Introduction to official UAP and UFO studies, investigations, hearings, analyses and reports in the United States - Version: 11 November 2026

This introduction includes updated draft extracts from the **Prologue** and from **Chapter 1 (How alien aerospace craft fly)** plus **Chapter 3 (Alien craft)** of the forthcoming *Edition 1.9* of Time of Contact.

The most important development so far this year was President Donald J. Trump's order that the U.S. federal government must disclose information relating to our field of study. In this introduction, a start has been made to reflect some of the content of selected historical documents that have been published as Releases (or Tranches) 01 – 07.

As this document contains so many hyperlinks it is difficult to ensure that they all work, but where they don't hopefully the text supplies sufficient information to enable readers to search for working links to referenced websites, web pages, documents, videos, audio files, etc.

Extract from the **Prologue** of the forthcoming *Edition 1.9* of Time of Contact.

President Donald J. Trump of the United States of America announced that he would be *"directing the (U.S.) Secretary of War, and other relevant Departments and Agencies, to begin the process of identifying and releasing Government files related to alien and extraterrestrial life, unidentified aerial phenomena (UAP), and unidentified flying objects (UFOs), and any and all other information connected to these highly complex, but extremely interesting and important, matters. GOD BLESS AMERICA!"*: Truth Social, 20 February 2026. Information comprising documents, image and video files is now publicly and freely available online: Presidential Unsealing and Reporting System for UAP Encounters (PURSUE), starting with Release 01, dated May 8, 2026.

Independent, introductory overviews of each "Release" or "Tranche" disclosure of information are available online, for example, Inside UAP Tranche 7 (Inside the BAASS [Bigelow Aerospace Advanced Space Studies] Papers: What the New UAP Files Reveal) an overview of Release 07, October 23, 2026 of the Presidential Unsealing and Reporting System for UAP Encounters (PURSUE) by the researcher, author and communicator Mr. Richard M. Dolan.

President Trump's relevant official *Executive Order,* possibly with a reference such as "EO 144**" may be, or may become, publicly available on the Federal Register 2026 Donald J. Trump Executive Orders web page.

Initial reactions to President Trump's order included an article in Scientific American magazine: Trump's order to release evidence for aliens obscures the scientific search for extraterrestrial life, by Mr. Lee Billings (B.A. in Journalism from the University of Minnesota) and edited by Ms. Claire Cameron (Master of Arts [MA], English Literature and History from The University of Edinburgh, Scotland and Master of Science (M.S.) in Journalism from Columbia University, Graduate School of Journalism), published by Scientific American magazine on 20 February 2026.

Scientific American earlier published an article about UAP/UFOs written by scientists: Dr. Ravi Kumar Kopparapu of the National Aeronautics and Space Administration (NASA) and Dr. Jacob Haqq-Misra who is *"a research scientist at the Blue Marble Space Institute of Science"* proposed an *"interdisciplinary scientific investigation"* of *"unidentified aerial phenomena"* and referred to *"scholars such as* (Professor Dr.) *Carl Sagan*, (Professor Dr.) *J. Allen Hynek*, (Professor Dr.) *James McDonald*, (Professor Dr.) *Robert Hall and* (Professor Dr.) *Robert Baker"*; the work of some of these people is discussed in *Time of Contact*: 'Unidentified Aerial Phenomena', better known as UFOs, deserve scientific investigation, by Dr. Ravi Kumar Kopparapu and Dr. Jacob Haqq-Misra*,* published online by Scientific American, 27 July 2020. The essay Have they been here? also by Drs. Kopparapu and Haqq-Misra, dated 18 April 2025 is freely available online from Aeon Media and was made possible by a grant from the John Templeton Foundation.

In the view of the author of *Time of Contact,* President Trump's order was the most important development in our field of study since U.S. politicians revived official and publicly known efforts to collect and study reports of alien craft and aliens. The politicians' actions included holding public hearings and legislating to create the All-domain Anomaly Resolution Office (AARO) within the Office of the Secretary of War. An example of a public hearing was the

one held on 9 September 2025, titled Restoring Public Trust Through UAP Transparency and Whistleblower Protection; the hearing was held by the House of Representatives' Task Force on the Declassification of Federal Secrets a subcommittee of the House Committee on Oversight and Government Reform.

Among those giving evidence to the subcommittee was Mr. Dylan Borland, who spoke and wrote of his encounter with an alien craft *"at approximately 0130"* hours on an early morning in the Summer of 2012 at Langley Air Force Base (Joint Base Langley-Eustis) located just north of Hampton, in the state of Virginia. In the video of the hearing titled Restoring Public Trust Through UAP Transparency and Whistleblower Protection Mr. Borland described his encounter beginning at 53 minutes, and at 1 hour and 6 minutes, into the 2 hours and 52 minutes long video file; further information is available in Mr. Borland's written Whistleblower Statement for the House of Representatives Task Force.

Mr. Borland first observed a *"white light"* which travelled towards him; it then appeared to be an airborne alien craft looking like *"an approximately 100-foot long equilateral triangle"* and hovered about 100 feet away from him at an altitude of about 100 feet. The sides of the craft intersected its triangular base at an angle of *"90 degrees"* (i.e. the sides were vertical and not sloped or curved) and the hull was about *"1 to 2 storeys thick"* i.e. approximately 12 to 24 feet in height. Mr. Borland *"never saw the top of it"* but as far as he could see, the craft seemed to be shaped like a triangular prism; Mr. Borland's mobile telephone became *"extremely hot"* and stopped working.

Mr. Borland stated: *"There were 4 lights* (on the craft) *in total, one light on each corner and a larger light in the centre, two to three times the size of the corner lights"*. The craft's hull had the appearance of *"black metallic flight paint"* and *"on top of the craft was this gold lava/plasma - some type of fluid going over and around the craft".* After two to three minutes *"the centre light flashes two to three times – no sound –* (the craft) *immediately shoots up* (ascended) *to commercial jet level, minimum"* and then hovered once more; the craft's centre light resembled a star at this time, suggesting that it was then at an altitude of several tens of thousands of feet (the cruising altitude of commercial jet airliners is from about 30,000 to 40,000 feet). The craft then moved eastwards over the Atlantic Ocean; Mr. Borland stated that the alien craft *"displayed zero kinetic disturbance, sound, or wind displacement"* and that his entire encounter lasted approximately 15 minutes.

After the craft ascended Mr. Borland felt what may have been static electricity, and smelled what may have been ozone created by an electromagnetic field that ionized the molecules of atmospheric gases close to the craft; the field or fields may have been radiated by the craft's propulsion, energy generation or hull protection systems. As discussed throughout *Time of Contact* alien craft may radiate powerful gamma ray or X-ray frequency electromagnetic fields that direct and focus their synthetic acceleration (gravity-like) propulsion and hull, systems and users' protection force fields; the craft may also radiate powerful magnetic and electric fields to protect their hulls, systems and users from charged particles while travelling in space or from weapons that radiate charged particles: Shielding Space Travelers, by Professor Dr. Eugene N. Parker, published by Scientific American magazine, March 2006, Volume 294, Number 3, *pages 22 – 29,* at *page 29,* and Unconventional Flying Objects: a scientific analysis, by Professor Paul R. Hill, a scientist and engineer of the National Aeronautics and Space Administration (NASA), Section XX (Summary and Conclusions),

Part 15 (Speculative Theories of the Force Field – What Is It?), *pages 330 - 331* of the paperback edition published in 1995.

Decades earlier, during an encounter in Norway that is discussed in detail in **Chapter 2 (Alien technology)** Herr Reidar Salvesen, a young businessman observed a *"blue-white"* light that faded to reveal an airborne alien craft shaped like an ellipsoid with protrusions from the upper and lower surfaces of its hull, rather than the *triangular prism* that Mr. Borland observed. The craft observed by Mr. Salvesen also hovered for a time before it ascended, and was silent: Unconventional Flying Objects: a scientific analysis, by Professor Hill, Section VII (Direct Evidence of Force Field Propulsion), Part B (The Evidence), Example VII-B1 (Man knocked down), *pages 98 & 99,* and Section VIII (Force Field Evaluation: Which Type?, *page 111,* of the paperback edition published in 1995, referring to the article titled *UFO-Car Encounter in Norway*, The A.P.R.O. Bulletin, January – February, 1971, *page 7;* a detailed report titled *Strange Norwegian Encounter near Helleland*, by Herr Anders Liljegren, was published in Flying Saucer Review Case Histories, Supplement No. 4, April 1971, *pages 4 – 7.*

Mr. George Knapp, an investigative journalist was also among those invited to speak at the subcommittee hearing on 9 September 2025: Restoring Public Trust Through UAP Transparency and Whistleblower Protection and For the Record of the Committee on Oversight and Accountability, Hearing on "Unidentified Anomalous Phenomena", September 9th, 2025. Mr. Knapp presented the documentary Investigation Alien in 2024 and has appeared in other programmes including UFOs: The Best Evidence (1989).

Earlier in the twenty-first century, senior U.S. politicians were evidently encouraged by the American businessman and space entrepreneur Mr. Robert Bigelow to create the publicly-funded Advanced Aerospace Weapon Systems Application Program (AAWSAP) or Advanced Aerospace Threat Identification Program (AATIP) under which reports of unfamiliar craft made by military pilots and other service personnel were collected; the *AATIP* lasted officially from 2007 to 2012. The *AATIP* was apparently begun within the United States Defense Intelligence Agency (DIA) an organisation that is not affiliated to any particular military service organisation and is responsible to the Secretary of War.

Mr. Bigelow founded the National Institute for Discovery Science (NIDSci); he can be seen and heard in discussions with Mr. George Knapp, for example, in the video titled Robert Bigelow and George Knapp discuss UFO disclosure, dated 3 August 2026. He also appears in a video extract titled Space Industry CEO Robert Bigelow says aliens visit Earth, evidently from a *CBS 60 Minutes* video documentary dated 28 May 2017.

In the third decade of the twenty-first century, two official and publicly-known programs were established in the United States to study reports of possibly alien craft; one was the military All-domain Anomaly Resolution Office (AARO) mentioned earlier and the other was the Unidentified Anomalous Phenomena Independent Study within the National Aeronautics and Space Administration (NASA). These programs were the successors to the Scientific Study of Unidentified Flying Objects conducted by the University of Colorado under contract to the United States Air Force was published in January 1969; its case studies and other information may also be available online, including from the U.S. Defense Technical Information Center.

However, official U.S. investigations into (and analyses of) reports of alien craft began (at the latest) in the 1940s. For example, the AMC Opinion Concerning "Flying Discs was an early, formerly secret official U.S. analysis which concluded that the *"… phenomenon reported is something real and not visionary or fictitious …",* communicated from the then Lieutenant-General Nathan F. Twining commanding Air Materiel Command (AMC) based at Wright Field (now part of Wright-Patterson Air Force Base) in the state of Ohio, to Brigadier General George F. Schulgen, Chief, Air Intelligence Requirements Division, Washington, D.C., dated 23 September 1947.

The online version of the *AMC Opinion* linked-to above was marked as a "COPY" that was evidently retyped, because in it the word "phenomenon" (at paragraph 4., line 3) was mis-spelled whereas it was correctly spelled in what was evidently the original *AMC Opinion*, released on 8 May 2026. What appear to be the original *AMC Opinion* plus the copy were included in the information contained in the file reference: 18_100754_General 1946_7_Vol_2 at *pages 9 – 11*, disclosed under the Presidential Unsealing and Reporting System for UAP Encounters (PURSUE), Release 01, May 8, 2026.

Later reports included the *Analysis of Flying Object Incidents in the U.S., Air Intelligence Study No. 203, dated 10 December 1948*, Directorate of Intelligence, Headquarters, United States Air Force (some of the Directorate's functions may now be performed by the 16th Air Force) and Office of Naval Intelligence, United States Navy Department. The *Analysis of Flying Object Incidents in the U.S.* included an encounter during which, tragically, *"On 7 January 1948, a National Guard pilot was killed while attempting to chase an unidentified object up to 30,000 feet. While it is presumed that this pilot suffered anoxia, resulting in his crash, his last message to the* (control) *tower was, "it appears to be metallic object …. of tremendous size …. directly ahead and slightly above … I am trying to close for a better look": Analysis of Flying Object Incidents in the U.S.,* file reference DOW-UAP-093_Analysis-of-Flying-Object-Incidents-in-the-US_1948, Appendix "C", paragraph 2 k., marked *page 6* in the document, at *page 29* of the 67 page long PDF format file disclosed under the Presidential Unsealing and Reporting System for UAP Encounters (PURSUE), Release 04, July 10, 2026.

The encounter referred to above was evidently the one in which, on the afternoon of Wednesday, 7 January 1948 a U.S. North American F-51D fighter aircraft crashed while pursuing an alien craft that had been observed from Godman Army Air Field close to Fort Knox in the state of Kentucky. Captain Thomas Francis Mantell, Jr. a Kentucky Air National Guard pilot lost his life; his aircraft crashed several miles from Franklin, Kentucky, Detailed reports and analyses are available on the National Investigations Committee for Aerial Phenomena (NICAP) website, and the encounter and observations were re-enacted in a dramatised documentary movie: Unidentified Flying Objects released in 1956, beginning at 6 minutes and 25 seconds into the 1 hour 30 minute video file.

Another version of the *Analysis of Flying Object Incidents in the U.S.* was also published: DOW-UAP-094_Analysis-of-Flying-Object-Incidents-in-the-US_1949, a PDF format file 34 pages long that was also disclosed under the Presidential Unsealing and Reporting System for UAP Encounters (PURSUE), Release 04, July 10, 2026. The file was originally classified "Top Secret" and declassified on 5 March 1985. This version of the *Analysis of Flying Object Incidents in the U.S.* appears to be similar to another version which already available online, also published as a PDF format file, but 32 pages long: Air Intelligence Report No. 100-203-

79, Analysis of Flying Object Incidents in the U.S., Air Intelligence Study No. 203, dated 10 December 1948. In both these versions the last word of the communication from Captain Mantell was mis-spelled “book” rather than “look”, in Appendix “C”, paragraph 2 k. (at *page 17 of 34*, and *page 16 of 32*, respectively).

Unfamiliar airborne objects that glowed with a green colour, made no sound and appeared to travel horizontally over areas of the western United States, but of which no traces on the ground were discovered, were called green fireballs and investigated officially. The Conference on Aerial Phenomena was convened to discuss them, on 16 February 1949 at Los Alamos, in the state of New Mexico: file reference DOE-UAP-D004, Los Alamos Conference on Aerial Phenomena, disclosed under the Presidential Unsealing and Reporting System for UAP Encounters (PURSUE), Release 04, July 10, 2026. The scientists who participated in this conference included the nuclear physicist Professor Dr. Edward Teller and the meteor expert Professor Dr. Lincoln LaPaz. Military and security services personnel also attended the conference.

The *green fireballs* were also mentioned in the *Summary Report on BAASS (Bigelow Aerospace Advanced Space Studies) UAP Analysis Capabilities,* dated *November 23, 2010,* Section 2 (Introduction), sub-section 2.1 (Historical Events and Studies), at *page 13*, disclosed under the Presidential Unsealing and Reporting System for UAP Encounters (PURSUE), Release 07, October 23, 2026. The analyses of the performance of alien craft also contained in the *Summary Report* may be studied in conjunction with the book Unconventional Flying Objects: a scientific analysis, by Professor Paul R. Hill, published in 1995.

The Presidential Unsealing and Reporting System for UAP Encounters (PURSUE), Release 07, October 23, 2026 included what was perhaps the first public, official U.S. document to disclose multiple reports of observations of, or encounters with unfamiliar, mobile, and possibly alien entities that were based on or around the “Skinwalker Ranch” located in the state of Utah, United States. The variety of forms in which the entities appeared (most of which seem to have been intended to intimidate or frighten people who encountered or observed them) suggests that they may have been simulations or projections. Some of the apparent entities may have been artificial memories that were implanted into people, or alterations made to people’s perceptions. However, some of the entities may been alien surrogates with physical forms that could leave evidence of their presence: *BAASS (Bigelow Aerospace Advanced Space Studies) Utah Ranch Investigation*, dated *March 22 – 26 & April 19 – 23, 2010*, disclosed under the Presidential Unsealing and Reporting System for UAP Encounters (PURSUE), Release 07, October 23, 2026.

We may speculate that the entities observed or encountered on or around the *Skinwalker Ranch* were generated by a system (possibly malfunctioning) that was deliberately or accidentally left behind on the Earth long ago by visiting aliens. This is not an original idea; a fictional, indestructible robotic entity that was accidentally left on the Earth millions of ago by a visiting alien starship was described in a classic science fiction short story which was read by the author of *Time of Contact* when he was a child: The Ruum, by Mr. Arthur Porges (who was awarded a Masters Degree in Mathematics by the Illinois Institute of Technology), first published in The Magazine of Fantasy and Science Fiction, October 1953.

The *green fireballs* and the work of Dr. LaPaz, who investigated and analysed reports and personally observed one *green fireball* were discussed in Chapter Four (Green Fireballs, Project Twinkle, Little Lights, and Grudge) of the book The Report on Unidentified Flying Objects by Captain Edward J. Ruppelt, originally published in 1956, *pages 47 - 59*. Captain Ruppelt may be heard speaking about the green fireballs and Dr. LaPaz during a recorded presentation that has been made officially available online: Presentation by Captain Edward J. Ruppelt, 1952, file reference DOW-UAP-PR160, disclosed under the Presidential Unsealing and Reporting System for UAP Encounters (PURSUE), Release 06, September 18, 2026, beginning at about 31 minutes and 45 seconds into the file (there is an accompanying printed transcript of Captain Ruppelt's presentation in 1952 also available online: DOW-UAP-D154). The *green fireballs* were also mentioned in the 7 April 1952 issue of LIFE Magazine, at *pages 80 – 96*, including included a painting of one by Mrs. LaPaz.

The sound quality of the audio file of Captain Ruppelt's presentation is remarkably good considering its age and the sound recording technology of that era. It allows us to hope that further, high - quality historical audio and filmed recordings relevant to our field of study may be released officially. For example, a televised *"round-table discussion on flying saucers"* titled *"Are there Flying Saucers?"* was broadcast in Los Angeles on Tuesday, 5 August 1952 by television station KECA-TV Channel 7 (re-named KABC-TV in 1954 and also known as ABC7); the station was affiliated with the American Broadcasting Company (ABC), now owned by The Walt Disney Company. The discussion was almost certainly broadcast "live", as it happened, because the first practical, professional video tape recorder did not become available in the United States until 1956.

Advertisements for the television programme *"Are there Flying Saucers?"* appeared on Tuesday, 5 August 1952 in several Los Angeles newspapers. Mr. Aldous Huxley, a world-famous intellectual, participated in the discussion together with his friend Mr. Gerald Heard, another intellectual who was also a pioneering investigator into reports of alien craft and the author of Is Another World Watching? The Riddle of the Flying Saucers, first published in book form in 1950 and one of the earliest detailed and serious studies of these reports. Dr. Walther Johannes Riedel, an aerospace scientist and engineer, also participated: Special Report on Conferences with Astronomers on Unidentified Aerial Objects to Air Technical Intelligence Center Wright-Patterson Air Force Base of the U.S. Air Force (now the National Air and Space Intelligence Center), Wright-Patterson Air Force Base, by Professor Dr. J. Allen Hynek (an astronomer, consultant to the U.S. Air Force, investigator, and later an author and scientific consultant for the film/movie Close Encounters of the Third Kind), August 6, 1952, Appendix, *page 21.*

Since the television programme *"Are there Flying Saucers?"* was advertised in advance, the military or security services or private citizens may have used movie film cameras to record the discussion from the screens of their television sets, or they may have at least recorded the audio channel. The programme may have been filmed or the sound recorded in the television studio but the author of *Time of Contact* has been unsuccessful in his attempts to discover if this happened. However, researchers who are based or who can base themselves in Los Angeles, or who have contacts within ABC7 (KABC Television, LLC), the American Broadcasting Company (ABC) or its owner the The Walt Disney Company, or the military or security services, may be able to discover such recordings or transcripts or other

information about the broadcast. The programme is mentioned again later in this section and discussed in more detail in **Chapter 1 (How alien aerospace craft fly)**.

