

## ***UFOs and Defense: What Should We Prepare For?***

-An independent report on UFOs written by the French association COMETA. This report details the results of a study by the Institute of Higher Studies for National Defence.-

This paper originally appeared in a special issue of the magazine *VSD* published in France in July 1999.

# *“Stripping the UFO phenomenon of its irrational layer”*

Forward by Professor André Lebeau,  
Former chairman of the Centre National d'Etudes Spatiales (CNES)  
[French National Center for Space Studies]

It is not looked on highly in certain scientific circles to be preoccupied with phenomena that are deemed to come under the heading of popular mythology or that are, at any rate, outside the realm of science. Such was the case with [the theory of] stones falling from the sky, which was long considered in our country to be the stuff of fable. However, the day that a meteorite shower over the town of Laigle permitted a collective and indisputable observation, it entered into the domain of science. One century later NASA, no doubt hastily, elevated these stones to proof of the existence of primitive life on Mars.

Phenomena of this type pose a preliminary problem for the scientific approach: does a scientific fact exist?

When the phenomenon is a matter of experimentation, the criterion to be used is simple; the reproducibility of the experiment is the touchstone and furnishes the fact that must then be interpreted. But the situation is more difficult when the phenomenon is not open to experimentation, when repeated observation is the only basis on which one can go, as is the case in astronomy and for the most part in geophysics. However, when the fact, albeit rare, is collectively and indisputably visible, it is easy to elevate it to the status of scientific object. The existence of eclipses, comets, and novae has been recognized since ancient times, even though their interpretation long contained – and sometimes still contains – a religious dimension. Thus collective and simultaneous observation plays the same role as the reproducibility of experiments.

This is not true when the event is not only rare but discrete as well, and when there is a very small amount of evidence at each occurrence, which opens the door to various suspicions. Unidentified flying objects, or UFOs, fall into this category. One runs up against additional difficulties in the case of UFOs, firstly that of how many human activities, especially since the beginning of the space age, have generated atmospheric phenomena the origin of which is not immediately ascertainable by those who observe them. In any case, UFOs, the origin of which cannot be attributed to either a human source or a natural mechanism that has been identified by science, are

mixed in with a background noise the origin of which, although difficult to identify, is not at all mysterious.

Moreover, and above all, the existence of unexplained manifestations, both in the atmosphere and occasionally on the surface of the earth, inevitably gives rise to a fundamental question: are we alone in the universe? Could some of these phenomena be the work of extraterrestrial beings? This question gives the UFO issue a sociological, media-related, and even religious dimension in a domain that is not that of science and scientific methods. And it is the very existence of this dimension that elicits reactions of rejection in the scientific community.

However, a dispassionate examination of the situation should lead those who believe in the value of scientific method to consider that the very existence of a strong irrational environment is another reason to apply the precepts of this method to the issue of UFOs.

COMETA has tried its luck at this in the report that it is presenting, supported, namely, by the work performed by GEPAN, which later became SEPRA. The significant place granted to sightings, to testimonies, and to the analysis of cases that have been explained shows the major role played here by the establishment of facts. But we also find in this document a reflection on the hypothesis of extraterrestrial intelligence and of the importance that it could have if the work came together to confirm it.

This report is useful in that it contributes toward stripping the phenomenon of UFOs of its irrational layer. When all is said and done, the question of determining whether or not those who created this layer believe in the existence of extraterrestrial visitors, concealed in a variety of phenomena that are surprising in appearance but commonplace with respect to their cause, is of no real importance. What a scientist believes is important in the conducting of his research because this is what motivates and drives him. But his belief is not important to the results of his research nor does it have any effect on those results if he is meticulous.

# Table of Contents

PREFACE		Page 5
FOREWORD		Page 6
INTRODUCTION		Page 7
<b>PART 1</b>	<b>FACTS AND TESTIMONIES</b>	
Chapter 1	Testimonies of French Pilots	Page 9
Chapter 2	Aeronautical Cases Throughout the World	Page 12
Chapter 3	Sightings from the Ground	Page 17
Chapter 4	Close Encounters in France	Page 20
Chapter 5	Counterexamples of Phenomena That Have Been Explained	Page 24
<b>PART 2</b>	<b>THE EXTENT OF OUR KNOWLEDGE</b>	
Chapter 6	Organization of the Research in France	Page 27
Chapter 7	Methods and Results of GEPAN/SEPRA	Page 31
Chapter 8	UFOs: Hypotheses, Modeling Attempts	Page 35
Chapter 9	Organization of the Research Abroad	Page 42
<b>PART 3</b>	<b>UFOs AND DEFENSE</b>	
Chapter 10	Strategic Planning	Page 55
Chapter 11	Aeronautical Implications	Page 59
Chapter 12	Scientific and Technical Implications	Page 62
Chapter 13	Political and Religious Implications	Page 64
Chapter 14	Media Implications	Page 69
CONCLUSION AND RECOMMENDATIONS		Page 71
APPENDICES		
Appendix 1	Radar Detection in France	Page 74
Appendix 2	Astronomers' Sightings	Page 74
Appendix 3	Life in the Universe	Page 75
Appendix 4	Colonization of Space	Page 75
Appendix 5	The Roswell Affair – Disinformation	Page 77
Appendix 6	The Long History of the UFO Phenomenon – Elements of a Chronology	Page 80
Appendix 7	Reflections on Various Psychological, Sociological, and Political Aspects of the UFO Phenomenon	Page 82
REFERENCES		Page 87
GLOSSARY		Page 90

The photo section from pages 43 to 50, as well as pages 2 and 91, were not part of the initial report.

