

# Dream of the Open Channel

"The dream is to find the open channel." --- Richard Feynman

A blog using the scientific search for intelligent life on other worlds as a mental lens to ask every sort of interesting question.

[Home](#) [The Wow! Signal Podcast](#) [Creative Commons](#)

Friday, September 7, 2012

## The so-called Extraterrestrial Hypothesis

Dr. [Susan Blackmore](#) is a little weird and very smart. She received the first ever British PhD in parapsychology, and believed in Tarot reading, out of body experiences, and psychic powers. She was sure she could prove the existence of psychic abilities to even the most die-hard skeptics by amassing methodologically bulletproof evidence from a wide variety of experiments in clairvoyance and precognition, i.e. psi. At the time, the whole field of parapsychology felt they were on the verge of breaking through to mainstream acceptance.

After a grueling series of consistently negative results, Blackmore began to be troubled by the definition of psi. Psi was defined as whatever is causing psi experimental results to deviate from pure chance. That is what psi isn't, but what is it? Strengthening the methodologies made the signal drop down into the noise. After repeated failures and not being able to define what to really test for, Blackmore soured on the very concept of psi and turned her research focus on to other things.

When it comes to UFOs, there is a shopworn old meme lying around frequently known as the Extraterrestrial Hypothesis (ETH for short). It still attracts both derision and True Belief. The ETH can be summed up simply as: some fraction (usually quoted at around 10%) of UFO reports are the result of something intelligently controlled that is not from Earth.

Do you see the problem? It's analogous to the negative definition of psi. By asserting that some UFOs - the otherwise hard to explain ones - are craft from outer space, we are really just stating what they are not - they are not ours. But what ARE they? A good hypothesis tells us where to look, and what information we can use to test the hypothesis. The so-called ETH does not do that. It's not a hypothesis!

Since aliens are very likely [queerer than we can imagine](#), an alien spacecraft could be anything, and we would very likely not be able to perceive or describe it completely or accurately. I won't address here the problem of the sparse, uneven quality of UFO data, or the thorny question of what phenomena to include, but even if we had terrifically good data, we still have no bonafide hypothesis to test it against. "Not from here" doesn't fit the bill, and at this point, we don't know where to turn. What happens in practice is that each of us invents our own private mental model of a single human-like alien race and wonder why UFOs don't behave that way.

Is there hope for the old ETH? Not as such, but I believe it will have better successors. I do hope for really high quality hypotheses about the nature and behavior of alien intelligent life that we can really use. The study of alien life, especially intelligent life, is pre-paradigmatic right now and starved of hard data. We're going to need lots more information, and not much of it will be about UFOs (although I hope I am wrong). The new emerging science of astrobiology will probably tell us much more about the constraints on development of intelligent species than any of our deeply flawed perceptions and memories of things we are unlikely to understand at all.

Nearly all hypotheses we develop about alien intelligences are likely to be wrong. Wrong, but the work of proving them wrong will lead us places we can't see at all right now.



This work is licensed under a [Creative Commons Attribution-ShareAlike 4.0 International License](#).

Posted by [Paul Carr](#) at 6:04 PM



[Uninvited Guests](#)  
Richard Hall  
Best Price \$0.01  
or Buy New \$13.46  
[Buy from amazon.com](#)

[Privacy Information](#)

### About The Blogger



#### Paul Carr

I suffer from a low curiosity threshold. I am a space systems engineer, blogger, podcaster and a skeptical but open-minded investigator. Especially interested in space, astronomy, and the search for intelligent ETs. Although most of my G+ posts are science or space related, I also spout off on music from time, totally unqualified though I am.

Trying to keep my middle-aged body in shape and a bit safer by learning Krav Maga. Train at [Pure Performance Martial Arts](#) in Rockville, Maryland.

#### My CV

Blogging at [disownedsky.blogspot.com](#)

Podcast information at [wowsignalpodcast.com](#)

info on investigations at [aerial-phenomenon.org](#)

Follow me on Twitter [@PaulDCarr](#)

I am not a member of any [political tribe](#).

[View my complete profile](#)

### Search This Blog

### Recommended Blogs

#### [a closer listen](#)

[Maxwell August Croy and Sean McCann](#)

~ |

5 hours ago

#### [Next Big Future](#)

[Concession Offered, Taiwan Group to End Protest of China Trade Pact](#)

6 hours ago

#### [Centauri Dreams](#)

[A Tantalizing Exomoon Possibility](#)

12 hours ago

#### [PaleBlueBlog](#)

[The Next Full Moon is the Pink Moon](#)

2 days ago

#### [BLOG PICTURE SCIENCE](#)

[Big Picture Science – Since Sliced Bread](#)

3 days ago

#### [funkyscience.net](#)

[Saturday, April 5th, David will judge national finals of FameLab, the science communication competition in DC. Click me for ticket info and webcast info](#)

6 days ago

#### [Crowdspace](#)

Labels: [aliens](#), [astrobiology](#), [evidence](#), [extraterrestrial](#), [fallacies](#), [hypothesis](#), [parapsychology](#), [Psi](#), [queer](#), [Susan Blackmore](#), [UFO](#)

[Newer Post](#)

[Home](#)

[Older Post](#)

Subscribe to: [Post Comments \(Atom\)](#)

[Helium Planet?](#)

*1 week ago*



**The Wow! Signal Podcast**

[Season 2 Episode 1 - The Golden Age of Exoplanets](#)

*3 weeks ago*

**Stephen's Website**

[Ripples from the start of time](#)

*3 weeks ago*



**Future Planetary Exploration**

[2015 Planetary Science Proposed Budget – Steady as she goes and then big changes](#)

*3 weeks ago*

[Show All](#)

#### Google+ Followers

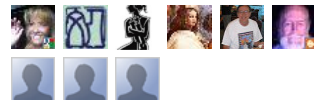
#### Followers

**Join this site**



with Google Friend Connect

#### Members (9)



Already a member? [Sign in](#)

#### From Amazon

[Amazon.com](#)



[Straight Ahead Soul](#)

Paul Carr

**New \$11.24**

**Best \$4.58**

[Standard Domain](#)

Paul Carr

**New \$8.91**

**Best \$8.91**

[We'll Always Have The Flamingo](#)

Paul Carr

**New**

[Musically Yours-- Remembering Joe Henderson](#)

Paul Carr

**New \$11.12**

**Best \$6.98**

[The Shallows](#)

Nicholas Carr, Pau...

**New \$26.95**

**Best \$15.58**

[Privacy Information](#)

#### Blog Archive

[January \(1\)](#)

[December \(2\)](#)

[October \(1\)](#)

[July \(1\)](#)

[June \(1\)](#)

- [March](#) (1)
- [February](#) (2)
- [January](#) (4)
- [November](#) (7)
- [October](#) (4)
- [September](#) (9)


There was an error in this gadget


Popular Posts

[The Jaws of Darkness](#)  
"Or, if there were a sympathy in choice, War, death, or sickness did lay siege to it, Making it momentary as a sound, Swift as a ...

[Where I am on the Drake Equation at the end of 2013](#)  
I'm sure you are all familiar with the Drake Equation. It's straightforward: SETI scientist Frank Drake devised it as a way to esti...


