

118TH CONGRESS  
1ST SESSION

**S.** \_\_\_\_\_

To provide for the safe and timely integration of advanced aviation technologies into the national airspace system by the Federal Aviation Administration and for other purposes.

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IN THE SENATE OF THE UNITED STATES

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Mrs. FISCHER (for herself and Ms. DUCKWORTH) introduced the following bill; which was read twice and referred to the Committee on

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**A BILL**

To provide for the safe and timely integration of advanced aviation technologies into the national airspace system by the Federal Aviation Administration 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 “Advanced Aviation In-  
5 tegration Act”.

6 **SEC. 2. ADVANCED AVIATION LEADERSHIP.**

7 (a) ESTABLISHMENT.—Not later than 90 days after  
8 the date of enactment of this Act, the Secretary shall des-

1 designate the Deputy Administrator of the Federal Aviation  
2 Administration as the executive responsible for leadership,  
3 coordination, and integration of advanced aviation in the  
4 national airspace system.

5 (b) RESPONSIBILITIES.—The responsibilities of the  
6 Deputy Administrator (including any designee of the Dep-  
7 uty Administrator) shall include the following:

8 (1) Coordinate across relevant offices of the Ad-  
9 ministration to facilitate the necessary planning for  
10 policy, rulemaking, and approval processes on mat-  
11 ters relating to the safe operation and integration of  
12 advanced aviation systems in the national airspace  
13 system.

14 (2) Coordinate across relevant offices of the Ad-  
15 ministration on the development, assessment, and  
16 refinement of advanced aviation systems concepts to  
17 ensure feasibility and viability within the national  
18 airspace system, including coordination of research  
19 and conducting studies and demonstrations to prove  
20 concepts.

21 (3) Coordinate workforce planning across rel-  
22 evant offices of the Administration to—

23 (A) hire and recruit personnel to—

24 (i) research, develop, test, and evalu-  
25 ate advanced aviation systems; and

1                   (ii) process hiring applications related  
2                   to advanced aviation systems in a timely  
3                   manner; and

4                   (B) develop and submit a biannual report  
5                   to the Secretary and the Administrator, includ-  
6                   ing—

7                   (i) core workforce requirements re-  
8                   lated to the research, development, testing,  
9                   and evaluation of advanced aviation sys-  
10                  tems by the Administration;

11                  (ii) core workforce requirements re-  
12                  lated to the safety, certification, and oper-  
13                  ational approval of advanced aviation sys-  
14                  tems by the Administration; and

15                  (iii) recommendations on staffing and  
16                  budgetary resources needed to address  
17                  areas of concern.

18                  (4) Coordinate across relevant offices of the Ad-  
19                  ministration to facilitate the United States' leader-  
20                  ship and participation in activities relating to the  
21                  international standardization of airworthiness and  
22                  the operational and environmental effects of ad-  
23                  vanced aviation systems.

1           (5) Advise the Administrator during internal  
2 and interagency coordination on advanced aviation  
3 systems and other matters.

4           (6) Advise the Chief Operating Officer of the  
5 Administration on the development of enterprise ar-  
6 chitecture.

7           (7) Validate supporting system requirements  
8 proposed by the Chief Operating Officer.

9           (8) Participate in aviation rulemaking commit-  
10 tees related to advanced aviation systems.

11           (9) Serve as the new Designated Federal Offi-  
12 cial for the Advanced Aviation Advisory Committee  
13 and consult with and assign tasks to the Advanced  
14 Aviation Advisory Committee.

15           (10) Use the Administration's clearinghouse  
16 website for publicly available data (commonly re-  
17 ferred to as "Data.FAA.gov") to ensure the estab-  
18 lishment and implementation of a secure, single-sign  
19 on for all FAA-related services (including pending  
20 certifications, applications, IACRA, CAPS,  
21 DroneZone, MedXpress, CARES, and any other  
22 service deemed appropriate by the Administration)  
23 with multifactor authentication-protected online ca-  
24 pability that allows stakeholders with a new or pend-  
25 ing certification or approval application to review the

1 status of such application, receive notice of deadlines  
2 and major certification milestones, identify the Ad-  
3 ministration office that is reviewing such application,  
4 and submit inquiries or requests for guidance pursu-  
5 ant to subsection (c).

