

THE SCU REVIEW

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What's Going on in SCU

- The SCU Conference this year will be virtual and held on July 28 & 29. The theme for the conference is: “Advancing the Scientific Study of UAP.”
- SCU Board hosted its first semiannual membership-wide Zoom meeting in early December. The meeting discussed SCU projects, the GEIPAN conference of October 2022 that was attended by SCU, the makeup of SCU, and general communication topics. It ended with a 30-minute Q&A session. The meeting generated a lot of positive feedback.
- SCU issued a press release commenting on the government’s UAP report released on January 12, 2023.
- The SCU’s Peer Review Team completed a review of Peter Reali’s paper, “A Forensic Analysis of ‘Rubber Duck,’ a Publicly Available Video Showing a UAP Purportedly Filmed by Arizona National Guard on November 23, 2019.” The paper is now available on the [SCU website](#).
- SCU submitted four papers on UAP to the American Institute of Aeronautics and Astronautics (AIAA) 2023 Aviation Forum, Aerospace Traffic Management section.
- *The SCU Review* editorial committee welcomes short and concise (2,000 word) research or analysis articles, commentaries and essays on UAP topics, and scifi pieces. Please email submissions to [Robert Powell](#) for consideration for publication in *The SCU Review*.

SCU FIRESIDE CHAT

Meet SCU Contributing Member, Keith Conroy

By Robert Powell

Where were you born and what were you like as a kid?

I was born in 1949 and grew up here in central New York State until I went to Clarkson College of Technology, Potsdam, NY, in 1967. I was quiet and studious, and did well in English and the sciences. I also wanted to be a spelunker and explore the underground.

In what subject are your degrees and why did you choose that field?

I received my electrical engineering degree in 1971, driven by my interest in physics and electronics. I got my amateur radio license when I was 13, and the test for that required knowledge of electronics and Morse code.

Tell us a little about the field in which you work and why you chose it or fell into it?

My focus in college was semiconductor physics, but I found no work in that area, so I fell into programming microcircuit electrical testing equipment. My first job out of college was at the Naval Ship R&D Center in Annapolis where I worked on a secret anti-submarine warfare project using a polarization-modulated Argon-ion LASER. Later I worked at the Rome Air Development Center (RADC) at Griffiss AFB in Rome, NY doing automatic electrical testing of military-spec microcircuits. I tested an 8-bit arithmetic logic unit sent to me from NORAD as a result of a computer glitch in their over-the-horizon radar that indicated Soviet missiles coming over the North Pole. DEFCON was incremented one step.

After RADC I was “invited” to work at GE Aerospace in Utica NY, setting them up with automated testing equipment and software training. Later I was a consultant at Genysis R&D, specializing in GPS applications, and I co-designed an aircraft (Cessna) tracking and data/image telemetry system using a parabolic antenna steered by a programmable ham radio antenna rotor, positioned by the Cessna’s telemetered GPS position, for the University of Florida’s Aerospace Engineering department.

Many years later I worked at Anaren Space and Defense in Syracuse, training test engineers to program test equipment for testing hybrid circuits in DoD and aerospace applications, including Air Force electronic warfare systems and the ORION project.

Tell us a little about your academic field and why it ties into UAP.

Most of my career has involved automated electrical testing and selecting & programming stimulus and measurement equipment with attention to measurement accuracy. Since I got into UAP (initially with MUFON) I often challenged the reliability and accuracy of the common hand-held meters in UAP investigations.

Have you met any famous people in real life?

Long ago I met Rod Serling (Twilight Zone), Burl Ives, and Natalie Wood.

Who is an interesting person that you've met due to your study of UAP?

Stanton Friedman and Travis Walton.

If you could choose a historical figure with which to have dinner conversation, who would it be?

Guglielmo Marconi. We'd converse in Morse code.

What attracted you to the SCU?

After being the New York State Chief Investigator for MUFON, I was happy to find a truly professional UAP group to work with. I have Robert Powell to thank for inviting me.

What is your role within SCU?

Shortly after joining I was appointed peer reviewer and copy editor. On the side, I prepare business card image files for contributing members.

How can we progress the science of UAPs, and what is SCU's role in this?

I would very much like to see us get involved with UAP tracking and identification as with UFODATA and UFODAP. My work in programming test equipment and evaluating data parallels their work and I see great value in it.

