

CHAPTER 447 -- SAFETY REGULATION

Sec.

- 44701. General requirements.
- 44702. Issuance of certificates.
- 44703. Airman certificates.
- 44704. Type certificates, production certificates, and airworthiness certificates.
- 44705. Air carrier operating certificates.
- 44706. Airport operating certificates.
- 44707. Examining and rating air agencies.
- 44708. Inspecting and rating air navigation facilities.
- 44709. Amendments, modifications, suspensions, and revocations of certificates.
- 44710. Revocations of airman certificates for controlled substance violations.
- 44711. Prohibitions and exemption.
- 44712. Emergency locator transmitters.
- 44713. Inspection and maintenance.
- 44714. Aviation fuel standards.
- 44715. Controlling aircraft noise and sonic boom.
- 44716. Collision avoidance systems.
- 44717. Aging aircraft.
- 44718. Structures interfering with air commerce.
- 44719. Standards for navigational aids.
- 44720. Meteorological services.
- 44721. Aeronautical maps and charts.
- 44722. Aircraft operations in winter conditions.
- 44723. Annual report.

Sec. 44701. General requirements

(a) Promoting Safety. -- The Administrator of the Federal Aviation Administration shall promote safe flight of civil aircraft in air commerce by prescribing --

(1) minimum standards required in the interest of safety for appliances and for the design, material, construction, quality of work, and performance of aircraft, aircraft engines, and propellers;

(2) regulations and minimum standards in the interest of safety for --

(A) inspecting, servicing, and overhauling aircraft, aircraft engines, propellers, and appliances;

(B) equipment and facilities for, and the timing and manner of, the inspecting, servicing, and overhauling; and

(C) a qualified private person, instead of an officer or employee of the Administration, to examine and report on the inspecting, servicing, and overhauling;

(3) regulations required in the interest of safety for the reserve supply of aircraft, aircraft engines, propellers, appliances, and aircraft fuel and oil, including the reserve supply of fuel and oil carried in flight;

(4) regulations in the interest of safety for the maximum hours or periods of service of airmen and other employees of air carriers; and

(5) regulations and minimum standards for other practices, methods, and procedure the Administrator finds necessary for safety in air commerce and national security.

(b) Prescribing Minimum Safety Standards. -- The Administrator may prescribe minimum safety standards for --

(1) an air carrier to whom a certificate is issued under section 44705 of this title; and

(2) operating an airport serving any passenger operation of air carrier aircraft designed for at least 31 passenger seats.

(c) Reducing and Eliminating Accidents. -- The Administrator shall carry out this chapter in a way that best tends to reduce or eliminate the possibility or recurrence of accidents in air transportation. However, the Administrator is not required to give preference either to air transportation or to other air commerce in carrying out this chapter.

(d) Considerations and Classification of Regulations and Standards. -- When prescribing a regulation or standard under subsection (a) or (b) of this section or section 44702-44716 of this title, the Administrator shall --

(1) consider --

(A) the duty of an air carrier to provide service with the highest possible degree of safety in the public interest; and

(B) differences between air transportation and other air commerce; and

(2) classify a regulation or standard appropriate to the differences between air transportation and other air commerce.

(e) Exemptions. -- The Administrator may grant an exemption from a requirement of a regulation prescribed under subsection (a) or (b) of this section or section 44702-44716 of this title if the Administrator finds the exemption is in the public interest.

Sec. 44702. Issuance of certificates

(a) General Authority and Applications. -- The Administrator of the Federal Aviation Administration may issue airman certificates, type certificates, production certificates, airworthiness certificates, air carrier operating certificates, airport operating certificates, air agency certificates, and air navigation facility certificates under this chapter. An application for a certificate must --

(1) be under oath when the Administrator requires; and

(2) be in the form, contain information, and be filed and served in the way the Administrator prescribes.

(b) Considerations. -- When issuing a certificate under this chapter, the Administrator shall --

(1) consider --

(A) the duty of an air carrier to provide service with the highest possible degree of safety in the public interest; and

(B) differences between air transportation and other air commerce; and

(2) classify a certificate according to the differences between air transportation and other air commerce.

(c) Prior Certification. -- The Administrator may authorize

an aircraft, aircraft engine, propeller, or appliance for which a certificate has been issued authorizing the use of the aircraft, aircraft engine, propeller, or appliance in air transportation to be used in air commerce without another certificate being issued.

(d) Delegation. -- (1) Subject to regulations, supervision, and review the Administrator may prescribe, the Administrator may delegate to a qualified private person, or to an employee under the supervision of that person, a matter related to --

(A) the examination, testing, and inspection necessary to issue a certificate under this chapter; and

(B) issuing the certificate.

(2) The Administrator may rescind a delegation under this subsection at any time for any reason the Administrator considers appropriate.

(3) A person affected by an action of a private person under this subsection may apply for reconsideration of the action by the Administrator. On the Administrator's own initiative, the Administrator may reconsider the action of a private person at any time. If the Administrator decides on reconsideration that the action is unreasonable or unwarranted, the Administrator shall change, modify, or reverse the action. If the Administrator decides the action is warranted, the Administrator shall affirm the action.