6 (11) Work with relevant offices of the Adminis-  
7 tration to develop and implement pilot programs in  
8 partnership with advanced aviation stakeholders to  
9 provide data to support rulemaking and approval  
10 processes.

11 (12) Serve as a representative of the Adminis-  
12 tration during interagency coordination of policies  
13 related to advanced aviation systems.

14 (13) Provide an opportunity for stakeholders to  
15 submit requests or inquiries related to advanced  
16 aviation systems to the Office of Advanced Aviation.

17 (14) Promote the safe and responsible integra-  
18 tion of advanced aviation systems into the national  
19 airspace system.

20 (c) REQUEST FOR GUIDANCE ON OPERATIONAL AP-  
21 PROVAL APPLICATIONS.—Any person who submits an  
22 operational approval application may include a request for  
23 the Assistant Administrator for Advanced Aviation to pro-  
24 vide guidance on the processing and coordination required  
25 for such request.

1 **SEC. 3. OFFICE OF ADVANCED INTEGRATION.**

2 (a) ESTABLISHMENT.—The Deputy Administrator  
3 shall redesignate the National Airspace System Engineer-  
4 ing and Integration Office as the Office of Advanced Inte-  
5 gration within the Office of Advanced Aviation.

6 (b) DESIGNATION.—Not later than 1 year after the  
7 date of enactment of this Act, the Deputy Administrator,  
8 in consultation with the Administrator and Secretary,  
9 shall appoint a Director of Advanced Integration to head  
10 the Office of Advanced Integration.

11 (c) RESPONSIBILITIES.—The Deputy Administrator  
12 shall delegate to the Director of Advanced Integration the  
13 responsibilities described in paragraphs (1) through (4) of  
14 section 2(b).

15 (d) COLLABORATION.—The Director of Advanced In-  
16 tegration shall collaborate with the following:

17 (1) The Vice President of Air Traffic Services  
18 of the Administration and the Vice President of Mis-  
19 sion Support Services of the Administration to carry  
20 out the responsibilities described in section 2(b)(2).

21 (2) The Executive Director of Aircraft Certifi-  
22 cation Service of the Administration, the Executive  
23 Director of Flight Standards Services of the Admin-  
24 istration, and the Executive Director of the Office of  
25 Rulemaking of the Administration to carry out the

1 responsibilities described in paragraphs (1) and (3)  
2 of section 2(b).

3 (3) The Director of the William J. Hughes  
4 Technical Center of the Administration to carry out  
5 the responsibilities described in section 2(b)(3).

6 (4) The Assistant Administrator for Finance  
7 and Management of the Administration and the As-  
8 sistant Administrator for Human Resource Manage-  
9 ment of the Administration to carry out the respon-  
10 sibilities described in section 2(b)(4).

11 **SEC. 4. ADVANCED AVIATION COORDINATION UNIT.**

12 (a) ESTABLISHMENT.—The Secretary shall establish  
13 a coordination unit within the Administration to carry out  
14 the responsibilities described in subsection (d), to be  
15 known as the Advanced Aviation Coordination Unit.

16 (b) MEMBERSHIP.—The Advanced Aviation Coordi-  
17 nation Unit shall consist of the head of each relevant office  
18 of the Administration, or an employee representing such  
19 office, including—

20 (1) the Office of Advanced Integration estab-  
21 lished under section 3;

22 (2) the Office of Aviation Safety, including the  
23 UAS Integration Office, the Aircraft Certification  
24 Service, the Flight Standards Service, and the Office  
25 of Rulemaking;

1           (3) the Air Traffic Organization, including the  
2           Program Management Organization, the Technical  
3           Operations Services, the Office of Mission Support  
4           Services, and the office headed by the Chief Oper-  
5           ating Officer;

6           (4) the Office of Security and Hazardous Mate-  
7           rials Safety;

8           (5) the Office of Airports;

9           (6) the Office of the Chief Counsel;

10          (7) the Office of Policy, International Affairs,  
11          and Environment; and

12          (8) any other office determined appropriate by  
13          the Deputy Administrator.

14          (c) CHAIR.—

15           (1) IN GENERAL.—The Director of Advanced  
16           Integration shall serve as the Chair of the Advanced  
17           Aviation Coordination Unit, at the discretion of the  
18           Deputy Administrator.

