

119TH CONGRESS  
1ST SESSION

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

To require all aircraft to be equipped with Automatic Dependent Surveillance–Broadcast In, to improve aviation safety, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

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Mr. CRUZ (for himself, Mr. MORAN, Mrs. BLACKBURN, Mr. BUDD, Mrs. CAPITO, Mr. MARSHALL, Mr. SCHMITT, Mr. SHEEHY, and Mr. YOUNG) introduced the following bill; which was read twice and referred to the Committee on \_\_\_\_\_

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**A BILL**

To require all aircraft to be equipped with Automatic Dependent Surveillance–Broadcast In, to improve aviation safety, 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 “Rotorcraft Operations  
5       Transparency and Oversight Reform Act” or the  
6       “ROTOR Act”.

7       **SEC. 2. REVISION TO EXCEPTION FOR ADS-B OUT TRANS-**  
8       **MISSION.**

9       (a) RULEMAKING.—

1           (1) IN GENERAL.—Not later than 1 year after  
2           the date of enactment of this section, the Adminis-  
3           trator of the Federal Aviation Administration (in  
4           this Act referred to as the “Administrator”) shall  
5           issue or revise regulations to clarify that, with re-  
6           spect to the exception described in section  
7           91.225(f)(1) of title 14, Code of Federal Regula-  
8           tions, the term “sensitive government mission” shall  
9           not include any proficiency evaluation or training  
10          mission operated within the lateral boundaries of the  
11          surface area of Class B or Class C airspace, unless  
12          such operation is for a national security event.

13          (2) REPORT.—If the Administrator fails to  
14          issue or revise regulations pursuant to paragraph  
15          (1), the Administrator shall, within 30 days, submit  
16          to the Committee on Commerce, Science, and Trans-  
17          portation of the Senate and the Committee on  
18          Transportation and Infrastructure of the House of  
19          Representatives a report on the status of such regu-  
20          lations, including the reasons that the Administrator  
21          has failed to issue or revise such regulations.

22          (b) GUIDANCE ON USE OF TECHNOLOGY OTHER  
23          THAN ADS-B.—Not later than 180 days after the date  
24          of enactment of this section, the Administrator shall issue  
25          guidance to clarify that, to the extent practicable, all air-

1 craft operating for purposes of national defense, homeland  
2 security intelligence, or law enforcement should utilize  
3 Traffic Information Services–Broadcast (“TIS–B”) and  
4 the Traffic Alert and Collision Avoidance System  
5 (“TCAS”).

6 (c) REPORTS.—

7 (1) TO THE ADMINISTRATOR.—Not later than  
8 90 days after the date of enactment of this section,  
9 each agency required to operate Automatic Depend-  
10 ent Surveillance–Broadcast Out (in this Act referred  
11 to as “ADS–B Out”) in transmit mode in accord-  
12 ance with section 91.225 of such title 14 shall sub-  
13 mit to the Administrator, on a quarterly basis until  
14 the date described in paragraph (3), a report that  
15 includes—

16 (A) an attestation that such operations are  
17 regularly transmitting ADS–B Out and are  
18 conducted with proper consideration to aviation  
19 safety; and

20 (B) a summary of operations in which the  
21 ADS–B Out equipment is not in transmit  
22 mode, including the date, time, duration, and  
23 mission type of such operations.

24 (2) TO CONGRESS.—

1 (A) IN GENERAL.—Not later than 180  
2 days after the date of enactment of this section,  
3 and biannually thereafter until the date de-  
4 scribed in paragraph (3), the Administrator  
5 shall submit to the Committee on Commerce,  
6 Science, and Transportation of the Senate and  
7 the Committee on Transportation and Infra-  
8 structure of the House of Representatives a re-  
9 port on the frequency and nature of the ADS-  
10 B Out exceptions granted to Federal, State,  
11 local, and tribal agencies under section  
12 91.225(f)(1) of title 14, Code of Federal Regu-  
13 lations. Such report shall include—

14 (i) aggregated data on the operations  
15 in which ADS-B Out equipment is not in  
16 transmit mode by each agency described in  
17 paragraph (1); and

18 (ii) a determination from the Adminis-  
19 trator whether such operations jeopardize  
20 aviation safety.

