

IFOs: Those Pesky UFO Impostors

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What's an IFO?

- An IFO is an Identified Flying Object.
- Experienced UFO investigators separate UFO report data into IFOs and UFOs.
- When they identify the stimulus (cause) of a UFO report, the stimulus becomes an IFO.
- An IFO is a conventional, natural or human-made object or phenomenon.
- For MUFON, a genuine UFO is an “unknown” since we do not know what causes genuine UFOs. We can't identify genuine UFOs.

IFOs vs. UFOs

- Of all UFO reports, IFOs account for around 90% of the total.
- Genuine UFOs only account for around 10% of the total of UFO reports.
- Genuine UFOs are basically flying saucers.
- All this means people are mistaken a lot about what they see, especially in the night sky.
- But they should get excited because one out of ten times they see genuine UFOs.

Hynek UFO Classification Scheme I

- Six categories: Nocturnal Light (NL), Daylight Disc (DD), Radar-Visuals (RV), Close Encounters of the First, Second, and Third Kinds (CE I, CE II, CE III)
- NLs: Anomalous, distant lights in the night sky not obviously stars, planets, airplanes, meteors, etc.
- DDs: Anomalous objects seen in the distant daytime sky.

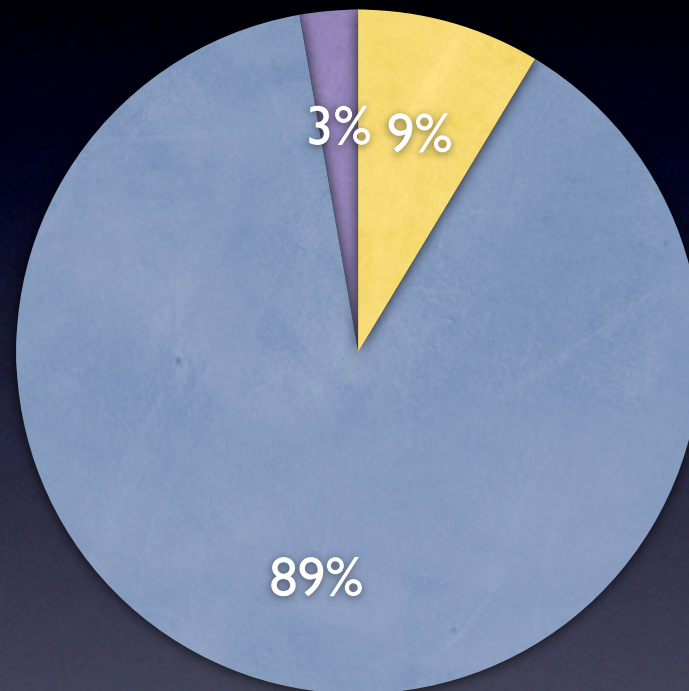
Hynek UFO Classification Scheme II

- RVs: A UFO observed visually and on radar in the daytime or nighttime.
- CE I: A UFO within 500 feet of the witness.
- CE II: A CE I event that also influences the physical environment with permanent or transient effects.
- CE III: A CE I or CE II event with “entities” or “occupants” also reported.

