

**STATEMENT OF  
STEVE DICKSON, ADMINISTRATOR  
FEDERAL AVIATION ADMINISTRATION**

**HEARING BEFORE THE COMMITTEE ON APPROPRIATIONS, SUBCOMMITTEE  
ON TRANSPORTATION, HOUSING AND URBAN DEVELOPMENT, AND RELATED  
AGENCIES: THE FISCAL YEAR 2021 BUDGET REQUEST FOR THE FEDERAL  
AVIATION ADMINISTRATION**

**MARCH 11, 2020**

Good morning, Chairman Price, Ranking Member Diaz-Balart, and Members of the Subcommittee. Thank you for the opportunity to discuss the Administration's Fiscal Year (FY) 2021 budget request for the Federal Aviation Administration (FAA).

The FAA operates the safest and most efficient aerospace system in the world. We have proudly delivered on this promise since 1958, providing the world's leading aviation system and setting an unparalleled standard for safety and efficiency that is emulated globally.

The President's Budget requests \$17.5 billion to operate and advance our airspace system in FY 2021. This funding enables the FAA to advance aviation safety, accommodate new entrants into the national airspace safely, operationalize new technologies and systems to modernize how we manage traffic, and make important investments in our Nation's infrastructure.

**Aviation Safety**

This Budget request reflects the FAA's continuing commitment to our number one priority: safety. We deliver on that priority every day for the more than 44,000 aircraft and nearly 3 million passengers taking to our nation's skies every day. We also understand that there is always more we can do to improve safety and efficiency. This Budget upholds that commitment by boosting funding for aviation safety oversight by \$36.7 million. These funds will improve our core business, which is to continuously raise the bar on aviation safety.

And yesterday, March 10<sup>th</sup>, was a stark reminder of the obligation we have to the traveling

public. Yesterday was the one year anniversary of the tragic Ethiopian Airlines Flight 302 accident. I have spoken to some of the families who lost loved ones on this flight, as well as Lion Air Flight 610, and this Budget reflects my agency's efforts to continually pursue a higher level of safety domestically and internationally in their memory.

We are working diligently to ensure that the type of accidents that occurred in Indonesia and Ethiopia—resulting in the tragic loss of 346 lives—do not occur again. The FAA is following a thorough process for assessing the safe return of the 737 MAX to service. This process is not guided by a calendar or schedule. Safety is the driving consideration. I unequivocally support the dedicated professionals of the FAA in continuing to adhere to a data-driven, methodical analysis, review, and validation of the modified flight control systems and pilot training required to safely return the 737 MAX to commercial service. I have directed FAA employees to take whatever time is necessary to complete their work.

As you well know, in response to the 737 MAX accidents, there have been several reviews evaluating how we conduct our business. That is input we welcome. Some key themes are emerging. The FAA should move toward a more holistic versus transactional, item-by-item approach to aircraft certification, with coordinated and flexible information flow throughout the oversight. In addition, the FAA should integrate human factors considerations more effectively throughout the design process, particularly as aircraft become more automated and systems more complex. Finally, the FAA should promote the implementation of Safety Management System processes that develop a Just Culture and Risk Management ideology, not only for operators, but for manufacturers and suppliers, regulators, air navigation service providers, and all industries involved in the aerospace system.

The FY 2021 President's Budget request includes \$14.3 million for the staffing and infrastructure needed to begin implementing these recommendations. In addition, the request includes \$5 million to recruit additional specialized skills, such as more human factors experts and software engineers, that can help address the FAA's needs. The Budget also includes \$5 million for a new system that tracks employee training, qualifications, and certifications to ensure our aviation safety workforce has the skills and knowledge required to execute our

oversight functions.

The FAA understands Congress' explicit direction to stand up an Organization Designation Authorization (ODA) office. Consistent with that direction, this Budget request includes \$7 million to support a new office to oversee all ODAs. While the ODA program has been in place since 2005, the creation of a single office supports standardized outcomes and improvements across the ODA program.

The FY 2021 Budget includes \$5.4 million in new funding to support improvements to several safety oversight systems such as Aviation Safety Information Analysis and Sharing, or ASIAS, and the Aviation Safety Reporting Program. These programs are critical tools in the FAA's toolbox, facilitating the collection of safety data that allows the FAA to identify trends and improve upon aviation safety. Included in this request is additional funding for the continued development and maintenance of FAA's Investigation Repository/Cyber Analysis Virtual Environment, which enables the agency to promptly and consistently respond to inquiries, as well as process and report on the data, as well as funding for improvements to FAA's Hotline Information System and Whistleblower Protection Program.

