HOUSE OF COMMONS

John F.G. Hannaford
Deputy Minister for Natural Resources
580 Booth Street, 21st Floor
Ottawa, Ontario K1A 0E4

Friday, March 4, 2022

Dear Mr. Hannaford,

Thank you for your appearance at the Standing Committee on Natural Resources as we considered and reviewed the department's Supplementary Estimates (C).

To ensure there is no ambiguity with the questions asked, and to clarify the specific information I am looking to have tabled with the Natural Resources Committee, I am providing further context:

1. Has Natural Resources Canada ever received incident reports of drones or unidentified aerial phenomena (UAP) in or near Canadian nuclear facilities? If so, please provide a list of all incidents including the dates, times, and locations. In addition, please provide every detail of the investigations that took place to determine origin and intent and the conclusions of those investigations.

   To assist your efforts, please find enclosed open-sourced incidents, provided by Chris Rutkowski, UAPMB Research, that have been reported in or near nuclear facilities.

2. Are reports of drone or UAP violations in and around nuclear facilities publicly disclosed? If so, where is that information? If not, please inform the committee what steps the department will take to standardize that information and make it publicly available.

3. Within the U.S. National Defence Authorization Act for Fiscal Year 2022, it states, "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."

   In addition, the office being established has the legal means to partner with allies of the United States, as "appropriate, to better assess the nature and extent of Unidentified Aerial Phenomena".

   I believe it would be prudent for Atomic Energy of Canada Limited to proactively reach out to their American counterparts to discuss their efforts and to inquire how they are handling these reports and investigations. Would you be open to reaching out to the American Nuclear Regulatory Commission to start this important conversation?

To follow up on my commitment to share the amendment contained in the National Defence Authorization Act for Fiscal Year 2022, which was signed into law by President Biden, I have attached it in its entirety. For your convenience, I highlighted the relevant sections applicable to your department.

For further context, I have also attached the Preliminary Assessment on UAP, which was written by the Office of the Director of National Intelligence, at the request of the United States Senate Select Committee on Intelligence.

As a trusted ally of the U.S., and through the close working relationships of various Canadian departments and agencies including Natural Resources Canada, we must be prepared to coordinate and be a meaningful partner in these efforts.

I met with Mr. Luis Elizondo, who was involved in the Pentagon's Advanced Aerospace Threat Identification Program from 2008 - 2017. He provided a high-level, unclassified outline of the issue. The information he provided on UAP has been previously shared in public interviews. I've also met with representatives from the Scientific Coalition of UAP studies, which included Canadian representatives, who also could not confirm any ongoing government efforts to study this issue.

Through other efforts, which includes tabling an Order Paper Question and following up on conversations, I have not been able to determine or confirm if there were any previous or ongoing efforts within the Government of Canada to investigate drone or UAP incidents near nuclear facilities or anywhere else in the country.

All attempts to establish and confirm the sharing of information between our government with allies, either through direct communication or investigative efforts, have not resulted in any concrete findings.

As NORAD has the lead on providing aerospace warning and air sovereignty of North America, there has been information obtained through Access to Information Act requests, which has been reported on, that has confirmed UAP incidents are reported through normal Canadian Armed Forces channels. However, no information on investigative efforts or conclusions has ever been made public. I have not been told nor am I aware of how that information is collected or analyzed.

The stigma surrounding this issue is the greatest barrier to better understand this issue. It is encouraging to see it subside as it should allow the matter to be publicly acknowledged and studied in an open and transparent way.

Thanks again, Mr. Hannaford, for your recent Committee appearance and I look forward to the responses to the questions I posed. If you need any further information, please do not hesitate to contact me directly.

Sincerely,

Larry R. Maguire

Larry Maguire, MP
Brandon – Souris

CC:

Hon. Jonathan Wilkinson, PC, MP
Clerk of the Standing Committee on Natural Resources
Senator Mark Warner, Chairman of the U.S. Senate Select Committee on Intelligence

(3) For global nuclear security, $17,767,000.
(4) For cooperative biological engagement, $229,022,000.
(5) For proliferation prevention, $58,754,000.
(6) For activities designated as Other Assessments/Administrative Costs, $23,059,000.