The Hendry UFO Study

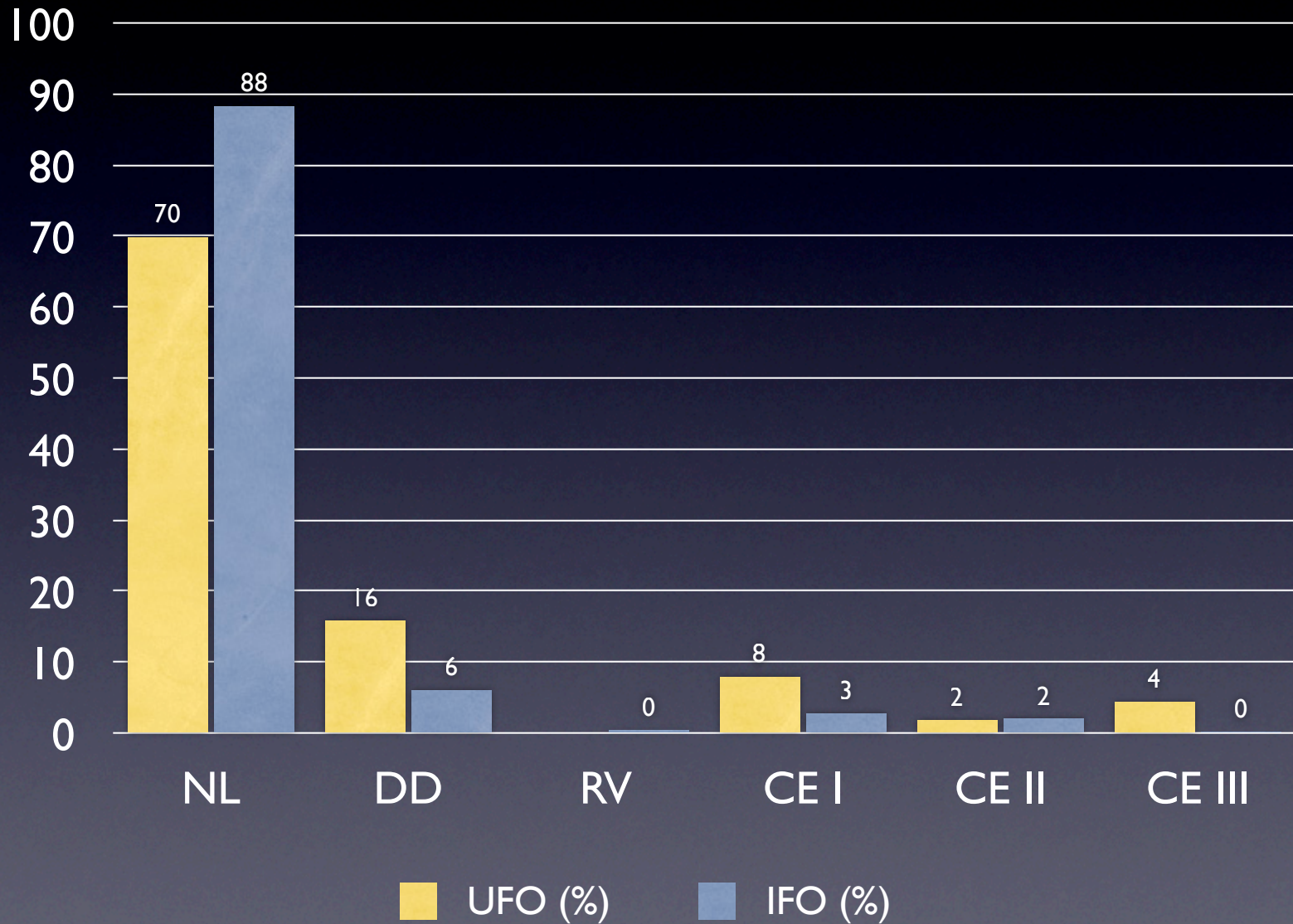
- Allan Hendry. *The UFO Handbook: A Guide to Investigating, Evaluating, and Reporting UFO Sightings* (Doubleday, 1979).
- Hendry worked for J. Allen Hynek's Center for UFO Studies for a year and a half.
- Most sighting reports came through police, sheriff's, and FBI organizations.
- 1307 reports total; IFOs: 1158 (88.6%), UFOs 113 (8.6%), "Exceptions": 36 (2.8%)

Total UFOs vs. IFOs



● UFOs ● IFOs ● “Exceptions”

UFO/IFO by Percentage



Nocturnal Light IFOs

- All IFOs account for 9 out of 10 total UFO reports.
- NL IFOs account for 9 out of 10 (88.4%) of IFOs.
- The top four categories of NL IFOs accounted for 9 out of 10 NL IFOs.
- Top four categories in Hendry study were stars/planets, ad planes, aircraft, & re-entries/meteors.

Top Four NL IFOs

IFO	No.	Percent of Total
Stars/Planets	360	35
Ad Planes	230	22
Aircraft	196	19
Re-entries/Meteors	113	11
Top Four Total	899	88
Remaining Categories Total	125	12
All Categories Total	1024	100

Stars

- Stars appear at dusk, dawn, and night.
- They can be any rainbow color and twinkling; white, blue, red are most common.
- They can appear to make small movements (autokinesis) and have been described to make all sorts of small movements compared to star size.
- They move across the sky in an arc around the north polar star (Polaris). They move slowly, 15 degrees of arc an hour (about a fist and a half at arm's length).
- Some stars are prominent: Sirius, Vega, Capella, Arcturus, and a few others.

Stars Example



Circumpolar Star Trails

(Courtesy Jerry Lodriguss at <http://www.astropix.com/HTML/SHOWCASE/METEOR.HTM>)

Planets

- Venus is the champion of the easily visible planets: Venus, Mars, Jupiter, and Saturn. Planets follow the ecliptic (the path of the sun through the sky) and rise in the east and set in the west.
- They move slowly but not exactly like the stars; planets even "doubleback" sometimes (retrograde motion for small distances).
- Venus can be 100 times as bright (whitish) as prominent stars and is quite easily seen in the morning and evening at times and even in daytime at its brightest.
- Mars can get quite prominent and bright (red) in certain years.
- In high-powered binoculars, planets are seen as small disks unlike stars.

Planets Example



Crescent Moon and Venus

(Courtesy David Williams at <http://www.pbase.com/bluesfish/image/51821276>)

Ad Planes

- In the 1970s, these low-flying (around 1000 feet) light planes with advertising slogans flashing underneath their wings naturally fooled many people.
- They flew at low level over highly populated areas.
- You could not see the body of the plane.
- Many people added details that weren't there such as that the lights rotated, it hovered, etc.
- Your assistant director saw one over Portland in the 1970s and it did indeed look quite a bit different from the usual things in the night sky.