The FY 2021 Budget request includes an additional \$13 million to safeguard against internal and external cyber threats, as well as to protect our new technologies against the threat of cyberattacks. The funding will address an existing backlog of cybersecurity vulnerabilities specific to air traffic control systems, as well as enable security risk assessments at field sites essential to the efficient operation of the airspace system.

Finally, this Budget request includes \$172 million for the Contract Tower Program. The FAA recognizes the importance and value of contract towers to rural America and smaller communities. This funding level is expected to fully fund all towers participating in the program.

## **Innovation and New Entrants**

In addition to safeguarding aviation safety, the President's Budget seeks to invest in innovation. We are witnessing a surge in both unmanned aircraft systems and commercial space vehicle launches. These operators want access to the same airspace as our general aviation and commercial aviation fleets, and we are committed to integrating—not segregating—all users. The FAA remains dedicated to meeting the challenges presented by these pioneering users of the national airspace while still maintaining the safest airspace in the world.

The President's FY 2021 Budget request includes over \$144 million for work related to unmanned aircraft systems, or UAS. The FAA has made huge strides in using automation to meet industry's UAS needs. An example of this is our online UAS registration system. The existing registration system for manned aviation used a manual process that was ill-suited for the flood of registrations coming from this new sector of aviation. So the FAA built a new online registration tool that allowed us to register more than 1.5 million UAS since its inception in December 2015.

To continue to reap the benefits of automation, this Budget request includes over \$48 million in our F&E account to further UAS automation. These funds will enable continued development of an Unmanned Aircraft System Traffic Management solution, commonly called UTM. UTM is a critical enabler of more advanced uses of UAS such as package delivery and urban air mobility, or UAM. The vision for these UAM concepts and aircraft currently under development is to provide automated passenger or cargo-carrying air transportation in populated areas. The requested funds will be used for further enhancements to the Low Altitude Authorization and Notification Capability, which we call LAANC.

LAANC has been one of the success stories of automation as well as government and industry partnership. This data exchange between the FAA and UAS Service Suppliers grants airspace authorizations to small UAS operators in near-real time, allowing them to safely fly in controlled airspace. With the proliferation of UAS into the national airspace, there has been a large increase in operators requesting access to the same airspace, typically under 400 feet from ground level.

Instead of manually reviewing each request, the FAA and industry built a tool that evaluates each request and, if the request meets certain criteria, provides a near real-time approval to use the airspace as requested. LAANC has approved over 150,000 airspace requests. The success of LAANC has led us to deploy it in approximately 400 air traffic facilities covering about 600 airports. Following congressional direction, in July 2019 the FAA enhanced LAANC to allow recreational users to use the tool. The successes of LAANC will inform the deployment of the technology for a Remote ID capability. We are currently working with a number of stakeholders to develop the data exchange protocols and industry infrastructure to support this effort. This critical capability would potentially enable the FAA, law enforcement partners, and the general public to remotely identify UAS operating in the national airspace. The FAA is working on this technology concurrently with the proposed rule for Remote Identification of UAS and will incorporate any input from that rulemaking into this capability as it is developed.

Of the \$144 million request for UAS, the Operations budget request accounts for \$65 million. This includes an increase of almost \$2 million to develop a coordinated and phased approach with our law enforcement partners to evaluate and address the implications of deploying Counter-UAS capabilities across the national airspace. This Budget recognizes the important role of research in integrating UAS into the national airspace. That is why it includes \$24 million to conduct research on UAS technologies that directly influence the safety of the national airspace. This research also enables future advanced UAS concepts and applications such as UAM.

Critical to unlocking the benefits of these advanced operations are our partnership programs, like the UAS Integration Pilot Program, or IPP. Through the IPP, the FAA is partnering with State, local, and tribal government entities to safely explore the further integration of drone operations. The IPP has already achieved significant successes, such as issuing the first ever drone air carrier certificate under Part 135 to the Virginia IPP team. This is an important first step towards routine package delivery operations with UAS. Since then, another similar Part 135 certificate was approved which has allowed for the delivery of medical packages in the WakeMed hospital campus in Raleigh, North Carolina. Additionally, the Chula Vista Police Department developed the Drone as a First Responder Program as part of the San Diego IPP team. They dispatch

drones in response to 911 calls to improve situational awareness for their arriving officers, as well as deploy their resources more efficiently.

