

Recommended Actions to Improve the Current Climate
of Denial within the Aviation World about Unidentified Aerial Phenomena
and Related Commentary

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November 18, 2010

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Abstract

This paper presents fifty four completely independent recommendations and related comments made by fourteen national and international government officials, military leaders, pilots, academics and others responding to the following basic question: What actions are needed today to improve the current climate of denial about unidentified aerial phenomena in aviation? All were numbered and then grouped into one of seven themes. On average, each contributor made 3.8 suggestions. A remarkable degree of consistency was found among these recommendations that may be summarized as (ranked in order of number of recommendations): Exchange information broadly and openly; Establish a central global organization to study and report its findings; Carry out high quality research; Develop new precautionary measures for pilots; Strengthen and enforce existing aviation regulations regarding near-miss and related UAP events; Work to change the present negative biases toward UAP; and Improve UAP detection capabilities. A miscellaneous category was also included. Only a few of these recommendations had to do specifically with combating the negativity and irrational bias that exists today within many segments of world aviation. All of these recommendations could have positive long-term effects on this continuing problem. Evidence provided by several contributors made it clear that some UAP can pose a threat to flight safety.

Introduction

Eighteen contributors to Leslie Kean's new book "*UFOs: Generals, Pilots, and Government Officials Go on the Record*"¹ (2010) provided insightful views about the ubiquitous and continuing

¹ Published 2010 by Harmony Books, New York, ISBN 978-0-307-71684-2.

existence of unidentified phenomena in our skies. As one of the authors in her book I received my copy early in August 2010 and read it immediately. In the following days I read it again hoping to find something that I might have overlooked the first time, particularly because so many of the contributors seemed to have written much the same thing, viz., UAP are real, are a threat to flight, are being ignored by U. S. officialdom and the science community, and are not likely to go away very soon.² The varied backgrounds, training, and experiences of these writers were as exceptional as were their recommendations³; all were enlightening to say the least. I came to recognize how united we all are in our views about the basic problem, or more precisely, the challenge posed by some unidentified aerial phenomena (UAP) to flight safety and to mankind.

I wrote to Leslie soon thereafter about an idea that came to me that seemed to be a logical extension of her book. This idea was to tap the wealth of experience, talent, and wisdom represented in its many contributors. I wrote, “I plan to write to every contributor to your book to ask them the following question:

“What specific actions or steps would you like to see happen to improve the current climate of denial concerning unidentified aerial phenomena in much of the world’s aviation and thereby help improve flight safety?”

She quickly responded with enthusiastic support for this idea and provided me with e-mail addresses for everyone. I wrote to ask them for their answer(s) to this question along with permission to quote their names. Everyone who submitted a response gave their approval to be identified with their submission. Except for minor editing, this paper presents the word-for-word responses I received. In a few instances I have inserted words or phrases in parentheses to help clarify the meaning of the statements and boldened what I took to be the core idea of their recommendation. I have also numbered each of them. In several instances I had to extract the basic point from the text in which case they are not in quotations. These fifty four completely independent recommendations are presented below in the following groups: military officers and pilots, government officials, academics and others.

Military Officers and Pilots

General Ricardo Bermudez Sanhueza (Chile)⁴

1. **“It is necessary (to establish) a continuous exchange of reliable information between peer credited as trustful, serious, responsible non-profit oriented individuals.**
2. **“Based on this information, jointly establish precautionary measures to be known by pilots that make use of air space.”**
3. **“I believe that the evidence of these phenomena is of such extent worldwide that it cannot be**

² My second reading uncovered enough documented facts to compel me to pursue the present study.

³ Their biographies are included at the end of this paper.

⁴ Received August 11, 2010.

handled by countries acting individually. I believe **the office dedicated to the study of these phenomena and its consequences should be located (within) the United Nations.**”

Capt. Ray Bowyer (U.K.)

(Initial reply)⁵ “...eventually the truth will out. I feel that with virtually every person on earth now carrying a camera that it is only a matter of time that irrefutable evidence will become available to the media that cannot be denied by the governments of the world.

“I feel that within the next ten years governments worldwide will begin to gently leak selected sightings to enable one of three options to reach the general public as information and sightings gather momentum: (a) To allow the assimilation of information to gather speed to a pace where full disclosure of a visiting life form from outside of Earth by governments - whether it be benign, hostile or intentions unknown - has been known about for decades. (b) To enable the world’s population to realize that visitations have been occurring with the full knowledge of world governments. (c) To enable the population to accept the knowledge that visitations are occurring and that there is nothing that can be done to prevent it. I suspect that ‘specific actions’ by governments will never come to pass, however matters will I think eventually reach a point where one of the three options above must occur.”

(Subsequent reply)⁶

4. Pilots must follow already established regulations on reporting UAP.

“**Specific steps (already) exist. If any aircraft is seen in a position where it should not be, i.e., controlled airspace for example, it should be reported to the relevant authority.** The problem with this in the (United) States, as opposed to the rest of the world, is that if you put your head above the parapet and talk about a sighting that pilot becomes unemployable.

5. Airlines must enforce FAA air law.

“**The responsibility lies with the airlines to enforce FAA air law** that any sightings must be reported as with an airprox or bird strike (event) or any other non-standard operational procedure. Sadly the U.S. airlines, as opposed to most other countries of the world take an active stance in the opposite direction. For what reason or under whose direction I don’t know, however, I suspect that the U.S. military and therefore (the) U.S. Government may have had some influence in this matter. The air law is in place. Let’s get the airlines to enforce it and back their pilots up! This is what happened during my sighting.”

Capt. Rodrigo Bravo (Chile)⁷

“I can answer in two parts:

6. “First, it is necessary to **consider openly that UFO is a psychosocial phenomenon**, you as a doctor of psychology must be clear on this matter. Sadly, the UFO subject is transverse, so that (there are) many people with little technical knowledge working in this area. The ufologists do not contribute to clarify the phenomenon, however, (they) pollute the environment and create a

⁵ Received August 12, 2010.

⁶ Received August 13, 2010 when he was asked for further comment and clarification.

⁷ Received August 18, 2010

whimsical (situation) and full of false information. This point is alienating the scientific community and the subject (of) aircraft. It is for this reason that, I call “amateur” ufologists as being self-taught people, their research methodology is far from achieving a scientifically sound pattern. (This is) with the exception of a few people (I think 10 people, no more).

7. “Second, the CEFAA⁸ in Chile, has (made) a contribution in the sense of **opening a window to the reception and delivery of information**. Another point, the conference in Washington (on) November 12, 2007, was the gathering of serious people, military, pilots and scientists who validated the serious study of the UAP, seeking the release of official information from the U.S. government. (A) similar action (was found in the) 1997 Sturrock report,⁹ (that) gave an analysis of cases with physical evidence.

8. “But I think today, (this) is very necessary and **it’s time for a global aviation conclave** in relation to the UAP, where they show the world how important the study of the subject (is) and the dangers that accompany this phenomenon for global aviation. This meeting must be distributed and exposed to the aviation community and the world, thus, break(ing) the denial that exists and show(ing) how interesting real cases (are). In Chile, the topic is discussed by the fact that there are important aviation cases where it (has been proven) to be a dangerous activity (and) which should be studied and all pilots made aware that the phenomenon is a very sensitive issue.”

