

Ralph M. Hall

(Original Signature of Member)

112TH CONGRESS
1ST SESSION

H. R. 2463

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

IN THE HOUSE OF REPRESENTATIVES

Mr. HALL (for himself and [see ATTACHED LIST of cosponsors]) introduced the following bill; which was referred to the Committee on

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".

6 **SEC. 2. SOURCE OF APPROPRIATIONS.**

7 Appropriations for carrying out this Act and the
8 amendments made by this Act shall be derived from au-

1 thORIZATIONS OF APPROPRIATIONS UNDER THE HOMELAND SECUR-
2 RITY ACT OF 2002 (6 U.S.C. 101 ET SEQ.).

3 **SEC. 3. ENSURING RESEARCH ACTIVITIES OF THE DEPART-**
4 **MENT OF HOMELAND SECURITY INCLUDE AP-**
5 **PROPRIATE CONCEPTS OF OPERATION.**

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

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

19 **SEC. 4. REAUTHORIZATION OF HOMELAND SECURITY**
20 **SCIENCE AND TECHNOLOGY ADVISORY COM-**
21 **MITTEE.**

22 Section 311(j) of the Homeland Security Act of 2002
23 (6 U.S.C. 191(j)) is amended by striking “on December
24 31, 2008” and inserting “on December 31, 2014”.

1 **SEC. 5. REPORT ON BASIC RESEARCH NEEDS FOR BORDER/**
2 **MARITIME SECURITY.**

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

7 (1) detection, tracking, and identification tech-
8 nologies for cargo and people;

9 (2) personal protective equipment;

10 (3) document security and authentication tech-
11 nologies;

12 (4) nonradiological advanced screening tech-
13 nologies at ports of entry; and

14 (5) technologies for real time tactical scene
15 awareness.

16 (b) **REPORT.**—Not later than 6 months after the date
17 of enactment of this Act, the Comptroller General shall
18 transmit to the Committee on Science, Space, and Tech-
19 nology of the House of Representatives and the Committee
20 on Commerce, Science, and Transportation of the Senate
21 a report on the assessment under subsection (a).

22 **SEC. 6. INCORPORATING UNMANNED AERIAL VEHICLES**
23 **INTO BORDER/MARITIME AIRSPACE.**

24 (a) **RESEARCH AND DEVELOPMENT.**—Using
25 amounts made available under section 307 of the Home-
26 land Security Act of 2002 (6 U.S.C. 187), the Secretary

1 of Homeland Security and the Director of the Joint Plan-
2 ning and Development Office shall continue to research
3 and develop technologies to permit routine operation of
4 unmanned aerial vehicles, including autonomously piloted
5 drones, within the national airspace for border and mari-
6 time security missions without any degradation of existing
7 levels of safety for all national airspace system users.

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

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

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

1 (b) COORDINATION.—The Secretary of Homeland Se-
2 curity shall coordinate with other appropriate Federal
3 agencies, including the Department of Defense and the
4 United States Geological Survey, and ensure the integra-
5 tion of activities under subsection (a) with relevant efforts
6 of such other agencies and the Department of Homeland
7 Security’s Centers of Excellence Program.

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

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

19 (b) CONSULTATION.—In carrying out the program in
20 subsection (a), the Under Secretary or his designee shall
21 consult with other Federal agencies engaged in similar ac-
22 tivities, including Immigration and Customs Enforcement,
23 the Department of State, the Department of Defense, and
24 the Department of Justice.

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

11 **SEC. 9. STUDY OF MOBILE BIOMETRIC TECHNOLOGIES AT**
12 **THE BORDER.**

13 (a) IN GENERAL.—Using amounts made available
14 under section 307 of the Homeland Security Act of 2002
15 (6 U.S.C. 187), the Under Secretary, in coordination with
16 the Commissioner of United States Customs and Border
17 Protection, shall continue research on the use of mobile
18 biometric technology at the Nation's borders between the
19 ports of entry, including—

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

1 (2) undertaking an examination of the potential
2 end-user requirements of mobile biometric tech-
3 nology by the Border Patrol and other relevant end-
4 users;

5 (3) developing recommendations for addressing
6 capability gaps in mobile biometric technologies; and

7 (4) examining the feasibility of implementing a
8 pilot program for use of mobile biometric tech-
9 nologies at the border.

10 (b) CONSULTATION.—In conducting the research pro-
11 gram under subsection (a), the Under Secretary shall con-
12 sult the National Institute of Standards and Technology,
13 other appropriate Federal agencies, and appropriate Fed-
14 eral, State, and local law enforcement officials.

15 (c) COORDINATION.—The Secretary shall ensure that
16 the research program is coordinated with other biometric
17 identification programs within the Department of Home-
18 land Security.

19 (d) REPORT.—Not later than 12 months after the
20 date of enactment of this Act, the Under Secretary shall
21 transmit to Congress a report on the findings of the re-
22 search program conducted under this section.