

Warnock 3 (as modified)

R. C. W. E

AMENDMENT NO. \_\_\_\_\_ Calendar No. \_\_\_\_\_

Purpose: To require the Secretary of Transportation, the Administrator of the FAA, and the Secretary of Energy to exercise leadership in the creation of Federal and international policies relating to the safe and efficient use of hydrogen to encourage the use of hydrogen in the aviation sector.

**IN THE SENATE OF THE UNITED STATES—118th Cong., 1st Sess.**

**S. 1939**

To amend title 49, United States Code, to authorize appropriations for the Federal Aviation Administration for fiscal years 2024 through 2028, and for other purposes.

Referred to the Committee on \_\_\_\_\_ and ordered to be printed

Ordered to lie on the table and to be printed

AMENDMENT intended to be proposed by Mr. WARNOCK

Viz:

1 At the appropriate place, insert the following:

2 **SEC. \_\_\_\_ . HYDROGEN AVIATION STRATEGY.**

3 (a) FAA AND DEPARTMENT OF ENERGY LEADER-  
4 SHIP ON USING HYDROGEN TO PROPEL COMMERCIAL  
5 AIRCRAFT.—

6 (1) IN GENERAL.—The Secretary, acting  
7 through the Administrator and jointly with the Sec-  
8 retary of Energy, shall exercise leadership in the cre-  
9 ation of Federal and international policies, and shall

1       conduct research relating to the safe and efficient  
2       use and sourcing of hydrogen to propel commercial  
3       aircraft.

4               (2) EXERCISE OF LEADERSHIP.—In carrying  
5       out paragraph (1), the Secretary, the Administrator,  
6       and the Secretary of Energy shall—

7               (A) establish positions and goals for the  
8       use of hydrogen to propel commercial aircraft;

9               (B) through grant, contract, or interagency  
10       agreements, study the contribution the use of  
11       hydrogen would have on propelling commercial  
12       aircraft, including hydrogen as an input for  
13       conventional jet fuel, hydrogen fuel cells as a  
14       source of electric propulsion, sustainable avia-  
15       tion fuel, and power to liquids or synthetic fuel,  
16       and research ways of accelerating introduction  
17       of hydrogen-propelled aircraft;

18              (C) review grant eligibility requirements,  
19       loans, loan guarantees, and other policies and  
20       requirements of the FAA and the Department  
21       of Energy to identify ways to increase the safe  
22       and efficient use of hydrogen to propel commer-  
23       cial aircraft;

24              (D) consider the needs of the aerospace in-  
25       dustry, aviation suppliers, hydrogen producers,

1 airlines, airport sponsors, fixed base operators,  
2 and other stakeholders when creating policies  
3 that enable the safe use of hydrogen to propel  
4 commercial aircraft;

5 (E) coordinate with the National Aero-  
6 nautics and Space Administration, and obtain  
7 input from the aerospace industry, aviation sup-  
8 pliers, hydrogen producers, airlines, airport  
9 sponsors, fixed base operators, and other stake-  
10 holders regarding—

11 (i) the safe and efficient use of hydro-  
12 gen to propel commercial aircraft within  
13 United States airspace, including—

14 (I) updating or modifying exist-  
15 ing policies on such use;

16 (II) assessing barriers to, and  
17 benefits of, the introduction of air-  
18 craft propelled by hydrogen;

19 (III) the operational differences  
20 between aircraft propelled by hydro-  
21 gen and aircraft propelled with other  
22 types of fuels; and

23 (IV) public, economic, and noise  
24 benefits of the operation of commer-  
25 cial aircraft propelled by hydrogen

1 and associated aerospace industry ac-  
2 tivity; and

3 (ii) other issues identified by the Sec-  
4 retary, the Administrator, the Secretary of  
5 Energy, or the advisory committee estab-  
6 lished under subparagraph (F) that must  
7 be addressed to enable the safe and effi-  
8 cient use of hydrogen to propel commercial  
9 aircraft; and

10 (F) establish an advisory committee com-  
11 posed of representatives of the National Aero-  
12 nautics and Space Administration, the aero-  
13 space industry, aviation suppliers, hydrogen  
14 producers, airlines, airport sponsors, fixed base  
15 operators, and other stakeholders to advise the  
16 Secretary, the Administrator, and the Secretary  
17 of Energy on the activities carried out under  
18 this subsection and subsection (b).