For commercial space activities, total funding of over \$44 million will speed the processing of licenses and approvals and support streamlining regulatory requirements. These funds will also help the FAA continue to advance the integration of space operations into the National Airspace System via automation tools such as the Space Data Integrator, or SDI. This automation will safely reduce the amount of airspace that must be closed to other airspace users during launch and reentry activities.

In addition to automation, the FAA recognizes the importance of streamlining its launch and reentry licensing requirements. The FAA published a proposed rule in April 2019 that provides a safe, performance-based regulatory approach to commercial space transportation. It would promote safety practices by creating flexibility for operators to meet safety requirements through innovation, performance-based standards, and by enhancing collaboration among stakeholders.

The FAA is also working to issue new regulations in anticipation of innovations in supersonic aircraft. As companies in the United States and abroad are once again looking to operate supersonic aircraft, the FAA is taking steps to protect public interests while also supporting innovation. In June 2019, we published a proposed rule that will streamline the application process for testing and development of supersonic aircraft.

## **Aircraft Noise**

FAA recognizes that many communities have raised concerns about aircraft noise associated with legacy radar-based flight paths and new satellite-based flight paths. Communities and their elected representatives expect a heightened level of engagement as the FAA executes airspace modernization. Over the past two years, the FAA has implemented a standard, repeatable process to ensure productive and effective community involvement for new or modified air traffic procedures. We have also put in place the FAA Noise Complaint and Inquiry Database and Tracking System, referred to as the Noise Portal, to more effectively and efficiently track

and respond to noise complaints. The FAA has been using the system internally since 2018 and anticipates eventual public use of the Noise Portal.

In addition to the regular annual funding requests within research, engineering and development, this year we are requesting \$4.3 million of additional funding in our Operations account to support the kind of community engagement effort we know Congress wants to see from FAA. With these additional funds, the FAA will develop community engagement tool kits tailored to address the specific concerns of individual communities, prepare historical traffic analyses, and evaluate the feasibility of changes proposed through these roundtables to performance based navigation procedures. These resources will support the FAA's strategy to participate as technical experts at community roundtables and react to the recommendations of those roundtables. When a community wishes to change flight plans in order to move the noise, this roundtable concept is critical so that all stakeholders from communities, airport management, local officials and industry are informed and able to arrive at a consensus about the tradeoffs inherent in designing a flight path for noise distribution purposes.

## **NextGen**

The FAA is committed to modernizing the air traffic control system under our NextGen program while also maintaining an aging legacy infrastructure. Just a little over a month ago, we met the 2020 ADS-B equipage milestone. We appreciate the great strides made by industry to meet the January 1, 2020 mandate. More than 108,000 aircraft are now equipped with ADS-B, with close to 92,000 of those in the General Aviation fleet.

With ADS-B operational and many of NextGen's infrastructure programs entering various stages of deployment, the FAA's task now is to effectively use these systems so that the users of the national airspace can enjoy the performance improvements NextGen can bring.

For example, the FAA has investigated various long-term opportunities for implementing space-based ADS-B within the national airspace over places that do not have ADS-B ground infrastructure. In FY 2020, the FAA will conduct an operational assessment of the technology in

the Caribbean. This test, if successful and cost-beneficial, could allow the technology to provide an immediate benefit in an area where ground surveillance is not available.

In the last fiscal year, the FAA made significant achievements in the System Wide Information Management system. This program, commonly called SWIM, allows the agency to better share data with the aviation community. Commercial airlines and other users of the national airspace already use SWIM to receive data over a secure network. This data includes safety notifications, weather forecasts, and traffic flow information. In FY 2019, the FAA expanded SWIM by using cloud technology to share data with the broader aviation community at lower cost.

During the past year, the FAA also completed developmental testing of the first major software build for the Terminal Flight Data Manager program. This program shares real-time data among controllers, aircraft operators, and airports in order to better stage arrivals and departures, obtaining greater efficiency.

The President's FY 2021 Budget request of almost \$1 billion for NextGen investments supports the NextGen Advisory Committee's priorities, including initiatives for traffic flow and metering tools. These efforts will continue the operationalization of NextGen to unlock benefits for all the users of the national airspace. The budget focuses on funding the priorities that will achieve the maximum benefits.

For example, the Budget proposes over \$16 million for Time Based Flow Management. This capability uses the time an aircraft will arrive at specific points along its route to improve the flow of aircraft in the national airspace, particularly on approaches to high-traffic metropolitan airspaces, and even from hundreds of miles away.