General Wilfried De Brouwer (Belgium)¹⁰

“I was Chief Operations of the Belgian Air Staff when an exceptional UAP wave took place over Belgium. As from November 1989, during a period of more than two years, hundreds of witnesses reported to have seen Unidentified Aerial Phenomena. In many cases, people described the UAPs as triangular crafts, equipped with three enormous spotlights, hovering or moving very slowly without making any significant noise but sometimes accelerating to very high speeds. Most of these sightings occurred at night.

“Air operations in night flying are strictly limited and, except for a few exceptions, have to be authorized by the Civil Aviation Authorities (CAA). Investigations revealed that these craft were operating without permission. This meant that the reported UAPs committed an infraction against the aviation rules.

“The numerous observations triggered a formal meeting between the CAA and the Military. It was concluded that such illegal activities could not only endanger flight safety but also the security of the population.

- Flight Safety in controlled (non-military) airspace is the responsibility of the relevant Civil Aviation Authorities. All flights have to be approved by these CAA; unauthorized flights are conflicting with routine flying activities and constitute a flight safety hazard.

⁸ Committee for the Study of Anomalous Aerial Phenomena.

⁹ This refers to a book by Peter Sturrock entitled “The UFO Enigma: A New Review of the Physical Evidence,” Warner Books, New York, 1999.

¹⁰ Received October 10, 2010.

- Safeguarding the airspace is the responsibility of the air defense authorities. All unauthorized flights can represent a security hazard because their intentions are unknown. Unauthorized flights have to identify themselves and announce their planned routing and intentions. In cases of uncertainty or non compliance, these flights have to be intercepted by the existing air defense system.

“The Belgian Air Force tried to identify the alleged intruders but could not gather sufficient information to determine the origin and nature of the UAPs.

“Nevertheless, in spite of all these sightings described by people on the ground, not one single pilot, either civil or military, reported to have seen irregular activities in the air. Also, the UAPs were not detected by the numerous civil and military radars. The latter can have several reasons: UAPs may have stealth capabilities and/or radars are not tuned to detect targets that are immobile or operating at very slow speeds.”

9. Pilots should be encouraged to report their UAP sightings to aviation authorities.

“It is evident that pilots' reports would have been of very high value to compliment reports from ground observers but it is unknown whether civil pilots saw any irregular air activities over Belgium during this period. Military pilots were instructed to report any abnormalities but, such as discussed in Leslie Kean's book on UFOs, some commercial air operators don't want their pilots to report any unusual sightings. These air operators are afraid that this would scare the passengers and damage the company's reputation. The result is that pilots rarely make written reports of unusual sightings. Even if they did warn the duty air traffic controller by radio, the CAA does not feel obliged conduct formal investigations as long as no formal reports are received.

“It should be emphasized that this ostrich policy is not the right approach. Reporting UAP sightings are only an expression of the observers' perception to have seen unusual aerial activities and there is nothing mysterious or ridiculous about this. Some of these sightings can be related to normal air activities or to weather phenomena but other sightings may indeed remain unexplainable.

10. All unexplained sightings should be investigated by civilian and in some instances military authorities. **“These unexplainable sightings should be investigated in depth**, i.e. pilots of other aircraft in the vicinity should be consulted and encouraged to report their experiences as well. It is by matching several observations together that more precise information can be extracted, allowing investigators to come forward with well founded conclusions. If witnesses want to remain anonymous, their names should not be revealed. Also, this will prevent that witnesses are affected by third parties.

“Air defense authorities should be involved in these investigations. Not only because they may have an answer for the unusual activities but, if they don't have, they may be able to determine the weaknesses in their air defense system. Such conclusions are rather sensitive and knowing that, for security reasons, military don't want to expose their weaknesses, investigations by air defense authorities should be kept confidential during the early stages.”

”The question is: how to encourage pilots to report UAPs?”

“The most rational approach would be: go French! France has a formal reporting and investigation body (GEPAN/SEPPA/GEIPAN) that is operational since 1977. This body consists of a focal point that is collecting sighting reports through a formally established reporting system. Investigations are made with the support of Police, Air Force, Navy, Aviation and Metrological Centers. The body is embedded in the national research centre (CNES) that is the equivalent of NASA. One of the most important consequences of the establishment of such a system is that people are not reluctant to report unusual air activities; they are not afraid to be ridiculed because they are reporting to an official investigation body. Also, there have been no negative reactions of the population towards air operators whose crews reported UAP(s) in the vicinity of their aircraft. The fear of some companies that potential passengers would refrain from flying with them is not justified. This results in a more rational and transparent policy with regard to the UAP problem.

“Similar organizations exist in other countries (i.e. Peru, Chili, Uruguay, etc.) where the attitude of the population towards the UAP issue is more open-minded than in those countries where no such system exists.

“It should be noted that in the countries with an existing investigation structure, the initiative to create such structure was taken after remarkable UAP events. When these happen, the population puts pressure on the national authorities to provide an answer and such an answer cannot be given without adequate investigation. Nevertheless, during the UFO wave in Belgium, the national authorities did not agree with the establishment of a formal investigation body. The approach was that the Air Force would support a private group of experts who were investigating the numerous UAP reports, but the Air Force did lead or conduct formal investigations. This worked very well, but the problem remained that some witnesses did not want to report to a private organization and also that no official conclusions were drawn after the events.

“While it cannot be expected that governments establish UAP bodies of the blue¹¹, there may still be way's to encourage pilots to report unusual sightings. Common sense would be that national CAAs¹² oblige pilots to report unusual activities, even if they didn't affect flight safety. The CAA should be informed of such activities, simply because they were not authorized and commit an infraction against the established rules.

“Nevertheless, CAAs are reluctant to promulgate specific rules for reporting UAPs, simply because pilots are supposed to report all air events that affect the safety of their flight. UAPs (are) part of such events. However, except for a limited number of cases, pilots only report events when they judge that the safety of their flight has been directly affected. They are less enthusiastic to report UAPs that did not endanger their flight because of factors such as the fear of being ridiculed, company policy, administrative complications, etc.

11. “Nonetheless, **pilots should be made aware that unauthorized UAP activities may endanger other flights**. Also, it has been experienced that UAPs do not necessarily show up on the air traffic controllers' radar which means that the latter are unaware that unauthorized

¹¹ Refers to the Air Force.

¹² A reference to civil aeronautics authorities like the FAA in America.

activities are going on in the airspace that they are supposed to control. The relevant CAA should be informed of any potential infraction. In other words, the current climate of denial will not change as long as no specific instructions on the reporting of UAPs are issued by national CAA.

12. “One way to approach this is to **invite international organizations to discuss this issue with their member countries**. To accomplish this, two important international organizations could be approached

i. “The **International Civil Aviation Organization (ICAO)**, a specialized agency of the United Nations with its headquarters in Montreal, Canada, codifies the principles and techniques of international air navigation and fosters the planning and development of international air transport to ensure safe and orderly operations. The ICAO Council adopts standards and recommended practices concerning air navigation, its infrastructure, flight inspection, prevention of unlawful interference, etc. for international civil aviation. In addition, the ICAO defines the protocols for air accident investigation.

ii. “The **International Air Transport Association (IATA)**, also with its headquarters in Montreal represents, leads and serves the airline industry. All the airline rules and regulations are defined by IATA. The main aim of IATA is to provide safe and secure transportation to its passengers. There is always close association and dialogue with ICAO because one of IATA's stated aims is to promote safe, regular and economical air transport. One of IATA's departments is the Traffic Department that provides a forum for traffic coordination discussions and serves as a central source of traffic information for publishers and members.”