[The Case for the Wow! Signal](#)  
I recommend Robert Gray's book The Elusive Wow! if you want detailed background on the Wow! event of August 15th 1977. The book als...

 [Did the Hitchhiker's Guide to the Galaxy Get It Right?](#)  
The late, great DNA More than 30 years ago, Douglas Adams wrote his famous Hitchhiker's Guide novels around the idea that...

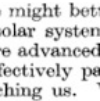
 [Searching for Bracewell Probes - part 1](#)  
Ronald Bracewell Bracewell Probes were first discussed by Ronald Bracewell in a 1960 Nature paper. The basic idea is send robotic probe...

[When is absence of evidence = evidence of absence?](#)  
You often hear the old mantra "absence of evidence is not evidence of absence," but I think that this is an oversimplification. T...

[Review of "An Eerie Silence" by Paul Davies](#)  
I want my book reviews to be useful to you, the reader, who may not have read the book in question and are trying decide whether to sp...

 [The Skeptical UFO Investigator, Part 1.](#)  
This post is a companion to the talk I gave at Balticon 47, and is for people who would rather not watch the video , or would like more m...

[Speculation - Hot Jupiters as Expended Batteries](#)  
Hot Jupiters are large planets – about the size of Jupiter or larger - that orbit very close to their star. They comprise the upper lef...

 [Searching for Bracewell Probes - part 2](#)  
In the first part , we talked about some of the variables that I think could control the observables of a Bracewell Probe. This is essen...

Simple template. Powered by Blogger.

Related at Amazon



# The Extraterrestrial Hypothesis (ETH) (The Examiner, 05-19-2009)

From UFOHQ UFO wiki

## Contents

- 1 The Article
  - 1.1 UFOs, UAPs, ESVs, ABC easy as 123
  - 1.2 There is no E in UFO
  - 1.3 Could they be extraterrestrial?
  - 1.4 Compelling witness testimony to the ETH
  - 1.5 Some say they have met them
  - 1.6 The ETH is a valid possibility to pursue
- 2 Credits
- 3 External Links

## The Article

By Alejandro Rojas

As in most scientific endeavors, there are many perspectives on how to approach any given research. In this story, the observed phenomena we are look for answers to are Unidentified Flying Objects (UFOs). Sometimes referred to as the Unidentified Aerial Phenomena (UAPs).

### UFOs, UAPs, ESVs, ABC easy as 123

The term UAP is often used because of the baggage that comes along with the term UFO. Most often the term UFO is associated with extraterrestrials. In fact when someone calls something a UFO it is assumed it is extraterrestrial. If we knew that an object was extraterrestrial, it would no longer be an unknown, it would be a known object that we don't have an acronym for yet. I guess I could coin one here, something like Alien Space Ship (ASS). Hmm, maybe Extraterrestrial Space Vehicle (ESV) would be better.

The term UFO is also associated with a lot of silly movies and is the term used when people make fun of this area of study. Some people call this the "giggle factor". That is when people laugh at or make fun of UFOs. You have probably watched a newscast where the reporters make a joke and/or play the X-files theme when they cover a UFO story.

The majority of radio interviews I do start off with the X-files theme. One guy was at least a little creative and played the My Favorite Martian theme.

## There is no E in UFO

While the term UFO does serve as a catch all for the phenomena, UFO does not and should not equal ESV. UFOs are Unidentified Flying Objects, and most often misidentified flying objects. Many reported UFO sightings have prosaic explanations, such as balloons, or flares tied to balloons as we saw in a recent hoax in New Jersey. They are also often stars, satellites, meteorites, weather anomalies, and a number of other things that are known and not paranormal.

Of course there are objects that display characteristics that cannot be explained by conventional means. However, some of these could also be man made. The last super-secret aircraft to come to light was the stealth, and we think those were developed in the 80's. With the exponential increase in technology over the last few decades, who knows what kind of exotic technologies the military may be testing. There is no doubt that a portion of UFO reports can be accredited to these types of sightings.

Still, many make the argument that UFOs were spotted many years ago with configurations and characteristics that exhibit advance technologies when we were nowhere near advanced enough to create them. For instance in a UFO study done by the University of Colorado in 1968, commonly referred to as the Condon Report, they studied photographs taken outside of McMinnville, Oregon in 1950. The object hovered for a moment and then flew off at an extraordinary speed. One of these photos is the picture I used for this story.

The scientists concluded: "This is one of the few UFO reports in which all factors investigated, geometric, psychological, and physical appear to be consistent with the assertion that an extraordinary flying object, silvery, metallic, disk-shaped, tens of meters in diameter, and evidently artificial, flew within sight of two witnesses. It cannot be said that the evidence positively rules out a fabrication, although there are some physical factors such as the accuracy of certain photometric measures of the original negatives which argue against a fabrication."

I must note that despite these and other findings, the University of Colorado concluded that there was no scientific value to the investigation of UFOs, and the US Air Force took this cue to shut down their investigations in 1969. Still, the point being, this case was an example of observed technologies that were beyond human capabilities of the time.

I should also mention that some believe this McMinnville object, and other objects that have been reported that are similar in structure, were made by the Nazis during World War II. To complicate things, some of the researchers that believe these are possibly Nazi aircraft also believe they may have been back-engineered ET craft.

Other theories are that these objects are possibly from the future, other dimensions, or from highly advanced cultures within the planet.

## Could they be extraterrestrial?

Any of this is a possibility, maybe they are all true, but of course the leading theory is the extraterrestrial hypothesis. Among the groups that seek serious scientific research into this field, some believe that entertaining the extraterrestrial hypothesis damages the credibility of the pursuit for answers in this field. They also feel that

scientists will not want to attach their reputations to research that includes this hypothesis.

I do agree that some will shy away from research having anything to do with extraterrestrials, especially given the attitudes many have towards this sort of idea. However, beyond classic sightings, there are other reasons that serious researchers and scientist entertain the extraterrestrial hypothesis.

## **Compelling witness testimony to the ETH**

One compelling area of evidence is credible witness testimony. Military insiders, such as Major George Filer, astronauts Edgar Mitchell, and Gordon Cooper, and many others, tell us that they have knowledge that the military also believes these devices to be created by extraterrestrials.

From the very beginning of contemporary UFO studies scientists have speculated on this theory. Dr. Herman Oberth, a famous German rocket scientist who came to work for the US after World War II, said in 1954: "It is my thesis that flying saucers are real and that they are space ships from another solar system. I think that they possibly are manned by intelligent observers who are members of a race that may have been investigating our earth for centuries. I think that they have been sent out to conduct systematic, long-range investigations, first of men, animals and vegetation, and more recently of atomic centers, armaments and centers of armament production. They obviously have not come as invaders, but I believe their present mission may be one of scientific investigation."

## **Some say they have met them**

There is also testimony from those that may have spent time with extraterrestrials. In 1961, Betty and Barney Hill were driving through New Hampshire when they noticed a bright object in the night sky following them. They got out and took a look, but eventually raced off frightened because the object flew towards them. During the next few moments they had a harrowing experience being buzzed by a large circular craft. They felt very strange when they got home, and began having memories of meeting the occupants of the craft. Eventually they were both taken into hypnotic states to try and recover their memories. Even though they were hypnotized separately, they remembered similar experiences.

