

119TH CONGRESS  
2D SESSION

**S.** \_\_\_\_\_

To establish the Radar Next Program, and for other purposes.

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IN THE SENATE OF THE UNITED STATES

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Ms. CANTWELL (for herself and Mr. BUDD) introduced the following bill;  
which was read twice and referred to the Committee on

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**A BILL**

To establish the Radar Next Program, 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 “Radar Next Program  
5 Act of 2026”.

6 **SEC. 2. RADAR NEXT PROGRAM.**

7 (a) IN GENERAL.—The Under Secretary, in consulta-  
8 tion with the Director of the National Weather Service,  
9 shall establish a program to be known as the “Radar Next  
10 Program” (in this section referred to as the “program”).

1 (b) REQUIREMENTS.—In carrying out the program,  
2 the Under Secretary shall—

3 (1) develop performance and coverage require-  
4 ments for the weather radar network of the United  
5 States, including for the territories of the United  
6 States;

7 (2) collaborate with the weather enterprise to  
8 determine potential solutions to update the weather  
9 radar network of the United States that meet the re-  
10 quirements developed under paragraph (1); and

11 (3) develop a plan in accordance with sub-  
12 section (c).

13 (c) PLAN.—

14 (1) IN GENERAL.—The Under Secretary shall  
15 develop a plan to replace the Next Generation  
16 Weather Radar system of the National Weather  
17 Service in existence as of the date of the enactment  
18 of this Act (in this subsection referred to as the  
19 “NEXRAD system”).

20 (2) ELEMENTS.—The plan developed under this  
21 subsection shall seek to continue and improve weath-  
22 er radar coverage in the United States and its terri-  
23 tories and include the following:

24 (A) Estimates of quantifiable improve-  
25 ments in performance, coverage, and accuracy

1 to be made from potential options for replace-  
2 ment of the NEXRAD system.

3 (B) Development of a phased array radar  
4 to test and determine the specifications and re-  
5 quirements for such replacement.

6 (C) Expected actions needed to implement  
7 the recommendations of the report published by  
8 the Environmental Information Services Work-  
9 ing Group of the Science Advisory Board of the  
10 National Oceanic and Atmospheric Administra-  
11 tion on November 15, 2023, and entitled “A  
12 NESDIS Observing System Backbone Frame-  
13 work” to assist in defining a radar backbone  
14 architecture that will best serve the United  
15 States.

16 (D) Establishment of a weather surveil-  
17 lance radar testbed for the following:

18 (i) Evaluation of commercial radars  
19 with the potential to replace or supplement  
20 the NEXRAD system.

21 (ii) Providing technical assistance for  
22 the use of small, gap-filling radars with  
23 private and local partners in regions where  
24 geographical topography prevents the full  
25 use of large systems or in locations where

1                   such systems may not be commercially via-  
2                   ble.

3                   (E) Consultation and input solicited from  
4                   academia, meteorologists, emergency managers,  
5                   and public safety or utility officials regarding  
6                   the specifications and requirements for replace-  
7                   ment of the NEXRAD system.

8                   (F) Prioritized locations for initial deploy-  
9                   ment of the system that will replace the  
10                  NEXRAD system.

11                  (G) Expected locations of the system that  
12                  will replace the NEXRAD system, including  
13                  sites located more than 75 miles away from an  
14                  existing NEXRAD system station and addi-  
15                  tional appropriate locations.

16                  (H) Expected or planned improvements to  
17                  data available for weather and water-related  
18                  forecasts and warnings from the system that  
19                  will replace the NEXRAD system.

20                  (3) PROCUREMENT DEADLINE.—The Under  
21                  Secretary shall take such actions as may be nec-  
22                  essary to ensure the plan developed under this sub-  
23                  section is fully implemented and executed by not  
24                  later than September 30, 2040.

25                  (d) RADAR-AS-A-SERVICE.—

1           (1) IN GENERAL.—The Under Secretary may  
2 partner or contract with entities outside of the Na-  
3 tional Oceanic and Atmospheric Administration to  
4 fill data gaps in weather radar coverage using  
5 weather radars and data assimilation technologies in  
6 order to—

7           (A) supplement data gaps in weather radar  
8 coverage, including at low levels and in wide  
9 areas, in existence as of the date of the enact-  
10 ment of this Act;

11           (B) ensure the continued performance of  
12 the weather radar network of the United  
13 States; and

14           (C) better detect significant precipitation  
15 and severe weather over a greater area across  
16 a population.

17           (2) CONSIDERATIONS.—In carrying out para-  
18 graph (1), the Under Secretary may consider—

19           (A) partnering or contracting with entities  
20 that have participated in the testbed described  
21 in subsection (c)(2)(D), the National Mesonet  
22 Program, or cooperative research and develop-  
23 ment agreements; and

24           (B) weather camera systems and services,  
25 including in consultation with the Federal Avia-

1           tion Administration, as viable technologies to  
2           supplement weather forecasting and prediction  
3           needs.

4       (e) UPDATES TO CONGRESS.—The Under Secretary  
5 shall provide to the Committee on Commerce, Science, and  
6 Transportation of the Senate and the Committee on  
7 Science, Space, and Technology of the House of Rep-  
8 resentatives periodic updates on the implementation of  
9 this section.

10       (f) DEFINITIONS.—In this Act, the terms “Under  
11 Secretary” and “weather enterprise” have the meanings  
12 given such terms in section 2 of the Weather Research  
13 and Forecasting Innovation Act of 2017 (15 U.S.C.  
14 8501).