

## FEDERAL AVIATION ADMINISTRATION

### OPERATIONS

#### (AIRPORT AND AIRWAY TRUST FUND)

The agreement includes \$10,025,852,000 for the operations of the Federal Aviation Administration (FAA), to remain available until September 30, 2018. Of the total amount provided, \$9,173,000,000 is to be derived from the airport and airway trust fund. Funds are distributed in the bill by budget activity.

The following table compares the agreement to the levels proposed in the budget request by activity:

	Budget Request	Agreement
Air Traffic Organization	7,539,785,000	7,559,785,000
Aviation Safety	1,286,982,000	1,298,482,000
Commercial Space Transportation	19,826,000	19,826,000
Finance and Management	771,342,000	771,342,000
NextGen and Operations Planning	60,155,000	60,155,000
Security and Hazardous Materials Safety	107,161,000	107,161,000
Staff Offices	209,101,000	209,101,000
Total	9,994,352,000	10,025,852,000

*Funding availability and transfer authority.*—The agreement provides two-year funding availability for the entire operations account. This funding flexibility is provided to enhance assurance of continuity of air traffic operations during the annual transition from one fiscal year to the next. In addition, the agreement includes funding transfer authority of five percent among the activities in this account. This transfer authority is provided to meet emerging requirements as FAA works to accelerate the modernization of the Nation's air traffic control system.

*Operations funding.*—The agreement includes \$20,000,000 above the budget request for the air traffic organization. This funding level fully supports the air traffic operational workforce, including the hiring and training of new controllers to fill critical positions. The increase above the budget request is provided to accelerate the safe integration of Unmanned Aerial Vehicles (UAVs) into the national airspace (NAS).

*Aviation safety.*—The agreement provides \$11,500,000 above the budget request for aviation safety activities. Of this amount, \$10,000,000 is provided to accelerate the safe integration of UAVs into the NAS; and \$1,500,000 is provided for six additional full time equivalent (FTE)

positions to support the certification of new technologies and advance FAA's organizational delegation authorization (ODA) efforts and strengthen safety oversight.

The agreement provides FAA with the resources it needs to work with industry to achieve the goal of full utilization of ODA to improve the effectiveness and efficiency of product certification. FAA is directed to ensure that an ODA can conduct all specified activities authorized and approved by FAA in their procedures manual. When requested by an ODA, FAA is directed to conduct a review of ODA limitations and remove limitations that FAA determines, through risk analysis, are associated with low and medium risk activities. These efforts should include all FAA field office activities for the type certification and delivery of new aircraft including the Aircraft Certification Office, Aircraft Evaluation Group, and Manufacturing Inspection District Offices. FAA's plan to expand the ODA performance scorecard to all ODAs nationally should be aligned with objectives to facilitate full utilization of ODAs by all FAA offices.

FAA is commended for continuing to strengthen international aviation safety cooperation and improve the flow of aviation products globally through strategic engagement with the European Aviation Safety Agency (EASA), Transport Canada Civil Aviation (TCCA), and National Civil Aviation Agency of Brazil (ANAC). These activities should result in streamlined validation and acceptance of type certificates and approvals among these authorities. FAA is directed to ensure that the efficiency of foreign validations is consistent with the terms of the Bilateral Agreement and to assist U.S. companies that experience significant delays.

The full budget request is provided for Commercial Space Transportation, Finance and Management, NextGen and Operations Planning, Security and Hazardous Materials Safety, and Staff Offices.

The agreement provides \$159,000,000 for the contract tower program.

The agreement includes language preventing the elimination of the Contract Weather Observers (CWO) program, therefore a report is not required.

The agreement directs FAA to develop a plan updating the controller staffing model for en route centers no later than one year after enactment.

The agreement directs FAA to review current policies concerning reporting and data collection standards for severe allergic reactions aboard aircraft. The FAA shall submit the

results of the review to the House and Senate Committees on Appropriations no later than 180 days after enactment of this Act.

The agreement directs FAA to regularly report to the House and Senate Committees on Appropriations on the NextGen Advisory Committee's objectives for the implementation of airspace modernization programs.

