

116TH CONGRESS
1ST SESSION

H. R. 5450

To amend title 51, United States Code, to require a National Aeronautics and Space Administration initiative on reduction of greenhouse gas emissions and noise emissions from aircraft, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

DECEMBER 17, 2019

Mr. BEYER (for himself, Mr. TONKO, Ms. BONAMICI, Ms. NORTON, Mr. ROUDA, Mr. KHANNA, Mr. THOMPSON of Mississippi, Mr. HUFFMAN, Ms. ESHOO, Mr. QUIGLEY, Mr. NEGUSE, Mr. GRIJALVA, Mr. LOWENTHAL, Mr. SHERMAN, Mr. SUOZZI, Ms. SCHAKOWSKY, and Mr. BLUMENAUER) introduced the following bill; which was referred to the Committee on Science, Space, and Technology

A BILL

To amend title 51, United States Code, to require a National Aeronautics and Space Administration initiative on reduction of greenhouse gas emissions and noise emissions from aircraft, 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 “Cleaner, Quieter Air-
5 planes Act”.

1 **SEC. 2. FINDINGS.**

2 Congress makes the following findings:

3 (1) Air travel currently contributes approxi-
4 mately 3 percent to global carbon emissions, but
5 emissions from this sector are expected to triple by
6 2050.

7 (2) A healthy, thriving aviation sector contrib-
8 utes to the quality of life and economic well-being of
9 the United States. In 2014, the Federal Aviation
10 Administration found that civil aviation accounted
11 for 5.1 percent of the United States gross domestic
12 product, generated \$1.6 trillion, and supported
13 10,600,000 jobs.

14 (3) Existing aircraft technologies contribute to
15 noise pollution that has adverse impacts on the qual-
16 ity of life in affected communities. As air traffic vol-
17 umes increase and the adoption of performance-
18 based navigation technology proceeds, the problem of
19 noise pollution is becoming more severe in some
20 areas.

21 (4) The United States has adopted a goal of
22 carbon-neutral growth in aviation from 2020.

23 (5) Research on technologies to lessen the envi-
24 ronmental and noise impacts of aviation is ongoing,
25 but should accelerate, and should include work on
26 the further maturation and integration of multiple

1 enabling technologies on production aircraft, includ-
2 ing novel integrated systems at the aircraft level.

3 **SEC. 3. NATIONAL AERONAUTICS AND SPACE ADMINISTRA-**
4 **TION INITIATIVE ON REDUCTION OF GREEN-**
5 **HOUSE GAS EMISSIONS AND NOISE EMIS-**
6 **SIONS FROM AIRCRAFT.**

7 (a) INITIATIVE REQUIRED.—Section 40112 of title
8 51, United States Code, is amended—

9 (1) by redesignating subsections (b) through (e)
10 as subsections (c) through (f), respectively; and

11 (2) by inserting after subsection (a) the fol-
12 lowing new subsection (b):

13 “(b) TECHNOLOGIES FOR GREENHOUSE GAS EMIS-
14 SIONS AND NOISE EMISSIONS REDUCTION.—

15 “(1) INITIATIVE REQUIRED.—The Adminis-
16 trator shall establish an initiative to build upon and
17 accelerate previous or ongoing work to develop and
18 demonstrate new technologies, including systems ar-
19 chitecture, components, or integration of systems
20 and airframe structures, in aircraft concepts that
21 are capable of reducing both greenhouse gas emis-
22 sions and noise emissions from aircraft by at least
23 50 percent compared to the highest-performing air-
24 craft technologies in service as of December 31,
25 2019, with the goal of deploying new technologies

1 developed pursuant to the initiative on regional
2 transport aircraft intended to enter into service by
3 2030 and on single-aisle aircraft designed to accom-
4 modate more than 125 passengers intended to enter
5 into service by 2040.

6 “(2) APPROACH.—In carrying out the initiative,
7 the Administrator shall do the following:

8 “(A) Continue and expand work of the Ad-
9 ministration on research, development, and
10 demonstration of aircraft concepts described in
11 paragraph (1), and the integration of related
12 advanced technologies and concepts, with the
13 goal of carrying out test flights by 2025.

14 “(B) To the extent practicable, work with
15 multiple partner organizations, including cur-
16 rent commercial production aircraft providers
17 and small businesses and new entrants, on re-
18 search and development activities related to
19 both regional transport aircraft and aircraft de-
20 signed to accommodate more than 125 pas-
21 sengers in order to achieve an industry-wide
22 shift towards aircraft concepts for the reduction
23 of greenhouse gas emissions and noise emis-
24 sions.

1 “(C) Provide guidance to the Federal Avia-
2 tion Administration (FAA) on technologies de-
3 veloped and tested pursuant to the initiative in
4 order to assist the work of the Federal Aviation
5 Administration to identify new requirements for
6 policy, infrastructure, and administrative capac-
7 ity necessary to enable the safe deployment of
8 such technologies on transport category air-
9 craft.”.

10 (b) REPORTS.—Not later than 180 days after the
11 date of the enactment of this Act and annually thereafter,
12 the Administrator of the National Aeronautics and Space
13 Administration shall submit to Congress a report on the
14 progress of the work under the initiative required by sub-
15 section (b) of section 40112 of title 51, United States
16 Code (as amended by subsection (a) of this section), in-
17 cluding a description of any perceived obstacles to achiev-
18 ing the goal of a 50-percent reduction in both greenhouse
19 gas emissions and noise emissions from aircraft as con-
20 templated for the initiative.

21 (c) AUTHORIZATION OF APPROPRIATIONS.—There is
22 authorized to be appropriated for the National Aero-
23 nautics and Space Administration for the initiative re-
24 quired by subsection (b) of section 40112 of title 51,
25 United States Code (as so amended), amounts as follows:

- 1 (1) For fiscal year 2021, \$125,000,000.
- 2 (2) For fiscal year 2022, \$225,000,000.
- 3 (3) For each of fiscal years 2023 and 2024,
- 4 \$275,000,000.
- 5 (4) For fiscal year 2025, \$225,000,000.
- 6 (5) For fiscal year 2026, \$75,000,000.

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