shall include at least one electronic method and one physical mail-

ing method to provide such information.

(b) AIRBORNE HAZARDS AND OPEN BURN PIT REGISTRY DE-FINED.—In this section, the term "Airborne Hazards and Open Burn Pit Registry" means the registry established by the Secretary of Veterans Affairs under section 201 of the Dignified Burial and Other Veterans' Benefits Improvement Act of 2012 (Public Law 112–260; 38 U.S.C. 527 note).

## SEC. 1051. NATIONAL SECURITY COMMISSION ON ARTIFICIAL INTEL-LIGENCE.

(a) Establishment.—

(1) In General.—There is established in the executive branch an independent Commission to review advances in artificial intelligence, related machine learning developments, and associated technologies.

(2) Treatment.—The Commission shall be considered an independent establishment of the Federal Government as defined by section 104 of title 5, United States Code, and a tem-

porary organization under section 3161 of such title.

(3) Designation.—The Commission established under paragraph (1) shall be known as the "National Security Commission on Artificial Intelligence".

(4) MEMBERSHIP.

(A) Composition.—The Commission shall be composed of 15 members appointed as follows:

(i) The Secretary of Defense shall appoint 2 mem-

bers.

- (ii) The Secretary of Commerce shall appoint 1 member.
- (iii) The Chairman of the Committee on Commerce, Science, and Transportation of the Senate shall appoint 1 member.

(iv) The Ranking Member of the Committee on Commerce, Science, and Transportation of the Senate

shall appoint 1 member.

(v) The Chairman of the Committee on Energy and Commerce of the House of Representatives shall appoint 1 member.

(vi) The Ranking Member of the Committee on Energy and Commerce of the House of Representatives

shall appoint 1 member.

(vii) The Chairman of the Committee on Armed Services of the Senate shall appoint 1 member.

(viii) The Ranking Member of the Committee on Armed Services of the Senate shall appoint 1 member.

- (ix) The Chairman of the Committee on Armed Services of the House of Representatives shall appoint 1 member.
- (x) The Ranking Member of the Committee on Armed Services of the House of Representatives shall appoint 1 member.

(xi) The Chairman of the Select Committee on In-

telligence of the Senate shall appoint 1 member.

(xii) The Vice Chairman of the Select Committee on Intelligence of the Senate shall appoint 1 member. (xiii) The Chairman of the Permanent Select Committee on Intelligence of the House of Representatives shall appoint 1 member.

(xiv) The Ranking Member of the Permanent Select Committee Intelligence of the House of Representatives

shall appoint 1 member.

(B) Deadline for appointment.—Members shall be appointed to the Commission under paragraph (1) not later than 90 days after the Commission establishment date.

(C) EFFECT OF LACK OF APPOINTMENT BY APPOINTMENT DATE.—If one or more appointments under paragraph (1) is not made by the appointment date specified in paragraph (2), the authority to make such appointment or appointments shall expire, and the number of members of the Commission shall be reduced by the number equal to the number of appointments so not made.

(5) Chair and vice chair.—The Commission shall elect a

Chair and Vice Chair from among its members.

(6) Terms.—Members shall be appointed for the life of the Commission. A vacancy in the Commission shall not affect its powers, and shall be filled in the same manner as the original appointment was made.

(7) STATUS AS FEDERAL EMPLOYEES.—Notwithstanding the requirements of section 2105 of title 5, United States Code, including the required supervision under subsection (a)(3) of such section, the members of the Commission shall be deemed to be Federal employees.

(b) DUTIES.—

(1) In General.—The Commission shall carry out the review described in paragraph (2). In carrying out such review, the Commission shall consider the methods and means necessary to advance the development of artificial intelligence, machine learning, and associated technologies by the United States to comprehensively address the national security and defense needs of the United States.

(2) Scope of the review.—In conducting the review para-

graph (1), the Commission shall consider the following:

(A) The competitiveness of the United States in artificial intelligence, machine learning, and other associated technologies, including matters related to national security, defense, public-private partnerships, and investments.

(B) Means and methods for the United States to maintain a technological advantage in artificial intelligence, machine learning, and other associated technologies related

to national security and defense.

(C) Developments and trends in international cooperation and competitiveness, including foreign investments in artificial intelligence, related machine learning, and computer science fields that are materially related to national security and defense.

(D) Means by which to foster greater emphasis and investments in basic and advanced research to stimulate private, public, academic and combined initiatives in artificial intelligence, machine learning, and other associated tech-

nologies, to the extent that such efforts have application

materially related to national security and defense.

(E) Workforce and education incentives to att

(E) Workforce and education incentives to attract and recruit leading talent in artificial intelligence and machine learning disciplines, including science, technology, engineering, and math programs.