(b) SPECIFICATION OF COOPERATIVE THREAT REDUCTION FUNDS.—Funds appropriated pursuant to the authorization of appropriations in section 301 and made available by the funding table in division D for the Department of Defense Cooperative Threat Reduction Program shall be available for obligation for fiscal years 2022, 2023, and 2024.

SEC. 1682. MODIFICATION TO ESTIMATE OF DAMAGES FROM FEDERAL COMMUNICATIONS COMMISSION ORDER 20–48.

Section 1664 of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Public Law 116–283) is amended—

(1) in subsection (a), in the matter preceding paragraph (1), by inserting "or any subsequent fiscal year" after "fiscal year 2021"; and

(2) by adding at the end the following new subsections:

"(d) DISTRIBUTION OF ESTIMATE.—As soon as practicable after submitting an estimate as described in paragraph (1) of subsection (a) and making the certification described in paragraph (2) of such subsection, the Secretary shall make such estimate available to any licensee operating under the Order and Authorization described in such subsection.

"(e) AUTHORITY OF SECRETARY OF DEFENSE TO SEEK RECOVERY OF COSTS.—The Secretary may work directly with any licensee (or any future assignee, successor, or purchaser) affected by the Order and Authorization described in subsection (a) to seek recovery of costs incurred by the Department as a result of the effect of such order and authorization.

"(f) REIMBURSEMENT.—

"(1) IN GENERAL.—The Secretary shall establish and facilitate a process for any licensee (or any future assignee, successor, or purchaser) subject to the Order and Authorization described in subsection (a) to provide reimbursement to the Department, only to the extent provided in appropriation Acts, for the covered costs and eligible reimbursable costs submitted and certified to the congressional defense committees under such subsection.

"(2) USE OF FUNDS.—The Secretary shall use any funds received under this subsection, to the extent and in such amounts as are provided in advance in appropriation Acts, for covered costs described in subsection (b) and the range of eligible reimbursable costs identified under subsection (a)(1).

"(3) REPORT.—Not later than 90 days after the date on which the Secretary establishes the process required by paragraph (1), the Secretary shall submit to the congressional defense committees a report on such process.".

50 USC 3373.

SEC. 1683. ESTABLISHMENT OF OFFICE, ORGANIZATIONAL STRUCTURE, AND AUTHORITIES TO ADDRESS UNIDENTIFIED AERIAL PHENOMENA.

Deadline.

(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 Office of the Secretary of Defense, or within a joint organization 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 subsection (i).

(c) RESPONSE TO AND FIELD INVESTIGATIONS OF UNIDENTIFIED AERIAL PHENOMENA.—

(1) DESIGNATION.—The Secretary, in coordination with the Director, shall designate one or more line organizations within the Department of Defense and the intelligence community that possess appropriate expertise, authorities, accesses, data, systems, platforms, and capabilities to rapidly respond to, and conduct field investigations of, incidents involving unidentified aerial phenomena under the direction of the head of the Office established under subsection (a).

(2) ABILITY TO RESPOND.—The Secretary, in coordination with the Director, shall ensure that each line organization designated under paragraph (1) has adequate personnel with the requisite expertise, equipment, transportation, and other resources necessary to respond rapidly to incidents or patterns of observations involving unidentified aerial phenomena of which the Office becomes aware.

(d) SCIENTIFIC, TECHNOLOGICAL, AND OPERATIONAL ANALYSES OF DATA ON UNIDENTIFIED AERIAL PHENOMENA.—

(1) DESIGNATION.—The Secretary, in coordination with the Director, shall designate one or more line organizations that

will be primarily responsible for scientific, technical, and operational analysis of data gathered by field investigations conducted pursuant to subsection (c) and data from other sources, including with respect to the testing of materials, medical studies, and development of theoretical models, to better understand and explain unidentified aerial phenomena.

(2) AUTHORITY.—The Secretary and the Director shall each issue such directives as are necessary to ensure that the each line organization designated under paragraph (1) has authority to draw on the special expertise of persons outside the Federal Government with appropriate security clearances.

