

119TH CONGRESS
1ST SESSION

S. 2583

To require the Under Secretary of Commerce for Oceans and Atmosphere to expand and modernize the weather radio system of the National Oceanic and Atmospheric Administration, and for other purposes.

IN THE SENATE OF THE UNITED STATES

JULY 31, 2025

Mr. CRUZ (for himself, Ms. CANTWELL, Mr. SULLIVAN, Mr. SCHATZ, Mr. MORAN, and Mr. PETERS) introduced the following bill; which was read twice and referred to the Committee on Commerce, Science, and Transportation

A BILL

To require the Under Secretary of Commerce for Oceans and Atmosphere to expand and modernize the weather radio system of the National Oceanic and Atmospheric Administration, 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 “NOAA Weather Radio
5 Modernization Act”.

1 **SEC. 2. NOAA WEATHER RADIO.**

2 (a) IN GENERAL.—The Weather Research and Fore-
3 casting Innovation Act of 2017 (15 U.S.C. 8501 et seq.)
4 is amended by adding at the end the following:

5 **“TITLE VII—NOAA WEATHER**
6 **RADIO**

7 **“SEC. 701. NOAA WEATHER RADIO.**

8 “(a) IN GENERAL.—The Under Secretary shall es-
9 tablish or maintain a nationwide weather radio network,
10 to be known as ‘NOAA Weather Radio’, that—

11 “(1) broadcasts weather information, including
12 emergency weather watches, warnings, and other
13 hazard information;

14 “(2) operates 24 hours a day, 7 days a week;
15 and

16 “(3) is resilient to emergency hazards, such as
17 loss of power and cellular service.

18 “(b) COVERAGE AND RELIABILITY.—The Under Sec-
19 retary shall ensure the reliability of NOAA Weather Radio
20 by—

21 “(1) maintaining support for existing systems,
22 especially those serving areas not covered by or hav-
23 ing poor quality cellular service; and

24 “(2) ensuring consistent maintenance and oper-
25 ations monitoring, with timely repairs to broadcast
26 transmitter site equipment and antennas.

1 “(c) MODERNIZATION INITIATIVE.—

2 “(1) IN GENERAL.—To the maximum extent
3 practicable, the Under Secretary shall expand the
4 coverage of and modernize NOAA Weather Radio to
5 ensure it remains valuable to the public, including
6 by—

7 “(A) improving those methods of commu-
8 nicating the risks posed by hazardous weather
9 events to the public that are most likely to re-
10 sult in informed decisionmaking regarding the
11 mitigation of such risks;

12 “(B) improving communication of haz-
13 ardous weather warnings and the urgency of
14 such warnings to areas that experience a high
15 frequency of such warnings;

16 “(C) enhancing the ability to amplify non-
17 weather emergency messages through NOAA
18 Weather Radio as necessary;

19 “(D) acquiring additional transmitters as
20 required to expand coverage to—

21 “(i) areas at high risk for rapid onset
22 weather disasters that require short-fuse
23 warnings;

24 “(ii) communities without—

1 “(I) mobile broadband internet
2 access service (as defined in section
3 8.1(b) of title 47, Code of Federal
4 Regulations (or a successor regula-
5 tion)) and as depicted by a map cre-
6 ated under section 802(c)(1)(C) of the
7 Communications Act of 1934 (47
8 U.S.C. 642(c)(1)(C));

9 “(II) State or local emergency
10 warning systems; or

11 “(III) satellite coverage; and

12 “(iii) Federal lands, such as land in
13 the National Park System or the National
14 Forest System and National Recreation
15 Areas;

16 “(E) adding the capability to disseminate
17 NOAA Weather Radio alerts by satellite or
18 through the cloud; and

19 “(F) modernizing the messaging system to
20 enable more geographically specific warnings.

