

## AIRCRAFT DISPATCHERS

Pub. L. 106-181, title V, §516, Apr. 5, 2000, 114 Stat. 145, provided that:

“(a) STUDY.—The Administrator [of the Federal Aviation Administration] shall conduct a study of the role of aircraft dispatchers in enhancing aviation safety.

“(b) CONTENTS.—The study shall include an assessment of whether or not aircraft dispatchers should be required for those operations not presently requiring aircraft dispatcher assistance, operational control issues related to the aircraft dispatching functions, and whether or not designation of positions within the Federal Aviation Administration for oversight of dispatchers would enhance aviation safety.

“(c) REPORT.—Not later than 1 year after the date of the enactment of this Act [Apr. 5, 2000], the Administrator shall transmit to Congress a report on the results of the study conducted under this section.”

## OCCUPATIONAL INJURIES OF AIRPORT WORKERS

Pub. L. 106-181, title V, §520, Apr. 5, 2000, 114 Stat. 149, provided that:

“(a) STUDY.—The Administrator [of the Federal Aviation Administration] shall conduct a study to determine the number of persons working at airports who are injured or killed as a result of being struck by a moving vehicle while on an airport tarmac, the seriousness of the injuries to such persons, and whether or not reflective safety vests or other actions should be required to enhance the safety of such workers.

“(b) REPORT.—Not later than 1 year after the date of the enactment of this Act [Apr. 5, 2000], the Administrator shall transmit to Congress a report on the results of the study conducted under this section.”

## ALKALI SILICA REACTIVITY DISTRESS

Pub. L. 106-181, title VII, §743, Apr. 5, 2000, 114 Stat. 175, provided that:

“(a) IN GENERAL.—The Administrator [of the Federal Aviation Administration] may conduct a study on the impact of alkali silica reactivity distress on airport runways and taxiways and the use of lithium salts and other alternatives for mitigation and prevention of such distress. The study shall include a determination based on in-the-field inspections followed by petrographic analysis or other similar techniques.

“(b) AUTHORITY TO MAKE GRANTS.—The Administrator may carry out the study by making a grant to, or entering into a cooperative agreement with, a non-profit organization for the conduct of all or a part of the study.

“(c) REPORT.—Not later than 18 months after the date of initiation of the study under subsection (a), the Administrator shall transmit to Congress a report on the results of the study.”

## RESEARCH PROGRAM TO IMPROVE AIRFIELD PAVEMENTS

Pub. L. 108-176, title VII, §704, Dec. 12, 2003, 117 Stat. 2581, provided that:

“(a) CONTINUATION OF PROGRAM.—The Administrator of the Federal Aviation Administration shall continue the program to consider awards to nonprofit concrete and asphalt pavement research foundations to improve the design, construction, rehabilitation, and repair of airfield pavements to aid in the development of safer, more cost effective, and more durable airfield pavements.

“(b) USE OF GRANTS OR COOPERATIVE AGREEMENTS.—The Administrator may use grants or cooperative agreements in carrying out this section.

“(c) STATUTORY CONSTRUCTION.—Nothing in this section requires the Administrator to prioritize an airfield pavement research program above safety, security, Flight 21, environment, or energy research programs.”

Pub. L. 106-181, title IX, §905, Apr. 5, 2000, 114 Stat. 196, provided that: “The Administrator [of the Federal Aviation Administration] shall consider awards to nonprofit concrete pavement research foundations to improve the design, construction, rehabilitation, and re-

pair of rigid concrete airfield pavements to aid in the development of safer, more cost-effective, and durable airfield pavements. The Administrator may use a grant or cooperative agreement for this purpose. Nothing in this section shall require the Administrator to prioritize an airfield pavement research program above safety, security, Flight 21, environment, or energy research programs.”