(e) DATA; INTELLIGENCE COLLECTION.—

(1) AVAILABILITY OF DATA AND REPORTING ON UNIDENTIFIED AERIAL PHENOMENA.—The Director and the Secretary shall each, in coordination with one another, ensure that—

(A) each element of the intelligence community with data relating to unidentified aerial phenomena makes such data available immediately to the Office established under subsection (a) or to an entity designated by the Secretary and the Director to receive such data; and

(B) military and civilian personnel of the Department of Defense or an element of the intelligence community, and contractor personnel of the Department or such an element, have access to procedures by which the personnel shall report incidents or information, including adverse physiological effects, involving or associated with unidentified aerial phenomena directly to the Office or to an entity designated by the Secretary and the Director to receive such information.

(2) INTELLIGENCE COLLECTION AND ANALYSIS PLAN.—The head of the Office established under subsection (a), acting on behalf of the Secretary of Defense and the Director of National Intelligence, shall supervise the development and execution of an intelligence collection and analysis plan to gain as much knowledge as possible regarding the technical and operational characteristics, origins, and intentions of unidentified aerial phenomena, including with respect to the development, acquisition, deployment, and operation of technical collection capabilities necessary to detect, identify, and scientifically characterize unidentified aerial phenomena.

(3) USE OF RESOURCES AND CAPABILITIES.—In developing the plan under paragraph (2), the head of the Office established under subsection (a) shall consider and propose, as the head determines appropriate, the use of any resource, capability, asset, or process of the Department and the intelligence community.

(f) SCIENCE PLAN.—The head of the Office established under subsection (a), on behalf of the Secretary and the Director, shall supervise the development and execution of a science plan to develop and test, as practicable, scientific theories to—

(1) account for characteristics and performance of unidentified aerial phenomena that exceed the known state of the art in science or technology, including in the areas of propulsion, aerodynamic control, signatures, structures, materials, sensors, countermeasures, weapons, electronics, and power generation; and

(2) provide the foundation for potential future investments to replicate any such advanced characteristics and performance.

(g) ASSIGNMENT OF PRIORITY.—The Director, in consultation with, and with the recommendation of the Secretary, shall assign an appropriate level of priority within the National Intelligence Priorities Framework to the requirement to understand, characterize, and respond to unidentified aerial phenomena. Consultation.

(h) ANNUAL REPORT.—

(1) REQUIREMENT.—Not later than October 31, 2022, and annually thereafter until October 31, 2026, the Director, in consultation with the Secretary, shall submit to the appropriate congressional committees a report on unidentified aerial phenomena. Termination date.

(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. Data.

(D) An analysis of data relating to unidentified aerial phenomena collected through— Data.

(i) geospatial intelligence;

(ii) signals intelligence;

(iii) human intelligence; and

(iv) measurement and signature intelligence.

(E) The number of reported incidents of 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. Assessment.

(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 any efforts underway on the ability to capture or exploit discovered unidentified aerial phenomena.

(L) An assessment of any health-related effects for individuals that have encountered unidentified aerial phenomena. Assessment.

(M) The number of reported incidents, and descriptions thereof, of unidentified aerial phenomena associated with

military nuclear assets, including strategic nuclear weapons and nuclear-powered ships and submarines.

Consultation.

(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.

Consultation.

(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.

(3) FORM.—Each report submitted under paragraph (1) shall be submitted in unclassified form, but may include a classified annex.

(i) SEMIANNUAL BRIEFINGS.—

Deadline. Termination date.

(1) REQUIREMENT.—Not later than 90 days after the date of the enactment of this Act and not less frequently than semiannually thereafter until December 31, 2026, the head of the Office established under subsection (a) shall provide to the congressional committees specified in subparagraphs (A), (B), and (D) of subsection (l)(1) classified briefings on unidentified aerial phenomena.

(2) FIRST BRIEFING.—The first briefing provided under paragraph (1) shall include all incidents involving unidentified aerial phenomena that were reported to the Unidentified Aerial Phenomena Task Force or to the Office established under subsection (a) after June 24, 2021, regardless of the date of occurrence of the incident.

(3) SUBSEQUENT BRIEFINGS.—Each briefing provided subsequent to the first briefing described in paragraph (2) shall include, at a minimum, all events relating to unidentified aerial phenomena that occurred during the previous 180 days, and events relating to unidentified aerial phenomena that were not included in an earlier briefing.