21 (B) SPECIAL NOTIFICATION.—If the Ad-  
22 ministrator determines that an agency de-  
23 scribed in paragraph (1) is too frequently, at  
24 the discretion of the Administrator, using ex-  
25 ceptions granted under section 91.225(f)(1) of

1           such title 14, the Administrator shall notify the  
2           Committee on Commerce, Science, and Trans-  
3           portation of the Senate and the Committee on  
4           Transportation and Infrastructure of the House  
5           of Representatives of such determination within  
6           14 days of such determination.

7           (3) SUNSET.—The reporting requirements de-  
8           scribed in this subsection shall terminate on the date  
9           that is 10 years after the date of enactment of this  
10          section.

11 **SEC. 3. ADS-B IN REQUIREMENTS.**

12          (a) REQUIREMENT FOR NEWLY MANUFACTURED  
13 MANNED AIRCRAFT.—Subject to subsection (c), not later  
14 than 2 years after the date of enactment of this section,  
15 the Administrator shall issue a final rule that has an effec-  
16 tive date which is not later than 3 years of the date on  
17 which such final rule is issued to require that any newly  
18 manufactured aircraft (other than an unmanned aircraft  
19 as defined in section 44801 of title 49, United States  
20 Code) registered in the United States shall be equipped  
21 with Automatic Dependent Surveillance–Broadcast In (re-  
22 ferred to in this section as “ADS–B In” ).

23          (b) ADS–B IN REQUIRED IN DESIGNATED AIR-  
24 SPACE.—

1           (1) IN GENERAL.—Subject to subsection (c),  
2           not later than 2 years after the date of enactment  
3           of this section, the Administrator shall issue a final  
4           rule that has an effective date which is not later  
5           than 3 years of the date on which such final rule is  
6           issued to require that any aircraft (other than an  
7           unmanned aircraft as defined in section 44801 of  
8           title 49, United States Code) manufactured as of the  
9           date of enactment of this section that is required to  
10          be equipped with ADS-B Out when operating in an  
11          airspace described in section 91.225(d) of title 14,  
12          Code of Federal Regulations, shall also be required  
13          to install and operate ADS-B In.

14          (2) CONSIDERATIONS.—

15                (A) ADDITIONAL TIME.—In conducting the  
16                rulemaking under paragraph (1), the Adminis-  
17                trator may consider whether any aircraft de-  
18                scribed in paragraph (1) would require addi-  
19                tional time, not to exceed an additional 2 years  
20                after the effective date described in paragraph  
21                (1), to implement such requirement.

22                (B) NOTIFICATION TO CONGRESS.—If the  
23                Administrator determines there is a need to  
24                provide additional time as described in subpara-  
25                graph (A), the Administrator shall—

- 1 (i) notify Congress not later than 14  
2 days after making such determination; and  
3 (ii) include a justification for such de-  
4 termination, as well as the date on which  
5 full compliance is expected.

6 (3) SPECIAL DETERMINATION.—For purposes  
7 of meeting the requirements of paragraph (1), the  
8 Administrator shall determine whether the use of a  
9 non-Technical Standard Order receiver is permissible  
10 for aircraft with a maximum certificated takeoff  
11 weight of fewer than 12,500 pounds.

12 (c) EXCEPTION.—The requirements of subsections  
13 (a) and (b) shall not apply to any aircraft described in  
14 section 91.225(e) of title 14, Code of Federal Regulations,  
15 including balloons and gliders not certified with an elec-  
16 trical system.

17 **SEC. 4. STUDY ON DYNAMIC RESTRICTED AREA.**

18 (a) IN GENERAL.—Not later than 120 days after the  
19 date of enactment of this section, the Administrator shall  
20 initiate a study on the feasibility, costs, and benefits of  
21 establishing a dynamic restricted area for rotorcraft and  
22 powered-lift (as such terms are defined in section 1.1 of  
23 title 14, Code of Federal Regulations (as in effect on the  
24 date of enactment of this section) over the Potomac River

1 to the north, south, and east of DCA. Such study's final  
2 report shall be—

3 (1) completed not later than 2 years after the  
4 date of enactment of this section; and

5 (2) submitted to the Committee on Commerce,  
6 Science, and Transportation of the Senate and the  
7 Committee on Transportation and Infrastructure of  
8 the House of Representatives.

