light would brighten the previous one would fade. He judged there to be five lights based on their spacing location as each light brightened off and on 3 times. He never saw more than two lights on at the same time. The lights were at two fists elevation, which equates to about 20 degrees. He estimated that the

distance between the left most and right most light was about the size of his fist or perhaps larger, which would be about 10-15 degrees.

7:15pm; SW Dublin Sighting Witness 'J' is a local constable who was at home at the time of his sighting. He has been interviewed in person as well as over the phone multiple times. The event was also witnessed by his young son. Their location at the time of the sighting was 32°03'N 98°23'W. The time was about 7:15pm and the witness indicated it was completely dark with all the stars being viewable. One reddish-orange glowing light was first seen in the south. That light disappeared and either the same light or a different light reappeared 1-2 seconds later at about 5 degrees away from the first light. No sound was heard related to the lights. They were just above the tree line and in a horizontal line. Based on the trees being 15 feet tall and their distance at 450 feet, this would equate to 2 degrees above the horizon. The witness described the lights as the size of his little finger at arm's length, or about 1 degree. Although the witness did not have a reference point, he felt like the lights were less than 300 feet high and that they occupied a space of 50' by 50'. Witness 'J' went inside to look for his wife. When he came back in about 30 seconds the two reddish-orange lights were gone. But to the southwest he could see nine strobing/flashing white lights which were smaller and appeared to be much higher up. Again he had no reference point, but felt they were at least 5,000 feet high. He said that they were definitely spread out across more than 50 degrees of sky, but not in any formation. The lights would turn on and off and show up in different locations. The witness retrieved his binoculars from his pickup truck to get a better view. He couldn't see any outline of an object with his binoculars. He was asked if he could see any stars between the lights. He said he was concentrated too much on the lights to recall if he saw any stars between the lights. The lights randomly moved around except when they shot off to the northeast, and were then in tandem. The witness indicated that when they moved to the northeast their rate of speed was so fast that he had trouble following it with his binoculars.

9:30pm; Comanche Sighting The city of Comanche is located 20 miles southwest of the city of Dublin. Witnesses 'K' and 'L', a former air traffic controller and his wife, provided a very good description of a sighting which was considerably later than the previous sightings. The report was generated by the husband. He was not sure of the exact time but estimated it to be about 9:30pm, plus or minus 10 minutes. His location at the time of the sighting was 31°53'54"N 98°36'W. His report is as follows:

"I am not sure of the exact time. My wife and I had made a trip to a local store. On our way home (4 blocks) we were crossing Grand Ave. As I looked left (west) for traffic, I saw several strange lights not far above the horizon. The lights were partially obscured by a two story building about 4 blocks away. I stopped in the middle of Grand Ave., blocking traffic and told my wife to look and pointed towards the lights. She looked and saw the lights also. When I first saw them, they looked like white fireworks (without the trailing flame) coming up from the ground. As we watched them, they appeared to fly around one another very quickly and randomly. We watched them for a little more than a minute and they just disappeared, like turning off a light switch."

"I worked for five years as an Air Traffic Controller, mostly in a control tower at night. I can quite confidently state that these were NOT any known aircraft. I cannot estimate a size, but judging by how large they appeared in contrast to the building they were partially behind and not knowing how much further away they were, each individual light was much too large to be any type of known aircraft. If the lights were all part of a single unit then it would have been more massive than any craft I have ever seen or studied, including the Zeppelins and other lighter than air giants."

"Approximately 15-20 minutes after we observed the lights, I saw a couple of small jet aircraft in the same area (this after arriving home). The contrast between the small jets and the strange lights is staggering. It would be like comparing the size of grapefruit to a raisin."

During the interview the witness indicated that he saw five lights that rose upwards from the ground and stopped at an elevation of about 10-15 degrees towards the west. Each light was white, similar to a 4th of July roman candle light, and was slightly larger than his little finger' tip at arm's

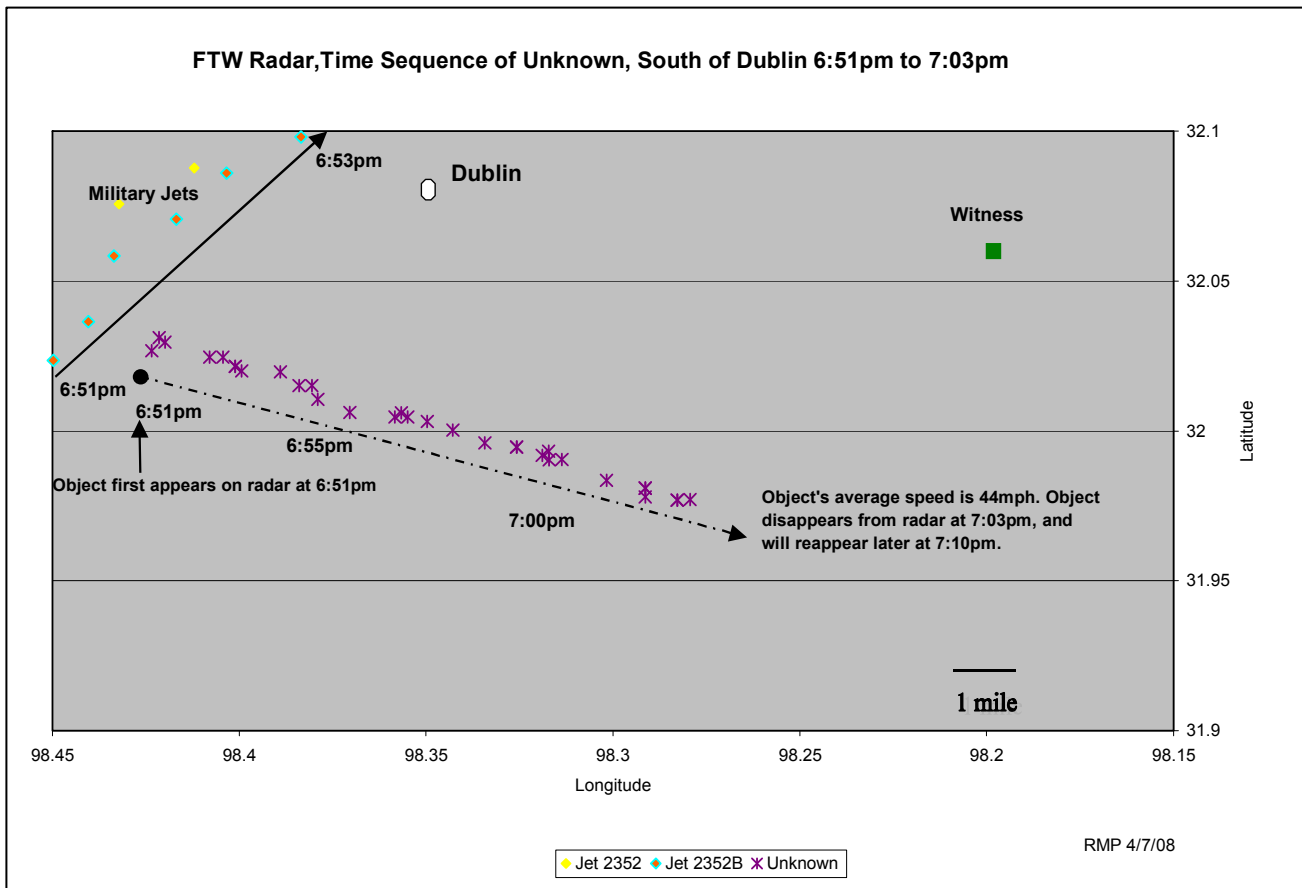
length which would be about 1 degree. No physical object was seen. The lights danced around each other and remained for 1 minute and then just disappeared as if turned off. About 10 minutes after the objects disappeared, the witness saw two military jets in the same general area. He indicated that he could tell they were military based on how they maneuvered, but that they were too far away for him to determine the type of military jet.

D. Second set of sightings; 6:40pm to 7:15pm and 9:30pm; relation to radar data

The witness near Alexander, Texas, describes two large and bright lights to the southwest at 6:40pm. The witness's testimony does not allow a determination of whether this was one large object with two lights on it or two different objects. Radar data shows no unusual aircraft near her position at 6:40pm, but does by 6:52pm. Two military jets are 12 miles due west of her position at 6:52pm and at an altitude of 17,000 feet. (See Graph #4-3, below.) From her vantage point, the jets would have been immediately to her right, at an elevation of 15 degrees, and occupying 0.04 degrees of sky. It is not likely that she would have noticed the jets while driving, and it may not have even been possible due to the hill to her right. See Image #4 on this page that shows the terrain to the southwest of the witness's location. Due to the size of the object viewed by this witness and the fact that it remained stationary; what she saw cannot be explained by the military jets.