In their experiences the pilots of the craft told Betty Hill that they were from another solar system. They even showed her a star map. Years later, researchers believed they solved the mystery of what Betty's star map revealed, and the star configuration seemed to fit that of Zeta Reticulli, a relatively nearby star system.

Now we have thousands of accounts of people who believe they have been abducted. Some claim that they are told by their abductors that they are from other planets. Contrary to popular belief, some of these cases do have physical evidence as well. Many come back with strange "scoop marks". These are marks where skin is removed, but there is no bleeding or scabbing and they heal quickly. Some people have put these marks under a UV lamp (black light), and their marks fluoresce. This fluorescing can be in a configuration, such as a triangle. Scrubbing the area to try to remove any substance on the surface reveals that whatever is fluorescing is under

the skin. This fluorescing usually doesn't last long.

## The ETH is a valid possibility to pursue

So there are many reasons why serious researchers take the extraterrestrial hypothesis serious, and it is certainly one to look at closely. Any good scientist should be open to the possibility that their hypothesis or theory could be proven wrong if contradictory evidence comes to light. However, just because some people may feel uncomfortable with the notion that we are being visited and experimented upon by beings from other solar systems, doesn't mean we should not pursue this possible explanation for the UFO phenomena.

I agree that the term UFO has been abused and comes with a lot of baggage, but it really is the accepted term when it comes to this research. If you told a buddy that you are looking into UAPs, or even my new term ESVs, they would ask you what the heck you are talking about. After explaining yourself, they would probably wonder why you didn't just say UFO. Personally, I think it is important that we tackle the public perception of UFO research, rather than use a new term.

Luckily, there are scientists interested in this research. At the MUFON Symposium this August 6-9th in Denver, Colorado, there will be 4 or 5 scientists presenting their material. As you read in my recent article on theoretical physicist, Dr. Michio Kaku, he is ready and willing to entertain the possibility of extraterrestrial visitations.

Even the conservative radio telescope watchers, SETI, had a couple of scientists at their last conference talking about the extraterrestrial hypothesis, and the possibility that they are already here.

It is an uphill battle to change the strong perceptions people have of UFOs, but I think it is a winnable battle and worth the fight. Its quite a shift to get people to stop thinking about UFOs as silly, and to get them to see this as serious research. However, in my experience, I see that shift happening.

## Credits

Special thanks to The Examiner.

## External Links

! The Examiner Article (<http://www.examiner.com/x-7521-Denver-Examiner~y2009m5d18-The-Extraterrestrial-Hypothesis-ETH>)

Retrieved from "http://wiki.ufohqs.com/index.php?title=The\_Extraterrestrial\_Hypothesis\_(ETH)\_(The\_Examiner,\_05-19-2009)"  
Category: UFO Newspaper Clippings



- This page was last modified on 1 October 2011, at 10:36.
- This page has been accessed 33 times.
- Content is available under Creative Commons Attribution Non-Commercial Share Alike.

# Extraterrestrial hypothesis

---

The **extraterrestrial hypothesis (ETH)** is the hypothesis that some unidentified flying objects (UFOs) are best explained as being physical spacecraft occupied by extraterrestrial life or non-human aliens from other planets visiting Earth.

## Etymology

Origins of the term *extraterrestrial hypothesis* are unknown, but use in printed material on UFOs seems to date to at least the latter half of the 1960s. French ufologist Jacques Vallee used it in his 1966 book *Challenge to science: the UFO enigma*. It was used in a publication by French engineer Aimé Michel in 1967, by Dr. James E. McDonald in a symposium in March 1968<sup>[1]</sup> and again by McDonald and James Harder while testifying before the Congressional Committee on Science and Astronautics, in July 1968. Skeptic Philip J. Klass used it in his 1968 book *UFOs--Identified*.<sup>[2]</sup> In 1969 physicist Edward Condon defined the "Extra-terrestrial Hypothesis" or "ETH" as the "idea that *some* UFOs may be spacecraft sent to Earth from another civilization or space other than earth, or on a planet associated with a more distant star," while presenting the findings of the much debated Condon Report. Some UFO historians credit Condon with popularizing the term and its abbreviation "ETH".

## Chronology

Although ETH, as a unified and named hypothesis, is a comparatively new concept - one which owes a lot to the *saucer sightings* of the 1940s–1960s, it can trace its origins back to a number of earlier events such as the now discredited Martian canals and ancient Martian civilization promoted by astronomer Percival Lowell, popular culture including the writings of H. G. Wells and fellow science fiction pioneers such as Edgar Rice Burroughs, who likewise wrote of Martian civilizations, and even to the works of figures such as the Swedish philosopher, mystic and scientist Emanuel Swedenborg, who promoted a variety of unconventional views that linked other worlds to the afterlife.<sup>[3]</sup>

Also in the early part of the 20th century, Charles Fort collected accounts of anomalous physical phenomena from newspapers and scientific journals, including many reports of extraordinary aerial objects. These reports were first published in 1919 in *The Book of the Damned*. In this and two subsequent books, *New Lands* (1923) and *Lo!* (1931), Fort theorized that visitors from other worlds were observing Earth. Fort's reports of these early unknown aerial phenomena were frequently cited in American newspapers when the UFO phenomenon first attracted widespread media attention in June and July 1947.

The modern ETH - specifically the implicit linking of unidentified aircraft and lights in the sky to alien life - took root during the late 1940s and took its current form during the 1950s. It drew on pseudoscience as well as popular culture. Unlike earlier speculation of extraterrestrial life, interest in the ETH was also bolstered by many unexplained sightings investigated by the U.S. government and governments of other countries, as well as private civilian groups, such as NICAP and APRO.

## Historical reports of extraterrestrial visits

An early example of speculation over extraterrestrial visitors can be found in the French newspaper *Le Pays*, which on June 17, 1864, published a story about two American geologists who had allegedly discovered an alien-like creature, a mummified three-foot-tall hairless humanoid with a trunk-like appendage on its forehead, inside a hollow egg-shaped structure.<sup>[4]</sup>

A further report can be found in the *Missouri Democrat* (St. Louis), which, in October 1865, reported on the story of Rocky Mountain trapper James Lumley, who claimed to have discovered fragments of rock bearing "curious hieroglyphics" which seemed to form a compartmentalized object which he believed was being used to transport "an animate being", after investigating a meteor impact near Great Falls, Montana. The newspaper goes on to speculate "Possibly, meteors could be used as a means of conveyance by the inhabitants of other planets, in exploring space".

H. G. Wells, in his 1898 science fiction classic *The War of the Worlds*, popularized, perhaps for the first time, the idea of Martian visitation and invasion. Even before Wells, there was a sudden upsurge in reports in "Mystery airships" in the U.S. UFO historians Jerome Clark and David M. Jacobs<sup>[5]</sup> note that extraterrestrial visitation, particularly from Mars, was sometimes proposed to explain these mystery airship waves. For example, the *Washington Times* in 1897 speculated that the airships were "a reconnoitering party from Mars" and the *Saint Louis Post-Dispatch* wrote, "these may be visitors from Mars, fearful, at the last, of invading the planet they have been seeking."<sup>[6]</sup> Later there was a more international airship wave from 1909-1912. An example of an extraterrestrial explanation at the time was a 1909 letter to a New Zealand newspaper suggesting "atomic powered spaceships from Mars."<sup>[7]</sup>

From the 1920s the idea of alien visitation in space ships was commonplace in popular comic strips and radio and movie serials such as *Buck Rogers* and *Flash Gordon*. In particular, *Flash Gordon* serials have Earth being attacked from space by alien meteors, ray beams, and biological weapons. In 1938 a radio broadcast version of *War of the Worlds* by Orson Welles, using a contemporary setting for H. G. Wells' Martian invasion, created some public panic in the U.S. This would later figure into some commentary on what was happening in 1947 when "flying saucers" finally hit the U.S.

