

UNIDENTIFIED FLYING OBJECT. a moving aerial or celestial phenomenon, detected visually or by radar but whose nature is not immediately understood. Interest in unidentified flying objects (UFO's) stems from speculation that some of them are the products of extraterrestrial beings beyond the earth, and from the psychological insights into contemporary human problems that this interpretation provides.

Observations of unidentified flying objects have been described variously as rapidly moving or hovering, disk-shaped, cigar-shaped, or ball-shaped; moving steadily or erratically with a heavy exhaust, or with or without whatever, accompanied by Emission RFLM, or otherwise glowing with a silvery cast. The diversity of the observations suggests that UFO's have no common origin and that the use of such terms as UFO's, or "flying saucers" served only to confuse the issue by grouping generically a variety of unrelated phenomena.

In the United States, popular interest in unidentified flying objects began on June 24, 1947, when a group of rapidly moving, glowing objects was observed from the air in daytime, near Mount Rainier, Washington. The observer, a Seattle resident, added them "flying saucers." The sighting received extensive publicity. Several similar sightings have been reported ever since. The differences among these observations, however, are of striking as the observations themselves.

Investigations, because of the national defense responsibility, the U.S. Air Force assigns reports of unidentified flying objects over the United States. The number of sightings investigated by the Air Force in the period 1947-1960 varied greatly from year to year.

UFO SIGHTINGS INVESTIGATED BY U.S. AIR FORCE

1947-1950	157	1951-1955	1,296
1956-1960	2,886	1961-1965	1,151

Source: Tamm, L.J., *Flying Saucers and the U.S. Air Force* (Pittsburgh: 1961) and Library of Congress, *Papers about unidentified Flying Objects* (Washington: 1961).

Evaluation of these reports is difficult. Observations frequently are sketchy, and different reports of the same phenomenon are often dissimilar, or even irreconcilable. Observers tend to exaggerate. Deliberate hoaxes, some involving double-exposure photographs, have been perpetrated.

Most UFO's have been classified as belonging to one of the following categories: unconventional aircraft, aircraft under unknown weather conditions, aircraft with unusual external light patterns, optoelectrical and other high-altitude balloons, jet-fitted earth satellites; flocks of birds; reflections of aeroblights or headlights off clouds; reflection of sunlight from shiny surfaces; long-continued exposures including one frame of a briefly halped between two adjacent panes of glass in an airplane cockpit window; optical mirages and looming in mirage in which images of objects below the horizon appear distorted; contrails; cloud formations; ball lightning; sun dogs; aurora, including green Earth's plasma, especially "human bright stars" and the aurora borealis.

Radar detection of unidentified flying objects has also occurred occasionally. Many of these sightings have been explained as radar reflections from temperature inversion layers in the atmosphere and other sources of radar "echoes."

Considering the difficulties involved in tracking down visual and radar sightings, it is remarkable that all but a few percent of the reported UFO's have been identified as naturally occurring or man-made phenomena. It is of some interest that the UFO's are unidentified do not fall into uniform categories such as motion, color, and lighting, but rather run through the same range of these variables as the identified UFO's. In October 1947, shortly after the first earth-orbiting artificial satellite was launched, 1,179 UFO sightings in that year, 704 occurred between October and December. The clear implication is that Sputnik and its attendant publicity was responsible for many UFO sightings.

Earlier, in July 1951, a set of visual and radar observations of unidentified flying objects over Washington, D.C., caused substantial public concern. Government concern was reflected in the creation in November of that year of a special panel, "to evaluate these reports." The panel was established by the Office of Scientific Intelligence of the Central Intelligence Agency, and was headed by R.P. Robinson of the California Institute of Technology. The Robinson panel, after a thorough investigation of the UFO reports to that date, concluded that all were probably natural phenomena, wrongly interpreted.

The panel's reliable testimony is that in the professional astronomer, Jesse L. Greenstein of