The agreement directs the GAO to submit a report to the House and Senate Committees on Appropriations on the importance of collegiate aviation flight training operations. The report shall assess: the total capacity of collegiate aviation flight training programs in the United States to meet the needs of the nation to train commercial pilots, the footprint of collegiate aviation flight training operations at the airports in the United States, whether infrastructure beyond that necessary for operations of commercial air carriers is needed at airports with collegiate aviation flight training operations, and the cost of additional infrastructure if such infrastructure is warranted. Additionally, the report should identify available funding sources and recommendations for improving technical and financial assistance to airports to construct such infrastructure.

#### FACILITIES AND EQUIPMENT

##### (AIRPORT AND AIRWAY TRUST FUND)

The agreement includes \$2,855,000,000 for FAA facilities and equipment. Of the total amount available, \$486,000,000 is available until September 30, 2017 and \$2,369,000,000 is available until September 30, 2019.

The following table provides a breakdown of the agreement by program:

Program	Request	Agreement
Activity 1 - Engineering, Development, Test and Evaluation		
Advanced Technology Development and Prototyping	24,800,000	24,800,000
William J. Hughes Technical Center Laboratory Improvement	1,000,000	1,000,000
William J. Hughes Technical Center Laboratory Sustainment	19,000,000	19,000,000

Program	Request	Agreement
William J. Hughes Technical Center Infrastructure Sustainment	12,200,000	12,200,000
Separation Management Portfolio	25,800,000	32,800,000
Improved Surface Portfolio	2,000,000	2,000,000
On Demand NAS Portfolio	8,500,000	11,500,000
Improved Multiple Runway Operations Portfolio	6,500,000	6,500,000
NAS Infrastructure Portfolio	17,660,000	17,660,000
NextGen Support Portfolio	12,000,000	12,000,000
Performance Based Navigation & Metroplex Portfolio	17,500,000	17,500,000
<b>Total Activity 1</b>	<b>146,960,000</b>	<b>156,960,000</b>
<b>Activity 2 - Air Traffic Control Facilities and Equipment</b>		
<b>a. En Route Programs</b>		
En Route Automation Modernization (ERAM) - System Enhancements and Tech Refresh	78,000,000	78,000,000
En Route Communications Gateway (ECG)	2,650,000	2,650,000
Next Generation Weather Radar (NEXRAD) - Provide	6,300,000	6,300,000
Air Route Traffic Control Center (ARTCC) & Combined Control Facility (CCF) Building Improvements	74,870,000	74,870,000
Air Traffic Management (ATM)	20,000,000	20,000,000
Air/Ground Communications Infrastructure	8,750,000	8,750,000
Air Traffic Control En Route Radar Facilities Improvements	5,800,000	5,800,000
Voice Switching and Control System (VSCS)	11,300,000	11,300,000
Oceanic Automation System	24,000,000	24,000,000
Next Generation Very High Frequency Air/Ground Communications (NEXCOM)	50,500,000	50,500,000
System-Wide Information Management	28,800,000	43,800,000
ADS-B NAS Wide Implementation	31,100,000	154,800,000
Windshear Detection Service	4,500,000	4,500,000
Collaborative Air Traffic Management Technologies	13,820,000	13,820,000
Time Based Flow Management Portfolio	50,600,000	50,600,000
ATC Beacon Interrogator (ATCBI) - Sustainment	1,000,000	1,000,000
NextGen Weather Processors	27,800,000	27,800,000
Airborne Collision Avoidance System X (ACASX)	8,900,000	8,900,000
Data Communications in Support of NG Air Transportation System	232,000,000	232,000,000
Non-Continental United States (Non-CONUS) Automation	3,000,000	3,000,000
<b>Subtotal En Route Programs</b>	<b>683,690,000</b>	<b>822,390,000</b>
<b>b. Terminal Programs</b>		

