## [DISCUSSION DRAFT]

**H.R**.

118th CONGRESS 1st Session

To provide for Department of Energy and National Aeronautics and Space Administration research and development coordination, and for other purposes.

## IN THE HOUSE OF REPRESENTATIVES

M\_\_\_\_ introduced the following bill; which was referred to the Committee on

## A BILL

- To provide for Department of Energy and National Aeronautics and Space Administration research and development coordination, and for other purposes.
  - 1 Be it enacted by the Senate and House of Representa-
  - 2 tives of the United States of America in Congress assembled,

## **3** SECTION 1. SHORT TITLE.

4 This Act may be cited as the "[To Be Supplied]5 Act".

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1SEC. 2. DEPARTMENT OF ENERGY AND NATIONAL AERO-2NAUTICS AND SPACE ADMINISTRATION RE-3SEARCH AND DEVELOPMENT COORDINA-4TION.

5 (a) IN GENERAL.—The Secretary of Energy (in this section referred to as the "Secretary") and the Adminis-6 7 trator of the National Aeronautics and Space Administration (in this section referred to as the "Administrator") 8 9 shall carry out cross-cutting and collaborative research 10 and development activities focused on the joint advance-11 ment of Department of Energy and National Aeronautics and Space Administration mission requirements and prior-12 ities. 13

14 (b) MEMORANDUM OF UNDERSTANDING.—The Secretary and the Administrator shall coordinate the activi-15 16 ties under subsection (a) through the establishment of a memorandum of understanding, or other appropriate 17 interagency agreement. Such memorandum or agreement, 18 19 as the case may be, shall require the use of a competitive, 20 merit-reviewed process, which considers applications from 21 Federal agencies, National Laboratories, institutions of 22 higher education, non-profit institutions, and other appro-23 priate entities.

(c) COORDINATION.—In carrying out the activities
under subsection (a), the Secretary and the Administrator
may—

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3 1 (1) conduct collaborative research in a variety 2 of focus areas, such as-3 (A) propulsion systems and components, 4 including nuclear thermal and nuclear electric, 5 for the Moon and Mars, including radioisotope 6 power systems, thermoelectric generators, ad-7 vanced nuclear fuels, and heater units: 8  $(\mathbf{B})$ modeling and simulation, machine 9 learning, data assimilation, large scale data 10 analytics, and predictive analysis in order to op-11 timize algorithms for mission-related purposes; 12 (C) fundamental high energy physics, in-13 cluding regarding dark energy and dark matter, 14 in collaboration with the program authorized

under section 305 of the Department of Energy Research and Innovation Act (42 U.S.C. 18643);

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(D) fundamental earth and environmental
sciences, including in collaboration with the program authorized under section 306 of the Department of Energy Research and Innovation
Act (42 U.S.C. 18644);

(E) radiation health effects, including in
collaboration with the program authorized
under section 306 of the Department of Energy

1	Research and Innovation Act (42 U.S.C.
2	18644);
3	(F) quantum information sciences, includ-
4	ing quantum computing and quantum network
5	infrastructure, including in collaboration with
6	the programs authorized under sections 403
7	and 404 of the National Quantum Initiative Act
8	(15 U.S.C. 8853 and 8854);
9	(G) nanotechnology;
10	(H) scientific observations of the early uni-
11	verse from the Moon;
12	(I) planetary defense from potentially haz-
13	ardous asteroids and near-Earth objects;
14	(J) sensor and satellite development;
15	(K) space situational awareness; and
16	(L) fundamental heliophysics;
17	(2) develop methods to accommodate large vol-
18	untary data sets on space and aeronautical informa-
19	tion on high-performance computing systems with
20	variable quality and scale;
21	(3) promote collaboration, open community-
22	based development, and data and information shar-
23	ing between Federal agencies, National Labora-
24	tories, institutions of higher education, nonprofit in-
25	stitutions, and other appropriate entities by pro-

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viding the necessary access and secure data and in formation transfer capabilities; and

3 (4) support research infrastructure as the Sec4 retary and Administrator determine necessary.

5 (d) AGREEMENTS.—In carrying out the activities
6 under subsection (a), the Secretary and the Administrator
7 are authorized to—

8 (1) carry out reimbursable agreements between 9 the Department of Energy, the National Aeronautics 10 and Space Administration, and other entities in 11 order to maximize the effectiveness of research and 12 development; and

13 (2) collaborate with other Federal agencies as14 appropriate.

(e) REPORT.—Not later than two years after the date
of the enactment of this section, the Secretary and the
Administrator shall submit to the Committee on Science,
Space, and Technology of the House of Representatives
and the Committee on Energy and Natural Resources and
the Committee on Commerce, Science, and Transportation
of the Senate, a report detailing the following:

(1) Interagency coordination between each Federal agency involved in the research and development
activities carried out under this section.

1 (2) Potential opportunities to expand the tech-2 nical capabilities of the Department of Energy and 3 the National Aeronautics and Space Administration. 4 (3) Collaborative research achievements. 5 (4) Areas of future mutually beneficial suc-6 cesses. 7 (5) Continuation of coordination activities between the Department of Energy and the National 8 9 Aeronautics and Space Administration. (f) RESEARCH SECURITY.—The activities authorized 10 11 under this section shall be applied in a manner consistent 12 with subtitle D of title VI of the Research and Development, Competition, and Innovation Act (enacted as divi-13 sion B of the CHIPS Act of 2022 (Public Law 117–167; 14 15 42 U.S.C. 19231 et seq.)).