# Ufology

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Artistic representation of UFOs

**Ufology** is a [neologism](http://en.wikipedia.org/wiki/Neologism) coined to describe the collective efforts of those who study [unidentified flying object](http://en.wikipedia.org/wiki/Unidentified_flying_object) reports and associated evidence. Not all Ufologists believe that UFOs are necessarily extraterrestrial spacecraft, or even that they are objective physical phenomena. Even UFO cases that are exposed as hoaxes, delusions or misidentifications may still be worthy of serious study from a [psychosocial](http://en.wikipedia.org/wiki/Psychosocial_Hypothesis) point of view. While Ufology does not represent an academic research program, UFOs have been subject to various investigations over the years, varying widely in scope and scientific rigor.

Governments or independent academics in the United States, Canada, the United Kingdom, France, Belgium, Sweden, Brazil, Mexico, Spain, and the Soviet Union are known to have investigated UFO reports at various times. No national government has ever asserted that UFOs represent any form of alien intelligence. Perhaps the best known study was [Project Blue Book](http://en.wikipedia.org/wiki/Project_Blue_Book), previously [Project Sign](http://en.wikipedia.org/wiki/Project_Sign) and [Project Grudge](http://en.wikipedia.org/wiki/Project_Grudge), conducted by the [United States Air Force](http://en.wikipedia.org/wiki/United_States_Air_Force) from 1947 until 1969. Other notable investigations include the [Robertson Panel](http://en.wikipedia.org/wiki/Robertson_Panel) (1953), the [Brookings Report](http://en.wikipedia.org/wiki/Brookings_Report) (1960), the [Condon Committee](http://en.wikipedia.org/wiki/Condon_Report) (1966-1968), the Project Twinkle investigation into [green fireballs](http://en.wikipedia.org/wiki/Green_fireballs) (1948-1951), the [Sturrock Panel](http://en.wikipedia.org/wiki/Peter_A._Sturrock) (1998), and the French [GEIPAN](http://en.wikipedia.org/wiki/GEIPAN) (1977-) and [COMETA](http://en.wikipedia.org/wiki/COMETA) (1996-1999) study groups.

## Background and legitimacy

Ufology has never been fully embraced by the scientific community. One cannot obtain a "ufology" degree from any [college](http://en.wikipedia.org/wiki/College) or [university](http://en.wikipedia.org/wiki/University), though there have been a few college or university courses on the subject, often from a [folklore](http://en.wikipedia.org/wiki/Folklore) perspective.

Ufologists vary from fringe proponent [David Icke](http://en.wikipedia.org/wiki/David_Icke) to respected mainstream scientists like [Peter A. Sturrock](http://en.wikipedia.org/wiki/Peter_A._Sturrock), [J. Allen Hynek](http://en.wikipedia.org/wiki/J._Allen_Hynek), [Jacques Vallee](http://en.wikipedia.org/wiki/Jacques_Vallee), [James E. McDonald](http://en.wikipedia.org/wiki/James_E._McDonald), or [Auguste Meessen](http://en.wikipedia.org/w/index.php?title=Auguste_Meessen&action=edit&redlink=1), some of whom argue that UFO reports are as worthy of study as any topic, and deserve [case-by-case analysis](http://en.wikipedia.org/wiki/Case-by-case_analysis) using the [scientific method](http://en.wikipedia.org/wiki/Scientific_method). [Debunkers](http://en.wikipedia.org/wiki/Debunk) include [Philip Klass](http://en.wikipedia.org/wiki/Philip_Klass) or Dr. [Donald Menzel](http://en.wikipedia.org/wiki/Donald_Menzel)).

Dr. [Carl Sagan](http://en.wikipedia.org/wiki/Carl_Sagan) was quite skeptical of any extraordinary answer to the UFO question, but in 1969, he co-organized a [symposium](http://en.wikipedia.org/wiki/Symposium) on the subject, thinking that science had unfairly neglected the UFO question.

In her critique of the [Condon Report](http://en.wikipedia.org/wiki/Condon_Report), Diana Palmer Hoyt notes that "*The UFO problem seems to bear a closer resemblance to problems in* [*meteorology*](http://en.wikipedia.org/wiki/Meteorology) *than in* [*physics*](http://en.wikipedia.org/wiki/Physics)*. The phenomena are observed, occur episodically, are not reproducible, and in large part, are identified by* [*statistical*](http://en.wikipedia.org/wiki/Statistical) *gathering of data for possible organization into patterns. They are not experiments that can be replicated at will at the* [*laboratory*](http://en.wikipedia.org/wiki/Laboratory) *bench under controlled conditions.*" (see external links below)

Along these lines, [Peter A. Sturrock](http://en.wikipedia.org/wiki/Peter_A._Sturrock) suggests that UFO studies should be compartmentalized — as are most scientific endeavors — into at least "*the following distinct activities:*

1. *Field investigations leading to case documentation and the measurement or retrieval of physical evidence;*
2. *Laboratory analysis of physical evidence;*
3. *The systematic compilation of data (descriptive and physical) to look for patterns and so extract significant facts;*
4. *The analysis of compilations of data (descriptive and physical) to look for patterns and so extract significant facts;*
5. *The development of theories and the evaluation of those theories on the basis of facts.*"

Study of UFO sightings *has* yielded results applicable to other fields, such as in weather phenomena (see [Hessdalen](http://en.wikipedia.org/wiki/Hessdalen)) and in human perception, such as the study lead by the [SOBEPS](http://en.wikipedia.org/wiki/SOBEPS) for the Belgian flap in 1989-'90 or the studies of the [GEPAN/SEPRA](http://en.wikipedia.org/wiki/GEIPAN) in [France](http://en.wikipedia.org/wiki/France).

Some arguethe general rejection of ufology by mainstream science is part of the problem: anyone can declare themselves a "UFO researcher", and completely bypass the sorts of [scientific consensus](http://en.wikipedia.org/wiki/Scientific_consensus) building and [peer review](http://en.wikipedia.org/wiki/Peer_review) that otherwise shape and influence scientific [paradigms](http://en.wikipedia.org/wiki/Paradigm). This has allowed many to stake out territory and disseminate claims, information and analysis of widely varying rigor and quality.

Some Ufologistsconsider the general attitude of mainstream academics as arrogant and dismissive, or bound to a rigid [world view](http://en.wikipedia.org/wiki/World_view) that disallows any evidence contrary to previously held notions. Others charge that mainstream rejection of UFO evidence is a classic case of [pathological science](http://en.wikipedia.org/wiki/Pathological_science). Astronomer and Ufologist [J. Allen Hynek](http://en.wikipedia.org/wiki/J._Allen_Hynek)'s famous comment regarding this subject is, "*Ridicule is not part of the* [*scientific method*](http://en.wikipedia.org/wiki/Scientific_method) *and people should not be taught that it is.*" Another comment by Hynek regarding the frequent dismissal of UFO reports by astronomers was, "*Close questioning revealed they knew nothing of the actual sightings, of their frequency or anything much about them, and therefore cannot be taken seriously. This is characteristic of scientists in general when speaking about subjects which are not in their own immediate field of concern.*"

While the above Ufologists maintain that mainstream science has not held to the scientific method, it is of note that to date there has been no consistent, repeatable, independently verifiable, proof that UFO's, or extraterrestrial life at all, exists.