Publication of:  
 (G.S. Presse Communication logo) 79-83, rue Baudin, 92309 Levallois-Perret Cedex. ☎ 01 55 21 00 50, fax: 01 55 21 00 55. *Société anonyme* with FF 250,000 in capital, in business for 99 years.  
 Sole Chief Executive Officer: Daniel Denis. Publication Director: Daniel Denis. Art Director: Richard Yotis. Editorial Assistant: Jacques Péron. Illustrations and Technical Consulting: Bernard Thouanel.  
 Editorial Dept. ☎ 01 55 21 00 50. E-mail: vsd\_hu@worldnet.fr. Public Relations Agent: Image7/Isabelle de Segonzac ☎ 01 44 15 93 94. Sales and restocking: MEP, ☎ 01 42 56 12 26, terminal ELL. Photoengraving: Key Graphic. Printing: Berger Levrault, 34, avenue du Roule, 92220 Neuilly-sur-Seine. Joint Appeals Board No.: 59521. ISSN 1278-916 X. Copyright deposit: July 1999.  
 © G.S. Presse Communication. The editorial department is not responsible for the loss of or damage to texts or photos that are sent to it for consideration. Reproduction in whole or in part of any material published in the magazine is prohibited.

## UFOs AND DEFENSE

### What should we prepare for?

COMETA, an association governed by the Law of July 1, 1901.

All reproduction, in whole or in part, translation, and adaptation rights reserved for all countries. Copyright 1999.

#### Cover:

Photo taken on September 4, 1971, directly over the Tilaran range in Central America by an airplane from the National Geographic Institute of Costa Rica (Bernard Thouanel collection).

# *“Concrete problems are raised that call for a response in terms of action”*

by **General Bernard Norlain,**  
**Former director of the Institut des Hautes Etudes de Défense Nationale**  
**[Institute for Advanced National Defense Studies (IHEDN)]**

When General Letty visited me in March 1995 at my office at IHEDN to explain to me his project for creating a new fact-finding committee on UFOs, I assured him of my interest and referred him to the management of the IHEDN Auditors Association (AA), which gave him its support. Knowing that some twenty years earlier the AA had produced and published a preliminary report on the subject in its bulletin, it was but time to update it.

Denis Letty seemed to me to be the perfect one to spearhead this task; one month earlier, in February, he had organized, within the framework of the Ecole de l'Air [Air Force Academy] Alumni Association, a conference on unidentified aerospace phenomena. Before a large public, some of our comrades, former pilots, spontaneously related their encounters with UFOs. The person in charge of studying these phenomena at the CNES then presented his papers, and a well-known astronomer described a scientifically acceptable version of the extraterrestrial hypothesis.

The fields of knowledge affected by the UFO phenomenon are very diverse, and General Letty was able to find within the AA, but on the outside as well, numerous experts whose efforts he coordinated. This list of high-level civilian and military degrees of the members of his committee is very impressive: officers, engineers, and specialists in the physical scientists, life sciences, and social sciences were able to deal with all aspects of the study.

This is not a purely academic study. Concrete problems are raised, and not just for civilian and military pilots, that call for a response in terms of action. The makeup of COMETA [Committee for In-Depth Studies], which is the name of the committee, took these into account. Almost all of its members have, or had during the course of their careers, important responsibilities in defense, industry, teaching, research or various central administrations.

I express the wish that the recommendations of COMETA, which are inspired by good sense, will be examined and implemented by the authorities of our country. The first report of the AA favored the creation within CNES of the only civilian government agency known in the world dedicated to the study of UFOs. May this new report, which is much more in-depth, give new impetus to our national efforts and to indispensable international cooperation. IHEDN will then have well served the nation and, perhaps, humanity.

# *“Consider all of the hypotheses”*

by Denis Letty,  
Air Force General, 2nd Section, AA (35)

The accumulation of well-documented sightings made by credible witnesses forces us to consider from now on all of the hypotheses regarding the origin of *unidentified flying objects*, or UFOs, and the extraterrestrial hypothesis, in particular. UFOs are now a part of our media environment; the films, television broadcasts, books, advertisements, etc., dealing with UFOs amply demonstrate this.

