

OFFICE OF THE DIRECTOR OF NATIONAL INTELLIGENCE

2022 Annual Report on Unidentified Aerial Phenomena

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EXECUTIVE SUMMARY

Unidentified Aerial Phenomena (UAP) reporting is increasing, enabling a greater awareness of the airspace and increased opportunity to resolve UAP events. In addition to the 144 UAP reports covered during the 17 years of UAP reporting included in the Office of the Director of National Intelligence (ODNI) preliminary assessment, there have been 247 new reports and another 119 that were either since discovered or reported after the preliminary assessment's time period. This totals 510 UAP reports as of 30 August 2022. Additional information is provided in the classified version of this report.

AARO and ODNI assess that the observed increase in the UAP reporting rate is partially due to a better understanding of the possible threats that UAP may represent, either as safety of flight hazards or as potential adversary collection platforms, and partially due to reduced stigma surrounding UAP reporting. This increased reporting allows more opportunities to apply rigorous analysis and resolve events.

The establishment of the Department of Defense (DoD) All-Domain Anomaly Resolution Office (AARO) should facilitate more coordinated UAP efforts, resulting in greater attribution of UAP. While limited data on UAP continues to be a challenge, the establishment of AARO—with its broad scope of authorities and responsibilities, and its replacement of the Unidentified Aerial Phenomena Task Force (UAPTF)—will allow for increased coordination of efforts against the UAP problem set. AARO's authorities ensure that UAP detection and identification efforts will span across DoD and relevant interagency partners, as well as the Intelligence Community (IC), with the support and coordination of the National Intelligence Manager for Aviation (NIM-Aviation). NIM-Aviation's and AARO's coordination efforts will improve U.S. Government awareness of objects in the airspace and resolution of UAP events (see Appendix B).

UAP events continue to occur in restricted or sensitive airspace, highlighting possible concerns for safety of flight or adversary collection activity. We continue to assess that this may result from a collection bias due to the number of active aircraft and sensors, combined with focused attention and guidance to report anomalies. AARO, in conjunction with NIM-Aviation and the IC, will continue to investigate any evidence of possible foreign government involvement in UAP events.

SCOPE AND ASSUMPTIONS

Scope

This annual report is provided by ODNI in response to a requirement established in Section 1683 of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2022, Establishment of Office, Organizational Structure, and Authorities to Address Unidentified Aerial Phenomena. Subsection (h) of that section states "the Director [of National Intelligence—DNI], in consultation with the Secretary [of Defense—SECDEF], shall submit to the appropriate congressional committees a report on unidentified aerial phenomena" (See Appendix A).

In addition to responding to the required elements delineated in the NDAA, this report details the establishment and coordinating efforts between ODNI and the newly-created DoD AARO. This report provides an overview for policymakers of UAP¹ that have been reported since the 05 March 2021 information cut-off date for ODNI's preliminary assessment on UAP, published 25 June 2021. Per the NDAA, AARO delivers quarterly reports on UAP to policymakers that contain greater detail regarding analysis and attribution of UAP events.

This report was drafted by ODNI's NIM-Aviation in conjunction with AARO. It includes input from the Under Secretary of Defense for Intelligence and Security (USD[I&S]), the Defense Intelligence Agency (DIA), the Federal Bureau of Investigation (FBI), the National Reconnaissance Office (NRO), the National Geospatial-Intelligence Agency (NGA), the National Security Agency (NSA), the U.S. Army, the U.S. Navy, the U.S. Marine Corps, the U.S. Air Force, the Federal Aviation Administration (FAA), the National Aeronautics and Space Administration (NASA), the National Oceanographic and Atmospheric Administration (NOAA), the Department of Energy (DoE), ODNI/NIM-Emerging and Disruptive Technology (NIM-EDT), ODNI/National Counterintelligence and Security Center (NCSC), and ODNI/National Intelligence Council (ODNI/NIC).

Assumptions

Multiple factors affect the observation or detection of UAP, such as weather, illumination, atmospheric effects, or the accurate interpretation of sensor data. Regarding review or analysis of UAP events, ODNI and AARO operate under the assumption that UAP reports are derived from the observer's accurate recollection of the event and/or sensors that generally operate correctly and capture enough real data to allow initial assessments. However, ODNI and AARO acknowledge that a select number of UAP incidents may be attributable to sensor irregularities or variances, such as operator or equipment error.