Program	Request	Agreement
Airport Surface Detection Equipment - Model X (ASDE-X)	8,400,000	8,400,000
Terminal Doppler Weather Radar (TDWR) - Provide	5,000,000	5,000,000
Standard Terminal Automation Replacement System (STARS) (TAMR Phase 1)	64,200,000	64,200,000
Terminal Automation Modernization/Replacement Program (TAMR Phase 3)	108,900,000	108,900,000
Terminal Automation Program	7,700,000	7,700,000
Terminal Air Traffic Control Facilities - Replace	58,800,000	58,800,000
ATCT/Terminal Radar Approach Control (TRACON) Facilities - Improve	47,720,000	47,720,000
Terminal Voice Switch Replacement (TVSR)	6,000,000	6,000,000
NAS Facilities OSHA and Environmental Standards Compliance	42,700,000	42,700,000
Airport Surveillance Radar (ASR-9)	4,500,000	4,500,000
Terminal Digital Radar (ASR-11) Technology Refresh and Mobile Airport Surveillance Radar (MASR)	6,100,000	6,100,000
Runway Status Lights	4,800,000	4,800,000
National Airspace System Voice System (NVS)	48,400,000	48,400,000
Integrated Display System (IDS)	7,700,000	7,700,000
Remote Monitoring and Logging System (RMLS)	9,900,000	9,900,000
Mode S Service Life Extension Program (SLEP)	37,900,000	37,900,000
Surveillance Interface Modernization	26,800,000	21,800,000
Improved Surface/TFDM Portfolio	42,200,000	42,200,000
National Air Space (NAS) Voice Recorder Program (NVRP)	2,000,000	2,000,000
Integrated Terminal Weather System (ITWS)	1,000,000	1,000,000
Next Generation: Surveillance and Weather Radar Capability & Back-up Surveillance Capability	6,000,000	6,000,000
Flight and Interfacility Data Interface (FIDI) Modernization	15,000,000	13,000,000
<b>Subtotal Terminal Programs</b>	<b>561,720,000</b>	<b>554,720,000</b>
<b>c. Flight Service Programs</b>		
Aviation Surface Observation System (ASOS)	10,000,000	10,000,000
Future Flight Services Program	3,000,000	3,000,000
Alaska Flight Service Facility Modernization (AFSFM)	2,650,000	2,650,000
Weather Camera Program	2,200,000	2,200,000
<b>Subtotal Flight Service Programs</b>	<b>17,850,000</b>	<b>17,850,000</b>
<b>d. Landing and Navigational Aids Program</b>		
VHF Omnidirectional Radio Range (VOR) with Distance Measuring Equipment (DME)	7,000,000	9,000,000
Instrument Landing System (ILS) - Establish	7,000,000	7,000,000

Program	Request	Agreement
Wide Area Augmentation System (WAAS) for GPS	85,000,000	111,600,000
Runway Visual Range (RVR) and Enhanced Low Visibility Operations (ELVO)	6,500,000	6,500,000
Approach Lighting System Improvement Program (ALSIP)	3,000,000	3,000,000
Distance Measuring Equipment (DME)	3,000,000	3,000,000
Visual NAVAIDS - Establish/Expand	2,000,000	2,000,000
Instrument Flight Procedures Automation (IFPA)	9,400,000	9,400,000
Navigation and Landing Aids - Service Life Extension Program (SLEP)	3,000,000	3,000,000
VASI Replacement - Replace with Precision Approach Path Indicator	5,000,000	5,000,000
Runway Safety Areas - Navigational Mitigation	14,000,000	14,000,000
Integrated Control and Monitoring System (ICMS) - NAVAIDS Monitoring Equipment	2,000,000	2,000,000
<b>Subtotal Landing and Navigational Aids Programs</b>	<b>146,900,000</b>	<b>175,500,000</b>
<b>e. Other ATC Facilities Programs</b>		
Fuel Storage Tank Replacement and Management	22,700,000	22,700,000
Unstaffed Infrastructure Sustainment	40,490,000	40,490,000
Aircraft Related Equipment Program	13,000,000	13,000,000
Airport Cable Loop Systems - Sustained Support	8,000,000	8,000,000
Alaskan Satellite Telecommunications Infrastructure (ASTI)	6,000,000	6,000,000
Facilities Decommissioning	6,200,000	6,200,000
Electrical Power Systems - Sustain/Support	105,000,000	105,000,000
Energy Management and Compliance (EMC)	2,000,000	2,000,000
Child Care Center Sustainment	1,000,000	1,000,000
FAA Telecommunications Infrastructure	10,360,000	10,360,000
System Capacity, Planning, and Improvements	6,500,000	6,500,000
<b>Subtotal Other ATC Facilities Programs</b>	<b>221,250,000</b>	<b>221,250,000</b>
<b>TOTAL ACTIVITY 2</b>	<b>1,631,410,000</b>	<b>1,791,710,000</b>
<b>Activity 3 - Non-Air Traffic Control Facilities and Equipment</b>		
<b>a. Support Equipment</b>		
Hazardous Materials Management	31,000,000	31,000,000
Aviation Safety Analysis System (ASAS)	11,300,000	11,300,000
National Air Space (NAS) Recovery Communications (RCOM)	12,000,000	12,000,000
Facility Security Risk Management	21,000,000	21,000,000
Information Security	24,970,000	24,970,000
System Approach for Safety Oversight (SASO)	17,200,000	17,200,000