What are the main challenges we face in progressing UAP research?

Without a doubt it's getting professionals to work with us without fearing ridicule from their peers.

What are your thoughts about UAPs?

I've been following the research for 25+ years, and I lean toward the entities controlling what we perceive. The biggest contributor to that theory is the multitudes of reports of close encounters where the object is silent, but also all other surrounding sounds absent as well. This is why I promote using equipment to track and document them in addition to collecting and evaluating subjective reports.

When your family hears that you are interested in UAPs, what are their reactions?

I have one sister who doesn't want to talk about it and thinks I'm an easy believer.

Do you have any hobbies?

Yes, playing with my quadcopter drone, doing PowerPoint presentations on various UAP subjects, as well as the sinking of the Titanic from a wireless radio perspective, and the sinking of the Edmund Fitzgerald. Lately I've been bluegrass banjo jamming with another engineer who plays guitar. In amateur radio, I was Assistant Radio Officer in the local RACES (Radio Amateur Civil Emergency Service) in Oswego, NY, organized to respond in the event of a local nuclear power plant disaster. I'm currently working on a talk for the local radio club on antenna radiation patterns.

What might someone be surprised to know about you?

I'm a country boy who drove cars in demolition derbies for many years, square danced, shot black powder guns, built a 2-bedroom log home in the woods by myself, and I learned and practiced hypnosis and studied all manner of psychic phenomena. And I love country/western and bluegrass music... YEE HAA.

EDITORIAL

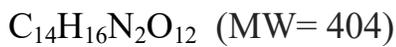
Addendum to the Delphos Story

Ref. paper: [A New Appraisal of the Data of the Delphos CE2 1971 Case](#)

by Erol Faruk, PhD

One of the most puzzling features of the Delphos ring soil compound is its pronounced surfactant properties, resulting in strong binding to the soil hydrophilic sites, and thereby generating the soil's astonishing degree of water repellence. In order to achieve this, the compound requires numerous polar groups to attach to the corresponding soil ones. Oxygen-containing sites would be ideal for this, and what I found - and Phyllis Budinger subsequently confirmed - was that the soil compound did indeed have a high oxygen content.

The mass analysis of the ring soil compound (with the alkali metal detached and replaced with 2H) suggested the following molecular formula (or similar equivalent):



This formula would comprise of:
42%C, 4%H, 7%N and 47%O.

The later analysis performed on the ring soil compound by Phyllis Budinger suggested 43%C, 5%H, 5%N and 42%O

The most notable feature of these two analyses is the high oxygen content for the compound. Indeed, it's difficult to rationalize a viable chemical structure using these figures.

Some months ago, I received an email from Dr. William Granger, a medical doctor and SCU member, who was keenly interested in the prolonged anaesthetic properties of the ring soil compound. This effect was described by the Johnson family members, who had touched the ring soil shortly after the UAP flew off and then noted an immediate numbness on their skin, which was long-lasting. Granger informed me that the only compound he knew that had a similar prolonged anaesthetic characteristic was a highly toxic marine compound called Tetrodotoxin (TTX) (Fig. 1), found in puffer fish which, despite its toxicity, was being investigated for its medical anaesthesia potential.

The interesting feature of TTX, which has a molecular weight 319, is that it contains 40%O. And it has a most unusual cage-like structure:

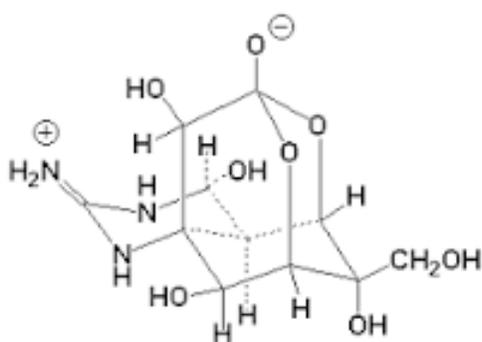


Figure 1. Tetrodotoxin

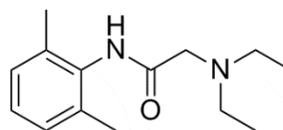


Figure 2. Lidocaine

Normally, topical anesthetics are small molecules containing nitrogen (usually a tertiary amine) such as lidocaine (Fig. 2) and are administered as water-based ointments that can take at least 30-40 minutes to have an effect on skin. I wondered if an additional factor in TTX's long-acting potency might be its high oxygen content. It turns out that this is largely due to the presence of the charged guanidinium group comprising of three nitrogen atoms linked to a central carbon situated at the left side of the molecule as shown in Fig. 1. This grouping, together with the two hydroxyl groups shown at the top of the molecule are able together to block protein Na^+ channels, thus halting nerve transmission. So, while the number of oxygen atoms is not a direct cause for the potency, it can be seen that the cage-like structure they help to create provides a way for the three aligned groups to simultaneously affect the protein and close off its Na^+ channels.

