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FAA REAUTHORIZATION ONE YEAR LATER: AVIATION SAFETY, AIR TRAFFIC AND NEXT GENERATION TECHNOLOGY

HEARING

BEFORE THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED NINETEENTH CONGRESS

FIRST SESSION

MAY 14, 2025

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SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED NINETEENTH CONGRESS

FIRST SESSION

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FAA REAUTHORIZATION ONE YEAR LATER: AVIATION SAFETY, AIR TRAFFIC AND NEXT GENERATION TECHNOLOGY

WEDNESDAY, MAY 14, 2025

U.S. SENATE,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Committee met, pursuant to notice, at 12 p.m., in room SR–253, Russell Senate Office Building, Hon. Ted Cruz, Chairman of the Committee, presiding.

Present: Senators Cruz [presiding], Wicker, Fischer, Moran, Sullivan, Blackburn, Young, Budd, Schmitt, Moreno, Sheehy, Lummis, Cantwell, Klobuchar, Markey, Peters, Duckworth, Rosen, Luján, Hickenlooper, Fetterman, Kim, and Blunt Rochester.

OPENING STATEMENT OF HON. TED CRUZ, U.S. SENATOR FROM TEXAS

Chairman CRUZ. Good morning. The Senate Committee on Commerce, Science, and Transportation will come to order. The clerk is directed in the previous vote to show Senator Hickenlooper as voting in person rather than by proxy.

Good morning to each of our witnesses.

It has been nearly one year since the FAA Reauthorization Act of 2024 was signed into law. I was proud to co-lead that effort in the Senate along with Ranking Member Cantwell.

As we are seeing today in the wake of a major aviation tragedy, repeated staffing challenges, and technological failures, the 2024 Act was unfortunately quite prescient. It mandated an audit of all legacy pre-2000 air traffic control systems to assess operational risk, functionality, security, and compatibility with current and future technologies.

An additional requirement ensures the FAA notifies Congress of unfunded priorities not in the budget request that are integral to the operation of the national airspace. It also directed the FAA and airports to adopt new runway technology to cut down on the high number of near misses on airport runways.

It is clear that there is a dire need to fix our troubled airspace. Last week, President Trump and Secretary Duffy proposed a major plan to replace vast segments of the national airspace system—radars, towers, telecommunications, and more.

Secretary Duffy previously announced new policies to attract more air traffic controllers, improve their training, and incentivize

good controllers to stay in the workforce longer. These upgrades are overdue, and I hope there will be bipartisan support for them.

I am committed to helping Secretary Duffy get the resources he needs to address acute problems like replacing existing, unreliable copper lines with faster fiber at facilities managing the Newark airspace and other areas, as well.

But the FAA's multi-year failure to keep pace with technology and staffing needs underscores a larger problem when a bureaucracy has to fund and manage multi-year projects on behalf of private sector stakeholders like airlines and general aviation, all while acting simultaneously as a safety regulator. The challenge of quickly and properly implementing new multibillion-dollar, mission-critical tech systems is about to become even more daunting with the arrival of air taxis and commercial drones.

If you think the FAA as currently constructed is ready for this challenge, then you have not been paying attention over the last two decades. Congress and the Administration must think boldly about how we can set the FAA up for long-term success. Both our economy's productive capacity and the safety of the Nation's airspace depend on it.

Regarding the arrival of air taxis and commercial drones, the 2024 law took meaningful steps to accelerate the safe integration of these new entrants into the Nation's skies. Most notably, the FAA bill required a rulemaking to enable drones to operate beyond visual line of sight, a huge priority for the growth of the drone industry. The Biden administration, unfortunately, missed the bill's deadline of September.

The bill also directed the establishment of a new Center for Advanced Aviation Technologies, a provision that I authored, which was recently announced to be in the Dallas-Fort Worth metroplex and will be headed up by the Texas A&M System. The Center will play an extremely important role for the advancement of new technologies, and I am thankful for the work Secretary Duffy and the FAA has played in moving it forward.

Ensuring that the 2024 law is implemented in line with the statutory timelines and consistent with congressional intent is of paramount importance to this Committee, and I appreciate my colleagues' commitment to maintaining robust oversight of the process.

Finally, I want to express my continued condolences to the families of American Airlines Flight 5342. Thank you for turning your tragedy into tireless advocacy. I remain dedicated to ensuring and doing everything possible, to make sure that something like this never happens again, and it is precisely why members of this Committee hear directly from the FAA about the steps it is taking to create a safer and more efficient airspace.