Sec. 44703. Airman certificates

(a) General. -- The Administrator of the Federal Aviation Administration shall issue an airman certificate to an individual when the Administrator finds, after investigation, that the individual is qualified for, and physically able to perform the duties related to, the position to be authorized by the certificate.

(b) Contents. -- (1) An airman certificate shall --

(A) be numbered and recorded by the Administrator of the Federal Aviation Administration;

(B) contain the name, address, and description of the individual to whom the certificate is issued;

(C) contain terms the Administrator decides are necessary to ensure safety in air commerce, including terms on the duration of the certificate, periodic or special examinations, and tests of physical fitness;

(D) specify the capacity in which the holder of the certificate may serve as an airman with respect to an aircraft; and

(E) designate the class the certificate covers.

(2) A certificate issued to a pilot serving in scheduled air transportation shall have the designation "airline transport pilot" of the appropriate class.

(c) Appeals. -- (1) An individual whose application for the issuance or renewal of an airman certificate has been denied may appeal the denial to the National Transportation Safety Board, except if the individual holds a certificate that --

(A) is suspended at the time of denial; or

(B) was revoked within one year from the date of the denial.

(2) The Board shall conduct a hearing on the appeal at a place convenient to the place of residence or employment of the applicant. The Board is not bound by findings of fact of the

Administrator of the Federal Aviation Administration but is bound by all validly adopted interpretations of laws and regulations the Administrator carries out unless the Board finds an interpretation is arbitrary, capricious, or otherwise not according to law. At the end of the hearing, the Board shall decide whether the individual meets the applicable regulations and standards. The Administrator is bound by that decision.

(d) Restrictions and Prohibitions. -- The Administrator of the Federal Aviation Administration may --

(1) restrict or prohibit issuing an airman certificate to an alien; or

(2) make issuing the certificate to an alien dependent on a reciprocal agreement with the government of a foreign country.

(e) Controlled Substance Violations. -- The Administrator of the Federal Aviation Administration may not issue an airman certificate to an individual whose certificate is revoked under section 44710 of this title except --

(1) when the Administrator decides that issuing the certificate will facilitate law enforcement efforts; and

(2) as provided in section 44710(e)(2) of this title.

(f) Modifications in System. -- (1) The Administrator of the Federal Aviation Administration shall make modifications in the system for issuing airman certificates necessary to make the system more effective in serving the needs of pilots and officials responsible for enforcing laws related to the regulation of controlled substances (as defined in section 102 of the Comprehensive Drug Abuse Prevention and Control Act of 1970 (21 U.S.C. 802)). The modifications shall ensure positive and verifiable identification of each individual applying for or holding a certificate and shall address at least each of the following deficiencies in, and abuses of, the existing system:

(A) the use of fictitious names and addresses by applicants for those certificates.

(B) the use of stolen or fraudulent identification in applying for those certificates.

(C) the use by an applicant of a post office box or "mail drop" as a return address to evade identification of the applicant's address.

(D) the use of counterfeit and stolen airman certificates by pilots.

(E) the absence of information about physical characteristics of holders of those certificates.

(2) The Administrator of the Federal Aviation Administration shall prescribe regulations to carry out paragraph (1) of this subsection and provide a written explanation of how the regulations address each of the deficiencies and abuses described in paragraph (1). In prescribing the regulations, the Administrator of the Federal Aviation Administration shall consult with the Administrator of Drug Enforcement, the Commissioner of Customs, other law enforcement officials of the United States Government, representatives of State and local law enforcement officials, representatives of the general aviation aircraft industry, representatives of users of general aviation aircraft, and other interested persons.

Sec. 44704. Type certificates, production certificates, and

airworthiness certificates

(a) Type Certificates. -- (1) The Administrator of the Federal Aviation Administration shall issue a type certificate for an aircraft, aircraft engine, or propeller, or for an appliance specified under paragraph (2)(A) of this subsection when the Administrator finds that the aircraft, aircraft engine, propeller, or appliance is properly designed and manufactured, performs properly, and meets the regulations and minimum standards prescribed under section 44701(a) of this title. On receiving an application for a type certificate, the Administrator shall investigate the application and may conduct a hearing. The Administrator shall make, or require the applicant to make, tests the Administrator considers necessary in the interest of safety.

(2) The Administrator may --

(A) specify in regulations those appliances that reasonably require a type certificate in the interest of safety;

(B) include in a type certificate terms required in the interest of safety; and

(C) record on the certificate a numerical specification of the essential factors related to the performance of the aircraft, aircraft engine, or propeller for which the certificate is issued.

(b) Production Certificates. -- The Administrator shall issue a production certificate authorizing the production of a duplicate of an aircraft, aircraft engine, propeller, or appliance for which a type certificate has been issued when the Administrator finds the duplicate will conform to the certificate. On receiving an application, the Administrator shall inspect, and may require testing of, a duplicate to ensure that it conforms to the requirements of the certificate. The Administrator may include in a production certificate terms required in the interest of safety.

(c) Airworthiness Certificates. -- (1) The registered owner of an aircraft may apply to the Administrator for an airworthiness certificate for the aircraft. The Administrator shall issue an airworthiness certificate when the Administrator finds that the aircraft conforms to its type certificate and, after inspection, is in condition for safe operation. The Administrator shall register each airworthiness certificate and may include appropriate information in the certificate. The certificate number or other individual designation the Administrator requires shall be displayed on the aircraft. The Administrator may include in an airworthiness certificate terms required in the interest of safety.

