

114TH CONGRESS  
1ST SESSION

# S. 1314

To establish an interim rule for the operation of small unmanned aircraft for commercial purposes and their safe integration into the national airspace system.

---

## IN THE SENATE OF THE UNITED STATES

MAY 13, 2015

Mr. BOOKER (for himself and Mr. HOEVEN) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

---

## A BILL

To establish an interim rule for the operation of small unmanned aircraft for commercial purposes and their safe integration into the national airspace system.

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 “Commercial UAS Mod-  
5 ernization Act”.

1 **SEC. 2. INTERIM RULE FOR THE OPERATION OF SMALL UN-**  
2 **MANNED AIRCRAFT FOR COMMERCIAL PUR-**  
3 **POSES.**

4 (a) IN GENERAL.—Subtitle B of title III of the FAA  
5 Modernization and Reform Act of 2012 (Public Law 112–  
6 95) is amended by adding at the end the following:

7 **“SEC. 337. OPERATION OF SMALL UNMANNED AIRCRAFT**  
8 **FOR COMMERCIAL PURPOSES.**

9 “(a) IN GENERAL.—A person may operate a small  
10 unmanned aircraft for commercial purposes without an  
11 airworthiness certificate within the United States, subject  
12 to the requirements under subsection (b) and the oper-  
13 ating restrictions under subsection (c) during the period  
14 beginning on the date of the enactment of this Act and  
15 ending on the effective date of a final rule based on the  
16 Notice of Proposed Rulemaking Operation and Certifi-  
17 cation of Small Unmanned Aircraft Systems (80 Fed.  
18 Reg. 9544, February 23, 2015).

19 “(b) GENERAL REQUIREMENTS.—

20 “(1) LIABILITY INSURANCE.—A small un-  
21 manned aircraft may not be operated for commercial  
22 purposes during the period set forth in subsection  
23 (a) unless the Administrator receives an attestation  
24 that the owner of such aircraft has a liability insur-  
25 ance policy covering the operation of such aircraft.

1           “(2) REGISTRATION.—A small unmanned air-  
2           craft may not be operated for commercial purposes  
3           unless the owner has registered the aircraft under  
4           section 3(a) of the Commercial UAS Modernization  
5           Act.

6           “(3) TESTING REQUIREMENTS.—

7           “(A) EXAM DEVELOPMENT.—Not later  
8           than 30 days after the date of the enactment of  
9           the Commercial UAS Modernization Act, the  
10          Administrator of the Federal Aviation Adminis-  
11          tration shall develop an initial aeronautical  
12          knowledge test that meets the requirements set  
13          forth in the notice referred to in subsection (a).

14          “(B) REQUIREMENTS.—An individual may  
15          not operate a small unmanned aircraft for com-  
16          mercial purposes unless he or she—

17                  “(i) has received a passing grade on  
18                  the test developed under subparagraph  
19                  (A);

20                  “(ii) passed a proficiency test admin-  
21                  istered by a test site selected pursuant to  
22                  section 332(c); and

23                  “(iii) has demonstrated the ability to  
24                  fly the aircraft in accordance with the op-

1                   erating restrictions set forth in subsection  
2                   (c).

3                   “(4) CERTIFICATION.—A small unmanned air-  
4                   craft may not be operated for commercial purposes  
5                   until the operator of a test site selected pursuant to  
6                   section 332(c), in collaboration with a designated  
7                   airworthiness representative, certifies that the small  
8                   unmanned aircraft—

9                   “(A) meets the requirements for small un-  
10                  manned aircraft set forth in the notice referred  
11                  to in subsection (a); and

12                  “(B) is capable of operating within the  
13                  limits described in subsection (c).