Although no characterized threat has been perceived to date in France, it seemed necessary to the former auditors of the Institut des Hautes Etudes de Défense Nationale (IHEDN) to take stock of the subject. Along with qualified experts from extremely varied backgrounds, they are grouped together to form a private in-depth fact-finding committee, which was christened COMETA.

This committee was transformed into a COMETA association, which I chair. I would like to thank General Bernard Norlain, former director of IHEDN, and Mr. André Lebeau, former chairman of the Centre National d'Etudes Spatiales, without whom COMETA would not have been born.

In addition, I wish to acknowledge the various people who agreed to give their testimony or to contribute to this study, and namely:

**Jean-Jacques Vélasco**, Head of SEPRA at CNES,  
**François Louange**, Chief Executive Officer of Fleximage,  
**Jean-Charles Duboc, Jean-Pierre Fartek, René Giraud**, civilian and military pilots,  
**Edmond Campagnac**, former technical director of Air France at Antananarivo,  
**Michel Perrier**, Squadron Commander, Gendarmerie Nationale  
**M. Soun**, of the Direction Générale de l'Aviation Civile [Civil Aviation Agency]  
**Joseph Domange**, Air Force General, Auditors Association delegate general.

I must also thank the commander of the Air Force Air Operations Command Center for its participation during the investigation into flight AF 3532 on January 28, 1994.

Among the members of COMETA who spared no effort for close to three years, it is possible for me to list:

**Michel Algrin**, State Doctor of Political Science, attorney-at-law, AA (35), (1)  
**Pierre Bescond**, Weapons Engineer General, 2nd Section, AA (48),  
**Denis Blancher**, Chief of Police, Police Nationale, Ministry of the Interior,  
**Jean Dunglas**, Doctor of Engineering, Honorary Engineer General, Rural, Water, and Forest Engineering, AR (48)  
**Bruno Le Moine**, Air Force General, 2nd Section, AA (41),  
**Françoise Lépine**, Fondation pour les Etudes de Défense [Foundation for Defense Studies], AA (33),  
**Christian Marchal**, Chief Mining Engineer, Research Director at ONERA [National Aerospace Study and Research Office],  
**Marc Merlo**, Admiral, 2nd Section, AA (35),  
**Alain Orszag**, Doctor of Physical Sciences, Weapons Engineer General, 2nd Section.

(1): AA or AR xx: auditor of national or regional promotion no. xx.

# INTRODUCTION

In 1976, a committee of the Institut des Hautes Etudes de Défense Nationale (IHEDN) chaired by General Blanchard of the Gendarmerie Nationale opened the unidentified flying objects file. The objective: to make proposals for organizing research and the collection of data on these phenomena. The goal was achieved, because the recommendations of this committee were followed in the creation of the Groupe d'Etude des Phénomènes Aérospatiaux Non Identifiés (GEPAN) [Unidentified Aerospace Phenomena Study Group], the precursor to the current Service d'Expertise des Phénomènes de Rentrée Atmosphérique (SEPRA) [Atmospheric Reentry Phenomena Consulting Department], an agency of the Centre National d'Etudes Spatiales (CNES), which is in charge of this file. Twenty years later, it seemed useful to us to take stock once again of the knowledge regarding these sightings, which are becoming of greater and greater interest to a large public that is often convinced of the extraterrestrial origin of UFOs. Just look at the number of films or television broadcasts on this subject.

For the sake of convenience with respect to language, we will use the term UFO (Unidentified Flying Object) generally instead of the more scientific term UAP (Unidentified Aerospace Phenomenon).

Without a doubt, the phenomenon remains and the number of sightings, which are completely unexplained despite the abundance and quality of data from them, is growing throughout the world. On the ground, some sightings, like the Trans-en-Provence sighting in 1981, have been the subject of in-depth studies proving that something did in fact land on the ground and parked there. Civilian and military pilots have provided gripping testimonies, often corroborated by radar recordings, as was the case recently in France. In view of the lack of irrefutable proof regarding the origin of these phenomena, the need for understanding persists.

We will devote the first part of this report to several particularly remarkable French and foreign cases.

In the second part, after having recalled the current organization of the research on these phenomena in France and abroad, we will evaluate the work being done by scientists worldwide who are interested in UFOs and are proposing, as we will see, partial explanations that are based on known laws of physics.

Some of these (propulsion systems, nonlethal weapons, etc.) could become realities in the short, medium and long term.

We will review the principal global explanations proposed, focusing on those that are in keeping with the current scientific data, which range from secret weapons to extraterrestrial manifestations.

The UFO phenomenon involves defense in the broad sense and calls for a certain number of measures, which we will examine in the last part:

- [providing] civilian and military pilots with sufficient information to teach them adapted conduct when faced with these phenomena and, more generally, [providing] the public and decision-makers with information,

- developing the actions of SEPRA and promoting supplemental scientific monitoring, or even research, actions,

- considering the strategic, political, and religious consequences of a possible confirmation of the extraterrestrial hypothesis, the bizarre connotation of which it is advisable to eliminate here and now.