



The Relationship Between Atmospheric Science, Unexplained Aerial Phenomena and Public Accountability:

A lecture on GEIPAN/CNES
*(Groupe d' Etude et d'Information des
Phénomènes Aérospatiaux Non Identifiés)*

Philippe Ailleris, July 2012

Table of contents

Background	3
GEIPAN/CNES	4
GEIPAN presentation (May 2012) by Xavier Passot, Head of GEIPAN	8
Interview (May 2012) of Xavier Passot	21

1. BACKGROUND

"...There is there a set of relatively disturbing phenomena which can one day receives an explanation which is not the one of a specific object, which could be some magnetic phenomena. But, at the moment, we are forced to recognize that there is something that we do not understand. There is also the multiplication, quite impressive, of visual observations of luminous phenomena sometimes spherical, sometimes ovoid and which produce extraordinarily fast movements. All these phenomena are phenomena to which we have to pay a certain attention.." 1974, Mr Robert Galley, French Defence Minister (France-Inter broadcast)

Over the last 60 years, alleged observations of unidentified aerial phenomena (popularly called Unidentified Flying Objects, UFO) have generated intense interest and invaded the modern consciousness on a worldwide scale. Many thousands of people, from all walks of life and including numerous civilian, governmental and military credible witnesses, have reported UFO sightings. Although embedded in everyone's psychology and having gained the status of a modern myth, it is still necessary to give a definition of what the term, generally speaking, refers to: *"A UFO is the reported sighting of an object or light seen in the sky or on land, whose appearance, trajectory, actions, motions, lights, and colours do not have a logical, conventional, or natural explanation, and which cannot be explained, not only by the original witness, but by scientists or technical experts who try to make a common sense identification after examining the evidence."*

Despite the fact that the majority of sightings can be attributed to the misidentification of natural or man-made objects (e.g. meteors, planets, rockets, space debris, satellites, weather balloons, illuminated party balloons) and a continuing lack of any scientifically acceptable evidence, the continuance of UFO reports, the apparent existence of a small residue of cases remaining unexplained after analysis and the direct association with extra-terrestrial probes, gives the subject a strong aura of mystery, fascination, popularity and controversy.

The need for legitimacy of the UFO phenomenon was stressed in March 2007 when France, via its space agency (Centre National d'Etudes Spatiales, CNES), became the first country to officially open its Unidentified Aerospace Phenomena (UAP) files to the public and announced that 14% of the total cases remained unexplained. The strong public interest was highlighted when the CNES web server crashed, overwhelmed by the flood of viewers around the world attempting to access the information.

Since many decades France has kept a close relationship with the UFO topic. As early as 1951 and the first sighting to be officially recorded by the French Air force and categorized as unexplained, the scientific offices of the Air Force headquarters were following the topic. The national French Gendarmerie had been tasked as early as 1974 to systematically gather the

testimonies at national level, and three years later, the French government requested the CNES to set up a permanent group for the study of Unidentified Aerospace Phenomena. This was made official in May 1977 with the creation of the GEPAN (Groupement d'Etude des Phenomenes Aérospatiaux Non-identifiés). This group had three main objectives:

- Social: the motivation to adequately reply to the public curiosity (population, political, scientific);
- Scientific: the possibility by studying UFO reports to increase the knowledge of our aerospace's environment;
- Security: the necessity to evaluate any eventual threat, natural or artificial.

As a matter of fact, many countries during the last 60 years have set up departments that collected, if not analysed UFO reports, such as the United States Air Force, the MoD in the UK, the RAAFF in Australia, and nowadays some South American nations, including Chile, Brazil and Uruguay. Similarly to the GEIPAN, all these departments systematically faced two major problems in their research:

- A strong culture of belief: The general public associates any strange aerial sighting to something exotic, unknown and to the possibility of extra-terrestrial visitors. Irrational thinking surrounds the topic (hoaxes, pseudo-science, conspiracy theories), hindering a rational and serious approach;
- The existence of a significant "signal-to-noise" ratio: The majority of reported UFO sightings are due to the misidentification of natural and man-made phenomena, caused by inexperience or misperception.