## § 44506. Air traffic controllers

(a) RESEARCH ON EFFECT OF AUTOMATION ON PERFORMANCE.—To develop the means necessary to establish appropriate selection criteria and training methodologies for the next generation of air traffic controllers, the Administrator of the Federal Aviation Administration shall conduct research to study the effect of automation on the performance of the next generation of air traffic controllers and the air traffic control system. The research shall include investigating—

(1) methods for improving and accelerating future air traffic controller training through the application of advanced training techniques, including the use of simulation technology;

(2) the role of automation in the air traffic control system and its physical and psychological effects on air traffic controllers;

(3) the attributes and aptitudes needed to function well in a highly automated air traffic control system and the development of appropriate testing methods for identifying individuals with those attributes and aptitudes;

(4) innovative methods for training potential air traffic controllers to enhance the benefits of automation and maximize the effectiveness of the air traffic control system; and

(5) new technologies and procedures for exploiting automated communication systems, including Mode S Transponders, to improve information transfers between air traffic controllers and aircraft pilots.

(b) RESEARCH ON HUMAN FACTOR ASPECTS OF AUTOMATION.—The Administrators of the Federal Aviation Administration and National Aeronautics and Space Administration may make an agreement for the use of the National Aeronautics and Space Administration’s unique human factor facilities and expertise in conducting research activities to study the human factor aspects of the highly automated environment for the next generation of air traffic controllers. The research activities shall include investigating—

(1) human perceptual capabilities and the effect of computer-aided decision making on the workload and performance of air traffic controllers;

(2) information management techniques for advanced air traffic control display systems; and

(3) air traffic controller workload and performance measures, including the development of predictive models.

(c) COLLEGIATE TRAINING INITIATIVE.—(1) The Administrator of the Federal Aviation Administration may maintain the Collegiate Training Initiative program by making new agreements and continuing existing agreements with institutions of higher education (as defined by the

Administrator) under which the institutions prepare students for the position of air traffic controller with the Department of Transportation (as defined in section 2109 of title 5). The Administrator may establish standards for the entry of institutions into the program and for their continued participation.

(2)(A) The Administrator of the Federal Aviation Administration may appoint an individual who has successfully completed a course of training in a program described in paragraph (1) of this subsection to the position of air traffic controller noncompetitively in the excepted service (as defined in section 2103 of title 5). An individual appointed under this paragraph serves at the pleasure of the Administrator, subject to section 7511 of title 5. However, an appointment under this paragraph may be converted from one in the excepted service to a career conditional or career appointment in the competitive civil service (as defined in section 2102 of title 5) when the individual achieves full performance level air traffic controller status, as decided by the Administrator.

(B) The authority under subparagraph (A) of this paragraph to make appointments in the excepted service expires on October 6, 1997, except that the Administrator of the Federal Aviation Administration may extend the authority for one or more successive one-year periods.

(d) AIR TRAFFIC CONTROL SPECIALIST QUALIFICATION TRAINING.—

(1) APPOINTMENT OF AIR TRAFFIC CONTROL SPECIALISTS.—The Administrator is authorized to appoint a qualified air traffic control specialist candidate for placement in an airport traffic control facility if the candidate has—

(A) received a control tower operator certification (referred to in this subsection as a “CTO” certificate); and

(B) satisfied all other applicable qualification requirements for an air traffic control specialist position, including successful completion of orientation training at the Federal Aviation Administration Academy.

(2) COMPENSATION AND BENEFITS.—An individual appointed under paragraph (1) shall receive the same compensation and benefits, and be treated in the same manner as, any other individual appointed as a developmental air traffic controller.

(3) REPORT.—Not later than 2 years after the date of enactment of the FAA Modernization and Reform Act of 2012, the Administrator shall submit to Congress a report that evaluates the effectiveness of the air traffic control specialist qualification training provided pursuant to this section, including the graduation rates of candidates who received a CTO certificate and are working in airport traffic control facilities.

(4) ADDITIONAL APPOINTMENTS.—If the Administrator determines that air traffic control specialists appointed pursuant to this subsection are more successful in carrying out the duties of an air traffic controller than air traffic control specialists hired from the general public without any such certification, the Administrator shall increase, to the maximum extent practicable, the number of appointments of candidates who possess such certification.

(5) REIMBURSEMENT FOR TRAVEL EXPENSES ASSOCIATED WITH CERTIFICATIONS.—

(A) IN GENERAL.—Subject to subparagraph (B), the Administrator may accept reimbursement from an educational entity that provides training to an air traffic control specialist candidate to cover reasonable travel expenses of the Administrator associated with issuing certifications to such candidates.