## UFOs and ETH (Extraterrestrial Hypothesis)

### The 1947 U.S. flying saucer wave

On June 24, 1947, at about 3.00 p.m. local time, pilot Kenneth Arnold reported seeing nine unidentified disk-shaped aircraft flying near Mount Rainier.<sup>[8][9]</sup>

Arnold said the objects moved as if they were a saucer skipping across water, but also described the shape as thin, flat, and disc-like or saucer-like (also like a "pie-plate," "pie-pan," and "half-moon shaped")--see Kenneth Arnold article for detailed quotes. Two to three days later, the terms "flying disc" and "flying saucer" first appeared in newspapers and became the preferred terms for the phenomenon for several years, until largely replaced in the 1950s and 1960s by UFO.

Though he was impressed by their high speed and quick movements, Arnold did not initially consider the ETH, stating:

"I assumed at the time they were a new formation or a new type of jet, though I was baffled by the fact that they did not have any tails. They passed almost directly in front of me, but at a distance of about 23 miles, which is not very great in the air. I judged their wingspan to be at least 100 feet across. Their flying did not particularly disturb me at the time, except that I had never seen planes of that type."

When no aircraft emerged that seemed to account for what he had seen, Arnold quickly considered the possibility of the objects being extraterrestrial. On July 7, 1947, two stories came out where Arnold was raising the topic of possible extraterrestrial origins, both as his opinion and those who had written to him. In an Associated Press story, Arnold said he had received quantities of fan mail eager to help solve the mystery. Some of them "suggested the

discs were visitations from another planet."<sup>[10]</sup>

In the other story, Arnold was interviewed by the *Chicago Times*:

"...Kenneth Arnold ...is not so certain that the strange contraptions are made on this planet. Arnold... said he hoped the devices were really the work of the U.S. Army. But he told the *TIMES* in a phone conversation: 'If our government knows anything about these devices, the people should be told at once. A lot of people out here are very much disturbed. Some think these things may be from another planet... Arnold, in pointing to the possibility of these discs being from another world, said, regardless of their origin, they apparently were traveling to some reachable destination. Whoever controlled them, he said, obviously wasn't trying to hurt anyone. ...He said discs were making turns so abruptly in rounding peaks that it would have been impossible for human pilots inside survived the pressure. So, he too thinks they are controlled from elsewhere, regardless of whether it's from Mars, Venus, or our own planet.'"<sup>[11]</sup>

Arnold expressed similar views in a 1950 interview with journalist Edward R. Murrow:

"...if it's not made by our science or our Army Air Forces, I am inclined to believe it's of an extraterrestrial origin."<sup>[12]</sup>

Arnold had first brought up the subject on June 27, 1947, when he described an encounter he had with a near-hysterical woman in Pendleton, Oregon, shrieking, "there's the man who saw the men from Mars." Arnold then added, "This whole thing has gotten out of hand... Half the people I see look at me as a combination Einstein, Flash Gordon and screwball."<sup>[13]</sup>

When the 1947 flying saucer wave hit the U.S., there was much speculation in the newspapers about what they might be in news stories, columns, editorials, and letters to the editor. Like Arnold mentioned in his interview, this included some serious discussion of the ETH.

For example, on July 10, U.S. Senator Glen Taylor of Idaho commented, "I almost wish the flying saucers would turn out to be space ships from another planet," because the possibility of hostility "would unify the people of the earth as nothing else could." On July 8, Dewitt Miller was quoted by UP saying that the saucers had been seen since the early nineteenth century. If the present discs weren't secret Army weapons, he suggested they could be vehicles from Mars or other planets or maybe even "things out of other dimensions of time and space."<sup>[14]</sup> Other articles brought up the work of Charles Fort, who earlier in the 20th Century had documented numerous reports of unidentified flying objects that had been written up in newspapers and scientific journals.<sup>[15]</sup>

Generally, if the ETH was brought up it was done in a sarcastic or dismissive way. For example, nationally syndicated columns by humorist Hal Boyle on July 8 and 9 spoke of a green man from Mars in his flying saucer (see Little green men) who had kidnapped him and taken him for a ride. A United Press story on July 8 had the Army Air Forces at the Pentagon stating what the flying saucers were *not*. They were not a secret U.S. military project, a bacteriological weapon of a foreign power, and they were *not* "space ships."

Even if people thought the saucers were real, most were generally unwilling to leap to the conclusion that they were extraterrestrial in origin. Various popular theories began to quickly proliferate in press articles, such as secret military projects, Russian spy devices, hoaxes, optical illusions, and mass hysteria. According to Murrow, the ETH as a serious explanation for "flying saucers" did not earn widespread attention until about 18 months after Arnold's sighting.<sup>[16]</sup>

These attitudes seem to be reflected in the results of the first US poll of public UFO perceptions released by Gallup on August 14, 1947.<sup>[17]</sup> The term "flying saucer" was familiar to 90% of the respondents. As to what people thought explained them, the poll further showed that most people either held no opinion or refused to answer the question (33%), or generally believed that there was a mundane explanation. 29% thought they were optical illusions, mirages or imagination, 15% a US secret weapon, 10% a hoax, 3% a "weather forecasting device", 1% of Soviet origin, and 9% had "other explanations", including fulfillment of Biblical prophecy, secret commercial aircraft, or related to atomic testing.<sup>[18]</sup> What is unclear in this poll is what fraction of the public might seriously or half-seriously have

considered the ETH had their attitudes been probed more deeply. Attitudes of people in the large "no opinion/no answer" category" are unknown, as are most of the people in the "other explanation" category. Others may have entertained more than one opinion that might not be reflected in such a poll where usually only one opinion was offered. For example, Kenneth Arnold stated he hoped they were secret U.S. military aircraft, but if they weren't, then he believed they were likely extraterrestrial.

### **Military investigations begin: ETH conclusion and debunkery**

On July 9, Army Air Forces Intelligence began a secret study of the best saucer reports, including Arnold's. A follow-up study by the Air Materiel Command intelligence and engineering departments at Wright Field Ohio led to the formation the U.S. Air Force's Project Sign at the end of 1947, the first official U.S. military UFO study.

In 1948, Project Sign wrote their Estimate of the Situation, which concluded that the remaining unidentified sightings were best explained by the ETH. The report ultimately was rejected by the USAF Chief of Staff, General Hoyt Vandenberg, citing a lack of physical evidence, and its existence was not publicly disclosed until 1956 by later Project Blue Book director Edward J. Ruppelt. Ruppelt also indicated that Vandenberg dismantled Project Sign after they wrote their ETH conclusion.