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¹ The FY 2022 NDAA expands the definition of UAP to include air, sea, and transmedium objects, and this report maintains that nomenclature during the transition phase and stand up of AARO.

GOVERNMENTAL CHANGES TO MANAGE UAP ISSUES

Establishment of the All-Domain Anomaly Resolution Office (AARO)

The Deputy Secretary of Defense directed the USD(I&S) to establish an office with sufficient scope, authorities, responsibilities, and capabilities to continue the UAPTF efforts and meet the expanded criteria. AARO was established as the UAPTF's successor entity on 20 July 2022. Per its mandate, AARO has the authority to coordinate UAP efforts beyond DoD and is authorized to develop processes and procedures to synchronize and standardize collection, reporting, and analysis throughout not just DoD, but the IC as well, with the support and coordination of NIM-Aviation. AARO will coordinate with other non-IC agencies such as the FAA, NASA, NOAA, and the non-IC elements of the Department of Homeland Security (DHS) and the Department of Energy (DOE), as appropriate. The broad scope of authority granted to AARO should enable them to leverage a multi-agency, whole-of-government approach to understanding, resolving, and attributing UAP in the future.

ODNI Coordinating with AARO and Multi-Agency Partners, Seeking Opportunities to Assist in Collection, Reporting, and Analysis of UAP Incidents across the IC

Since the June 2021 publication of ODNI's preliminary assessment on UAP, ODNI has developed strategic guidance to enhance further collection, which AARO and ODNI will leverage to prepare, collect, and report on UAP in a comprehensive manner for the IC. NIM-Aviation will remain the IC's focal point for UAP issues, while AARO is the DoD focal point for these issues and related activities. AARO will represent DoD to the interagency, Congress, media, and public, in coordination with the Assistant Secretary of Defense for Legislative Affairs and the Assistant to the Secretary of Defense for Public Affairs (OSD[PA]). AARO's mission and responsibilities are contained in Appendix B.

CONTINUED REPORTING AND ROBUST ANALYSIS ARE PROVIDING BETTER FIDELITY ON UAP EVENTS, BUT MANY CASES REMAIN UNRESOLVED

UAP Reporting

The ODNI preliminary assessment on UAP discussed 144 UAP reports and had an information cut-off date of 05 March 2021. Since then, AARO received a total of 247 new UAP reports. An additional 119 UAP reports on events that occurred before 05 March 2021, but were not included in the preliminary assessment, have been discovered or reported after the preliminary assessment's time period. These 366 additional reports, when combined with the 144 reports identified in the preliminary assessment, bring the total UAP reports catalogued to date to 510.

Since its establishment in July 2022, AARO has formulated and started to leverage a robust analytic process against identified UAP reporting. Once completed, AARO's final analytic findings will be available in their quarterly reports to policymakers. AARO's initial analysis and characterization of the 366 newly-identified reports, informed by a multi-agency process, judged more than half as exhibiting unremarkable characteristics:

- 26 characterized as Unmanned Aircraft System (UAS) or UAS-like entities;
- 163 characterized as balloon or balloon-like entities; and
- 6 attributed to clutter.²

Initial characterization does not mean positively resolved or unidentified. This initial characterization better enables AARO and ODNI to efficiently and effectively leverage resources against the remaining 171 uncharacterized and unattributed UAP reports. Some of these uncharacterized UAP appear to have demonstrated unusual flight characteristics or performance capabilities, and require further analysis.

The majority of new UAP reporting originates from U.S. Navy and U.S. Air Force aviators and operators who witnessed UAP during the course of their operational duties and reported the events to the UAPTF or AARO through official channels. Regardless of the collection or reporting method, many reports lack enough detailed data to enable attribution of UAP with high certainty.

Partnerships and Collaboration

ODNI and AARO are committed to the responsible sharing of UAP findings with interagency partners (such as FAA and NASA), other stakeholders, congressional oversight, international partners, and the public. AARO is working closely with the OSD(PA) and mission partners to develop an information-sharing and messaging strategy that aims to maximize transparency, while maintaining appropriate protections of sensitive sources and methods.

² e.g., birds, weather events, or airborne debris like plastic bags.

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ODNI and AARO have maintained communication with our allied partners regarding UAP, keeping them informed of developments and U.S. initiatives. The DoD and IC enterprises are working collaboratively to report, identify, and resolve UAP events. Agencies across the IC have established standard operating procedures that will streamline UAP resolution. For example, AARO's analytic methodology requires a whole-of-government approach to resolving UAP events, to include analysts and science and technology specialists, to help resolve UAP events.