Image #4

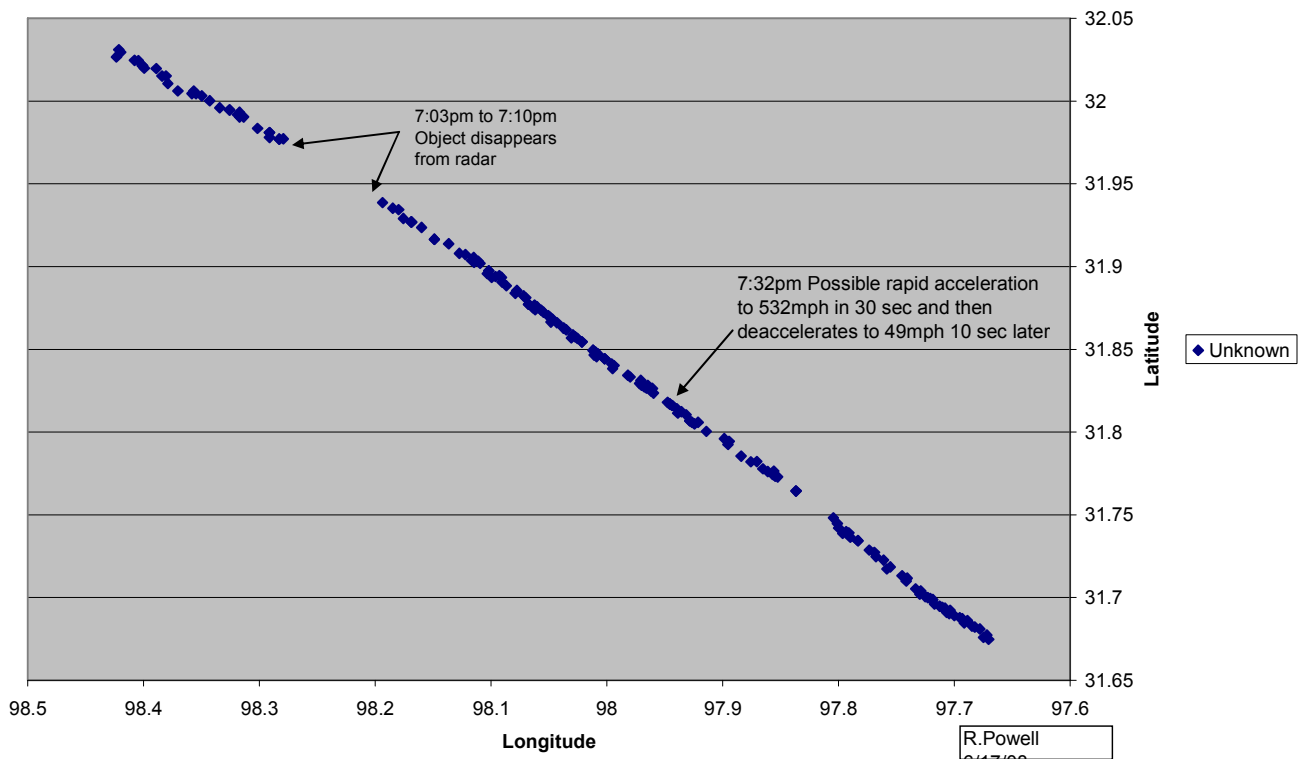


Another object shows up on radar to her southwest, the direction that she described the object that she witnessed. This object is very slow moving with its speed averaging 40-50mph. The object has no beacon signal, so it is being tracked by primary radar based on reflections off its surface. This object could be explained by two military helicopters traveling without beacons, outside of a MOA, and violating FAA regulations because no beacons aircraft are nearby. However, this is not very likely and the military indicated in the FOIAs sent to them that they had no aircraft in the area other than the jets from the NASJRB in Ft. Worth. No known civilian helicopters were in the area at the time.

If the object on radar is the same object seen by the witness, then we can estimate its size. Altitude cannot be calculated because the elevation of the object would have been very difficult for the witness to estimate since it was above a hill. The witness indicated that each light filled 3 degrees of sky, so as before we will use a range of 1.5-3.0 degrees in our calculations. The radar distance is 6.5-10 miles depending on the exact time that the witness saw the object. Its size can be estimated by multiplying its distance by the tangent of its apparent size in degrees. This gives a size range of .17 to .52 miles for the object, which is similar in size to the calculations made based on other witness testimony.

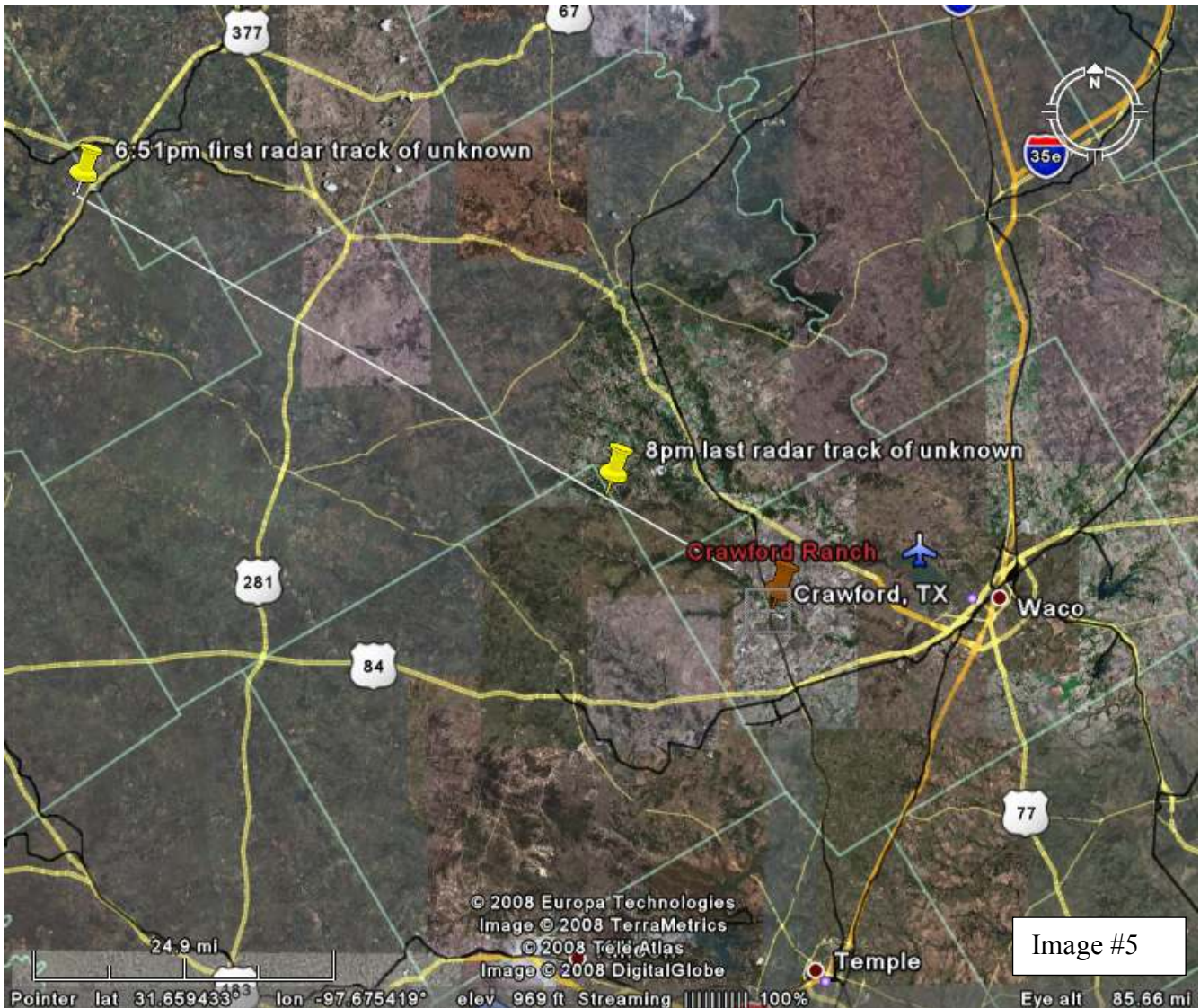
Graph #4-4 on the next page shows the full path of this object from 6:51pm to 8:00pm. The y-axis of the graph has been stretched to allow a better view of the individual radar hits. This object was tracked on radar for over an hour with 187 returns being obtained by the FTW radar. At 7:32pm, this object is captured on radar accelerating to 532mph in the course of 30 seconds and then in 10 seconds or less, the object drops speed from 532mph to 49mph. What could have caused this? Calculating the speed using the minimum radar sweep increment of 10 seconds magnifies any imprecision within the radar system. One possibility is imprecision in the azimuth values from the radar, which will then induce an error in speed calculations. Radar azimuth uncertainty will impact the speed calculation for a slow moving aircraft more than a fast moving aircraft. The potential error can be caused by the width of the radar beam, distance to the object, and strength of the returned signal. One way to estimate this error is to look at actual data on known aircraft. Empirical data taken on known aircraft with and without transponders yielded a potential standard deviation of plus/minus 7%-8%. That error can be greater on a slow moving object without a transponder. Although the authors cannot determine for certain whether the unknown object accelerated to this speed, it is worth mentioning. And of course the other possibility is that this unknown object did accelerate and decelerate rapidly. Either way, this should not distract from a more important aspect of this object on radar, which is discussed next.