Critics like Robert Sheaffer have accused ufology of having a "credulity explosion." He observes a trend of increasingly sensational ideas steadily gaining popularity within ufology. Sheaffer remarked "the kind of stories generating excitement and attention in any given year would have been rejected by mainstream Ufologists a few years earlier for being too outlandish."

## UFO researchers

*Main article:* [*List of Ufologists*](http://en.wikipedia.org/wiki/List_of_Ufologists)

Although it is sometimes contended that astronomers never report UFOs, the Air Force's [Project Blue Book](http://en.wikipedia.org/wiki/Project_Blue_Book) files indicate that approximately 1% of all their reports came from amateur and professional astronomers or other users of telescopes (such as missile trackers or surveyors). In the 1970s, astrophysicist [Peter A. Sturrock](http://en.wikipedia.org/wiki/Peter_A._Sturrock) conducted two surveys of the [American Institute of Aeronautics and Astronautics](http://en.wikipedia.org/wiki/American_Institute_of_Aeronautics_and_Astronautics) and [American Astronomical Society](http://en.wikipedia.org/wiki/American_Astronomical_Society). About 5% of the members polled indicated that they had had UFO sightings. [[3]](http://www.ufoevidence.org/documents/doc592.htm) [[4]](http://www.ufoevidence.org/documents/doc604.htm) In 1980, a survey of 1800 members of various amateur astronomer associations by Gert Helb and astronomer [J. Allen Hynek](http://en.wikipedia.org/wiki/J._Allen_Hynek) of the [Center for UFO Studies](http://en.wikipedia.org/wiki/Center_for_UFO_Studies) (CUFOS) found that 24% responded "yes" to the question "Have you ever observed an object which resisted your most exhaustive efforts at identification?"

Astronomer [Clyde Tombaugh](http://en.wikipedia.org/wiki/Clyde_Tombaugh), who admitted to 6 UFO sightings, including 3 [green fireballs](http://en.wikipedia.org/wiki/Green_fireballs) supported the Extraterrestrial hypothesis (ETH) for UFOs and stated he thought scientists who dismissed it without study were being "unscientific." Another astronomer was Dr. [Lincoln LaPaz](http://en.wikipedia.org/wiki/Lincoln_LaPaz), who had headed the Air Force's investigation into the green fireballs and other UFO phenomena in New Mexico. LaPaz reported 2 personal sightings, one of a green fireball, the other of an anomalous disc-like object. Even later UFO debunker Dr. [Donald Menzel](http://en.wikipedia.org/wiki/Donald_Menzel) filed [a UFO report in 1949](http://en.wikipedia.org/wiki/Donald_Menzel#Menzel.27s_1949_UFO_Sighting).

### Physicists and UFOs

Certain physicists, some working for the US Military, others said to be associated with the [US Intelligence Community](http://en.wikipedia.org/wiki/United_States_Intelligence_Community) are seriously interested in UFOs as extraterrestrial flying machines. Dr. [Jack Sarfatti](http://en.wikipedia.org/wiki/Jack_Sarfatti), in his book "Super Cosmos" (2005), has an extremely detailed "theory" based on the recent discovery of the [repulsive](http://en.wikipedia.org/wiki/Repulsion_%28disambiguation%29) [anti-gravity](http://en.wikipedia.org/wiki/Anti-gravity) [field](http://en.wikipedia.org/wiki/Field_%28physics%29) "[dark energy](http://en.wikipedia.org/wiki/Dark_energy)" that is accelerating the expansion of the [3D](http://en.wikipedia.org/wiki/Three_dimensional_space) space of our universe. Sarfatti also cites Alcubierre's [weightless](http://en.wikipedia.org/wiki/Weightless) [warp drive](http://en.wikipedia.org/wiki/Warp_drive) without [time dilation](http://en.wikipedia.org/wiki/Time_dilation) as essential conditions for "propellantless propulsion" in what Puthoff has called "metric engineering." In his book "The Physics of Star Trek," [Lawrence M. Krauss](http://en.wikipedia.org/wiki/Lawrence_M._Krauss) argues that it would be physically impossible to concentrate enough energy in one place to "warp" the fabric of space.

According to other physicists, taking advantage of certain experimentally verified quantum phenomena, such as the [Casimir effect](http://en.wikipedia.org/wiki/Casimir_effect), may make the construction of [Alcubierre](http://en.wikipedia.org/wiki/Alcubierre_drive) type [warp drives](http://en.wikipedia.org/wiki/Warp_drive) theoretically possible. However, if certain [quantum inequalities](http://en.wikipedia.org/wiki/Quantum_inequalities) conjectured by Ford and Roman (1996) hold, then the energy requirements for some warp drives may be absurdly gigantic, e.g. the energy -1067g might be required to transport a small spaceship across the Milky Way galaxy. Counterarguments to these apparent problems have been offered (Krasnikov, 2003), but not all physicists are convinced they can be overcome. (For a detailed discussion, see: [Alcubierre drive](http://en.wikipedia.org/wiki/Alcubierre_drive).)

## Studies

Various public scientific studies over the past half century have examined UFO reports in detail. None of these studies have officially concluded that any reports are caused by extraterrestrial spacecraft (e.g., Seeds 1995:A4). Some studies were neutral in their conclusions, but argued the inexplicable core cases called for continued scientific study. Examples are the Sturrock Panel study of 1998 and the 1970 [AIAA](http://en.wikipedia.org/wiki/AIAA) review of the [Condon Report](http://en.wikipedia.org/wiki/Condon_Report). Other private or governmental studies, some secret, have concluded in favor of the ETH, or have had members who disagreed with the official conclusions. The following are examples of such studies and individuals:

* One of the earliest government studies to come to a secret ETH conclusion was [Project Sign](http://en.wikipedia.org/wiki/Project_Sign), the first official Air Force UFO investigation. In 1948, they wrote a [top-secret intelligence estimate](http://en.wikipedia.org/wiki/Estimate_of_the_Situation) to that effect. The [Air Force Chief of Staff](http://en.wikipedia.org/wiki/Air_Force_Chief_of_Staff) ordered it destroyed. The existence of this suppressed report was revealed by several insiders who had read it, such as astronomer and USAF consultant Dr. [J. Allen Hynek](http://en.wikipedia.org/wiki/J._Allen_Hynek) and [Edward J. Ruppelt](http://en.wikipedia.org/wiki/Edward_J._Ruppelt), the first head of the USAF's [Project Blue Book](http://en.wikipedia.org/wiki/Project_Blue_Book). (Ruppelt, Chapter 3)
* An early U.S. Army study, of which little is known, was called the [Interplanetary Phenomenon Unit](http://en.wikipedia.org/wiki/Interplanetary_Phenomenon_Unit) (IPU). In 1987, British UFO researcher [Timothy Good](http://en.wikipedia.org/wiki/Timothy_Good) received a letter confirming the existence of the IPU from the Army Director of Counter-intelligence, in which it was stated, "...the aforementioned Army unit was disestablished during the late 1950s and never reactivated. All records pertaining to this unit were surrendered to the U.S. [Air Force Office of Special Investigations](http://en.wikipedia.org/wiki/Air_Force_Office_of_Special_Investigations) in conjunction with operation BLUEBOOK." The IPU records have never been released.