13. “The two bodies mentioned above could be invited to **encourage their members to be more vigilant regarding UAP sightings**. IATA, representing the airline industry, should encourage pilots to formally report any unusual activities, while ICAO, issuing recommendations for ensuring safe operations, should encourage Civil Aviation Authorities to investigate unauthorized aerial activities and to coordinate their investigations with the relevant air defense authorities.

Capt. Julio Miguel Guerra (Portugal) ¹³

”Here are my answers to your question.

14. “**Achieve an agreement with the governments in order to improve the disclosure (of these) events** without any complications.

15. “**Achieve collaboration (with the) science community and (the) media**.

16. “**Create commissions (groups of investigators) in all the countries** related to this project.

17. “**Creation or insertion of this organization, if possible, in the United Nations** with credible and qualified persons that may wish to collaborate on this subject in order to (help it) become more credible to the world so that we may proceed into a reality that I predict to be so close (to) bursting the veil which separates us from other inhabitants of this Planet -

¹³ Received August 12, 2010

extraterrestrial beings.

18. **“As you may know, why are there confidential reports in the Air Forces concerning the UFO matter if, supposedly, this matter isn't real? This should be clarified.**

“Regarding Flight Safety, the information that I have and that I may develop, (is that) the ones who control the (UAP) ships seem to have (the) capacity to avoid collisions or they simply dodge at an extraordinary speed, just as it happened with me, or, maybe, through the decomposition of matter (where) the flying object (changes) into pure energy, which leads us into a deeper matter and more interest.

”Conclusion: In my opinion, we need to clarify the reports and the investigation about this matter, so that this phenomenon may become clearer, or even become familiarized, so that we may more clearly analyze this situation in the matter of flight safety.”

Col. Charles Halt (USA)

“Most of the public think of the government as an all encompassing agency that has somewhat central control and generally moves in a positive and beneficial way. Nothing could be further from the truth.”

19. **“(We must realize that) the (U.S.) government is a fragmented agency made up of organizations that compete against each other for money, mission and attention.** I am firmly convinced that there are probably a dozen governmental organizations that investigate UFO's. They share and withhold information from each other as they deem appropriate.

20. **“(We must realize that) all (of these agencies) will deny this as they all keep what they have in a black area.”**¹⁴ They all want the answers but nobody wants the overall public responsibility.

21. “I doubt it will be possible, but **having a central organization with the responsibility to coordinate and properly investigate the issue** would go a long way to providing answers and improving flight safety.”

General Parviz Jafari (Iran)

(Initial reply)¹⁵

“I believe they are not dangerous. Neither to our planet, nor to our aviation. I do not look at them as our enemy. In my encounters that was the longest one, they hesitated (in order) to scare me.

(Subsequent reply)¹⁶

“The last thing I can say is:

¹⁴ A black area refers to a top secret activity.

¹⁵ Received August 17, 2010

¹⁶ Received August 20, 2010 invited in order to further clarify his suggestions.

22. **“Never try to fire¹⁷ toward them** in close encounters which may make them react.
23. **“Also try to send messages by the pilots** in any frequencies which may communicate with them. That is what I did not do because of excitement, and I still feel sorry about it.
24. **“Don’t view UFO as an enemy.”**

General Denis Letty (France)

25. “I do think that it is important to **involve psychiatrist doctors in the study of UFO phenomena**, in doing so: (a) we are able to demonstrate that personnel having observed UFO are quite normal; and (b) flying personnel (mainly pilots) will hesitate less to (give) account of their observations;
26. “Taking into account the reality of the phenomena, **UFO detection should become a priority** such as it is today for satellites and space debris to avoid in-flight collisions with UAP. Finally (by doing these things) flying safety will be improved.”
27. **(Understand that) “...of course, (that) the conclusions of our Cometa report¹⁸ remain valid.”**

Government Officials

John Callahan (USA)¹⁹

“In response to your question.

28. **“Federal Government should establish an independent “UFO” investigative team that reports directly to the FAA Administrator** with the authority to review all current, past and future “UFO” occurrences, files, records and data. The investigative team should have the authority to examine any records dealing with “UFO”s, interview personnel, etc. in any government facility.
29. **“Also, the FAA should upgrade Air Traffic Computers** to allow the computer to search and track all high performance Air Ships operating within or over the U.S. airspace.”

Richard F. Haines (USA)

30. **“The International Civil Aviation Organization (I.C.A.O.) should establish a review committee immediately to assess the validity and reliability of selected near-air misses and other in-flight occurrences with UAP** that have been documented by NARCAP and other international organizations. If they agree that there is a potential for hazard posed by some UAP

¹⁷ The reference is to weapons.

¹⁸ The 1999 COMETA Report was prepared by a private, unofficial group of high-ranking officers and officials within French aerospace and military establishments. Its title “Les Ovni et la Defense: A Quoi doit-on se Preparer?” is translated “UFOs and Defense: What Must we be prepared for?” Its English version is found at: www.ufoevidence.org/topics/Cometa.htm The specific conclusions referred to by Gen. Letty are found in Part III “UFOs and Defense” also available at: www.cufos.org/cometa.html

¹⁹ Received August 9, 2010

the ICAO should: (see next item)

31. “Instigate appropriate measures for all its member-state aviation organizations to include: 1) **modifying all incident and accident reporting forms** to include a dedicated space for air crew (and others) to report UAP. This is not now being done and acts to inhibit reporting of UAP. 2) **encouraging in the most forceful manner possible pilot unions and airlines to urge their air crews to report anything that is unusual and a possible threat to safety.** The FAA’s Aviation Safety Reporting System (ASRS) was originally established to allow anyone associated with aviation to report any safety-related event but this seldom happens with regard to UAP because of the fear of official, corporate, and peer ridicule when reporting a UAP.
32. “**The FAA (and aviation officials of other nations) must work in whatever ways are necessary to eliminate this deeply entrenched attitude of denial concerning UAP** that has existed for decades in America.
33. “**Encourage airlines to insert into their recurrency simulator training programs a “module” that presents pilots with realistic in-flight encounters** with UAP that are based on past documented encounters and which are most likely to lead to an accident of some kind. Airlines have done this with regard to coping with wind shear and other low probability of occurrence situations so why not with UAP?
34. “**Establish an international database of the highest quality of aviation safety cases** that is completely access-free along the same lines as the FAA’s ASRS program. Airline name, flight number, and witness names should be deleted to protect them after the reporter’s identity has been fully verified. We must be proactive and not wait for an accident between an airplane and UAP to occur before we act.”
35. “**The FAA should investigate the adequacy of current NAS radar systems to detect UAP and, if necessary, upgrade them with fully functional systems.** There is sufficient evidence to support the assertion that current civilian and military radar systems are incapable of detecting some UAP.

Nick Pope (U.K.)

”I believe the following actions could be taken:

36. “**Replace the term UFO with UAP.** The term UFO has so much baggage associated with it that it has become a liability and an impediment to serious discussion of the phenomenon. Replacing it with UAP would address this issue and is something that the UK’s Ministry of Defense (MoD) did in the Nineties, in internal policy documents. This met with some success in getting people to take the issue more seriously and was one of the factors that led to the funding of a study entitled “Unidentified Aerial Phenomena in the UK Air Defence Region”. Changing language is difficult, but not impossible. For example, in relation to the phenomenon being discussed, the term “flying saucer” is now seldom used, having been superseded by “UFO”. However, the term “flying saucer” was coined in 1947 and had only been in use for a few years before “UFO” was devised in the early Fifties, while “UFO” has been in use for nearly 60 years

and is probably too firmly embedded in popular culture to be ousted.