9 (b) CONSIDERATIONS.—In conducting the study re-  
10 quired under subsection (a), the Administrator shall re-  
11 view, but is not limited to—

12 (1) terrestrial and aircraft-based technology or  
13 equipment improvements required to operationalize a  
14 dynamic restricted area inside the FRZ and in prox-  
15 imity to DCA;

16 (2) the training requirements to enable the use  
17 of an automated visual warning system in a way  
18 that functions as a traffic signal that is similar to  
19 the system deployed in the FRZ, as of the date of  
20 enactment of this section, to warn aircraft that they  
21 are entering a dynamic restricted airspace that is ac-  
22 tive or inactive;

23 (3) the ways in which the dynamic restricted  
24 area can be depicted on various paper and electronic  
25 aeronautical charts and other navigational materials;



1           (4) the feasibility of using automated audio  
2           sounds to indicate active or inactive restricted area,  
3           including a continuous tone being generated on a  
4           certain aviation VHF and UHF radio communica-  
5           tion and VOR and TACAN frequencies that are  
6           modulated in tone frequency and tone length (such  
7           as Instrument Landing System marker sounds) such  
8           that they are received by existing aviation VHF or  
9           UHF radio communications transceivers and an  
10          automated visual warning system deployed in the  
11          FRZ;

12          (5) the potential and mitigation steps for pilot  
13          and air traffic controller distraction;

14          (6) procedures to allow air traffic controllers to  
15          override any automatic function of the system for  
16          manual control;

17          (7) the creation of an indication or other signal  
18          in the air traffic control tower at DCA and the Poto-  
19          mac Terminal Radar Approach Control Facility  
20          (“TRACON”) to communicate the status of whether  
21          the dynamic restricted area is active or inactive;

22          (8) the creation of methods to anticipate fixed  
23          wing aircraft taking off from DCA so to provide suf-  
24          ficient warning to rotorcraft and powered-lift air-

1       craft of the imminent activation of the dynamic re-  
2       stricted area; and

3           (9) any other matters determined appropriate  
4       by the Administrator.

5       (c) BRIEFING.—Not later than 30 days after com-  
6       pleting the study required by subsection (a), the Adminis-  
7       trator shall brief the Committee on Commerce, Science,  
8       and Transportation of the Senate and the Committee on  
9       Transportation and Infrastructure of the House of Rep-  
10      resentatives on the results of the study.

11      (d) DEFINITIONS.—In this section:

12           (1) DCA.—The term “DCA” means Ronald  
13       Reagan Washington National Airport.

14           (2) DYNAMIC RESTRICTED AREA.—The term  
15       “dynamic restricted area” means an area of restric-  
16       tion placed on specific areas of airspace, which is  
17       contemplated to be an area over the Potomac River  
18       that is 4 miles north, south, and east of DCA, to  
19       prevent the transit of rotorcraft and powered lift air-  
20       craft that activates independently from air traffic  
21       controller action and automatically by computer ac-  
22       tion based on criteria that uses position, altitude,  
23       and velocity data from fixed wing aircraft.

24           (3) FRZ.—The term “FRZ” means the Wash-  
25       ington, DC Metropolitan Area Flight Restricted

1 Zone, as defined by section 93.335 of title 14, Code  
2 of Federal Regulations (as in effect on the date of  
3 enactment of this Act).

4 (4) TACAN.—The term “TACAN” means tac-  
5 tical air navigation pursuant to Appendix 3 Abbre-  
6 viation/Acronyms of the Aeronautical Information  
7 Manual.

8 (5) UHF.—The term “UHF” means ultra high  
9 frequency pursuant to Appendix 3 Abbreviation/  
10 Acronyms of the Aeronautical Information Manual.

11 (6) VHF.—The term “VHF” means very high  
12 frequency pursuant to Appendix 3 Abbreviation/  
13 Acronyms of the Aeronautical Information Manual.

