

The Inconclusive UFO Evidence

The UFO Evidence, Volume II: A Thirty Year Report

By Richard H. Hall

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Reviewed by John F. McGowan, Ph.D.

The UFO Evidence, Volume II is a sequel to *The UFO Evidence* report prepared and circulated by the National Investigations Committee for Aerial Phenomena (NICAP) in 1964, one of the premiere UFO groups of the time. The author Richard Hall compiled the first *The UFO Evidence* in 1964 for NICAP. *The UFO Evidence, Volume II* is supposed to be a comprehensive collection of the evidence for UFOs from about 1964 to about 1994, a thirty year span. Indeed, as UFO books go, it is an extensive compilation of hard to explain UFO cases.

The UFO Evidence, Volume II is cited as a key piece of scientific evidence for the existence of UFOs as extraterrestrial spacecraft in Stanton Friedman's *Flying Saucers and Science (2008)*. Of the studies and reports cited by Friedman, it is the most recent and one of the most comprehensive.

Table 1: Sources Cited in *Flying Saucers and Science*

Source	Author	Date	Number of Unknown UFOs	Comment
Project Blue Book Special Report #14	Battelle Memorial Institute	1953	689	Statistical analysis of UFO report commissioned by the Air Force Project Blue Book
The UFO Evidence	Richard Hall/NICAP	1964	746	Original report compiled and circulated by NICAP
The UFO Evidence, Volume II	Richard Hall	2000	650? (See below)	

Symposium on Unidentified Flying Objects	Multiple authors, sponsored by the U.S. House Committee on Science and Astronautics	1968	Not clear, probably at least 41	
Scientific Study of Unidentified Flying Objects (Condon Report)	Edward Condon and staff of project	1968	Possibly 35	Report of Air Force funded project that concluded there was nothing to UFOs (sort of).
The UFO Experience	J. Allen Hynek	1972	80 cases are listed in <i>Appendix I: Description of Sightings Discussed in Text</i>	This is a semi-popular book by Professor J. Allen Hynek, an astronomer and former consultant to the Air Force Project Blue Book.
The COMETA Report	COMETA	1999	Not clear	This report discusses some French cases and rehashes a variety of standard UFO material.

Before launching into a critique of the book, let me say that the author does not claim to be a statistical analyst and describes the book as a “natural history” of UFOs. He appears to avoid overblown and unjustifiable language such as “overwhelming evidence” used by Stanton Friedman in *Flying Saucers and Science*.

How Many Unexplained UFO Sightings?

One of the book's weaknesses is that it is actually difficult to determine how many unexplained UFO sightings are listed in the book. The book has a master chronology on pages 1-34 which may list the sightings in the book, although this is not clear. The chronology has entries for UFO sightings in the years from 1952 through 1995. Most entries refer to a single UFO sighting. However, a number of entries refer to waves or concentrations of sightings, many of which are described separately in Section VIII of the book.

Table 2: Tabulation of Sightings in Master Chronology

Page	Dates	Number of Entries	Cumulative Number of Entries	Wave Entries	Cumulative Wave Entries
1	Pre-1964	9	9	0	0
2	1964	13	22	0	0
3	1964/65	13	35	1 (Washington, D.C.)	1
4	1965	10	45	1 (Southwestern, US)	2
5	1965	9	54	0	2
6	1965/66	10	64	0	2
7	1966	4	68	0	2
8	1966	6	74	1 (Uintah Basin, UT)	3
9	1967	8	82	1 (US/International)	4
10	1967	10	92	0	4
11	1967	14	106	1 (US/International)	5
12	1967/68	6	112	0	5
13	1968	11	123	1 (Southeastern/N W US)	6
14	1969	6	129	0	6
15	1970/71	10	139	0	6
16	1971/72/73	12	151	1 (Los Angeles Basin, CA – at least 16 sightings)	7
17	1973/74	12	163	1 (Georgia, Al, LA, MS, and OH)	8