November 1948 USAF Top Secret document citing extraterrestrial opinion

* In 1967, Greek physicist Paul Santorini, a [Manhattan Project](http://en.wikipedia.org/wiki/Manhattan_Project) scientist, publicly stated that a 1947 Greek government investigation that he headed into the European [Ghost rockets](http://en.wikipedia.org/wiki/Ghost_rockets) of 1946 quickly concluded that they were not missiles. Santorini claimed the investigation was then quashed by military officials from the U.S., who knew them to be extraterrestrial, because there was no defense against the advanced technology and they feared widespread panic should the results become public.
* A 1948 Top Secret USAF Europe document (at right) states that Swedish air intelligence informed them that at least some of their investigators into the ghost rockets and flying saucers concluded they had extraterrestrial origins: "...[Flying saucers] have been reported by so many sources and from such a variety of places that we are convinced that they cannot be disregarded and must be explained on some basis which is perhaps slightly beyond the scope of our present intelligence thinking. When officers of this Directorate recently visited the Swedish Air Intelligence Service... their answer was that some reliable and fully technically qualified people have reached the conclusion 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 unidentified technology, possibly outside the earth."
* Various European countries conducted a secret joint study in 1954, also concluding that UFOs were extraterrestrial. This study was revealed by German rocketry pioneer [Hermann Oberth](http://en.wikipedia.org/wiki/Hermann_Oberth), a member of the study, who also made many public statements supporting the ETH.
* In 1958, Brazil's main UFO investigator, Dr. Olavo T. Fuentes wrote a letter to the American UFO group [APRO](http://en.wikipedia.org/wiki/APRO) summarizing a briefing he had received from two Brazilian Naval intelligence officers. Fuentes said he was told that every government and military on Earth was aware that UFOs were extraterrestrial craft and there was absolute proof of this in the form of several crashed craft. The subject was classified Top Secret by the world's militaries. The objects were deemed dangerous and hostile when attacked, many planes had been lost, and it was generally believed that Earth was undergoing an invasion of some type, perhaps a police action to keep us confined to the planet. This information had to be withheld from the public by any means necessary because of the likelihood of widespread panic and social breakdown.
* An [FBI](http://en.wikipedia.org/wiki/FBI) field office letter to the FBI Director, dated January 31, 1949, stated "...the matter of 'Unidentified Aircraft' or 'Unidentified Aerial Phenomena,' otherwise known as 'Flying Discs,' 'Flying Saucers,' and ['Balls of Fire'](http://en.wikipedia.org/wiki/Green_fireballs) ...*is considered Top Secret by Intelligence Officers of both the Army and Air Forces.*" (emphasis included in original)
* During the height of the flying saucer epidemic of July 1952, including highly publicized radar/visual and jet intercepts over [Washington, D.C.](http://en.wikipedia.org/wiki/Washington%2C_D.C.), the [FBI](http://en.wikipedia.org/wiki/FBI) was informed by the Air Force Directorate of Intelligence that they thought the "flying saucers" were either "optical illusions or atmospheric phenomena" but then added that, "some Military officials are seriously considering the possibility of interplanetary ships." [FBI document](http://www.rense.com/general30/inter.htm)
* The [CIA](http://en.wikipedia.org/wiki/CIA) started their own internal scientific review the following day. Some CIA scientists were also seriously considering the ETH. An early memo from August was very skeptical, but also added, "...as long as a series of reports remains 'unexplainable' (interplanetary aspects and alien origin not being thoroughly excluded from consideration) caution requires that intelligence continue coverage of the subject." A report from later that month was similarly skeptical but nevertheless concluded "...sightings of UFOs reported at [Los Alamos](http://en.wikipedia.org/wiki/Los_Alamos_National_Laboratory) and [Oak Ridge](http://en.wikipedia.org/wiki/Oak_Ridge_National_Laboratory), at a time when the background [radiation](http://en.wikipedia.org/wiki/Radiation) count had risen inexplicably. Here we run out of even 'blue yonder' explanations that might be tenable, and we still are left with numbers of incredible reports from credible observers." A December 1952 memo from the Assistant CIA Director of Scientific Intelligence (O/SI) was much more urgent: "...the reports of incidents convince us that there is something going on that must have immediate attention. Sightings of unexplained objects at great altitudes and traveling at highs speeds in the vicinity of U.S. defense installation are of such nature that they are not attributable to natural phenomena or known types of aerial vehicles." Some of the memos also made it clear that CIA interest in the subject was not to be made public, partly in fear of possible public panic. (Good,331-335)
* The CIA organized the January 1953 [Robertson Panel](http://en.wikipedia.org/wiki/Robertson_Panel) of scientists to debunk the data collected by the Air Force's [Project Blue Book](http://en.wikipedia.org/wiki/Project_Blue_Book). This included an engineering analysis of UFO maneuvers by Blue Book (including a motion picture film analysis by Naval scientists) that had concluded UFOs were under intelligent control and likely extraterrestrial.
* Extraterrestrial "believers" within [Project Blue Book](http://en.wikipedia.org/wiki/Project_Blue_Book) including Major Dewey Fournet, in charge of the engineering analysis of UFO motion. Director [Edward J. Ruppelt](http://en.wikipedia.org/wiki/Edward_J._Ruppelt) is also thought to have held these views, though expressed in private, not public. Another defector from the official Air Force party line was consultant Dr. [J. Allen Hynek](http://en.wikipedia.org/wiki/J._Allen_Hynek), who started out as a staunch skeptic. After 20 years of investigation, he changed positions and generally supported the ETH. He became the most publicly known UFO advocate scientist in the 1970s and 1980s.
* The first CIA Director, Vice Admiral [Roscoe H. Hillenkoetter](http://en.wikipedia.org/wiki/Roscoe_H._Hillenkoetter), stated in a signed statement to Congress, also reported in the [New York Times](http://en.wikipedia.org/wiki/New_York_Times), [February 28](http://en.wikipedia.org/wiki/February_28), [1960](http://en.wikipedia.org/wiki/1960), "It is time for the truth to be brought out... Behind the scenes high-ranking Air Force officers are soberly concerned about the UFOs. However, through official secrecy and ridicule, many citizens are led to believe the unknown flying objects are nonsense... I urge immediate Congressional action to reduce the dangers from secrecy about unidentified flying objects." In 1962, in his letter of resignation from [NICAP](http://en.wikipedia.org/wiki/NICAP), he told director [Donald Keyhoe](http://en.wikipedia.org/wiki/Donald_Keyhoe), "I know the UFOs are not U.S. or Soviet devices. All we can do now is wait for some actions by the UFOs."
* Although the 1968 [Condon Report](http://en.wikipedia.org/wiki/Condon_Report) came to a negative conclusion (written by [Condon](http://en.wikipedia.org/wiki/Edward_Condon)), it is known that many members of the study strongly disagreed with Condon's methods and biases. Most quit the project in disgust or were fired for insubordination. A few became ETH supporters. Perhaps the best known example is Dr. David Saunders, who in his 1968 book *UFOs? Yes* lambasted Condon for extreme bias and ignoring or misrepresenting critical evidence. Saunders wrote, "It is clear... that the sightings have been going on for too long to explain in terms of straightforward terrestrial intelligence. It is in this sense that ETI (Extra Terrestrial Intelligence) stands as the `least implausible' explanation of `real UFOs'."
* [Nick Pope](http://en.wikipedia.org/wiki/Nick_Pope), a Higher Scientific Officer in the [UK](http://en.wikipedia.org/wiki/UK) [MOD](http://en.wikipedia.org/wiki/MOD) who was responsible for the UK government UFO desk for a number of years, is an advocate of the ETH based on the inexplicable cases he reviewed, such as the [Rendlesham UFO incident](http://en.wikipedia.org/wiki/Rendlesham_UFO_incident), although the British government has never made such claims.
* [Jean-Jacques Velasco](http://en.wikipedia.org/w/index.php?title=Jean-Jacques_Velasco&action=edit&redlink=1), the head of the official French UFO investigation SEPRA, wrote a book in 2005 saying that 14% of the 5800 cases studied by SEPRA were utterly inexplicable and extraterrestrial in origin. [Yves Sillard](http://en.wikipedia.org/w/index.php?title=Yves_Sillard&action=edit&redlink=1), the head of the new official French UFO investigation GEIPAN and former head of the French space agency [CNES](http://en.wikipedia.org/wiki/CNES), echoes Velasco's comments and adds the U.S. is guilty of covering up this information. Again, this isn't the official public posture of SEPRA, CNES, or the French government. (CNES recently announced that their 5800 case files will be placed on the Internet starting March 2007.)
* The 1999 French COMETA committee of high-level military analysts/generals and aerospace engineers/scientists declared the ETH was the best hypothesis for the unexplained cases.

