

may sufficiently mitigate risks to aviation safety, such as the length of time the tower has been in existence or alternative marking methods or technologies that maintains a tower's level of conspicuity to a degree which adequately maintains the safety of the airspace; and

“(4) shall consider excluding towers located in a State that has enacted tower marking requirements according to the Federal Aviation Administration's recommended guidance for the voluntary marking of meteorological evaluation towers erected in remote and rural areas that are less than 200 feet above ground level to enhance the conspicuity of the towers for low level agricultural operations in the vicinity of those towers.

“(e) PERIODIC REVIEW.—The Administrator shall, in consultation with the Federal Communications Commission, periodically review any regulations or guidance regarding the marking of covered towers issued pursuant to this section and update them as necessary, consistent with this section, and in the interest of safety of low-altitude aircraft operations.

“(f) FCC REGULATIONS.—The Federal Communications Commission shall amend section 17.7 of title 47, Code of Federal Regulations, to require a notification to the Federal Aviation Administration for any construction or alteration of an antenna structure, as defined in section 17.2(a) of title 47, Code of Federal Regulations, that is a covered tower as defined by this section.”

#### STUDY OF EFFECTS OF NEW CONSTRUCTION OF OBSTRUCTIONS ON MILITARY INSTALLATIONS AND OPERATIONS

Pub. L. 111-383, div. A, title III, §358, Jan. 7, 2011, 124 Stat. 4198, as amended by Pub. L. 112-81, div. A, title III, §331, Dec. 31, 2011, 125 Stat. 1369; Pub. L. 112-239, div. A, title X, §1076(b)(1), Jan. 2, 2013, 126 Stat. 1949; Pub. L. 114-92, div. A, title III, §314, Nov. 25, 2015, 129 Stat. 790, related to study of effects of new construction of obstructions on military installations and operations, prior to repeal by Pub. L. 115-91, div. A, title III, §311(b)(1), Dec. 12, 2017, 131 Stat. 1347. See section 183a of Title 10, Armed Forces.

#### LANDFILLS INTERFERING WITH AIR COMMERCE

Pub. L. 106-181, title V, §503(a), Apr. 5, 2000, 114 Stat. 133, provided that: “Congress finds that—

“(1) collisions between aircraft and birds have resulted in fatal accidents;

“(2) bird strikes pose a special danger to smaller aircraft;

“(3) landfills near airports pose a potential hazard to aircraft operating there because they attract birds;

“(4) even if the landfill is not located in the approach path of the airport's runway, it still poses a hazard because of the birds' ability to fly away from the landfill and into the path of oncoming planes;

“(5) while certain mileage limits have the potential to be arbitrary, keeping landfills at least 6 miles away from an airport, especially an airport served by small planes, is an appropriate minimum requirement for aviation safety; and

“(6) closure of existing landfills (due to concerns about aviation safety) should be avoided because of the likely disruption to those who use and depend on such landfills.”

#### § 44719. Standards for navigational aids

The Secretary of Transportation shall prescribe regulations on standards for installing navigational aids, including airport control towers. For each type of facility, the regulations shall consider at a minimum traffic density (number of aircraft operations without consideration of aircraft size), terrain and other obstacles to navigation, weather characteristics, pas-

sengers served, and potential aircraft operating efficiencies.

(Pub. L. 103-272, §1(e), July 5, 1994, 108 Stat. 1201.)

#### HISTORICAL AND REVISION NOTES

<i>Revised Section</i>	<i>Source (U.S. Code)</i>	<i>Source (Statutes at Large)</i>
44719 .....	49 App.:1348 (note).	Dec. 30, 1987, Pub. L. 100-223, §308, 101 Stat. 1526.

The words “Not later than December 31, 1988” are omitted as obsolete.

#### § 44720. Meteorological services

(a) RECOMMENDATIONS.—The Administrator of the Federal Aviation Administration shall make recommendations to the Secretary of Commerce on providing meteorological services necessary for the safe and efficient movement of aircraft in air commerce. In providing the services, the Secretary shall cooperate with the Administrator and give complete consideration to those recommendations.