21 “(2) ELEMENTS.—In carrying out paragraph
22 (1), the Under Secretary shall—

23 “(A) upgrade telecommunications infra-
24 structure of NOAA Weather Radio to accelerate

1 the transition of broadcasts to internet protocol-
2 based communications over non-copper media;

3 “(B) accelerate software upgrades to the
4 Advanced Weather Interactive Processing Sys-
5 tem, or any relevant system successors, in order
6 to implement partial county notifications and
7 alerts;

8 “(C) enhance accessibility and usability of
9 data and feeds of NOAA Weather Radio with
10 feedback from relevant stakeholders, including
11 the private sector;

12 “(D) develop options, including satellite
13 backup capability and commercial provider
14 partnerships, for continuity of service of NOAA
15 Weather Radio in the event of an outage at a
16 weather forecast office;

17 “(E) research and develop alternative op-
18 tions to transmit NOAA Weather Radio signals
19 to transmitters that are remote or do not have
20 internet protocol capability;

21 “(F) transition critical applications to the
22 Integrated Dissemination Program, or any rel-
23 evant program successors; and

24 “(G) work with the General Services Ad-
25 ministration, and other relevant agencies, to de-

1 velop new, alternative, or updated expedited
2 mechanisms to secure priority space capacity,
3 such as leased land and tower space, for NOAA
4 Weather Radio transmitters and antennas that
5 are best suited for the national security and
6 public safety missions of NOAA Weather Radio.

7 “(3) PRIORITY.—In carrying out paragraph (1),
8 the Under Secretary shall prioritize practices, capa-
9 bilities, and technologies recommended in accordance
10 with the assessment under subsection (d) to maxi-
11 mize the accessibility of NOAA Weather Radio, par-
12 ticularly in areas of the United States described in
13 paragraph (1)(D)(i).

14 “(d) ASSESSMENT FOR MANAGEMENT AND DIS-
15 TRIBUTION.—

16 “(1) IN GENERAL.—Not later than one year
17 after the date of the enactment of this section, the
18 Under Secretary shall complete an assessment of ac-
19 cess to NOAA Weather Radio.

20 “(2) ELEMENTS.—In conducting the assess-
21 ment required under paragraph (1), the Under Sec-
22 retary shall take into consideration and provide rec-
23 ommendations regarding the following:

1 “(A) The need for continuous, adequate,
2 and operational real-time broadcasts of NOAA
3 Weather Radio.

4 “(B) Input from relevant stakeholders that
5 provide access to NOAA Weather Radio, includ-
6 ing third-party platforms that provide online
7 services, such as websites and mobile device ap-
8 plications.

9 “(C) The manner by which existing or new
10 management systems may promote consistent,
11 efficient, and compatible access to NOAA
12 Weather Radio.

13 “(D) The ability of the National Oceanic
14 and Atmospheric Administration to aggregate
15 real-time broadcast feeds at one or more central
16 locations, as a redundancy to the broadcast feed
17 from the nearest weather forecast office.

18 “(E) Effective coordination between agen-
19 cies with responsibilities relating to emergencies
20 and natural disasters.

21 “(F) The potential effects of an electro-
22 magnetic pulse or geomagnetic disturbance on
23 NOAA Weather Radio.

1 “(e) AUTHORIZATION OF APPROPRIATIONS.—There
 2 are authorized to be appropriated to the Under Sec-
 3 retary—

4 “(1) for each of fiscal years 2026 through
 5 2031, \$25,000,000 to operate NOAA Weather Radio
 6 under subsections (a) and (b); and

7 “(2) for fiscal year 2026, \$100,000,000, which
 8 shall remain available until expended, to carry out
 9 subsections (c) and (d).”.

10 (b) WEATHER READY ALL HAZARDS AWARD PRO-
 11 GRAM.—Section 407 of the Weather Research and Fore-
 12 casting Innovation Act of 2017 (15 U.S.C. 8546) is—

13 (1) transferred to title VII of that Act, as
 14 added by subsection (a);

15 (2) inserted after section 701 of that Act, as
 16 added by subsection (a); and

17 (3) redesignated as section 702.

18 (c) CLERICAL AMENDMENTS.—The table of contents
 19 for the Weather Research and Forecasting Innovation Act
 20 of 2017 is amended—

21 (1) by striking the item relating to section 407;

22 and

23 (2) by adding at the end the following:

“TITLE VII—NOAA WEATHER RADIO

“Sec. 701. NOAA Weather Radio.

“Sec. 702. National Oceanic and Atmospheric Administration Weather Ready
 All Hazards Award Program.”.

1 **SEC. 3. NATIONAL STANDARDS FOR WEATHER WARNING**
 2 **SYSTEMS IN FLASH FLOOD ZONES.**

3 (a) IN GENERAL.—The Under Secretary of Com-
 4 merce for Standards and Technology, in consultation with
 5 the Under Secretary of Commerce for Oceans and Atmos-
 6 phere, shall develop standards for flash flood emergency
 7 alert systems within the 100-year floodplain (as defined
 8 in section 100202(a) of the Biggert-Waters Flood Insur-
 9 ance Reform Act of 2012 (42 U.S.C. 4004(a))).