FTW Radar; 6:51pm to 8:00pm
Unknown Object



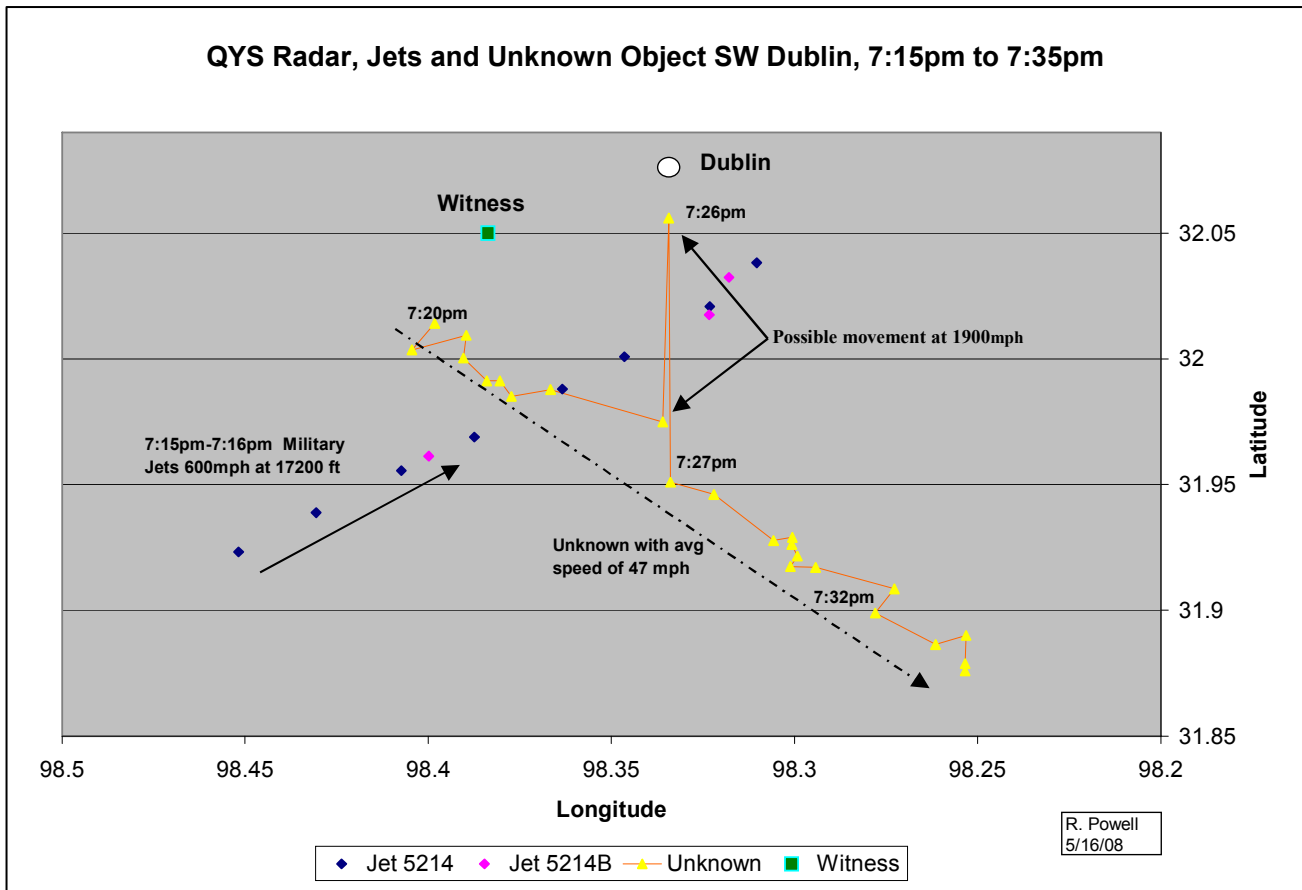
Graph #4-4

And what does the U.S. military know about this unknown aircraft? What is their reaction? Here is an aircraft flying without a transponder and is clearly seen on FAA radar for over an hour. There are three sorties of 10 jets that fly by during this time period, some as close as 1 mile from the unknown aircraft, as well as what is probably an AWACS, crisscrossing the AOI. Didn't they pick up this object on their radar? And in what direction is this unknown object flying? It is headed directly towards the Crawford Ranch, home of the Western White House. See Image #5 below. The last sighting on FAA radar showed it only 10 miles from Crawford Ranch at 8:00pm. The president was not at the ranch on January 8th, 2008, but that would not lessen the importance of an unknown craft headed in that direction and already in controlled air space. And where are the radar tapes from any of the F16s that were in this operating area? Apparently they have all been erased.

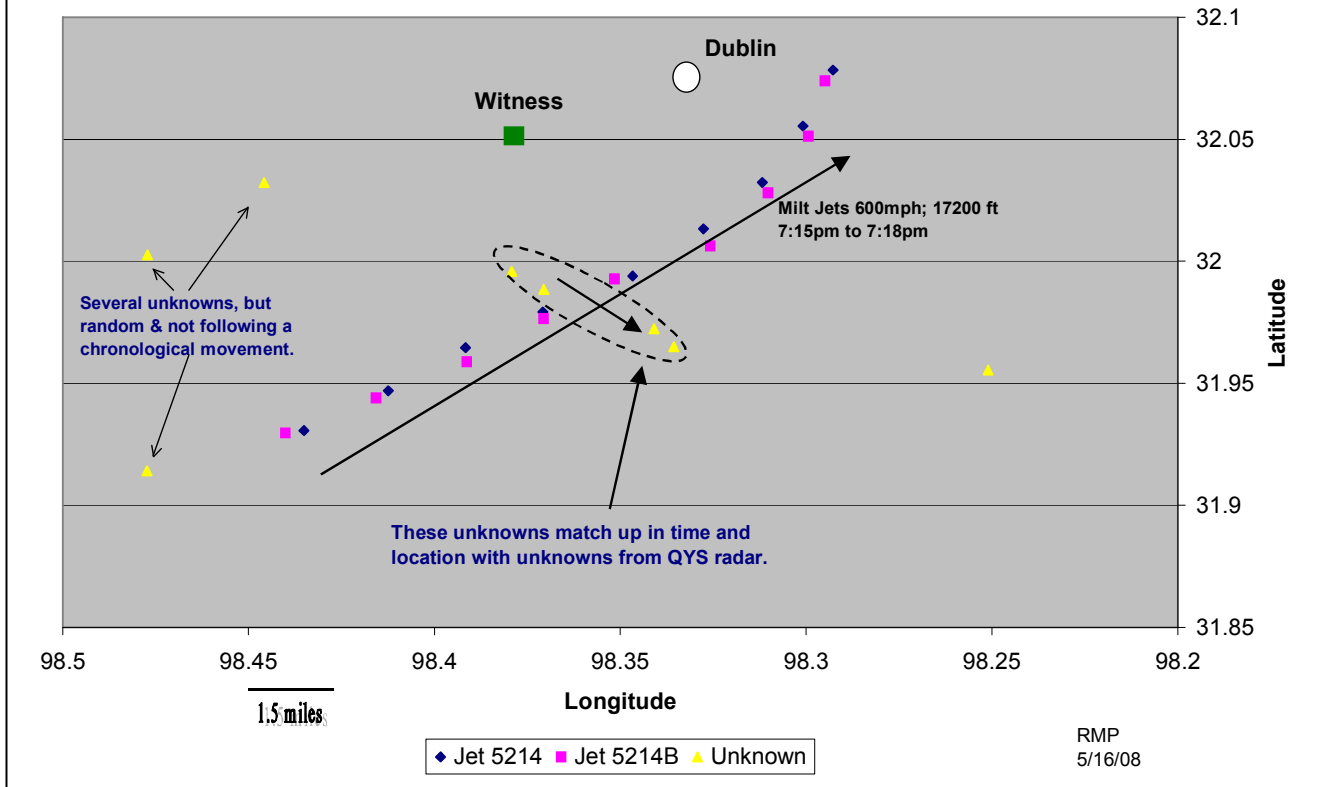


At 6:45pm another witness sighted an object in the same direction as the object that appeared on radar. This witness was 48 miles to the northwest of the object and was near Cisco, Texas. His description is very similar to the one made by the witness near Gorman, Texas, earlier in the evening. If this is the same object that was seen southwest of Alexander then the witness near Cisco has grossly overestimated the apparent size of the object because at the distance of the witness, the lights were spanning an area that would equate to an object 4 miles in size.

At 7:15pm a constable witnessed an object to the south of his home that also shows up on radar beginning at 7:20pm. The object on radar is only 2.8 miles south of the constable's home. This matches quite well to the location and direction of the object seen by the constable. This is the third instance of radar matching up with a witness. This object shows up both on the FTW radar and the QYS radar that is located in Rogers, Texas. The QYS radar (graph #4-5) does much better than the FTW radar (graph #4-6) in tracking the object, which is opposite of what normally occurs in terms of the capability of these two radars. It is noteworthy that this object showed up on radar in very close to the same location as the object which showed up 24 minutes earlier at 6:51pm. Its origination point on radar is within 2 miles of the previous object's point of origin. It also travels towards the southeast as did the earlier object, but on a slightly different route. It is also moving slowly at an average speed of 47mph. Two military jets passed to the south and southeast, within 4 miles of the constable's home at 17,000 feet at 7:17pm, which was three minutes prior to the unknown object appearing on radar. The jets would have been at an elevation of 39 degrees and would have occupied 0.1 degree of sky. They would have been easy to see and should have generated about 56 decibels of noise ⁽⁴⁾, which is near the sound level of a typical conversation of 60 decibels. If the constable had been in his home when the jets went over, they would not have generated enough noise to have been heard, but should have been easy to hear outdoors.