According to Professor Dr. Hynek, Captain Ruppelt directed the U.S. Air Force's Project Blue Book from March 1952 to February 1953, and from July 1953 to May 1954: The Hynek UFO Report, by Professor Dr. Hynek, first published in the United Kingdom in 1978, Chapter 1 (Blue Book Is Not a Book), *page 25.* Aspects of the work of Captain Ruppelt and his team are discussed later in this section. Professor Dr. Hynek was portrayed in a television series called Project Blue Book, based on selected *Project Blue Book* investigations, and first broadcast in January 2019.

Captain Ruppelt may also be heard speaking on the audio file reference 49 Capt. Edward J. Ruppelt 1st Director of Project Blue Book, that may be available on the UFOLOGY A Primer in Audio 1939 - 1959 web page on the Internet Archive website; the sound quality of this file is very poor but might be improved by using the latest audio processing services or software.

By the early 1950s the U.S. security service the Central Intelligence Agency (CIA) (formally created on 26 July 1947) was involved in our field of study. However, the experiences of people who investigated an encounter with alien craft on Saturday, 21 June 1947 close to Maury Island (Vashon-Maury Island) north of the port of Tacoma in the state of Washington in the north-western United States, suggest that the CIA's precursor organisations or other security services were already involved. Some of the investigators' experiences may suggest that aliens or their surrogates were also involved in the aftermath of the encounter.

The *Maury Island* encounter is discussed in **Chapter 1 (How alien aerospace craft fly)**, **Chapter 2 (Alien technology)** and **Chapter 4 (Aliens)**: The Coming of the Saucers: A Documentary Report on Sky Objects That Have Mystified the World, by Mr. Kenneth Arnold (who personally investigated the *Maury Island* encounter) and Mr. Ray Palmer, published in 1952. Another recommended starting point for research into the *Maury Island* encounter: UFOs and the National Security State: Chronology of a Cover-up 1941 - 1973, by Mr. Richard M. Dolan, published in 2002, Chapter 2: Saucers in the Skies: 1947, The Maury Island Saga, *pages 35 – 42.*

By the early 1950s independent, private organisations based in the U.S. and other countries had begun to systematically collect, investigate, analyse and publish reports of observations of, or encounters with alien craft. *The Report of Meetings of Scientific Advisory Panel on Unidentified Flying Objects convened by Office of Scientific Intelligence, CIA, January 14 – 18, 1953* (part of what is known as the "Robertson Panel Report" after its Chairman, Professor Dr. Howard Percy "Bob" Robertson) mentioned (at *pages 23 & 24)* two private U.S. investigative organisations: the Civilian Saucer Investigation (CSI) and the Aerial Phenomenon Research Organization (A.P.R.O.). The latter, A.P.R.O., published regular journals containing reports and analyses of encounters with and observations of alien craft, aliens or their surrogates, and their activities until 1987: CIA-UAP-002_Scientific-Advisory-Panel-on-Unidentified-Flying-Objects-Report-1952-1953 disclosed under the Presidential Unsealing and Reporting System for UAP Encounters (PURSUE), Release 03, June 12, 2026.

CSI published journals between 1952 and 1954 that included reports of alien craft. The intellectual, researcher, analyst and author Mr. Gerald Heard mentioned earlier was (at least

in 1953) CSI's *"President"* and an aerospace scientist and engineer Dr. Walther Johannes Riedel also mentioned earlier, was CSI's *"Honorary Vice President"*: Civilian Saucer Investigation, VOL. I, No. 2, Winter 1953 at *page 8*.

In Los Angeles during 1951, Mr. Heard and his friend Mr. Aldous Huxley mentioned earlier, met two men at Mr. Huxley's home. The men said that they were scientists and discussed advanced scientific and technological possibilities with Mr. Heard and Mr. Huxley, including the propulsion system that was possibly used by alien craft. Based on Mr. Huxley's detailed, written account of what the two men told and showed them we may speculate that the men were possibly members of a security service, the military, or aliens or their surrogates. Their discussion is covered in detail in **Chapter 1 (How alien aerospace craft fly)**: Letter from Aldous Huxley to his son Matthew Huxley and Matthew's wife Ellen, dated July or August 1951, Selected Letters of Aldous Huxley, edited with an introduction by Dr. James Sexton, published in 2007, *pages 422 - 424.*

As mentioned earlier, on Tuesday, 5 August, 1952 Mr. Heard, Mr. Huxley and Dr. Riedel participated in a televised *"round-table discussion on flying saucers"* titled *"Are there Flying Saucers?"* in Los Angeles, also covered in more detail in **Chapter 1 (How alien aerospace craft fly)**.

The Aerial Phenomenon Research Organization (A.P.R.O.) was founded by Mrs. Coral Lorenzen and Mr. Jim Lorenzen and as mentioned earlier published regular journals containing reports of encounters and observations until 1987. The Lorenzens also published several books which like their "A.P.R.O. Bulletins" contained reports and analyses of encounters with or observations of alien craft, aliens or their surrogates, and their activities; their books are listed in **Chapter 8 (Bibliography)**. The journals of CSI and A.P.R.O. are freely available online: Civilian Saucer Investigation (CSI) "Quarterly Reviews" from the Archives for the Unexplained (AFU) Downloads and A.P.R.O. Bulletins from OpenMinds or the AFU Downloads, or the Internet Archive.

Professor Dr. h. c. (honoris causa) Hermann Oberth, was the first aerospace expert *"to conclude that UFOs convert gravitational field energy to propulsive purposes":* Unconventional Flying Objects: a scientific analysis, by Professor Paul R. Hill, Section XIX (UFO Operational Capabilities), Part E. (Performance Unlimited – Energy Gathered En Route), Professor Hermann Oberth's Contribution, *pages 294 – 295,* and Section XX (Summary and Conclusions), Part 14. (The UFO Energy Supply – Is it Enough?), *pages 328 – 329,* of the paperback edition published in 1995, The Flying Saucer Conspiracy, by Major Donald E. Keyhoe, a researcher, investigator, author, communicator, and head of the National Investigations Committee for Aerial Phenomena (NICAP), published in 1955, Chapter 17 (Oberth and the G-Field), *page 253,* quoting a letter received by Major Keyhoe from Professor Dr. Oberth in late January of 1955, and *They Come from Outer Space* (The Unexplained Nine Per Cent, paragraphs 2, 3(c), 4 and 5), by Professor Dr. Oberth, published in Flying Saucer Review, May - June 1955, Vol. 1, No. 2, *pages 12 – 15*, at *page 14.*

It is therefore unsurprising that by 1955 the U.S. government was sponsoring projects to try to generate and control artificial gravitational force fields: *Scientific and Intelligence Aspects of the UFO Problem,* an (Australian) Department of Defence, Joint Intelligence Organization Minute Paper, covering note dated 27th May 1971, section headed "U.S. Official Attitude to U.F.O.'s", sub-sections 14 -17, *pages 5* (also marked "45") and *6* (also marked "44"): CIA-

UAP-019, Australian Dept of Defense Scientific and Intel aspects of the UFO problem disclosed under the Presidential Unsealing and Reporting System for UAP Encounters (PURSUE), Release 03, June 12, 2026. The Australian summary complements a similar summary that supplied outline details of "unclassified" projects in 1965: Aliens from Space, by Major Keyhoe, originally published in 1973, Chapter 3 (The Hidden Gamble), *pages 39 - 40*, discussed in **Chapter 2 (Alien Technology)**.

Official sponsorship of experiments to try to generate and control artificial gravitational force fields continued after the 1960s, for example, a European team that tried to generate gravitomagnetic and "gravitoelectric" fields was funded in part by the European Space Agency (ESA) and the United States Air Force: Towards a new test of general relativity? originally published on 23 March, 2006 by ESA, and Gravity's secret by Dr. Stuart Clark, FRAS (Fellow of the Royal Astronomical Society), published in New Scientist, 11 November 2006, No. 2577, *pages 36 – 39.* This work is discussed in **Chapter 1 (How alien aerospace craft fly)** and **Chapter 2 (Alien technology)** and was mentioned in the paper *The Role of Superconductors in Gravity Research*, file reference DOW-UAP-131-AAWSAP-DIRD, a Defense Intelligence Reference Document dated 23 March 2010, disclosed under the Presidential Unsealing and Reporting System for UAP Encounters (PURSUE), Release 06, September 18, 2026.

The All-domain Anomaly Resolution Office (AARO) (possibly pronounced "aero" as in "aeroplane") was established as required by law on 15 July 2022: National Defense Authorization Act (NDAA) for Fiscal Year 2022 (FY 2022), Section 1683, *pages 578 – 583* of the PDF file, and NDAA FY 2023, Section 6802, *pages 1192 – 1199* of the PDF file. The *AARO* comprises the re-named and expanded Airborne Object Identification and Management Synchronization Group (AOIMSG) that was established in 2021.

The *AARO* is led by Dr. Jon T. Kosloski; an online video is available of his testimony before the United States Senate Committee on Armed Services, Subcommittee on Emerging Threats and Capabilities, in Washington, D.C., on 19 November, 2024.

The *AARO* was led initially by Professor Sean M. Kirkpatrick; he and Professor Avi Loeb co-authored the paper Physical Constraints on Unidentified Aerial Phenomena, draft version March 7, 2023. A video of Professor Kirkpatrick is available online making a presentation and answering questions from Senator Kirsten Gillibrand and Senator Joni Ernst plus Senator Jacky Rosen at an open session (following closed hearings) of the United States Senate Committee on Armed Services, Subcommittee on Emerging Threats and Capabilities, in Washington, D.C., 19 April, 2023.

Professor David Nathaniel Spergel led the Unidentified Anomalous Phenomena Independent Study that produced the NASA Unidentified Anomalous Phenomena Independent Study Team Report dated 13 September 2023, discussed in the Media Briefing Unidentified Anomalous Phenomena Independent Study Report from ScienceAtNASA, 14 September, 2023.

The other members of the NASA Unidentified Anomalous Phenomena Independent Study (UAPIST) were: Professor Anamaria Berea, Professor Federica Bianco, Professor Paula S. Bontempi, Dr. Reggie Brothers, Dr. Jennifer Buss, Dr. Nadia Drake, Mr. Michael Gold, Dr. David H. Grinspoon, Captain Scott Joseph Kelly, Dr. Charles Mattias ("Matt") Mountain

FRAS, Mr. Warren Randolph, Dr. Walter S. Scott, Professor Joshua Semeter, Dr. Karlin Toner, and Professor Shelley Wright.

The *UAPIST's* members (with the exception of Dr. Mountain) can be seen and heard when they attended NASA's Unidentified Anomalous Phenomena (UAP) Meeting on 31 May 2023 (at which Professor Kirkpatrick also made a presentation). Presentation and remarks' transcripts and other information are available via NASA Science for researchers – UAP. In addition, the *UAPIST's* members may be viewed individually online in other videos or listened-to on audio files, where they were participating in discussions or making presentations, for example, Professor Spergel's lecture: The Cosmic Microwave Background and the Case for non-Baryonic Dark Matter.

In 2023 Mr. Mark A. McInerney was appointed as NASA's first *Director of UAP Research*: NASA shares Independent UAP Study Report; Names Director, 14 September 2023. However, he apparently *"left NASA in October 2025, and the UAP Research Director post no longer exists"*: *Scientific taboo?* by Mr. Rob Coppinger (Bachelor of Engineering (B.Eng.), Manufacturing Engineering, Middlesex University and Postgraduate Diploma in Manufacturing Systems, University of Birmingham), published in SpaceFlight, Volume 68, No. 5, May 2026, *pages 30 & 31*, by the British Interplanetary Society.

NASA was earlier directed to *"search for* (alien*) technosignatures"*: NASA renews interest in SETI (*Search for Extraterrestrial Intelligence*), by Dr. David H. Grinspoon (mentioned above as a member of NASA's *Unidentified Anomalous Phenomena Study Team*), 4 January 2019, published online by Sky & Telescope and NASA and the search for technosignatures – a report from the NASA Technosignatures Workshop, 28 November 2018.

In June 2021 the United States published its first public, official report in over 50 years that dealt with reports of what may have been alien craft: the Office of the Director of National Intelligence (ODNI) published the Preliminary Assessment: Unidentified Aerial Phenomena dated 25 June 2021 required by Report 116 – 233, section headed *"Committee Comments - Advanced Aerial Threats"* at *pages 11 & 12*, *"accompanying the Intelligence Authorization Act (IAA) for Fiscal Year 2021" "to deliver an unclassified report on unidentified flying objects to Congress … compiling what the government knows about UFOs rocketing around over American airspace"*: What's inside the Pentagon's long-awaited UFO Report? by Mr. Matt Stieb, and Mr. Chas Danner, published by the New York Intelligencer, 25 June 2021.

In 2024 the *AARO* published its Fiscal Year 2024 Consolidated Annual Report on Unidentified Anomalous Phenomena – Information Cut Off: June 1, 2024; this report was preceded by the ODNI's and the U.S. Department of War's Fiscal Year 2023 Consolidated Annual Report on Unidentified Anomalous Phenomena *"cleared for open publication"* on 17 October 2023, and the ODNI's 2022 Annual Report on Unidentified Aerial Phenomena. A comparison of the lists of the numerous official offices and organisations with which these reports and the earlier *Preliminary Assessment* were *"coordinated"* (links are provided to most of their websites later in this section) may suggest that the *AARO* is collecting and collating data, and undertaking (and possibly also outsourcing or contracting-out) investigation and analysis.

The U.S. intelligence community (overseen by the ODNI), the Department of War, and NASA have huge resources that include extensive relationships with many other official and

private organisations. Nevertheless, due to the exceptional nature, long history and large number of reports of observations of and encounters with alien craft or their users *"there is, however, something lost when many authors* (and arguably also organisations) *co-operate. If there is any unity in the movement of history, if there is any intimate relation between what goes before and what comes later, it is necessary, for setting this forth, that earlier and later periods should be synthesized in a single mind"*: History of Western Philosophy, by the philosopher and mathematician Bertrand Russell, elected a Fellow of the Royal Society (FRS) in 1908, third Earl Russell (1931), awarded the Order of Merit (OM) in 1949 and the Nobel Prize in Literature 1950, first published in 1946, Preface, *page 7*.

Therefore, if or when the U.S. official study programs expand or evolve to deal with historical reports by private individuals as well as by military personnel, law enforcement officers, etc. that include many detailed accounts of close encounters with alien craft or their users, they may wish to utilise the syntheses already provided by experienced, independent individuals, for example, Dr. Jacques Vallée a computer scientist, astronomer, entrepreneur, investigator, researcher, and author, and Mr. John A. Keel a journalist, investigator, researcher, and author.

The NDAA FY 2023, Section 6802 included a requirement (at *page 1196* of the PDF file version) for a *"Historical Record Report"* that shall *"focus on the period beginning on January 1, 1945"*. i.e. for the last 80 years. The *AARO* published online its Report on the Historical Record of U.S. Government Involvement with Unidentified Anomalous Phenomena (UAP), Volume I, February 2024, cleared for Open Publication Mar(ch) 06, 2024, Department of War, Office of Prepublication and Security Review.

The *AARO* also made available online a U.S. Government UAP-Related Programs or Activities Reporting Form that is *"intended as an initial point of contact with AARO",* to enable it to accept *"reports from current or former U.S. Government employees, service members, or contractor personnel with direct knowledge of U.S. Government programs or activities related to UAP dating back to 1945*. These reports will be used to inform AARO's congressionally directed Historical Record Report"*.

The *U.S. Government UAP-Related Programs or Activities Reporting Form* has a different purpose from official forms that enable military personnel to report their recent observations of what were once officially called "Unidentified Flying Objects (UFO or UFOs)", for example, early forms included Air Force Regulation No. 200-2 (AFR 200-2) that was referred to in UFOs SERIOUS BUSINESS, published in The Inspector General … United States Air Force TIG brief, Number 26, Volume XI, 24 December 1959, and addressed to U.S. AIR FORCE Operations and Training Commands by the Acting Inspector General, Major General Richard E. O'Keefe. Various versions of AFR 200-2, for example, dated 5 February 1958 are available online.

The General's characterisation of *"UFO sightings"* as *"serious USAF business"* supplied part of the title of the book Flying Saucers – Serious Business, by Mr. Frank Edwards that surveyed reports of alien craft or their users from ancient times to the mid-1960s. In 2023, *Flying Saucers – Serious Business* was mentioned by The Honorable Glenn S. Grothman, a United States lawmaker, starting at about 19 minutes and 30 seconds into an online video of an official hearing that he chaired: Unidentified Anomalous Phenomena, Implications on National Security, Public Safety, and Government Transparency, United States House

Committee on Oversight and Accountability, Subcommittee on National Security, the Border & Foreign Affairs, 26 July, 2023 that is discussed later in this section.

Over seventy years ago, historical UAP/UFO reports were officially collected and analysed in the United States. In the early 1950s a U.S. Air Force team led by Captain Edward J. Ruppelt collected and analysed not only contemporary reports of alien craft but also reports made towards the end of the nineteenth century: in 1896 and 1897 U.S. newspapers published many articles (often accompanied by illustrations) about a large "wave" of observations of, or encounters with what appeared to be "airships" and in several cases mostly (but not exclusively) human-looking entities that claimed or seemed to be, their inventors, crews or passengers.

It seems probable that the craft that were observed or encountered in 1896 and 1897 were alien aerospace craft disguised as (or that simulated the appearance of) advanced human-made airships. The engineer, researcher, investigator, and author Monsieur Aimé Michel concluded that *"During the Wave of 1896-97* (in the United States), *the objects seen on the ground seem to have been arrived at by hybridization between Renard and Krebs' dirigible balloon …* (La France which first flew in 1884) *and a small locomotive of the Far West (see Flying Saucer Review, July - August 1966, Vol. 12, No. 4, cover illustration)"*: The Humanoids, published in 1969, *The Problem of Non-Contact,* by Monsieur Aimé Michel, *pages 249 - 256,* at *page 256*, and *The Problem of Non-Contact,* by Monsieur Aimé Michel, included in The Humanoids, published in 1969, *pages 249 - 256,* at *page 256*, and Flying Saucer Review, Special Issue, October – November 1966, The Humanoids – A Survey of World-Wide reports of landings of unconventional aerial objects and their alleged Occupants, *pages 67 - 70.*

Several of the newspaper articles published during the "airship wave" of 1896 - 1897 included details of conversations with whoever or whatever impersonated the ostensible inventors, crews or passengers of the "airships": Operation Trojan Horse (Why UFOs), by Mr. John A. Keel, copyright 1970, edition published by Manor Books, Inc. in 1976 digitised by the Internet Archive, Chapter 5, *pages 69 – 93,* and Chapter 6, *pages 94 – 111*. Nevertheless, they may have made at least one major error in what they said (or omitted to say) initially, which however they took care to correct in subsequent encounters, as discussed in **Chapter 4 (Aliens)**.

Our own Artificial Intelligence (AI) systems are already capable of impersonating the speech or written language of real people; for example, The Infinite Conversation available online appears to be a conversation between two intellectuals but is completely synthetic (Coqui TTS was the speech-synthesis software used): What an endless conversation with Werner Herzog can teach us about AI, printed publication title *Chatbots Talking*, by Giacomo Miceli, published by Scientific American magazine, April 2023, Volume 328, Number 4, *pages 64 – 67*.