18	1974/75	15	178	0	8
19	1975	13	191	2 (Lumberton, NC, mini-flap, at least 57 sightings; Northern US and Canada)	10
20	1975/76	11	202	0	10
21	1977	13	215	1 (UK mini-wave)	11
22	1977/78	14	229	1 (Global, July-Dec, 1978)	12
23	1978	12	241	1 (New Zealand)	13
24	1979/80	13	254	1 (Los Angeles and San Fernando Valley, CA)	14
25	1980	10	264	0	14
26	1980/81	14	278	1 (Northern California, Jan-March 1981)	15
27	1981/82	12	290	0	15
28	1982-85	9	299	2 (New York State and CT; Hessdalen Valley, Norway)	17
29	1985-87	12	311	1 (Belleville, WI)	18
30	1987/88	12	323	2 (Foreman and Ashdown, AR; Central North Dakota)	20
31	1988/89	14	337	3 (Soviet Union; Voronezh, USSR; Belgium)	23
32	1989/90	10	347	0	23
33	1991/92	9	356	1 (San Luis Valley, CO)	24
34	1993-95	13	369	1 (Antelope Valley, CA, Jun-Nov, 1993)	25

This gives 344 separate cases, excluding the wave entries. This is a hand count so the exact number of cases may be off by a few cases. Many of the waves are covered in more detail in Section VIII *Sighting*

Waves and Concentrations. Section VIII has 180 footnotes, the vast majority of which are references to original sources for the cases such as NICAP reports. Below is a tabulation of the cases listed in Section VIII.

Table 3: Sighting Waves and Concentrations

Page Number	Name	Number of Cases	Cumulative Number of Cases	Comments
pp. 314-317	1965	At least 23	23+	It is difficult to ascertain the exact number from the text of this section.
pp. 317-322	1966	39 entries	62+	Better organized list of cases
pp. 324-326	Jan 1967	11	73+	
pp. 326-330	Feb 1967	23	96+	
pp. 330-334	Mar 1967	31	127+	
pp. 334-337	Apr 1967	22	149+	
pp. 337-340	May 1967	16	165+	
pp. 340-345	1973	46	209+	
pp. 345-346	Spanish Concentration 1973/74	8	217+	
pp. 347-348	NC Mini-Flap 1975	57	274+	
pp. 348-352	1978	32	306+	

Combining this number (306) with the 344 cases from the Master Chronology gives a total of at least 650 separate cases over a thirty-plus period drawn from the entire world (mostly North America, South America, Europe, Japan, and the former Soviet Union). Again this is based on a hand count and may be off by a few cases. It is difficult to know if this is a complete tabulation of the cases in the book since there are many other tables of cases in other sections, that clearly overlap with the Master Chronology cases and the Section VIII cases. There may be additional cases in these other tables and sections. Section XI *The UFO Profile* in a footnote on page 442 indicates that the

Statistics sub-section of Section XI is based on "225 cases summarized in some detail in Sections I-XII of this book".

In addition, I counted 38 abduction cases on pages 525-566 in Section XIII *The Abduction Phenomenon*. Some of these cases are listed in the Master Chronology and Wave Chronologies. This section also refers on page 515 to about 300 abduction cases up until 1985, an additional 1000 abduction cases in the literature (presumably since 1985), and a 1992 survey of 13 investigators listing 1700 abduction cases.

Other Weaknesses

1. The book has almost no primary sources or data such as transcripts of eyewitness accounts, affidavits, court records, official reports, specific results of lab tests and so forth.
2. The references for sources for individual cases are usually to NICAP reports, newspapers, and articles and books by UFO authors.
3. There is no systematic assessment of witness credibility such as criminal background checks, credit checks, reference checks, whether the witnesses received or sought any sort of compensation for their story, psychological tests or examinations, and so forth. This is very important because the most likely conventional explanations for truly hard to explain UFO cases are hoaxes and psychological phenomena.
4. There is no procedures section as in a typical scientific report or article explaining in detail the methodology for the selection and assessment of the cases.
5. While many cases as summarized sound hard to explain, a number of cases sound like lights or blobs of light at a distance which are usually hard to assess.