(B) TREATMENT OF REIMBURSEMENTS.—Notwithstanding section 3302 of title 31, any reimbursement authorized to be collected under subparagraph (A) shall—

(i) be credited as offsetting collections to the account that finances the activities and services for which the reimbursement is accepted;

(ii) be available for expenditure only to pay the costs of activities and services for which the reimbursement is accepted, including all costs associated with collecting such reimbursement; and

(iii) remain available until expended.

(e) STAFFING REPORT.—The Administrator of the Federal Aviation Administration shall submit annually to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Commerce, Science, and Transportation of the Senate a report containing—

(1) the staffing standards used to determine the number of air traffic controllers needed to operate the air traffic control system of the United States;

(2) a 3-year projection of the number of controllers needed to be employed to operate the system to meet the standards; and

(3) a detailed plan for employing the controllers, including projected budget requests.

(Pub. L. 103–272, §1(e), July 5, 1994, 108 Stat. 1178; Pub. L. 104–287, §5(9), Oct. 11, 1996, 110 Stat. 3389; Pub. L. 112–95, title VI, §607, Feb. 14, 2012, 126 Stat. 114.)

#### HISTORICAL AND REVISION NOTES

<i>Revised Section</i>	<i>Source (U.S. Code)</i>	<i>Source (Statutes at Large)</i>
44506(a), (b)	49 App.:1353 (note).	Nov. 3, 1988, Pub. L. 100–591, §8(a)–(c), 102 Stat. 3015; Nov. 17, 1988, Pub. L. 100–685, §§601–603, 102 Stat. 4102.
44506(c) .....	49 App.:1348a.	Oct. 6, 1992, Pub. L. 102–388, §362, 106 Stat. 1560.
44506(d) .....	49 App.:1348 (note).	Oct. 31, 1992, Pub. L. 102–581, §120, 106 Stat. 4884.

In subsections (a) and (b), the text of section 8(a) and (b)(3) of the Aviation Safety Research Act of 1988 (Public Law 100–581, 102 Stat. 3015, 3016) and sections 601 and 602(3) of the National Aeronautics and Space Administration Authorization Act, Fiscal Year 1989 (Public Law 100–685, 102 Stat. 4102, 4103) is omitted as executed.

In subsection (c), the words “institutions of higher education” are substituted for “post-secondary educational institutions” for consistency in the revised title.

#### REFERENCES IN TEXT

The date of enactment of the FAA Modernization and Reform Act of 2012, referred to in subsec. (d)(3), is the date of enactment of Pub. L. 112–95, which was approved Feb. 14, 2012.

## AMENDMENTS

2012—Subsecs. (d), (e). Pub. L. 112-95 added subsec. (d) and redesignated former subsec. (d) as (e).

1996—Subsec. (d). Pub. L. 104-287 substituted “Transportation and Infrastructure” for “Public Works and Transportation”.

## AIR TRAFFIC CONTROLLER STAFFING INITIATIVES AND ANALYSIS

Pub. L. 112-95, title II, § 224, Feb. 14, 2012, 126 Stat. 55, provided that: “As soon as practicable, and not later than 1 year after the date of enactment of this Act [Feb. 14, 2012], the Administrator of the Federal Aviation Administration shall—

“(1) ensure, to the extent practicable, a sufficient number of contract instructors, classroom space (including off-site locations as needed), and simulators to allow for an increase in the number of air traffic controllers at air traffic control facilities;

“(2) distribute, to the extent practicable, the placement of certified professional air traffic controllers-in-training and developmental air traffic controllers at facilities evenly across the calendar year in order to avoid training bottlenecks;

“(3) initiate an analysis, to be conducted in consultation with the exclusive bargaining representative of air traffic controllers certified under section 7111 of title 5, United States Code, of scheduling processes and practices, including overtime scheduling practices at those facilities;

“(4) provide, to the extent practicable and where appropriate, priority to certified professional air traffic controllers-in-training when filling staffing vacancies at facilities;

“(5) assess training programs at air traffic control facilities with below-average success rates to determine if training is being carried out in accordance with Administration standards, and conduct exit interview analyses with all candidates to determine potential weaknesses in training protocols, or in the execution of such training protocols; and

“(6) prioritize, to the extent practicable, such efforts to address the recommendations for the facilities identified in the Department of Transportation’s Office of the Inspector General Report Number: AV-2009-047.”