With this official policy in place, all subsequent public Air Force reports concluded that there was either insufficient evidence to link UFOs and ETH, or that UFOs did not warrant investigation.

Immediately following the great UFO wave of 1952 and military debunkery of the radar and visual sightings plus jet interceptions over Washington, D.C. in August, the CIA's Office of Scientific Investigation took particular interest in UFOs. Though the ETH was mentioned, it was generally given little credence. However, others within the CIA, such as the Psychological Strategy Board, were more concerned about how an unfriendly power such as the Soviet Union might use UFOs for psychological warfare purposes, exploit the gullibility of the public for the sensational, and clog intelligence channels. Under a directive from the National Security Council to review the problem, in January 1953, the CIA organized the Robertson Panel,<sup>[19]</sup> a group of scientists who quickly reviewed the Blue Book's best evidence, including motion pictures and an engineering report that concluded that the performance characteristics were beyond that of earthly craft. After only two days' review, all cases were claimed to have conventional explanations. An official policy of public debunkery was recommended using the mass media and authority figures in order to influence public opinion and reduce the number of UFO reports.

### **Evolution of public opinion**

The early 1950s also saw a number of movies depicting flying saucers and aliens, including *The Day the Earth Stood Still* (1951), *The War of the Worlds*, *Earth vs. the Flying Saucers* (1956), and *Forbidden Planet* (1956).

Despite this, public belief in ETH seems to have remained low during the early 1950s, even among those reporting UFOs. A poll published in *Popular Science* magazine, in August 1951, showed that 52% of UFO witnesses questioned believed that they had seen a man-made aircraft, while only 4% believed that they had seen an alien craft. However, an additional 28% were uncertain, with more than half of these stating they believed they were either man-made aircraft or "visitors from afar." Thus the total number of UFO witnesses who considered the ETH viable was approximately 20%. Within a few years, belief in ETH had increased due to the activities of people such as retired U.S. Marine Corp officer Maj. Donald E. Keyhoe, who campaigned to raise public awareness of the UFO phenomena. By 1957, 25% of Americans responded that they either believed, or were willing to believe, in ETH, while 53% responded that they weren't (though a majority of these respondents indicated they thought UFOs to be real but of earthly origin). 22% said that they were uncertain.<sup>[20]</sup>

During this time, the ETH also fragmented into distinct camps, each believing slightly different variations of the hypothesis. The "contactees" of the early 1950s said that the "space brothers" they met were peaceful and benevolent, but by the mid-1960s, a number of alleged Alien abductions; including that of Betty and Barney Hill, and of the apparent mutilation of cattle cast the ETH in more sinister terms.

Opinion polls indicate that public belief in the ETH has continued to rise since then. For example, a 1997 Gallup poll of the U.S. public indicated that 87% knew about UFOs, 48% believed them to be real (vs. 33% who thought them to be imaginary), and 45% believed UFOs had visited Earth.<sup>[21]</sup> Similarly a Roper poll from 2002 found 56% thought UFOs to be real and 48% thought UFOs had visited Earth.<sup>[22]</sup>

Polls also indicate that the public believes even more strongly that the government is suppressing evidence about UFOs. For example, in both the cited Gallup and Roper polls, the figure was about 80%.

## Analyzing ETH

In a 1969 lecture U.S. astrophysicist Carl Sagan said:

"The idea of benign or hostile space aliens from other planets visiting the earth [is clearly] an emotional idea. There are two sorts of self-deception here: either accepting the idea of extraterrestrial visitation by space aliens in the face of very meager evidence because we want it to be true; or rejecting such an idea out of hand, in the absence of sufficient evidence, because we don't want it to be true. Each of these extremes is a serious impediment to the study of UFOs."<sup>[23]</sup>

Similarly, British astrophysicist Peter A. Sturrock wrote that for many years,

"discussions of the UFO issue have remained narrowly polarized between advocates and adversaries of a single theory, namely the extraterrestrial hypothesis ... this fixation on the ETH has narrowed and impoverished the debate, precluding an examination of other possible theories for the phenomenon."<sup>[24]</sup>

## Opinions among scientists

The scientific community has shown very little support for the ETH, and has largely accepted the explanation that reports of UFOs are the result of people misinterpreting common objects or phenomena, or are the work of hoaxers.

A cited example of this was an informal poll conducted in 1977 by astrophysicist Peter A. Sturrock, surveying the members of the American Astronomical Society. Sturrock asked polled scientists to assign probabilities to eight possible explanations for UFOs. The results were:<sup>[1]</sup> Wikipedia:Verifiability

23%	An unfamiliar natural phenomenon
22%	A familiar phenomenon or device
21%	An unfamiliar terrestrial device
12%	Hoax
9%	An unknown natural phenomenon
7%	Some specifiable other cause
3%	An alien device
3%	Some unspecified other cause

An earlier poll done by Sturrock in 1973 of American Institute of Aeronautics and Astronautics members found that a somewhat higher 10% believed UFOs were vehicles from outer space.<sup>[1]</sup>

---

## For

Physicist Bernard Haisch on his "ufoskeptic" website<sup>[25]</sup> presents a number of counterarguments Wikipedia: Avoid weasel words to those of Hynek (presented below). Haisch argues he is convinced something is going on and that modern theories of physics and cosmology might support extraterrestrial or even interdimensional origins for UFOs.

In a 1969 report to the American Association for the Advancement of Science, the late American physicist James E. McDonald summarized his reasons for not dismissing ETH:

"Present evidence surely does not amount to incontrovertible proof of the extraterrestrial hypothesis. What I find scientifically dismaying is that, while a large body of UFO evidence now seems to point in no other direction than the extraterrestrial hypothesis, the profoundly important implications of that possibility are going unconsidered by the scientific community because this entire problem has been imputed to be little more than a nonsense matter unworthy of serious scientific attention."<sup>[26]</sup>

Dr. Steven M. Greer MD, founder of CSETI (Center for the Study of Extraterrestrial Intelligence) has gathered over 36 hours of witness testimony from high-ranking government, and military officials. John Callahan, Chief of Division for the FAA (Federal Aviation Administration) recalls an incident in which a Japanese Boeing 747 had captured an object travelling tens of thousands of miles on radar.

Greer states that the reason for the cover-up of the UFO phenomena by the military industrial complex is because "any rational person, would ask the question, how did they get here?" and that if these reverse-engineered technologies ever became disclosed, there would be free, abundant energy for all, "however that is somebodies \$200 trillion piggy bank" in reference to the current estimates of oil reserves left on the planet.<sup>[citation needed]</sup>

Dr. Edgar Mitchell, former Apollo astronaut, sixth man on the moon, and founder of the Institute of Noetic Sciences (featured in Dan Brown's novel "The Lost Symbol") claims "there have been crashed craft and bodies recovered". Born in Roswell himself, he investigated the 1947 Roswell Incident and concluded the initial report by local newspapers was correct in its speculations.