I look forward to hearing about the progress the Administration is making on these critical issues.

I now turn to Ranking Member Duckworth.

STATEMENT OF HON. TAMMY DUCKWORTH,
U.S. SENATOR FROM ILLINOIS

Senator DUCKWORTH. Thank you, Chairman Cruz, and thank you to Ranking Member Cantwell, who we will be hearing from later.

Welcome to our witnesses. I am disappointed that the Acting Administrator was unavailable, but I thank you each for being here.

I look forward to hearing about FAA's efforts to implement the FAA Reauthorization Law, but I must first address the recent critical safety lapses that we have seen. Close calls, a deadly crash, equipment outages, these are all terrible, but unfortunately they are not a surprise. Alarm bells have been ringing about near misses and aging equipment for years. We have held hearings. We passed the FAA bipartisan Reauthorization Bill, but there is still so much more work to do. We need both a long- and a short-term plan, and that is what I hope we will hear from the FAA today.

A large-scale overhaul of our air traffic controller system will take years. In the meantime, we need to know what FAA is doing now to prevent another tragedy. How is FAA ensuring that other airports do not experience the type of radar and communications failures impacting Newark? What is FAA's plan for inspection, maintenance, and testing to ensure redundancy and resiliency systemwide? FAA needs to be proactively looking for risk and mitigating it.

Yet, FAA failed to spot a clear trend of helicopter-related near misses near DCA. After 67 people died, FAA permanently closed the risky helicopter route, but even that long-overdue action failed to fully solve the problem. Coordination failures between the FAA and the military has continued to put the flying public at risk.

In March, after the deadly January 29th crash, a departing flight came within 200 vertical feet of an Air Force jet conducting a flyover of Arlington Cemetery. More recently, another Army helicopter, from the same brigade involved in January's deadly crash, came within 200 feet of a commercial flight near the Pentagon. These are foreseeable risks.

And in the aftermath of the worst deadly aviation incident on U.S. soil since the horrific Colgan air crash, the Administration's lack of a more aggressive, proactive mitigation approach is simply inexcusable. FAA and DoD must coordinate better. We do not need to wait for the completion of a lengthy investigation to know that.

Look, I know this is complicated. I have flown Black Hawk helicopters in Chicago's Class B airspace. It is always among the top three busiest airspaces in the nation, and it is not easy in the best of circumstances.

But there are things that can be done to mitigate these risks. Following the DCA crash, my colleagues and I asked FAA to proactive review helicopter operations in other busy commercial airspaces, and I appreciate FAA taking this urgently needed action.

But let's be honest. That required a request from me, the Ranking Member, and the Chairman of this Committee to spur this kind of proactive risk analysis. The fact that it took those requests to have that analysis done is hardly inspiring.

So I hope we will hear from FAA today about what it is doing proactively in the near term to prevent more Newark-type failures while Congress considers longer-term reforms. I also hope to get an explanation from FAA about its staff cuts. How do they think these are going to help FAA meet this safety-critical moment? How do they think these cuts are going to help them implement FAA Reauthorization Law on time?

Earlier this year, FAA fired hundreds of probationary workers. In addition, 700 FAA employees reportedly accepted FAA's first deferred resignation offer, and more than 2,000 are now projected to accept it in a second round. Acting Administrator Rocheleau has said FAA expects further reductions in force. We have been told the Administration is not terminating air traffic controllers or others who are critical for safety. But FAA's entire mission is literally safety, and everybody who works there is there to support that mission.

Implementation of the FAA Reauthorization Law is also critical for safety. For example, the law requires FAA to establish realistic airplane evacuation standards that take into account the presence of carry-on bags, seniors, children, and people with disabilities, none of which were included in recent FAA in-person simulations. The law also sets hiring targets for air traffic controllers, advances airport surface surveillance, and expands the Aviation Workforce Development Grant Program to help recruit and train future pilots, mechanics, and aviation manufacturing technical workers. All of these were supported in a bipartisan way out of this Committee.

Importantly, the law also makes long-overdue reforms to improve accessibility and safety for passengers with disabilities so they can travel with the dignity that all Americans deserve. For example, it requires FAA to establish minimum training standards for airline staff to assist passengers using wheelchairs with boarding and deplaning and training for how to handle wheelchairs and scooters so they will be damaged less frequently.

I look forward to our discussion today, and I yield back. Thank you, Mr. Chairman.