FTW Radar, Jets and Unknown SW Dublin, 7:15pm to 7:35pm



Graph #4-6

The detailed information provided by the constable allows us to make some estimations of the object's size. Since he saw the object just above a tree line, we can calculate potential sizes and distances for the object. The tree line was 450 feet away and the height of the trees was 15 feet. The object was seen just above this tree line at about ½ the trees height above the trees, which places it at 3 degrees above the horizon. Each light was estimated at 1 degree in size and the separation of the lights at 5 degrees. This allows us to calculate a set of distances and sizes for the object. See Table 1 below. The radar data shows the object at distances varying between 2.8 miles and 4 miles south of the constable's house from 7:20pm to 7:24pm. If one light defines the object then its size is between 258 to 368 feet. If the object is outlined by both lights then its size is 1294 to 1848 feet. Its altitude would equate to between 773' to 1104' in the table below, which is below detectable altitude for radar in that area. But when the constable returned from trying to find his wife, the object had moved to a higher elevation and would have been within radar range at that point in time.

Table 1

Distance to Object	Altitude of Object	Size of Lights 1°	Distance Between Lights 5°
2640'(1/2 mile)	138'	46'	231'
5280'(1 mile)	276'	92'	462'
2.8 miles	773'	258'	1294'
4 miles	1104'	368'	1848'

Radar confirms an unknown skin paint to the south of the Constable's home at about the time he first saw the object. But does it confirm the second part of his observation when he stated that the object moved at a high rate of speed to the northeast? Graph #4-5 does show the possibility that the object being tracked, suddenly moves quickly to the north. Two arrows outline the object's movement to the north. This is somewhat similar to what happened earlier in the evening near Selden. There are two possibilities. One is that this is a different object that just happens to show up near Dublin at about the same time as this unknown object is moving south of the Constable's home. If so, this coincidence has now occurred twice on the same night. The other possibility is that it is the same object that is south of the Constable's home and it moves towards Dublin then returns to its original course one minute and twenty seconds later. If it is the same object then it traveled at over 1,900 mph based on the radar calculation. Additional support of this possibility is provided by a detailed description by another law enforcement witness, of an object over Stephenville at about the same time. At the speed noted above, Stephenville is less than 30 seconds away from Dublin. (Because this report was received after this paper was basically complete, it is documented in the appendix. It is a very striking report.)

There is no way to know for sure, but with everything that happened on January 8th it certainly would have been highly desirable to have had access to the radar of the military jets that were flying in the area.

The last important witness that night was the former Air Traffic Controller that described seeing an object very similar to what the Constable saw, but to the west of Comanche, Texas. Unfortunately, we don't have any FOIA radar data for any events after 8pm that night. But what is still important is that this witness saw two military jets in the same area about 10 minutes after the object disappeared. So from where did the military jets originate? There is a partial entry that has been redacted in the logbook from CAFB which would have been entry lines #20 and #21. It is possible this could have been the source of the jets later that night that were seen in Comanche.

X. SUMMARIZATION

There are several conclusions that the authors have reached with this report and its supporting analysis. The first and primary conclusion is that there was definitely a real and physical object that appeared and was witnessed on January 8, 2008, in the Dublin-Stephenville area. Reports of unidentified flying objects occur all the time. Most of those reports are from single individuals or a group of individuals who see an unexplained object at a given location and time. These types of reports are easier to explain away because there is usually, whether likely or not, some type of explanation that can be constructed to explain away the event at a specific time and place. What makes the Dublin-Stephenville event unique is that there are multiple witnesses at different locations and the sightings occur over a three hour time period. Additionally, radar data identifies unknown aircraft in the sky at the same time as many of the witness sightings. So in the Dublin-Stephenville case, one would have to attempt several varied low probability explanations to try and explain away all of the various sightings. The likelihood that all of these witnesses miss-identified separate known objects at different times, in different but closely associated geographic locations, all within a 3 ½ hour time period is extremely low. It is much more reasonable to believe that these witnesses truly saw an object that could not be explained by any objects with which they are familiar.

As to what these witnesses saw, it is difficult to determine. It was not any known aircraft. The enormous size of the object, its complete silence, and its ability to travel at high rates of speed and to also remain stationary or travel at slow speeds, is not explained by any known aircraft. The smallest size calculated from witness descriptions was 524 feet and most of the calculations based on approximate distance of the object and witness descriptions of degrees of sky covered by the object indicated an object closer to 1,000 feet in size. Twice, radar picked up an unknown object flying at 1,900-2,100 mph. Admittedly, it could have been a coincidental radar hit...but in both cases that coincidence occurred when a witness saw a very fast moving object in the same direction as an object painted by radar. Twice, radar tracked slow moving objects, for extended periods of time, that were very near the witness' location, in the direction described by the witness, and at approximately the same time that the witness saw the unknown object. It is very difficult to dismiss witness testimony that is corroborated by radar. And to further augment the strangeness of these events, radar tracked one of those two objects for over an hour as it traveled directly toward Crawford Ranch. The authors cannot comment on the source or origin of this object, but it is clear to the authors that the unknown object was real and not imaginary.

The second conclusion of this report is that the military did not react overtly to the presence of these unknown objects. In light of the disaster of Sept. 11, 2001, the authors of this report have concerns with how the military reacted to an unknown aircraft(s) in U.S. air space. It is clear that there was an unknown object without any transponder beacon traveling along a path that began south of Dublin and that proceeded on a direct path to Crawford Ranch. This object was tracked by the FTW radar for over an hour. Military jets flew within a mile of this object on their way to the Brownwood MOA. The F-16s had to have seen this object on their radar and the suspected AWACS that was circling this area must have detected and recorded this object on its state-of-the-art radar. This must have raised concerns, yet the radar tracks of the military jets, indicates that there was no reaction by them to this object during the hour of time in question. What could explain this lack of reaction? One possibility is that the military knew the identity of the object and instructed the F-16 pilots to ignore it and stay on course to the MOA. But this possibility is countered by all of the military replies to the FOIAs that indicated the military had no aircraft in the area other than the F16s from CAFB that have already been identified. Secondly, if it was a military aircraft then it was violating FAA and military MARSA rules by not having a transponder beacon code activated while being outside of a MOA. This leaves us with the possibility that the military either did not see the object or just ignored it. In light of what happened on 9/11, what if the unknown object had been a terrorist aircraft? The Air Force should

explain what their radar detected on the evening of January 8, 2008, and the reason as to why the military jets in the area did not react.

The third conclusion is that military aircraft traffic in the area was unusually heavy and twice military aircraft strayed out of their standard Military Training Routes and into civilian airspace. Ten F-16 jets from Carswell AFB were documented as flying into the Dublin-Stephenville area within a 2 hour time period as well as a probable AWACS that circled the area for over 4 hours. A FOIA requesting information to determine how unique this level of jet activity may be was sent to the 10th Air Force in Ft. Worth on May 7th, 2008. An acknowledgement of the correspondence has been received but a formal reply is still pending.

Two CAFB sorties, a total of 4 F-16s, returning to CAFB belatedly activated military beacons and veered unexpectedly eastward over Stephenville toward DFW civilian aircraft arrival traffic patterns. There is no explanation as to why the military jets strayed from their normal MTR. Since they did not initially leave CAFB with beacons, it is reasonable to assume that something occurred that caused those aircraft to break away from their lead aircraft and request a beacon code so that they could veer away from the standard MTR.

The last conclusion is that there are indications that requests submitted under the Freedom of Information Act are not considered seriously by the U.S. military and were completely ignored by the Dept of Homeland Security's branch, U.S. Customs & Border Patrol. If true, this would be a violation of a law passed by the Congress of the United States. FOIA requests are usually handled by a clerk who is an intermediary between the submitter and who ever within the military decides what information can be provided. The reply is uniformly the same from military base to military base. The standard reply has obviously been crafted specifically in the manner that the military should use to deal with FOIAs from the public. The standard reply is, "*There are no responsive records that meet your request*". With the events of September 11, 2001, it is understandable that the military would choose caution in dealing with any release of information regarding their operational activities. But in this case, we are discussing military activities within the United States, during a four hour period of time, on a specific date, and in a small and specific area of Texas. One would be hard pressed to argue that release of this type of information would be a threat to national security. And exactly what complicated information was requested? Only the following..."Do you have any evidence to support if Military Base "X" was flying aircraft within 50 miles of Stephenville, Tx., on Jan.8, 2008?" "Can you provide copies of radar images from any military aircraft operating with 50 miles of Stephenville on Jan 8, 2008?" Surely the military can say, "No, we had no aircraft in the area.", or perhaps, "We cannot release this information due to reasons of national security." But, no, instead we receive..."*We found no documents responsive to your request.*" On the other hand, we would like to again express our sincere thanks to the National Weather Service and the Federal Aviation Administration for their excellent responses and their willingness to abide by the requirements of the Freedom of Information Act. They communicated effectively and if they did not have the required information, they readily said so.

We are a nation of freedom that is based on a set of principals designed to maintain our individual liberties. When our government bodies reach a point that they do not feel compelled to honor the requests of their citizenry, as defined by the laws of this nation, we have taken a path that allows the government to arbitrarily and secretly decide what we should and should not know. The American people have a right to know what did or did not occur on January 8, 2008 in the Dublin-Stephenville area.