(4) INSTANCES IN WHICH DATA WAS NOT SHARED.—For each briefing period, the head of the Office established under subsection (a) shall jointly provide to the chairman and the ranking minority member or vice chairman of the congressional committees specified in subparagraphs (A) and (D) of subsection (k)(1) an enumeration of any instances in which data relating to unidentified aerial phenomena was not provided to the Office because of classification restrictions on that data or for any other reason.

(j) AUTHORIZATION OF APPROPRIATIONS.—There is authorized to be appropriated such sums as may be necessary to carry out the work of the Office established under subsection (a), including with respect to—

(1) general intelligence gathering and intelligence analysis; and

(2) strategic defense, space defense, defense of controlled air space, defense of ground, air, or naval assets, and related purposes.

(k) TASK FORCE TERMINATION.—Not later than the date on which the Secretary establishes the Office under subsection (a), the Secretary shall terminate the Unidentified Aerial Phenomenon Task Force. Deadline.

(l) DEFINITIONS.—In this section:

(1) The term "appropriate congressional committees" means the following:

(A) The Committees on Armed Services of the House of Representatives and the Senate.

(B) The Committees on Appropriations of the House of Representatives and the Senate.

(C) The Committee on Foreign Affairs of the House of Representatives and the Committee on Foreign Relations of the Senate.

(D) The Permanent Select Committee on Intelligence of the House of Representatives and the Select Committee on Intelligence of the Senate.

(2) The term "intelligence community" has the meaning given such term in section 3 of the National Security Act of 1947 (50 U.S.C. 3003).

(3) The term "line organization" means, with respect to a department or agency of the Federal Government, an organization that executes programs and activities to directly advance the core functions and missions of the department or agency to which the organization is subordinate, but, with respect to the Department of Defense, does not include a component of the Office of the Secretary of Defense.

(4) The term "transmedium objects or devices" means 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.

(5) The term "unidentified aerial phenomena" means—

(A) airborne objects that are not immediately identifiable;

(B) transmedium objects or devices; and

(C) submerged objects or devices that are not immediately identifiable and that display behavior or performance characteristics suggesting that the objects or devices may be related to the objects or devices described in subparagraph (A) or (B).

SEC. 1684. DETERMINATION ON CERTAIN ACTIVITIES WITH UNUSUALLY HAZARDOUS RISKS.

(a) REPORT REQUIRED.—For fiscal years 2022 and 2023, the Secretary concerned shall prepare a report for each indemnification request made by a covered contractor with respect to a contract. Such report shall include the following elements: Time periods.

(1) A determination of whether the performance of the contract includes an unusually hazardous risk (as defined in this section).

(2) An estimate of the maximum probable loss for claims or losses arising out of the contract.

OFFICE OF THE DIRECTOR OF NATIONAL INTELLIGENCE

Preliminary Assessment: Unidentified Aerial Phenomena

25 June 2021

SCOPE AND ASSUMPTIONS

Scope

This preliminary report is provided by the Office of the Director of National Intelligence (ODNI) in response to the provision in Senate Report 116-233, accompanying the Intelligence Authorization Act (IAA) for Fiscal Year 2021, that the DNI, in consultation with the Secretary of Defense (SECDEF), is to submit an intelligence assessment of the threat posed by unidentified aerial phenomena (UAP) and the progress the Department of Defense Unidentified Aerial Phenomena Task Force (UAPTF) has made in understanding this threat.

This report provides an overview for policymakers of the challenges associated with characterizing the potential threat posed by UAP while also providing a means to develop relevant processes, policies, technologies, and training for the U.S. military and other U.S. Government (USG) personnel if and when they encounter UAP, so as to enhance the Intelligence Community's (IC) ability to understand the threat. The Director, UAPTF, is the accountable official for ensuring the timely collection and consolidation of data on UAP. The dataset described in this report is currently limited primarily to U.S. Government reporting of incidents occurring from November 2004 to March 2021. Data continues to be collected and analyzed.

ODNI prepared this report for the Congressional Intelligence and Armed Services Committees. UAPTF and the ODNI National Intelligence Manager for Aviation drafted this report, with input from USD(I&S), DIA, FBI, NRO, NGA, NSA, Air Force, Army, Navy, Navy/ONI, DARPA, FAA, NOAA, NGA, ODNI/NIM-Emerging and Disruptive Technology, ODNI/National Counterintelligence and Security Center, and ODNI/National Intelligence Council.