At least one of our humanoid robots can converse with a human being in a reasonably natural manner and perform tasks in response to spoken orders: Figure Status Update - Open AI Speech-to-Speech Reasoning, 13 March 2024. However, we cannot yet make physical, mobile, completely plausible simulations of real people like, for example, the "airships"' users that were observed or encountered in the U.S. in 1896 and 1897 (if we assume that they were humanoid robots or androids; of course, they may have been

biological, non-human beings in disguise or possibly human beings who may have pretended to be the airships' users because they were being paid or compelled to do so).

Captain Ruppelt's U.S. Air Force team studied *"hundreds of newspaper accounts"* of the 1896 - 1897 "airship wave". Captain Ruppelt concluded that the *"first documented reports of sightings similar to the UFO* (Unidentified Flying Object) *sightings as we know them today appeared in the newspapers of 1896. In fact, the series of sightings that occurred in that year and the next* (1897) *had many points of similarity with the reports of today"*: Chapter Sixteen (The Hierarchy Ponders) of The Report on Unidentified Flying Objects by Captain Ruppelt, published in 1956, at *pages 214 & 215*, freely available online including from the National Investigations Committee on Aerial Phenomena (NICAP) Online books.

The wave of observations and encounters in 1896 and 1897 began on the west coast of the United States in 1896, but in 1897 many reports were from further east. We are fortunate that many reports in historic newspapers like those mentioned by Captain Ruppelt may now be instantly viewed online, for example: *Strange Craft of the Sky,* The San Francisco Call, Thursday Morning, November 19, 1896, Volume LXXX.-No. 172, page 1, *columns 1 – 3; A Winged Ship In The Sky,* The San Francisco Call, Monday Morning, November 23, 1896, Volume LXXX.-No. 176, page 1, *columns 5 & 6;* and page 2, *columns 4 – 7*, *The Airship in Texas – Seen in Milam County – Cast its Shadow over the Convicts while at work.*, Cameron, Tex. (Texas), (Sunday) April 18 (1897), The Galveston Daily News, Monday, April 19, 1897, 56th year – No. 26, page 2, *columns 1 – 3; Was Aboard An Airship – The First Description Of The Modern Invention to Be Published. A San-Francisco-New York Line – Travel to Be Revolutionized Within Two Years-Speed of 1000 Miles in Eight Hours.,* The Galveston Daily News, Wednesday, May 5, 1897, 56th year – No. 42, page 7, *columns 2 & 3* (the encounter occurred at about noon [midday] on Monday,19 April, 1897); *Inspected The Air Ship - Beaumont Man Saw the Mystery at Close Range – Conversed With The Travelers – Says It Is Propelled by Four Huge Wings, Electricity Being the Power Used*, Beaumont, Texas, April 20, Houston Daily Post newspaper, Wednesday Morning, April 21, 1897, page 2, *column 7; The Airship In West Texas – Landed In The Town of Uvalde. Sheriff Baylor Interviewed The Men. It Started From Goshen, New York. And Is on a trial Trip-Navigator Wilson Left a Message for His Friend Akers*. Uvalde, Tex.(as), (Thursday) April 22 (1897), The Galveston Daily News, Saturday, April 24, 1897, 56th year – No. 31, page 3, *column 5;* and *Supplies for Airship - A Rockland Man Helped The Aerial Navigators. Purchased Chisels and Lubricating Oil for "Smith," the Man With the Mysterious Machine,* Rockland, Texas, (Friday) April 23 (1897), Houston Daily Post newspaper, Sunday Morning, April 25, 1897, page 13, *column 3*.

In the later nineteenth century the alien crafts' operators or users may have been engaged in similar activities to those that were reported for their counterparts from about the later twentieth century onwards, discussed in **Chapter 4 (Aliens)** and **Chapter 7 (Health, Security & Safety)**. Information in personal letters and diaries, medical records, police and other confidential reports and records, as well as in newspapers may support this idea. For example, in 1887 "The Phillipsburg Dispatch" a newspaper based in Phillipsburg in the state of Kansas in the United States, reported that Mr. John Miller (a farmer) had a testicle surgically removed during a two hour period of time that he could not account for, nor could he recall what had happened to him.

Mr. Miller remembered nothing of what happened between his entering the door of his barn to feed his "*team"* (probably working horses that could be used, for example, to pull farm implements or machinery such as ploughs or wheeled transportation vehicles such as buckboards) and when he *"stepped* (back) *into the kitchen* (of his house) *and discovered he had been injured"*. The Phillipsburg Dispatch newspaper report (which was published on Thursday, 1 September 1887) stated that the encounter occurred *"last Wednesday"* at *"12 o'clock"* (probably midday or noon, during daylight hours). Wednesday, 24 August 1887 may have been meant as the day of the encounter because the report would probably have stated "yesterday" if it had occurred on Wednesday, 31 August 1887. The location of the encounter was "*five miles east of this city"* i.e. probably Phillipsburg, Kansas: *A Mysterious Affair – John Miller meets with an experience as mystical* (sic: "mysterious" may have been meant) *as it is diabolical*, The Phillipsburg Dispatch, a newspaper based in Phillipsburg, Phillips County, Thursday, 1 September 1887, Volume I, Number L, column 3, *page 4*, available on the subscription website Newspapers.com and discussed in more detail in **Chapter 4 (Aliens)** and **Chapter 7 (Health, Security & Safety)**.

Encounters with aliens or their surrogates during which people underwent what seemed to be involuntary medical tests, procedures or experiments were reported and investigated from the later twentieth century onward; please refer to, for example, the summaries of the *Allagash* and *Kentucky* encounters that appear later in this section.

Official investigations and studies of some of the reports in 1896 and 1897 may possibly have been undertaken by contemporary national security services, for example, the United States Marshals Service or the United States Secret Service. It is possible that any detailed official study (even one made in the nineteenth century) could have identified anomalies in what the crafts' ostensible inventors or users said, as well as the very high performance of some of their craft compared with what could be expected of an advanced airship then or now.

Contemporary investigators may have included other U.S. Federal or State officials, the military, or police services, which may have been assisted by scientists that they consulted or employed. Private investigative organisations that were possibly contracted by Federal or State officials may have included the Pinkerton National Detective Agency which performed national security duties for the Union government during the American Civil War of 1861 - 1865; the *Pinkerton National Detective Agency* was also used by the U.S. government after the war. However, government-funded, private investigations may have been restricted by the Anti-Pinkerton Act of 1893.

Selected newspaper articles from the late nineteenth century are discussed in **Chapter 3 (Alien craft)** and **Chapter 4 (Aliens)** together with reports from the eastern United States in 1909 of alien craft that were disguised as or simulated the appearance (and sometimes the sounds) of our aircraft of the period; alien craft that again simulated airships were also observed or encountered in the United Kingdom and New Zealand in 1909. The alien "aircraft" and "airships" in 1909 sometimes used powerful searchlights as did some of the "airships" that were observed or encountered in 1896 and 1897 and other alien craft reported later in the twentieth century.

Mr. Wallace E. Tillinghast, a businessman based in Worcester, in the state of Massachusetts, United States, appears to have acted as a press spokesman for the

“aircraft’s” operators similarly to the way two San Francisco lawyers were used by the operators of the “airships” in 1896 at the beginning of the “airship” wave of 1896 – 1897. Mr. Tillinghast claimed to have flown in the “aircraft”: *He Flew, So He Says – Remarkable Story By Worcester Man – Claims His Aeroplane Flew to New York and Then to Boston on September 8*, by telegraph, Worcester, December 12, New York Tribune, Monday, December 13, 1909, Volume LXIX No. 23,038, page 1, *column 5,* and *Tells of Marvellous Flight – Worcester To New York, Then to Boston, And Back Home*, Worcester, Mass., Dec. 12, The Sun, New York, Monday, December 13, 1909, Vol. LXXVII. – No. 104, page 3, *columns 1 & 2,* plus *He Makes A Great Flight – Airship With Two Men Aboard Hovers Over Worcester at Night*, by United Press Wire, Worcester, Mass., Dec. 23, The Marion Daily Mirror, Thursday, December 23, 1909, Volume XVIII – Number 110, page 1, *column 7,* and *Airship Now At Hub – Seen Flying Over the City – Pulsation of Engines Heard and Its Hull Outlined Against the Sky, Tillinghast Talks. Said to Have Told Partner About Wednesday Flight*, *Seen at Willimantic, Airship with Powerful Light Passes Over City,* New York Tribune, Friday, December 24, 1909, Volume LXIX No. 23,049, page 1*, column 3.*

The following year (1910) Mr. Tillinghast displayed a static “aircraft” located in a *“hidden workshop”* privately to a journalist and a local business leader: *Tillinghast Aeroplane – The Mysterious Monoplane Has Been Found at Last,* by telegraph, Worcester, Mass., July 12*,* New York Tribune, Wednesday, July 13, 1910, Volume LXX No. 23,250, page 3, *column 5*. The simulated “aircraft” and Mr. Tillinghast were discussed in Operation Trojan Horse (Why UFOs), by Mr. John A. Keel, copyright 1970, edition published by Manor Books, Inc. in 1976 digitised by the Internet Archive, Chapter 6, *pages 101 - 120* (A New “Secret” Inventor & The Mysterious Shed).

A wave of simulated aircraft occurred during the 1930s in Scandinavia: reports of what were called the “ghost fliers” were summarised and discussed in the following articles: *Mystery Aeroplanes of the 1930s - Part 1,* Flying Saucer Review, May - June 1970, Vol. 16, No. 3, *pages 10 – 13, Mystery Aeroplanes of the 1930s – Part 2,* Flying Saucer Review, July – August 1970, Vol. 16, No. 4, *pages 9 – 14, Mystery Aeroplanes of the 1930s Part III – The Landings,* Flying Saucer Review, July – August 1971, Vol. 17, No. 4, *pages 17 – 19, Mystery Aeroplanes of the 1930s Part IV,* Flying Saucer Review, September - October 1971, Vol. 17, No. 5, *pages 20 - 22, & 28,* all by Mr. John A. Keel. The *ghost fliers* were also discussed in Operation Trojan Horse (Why UFOs), by Mr. John A. Keel, copyright 1970, edition published by Manor Books, Inc. in 1976 digitised by the Internet Archive, Chapter 7, *pages 116 – 125* (The Mystery Planes of 1934 & Radio Signals from Nowhere).

During the so-called Battle of Los Angeles at least one large alien craft was fired upon by ground-based anti-aircraft guns in the early morning of 25 February 1942, and during the Second World War of 1939 – 1945 military aircrews reported observing or encountering a wide variety of different sizes and shapes of alien craft, generally called foo fighters. Examples of such reports are available in the file reference: 331_120752_numeric_files_1944-1945_37153_german-armament_equipment_documents disclosed under the Presidential Unsealing and Reporting System for UAP Encounters (PURSUE), Release 01, May 8, 2026.

A detailed first - hand account of an encounter with a *foo fighter* in June 1942 is contained in an audio file numbered 004 6. (UFOlogy: A Primer in Audio 1939 – 1959) on the Internet Archive website, attributed to a Major Raymond Sabinski. Major Sabinski was evidently

returning from a bombing mission to Germany flying in a Vickers Wellington aircraft of the United Kingdom's Royal Air Force - Bomber Command. An alien craft was initially observed approaching the aircraft from its rear while they flew over the Zuiderzee area in the northwest of The Netherlands.

Alien craft that simulated or were disguised as cruise-missile-like military aircraft that resembled much longer-range, manoeuvrable, and higher-performing versions of German V1 cruise missiles flew over (and sometimes appeared to crash in) Scandinavia in 1946; they were called ghost rockets. According to a report which also mentions the apparent crash or landing of what may have been an alien craft in a lake, the *"Swedish Air Intelligence Service"* communicated the conclusion of *"'some reliable and fully technically qualified people' that 'these phenomena are obviously the result of a high technical skill which cannot be credited to any presently known culture on earth'. They are therefore assuming that these objects originate from some previously unknown or identified technology, potentially outside the earth"*: USAFE (presumably United States Air Force Europe) 14, TT 1524, dated 4 Nov(ember) 1948, included in the file reference: 341_110448_records_relating_to_the_collection_and_dissemination_of_intelligence_1948_–_1955-ts_cont_no.2_2_5300_2-5399 , *page 5* of *7*, disclosed under the Presidential Unsealing and Reporting System for UAP Encounters (PURSUE), Release 01, May 8, 2026.

An article about the ghost rockets titled *"Ghost Rockets" over Scandinavia* appeared in the Intelligence Review, Number 47, 9 (January) 1947, file reference DOW-UAP-D099_Intelligence-Review-of-Ghost-Rocket-Incidents-1947.pdf, disclosed under the Presidential Unsealing and Reporting System for UAP Encounters (PURSUE), Release 05, August 7, 2026.

Selected reports of observations of and encounters with *foo fighters* and *ghost rockets* are discussed in more detail towards the end of **Chapter 4 (Aliens)**. Airborne alien craft that simulated or were disguised as our aircraft, aerospace craft, helicopters or Unmanned Aerial Vehicles (UAVs) or "drones" were encountered or observed during the twentieth and twenty-first centuries, for example:

1950s: On Sunday, 20 April 1952 at between *"2115 to 2240 hours"* (presumably local time and at a location within the United States) *"a naval aviation student"* and several other people observed multiple airborne craft fly over, that *"were shaped like conventional aircraft"* except that they were each surrounded by a red-coloured *"light glow"* with a *"fuzzy area"* that extended back from behind the "wings": *Case II (Serial 4508.00)*, Project Blue Book, Special Report No. 14 (Analysis of Reports of Unidentified Aerial Objects), Project No. 10073, 5 May 1955, Air Technical Intelligence Center (now the National Air and Space Intelligence Center), Wright-Patterson Air Force Base, Ohio (United States), Copy No. 35, at *pages 78 & 79* (*pages 89 & 90* of the PDF format file). This report was disclosed as file reference CIA-UAP-015-Project_Blue_Book_Special_Report_No_14 , at *pages 78 & 79* (*pages 88 & 89* of the PDF format file) under the Presidential Unsealing and Reporting System for UAP Encounters (PURSUE), Release 03, June 12, 2026. Other copies of *Special Report No. 14* may be available online, for example, from the Internet Archive.

1960s: One or more airborne alien craft were observed or encountered beginning at about 1100 hours local time on Wednesday, 6 April 1966, near to *Westall High School* (now Westall Secondary College) in Clayton South) *"and the adjacent Westall State School"*

(Westall Primary School), south-east of the city of Melbourne in the state of Victoria, Australia. At least one of the alien craft landed or hovered at a low altitude, and what were described variously as *"many private aircraft, mainly Cessna"*, *"light aircraft"* or *"small planes"* were also observed. However, neither the "aircraft" nor any of their pilots were identified publicly.

A description of the "aircraft" and of one of the alien craft *"written by a boy from the Westall High School"* appeared in the article *Scoop! Flying Saucer over Westall*, published in *The Clayton Calendar*, reproduced in the Australian Flying Saucer Review, Victorian edition, July 1966, *pages 13 & 14*, with an afterword by Ms. Judith Magee. Other reports include the video Westall 1966: A Suburban UFO Mystery (2009) and another video titled 50 years of Melbourne UFO mystery (2016), that may be available online. The encounter is discussed in the book Contact Down Under by Ms. Moira McGhee, published in April 2016 by the Independent Network of UFO Researchers (INUFOR) of Australia, *Chapter Nine (Victoria and Tasmania)*, Schools and children, Westall, East Melbourne, 6 April 1966, *pages 137 – 139.*

An airborne alien craft was observed over the Wanaque Reservoir in the state of New Jersey, United States on Tuesday, 11 October 1966; what appeared to be *"seven helicopters"* and *"ten or twelve jet airplanes"* were observed at the scene after the alien craft's departure. The *"helicopters"* and *"jet airplanes"* arrived so quickly at the scene and there were so many of them operating so closely together, that it seems unlikely that they were real helicopters and aircraft belonging to U.S. military or security services: Operation Trojan Horse (Why UFOs), by Mr. John A. Keel, published in 1970, Chapter 7 (Unidentified Airplanes), Mystery Helicopters, *pages 127 & 128*, and The Official Guide to UFOs, compiled by the editors of *Science & Mechanics* magazine, published in 1968, Chapter 5 – What Happened at Wanaque, N.J.? (An Objective Look At UFOs), by Mr. Lloyd Mallan, who was a member of what is now the American Institute of Aeronautics and Astronautics as well as what is now the *Aviation/Space Writers Association*, and the British Interplanetary Society.

1970s: Airborne alien craft that approximately simulated or were disguised as military transport aircraft with a twin tail boom configuration were observed in the United Kingdom and the United States: *Bizarre "Boxcar" over Preston* (United Kingdom), by Mr. Ray Rimell, *"a World War 1 aero historian, illustrator and modeller",* published in Flying Saucer Review, June 1978, Vol. 24, No. 1, *page 22,* Operation Trojan Horse (Why UFOs), by Mr. John A. Keel, published in 1970, Chapter 7 (Unidentified Airplanes), Mystery "Cargo Planes", *pages 115 & 116*, and Visitors from Space (The Mothman Prophecies), also by Mr. Keel, published in 1975, Chapter Ten, Part IV, *pages 136 - 139* (the simulated craft in this U.S. report resembled *"big gray 'flying boxcars'"* i.e. Fairchild C-119 Flying Boxcar military transport aircraft).

1980s: Beginning *"shortly before"* 2100 hours local time on Monday, 29 December 1980 in southern Texas in the United States, an alien craft was encountered that appeared to be accompanied by numerous "helicopters" which resembled Boeing CH-47 Chinooks used primarily by military services to transport people, supplies and equipment. The alien craft and the "helicopters" were encountered by Mrs. Betty Cash, Mrs. Vickie Landrum and Mrs. Landrum's 7 year-old grandson Colby as they travelled south on the Huffman-Cleveland Road in a 1980 model Oldsmobile Cutlass Supreme car.

The alien craft descended *"directly in front of them, settling swiftly between the trees just ahead of them and above the highway."* Mrs. Cash (who was driving) experienced a *"panicky impulse"* to accelerate and drive under the craft *"to get away from it"* but instead stopped the car at Mrs. Landrum's urging. The distance from the stopped car to the craft was later variously estimated to have been from approximately 100 feet to *"less than 150 feet"*, and the altitude of the craft was reported as *"60 – 80 feet above the road"*: The Cash Landrum Incident, copyright © 1998/2022, by Mr. John F. Schuessler, an aerospace engineer who was the Deputy Director of the Mutual UFO Network (MUFON) and the encounter's *"primary investigator",* Chapter 1 (The Encounter), *pages 16 – 18,* and Addendum, *pages 248, 251, 252, 255,* and *257.*

The car stopped at a location slightly north of the junction with Inland Road, which runs south-east from the *Huffman-Cleveland Road.* A simplified map of the roads where the encounter occurred that includes the position of the car when it stopped and the flight path of the alien craft, is contained in the article: *Burns Follow UFO Incident*, The A.P.R.O. Bulletin, Vol. 29, No. 8, published in 1981, *page 3.* The area where the encounter occurred is to the north of Lake Houston and about 60 kilometres northeast of the Gulf of Mexico (renamed the "Gulf of America" by President Trump's Executive Order 14172). In the *A.P.R.O.* report referenced above the *Huffman-Cleveland Road* was referred to as the Huffman-New Caney Road; it was referred to as State Farm Road FM (Farm-to-Market-Road No.) 1485 in *The Cash Landrum Incident,* for example, in Chapter 1 (The Encounter), at *page 16.*

As there were so many "helicopters" observed flying so close to one another and the alien craft it seems unlikely that they were real helicopters. In addition, Mrs. Cash, Mrs. Landrum, and Colby received injuries from their encounter that were consistent with exposure to strong X-ray, ultraviolet and infra-red electromagnetic radiation; such radiation might have adversely affected the systems of real helicopters and the health of their human crews. The injuries received by Mrs. Cash, Mrs. Landrum, and Colby and the investigations into the possible origin, etc. of the "helicopters" they observed are among the issues connected with the encounter that were covered in detail in *The Cash Landrum Incident,* which may be available in public libraries or purchased online. For example, in 2026 the paperback version of the book was available via Amazon UK for £12.34 including free delivery in the United Kingdom; the book may also be available via other websites such as the AFU Shop or AbeBooks, etc. Mr. Schuessler can be seen and heard in video documentaries that are referenced towards the end of this section.