“The term UFO should be redefined. In popular culture the term UFO has become inextricably linked to extraterrestrial spacecraft and alien visitation. Such a linkage is entirely false, but questions such as “do you believe in UFOs?” continue to be asked in this context when, in strictness, it is virtually impossible not to believe in UFOs, given that people consistently see things in the skies that they are unable to identify. But this point has been made before by numerous researchers, in books and in media interviews, with little effect. The fallacious linkage is probably too firmly established to be dealt with effectively.

37. “Lobby the FAA. There are numerous cases involving near-misses between commercial aircraft and UAP that are backed up by official documentation. It would be possible to **create a short briefing document about this and use it to lobby the FAA.**

38. “Such a document should be concise, well-referenced and designed to achieve a specific outcome, e.g. **incorporating material on UAP into pilot training and/or into FAA regulations.** The U.K. MoD’s study “Unidentified Aerial Phenomena in the UK Air Defence Region” should be cited here as it addressed the UAP issue in relation to flight safety. Three recommendations were made which it was stated should be passed to the appropriate military and civil authorities responsible for flight safety.

39. “**Lobby aviation journalists** in parallel with similar efforts with the FAA or as a separate initiative.

40. “**Lobby Congressional representatives.** This could be undertaken in isolation, or in parallel with lobbying the FAA and aviation journalists. The broad approach should be the same.”

41. “**Dissociate from ufology.** It is critically important that this initiative disassociates itself from ufology and ufologists...because of the reputational damage that would arise from association with a field that is widely perceived by key decision-makers as being unscientific and full of cultists, charlatans and crackpots.

42. “**Avoid expressing any definitive belief about UAP.** This initiative must not be conclusion-led. The key message must be that we do not know what UAP are, but that whatever they are, they raise flight safety issues. Presentationally, if we speculate at all, we should probably focus on possibilities such as US military drones/UAVs²⁰ inadvertently straying into commercial flight paths, Russian or Chinese drones/UAVs on spying missions, or the sort of unknown atmospheric phenomenon (possibly plasma-related) postulated in the UK MoD study

²⁰ Unmanned aerial vehicle. See NARCAP, Technical Report 11 by T. Osborn (2009) for more detailed information on this subject.

“Unidentified Aerial Phenomena in the UK Air Defence Region.”

Jean-Jacques Velasco (France)

43. “It would be essential to **gather in a conference, seminar or workshop: specialists, experts, flight crew, responsible civil and military aeronautical engineers, radar specialists, meteorologists, etc to expose them all (to) the research work and actions around the world since the 1950s.**

44. “**Define and standardize unique terminology worldwide** that GEIPAN has adopted for decades.

45. “**Establish a global database reference on the UAP.**”

46. “**Establish a comprehensive catalogue of natural anomalies** (weather, Aurora Borealis, etc.) or artificial (radar, drones, etc.).

47. “**Permit access to confidential information (military) to monitor compliance cases that cannot be verified by "official" civil groups** and information related to data satellite or radar (NORAD).”

48. “**Examine old UAP cases worldwide with aerospace experts to assess the physical parameters of the phenomena.**”

49. “**Create a permanent international body for coordination of the evolution of UAP in the world.**”

Academic and Other

Alexander Wendt (USA)

(Initial reply)²¹

“As for your question... I’m not sure I can be of much help, since in my view at present there is not any way to get officialdom to take UFOs seriously. Where progress might be made is by civil society actors²² (rather than governments) somehow organizing a systematic scientific study of UFOs, but that would itself be very difficult and expensive (though I have some ideas on this score). I’m sorry to be so negative, but given my theory of the UFO taboo I’m afraid I have no other choice!”

(Subsequent reply)²³

50. “**If any government were willing to finance a systematic scientific investigation of UFO phenomena then by all means it could be part of the solution,** but despite the recent moves by

²¹ Received August 17, 2010

²² By “actors” Dr. Wendt refers to private citizens acting on their own without government approval or support.

²³ Received August 18, 2010 following a request for clarification of his earlier remarks.

the French, the UK, and now Brazil to at least acknowledge that UFOs happen, I don't see any sign of these or any other governments actually stepping forward with an actual study, if only on political grounds. So it's not that I'm opposed to government involvement; I just don't see it happening anytime soon. And I do see this as a kind of threat to democracy, as you suggested below, but this is precisely why...

51. **"I'm in favor of a more "democratic" strategy** along the lines of the attached memo, which is a draft of a talk that I might get to present here in Columbus in Fall 2011.²⁴

Leslie Kean (USA)²⁵

"I believe that our book *UFOs: Generals, Pilots and Government Officials Go On the Record* can be used as a tool in ending that denial referred to by Dr. Haines, simply because it presents the most credible data from the highest sources about UAP. The theme of aviation safety runs throughout the volume, so my goal is to circulate the book among aviation officials and policy makers as widely as possible. That is a first step.

"Overall, as stated in *UFOs*, the contributors and I generally agree that in order to change the climate of denial towards UAP and move the issue forward,

- further scientific investigation is mandated, partly because of the impact of UFOs on aircraft and aviation safety;
- this investigation must be an international, cooperative venture involving many governments, transcending politics;
- such a global effort cannot be effective without the participation of the United States, the world's greatest technological power.

The question then becomes: how do we get the U.S. Government to change its unspoken policy of denial, so the affect can be felt around the world? I propose the following:

52. **"The establishment of a small office or agency to oversee UAP investigations and liaison with its counterpart in other countries.** In order to open a dialogue and persuade officials to move in this direction, we can point out successes in other countries. As examples, four specific agencies – the GEIPAN of France, the CEFAA of Chile, the OIFFA of Peru, and the Ministry of Defense office in the U.K. – were set up in four distinctly different bureaucratic departments within each of their respective countries, for the designated purpose of investigating UAP.

"We need an official focal point for investigations in the U.S.A. A small, simple change in policy is all it would take to make a very big difference. Such a body can be set up quietly and

²⁴ In this paper Wendt suggests a "bottom-up" approach to solve the UAP problem where "*The People*" carry out the needed research "...independently of what the government pronounces." A new non-governmental organization is proposed to carry out high quality research that both main-stream science and our current government agencies are not now willing to conduct.

²⁵ Received November 9, 2010

inexpensively. To get started, all it requires is funding for a small office, staffed by one to three people, equipped with a few computers and file cabinets and tucked away in one of many possible locations. The staff would establish links to scientists, law enforcement officials, civilian researchers and specialists from a range of disciplines who would step in as needed if a major UAP/UFO event were to occur. Few additional resources would be necessary, because investigation of worthwhile cases would involve drawing on existing resources both in terms of equipment and personnel, such as cross-referring to satellite imagery and existing records of aviation, meteorological, astronomical and radar data. Existing labs could be used for the analysis of photographic images and physical evidence. A qualified volunteer board of advisors, to include academics, scientists, aviation experts and retired military officers, would meet regularly with the staff to offer input and help coordinate the public release of information. Through its legitimization of the subject, such an agency would stimulate scientific interest and assist with the allocation of government and foundation grants for interested scientists in the academic and aviation research communities. As the work of the agency develops over time, positive attitudes toward the serious study of UFOs would be nurtured and public support – already very strong although without a focal point – would grow for a global research project that could ultimately solve the UFO mystery.