## Against

The primary scientific arguments against ETH were summarized by Astronomer and UFO researcher J. Allen Hynek during a presentation at the 1983 MUFON Symposium. During which time he outlined seven key reasons why he could not accept the ETH.<sup>[27]</sup>

1. "Failure of Sophisticated Surveillance Systems to Detect Incoming or Outgoing UFOs"
2. "Gravitational and Atmospheric Considerations"
3. "Statistical Considerations"
4. "Elusive, Evasive and Absurd Behavior of UFOs and Their Occupants"
5. "Isolation of the UFO Phenomenon in Time and Space: The Cheshire Cat Effect"
6. "The Space Unworthiness of UFOs"
7. "The Problem of Astronomical Distances"

Hynek argued that:

1. Despite worldwide radar systems and Earth-orbiting satellites, UFOs are alleged to flit in and out of the atmosphere, leaving little to no evidence.
2. Space aliens are alleged to be overwhelmingly humanoid, and are allegedly able to exist on Earth without much difficulty (often lacking "space suits", even though extra-solar planets would likely have different atmospheres, biospheres, gravity and other factors, and extraterrestrial life would likely be very different from Earthly life.)
3. The number of reported UFOs and of purported encounters with UFO-inhabitants outstrips the number of expeditions that an alien civilization (or civilizations) could statistically be expected to mount.
4. The behavior of extraterrestrials reported during alleged abductions is often inconsistent and irrational.

5. UFOs are isolated in time and space: like the Cheshire Cat, they seem to appear and disappear at will, leaving only vague, ambiguous and mocking evidence of their presence
6. Reported UFOs are often far too small to support a crew traveling through space, and their reported flight behavior is often not representative of a craft under intelligent control (erratic flight patterns, sudden course changes).
7. The distance between planets makes interstellar travel impractical, particularly because of the amount of energy that would be required for interstellar travel using conventional means, (According to a NASA estimate, it would take  $7 \times 10^{19}$  joules of energy to send the current space shuttle on a one-way, 50 year, journey to the nearest star, an enormous amount of energy<sup>[28]</sup>) and because of the level of technology that would be required to *circumvent* conventional energy/fuel/speed limitations using exotic means such as Einstein Rosen Bridges as ways to shorten distances from point A to point B.(see Faster than light travel).<sup>[29]</sup>

According to Hynek, points 1 through 6 could be argued, but point 7 represented an insurmountable barrier to the validity of the ETH.

More recently, Professor Stephen Hawking argued that because most UFOs turn out to have prosaic explanations, it was reasonable to presume that the "unidentified" UFOs also had prosaic origins.<sup>[30]</sup>

## NASA

NASA frequently fields questions in regard to the ETH and UFOs. As of 2006, its official standpoint was that ETH has a lack of empirical evidence.

"no one has ever found a single artifact, or any other convincing evidence for such alien visits". David Morrison.<sup>[31]</sup>

"As far as I know, no claims of UFOs as being alien craft have any validity -- the claims are without substance, and certainly not proved". David Morrison<sup>[32]</sup>

Despite public interest, NASA considers the study of ETH to be irrelevant to its work because of the number of false leads that a study would provide, and the limited amount of usable scientific data that it would yield.

"That whole subject is really irrelevant to our own human quest to travel to space ... if someone in the previous century saw a film of a 747 flying past, it would not tell them how to build a jet engine, what fuel to use, or what materials to make it out of. Yes, the wings are a clue, but just that, a clue." NASA.<sup>[33]</sup>

## Conspiracy

A frequent concept in ufology and popular culture is that the true extent of information about UFOs is being suppressed by some form of conspiracy of silence, or by an official cover up that is acting to conceal information.

In 1968, American engineer James Harder argued that significant evidence existed to prove UFOs "beyond reasonable doubt," but that the evidence had been suppressed and largely neglected by scientists and the general public, thus preventing sound conclusions from being reached on the ETH.

"Over the past 20 years a vast amount of evidence has been accumulating that bears on the existence of UFO's. Most of this is little known to the general public or to most scientists. But on the basis of the data and ordinary rules of evidence, as would be applied in civil or criminal courts, the physical reality of UFO's has been proved beyond a reasonable doubt" J A Harder

A survey carried out by Industrial Research magazine in 1971 showed that more Americans believed the government was concealing information about UFOs (76 percent) than believed in the existence of UFOs (54 percent), or in ETH itself (32 percent).



Other private or governmental studies, some secret, have concluded in favor of the ETH, or have had members who disagreed with official conclusions against the conclusion by committees and agencies to which they belonged. The following are examples of sources that have focused specifically on the topic:

- REF ID: A66303

~~TOP SECRET~~

DECLASSIFIED  
AUTHORITY: 25X5  
BY: 60320 UCBA/STP

2-5317  
100-272

~~TOP SECRET~~

USAFS 1A      TS 122A      TOP SECRET      4 Nov 1948

REF ID: A66303

From this memo we have been concerned by the recurring reports on flying saucers. They periodically continue to us up during the last week of the month as reported through Newbernburg Air Base for about thirty minutes. They have been reported by an easy source and from such a variety of places that we are convinced that they cannot be disregarded and must be explained in some basis which is perhaps slightly beyond the scope of present intelligence gathering.

These officers of this Headquarters recently visited the Swedish Air Intelligence Service. This service was met with Sweden. Their account was the conclusion that "these phenomena are obviously the result of a high technical skill which cannot be ascribed to the present state of the earth." They are therefore assuming that these objects originate from some previous source or intelligence beyond the scope of present intelligence gathering.

One of these objects was observed by a Swedish technical expert near his home on the edge of a lake. The object crashed or landed in the lake and he carefully noted the details from his point of observation. Swedish intelligence was sufficiently confirmed in his observation that a neutral mission team was sent to the lake. Operations were underway during the visit of USAC officers. The lake. Operations were underway during the visit of USAC officers. The lake. Operations were underway during the visit of USAC officers. The lake. Operations were underway during the visit of USAC officers.

Although accepting this theory of the origin of these objects people a whole new group of questions and just much of our thinking is in a shadowy light, we are inclined not to discredit entirely this somewhat speculative theory, attention bearing an open mind on the subject. They are now reactions?

~~TOP SECRET~~

(END OF USAF 122A 1A)

Nov 1948 USAF TOP SECRET

document citing extraterrestrial  
opinion.

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 high 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 of scientists to debunk the data collected by the Air Force's 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.<sup>[38]</sup>
- Extraterrestrial "believers" within Project Blue Book included Major Dewey Fournet, in charge of the engineering analysis of UFO motion, who later became a board member on the civilian UFO organization NICAP. Blue Book director Edward J. Ruppelt privately commented on other firm "pro-UFO" members in the USAF investigations, including some Pentagon generals, such as Charles P. Cabell, USAF Chief of Air Intelligence who, angry at the inaction and debunkery of Project Grudge, dissolved it in 1951, established Project Blue Book in its place, and made Ruppelt director.<sup>[39]</sup> In 1953, Cabell became deputy director of the CIA. Another defector from the official Air Force party line was consultant Dr. 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, stated in a signed statement to Congress, also reported in the New York Times, February 28, 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, he told director 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."<sup>[40]</sup>
- Although the 1968 Condon Report came to a negative conclusion (written by 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's in this sense that ETI (Extra Terrestrial Intelligence) stands as the 'least implausible' explanation of 'real UFOs'."<sup>[41]</sup>
- In 1999, the private French COMETA report (written primarily by military defense analysts) stated the conclusion regarding UFO phenomena, that a "single hypothesis sufficiently takes into account the facts and, for the most part, only calls for present-day science. It is the hypothesis of extraterrestrial visitors."<sup>[42]</sup> The report noted issues with formulating the extraterrestrial hypothesis, likening its study to the study of meteorites, but concluded that although it was far from the best scientific hypothesis, "strong presumptions exist in its favour". The report also concludes that the studies it presents "demonstrate the almost certain physical reality of completely unknown flying objects with remarkable flight performances and noiselessness, apparently operated by intelligent [beings] ... Secret craft definitely of early origins (drones, stealth aircraft, etc.) can only explain a minority of cases. If we go back far enough in time, we clearly perceive the limits of this explanation."
- Jean-Jacques Velasco, 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.<sup>[43]</sup> Yves Sillard, the head of the new official French UFO investigation GEIPAN and former head of the French space agency CNES, echoes Velasco's comments and adds the U.S. is guilty of covering up this information.<sup>[44]</sup> However this is not the official public posture of SEPRA, CNES, or the French government. (CNES recently

placed their 5800 case files on the Internet starting March 2007.)