(b) PROMOTING SAFETY AND EFFICIENCY.—To promote safety and efficiency in air navigation to the highest possible degree, the Secretary shall—

(1) observe, measure, investigate, and study atmospheric phenomena, and maintain meteorological stations and offices, that are necessary or best suited for finding out in advance information about probable weather conditions;

(2) provide reports to the Administrator<sup>1</sup> to persons engaged in civil aeronautics that are designated by the Administrator and to other persons designated by the Secretary in a way and with a frequency that best will result in safety in, and facilitating, air navigation;

(3) cooperate with persons engaged in air commerce in meteorological services, maintain reciprocal arrangements with those persons in carrying out this clause, and collect and distribute weather reports available from aircraft in flight;

(4) maintain and coordinate international exchanges of meteorological information required for the safety and efficiency of air navigation;

(5) in cooperation with other departments, agencies, and instrumentalities of the United States Government, meteorological services of foreign countries, and persons engaged in air commerce, participate in developing an international basic meteorological reporting network, including the establishment, operation, and maintenance of reporting stations on the high seas, in polar regions, and in foreign countries;

(6) coordinate meteorological requirements in the United States to maintain standard observations, to promote efficient use of facilities, and to avoid duplication of services unless the duplication tends to promote the safety and efficiency of air navigation; and

(7) promote and develop meteorological science and foster and support research projects in meteorology through the use of

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

private and governmental research facilities and provide for publishing the results of the projects unless publication would not be in the public interest.

(Pub. L. 103-272, §1(e), July 5, 1994, 108 Stat. 1201.)

HISTORICAL AND REVISION NOTES

Revised Section	Source (U.S. Code)	Source (Statutes at Large)
44720(a) .....	49 App.:1351. 49 App.:1655(c)(1).	Aug. 23, 1958, Pub. L. 85-726, §§ 310, 803, 72 Stat. 751, 783. Oct. 15, 1966, Pub. L. 89-670, §6(c)(1), 80 Stat. 938; Jan. 12, 1983, Pub. L. 97-449, §7(b), 96 Stat. 2444.
44720(b) .....	49 App.:1463. 49 App.:1655(c)(1).	

In subsection (b), the title “Secretary” [of Commerce] is substituted for “Chief of the Weather Bureau” in section 803 of the Federal Aviation Act of 1958 (Public Law 85-726, 72 Stat. 783) because of sections 1 and 2 of Reorganization Plan No. 2 of 1965 (eff. July 13, 1965, 79 Stat. 1318). Before clause (1), the words “In order” and “in addition to any other functions or duties pertaining to weather information for other purposes” are omitted as surplus. In clause (2), the words “forecasts, warnings, and advices” are omitted as being included in “reports”. In clause (3), the words “or employees thereof” and “establish and” are omitted as surplus. The words “with those persons” are added for clarity. In clause (5), the words “departments, agencies, and instrumentalities of the United States Government” are substituted for “governmental agencies of the United States” for consistency in the revised title and with other titles of the United States Code.

Statutory Notes and Related Subsidiaries

IMPROVED SAFETY IN RURAL AREAS

Pub. L. 115-254, div. B, title III, §322, Oct. 5, 2018, 132 Stat. 3270, provided that: “The Administrator [of the Federal Aviation Administration] shall permit an air carrier operating pursuant to part 135 of title 14, Code of Federal Regulations, to operate to a destination with a published approach, in a noncontiguous State under instrument flight rules and conduct an instrument approach without a destination Meteorological Aerodrome Report (METAR) if a current Area Forecast, supplemented by noncertified local weather observations (such as weather cameras and human observations) is available, and an alternate airport that has a weather report is specified. The operator shall have approved procedures for departure and en route weather evaluation.”

TERMINAL AERODROME FORECAST

Pub. L. 115-254, div. B, title V, §516, Oct. 5, 2018, 132 Stat. 3358, provided that:

“(a) IN GENERAL.—The Administrator [of the Federal Aviation Administration] shall permit a covered air carrier to operate to or from a location in a noncontiguous State without a Terminal Aerodrome Forecast or Meteorological Aerodrome Report if—

- “(1) such location is determined to be under visual meteorological conditions;
- “(2) a current Area Forecast, supplemented by other local weather observations or reports, is available; and
- “(3) an alternate airport that has an available Terminal Aerodrome Forecast and weather report is specified.