“This new plan involves a fundamentally different organization than that of Project Blue Book, because it would be committed to openness and to working with other countries on a global initiative. In addition, it would *not* be tasked with receiving all reports of individual sightings from citizens, but would focus only on the more significant events involving pilots and aviation professionals, police officers, military personnel, or widespread sightings involving many witnesses. (The Phoenix Lights in 1997, the Illinois sightings of 2000, the incident at O’Hare Airport in 2006, and the Stephenville, Texas sightings in 2008 are recent examples of the kinds of incidents that the office would address.)

53. “Advocating for specific changes within the FAA, such as: (A) Conducting proper investigations. The FAA avoids dealing with incidents involving UAP whenever possible, despite its mandate to protect our skies. In 2006, after the sighting of a hovering disc over O’Hare airport which cut a hole in the cloud bank - a safety hazard during rush hour - the FAA stated the United Airlines pilots and staff had simply witnessed weather. When pressed, the FAA attributed the sighting to a hole-punch cloud, a weather phenomenon which could not have occurred that day due to above freezing temperatures. The FAA needs to fundamentally change its approach and see that these events are properly investigated by the appropriate officials, and that the results are made public to the extent that national security is not compromised.

(B) “Providing reporting forms for pilots and crew. The 2010 FAA Aeronautical Information Manual, in Section 6 on “Safety, Accident, and Hazard Reports,” states that “persons wanting to report UFO/unexplained phenomena activity” should contact a collection center such as Bigelow Aerospace Advanced Space Studies, a new research organization focusing on novel and emerging spacecraft technologies, or the National UFO Reporting Center (NUFORC), a civilian group with a UFO hotline and reporting forms. “If concern is expressed that life or property might be endangered” by the UFO, “report the activity to the local law enforcement department,” the manual states.

“The FAA should not make distinctions among those hazards that are to be reported and those that are not. While providing no reporting forms for UAP sightings, the FAA does offer them for other types of hazards that occur infrequently, such as volcanic activity and bird strikes, and it even provides a detailed “laser beam exposure questionnaire” for pilots. The FAA must also offer reporting forms for UAP sightings and encourage its pilots and crew to report anything that is even a remote threat to aviation safety, no matter if the threat cannot be easily identified or explained.

(C) “Supporting research. Pilots and crew could make important contributions towards research into UAP, if the FAA changed its approach. One obvious advance would be the placement of cameras in all aircraft, perhaps even underneath the fuselage. Digital cameras are inexpensive and so is data storage. Such a program could be launched by a non-governmental or scientific organization, if not a government agency. Any data acquired would aid in the study of these phenomena and their impact on aviation safety.

54. “Generating a study within the National Academy of Sciences to determine if UFOs/UAP are worthy of investigation. Perhaps a classified (or unclassified) study could be requested through the appropriate channels of members of the National Academy of Scientists, asking for a review of UAP evidence along the lines of what is presented in the book and following the logic presented in the book. A positive determination by the Academy that the phenomenon is worthy of future study could facilitate the establishment of the government agency described earlier, and certainly would have a large impact on the scientific community.

“In summary, I think the critical component is the new central government office, to be established within the Executive branch of government. Once that is in place, the door is no longer closed, and many specific changes will follow. While working on establishing this office through private channels, we must pursue other ways of influencing the scientific and aviation communities through more specific proposals.”

Analyzing the Data

It is a challenge to identify valid and clearly defined patterns that will encompass all of these recommendations. My approach was more pragmatic than it was statistically precise and employed a pseudo factor analysis approach, i.e., where all of the 54 recommendations could be placed in the smallest number of independent,²⁶ themes. This was difficult due to the overlap of ideas, for example, the recommendation to establish a U.N. (or other venue) entity to study UAP sightings also could be included under the conducting research theme. In a different vein some themes naturally lead to others as in the suggestions to improve our current radar UAP sensing capabilities which would also require much more knowledge about the electromagnetic characteristics of UAP. The seven basic themes developed are presented in Table 1 with their numbered recommendations.

²⁶ Independence means non-overlapping categories or themes. To be of most use clear boundaries must separate each theme to help reduce later confusion and misapplications. This was not entirely achieved here.

Table 1

Organizing Themes

Theme	Recommendation number	Total	No. of authors
1. Continue (and augment) the exchange of reliable UAP information among peers and at all levels.	1,7,8,11,12,14, 15,18,37,39,40, 43,47,	13	6
2. Establish a central organization to coordinate, receive analyze, document, and report all reliable sighting reports.	3,16,17,21,28, 30,49,52	8	6
3. Conduct high quality research using state-of-the-art technology and science, define and standardize all terminology, and disclose the findings widely.	10,25,35,45, 46,48,50,54	8	5
4. Derive and implement new precautionary measures for flight crews to follow during an encounter.	2,22,23,33,38	5	4
5. Strengthen the enforcement of current air regulations	4,5,9,13,31	5	3
6. Change the existing biased view(s) of UFO at various levels (official, societal, individual).	32,36,53	3	3
7. Improve UAP detection capabilities	26,29,34,	3	3
8. Miscellaneous suggestions.	6,19,20,24,27 41,42,44,51	9	7
		Total =	54

Theme 1 - Exchange Reliable Information at all Levels

This general theme received thirteen recommendations from six contributors. It was felt that reliable information about UAP should continue to be exchanged between all interested parties. Four contributors (Bermudez, Bravo, Brouwer, and Velasco) all said essentially the same thing, viz., a completely unclassified, state-of-the-art, technical conference should be convened

involving flight crews, aeronautical engineers, radar specialists, meteorologists and other disciplines. Of course planning and carrying out such a huge undertaking would involve great expense and careful coordination along with the support of aviation and union management, and national and local aviation executives. Such a conference could require several full days to adequately cover all of the relevant aspects of UAP and aviation safety. It could lead to the formation of separate working groups in such areas as advanced sensing (laser, radar, microwave) technology, electronic shielding systems, flight energy management (propulsion design and modification), cockpit resource management and advanced training, air traffic control, and other areas.

It is my opinion that accomplishing a technical conference such as this should be done in carefully planned stages, each building upon the previous conference and broadening the participant list. The inhibitions against taking part in such a conference are so great today that early meetings may only involve “the already initiated” who will talk only to one other. Perhaps the International Press Conference held in Washington, D.C. on November 12, 2007 that included all of the present contributors also offers a useful early organizational model.

Theme 2 - Establish a Central Organization to Coordinate, Receive and Analyze Reports

The second largest number of recommendations (8) was related to the establishment of a central organization (perhaps within the United Nations) to coordinate, receive, analyze, document, and report all new reliable sighting reports, and (b) develop and implement new precautionary measures for flight crews to follow during an encounter.

While Bermudez (3)²⁷, Bravo (8), and Velasco (45) called specifically for a global aviation conclave related to UAP and aviation safety several others likewise acknowledged the value of continuing research on UAP and sharing their findings as mentioned in relation to theme 1 above. Guerra (17), Halt (21), the author (30), Velasco (43) all echoed the view of Bermudez that having a central organization responsible for coordinating and investigating the issue would “...go a long way to providing answers and improving flight safety.” However, Halt (19, 20) and Wendt (50) doubted whether this would be possible.