Signal and Background

The implicit methodology used by most UFO enthusiasts and most UFO debunkers is almost certainly seriously flawed. The emphasis is on detailed investigation of individual cases. A majority of reported cases can indeed be identified and explained by careful investigation. However, a certain percentage of the cases, perhaps as high as 30%, cannot be unambiguously identified on a case by case basis. Some cases are very hard to explain and hard-core debunkers frequently attribute them to hoaxes or psychological phenomena. It is probably impossible with current technology to explain all cases on a case by

case basis. It is very difficult to either prove or disprove a hoax or a psychological phenomenon in some cases.

This is a common problem in many research fields where there is a signal, in this case aliens or some other exotic unknown phenomenon, and a background that can perfectly imitate the signal. In this case, sophisticated hoaxes, various psychological phenomena, and classified aircraft (US or foreign) all constitute background. The signal can only be detected by successfully modeling the background, something that is *extremely* difficult in this case.

Fraud is very common. The Federal Trade Commission (FTC) Consumer Sentinel project reported 555,472 complaints of consumer fraud in the USA in 2007. The Sentinel project covers only consumer fraud and is not an exhaustive survey of fraud. With the US population of about 300 million people (2007), this means an incidence rate of some type of fraud of at least 1.85 cases per *thousand* US citizens. Based on *The UFO Evidence, Volume II* the incidence rate of hard to explain UFO cases is around 22 (650 cases/30 years) per year over the entire planet with a population now around 6 billion people. Thus, it is extremely difficult to rule out sophisticated hoaxes as the explanation for hard to explain UFO cases.

(Source: *Consumer Fraud and Identity Theft Complaint Data: January – December 2007, Federal Trade Commission*)

The Center for UFO Studies (CUFOS) UFOCAT99 electronic catalog reportedly contains 109,000 cases (*source: CUFOS web site, accessed August 5, 2008*). This is a much larger number than the number of cases in *The UFO Evidence, Volume II*. However, even if these were all extremely hard to explain UFO cases and they were all from the USA, this would mean an incidence rate of UFO sightings of 1-2 per 100,000 people per year (3-6,000 UFO sightings per year in 2007). This is actually below the *murder rate* in most states. As the Sentinel statistics show, fraud is both common and much more common than murder. Thus, even if there are a much larger number of UFO cases than appear to be listed in the book, the hard to explain UFO sightings, the signal, may be due entirely to hoaxes, the background.

Correctly modeling UFO cases is considerably more difficult than modeling signal and background in mainstream scientific fields such as particle physics where this is common. The events in particle physics, for example, are collected under controlled, arguably reproducible conditions and no longer involve eyewitness testimony with its

attendant difficulties. In the old days of bubble and cloud chambers, particle physics involved visual analysis, classification, and counting of photographs by human analysts which introduced the problems with bias and other human failings that complicate UFO cases. This is no longer the case. UFO cases involve both unpredictable human observers and technically challenging backgrounds to identify and model (see the discussion of dirigible technology below).

Dirigible Technology

Many of the cases in the book could probably be explained by a dirigible, especially a dirigible with a high performance engine such as a jet or rocket. These might be a machine built by a sophisticated hoaxer, an experimental aircraft built by a private inventor or R&D organization, or a classified aircraft, quite probably used for surveillance. Dirigibles are very rare today and most witnesses and investigators probably do not even consider this possibility and, in any case, have no familiarity with such craft.