Mrs. Cash, Mrs. Landrum and Colby seem to have received their injuries when they got out of the stopped car to observe the craft. Mrs. Cash's injuries were the most severe, probably because she stayed outside the car longer than Mrs. Landrum and Colby. Relatively speaking, Colby's physical injuries seem to have been the least severe (he spent the least amount of time outside of the car) although he like Mrs. Cash and Mrs. Landrum subsequently suffered serious and ongoing health problems and was also emotionally traumatised by the encounter.

The physical injuries suffered by Mrs. Cash, Mrs. Landrum and Colby seem to support a hypothesis proposed by Professor Paul R. Hill, a United States, NASA aerospace scientist and engineer, that *"the propulsive waves* (the synthetic acceleration propulsion force fields that may be radiated by alien craft to enable them to hover and fly) *and the ionizing waves* (see below) *are two separate entities that (more or less) go out together"* (from the hull of an

alien craft): Unconventional Flying Objects: a scientific analysis, by Professor Hill, Section X (Propulsion Oddities), Part B. (Saucer Rings), Example X-B3. Pressure Rings, *page 140,* and Part C. Discussion, *pages 141 – 144,* of the paperback edition published in 1995.

Professor Hill concluded that the *"ionizing waves"* were probably X-ray or gamma ray frequency electromagnetic fields. These powerful electromagnetic fields may possibly direct and focus an alien craft's synthetic acceleration propulsion and hull protection force fields or be associated with the generation of these force fields. Ultraviolet radiation may also be produced below or around an alien craft when the electromagnetic fields it radiates make the surrounding air produce *"ionized atmospheric nitrogen* (that) *radiates very strongly in the ultraviolet frequencies"*: Unconventional Flying Objects: a scientific analysis, by Professor Hill, Section III (Illumination), Part B (Sample Data on Colors and Illumination), *page 59.* These issues are discussed in more detail elsewhere in *Time of Contact* including in **Chapter 2 (Alien technology)**.

The Mutual UFO Network (MUFON), the Aerial Phenomenon Research Organization (A.P.R.O.) and the J. Allen Hynek Center for UFO Studies (CUFOS) *"all cooperated in a responsible manner to assist the Houston-based Project VISIT (Vehicle Internal Systems Investigation Team) to conduct the* (*Cash-Landrum encounter*) *investigation by providing consultants, recommendations, and data pertaining to similar cases." A.P.R.O.* stated that they were first notified of the encounter on 2 February 1981.

Reports and analyses of the *Cash-Landrum encounter* include: *Physical Effects, Helicopters and a Fiery UFO*, International UFO Reporter (IUR), May – June 1981, Vol. III, no. 4, *pages 13 & 14*, *Burns Follow UFO Incident*, The A.P.R.O. Bulletin, Vol. 29, No. 8, published in 1981, *pages 1 – 4, Follow-Up*, by Mrs. Coral E. Lorenzen, The A.P.R.O. Bulletin, Vol. 29, No. 10, published in October 1981, *page 8, Radiation Injuries from UFO*, by Mr. Richard H. Hall, published in the MUFON UFO Journal, April 1981, No. 158, *page 3, Cash-Landrum Radiation Case*, by Mr. John F. Schuessler, MUFON UFO Journal, November 1981, No. 165, *pages 3 – 6, Pentagon Investigates Cash-Landrum Case,* by Mr. John F. Schuessler, MUFON UFO Journal, October 1982, No. 176, *pages 3 – 6, Technical Review of Radiation Evidence in Cash-Landrum Case,* by Mr. Paul Stowe (with comments by Dr. Peter Rank), MUFON UFO Journal, December 1982, No. 178, *pages 8 & 9, Radiation UFO Injuries*, by Dr. Richard C. Niemtzow, M.D., MUFON UFO Journal, January 1983, No. 179, *pages 14 & 15, Cash-Landrum Case, Investigation of Helicopter Activity,* by Mr. John F. Schuessler, MUFON UFO Journal, September 1983, No. 187, *pages 3 – 7*, and the book The Cash Landrum Incident, by Mr. John F. Schuessler, copyright © 1998/2022.

Video documentaries that contain interviews with Mrs. Cash, Mrs. Landrum, Colby and Mr. Schuessler may be available online, including: The UFO Experience 1982 Documentary, beginning at about 14 minutes into the video file, and an episode of Unsolved Mysteries with Robert Stack, Season 3, Episode 18, first released on 30 January, 1991, beginning at about 18 minutes into the video file. A list of video programmes about or that include the *Cash-Landrum encounter* is available on the IMDb database, The *Cash-Landrum encounter* is also discussed in **Chapter 7 (Health, Security, & Safety)**.

1990s: there were several reports of what was possibly an alien aerospace craft that simulated or was disguised as an "aircraft" that resembled the obsolete North American Aviation XB-70 Valkyrie. One observer reported how the craft flew and manoeuvred at a

slow speed and low altitude over Doylestown, in the state of Pennsylvania, United States in 1993. Another, similar "aircraft" was observed *"flying over Salt Lake City"* in the state of Utah at 1435 hours local time on Sunday, 4 October 1998; it had what appeared to be a smaller aircraft or aerospace craft attached to its underside: Two-Stage-to-Orbit 'Blackstar' System Shelved at Groom Lake? and Spaceplane 'Mothership' Resembles 1960s' XB-70 Bomber Prototypes, by Mr. William B. Scott, published in Aviation Week & Space Technology, 6 March 2006, *pages 48* & *52*.

21st century: in late February of 2016 multiple alien craft were observed over and around the village of Pentyrch, northwest of the city of Cardiff in Wales in the United Kingdom. In addition, a close encounter with two alien craft and a possible, brief communication from a craft or one of its users were reported by one of the observers, Ms. Caz Clarke, who has co-authored a book and appeared in videos that are available online describing her experience. Ms. Clarke also provided a detailed description of what may have been plasma created in the air close to two of the craft by their propulsion or hull or user protection systems: UFO witness describes in detail her close encounter – The Central Club, published on 5 July, 2023, beginning at 8 minutes and 20 seconds into the 21 minute, 31 seconds-long video.

Observers on the ground in Pentyrch also reported what appeared to be military aircraft flying overhead (Pentyrch is approximately 14 miles north by road from a British military facility, Ministry of Defence [MOD] St. Athan). Their observations may have begun on Tuesday, 23 February 2016 when one of at least two relatively small twin engined propellor driven aircraft (possibly Royal Air Force Beechcraft [part of Textron Aviation] Shadow R Mk. 1 intelligence, surveillance, target acquisition and reconnaissance [ISTAR] aircraft) flew continuously overhead of Pentyrch. These aircraft appeared to be capable of staying aloft for up to eight hours each, which is the approximate maximum endurance time of a *Shadow R Mk. 1.*

Later, several larger aircraft were observed: a Boeing E-3 Sentry Airborne Warning and Control Systems (AWACS) jet aircraft, two Boeing C-17 Globemaster III jet transports and two Lockheed C-130 Hercules propellor-driven transports, as well as at least three Boeing AH-64 Apache attack helicopters. However, since some of the larger "aircraft" were also observed flying anomalously, i.e. slowly and low over a residential area, sometimes in close formation and in close proximity to alien craft, some or all of the "aircraft" and "helicopters" may have been simulations or alien craft disguised to resemble our aircraft and helicopters.

Alternatively, since some or all aliens can alter human memories and possibly perceptions too, they may have caused the observers to perceive and remember the "aircraft" and "helicopters" without any physical craft (or even images of craft) actually being present in the sky. The forgoing may of course also apply to some other reports of anomalous aircraft, helicopters, drones, airships, etc: UFO witness describes in detail her close encounter – The Central Club, published on 5 July, 2023, among other online videos about the observations. More information may be available in a book: The Pentyrch Incident: The Greatest UFO Cover-up of Modern Times, by Ms. Caz Clarke and Mr. Gari Jones, published in 2021, but at the time of writing the author of *Time of Contact* has been unable to discover a copy of the book for sale.

Unidentified airborne and possibly alien craft that news and other reports, articles and video documentaries, etc. often referred to as "drones" (Unmanned Aerial Vehicles or UAVs) were

observed over military facilities and *"critical infrastructure"* such as water reservoirs and electricity generation stations (power stations), etc. during the twenty-first century.

For example, at 0710 hours (presumably local time) on Tuesday, 1 September 2015 an unidentified airborne object was detected by radar travelling at *"approximately 10-15 mph"* (miles per hour) in a northerly direction, west of the Pantex Plant near Amarillo, in the state of Texas, United States, where nuclear weapons may be stored and maintained, etc. Two observers who were *"approximately 75 – 100 meters from the object"* at the time estimated that it was *"100 – 200 f(ee)t above the ground"*. They described the object as silent, and of a *"'diamond' type shape with it being more round at the top"*. Other observers *"described it as being approximately 4ft. tall and 2 ft. wide at the bottom. The object was described as being thinner at the top"*: *Pantex Unidentified Object Incident Report, September 2, 2015, Pantex Plant, Amarillo, TX 79120-0020*, file reference DOC-UAP-D005, Pantex Unidentified Object Incident Report, 2015, disclosed under the Presidential Unsealing and Reporting System for UAP Encounters (PURSUE), Release 04, July 10, 2026.

Unidentified craft were observed over nuclear power stations in France and Belgium in the last quarter of 2014 and in early 2015. The craft observed in France were described as being *"something much more complex and expensive"* than ordinary "drones" with *"a triangle of three white lights, a larger red light and a searchlight, possibly linked to a camera, which throws intermittent beams of light on the 'target'"*: French government on high alert after unexplained drone flights over nuclear power stations, published by The Independent online newspaper, Sunday, 9 November 2014 and Drone spotted over Belgium nuclear plant, published by SBS News, Sunday, 21 December 2014.

The "drones" may have been alien craft that were monitoring the integrity of nuclear reactors which were defective or vulnerable to sabotage or other attacks, and therefore were potentially very dangerous: Police call for witnesses to identify man suspected of sabotaging nuclear reactor, published in The Brussels Times, Wednesday, 6 November 2019 and Belgium's neighbors fear a nuclear Incident, by Mr. Dave Keating, published by Forbes, updated Monday, 5 February 2018.

Unidentified craft have also been observed over non-nuclear power stations, for example, the natural gas and coal-fired Jim Bridger Plant (power station) located in Sweetwater County, in the state of Wyoming, United States: Mystery drones, or maybe UFOs, over Sweetwater County are the "new normal", by Ms. Clair McFarland, published in the Cowboy State Daily, 15 December 2025.

In the United States in late 2019 and early 2020 there was a "wave" or "flap" of reports of unidentified airborne craft that may have surveyed U.S. nuclear missiles and associated systems and facilities in the states of Colorado and Nebraska. These craft possibly came from a much larger alien craft that had recently arrived in our solar system and were performing their first survey of these missiles, systems and facilities, or perhaps updating a database they had brought with them or were able to access. Alternatively, the craft may have been deployed by longer term visiting (or resident) aliens engaged in similar activities: A night on the plains: Chasing the mysterious drones of eastern Colorado, by Mr. Sam Tabachnik, and Mysterious drones flying nighttime patterns over northeast Colorado leave local law enforcement stumped, by Ms. Shelly Bradbury, published by The Denver Post on Monday, 23 December 2019 and Friday, 3 January 2020, 'It's creepy': unexplained drones

are swarming by night over Colorado, by Mr. Mitch Smith, published by The New York Times on Wednesday, 1 January 2020, plus Wikipedia – 90th Missile Wing LGM-30 Minuteman Missile Launch Sites in the states of Colorado, Nebraska and Wyoming.

Reports from Nebraska included those near County Road R, outside Mead, Grand Island, the Hastings Municipal Airport, Juniata, and Westbrook: *'Mystery drones' spotted over eastern Nebraska* (including video), published by KTIV.COM on Wednesday, 8 January 2020, and Authorities investigate mysterious drone sightings in Nebraska, by KSNB, published by WVLT8 on Monday, 6 January 2020.

It is possible that the craft's controllers were aware of an accident with a nuclear missile in 2014 at the facility *"designated Juliet-07 and placed among wheat fields and wind turbines west of Peetz, Colorado. The silo, one of 10 in a cluster that straddles the Colorado-Nebraska border, is controlled by launch officers of the 320th Missile Squadron and administered by the 90th Missile Wing at F.E. Warren Air Force Base in Wyoming"*: US airmen damage nuclear missile as 'troubleshooting' mission goes wrong, published by The Guardian newspaper, Saturday, 23 January 2016. It is possible that in the future, alien craft may be observed surveying other United States land-based missile launch sites: those of the 341st Missile Wing in the state of Montana, north of Wyoming, and of the 91st Missile Wing in the state of North Dakota north-east of Wyoming.

Reports of alien craft that seemed to survey or interfere with ballistic missiles or other military systems and facilities during the twentieth century were discussed in papers and journal articles, for example: Remarkable Reports from the Missile Field, by Mr. Robert L. Hastings, International UFO Reporter (IUR) Volume 32, number 1 (August 2008), *pages 8 – 27* and other papers and articles referenced in **Chapter 4 (Aliens)**.

Beginning in late 2024 news reports, articles, online videos, etc. were published about a "wave" of unidentified airborne craft some of which may have been alien craft that simulated or were disguised to resemble our fixed wing UAVs or quadcopter drones, and usually flew at night over *"critical infrastructure like reservoirs"* and over many other locations. The earliest reports may have been of craft observed near Morris County, in the state of New Jersey, United States on Monday, 18 November 2024. Subsequent reports included observations of unidentified craft over Wright-Patterson Air Force Base north-east of Dayton in the state of Ohio (beginning late on Friday, 13 December, 2024).

Some observers reported seeing relatively large craft (for example, the size of a *"car"* or a *"bus"*) or reported there was no sound made by some of the craft. There have been many articles, reports and online videos published about this wave, including: Drones continue to buzz over US bases. The military isn't sure how or why to stop them, by Ms. Haley Britzky, published by CNN News, Monday, Saturday, 21 December 2024, Key US Air Force base closes airspace amid drone sightings, by Mr. Brad Lendon and Ms. Hanna Park, and What we know about mysterious drone sightings, by Ms. Zoe Sottile, Mr. Josh Campbell and Ms. Artemis Moshtaghian, both articles published by CNN News, Monday, 16 December, 2024.

Beginning on or about Wednesday, 20 November 2024 unidentified airborne craft were observed over and in the vicinity of four bases used by the United States military in the United Kingdom: Royal Air Force (RAF) (station) Mildenhall and the adjacent base RAF Lakenheath in the county of Suffolk in the region of East Anglia, in England, plus RAF

Feltwell in the county of Norfolk, East Anglia, and RAF Fairford in the county of Gloucestershire.

The craft observed over the village of Beck Row near to and over *RAF Mildenhall* itself were described as *"brightly lit aerial vehicles";* one was described by the person who observed it as *"triangle-shaped"* with a hull that was *"a grey, dark colour"*. Other reports from residents of *Beck Row* described *"a big orange light in the sky"*, *"very large* (craft) *with bright lights"* and *"a big, big light"*. One observer *"could not detect a noise"* (from the craft). The craft were initially reported over the *East Anglian* bases *"between* (Wednesday) *20 and* (Friday) *22 November, and the aircraft has since reappeared":* Are mystery drones above US bases in England something sinister? by Mr. Matt Precey and Ms. Alice Cunningham, published by BBC News, Suffolk, (Saturday) 30 November, 2024.

The wave that began in November 2024 suggests that an alien expedition may recently have arrived in our solar system and began a routine survey of our nuclear weapons and military bases, critical infrastructure, etc. Alternatively, the deployment of alien craft may have been a warning by visiting or resident aliens to us about the danger that the war in Ukraine could develop into a much wider and more destructive war involving the use of nuclear weapons. The last-mentioned idea is supported by the apparent correlation between the appearance of the alien craft and the reported launch by Russia on Thursday, 21 November 2024 of an Oreshnik ballistic missile at a target in the city of Dnipro in Ukraine. This type of missile can carry nuclear weapons and although in this case it may not have carried any weapons at all, the very high speed with which it probably struck meant that it evidently still caused casualties and damage.

If a missile known to be capable of carrying nuclear weapons was launched accidentally or deliberately on a trajectory terminating in a country which was, for example, a member of the North Atlantic Treaty Organization (NATO) the result might be the launch of nuclear weapons at targets in Russia: Putin says Russia hit Ukraine with new intermediate-range ballistic missile, published by BBC News, (Thursday) 21 November, 2024.

Unidentified and possibly alien airborne craft were observed over Denmark during the week beginning Monday, 22 September 2025; their presence may have constituted a further warning about the dangers of the war in Ukraine: Drones seen over Danish military bases in latest air disruption, by Mr. Ian Aikman, published on Saturday, 27 September 2025 by BBC News – Europe; the observations preceded international meetings about support for Ukraine and the defence of Europe during the following week in Copenhagen, the capital of Denmark: Informal meeting of heads of state or government, on Wednesday, 1 October 2025 and Meeting of the European Political Community on Thursday, 2 October 2025.

Later in October 2025 and during November 2025, there were more reports of unidentified airborne craft over military bases and airports in Europe. The craft were possibly surveying nuclear weapons contained in storage facilities, or their presence was a further warning of the dangers posed by the Ukraine war, or was intended to encourage efforts to end the war: Dutch air force fails to intercept unknown drones over Volkel Air Base, by Clement Charpentreau, published by AeroTime, (Monday) 24 November 2025 and Drones spotted over Belgian military base for third night in a row, by Evelyn Ann-Marie Dom, published by Euronews, (Sunday) 2 November 2025.

The controllers of the unidentified, possibly alien airborne craft may also have been warning of the danger posed by war damage to the protective shell over the Chernobyl nuclear power station's reactor number 4: Chernobyl radiation shield has stopped working after Russian drone strikes, by Mr. Ben Munster, published by Politico, (Saturday) 6 December 2025.

During 1989 and 1990 the presence of alien craft over Belgium (where *NATO* has its headquarters) may have constituted a similar warning. This was the time when *NATO's* primary adversary the Eurasian Soviet Union (the Union of Soviet Socialist Republics, or USSR or CCCP controlled by Russia) was disintegrating, beginning in 1989; the *Soviet Union* existed from December 1922 to December 1991. The craft's controllers may have been warning *NATO* not to take advantage of the USSR's disintegration militarily, or were highlighting the dangers its disintegration posed, for example, possible loss of control over the USSR's nuclear weapons: *Observations récentes - 7 novembre 1989, Esneux (Belgique); 29 novembre 1989, région nord-est de Verviers (Belgique)* and *6 Décembre 1989, Battice (Belgique)*, published in Lumières Dans La Nuit (LDLN), Novembre – Decembre 1989, No. 300, *pages 28 – 36,* and articles published in Lumières Dans La Nuit (LDLN), Janvier/Février 1990, No. 301 (an online version of this edition of the journal may exist but the author of Time of Contact has not yet discovered it).