Chairman CRUZ. Thank you. I will now introduce each of the witnesses. We have Mr. Franklin McIntosh, who is the Deputy Chief Operating Officer for the Air Traffic Organization. We have Ms. Jodi Baker, the Deputy Associate Administrator for Aviation Safety. And we have Mr. Wayne Heiback, who is the Deputy Associate Administrator for Airports.

Mr. McIntosh, you are recognized for five minutes.

Ms. BAKER. I believe I am actually going to do our opening five minutes, if that is OK.

Chairman CRUZ. OK.

JOINT STATEMENT OF JODI BAKER, DEPUTY ASSOCIATE ADMINISTRATOR FOR AVIATION SAFETY; FRANKLIN McINTOSH, DEPUTY CHIEF OPERATING OFFICER, AIR TRAFFIC ORGANIZATION; AND WAYNE HEIBECK, DEPUTY ASSOCIATE ADMINISTRATOR FOR AIRPORTS, FEDERAL AVIATION ADMINISTRATION

Ms. BAKER. Chairman Cruz, Ranking Member Cantwell, members of the Committee, thank you for the opportunity to share some updates regarding the FAA's efforts to implement the FAA Reauthorization Act of 2024.

The FAA has made significant progress implementing the Act's several hundred requirements over the past year, and together with my colleagues from the Air Traffic Organization and the Office of Airports I would like to highlight several of these accomplishments.

Regarding direction to improve the FAA's communication and timely decisionmaking on matters before the Agency, so far we have reduced the aircraft registration backlog, and applications are now processed within an average of 10 business days or less. We have also shortened the time-frame for determining acceptance or rejection of air carrier, air operator, and air agency certificate applications.

We have improved guidance our aviation safety inspector workforce uses when planning for production approval-holder inspections. We are also enhancing and processing the analysis of aviation safety data. Specifically, ASIAS, or the Aviation Safety Information and Analysis System, has incorporated an advanced tool to process safety data more rapidly and produce actionable safety intelligence to identify trends and mitigate risks.

As we enhance the safety of the national airspace system for current users, we are also focused on integrating new and emerging aviation technologies, including advanced air mobility. Last month, Secretary Duffy announced the Center for Advanced Aviation Technologies, to be operated by the Texas A&M University System. The center will play a pivotal role advancing aviation technologies, ensuring safe integration into the NAS and drive innovation in aviation.

The FAA is ready for powered lift, the first brand-new category of civil aircraft in almost a century. Last year, the FAA issued the Special Federal Aviation Regulation on powered-lift instructor and pilot certification, pilot training, and operating rules.

President Trump and Secretary Duffy made clear their priority to deliver an all-new, state-of-the-art air traffic control system that makes air traffic safer and more efficient for the American people. Last week, Secretary Duffy announced a plan to replace core infrastructure, including radar, software, hardware, telecommunication networks, and facilities. The FAA has already accelerated the modernization of the Notice to Airmen system. We expect delivery by July 2025, and are targeting deployment by September 2025.

The FAA must recruit, train, and retain the best and brightest. Consistent with congressional direction in the Act, the FAA is laser-focused on air traffic controllers and aviation safety inspectors. We are updating controller staffing targets across facilities to reflect FAA-NATCA workgroup negotiated levels. Under Secretary Duffy's leadership, we accelerated the time to hire and streamlined the controller hiring process through targeted automation and process improvements. We are offering financial incentives to grow the new controller pipeline and retain our most experienced controllers, and we are using on-the-spot hiring authority for experienced military controllers to join the workforce.

The FAA is leveraging partnerships with colleges and universities to create another pipeline for controllers through the Enhance Air Traffic Collegiate Training Initiative. We expect these investments to assist staffing at critical Federal contract towers as we grow the controller workforce.

Aviation safety inspectors are the front line in safety oversight and are essential to execute our safety mission. The use of direct hire authority, for example, on-the-spot hiring authority, has en-

abled the FAA to continue targeted recruitment for these mission-critical positions and accelerate the hiring process.

For our Nation's airports we have updated airport improvement plan guidance that will benefit airport operators, and we are continuing to support the transition to fluorine-free firefighting foam and updating guidance for vertiports, which will support integration of AAM.

We have made substantial progress implementing the requirements aimed at eliminating dangerous runway incidents. Since November 2024, the FAA has added Surface Awareness Initiative at 18 sites. We have more than 30 additional sites planned to go operational by the end of calendar year 2025. And we are rolling out new, enhanced safety technology at more than 70 airports.