Assumptions

Various forms of sensors that register UAP generally operate correctly and capture enough real data to allow initial assessments, but some UAP may be attributable to sensor anomalies.

EXECUTIVE SUMMARY

The limited amount of high-quality reporting on unidentified aerial phenomena (UAP) hampers our ability to draw firm conclusions about the nature or intent of UAP. The Unidentified Aerial Phenomena Task Force (UAPTF) considered a range of information on UAP described in U.S. military and IC (Intelligence Community) reporting, but because the reporting lacked sufficient specificity, ultimately recognized that a unique, tailored reporting process was required to provide sufficient data for analysis of UAP events.

- As a result, the UAPTF concentrated its review on reports that occurred between 2004 and 2021, the majority of which are a result of this new tailored process to better capture UAP events through formalized reporting.
- Most of the UAP reported probably do represent physical objects given that a majority of UAP were registered across multiple sensors, to include radar, infrared, electro-optical, weapon seekers, and visual observation.

In a limited number of incidents, UAP reportedly appeared to exhibit unusual flight characteristics. These observations could be the result of sensor errors, spoofing, or observer misperception and require additional rigorous analysis.

There are probably multiple types of UAP requiring different explanations based on the range of appearances and behaviors described in the available reporting. Our analysis of the data supports the construct that if and when individual UAP incidents are resolved they will fall into one of five potential explanatory categories: airborne clutter, natural atmospheric phenomena, USG or U.S. industry developmental programs, foreign adversary systems, and a catchall "other" bin.

UAP clearly pose a safety of flight issue and may pose a challenge to U.S. national security. Safety concerns primarily center on aviators contending with an increasingly cluttered air domain. UAP would also represent a national security challenge if they are foreign adversary collection platforms or provide evidence a potential adversary has developed either a breakthrough or disruptive technology.

Consistent consolidation of reports from across the federal government, standardized reporting, increased collection and analysis, and a streamlined process for screening all such reports against a broad range of relevant USG data will allow for a more sophisticated analysis of UAP that is likely to deepen our understanding. Some of these steps are resource-intensive and would require additional investment.

AVAILABLE REPORTING LARGELY INCONCLUSIVE

Limited Data Leaves Most UAP Unexplained…

Limited data and inconsistency in reporting are key challenges to evaluating UAP. No standardized reporting mechanism existed until the Navy established one in March 2019. The Air Force subsequently adopted that mechanism in November 2020, but it remains limited to USG reporting. The UAPTF regularly heard anecdotally during its research about other observations that occurred but which were never captured in formal or informal reporting by those observers.

After carefully considering this information, the UAPTF focused on reports that involved UAP largely witnessed firsthand by military aviators and that were collected from systems we considered to be reliable. These reports describe incidents that occurred between 2004 and 2021, with the majority coming in the last two years as the new reporting mechanism became better known to the military aviation community. We were able to identify one reported UAP with high confidence. In that case, we identified the object as a large, deflating balloon. The others remain unexplained.

- **144** reports originated from USG sources. Of these, **80** reports involved observation with multiple sensors.
    - Most reports described UAP as objects that interrupted pre-planned training or other military activity.

UAP Collection Challenges

Sociocultural stigmas and sensor limitations remain obstacles to collecting data on UAP. Although some technical challenges—such as how to appropriately filter out radar clutter to ensure safety of flight for military and civilian aircraft—are longstanding in the aviation community, while others are unique to the UAP problem set.

- Narratives from aviators in the operational community and analysts from the military and IC describe disparagement associated with observing UAP, reporting it, or attempting to discuss it with colleagues. Although the effects of these stigmas have lessened as senior members of the scientific, policy, military, and intelligence communities engage on the topic seriously in public, reputational risk may keep many observers silent, complicating scientific pursuit of the topic.
- The sensors mounted on U.S. military platforms are typically designed to fulfill specific missions. As a result, those sensors are not generally suited for identifying UAP.
- Sensor vantage points and the numbers of sensors concurrently observing an object play substantial roles in distinguishing UAP from known objects and determining whether a UAP demonstrates breakthrough aerospace capabilities. Optical sensors have the benefit of providing some insight into relative size, shape, and structure. Radiofrequency sensors provide more accurate velocity and range information.