Theme 3 – Conduct High Quality Research and Disclose Results Widely

This theme received the third largest number of recommendations (8) made by five contributors. It had to do with pursuing high quality research on the subject of UAP and their interaction with airplanes. De Brouwer (10) and Guerra (15, 16) called for research of all unexplained sightings (in collaboration with the science community and the mass media). Existing confidential military (UAP) reports should be explained to the public (18). Callahan (28)

²⁷ Numbers in parentheses represent the numbered suggestion presented earlier.

suggested the establishment of an independent U. S. investigative team that would report directly to the FAA administrator.

J-J Velasco (47) recommended access by investigators to confidential (satellite and radar) information in order to determine whether UAP are in compliance with existing aviation regulations. This suggestion underlines the importance of involving air traffic management and control personnel in this research. While theme 3 was clearly the focus of five contributors others also included it one way or another as a desired objective: viz., 1, 3, 8, 12, 15, 16, 18, 21, 26, 28, 30, 31, 50, 53.

Theme 4 - *Develop and Implement New Precautionary Measures for Flight Crews Relative to UAP Encounters*

The fourth most recommended theme received five recommendations made by four individuals; all had to do with preparing and/or enforcing new precautionary measures for flight crews to follow during a UAP encounter so that an incident or accident might be avoided because of this special training. A variety of approaches were suggested in this regard. While Bermudez (2) and de Brouwer (11) did not specify what these particular precautionary measures might be (indeed, it is premature to do so), de Brouwer (13) suggested that the I.C.A.O. and I.A.T.A. bodies should encourage their member states "...to be more vigilant regarding UAP sightings and also encourage airlines to require their pilots to report any unusual activities (9). Because of his own very intense close encounter in 1976, Jafari said that no military airplane should fire at UAP (22), pilots should attempt to communicate with them (23), and that UAP should not be viewed as an enemy (24). The author (33) suggested that airlines should insert into flight crew recurrency training carefully planned modules involving virtually real encounters that are based on past documented in-flight encounters and that (statistically speaking) lead to the greatest probability of avoiding a collision while improving intra-cockpit morale and discipline during what is otherwise a very stressful time. The specially prepared briefing document suggested by Pope (37) could also contribute to improved pilot training and FAA reporting regulations. He also quoted from the UK MoD Study "Unidentified Aerial Phenomena in the UK Air Defence Region" that "No attempt should be made to out-maneuver a UAP during interception. At higher altitudes, although UAP appear to be benign to civil air traffic, pilots should be advised not to maneuver, other than to place the object astern, if possible."²⁸

²⁸ A very similar independent conclusion is made in the author's report "Aviation Safety in America: A Previously Neglected Factor" (2000). My conclusion in this report regarding a threat posed by UAP to flight was that: "Based on a thorough review of pilot reports of UAP over the conterminous United States between 1950 and 2000 it is concluded that an immediate physical to aviation safety does not exist. However, should pilots make the wrong control input at the wrong time the possibility of a mid-air collision with a UAP does exist. Likewise, if pilots depend upon erroneous instrument readouts safety may be compromised."

Theme 5 - Strengthen and Enforce Existing Aviation Regulations Regarding Near-Miss and Related UAP events.

Five recommendations were made by three individuals related to this theme: Pilots should be encouraged (not discouraged) to report their UAP sightings to aviation authorities at all levels. In addition, I.C.A.O. and I.A.T.A. should encourage their member-states and participants to become more vigilant than they now appear to be regarding both the reality of UAP and their possible impact upon aviation safety (13). Existing pilot reporting forms should be modified to include UAP-related incidents of any kind.

Bowyer pointed out that the air law is already in place and only needs to be enforced (5). The main responsibility for doing this lies with the airlines (4). Both Bowyer and de Brouwer (9) agreed that "...some commercial operators don't want their pilots to report any unusual sightings."²⁹ The author (31) suggested that reporting forms now in use need be only slightly modified to provide a dedicated space for eye witnesses to report an unusual or ambiguous aerial sighting event. Taking this small step would send a positive signal to all flight crew that it is OK to talk about this subject; doing so would not cost very much either.

Theme 6 - Correct the Existing Negative Biases Shown Toward UAP at Various Levels.

The next set of recommendations with the most contributions was actually the one that the author had hoped would occupy most thought and concern, viz., how to change the existing highly negatively biased and long-standing view(s) of UAP at various levels (societal, governmental, individual) within the aviation world. Only three of the fourteen contributors made one suggestion each. Perhaps the basic question was not made clearly enough or suffered in translation into other languages or the problem itself is so difficult to approach that few felt qualified to make any suggestions.

Bravo (6) correctly views the subject of UAP as a psychosocial phenomenon that has, over the years, drawn into itself many people having no technical knowledge yet much false (unsubstantiated) information, and who turn the subject into a comical and "whimsical" matter. One effect of this has been that officials want to distance themselves from such "fringe" advocates. Pope's suggestion (36) to replace the term UFO with UAP would, over time, help dissociate the often misleading and biased images of the past from the small core of legitimate atmospheric phenomena that deserve to be studied.³⁰ But even by redefining the term UFO Pope believes that the perceived link with extraterrestrial spacecraft and alien visitation still will be hard to change; nevertheless, some people may be willing to accept the term UAP as a subset of

²⁹ A NARCAP survey of pilots flying for a major U. S. airline discovered that only twenty five percent of the responding pilots who had seen a UAP reported it to their management or the FAA. The non-reporters gave a variety of "creative" reasons for not doing so. NARCAP Technical Report 5, 2001.

³⁰ It should be noted that the U.K.'s Ministry of Defence, the National Aviation Reporting Center on Anomalous Phenomena (NARCAP), and several other organizations have employed the term UAP precisely for this same reason for many years.

phenomena acceptable for future study. Pope also suggested (37) that a short briefing document should be prepared for the FAA to begin lobbying them concerning near-miss cases where official reports already exist. The author suggested (32) that the FAA and other high level aviation officials elsewhere could become a part of the solution (and not the problem) simply by acknowledging that UAP (not UFO) exist (i.e., that they stop blindly accepting the current biased and incorrect, commonly held viewpoint toward UFO) and encourage America's aviation community to take the subject seriously. Both the author (31) and Kean (53) agreed that current FAA pilot reporting forms should be slightly modified to encourage and also require flight crews to describe any and all UAP sightings. Doing so would help reduce away the deeply entrenched bias against reporting such events.

Theme 7 – Improve our Capability to Detect UAP

This suggestion is very likely to be the most costly to implement of all those offered here. This realization might have inhibited some contributors from even mentioning it. Only three people gave one suggestion each. Callahan (29) urged that the FAA should upgrade air traffic computers to allow them to "...search and track all high performance Air Ships operating within or over the U. S. airspace." Nevertheless, because these computers can only process the information that is fed into them any deficiencies in our current vehicle tracking sensor technology (primarily radar) that permit some UAP to go undetected will not be computed properly. As a recent research report³¹ made clear concerning an obvious UAP hovering over a passenger terminal at O'Hare International Airport on November 7, 2006, because the FAA's ground radar system did not detect the object³² (but the UAP was seen visually by several airline ground personnel and flight crews as well as several passengers at widely spaced locations on and off airport property) the FAA announced that there was no such UAP present and therefore no safety issue.

Gen. Letty (26) and the author (34) each agreed that the detection of UAP "...should become a high priority ...today." There are already a large and growing number of well documented reports of UAP that are seen visually by aircrew but not detected by ground or airborne radar.³³ The stealth capability of some UAP is well documented.