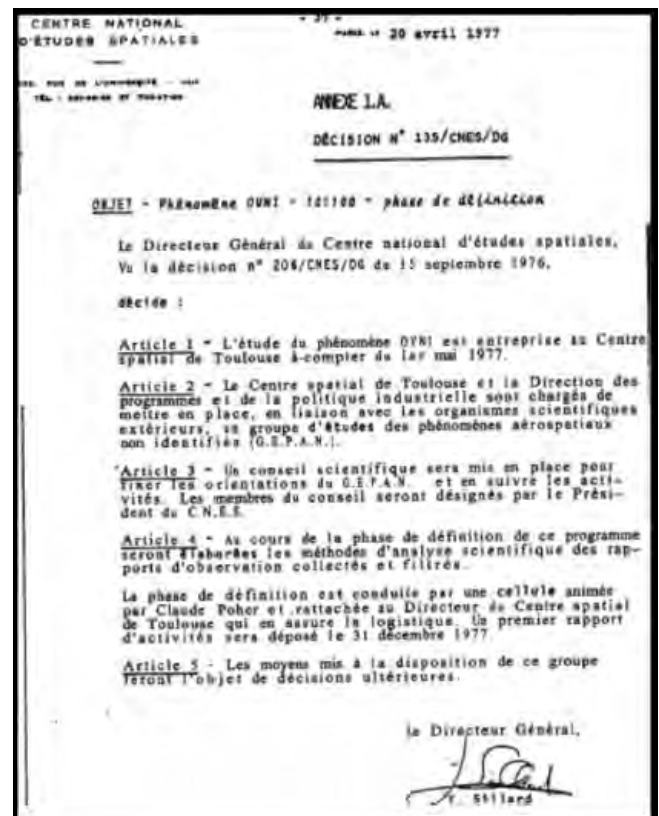


Fig. 1: CNES decision to initiate UFO studies (1st May 1977)

The existence of GEPAN has always been somewhat of an anomaly among Western nations. Compared to the others countries' UFO projects that were all located in the military (and none were really given many resources for investigation), GEPAN was the only true civilian project. This is undoubtedly a very unique situation. Despite the strong controversy associated to the UFO topic, the fact that GEIPAN is still active 35 years after its inception constitutes a significant achievement.

Above all, it demonstrates that it remains possible to approach the UFO topic from a rigorous and rational angle, to develop relevant methodologies for studying unusual transient atmospheric phenomena, and to follow a long term and unbiased research.

2. GEIPAN : GROUPE D' ETUDE ET D'INFORMATION DES PHENOMENES AEROSPATIAUX NON IDENTIFIES

2.1 History of CNES' UAP research: From GEPAN to GEIPAN



Fig. 2: CNES entrance (Toulouse, France)

In 1977, the CNES Director General set up the GEPAN research group to pursue UAP studies initiated by a CNES engineer as a personal project. Its mandate was simple: conduct research into UFOs (as they are commonly called). The group's work was overseen by a scientific advisory board.

GEPAN continued its research until 1988, when it was superseded by SEPRA (Service d'études des Phénomènes de rentrées atmosphériques). As well as UAPs, the new unit also monitored artificial atmospheric re-entries, i.e. debris from space missions falling back to Earth.

In 2000, SEPRA refocused on the original mission of UAP research, albeit with limited resources. In 2001, the Director General requested an audit to help decide on the future of this CNES office. In 2005 and following this audit, the President of CNES decided to restructure this

office. GEIPAN (Group of Studies and Information on Unidentified Aerospace Phenomena) replaced the SEPRA, with a key recommendation of informing the public in a transparent manner. This recommendation was reflected by a change of acronym (the supplementary 'I' corresponding to Information) and by initiating in 2007 the publication of the office's archives on a dedicated website.

Since 1977, GEIPAN has collected close to 6,000 reports from eyewitnesses, mostly on the ground but about 6% who observed phenomena from aircrafts. Once reported events have been grouped into different observation categories (see 4. Methodology), about 22% remain unexplained after investigation and analysis.

2.2 Objectives

GEIPAN is an integral part of the Centre National d'Etudes Spatiales (CNES)' missions and is responsible for:

- The collection of evidence of observations of PAN on the French territory;
- The analysis of the evidence to try to explain the observed phenomena (surveys);
- The testimonies' archiving. One important goal of this activity is to eventually allow the future study of the unexplained cases by the scientific community;
- The information and communication to the public. As such, GEIPAN has committed itself in 2007 to the publication on-line of all its archives.

Some might think that GEIPAN is a research organization dedicated to research of the existence of extra-terrestrial life or advanced alien technology. This is not the case, as this is neither part of its objectives nor falling under its competencies. This is consistent with the CNES activities, which is not a research organization.

2.3 Working methods

GEIPAN is attached to the Directorate's Assistant Toulouse Space Centre. It is supervised by a Steering Committee, composed of representatives of civilian and military authorities of the country (National Gendarmerie, Civil Aviation, Weather, Air Force, Scientific Research), and of CNES representatives. This committee is tasked with analysing the GEIPAN results and make recommendations on future directions.

