

112TH CONGRESS  
1ST SESSION

# H. R. 2463

To provide for the next generation of border and maritime security technologies.

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## IN THE HOUSE OF REPRESENTATIVES

JULY 8, 2011

Mr. HALL (for himself, Mr. QUAYLE, Mr. WU, Mr. CONAWAY, Mr. SMITH of Texas, Mr. SENSENBRENNER, Mr. BENISHEK, Mr. BARTON of Texas, Mr. HULTGREN, Mr. NEUGEBAUER, and Mrs. BIGGERT) introduced the following bill; which was referred to the Committee on Homeland Security, and in addition to the Committee on Science, Space, and Technology, for a period to be subsequently determined by the Speaker, in each case for consideration of such provisions as fall within the jurisdiction of the committee concerned

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## A BILL

To provide for the next generation of border and maritime security technologies.

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 “Border Security Tech-  
5       nology Innovation Act of 2011”.

1 **SEC. 2. SOURCE OF APPROPRIATIONS.**

2 Appropriations for carrying out this Act and the  
3 amendments made by this Act shall be derived from au-  
4 thorizations of appropriations under the Homeland Secu-  
5 rity Act of 2002 (6 U.S.C. 101 et seq.).

6 **SEC. 3. ENSURING RESEARCH ACTIVITIES OF THE DEPART-**  
7 **MENT OF HOMELAND SECURITY INCLUDE AP-**  
8 **PROPRIATE CONCEPTS OF OPERATION.**

9 The Under Secretary for Science and Technology of  
10 the Department of Homeland Security (in this Act re-  
11 ferred to as the “Under Secretary”) shall ensure that any  
12 Federal Government interagency or intra-agency agree-  
13 ment entered into by the Under Secretary to develop and  
14 transition new technology explicitly characterizes the re-  
15 quirements, expected use, and concept of operations for  
16 that technology, including—

- 17 (1) the manpower needed to effectively operate  
18 the technology;
- 19 (2) the expected training requirements; and
- 20 (3) the expected operations and maintenance  
21 costs.

1 **SEC. 4. REAUTHORIZATION OF HOMELAND SECURITY**  
2 **SCIENCE AND TECHNOLOGY ADVISORY COM-**  
3 **MITTEE.**

4 Section 311(j) of the Homeland Security Act of 2002  
5 (6 U.S.C. 191(j)) is amended by striking “on December  
6 31, 2008” and inserting “on December 31, 2014”.

7 **SEC. 5. REPORT ON BASIC RESEARCH NEEDS FOR BORDER/**  
8 **MARITIME SECURITY.**

9 (a) **ASSESSMENT.**—The Comptroller General shall as-  
10 sess the basic science research needs in the border and  
11 maritime security domain. The assessment shall include  
12 consideration of the need for research on—

13 (1) detection, tracking, and identification tech-  
14 nologies for cargo and people;

15 (2) personal protective equipment;

16 (3) document security and authentication tech-  
17 nologies;

18 (4) nonradiological advanced screening tech-  
19 nologies at ports of entry; and

20 (5) technologies for real time tactical scene  
21 awareness.

22 (b) **REPORT.**—Not later than 6 months after the date  
23 of enactment of this Act, the Comptroller General shall  
24 transmit to the Committee on Science, Space, and Tech-  
25 nology of the House of Representatives and the Committee

1 on Commerce, Science, and Transportation of the Senate  
2 a report on the assessment under subsection (a).

3 **SEC. 6. INCORPORATING UNMANNED AERIAL VEHICLES**  
4 **INTO BORDER/MARITIME AIRSPACE.**

5 (a) RESEARCH AND DEVELOPMENT.—Using  
6 amounts made available under section 307 of the Home-  
7 land Security Act of 2002 (6 U.S.C. 187), the Secretary  
8 of Homeland Security and the Director of the Joint Plan-  
9 ning and Development Office shall continue to research  
10 and develop technologies to permit routine operation of  
11 unmanned aerial vehicles, including autonomously piloted  
12 drones, within the national airspace for border and mari-  
13 time security missions without any degradation of existing  
14 levels of safety for all national airspace system users.