## FACILITY TRAINING PROGRAM

Pub. L. 112-95, title VI, § 609(b), Feb. 14, 2012, 126 Stat. 116, provided that: “Not later than 1 year after the date of enactment of this Act [Feb. 14, 2012], the Administrator [of the Federal Aviation Administration] shall conduct a comprehensive review and evaluation of its Academy and facility training efforts. The Administrator shall—

“(1) clarify responsibility for oversight and direction of the Academy’s facility training program at the national level;

“(2) communicate information concerning that responsibility to facility managers; and

“(3) establish standards to identify the number of developmental air traffic controllers that can be accommodated at each facility, based on—

“(A) the number of available on-the-job training instructors;

“(B) available classroom space;

“(C) the number of available simulators;

“(D) training requirements; and

“(E) the number of recently placed new personnel already in training.”

## CONTROLLER STAFFING

Pub. L. 112-55, div. C, title I, Nov. 18, 2011, 125 Stat. 645, provided in part: “That not later than March 31 of each fiscal year hereafter, the Administrator of the Federal Aviation Administration shall transmit to Congress an annual update to the report submitted to Congress in December 2004 pursuant to section 221 of Public Law 108-176 [set out below].”

Similar provisions were contained in the following prior appropriation acts:

Pub. L. 111-117, div. A, title I, Dec. 16, 2009, 123 Stat. 3039.

Pub. L. 111-8, div. I, title I, Mar. 11, 2009, 123 Stat. 918.

Pub. L. 110-161, div. K, title I, Dec. 26, 2007, 121 Stat. 2378.

Pub. L. 108-176, title II, § 221, Dec. 12, 2003, 117 Stat. 2526, provided that:

“(a) ANNUAL REPORT.—Beginning with the submission of the Budget of the United States to the Congress for fiscal year 2005, the Administrator of the Federal Aviation Administration shall transmit a report to the Senate Committee on Commerce, Science, and Transportation and the House of Representatives Committee on Transportation and Infrastructure that describes the overall air traffic controller staffing plan, including strategies to address anticipated retirement and replacement of air traffic controllers.

“(b) HUMAN CAPITAL WORKFORCE STRATEGY.—

“(1) DEVELOPMENT.—The Administrator shall develop a comprehensive human capital workforce strategy to determine the most effective method for addressing the need for more air traffic controllers that is identified in the June 2002 report of the General Accounting Office [now Government Accountability Office].

“(2) COMPLETION DATE.—Not later than 1 year after the date of enactment of this Act [Dec. 12, 2003], the Administrator shall complete development of the strategy.

“(3) REPORT.—Not later than 30 days after the date on which the strategy is completed, the Administrator shall transmit to Congress a report describing the strategy.”

## § 44507. Civil aeromedical research

The Civil Aeromedical Institute established by section 106(j) of this title may—

(1) conduct civil aeromedical research, including research related to—

(A) the protection and survival of aircraft occupants;

(B) medical accident investigation and airman medical certification;

(C) toxicology and the effects of drugs on human performance;

(D) the impact of disease and disability on human performance;

(E) vision and its relationship to human performance and equipment design;

(F) human factors of flight crews, air traffic controllers, mechanics, inspectors, airway facility technicians, and other individuals involved in operating and maintaining aircraft and air traffic control equipment; and

(G) agency work force optimization, including training, equipment design, reduction of errors, and identification of candidate tasks for automation;

(2) make comments to the Administrator of the Federal Aviation Administration on human factors aspects of proposed air safety regulations;

(3) make comments to the Administrator on human factors aspects of proposed training programs, equipment requirements, standards, and procedures for aviation personnel;

(4) advise, assist, and represent the Federal Aviation Administration in the human factors aspects of joint projects between the Administration and the National Aeronautics and Space Administration, other departments,