Translations into English of the above-mentioned *LDLN* reports appeared subsequently as the articles *Belgium Haunted for Months Past by Huge Low-Flying Triangular Craft - B. The UFO "Wave" November/December 1989 over Eastern Belgium*, by Monsieur Joël Mesnard and the Editorial Committee of Lumières dans la Nuit (LDLN), translated into English by Mr. Gordon Creighton and published in Flying Saucer Review, June Quarter 1990, Vol. 35, No. 2, *pages 1 – 10,* and *Belgium Haunted by Huge Triangular craft: Part II*, by Monsieur Joël Mesnard and the Editorial Committee of LDLN; the article *A UFO On the F-16's Radar*, by Ms. Marie-Thérèse de Brosses was published in Paris-Match, No. 2145 (Paris), July 5, 1990 and translated into English by Mr. Gordon Creighton, Flying Saucer Review, December Quarter 1990, Vol. 35, No. 4, *pages 2 – 11*. Selected observations of and encounters with alien craft from the *Belgian Wave* are discussed in **Chapter 1 (How alien aerospace craft fly)** and **Chapter 3 (Alien craft)**.

A still-earlier international crisis may possibly have caused alien craft to survey or monitor nuclear weapons belonging to the United States that may have been stored in the United Kingdom, and possibly also other systems used by the military. Observations of, or encounters with alien craft began on Thursday, 25 December 1980 in the vicinity of RAF Woodbridge and RAF Bentwaters, which were military bases used by the U.S. Air Force located in the county of Suffolk in the East Anglian region of England. One of the first reports of these observations or encounters in a specialist journal was published early in 1981 and is mentioned later in this section.

Other observations or encounters that also occurred in the vicinity of, or at or over U.S. bases in the United Kingdom in late 1980 have been disclosed more recently, in particular the encounter reported to have occurred at about 2200 hours on Friday, 26 December 1980 by the retired U.S. Air Force pilot, test pilot, and educator Mr. Dan A. "Tanna" Isbell which happened as he drove to his home from the military base Royal Air Force (RAF) Upper Heyford in the county of Oxfordshire, in England. Other U.S. bases where there were also, possibly, observations of, or encounters with alien craft during the same period of time were RAF Alconbury in Cambridgeshire and RAF Croughton in Northamptonshire, both in

England: Safe Aerospace Podcast, an interview with Mr. Dan A. "Tanna" Isbell presented by former U.S. Navy Lieutenant Mr. Ryan Graves, Executive Director, Americans for Safe Aerospace, Part I, published on 8 October 2026 (it is recommended to begin by viewing and listening from 1 hour and 11 minutes, and 1 hour and 21 minutes into the podcast) and EarthFiles Podcast Episode108, Nov 6, 2024 – Whose Silent Triangle Craft hovered over three American RAF bases in December 1980? with Linda Moulton Howe.

What may be called the Rendlesham Forest observations or encounters occurred in the vicinity of *RAF Woodbridge* and *RAF Bentwaters* and involved U.S. military personnel as well as civilians and English police officers; they began over, near to or in the *Rendlesham Forest* north-east of the river Deben on the evening of Thursday, 25 December 1980 (Christmas night). An encounter that may have occurred about one kilometre (1 km) west of Butley Abbey may have possibly included direct contact between the users of an alien craft and a U.S. Air Force officer.

A recommended starting point is the summary of the encounter with an alien craft in the *Rendlesham Forest* reported by the then Staff Sergeant Jim Penniston of the U.S. Air Force, who was, on the evening of Thursday, 25 December 1980, the *"on-duty flight chief"* at *RAF Woodbridge*; he had arrived at *RAF Bentwaters* located a few kilometres north-east of *RAF Woodbridge "in the summer of 1980".* The reason for selecting Staff Sergeant Penniston's report is that according to the businesswoman, investigator and author Ms. Georgina Bruni (who contacted many people in the course of her investigation of the *Rendlesham Forest* observations or encounters) he was *"a most reliable witness".* Staff Sergeant Penniston made drawings to help illustrate his encounter that included a sketch of an alien craft: You Can't Tell the People, by Ms. Bruni, published in 2000, chapter titled The Evidence of Jim Penniston, *pages 164 - 175* of the Internet Archive online edition and Staff Sergeant Penniston's drawings reproduced in Appendix III (Letters, Statements and Drawings), *pages 371 – 373* of the Internet Archive online edition.

Filmed or video documentaries about or dramatisations of the *Rendlesham Forest* observations or encounters include: Capel Green, which premiered in *Suffolk* on Friday, 27 June 2025. Journal articles that were published relatively soon after the observations or encounters included: *Military Contact Alleged at Airbase*, by Ms. Jenny Randles, published in Flying Saucer Review, Volume 26, Number 6, March 1981, cover page iii, *The Rendlesham Forest Mystery*, by Ms. Jenny Randles, published in Flying Saucer Review, Volume 27, Number 6, June 1982, *pages 4 – 8,* and *UFO Update*, by Mr. Eric Mishara, published in OMNI magazine, March 1983, *page 115.*

If, during an encounter in the *Rendlesham Forest* an alien craft's users actually communicated with a U.S. Air Force officer, we may speculate that the aliens may have issued instructions or expressed their concern about the danger of a nuclear war; at this time there was a possibility that the Eurasian Soviet Union (the Union of Soviet Socialist Republics - USSR or CCCP - controlled by Russia) would invade Poland to suppress growing opposition to its rule: The Soviet Non-Invasion of Poland in 1980/81 and the End of the Cold War, by Vojtech Mastny, Working Paper No. 23, dated September 1998 published by the Woodrow Wilson International Center for Scholars (now called The Wilson Center) and You Can't Tell the People, by Ms. Bruni, chapter titled A Little Piece of American Pie, *pages 46 - 48* of the Internet Archive online edition, plus Left at East Gate, by Mr. Larry

Warren and Mr. Peter Robbins, published in 1997, Chapter 1 (The Bentwaters Incident), *page marked 40* of the Internet Archive online edition.

At least one possible witness to an encounter in the *Rendlesham Forest* evidently stated that *"aliens were busily repairing their crashed spacecraft"* and another that two aliens were *"floating around* (outside) *as if inspecting* (their craft)": You Can't Tell the People, by Ms. Bruni, chapters titled The Mysterious Steve Roberts, *page 67* of the Internet Archive online edition, and The Larry Warren Story, *page 88* of the Internet Archive online edition.

As discussed in **Chapter 4 (Aliens)** there are detailed reports of aliens or their surrogates ostensibly inspecting, repairing or maintaining their landed or low-hovering craft, for example: *New York state: 1964 – UFO repair reported*, Skylook, The UFO Monthly, Official Publication of the Mutual UFO Network, Inc., Number 92, July 1975, *pages 1,* and *3 – 12,* by Mr. Ted Bloecher and Mr. Everett C. Brazie. Occasionally, aliens or their surrogates have asked people they encountered to procure tools or supplies for them that appeared to be for use in repairing or maintaining their craft, probably to try to portray the craft as human-made with contemporary mechanical or electrical components, for example: *Supplies for Airship - A Rockland Man Helped The Aerial Navigators. Purchased Chisels and Lubricating Oil for "Smith," the Man With the Mysterious Machine,* Rockland, in Tyler County, in the state of Texas, United States, April 23 (1897), Houston Daily Post newspaper, Sunday Morning, April 25, 1897, page 13, *column 3,* discussed in detail in **Chapter 4 (Aliens)**.

The author of *Time of Contact* has concluded that elements of observation or encounter reports where aliens ostensibly inspect, repair or maintain their craft, or ask for tools and supplies with which to do so, probably reflect alien disinformation. This view is based in part on the opinion of the space pioneer Professor Dr. Hermann Oberth who wrote that, *"Observations suggest that Flying Saucers* (disc-shaped alien craft) *are able to suppress the force of gravity ... The safe working of the U.F.O.s – in conjunction with the long history of reports – seem to suggest a very old invention which has long since disposed of its teething troubles* (i.e. alien craft would be unlikely to require inspection, repair or maintenance). *Having weighed all the pros and cons, I find the explanation of flying discs from outer space the most likely one": They Come from Outer Space* (The Unexplained Nine Per Cent, paragraphs 2, 3(c), 4 and 5), by Professor Dr. Oberth, Flying Saucer Review, May - June 1955, Vol. 1, No. 2, *pages 12 – 15*, at *page 14.*

It is also possible that the alien craft observed or encountered over or in the *Rendlesham Forest* were primarily interested in, or were also surveying the two, then-operational nuclear fission, gas-cooled reactors of Sizewell A power station with a total combined output of 910 megawatts (MW). *Sizewell A* operated between 1966 and 2006 and is located 15 km north-east of Butley Abbey. As mentioned earlier, alien craft have been observed over or near to nuclear power stations, for example, the craft that were observed in France and Belgium in the last quarter of 2014 and in early 2015. *Sizewell A* is presently being decommissioned.

The Sizewell B nuclear fission, water-cooled power station with an output of 1.196 GW started generating electricity in 1995; it remains operational and will be joined or replaced by the new Sizewell C nuclear power station now under construction which will include two nuclear fission, water-cooled reactors with a combined, total output of 3.26 Gigawatts (GW) and begin operating in the mid to late 2030s.

On a personal note, the author of *Time of Contac*t has often travelled to the area north of the river *Deben* to lunch at the Ramsholt Arms public house by the river Deben, or to visit the site of an ancient ship burial at Sutton Hoo whose discovery was dramatised in the film (movie) The Dig, or the attractive small towns of Woodbridge (where a replica of the Sutton Hoo ship is being constructed) and Aldeburgh.

Despite the numerous reports of alien craft that have simulated or were disguised as human-made airships, aerospace craft, aircraft, helicopters, or UAVs, drones, etc., many other reports described craft that did not resemble our craft or were not accompanied by craft that resembled any of ours. Detailed reports of what may be the real appearance of some alien craft as well as of their manoeuvres, any sounds they made, or any effects on animals, people, vegetation, shrubs and trees, natural or human-made surfaces, cars, trucks, roofs of buildings, etc. may help us to understand the evidently highly advanced science and technology on which they are based. If an alien craft's users are encountered we may learn from their reported appearance and behaviour and from what (if anything) they communicate to people.

On the evening of Thursday, 26 August 1976 an alien craft that did not resemble any of our craft, together with its users, were encountered by four young men (Mr. Jim Weiner, his twin brother Mr. Jack Weiner, Mr. Chuck Rak and Mr. Charlie Foltz) while they were travelling in their canoe (a watercraft 16 feet long which they propelled manually) on Eagle Lake in the Allagash Wilderness Waterway, located in the state of Maine in the far north-east of the United States. Their reported observations included: details of the appearance, patterns and movement of what may have been plasma on or around the craft's exterior caused by its propulsion, hull protection, or energy generation systems, the way the craft moved, and the appearance of the exterior and some of the interior of the craft. The men's descriptions of the appearance and operation of a system used to transport them and some of the craft's users up to and down from the craft are discussed in more detail together with other, similar reports in **Chapter 2 (Alien technology)**. The men also provided detailed descriptions of the appearance and behaviour of the craft's users.

The encounter was investigated beginning in 1988 after Mr. Jim Weiner personally approached Mr. Raymond E. Fowler, the Director of Investigations for the Mutual UFO Network (MUFON). The investigation concluded that the men had been subjected to non-consensual, intrusive medical examinations, procedures or experiments by the alien craft's users for perhaps two or three hours. The men had all studied art and made illustrations of their encounter that were included in a book: The Allagash Abductions: Undeniable Evidence of Alien Intervention by Mr. Fowler, first edition published in 1993. In addition, a graphics-based book about the encounter was created by two of the men who experienced it: The Allagash Incident, by Mr. Charles Rak and Mr. Jack Weiner, also published in 1993.

The *Allagash encounter* is discussed in **Chapter 4 (Aliens)** and further information is available in the following articles, videos and book: *The Allagash Abductions*, by Mr. Fowler, Flying Saucer Review, Winter 1993, Vol. 38, No. 4, *pages 2 – 5*, and *The Allagash Abductions*, MUFON UFO Journal, April 1993, No. 300, also by Mr. Fowler, *pages 3 – 6;* the video documentaries The Allagash Incident of 20 August 1976 (History Channel), Part 1 and Part 2, The Allagash Abductions – an openminds.tv documentary, attributed to Ms. Amanda McDonald and published on 15 March 2016, and The Allagash Abductions: Undeniable Evidence of Alien Intervention by Mr. Fowler, first edition published in 1993, which provides

a great deal of information about the encounter. *The Allagash Abductions: Undeniable Evidence of Alien Intervention* may be available online or in public libraries, or purchased via websites such as the AFU Shop (where it was available for US$25.00 excluding postal charges in 2026) or Amazon (£31.05 excluding delivery charges in the United Kingdom, in 2026) or AbeBooks, etc.

Another encounter that is discussed in **Chapter 4 (Aliens)** occurred earlier in 1976: Ms. Mona Stafford, Ms. Louise Smith and Mrs. Elaine Thomas were travelling in a 1967 model Chevrolet Nova car late at night on Tuesday, 6 January 1976 when their encounter began "*about one mile south of Stanford"* on Highway (number) 78 that runs south-west towards Hustonville (their destination was Liberty) in the state of Kentucky, United States. The *Kentucky encounter* seems to have become known initially through reports in the media and was then investigated by the Aerial Phenomenon Research Organization (A.P.R.O.), the J. Allen Hynek Center for UFO Studies (CUFOS), and the Mutual UFO Network (MUFON).

The *Kentucky encounter* may have lasted for over an hour; the women reported they were subjected to non-consensual, intrusive medical examinations, procedures or experiments. When they were interviewed by investigators the women were still recovering from physical injuries and other trauma caused during the encounter: *The Kentucky Abduction*, The A.P.R.O. Bulletin, October 1976, Vol. 25, No. 4 (evidently mis-titled on its first page as Vol. 24, No. 6), *pages 1 & 3 – 6*, that refers to the newspaper article: *Possible UFOs? Strange objects seen in sky in Lincoln County*, by Brenda Edwards, Area Editor, Kentucky Advocate, published in Danville, Kentucky, Vol. 110, No. 189, Sunday, February 1, 1976, columns 1 – 3, *page 28,* available via the subscription website Newspapers.com.

Other contemporary reports included: *Kentucky women report close encounter*, Skylook, April 1976, Number 101, *pages 3 & 4* (a sketch of the exterior of the alien craft by one of the women is at the top of *page 3*), based on an article in the Casey County News newspaper published in Liberty, Kentucky, Thursday, 12 February 1976, and *3 – Progress Reports, The Kentucky Abduction*, International UFO Reporter, Vol. 2, No. 3, March 1977, at *pages 6 & 7.* A later article titled *Casey woman recalls UFO encounter in 1976*, by Bobbie Curd, was published by the Central Kentucky News-Journal, 24 September 2010, that may be (or may become) available, online.

The *Kentucky encounter* was also discussed in the book Situation Red – The UFO Siege, by Mr. Leonard H. Stringfield, also published in 1977, Chapter X (Confrontation!), *pages 198 – 212,* and *Appendix III (Observations and Conclusions regarding the Investigation of the UFO Experience of Ms. Smith, Ms. Stafford, and Mrs. Thomas, by R. Leo Sprinkle, Ph.D.), pages 216 – 221. Situation Red – The UFO Siege* may be freely available online or at public libraries, or may be purchased online, for example, in 2026 the paperback version was available via Amazon UK as an Amazon Audible Audiobook, and in Amazon Kindle and printed paper book formats, or via websites such as the AFU Shop or AbeBooks, etc.

One of the earliest reports in the modern era, of a close encounter that involved an abduction concerned the experiences of Mr. Barney Hill and Mrs. Betty Hill in the late evening of Tuesday, 19 September 1961, some distance beyond The Flume Gorge (a natural feature and tourist attraction) as they drove south on Route 3 towards their home in Portsmouth in the state of New Hampshire, United States: The Interrupted Journey: Two Lost Hours "Aboard a Flying Saucer", by Mr. John G. Fuller, published in 1966 by The Dial

Press; subsequent editions included: The Interrupted Journey: Two Lost Hours aboard a UFO – The Abduction of Betty and Barney Hill, published in 2022 and available as an Amazon Kindle book. The Hills' abduction was also discussed in detail in Captured! The Betty and Barney Hill UFO Experience, by Mr. Stanton T. Friedman and Ms. Kathleen Marden, published in 2007. The book Abducted! Confrontations with Beings from Outer Space, by Mrs. Coral and Mr. Jim Lorenzen, published in 1977 discussed several close encounter reports that involved abductions. Later works on reported abductions by scholars included: Secret Life – firsthand documented accounts of UFO abductions, by Professor Dr. David M. Jacobs, published in 1992 and Abduction – Human Encounters with Aliens, by Professor John E. Mack M.D., Professor of Psychiatry, Harvard Medical School, published in 1994.

Summaries and comparisons of abduction encounters were included in UFO Abductions: The Measure of a Mystery, Volume 1: Comparative Study of Abduction Reports, and UFO Abductions: The Measure of a Mystery, Volume 2: Catalogue of Cases by Dr. Thomas E. Bullard, for the Fund for UFO Research (FUFOR), published in 1987, in the Archives for Unexplained (AFU) Books/Other section, Dr. Bullard provided references to the original, more detailed reports of such encounters published in, for example, The MUFON UFO Journal, the publications of the Aerial Phenomenon Research Organization (A.P.R.O.) and the Flying Saucer Review, etc. which may also be available from websites such as the Archives for Unexplained (AFU) and Amazon UK.

U.S. lawmakers have held hearings about *Unidentified Aerial Phenomena (UAP or UAPs):* Unidentified Anomalous Phenomena: Exposing the Truth, United States House Committee on Oversight and Accountability, Joint Hearing of the Subcommittees on Cyberspace, Information Technology and Government Innovation and National Security, the Border and Foreign Affairs, Washington D.C., Wednesday, 13 November, 2024. Oral and written testimony was provided by Dr. Timothy Cole Gallaudet, Rear Admiral, United States Navy (Retired), Mr. Luis Daniel Elizondo, Mr. Michael Gold, and Mr. Michael D. Shellenberger.

Earlier hearings included the Unidentified Anomalous Phenomena, Implications on National Security, Public Safety, and Government Transparency, United States House Committee on Oversight and Accountability, Subcommittee on National Security, the Border and Foreign Affairs, Washington D.C., Wednesday, 26 July, 2023 to which reports of observations of or encounters with evidently alien craft were provided, including by former U.S. Navy Lieutenant Mr. Ryan Graves, Executive Director, Americans for Safe Aerospace and U.S. Navy Commander (CDR) David Fravor (Retired), whose encounter is discussed in **Chapter 2 (Alien technology)** and in A Forensic Analysis of Navy Strike Group Eleven's Encounter with an Anomalous Aerial Vehicle, dated March 2019 introduced later in this section.

Mr. David Grusch, a *"former National Reconnaissance Office Representative, Unidentified Anomalous Task Force, Department of Defense"* (now called the Department of War) also testified. An interview with Mr. Grusch on NewsNation may be available online.

Videos of the public, unclassified parts of the Unidentified Aerial Phenomena (Open and Closed [hearings]), 117th Congress (2021 – 2022), House Intelligence (Permanent) Committee on Counterterrorism, Counterintelligence, and Counterproliferation may be available online: CNET highlights - 17 May 2022.

Hearings about what were then called “Unidentified Flying Objects” or “UFOs” were held over fifty years earlier: Symposium on Unidentified Flying Objects, Hearings before the Committee on Science and Astronautics, U.S. House of Representatives, Ninetieth Congress, Second Session, July 29, 1968 [No. 7].