A dirigible has a rigid frame unlike a balloon and would appear as a solid, indeed massive object to witnesses. A dirigible is filled with lifting gas such as hydrogen, helium, or hot air. A dirigible is lighter than air and can have a very low inertial mass, much lower than an airplane or other vehicle. A dirigible can hover and fly in near or total silence at least at low speeds. A dirigible with a high performance engine may be capable of extreme accelerations and speeds that cannot be achieved by more massive aircraft such as conventional airplanes, F-16s, and so forth. Dirigibles today may be constructed from special materials such as composites that have little or no radar signature. Dirigibles intended for long duration and/or long range missions in the past may have been constructed of metal foils or special plastics or other materials available to 1940's and 1950's aircraft designers.

Dirigibles would be of little use in modern aviation for passenger transport or combat aircraft. They would however be ideal for creating impressive special effects such as highly realistic alien landings and *for intelligence gathering*. A dirigible with a camera or other sensors may be able to approach a target such as a military base or weapons lab at close range and take detailed pictures that a satellite or high altitude aircraft such as the SR-71 cannot. Because a dirigible is very light-weight it may be capable of outrunning manned fighter interceptors if it is detected. Indeed, mass is at a premium in dirigibles and piloted dirigibles might have very small pilots including

midgets to keep the weight of the manned vehicle as small as possible. The UFO occupants are often described as small humanoids (small pilots in costumes?). Dirigibles would not involve a new high performance power or propulsion system such as nuclear propulsion or reverse-engineered alien technology that would likely be transitioned into combat aircraft and seen in wars such as Iraq I and Iraq II.

Dirigibles or other special craft used for low altitude missions into other nations whether US missions into the former Soviet Union or Soviet missions into the US (consider alleged UFO encounters at US air bases) would be an extremely sensitive and almost certainly highly classified matter. Domestic field tests of such vehicles with unsuspecting civilians as guinea pigs would, of course, be highly questionable and likely to be kept secret due to the possibility of law suits, public censure, and even criminal charges.

In the same vein, a hoax in which the hoaxer designed and built a dirigible to fool the witnesses would be very difficult to detect unless the dirigible crashed or was somehow recovered later by investigators. This hoax would be an authentic UFO sighting in the sense that the witness or witnesses honestly saw a mysterious vehicle with flight characteristics quite unlike conventional aircraft. Even occupants could be faked with some thought. From time to time individual inventors and private R&D organizations may experiment with dirigibles and, unwittingly in some cases, create very convincing UFO cases.

What About Genuine Aliens?

Taken as a whole the cases in the book are consistent with an alien civilization that is using advanced technology and sophisticated precautionary measures to hide their presence, goals, and probably advanced technology from us. In fact, a number of behaviors that the author appears to find puzzling can easily be understood from this point of view. If a significant fraction of unexplained UFO sightings are extraterrestrial vehicles, it is extremely likely that the aliens are taking active measures to hide their presence, goals, and/or technology.

This could be done by the following measures (this is not an exhaustive list):

1. Use tracking devices and/or self-destruct mechanisms for any sensitive components that might reveal the alien's presence, goals, and/or sensitive advanced technology.

2. Always travel in groups of at least two craft, so that in the probably rare case of a crash, mechanical problem, or other difficulty, the fully functioning craft can assist with repairs, clean up any evidence, provide protection, and so forth.
3. Any materials that are not recovered or destroyed must be materials that can be produced on Earth and will not constitute evidence of the alien presence, goals, or technology.
4. In the case of piloted craft, some sort of high performance sterilization or containment system to prevent biological samples from contaminating the Earth.
5. An automatic or semi-automatic guidance, navigation, and control system that uses advanced sensors and pattern recognition programs to detect and avoid observers, cameras, and other sensors that would record sensitive data about the aliens and their craft. This would also be used to evade radar tracking.