## Physical evidence

Besides visual sightings, cases sometimes have an indirect physical evidence, including many cases studied by the military and various government agencies of different countries. Indirect physical evidence would be data obtained from afar, such as radar contact and photographs. More direct physical evidence involves physical interactions with the environment at close range—Hynek's "close encounter" or Vallee's "Type-I" cases—which include "landing traces," [electromagnetic interference](http://en.wikipedia.org/wiki/Electromagnetic_interference), and physiological/biological effects.

* [Radar](http://en.wikipedia.org/wiki/Radar) contact and tracking, sometimes from multiple sites. These are often considered among the best cases since they usually involve trained military personnel and control tower operators, simultaneous visual sightings, and aircraft intercepts. One such recent example were the mass sightings of large, silent, low-flying [black triangles](http://en.wikipedia.org/wiki/Black_triangle_%28UFO%29) in 1989 and 1990 over Belgium, tracked by multiple [NATO](http://en.wikipedia.org/wiki/NATO) radar and jet interceptors, and investigated by Belgium's military (included photographic evidence). Another famous case from 1986 was the [JAL](http://en.wikipedia.org/wiki/Japan_Airlines) 1628 case over Alaska investigated by the [FAA](http://en.wikipedia.org/wiki/FAA).
* Photographic evidence, including still photos, movie film, and video, including some in the [infrared](http://en.wikipedia.org/wiki/Infrared) spectrum (rare).
* Recorded visual spectrograms (extremely rare) — (see [Spectrometer](http://en.wikipedia.org/wiki/Spectrometer))
* Recorded [gravimetric](http://en.wikipedia.org/wiki/Gravimetric) and [magnetic](http://en.wikipedia.org/wiki/Magnetic) disturbances (extremely rare)
* Landing physical trace evidence, including ground impressions, burned and/or desiccated soil, burned and broken foliage, magnetic anomalies, increased radiation levels, and metallic traces. See, e.g. [Height 611 UFO Incident](http://en.wikipedia.org/wiki/Height_611_UFO_Incident) or the 1964 [Lonnie Zamora](http://en.wikipedia.org/wiki/Lonnie_Zamora)'s [Socorro](http://en.wikipedia.org/wiki/Socorro%2C_New_Mexico), [New Mexico](http://en.wikipedia.org/wiki/New_Mexico) encounter, considered one of the most inexplicable of the USAF [Project Blue Book](http://en.wikipedia.org/wiki/Project_Blue_Book) cases). A well-known example from December 1980 was the [USAF](http://en.wikipedia.org/wiki/USAF) [Rendlesham Forest Incident](http://en.wikipedia.org/wiki/Rendlesham_Forest_Incident) in England. Another less than 2 weeks later, in January 1981, occurred in Trans-en-Provence and was investigated by [GEPAN](http://en.wikipedia.org/wiki/GEIPAN), then France's official government UFO-investigation agency. [Project Blue Book](http://en.wikipedia.org/wiki/Project_Blue_Book) head [Edward J. Ruppelt](http://en.wikipedia.org/wiki/Edward_J._Ruppelt) described a classic 1952 CE2 case involving a patch of charred grass roots. Catalogs of several thousand such cases have been compiled, particularly by researcher Ted Phillips.
* Physiological effects on people and animals including temporary paralysis, skin burns and rashes, [corneal](http://en.wikipedia.org/wiki/Cornea) burns, and symptoms superficially resembling [radiation poisoning](http://en.wikipedia.org/wiki/Radiation_poisoning), such as the [Cash-Landrum incident](http://en.wikipedia.org/wiki/Cash-Landrum_incident) in 1980. One such case dates back to 1886, a Venezuelan incident reported in [Scientific American](http://en.wikipedia.org/wiki/Scientific_American) magazine.
* So-called animal/[cattle mutilation](http://en.wikipedia.org/wiki/Cattle_mutilation) cases, that some feel are also part of the UFO phenomenon. Such cases can and have been analyzed using [forensic science](http://en.wikipedia.org/wiki/Forensic_science) techniques.
* Biological effects on plants such as increased or decreased growth, germination effects on seeds, and blown-out stem nodes (usually associated with physical trace cases or [crop circles](http://en.wikipedia.org/wiki/Crop_circles))
* [Electromagnetic interference](http://en.wikipedia.org/wiki/Electromagnetic_interference) (EM) effects, including stalled cars, power black-outs, radio/TV interference, magnetic compass deflections, and aircraft navigation, communication, and engine disruption. A list of over 30 such aircraft EM incidents was compiled by [NASA](http://en.wikipedia.org/wiki/NASA) scientist Dr. [Richard F. Haines](http://en.wikipedia.org/w/index.php?title=Richard_F._Haines&action=edit&redlink=1). A famous [1976 military case](http://en.wikipedia.org/wiki/1976_Tehran_UFO_incident) over [Tehran](http://en.wikipedia.org/wiki/Tehran), recorded in [CIA](http://en.wikipedia.org/wiki/CIA) and [DIA](http://en.wikipedia.org/wiki/Defense_Intelligence_Agency) classified documents, resulted in communication losses in multiple aircraft and weapons system failure in an [F-4 Phantom II](http://en.wikipedia.org/wiki/F-4_Phantom_II) jet interceptor as it was about to fire a missile on one of the UFOs. This was also a radar/visual case. (Fawcett & Greenwood, 81-89; Good, 318-322, 497-502)
* Remote radiation detection, some noted in [FBI](http://en.wikipedia.org/wiki/FBI) and [CIA](http://en.wikipedia.org/wiki/CIA) documents occurring over government nuclear installations at [Los Alamos National Laboratory](http://en.wikipedia.org/wiki/Los_Alamos_National_Laboratory) and [Oak Ridge National Laboratory](http://en.wikipedia.org/wiki/Oak_Ridge_National_Laboratory) in 1950, also reported by [Project Blue Book](http://en.wikipedia.org/wiki/Project_Blue_Book) director Ed Ruppelt in his book.
* Actual hard physical evidence cases, such as 1957, [Ubatuba](http://en.wikipedia.org/wiki/Ubatuba), Brazil, [magnesium](http://en.wikipedia.org/wiki/Magnesium) fragments analyzed by the Brazilian government and in the [Condon Report](http://en.wikipedia.org/wiki/Condon_Report) and by others. The 1964 Socorro/[Lonnie Zamora](http://en.wikipedia.org/wiki/Lonnie_Zamora) incident also left metal traces, analyzed by [NASA](http://en.wikipedia.org/wiki/NASA).
* Misc.: Recorded electromagnetic emissions, such as microwaves detected in the well-known 1957 RB-47 surveillance aircraft case, which was also a visual and radar case; polarization rings observed around a UFO by a scientist, explained by Dr. [James Harder](http://en.wikipedia.org/wiki/James_Harder) as intense magnetic fields from the UFO causing the [Faraday effect](http://en.wikipedia.org/wiki/Faraday_effect).