Flight Safety Concerns and Health Implications

UAP pose a safety of flight and collision hazard to air assets, potentially requiring aircraft operators to adjust flight patterns in response to their unauthorized presence in the airspace, operating outside of air traffic control standards and instruction. To date, there have been no reported collisions between U.S. aircraft and UAP. Regarding health concerns, there have also been no encounters with UAP confirmed to contribute directly to adverse health-related effects to the observer(s). Acknowledging that health-related effects may appear at any time after an event occurs, AARO will track any reported health implications related to UAP should they emerge.

SUMMARY AND WAY AHEAD

UAP continue to represent a hazard to flight safety and pose a possible adversary collection threat. Since the publication of the ODNI preliminary assessment in June 2021, UAP reporting has increased, partially due to a concentrated effort to destignatize the topic of UAP and instead recognize the potential risks that it poses as both a safety of flight hazard and potential adversarial activity. Whereas there were previously 144 UAP reports covered during the 17 years of UAP reporting included in the ODNI preliminary assessment on UAP, there have been 247 more UAP reports during the 17 months since. Combined with another 119 reports either discovered or reported late that fell within the original 17 year period but were not included in the preliminary assessment, a total of 510 UAP reports are currently catalogued.

AARO has been established as the DoD focal point for UAP. In an effort to gain fidelity on the nature of UAP and the possible risk UAP represent, Congress required the establishment of a central office for all UAP matters in the FY 2022 NDAA. That office formally became operational as the AARO, under the USD(I&S), in July 2022. AARO is the single focal point for all DoD UAP efforts, leading a whole-of-government approach to coordinate UAP collection, reporting, and analysis efforts throughout DoD, the IC, and beyond, to include other government agencies not in the IC, as well as foreign allies and partners of the United States.

Coordinated efforts between DoD, the IC, and other government agencies to collect and report UAP events have resulted in increased data sets, spanning multiple security domains. AARO, in coordination with the IC, is focused on identifying solutions to manage and alleviate the resulting data problem, including the intake, indexing, visualization, and analysis of that data across multiple security domains. We are confident that continued multi-agency cooperative UAP prosecution activities will likely result in greater awareness of objects in and across the air, space, and maritime domains, as well as the nature and origin of UAP in the future. The establishment of AARO and application of AARO's new analytic process to this detailed reporting will increase resolution of UAP events.

APPENDIX A: ANNUAL REPORT ON UAP—FY 2022 NDAA

Subsection (h) of section 1683 (*Establishment of Office, Organizational Structure, and Authorities to Address Unidentified Aerial Phenomena*) of the FY 2022 NDAA (Public Law 117-81) listed requirements for an Annual Report on UAP matters. In the subsection, the term "the Director" refers to the Director of National Intelligence (DNI), and the term "the Secretary" refers to the Secretary of Defense (SECDEF). The text of the subsection is below.

- (1) Requirement. Not later than 31 October 2022, and annually thereafter until 31 October 2026, the Director, in consultation with the Secretary, shall submit to the appropriate congressional committees a report on unidentified aerial phenomena.
- (2) Elements. Each report under paragraph (1) shall include, with respect to the year covered by the report, the following information:
 - (A) All reported unidentified aerial phenomena-related events that occurred during the one-year period.
 - (B) All reported unidentified aerial phenomena-related events that occurred during a period other than that one-year period but were not included in an earlier report.
 - (C) An analysis of data and intelligence received through each reported unidentified aerial phenomena related event.
 - (D) An analysis of data relating to unidentified aerial phenomena collected through:
 - (i) Geospatial intelligence;
 - (ii) Signals intelligence;
 - (iii) Human intelligence; and
 - (iv) Measurement and signature intelligence.
 - (E) The number of reported unidentified aerial phenomena over restricted air space of the United States during the one-year period.
 - (F) An analysis of such incidents identified under subparagraph (E).
 - (G) Identification of potential aerospace or other threats posed by unidentified aerial phenomena to the national security of the United States.
 - (H) An assessment of any activity regarding unidentified aerial phenomena that can be attributed to one or more adversarial foreign governments.
 - (I) Identification of any incidents or patterns regarding unidentified aerial phenomena that indicate a potential adversarial foreign government may have achieved a breakthrough aerospace capability.
 - (J) An update on the coordination by the United States with allies and partners on efforts to track, understand, and address unidentified aerial phenomena.
 - (K) An update on efforts underway on the ability to capture or exploit discovered unidentified aerial phenomena.