19           (2) AUTHORITY.—The Chair may—

20           (A) schedule meetings of the members of  
21           the Advanced Aviation Coordination Unit;

22           (B) identify items for the members of the  
23           Advanced Aviation Coordination Unit to act on  
24           in fulfillment of the responsibilities described in  
25           subsection (d); and



1 (C) establish working groups in addition to  
2 the working groups established pursuant to sub-  
3 section (e).

4 (d) RESPONSIBILITIES.—The members of the Ad-  
5 vanced Aviation Coordination Unit shall collaborate to—

6 (1) promote the safe and responsible integration  
7 of advanced aviation systems into the national air-  
8 space system;

9 (2) improve processes related to such integra-  
10 tion;

11 (3) improve processes related to the certifi-  
12 cation of advanced aviation systems;

13 (4) develop clear and consistent standards re-  
14 lated to advanced aviation systems;

15 (5) ensure that determinations of the Adminis-  
16 tration related to advanced aviation systems are  
17 made in a timely manner; and

18 (6) identify innovative aviation technologies  
19 that may be integrated into the national airspace  
20 system.

21 (e) WORKING GROUPS.—

22 (1) ESTABLISHMENT.—The Chair of the Ad-  
23 vanced Aviation Coordination Unit shall establish  
24 within the Advanced Aviation Coordination Unit a  
25 working group on each of the following topics:

1 (A) Unmanned aircraft system integration.

2 (B) Advanced air mobility integration.

3 (C) Safety technology integration.

4 (2) PERSONNEL.—The Chair shall consult with  
5 the members of the Advanced Coordination Unit on  
6 the assignment of Administration personnel to staff  
7 the working groups established under paragraph (1).

8 (3) PROJECTS.—The Chair shall, in consulta-  
9 tion with the Administrator and members of the Ad-  
10 vanced Aviation Coordination Unit, assign projects  
11 to the working groups established under paragraph  
12 (1) and oversee the execution of such projects.

13 (f) CONSULTATION.—The Deputy Administrator  
14 shall consult with the Administrator and members of the  
15 Advanced Aviation Coordination Unit to ensure that exist-  
16 ing projects of the Administration are incorporated into  
17 the Advanced Aviation Coordination Unit in a minimally  
18 disruptive manner.

19 (g) INTERAGENCY COORDINATION.—The Secretary  
20 may facilitate coordination between interagency partners  
21 and the members of the Advanced Aviation Coordination  
22 Unit to fulfill the responsibilities described in subsection  
23 (d).

24 **SEC. 5. DEFINITIONS.**

25 In this Act:

1           (1) ADMINISTRATOR.—The term “Adminis-  
2           trator” means the Administrator of the Federal  
3           Aviation Administration.

4           (2) ADMINISTRATION.—The term “Administra-  
5           tion” means the Federal Aviation Administration.

6           (3) ADVANCED AVIATION SYSTEM.—The term  
7           “advanced aviation system” means—

8                   (A) an unmanned aircraft system;

9                   (B) a powered lift aircraft;

10                  (C) a technology related to—

11                           (i) advanced air mobility;

12                           (ii) the ability of an aircraft to detect  
13                           surroundings and avoid impacts;

14                           (iii) autonomous functioning of air-  
15                           craft;

16                           (iv) supersonic aircraft capabilities;

17                           (v) electric or hydrogen based aircraft  
18                           propulsion; or

19                           (vi) evolving aerospace operations in-  
20                           cluding new aircraft, airport, weather, or  
21                           info-centric and digital systems; or

22                   (D) any other aviation-related technology  
23                   that the Deputy Administrator determines  
24                   qualifies as an advanced aviation system that

1           could feasibly be integrated into the national  
2           airspace system.

3           (4) OPERATIONAL APPROVAL APPLICATION.—

4           The term “operational approval application” means  
5           an application for the operation of an advanced avia-  
6           tion system in the national airspace system sub-  
7           mitted pursuant to section 44701 or 44807 of title  
8           49, United States Code, or any other provision of  
9           law related to such operation.

10          (5) SECRETARY.—The term “Secretary” means  
11          the Secretary of Transportation.