<b>Program</b>	<b>Request</b>	<b>Agreement</b>
Aviation Safety Knowledge Management Environment (ASKME)	4,200,000	4,200,000
Aerospace Medical Equipment Needs (AMEN)	3,000,000	3,000,000
System Safety Management Portfolio	17,000,000	17,000,000
National Test Equipment Program	5,000,000	5,000,000
Mobile Assets Management Program	5,760,000	5,760,000
Aerospace Medicine Safety Information Systems (AMSIS)	12,000,000	12,000,000
Tower Simulation System (TSS) Technology Refresh	3,000,000	3,000,000
<b>Subtotal Support Equipment</b>	<b>167,430,000</b>	<b>167,430,000</b>
<b>b. Training, Equipment and Facilities</b>		
Aeronautical Center Infrastructure Modernization	14,000,000	14,000,000
Distance Learning	1,500,000	1,500,000
<b>Subtotal Training, Equipment and Facilities</b>	<b>15,500,000</b>	<b>15,500,000</b>
<b>TOTAL ACTIVITY 3</b>	<b>182,930,000</b>	<b>182,930,000</b>
<b>Activity 4 - Facilities and Equipment Mission Support</b>		
<b>a. System Support and Services</b>		
System Engineering and Development Support	35,000,000	35,000,000
Program Support Leases	46,600,000	46,600,000
Logistics and Acquisition Support Services	11,000,000	11,000,000
Miko Monroney Aeronautical Center Leases	19,300,000	19,300,000
Transition Engineering Support	24,100,000	24,100,000
Technical Support Services Contract (TSSC)	23,000,000	23,000,000
Resource Tracking Program (RTP)	6,000,000	6,000,000
Center for Advanced Aviation System Development (CAASD)	60,000,000	60,000,000
Aeronautical Information Management Program	10,400,000	10,400,000
Cross Agency NextGen Management	2,000,000	2,000,000
<b>TOTAL ACTIVITY 4</b>	<b>237,400,000</b>	<b>237,400,000</b>
<b>Activity 5 - Personnel and Related Expenses</b>		
Personnel and Related Expenses	489,000,000	486,000,000
<b>Activity 6 - Sustain ADS-B services and Wide Area Augmentation Services (WAAS) GEOs</b>		

Program	Request	Agreement
ADS-B services and WAAS GEOs	150,300,000	(provided in operational lines)
<b>SUB-TOTAL ALL ACTIVITIES</b>	<b>2,838,000,000</b>	<b>2,855,000,000</b>

The agreement provides \$32,800,000 for separation management portfolio, including \$7,000,000 above the budget request to advance space-based automatic dependent surveillance-broadcast (ADS-B) technology.

The agreement provides \$11,500,000 for on demand NAS portfolio, including \$3,000,000 above the budget request to continue to develop and implement an integrated Cyber Testbed at the FAA Technical Center.

The agreement provides \$43,800,000 for System-Wide Information Management (SWIM), an increase of \$15,000,000 above the budget request. The additional funding for SWIM will accelerate FAA's ability to share traffic and weather data with airlines and other users of our national airspace. The Committee makes this investment with the understanding that both the FAA and its NextGen partners put a high priority on sharing data over SWIM's secure and reliable architecture.