³¹ See R. F. Haines, et al. "Report of an Unidentified Aerial Phenomenon and its Safety Implications at O'Hare International Airport on November 7, 2006," National Aviation Reporting Center on Anomalous Phenomena, Technical Report 10, March 9, 2007.

³² None of the control tower personnel claimed to have seen the object. Calculations of their location in the control tower and its viewing geometry coupled with the calculated altitude of the UAP supported their claim that the object would not have been visible to them.

³³ See M. Shough, "Radar Catalogue: A Review of Twenty One Ground and Airborne Radar UAP Contact Reports Generally Related to Aviation Safety for the Period October 15, 1948 to September 19, 1976." National Aviation Reporting Center on Anomalous Phenomena, Technical Report 6, 2002.

Miscellaneous Suggestions

Seven contributors offered nine additional suggestions that are important to discuss here. It is interesting to note that Halt's (19, 20) comments mesh closely with those of Letty (27). Halt wrote that it is important to clearly understand that the U. S. government is not a unified, monolithic structure that can readily respond to our call for changes in some aviation regulations and operational procedures. He sees perhaps a dozen separate and isolated departments investigating UAP, each withholding their knowledge from the others. Letty (27) also cautions us to be aware of the conclusions and recommendations found in the special ninety page briefing document released in 1999 referred to as the COMETA Report ("Committee for In-Depth Studies"). (see footnote 16). This remarkable report acknowledges "...the almost certain physical reality of completely unknown flying objects with remarkable flight performances and noiselessness, apparently operated by intelligent (beings)." While this document does not address aviation safety specifically it does recommend a "gradual information campaign" targeted specifically for "political, military and administrative decision-makers as well as "...aircraft and helicopter pilots." The "more democratic strategy referred to by Wendt (51) has to do with the active involvement by qualified citizens in the careful study of UAP rather than the involvement of academics, military or other government personnel. One aspect of this new movement calls for a clear and deliberate dissociation from ufology, as suggested by Pope (41) along with avoiding any definitive statements about what UAP are (42).

Discussion

It is apparent that most of the respondents did not answer the question posed as directly as I would have liked. Perhaps they did not agree with it at all. Perhaps they didn't feel qualified to give their opinion.³⁴ Perhaps they were too busy to consider the question in the depth it deserves. Nevertheless, I believe that these contributors did share their opinions about a number of related aspects of this question in a manner that conveyed what they thought was most important.

Interestingly, the single theme that was addressed by the largest number of contributors had to do with the importance of having an open exchange of information related to UAP. Because most of the contributors were directly or indirectly related to aviation it is natural that this professional focus was reflected in their emphasis on flight safety, piloting and administrative procedures, and other piloting issues. Differences among this group of recommendations appeared only in the particular venue(s) or sponsoring organization(s) that should generate and share the information. It is easy to interpret these recommendations as exposing an underlying belief that UAP information is not now being shared as openly as it could and should be.

³⁴ Several respondents wrote that they hesitated to reply for this reason so that I had to contact them a second time for clarification.

In theme 2 six contributors submitted thoughts about how and where this information might be generated and shared: namely, via a United Nations' (e.g., I.C.A.O.) study commission, new commissions located in individual countries (e.g., I.A.T.A., National Academy of Science or an independent agency or office within the U.S. Government).

Much more research on the physical characteristics of UAP needs to be carried out as the recommendations in theme 3 made clear. While there already exists a truly huge body of anecdotal information about a wide variety of UAP most of it is useless from a scientific standpoint. These five respondents expressed their frustration at this gap in our knowledge. The interesting idea offered by Letty that psychiatrists should play a larger role in these studies is both relevant and timely (25); Bravo's support for a similar point of view is noted (6) as was the idea supported by many others that the database should be global in nature (3, 8, 12, 16, 17, 30, 35, 45, 46, 48, 49). Velasco suggested (44) that the terminology and general approach developed for many years by GEIPAN in France should be adopted universally which makes sense on the grounds of proven effectiveness.

In their chapter 27 "Militant Agnosticism and the UFO Taboo" in Leslie Kean's book, Wendt and Duvall discuss the issue of denial (theme 4) in some depth. They argue that in the U.S.A. an unofficial taboo surrounds the idea that UFO are extraterrestrial because of a sub-conscious fear and anxiety that surrounds what acknowledging the reality of UFOs (much less ET) could mean for modern life and our national identity. Among these threats to our way of life is the "tremendous pressure for a unified human response, or world government." Indeed, the very identity of the nations of the earth demand that they remain constitutionally independent! Modern sovereignty is anthropocentric and cannot tolerate an outside (ET) presence and perhaps even domination. And so, calling for an exchange of information (theme 1) that is coordinated by a global organization (theme 2) and established to study what is clearly a global phenomena (theme 3) that could negatively impact global aviation (themes 4 and 5) is being blocked at a deeply sub-conscious and invisible psychological level according to Wendt and Duvall. This creative idea may also explain why so few of the present contributors addressed the initial question (theme 6) directly. Are we also hindered in moving forward by our own sub-conscious fears of one kind or another, perhaps not of the reality of ET specifically? Are we perhaps afraid of what we might discover as we probe deeper and deeper into this murky realm?

The statements made by Hall also must not be overlooked (19, 20). He offers a realistic view of yet another basis for the negativity that seems to have surrounded UAP issues in the U.S.A. for the past several generations. The American Government truly is "a fragmented agency made up of organizations that compete against each other for money, mission and attention... They share and withhold information from each other as they deem appropriate. All (of them) will deny this as they all keep what they have in a black area." They are also fearful of being associated publicly

with the subject of UAP. These truths raise the question of how meaningful progress can be made on this subject working with U. S. Government agencies?³⁵

The suggestions made in theme 7 could turn out to be the most difficult and costly to achieve of them all. Upgrading the current ground-based civilian radar sensing capability to be able to detect some classes of UAP that could interfere with aviation would require extremely well supported justifications to do so at both agency (FAA, CAA, DGAC, et al.) and congressional levels. A much stronger case needs to be made for the need of such an upgrade before aviation officials will even consider it.³⁶

Conclusions

While several respondents gave their opinions about what might be done to help reduce the state of denial that exists within much of the world's aviation community concerning the reality of UAP most others didn't comment. The majority of respondents to my question addressed a broader set of issues having to do with the social acceptance of UAP in general by national and international aviation and scientific bodies. Now that we are armed with these thoughtful recommendations it remains to carry them out for the long term benefit of everyone who flies. Now, if we have time before lives are lost in an aviation accident with a UAP, we face great challenges that may well take a generation to overcome. We shouldn't wait to begin.

Biographies

RAY BOWYER has been a flight calibration inspection pilot, and continues as a commercially qualified airline pilot. He has flown for ten airlines operating in Europe and the Middle East, including Jersey European, Channel Express, Regionair, BusinessAir and Farner Air transport. From 1999-2008 he was a Line Captain for Aurigny Air Services in the Channel Islands, flying inter-island and international routes based in Guernsey. He currently flies as a captain for a Channel Island-based corporation throughout Europe and has a total flying time of 7000 hours.