(2) A person applying for the issuance or renewal of an airworthiness certificate for an aircraft for which ownership has not been recorded under section 44107 or 44110 of this title must submit with the application information related to the ownership of the aircraft the Administrator decides is necessary to identify each person having a property interest in the aircraft and the kind and extent of the interest.

Sec. 44705. Air carrier operating certificates

The Administrator of the Federal Aviation Administration shall issue an air carrier operating certificate to a person

desiring to operate as an air carrier when the Administrator finds, after investigation, that the person properly and adequately is equipped and able to operate safely under this part and regulations and standards prescribed under this part. An air carrier operating certificate shall--

(1) contain terms necessary to ensure safety in air transportation; and

(2) specify the places to and from which, and the airways of the United States over which, a person may operate as an air carrier.

Sec. 44706. Airport operating certificates

(a) General. -- The Administrator of the Federal Aviation Administration shall issue an airport operating certificate to a person desiring to operate an airport --

(1) that serves an air carrier operating aircraft designed for at least 31 passenger seats;

(2) that the Administrator requires to have a certificate; and

(3) when the Administrator finds, after investigation, that the person properly and adequately is equipped and able to operate safely under this part and regulations and standards prescribed under this part.

(b) Terms. -- An airport operating certificate issued under this section shall contain terms necessary to ensure safety in air transportation. Unless the Administrator decides that it is not in the public interest, the terms shall include conditions related to --

(1) operating and maintaining adequate safety equipment, including firefighting and rescue equipment capable of rapid access to any part of the airport used for landing, takeoff, or surface maneuvering of an aircraft; and

(2) friction treatment for primary and secondary runways that the Secretary of Transportation decides is necessary.

(c) Exemptions. -- The Administrator may exempt from the requirements of this section, related to firefighting and rescue equipment, an operator of an airport described in subsection (a) of this section having less than .25 percent of the total number of passenger boardings each year at all airports described in subsection (a) when the Administrator decides that the requirements are or would be unreasonably costly, burdensome, or impractical.

Sec. 44707. Examining and rating air agencies

The Administrator of the Federal Aviation Administration may examine and rate the following air agencies:

(1) civilian schools giving instruction in flying or repairing, altering, and maintaining aircraft, aircraft engines, propellers, and appliances, on the adequacy of instruction, the suitability and airworthiness of equipment, and the competency of instructors.

(2) repair stations and shops that repair, alter, and maintain aircraft, aircraft engines, propellers, and appliances, on the adequacy and suitability of the equipment, facilities, and materials for, and

methods of, repair and overhaul, and the competency of the individuals doing the work or giving instruction in the work.

(3) other air agencies the Administrator decides are necessary in the public interest.

Sec. 44708. Inspecting and rating air navigation facilities

The Administrator of the Federal Aviation Administration may inspect, classify, and rate an air navigation facility available for the use of civil aircraft on the suitability of the facility for that use.

Sec. 44709. Amendments, modifications, suspensions, and revocations of certificates

(a) Reinspection and Reexamination. -- The Administrator of the Federal Aviation Administration may reinspect at any time a civil aircraft, aircraft engine, propeller, appliance, air navigation facility, or air agency, or reexamine an airman holding a certificate issued under section 44703 of this title.

(b) Actions of the Administrator. -- The Administrator may issue an order amending, modifying, suspending, or revoking --

(1) any part of a certificate issued under this chapter if --

(A) the Administrator decides after conducting a reinspection, reexamination, or other investigation that safety in air commerce or air transportation and the public interest require that action; or

(B) the holder of the certificate has violated an aircraft noise or sonic boom standard or regulation prescribed under section 44715(a) of this title; and
(2) an airman certificate when the holder of the certificate is convicted of violating section 13(a) of the Fish and Wildlife Act of 1956 (16 U.S.C. 742j-1(a)).

(c) Advice to Certificate Holders and Opportunity To Answer. -- Before acting under subsection (b) of this section, the Administrator shall advise the holder of the certificate of the charges or other reasons on which the Administrator relies for the proposed action. Except in an emergency, the Administrator shall provide the holder an opportunity to answer the charges and be heard why the certificate should not be amended, modified, suspended, or revoked.

(d) Appeals. -- (1) A person adversely affected by an order of the Administrator under this section may appeal the order to the National Transportation Safety Board. After notice and an opportunity for a hearing, the Board may amend, modify, or reverse the order when the Board finds --

(A) if the order was issued under subsection (b)(1)(A) of this section, that safety in air commerce or air transportation and the public interest do not require affirmation of the order; or

(B) if the order was issued under subsection (b)(1)(B) of this section --

(i) that control or abatement of aircraft noise or sonic boom and the public health and welfare do not require affirmation of the order; or

(ii) the order, as it is related to a violation of

aircraft noise or sonic boom standards and regulations, is not consistent with safety in air commerce or air transportation.

(2) The Board may modify a suspension or revocation of a certificate to imposition of a civil penalty.

(3) When conducting a hearing under this subsection, the Board is not bound by findings of fact of the Administrator but is bound by all validly adopted interpretations of laws and regulations the Administrator carries out and of written agency policy guidance available to the public related to sanctions to be imposed under this section unless the Board finds an interpretation is arbitrary, capricious, or otherwise not according to law.