19 (3) INTERNATIONAL LEADERSHIP.—The Sec-  
20 retary, the Administrator, and the Secretary of En-  
21 ergy, in the appropriate international forums, shall  
22 take actions that—

23 (A) demonstrate global leadership in car-  
24 rying out the activities required by paragraphs  
25 (1) and (2);

1 (B) address the needs of the aerospace in-  
2 dustry, aviation suppliers, hydrogen producers,  
3 airlines, airport sponsors, fixed base operators,  
4 and other stakeholders identified under para-  
5 graph (2);

6 (C) address the needs of fuel cell manufac-  
7 turers; and

8 (D) advance the United States' competi-  
9 tiveness in hydrogen-propelled aircraft.

10 (4) REPORT TO CONGRESS.—Not later than 3  
11 years after the date of enactment of this section, the  
12 Secretary, acting primarily through the Adminis-  
13 trator, and jointly with the Secretary of Energy,  
14 shall submit to the appropriate committees of Con-  
15 gress a report detailing—

16 (A) the Secretary's, Administrator's, and  
17 Secretary of Energy's actions to exercise leader-  
18 ship in the creation of Federal and inter-  
19 national policies, and of research conducted, re-  
20 lating to the safe and efficient use of hydrogen  
21 to propel commercial aircraft;

22 (B) planned, proposed, and anticipated ac-  
23 tions to update or modify existing policies re-  
24 lated to the use of hydrogen to propel commer-  
25 cial aircraft, including those identified as a re-

1           sult of consultation with, and feedback from,  
2           the aerospace industry, aviation suppliers, hy-  
3           drogen producers, airlines, airport sponsors,  
4           fixed base operators, and other stakeholders  
5           identified under paragraph (2); and

6                   (C) a timeline for any actions pursuant to  
7           subparagraphs (A) and (B) to be taken to up-  
8           date or modify existing policies related to the  
9           safe and efficient use of hydrogen to propel  
10          commercial aircraft.

11          (b) FAA LEADERSHIP ON THE CERTIFICATION OF  
12          HYDROGEN-PROPELLED COMMERCIAL AIRCRAFT.—

13                   (1) IN GENERAL.—The Administrator shall ex-  
14          ercise leadership in the creation of Federal regula-  
15          tions, standards, and guidance relating to the safe  
16          and efficient certification of hydrogen-propelled com-  
17          mercial aircraft.

18                   (2) EXERCISE OF LEADERSHIP.—In carrying  
19          out paragraph (1), the Administrator shall—

20                           (A) establish a viable path for the certifi-  
21          cation of hydrogen-propelled aircraft that con-  
22          siders existing frameworks; modifying an exist-  
23          ing framework; or developing a new framework  
24          as appropriate;

1 (B) review certification regulations, guid-  
2 ance, and other requirements of the FAA to  
3 identify ways to safely and efficiently certify hy-  
4 drogen-propelled commercial aircraft;

5 (C) consider the needs of the aerospace in-  
6 dustry, aviation suppliers, hydrogen producers,  
7 airlines, airport sponsors, fixed base operators,  
8 and other stakeholders when creating regula-  
9 tions and standards that enable the safe certifi-  
10 cation and deployment of hydrogen-propelled  
11 commercial aircraft in the national airspace sys-  
12 tem;

13 (D) obtain the input of the aerospace in-  
14 dustry, aviation suppliers, hydrogen producers,  
15 airlines, airport sponsors, fixed base operators,  
16 and other stakeholders regarding—

17 (i) the appropriate regulatory frame-  
18 work and timeline for permitting the safe  
19 and efficient deployment and operation of  
20 hydrogen-propelled aircraft in the United  
21 States, including updating or modifying ex-  
22 isting regulations;

23 (ii) how to accelerate the resolution of  
24 issues related to data and standards devel-  
25 opment and related regulations necessary

1 to facilitate the safe and efficient certifi-  
2 cation of hydrogen-propelled commercial  
3 aircraft; and

4 (iii) other issues identified by the Ad-  
5 ministrator or the advisory committee es-  
6 tablished under subsection (a)(2)(F) that  
7 must be addressed to enable the safe and  
8 efficient deployment and operation of hy-  
9 drogen-propelled commercial aircraft.