Authors Certification Statements


The authors certify that all radar graphs and annotations are the true, unaltered and non fabricated product of the FAA radar returns contained within the FAA ARTCC FOIA response of Feb. 16, 2008. Only valid and uncontroversial editing of the FAA radar return data needed to reduce the large number of radar returns to manageable levels and to radar returns relevant to the airspace of interest has been performed.

These radar analyses and graphical presentations have been peer reviewed by well qualified radar specialists wishing to remain anonymous.

x 

Glen H. Schulze, Radar Specialist

Date: July 4, 2008

x 

Robert Powell, MUFON Director of Research

Date: July 4, 2008

COPYRIGHT JULY 4, 2008

BIBLIOGRAPHY

- (1) Fort Hood Public Affairs Office; Current as of Feb. 15, 2007
- (2) Globalsecurity.org
- (3) FAA's Automated Surface Observation System
- (4) Realistic Bomber Training Initiatives; Fleischner and Weisber, 1986
- (5) Air Force Military Fact Sheet; Public Affairs Office; 130 Andrews St., Suite 202; Langley AFB, VA; April 2008
- (6) NOAA's National Climatic Data Center

APPENDIX

- p.51 Errata sheet
- p.52 Flight logbook from the 457th, NASJRB, Ft. Worth, Tx.
- p.53 MARSAs guidelines of the FAA
- p.54-58 FOIA request and replies from the Dept of the Air Force, 30th Space Wing, Vandenberg AFB, CA., and the 21st Space Wing at Peterson AFB, CO.
- p.59-62 FOIA request and reply from Dyess AFB, Abilene, TX.
- p.63-65 FOIA request and reply from Sheppard AFB, Wichita Falls, TX.
- p.66-68 FOIA request and reply from 10th AF, Ft. Worth, TX.
- p.69-70 FOIA request and reply from 4th Marine Wing, Ft. Worth, TX.
- p.71-72 FOIA request and reply from Ft. Hood Army Base, Ft. Hood, TX.
- p.73-75 FOIA request and reply from the FAA
- p.76 Statement from Witness M

Errata Sheet

Item: Stephenville TX Statute Mile Scales and Latitude and Longitude Relationships

Several of the provided graphs have incorrect statute mile scales shown in the lower left and lower right hand corners. The correct relationships are as follows:

One degree of longitude at Stephenville, TX: 58.50 miles

One half degree of longitude at Stephenville, TX: 29.25 miles

One degree of latitude at Stephenville, TX: 68.70 miles

One half degree of latitude at Stephenville, TX: 34.35 miles

Mission Builder | Mission Events Builder | Sortie Events Builder | Load Builder | Crew Builder | Mission Changes |

Squadron: Base: Sortie Type:

Date:

Span In Days:

LOGBOOK
COVERS
1 DAY

Man #	ManType	Man Start (Z)	Man End (Z)	Man Start (L)	Man End (L)	Description	ACT	Comm	TDY	AR
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15			18:15	18:45				HNL	18:15	18:30	
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RADAR

2 AFTER 02M

ATCC Controllers' Read Binder...

NOTAMS, FAQs and other info for users of ATCC

August, 1998

MARSA

This is a term that means "Military Assumes Responsibility for Separation." If a military aircraft wants to join in formation with another in your sector, you first vector them and/or assign an altitude next to their target at the minimum separation amount (5 miles/1000 feet). Once they get each other in sight, they will say they are "MARSA", which means they are taking over separation and will join up. So, for instance, you may have TOPGUN1 at FL230, and TOPGUN2 you would assign FL220. When TOPGUN2 gets #1 in sight, he would say "TOPGUN2 is MARSA with TOPGUN1", then you would say "TOPGUN1 flight, maintain FL230." They join up, and you treat them as one aircraft (the second turns off his transponder).

Similarly, if a flight wishes to break up, you would assign different altitudes to each aircraft in the flight, tell them to report when established, then say "MARSA terminated" which means you are taking over separation responsibility. So for a flight of 3 at FL230, you might assign TOPGUN1 FL210, TOPGUN2 FL220, and TOPGUN3 FL230, then when they report established at those separate altitudes, you would terminate MARSA and treat them as three separate aircraft with their own datablocks, instead of one flight with one datablock.

It becomes a headache if you are busy and a flight suddenly announces they want to break up, so it is possible to deny the breakup until you are less busy, or tell them to make the request on the next sector. If they are headed into clouds, however, you may have no choice, or you may tell them to circle awhile until you can get to them.

January 28, 2008

Robert Powell



Naval Space Command
5280 Fourth Street
Dahlgren, VA 22448-5300
VOICE: (540) 653-6146
FAX: (540) 653-6148

Re: Freedom of Information Act Request(DODR 5400.7)

Dear Sir or Madam:

This is a request under the Freedom of Information Act. I am the Director of Research at MUFON, a non-profit organization, and I am conducting this investigation solely for the purpose of conducting scientific research. The fee category should be classified as an educational or noncommercial scientific organization. I am willing to pay up to \$50 for this request for the cost of duplication, after the first 100 pages as per the FOIA. If fees will exceed this amount, please contact me first.

All requests for information are related to the dates of January 8 and January 9 2008, and with specific interest in the time period of 17:30hrs to 19:30hrs Central Standard Time, on January 8, 2008. The specific location and description of interest is any airborne object of unknown origin, traveling over the southern United States at any altitude and a size greater than 100 meters in diameter. This request is related to civilian sightings of an unknown object near Stephenville, Texas. I request a review of any documents, records, radar logs, communication entries, etc. that can be obtained from the NAVSPASUR surveillance system, or from satellite photos. Please provide me a copy of any such documents.

Thank you for your time and consideration in helping us resolve this issue.

Sincerely,

Robert Powell
MUFON Director of Research



DEPARTMENT OF THE AIR FORCE

30TH SPACE WING (AFSPC)

APR 07 2008

30 SCS/SCXS (FOIA Office)
867 Washington Avenue
Vandenberg AFB CA 93437-6120



Dear Mr. Powell

This letter is sent in response to your original Freedom of Information Act (FOIA) request, you sent to the Dept of the Navy dated 28 January 2008, for any documents, records, radar logs, communication entries or satellite photos available, from the NAVPASUR surveillance on 8 Jan 08 (0730-1930) that relate to any airborne objects of unknown origin flying near Stephenville TX. A thorough search conducted by the Joint Space Operations Center (JSpOC) did not locate any records responsive to your request. The Air Force Surveillance Network (including the sensor formerly called NAVSPASUR) does not track or maintain records for any airborne objects. They further suggested that you submit your inquiries to NORAD and the Federal Aviation Administration (FAA). Your original request was also referred to NORAD who will respond directly to you. The FAA contact information is:

Ms. Lettie Perez, FOIA Coordinator
Federal Aviation Administration
Central Service Area Air Traffic Organization
Fort Worth, TX 76193
Phone: (817) 222-5564
Fax: (817) 222-4299

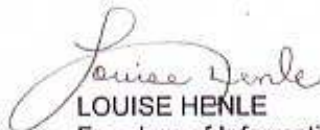
If you interpret this no records response as an adverse action, you may appeal our decision by writing to the Secretary of the Air Force within 60 days from the date of this letter. If no appeal is received, or if the appeal is postmarked after the conclusion of this 60-day period, the appeal may be considered closed. Include your reasons for reconsideration along with a copy of this letter. Mail to:

Secretary of the Air Force
THRU: 30 SCS/SCXS (FOIA Office)
867 Washington Avenue
Vandenberg AFB CA 93437-6120

GUARDIANS OF THE HIGH FRONTIER

The Department of Defense Regulation 5400.7 indicates fees be assessed for processing requests; however, the fees are not applicable in this instance. This concludes the administrative process of this request. If you have any questions, please call us at (805) 606-7006, and refer to FOIA case file 08-0018.

Sincerely

A handwritten signature in cursive script that reads "Louise Henle".

LOUISE HENLE
Freedom of Information Act Manager

Feb. 11, 2008

Schulze-Powell

7/3/2008

56

Robert Powell



Air Force Space Command
21 SCS/SCXIF (FOIA)
655 West Ent Ave Ste 107
Peterson AFB, CO 80914-1645

Re: Freedom of Information Act Request(DODR 5400.7)

Dear Sir or Madam:

This is a request under the Freedom of Information Act. I am the Director of Research at MUFON, a non-profit organization, and I am conducting this investigation solely for the purpose of conducting scientific research. The fee category should be classified as an educational or noncommercial scientific organization. I am willing to pay up to \$50 for this request for the cost of duplication, after the first 100 pages as per the FOIA. If fees will exceed this amount, please contact me first.

All requests for information are related to the dates of January 8 and January 9 2008, and with specific interest in the time period of 17:30hrs to 19:30hrs Central Standard Time, on January 8, 2008. The specific location and description of interest is any airborne object of unknown origin, traveling over the southern United States at any altitude and a size greater than 100 meters in diameter. This request is related to civilian sightings of an unknown object near Stephenville, Texas.