The strongest argument against UFOs as extraterrestrial visitors is the apparent lack of crash debris, gizmos dropped by occupants during landings, and other strong physical evidence. However, precautions such as those listed above can explain this. The failure rate of commercial jet aircraft is currently less than 40 per one million departures (Source: *Statistical Summary of Commercial Jet Airplane Accidents Worldwide Operations 1959 - 2007*, Boeing, <http://www.boeing.com/news/techissues/pdf/statsum.pdf>, Accessed August 25, 2008). If the UFOs had a failure rate of 40 per million missions and conducted even one million missions since 1947 (the first major UFO wave), this would mean only about forty crashes in sixty years. By traveling in groups and taking the precautions outlined above, the UFOs might well be able to clean up any strong physical evidence. UFOs are usually sighted at night in sparsely populated areas where a clean-up operation could be performed with relative ease and few witnesses. With an advanced power source such as a 1000 megawatt nuclear engine, melting or incinerating any evidence could be done in seconds.

The author appears puzzled about many vehicle encounter cases, frequently automobiles. Many cases involve a UFO following a car for a while, sometimes landing in front of the car, even levitating the car to another location. Some automobile cases involve so-called "missing time" or memory loss, blending into the bizarre abduction cases. This behavior is actually easy to understand if one assumes that the aliens work in groups. Indeed, UFO's are frequently sighted in groups. In an emergency landing, a country road would provide an open level

landing site with little or no fire danger. In the event of a crash or landing of one craft, the other craft will begin a protective operation. If they see an approaching automobile, they may follow it, scare it off, block its advance to prevent the car from seeing the landed UFO, even detain the passengers for the duration of the incident.

In particular, a crash or repair operation could be extremely sensitive. During a crash or repair operation, the power and propulsion system, and perhaps weapons as well, of the UFO could easily be exposed to view by witnesses. In our vehicles, there is usually a protective cover over the engine. In a major repair operation, the engine could not only be exposed but even disassembled and parts strewn around the UFO landing site. A witness could easily see key technical details that could lead to reverse engineering of the alien power and propulsion technology, which would probably be one of their most closely guarded secrets. If the witnesses did "see too much", erasing their memory using some agent such as a powerful psychoactive drug or "telepathy" would be a non-lethal way to protect the sensitive information.

Of course, it is likely that not every UFO sighting would be due to a crash or repair operation. In some cases, the sighted UFO could be protecting some other sensitive activity such as scientists gathering specimens, communication with human contacts or many other possibilities.

Similarly, this view can explain the UFO concentrations, waves, and hotspots. For example, in the case of a high altitude explosion of a UFO, debris could be scattered over a substantial area. It is likely that tracking devices and/or self-destruct mechanisms would enable the aliens to clean up most evidence quickly but it could take some time to track down and recover or destroy all debris. In most cases, however, a crash, repair, or other mission would produce a short localized burst of sightings. These sightings would be diversionary or blocking activities intended to keep human witnesses, police, and military *away* from the primary activities. The UFOs would also exhibit interest in any aircraft flying near the landing site or other mission locale.

What Would Make the Book Better

The book would be stronger with a more systematic numerical tabulation of the cases. For example, it would be helpful to know the exact number of cases listed. There should be a procedures section outlining the methodology for selection and analysis of the cases.

There should be a systematic procedure for evaluating and rating the

credibility of the witnesses. The book should try to model the incidence rate of the background phenomena such as hoaxes, psychological phenomena, and classified aircraft. This is, however, extremely difficult. Ideally, the original raw data such as transcripts of witness accounts should be included, perhaps on a CD-ROM or web site.

Conclusion

The UFO Evidence, Volume II presents inconclusive evidence for UFO's as extraterrestrial visitors. The total number of cases (apparently about 650) over a thirty year period and many nations is not large. Hoaxes, psychological phenomena, classified aircraft, and perhaps a few other explanations in certain cases could explain the cases. Identifying hoaxes and other explanations on a case by case basis is probably impossible with current technology. Accurate modeling of this background of spurious cases is extremely difficult. The cases reported in the book are also consistent with an alien civilization that is using advanced technology and sophisticated measures to hide its presence, goals, and/or technology from us.

About the Reviewer

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