14 (7) VOR.—The term “VOR” means VHF  
15 Omnidirectional Range pursuant to Appendix 3 Ab-  
16 breviation/Acronyms of the Aeronautical Information  
17 Manual.

18 **SEC. 5. INSPECTOR GENERAL OF THE ARMY AUDIT.**

19 (a) IN GENERAL.—Not later than 60 days after the  
20 date of enactment of this section, the Inspector General  
21 of the Army shall initiate an audit to evaluate the Army’s  
22 coordination with the Federal Aviation Administration,  
23 pilot training, and qualification standards, and the Army’s  
24 use of ADS–B Out and whether it adheres to Army policy,  
25 regulation, and law.

1 (b) ASSESSMENT.—In conducting the audit required  
2 by subsection (a), the Inspector General of the Army shall  
3 assess practices and recommendations for the Army, in-  
4 cluding—

5 (1) whether Army policy and United States law  
6 was adhered to, and the Army’s coordination with  
7 the Federal Aviation Administration, during Na-  
8 tional Capitol Region (in this subsection referred to  
9 as the “NCR”) operations of pilot training and  
10 qualifications standards in the NCR;

11 (2) the Army’s policy on ADS–B Out equipage,  
12 usage, and activation;

13 (3) maintenance protocols for UH-60 Black  
14 Hawk helicopters operated by the 12th Army Avia-  
15 tion Brigade including, but not limited to, the cali-  
16 bration of any system that transmits altitude and  
17 position information outside the aircraft and the  
18 calibration of systems that sends altitude and posi-  
19 tion information to the pilots inside the aircraft;

20 (4) compliance with the September 29, 2021,  
21 Letter of Agreement executed between the Pentagon  
22 Heliport Air Traffic Control Tower and the Ronald  
23 Reagan Washington National Airport Air Traffic  
24 Control Tower regarding flight operations in the  
25 NCR; and

1           (5) the Army’s review of loss of separation inci-  
2           dents involving its rotorcraft in the NCR along with  
3           possible mitigations to prevent future mishaps.

4           (c) PUBLIC DISCLOSURE.—Not later than 14 days  
5           after the audit required by subsection (a) is concluded,  
6           the Secretary of the Army shall—

7           (1) transmit a report on the results of the  
8           audit, without redactions, to the Committee on the  
9           Committee on Commerce, Science, and Transpor-  
10          tation and the Committee on Armed Services of the  
11          Senate and the Committee on Transportation and  
12          Infrastructure and the Committee on Armed Serv-  
13          ices of the House of Representatives; and

14          (2) publicly release the report without  
15          redactions, except to the extent required for national  
16          security reasons.

17   **SEC. 6. REVIEW OF ROTORCRAFT TRAFFIC SURROUNDING**  
18                   **COMMERCIAL SERVICE AIRPORTS.**

19          (a) REVIEW.—Not later than 30 days after the date  
20          of enactment of this section, the Administrator shall ini-  
21          tiate a review of all currently charted helicopter routes  
22          where flight paths of fixed-wing aircraft and rotorcraft (as  
23          defined in section 1.1 of such title 14) may not provide  
24          sufficient separation, as determined by the Administrator.

1 (b) MODIFICATION OF FLIGHT ROUTES.—Based on  
2 the results of the review conducted under subsection (a),  
3 the Administrator shall evaluate and modify flight routes,  
4 as necessary, to improve separation between fixed-wing  
5 aircraft and rotorcraft (as so defined).

6 (c) BRIEFING.—Not later than 180 days after the  
7 date of enactment of this section, the Administrator shall  
8 brief the Committee on Commerce, Science, and Transpor-  
9 tation of the Senate and the Committee on Transportation  
10 and Infrastructure of the House of Representatives on the  
11 results of the review conducted under subsection (a) and  
12 any modifications to flight routes made under subsection  
13 (b).

14 **SEC. 7. REPEAL OF PROVISION REGARDING ADS-B EQUIP-**  
15 **MENT ON CERTAIN AIRCRAFT OF DEPART-**  
16 **MENT OF DEFENSE.**

17 Section 1046 of the John S. McCain National De-  
18 fense Authorization Act for Fiscal Year 2019 (49 U.S.C.  
19 40101 note) is repealed.