

119TH CONGRESS
1ST SESSION

H. R. 477

To advance scientific research and technology development of hypersonic vehicles, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JANUARY 16, 2025

Mr. FONG (for himself and Mr. MULLIN) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

A BILL

To advance scientific research and technology development of hypersonic vehicles, 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 “Making Advancements
5 in Commercial Hypersonics Act” or the “MACH Act”.

6 **SEC. 2. MAKING ADVANCEMENTS IN COMMERCIAL**
7 **HYPERSONICS PROGRAM.**

8 (a) IN GENERAL.—In conducting hypersonics re-
9 search pursuant to section 40112(d) of title 51, United
10 States Code, the Administrator of the National Aero-

1 nautics and Space Administration (in this section referred
2 to as the “Administrator”) may establish the Making Ad-
3 vancements in Commercial Hypersonics Program (in this
4 section referred to as the “Program”) to facilitate oppor-
5 tunities for testing of high-speed aircraft and other tech-
6 nologies that advance scientific research and technology
7 development related to hypersonic aircraft.

8 (b) LIMITATION.—The Program may not fund the
9 development of technologies that are supported by the
10 testing described in subsection (a).

11 (c) STRATEGIC PLAN.—Not later than 60 days after
12 the date of the enactment of this Act, the Administrator,
13 acting through the Aeronautics Research Mission Direc-
14 torate, shall develop a strategic plan for activities under
15 subsection (a) that aligns with the hypersonic research
16 roadmap required under section 603 of the National Aero-
17 nautics and Space Administration Transition Authoriza-
18 tion Act of 2017 (Public Law 115–10; 51 U.S.C. 20302
19 note).

20 (d) COORDINATION, CONSULTATION, AND COLLABO-
21 RATION.—

22 (1) COORDINATION.—The Administrator shall
23 ensure coordination between the Aeronautics Re-
24 search Mission Directorate and other Mission Direc-

1 torates, as appropriate, to identify technologies eligi-
2 ble for testing opportunities under the Program.

3 (2) CONSULTATION; COLLABORATION.—The
4 Administrator shall consult and seek to collaborate,
5 as appropriate, with the Secretary of Defense and
6 the Administrator of the Federal Aviation Adminis-
7 tration on activities related to the Program, includ-
8 ing development, testing, and evaluation of high-
9 speed aircraft and related technologies.

10 (e) REPORT.—The Administrator shall submit to the
11 Committee on Science, Space, and Technology and the
12 Committee on Armed Services of the House of Represent-
13 atives and the Committee on Commerce, Science, and
14 Transportation and the Committee on Armed Services of
15 the Senate—

16 (1) not later than 90 days after the date of the
17 enactment of this Act, a report that—

18 (A) describes activities of the Program;

19 and

20 (B) includes the strategic plan required
21 under subsection (c); and

22 (2) not later than one year after the date of the
23 enactment of this Act and annually thereafter, a re-
24 port describing progress in carrying out the Pro-
25 gram, including regarding the number and type of

1 testing opportunities carried out in the previous fis-
2 cal year and planned for the upcoming fiscal year.

3 (f) RESEARCH SECURITY.—Nothing in this section
4 authorizes the Administrator to develop, implement, or
5 execute an agreement related to technologies under this
6 section with any entity of concern, a foreign business enti-
7 ty, or a foreign country of concern.

8 (g) DEFINITIONS.—In this section—

9 (1) ENTITY OF CONCERN.—The term “entity of
10 concern” has the meaning given such term in section
11 10114 of the Research and Development, Competi-
12 tion, and Innovation Act (Public Law 117–167; 42
13 U.S.C. 18912).

14 (2) FOREIGN BUSINESS ENTITY.—The term
15 “foreign business entity” means an entity that is
16 majority-owned or majority-controlled (as such term
17 is defined in section 800.208 of title 31, Code of
18 Federal Regulations, or a successor regulation), or
19 minority owned greater than 25 percent by—

20 (A) any governmental organization of a
21 foreign country of concern; or

22 (B) any other entity that is—

23 (i) known to be owned or controlled
24 by any governmental organization of a for-
25 eign country of concern; or

1 (ii) organized under, or otherwise sub-
2 ject to, the laws of a foreign country of
3 concern.

4 (3) FOREIGN COUNTRY OF CONCERN.—The
5 term “foreign country of concern” has the meaning
6 given such term in section 9901 of title XCIX of di-
7 vision H of the William M. (Mac) Thornberry Na-
8 tional Defense Authorization Act for Fiscal Year
9 2021 (15 U.S.C. 4651).

10 (4) HIGH-SPEED AIRCRAFT.—The term “high-
11 speed aircraft” has the meaning given such term in
12 section 1009 of the Federal Aviation Reauthoriza-
13 tion Act of 2024 (Public Law 118–63; 49 U.S.C.
14 44701 note).

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