These various reported physical evidence cases have been studied by various scientist and engineers, both privately and in official governmental studies (such as [Project Blue Book](http://en.wikipedia.org/wiki/Project_Blue_Book), the [Condon Committee](http://en.wikipedia.org/wiki/Condon_Committee), and the French [GEPAN/SEPRA](http://en.wikipedia.org/wiki/GEIPAN)). A comprehensive scientific review of physical evidence cases was carried out by the 1998 Sturrock UFO panel.

Attempts have been made to [reverse engineer](http://en.wikipedia.org/wiki/Reverse_engineering) the possible [physics](http://en.wikipedia.org/wiki/Physics) behind UFOs through analysis of both eyewitness reports and the physical evidence. Examples are former [NASA](http://en.wikipedia.org/wiki/NASA) and nuclear engineer James McCampbell in his book *Ufology* [online](http://www.nicap.org/ufology/ufology.htm), [NACA](http://en.wikipedia.org/wiki/National_Advisory_Committee_for_Aeronautics)/[NASA](http://en.wikipedia.org/wiki/NASA) engineer [Paul R. Hill](http://en.wikipedia.org/wiki/Paul_R._Hill) in his book *Unconventional Flying Objects*, and German rocketry pioneer [Hermann Oberth](http://en.wikipedia.org/wiki/Hermann_Oberth). Among subjects tackled by McCampbell, Hill, and Oberth was the question of how UFOs can fly at [supersonic](http://en.wikipedia.org/wiki/Supersonic) speeds without creating a [sonic boom](http://en.wikipedia.org/wiki/Sonic_boom). McCampbell's proposed solution of a [microwave plasma](http://en.wikipedia.org/wiki/Microwave_plasma) parting the air in front of the craft is currently being researched by Dr. [Leik Myrabo](http://en.wikipedia.org/wiki/Leik_Myrabo), Professor of Engineering Physics at the [Rensselaer Polytechnic Institute](http://en.wikipedia.org/wiki/Rensselaer_Polytechnic_Institute) as a possible advance in [hypersonic](http://en.wikipedia.org/wiki/Hypersonic) flight.[1995 *Aviation Week* article](http://www.abovetopsecret.com/pages/airspike.html)

## Psychology

The study of UFO claims over the years has led to valuable discoveries about [atmospheric phenomena](http://en.wikipedia.org/wiki/Meteorology) and psychology. In [psychology](http://en.wikipedia.org/wiki/Psychology), the study of UFO sightings has revealed information on misinterpretation, perceptual illusions, [hallucination](http://en.wikipedia.org/wiki/Hallucination) and fantasy-prone personality. Many have questioned the reliability of [hypnosis](http://en.wikipedia.org/wiki/Hypnosis) in [UFO abduction](http://en.wikipedia.org/wiki/UFO_abduction) cases.

Psychologists point out that almost all UFO-related claims are based solely on eyewitness and [anecdotal](http://en.wikipedia.org/wiki/Anecdotal) evidence, which is extremely unreliable. It has further been shown that memory of an event can be unconsciously altered to suit a desired interpretation of what was remembered. For example, a person who has a supposed UFO sighting may simply be reinterpreting an older memory to fit a desired explanation. Many skeptics believe this to be the case with the [Roswell incident](http://en.wikipedia.org/wiki/Roswell_incident) and many other UFO claims.

## UFO categorization

Some researchers recommend that observations be classified according to the features of the phenomenon or object that are reported or recorded. Typical categories include:

* Saucer, toy-top, or disk-shaped “craft” without visible or audible propulsion. (day and night)
* Rapidly-moving lights or lights with apparent ability to rapidly change direction and then suddenly stop, impossible for conventional aircraft.
* [Large triangular “craft” or triangular light pattern](http://en.wikipedia.org/wiki/Black_triangle_%28UFO%29)
* Cigar-shaped “craft” with lighted windows (Meteor fireballs are sometimes reported this way).
* Other: chevrons, equilateral triangles, spheres, domes, diamonds, shapeless black masses, eggs, and cylinders.

### Hynek system

[J. Allen Hynek](http://en.wikipedia.org/wiki/J._Allen_Hynek) developed another commonly used system of description, dividing sightings into six categories. It first separates sightings into distant- and close-encounter categories, arbitrarily setting 500 feet as the cutoff point. It then subdivides these close and distant categories based on appearance or special features. The three distant-encounter categories are:

* Nocturnal Lights (NL): Anomalous lights seen in the night sky.
* Daylight Discs (DD): Any anomalous object, generally but not necessarily “discoidal”, seen in the distant daytime sky.
* Radar/Visual cases (RV). Objects seen simultaneously by eye and on radar.