But Some Potential Patterns Do Emerge

Although there was wide variability in the reports and the dataset is currently too limited to allow for detailed trend or pattern analysis, there was some clustering of UAP observations regarding shape, size, and, particularly, propulsion. UAP sightings also tended to cluster around U.S. training and testing grounds, but we assess that this may result from a collection bias as a result of focused attention, greater numbers of latest-generation sensors operating in those areas, unit expectations, and guidance to report anomalies.

And a Handful of UAP Appear to Demonstrate Advanced Technology

In **18** incidents, described in **21** reports, observers reported unusual UAP movement patterns or flight characteristics.

Some UAP appeared to remain stationary in winds aloft, move against the wind, maneuver abruptly, or move at considerable speed, without discernable means of propulsion. In a small number of cases, military aircraft systems processed radio frequency (RF) energy associated with UAP sightings.

The UAPTF holds a small amount of data that appear to show UAP demonstrating acceleration or a degree of signature management. Additional rigorous analysis are necessary by multiple teams or groups of technical experts to determine the nature and validity of these data. We are conducting further analysis to determine if breakthrough technologies were demonstrated.

UAP PROBABLY LACK A SINGLE EXPLANATION

The UAP documented in this limited dataset demonstrate an array of aerial behaviors, reinforcing the possibility there are multiple types of UAP requiring different explanations. Our analysis of the data supports the construct that if and when individual UAP incidents are resolved they will fall into one of five potential explanatory categories: airborne clutter, natural atmospheric phenomena, USG or industry developmental programs, foreign adversary systems, and a catchall "other" bin. With the exception of the one instance where we determined with high confidence that the reported UAP was airborne clutter, specifically a deflating balloon, we currently lack sufficient information in our dataset to attribute incidents to specific explanations.

Airborne Clutter: These objects include birds, balloons, recreational unmanned aerial vehicles (UAV), or airborne debris like plastic bags that muddle a scene and affect an operator's ability to identify true targets, such as enemy aircraft.

Natural Atmospheric Phenomena: Natural atmospheric phenomena includes ice crystals, moisture, and thermal fluctuations that may register on some infrared and radar systems.

USG or Industry Developmental Programs: Some UAP observations could be attributable to developments and classified programs by U.S. entities. We were unable to confirm, however, that these systems accounted for any of the UAP reports we collected.

Foreign Adversary Systems: Some UAP may be technologies deployed by China, Russia, another nation, or a non-governmental entity.

Other: Although most of the UAP described in our dataset probably remain unidentified due to limited data or challenges to collection processing or analysis, we may require additional scientific knowledge to successfully collect on, analyze and characterize some of them. We would group such objects in this category pending scientific advances that allowed us to better understand them. The UAPTF intends to focus additional analysis on the small number of cases where a UAP appeared to display unusual flight characteristics or signature management.

UAP THREATEN FLIGHT SAFETY AND, POSSIBLY, NATIONAL SECURITY

UAP pose a hazard to safety of flight and could pose a broader danger if some instances represent sophisticated collection against U.S. military activities by a foreign government or demonstrate a breakthrough aerospace technology by a potential adversary.

Ongoing Airspace Concerns

When aviators encounter safety hazards, they are required to report these concerns. Depending on the location, volume, and behavior of hazards during incursions on ranges, pilots may cease their tests and/or training and land their aircraft, which has a deterrent effect on reporting.

- The UAPTF has 11 reports of documented instances in which pilots reported near misses with a UAP.

Potential National Security Challenges

We currently lack data to indicate any UAP are part of a foreign collection program or indicative of a major technological advancement by a potential adversary. We continue to monitor for evidence of such programs given the counter intelligence challenge they would pose, particularly as some UAP have been detected near military facilities or by aircraft carrying the USG's most advanced sensor systems.

EXPLAINING UAP WILL REQUIRE ANALYTIC, COLLECTION AND RESOURCE INVESTMENT

Standardize the Reporting, Consolidate the Data, and Deepen the Analysis

In line with the provisions of Senate Report 116-233, accompanying the IAA for FY 2021, the UAPTF's long-term goal is to widen the scope of its work to include additional UAP events documented by a broader swath of USG personnel and technical systems in its analysis. As the dataset increases, the UAPTF's ability to employ data analytics to detect trends will also improve. The initial focus will be to employ artificial intelligence/machine learning algorithms to cluster and recognize similarities and patterns in features of the data points. As the database accumulates information from known aerial objects such as weather balloons, high-altitude or super-pressure balloons, and wildlife, machine learning can add efficiency by pre-assessing UAP reports to see if those records match similar events already in the database.

