out above] unless the Secretary certified to Committee on Commerce, Science, and Transportation of the Senate and Committee on Science, Space, and Technology of the House of Representatives that such action would not result in any degradation of weather services provided to the affected area, prior to repeal by Pub. L. 102-567, title VII, §709(2), Oct. 29, 1992, 106 Stat. 4309.

WEATHER AND CLIMATE INFORMATION IN AGRICULTURE

Pub. L. 99–198, title XVII, \$1762, Dec. 23, 1985, 99 Stat. 1651, as amended by Pub. L. 115–25, title II, \$201, Apr. 18, 2017, 131 Stat. 98, formerly set out as a note under this section, was transferred to section 8521 of this title.

NATIONAL WEATHER SERVICE; CONGRESSIONAL AP-PROVAL REQUISITE TO SALE, LEASE, TRANSFER, OR DISMANTLING OF AGENCY

Pub. L. 98-8, title I, §104, Mar. 24, 1983, 97 Stat. 34, provided that:

"Since the Administration has proposed to sell the weather (METSAT) and land (LANDSAT) satellite systems;

"Since there are concerns about possible commercialization of the National Weather Service;

"Since our country should provide weather service information for the protection of life and property;

"Since our Nation's economy—its agriculture, aviation, ocean shipping and construction—is heavily affected by weather and our ability to forecast and disseminate vital information about its behavior: Now, therefore,

"It is the sense of the Congress that a reliable and comprehensive national weather information system responsive to the needs of national security; agriculture, transportation and other affected sectors; and individual citizens must be maintained through a strong central National Weather Service that can work closely with the private sector, other Federal and State government agencies, and the weather services of other nations.

"Further, the Nation's civil operational remote sensing satellites (METSAT and LANDSAT) shall remain under the National Oceanic and Atmospheric Administration. No effort shall be made to dismantle, transfer, lease or sell any portion of these systems without prior congressional approval."

### STUDY OF THUNDERSTORMS AND ATMOSPHERIC DISTURB-ANCES; REPORTS; EXPENDITURES; COOPERATION OF OTHER DEPARTMENTS

Act June 16, 1948, ch. 483, 62 Stat. 470, as amended Oct. 19, 1980, Pub. L. 96-470, title I, §103(b), 94 Stat. 2237, provided: "That the Chief of the Weather Bureau is authorized and directed to study fully and thoroughly the internal structure of thunderstorms, hurricanes, cyclones, and other severe atmospheric disturbances, particularly the degree of turbulence within such storms and the development, maintenance, and magnitude of updrafts and downdrafts with a view to establishing methods by which the characteristics of particular thunderstorms may be forecast and methods by which the characteristics of such storms may be determined on visual observation from outside of the immediate thunderstorm area. Such study shall be concluded at the earliest practicable date and a final report submitted to Congress.

"SEC. 2. The Chief of the Weather Bureau is empowered to make such expenditures at the seat of government and elsewhere as may be necessary to carry out the purposes of this Act and as from time to time may be appropriated for by Congress, including expenditures for the development and purchase of special meteorological instruments and other equipment (including motor vehicles and aircraft), without regard to the provisions of section 3709 of the Revised Statutes [now 41 U.S.C. 6101]. There is hereby authorized to be appropriated such sums as are necessary for the purpose of carrying out the provisions of this Act.

"SEC. 3. Any executive department or independent establishment is hereby authorized to cooperate with the Chief of the Weather Bureau in carrying out the purposes of this Act, and for such purposes may lend or transfer to the Chief of the Weather Bureau any officer or employee of such department or establishment and any property, equipment, lands, or buildings under its control."

## §313a. Establishment of meteorological observation stations in the Arctic region

In order to improve the weather forecasting service of the United States and to promote safety and efficiency in civil air navigation to the highest possible degree, the Secretary of Commerce shall, in addition to his other functions and duties, take such action as may be necessary in the development of an international basic meteorological reporting network in the Arctic region of the Western Hemisphere, including the establishment, operation, and maintenance of such reporting stations in cooperation with the State Department and other United States governmental departments and agencies, with the meteorological services of foreign countries and with persons engaged in air commerce.

(Feb. 12, 1946, ch. 4, §1, 60 Stat. 4; 1965 Reorg. Plan No. 2, §§1, 2, eff. July 13, 1965, 30 F.R. 8819, 79 Stat. 1318.)

## TRANSFER OF FUNCTIONS

Office of Chief of Weather Bureau abolished and functions transferred to Secretary of Commerce by Reorg. Plan No. 2 of 1965, eff. July 13, 1965, 30 F.R. 8819, 79 Stat. 1318. For further details, see notes set out under section 311 of this title.

#### APPROPRIATIONS

Section 2 of act Feb. 12, 1946, authorized appropriation of necessary funds to carry out provisions of this section.

# §313b. Institute for Aviation Weather Prediction

The Administrator of the National Oceanic and Atmospheric Administration shall establish an Institute for Aviation Weather Prediction. The Institute shall provide forecasts, weather warnings, and other weather services to the United States aviation community. The Institute shall expand upon the activities of the aviation unit currently at the National Severe Storms Forecast Center in Kansas City, Missouri, and shall be established in the Kansas City<sup>1</sup> Missouri<sup>1</sup> area. The Administrator of the National Oceanic and Atmospheric Administration shall provide a full and fair opportunity for employees at the National Severe Storms Center to assume comparable duties and responsibilities within the Institute.