The classified status of many U.S. military radar systems and other sensors and detectors means that it is unlikely that full details of the observations or encounters on which, for example, the Preliminary Assessment: Unidentified Aerial Phenomena, published in 2021, was based, will be made public for many years. However, since the *Preliminary Assessment: Unidentified Aerial Phenomena* included reports beginning in “*November 2004”* the data may have included what may be called the *“Nimitz encounters”:* visual, radar and infra-red sensor observations or encounters experienced by U.S. military personnel in that same month and year, that are discussed in detail in **Chapter 2 (Alien technology)**.The observations were made by personnel aboard ships and in aircraft based on an aircraft carrier, the USS Nimitz equipped with McDonnell Douglas F/A-18C Hornets of VMFA-232 of the US Marine Corps, plus Boeing F/A-18F Super Hornets of VFA-41 of the US Navy and Northrop Grumman E-2 Hawkeye *“tactical … early warning aircraft (AEW*)” of VAW-117 of the U.S. Navy. Among the vessels accompanying the USS Nimitz was the guided missile destroyer USS Princeton (CG-59).

Please also refer to other independent articles about, reports, investigations and analyses of the *Nimitz encounters*, for example, Navy pilots describe encounters with UFOs, a CBS 60 minutes video published on 16 May 2021, Navy pilot who filmed the “Tic Tac” UFO speaks: ‘It wasn’t behaving by the normal laws of physics’, by Mr. Matthew Phelan, published by the New York Intelligencer, 19 December 2019, The Nimitz encounters updated by Mr. Dave Beatty, published on 29 August 2019, and A Forensic Analysis of Navy Strike Group Eleven’s Encounter with an Anomalous Aerial Vehicle, dated March 2019.

The *Nimitz encounters* were discussed in the *Summary Report on BAASS (Bigelow Aerospace Advanced Space Studies) UAP Analysis Capabilities,* dated *November 23, 2010,* disclosed under the Presidential Unsealing and Reporting System for UAP Encounters (PURSUE), Release 07, October 23, 2026. The *Summary Report* mentioned (at *page 25*) that the “FLIR” (i.e. the Raytheon ATFLIR AN/ASQ-228 sensor pod) that equipped Boeing F/A-18F Super Hornet combat aircraft could “track” an alien craft while it was *“stationary or at slower speeds”* but that the aircraft’s radar system (probably an AN/APG-73 X-band radar) *“could not obtain a ‘lock’”* on the alien craft. The *Raytheon ATFLIR AN/ASQ-228* is an Advanced Targeting, Forward-looking Infrared (ATFLIR*) “multi-sensor, electro-optical targeting pod incorporating an infra-red camera, a low-light television camera, a target laser rangefinder/laser designator, and a laser spot tracker”*: A Forensic Analysis of Navy Strike Group Eleven’s Encounter with an Anomalous Aerial Vehicle, dated March 2019, section 2 (Supporting Data and Limitations).

In addition, the *Summary Report* mentioned (also at *page 25*) that an AN/SPY-1B(V) (a synthetic aperture phased array radar system) which equipped the *USS Princeton* may have been better able to detect alien craft had it been switched to a mode intended to track ballistic missiles from a mode used for *“air intercept”* of conventional aircraft: the alien craft *“… exhibited ballistic missile characteristics in respect to its appearance, velocity and indications on the radar. Since the radar was in the mode to handle Air Intercept of conventional aircraft it never obtained an accurate track of the AAVs* (Anomalous Aerial

Vehicles) *and was quickly "dropped" by the radar meaning that it was eliminated by the computer to reduce the clutter on the radar, as any other false target is handled. If the radar were set up in a mode for Ballistic Missile tracking they would likely have had the capability to track the AAV."* Therefore, older reports where alien craft were detected by now-obsolete radar systems may in some respects still provide useful data, in part because the older radar systems did not have the capability to filter (out) "unwanted" or unusual but possibly still valid data to the same extent as modern radar systems: *Summary Report on BAASS (Bigelow Aerospace Advanced Space Studies) UAP Analysis Capabilities,* dated *November 23, 2010,* Section 4 (Analytical and Numerical Solutions for UAP Investigations), sub-section 4.1 ("Tic Tac" Incident), at *page 25* onwards, disclosed under the Presidential Unsealing and Reporting System for UAP Encounters (PURSUE), Release 07, October 23, 2026.

The *Summary Report* also mentioned an alien craft that, in 1967 *"entered the water"* of Shag Harbor in the province of Nova Scotia in eastern Canada: *Summary Report on BAASS (Bigelow Aerospace Advanced Space Studies) UAP Analysis Capabilities,* dated *November 23, 2010,* Section 4 (Analytical and Numerical Solutions for UAP Investigations), sub-section 4.2 (Analyses of Spherical UAPs), sub-sub-section 4.2.1 (Acoustical Analysis of a Spherical USO), at *page 58* onwards. The *Shag Harbor* observations (that began on Wednesday, 4 October 1967) are discussed in detail in **Chapter 3 (Alien craft)**. Please also refer to the book: Dark Object: the World's only Government - documented UFO crash, by Mr. Don Ledger and Mr. Chris Styles, published in 2001, and video documentaries that may be available online, for example, The Shag Harbour UFO Incident – Part 1 and The Shag Harbour UFO Incident - Part 2.

Some of the unidentified airborne objects that flew close to or over U.S. Navy vessels, for example, the USS Paul Hamilton in 2019 may have been alien craft that simulated the appearance of our *"quadcopter"* drones: Swarmed Navy destroyer had its bridge illuminated by mysterious drones (and other articles dated 2021 and 2022), by Mr. Adam Kehoe and Mr. Marc Cecotti, published in The Warzone (The Drive), and *Mirages or Martians?* by Mr. Rob Coppinger, published by Air International, March 2023, *pages 68 – 72*.

The following reports concern alien craft that were detected over or near Lake Michigan in the United States in early 1994 by a 1970s-era weather radar system. These weather radar systems were operated by highly trained people who could adjust the equipment manually and rapidly to detect, resolve and track selected airborne objects. In the case of the *Lake Michigan* detections introduced below, the radar operator used his equipment while communicating by telephone with an emergency service call operator and a law enforcement officer, who passed him reports of visual observations. These reports helped the operator to guide the radar, and he could compare what he was told over the telephone with what was displayed on his radar screen.

On the evening of Tuesday, 8 March 1994 multiple alien airborne craft were observed by a U.S. government weather radar operator over *Lake Michigan* in the United States. The radar was an Enterprise Electronics Corporation (EEC)-made WSR (Weather Surveillance Radar)-74C commissioned on 25 March 1976 by or for the National Weather Service (NWS) which is part of the United States National Oceanic and Atmospheric Agency (NOAA). The radar was based at Muskegon County Airport a few kilometres from the eastern shore of Lake Michigan. The NWS Muskegon radar was de-commissioned on 13 August, 1996: Wikipedia.

In addition, some people observed alien craft over land to the east of *Lake Michigan* and others observed the craft over the lake itself; the crew of a civil aircraft flying over *Lake Michigan* had observed an unknown airborne craft the previous evening: Monday, 7 March 1994. It is recommended to view the 2022 television documentary titled Something in the Sky, in the Netflix Unsolved Mysteries series, Volume 3, Episode 2 which includes appearances by the NWS radar operator who detected the alien craft on his radar and some of the people who had observed the alien craft visually, or who had received or investigated reports of observation.

The earliest published reports may have been the Muskegon Chronicle newspaper articles titled *UFO sighting stirs interest* and *West Michigan's UFOs still a mystery*, Saturday, 12 March 1994, *pages 1 & 2A* and *U.P.* (western Upper Peninsula) *residents join West Michigan in reporting odd light*, Sunday, 20 March 1994, *pages 1 & 2A*, digital copies of which are available online from the paid subscription archives of Newspapers.com. Specialist journals published initial reports and later the results of their detailed investigations and analyses, including: Western Michigan UFO Sightings, published in the MUFON UFO Journal, May 1994, Number 313, *page 23*, and Michigan Visual & Radar Sightings, by Ms. Shirley Coyne, also published in the MUFON UFO Journal, September 1994, Number 317, *pages 8 - 11*. Please also refer to *The Holland, Michigan Radar-Visual Case*, by Professor Michael D. Swords, published in the International UFO Reporter, Fall 1999, Volume 24, Number 3, *pages 3 – 7*.

More information may now be publicly available about older or civilian radars than for more modern or military radars, details of whose technology and performance may presently be unavailable for reasons of commercial confidentiality or national security. For example, details of NWS and other weather radars that are available online, include the following papers: History of Operational Use of Weather Radar by U.S. Weather Services, Part I: The Pre-NEXRAD Era, and Part II: Development of Operational Doppler Weather Radars, both by Roger C. Whiton et al, © (copyright) 1998 American Meteorological Society.

Over thirty-six years earlier than the *Lake Michigan* radar detections and visual observations, an airborne alien craft manoeuvred in the vicinity of a Boeing RB-47H-1-BW military reconnaissance aircraft of the United States Air Force, flying over the southern United States on a training mission between about 0430 and 0640 hours Central Daylight Time (CDT) on Wednesday, 17 July 1957. Electromagnetic transmissions from the alien craft that simulated (to some extent) a ground-based radar system of that period were received by the RB-47H. In addition, the alien craft was detected by a search and navigation radar system on the RB-47H and by a ground-based radar system. Visible light radiated by or from around the craft was observed by the pilot and co-pilot of the RB-47H: RB-47 Radar/Visual Case, by Mr. Brad Sparks, UFO Encyclopedia, 2nd Edition, published in 1998, *pages 761 - 790.* A Third Edition of the UFO Encyclopedia was published in 2019; the encounter is discussed in detail in **Chapter 3 (Alien craft)**.

Earlier still, several airborne alien craft were observed visually and on radar by the crew of a Boeing B-29 bomber aircraft of the United States Air Force, flying over the Gulf of Mexico (renamed the "Gulf of America" by President Trump's Executive Order 14172) on 6 December 1952. These observations are discussed in detail in **Chapter 1 (How alien aerospace craft fly)** based on the following reports: National Investigations Committee on Aerial Phenomena (NICAP) – Gulf of Mexico case, Dec. 6, 1952, that reproduced the

contemporary account which is contained in the book Flying Saucers from Outer Space by Major Donald E. Keyhoe, published in 1953 and freely available on the NICAP website, Chapter IX (The Utah Pictures), *pages 161 – 167,* and UFO's: A History 1952: November – December, by Mr. Loren E. Gross, copyright 1986, *page 59* (*page 65 of 126* of the PDF file).

The U.S. Office of the Director of National Intelligence (ODNI) *"prepared ….* (the Preliminary Assessment: Unidentified Aerial Phenomena) *for the Congressional Intelligence and Armed Services Committees"* (the U.S. House of Representatives Permanent Select Committee on Intelligence and the House Armed Services Committee) and the report was *"drafted"* by the Unidentified Aerial Phenomena (UAP) Task Force (UAPTF) and the *National Intelligence Manager (NIM) for Aviation* of the *ODNI*.

There were inputs from the United States Under Secretary of War for Intelligence and Security (OUSW(I&S)), the Defense Intelligence Agency (DIA), the Federal Bureau of Investigation (FBI), the National Reconnaissance Office (NRO), the National Geospatial-Intelligence Agency (NGA), the National Security Agency (NSA), the United States Air Force (USAF), the United States Army, the Office of Naval Intelligence (ONI) of the United States Navy, the Defense Advanced Research Projects Agency (DARPA), the Federal Aviation Administration (FAA), the National Oceanic and Atmospheric Administration (NOAA), the ODNI/National Intelligence Manager (NIM)-Emerging and Disruptive Technology, the ODNI/National Counterintelligence and Security Center, and the ODNI/National Intelligence Council: Preliminary Assessment: Unidentified Aerial Phenomena, Scope and Assumptions – Scope, *page 2*.

Other U.S. government organisations that are not mentioned as having input to the *Preliminary Assessment: Unidentified Aerial Phenomena* have collected and may also have investigated or analysed reports of observations of or encounters with alien craft. For example, a video recording was made of first one and then two alien craft from a United States Customs and Border Protection aircraft in Puerto Rico: video file 2013 Aguadilla Puerto Rico UAP/USO and the paper 2013 Aguadilla Puerto Rico UAP- the detailed analysis of an Unidentified Anomalous Phenomenon captured by Department of Homeland Security, dated 13 August 2015, discussed in **Chapter 2 (Alien technology)**. In addition, the Central Intelligence Agency (CIA) collected reports, for example, a detailed report by a military pilot of two alien craft flying over a part of Africa which is especially rich in mineral resources including uranium, discussed in **Chapter 3 (Alien craft)**: DOC_0000015463 titled Flying Saucers over Belgian Congo Uranium Mines and a detailed report of a close encounter with an alien craft and its users in Germany: DOC_0000015464 titled "Flying Saucers" in East Germany, both dating from 1952 and available in the online CIA Electronic Reading Room.

The Director, *UAPTF* was *"the accountable official for ensuring the timely collection and consolidation of data on UAP"* in the brief (9 pages) Preliminary Assessment: Unidentified Aerial Phenomena. It was reported that Mr. Brennan McKernan was the Director, *UAPTF*: 'We've got to get an answer': UFOs catch Congress' interest, by Mr. Andrew Desiderio, published in Politico, 23 June 2021. Prior to the UAPTF being *"officially established"* it may have been called the Inter-Agency Task Force (ITF): *Scientific taboo?* by Mr. Rob Coppinger (Bachelor of Engineering (B.Eng.), Manufacturing Engineering, Middlesex University and Postgraduate Diploma in Manufacturing Systems, University of Birmingham), SpaceFlight, Volume 68, No. 5, May 2026, *pages 30 & 31*, published by the British Interplanetary Society.

The *Preliminary Assessment: Unidentified Aerial Phenomena's "dataset … is currently limited primarily to U.S. Government reporting of incidents occurring from November 2004 to March 2021"* and *"144 reports originated from USG* (i.e. 'U.S. military and other U.S. Government personnel') *sources. Of these, 80 reports involved observations with multiple sensors."* It concluded *that "Most of the UAP reported probably do represent physical objects given that the majority of UAP were registered across multiple sensors, to include radar, infrared, electro-optical, weapon seekers, and visual observations*": *Preliminary Assessment: Unidentified Aerial Phenomena*, *pages 2, 3, & 4*.

"In 18 incidents, described in 21 reports, observers reported unusual UAP movement patterns or flight characteristics. Some UAP appeared to remain stationary in winds aloft, move against the wind, maneuver abruptly, or move at considerable speed, without discernible means of propulsion. In a small number of cases, military aircraft systems processed radio frequency (RF) energy associated with UAP sightings. The UAPTF holds a small amount of data that appear to show UAP demonstrating acceleration or a degree of signature management": *Preliminary Assessment: Unidentified Aerial Phenomena*, And a handful of UAP appear to demonstrate advanced technology, *page 5*.

The report made a number of recommendations for increasing the scope of the work and stated that while *the "majority of UAP data is from U.S. Navy reporting … efforts are underway to standardize incident reporting across U.S. military services and other government agencies to ensure all relevant data is captured with respect to particular incidents and any U.S. activities that might be relevant. The UAPTF is currently working to acquire additional reporting, including from the U.S. Air Force (USAF) and has begun receiving data from the Federal Aviation Administration (FAA). …The UAPTF is looking for novel ways to increase collection of UAP cluster areas when U.S. forces are not present …. **One proposal is to use advanced algorithms to search historical data captured and stored by radars** … The UAPTF has indicated that additional funding for research and development could further the future study of the topics laid out in this report. Such investments should be guided by a UAP Collection Strategy, UAP R&D Technology Roadmap, and a UAP Program Plan"*: *Preliminary Assessment: Unidentified Aerial Phenomena*, Explaining UAP will require analytic, collection and resource investment, *pages 6 & 7*.

Radar data (***highlighted*** above) that might provide information about alien craft (for example, direction of flight, altitude, manoeuvres, acceleration and speed, size, etc.) may however be filtered, suppressed, or deleted by our radar systems. This is because the primary mission of these systems is probably to detect and characterise human-made aircraft, aerospace, and space craft. However, in early 2023 North American Aerospace Defense Command (NORAD) was reported to have *"adjusted velocity and altitude restrictions on radars"*, i.e. North American military radar systems were evidently reconfigured to better detect balloon-type objects that may travel much more slowly and higher than most aircraft, and may possibly also hover and ascend and descend vertically (alien craft have also performed these types of manoeuvres): F-16 downs another unidentified object, 4th in 8 days, by Mr. Brian Everstine, published by Aviation Week Network, 13 February 2023.

Decades earlier, a former *FAA* aircraft traffic controller explained to an investigator that *"Most non-aircraftlike radar targets are automatically siphoned off the controllers' screens",*

in the context of a discussion about whether there would be any radar data about an alien craft that was observed or encountered on 6, 11 and 12 January 1975 near to or in James J. Braddock North Hudson Park in the state of New Jersey, in the United States. The former *FAA* controller also stated that the data would have been *"automatically eliminated … and no controller would have seen it on his screen"*: Missing Time: A Documented Study of UFO Abductions, by Mr. Budd Hopkins, originally published in 1981, Chapter 2 (The Landing in North Hudson Park), *pages 43 & 44*, *Digging holes in the ground – Occupants sighted in New Jersey*, Skylook, March 1976, No. 100, investigated by Mr. Ted Bloecher, Mr. Budd Hopkins, and Mr. Jerry Stoehrer, *pages 3 – 7*, and *The "Stonehenge" Incidents of January 1975*, *Part 1: The Investigations,* Flying Saucer Review, October 1976, Vol. 22, No. 3, *pages 3 – 7,* plus *The "Stonehenge" Incidents of January 1975, Part 2: The Events*, Flying Saucer Review, November 1976, Vol. 22, No. 4, *pages 5 – 11*, *& 31,* both by Mr. Ted Bloecher.

The *Preliminary Assessment: Unidentified Aerial Phenomena* originated from the Office of the Director of National Intelligence; please refer also to the Statement by Pentagon Press Secretary John Kirby on Unidentified Aerial Phenomena Assessment, a U.S. Department of War Newsroom Release, 25 June 2021.

The *AARO's* Fiscal Year 2024 Consolidated Annual Report on Unidentified Anomalous Phenomena – Information Cut Off: June 1, 2024 stated that *"as of October 24, 2024, there are 1652 reports in total. This report covers UAP reports from May 1, 2023 to June 1, 2024 and all UAP reports from any previous time periods that were not included in an earlier report."*

The *AARO* drafted its report *"in coordination with:"* the United States Under Secretary of War for Intelligence and Security (OUSW(I&S)); ODNI (Office of the Director of National Intelligence)'s National Intelligence Manager for Military Integration (NIM-MIL); ODNI's National Intelligence Council (NIC); the United States Army, the United States Navy (USN); the United States Marine Corps (USMC); the United States Air Force (USAF); the United States Space Force (USSF); the Air Force Research Laboratory (AFRL); the Defense Intelligence Agency (DIA); the DoD Joint Staff (JS); the Department of Energy (DoE); the Federal Bureau of Investigation (FBI); the Missile and Space Intelligence Center (MSIC); the National Aeronautics and Space Administration (NASA); the National Air and Space Intelligence Center (NASIC); the National Geospatial-Intelligence Agency (NGA); the National Ground Intelligence Center (NGIC); the National Oceanic and Atmospheric Administration (NOAA); the National Reconnaissance Office (NRO); the National Security Agency (NSA); the Naval Criminal Investigative Service (NCIS); the Nuclear Regulatory Commission (NRC); the Office of the Assistant Secretary of War for Homeland Defense and Hemispheric Affairs; the Office of the Assistant to the Secretary of War for Public Affairs; the Office of the Deputy Assistant Secretary of War for Nuclear Matters; the Office of the General Counsel of the Department of War; the Office of Naval Intelligence/National Maritime Intelligence Center; and the Office of the Principal Deputy Assistant Secretary of War for Nuclear, Chemical and Biological Defense Programs: the Fiscal Year 2024 Consolidated Annual Report on Unidentified Anomalous Phenomena – Information Cut Off: June 1, 2024, I. Executive Summary, *page 2*, and II. Scope, *pages 2 - 4*.