I request a review of any documents, records, radar logs, communication entries, etc. that can be obtained from the Air Force Space Command's surveillance systems such as but not limited to, The Ballistic Missile Early Warning System, PAVE Phased Array Warning System and Perimeter Acquisition Radar Attack radars, The Maui Optical Tracking Identification Facility, Ground-based Electro-Optical Deep Space Surveillance System, Passive Space Surveillance System, Space Based Infrared System, phased-array and mechanical radars, or from satellite photos. Please provide me a copy of any such documents.

Thank you for your time and consideration in helping us resolve this issue.

Sincerely,

Robert Powell
MUFON Director of Research



DEPARTMENT OF THE AIR FORCE
21ST SPACE WING (AFSPC)

13 March 2008

21 SCS/SCOKF
655 W. Ent Ave Ste 109
Peterson AFB CO 80914-1645



Dear Mr. Powell

This is in response to your Freedom of Information Act (FOIA) request dated 11 February 2008 for information pertaining to any airborne object of unknown origin traveling over the southern United States at any altitude and a size greater than 100 meters in diameter during the time period of 17:30 hrs to 19:30 hrs Central Standard Time on the dates of January 8 and 9 2008, our FOIA Case #08-037.

A thorough search by the 21st Space Wing did not locate any records responsive to your request. No other record systems within the 21st Space Wing are likely to produce any responsive records.

If you interpret this "no records" response as an adverse action, you may appeal it in writing to the Secretary of the Air Force. Your appeal should be postmarked no later than 60 calendar days from the date of this letter. Address your letter as follows:

Secretary of the Air Force
Thru: HQ AFSPC/A6NKI (FOIA)
150 Vandenberg Street STE 1105
Peterson AFB CO 80914-4160

The FOIA provides for the collection of fees based on the cost of processing a FOIA request and your fee category. We have placed you in the Non-Commercial Scientific Institution Requesters fee category; however, in this case, we have waived fees.

Sincerely

CHARLES M. SPRINGS
FOIA Manager

January 30, 2008

Robert Powell

7th Communications Squadron/SCXR
341 3rd Avenue
Dyess AFB, TX 79607-1441

Re: Freedom of Information Act Request(DODR 5400.7)

Dear Sir or Madam:

This is a request under the Freedom of Information Act. I am the Director of Research at MUFON, a non-profit organization, and I am conducting this investigation solely for the purpose of conducting scientific research. The fee category should be classified as an educational or noncommercial scientific organization. I am willing to pay up to \$50 for this request for the cost of duplication, after the first 100 pages as per the FOIA. If fees will exceed this amount, please contact me first.

All requests for information are related to the time period of 17:30hrs to 19:30hrs Central Standard Time on January 8, 2008. This request is related to civilian sightings of an unknown object near Stephenville, Texas. I request a review of the following document(s) and release of copies to me of those documents as described below:

1. A copy of any and all Dyess Air Force Base records or logs of communication by aircraft that were operating within 50 miles of Stephenville, Texas, during the above mentioned date.
2. A copy of any evidence that establishes whether military aircraft controlled by Dyess Air Force Base, were operating within 50 miles of Stephenville, Texas, during the above mentioned time period.
3. Copies of any radar images, preferably in a CD using ASCII format, from any military aircraft operating within 50 miles of Stephenville, Texas, during the above mentioned date.
4. A copy of any gun camera images of unknown aerial phenomena or objects filmed during the above mentioned time period.

Thank you for your time and consideration in helping us resolve this issue.

Sincerely,

Robert Powell
MUFON Director of Research



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 7TH MISSION SUPPORT GROUP (ACC)
DYESS AIR FORCE BASE TEXAS

1 Feb 08

Dyess FOIA
426 3d Ave
Dyess AFB TX 79607



Dear Mr. Powell,

This is in reference to your Freedom of Information Act (FOIA) request, dated, 30 Jan 08, asking for a copy of the following:

- any and all Dyess AFB records or logs of communications by aircraft that were operating within 50 miles of Stephenville TX during 8 Jan 08 between the hours of 1730 to 1930, Central Standard Time
- any evidence to support if Dyess AFB was flying in the vicinity of Stephenville on 8 Jan 08
- copies of radar images from any military aircraft operating within a 50-mile radius of Stephenville on 8 Jan 08
- copies of gun camera images of unknown aerial phenomena or objects on 8 Jan 08

It was confirmed, in speaking to the office of primary responsibility (OPR), that Dyess AFB do not have any of the records that is being requested. It was recommended that you might want to contact the Public Affairs office located at the Carlswell Naval Air Station in Ft Worth TX, as it is believed they have jurisdiction around that surrounding area. They may be contacted by calling (817) 782-7170.

If you interpret this "no records" response as an adverse action, you may appeal our decision by writing to the Secretary of the Air Force within 60 days from the date of this letter/e-mail. If no appeal is received, or if the appeal is postmarked after the conclusion of this 60-day period, the appeal may be considered closed. Include your reasons for reconsideration along with a copy of this letter/e-mail. Mail to:

Secretary of the Air Force
Thru: HQ ACC/A6XP (FOIA)
180 Benedict Avenue, Ste 210
Langley AFB VA 23665-1993

Department of Defense Regulation 5400.7 indicates fees be assessed for processing this request; however, the fees are waived in this instance.

Sincerely,

Dianna Sanders

Dyess FOIA Manager

Global Power For America

Feb. 11, 2008

Robert Powell



Dyess FOIA
426 3d Ave
Dyess AFB, TX 79607

Re: Freedom of Information Act Request(DODR 5400.7)

Dear Ms. Sanders,

Thank you for your prompt reply. A copy of your reply is attached. I have a question regarding clarification of your reply.

Does your reply mean that there were no aircraft from Dyess AFB in the air during the time & location in question, or does your reply mean that Carswell Naval Air Station would be the controlling authority that would answer that question regarding aircraft from Dyess AFB?

Thank you for your time and consideration in helping me regarding this issue.

Sincerely,

Robert Powell
MUFON Director of Research



DEPARTMENT OF THE AIR FORCE
HEADQUARTERS 7TH MISSION SUPPORT GROUP (ACC)
DYESS AIR FORCE BASE TEXAS

14 Feb 08

Dyess FOIA
426 3d Ave
Dyess AFB TX 79607



Dear Mr. Powell,

This is in reference to your letter dated, 11 Feb 08, concerning your Freedom of Information Act (FOIA) request dated, 30 Jan 08.

If you are trying to seek information regarding aircraft(s) that were flying in the area of Stephenville, Texas, during the date and time that you specified, then you will need to contact the Carlswell Naval Air Station in Ft Worth TX, to see if maybe they can assist you or determine if records/documentation exist. Again, they may be contacted by calling (817) 782-7170.

Sincerely,

Dianna Sanders

Dyess FOIA Manager

January 28, 2008

Robert Powell



82 CS/SCBR (FOIA)
819 D Avenue
Sheppard AFB, TX 76311

Re: Freedom of Information Act Request(DODR 5400.7)

Dear Sir or Madam:

This is a request under the Freedom of Information Act. I am the Director of Research at MUFON, a non-profit organization, and I am conducting this investigation solely for the purpose of conducting scientific research. The fee category should be classified as an educational or noncommercial scientific organization. I am willing to pay up to \$50 for this request for the cost of duplication, after the first 100 pages as per the FOIA. If fees will exceed this amount, please contact me first.

All requests for information are related to the time period of 17:30hrs to 19:30hrs Central Standard Time on January 8, 2008. This request is related to civilian sightings of an unknown object near Stephenville, Texas. I request a review of the following document(s) and release of copies to me of those documents as described below:

1. A copy of any and all Sheppard Air Force Base records or logs of communication by aircraft under the control of Sheppard Air Force Base, where those aircraft were operating within 50 miles of Stephenville, Texas, during the above mentioned date.
2. A copy of any evidence that establishes whether military aircraft controlled by Sheppard Air Force Base, were operating within 50 miles of Stephenville, Texas, during the above mentioned time period.
3. Copies of any radar images, preferably in a CD using ASCII or excel format, from any military aircraft operating within 50 miles of Stephenville, Texas, during the above mentioned date.
4. A copy of any gun camera images of unknown aerial phenomena or objects filmed during the above mentioned time period.

Thank you for your time and consideration in helping us resolve this issue.

Sincerely,

Robert Powell
MUFON Director of Research



DEPARTMENT OF THE AIR FORCE
AIR EDUCATION AND TRAINING COMMAND

FEB 26 2008

Capt Sanjoy Malhotra
82d Communications Squadron
227 Avenues G
Sheppard AFB TX 76311-2061



Dear Mr. Powell,

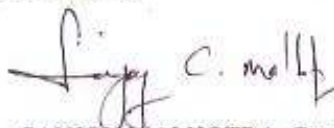
Your Freedom of Information Act (FOIA) request was received 30 Jan 08 in this office for processing and given case #2008-0014. The 80 Operation Support Squadron (80 OSS) was tasked as the Office of Primary Responsibility (OPR) for this request. A thorough search and review was conducted for this request. The OPR found no documents that are responsive to your request. Therefore, a no records response is being provided.

If you interpret this no records response as an adverse action you may appeal it in writing to the Secretary of the Air Force. Your appeal should be postmarked no later than 60 calendar days from the date of this letter. Address your letter as listed below.