The agreement provides \$9,000,000 for VHF Omnidirectional Radio Range (VOR) with Distance Measuring Equipment (DME), an increase of \$2,000,000 above the budget request to address the rationalization and recapitalization of aging en route navigational aids. These additional funds are provided to expedite the issuance of a request for proposals to implement a service-based procurement for Very High Frequency (VHF), Omni-Directional Range (VOR) and Tactical Air Navigation (TACAN) systems during fiscal year 2017, and to accelerate the selection of a final contract.

FAA budget documents report high numbers of reimbursable positions, but it is unclear whether those employees perform reimbursable work for the majority of their time on duty. The FAA is directed to reclassify positions, as appropriate, in order to ensure that the classification of positions as reimbursable or direct accurately reflects employees' work.

Telecommunications carriers have signaled their intention of discontinuing Time-Division Multiplexing (TDM) based connections. FAA should prepare to adopt Internet Protocol (IP) connections across all national airspace system infrastructure, and it should utilize



both near and long term strategies to manage this transition without impacts to air traffic services. Funding provided for two FAA programs – Surveillance Interface Modernization and Flight Interfacility Data Interface – will support the transition from TDM to IP telecommunications. FAA is encouraged to consider existing technology solutions that may be implemented while it continues to plan for modernization strategies.

## RESEARCH, ENGINEERING, AND DEVELOPMENT

### (AIRPORT AND AIRWAY TRUST FUND)

The agreement provides \$176,500,000 for the FAA's research, engineering, and development activities, to remain available until September 30, 2019.

The agreement provides the following levels for specific programs:

Program	Request	Agreement
Fire Research & Safety	7,925,000	7,425,000
Propulsion & Fuel Systems	2,574,000	2,074,000
Advanced Materials /Structural Safety	4,113,000	6,500,000
Aircraft Icing/Digital System Safety/Cyber Security	5,102,000	5,102,000
Continued Air Worthiness	10,269,000	9,269,000
Aircraft Catastrophic Failure Prevention Research	1,528,000	1,528,000
Flightdeck/Maintenance/System Integration Human Factors	8,513,000	7,305,000
Safety System Management/Terminal Area Safety	7,000,000	6,500,000
Air Traffic Control/Technical Operations Human Factors	6,165,000	6,165,000
Aeromedical Research	9,538,000	8,538,000
Weather Research	17,976,000	15,476,000
Unmanned Aircraft Systems Research	8,422,000	20,035,000
NextGen - Alternative Fuels for General Aviation	5,792,000	7,000,000
Commercial Space Transportation Safety	2,953,000	2,453,000
NextGen - Wake Turbulence	8,609,000	8,609,000
NextGen - Air Ground Integration Human Factors	8,575,000	8,575,000
NextGen - Weather Technology in the Cockpit	4,059,000	4,059,000
NextGen - Information Security	1,000,000	1,000,000
Environment & Energy	15,013,000	16,013,000

Program	Request	Agreement
NextGen Environmental Research - Aircraft Technologies, Fuels and Metrics	26,174,000	27,174,000
System Planning and Resource Management	2,788,000	2,288,000
WJHTC Lab Facilities	3,412,000	3,412,000
<b>Total</b>	<b>167,500,000</b>	<b>176,500,000</b>

*Advanced material/structural safety.*—The agreement provides \$6,500,000 for Advanced Material/Structural Safety, of which \$2,000,000 is for the FAA to work with public and private partners who provide leading-edge research, development and testing of composite materials and structures.

*Unmanned aircraft systems research.*—The agreement provides \$20,035,000 for Unmanned Aircraft Systems (UAS) Research, an increase of \$2,670,000 above the fiscal year 2016 enacted level, to address the host of research challenges associated with the integration of UAS into the NAS system. Of this amount, \$3,650,000 is provided to the NextGen integrated laboratories, in partnership with NASA laboratories, to provide for proofs of concept supporting the integration of UAS into the national airspace. This effort will ensure interoperability with national airspace systems through the Unmanned Traffic Management system, which will create an air traffic control network for UAS that will have the capability to communicate with existing NAS infrastructure. In addition to the amount provided for UAS Research, \$10,000,000 is directed to support the expanded role of the Center of Excellence in the areas of UAS research, including cybersecurity, agricultural applications, beyond visual line of sight technology, counter-UAS detection technology, and continuation of air and ground collision studies. Furthermore, the Center of Excellence shall establish a UAS safety research facility to study appropriate safety standards for UAS and to develop and validate certification standards for such systems. Even with this additional funding, private sector contributions to the Center will likely continue to outmatch Federal investment.