“(b) PROCEDURES.—A covered air carrier shall—

- “(1) have approved procedures for dispatch or release and enroute weather evaluation; and
- “(2) operate under instrument flight rules enroute to the destination.

“(c) LIMITATION.—Without a written finding of necessity, based on objective and historical evidence of im-

minent threat to safety, the Administrator shall not promulgate any operation specification, policy, or guidance document pursuant to this section that is more restrictive than, or requires procedures that are not expressly stated in, the regulations.

“(d) COVERED AIR CARRIER DEFINED.—In this section, the term ‘covered air carrier’ means an air carrier operating in a noncontiguous State under part 121 of title 14, Code of Federal Regulations.”

AUTOMATED WEATHER OBSERVING SYSTEMS POLICY

Pub. L. 115-254, div. B, title V, §553, Oct. 5, 2018, 132 Stat. 3379, provided that:

“(a) IN GENERAL.—Not later than 18 months after the date of enactment of this Act [Oct. 5, 2018], the Administrator [of the Federal Aviation Administration] shall—

- “(1) update automated weather observing systems standards to maximize the use of new technologies that promote the reduction of equipment or maintenance cost for non-Federal automated weather observing systems, including the use of remote monitoring and maintenance, unless demonstrated to be ineffective;
- “(2) review, and if necessary update, existing policies in accordance with the standards developed under paragraph (1); and
- “(3) establish a process under which appropriate on-site airport personnel or an aviation official may, with appropriate manufacturer training or alternative training as determined by the Administrator, be permitted to conduct the minimum triannual preventative maintenance checks under the advisory circular for non-Federal automated weather observing systems (AC 150/5220-16E) and any other similar, successor checks.

“(b) PERMISSION.—Permission to conduct the minimum triannual preventative maintenance checks described under subsection (a)(3) and any similar, successor checks shall not be withheld but for specific cause.

“(c) STANDARDS.—In updating the standards under subsection (a)(1), the Administrator shall—

- “(1) ensure the standards are performance-based;
- “(2) use risk analysis to determine the accuracy of the automated weather observing systems outputs required for pilots to perform safe aircraft operations; and
- “(3) provide a cost-benefit analysis to determine whether the benefits outweigh the cost for any requirement not directly related to safety.

“(d) AIP ELIGIBILITY OF AWOS EQUIPMENT.—

“(1) IN GENERAL.—Notwithstanding any other law, the Administrator is authorized to and shall waive any positive benefit-cost ratio requirement for automated weather-observing system equipment under subchapter I of chapter 471, of title 49, United States Code, if—

- “(A) the airport sponsor or State, as applicable, certifies that a grant for such automated weather observing systems equipment under that chapter will assist an applicable airport to respond to regional emergency needs, including medical, firefighting, and search and rescue needs;
- “(B) the Secretary determines, after consultation with the airport sponsor or State, as applicable, that the placement of automated weather-observing equipment at the airport will not cause unacceptable radio frequency congestion; and
- “(C) the other requirements under that chapter are met.

“(2) APPLICABILITY TO LOW POPULATION DENSITY STATES.—This subsection is applicable only to airports located in states with a population density, based on the most recent decennial census, of 50 or fewer persons per square mile.

“(e) REPORT.—Not later than September 30, 2025, the Administrator shall submit to the appropriate committees of Congress [Committee on Commerce, Science, and Transportation of the Senate and Committee on

Transportation and Infrastructure of the House of Representatives] a report on the implementation of the requirements under this section.”

**AUTOMATED SURFACE OBSERVATION SYSTEM STATIONS**

Pub. L. 106-181, title VII, §728, Apr. 5, 2000, 114 Stat. 168, provided that: “The Administrator [of the Federal Aviation Administration] shall not terminate human weather observers for Automated Surface Observation System stations until—

“(1) the Administrator determines that the system provides consistent reporting of changing meteorological conditions and notifies Congress in writing of that determination; and

“(2) 60 days have passed since the report was transmitted to Congress.”