Offices or organisations that were not mentioned as co-ordinating with this report were: the ODNI (Office of the Director of National Intelligence)'s NIM (National Intelligence Manager) - Economic Security and Emerging Technology; ODNI's National Counterintelligence and

Security Center; the Federal Aviation Administration (FAA); and the Oak Ridge National Laboratory that were mentioned in the Fiscal Year 2023 Consolidated Annual Report on Unidentified Anomalous Phenomena, introduced below, I. Executive Summary, *pages 2 & 3*, and II. Scope and Assumptions – Scope, *page 4*.

The ODNI's and DoD's Fiscal Year 2023 Consolidated Annual Report on Unidentified Anomalous Phenomena *"covers unidentified anomalous phenomena (UAP) reports from 31 August 2022 to 30 April 2023, and all UAP reports from previous time periods that were not included in an earlier report. The … AARO … received a total of 291 UAP reports during this period, consisting of 274 that occurred during this period and another 17 that occurred during previous reporting periods from 2021-2022, but had not been conveyed in previous submissions".*

The *2023 Consolidated Annual Report "was drafted by AARO and ODNI's National Intelligence Manager for Military Integration (NIM – MIL) and co-ordinated with:"* the United States Under Secretary of War for Intelligence and Security (OUSW(I&S)); the Office of the Assistant Secretary of War for Homeland Defense and Hemispheric Affairs; the Office of the Principal Deputy Assistant Secretary of War for Nuclear, Chemical and Biological Defense Programs; the Office of the Deputy Assistant Secretary of Defense for Nuclear Matters; the Office of the General Counsel of the Department of War; the Office of the Assistant to the Secretary of War for Public Affairs; ODNI (Office of the Director of National Intelligence)'s NIM (National Intelligence Manager) -Economic Security and Emerging Technology; ODNI's National Counterintelligence and Security Center; ODNI's National Intelligence Council; the Department of Energy (DoE); the Nuclear Regulatory Commission (NRC); the National Aeronautics and Space Administration (NASA); the National Security Agency (NSA); the Defense Intelligence Agency (DIA); the National Geospatial-Intelligence Agency (NGA); the DoD Joint Staff; the National Ground Intelligence Center (NGIC); the Missile and Space Intelligence Center (MSIC); the Office of Naval Intelligence/National Maritime Intelligence Center; the Federal Bureau of Investigation (FBI), the Federal Aviation Administration (FAA); the National Reconnaissance Office (NRO); the National Oceanic and Atmospheric Administration (NOAA), the Air Force Research Laboratory (AFRL); the National Air and Space Intelligence Center (NASIC); the Oak Ridge National Laboratory; the Naval Criminal Investigative Service (NCIS); the United States Army; the United States Navy; the United States Marine Corps; the United States Air Force (USAF); and the United States Space Force (USSF): the Fiscal Year 2023 Consolidated Annual Report on Unidentified Anomalous Phenomena, I. Executive Summary, *pages 2 & 3*, and II. Scope and Assumptions – Scope, *page 4*.

The earlier 2022 Annual Report on Unidentified Aerial Phenomena was drafted by ODNI's *National Intelligence Manager (NIM) for Aviation* and the *AARO*. The *2022 Annual Report* stated that *"In addition to the 144 UAP reports covered during the 17 years of UAP reporting included in the … (Preliminary Assessment: Unidentified Aerial Phenomena) … there have been 247 new reports and another 119 that were either since discovered or reported after the preliminary assessment's time period. This totals 510 UAP reports as of 30 August 2022. It includes input from …"* the United States Under Secretary of War for Intelligence & Security, the Defense Intelligence Agency (DIA), the Federal Bureau of Investigation (FBI), the National Reconnaissance Office (NRO), the National Geospatial-Intelligence Agency (NGA), the National Security Agency (NSA), the United States Air Force (USAF), the United

States Army, the United States Navy, the United States Marine Corps, the Defense Advanced Research Projects Agency (DARPA), the Federal Aviation Administration (FAA), the National Aeronautics and Space Administration (NASA), the National Oceanic and Atmospheric Administration (NOAA), the Department of Energy (DoE), the ODNI/National Intelligence Manager (NIM)-Emerging and Disruptive Technology (NIM-EDI), the ODNI/National Counterintelligence and Security Center (NCSC), and the ODNI/National Intelligence Council (OSI/NIC): the 2022 Annual Report on Unidentified Aerial Phenomena, Executive Summary, *page 2*, and Scope and Assumptions – Scope, *page 3*.

Please also refer to remarks by, for example, The Honorable Ronald S. Moultrie, formerly the United States Under Secretary of Defense for Intelligence & Security, during the Unidentified Aerial Phenomena (Open and Closed [hearings]), 117th Congress (2021 – 2022), House Intelligence (Permanent) Committee on Counterterrorism, Counterintelligence, and Counterproliferation, contained in the Open Transcript, Hearing Record, Tuesday, 17 May 2022. Additional information may be available in videos of the public, unclassified parts of the hearings, for example, CNET highlights - 17 May 2022 and advertisements that sought staff, for example, The DoD's Unidentified Aerial Phenomena Office was recently hiring, by Mr. Tim McMillan, published by The Debrief, 6 May 2022.

When the *AARO* was established, the *UAPTF* was dis-established and there was to be an *"orderly transition of the UAPTF, including the transfer of any data, analysis, or other relevant material, to the AARO"*: Memorandum from the Deputy Secretary of Defense – Establishment of the All-domain Anomaly Resolution Office, 15 July 2022. The *UAPTF* appears to have been based in the Office of Naval Intelligence (ONI) within the U.S. Navy: *"The Department of the Navy, under the cognizance of the Office of the Under Secretary of War for Intelligence and Security, will lead the UAPTF":* Establishment of Unidentified Aerial Phenomena Task Force, 14 August 2020; "*The Pentagon is forming a new task force to investigate UFOs that have been observed by US military aircraft, according to two defense officials. Deputy Secretary of Defense* (now the Deputy Secretary of the Department of War) *David Norquist will help oversee the task force…"*: Pentagon to launch task force to investigate UFO sightings, by Mr. Ryan Browne, contributed to by Mr. Michael Conte, and published online by CNN, 14 August 2020.

Public concern in the United States following many reports of alien craft, their users and activities in the mid-1960s and consequent political pressure, may have contributed to the decision by the United States Air Force to commission an official study from the University of Colorado at Boulder, Colorado in October 1966: News Releases from the Office of House Minority Leader Gerald R. Ford, March 25 & 28, & April 3 & 21, 1966 and Air Force Selects University of Colorado to investigate Unidentified Flying Object reports, Office of Assistant Secretary of Defense (Public Affairs) News Release, No. 847- 44, October 7, 1966. The report of the Scientific Study of Unidentified Flying Objects directed by Professor Dr. Edward U. Condon was published in January 1969; its case studies and other data may also be available online including from the U.S. Defense Technical Information Center.

The report of the *Scientific Study of Unidentified Flying Objects* was the subject of a Review by a Panel of the U.S. National Academy of Sciences in 1969. Commentaries by experienced investigators, analysts, and authors included, for example, UFOs and the Condon Report: A Dissenting View, by Professor Dr. James E. McDonald, Institute of Atmospheric Physics, The University of Arizona, presented to the Pacific Missile Range

Section, American Institute of Aeronautics and Astronautics, Point Magu, California, 18 February 1969, and *Comments on Condon*, by Mr. Charles Bowen and *Review of the Final Report of Dr. Edward U. Condon*, by Mr. John A. Keel, Flying Saucer Review, March – April 1969, Vol. 15, No. 2, *page 31* onwards.

As mentioned earlier, public, official hearings on reports of alien craft and related issues were also conducted by lawmakers in the United States in 1968: Symposium on Unidentified Flying Objects, Hearings before the Committee on Science and Astronautics, U.S. House of Representatives, Ninetieth Congress, Second Session, July 29, 1968 [No. 7]; in the twenty-first century U.S. lawmakers held new hearings, for example, Unidentified Anomalous Phenomena, Implications on National Security, Public Safety, and Government Transparency, United States House Committee on Oversight and Accountability, Subcommittee on National Security, the Border & Foreign Affairs, 26 July, 2023.

The conclusions of the Director's report of the *Scientific Study of Unidentified Flying Objects* and its *Review by a Panel of the U.S. National Academy of Sciences* seem to have provided the justification for the U.S. Air Force to withdraw from dealing publicly with reports by citizens of alien craft, aliens or their activities: *Official News Release from the United States, Office of Assistant Secretary of Defense (Public Affairs) dated December 17, 1969* titled: Air Force to terminate Project "Blue Book". However, some U.S. officials continued to collect reports as discussed below and elsewhere in *Time of Contact*, including **Chapter 7 (Health, Security & Safety).**

Under the Advanced Aerospace Threat Identification Program (AATIP) mentioned at the beginning of this section (that heralded a revival of official and (eventually) publicly-known studies of reports of alien craft in the United States) reports of unfamiliar aerospace craft made by military pilots and other service personnel were collected: Glowing Auras and 'Black Money': The Pentagon's Mysterious U.F.O. Program and 2 Navy airmen and an object that 'accelerated like nothing I've ever seen', both by Ms. Helene Cooper, Ms. Leslie Kean and Mr. Ralph Blumenthal, published by the New York Times newspaper on 16 December 2017. Videos that appear to display high performance, unfamiliar airborne craft were disclosed officially by the Department of War of the United States: Statement by the Department of Defense on the Release of Historical Navy Videos, April 27, 2020.

The former director of the *AATIP* became a member of the private *To the Stars Academy of Arts and Science*, whose publications included analyses of the GOFAST plus GIMBAL and FLIR1 videos mentioned earlier in this section, that were disclosed officially by the U.S. Department of War.

Further reports in the *New York Times* newspaper about observations of, or encounters with unfamiliar aerospace craft by U.S. Navy service personnel included: 'Wow, What is That?' Navy pilots report unexplained flying objects, by Ms. Helene Cooper, Ms. Leslie Kean and Mr. Ralph Blumenthal, and a video file titled 'Look at that thing': Footage shows pilots spotting unknown objects, both published on 26 May 2019.

Official organisations in selected countries other than the United States that collect and study reports of alien craft, their users and their activities are introduced in **Chapter 7 (Health, Security & Safety)**.

Extract from **Chapter 1 (How alien aerospace craft fly)** of the forthcoming *Edition 1.9* of Time of Contact.

On 6 December 1952, the crew of a U.S. Air Force Boeing B-29 bomber aircraft detected airborne alien craft using their aircraft's radar system, probably a version of either the AN/APQ-13 or AN/APQ-23 bombing, search, or navigation radar systems that are discussed in more detail later in this section. The B-29 was *"returning to its base* (Randolph Air Force Base close to the city of San Antonio) *in* (the U.S. state of) *Texas"* from a *"training flight"* at an altitude of 18,000 feet above what was then called the Gulf of Mexico (renamed the "Gulf of America" by President Trump's Executive Order 14172) and was flying towards, and was *"190 miles from Galveston* (in Texas) *and about 100 miles south of the* (state of*) Louisiana coast".*

The B-29's radar systems were originally developed during the Second World War (1939 – 1945) and were widely-used and continuously improved. *"While radar has been responsible for the development of sensitive wide band microwave receivers, nothing as important as the discovery of the resonant cavity magnetron* (a compact, high-power, very short wavelength microwave generator) *has resulted. The most notable advances have been in crystal mixers, low voltage klystrons, disc seal triodes and miniature pentodes and triodes suitable for high gain wide band amplifiers":* A Textbook of Radar, edited by E. G. Bowen, A Collective Work by the Staff of the Radiophysics Laboratory, C.S.I.R.O. Australia, Second Edition, originally published in 1954, reprinted in paperback format in 2015, Chapter X (Receivers), by L. L. McCready, *page 341*. Other contemporary articles, books and papers include: *Radar Technique – I.E.E. Convention*, published in Wireless World Radio and Electronics, May 1946, *pages 146 – 158*, and *Volumes 1 – 28* of the Massachusetts Institute of Technology Radiation Laboratory Series, published in the 1940s.

The early radar systems' relatively minimal signal processing, and simplicity (by comparison with modern radar systems) may have been advantageous for detecting and characterising alien craft. An analogy is that constructing a magnetometer from individual components is recommended by the author of *Time of Contact* to try to detect the powerful magnetic fields that may be radiated by alien craft, rather than using a modern integrated circuit with inbuilt filters that could suppress or eliminate valid data: **Chapter 6 (Search for Extraterrestrial Intelligence (SETI))**. Nevertheless, even early radar systems processed the data they handled to some extent, for example, adding circuitry so that *"reflections from all distances should give approximately equal responses on the C. R. tube"* (the cathode ray tube display screen). In addition, *"over-compensation can be applied to remove 'clutter' from fixed local objects near the origin"* and *"Automatic gain control is often employed where it is desired to keep a constant level of background noise": Radar Technique – I.E.E. Convention*, published in Wireless World Radio and Electronics, May 1946, Transmitters and Receivers, at *page 155.*

It is possible that the processing and filtering of signals received by airborne Raytheon AN/APG-73 radar systems that equipped United States Marines McDonnell Douglas F/A-18C Hornet and United States Navy Boeing F/A-18F Super Hornet aircraft which encountered an alien craft in 2004, discussed in more detail in **Chapter 2 (Alien technology)**, were among the reasons why their crews evidently found it difficult to detect, follow (track) and characterise the alien craft using their radar systems.

However, former U.S. Navy Lieutenant Mr. Ryan Graves, Executive Director, Americans for Safe Aerospace testified that during 2014 when he flew a Boeing F/A-18F Super Hornet in the U.S. Navy Strike/Fighter Squadron (VFA) 11 (Red Rippers): *"After upgrades were made to our jets' radar systems we began to detect unknown objects operating in our airspace"*. Further unclassified information about the upgrades and in particular any changes that were made to how the radars may have processed or filtered data might be helpful: Unidentified Anomalous Phenomena, Implications on National Security, Public Safety, and Government Transparency, United States House Committee on Oversight and Accountability, Subcommittee on National Security, the Border and Foreign Affairs, Washington D.C., Wednesday, 26 July, 2023 , beginning at about 44 minutes into the 2 hour 34 minutes long video.

At least two members of the B-29's crew briefly observed three of the smaller alien craft visually as they travelled past. At least one and possibly two larger alien craft were detected on the radar system towards the end of the encounter, which lasted for ten minutes. The average speeds of some of the smaller craft, and of the larger craft were calculated from radar data by members of the crew. The alien craft travelled at high supersonic speeds except when some of the smaller craft reduced their speeds and travelled behind the bomber, matching its speed for ten seconds (the cruising speed of a B-29 was about 220 miles per hour). The speed of sound is approximately 707 miles per hour or 1,138 kilometres per hour at 20,000 feet and a temperature of minus 24.6 degrees Celsius: Speed of Sound at Different Altitudes and Temperatures.

According to the investigator and author Major Donald E. Keyhoe this B-29's radar system had at least *"three scopes"* or *"radarscopes"* or *"screens"* (officially called plan position indicators or just "indicators") that each provided a visual display of radar returns from anything that reflected the electromagnetic radiation transmitted by the radar system. A *"main radarscope"* was viewed by the B-29's radar officer and the flight engineer, there was an *"auxiliary scope in the cockpit"* viewed by the pilot, and a third radarscope was viewed by the navigator.

Beginning at 0525 hours several unidentified airborne craft were detected by the B-29's radar system and observed for ten minutes, until 0535 hours. According to a later investigator, Mr. Loren E. Gross, who had been *"a radar operator for the* [United States] *Air Defense Command [ADC] from 1956 to 1960 … stationed at radar sites in Michigan, Korea, and Arizona*: Dialogue with Loren Gross) in the *"the clearest and most complete* (official) *statement in the* (U.S. Air Force) *Project Blue Book",* 1st Lt. (First Lieutenant) Norman Karas reported that he had turned on the radar system when *"the flight engineer finished transferring fuel".* Karas *"noticed an unidentified object approaching our aircraft at a terrific rate of speed. I timed it as best I could with my stopwatch over a known distance and the instructor flight engineer computed the speed at 5,240 mph* (miles per hour). *I alerted the entire crew to look for the object visually and some flashes of light were noticed. The closest the objects came were approximately 20 miles. I saw about twenty objects in all, sometimes as much as two and three on the scope at one time. I re-calibrated the* (radar) *set* (system) *and there was no change. The object was small and possibly round, with the exception of a very large return shaped as follows: 'C' – moved as arrow indicated. I also noticed a large return come up to within 40 miles of our tail from behind, and then disappeared. To the best of my knowledge, I believe that this object was real and not a set malfunction or optical*

illusion … His crewmate, 1st. Lt. William W. Naunann, had this to add: 'Contact was broken off at 0535 after a group of the blips (radar returns) *merged into a ½ inch curved arc about 30 miles from our a. c.* (aircraft) *at 320 degrees and proceeded across the scope and off at a computed speed of over 9,000 mph* (miles per hour}": UFO's: A History 1952: November – December, by Mr. Loren E. Gross, copyright © 1986, Freemont, California, *page 59* (*page 65 of 126* of the PDF file).

In endnotes 185 & 186 at *page 114 of 126* of the PDF file UFO's: A History 1952: November – December, Mr. Gross attributed his information to an "Air Intelligence Information Report," by Lt. R. A. Reed, 3510th Flying Training Wing, (possibly 3510th Pilot Training Wing was meant) based at RAFB (Randolph Air Force Base), Texas (now Joint Base San Antonio located east-northeast of San Antonio),dated 10 December 1952, in the Air Force BLUE BOOK Files. As mentioned earlier, Mr. Gross had been a U.S. Air Force radar operator from 1956 to 1960: Dialogue with Loren Gross.

According to Major Keyhoe the first detection of an alien craft occurred at 0525 hours, when the radar officer observed *"the blip of some unknown object appeared at one edge of the screen. When the sweep made its next revolution … In that brief moment the unknown craft had gone thirteen miles"*. If we assume that the B-29 was equipped with a version of the AN/APQ-23 radar system (see below for further information) and we also assume the *"brief moment"* means the antenna was set to rotate at one of its higher rates, for example 21 revolutions per minute in "search mode" the alien craft would be detected every 2.86 seconds as the antenna rotated. The average speed of a craft which travelled 13 miles in 2.86 seconds would be approximately 4.54 miles per second or 16,344 miles per hour.

Another craft was detected on the same radarscope by the radar officer, that was travelling towards the B-29. The radar officer and flight engineer *"computed the unknown's speed"* using a stopwatch. It was travelling at *"5,420 miles an hour".* Two more alien craft were then reported on the same radarscope by the flight engineer and were also seen by the navigator on his radarscope. The radar officer recalibrated the radar system and by the time he finished doing this *"the blips of four UFOs were racing across his screen"* i.e. the radar officer's radarscope, and the screens of the other two radarscopes.

The captain of the B-29 reported that one of the craft was approaching the aircraft on the right-hand side and this was seen visually by the flight engineer from the *"right waist blister"* of the B-29 as *"a blue-white blur".* The B-29 had three "blisters" or viewing stations one on each side of the aircraft *"just behind the wing"* to watch for attacking aircraft, and another blister on the top of the B-29: Defending the Superbomber: The B-29's Central Fire Control System, by Mr. Christopher Moore, Aeronautics Department, Smithsonian National Air and Space Museum, 12 August 2020.