## Official White House position

In November 2011, the White House released an official response to two petitions asking the U.S. government to acknowledge formally that aliens have visited Earth and to disclose any intentional withholding of government interactions with extraterrestrial beings. According to the response, "The U.S. government has no evidence that any life exists outside our planet, or that an extraterrestrial presence has contacted or engaged any member of the human race." Also, according to the response, there is "no credible information to suggest that any evidence is being hidden from the public's eye." The response further noted that efforts, like SETI, the Kepler space telescope and the NASA Mars rover, continue looking for signs of life. The response noted "odds are pretty high" that there may be life on other planets but "the odds of us making contact with any of them—especially any intelligent ones—are extremely small, given the distances involved."

## References

- [1] <http://news.google.com/newspapers?id=WWNkAAAAIBAJ&sjid=d3wNAAAAIBAJ&pg=892,4105658&dq=extra-terrestrial-hypothesis&hl=en>
- [2] [http://books.google.com/books?id=u9bS1YhiSa4C&q=%22extraterrestrial+hypothesis%22&dq=%22extraterrestrial+hypothesis%22&hl=en&ei=CCBCTeHaMITGsAPDwuHgCg&sa=X&oi=book\\_result&ct=result&resnum=3&ved=0CDgQ6AEwAg](http://books.google.com/books?id=u9bS1YhiSa4C&q=%22extraterrestrial+hypothesis%22&dq=%22extraterrestrial+hypothesis%22&hl=en&ei=CCBCTeHaMITGsAPDwuHgCg&sa=X&oi=book_result&ct=result&resnum=3&ved=0CDgQ6AEwAg)
- [3] Swedenborg, Emanuel (1758) *Concerning the Earths in Our Solar System*.....
- [4] Jacobs David M (2000), "UFOs and Abductions: Challenging the Borders of Knowledge", University Press of Kansas, ISBN 0-7006-1032-4 (Compiled work quoting Jerome Clark; "So far as is known, the first mention of an extraterrestrial spacecraft was published in the 17 June 1864 issue of a French newspaper, *La Pays*, which ran an allegedly real but clearly fabulous account of a discovery by two American geologists of a hollow, egg-shaped structure holding the three-foot mummified body of a hairless humanoid with a trunk protruding from the middle of his forehead.")
- [5] Extraterrestrial Contact. (<http://www.ufoevidence.org/topics/DavidJacobs.htm>) Ufoevidence.org, retrieved February 19, 2011
- [6] David Michael Jacobs, *The UFO Controversy In America*, p. 29, Indiana University Press, 1975, ISBN 0-253-19006-1
- [7] Jerome Clark, *The UFO Book*, 1998, 199-200
- [8] Chicago Daily Tribune (June 26, 1947)
- [9] Arnold Kenneth, Report on 9 unidentified aircraft observed on June 24, 1947, near Mt. Rainier, Washington (<http://www.project1947.com/fig/ka.htm>), (October 1947)
- [10] Associated Press story, July 7, 1947, e.g., Salt Lake City *Deseret News*, p. 3, "Author of 'Discs' Story To Seek Proof" (<http://news.google.com/newspapers?nid=Aul-kAQHnToC&dat=19470707&printsec=frontpage>)
- [11] Chicago 'Times', July 7, 1947, p. 3
- [12] Kenneth Arnold; Speaking to Journalist Edward R. Murrow (April 7, 1950), Transcript (<http://www.project1947.com/fig/kamurrow.htm>) care of Project 1947 (<http://www.project1947.com/>)
- [13] Spokane *Daily Chronicle*, p.1, June 27, 1947, "More Sky-Gazers Tell About Seeing the Flying Piepans" (<http://news.google.com/newspapers?nid=ddB7do2jUx8C&dat=19470627&printsec=frontpage>); Eugene (OR) Register-Guard, p.1, June 27, 1947; Bremerton (Washington) *Sun*, June 28, 1947, "Eerie 'Whatsit objects' In Sky Observed Here."
- [14] Jerome Clark, *UFO Encyclopedia*, p. 202-203
- [15] Example AP article on Fort, July 8, 1947 (<http://news.google.com/newspapers?id=rUohAAAAIBAJ&sjid=gIEFAAAAIBAJ&pg=2393,814473&dq=charles+fort&hl=en>)
- [16] Edward R. Murrow (April 7, 1950) *The Case of the Flying Saucer* (<http://www.albany.edu/talkinghistory/arch2004jan-june.html>), CBS News (Radio Documentary available in MP3/Real Media), (October 2006)
- [17] Jacobs David M (2000), "UFOs and Abductions: Challenging the Borders of Knowledge", University Press of Kansas, ISBN 0-7006-1032-4 (Compiled work: section sourced from Jerome Clark)
- [18] Gallup poll in August 15, 1947, *St. Petersburg Times*, p. 6 (<http://news.google.com/newspapers?nid=feST4K8J0scC&dat=19470815&printsec=frontpage>)
- [19] Timothy Good, *Above Top Secret*, 328-335
- [20] Trendex Poll, St. Louis Globe Democrat (August 24, 1957)
- [21] Summary of UFO opinion polls (<http://www.ufoevidence.org/documents/doc999.htm>)
- [22] Roper poll results (<http://www.scifi.com/ufo/roper/05.html>)
- [23] Sagan Carl, Page Thornton (1972), "UFOs: A Scientific Debate". Cornell University Press, ISBN 0-8014-0740-0
- [24] Sturrock Peter A (1999), "The UFO Enigma: A New Review of the Physical Evidence", Warner Books, ISBN 0-446-52565-0
- [25] <http://www.ufoskeptical.org/BernardHaisch> "ufoskeptical" website