The agreement provides a total of \$43,187,000 for research related to environmental sustainability, of which \$16,013,000 is for environment and energy, and \$27,174,000 is for NextGen—Environmental research aircraft technologies, fuels, and metrics. The total level of funding supports the CLEEN program, as well as the Center of Excellence for alternative jet fuels and environment. The FAA is directed to use the increase in funding for the Center of

Excellence, resulting in a total of \$2,000,000 for the Center. The committee further directs the FAA to coordinate with NASA and the Departments of Energy and Agriculture to continue research and development activities into the development and deployment of jet fuels as outlined in section 911(a) of Public Law 112-95, including feedstock logistics and all aspects of supply chains from feedstock through final combustion. (UC)

GRANTS-IN-AID FOR AIRPORTS  
(LIQUIDATION OF CONTRACT AUTHORIZATION)  
(LIMITATION ON OBLIGATIONS)  
(AIRPORT AND AIRWAY TRUST FUND)  
(INCLUDING TRANSFER OF FUNDS)

The agreement includes an obligation limitation of \$3,350,000,000 and a liquidating cash appropriation of \$3,750,000,000 to remain available until expended. Within the obligation limitation, the agreement provides not more than \$107,691,000 for administrative expenses, no less than \$15,000,000 for the airport cooperative research program, and no less than \$31,375,000 for airport technology research.

*Small community air service development program.*—The agreement includes \$10,000,000 under the obligation limitation to continue the small community air service development program (SCASDP) and directs the FAA to transfer these funds to the Office of the Secretary salaries and expenses appropriation.

*Cost share.*—The agreement includes a provision that allows small airports to continue contributing five percent of the total cost for unfinished phased projects that were underway prior to the passage of the FAA Modernization and Reform Act of 2012.

*Unmanned aircraft systems.*—House Report 114-606 directs the FAA to establish a pilot program to deploy and evaluate counter-UAS detection technologies at three airports. The agreement supports this initiative and notes that the FAA is currently undertaking this effort at four airports while utilizing cooperative research agreements within the research account to leverage Federal funds at the UAS Center of Excellence.

#### ADMINISTRATIVE PROVISIONS—FEDERAL AVIATION ADMINISTRATION

Section 110 allows no more than 600 technical staff-years at the Center for Advanced Aviation Systems Development.

Section 111 prohibits funds for adopting guidelines or regulations requiring airport sponsors to provide FAA "without cost" building construction or space.

Section 112 allows reimbursement for fees collected and credited under 49 U.S.C. 45303.

Section 113 allows reimbursement of funds for providing technical assistance to foreign aviation authorities to be credited to the operations account.

Section 114 prohibits funds for Sunday premium pay unless work was actually performed on a Sunday.

Section 115 prohibits funds in the Act from being used to buy store gift cards with Government issued credit cards.

Section 116 prohibits funds from being obligated or expended for retention bonuses for FAA employees without prior written approval of the DOT Assistant Secretary for Administration.

Section 117 requires the Secretary to block the display of an owner or operator's aircraft registration number in the Aircraft Situational Display to Industry program upon the request of an owner or operator.

Section 118 prohibits funds for salaries and expenses of more than nine political and Presidential appointees in the FAA.

Section 119 prohibits funds to increase fees under 49 U.S.C. 44721 until the FAA provides a report to the House and Senate Committees on Appropriations that justifies all fees related to aeronautical navigation products and explains how such fees are consistent with Executive Order 13642.

Section 119A requires the FAA to notify the House and Senate Committees on Appropriations at least 90 days before closing a regional operations center or reducing the services provided.

Section 119B prohibits funds from being used to change weight restrictions or prior permission rules at Teterboro Airport in New Jersey.

Section 119C prohibits funds from being used to withhold from consideration and approval certain application for participation in the Contract Tower Program, or for reevaluation of cost-share program participation, pending as of January 1, 2016.