14                  “(c) OPERATING RESTRICTIONS.—During the period  
15                  set forth in subsection (a), small unmanned aircraft oper-  
16                  ated for commercial purposes—

17                  “(1) may only be operated under visual line of  
18                  sight rules;

19                  “(2) may not be operated higher than 500 feet  
20                  above ground level;

21                  “(3) may not be operated, unless the operator  
22                  has prior authorization from the air traffic control  
23                  facility having jurisdiction over that airspace—

24                  “(A) in Class B, Class C, or Class D air-  
25                  space; or

1           “(B) within the lateral boundaries of the  
2           surface area of Class E airspace designated for  
3           an airport;

4           “(4) shall comply with model aircraft operating  
5           standards set forth in Advisory Circular 91–57,  
6           which was issued by the Federal Aviation Adminis-  
7           tration on June 9, 1981, or the current revision of  
8           such standards;

9           “(5) may only be operated in daylight condi-  
10          tions;

11          “(6) shall yield right of way to all other users  
12          of the National Airspace System;

13          “(7) may not be operated by any individual  
14          with any physical or mental condition that the indi-  
15          vidual knows, or has reason to know, would interfere  
16          with the safe operation of the aircraft; and

17          “(8) may only be operated after a preflight in-  
18          spection (as described in the notice referred to in  
19          subsection (a)).

20          “(d) ENFORCEMENT.—The Secretary of Transpor-  
21          tation, or designee, may bring a civil action against a per-  
22          son in a district court of the United States to enforce this  
23          section or a requirement or regulation prescribed, or an  
24          order or any term of a certificate or permit issued, under  
25          this section. The action may be brought in the judicial

1 district in which the person does business or the violation  
2 occurred.

3 “(e) ACCIDENT REPORTING.—The owner or operator  
4 of a small unmanned aircraft that is involved in any acci-  
5 dent causing personal injury or property damage, other  
6 than to the small unmanned aircraft, shall report such ac-  
7 cident to the Federal Aviation Administration not later  
8 than 2 days after such accident.”.

9 (b) CLERICAL AMENDMENT.—The table of contents  
10 in section 1(b) of the FAA Modernization and Reform Act  
11 of 2012 is amended by inserting after the item relating  
12 to section 336 the following:

“Sec. 337. Operation of small unmanned aircraft for commercial purposes.”.

13 **SEC. 3. DEPUTY ASSOCIATE ADMINISTRATOR FOR UN-**  
14 **MANNED AIRCRAFT.**

15 (a) IN GENERAL.—Subtitle B of title III of the FAA  
16 Modernization and Reform Act of 2012 (Public Law 112–  
17 95), as amended by section 2(a), is further amended by  
18 adding at the end the following:

19 **“SEC. 338. DEPUTY ASSOCIATE ADMINISTRATOR FOR UN-**  
20 **MANNED AIRCRAFT.**

21 “(a) APPOINTMENT.—The Administrator of the Fed-  
22 eral Aviation Administration (referred to in this section  
23 as the ‘Administrator’) shall appoint a Deputy Associate  
24 Administrator for Unmanned Aircraft (referred to in this  
25 section as the ‘Deputy Associate Administrator’), who

1 shall report to the Administrator and to the Secretary of  
2 Transportation.

3 “(b) REGISTRATION.—

4 “(1) PROCEDURES.—Not later than 30 days  
5 after the date of the enactment of the Commercial  
6 UAS Modernization Act, the Deputy Associate Ad-  
7 ministrator, in consultation with the Administrator,  
8 shall develop procedures for registering small un-  
9 manned aircraft.

10 “(2) FEES.—The Deputy Associate Adminis-  
11 trator is authorized to collect reasonable fees, in an  
12 amount to be determined by the Deputy Associate  
13 Administrator, from the owner or operator of the  
14 small unmanned aircraft as part of the registration  
15 process.

16 “(c) PRINCIPAL DUTIES.—The Deputy Associate Ad-  
17 ministrator shall—

18 “(1) create an achievable comprehensive re-  
19 search and development plan for the safe integration  
20 of unmanned aircraft into the National Airspace  
21 System, which—

22 “(A) takes into account work being done at  
23 other Federal agencies, in conjunction with  
24 their industry collaborators;

1           “(B) is based on an initial audit of current  
2           unmanned aircraft activity across the Federal  
3           Government in order to identify gaps and over-  
4           laps; and

5           “(C) allows for programmatic exemptions  
6           based on previous analysis.