Another group of craft was then viewed on all three radarscopes approaching the B-29 *"from almost dead ahead"* and travelling at *"over 5,000 miles an hour".* Several minutes after the first alien craft was detected, another group of craft that were travelling at high supersonic speed was detected by the radar system. Two of the craft travelled past the right side of the B-29 and another crewman saw them as *"blurs of blue-white light"* from his position in the waist blister. The captain of the B-29 viewed five craft on his radarscope *"racing behind the bomber, cutting across its course"*. The craft then changed direction towards the B-29 which they would reach in *"three seconds"*. However, the craft reduced their velocity to match that

of the B-29 and remained behind it for ten seconds. They then changed direction to *"one side"* and on his radarscope the captain viewed *"a huge blip – a half inch spot on the scope".* The radar images of the smaller craft then *"merged with the large machine"* which then (according to the radar officer) moved away at *"over 9,000 miles an hour"* equivalent to 150 miles per minute or 2.5 miles per second. The observations ended at 0535 hours.

The radar officer also stated that *"the objects were small and possibly round, with exception of one very large return shaped as follows, one-half inch curved arc. I also noticed a large return come up to within forty miles of our tail from behind and then disappear".*

Online reports of the B-29's encounter include NICAP – Gulf of Mexico case, Dec. 6, 1952, that reproduced the contemporary account which is contained in the book Flying Saucers from Outer Space by Major Donald E. Keyhoe, published in 1953 and freely available on the NICAP website: Chapter IX (The Utah Pictures), *pages 161 – 167,* and UFO's: A History 1952: November – December, by Mr. Loren E. Gross, copyright © 1986, *page 59* (*page 65 of 126* of the PDF file). Major Keyhoe evidently used pseudonyms to protect the identities of the aircrew involved, as the names of the crew in the *Air Intelligence Information Report* mentioned earlier do not appear in Major Keyhoe's report.

Professor Paul R. Hill, a NASA aerospace scientist and engineer discussed the B-29's encounter, prefacing it with the comment that *"Two of the best sources of speed data are Maj.* (actually Captain) *Edward J. Ruppelt's* Report on Unidentified Flying Objects *and Maj. Donald E. Keyhoe's* Flying Saucers from Outer Space *because they present the early speed data measured by the Air Force radar before such data was classified by JANAP (Joint Army, Navy, Air Force Publication) 146 and AFR (Air Force Regulation prohibiting data release), 200-2:* Unconventional Flying Objects: a scientific analysis, by Professor Hill, Section II (Performance), Part B (Speed), *pages 41 – 43* of the paperback edition published in 1995.

In June 2021 it was stated officially that *"No standardized reporting system existed until the Navy established one in March 2019. The Air Force subsequently adopted that mechanism in November 2020, but it remains limited to USG* (i.e. 'U.S. military and other U.S. Government personnel') *reporting"*: Preliminary Assessment: Unidentified Aerial Phenomena dated 25 June 2021, published by the Office of the Director of National Intelligence. Earlier, it was reported that the latest official military regulations might include *"new guidelines for pilots and other personnel to report encounters with 'unidentified aircraft'"*: U.S. Navy drafting new guidelines for reporting UFOs, by Mr. Bryan Bender, published by Politico, 23 April 2019.

The B-29 that encountered the alien craft in 1952 may have been equipped with one or more of the following radar systems: AN/APQ-7, AN/APQ-13A, or AN/APQ-23A bombing, search, or navigation systems, or the AN/APG-15B gun laying radar: Standard Aircraft Characteristics – B-29B Superfortress, published by authority of Commanding General, Air Materiel Command, U.S. Air Force, and dated 19 April 1950.

However, it seems probable that by 1952 the B-29 was equipped with a version of either the AN/APQ-13 or AN/APQ-23 bombing, search, or navigation radar systems, rather than the earlier AN/APQ-7. The AN/APQ-13 (manufactured by Western Electric) was described officially as *"an airborne radar system designed for navigation and high altitude bombing …*

It provides 4, 10, 20, 50 and 100 nautical miles ranges of operation." The AN/APQ-13 had a peak power output of 40 kilowatts and its radarscopes were *"Indicator ID-41/APQ-13 or ID-41A/APQ-13"*: MIL-HDBK-162A, 15 December 1965, Volume 1, Section 2, *pages 806 - 808 of 1531* of the PDF file.

The AN/APQ-23 (also manufactured by Western Electric) comprised *"essentially the APQ-13 search radar combined with the new CP-16 computer …* (and) *was installed in B-29s and B-50s … Improved models saw service in the Korean fighting"* (the Korean War lasted from 25 June 1950 to 27 July 1953): *Development of Airborne Armament 1910 - 1961,* Volume 1 Bombing Systems, AFSC Historical Publications Series 61 – 52 -1, *pages I-27 & I-28,* which has been available online in the past and may become available again, in the future.

The AN/APQ-23D was described officially as *"identical to the AN/APQ-13 Series Radar Sets with the exception of Modification Kit MX-344/ APQ"* which improved its performance in several ways. The AN/APQ-23D radar system operated at a frequency of 9,375 MHz or 3.2 centimetres (X-band) plus or minus 40 MHz in radar mode or 9,310 MHz (3.22 centimetres) plus or minus 3 MHz in beacon mode. In radar mode it had a pulse repetition rate of 1,350 pulses per second and a pulse duration of 0.5 microseconds (radar mode: 4, 10, and 20 mile ranges), or a pulse repetition rate of 675 pulses per second and a pulse duration of 0.75 microseconds (radar mode: 50 and 100 mile ranges) or a pulse duration of 2.25 microseconds for *"all beacon ranges"*. Theoretically, the system had a range of 300 nautical miles when used in beacon mode.

The radar antenna was a *"center fed feedhorn with a full parabolic reflector"* that scanned horizontally in "continuous" or "search" mode through 360 degrees or in "sector scan" mode through an arc of 40 to 50 degrees in a sector 70 degrees either side of "dead ahead". The antenna could be tilted 10 degrees above and 30 degrees below the horizontal. The antenna scan speed was 20 to 27 revolutions per minute (rpm) in "continuous" mode, 13 to 21 rpm in "search" mode or 50 to 60 scans per minute in "sector scan" mode. The system's peak power output was 35 kilowatts and it had a beam width of 3 degrees. Its radarscopes were *"Indicator (Aux*[iliary]*) ID-41I/APQ-13* and *Indicator (Main) ID-41G/APQ-13"*: MIL-HDBK-162A, 15 December] 1965, Volume 1, Section 2, *pages 811 – 813 of 1531* of the PDF file, Integrated Publishing – radar maintenance and parts manuals and radartutorial-eu. More detailed information may be available, for example, the *Radar Observers' Bombardment Information File*, Section Two * Radar Equipment, sections 2-1 to 2-5 (AN/APQ-13) dated July 1945 and Handbook – Maintenance Instructions, Radio Sets AN/APQ-13 to AN/APQ-13D, reference AN 16-30APQ13-4 revised 15 October 1952 which may be viewable online for a monthly subscription or purchased as a download.

One or more B-29s were evidently used to test new radar systems in the late 1940s, for example, the AN/APQ-24 Bombing - Navigational System using the Western Electric APS-23 search radar, a *"high resolution, high altitude radar using the best features of the APS-22 and incorporating the common 360-degree scan …"* intended for newer aircraft like the Boeing B-50, the Consolidated Vultee (Convair) B-36 and the North American Aviation B-45: *Development of Airborne Armament 1910 - 1961, Volume 1 Bombing Systems, AFSC Historical Publications Series 61 – 52 -1*, beginning at *page I-30*.

Extract from **Chapter 3 (Alien craft)** of the forthcoming *Edition 1.9* of Time of Contact.

An airborne alien craft manoeuvred in the vicinity of a Boeing RB-47H-1-BW military reconnaissance aircraft flying over the southern United States on a training mission between about 0430 and 0640 hours Central Daylight Time (CDT) on Wednesday, 17 July 1957. The RB-47H, serial number 53-4305, was assigned to the United States Air Force's 55th Strategic Reconnaissance Wing and was based at Forbes Air Force Base (AFB) south of Topeka in the U.S. state of Kansas.

Electromagnetic transmissions from the alien craft were received by the RB-47H; the alien craft was detected by a search and navigation radar system on the RB-47H and by a ground-based radar system. Visible light radiated by or from around the craft was seen by the pilot and co-pilot of the RB-47H. The alien craft was described as *"large, metallic, rapidly maneuvering airborne source of powerful S-band radarlike signals and visible light"*: RB-47 Radar/Visual Case, by Mr. Brad Sparks, UFO Encyclopedia, 2nd Edition, published in 1998 – illustration titled RB-47 Flight Path and Sighting Circumstances, and Conclusions, *pages 766* and *790.* A Third Edition of the UFO Encyclopedia was published in 2019. **It is recommended to keep the illustration at *page 766* to hand while reading the report. This will assist in understanding the times, durations, and sequence of events, and the people, equipment and facilities involved.**

The RB-47H aircraft was *"designed for ECM* (Electronic Counter-Measures) *and electronic and communications intelligence collection"* (Electronic Intelligence - ELINT and Communications Intelligence - COMINT are jointly called Signals Intelligence – SIGINT): RB-47 Radar/Visual Case, by Mr. Brad Sparks, UFO Encyclopedia, 2nd Edition, published in 1998, *Training flight*, at *pages 764 – 765,* and *RB-47 turns again to pursue UFO*, at *page 784.*

The RB-47H departed *Forbes AFB* at about 2300 hours CDT on 16 July 1957 *"to conduct gunnery, celestial navigation and electronic warfare exercises"* and was returning *"from the long flight over the gunnery range at Matagorda Island AFB* (on Matagorda Island), *Texas, and the Gulf of Mexico* (renamed the "Gulf of America" by President Trump's Executive Order 14172) *before turning northward over Mississippi"*: RB-47 Radar/Visual Case, by Mr. Brad Sparks, UFO Encyclopedia, 2nd Edition, published in 1998, Training flight, *page 764* and Gulfport "upscope" incident, *page 767.*

The RB-47's pilot was Major Lewis D. Chase, the co-pilot was First Lieutenant James H. McCoid, and the navigator was Captain Thomas H. Hanley. The three ECM/SIGINT officers or "Ravens" were Captain John J. Provenzano, the *"No. 1 monitor"*, Captain Frank B. McClure, the *"No. 2 monitor"* and Captain Walter A. Tuchscherer, the *"No. 3 monitor"*: Air Force Observations of an Unidentified Object in the South-Central U.S., July 17, 1957, by Professor Dr. James E. McDonald, published in Astronautics & Aeronautics Journal, July 1971, Volume 9, Issue 7, Introduction, *page 66.*

At about 0430 hours CDT on 17th July 1957 the RB-47H was flying in a northerly direction to the east of Gulfport, a coastal city by the Gulf of Mexico (renamed the "Gulf of America" by President Trump's Executive Order 14172) in the U.S. state of Mississippi when Captain McClure detected a transmission (signal) from an airborne alien craft with his ELINT equipment. The signal was vertically polarised, had a frequency of 2.995 to 3 GigaHertz

(GHZ), with a pulse width of 2.0 micro-seconds, a pulse repetition frequency of 600 cycles per second, and a sweep rate of 4 revolutions per minute (RPM). The output power of the alien craft's transmitter was later estimated to be approximately 40 kilowatts (kW): RB-47 Radar/Visual Case, by Mr. Brad Sparks, UFO Encyclopedia, 2nd Edition, published in 1998, *History of investigations*, *page 762* and *Gulfport "upscope incident"*, *pages 767 - 768.*

The transmission from the alien craft was anomalous compared with a normal radar transmission from the ground because the source of the transmission initially appeared to partially circle the aircraft in a counter-clockwise direction beginning at an initial position behind and to the right of the aircraft. In addition, the alien craft's signal only simulated about half of the characteristics of one type of transmission from General Electric AN/CPS-6B and AN/FPS-10 ground-based radar systems, i.e. the transmission *"was similar to only one of the six different beams emitted by the CPS-6B and FPS-10, namely the Vertical-Center (VC) Beam, and even then it imitated only 4 or 5 of its 8 distinguishing features, and one of them was definitely at variance from a normal VC Beam"*: RB-47 Radar/Visual Case, by Mr. Brad Sparks, UFO Encyclopedia, 2nd Edition, published in 1998, *History of investigations*, *page 764.*

The AN/CPS-6B and AN/FPS-10 radar systems were designed to provide distance or range, direction or azimuth and elevation information (which can be used to calculate height) about airborne targets which reflected some of the electromagnetic energy from the radar systems' powerful transmissions in the S-band portion of the electromagnetic spectrum (2 – 4 GHz).

The alien craft's transmission was subsequently detected again by Captain McClure's ELINT equipment and by Captain Provenzano's ELINT equipment: RB-47 Radar/Visual Case, by Mr. Brad Sparks, UFO Encyclopedia, 2nd Edition, published in 1998, *UFO "upscopes" again, then veers off to Fort Worth-Dallas, pages 778 – 779.*

The alien craft was also detected by Major Thomas Hanley, the RB-47's navigator, using his AN/APS-23 radar system: RB-47 Radar/Visual Case, by Mr. Brad Sparks, UFO Encyclopedia, 2nd Edition, published in 1998, *RB-47 turns again to pursue UFO, pages 784 & 785.* The AN/APS-23 was a *"high-resolution, high-altitude radar using the best features of the APS-22 and incorporating the common 360-degree scan, provisions for 'sector scan' (in which the antenna oscillated through any desired portion of a circle), and a 'displaced center' scan with vertex of the sweep starting at or even below the bottom of the cathode ray tube* (visual display monitor). *The APS-23, when combined with the APA-44 computer, formed the APQ-24 bombing-navigation system … At 30,000 feet the APQ-24 had a search range of from 150 to 200 miles against large cities and could efficiently map an area of about 75 miles radius"*: *Development of Airborne Armament 1910 - 1961, Volume 1 Bombing Systems*, AFSC Historical Publications Series 61 – 52 -1, Chapter II (Bombing with Radar) *pages I-29 – I-36*, which has been available online in the past and may become available again, in the future.

Visible light which may have been radiated by (or from the air around) an airborne alien craft was seen by the RB-47H's pilot and co-pilot: RB-47 Radar/Visual Case, by Mr. Brad Sparks, UFO Encyclopedia, 2nd Edition, published in 1998, *First steady UFO visual sighting, pages 777 – 778*, and *UFO "upscopes" again, then veers off to Fort Worth-Dallas, page 778,* plus *UFO suddenly stops – RB-47 overshoots near Fort Worth, page 781*.

The ELINT equipment used by Captain McClure included *"an* (AN/)*ALA-6 DF* (direction-finder) *receiver with back-to-back antennas in a housing on the belly* (undersurface) *of the RB-47 near the tail* (rear of the RB-47) *spun at 150 or 300 rpm* (revolutions per minute) *as it scanned in azimuth* (i.e. horizontally)*… Inside the aircraft, the signals from the* (AN/)*ALA-6 were processed in an* (AN/)*APR-9 radar receiver and an* (AN/)*ALA-5 pulse analyzer"*: Air Force Observations of an Unidentified Object in the South-Central U.S., July 17, 1957, by Professor Dr. James E. McDonald, published in Astronautics & Aeronautics Journal, July 1971, Volume 9, Issue 7, Introduction, *page 67.* A block diagram may be available online illustrating how the AN/APR-9 radar receiver was connected to the antennae and an AN/ALA-6 direction finder, and an AN/ALA-5 pulse analyser: The Silent War: Electronic Spying, by Mr. John M. Carroll, Managing Editor, Electronics magazine, published on 20 April 1964. Further details of the equipment are provided towards the end of this summary.

Captain Provenzano viewed the signal from the alien craft on the scope (display or monitor) of his AN/APD-4 system which enabled him to detect signals on the same frequency that Captain McClure's system could detect: RB-47 Radar/Visual Case, by Mr. Brad Sparks, UFO Encyclopedia, 2nd Edition, published in 1998, *UFO "upscopes" again, then veers off to Fort Worth-Dallas, page 779*.

The alien craft encountered by the RB-47 "disappeared" and "re-appeared" as viewed by ground radar and visual observations from the RB-47, and the simulated radar transmission from the alien craft transmitted was similarly intermittent: RB-47 Radar/Visual Case, by Mr. Brad Sparks, UFO Encyclopaedia, 2nd Edition, published in 1998, *UFO suddenly stops – RB-47 overshoots near Fort Worth, page 781*.

Possibly, the alien craft's visual appearances and disappearances may have been caused by the air molecules around the craft becoming ionized and excited as the craft's propulsion, hull protection, or other systems throttled up or down, and the loss and reacquisition of the craft by the ground radar could have been caused by the craft moving very rapidly out of radar range, and then returning to within range. Alternatively, the simulated radar transmission from the alien craft could have been turned on and turned off by the craft (if it was autonomous), or its users or remotely-located operators. Another possibility is that optical and radar stealth or "cloaking" technologies that are introduced in **Chapter 2 (Alien technology)** may have been used intermittently by the alien craft.

Information about the encounter is available in a number of publications, including: RB-47 Radar/Visual Case, by Mr. Brad Sparks, UFO Encyclopedia, 2nd Edition, published in 1998, *pages 761 – 790,* Science in Default: 22 Years of Inadequate UFO Investigations, by Professor Dr. James E. McDonald, presented at the 134th Meeting of the American Association for Advancement of Science (AAAS), 27 December, 1969 (an audio file containing a recording of Professor Dr. McDonald's presentation, filename 27. Profiles 27, may be available via the Profiles in Ufology: Major Donald E. Keyhoe, Dr. James E. McDonald & Frank Edwards Guide on the Internet Archive website), *The 1957 Gulf Coast RB-47 Incident,* also by Professor Dr. McDonald, Flying Saucer Review, May - June 1970, Vol. 16, No. 3, *pages 2 – 6,* and Air Force Observations of an Unidentified Object in the South-Central U.S., July 17, 1957, again by Professor Dr. McDonald, published in Astronautics & Aeronautics Journal, July 1971, Volume 9, Issue 7, *pages 66 – 70.*

Photographs of AN/ALA-5 pulse analysers and AN/ALA-6 direction-finders installed in a Douglas RB-66C Destroyer aircraft may be available online together with a block diagram mentioned earlier illustrating how the AN/APR-9 radar receiver was connected to the aircraft's antennae and an AN/ALA-6 direction finder and an AN/ALA-5 pulse analyser: The Silent War: Electronic Spying, by Mr. John M. Carroll, Managing Editor, Electronics magazine, published on 20 April 1964. Detailed photographs of an AN/APA-17 direction finder, which along with the AN/APA-17B direction finder was described as *"similar to"* the AN/ALA-6 may also be available online: Antenna Catalog, Volume IV, Aircraft Antennas, October 1960, prepared for the Electronics Research Directorate, Air Force Cambridge Research Laboratories by Georgia Institute of Technology Engineering Experiment Station, at *page 126* (*page 131* of *325* of the PDF document) and AAFRadio.

The RB-47's AN/ALA-6 direction-finder's antennae may have been type AS-656/ALA-6 which were designed to operate over a frequency range from 1 GHz to 5 GHZ; further details including the antennas' gain, etc. may be available in the Antenna Catalog, Volume IV, Aircraft Antennas, October 1960, prepared for the Electronics Research Directorate, Air Force Cambridge Research Laboratories by Georgia Institute of Technology Engineering Experiment Station, at *page 127* (*page 132* of *325* of the PDF document).

The RB-47's encounter was awarded first place and discussed at the end of a video documentary titled Best Evidence: Top 10 UFO Sightings (2007) by Mr. Paul Kimball, that may be freely available online. An extract from a video interview with Professor McDonald is included in the television documentary Westall 1966: A Suburban UFO Mystery (2009), beginning at 30 minutes and 16 seconds, that may be available online. Further audio files are available online of Professor McDonald speaking: file names *21* – *27* available via the Profiles in Ufology: Major Donald E. Keyhoe, Dr. James E. McDonald & Frank Edwards Guide on the Internet Archive website. More information about Professor Dr. McDonald and his work was provided in the book Firestorm – Dr. James E. McDonald's Fight for UFO Science, by Ms. Ann Druffel published in 2003.