



Current & Future Flyover Reporting Guidance for SIDs: A Proposal

Daryl Johnson

Security Specialist

Senior

NSIR/DSO/SOSB

U.S. Nuclear Regulatory Commission

11545 Rockville Pike

One White Flint North

Rockville, MD 20852

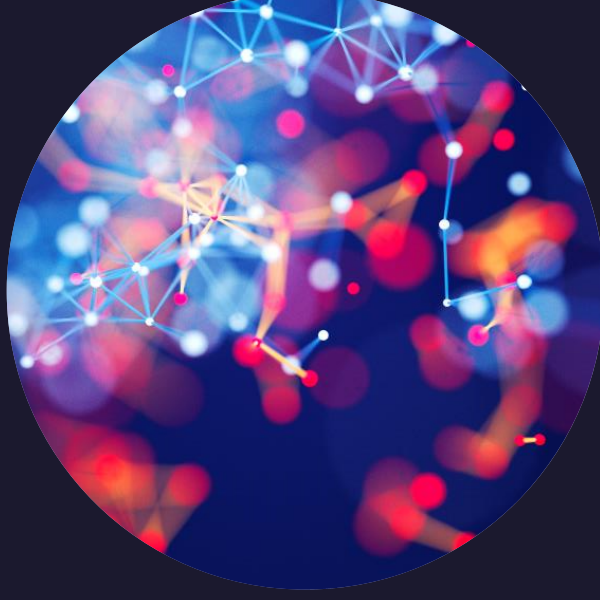
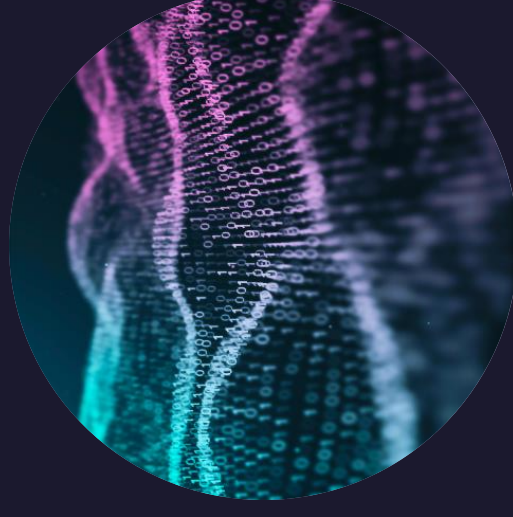