This still leaves open the question as to why touching the ring soil was so quick to produce a numbing effect on the Johnson family's skin. My view is that once the aqueous deposition of the chemiluminescent compound had finished, the compound continued reacting with aerial oxygen, emitting light (producing the glow effect) while generating a smaller nitrogen-containing reaction product that then layered the soil. This became the white 'slick crust' that covered the ring and was photographed the next morning by the sheriff. It may be that this residue, while still moist (as indicated by the Johnson family), was the main causative factor of the numbness. Unfortunately, by the time I received the ring soil to analyze (eight years later), the white material was no longer apparent, suggesting it had degraded. The original white material sampled by the sheriff had been handed to a Dr. Hostetler to study, but he then apparently went to Australia taking it with him, and it was never reported upon (see Appendix L of my [original paper](#)).

Additional information about TTX and other neurotoxins can be found at the following links:

1. Blockade by various guanidinium toxins: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1275657/?page=2>
2. Guanidinium toxins and their interactions with voltage-gated sodium channels: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5666411/>
3. Neurotoxins and their binding areas on voltage-gated sodium channels: <https://www.frontiersin.org/articles/10.3389/fphar.2011.00071/full>
4. Tetrodotoxin (TTX) as a therapeutic agent for pain: <https://www.mdpi.com/1660-3397/10/2/281>

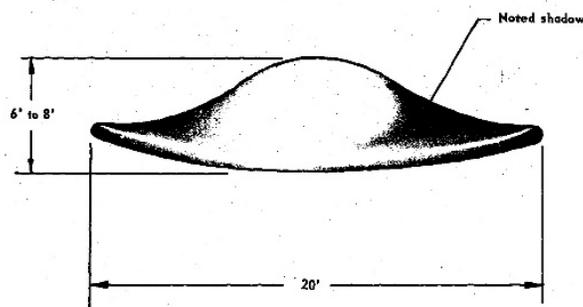
OPINION PIECES

UAP and National Security

by Robert Powell

The Director of the Office of National Intelligence (DNI) released two versions of the UAP report in June of 2021. One was for the public and the other was classified and only for select members of Congress. The public version was nine pages long and contained very little information.¹ It noted that the government had 144 UAP reports, of which only one had been identified (a balloon). The congressional version was 17 pages long. A copy of the classified June 2021 UAP report to Congress was obtained via a Freedom of Information request by John Greenwald in March 2022.² It was heavily redacted. The redactions are referenced against section 1.4 of Executive Order 13526³ which states that any information that can be reasonably expected to damage the national security of the United States may be classified. The redacted information included: object shape, information on UAP acceleration capability and behavior, flight characteristics, number of UAP disruptions of Navy training exercises in a Military Operating Area, and type of physical sensors used in detection of UAP. Are these truly national security concerns? What does this mean for the future of UAP investigations?

It is a struggle to understand how releasing the shapes of various UAP reported by our military is a threat to the national security of the United States. The Air Force's Project Blue Book not only released the shapes of unknowns — then called unidentified flying objects — but released information on characteristics based on shape, color, location, etc. They even provided drawings as shown below.⁴ So exactly what capability are we exposing by indicating we can recognize the shape of an object? I discussed this issue with two individuals who had worked closely with the government's UAP task force. They



(Ratio approx. 3:1)

¹ <https://www.dni.gov/files/ODNI/documents/assessments/Preliminary-Assessment-UAP-20210625.pdf>

² <https://www.theblackvault.com/documentarchive/june-2021-classified-uap-ufo-report-given-to-congress-partially-released/>

³ <https://obamawhitehouse.archives.gov/the-press-office/executive-order-classified-national-security-information>

⁴ "Special Report 14: Analysis of Reports of Unidentified Aerial Objects," by Battelle Memorial Institute, *United States Air Force*, Project No. 10073, May 5, 1955.

stated that indications as to which shapes were state-actors or for that matter non-state-actors could give our enemies clues. Those clues could tell them if we knew that their UAP were monitoring our military exercises, or the clues could tell them which UAP shapes to monitor in case they were some advanced technology controlled by an unknown intelligence.