The Budget request is also proposing almost \$100 million for Data Communications, or DataComm, which enables text-based communication between the pilot and controller in addition to voice. This technology improves safety and efficiency by reducing voice communication errors and radio frequency congestion. DataComm has already collectively saved pilots and controllers thousands of hours they would have otherwise spent on voice



communications.

This Budget request includes \$79 million for the Terminal Flight Data Manager program, which will apply advanced automation to the movement of aircraft around airport property in an effort to optimize the flow of aircraft traffic to and from gates and the runway. This program is a key ground infrastructure program for NextGen operations in the many areas of flight planning.

## **Airports and Research**

In addition to the FAA's systems, facilities, and equipment, airports are an important component of aviation infrastructure and the infrastructure of America's cities and communities. The \$3.35 billion requested in FY 2021 for Airport Improvement Program grants reflects the FAA's commitment to our Nation's infrastructure and provides the funding needed to support safety, capacity, and efficiency at our Nation's airports. It supports our continued focus on safety-related airfield development projects, including projects to reduce runway incursions and to reduce the risk of wrong-surface takeoffs and landings.

Since FY 2018, Congress has provided \$1.9 billion in supplemental discretionary airport grant funding. To date, the Secretary of Transportation has announced almost \$1.5 billion in supplemental grants to airports located in all 50 States, Puerto Rico, Guam, and the Virgin Islands. We plan to award an additional \$400 million by September 2020.

The FY2021 Budget request includes over \$40.6 million for the Airport Technology Research program to support the safe and efficient integration of new and innovative technologies into the airport environment. This includes an additional \$1.4 million to conduct research and develop standards related to urban air mobility, as well as new and innovative pavement materials testing.

This Budget request also includes \$170 million in the Research, Engineering & Development (RE&D) account to continue the FAA's research, which supports all aspects of aviation. Some of these efforts, such as UAS research, I've already highlighted. Much of the rest of this work, such as fire safety, human factors, advanced materials, and aircraft airworthiness, is performed at

the FAA's William J. Hughes Technical Center, the Nation's premier air transportation system laboratory.

## **Aviation Workforce Development**

Industry reports cite the potential risk of an aviation workforce shortage due to increasing retirements, decreasing numbers of new people looking for careers in the aviation industry, and advancements in aerospace technologies. Industry is especially concerned about the ability to recruit pilots and mechanics. To facilitate collaboration, the FAA sponsored an Aviation Workforce Symposium in September 2018 that brought together government, industry, and academia to begin to identify solutions together. Since then, the FAA created an Aviation Workforce Steering Committee, an internal executive-level committee dedicated to reducing barriers to entry without compromising safety and focused on building a pipeline of safety professionals that have the right skills to meet the challenges of a 21<sup>st</sup> century aviation and aerospace industry.

One of the early successes of the steering committee is a renewed focus on the Science, Technology, Engineering and Math Aviation and Space Education program, or STEM AVSED. The FAA has increased STEM AVSED outreach activities since the Aviation Workforce Symposium. The FY 2021 Budget request continues these efforts through a \$1.5 million increase towards the STEM AVSED program, allowing the FAA to expose students to aviation and aerospace career options by embedding FAA professionals in the field to directly conduct these outreach activities.

The FAA's 2018 Reauthorization bill established two separate Aviation Workforce Development Grant Programs, one for pilots and one for aviation maintenance technicians. The goal of these programs is to support education, recruitment and development of the aviation workforce. The FAA is moving forward on the steps needed to execute the \$10 million in funds for these grants provided in 2020. We recently published a Federal Register Notice to initiate information collections under the Paperwork Reduction Act process. Once this process is complete, the FAA will issue a call for proposals later this year. The FY 2021 budget request includes funding in

the FAA's Research, Engineering & Development account to further support these grant programs that will help develop the aviation workforce of the future.

## **Conclusion**

The FY 2021 President's Budget request reflects the importance of aviation to our Nation's economy and the work the FAA needs to continue to pursue in order to stimulate innovation and enhance safety. The U.S. is highly dependent on civil aviation -- it contributes roughly \$1.8 trillion annually to the national economy, provides 10.9 million jobs and constitutes 5.2 percent of the gross domestic product. The FAA contributes to the success of this industry while always upholding our commitment to maintain the safest, most efficient airspace in the world. Through the continued investments in this budget, the FAA will continue to lead the world in aviation.