The FAA is committed to implementing the FAA Reauthorization Act. We are confident we are making substantial and meaningful progress, and we intend to keep Congress apprised of our progress. And we now look forward to answering your questions.

[The joint prepared statement of Ms. Baker, Mr. McIntosh, and Mr. Heibeck follow:]

JOINT PREPARED STATEMENT OF JODI BAKER, DEPUTY ASSOCIATE ADMINISTRATOR FOR AVIATION SAFETY; FRANKLIN MCINTOSH, DEPUTY CHIEF OPERATING OFFICER, AIR TRAFFIC ORGANIZATION; AND WAYNE HEIBECK, DEPUTY ASSOCIATE ADMINISTRATOR FOR AIRPORTS, FEDERAL AVIATION ADMINISTRATION

Chairman Cruz, Ranking Member Cantwell, and Members of the Committee, thank you for the opportunity to share some updates on behalf of the Federal Aviation Administration (FAA) regarding the agency's efforts to implement the FAA Reauthorization Act of 2024 (the Act) as we approach the first anniversary of its enactment.

The Act, which runs through Fiscal Year 2028, communicates congressional priorities for the agency's mission to provide the world's safest, most efficient aerospace system. It is broad in scope and speaks to everything from FAA's staffing, ways to bolster many of the agency's oversight processes, and where to invest resources to support safety and efficiency for both conventional users and new entrants. The Act has several hundred requirements, the bulk of which fall primarily under the purview of the Aviation Safety Organization, the Air Traffic Organization, and the Office of Airports.

The FAA made significant progress in implementing the Act's requirements during the past year. We want to highlight some of those accomplishments for you today.

Aviation Safety

Building on our commitment to continuous improvement of our certification process and safety oversight, we updated guidance applicable to our risk model for production approval holder inspections and implemented enhancements to the processing and analysis of safety data.

The Act requires the FAA to review and update its Production Approval Holder (PAH) risk model to ensure it adequately accounts for risk at facilities "during periods of increased production." [1] The FAA policy applicable to Aviation Safety Inspectors (ASI) overseeing PAH recognizes that changes in production rates—both increases and decreases—can increase risk. An FAA team reviewed the policy and determined that it would benefit from improved guidance on how to respond when a PAH experiences a change in production rate. As a result, in April, the FAA issued additional guidance to ASIs on performing a risk assessment when a PAH's production rate changes; how to use the risk assessment results; when to add audits; how to customize an audit plan to focus on the areas of highest risk; and which facilities and suppliers to audit.

Regarding the Act's direction to improve the Aviation Safety Information Analysis and Sharing program (ASIAS) concerning safety data sharing and risk mitigation, the FAA accelerated the procurement of a commercially available solution to mod-

[1] Pub. L. No. 118–63, § 314 (2024).

ernize ASIAS. This includes using commercial cloud-based solutions to store and process ASIAS data. More than 30 million digital flight records voluntarily submitted by airline stakeholders have moved to a cloud-based platform. ASIAS has also initiated the implementation of a new advanced technology tool to process safety data more rapidly and produce safety intelligence that we can use to identify trends and mitigate risks.[2]

As we implement the Act's requirements, we continually examine the effectiveness of our oversight processes and make necessary improvements to ensure accountability. We continue to maintain rigorous oversight of Boeing's manufacturing, including implementation of its safety management system. And we appreciate Congress's additional support in extending several provisions of the Aircraft Certification, Safety, and Accountability Act and adding annual training requirements for Organization Designation Authorization unit members to include ethics, professionalism, and safety concern reporting processes.[3]

Advanced Aviation Operations and Technologies

As we enhance the safety of the national airspace system (NAS) for current users, we are also focused on integrating new and emerging aviation technologies, including Advanced Air Mobility (AAM). AAM is an umbrella term for aircraft that are typically highly automated, electrically powered, and have vertical take-off and landing capability. Last month, Secretary Duffy announced the establishment of the Center for Advanced Aviation Technologies (CAAT), to be operated by the Texas A&M University System.[4] The CAAT will play a pivotal role in advancing aviation technologies and ensuring their safe integration into the NAS. The center will also represent a collaboration between government, academia, and industry to drive innovation in aviation.