(e) Effectiveness of Orders Pending Appeal. -- When a person files an appeal with the Board under subsection (d) of the section, the order of the Administrator is stayed. However, if the Administrator advises the Board that an emergency exists and safety in air commerce or air transportation requires the order to be effective immediately --

(1) the order is effective; and

(2) the Board shall make a final disposition of the appeal not later than 60 days after the Administrator so advises the Board.

(f) Judicial Review. -- A person substantially affected by an order of the Board under this section, or the Administrator when the Administrator decides that an order of the Board under this section will have a significant adverse impact on carrying out this part, may obtain judicial review of the order under section 46110 of this title. The Administrator shall be made a party to the judicial review proceedings. Findings of fact of the Board are conclusive if supported by substantial evidence.

Sec. 44710. Revocations of airman certificates for controlled substance violations

(a) Definition. -- In this section, "controlled substance" has the same meaning given that term in section 102 of the Comprehensive Drug Abuse Prevention and Control Act of 1970 (21 U.S.C. 802).

(b) Revocation. -- (1) The Administrator of the Federal Aviation Administration shall issue an order revoking an airman certificate issued an individual under section 44703 of this title after the individual is convicted, under a law of the United States or a State related to a controlled substance (except a law related to simple possession of a controlled substance), of an offense punishable by death or imprisonment for more than one year if the Administrator finds that --

(A) an aircraft was used to commit, or facilitate the commission of, the offense; and

(B) the individual served as an airman, or was on the aircraft, in connection with committing, or facilitating the commission of, the offense.

(2) The Administrator shall issue an order revoking an airman certificate issued an individual under section 44703 of this title if the Administrator finds that --

(A) the individual knowingly carried out an activity punishable, under a law of the United States or a State related to a controlled substance (except a law related to

simple possession of a controlled substance), by death or imprisonment for more than one year;

(B) an aircraft was used to carry out or facilitate the activity; and

(C) the individual served as an airman, or was on the aircraft, in connection with carrying out, or facilitating the carrying out of, the activity.

(3) The Administrator has no authority under paragraph (1) of this subsection to review whether an airman violated a law of the United States or a State related to a controlled substance.

(c) Advice to Holders and Opportunity To Answer. -- Before the Administrator revokes a certificate under subsection (b) of this section, the Administrator must --

(1) advise the holder of the certificate of the charges or reasons on which the Administrator relies for the proposed revocation; and

(2) provide the holder of the certificate an opportunity to answer the charges and be heard why the certificate should not be revoked.

(d) Appeals. -- (1) An individual whose certificate is revoked by the Administrator under subsection (b) of this section may appeal the revocation order to the National Transportation Safety Board. The Board shall affirm or reverse the order after providing notice and an opportunity for a hearing on the record. When conducting the hearing, the Board is not bound by findings of fact of the Administrator but shall be bound by all validly adopted interpretations of laws and regulations the Administrator carries out and of written agency policy guidance available to the public related to sanctions to be imposed under this section unless the Board finds an interpretation is arbitrary, capricious, or otherwise not according to law.

(2) When an individual files an appeal with the Board under this subsection, the order of the Administrator revoking the certificate is stayed. However, if the Administrator advises the Board that safety in air transportation or air commerce requires the immediate effectiveness of the order --

(A) the order remains effective; and

(B) the Board shall make a final disposition of the appeal not later than 60 days after the Administrator so advises the Board.

(3) An individual substantially affected by an order of the Board under this subsection, or the Administrator when the Administrator decides that an order of the Board will have a significant adverse effect on carrying out this part, may obtain judicial review of the order under section 46110 of this title. The Administrator shall be made a party to the judicial review proceedings. Findings of fact of the Board are conclusive if supported by substantial evidence.

(e) Acquittal. -- (1) The Administrator may not revoke, and the Board may not affirm a revocation of, an airman certificate under subsection (b)(2) of this section on the basis of an activity described in subsection (b)(2)(A) if the holder of the certificate is acquitted of all charges related to a controlled substance in an indictment or information arising from the activity.

(2) If the Administrator has revoked an airman certificate under this section because of an activity described in subsection

(b)(2)(A) of this section, the Administrator shall reissue a certificate to the individual if --

(A) the individual otherwise satisfies the requirements for a certificate under section 44703 of this title; and

(B)(i) the individual subsequently is acquitted of all charges related to a controlled substance in an indictment or information arising from the activity; or (ii) the conviction on which a revocation under subsection (b)(1) of this section is based is reversed.

(f) Waivers. -- The Administrator may waive the requirement of subsection (b) of this section that an airman certificate of an individual be revoked if --

(1) a law enforcement official of the United States Government or of a State requests a waiver; and

(2) the Administrator decides that the waiver will facilitate law enforcement efforts.