**§ 44721. Aeronautical charts and related products and services**

(a) PUBLICATION.—

(1) IN GENERAL.—The Administrator of the Federal Aviation Administration may arrange for the publication of aeronautical maps and charts necessary for the safe and efficient movement of aircraft in air navigation, using the facilities and assistance of departments, agencies, and instrumentalities of the United States Government as far as practicable.

(2) NAVIGATION ROUTES.—In carrying out paragraph (1), the Administrator shall update and arrange for the publication of clearly defined routes for navigating through a complex terminal airspace area and to and from an airport located in such an area, if the Administrator decides that publication of the routes would promote safety in air navigation. The routes shall be developed in consultation with pilots and other users of affected airports and shall be for the optional use of pilots operating under visual flight rules.

(b) INDEMNIFICATION.—The Government shall make an agreement to indemnify any person that publishes a map or chart for use in aeronautics from any part of a claim arising out of the depiction by the person on the map or chart of a defective or deficient flight procedure or airway if the flight procedure or airway was—

(1) prescribed by the Administrator;

(2) depicted accurately on the map or chart; and

(3) not obviously defective or deficient.

(c) AUTHORITY OF OFFICE OF AERONAUTICAL CHARTING AND CARTOGRAPHY.—Effective October 1, 2000, the Administrator is vested with and shall exercise the functions, powers, and duties of the Secretary of Commerce and other officers of the Department of Commerce that relate to the Office of Aeronautical Charting and Cartography to provide aeronautical charts and related products and services for the safe and efficient navigation of air commerce, under the following authorities:

(1) Sections 1 through 9 of the Act entitled “An Act to define the functions and duties of the Coast and Geodetic Survey, and for other purposes”, approved August 6, 1947,<sup>1</sup> (33 U.S.C. 883a–883h).

(2) Section 6082 of the Consolidated Omnibus Budget Reconciliation Act of 1985 (33 U.S.C. 883j).

(d) AUTHORITY.—In order that full public benefit may be derived from the dissemination of data resulting from activities under this section and of related data from other sources, the Administrator may—

(1) develop, process, disseminate and publish digital and analog data, information, compilations, and reports;

(2) compile, print, and disseminate aeronautical charts and related products and services of the United States and its territories and possessions;

(3) compile, print, and disseminate aeronautical charts and related products and services covering international airspace as are required primarily by United States civil aviation; and

(4) compile, print, and disseminate nonaeronautical navigational, transportation or public-safety-related products and services when in the best interests of the Government.

(e) CONTRACTS, COOPERATIVE AGREEMENTS, GRANTS, AND OTHER AGREEMENTS.—

(1) CONTRACTS.—The Administrator is authorized to contract with qualified organizations for the performance of any part of the authorized functions of the Office of Aeronautical Charting and Cartography when the Administrator deems such procedure to be in the public interest and will not compromise public safety.

(2) COOPERATIVE AGREEMENTS, GRANTS, AND OTHER AGREEMENTS.—The Administrator is authorized to enter into cooperative agreements, grants, reimbursable agreements, memoranda of understanding and other agreements, with a State, subdivision of a State, Federal agency, public or private organization, or individual, to carry out the purposes of this section.

(f) SPECIAL SERVICES AND PRODUCTS.—

(1) IN GENERAL.—The Administrator is authorized, at the request of a State, subdivision of a State, Federal agency, public or private organization, or individual, to conduct special services, including making special studies, or developing special publications or products on matters relating to navigation, transportation, or public safety.

(2) FEES.—The Administrator shall assess a fee for any special service provided under paragraph (1). A fee shall be not more than the actual or estimated full cost of the service. A fee may be reduced or waived for research organizations, educational organizations, or non-profit organizations, when the Administrator determines that reduction or waiver of the fee is in the best interest of the Government by furthering public safety.

(g) SALE AND DISSEMINATION OF AERONAUTICAL PRODUCTS.—

(1) IN GENERAL.—Aeronautical products created or maintained under the authority of this section shall be sold at prices established annually by the Administrator consistent with the following:

(A) MAXIMUM PRICE.—Subject to subparagraph (B), the price of an aeronautical product sold to the public shall be not more than necessary to recover all costs attributable to: (i) data base management and processing;

<sup>1</sup> So in original. The comma probably should not appear.