10 (b) REQUIREMENTS.—The Director shall ensure that
 11 standards developed under subsection (a)—

12 (1) meet the needs of communities without—

13 (A) mobile broadband internet access serv-
 14 ice (as defined in section 8.1(b) of title 47,
 15 Code of Federal Regulations (or a successor
 16 regulation)) and as depicted by a map created
 17 under section 802(c)(1)(C) of the Communica-
 18 tions Act of 1934 (47 U.S.C. 642(c)(1)(C));

19 (B) State or local emergency warning sys-
 20 tems; or

21 (C) satellite coverage; and

22 (2) will result in reliable systems, especially
 23 during hazardous events.

24 (c) REPORT REQUIRED.—Not later than 2 years
 25 after the date of the enactment of this Act, the Under
 26 Secretary of Commerce for Standards and Technology

1 shall submit to the Committee on Commerce, Science, and
 2 Transportation of the Senate and the Committee on
 3 Science, Space, and Technology of the House of Rep-
 4 resentatives a report that includes a summary of the
 5 standards developed under subsection (a).

6 **SEC. 4. CLASSIFICATION OF AND STAFFING PLAN FOR EM-**
 7 **PLOYEES AND PROTECTION FROM HIRING**
 8 **FREEZES.**

9 (a) IN GENERAL.—Title IV of the Weather Research
 10 and Forecasting Innovation Act of 2017 (15 U.S.C. 8541
 11 et seq.) is amended by adding at the end the following:

12 **“SEC. 415. CLASSIFICATION OF AND STAFFING PLAN FOR**
 13 **EMPLOYEES AND PROTECTION FROM HIRING**
 14 **FREEZES.**

15 “(a) CLASSIFICATION OF CERTAIN EMPLOYEES.—

16 “(1) IN GENERAL.—Not later than 30 days
 17 after the date of the enactment of this section, the
 18 Director of the Office of Management and Budget
 19 shall categorize each position in the National Ocean-
 20 ographic and Atmospheric Administration specified
 21 in paragraph (2) as a protective service occupation
 22 under the Standard Occupational Classification Sys-
 23 tem.

24 “(2) POSITIONS SPECIFIED.—The positions
 25 specified in this paragraph are the following posi-

tions in the National Oceanic and Atmospheric Administration, as defined by the Director of the Office of Personnel Management:

“(A) Meteorology Series (1340).

“(B) Hydrology Series (1315).

“(C) General Physical Science Series (1301).

“(D) Oceanographer Series (1360).

“(E) Electronics Technical Series (0856).

“(F) Information Technology Management Series (GS–2210).

“(G) Professional Mariners (as defined in section 269B of the National Oceanic and Atmospheric Administration Commissioned Officer Corps Act of 2002 (33 U.S.C. 3079b)) who are involved in the collection of data to support forecasts and warnings to protect human life and property (including Series 0865, 9901, 9916, 9920, 9923–24, 9927–28, 9931–34, 9944, 9954, 9960, 9965, 9968, 9971, 9973, and 9984).

“(b) 10-YEAR STAFFING PLAN FOR THE NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION.—Not later than 180 days after the date of the enactment of

1 this section, the Under Secretary shall submit to Congress
 2 a 10-year staffing plan for—

3 “(1) the National Weather Service; and

4 “(2) any positions within the National Oceanic
 5 and Atmospheric Administration that support fore-
 6 casts and warnings to protect human life and prop-
 7 erty, including positions that involve—

8 “(A) collection of data for incorporation
 9 into watches and warnings;

10 “(B) operation and maintenance of equip-
 11 ment for collection of data described in sub-
 12 paragraph (A);

13 “(C) maintenance of information tech-
 14 nology systems;

15 “(D) modeling for forecasts and warnings;
 16 and

17 “(E) research to improve forecasts, warn-
 18 ings, and communication of those warnings to
 19 better protect human life and property.”.

20 (b) CLERICAL AMENDMENT.—The table of contents
 21 for the Weather Research and Forecasting Innovation Act
 22 of 2017 is amended by inserting after the item relating
 23 to section 414 the following:

“Sec. 415. Classification of and staffing plan for employees and protection from
 hiring freezes.”.