Firstly, GEIPAN relies on a panel of experts, which includes some thirty volunteers from multidisciplinary sciences, who are tasked to examine the most complex UAP sighting cases submitted to them. These experts provide a real scientific backing to the cases analysis.

Secondly, there are also the First Level Speakers (Intervenants Premier Niveau, IPN), geographically distributed across the whole French territory and who are volunteers participating in the evaluation of the UAP sightings. They are mandated by the GEIPAN for a specific mission and a limited duration, for going to the sightings' locations and make additional interviews with

the witnesses, if deemed required. These IPN must respect the survey methods that are defined in the GEIPAN investigating guidelines.



Fig. 3: From paper files to the Internet

Thirdly, GEIPAN also relies on external parties to undertake UAP investigations:

- The agencies with which the GEIPAN has developed conventions, allowing a quick access to tangible information: National Gendarmerie, the Air Force, Civil Aviation, Maritime services, Météo France.
- The scientific community: the CNRS (IMCEE among others), CEA (French Alternative Energies and Atomic Energy Commission).

The GEIPAN team consists of two GEIPAN CNES staff full-time: the manager and an assistant, who rely on external services and tools for:

- The study and expertise in information processing (monitoring and review of cases, statistical);
- The information management, formatting, making the information "anonymous", archiving of UAP sightings and other UAP related information.

The budgetary resources of GEIPAN come from the public service grant received overall by CNES to carry out its activities.

Period	Service	Responsible
1977-1979	GEPAN	Claude Poher
1979-1983	GEPAN	Alain Esterle
1983-1988	GEPAN	Jean-Jacques Velasco
1988-2005	SEPRA	Jean-Jacques Velasco
2005-2008	GEIPAN	Jacques Patenet
2008-2011	GEIPAN	Yvan Blanc
Since 2011	GEIPAN	Xavier Passot

Fig. 4: Heads of GEIPAN

2.4 Methodology

During its first five years, GEIPAN developed scientific methods for collecting and analysing interdependent data. Since the 1980s, a rigorous scientific approach has also been applied to UAP-related investigations. This approach is still used today. Through agreements and conventions between GEIPAN and its partners (authorities, researchers, etc.), the unit has access to the information sources and observable data that it needs for conducting proper investigations.

These data come from:

- Eyewitnesses interviewed to ascertain their physiological and psychological profiles;
- Eyewitness accounts in the form of verbal and written reports to the authorities;
- Psychosocial factors assessed by looking at the influence of social environments, i.e. what eyewitnesses read, their education, media influences, as all these factors affecting the way people perceive and interpret phenomena
- The physical environment in which the phenomenon occurred, including the analysis of evidence on the ground, camcorder footage, photographs, atmospheric and astronomical conditions, etc...
- GEIPAN also relies on partner research bodies and experts to perform analysis in different fields.

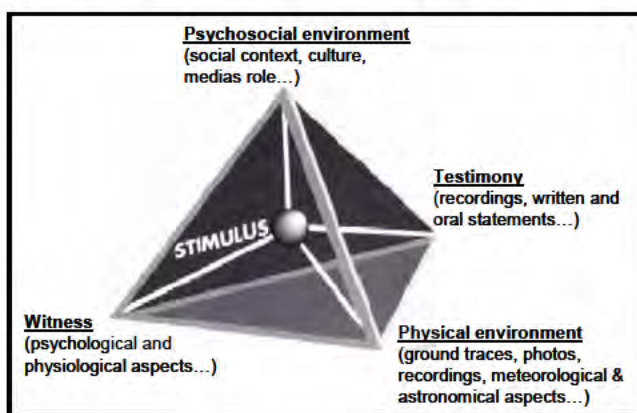


Fig. 5: The GEIPAN's tetrahedral approach for apprehending an UAP observation. Four aspects are systematically studied: the witness, the testimony and the physical and psycho sociological environments.

After analysis of all observable data, researchers attempt to determine the origin of the stimulus, i.e. the actual event the eyewitness saw and reported.

Afterwards, each UAP sighting case phenomenon is classified into one of the following four categories:

- Cat. A: conclusively identified
- Cat. B: probably identified
- Cat. C: unidentified (due to insufficient data)
- Cat. D: unidentified (after study)

In July 2012, The GEIPAN online statistics reflect the following percentages: Cat. A: 9%, Cat. B: 28%, Cat. C: 41% and Cat. D: 22%.

(basis of 1150 cases,

<http://www.cnes-geipan.fr/index.php?id=196>)