Subgroups of the distant category of sightings correlate with evidentiary value. RV cases are usually considered to have the highest value because of radar corroboration, whereas NL cases have the lowest because it is so easy to mistake lights seen at night for prosaic phenomena such as meteors, bright stars, or aircraft. RV reports are also fewest in number, while NL are most common.

Hynek also defined three “[close encounter](http://en.wikipedia.org/wiki/Close_encounter)” (CE) subcategories:

* CE1: Strange objects seen nearby but without physical interaction with the environment.
* CE2: A CE1 case that leaves physical evidence (e.g. soil depressions, vegetation damage) or causes [electromagnetic interference](http://en.wikipedia.org/wiki/Electromagnetic_interference) (see below).
* CE3: CE1 or CE2 cases where “occupants” or entities are seen. (Hence the title of [Steven Spielberg](http://en.wikipedia.org/wiki/Steven_Spielberg)’s movie [*Close Encounters of the Third Kind*](http://en.wikipedia.org/wiki/Close_Encounters_of_the_Third_Kind).)

**From** [**UFO Casebook**](http://en.wikipedia.org/w/index.php?title=UFO_Casebook&action=edit&redlink=1)**:**

* CE4+: aliens communicate with the observer, even abduct, experiment on the observers, others. [UFO Casebook](http://en.wikipedia.org/w/index.php?title=UFO_Casebook&action=edit&redlink=1) lists additional categories, in which the UFO and/or alien is captured/destroyed by military forces and/or civilians.

Like the RV cases, CE cases are considered higher in evidentiary value because they include measurable physical effects, and because objects seen up close are less likely to be the result of misperception. Like the RV cases, these tend to be relatively rare.

Hynek’s CE classification system has since been expanded to include such things as alleged [alien abductions](http://en.wikipedia.org/wiki/Alien_abductions) and [cattle mutilation](http://en.wikipedia.org/wiki/Cattle_mutilation) phenomena.

### Vallee system

[Jacques Vallee](http://en.wikipedia.org/wiki/Jacques_Vallee) has devised a UFO classification system which is preferred by many UFO investigators over Hynek’s system as it is considerably more descriptive than Hynek’s, especially in terms of the reported behavior of UFOs.

**Type - I** (a, b, c, d) - Observation of an unusual object, spherical discoidal, or of another [geometry](http://en.wikipedia.org/wiki/Geometry), on or situated close to the ground (tree height, or lower), which may be associated with traces - thermal, luminous, or mechanical effects.

* a - On or near ground.
* b - Near or over body of water.
* c - Occupants appear to display interest in witnesses by gestures or luminous signals.
* d - Object appears to be “scouting” a terrestrial vehicle.

**Type - II** (a, b, c) - Observation of an unusual object with vertical cylindrical formation in the sky, associated with a diffuse cloud. This phenomenon has been given various names such as “cloud-cigar” or “cloud-sphere.”

* a - Moving erratically through the sky
* b - Object is stationary and gives rise to secondary objects (sometimes referred to as “satellite objects”)
* c - Object is surrounded by secondary objects

**Type - III** (a, b, c, d, e) - Observation of an unusual object of spherical, discoidal or elliptical shape, stationary in the sky.

* a - Hovering between two periods of motion with “falling-leaf” descent, up and down, or [pendulum](http://en.wikipedia.org/wiki/Pendulum) motion
* b - Interruption of continuous flight to hover and then continue motion
* c - Alters appearance while hovering - e.g., change of luminosity, generation of secondary object, etc.
* d - “[Dogfights](http://en.wikipedia.org/wiki/Dogfight)” or swarming among several objects
* e - Trajectory abruptly altered during continuous flight to fly slowly above a certain area, circle, or suddenly change course

**Type IV** (a, b, c, d) - Observation of an unusual object in continuous flight.

* a - Continuous flight
* b - Trajectory affected by nearby conventional aircraft
* c - Formation flight
* d - Wavy or zig-zag trajectory

**Type V** (a, b, c) - Observation of an unusual object of indistinct appearance, i.e., appearing to be not fully material or solid in structure.

* a - Extended apparent diameter, non-[point source](http://en.wikipedia.org/wiki/Point_source) luminous objects (“fuzzy”)
* b - Star like objects (point source), motionless for extended periods
* c - Star like objects rapidly crossing the sky, possibly with peculiar trajectories

## Funding issues

Astrophysicist [Peter A. Sturrock](http://en.wikipedia.org/wiki/Peter_A._Sturrock) suggests that a lack of funding is a major factor in the institutional disinterest in UFO’s: "If the [Air Force](http://en.wikipedia.org/wiki/U.S._Air_Force) were to make available, say, $50 million per year for ten years for UFO research, it is quite likely that the subject would look somewhat less disreputable ... however, an agency is unlikely to initiate such a program at any level until scientists are supportive of such an initiative. We see that there is a chicken-and-egg program. It would be more sensible, and more acceptable to the scientific community, if research began at a low level."

## Hypotheses involving the objective existence of UFOs

These hypotheses speculate that the phenomena derives wholly or in part from a phenomenon, rather than the mind of the observer.

### The extraterrestrial hypothesis

The [extraterrestrial hypothesis](http://en.wikipedia.org/wiki/Extraterrestrial_hypothesis) (**ETH**) theorizes that some UFO sightings are [alien](http://en.wikipedia.org/wiki/Extraterrestrial_life) [spacecraft](http://en.wikipedia.org/wiki/Spacecraft).

#### The staging hypothesis

* A sub-set of the ETH, the **Staging Hypothesis**, prevalent up until the [1980s](http://en.wikipedia.org/wiki/1980s), speculated that extraterrestrials have "stage-managed" encounters as a deliberate policy to "educate"

#### The hostility hypothesis

[Wilhelm Reich](http://en.wikipedia.org/wiki/Wilhelm_Reich) and [Jerome Eden](http://en.wikipedia.org/w/index.php?title=Jerome_Eden&action=edit&redlink=1) have the hypothesis that UFOs - or at least some of them - or the beings traveling in the UFOs - are hostile. They claim that the *waste product* of the UFO engines is what they call "Deadly [Orgone](http://en.wikipedia.org/wiki/Orgone)" (DOR) which ruins the atmosphere, dries it out, and is one cause, if not the most important cause, of the development of [deserts](http://en.wikipedia.org/wiki/Desert). They found this during their operations with the "[Cloudbuster](http://en.wikipedia.org/wiki/Cloudbuster)".

Eden, just like several other researchers, attributes the [Cattle mutilations](http://en.wikipedia.org/wiki/Cattle_mutilation), cases such as "Snippy the horse", to aliens, and claims that these beings abduct persons, manipulate their feelings and thoughts, cause military aircraft to crash or disappear, but they do not make open contact to government or military. That they even try to "educate" mankind in the way that the human beings develop a spiritual attitude towards aliens and UFOs, hoping that the aliens arrive as the saviors for the big problems of mankind and earth, when, in fact, their agenda involves exploiting Earth's natural resources and destroying its water and atmosphere.