15 (b) PILOT PROJECTS.—The Secretary shall coordi-  
16 nate with the Administrator of the Federal Aviation Ad-  
17 ministration acting through the Director of the Joint  
18 Planning and Development Office to enter into pilot  
19 projects in designated test ranges in sparsely populated,  
20 low-density air traffic airspace to conduct research, experi-  
21 ments, and data collection in order to accelerate the safe  
22 integration of unmanned aircraft systems into the national  
23 airspace system as part of research activities of the Joint  
24 Planning and Development Office.

1 **SEC. 7. RESEARCH PROGRAM IN TUNNEL DETECTION.**

2 (a) RESEARCH AND DEVELOPMENT.—Using  
3 amounts made available under section 307 of the Home-  
4 land Security Act of 2002 (6 U.S.C. 187), the Under Sec-  
5 retary shall continue to research and develop technologies  
6 to permit detection of near surface voids, such as tunnels,  
7 with an emphasis on technologies with real time capability.

8 (b) COORDINATION.—The Secretary of Homeland Se-  
9 curity shall coordinate with other appropriate Federal  
10 agencies, including the Department of Defense and the  
11 United States Geological Survey, and ensure the integra-  
12 tion of activities under subsection (a) with relevant efforts  
13 of such other agencies and the Department of Homeland  
14 Security’s Centers of Excellence Program.

15 **SEC. 8. RESEARCH IN ANTICOUNTERFEIT TECHNOLOGIES.**

16 (a) RESEARCH AND DEVELOPMENT.—Using  
17 amounts made available under section 307 of the Home-  
18 land Security Act of 2002 (6 U.S.C. 187), the Under Sec-  
19 retary, in coordination with the Director of the National  
20 Institute of Standards and Technology, shall continue a  
21 joint research and development program on  
22 anticounterfeit technologies and standards. The program  
23 may include development of counterfeit-resistant docu-  
24 mentation, counterfeit-resistant devices, document valida-  
25 tion technologies, and document identification standards.

1           (b) CONSULTATION.—In carrying out the program in  
2 subsection (a), the Under Secretary or his designee shall  
3 consult with other Federal agencies engaged in similar ac-  
4 tivities, including Immigration and Customs Enforcement,  
5 the Department of State, the Department of Defense, and  
6 the Department of Justice.

7           (c) REPORT TO CONGRESS.—Not later than 12  
8 months after the date of enactment of this Act, the Under  
9 Secretary and the Director of the National Institute of  
10 Standards and Technology shall provide to the Committee  
11 on Homeland Security and the Committee on Science,  
12 Space, and Technology of the House of Representatives,  
13 and the Committee on Homeland Security and Govern-  
14 ment Affairs of the Senate, a report detailing the actions  
15 taken by the Under Secretary and the Director under this  
16 section.

17 **SEC. 9. STUDY OF MOBILE BIOMETRIC TECHNOLOGIES AT**  
18 **THE BORDER.**

19           (a) IN GENERAL.—Using amounts made available  
20 under section 307 of the Homeland Security Act of 2002  
21 (6 U.S.C. 187), the Under Secretary, in coordination with  
22 the Commissioner of United States Customs and Border  
23 Protection, shall continue research on the use of mobile  
24 biometric technology at the Nation’s borders between the  
25 ports of entry, including—

1           (1) conducting an analysis of existing mobile bi-  
2           ometric technologies and the extent to which they  
3           can be deployed in Border Patrol agents' vehicles  
4           and used at the border, in terms of operability, reli-  
5           ability, cost, and overall benefit to border operations;

6           (2) undertaking an examination of the potential  
7           end-user requirements of mobile biometric tech-  
8           nology by the Border Patrol and other relevant end-  
9           users;

10          (3) developing recommendations for addressing  
11          capability gaps in mobile biometric technologies; and

12          (4) examining the feasibility of implementing a  
13          pilot program for use of mobile biometric tech-  
14          nologies at the border.

15          (b) CONSULTATION.—In conducting the research pro-  
16          gram under subsection (a), the Under Secretary shall con-  
17          sult the National Institute of Standards and Technology,  
18          other appropriate Federal agencies, and appropriate Fed-  
19          eral, State, and local law enforcement officials.

20          (c) COORDINATION.—The Secretary shall ensure that  
21          the research program is coordinated with other biometric  
22          identification programs within the Department of Home-  
23          land Security.

24          (d) REPORT.—Not later than 12 months after the  
25          date of enactment of this Act, the Under Secretary shall

- 1 transmit to Congress a report on the findings of the re-
- 2 search program conducted under this section.

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