

My name is Ted Roe, I have been asked to speak to you about the scientific reality of Unidentified Aerial Phenomena or UAP. I think the best way I can do this is refer to the scientific efforts to understand UAP that are already underway. I hope you all come away with a new understanding for the serious studies that are being conducted by qualified researchers and that you consider these references as responsible sources for information regarding UAP.

For nearly three years I have had the unique opportunity to serve as an executive administrator to an international volunteer team of scientists and aviation professionals as they examine an apparent relationship between UAP and aviation safety. This effort, called the National Aviation Reporting Center on Anomalous Phenomena or NARCAP, is based upon an expanding body of evidence that safety related incidents involving UAP are occurring. This organization was founded by Dr. Richard Haines and myself to develop base data regarding these incidents within the US aviation system. The decision to take this step was based upon an analysis of over 3400 aviation related incidents and observations compiled by Dr. Haines through personal research during his 37 years with NASA.

These cases span the entire history of powered flight and come from official sources including the FAA, the USAF, and the direct testimony of civilian; commercial and military pilots, air traffic controllers and radar operators. After identifying examples of safety related incidents involving UAP, Dr. Haines composed a report titled "Aviation Safety in America – A Previously Neglected Factor". In this document, three kinds of reported UAP dynamic behavior and reported consequences are addressed, each of which can affect air safety: (1) near-miss and other high speed maneuvers conducted by the UAP near the aircraft, (2) transient and permanent electromagnetic effects onboard the aircraft that affect navigation, guidance, and flight control systems, and (3) close encounter flight performance by the UAP that produces cockpit distractions which inhibit the flight crew from flying the airplane in a safe manner.

More than one hundred documented close encounters between UAP and commercial, private, and military airplanes are reviewed relative to these three topics. These reports are drawn from several sources including the author's personal files, aviation reports prepared by the Federal Aviation Administration (FAA), National Transportation Safety Board (NTSB), and the National Aeronautics and Space Administration administered "Aviation Safety Reporting System (ASRS)." Interestingly, all of the U.S. government sources illustrate the fact either that pilots don't report their UAP sightings at all or, if they do, they almost never use the term UAP, UFO, or flying saucer when reporting their near-miss and/or in flight pacing encounters.

The Director of the ASRS, Linda Connell has acknowledged that there are indeed cases in the confidential database that fit the UAP profile and that she simply does not have the resources to examine them closely.

We define UAP as follows:

An unidentified aerial phenomenon (UAP) is the visual stimulus that provokes a sighting report of an object or light seen in the sky, the appearance and/or flight dynamics of which do not suggest a logical, conventional flying object and which remains unidentified after close scrutiny of all available evidence by persons who are technically capable of making both a full technical identification as well as a common-sense identification, if one is possible. (Haines, Pp. 13-22, 1980)

It is important to understand that UAP represent a family of observations and incidents that are categorized collectively as “unidentified”.

Though the category is “unidentified” there are certain commonalities to UAP reports that could be considered “characteristics”.

UAP Characteristics:

UAP are described as single or multiple lights or objects with unusual qualities.

UAP often appear as solid balls of white, blue, green, red, amber or orange light. Some will occasionally seem to display multicolored flashing lights, spotlights, colored beams, sparks, etc.... They can be very bright.

UAP have been reported to divide into two or more lights or objects, release smaller lights and/or objects and recover lights and/or objects.

UAP can appear as simple geometric forms; cones, triangles, cylinders, rectangles, oblate spheroids (discs) and tauroids (donuts). Some UAP are reported to have a bright metallic surface.

UAP can range in size from 6” to several hundred feet. Reliable radar/visual observations of very large lights and objects have been reported.

UAP are reported to hover and to move erratically and at great speed.

UAP observations can be accompanied by transient or permanent electrical/avionic system failures.

UAP observations and incidents have occurred at low, mid and high altitude.

UAP observations can range in duration up to several hours or longer and can

recur in specific locations.

Aviation safety related observations and incident profiles include:

Types of observations include:

1. Visual observations of lights or objects *that are visible* to ground and/or air based radars as targets that do not display transponder codes.
2. Visual observations of lights or objects *that are not visible* on ground or air based radars.
3. Radar observations of objects *that are not visible* to the unaided viewer and that do not display transponder codes.

Types of incidents include:

1. Close pacing, sometimes very close. Occasionally erratic movements are reported.
2. Disruption of on-board avionics systems
3. High-speed passes at sometimes very close range
4. Problems (including injuries) resulting from control inputs to avoid near mid-air collisions
5. Near mid-air collisions
6. Mid-air collisions
7. Disruption of, electrical systems, lighting, and air traffic near aviation facilities.
8. Downed or Missing aircraft and crews

Aviation cases can be particularly data-rich due to the quality and motivations of the reporting pilots and aviation professionals and the radar supported visual observations of crews and controllers. Sometimes these cases involve multiple aircraft, air and ground radar data and air traffic controller testimony. FAA mandated audio recordings of the incidents are often helpful in reviewing the incidents.

When NARCAP went on-line in December of 2000 it joined a small but growing list of similar efforts including several official international research groups who share our concern for safe aviation and our interest in UAP.

The French space agency, CNES, has maintained the longest continuous government study to date. Through the organization, SEPRA, formerly called GEPAN, UAP data is gathered from across the official bureaucracies of France. Under the leadership of its director, Jean-Jacques Valesco, SEPRA investigates reports of UAP submitted by the Gendarmerie, the air traffic control system, the airlines and the French military. Although the scope of SEPRA investigations is broad, they are conducting specific aviation related investigations including a study of radar cases. Additionally, Mr. Valesco teaches a course at the air traffic control school in Bordeaux.

Within the Air Technical School of the Chilean Directorate of Civil Aviation or DGAC is an organization called the Committee for the Study of Anomalous Aerial Phenomena or CEFAA. This organization was founded in 1997 after a number of safety related incidents and observations involving UAP occurred in Chile. Formerly under the guidance of General Bermudez Sanhueza, this organization is lead by General Henriquez and administrated by Gustavo Navarro. NARCAP and CEFAA share a common goal and collaborate on a variety of issues including international development and research and analysis of UAP related incidents involving aircraft and or aviation facilities.

Other efforts include the Uruguayan Air Force group, CRIDOVNI and the Peruvian Air Force group OIFAA.

Dr. Erling Strand is conducting another effort of merit at Hessdalen, Norway. UAP seem to repeatedly manifest in this location, in some cases creating difficulties for aircraft. Dr. Strand and other physicists and engineers have been conducting research and documenting UAP manifestations at this location for nearly 20 years. For the past two years a team of scientists called the EMBLA group have been conducting research at Hessdalen . There are sites located around the world, including several in the United States with similar characteristics and they deserve a much closer look.

NARCAP is working in coordination with these organizations and individuals as well as others to develop base metrics regarding incident profiles, frequency of occurrence and other foundational data.

With respect to today's topic we certainly feel that UAP are "Science Fact". Of course, the question on everyone's mind is "What are they?". It is likely that UAP represent several different sources including uncommon or poorly understood natural phenomena.

A category of observation appears in the data of both NARCAP and the other organizations previously mentioned that seems to have attributes of intelligence, technology and advanced energy management.

These characteristics are consistent in reports spanning 80 years of powered flight and should be examined very closely as they may represent important sociological and scientific developments.

NARCAP, OIFAA, CEFAA, SEPRA, CRIDOVNI, as well as the Hessdalen teams previously mentioned have no position regarding the source of this category of observation. The definitive work has not been done.

Thank you very much.