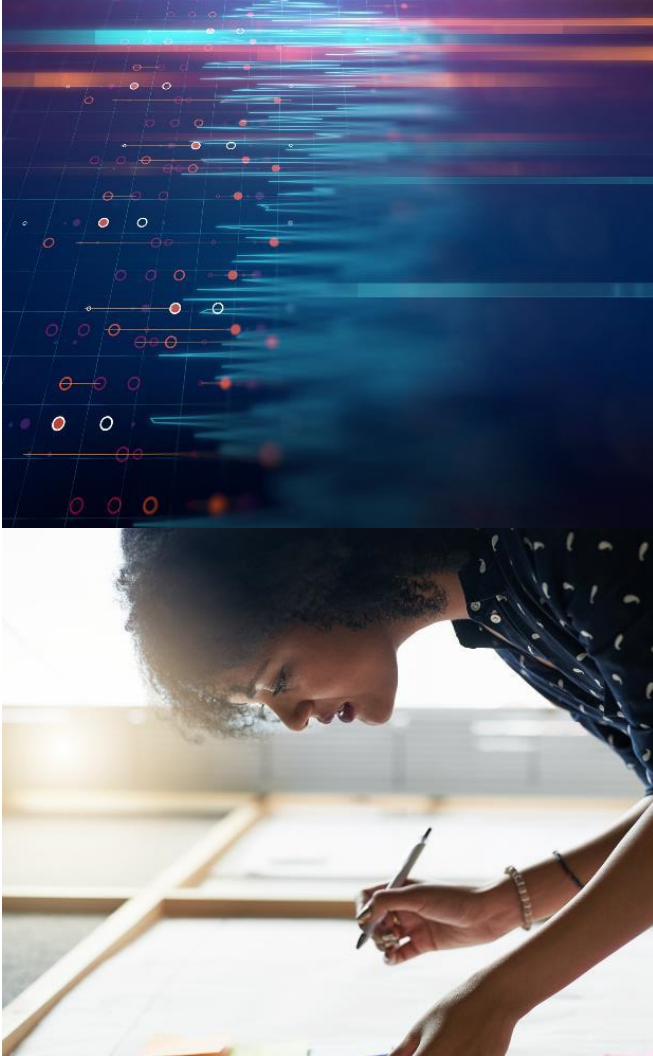
Agenda

- SID Flyover Reporting

Guidance

- CURRENT: Identified aircraft, unmanned aerial systems/drones
- PROPOSED UPDATE: Unidentified Anomalous Phenomena (UAP) ?





Introduction

- This presentation will address a recent law requiring the NRC provide annual reporting about Unidentified Anomalous Phenomena (UAP) to the Department of Defense (DOD) as well as a proposal to update current flyover reporting guidance to licensees regarding UAP.

SID Flyover Reporting Guidelines Update Needed?

- DOD's All-domain Anomaly Resolution Office (AARO) request to NRC for UAP/UAS flyover data for their Congressional Report, 5/01/2023
- NSIR provided response to AARO for FY-2023, 6/05/2023

UNCLASSIFIED



OFFICE OF THE DIRECTOR OF NATIONAL INTELLIGENCE

2022 Annual Report on Unidentified Aerial Phenomena

UNCLASSIFIED

UNCLASSIFIED

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

UNCLASSIFIED



AAARO UAP Reporting Requirement


EC. 1673. UNIDENTIFIED ANOMALOUS PHENOMENA REPORTING PROCEDURES.

(a) Mechanism for Authorized Reporting.--

(1) Establishment.--The Secretary of Defense, acting through the head of the Office and in consultation with the Director of National Intelligence, shall establish a secure mechanism for authorized reporting of--

(A) any event relating to unidentified anomalous phenomena; and

(B) any activity or program by a department or agency of the Federal Government or a contractor of such a department or agency relating to unidentified anomalous phenomena, including with respect to material retrieval, material analysis, reverse engineering, research and development, detection and tracking, developmental or operational testing, and security protections and enforcement.



NRC UAP Reporting Requirement

(xv) In consultation with the Chairman of the Nuclear Regulatory Commission, the number of reported incidents, and descriptions thereof, of unidentified anomalous 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.

SID Flyover Guidance

CURRENT GUIDANCE

- Identified/Unidentified Aircraft (e.g. fixed wing, rotary)
- Unmanned Aerial Systems (e.g. UAVs, drones)
- Recently provided updated guidance in 2021 requesting more details for UAS flyovers (e.g. UAS characteristics, flight duration, flyover time, number of drones, etc.)

INFORMATION REPORTING GAP

- No guidance for reporting Unidentified Anomalous Phenomenon (UAP)
- UAPs differ from known aircraft and UAS (no propulsion, no sound, different flight maneuvers, operate in water and air)
- Licensees may mistakenly report a UAP as a UAS/drone
- Gathering UAP data is now mandated by Congressional law, including the NRC

SID Flyover Guidance (*cont.*)

OTHER CONSIDERATIONS

- The NRC currently has no process to report UAPs and has no awareness of whether or not UAPs are operating around licensee's aerospace in its guidance (e.g. no mention of UAPs; no UAP definition; no information regarding differentiation between aircraft, UAS, and UAPs; no guidance about reporting them)
- There is no impact to the Enhanced Weapons Rule (EWR) because the current characterization language of flyovers in the EWR uses the terms “manned” and “unmanned” which likely covers UAPs.
- NSRI/Division of Physical and Cyber Security Policy (DPCP), however, has some input and questions concerning possible future rule making considerations regarding the new federal UAP reporting law's applicability to the NRC

We have no idea if
UAPs are flying
over the aerospace
of nuclear power
plants or Category
I fuel cycle
facilities.





RECOMMENDATION

- Request AARO UAP reporting guidance for government agencies and military, if any
- Develop special UAP reporting guidance for NRC licensees
- Issue a Security Advisory providing another update to flyover guidelines that includes UAP

Thank You

Daryl Johnson

daryl.johnson@nrc.gov

(301) 287-3623

