

110TH CONGRESS
2D SESSION

S. 2941

To improve airport runway safety, and for other purposes.

IN THE SENATE OF THE UNITED STATES

APRIL 30, 2008

Mr. LAUTENBERG introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To improve airport runway 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 “Runway Safety Im-
5 provement Act of 2008”.

6 **SEC. 2. STRATEGIC PLAN FOR RUNWAY SAFETY.**

7 (a) IN GENERAL.—Not later than 6 months after the
8 date of the enactment of this Act, the Administrator of
9 the Federal Aviation Administration (referred to in this
10 Act as the “Administrator”) shall develop and submit to
11 Congress a report that contains a strategic runway safety
12 plan.

1 (b) CONTENTS OF PLAN.—The strategic runway
2 safety plan submitted under subsection (a) shall—

3 (1) include—

4 (A) goals to improve runway safety;

5 (B) a description of near- and longer-term
6 actions designed to reduce the severity, number,
7 and rate of runway incursions;

8 (C) time frames and resources needed for
9 the actions described in subparagraph (B); and

10 (D) a plan to implement a continuous eval-
11 uative process to track performance toward the
12 goals referred to in subparagraph (A); and

13 (2) address the increased runway safety risk as-
14 sociated with the expected increases in the volume of
15 air traffic.

16 (c) AUDIT OF STRATEGIC RUNWAY SAFETY PLAN.—
17 The Comptroller General of the United States shall—

18 (1) conduct an audit of the plan developed
19 under subsection (a); and

20 (2) submit periodic reports to the Committee on
21 Commerce, Science, and Transportation of the Sen-
22 ate and Committee on Transportation and Infra-
23 structure of the House of Representatives that de-
24 scribe—

1 (A) the efficacy of the runway safety plan
2 in reducing runway safety risks; and

3 (B) the progress of the Federal Aviation
4 Administration in complying with the plan.

5 **SEC. 3. TECHNOLOGY IMPROVEMENTS.**

6 (a) PLAN AND SCHEDULE FOR INSTALLATION AND
7 DEPLOYMENT OF SYSTEMS TO PROVIDE ALERTS OF PO-
8 TENTIAL RUNWAY INCURSIONS.—

9 (1) DEPLOYMENT PLAN.—Not later than De-
10 cember 31, 2008, the Administrator shall submit to
11 Congress a plan for the installation of and deploy-
12 ment schedule for systems to alert air traffic con-
13 trollers and flight crews of potential runway incur-
14 sions at—

15 (A) the 35 commercial airports in the
16 United States that are most at risk of runway
17 incursions; and

18 (B) general aviation airports identified by
19 the Administrator as being most at risk of run-
20 way incursions.

21 (2) CONTENTS.—The plan submitted under
22 paragraph (1) shall—

23 (A) ensure existing technology for im-
24 proved situational awareness is available to pi-

1 lots of commercial and large general aviation
2 aircraft;

3 (B) enhance the value of investments in
4 surface movement detection systems by ensuring that runway incursion alert data collected
5 by such systems are automatically and directly
6 transmitted to flight crews; and

7
8 (C) ensure that airports most at risk of
9 runway incursions receive priority for the installation of advanced surface movement detection systems.
10
11

12 (3) OBJECTIVES.—The installation and deployment schedule required under paragraph (1) shall
13 ensure that—
14

15 (A) not later than March 31, 2009, the
16 Administrator certifies an integrated aircraft
17 and ground-based capability that transmits runway incursion alerts generated by advanced surface movement detection systems to pilots without controller intervention;
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21 (B) not later than December 31, 2009, capability providing aural indication of own aircraft position relative to airport runways is installed on—
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1 (i) all aircraft operated pursuant to
2 part 121 or 135 of title 14, Code of Fed-
3 eral Regulations, with more than 10 seats;
4 and

5 (ii) all turbine-powered aircraft oper-
6 ated pursuant to part 91 of such title 14,
7 with more than 6 seats;

8 (C) not later than June 30, 2010, the Ad-
9 ministrator provides the capability described in
10 subparagraph (A) at all airports equipped with
11 advanced surface movement detection systems;

12 (D) not later than December 31, 2010, all
13 aircraft described in subparagraph (B) at air-
14 ports equipped with advanced surface movement
15 detection systems are equipped with the capa-
16 bility to receive, process, and present runway
17 incursion alerts to pilots; and

18 (E) a schedule is published for the equi-
19 page of aircraft operated pursuant to part 125
20 or 129 of title 14, Code of Federal Regulations.