Aircraft I

- Aircraft are many and varied.
- Running lights at night on many aircraft are red and green wing tip lights with a white or red light on the tail.
- Usually one or more periodic (one sec.) flashing light(s) are present on larger airplanes.
- Whitish landing lights are switched on near runways. These can be very bright, looking head on at them.
- Aircraft can be covered by your thumb at the end of your outstretched arm, even if they fly very low over you. You must be close to an airport for flying aircraft to be very large (bigger than your thumb at arm's length).

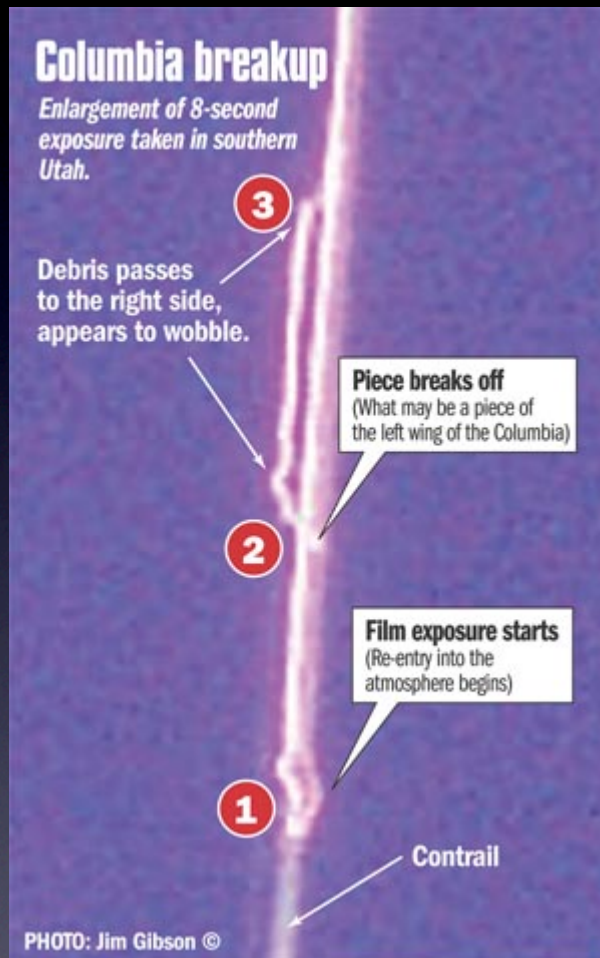
Aircraft II

- Aircraft can be strange-looking to the average person sometimes.
- Secret, experimental government aircraft are virtually *never* flown low over populated areas. You might see (or hear) a very high flying (above 35,000 feet) secret craft if you live under their flight path.
- For example, the Los Angeles area between Area 51 and/or Palmdale/Lancaster/Edwards AFB and their Pacific Ocean MOA.
- It is very rare for high flying craft to zig zag or otherwise make erratic movements except for possible fighter jet simulated battles over Area 51, for example.

Re-entries/Meteors

- Meteors can streak through the sky in daytime or night time. They last a maximum of 10 seconds or so.
- They can be just a bright streak of green, orange, or white, or they can be much closer (rarely) with obvious rumbling, hissing, or other noise with a cloudy, smoky trail.
- Most meteors are very small little streaks in the night time usually originating at a "radiant" point within certain constellations such as the Perseid and Leonid meteor showers.
- Space debris is somewhat similar; you can check with NASA if you suspect space debris. It doesn't last more than around two minutes.

Re-entry Debris Example



STS-107 Columbia Disaster Re-entry Photos

(Courtesy Paul Maley at <http://www.eclipssetours.com/sat/index.html>)

Meteor Example



A Taurid Fireball Photographed Oct. 28,
2005, by Hiroyuki Iida of Toyama, Japan.

(Courtesy NASA at http://www.nasa.gov/vision/universe/watchtheskies/03nov_taurids.html)

Other NL Categories

- In decreasing order of cases: Satellites (24), the Moon (22), Prank Balloons (14), Searchlights (11), Balloons (9), Missiles Launches (9), Fixed Ground Lights (7), Flares (6), Birds (5), Kites (5), Clouds (4), Test Clouds (4), Airborne Residue (2), Mirage (1), Moondog (1), and Window Reflection (1).
- Remember all of these NL IFOs are only 12% of the total NL IFOs.
- Check out oregonmufon.com under Investigating to find out more about the characteristics of these NL IFOs.

Summary

- About 90% of UFO reports resolve into IFOs.
- Of all IFOs, about 90% are NL IFOs.
- Of all NL IFOs, about 90% are identified as stars, planets, aircraft, meteors, or space debris/re-entries.
- Thus, of all UFO reports, about 70% are actually of stars, planets, aircraft, meteors, or space debris/re-entries.
- But, the good news is: of all UFO reports, about 10% are genuine UFOs, which are essentially “flying saucers.”