Secretary of the Air Force
82 CS/SCOK (FOIA)
819 D Avenue
Sheppard AFB TX 78311-3464

In response to your 2nd request received in this office 25 Feb 08 through certified mail, letter dated 20 Feb 08, stating that this office had not responded to you in a timely manner. In accordance with DoD 5400.7-R/AFSUP1, *Freedom of Information Act Program, para C1.5.4*. Simple requests are processed within 1 to 20 workdays. The 20 day workday time limit starts when the request is received in our office (not the date the request was written). Your request was dated 28 Jan 08 and was sent through the United States Postal Service and arrived in this office 30 Jan 08. Please note that all weekend and holidays are excluded from the 20 workday limit. A response from this office was due to you no later than 28 Feb 08, which meets all statutory requirements.

Thank you for giving us the opportunity to assist you.

A handwritten signature in black ink, appearing to read "Sanjoy C. Malhotra". The signature is written in a cursive style with a large initial 'S'.

SANJOY MALHOTRA, Capt, USAF
Operations Flight Commander

Cc: Senator Kay Bailey Hutchison
Senator John Cornyn

January 28, 2008

Robert Powell



Naval Air Station Joint Reserve Base
10th Air Force
1510 Chennault Avenue
Fort Worth, Tx. 76127-1510

Re: Freedom of Information Act Request(DODR 5400.7)

Dear Sir or Madam:

This is a request under the Freedom of Information Act. I am the Director of Research at MUFON, a non-profit organization, and I am conducting this investigation solely for the purpose of conducting scientific research. The fee category should be classified as an educational or noncommercial scientific organization. I am willing to pay up to \$50 for this request for the cost of duplication, after the first 100 pages as per the FOIA. If fees will exceed this amount, please contact me first.

All requests for information are related to the time period of 17:30hrs to 19:30hrs Central Standard Time on January 8, 2008. This request is related to civilian sightings of an unknown object near Stephenville. I request a review of the following document(s) and release of copies to me of those documents as described below:

1. A copy of any and all 10th Air Force records or logs of communication by aircraft under the control of the 10th Air Force, where those aircraft were operating within 50 miles of Stephenville, Texas, during the above mentioned date.
2. A copy of any evidence that establishes whether military aircraft controlled by the 10th Air Force, were operating within 50 miles of Stephenville, Texas, during the above mentioned time period.
3. Copies of any radar images, preferably in a CD using ASCII or excel format, from any military aircraft operating within 50 miles of Stephenville, Texas, during the above mentioned date.
4. A copy of any gun camera images of unknown aerial phenomena or objects filmed during the above mentioned time period.

Thank you for your time and consideration in helping us resolve this issue.

Sincerely,

Robert Powell
MUFON Director of Research



DEPARTMENT OF THE AIR FORCE
AIR FORCE RESERVE COMMAND

27 March 2008

10th Air Force A6/SC (FOIA)
1700 Tuskegee Airmen Drive
NAS Fort Worth JRB TX 76127

Dear Mr. Robert Powell,

This is in response to your January 28, 2008 Freedom of Information Act request for information on a reported civilian sighting of an unknown object near Stephenville Texas. You specifically asked for information for the time period of 17:30 hrs to 19:30 hrs Central Standard Time on January 8, 2008. As stated in previous memorandum the Headquarters 10th Air Force has no records; however, your request was sent to 301st Fighter Wing for another search for the requested records. The 301st Fighter Wing found the following records:

Item 1. A copy of any and all 10th Air Force records or logs of communication by aircraft under the control of the 10th Air Force, where those aircraft were operating within 50 miles of Stephenville, Texas, during the above mentioned date.

No records found - A thorough review has been conducted on all Digital Video Recording (DVR) cartridges that were used on the night of 8 Jan 08.

Item 2. A copy of any evidence that establishes whether military aircraft controlled by the 10th Air Force, were operating within 50 miles of Stephenville, Texas, during the above mentions time period.

See attached record – Only information we have indicating 10th Air Force aircraft was operating within 50 miles of Stephenville, Texas during the specific time frame per your request.

Item 3. Copies of any radar images, preferably in a CD using ASCII or excel format, from any military aircraft operating within 50 miles of Stephenville, Texas, during the above mentions time period.

No records found - The recording cartridges in use have a limited storage capacity. When full, older missions are recorded over. Due to this limitation, all the DVR files from 8 Jan 08 has been overwritten.

Item 4. A copy of any gun camera images of unknown aerial phenomena or objects filmed during the above mentioned time period.

No records found – There are no other devices used to record cockpit images, thus, there are no soft or hard media recording files, tapes or other cockpit images available.

A “no records” response may be considered to be adverse in nature, and if so interpreted, you may appeal this response. Should you decide that an appeal from this decision is necessary, you must write to the Secretary of the Air Force at the address provided below in sufficient time so that the appeal reaches us not later than 60 calendar days after the date of this letter. Please include in the appeal your reasons for requesting reconsideration, and attach a copy of this letter. Address your letter as follows:

Secretary of the Air Force
THRU: HQ AFRC/A6 (FOIA Office)
155 Richard Ray Blvd
Robins AFB GA 31098-1635

There are no fees charged for the processing of this request. If you have questions concerning this matter you may contact Ms. Barbara Mumaw at (817) 782-3210, fax number is 817 782-6084, and/or e-mail address is 10af.foia@carswell.af.mil. Please refer to case number FOIA 08-003 in future correspondence.

Sincerely



BARBARA L. MUMAW, MSgt, USAFR
Freedom of Information Act Manager

Attachment:
Releasable Document for Item 2

January 28, 2008

Robert Powell



rpowell@austin.rr.com

COMMANDER MARINE FORCES RESERVE

ATTN DEPUTY COUNSEL FOIA
4400 DAUPHINE STREET
BUILDING 601 ROOM 5A404
NEW ORLEANS LA 70146

Re: Freedom of Information Act Request(DODR 5400.7)

Dear Sir or Madam:

This is a request under the Freedom of Information Act. I am the Director of Research at MUFON, a non-profit organization, and I am conducting this investigation solely for the purpose of conducting scientific research. The fee category should be classified as an educational or noncommercial scientific organization. I am willing to pay up to \$50 for this request for the cost of duplication, after the first 100 pages as per the FOIA. If fees will exceed this amount, please contact me first.

All requests for information are related to the time period of 17:30hrs to 19:30hrs Central Standard Time on January 8, 2008. This request is related to civilian sightings of an unknown object near Stephenville. I request a review of the following document(s) and release of copies to me of those documents as described below:

1. A copy of any and all records or logs of communication by aircraft under the control of the 41st Marine aircraft Group's squadron located at the Naval Air Station Joint Reserve Base in Ft. Worth, Tx. , if those aircraft were operating within 50 miles of Stephenville, Texas, during the above mentioned date.
2. A copy of any evidence that establishes whether military aircraft controlled by the Marines, were operating within 50 miles of Stephenville, Texas, during the above mentioned time period.
3. Copies of any radar images, preferably in a CD using ASCII or excel format, from any Marine aircraft operating within 50 miles of Stephenville, Texas, during the above mentioned date.
4. A copy of any gun camera images of unknown aerial phenomena or objects filmed during the above mentioned time period.

Thank you for your time and consideration in helping us resolve this issue.

Sincerely,

Robert Powell
MUFON Director of Research



UNITED STATES MARINE CORPS

MARINE FORCES RESERVE
4400 DAUPHINE STREET
NEW ORLEANS, LOUISIANA 70146-5400

IN REPLY REFER TO:
5800
FOIA
12 Mar 08



Dear Mr. Powell:

This letter responds to your Freedom of Information Act (FOIA) request you submitted to Commander, U.S. Marine Forces Reserve, in which you seek information regarding Marine Corps aircraft flying "within 50 miles of Stephenville, Texas," during the "time period of 1730 hours to 1930 hours Central Standard Time on January 8, 2008." I am responding on behalf of the Commander, U.S. Marine Forces Reserve.

A thorough search was made into agency records to locate all documents relevant to your request. Although our search revealed that Marine Corps aircraft from the Naval Air Station Joint Reserve Base in Ft. Worth, Texas were flying during the timeframe identified in your request, none of these aircraft were near or within 50 miles of Stephenville, Texas. This information was verified by the aircrew flying that day. Therefore, we were unable to find any information responsive to your request.

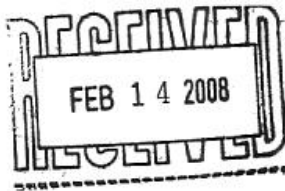
Because your request has been denied, you are advised of your right to appeal this determination, in writing, to the Judge Advocate General of the Navy (Code 14); 1322 Patterson Avenue, SE, Suite 3000; Washington Navy Yard, DC; 20374-5066. Please note your appeal must be postmarked within 60 calendar days from the date of this letter to be considered. Additionally, the appeal and the corresponding envelope should bear the notation: "Freedom of Information Act/Privacy Act Appeal." A copy of this letter and all correspondence from me should likewise be attached. A statement explaining why you believe your appeal should be granted should also be included.

Should you have questions, please feel free to contact Major D. R. Fields at (504) 678-8016.