Sec. 44711. Prohibitions and exemption

(a) Prohibitions. -- A person may not --

(1) operate a civil aircraft in air commerce without an airworthiness certificate in effect or in violation of a term of the certificate;

(2) serve in any capacity as an airman with respect to a civil aircraft, aircraft engine, propeller, or appliance used, or intended for use, in air commerce --

(A) without an airman certificate authorizing the airman to serve in the capacity for which the certificate was issued; or

(B) in violation of a term of the certificate or a regulation prescribed or order issued under section 44701(a) or (b) or 44702- 44716 of this title;

(3) employ for service related to civil aircraft used in air commerce an airman who does not have an airman certificate authorizing the airman to serve in the capacity for which the airman is employed;

(4) operate as an air carrier without an air carrier operating certificate or in violation of a term of the certificate;

(5) operate aircraft in air commerce in violation of a regulation prescribed or certificate issued under section 44701(a) or (b) or 44702- 44716 of this title;

(6) operate a seaplane or other aircraft of United States registry on the high seas in violation of a regulation under section 3 of the International Navigational Rules Act of 1977 (33 U.S.C. 1602);

(7) violate a term of an air agency or production certificate or a regulation prescribed or order issued under section 44701(a) or (b) or 44702-44716 of this title related to the holder of the certificate;

(8) operate an airport without an airport operating certificate required under section 44706 of this title or in violation of a term of the certificate; or

(9) manufacture, deliver, sell, or offer for sale any aviation fuel or additive in violation of a regulation prescribed under section 44714 of this title.

(b) Exemption. -- On terms the Administrator of the Federal Aviation Administration prescribes as being in the public

interest, the Administrator may exempt a foreign aircraft and airmen serving on the aircraft from subsection (a) of this section. However, an exemption from observing air traffic regulations may not be granted.

Sec. 44712. Emergency locator transmitters

(a) Installation. -- An emergency locator transmitter must be installed on a fixed-wing powered civil aircraft for use in air commerce.

(b) Nonapplication. -- Subsection (a) of this section does not apply to --

- (1) turbojet-powered aircraft;
- (2) aircraft when used in scheduled flights by scheduled air carriers holding certificates issued by the Secretary of Transportation under subpart II of this part;
- (3) aircraft when used in training operations conducted entirely within a 50 mile radius of the airport from which the training operations begin;
- (4) aircraft when used in flight operations related to design and testing, the manufacture, preparation, and delivery of the aircraft, or the aerial application of a substance for an agricultural purpose;
- (5) aircraft holding certificates from the Administrator of the Federal Aviation Administration for research and development;
- (6) aircraft when used for showing compliance with regulations, crew training, exhibition, air racing, or market surveys; and
- (7) aircraft equipped to carry only one individual.

(c) Removal. -- The Administrator shall prescribe regulations specifying the conditions under which an aircraft subject to subsection (a) of this section may operate when its emergency locator transmitter has been removed for inspection, repair, alteration, or replacement.

Sec. 44713. Inspection and maintenance

(a) General Equipment Requirements. -- An air carrier shall make, or cause to be made, any inspection, repair, or maintenance of equipment used in air transportation as required by this part or regulations prescribed or orders issued by the Administrator of the Federal Aviation Administration under this part. A person operating, inspecting, repairing, or maintaining the equipment shall comply with those requirements, regulations, and orders.

(b) Duties of Inspectors. -- The Administrator of the Federal Aviation Administration shall employ inspectors who shall --

- (1) inspect aircraft, aircraft engines, propellers, and appliances designed for use in air transportation, during manufacture and when in use by an air carrier in air transportation, to enable the Administrator to decide whether the aircraft, aircraft engines, propellers, or appliances are in safe condition and maintained properly; and
- (2) advise and cooperate with the air carrier during that inspection and maintenance.

(c) Unsafe Aircraft, Engines, Propellers, and Appliances. -- When an inspector decides that an aircraft,

aircraft engine, propeller, or appliance is not in condition for safe operation, the inspector shall notify the air carrier in the form and way prescribed by the Administrator of the Federal Aviation Administration. For 5 days after the carrier is notified, the aircraft, engine, propeller, or appliance may not be used in air transportation or in a way that endangers air transportation unless the Administrator or the inspector decides the aircraft, engine, propeller, or appliance is in condition for safe operation.

(d) Modifications in System. -- (1) The Administrator of the Federal Aviation Administration shall make modifications in the system for processing forms for major repairs or alterations to fuel tanks and fuel systems of aircraft not used to provide air transportation that are necessary to make the system more effective in serving the needs of users of the system, including officials responsible for enforcing laws related to the regulation of controlled substances (as defined in section 102 of the Comprehensive Drug Abuse Prevention and Control Act of 1970 (21 U.S.C. 802)). The modifications shall address at least each of the following deficiencies in, and abuses of, the existing system:

(A) the lack of a special identification feature to allow the forms to be distinguished easily from other major repair and alteration forms.

(B) the excessive period of time required to receive the forms at the Airmen and Aircraft Registry of the Administration.

(C) the backlog of forms waiting for processing at the Registry.

(D) the lack of ready access by law enforcement officials to information contained on the forms.

(2) The Administrator of the Federal Aviation Administration shall prescribe regulations to carry out paragraph (1) of this subsection and provide a written explanation of how the regulations address each of the deficiencies and abuses described in paragraph (1). In prescribing the regulations, the Administrator of the Federal Aviation Administration shall consult with the Administrator of Drug Enforcement, the Commissioner of Customs, other law enforcement officials of the United States Government, representatives of State and local law enforcement officials, representatives of the general aviation aircraft industry, representatives of users of general aviation aircraft, and other interested persons.