This strict control of UAP information based on national security concerns is not consistent within the government. Only one year ago, the Department of Defense (DoD) released the three Navy videos known as Gimbal, Go Fast, and Flir-1. These three videos certainly exposed the type of sensor used in the detection of the UAP and it provided information on UAP shape and flight characteristics. Based on the redactions in the UAP report to Congress, these videos should not have been released. Yet, the DoD release states, “After a thorough review, the department [DoD] has determined that the authorized release of these unclassified videos does not reveal any sensitive capabilities or systems, and does not impinge on any subsequent investigations of military air space incursions by unidentified aerial phenomena.”⁵ We have the DoD and the DNI operating differently regarding national security issues. Based on what I have heard, the government’s new UAP task force, the All-domain Anomaly Resolution Office (AARO), will likely operate using the tighter national security interpretation.

Let’s accept, for a moment, the argument that disclosure of shape or any of the other redacted information such as types of sensors used in detections and flight characteristics is a threat to our national security. This poses a question related to civilian organizations that might release this same type of information. What if shape or UAP characteristics are released by groups such as SCU, the Galileo Project, or the Mutual UFO Network? What if a group of scientists puts together a passive radar system to measure the speed of UAP? The assumption would then be that the government would have the right to act in the name of national security and shut down civilian UAP research operations. This is quite a slippery slope for a free society.

Overclassification and denial of information to the public is laden with risks. It causes the public to lose faith in the government and it is the seedling of conspiracy theories. The amount of classification is seen in data that is collected by the DNI. In 2019, roughly 2.9 million individuals held a U.S. federal security clearance, of which 1.7 million held confidential or secret clearances and just under 1.3 million held top secret clearances.⁶ The DNI’s classified UAP report to Congress contained heavy redacting, but the head of the organization may have a different view of the need to classify everything. Avril Haines, the Director of National Intelligence, said as much in a letter to two senators. Within her letter she states:

It is my view that deficiencies in the current classification system undermine our national security, as well as critical democratic objectives, by impeding our ability to share information in a timely manner, be that sharing with our intelligence partners, our oversight bodies, or, when appropriate, with the general public. This reduces the Intelligence Community’s (IC) capacity to effectively support senior policymaker decision-making, and further erodes the basic trust that our citizens have in their government⁷

⁵ <https://www.defense.gov/News/Releases/Release/Article/2165713/statement-by-the-department-of-defense-on-the-release-of-historical-navy-videos/>

⁶ <https://fcw.com/acquisition/2021/06/security-clearance-demands-are-exploding-and-government-must-keep-up/258405/>

⁷ <https://sgp.fas.org/othergov/intel/dni-010522.pdf>

The next DNI report to Congress was due on October 31, 2022. It was just released on January 12, 2023. The report was more than two months late and no explanation was provided for the tardiness. It would not be unreasonable to surmise that there might have been debate as to what type of information could and could not be released. A strong rumor indicates disagreement on how to handle the UAP issue within the government itself. One group wants to be as open as possible with Congress and the public; the other group wants to minimize information on the subject using the national-security door. The release of this second report tends to indicate that the side supporting less openness may be prevailing.

Where does all this lead us — policies that tightly control information based on national security concerns? Imagine sometime in the future when an advanced intelligence makes first contact with humanity. National security will be our “prime directive.” First contact will likely not occur through the United Nations or any other body that represents the entirety of the human species. First contact will likely be with the military commands of one or more nation-states because they have the most advanced sensor systems. They will hide any information they obtain from each other, as well as their own citizenry, because of national security. First contact with an advanced intelligence will be a landmark event for the human race, but these policies by definition will hide any such event from the bulk of humanity.