(Pub. L. 102-588, title II, §222, Nov. 4, 1992, 106 Stat. 5119.)

### SIMILAR PROVISIONS

Similar provisions were contained in Pub. L. 102-567, title I, §112, Oct. 29, 1992, 106 Stat. 4278.

### § 313c. Authorized activities of the National Oceanic and Atmospheric Administration

The National Oceanic and Atmospheric Administration, through the United States Weather Research Program, shall—

<sup>&</sup>lt;sup>1</sup>So in original. Probably should be followed by a comma.

(1) improve the capability to accurately forecast inland flooding (including inland flooding influenced by coastal and ocean storms) through research and modeling;

(2) develop, test, and deploy a new flood warning index that will give the public and emergency management officials fuller, clearer, and more accurate information about the risks and dangers posed by expected floods;

(3) train emergency management officials, National Weather Service personnel, meteorologists, and others as appropriate regarding improved forecasting techniques for inland flooding, risk management techniques, and use of the inland flood warning index developed under paragraph (2);

(4) conduct outreach and education activities for local meteorologists and the public regarding the dangers and risks associated with inland flooding and the use and understanding of the inland flood warning index developed under paragraph (2); and

(5) assess, through research and analysis of previous trends, among other activities—

(A) the long-term trends in frequency and severity of inland flooding; and

(B) how shifts in climate, development, and erosion patterns might make certain regions vulnerable to more continual or escalating flood damage in the future.

(Pub. L. 107–253,  $2, \ Oct. 29, \ 2002, \ 116 \ Stat. 1731.)$ 

# AUTHORIZATION OF APPROPRIATIONS

Pub. L. 107-253, §3, Oct. 29, 2002, 116 Stat. 1731, provided that: "There are authorized to be appropriated to the National Oceanic and Atmospheric Administration for carrying out this Act [see Short Title of 2002 Amendment note set out under section 311 of this title] \$1,250,000 for each of the fiscal years 2003 through 2005, of which \$100,000 for each fiscal year shall be available for competitive merit-reviewed grants to institutions of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)) to carry out the activities described in section 2(5) [15 U.S.C. 313c(5)], and \$1,150,000 for each of the fiscal years 2006 and 2007. Of the amounts authorized under this section, \$250,000 for each fiscal year shall be available for competitive merit-reviewed grants to institutions of higher education (as defined in section 101 of the Higher Education Act of 1965 (20 U.S.C. 1001)) to develop models that can improve the ability to forecast the coastal and estuary-inland flooding that is influenced by tropical cyclones. The models should incorporate the interaction of such factors as storm surges, soil saturation, and other relevant phenomena."

#### Report

Pub. L. 107-253, §4, Oct. 29, 2002, 116 Stat. 1732, required the National Oceanic and Atmospheric Administration to provide Congress with annual reports through fiscal year 2007 on its activities under Pub. L. 107-253 (see Short Title note set out under section 311 of this title) and the success and acceptance of the inland flood warning index developed under par. (2) of this section and also to report by Jan. 1, 2006, on the likely long-term trends in inland flooding for use in outreach activities conducted under par. (4) of this section.

# §313d. NIDIS program

## (a) In general

The Under Secretary, through the National Weather Service and other appropriate weather and climate programs in the National Oceanic and Atmospheric Administration, shall establish a National Integrated Drought Information System to better inform and provide for more timely decisionmaking to reduce drought related impacts and costs.

## (b) System functions

The National Integrated Drought Information System shall—

(1) provide an effective drought early warning system that—

(A) collects and integrates information on the key indicators of drought and drought impacts, including precipitation, soil moisture, and evaporative demand, in order to make usable, reliable, and timely forecasts of drought and assessments of the severity of drought conditions and impacts; and

(B) provides such information, forecasts, and assessments on both national and regional levels;

(2) communicate drought forecasts, drought conditions, and drought impacts on an ongoing basis to public and private entities engaged in drought planning and preparedness, including—

(A) decisionmakers at the Federal, regional, State, tribal, and local levels of government;

(B) the private sector; and

(C) the public;

(3) provide timely data, information, and products that reflect local, regional, watershed, and State differences in drought conditions;

(4) coordinate, and integrate, through interagency agreements as practicable, Federal research and monitoring in support of a drought early warning information system;

(5) utilize existing forecasting and assessment programs and partnerships, including forecast communication coordinators and cooperative institutes, and improvements in seasonal precipitation and temperature, subseasonal precipitation and temperature, and low flow water prediction; and

(6) continue ongoing research and monitoring activities related to drought, including research activities relating to the prediction, length, severity, and impacts of drought and the role of extreme weather events and climate variability in drought.

### (c) Partnerships

The National Integrated Drought Information System may—

(1) engage with the private sector to improve drought monitoring, forecast, and communication if the Under Secretary determines the partnership is appropriate, cost-effective, and beneficial to the public and decisionmakers described in subsection (b)(2)(A);

(2) facilitate the development of 1 or more academic cooperative partnerships to assist with National Integrated Drought Information System functions; and

(3) utilize and support, as appropriate, monitoring by citizen scientists, including by developing best practices to facilitate maximum data integration.