Sec. 44714. Aviation fuel standards

The Administrator of the Federal Aviation Administration shall prescribe --

(1) standards for the composition or chemical or physical properties of an aircraft fuel or fuel additive to control or eliminate aircraft emissions the Administrator of the Environmental Protection Agency decides under section 231 of the Clean Air Act (42 U.S.C. 7571) endanger the public health or welfare; and

(2) regulations providing for carrying out and enforcing those standards.

Sec. 44715. Controlling aircraft noise and sonic boom

(a) Standards and Regulations. -- (1) To relieve and protect the public health and welfare from aircraft noise and sonic boom, the Administrator of the Federal Aviation Administration shall prescribe --

(A) standards to measure aircraft noise and sonic boom;
and

(B) regulations to control and abate aircraft noise and sonic boom.

(2) The Administrator of the Federal Aviation Administration may prescribe standards and regulations under this subsection only after consulting with the Administrator of the Environmental Protection Agency. The standards and regulations shall be applied when issuing, amending, modifying, suspending, or revoking a certificate authorized under this chapter.

(3) An original type certificate may be issued under section 44704(a) of this title for an aircraft for which substantial noise abatement can be achieved only after the Administrator of the Federal Aviation Administration prescribes standards and regulations under this section that apply to that aircraft.

(b) Considerations and Consultation. -- When prescribing a standard or regulation under this section, the Administrator of the Federal Aviation Administration shall --

(1) consider relevant information related to aircraft noise and sonic boom;

(2) consult with appropriate departments, agencies, and instrumentalities of the United States Government and State and interstate authorities;

(3) consider whether the standard or regulation is consistent with the highest degree of safety in air transportation or air commerce in the public interest;

(4) consider whether the standard or regulation is economically reasonable, technologically practicable, and appropriate for the applicable aircraft, aircraft engine, appliance, or certificate; and

(5) consider the extent to which the standard or regulation will carry out the purposes of this section.

(c) Proposed Regulations of Administrator of Environmental Protection Agency. -- The Administrator of the Environmental Protection Agency shall submit to the Administrator of the Federal Aviation Administration proposed regulations to control and abate aircraft noise and sonic boom (including control and abatement through the use of the authority of the Administrator of the Federal Aviation Administration) that the Administrator of the Environmental Protection Agency considers necessary to protect the public health and welfare. The Administrator of the Federal Aviation Administration shall consider those proposed regulations and shall publish them in a notice of proposed regulations not later than 30 days after they are received. Not later than 60 days after publication, the Administrator of the Federal Aviation Administration shall begin a hearing at which interested persons are given an opportunity for oral and written presentations. Not later than 90 days after the hearing is completed and after consulting with the Administrator of the Environmental Protection Agency, the Administrator of the Federal Aviation Administration shall --

(1) prescribe regulations as provided by this

section --

(A) substantially the same as the proposed regulations submitted by the Administrator of the Environmental Protection Agency; or

(B) that amend the proposed regulations; or

(2) publish in the Federal Register --

(A) a notice that no regulation is being prescribed in response to the proposed regulations of the Administrator of the Environmental Protection Agency;

(B) a detailed analysis of, and response to, all information the Administrator of the Environmental Protection Agency submitted with the proposed regulations; and

(C) a detailed explanation of why no regulation is being prescribed.

(d) Consultation and Reports. -- (1) If the Administrator of the Environmental Protection Agency believes that the action of the Administrator of the Federal Aviation Administration under subsection (c)(1)(B) or (2) of this section does not protect the public health and welfare from aircraft noise or sonic boom, consistent with the considerations in subsection (b) of this section, the Administrator of the Environmental Protection Agency shall consult with the Administrator of the Federal Aviation Administration and may request a report on the advisability of prescribing the regulation as originally proposed. The request, including a detailed statement of the information on which the request is based, shall be published in the Federal Register.

(2) The Administrator of the Federal Aviation Administration shall report to the Administrator of the Environmental Protection Agency within the time, if any, specified in the request. However, the time specified must be at least 90 days after the date of the request. The report shall --

(A) be accompanied by a detailed statement of the findings of the Administrator of the Federal Aviation Administration and the reasons for the findings;

(B) identify any statement related to an action under subsection (c) of this section filed under section 102(2)(C) of the National Environmental Policy Act of 1969 (42 U.S.C. 4332(2)(C));

(C) specify whether and where that statement is available for public inspection; and

(D) be published in the Federal Register unless the request proposes specific action by the Administrator of the Federal Aviation Administration and the report indicates that action will be taken.

(e) Supplemental Reports. -- The Administrator of the Environmental Protection Agency may request the Administrator of the Federal Aviation Administration to file a supplemental report if the report under subsection (d) of this section indicates that the proposed regulations under subsection (c) of this section, for which a statement under section 102(2)(C) of the Act (42 U.S.C. 4332(2)(C)) is not required, should not be prescribed. The supplemental report shall be published in the Federal Register within the time the Administrator of the Environmental Protection Agency specifies. However, the time specified must be at least 90 days after the date of the request. The supplemental report shall contain a comparison of the environmental effects,

including those that cannot be avoided, of the action of the Administrator of the Federal Aviation Administration and the proposed regulations of the Administrator of the Environmental Protection Agency.