We are torn between the national security concerns of the nation-states and the “right-to-know” of each of the citizens of those nations. Many valid arguments on both sides should be discussed openly. And they should be debated now, not after an advanced intelligence has contacted us. Can the human population as a whole deal with contact with an advanced civilization? Is national security always a valid concern or is it a way for a bureaucracy to protect itself? Must we always use new technology for war? Perhaps preparing now for this eventual day will help us become a better people. Ronald Reagan said as much before the United Nations 35 years ago:

Can we and all nations not live in peace? In our obsession with antagonisms of the moment, we often forget how much unites all the members of humanity. Perhaps we need some outside, universal threat to make us recognize this common bond. I occasionally think how quickly our differences worldwide would vanish if we were facing an alien threat from outside this world. And yet, I ask you, is not an alien force already among us? What could be more alien to the universal aspirations of our peoples than war and the threat of war?⁸

The alien threat Reagan discusses is really us — our inability to live in peace. Let’s use the issue of first contact as a tool to improve ourselves. It can be done. Look at the state of division within the United States today. One of the few issues that Democrats and Republicans can agree upon is the subject of UAP. If those two groups can work together on this issue, there is hope that the nation-states of this world can do so also. Let us hope that when first contact finally comes, we are greeted as one world, one humanity, one people.

⁸ <https://www.reaganlibrary.gov/archives/speech/address-42d-session-united-nations-general-assembly-new-york-new-york>

HISTORY

The Foo-Fighter Episodes of WW2 by Erol Faruk, PhD

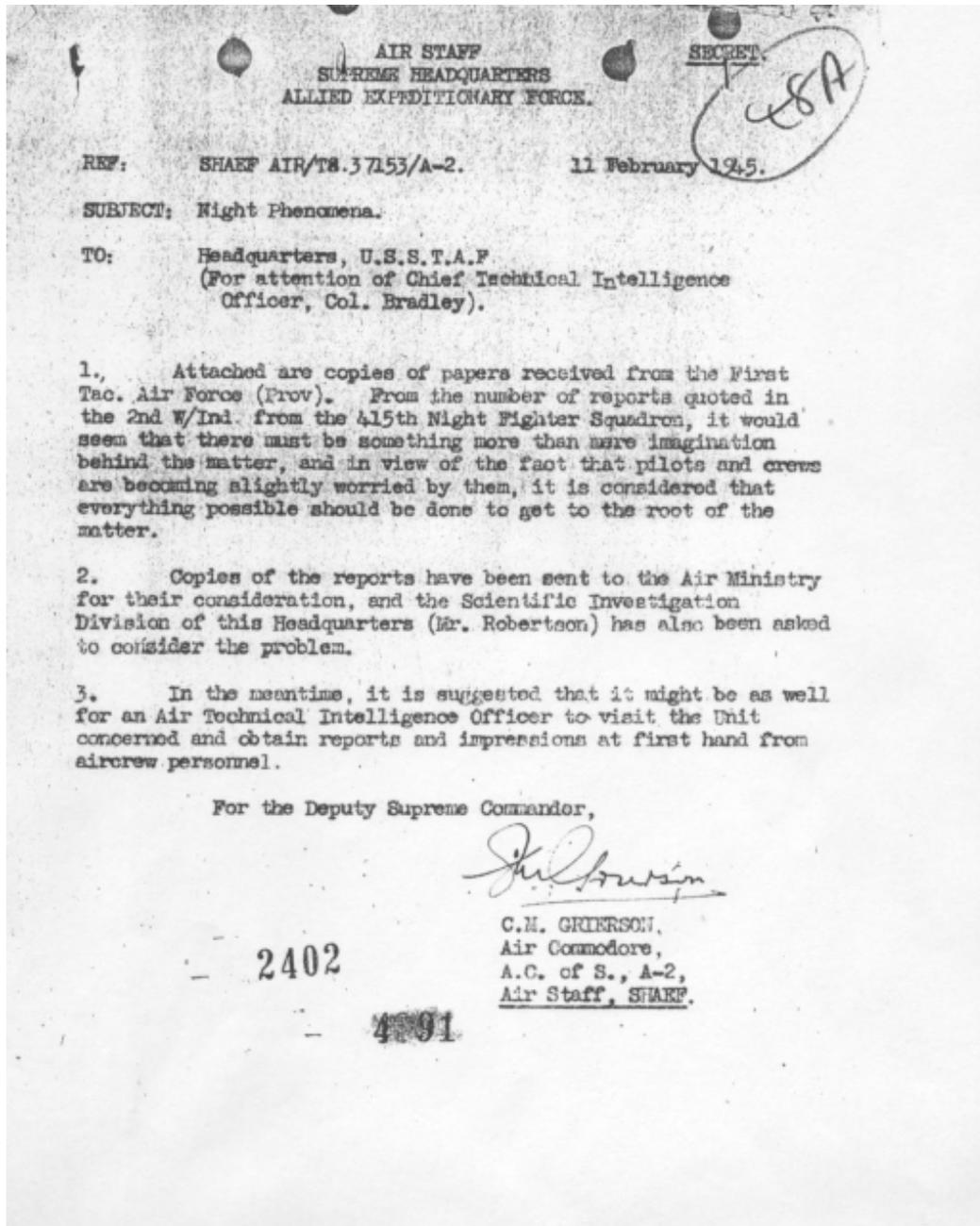
While attending the SCU online conference in June 2022, I decided to view the various photographs submitted by attendees and came across two that really took my interest. These were submitted by Ross Myers and were of a *New York Times* article from January 1945 that described the observation by pilots of that progenitor version of UAP, the 'Balls of Fire' that were nick-named Foo-Fighters by U.S. pilots. The front page of the New York Times places the Foo-Fighter article in context.