(F) Risks associated with United States and foreign country advances in military employment of artificial intelligence and machine learning, including international law

of armed conflict, international humanitarian law, and escalation dynamics.

(G) Associated ethical considerations related to artificial intelligence and machine learning as it will be used for future applications related to national security and defense.

(H) Means to establish data standards, and incentivize the sharing of open training data within related national

security and defense data-driven industries.

(I) Consideration of the evolution of artificial intelligence and appropriate mechanism for managing such technology related to national security and defense.

(J) Any other matters the Commission deems relevant

to the common defense of the Nation.

(c) Reports.—

(1) INITIAL REPORT.—Not later than 180 days after the date of the enactment of this Act, the Commission shall submit to the President and Congress an initial report on the findings of the Commission and such recommendations that the Commission may have for action by the executive branch and Congress related to artificial intelligence, machine learning, and associated technologies, including recommendations to more effectively organize the Federal Government.

(2) Annual comprehensive reports.—Not later than one year after the date of this enactment of this Act, and every year thereafter annually, until the date specified in subsection (e), the Commission shall submit a comprehensive report on the re-

view required under subsection (b).

(3) FORM OF REPORTS.—Reports submitted under this subsection shall be made publically available, but may include a

classified annex.

(d) FUNDING.—Of the amounts authorized to be appropriated by this Act for fiscal year 2019 for the Department of Defense, not more than \$10,000,000 shall be made available to the Commission to carry out its duties under this subtitle. Funds made available to the Commission under the preceding sentence shall remain available until expended.

(e) Termination.—The Commission shall terminate on October

1, 2020.

(f) DEFINITION OF ARTIFICIAL INTELLIGENCE.—In this section, the term "artificial intelligence" includes each of the following:

(1) Any artificial system that performs tasks under varying and unpredictable circumstances without significant human oversight, or that can learn from experience and improve performance when exposed to data sets.

(2) An artificial system developed in computer software, physical hardware, or other context that solves tasks requiring

human-like perception, cognition, planning, learning, communication, or physical action.

(3) An artificial system designed to think or act like a human, including cognitive architectures and neural networks.

(4) A set of techniques, including machine learning that is

designed to approximate a cognitive task.

(5) An artificial system designed to act rationally, including an intelligent software agent or embodied robot that achieves goals using perception, planning, reasoning, learning, communicating, decision-making, and acting.

## SEC. 1052. AUTHORITY TO TRANSFER FUNDS FOR BIEN HOA DIOXIN CLEANUP.

(a) Transfer Authority.—Notwithstanding section 2215 of title 10, United States Code, the Secretary of Defense may transfer to the Secretary of State, for use by the United States Agency for International Development, amounts to be used for the Bien Hoa dioxin cleanup in Vietnam.

(b) LIMITATION ON AMOUNTS.—Not more than \$15,000,000 may be transferred in fiscal year 2019 under the authority in subsection (a).

(c) SOURCE OF FUNDS.—The Secretary of Defense may transfer funds appropriated to the Department of Defense for "Operation and Maintenance, Defense-wide" under the authority in subsection (a).

(d) ADDITIONAL TRANSFER AUTHORITY.—The transfer authority provided under subsection (a) is in addition to any other transfer authority available to the Department of Defense.

## SEC. 1053. GUIDANCE ON THE ELECTRONIC WARFARE MISSION AREA AND JOINT ELECTROMAGNETIC SPECTRUM OPERATIONS.

(a) Processes and Procedures for Integration.—The Secretary of Defense shall—

(1) establish processes and procedures to develop, integrate, and enhance the electronic warfare mission area and the conduct of joint electromagnetic spectrum operations in all do-

mains across the Department of Defense; and

(2) ensure that such processes and procedures provide for integrated defense-wide strategy, planning, and budgeting with respect to the conduct of such operations by the Department, including activities conducted to counter and deter such operations by malign actors.

(b) Designated Senior Official.—

(1) In General.—The Secretary shall designate a senior official of the Department of Defense (hereinafter referred to as the "designated senior official"), who shall implement and oversee the processes and procedures established under subsection (a). The designated senior official shall be designated by the Secretary from among individuals serving in the Department as civilian employees or members of the Armed Forces who are, equivalent in grade or rank, at or below the level of Under Secretary of Defense. The designated senior official shall oversee the cross-functional team established pursuant to subsection (c) and serve as an ex-officio member of the Electronic Warfare Executive Committee established in March 2015.

(2) RESPONSIBILITIES.—The designated senior official shall have, with respect to the implementation and oversight of the