- The UAPTF has begun to develop interagency analytical and processing workflows to ensure both collection and analysis will be well informed and coordinated.

The majority of UAP data is from U.S. Navy reporting, but efforts are underway to standardize incident reporting across U.S. military services and other government agencies to ensure all relevant data is captured with respect to particular incidents and any U.S. activities that might be relevant. The UAPTF is currently working to acquire additional reporting, including from the U.S. Air Force (USAF), and has begun receiving data from the Federal Aviation Administration (FAA).

- Although USAF data collection has been limited historically the USAF began a six-month pilot program in November 2020 to collect in the most likely areas to encounter UAP and is evaluating how to normalize future collection, reporting, and analysis across the entire Air Force.
- The FAA captures data related to UAP during the normal course of managing air traffic operations. The FAA generally ingests this data when pilots and other airspace users report unusual or unexpected events to the FAA's Air Traffic Organization.
- In addition, the FAA continuously monitors its systems for anomalies, generating additional information that may be of use to the UAPTF. The FAA is able to isolate data of interest to the UAPTF and make it available. The FAA has a robust and effective outreach program that can help the UAPTF reach members of the aviation community to highlight the importance of reporting UAP.

Expand Collection

The UAPTF is looking for novel ways to increase collection of UAP cluster areas when U.S. forces are not present as a way to baseline "standard" UAP activity and mitigate the collection bias in the dataset. One proposal is to use advanced algorithms to search historical data captured and stored by radars. The UAPTF also plans to update its current interagency UAP collection strategy in order bring to bear relevant collection platforms and methods from the DoD and the IC.

Increase Investment in Research and Development

The UAPTF has indicated that additional funding for research and development could further the future study of the topics laid out in this report. Such investments should be guided by a UAP Collection Strategy, UAP R&D Technical Roadmap, and a UAP Program Plan.

APPENDIX A - Definition of Key Terms

This report and UAPTF databases use the following defining terms:

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[1] reports and other reporting.

[1] U.S. Navy aviators define a "range fouler" as an activity or object that interrupts pre-planned training or other military activity in a military operating area or restricted airspace.

APPENDIX B – Senate Report Accompanying the Intelligence Authorization Act for Fiscal Year 2021

Senate Report 116-233, accompanying the Intelligence Authorization Act for Fiscal Year 2021, provides that the DNI, in consultation with the SECDEF and other relevant heads of USG Agencies, is to submit an intelligence assessment of the threat posed by UAP and the progress the UAPTF has made to understand this threat.

The Senate Report specifically requested that the report include:

1. A detailed analysis of UAP data and intelligence reporting collected or held by the Office of Naval Intelligence, including data and intelligence reporting held by the UAPTF;
2. A detailed analysis of unidentified phenomena data collected by:
    a. Geospatial Intelligence;
    b. Signals Intelligence;
    c. Human Intelligence; and
    d. Measurement and Signatures Intelligence
3. A detailed analysis of data of the Federal Bureau of Investigation, which was derived from investigations of intrusions of UAP data over restricted U.S. airspace;
4. A detailed description of an interagency process for ensuring timely data collection and centralized analysis of all UAP reporting for the Federal Government, regardless of which service or agency acquired the information;
5. Identification of an official accountable for the process described in paragraph 4;
6. Identification of potential aerospace or other threats posed by the UAP to national security, and an assessment of whether this UAP activity may be attributed to one or more foreign adversaries;
7. Identification of any incidents or patterns that indicate a potential adversary, have achieved breakthrough aerospace capabilities that could put U.S. strategic or conventional forces at risk; and
8. Recommendations regarding increased collection of data, enhanced research and development, additional funding, and other resources.