### The advanced human aircraft hypothesis

This is a theory that all or some UFO sightings are advanced, secret or experimental aircraft of earthly origin.

* During the 1980s, there were reports of "[black triangle](http://en.wikipedia.org/wiki/Black_triangle_%28UFO%29)" UFOs. Some of these were the secret [F-117 Nighthawk](http://en.wikipedia.org/wiki/F-117_Nighthawk), which became known to the public in November 1988.
* [Nazi Germany](http://en.wikipedia.org/wiki/Nazi_Germany) is known to have experimented with circular jet planes using the [Coanda effect](http://en.wikipedia.org/wiki/Coanda_effect). At least one of the scientists involved was taken to the USA after [WWII](http://en.wikipedia.org/wiki/World_War_II). Experiments with these designs and their descendants down the years may explain many sightings of circular UFO's. See [Military flying saucers](http://en.wikipedia.org/wiki/Military_flying_saucers).

There is a theory that the secret groups developing these aircraft in the USA, have been encouraging ufology to follow the "alien spacecraft" line of thought, to cover up for sightings.

### The interdimensional hypothesis (a.k.a. "cosmic trickster", "ultra-terrestrial" hypothesis)

The **Interdimensional Hypothesis** has two meanings here. See [Interdimensional hypothesis](http://en.wikipedia.org/wiki/Interdimensional_hypothesis).

* That some UFO sightings are alien spacecraft who have come from a [parallel dimension](http://en.wikipedia.org/wiki/Parallel_universe_%28fiction%29) or similar, or are human-manufactured craft from the far future.
* The theory, related to the [Psychosocial Hypothesis](http://en.wikipedia.org/wiki/Psychosocial_Hypothesis), that [angelic](http://en.wikipedia.org/wiki/Angel), [demonic](http://en.wikipedia.org/wiki/Demons) and other [supernatural](http://en.wikipedia.org/wiki/Supernatural) manifestations down the centuries were caused by [aliens](http://en.wikipedia.org/wiki/Extraterrestrial_life) trying to control human destiny, and that or some UFO sightings are part of this process. (This overlaps considerably with the Staging Hypothesis.)

### Atmosphere beast hypothesis

The theory of [Trevor James Constable](http://en.wikipedia.org/w/index.php?title=Trevor_James_Constable&action=edit&redlink=1) (a.k.a. Trevor James) speculated that UFO sightings involve the sighting of exotic unknown life otherwise known as [Sky Critters](http://en.wikipedia.org/wiki/Atmospheric_beast), creatures similar or identical to [Rods](http://en.wikipedia.org/wiki/Rod_%28cryptozoology%29), a theory also held by [cryptozoologist](http://en.wikipedia.org/wiki/Cryptozoology) [Ivan T. Sanderson](http://en.wikipedia.org/wiki/Ivan_T._Sanderson).

Constable also worked with the [cloud buster](http://en.wikipedia.org/wiki/Cloudbuster). However, some have claimed that he does not understand what the DOR ("Deadly Orgone") means.[[*citation needed*](http://en.wikipedia.org/wiki/Wikipedia%3ACitation_needed)] There is the possibility that the infrared photos of the critters in his book are artifacts.

### Aliens as supernatural beings

See [Paranormal and Occult Hypotheses About UFOs](http://en.wikipedia.org/wiki/Paranormal_and_Occult_Hypotheses_About_UFOs)

## UFOs as perception or illusion

### The natural explanation hypothesis

This is a theory that most UFO sightings are misunderstood phenomena such as [ball lightning](http://en.wikipedia.org/wiki/Ball_lightning) or by a [visual illusions](http://en.wikipedia.org/wiki/Visual_illusion). See [Identified Flying Objects (IFOs)](http://en.wikipedia.org/wiki/Identified_flying_object).

### Psychosocial hypothesis

This is a theory that some UFO sightings are [hallucinations](http://en.wikipedia.org/wiki/Hallucination) or fantasies and are caused by the same mechanism as various [occult](http://en.wikipedia.org/wiki/Occult), [paranormal](http://en.wikipedia.org/wiki/Paranormal), [supernatural](http://en.wikipedia.org/wiki/Supernatural) or [religious](http://en.wikipedia.org/wiki/Religion) experiences (compare alleged sightings of the [Blessed Virgin Mary](http://en.wikipedia.org/wiki/Blessed_Virgin_Mary)). See article, [Psychosocial Hypothesis](http://en.wikipedia.org/wiki/Psychosocial_Hypothesis).

The route followed by these misperceptions can be influenced by the environment that the perceiver was brought up in as a child: [fairy stories](http://en.wikipedia.org/wiki/Fairy_tale), or one or other [religion](http://en.wikipedia.org/wiki/Religion), or [science fiction](http://en.wikipedia.org/wiki/Science_fiction), etc.: for example, one perceiver may see [fairies](http://en.wikipedia.org/wiki/Fairy) where another sees [Greys](http://en.wikipedia.org/wiki/Greys).

[Carl G. Jung](http://en.wikipedia.org/wiki/Carl_G._Jung), the Swiss analytical psychologist, published a book about UFOs in 1957 (*Flying Saucers: A Modern Myth of Things Seen in the Skies*). Jung explained UFOs -- mostly without addressing the question of their existence -- as objects of the collective unconscious and modern archetypes. (In a brief final chapter of his book, however, Jung also expressed his opinion that some UFOs were real "nuts-and-bolts" crafts, citing corroborating physical evidence.)

### UFO organizations

*Main article:* [*UFO organizations*](http://en.wikipedia.org/wiki/UFO_organizations)

