

118TH CONGRESS
1ST SESSION

H. R. 4575

To develop the next generation of weather radar, authorize supplemental gap radar coverage, and for other purposes.

IN THE HOUSE OF REPRESENTATIVES

JULY 12, 2023

Mr. CRAWFORD (for himself and Mr. MORAN) introduced the following bill;
which was referred to the Committee on Science, Space, and Technology

A BILL

To develop the next generation of weather radar, authorize supplemental gap radar coverage, 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 “Weather Radar Cov-
5 erage Improvement Act”

6 **SEC. 2. NEXT GENERATION PHASED ARRAY RADAR.**

7 (a) IN GENERAL.—The Under Secretary, in consulta-
8 tion with the Director of the National Weather Service,
9 shall develop a plan to replace the Next Generation
10 Weather Radar of the National Weather Service

1 (“NEXRAD”) system in existence as of the date of the
2 enactment of this section.

3 (b) PROCUREMENT DEADLINE.—The Under Sec-
4 retary shall take such actions as may be necessary to en-
5 sure the replacement described in subsection (a) is com-
6 pleted by not later than September 30, 2040.

7 (c) ELEMENTS.—The plan developed pursuant to
8 subsection (a) shall include the following:

9 (1) Estimates of quantifiable improvements in
10 coverage and accuracy to be made from replacement
11 of the NEXRAD system referred to in such sub-
12 section.

13 (2) Development of a prototype digital phased
14 array radar to test and determine the specifications
15 and requirements for such replacement.

16 (3) Establishment of a weather surveillance
17 phased array radar testbed for the following:

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

21 (B) Providing technical assistance for the
22 use of small, gap filling radars in regions where
23 geographical topography prevents full utilization
24 of larger systems.

1 (4) Consultation and input solicited from mete-
2 orologists, emergency managers, and public safety
3 officials regarding the specifications and require-
4 ments for replacement of the NEXRAD system re-
5 ferred in such subsection.

6 (d) RADAR-AS-A-SERVICE.—

7 (1) IN GENERAL.—In order to supplement gaps
8 in radar coverage in existence as of the date of the
9 enactment of this section and ensure the continued
10 performance of weather radar capabilities, the Direc-
11 tor of the National Weather Service may utilize and
12 contract with third party entities to fill such radar
13 gaps using diverse weather radars and data assimila-
14 tion technologies to better detect significant precipi-
15 tation and severe weather over a greater area across
16 the population.

17 (2) PRIORITY.—In carrying out the activities
18 under paragraph (1), the Director of the National
19 Weather Service shall prioritize utilizing and con-
20 tracting with third party entities that have partici-
21 pated in the testbed established in accordance with
22 subsection (c)(3).

23 (3) WEATHER CAMERA SYSTEMS.—In carrying
24 out the activities under paragraph (1), the Director
25 of the National Weather Service may consider

1 weather camera systems and services as viable tech-
2 nologies to supplement gaps in radar coverage.

3 (e) UPDATES TO CONGRESS.—The Under Secretary
4 shall provide to the Committee on Science, Space, and
5 Technology of the House of Representatives and the Com-
6 mittee on Commerce, Science, and Transportation of the
7 Senate periodic updates on the implementation of this sec-
8 tion.

9 (f) DEFINITION.—In this section, the term “Under
10 Secretary” has the meaning given such term in section
11 2 of the Weather Research and Forecasting Innovation
12 Act of 2017 (15 U.S.C. 8501).

○