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- (L) An assessment of any health-related effects for individuals that have encountered unidentified aerial phenomena.
- (M) The number of reported incidents, and descriptions thereof, of unidentified aerial phenomena with military nuclear assets, including strategic nuclear weapons and nuclear-powered ships and submarines.
- (N) In consultation with the Administrator for Nuclear Security, the number of reported incidents, and descriptions thereof, of unidentified aerial phenomena associated with facilities or assets associated with the production, transportation, or storage of nuclear weapons or components thereof.
- (O) In consultation with the Chairman of the Nuclear Regulatory Commission, the number of reported incidents, and descriptions thereof, of unidentified aerial phenomena or drones of unknown origin associated with nuclear power generating stations, nuclear fuel storage sites, or other sites or facilities regulated by the Nuclear Regulatory Commission.
- (P) The names of the line organizations that have been designated to perform the specific functions under subsections (c) and (d), and the specific functions for which each such line organization has been assigned primary responsibility.

Notes:

- 1. Subsection (c), referenced in subsection (h) (P) above, is titled *Response to and Field Investigations of Unidentified Aerial Phenomena*.
- 2. Subsection (d), referenced in subsection (h) (P) above, is titled *Scientific*, *Technological*, and *Operational Analyses of Data on Unidentified Aerial Phenomena*.

APPENDIX B: AARO ESTABLISHMENT OF OFFICE AND DUTIES—FY 2022 NDAA

Subsection (a) of section 1683 (Establishment of Office, Organizational Structure, and Authorities to Address Unidentified Aerial Phenomena) of the National Defense Authorization Act (NDAA) for Fiscal Year 2022 (Public Law 117-81) established an office designated to replace the Unidentified Aerial Phenomena Task Force (UAPTF), later identified as the Alldomain Anomaly Resolution Office (AARO). AARO was established on 20 July 2022. Subsection (b) of section 1683 delineated that office's duties. The text of these subsections is as follows:

- (a) Establishment of Office. Not later than 180 days after the date of the enactment of this Act, the Secretary of Defense, in coordination with the Director of National Intelligence, shall establish an office within a component of the Department of Defense and the Office of the Director of National Intelligence, to carry out the duties of the Unidentified Aerial Phenomena Task Force, as in effect on the day before the date of enactment of this Act, and such other duties as are required by this section.
- (b) Duties. The duties of the Office established under subsection (a) shall include the following:
 - (1) Developing procedures to synchronize and standardize the collection, reporting, and analysis of incidents, including adverse physiological effects, regarding unidentified aerial phenomena across the Department of Defense and the Intelligence Community.
 - (2) Developing processes and procedures to ensure that such incidents from each component of the Department and each element of the Intelligence Community are reported and incorporated in a centralized repository.
 - (3) Establishing procedures to require the timely and consistent reporting of such incidents.
 - (4) Evaluating links between unidentified aerial phenomena and adversarial foreign governments, other foreign governments, or nonstate actors.
 - (5) Evaluating the threat that such incidents present to the United States.
 - (6) Coordinating with other departments and agencies of the Federal Government, as appropriate, including the Federal Aviation Administration, the National Aeronautics and Space Administration, the Department of Homeland Security, the National Oceanic and Atmospheric Administration, and the Department of Energy.
 - (7) Coordinating with allies and partners of the United States, as appropriate, to better assess the nature and extent of unidentified aerial phenomena.
 - (8) Preparing reports for Congress, in both classified and unclassified form, including under section (i).

APPENDIX C: INDEX OF KEY TERMS

This report uses the following defining terms:

- Range Fouler: Defined by U.S. Navy aviators based on observations of UAP interrupting pre-planned training or other military activity in military operating areas or restricted airspace.
- Transmedium Objects or Devices: Objects or devices that are observed to transition between space and the atmosphere, or between the atmosphere and bodies of water, that are not immediately identifiable.
- Unidentified Aerial Phenomena (UAP): Airborne objects not immediately identifiable. The acronym UAP represents the broadest category of airborne objects reviewed for analysis.
- **UAP Event:** A holistic description of an occurrence during which a pilot or aircrew witnessed (or detected) a UAP.
- **UAP Incident:** A specific part of the event.
- **UAP Report:** Documentation of a UAP event to include verified chains of custody and basic information such as the time, date, location, and description of the UAP. UAP reports include Range Fouler reports and other reporting.