What follows is an enlargement of the article marked on the front page of the *New York Times* as well as the continuation of the article later in the newspaper.

<h1 style="margin: 0;">Balls of Fire Stalk U. S. Fighters In Night Assaults Over Germany</h1>		<h2 style="margin: 0;">FIRE-BALLS STALK PLANES OVER REICH</h2>
<p style="margin: 0;">By The Associated Press.</p>		<p style="margin: 0;">Continued From Page 1</p>
<p style="margin: 0;">AMERICAN NIGHT FIGHTER BASE, France, Jan. 1—The Germans have thrown something new into the night skies over Germany—the weird, mysterious “foo-fighter,” balls of fire that race alongside the wings of American Beaufighters flying intruder missions over the Reich.</p> <p style="margin: 0;">American pilots have been encountering the eerie “foo-fighter” for more than a month in their night flights. No one apparently knows exactly what this sky weapon is.</p> <p style="margin: 0;">The balls of fire appear suddenly and accompany the planes for miles. They appear to be radio-controlled from the ground and keep up with planes flying 300 miles an hour, official intelligence reports reveal.</p> <p style="margin: 0;">“There are three kinds of these lights we call ‘foo-fighters,’” Lieut.</p>	<p style="margin: 0;">Donald Meiers of Chicago said. “One is red balls of fire which appear off our wing tips and fly along with us; the second is a vertical row of three balls of fire which fly in front of us, and the third is a group of about fifteen lights which appear off in the distance—like a Christmas tree up in the air—and flicker on and off.”</p> <p style="margin: 0;">The pilots of this night-fighter squadron—in operation since September, 1943—find these fiery balls the weirdest thing that they have yet encountered. They are convinced that the “foo-fighter” is designed to be a psychological as well as a military weapon, although it is not the nature of the fire-balls to attack planes.</p> <p style="margin: 0;">“A ‘foo-fighter’ picked me up recently at 700 feet and chased me</p>	<p style="margin: 0;">twenty miles down the Rhine Valley,” Lieutenant Meiers said. “I turned to starboard and two balls of fire turned with me. I turned to the port side and they turned with me. We were going 260 miles an hour and the balls were keeping right up with us.</p> <p style="margin: 0;">“On another occasion when a ‘foo-fighter’ picked us up, I dove at 360 miles per hour. It kept right off our wing tips for a while and then zoomed up into the sky.</p> <p style="margin: 0;">“When I first saw the things off my wing tips, I had the horrible thought that a German on the ground was ready to press a button and explode them. But they don’t explode or attack us. They just seem to follow us like will-o’-the-wisps.”</p> <p style="margin: 0;">[An Associated Press report from Paris on Dec. 13 said that the Germans had thrown silvery balls into the air against day raiders. Pilots then reported that they had seen these objects, both individually and in clusters, during forays over Germany.]</p> <p style="margin: 0;">Lieut. Wallace Gould of Silver Creek, N. Y., said that the lights had followed his wing tips for a while and then, in a few seconds, zoomed 20,000 feet into the air out of sight Lieut. Edward Schlater of Oshkosh, Wis., said that he had seen the “foo-fighter” on two occasions and it “looked like shooting stars.” In his first experience with them, Lieutenant Gould said, “I thought it was some new form of jet-propulsion plane after us. But we were very close to them and none of us saw any structure on the fire balls.”</p>
<p style="margin: 0;">Continued on Page 4, Column 4</p>		