21 (b) REVIEW OF IMPLEMENTATION OF ADVANCED
22 SURFACE MOVEMENT DETECTION SYSTEMS.—The In-
23 spector General of the Department of Transportation
24 shall—

1 (1) review the installation of each advanced sur-
 2 face movement detection system funded by the Ad-
 3 ministrator to ensure that each system functions in
 4 accordance with the product's certification by the
 5 Administrator; and

6 (2) submit an annual report to the Committee
 7 on Commerce, Science, and Transportation of the
 8 Senate and Committee on Transportation and Infra-
 9 structure of the House of Representatives that de-
 10 scribes the status of the proper implementation of
 11 each system, including a review of the system's—

12 (A) reliability to ensure it is not suscep-
 13 tible to failures to generate timely alerts for
 14 controllers to take appropriate action; and

15 (B) ability to successfully operates in all
 16 climate conditions in which aircraft operations
 17 are conducted at the airport.

18 **SEC. 4. INFRASTRUCTURE UPGRADES.**

19 (a) **AUTHORIZATION OF APPROPRIATIONS FOR TECH-**
 20 **NOLOGY INVESTMENTS.**—There are authorized to be ap-
 21 propriated to the Administrator, from amounts deposited
 22 in the Airport and Airway Trust Fund established under
 23 section 9502(d) of the Internal Revenue Code of 1986,
 24 to install systems designed to reduce the potential for run-
 25 way incursions through the purchase and installation of

1 advanced surface movement detection systems, and cock-
2 pit-direct audible runway incursion warning systems—

3 (1) \$41,000,000 for fiscal year 2009;

4 (2) \$42,250,000 for fiscal year 2010; and

5 (3) \$45,000,000 for fiscal year 2011.

6 (b) AUTHORIZATION OF APPROPRIATIONS FOR NEAR-
7 TERM IMPROVEMENTS.—There are authorized to be ap-
8 propriated to the Administrator, from amounts deposited
9 in the Airport and Airways Trust Fund established under
10 section 9502(d) of the Internal Revenue Code of 1986,
11 to reduce the potential for runway incursions through the
12 purchase and installation of appropriate automatic equip-
13 ment, including runway occupancy alerting and warning
14 equipment, perimeter taxiways, and runway status
15 lights—

16 (1) \$40,000,000 for fiscal year 2009;

17 (2) \$45,000,000 for fiscal year 2010; and

18 (3) \$55,000,000 for fiscal year 2011.

19 (c) AUTHORIZATION OF APPROPRIATIONS FOR RUN-
20 WAY SAFETY AREA IMPROVEMENTS.—There are author-
21 ized to be appropriated to the Administrator, from
22 amounts deposited in the Airport and Airway Trust Fund
23 established under section 9502(d) of the Internal Revenue
24 Code of 1986, to improve runway safety areas to meet
25 Federal Aviation Administration standards—

- 1 (1) \$20,000,000 for fiscal year 2009;
- 2 (2) \$25,000,000 for fiscal year 2010; and
- 3 (3) \$30,000,000 for fiscal year 2011.

4 (d) CODIFICATION OF RUNWAY SAFETY DESIGN
5 STANDARD COMPLIANCE REQUIREMENT FROM PUBLIC
6 LAW 109–115.—Section 44727 is amended by adding at
7 the end the following:

8 “(c) RUNWAY SAFETY DESIGN STANDARD COMPLI-
9 ANCE.—Not later than December 31, 2015, the owner or
10 operator of each airport described in section 44706(a)
11 shall improve the airport’s runway safety areas to comply
12 with the Federal Aviation Administration design stand-
13 ards required under part 139 of title 14, Code of Federal
14 Regulations.”.

15 (e) ANNUAL REPORT ON RUNWAY SAFETY AREA
16 COMPLIANCE.—The Administrator shall annually submit
17 to the Committee on Commerce, Science, and Transpor-
18 tation of the Senate and Committee on Transportation
19 and Infrastructure of the House of Representatives a re-
20 port that describes the progress of the Administration to-
21 ward improving the runway safety areas at airports de-
22 scribed in section 44706(a) of title 49, United States
23 Code.

1 **SEC. 5. REVIEW OF RUNWAY AND TAXIWAY LIGHTING AND**
2 **MARKINGS.**

3 (a) IN GENERAL.—Not later than 180 days after the
4 date of the enactment of this Act, the Administrator
5 shall—

6 (1) review the type of runway and taxiway
7 lighting (both daytime and nighttime configurations)
8 and markings at airports described in section
9 44706(a) of title 49, United States Code, for compli-
10 ance with standards issued by the Federal Aviation
11 Administration; and

12 (2) identify runways on which nonstandard
13 lighting and markings, including variance in illu-
14 mination levels and standard colors used on runways
15 and taxiways, may contribute, or may have contrib-
16 uted, to operational errors or incidents.