(f) Exemptions. -- An exemption from a standard or regulation prescribed under this section may be granted only if, before granting the exemption, the Administrator of the Federal Aviation Administration consults with the Administrator of the Environmental Protection Agency. However, if the Administrator of the Federal Aviation Administration finds that safety in air transportation or air commerce requires an exemption before the Administrator of the Environmental Protection Agency can be consulted, the exemption may be granted. The Administrator of the Federal Aviation Administration shall consult with the Administrator of the Environmental Protection Agency as soon as practicable after the exemption is granted.

Sec. 44716. Collision avoidance systems

(a) Development and Certification. -- The Administrator of the Federal Aviation Administration shall --

(1) complete the development of the collision avoidance system known as TCAS-II so that TCAS-II can operate under visual and instrument flight rules and can be upgraded to the performance standards applicable to the collision avoidance system known as TCAS-III;

(2) develop and carry out a schedule for developing and certifying TCAS-II that will result in certification not later than June 30, 1989; and

(3) submit to Congress monthly reports on the progress being made in developing and certifying TCAS-II.

(b) Installation and Operation. -- The Administrator shall require by regulation that, not later than 30 months after the date certification is made under subsection (a)(2) of this section, TCAS-II be installed and operated on each civil aircraft that has a maximum passenger capacity of at least 31 seats and is used to provide air transportation of passengers, including intrastate air transportation of passengers. The Administrator may extend the deadline in this subsection for not more than 2 years if the Administrator finds the extension is necessary to promote --

(1) a safe and orderly transition to the operation of a fleet of civil aircraft described in this subsection equipped with TCAS-II; or

(2) other safety objectives.

(c) Operational Evaluation. -- Not later than December 30, 1990, the Administrator shall establish a one-year program to collect and assess safety and operational information from civil aircraft equipped with TCAS-II for the operational evaluation of TCAS-II. The Administrator shall encourage foreign air carriers that operate civil aircraft equipped with TCAS-II to participate in the program.

(d) Amending Schedule for Windshear Equipment. -- The Administrator shall consider the feasibility and desirability of amending the schedule for installing airborne low-altitude windshear equipment to make the schedule compatible with the schedule for installing TCAS-II.

(e) Deadline for Development and Certification. -- (1) The

Administrator shall complete developing and certifying TCAS-III as soon as possible.

(2) Necessary amounts may be appropriated from the Airport and Airway Trust Fund established under section 9502 of the Internal Revenue Code of 1986 (26 U.S.C. 9502) to carry out this subsection.

(f) Installing and Using Transponders. -- The Administrator shall prescribe regulations requiring that, not later than December 30, 1990, operating transponders with automatic altitude reporting capability be installed and used for aircraft operating in designated terminal airspace where radar service is provided for separation of aircraft. The Administrator may provide for access to that airspace (except terminal control areas and airport radar service areas) by nonequipped aircraft if the Administrator finds the access will not interfere with the normal traffic flow.

Sec. 44717. Aging aircraft

(a) Inspections and Reviews. -- The Administrator of the Federal Aviation Administration shall prescribe regulations that ensure the continuing airworthiness of aging aircraft. The regulations prescribed under subsection (a) of this section --

(1) at least shall require the Administrator to make inspections, and review the maintenance and other records, of each aircraft an air carrier uses to provide air transportation that the Administrator decides may be necessary to enable the Administrator to decide whether the aircraft is in safe condition and maintained properly for operation in air transportation;

(2) at least shall require an air carrier to demonstrate to the Administrator, as part of the inspection, that maintenance of the aircraft's age-sensitive parts and components has been adequate and timely enough to ensure the highest degree of safety;

(3) shall require the air carrier to make available to the Administrator the aircraft and any records about the aircraft that the Administrator requires to carry out a review; and

(4) shall establish procedures to be followed in carrying out an inspection.

(b) When and How Inspections and Reviews Shall Be Carried Out. -- (1) Inspections and reviews required under subsection (a)(1) of this section shall be carried out as part of each heavy maintenance check of the aircraft conducted after the 14th year in which the aircraft has been in service.

(2) Inspections under subsection (a)(1) of this section shall be carried out as provided under section 44701(a)(2)(B) and (C) of this title.

(c) Aircraft Maintenance Safety Programs. -- The Administrator shall establish --

(1) a program to verify that air carriers are maintaining their aircraft according to maintenance programs approved by the Administrator;

(2) a program --

(A) to provide inspectors and engineers of the Administration with training necessary to conduct auditing inspections of aircraft operated by air

carriers for corrosion and metal fatigue; and

(B) to enhance participation of those inspectors and engineers in those inspections; and

(3) a program to ensure that air carriers demonstrate to the Administrator their commitment and technical competence to ensure the airworthiness of aircraft that the carriers operate.

(d) Foreign Air Transportation. -- (1) The Administrator shall take all possible steps to encourage governments of foreign countries and relevant international organizations to develop standards and requirements for inspections and reviews that --

(A) will ensure the continuing airworthiness of aging aircraft used by foreign air carriers to provide foreign air transportation to and from the United States; and

(B) will provide passengers of those foreign air carriers with the same level of safety that will be provided passengers of air carriers by carrying out this section.