What impressed me was that this UAP news item appeared on the front page below the headline describing Hitler’s futile Ardennes gamble seeking to reverse the allied onslaught that had ensued after the D-Day landings. Europe was going through a tumultuous upheaval, and here was this unusual aerial phenomenon emerging to make an impact on the public’s consciousness. I wondered how present-day skeptics would try to explain away this quirky distraction that occurred during the final stages of that great conflict. At the time, it was initially believed that the reports could be yet another example of Nazi secret weapons, except the Balls of Fire didn’t appear to be hostile. They managed to follow allied bombers closely, despite pilots’ attempts to shake them off. The Foo-Fighters’ activities prompted even the Supreme Headquarters Allied Expeditionary Force (SHAEF) to take notice of what was being observed:



The Germans also took notice as determined by Dr. David Griggs who interviewed German pilots immediately after the war ended.⁹

Sightings two years later in New Mexico become much more significant to the US population, including the famous Roswell 'crash' incident. This geographical area was also home to the building and testing of the two nuclear bombs that were dropped on Japan, which led to speculation that the phenomenon was likely monitoring humans' warring activities and potential for self-destruction.

⁹ Notes by U.S. Army Air Corp's Dr. David Griggs who interviewed Axis pilots about the phenomenon, and retold in the book: Strange Company: Military Encounters with UFOs in WWII by Keith Chester.

Although books have been written about the Foo-Fighter) episode, the best online source for documentary evidence stemming from that period (e.g., the SHAEF letter shown above) appears to be Jan Aldrich's Project 1947 website¹⁰, in which UFO reports from 1909-1955 are listed in yearly categories.

The SCU Review welcomes submissions of up to 2000 words, including but not limited to the following categories: UAP research briefs, letters to the editor, current events, historical perspectives, original essays, cases that represent significant sightings, and scifi stories. Please submit your document in MSWord or equivalent, double-spaced, 12pt Times New Roman font, with page numbers, and include a title, your name, date and contact info in the document itself. Provide full citations, in footnotes at the bottom of the page, for any sources you reference. Each figure needs a caption that provides sufficient information for it to stand alone. Please email ExploringSCU@gmail.com if you have any questions or would like to submit an article.

SCU Review Editors: T.W. Fendley, W. Granger, S.A. Little, R. Powell

¹⁰ <http://www.project1947.com/fig/>

SCI-FI HIGHLIGHT

Celestial Seasonings

S.A. Little

Celeste admired the constellation of colored bottles arrayed on her vanity. She reached toward one labeled “Earth,” changed her mind, and picked up “Neptune.” She dabbed a little on her throat, inhaled, and let the rich scent engulf her. Earth was her favorite but she didn’t want to use up the last drops; it wasn’t made any more. Neptune and Jupiter, they were big planets, but little Earth, it was gone.

Her date arrived in a stunning nebula suit tied with a classic Orion belt. She approved, although the shoes were a little too Newtonian for her tastes. He whisked her off to his favorite restaurant, the Milky Way, and escorted her through the Pillars of Creation to their cozy table in the corner. He ordered wine, a Cassiopeian with a hint of stardust, delivered and poured by a cute sommelier. She was impressed.

Appetizers were on her. A flaming red dwarf for herself, and to be a little yin and yang about it, a cool white for him. The waiter, Asterion, commended her, turned his head, winked at him.

Her date took a long time choosing his meal. Perhaps he didn’t know his constellations or the varieties of trinary systems? She began to fidget, look at her watch, think of exit plans. Outside, orbits began to precess.

Her date looked up, smiled at her and signaled the waiter.

“We’ll have the dark matter filament from the Aquila region, served with a rotating quasar, and the aged supernova platter, for two please. Oh, and Asterion, we’ll take our dinner on the patio. It’s a beautiful evening for stargazing.”

Her pupils dilated. Heaven was back on the menu.

~

First published in [FlashFlood](#), 6/18/2022