UAP and other unidentified phenomena reported near Canadian nuclear facilities

Each year, UAPMB documents an average of 1000 reports of unidentified objects in Canadian skies. Many witnesses are professional observers such as pilots and military personnel. The reports are distributed across Canada, with concentrations near populated areas. Some reports originate from witnesses near nuclear facilities. These are just a few examples:

May 24, 2021 9:34 pm
Pickering, ON

"Over Pickering Nuclear Plant, 4 to 5 orange lights, very slow moving, one at a time came from the water/behind nuke plant, They would get to a certain point in the sky and then vanish and then another one would come from behind the other lights like they were trading places and a couple of times the lights would just vanish and there was two that stayed for quite a while at the beginning and then there was like a lineup of four of them to a certain place in the sky and then they vanished, they looked to be may be something smaller in a dime when we were looking at at them in the sky. Multiple witnesses from people on our balconies watching the fireworks. It was almost as if they position themselves over where the fireworks to watch them."
Night Time Podcast

March 1, 2021 11:35 pm
Port Elgin, ON, near Bruce Power Facility

"My friend and I went to get coffee and returned to our motel when a man knocked on my window and said "You gotta see this, there are UFOs in the the sky." My friend said "I believe him, let's go see." We walked to the back of the motel and looked at the sky. We saw at least 15 lights in a linear formation travelling North and then they disappeared. The man said the lights appeared just before 10 the first time where he counted about 18 lights. About an hour and a half later the lights appeared again when we were present. The man said there must of been about 50 lights but he lost count because they were going by so fast."
NUFORC

March 28, 2020 11:45 pm
Saint John, NB, near Lepreau Power Facility

“Wife and I were having a bonfire in the backyard, first one of the year, she witnessed the whole thing too. We were facing S SW and I noticed a strange light blazing across the sky. No clouds, visibility was flawless. It looked like it was slightly smaller than Venus. It resembled a star but it seemed closer than the stars and just not as bright but still very clearly luminescent. I point it out to my wife that I thought it was a UFO and she said she'd never seen anything like it before. Shooting stars are visible for a few seconds then they burn out. Satellites move much slower and seem much closer than the stars, and they aren't as bright. I pulled out my phone to see which direction it was going, and it was headed true North. We watched as it headed behind the trees out of view. Here's the even stranger part. By this time I'm looking for more as I always do when I spot something, I'm very avid on keeping track of the stars every night. Not ten minutes go by, i see the exact same enigma traveling only this time it's literally heading back on the same path it came!”
UAPMB

September 14, 2019 3:41 pm
Kitchener-Waterloo, ON

The pilot of a Waterloo-Wellington Flying Club Cessna 152 (C-FGJK) on a flight from Kitchener/Waterloo, ON (CYKF) to Goderich, ON (CYGD) reported seeing an unknown object at 3000 feet, 3 miles west of CYKF airport. [NB: Goderich is near Bruce Power Facility]
Transport Canada CADORS Incident Report 2019O2708

August 1, 2017 11:45PM
Port Elgin, ON

“I was on vacation at my cottage on the shore of Lake Huron just south of Port Elgin, Ontario. The sky viewing is often very good there, and a favorite past time for me is to watch the sky for Iridium satellites or the ISS using an app called ISS Detector. The sky was quite clear overhead, though there was some high thin cloud to the north. I had just observed several satellites, as well as the ISS, which was still in view when the unknown object appeared. The Moon was also up and about half full in the southern sky. The ISS was not particularly bright that night, so I was just about to go inside when my peripheral vision caught something moving. It came from the south and moved almost directly overhead. It had a bluish white halo around a bright centre. The trailing edge of it seemed brighter, so when I looked directly at it, it had a bit of a horseshoe look to it. But when I looked slightly away from it, I could tell the halo seemed to surround the inner light. At this point I was very excited, and wished someone was viewing it with me, as I knew this was unlike anything I'd seen before. I tried taking some pictures since I had my phone with me running the ISS detector app, but not much showed up. I watched it proceed northward, and the inner light varied in intensity. I thought at first it might be splitting up but it seemed to stay as a single light with the fuzzy halo. Eventually the light was obscured by high cloud to the north, but the glow produced in the cloud was bright enough to light an area as large as a full moon, (though not as bright of course). The glow lasted perhaps a full minute.”
MUFON

January 24, 2011 11:45 pm

Saint John, MB, near Lepreau Power Facility
The Saint John Flight Service Station (FSS) received a call from an individual stating that they observed a single object in the sky that was like a massive star. It was flashing many different colors and did not move.
Transport Canada CADORS Incident Report 2011A0065