7           “(d) OTHER ISSUES.—The Deputy Associate Admin-  
8           istrator, in consultation with the Administrator, shall de-  
9           velop strategies for resolving—

10           “(1) unmanned aircraft spectrum issues;

11           “(2) barriers to unmanned aircraft operating  
12           beyond line of sight;

13           “(3) barriers to allowing payload carriage; and

14           “(4) barriers to utilizing automated unmanned  
15           aircraft systems.

16           “(e) EXEMPTIONS.—

17           “(1) IN GENERAL.—Not later than 90 days  
18           after the date of the enactment of this Act, the Dep-  
19           uty Associate Administrator, in consultation with the  
20           Administrator, shall expedite and expand exemptions  
21           from the interim operating restrictions otherwise ap-  
22           plicable to unmanned aircraft under section 337.

23           “(2) EXEMPTIONS.—The exemptions authorized  
24           under paragraph (1) may include—

25           “(A) beyond line of sight operations;

1           “(B) programmatic exemptions based on  
2           previous analysis;

3           “(C) extended visual line of sight and mar-  
4           ginal visual flight rules weather conditions; and

5           “(D) heavier unmanned vehicles.”.

6           (b) CLERICAL AMENDMENT.—The table of contents  
7           in section 1(b) of the FAA Modernization and Reform Act  
8           of 2012 is amended by inserting after the item relating  
9           to section 337, as added by section 2(b), the following:

          “Sec. 338. Deputy Associate Administrator for Unmanned Aircraft.”.

10 **SEC. 4. JOINT AIRCRAFT SYSTEM RESEARCH AND DEVEL-**  
11 **OPMENT DATA COLLECTION AND ANALYSIS**  
12 **PROGRAM.**

13           (a) ESTABLISHMENT.—The Administrator of the  
14           Federal Aviation Administration shall establish a joint air-  
15           craft system research and development data collection and  
16           analysis program at the William J. Hughes Technical Cen-  
17           ter (referred to in this section as the “Center”).

18           (b) RESEARCH AND DEVELOPMENT PRIORITIES.—  
19           The Director of the Center shall set priorities for data  
20           collection, analysis, and research under the program estab-  
21           lished under subsection (a), including identifying safety  
22           standards for detect and avoid, command and control, au-  
23           tonomous aircraft systems, and air traffic management for  
24           beyond-visual-line of sight operations for such aircraft.

1 (c) USE OF TEST SITES.—The program established  
2 under subsection (a) shall utilize the 6 unmanned aircraft  
3 system test sites of the Federal Aviation Administration—

4 (1) to conduct research;

5 (2) to collect data;

6 (3) to develop quarterly milestones to expedite  
7 commercial unmanned aircraft system operations;  
8 and

9 (4) to work with other Federal agencies, the  
10 Center of Excellence for Unmanned Aircraft Sys-  
11 tems, Federally funded research and development  
12 centers, industry, academia, and others, as appro-  
13 priate, to implement the plan referred to in para-  
14 graph (3).

15 (d) AIR TRAFFIC MANAGEMENT PILOT PROGRAM.—

16 (1) IMPLEMENTATION.—The Administrator of  
17 the Federal Aviation Administration, acting through  
18 the Center, and the Administrator of the National  
19 Aeronautics and Space Administration, shall imple-  
20 ment an air traffic management pilot program to re-  
21 search and test a new regulatory structure for com-  
22 mercial and other operations of small unmanned air-  
23 craft in controlled and uncontrolled airspace below  
24 1,200 feet above ground level.

1           (2) MANAGEMENT TESTING.—The Center shall  
2 partner with a neutral third party to test the man-  
3 agement of small unmanned aircraft in the airspace  
4 described in paragraph (1).

5           (e) REPORT.—Not later than 180 days after the date  
6 of the enactment of this Act, and every 180 days there-  
7 after, the Director of the Center shall submit a report that  
8 summarizes the actions taken under subsections (b), (c),  
9 and (d) to—

10           (1) the Committee on Commerce, Science, and  
11 Transportation of the Senate;

12           (2) the Committee on Appropriations of the  
13 Senate;

14           (3) the Committee on Transportation and In-  
15 frastructure of the House of Representatives; and

16           (4) the Committee on Appropriations of the  
17 House of Representatives.

○