17 (b) REPORT.—Not later than 60 days after the com-
18 pletion of the review under subsection (a), the Adminis-
19 trator shall submit to the Committee on Commerce,
20 Science, and Transportation of the Senate and the Com-
21 mittee on Transportation and Infrastructure of the House
22 of Representatives a report that—

23 (1) describes the variance in lighting conditions
24 and markings at airport runways described in sub-
25 section (a);

1 (2) identifies those runways that are most likely
2 to contribute to operational errors and incidents;
3 and

4 (3) includes a plan for remedying variance in
5 lighting conditions and markings at nonstandard
6 runways, including associated costs.

7 **SEC. 6. MONITORING AND RECORDING EQUIPMENT FOR**
8 **NAVIGATION AND LIGHTING AIDS.**

9 (a) IN GENERAL.—The Administrator, in consulta-
10 tion with the Chairman of the National Transportation
11 Safety Board, shall evaluate the potential for improving
12 safety and accident investigations through the use of sys-
13 tems, including existing technologies, that record and en-
14 able the archival of the operational status of lighting sys-
15 tems on the movement areas of, or that are critical to the
16 safe operations at, airports described in section 44706(a)
17 of title 49, United States Code.

18 (b) REPORT.—Not later than 120 days after the date
19 of the enactment of this Act, the Administrator shall sub-
20 mit to the Committee on Commerce, Science, and Trans-
21 portation of the Senate and the Committee on Transpor-
22 tation and Infrastructure of the House of Representatives
23 a report that describes the results of the evaluation re-
24 quired under subsection (a).

1 **SEC. 7. AIRCRAFT RESCUE AND FIREFIGHTING STAND-**
 2 **ARDS.**

3 (a) RULEMAKING PROCEEDING.—Not later than 180
 4 days after the date of the enactment of this Act, the Ad-
 5 ministrator shall initiate a rulemaking proceeding for the
 6 purpose of issuing a proposed and final rule that revises
 7 the aircraft rescue and firefighting standards under part
 8 139 of title 14, Code of Federal Regulations, to improve
 9 the protection of the traveling public, other persons, air-
 10 craft, buildings, and the environment from fires and haz-
 11 ardous materials incidents.

12 (b) CONTENTS OF PROPOSED AND FINAL RULE.—
 13 The proposed and final rule to be issued under subsection
 14 (a) shall address—

15 (1) the mission of aircraft rescue and fire-
 16 fighting personnel, including responsibilities for pas-
 17 senger egress in the context of other Administration
 18 requirements;

19 (2) the proper level of staffing;

20 (3) the timeliness of a response;

21 (4) the handling of hazardous materials inci-
 22 dents at airports;

23 (5) proper vehicle deployment; and

24 (6) the need for equipment modernization.

25 (c) CONSISTENCY WITH VOLUNTARY CONSENSUS
 26 STANDARDS.—The proposed and final rule issued under

1 subsection (a) shall be, to the extent practical, consistent
 2 with national voluntary consensus standards for aircraft
 3 rescue and firefighting services at airports.

4 (d) ASSESSMENTS OF POTENTIAL IMPACTS.—In the
 5 rulemaking proceeding initiated under subsection (a), the
 6 Administrator shall assess the potential impact of any re-
 7 visions to the firefighting standards on airports and air
 8 transportation service.

9 (e) INCONSISTENCY WITH STANDARDS.—If the pro-
 10 posed or final rule issued under subsection (a) is not con-
 11 sistent with national voluntary consensus standards for
 12 aircraft rescue and firefighting services at airports, the
 13 Administrator shall submit to the Office of Management
 14 and Budget an explanation of the reasons for such incon-
 15 sistency in accordance with section 12(d) of the National
 16 Technology Transfer and Advancement Act of 1995 (15
 17 U.S.C. 272 note; 110 Stat. 783).

18 (f) FINAL RULE.—Not later than 24 months after
 19 the date of the enactment of this Act, the Administrator
 20 shall issue the final rule required by subsection (a).

21 **SEC. 8. IMPROVED DATA COLLECTION ON RUNWAY OVER-**
 22 **RUNS.**

23 The Administrator of the Federal Aviation Adminis-
 24 tration shall—

1 (1) collect data, using either existing sources of
2 aircraft operational incidents or a new reporting
3 process, regarding aircraft excursions that do not re-
4 sult in fatalities, injuries, or significant property
5 damage;

6 (2) examine the data collected pursuant to
7 paragraph (1) on an ongoing basis; and

8 (3) submit an annual report to the Committee
9 on Commerce, Science, and Transportation of the
10 Senate and the Committee on Transportation and
11 Infrastructure of the House of Representatives that
12 describes—

13 (A) trends and potential safety risks iden-
14 tified by the data; and

15 (B) actions taken by airports and the Fed-
16 eral Aviation Administration to reduce those
17 risks.

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