Sincerely,

T. D. TAYLOR
FOIA Officer
By direction of the Commander

Enclosure



February 11, 2008

Robert Powell

FREEDOM OF
INFORMATION ACT
REQUEST

FOIA Office (IMSW-HOD-HR)
Bldg. 1001, Room C-203
Fort Hood, Tx. 76544-5000

Re: Freedom of Information Act Request(DODR 5400.7)

Dear Sir or Madam:

This is a request under the Freedom of Information Act. I am the Director of Research at MUFON, a non-profit organization, and I am conducting this investigation solely for the purpose of conducting scientific research. The fee category should be classified as an educational or noncommercial scientific organization. I am willing to pay up to \$100 for this request for the cost of duplication, after the first 100 pages as per the FOIA. If fees will exceed this amount, please contact me first.

All requests for information are related to the time period of 17:30hrs to 19:30hrs Central Standard Time on January 8, 2008. This request is related to civilian sightings of an unknown object near Stephenville, Texas. I request a review of the following document(s) and release of copies to me of those documents as described below:

1. A copy of any and all Ft Hood records or logs of communication with any aircraft that were operating within 50 miles of Stephenville, Texas, on Jan. 8, 2008.
2. A copy of any Ft. Hood helicopter communications related to a sighting of unidentified lights during the time frame of Dec.28, 2007 through Jan. 21, 2008.
3. A copy of any evidence that establishes whether any type of military aircraft, were operating within 50 miles of Stephenville, Texas, during the time period of 17:30hrs to 19:30hrs on Jan. 8, 2008 .
4. Copies of radar images, if possible in a CD using ASCII format, from all primary and secondary surveillance radar at Ft. Hood, during the above mentioned time period.
5. Information on the models and types of radar in service at Ft. Hood.

Thank you for your time and consideration in helping us resolve this issue.

Sincerely,

Robert Powell
MUFON Director of Research



DEPARTMENT OF THE ARMY
DIRECTOR OF HUMAN RESOURCES
BUILDING 4230, 78TH STREET
FORT HOOD, TEXAS 76544-5016

REPLY TO
ATTENTION OF

IMWE-HOD-HR-R

20 February 2008

Dear Mr. Powell:

Your Freedom of Information Act request was processed through this office. There are no responsive records to fill your request. This reply is the final decision from original request.

I am considering this correspondence our final decision and please be advised that this request is now administratively closed.

If you consider this response to be an adverse action, you may make an appeal through this office. Your appeal should be filed in order to reach the appellate authority no later than 60 calendar days after the date of this letter and it should include a statement as to why an appeal is being filed. Please address your letter to:

Directorate of Human Resources
IMWE-HOD-HR-R (ATTN: FOIA)
Building 4230, 78th Street
Fort Hood, TX 76544-5016

If you have any questions or need further assistance please contact the undersigned at (254) 287-0220, Fax (254) 287-6509, or Email marie.ann.rosa@us.army.mil.

Sincerely,

Marie A. Rosa
Freedom of Information Act
Officer



Ms. Lettie Perez, FOIA Coordinator
Federal Aviation Administration
Central Service Area Air Traffic Organization
Fort Worth, TX 76193

16 January, 2008

Subject: FOIA Request for DFW TRACON Radar Data, Request dated
16 January, 2008 by G H Schulze of Littleton, Colorado

Dear Ms. Perez,

Pursuant to the Freedom of Information Act, 5 U.S.C. 552 and /or the Privacy Act, 4 U.S.C. 552a, I hereby submit the following specific request for FAA TRACON radar data.

This is an urgent FOIA request for unedited, unaltered, unfiltered, and unprocessed DFW TRACON radar returns ---both primary and secondary returns---for the entire contiguous 4 hour period from 1600 Hrs to 2000 Hrs local, 8 January 2008, and requiring a timely response.

- 1) By unedited we mean no radar returns are to be manually or electronically redacted or eliminated from the requested radar return data set,
- 2) By unaltered we mean no radar returns in the requested radar return data set are to be manually or electronically numerically changed, rounded or approximated,
- 3) By unfiltered we mean no radar returns from the requested radar return data set are to be manually or electronically removed by confining the returns to a specific azimuth sector or to a specific range/distance nautical mile limit or to a specific altitude limit,
- 4) By unprocessed we mean the radar returns are to be provided in raw antenna parameters of azimuth angles and radar return ranges in nautical miles, and not be converted to latitude and longitude values,
- 5) By contiguous for 4 hours we mean the data set shall not be segmented into various and different time spans but shall be one complete 4 hour data set free from time gaps and missing time periods.

We request the subject radar return data set documentation format follow the unofficial but prevalent NTSB established radar tabular format as follows, with one radar return per tabular line:

- a) raw ASR antenna radar return azimuths in degrees to three decimal places after the decimal point,
- b) raw ASR antenna radar return ranges in nautical miles to three decimal places after the decimal point,
- c) time of ASR radar return in days, hours, minutes and seconds to two decimal places after the decimal point,
- d) transponder codes (secondary returns only),
- e) transponder altitudes (secondary returns only),
- f) ASR run lengths in 1 to 7 steps (primary returns only),
- g) ASR antenna site designator code number,

from ALL ---repeat ALL -- ASR FAA and FAA affiliated radar antenna sites providing ASR radar returns for the DFW TRACON.

Also, we request confirmation and values of all latitude and longitude coordinates for all DFW TRACON affiliated radar antenna site designator codes, with NTSB approved precision, as well as their magnetic north deviation factors in degrees to one decimal place after the decimal point.

It is neither desired nor requested that radar returns be translated to, or plotted in, Cartesian X Y coordinates or translated to latitude and longitude values by the FAA.

We further request the subject radar return data set be provided in standard NTSB electronic format in either a Notepad or WordPad Comma Separated Value ---CSV – PC compatible program and supplied electronically and formatted on standard CD media.

These materials are for research purpose only and are not for commercial use.
I understand there may be a small fee to provide the requested materials.
Please contact me if this fee exceeds an amount of \$100.

Should any part, aspect or detail of this request be either unclear or be found unable to be met by the FAA DFW TRACON we suggest a telephone call be made to the undersigned prior to your commencement to comply with this request.

Sincerely,

Glen H. Schulze





U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of the Air Traffic Organization
Central Service Area

2601 Meacham Blvd.
Fort Worth, TX 76137

FEB 19 2008

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Dear Mr. Schulze:

Subject: Freedom of Information Act (FOIA)
Request Number 2008-002174

This letter is in response to your January 16, 2008, FOIA request seeking copies of radar data for Fort Worth Air Route Traffic Control Center (ARTCC) for a specific time period on January 8, 2008.

We are enclosing a CD-ROM containing radar data from Fort Worth ARTCC. Your request is within a category that entitles you to all review time and 2 hours of search time free; however, there is a \$12.35 charge for the CD-ROM.

Payment, in the amount of \$12.35, may be made by check or money order payable to the Federal Aviation Administration (FAA). Please include your FOIA number on the bottom left-hand corner of your check. Your payment should be mailed to:

FAA/ATO Central Service Center
ATTN: Lettie Perez, AJO2C5
Fort Worth, TX 76193

You can also make payment electronically through Pay.gov. A link from our FOIA web page (www.faa.gov/foia/) will take you to a secure website where you can pay by e-check or credit card. When you access the website, you will be asked to provide FOIA Web payment ID 304524, your FOIA request number, requester's name, and amount due.

Your request has been assigned FOIA Request Number 2008-002174, which should be referred to in any further correspondence concerning this matter. Should you have any questions, please call Ms. Connie Johnson, FOIA Specialist, Administrative Services Group, ATO Central Service Center, at 817-222-4039.

Sincerely,

Konstantine Nezer, Jr.
Director, ATO Central Service Center

Enclosure

VERBAL TESTIMONY FROM WITNESS M

(Because the report was basically complete at this point in time, this testimony has been placed in the appendix.)

Witness M was interviewed via telephone on July 3, 2008. Witness M is also a law enforcement officer. The total time involved in the following event was about 2-3 minutes. The event occurred in Stephenville, Texas.

Witness M had just started his patrol shift and the time was between 7pm and 7:30pm. The stars were already out on a clear night with no wind. As the officer was driving east on highway 377 near the city park, he saw a large object to the north, towards the courthouse. The object was stationary and because the object was within the city, he was able to compare it against other objects in order to estimate its size, distance, and altitude. The object was about 4 city blocks wide or close to 1/8 mile. Its height was about 40 feet. He couldn't tell its depth, or how far back it went. The altitude was between 150'-300'. Since it was near the courthouse, it was 1/4 - 1/2 mile away. The object was darker than the sky, which made it easier to see. It had towers with strobe lights on its top and bottom. There were two towers on top and three on bottom. They were about twice the width of the object or about 50' to 100'. There was no pattern to the flashing of the strobes. The object also had two very large lights on its body. The officer estimated that each light was 25 feet in diameter. The lights were similar to xenon lights as they were very steady and there was no flickering of the light.

As the officer turned left on Graham Street the object began moving slowly to the north. Then the object paused for about 3 seconds and tilted towards its left to a 45 degree angle. Then the object completed the turn to 90 degrees so that it was basically on its side in a vertical position. The strobe lights turned off at this point and a third "xenon-like" light came on in between the other two lights. The object began to move again to the north and at this point in time the officer turned on his radar and it registered the object moving at 27 mph. The last speed registered by the officer had the object at 33 mph. It disappeared from the officer's view at that point because of the trees in front of him and he was behind other cars at the time.