- [26] McDonald, James E., (December 27, 1969), in Default: Twenty-Two Years of Inadequate UFO Investigations ([http://dewoody.net/ufo/Science\\_in\\_Default.html](http://dewoody.net/ufo/Science_in_Default.html)Science)
- [27] Hynek, J. Allen (1983), "The case against ET", in Walter H. Andrus, Jr., and Dennis W. Stacy (eds), MUFON UFO Symposium
- [28] Warp Drive, When?: A Look at the Scaling (<http://www.nasa.gov/centers/glenn/technology/warp/scales.html>), (October 2006)
- [29] Clark Jerome (1998), "The UFO Book: Encyclopedia of the Extraterrestrial", Visible Ink, ISBN 1-57859-029-9
- [30] Hawking Stephen, Space and Time Warps (<http://www.hawking.org.uk/index.php/lectures/63>)
- [31] Morrison David, Senior Scientist at the NASA Astrobiology Institute (June 2006), Ask an Astrobiologist ([http://nai.arc.nasa.gov/astrobio/astrobio\\_detail.cfm?ID=1538](http://nai.arc.nasa.gov/astrobio/astrobio_detail.cfm?ID=1538)), (October 2006)
- [32] Morrison David, Senior Scientist at the NASA Astrobiology Institute (July 2006), Ask an Astrobiologist ([http://nai.arc.nasa.gov/astrobio/astrobio\\_detail.cfm?ID=1551](http://nai.arc.nasa.gov/astrobio/astrobio_detail.cfm?ID=1551)), (October 2006)
- [33] Warp Drive, When?: FAQ (<http://www.nasa.gov/centers/glenn/research/warp/warpfaq.html>), NASA, (October 2006)
- [34] Good (1988), 23
- [35] Document quoted and published in Timothy Good (2007), 106–107, 115; USAFE Item 14, TT 1524, (Top Secret), 4 November 1948, declassified in 1997, National Archives, Washington D.C.
- [36] Schuessler, John L., "Statements About Flying Saucers And Extraterrestrial Life Made By Prof. Hermann Oberth, German Rocket Scientist" 2002 ([http://www.mufon.com/MUFONNews/znews\\_oberth.html](http://www.mufon.com/MUFONNews/znews_oberth.html)); Oberth's American Weekly article appeared in a number of newspaper Sunday supplements, e.g., *Washington Post and Times Herald*, pg. AW4, and *Milwaukee Sentinel* (<http://news.google.com/newspapers?id=Pm8xAAAAIABAJ&sjid=MRAEAAAIAIAJ&pg=5451,3094226&dq=herman+oberth&hl=en>)
- [37] Text quotation in essay by Dr. Bruce Maccabee on military/CIA ETH opinions circa 1952 (<http://brumac.8k.com/1952YEAROFUFO/1952YEAROFUFO.html>)
- [38] Dolan, 189; Good, 287, 337; Ruppelt, Chapt. 16
- [39] Ruppelt's private notes (<http://www.ufologie.net/htm/ruppeltwhoiswho.htm>)
- [40] Good, 347
- [41] David Saunders, *UFOs? Yes*
- [42] [http://www.ufoevidence.org/newsite/files/COMETA\\_part2.pdf](http://www.ufoevidence.org/newsite/files/COMETA_part2.pdf)
- [43] Velasco quoted in *La Dépêche du Midi*, Toulouse, France, April 18, 2004 (<http://www.ufoevidence.org/documents/doc1627.htm>)
- [44] Sillard quotes (<http://www.ufoevidence.org/documents/doc2008.htm>)

## External links

- Extraterrestrial Energyzoa Hypothesis (ETZH) by Daniel Tarr (<http://www.tarrdaniel.com/documents/Ufology/energyzoa.html>)
- Formulation and Predictions of the ETH, by Brian Zeiler (<http://www.nicap.org/papers/zeiler-eth.htm>)
- UFOs and the Extraterrestrial Hypothesis (ETH), by Dave LeBoeuf (<http://www.featuringdave.com/Data/Webpage/ufo/eth.htm>)
- Five Arguments Against the Extraterrestrial Origin of Unidentified Flying Objects ([http://www.scientificexploration.org/journal/jse\\_04\\_1\\_vallee\\_2.pdf](http://www.scientificexploration.org/journal/jse_04_1_vallee_2.pdf)) - Jacques Vallée, Ph.D.
- Notable Nearby Stars (<http://www.solstation.com/stars.htm>)
- The Speed of Light: How Fast Can We Go? (<http://www.cem.msu.edu/~cem181h/projects/98/lightspeed/group.htm>)

# Article Sources and Contributors

**Extraterrestrial hypothesis** *Source:* <https://en.wikipedia.org/w/index.php?oldid=601891051> *Contributors:* AlexLoeher, All Is One, Anonymouses, Asm71, Auntof6, Barticus88, Bazonka, BenjaminBarber, Bfinn, Blehfu, BloodyRose, Bluemoon8520, Bluemoose, Bn gub, Bongwarrior, BorisG, Bubba73, CPWinter, Cattus, Chickencha, Chris the speller, Comp.arch, Crosbiesmith, Crzer07, Cuchullain, Cyberguru, DJ Sturm, DMacks, David Gerard, David Mörike, Dbachmann, Debresser, Dethme0w, Diego Moya, Dr Fil, Drbogdan, Dream of Nyx, Edward, Edz792003, Eka-bismuth, Elliskev, Elysdire, Eric Kvaalen, FlorenciaAmazonas, FreplySpang, Gaius Cornelius, Ghepeu, Gogo Dodo, GregorB, Hans Dunkelberg, Headbomb, Heirpixel, HenryLi, Hillman, Holon, IRP, InShanee, Ironywrit, Irrevenant, Ism schism, Italian Calabash, Ixfd64, J.smith, JNW, James Banogon, John, John of Reading, Jon513, Jonahandthewhale, Jonathan66, JorisvS, Jproxima, Kappa, Kbdank71, Kendroche, Kortoso, Ktr101, Landoftheliving, Locke9k, Lokalkosmopolit, M4th, Malcolm Farmer, MarchOrDie, Martial Law, Martinphi, Materialscientist, MegX, Michael Hardy, Mind the gap, Moriori, MrBill3, Muad, Nealparr, Neutrality, Nima Baghaei, Patrick, Perfectblue97, Petersburg, Pinethicket, Pol098, Proxima Centauri, Psm, QTxVi4bEMRbrNqOorWBV, R9tgokunks, RJHall, Rbarreira, Refinnejann, ReluctantPhilosopher, Rjwilmsi, Room429, Rrburke, Ryulong, Saros136, Schmiteye, Set72, Shoaler, Skeeter08865, Skeptic2, Slonismo, Smrolando, Solver, Sophie means wisdom, Spellmaster, Srleffler, Steven J. Anderson, SugnaSlays, SuperJew, Teratornis, Threedots dead, Toba Beta, Tom harrison, Tommy2010, Tony Sidaway, Twinsday, Urco, Wahwahpedal, WakeUpPoindexter, Wer900, Wikijsmak, Woohookitty, Xavierwold, Xhienne, Zoara, 247 anonymous edits

# Image Sources, Licenses and Contributors

**File:1948 Top Secret USAF UFO extraterrestrial document.png** *Source:* [https://en.wikipedia.org/w/index.php?title=File:1948\\_Top\\_Secret\\_USAF\\_UFO\\_extraterrestrial\\_document.png](https://en.wikipedia.org/w/index.php?title=File:1948_Top_Secret_USAF_UFO_extraterrestrial_document.png)  
*License:* Public Domain *Contributors:* United States Air Force. Original uploader was 718 Bot at en.wikipedia

# License

Creative Commons Attribution-Share Alike 3.0  
[//creativecommons.org/licenses/by-sa/3.0/](https://creativecommons.org/licenses/by-sa/3.0/)