WILFRIED DE BROUWER spent twenty years as a fighter pilot in the Belgian Air Force. He was then appointed to the Strategic Planning Branch of NATO in 1983, while a Colonel. After that, he became Wing Commander of the Belgian Air Force Transport Wing and, in 1989, chief of the Operations Division in the Air Staff. Promoted to Major General in 1991, De Brouwer

³⁵ Authors Wendt and Duvall suggest an overt stance of "militant agnosticism" be taken to combat the U. S. Government's continuing unwillingness to acknowledge the reality of UAP, in their chapter in Leslie Kean's book. At the core of this stance is a careful program of "systematic science" of UAP that will uncover physical evidence not only of their reality but also their constitution.

³⁶ This does not even begin to include problems associated with integration (and data sharing?) of existing military radar data with the proposed upgraded civilian sensor data.

served as Deputy Chief of Staff of the Belgian Air Force. Beginning in 1995, after retiring from the Air Force, he worked for more than ten years as consultant for the United Nations to improve the UN Logistics rapid response capabilities during emergencies.

JOHN J. CALLAHAN has over thirty years of experience at the Federal Aviation Administration (FAA) specializing in the air traffic control centers. As Automation Branch Chief, he supervised the design, programming, testing, and implementation of all air traffic control facilities software programs. From 1981-1988, he was Division Chief for Accidents, Evaluation and Investigations at Washington Headquarters, where he was responsible for the quality of air traffic service provided to FAA users. After retiring, Callahan was employed as a Senior Analyst for Washington Consulting Group and Chief Executive Officer for Crown Communications Consulting Company. He now owns and operates Liberty Tax Service in Culpeper, VA.

RODRIGO BRAVO GARRIDO is a captain and pilot for the Aviation Army of Chile. In 2000, at age twenty-four, he was assigned to conduct an internal study titled "Introduction to Anomalous Aerial Phenomenon and their Considerations for Aerospace Security" involving previous case reports of military planes' encounters with UAP. He has since continued this research and now works in cooperation with the Committee for the Study of Anomalous Aerial Phenomena (CEFAA), a branch of the General Administration of Civil Aeronautics, Chile's equivalent of our FAA.

JÚLIO MIGUEL GUERRA became a pilot with the Portuguese Air Force in 1973 and was an operations officer specializing in accident prevention at Ota Air Base. In 1990 he began flying commercially with Air Atlantis, a charter of Portugal's national airline TAP, Air Columbus, and Air Atlanta, piloting Boeing 737 - 200/300 jets. Since 1997, he has been a Line Captain for Portugalia Airlines. He is also a private flight instructor and an examiner for the Joint Aviation Authorities, a European body developing and implementing common safety regulatory standards. With 18,000 hours of flight time, Captain Guerra received an Aeronautic Science Degree from Lusófona University in 2009.

RICHARD F. HAINES is a senior research scientist who worked at NASA-Ames Research Center from 1967 - 1988 on projects such as Gemini, Apollo, Skylab, and the International Space Station, and managed the Joint FAA/NASA Head-up Display Evaluation Program. He was appointed Chief of the Space Human Factors Office at NASA-Ames in 1986. Dr. Haines has published more than seventy-five papers in leading scientific journals and over twenty-five U.S. government reports for NASA. Since retiring in 1988, he worked as a senior research scientist for the Research Institute for Advanced Computer Science, RECOM Technologies, Inc., and Raytheon Corporation. Currently, he serves as Chief Scientist for the National Aviation Reporting Center on Anomalous Phenomena (NARCAP).

CHARLES I. HALT was a Lt. Colonel when he was assigned to RAF Bentwaters, England – the largest Tactical Fighter Wing in the US Air Force - as Deputy Base Commander and then as Base Commander. After becoming a full Colonel, he was Base Commander at Kunsan Air Base in Korea, the F-16 base responsible for any offensive action required on the Korean peninsula, and also was instrumental in establishing the Cruise Missile Base in Belgium. Finally, he served as Director, Inspections Directorate for the DoD Inspector General, with total inspection oversight of the entire Department of Defense. Colonel Halt retired in 1991 and now manages a large gated community.

PARVIZ JAFARI is a retired General of the Iranian Air Force. After joining the Air Force, he spent two years training in the United States, at Lackland Air Force Base in Texas, Craig A.F.B in Alabama, and Nellis A.F.B in Nevada. In his country, Jafari served as a base commander for several bases and an Air Force Headquarters operations officer. As a General, Jafari became the coordinating officer between the Iranian Army, Navy and Air Force. He retired in 1989 and lives in Tehran.

LESLIE KEAN is an investigative journalist and the author of *UFOs: Generals, Pilots and Government Officials Go On the Record* (Harmony/Crown, 2010), a New York Times bestseller. She has been published internationally and nationally in the *Boston Globe*, *Baltimore Sun*, *Atlanta-Journal Constitution*, *Providence Journal*, *The Nation*, *International Herald Tribune*, *Globe and Mail*, and *Journal of Scientific Exploration*, among other publications. She is coauthor of *Burma's Revolution of the Spirit* and cofounder of the Coalition for Freedom of Information.

DENIS LETTY is a well known fighter pilot and major general in the French Air Force. He was head of the Fifth Fighter Wing, Strasbourg Air Base, French Air Force South East Defence Zone, and the French Military Mission near Allied Air Forces Central Europe. As a commander, he was decorated with Legion of Honour. After retiring, General Letty served as president of the joint venture company Aviation Defense Service which provided electronic warfare training for the armed forces. He also became chairman of the COMETA group, a private, in-depth fact-finding committee formed to study the UFO phenomenon, which published the report “UFOs and Defense” in 1999.

NICK POPE worked for the British Ministry of Defense for twenty-one years, from 1985 to 2006. His career involved postings to policy, operations, personnel, finance and security divisions. During the first Gulf War he was recruited into the Joint Operations Center, where he worked in the Air Force Operations Room as a watchkeeper/briefer. From 1991 to 1994, Pope's primary duty was to investigate reports of unidentified flying objects and assess whether any sightings were of defense interest. Various promotions followed and his last posting was to the Directorate of Defense Security. Now retired, Nick Pope works as a freelance journalist and broadcaster.

RICARDO BERMÚDEZ SANHUEZA is a retired General for the Chilean Air Force, who served as Chilean Air Attaché in London and was Chief Commander of the Air Force's Southern Area. He was also Director of the Technical School of Aeronautics. In 1998, he co-founded the Committee for the Study of Anomalous Aerial Phenomena (the CEFAA), a branch of the General Administration of Civil Aeronautics, Chile's FAA, to study aviation incidents involving anomalous aerial phenomena. He was appointed first President of the CEFAA and served until 2002. In January 2010, he was reinstated as director of the CEFAA and now works full time on investigating UFO incidents involving civil or military aeronautic personnel.

JEAN-JACQUES VELASCO was an engineer at the French National Center for Space Studies (Centre Nationale d'Études Spatiales, CNES), specializing in satellite research. In 1977, he joined a new French team formed to study unidentified aerospace phenomena within CNES. He became the director of this agency in 1983, and remained in that position until 2004, becoming an international authority on the scientific study of UFOs. His advice was sought by countries wishing to establish their own government agencies to investigate UFOs, such as Chile and Peru, and by the European parliament in 1994. He is the author of several books on the UFO subject.

ALEXANDER WENDT is Mershon Professor of International Security at the Ohio State University. Previously, he taught at Yale University, Dartmouth College, and the University of Chicago. He is interested in philosophical aspects of international politics, and has published a number of articles in leading political science journals, as well as a 1999 book, *Social Theory of International Politics* (Cambridge University Press), which received the International Studies Association's "Best Book of the Decade Award" in 2006.

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