(2) Not later than September 30, 1994, the Administrator shall report to Congress on carrying out this subsection.

Sec. 44718. Structures interfering with air commerce

(a) Notice. -- By regulation or by order when necessary, the Secretary of Transportation shall require a person to give adequate public notice, in the form and way the Secretary prescribes, of the construction, alteration, establishment, or expansion, or the proposed construction, alteration, establishment, or expansion, of a structure or sanitary landfill when the notice will promote --

(1) safety in air commerce; and

(2) the efficient use and preservation of the navigable airspace and of airport traffic capacity at public-use airports.

(b) Studies. -- (1) Under regulations prescribed by the Secretary, if the Secretary decides that constructing or altering a structure may result in an obstruction of the navigable airspace or an interference with air navigation facilities and equipment or the navigable airspace, the Secretary shall conduct an aeronautical study to decide the extent of any adverse impact on the safe and efficient use of the airspace, facilities, or equipment. In conducting the study, the Secretary shall consider factors relevant to the efficient and effective use of the navigable airspace, including --

(A) the impact on arrival, departure, and en route procedures for aircraft operating under visual flight rules;

(B) the impact on arrival, departure, and en route procedures for aircraft operating under instrument flight rules;

(C) the impact on existing public-use airports and aeronautical facilities;

(D) the impact on planned public-use airports and aeronautical facilities; and

(E) the cumulative impact resulting from the proposed construction or alteration of a structure when combined with the impact of other existing or proposed structures.

(2) On completing the study, the Secretary shall issue a report disclosing completely the extent of the adverse impact on

the safe and efficient use of the navigable airspace that the Secretary finds will result from constructing or altering the structure.

(c) Broadcast Applications and Tower Studies. -- In carrying out laws related to a broadcast application and conducting an aeronautical study related to broadcast towers, the Administrator of the Federal Aviation Administration and the Federal Communications Commission shall take action necessary to coordinate efficiently --

- (1) the receipt and consideration of, and action on, the application; and
- (2) the completion of any associated aeronautical study.

Sec. 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, passengers served, and potential aircraft operating efficiencies.

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

Sec. 44721. Aeronautical maps and charts

(a) Publication. -- (1) 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) In carrying out paragraph (1) of this subsection, 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.

Sec. 44722. Aircraft operations in winter conditions

The Administrator of the Federal Aviation Administration shall prescribe regulations requiring procedures to improve safety of aircraft operations during winter conditions. In deciding on the procedures to be required, the Administrator shall consider at least aircraft and air traffic control modifications, the availability of different types of deicing fluids (considering their efficacy and environmental limitations), the types of deicing equipment available, and the feasibility and desirability of establishing timeframes within which deicing must occur under certain types of inclement weather.

Sec. 44723. Annual report

Not later than January 1 of each year, the Secretary of Transportation shall submit to Congress a comprehensive report on the safety enforcement activities of the Federal Aviation

Administration during the fiscal year ending the prior September 30th. The report shall include --

(1) a comparison of end-of-year staffing levels by operations, maintenance, and avionics inspector categories to staffing goals and a statement on how staffing standards were applied to make allocations between air carrier and general aviation operations, maintenance, and avionics inspectors;

(2) schedules showing the range of inspector experience by various inspector work force categories, and the number of inspectors in each of the categories who are considered fully qualified;

(3) schedules showing the number and percentage of inspectors who have received mandatory training by individual course, and the number of inspectors by work force categories, who have received all mandatory training;

(4) a description of the criteria used to set annual work programs, an explanation of how these criteria differ from criteria used in the prior fiscal year and how the annual work programs ensure compliance with appropriate regulations and safe operating practices;

(5) a comparison of actual inspections performed during the fiscal year to the annual work programs by field location and, for any field location completing less than 80 percent of its planned number of inspections, an explanation of why annual work program plans were not met;

(6) a statement of the adequacy of Administration internal management controls available to ensure that field managers comply with Administration policies and procedures, including those on inspector priorities, district office coordination, minimum inspection standards, and inspection followup;

(7) the status of efforts made by the Administration to update inspector guidance documents and regulations to include technological, management, and structural changes taking place in the aviation industry, including a listing of the backlog of all proposed regulatory amendments;

(8) a list of the specific operational measures of effectiveness used to evaluate --

(A) the progress in meeting program objectives;

(B) the quality of program delivery; and

(C) the nature of emerging safety problems;

(9) a schedule showing the number of civil penalty cases closed during the 2 prior fiscal years, including the total initial and final penalties imposed, the total number of dollars collected, the range of dollar amounts collected, the average case processing time, and the range of case processing time;

(10) a schedule showing the number of enforcement actions taken (except civil penalties) during the 2 prior fiscal years, including the total number of violations cited, and the number of cited violation cases closed by certificate suspensions, certificate revocations, warnings, and no action taken; and

(11) schedules showing the safety record of the

aviation industry during the fiscal year for air carriers and general aviation, including --

(A) the number of inspections performed when deficiencies were identified compared with inspections when no deficiencies were found;

(B) the frequency of safety deficiencies for each air carrier; and

(C) an analysis based on data of the general status of air carrier and general aviation compliance with aviation regulations.