Medium

The Multiple Groups of UAP Studies Within Government

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Recent interest in scientific research on Unidentified Anomalous Phenomena (UAP) materialized in the Galileo Project at Harvard University in July 2021, the All-Domain Anomaly Resolution Office (AARO) in the Department of Defence (DoD) in July 2022, and the NASA UAP Study which is expected to deliver its final report in July 2023

This week was marked by the news about a shocking report under oath by the whistleblower David Grusch who served as a representative to the UAP Task Force and co-lead for UAP analysis within the DoD. Grusch says recoveries of extraterrestrial objects of non-human origin have been ongoing for decades by the US Government, allies, and defense contractors.

In response, AARO released the following public statement: “To date, AARO’s review of testimony from over two dozen individuals has not led to any verifiable information to substantiate claims that any programs to reverse-engineer extraterrestrial materials have existed in the past or exist currently.”

Both statements could be true and honest if and only if the DoD has multiple groups studying UAP that are unaware of each other. This situation can be easily maintained by assigning a higher security clearance to the group mentioned by Grusch, while using AARO as the public face of DoD in deliberations with the US Congress.

Separate from these internal DoD affairs, the military-industrial complex of the US is developing new technologies and might wish to reduce the likelihood that they will be exposed by UAP observatories of the type that the Galileo Project constructed and that the NASA Study recommends. One way to mitigate the risk of exposure is to discredit the scientific exploration of UAP. This may explain the 2020 report published by Northrop Grumman in their official newsletter "Now" which routinely features the intersection of technology, innovations & creativity. The report chose to feature my 2018 paper two years after it hypothesized a technological origin for the first reported interstellar object `Oumuamua, and stated that my paper "elicited derision from scientists." Why would Northrop Grumman care about extraterrestrials? And moreover, why would they care to dismiss in a newsletter on technology, innovation & creativity, a peer-reviewed scientific paper by the chair of Harvard's Astronomy department?

It is important to recognize that interstellar objects from outside the solar system do hit Earth. The first interstellar object for which a speed beyond the value required to escape from the Solar system was measured is IM1, whose fireball was detected by the US Government on January 8, 2014. This half-meter-sized object was tougher in material strength than all other 272 meteors in the CNEOS catalog of NASA, and was formally recognized as having an interstellar origin at the 99.999% confidence in an official letter from the US Space Command under DoD to NASA on March 1, 2022. In my discovery paper of IM1 with Amir Siraj, we showed that this first recognized interstellar meteor was moving outside the solar system faster than 95% of all stars in the vicinity of the Sun. The possibility that IM1 benefited from technological propulsion early on, and the fact that it was tougher than all known space rocks, suggests that it may have been artificial in origin.

This summer, I will be leading an expedition of the Galileo Project to the Pacific Ocean to discover whether IM1 was a craft from an extraterrestrial civilization. Based on the IM1 fireball energy, I calculated in a paper with my students, Amory Tillinghast-Raby and Amir Siraj, that the object likely disintegrated into tiny spherules, which our search team hopes to find with a magnetic sled or a sluicing device. If we recover the meteor materials, we plan to bring the sample back to the Harvard College Observatory, and analyze its composition with state-of-the-art diagnostic instruments.

Given that interstellar impacts occur on Earth, how would the government know that a crash site involves an exotic origin? In addition, foreign governments could test surprising technologies. We must keep in mind that interstellar objects could originate from natural astrophysical environments that are very different from the solar system, such as the materials ejected from exploding stars or merging neutron stars — which are highly enriched in rare isotopes of heavy elements. There is the possibility that some Oort cloud objects may have been exchanged with similar objects from passing stars and could impact Earth.

In contrast to the storyline provided by David Gursch, the scientific findings of the Galileo Project will be open to the public. Gursch's story is so far about hearsay and classified documents, but without any physical evidence.

We all look forward to watching whether Grusch's story will unveil real data and materials, following a related congressional hearing. Humans are prone to story-telling, and evidence-based science is our only anchor to reality.

ABOUT THE AUTHOR

Avi Loeb is the head of the Galileo Project, founding director of Harvard University's — Black Hole Initiative, director of the Institute for Theory and Computation at the Harvard-Smithsonian Center for Astrophysics, and the former chair of the astronomy department at Harvard University (2011–2020). He chairs the advisory board for the Breakthrough Starshot project, and is a former member of the President's Council of Advisors on Science and Technology and a former chair of the Board on Physics and Astronomy of the National Academies. He is the bestselling author of "*Extraterrestrial: The First Sign of Intelligent Life Beyond Earth*" and a co-author of the textbook "*Life in the Cosmos*", both published in 2021. His new book, titled "*Interstellar*", is scheduled for publication in August 2023.