* [United States Air Force](http://en.wikipedia.org/wiki/United_States_Air_Force) [Project Blue Book](http://en.wikipedia.org/wiki/Project_Blue_Book): Small, public Air Force UFO investigation, from 1952 until discontinued in 1969. Preceded by [Project Sign](http://en.wikipedia.org/wiki/Project_Sign) (1947-1948) and [Project Grudge](http://en.wikipedia.org/wiki/Project_Grudge) (1948-1952).
* [Aerial Phenomena Research Organization](http://en.wikipedia.org/wiki/Aerial_Phenomena_Research_Organization) (APRO) (1952-1988): Early, national U.S. civilian research organization with many PhD consulting scientists.
* [National Investigations Committee On Aerial Phenomena](http://en.wikipedia.org/wiki/National_Investigations_Committee_On_Aerial_Phenomena) (NICAP)(1956-1980), Early, national U.S. civilian research organization, very large and powerful at one time, with many scientists and military consultants.
* [Mutual UFO Network](http://en.wikipedia.org/wiki/Mutual_UFO_Network) (MUFON): Large, international, U.S. based civilian research organization stressing field investigations and data collection. MUFON is the largest civilian UFO research group in the United States today.
* [Center for UFO Studies](http://en.wikipedia.org/wiki/Center_for_UFO_Studies) (CUFOS): Founded by Project Blue Book consultant, astronomer and Ufologist [J. Allen Hynek](http://en.wikipedia.org/wiki/J._Allen_Hynek); stresses scientific investigations; large archives, including old NICAP files.
* [Fund for UFO Research](http://en.wikipedia.org/wiki/Fund_for_UFO_Research): Funds scientific UFO research; many consulting PhD scientists; does photo analysis.
* [Victorian UFO Research Society](http://en.wikipedia.org/w/index.php?title=Victorian_UFO_Research_Society&action=edit&redlink=1) (VUFORS) Circa 1957: The oldest and largest public UFO group in Australia.
* [National Institute of Discovery Science](http://en.wikipedia.org/wiki/National_Institute_of_Discovery_Science) (NIDS): Private, somewhat clandestine organization with insider government scientists and military people stressing scientific forensic analysis of UFO and paranormal phenomena.
* [Phenomena Research Australia](http://en.wikipedia.org/wiki/Phenomena_Research_Australia) (PRA): This group has grew out of the Aeronautical Research Laboratory – Melbourne, Victoria c1949.
* [Committee for the Scientific Investigation of Claims of the Paranormal](http://en.wikipedia.org/wiki/Committee_for_the_Scientific_Investigation_of_Claims_of_the_Paranormal), (CSICOP), a UFO and [paranormal](http://en.wikipedia.org/wiki/Paranormal) skeptics organization, which classifies ufology as a [pseudoscience](http://en.wikipedia.org/wiki/Pseudoscience) and claims all UFO reports are ultimately explainable as mundane phenomena or hoaxes. CSICOP is the largest and most prominent group of UFO [skeptics](http://en.wikipedia.org/wiki/Skeptics) and [debunkers](http://en.wikipedia.org/wiki/Debunkers) in the United States.
* [UFO-Norge](http://en.wikipedia.org/wiki/UFO-Norge), a Norwegian project dedicated to collect all material on observations and physical traces of UFO activity in [Norway](http://en.wikipedia.org/wiki/Norway).
* [Centro Ufologico Nazionale](http://en.wikipedia.org/w/index.php?title=Centro_Ufologico_Nazionale&action=edit&redlink=1) (CUN), big Italian private center directed by sociologist Dr. [Roberto Pinotti](http://en.wikipedia.org/wiki/Roberto_Pinotti), funded in [Florence](http://en.wikipedia.org/wiki/Florence).
* [Centro Italiano Studi Ufologici](http://en.wikipedia.org/w/index.php?title=Centro_Italiano_Studi_Ufologici&action=edit&redlink=1) (CISU), big Italian private center directed by Dr. [Edoardo Russo](http://en.wikipedia.org/w/index.php?title=Edoardo_Russo&action=edit&redlink=1), originated by a branch of CUN, funded in [Turin](http://en.wikipedia.org/wiki/Turin).
* [EXO-X UFO research group](http://en.wikipedia.org/w/index.php?title=EXO-X_ufo_research_group&action=edit&redlink=1), by Brazil
* [Erich von Däniken](http://en.wikipedia.org/wiki/Erich_von_D%C3%A4niken)'s controversial theories (along with [Peter Kolosimo](http://en.wikipedia.org/wiki/Peter_Kolosimo)), where he combines what he considers historical proof of [extraterrestrial](http://en.wikipedia.org/wiki/Extraterrestrial_life) visits with a theory on extraterrestrial help in the evolution of humanity.
* [UFO Casebook](http://en.wikipedia.org/w/index.php?title=UFO_Casebook&action=edit&redlink=1)
* [SOBEPS](http://en.wikipedia.org/wiki/SOBEPS): Société Belge d'Etude des Phénomènes Spatiaux(1971-2007). This group gained fame to have investigated the Belgian Wave (see [Black triangle](http://en.wikipedia.org/wiki/Black_triangle) incidents).
* [Karla Turner](http://en.wikipedia.org/wiki/Karla_Turner)
* [Disclosure Project](http://en.wikipedia.org/wiki/Disclosure_Project)
* [Malevolent Alien Abduction Research Organization](http://www.maar.us)
* [Greater UFO Network](http://en.wikipedia.org/w/index.php?title=Greater_UFO_Network&action=edit&redlink=1) (GUFON), privately funded organization with subchapters throughout western North America with close ties to numerous retired USAF officers.
* [National UFO Reporting Center](http://www.nuforc.com) (NUFORC), large database of sightings organized by state, date, etc. Online reporting forms.

## Panel discussion on November 12, 2007

On [November 12](http://en.wikipedia.org/wiki/November_12), [2007](http://en.wikipedia.org/wiki/2007), Former [Arizona](http://en.wikipedia.org/wiki/Arizona) Governor [Fife Symington](http://en.wikipedia.org/wiki/Fife_Symington) moderated a panel of former high-ranking government, aviation and military officials from seven countries at the [National Press Club](http://en.wikipedia.org/wiki/National_Press_Club_%28USA%29).

## Sources

* [Sergey Litsak](http://en.wikipedia.org/w/index.php?title=Sergey_Litsak&action=edit&redlink=1), Explanatory UFO Dictionary with Equivalents in Russian, English and German. [ETS Publishing House](http://en.wikipedia.org/w/index.php?title=ETS_Publishing_House&action=edit&redlink=1) and [Polyglossum](http://en.wikipedia.org/w/index.php?title=Polyglossum&action=edit&redlink=1), Inc; [ISBN 5-86455-063-9](http://en.wikipedia.org/wiki/Special%3ABookSources/5864550639). Dictionary contains 853 articles.
* Roth, Christopher F., "Ufology as Anthropology: Race, Extraterrestrials, and the Occult." In *E.T. Culture: Anthropology in Outerspaces,* ed. by Debbora Battaglia. Durham, N.C.: Duke University Press, 2005.
* Peter A. Sturrock; The UFO Enigma: A New Review of the Physical Evidence; Warner Books, 1999; [ISBN 0-446-52565-0](http://en.wikipedia.org/wiki/Special%3ABookSources/0446525650)
* [Jerome Eden](http://en.wikipedia.org/w/index.php?title=Jerome_Eden&action=edit&redlink=1); "The Desert Makers", Careywood, Idaho, PPCC, 1981, available from [Flatlandbooks](http://www.flatlandbooks.com).
* [Jerome Eden](http://en.wikipedia.org/w/index.php?title=Jerome_Eden&action=edit&redlink=1); "Scavengers From Space", Careywood, Idaho, PPCC, 1989, at present time out of print.

## See also

* [List of Ufologists](http://en.wikipedia.org/wiki/List_of_UFO_researchers)
* [Australian ufology](http://en.wikipedia.org/wiki/Australian_ufology)
* [UFO conspiracy theory](http://en.wikipedia.org/wiki/UFO_conspiracy_theory)
* [List of major UFO sightings](http://en.wikipedia.org/wiki/List_of_major_UFO_sightings).
* [Robertson Panel](http://en.wikipedia.org/wiki/Robertson_Panel): [CIA](http://en.wikipedia.org/wiki/CIA) program initiated in 1952.