

**(b) Outreach community**

In conducting outreach under subsection (a), the Under Secretary shall contact leading experts and innovators from relevant stakeholders, including the representatives from the following:

- (1) State or local emergency management agencies.
- (2) State agriculture agencies.
- (3) Indian tribes (as defined in section 5304 of title 25) and Native Hawaiians (as defined in section 7517 of title 20).
- (4) The private aerospace industry.
- (5) The private earth observing industry.
- (6) The operational forecasting community.
- (7) The academic community.
- (8) Professional societies that focus on meteorology.
- (9) Such other stakeholder groups as the Under Secretary considers appropriate.

(Pub. L. 115-25, title IV, §412, Apr. 18, 2017, 131 Stat. 113.)

**§ 8549. Hurricane hunter aircraft****(a) Backup capability**

The Under Secretary shall acquire backup for the capabilities of the WP-3D Orion and G-IV hurricane aircraft of the National Oceanic and Atmospheric Administration that is sufficient to prevent a single point of failure.

**(b) Authority to enter agreements**

In order to carry out subsection (a), the Under Secretary shall negotiate and enter into 1 or more agreements or contracts, to the extent practicable and necessary, with governmental and non-governmental entities.

**(c) Future technology**

The Under Secretary shall continue the development of Airborne Phased Array Radar under the United States Weather Research Program.

**(d) Authorization of appropriations**

For each of fiscal years 2017 through 2020, support for implementing subsections (a) and (b) is authorized out of funds appropriated to the Office of Marine and Aviation Operations.

(Pub. L. 115-25, title IV, §413, Apr. 18, 2017, 131 Stat. 114.)

**§ 8550. Improvements to Cooperative Observer Program of National Weather Service****(a) In general**

The Under Secretary of Commerce for Oceans and Atmosphere, acting through the National Weather Service, shall improve the Cooperative Observer Program by—

- (1) providing support to—
  - (A) State-coordinated programs relating to the Program; and
  - (B) States and regions where observations provided through the Program are scarce;
- (2) working with State weather service headquarters to increase participation in the Program and to add stations in States and regions described in paragraph (1)(B);
- (3) where feasible, ensuring that data streams from stations that have been contrib-

uting data to the Program for more than 50 years are maintained and continually staffed by volunteers;

(4) prioritizing the recruitment of new volunteers for the Program;

(5) ensuring that opportunities exist for automated reporting to lessen the burden on volunteers to collect and report data by hand; and

(6) ensuring that integrated reporting is available for qualitative observations that cannot be automated, such as drought conditions, snow observations, and hazardous weather events, to ensure that volunteers in the Program can report and upload observations quickly and easily.

**(b) Coordination with States and regions**

Not less frequently than every 180 days, the National Weather Service shall coordinate with State and regional offices with respect to the status of Cooperative Observer Program stations.

**(c) Coordination with Federal agencies**

The National Weather Service shall coordinate with other Federal agencies, including the Forest Service, the Department of Agriculture, and the United States Geological Survey, to leverage opportunities to grow the Cooperative Observer Program network and to more effectively use existing infrastructure, weather stations, and staff of the Program.

(Pub. L. 115-423, §8, Jan. 7, 2019, 132 Stat. 5461.)

**Editorial Notes****CODIFICATION**

This section was enacted as part of the National Integrated Drought Information System Reauthorization Act of 2018, and not as part of the Weather Research and Forecasting Innovation Act of 2017 which comprises this chapter.

**SUBCHAPTER IV—IMPROVING FEDERAL PRECIPITATION INFORMATION****§ 8561. Study on precipitation estimation****(a) In general**

Not later than 90 days after December 16, 2022, the Administrator, in consultation with other Federal agencies as appropriate, shall seek to enter an agreement with the National Academies—

(1) to conduct a study on the state of practice and research needs for precipitation estimation, including probable maximum precipitation estimation; and

(2) to submit, not later than 24 months after the date on which such agreement is finalized, to the Committee on Science, Space, and Technology of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate, and make publicly available on a website, a report on the results of the study under paragraph (1).

**(b) Study**

The report under subsection (a) shall include the following:

(1) An examination of the current state of practice for precipitation estimation at scales