The Act contains several sections focused on supporting U.S. leadership in AAM.[5] Many AAM aircraft fall into the powered-lift category. We are pleased to report that the FAA is ready for powered-lift, which will be the first brand-new category of civil aircraft in almost a century. Late last year, the FAA met the Act's requirement for publishing a Special Federal Aviation Regulation on powered-lift instructor and pilot certification, pilot training, and operating rules.[6] The FAA will gather data and information through regulatory requirements and the Aviation Rulemaking Committee required by the Act to develop a permanent regulatory framework for powered-lift.

The Act also expresses congressional priorities for continuing to integrate unmanned aircraft systems (UAS), or drones, into the NAS. While the FAA provides regulatory relief to enable certain more complex UAS operations, such as operations beyond the operator's visual line of sight (BVLOS), normalizing BVLOS operations through rulemaking remains a top priority for the FAA.[7]

Modernization

As we work to integrate advanced aviation technologies and aircraft into the NAS, we must prioritize NAS modernization for increased capacity and efficiency. President Trump and Secretary Duffy made clear their priority to deliver an all-new, state-of-the-art air traffic control system that makes air travel safer and more efficient for the American people. In line with the Administration's priorities and congressional direction, the FAA's first step is accelerating the modernization of the Notice to Airmen (NOTAM) system this year, much earlier than originally planned. The system will be securely hosted in the cloud and have a scalable and resilient architecture. We expect delivery by July 2025 and are targeting operational deployment of the modernized service by September 2025.

FAA Process Improvements

The Act directs the FAA to improve communication and timely decision-making on matters before the agency, including applications for aircraft registration and air carrier certification. We agree that there is room for process improvements and increased accountability to our stakeholders. Thus far, we have reduced the aircraft registration backlog, and applications are now processed within an average of 10 business days or less.[8]

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[2] *Id.,* § 348.
[3] *See* Pub. L. No. 116–260, Div. V, Title I, §§ 303–304, 306 (2020).
[4] Pub. L. No. 118–63, § 961 (2024).
[5] *See, e.g., id.,* § 951, et seq.
[6] *Id.,* § 955.
[7] *Id.,* § 930.
[8] *Id.,* § 817.

We also shortened the time frame for determining acceptance or rejection of air carrier, air operator, and air agency certificate applications. Notably, while the target set by Congress is for the FAA to maintain an average application or rejection time-frame of less than 60 days for part 135 air carrier certificates within one year of enactment, the average acceptance or rejection time-frame for these applications is now just 31 business days.[9] We attribute the resulting timeliness and backlog improvements to adjustments to documentation requirements during the design assessment phase to streamline single pilot air carrier certifications under 14 CFR part 135, the establishment of a Flight Standards certification team that exclusively focuses on certification projects to assist with additional certification capacity, and policy enhancements to foster applicant accountability and readiness.

FAA Staffing

As Congress recognized in the Act, the FAA must recruit, train, and retain the best and brightest for our FAA team. The Act specifically considers both Air Traffic Controller staffing[10] and Aviation Safety Inspector (ASI) staffing.[11]

Controller staffing is a top priority as air traffic controllers play an essential role in keeping the American people safe. As required by the Act, we are updating controller staffing targets across facilities to reflect FAA–NATCA workgroup negotiated levels until we make adjustments to our controller staffing model.

We currently have over 10,750 air traffic controllers on the job, with more than 3,000 in training. We are on track to hire another 2,000 controller trainees this year. We are reviewing our hiring, training, and placement processes, as well as FAA Academy withdrawals and failures, to ensure our selection methods effectively identify candidates best suited for the controller profession.

Consistent with Secretary Duffy's announcement on supercharged air traffic controller hiring and our commitment to enhancing efficiency, we streamlined the hiring process through targeted automation and process improvements, which will accelerate the time-to-hire for these critical positions by five months or more, bringing new air traffic controllers on the job much faster. We also incentivized hiring with a 30 percent increase in the salary of those who qualify to attend the FAA's Academy. And we are already seeing positive results from these improvements.

Under Secretary Duffy's leadership, we are also offering financial incentives to new FAA controllers who complete initial qualification training. Additional financial incentives are also available to retain our most experienced controllers, and we are expanding opportunities for experienced military controllers to join the workforce using on-the-spot hiring authority to allow these veterans to bypass the normal announcement process. Air Traffic managers will be able to directly accept resumes from interested military controllers and help place them at their preferred location.

In addition to financial incentives, we are also leveraging partnerships with approved colleges and universities to create an additional pipeline for controllers through the Enhanced Air Traffic Collegiate Training Initiative (AT–CTI). The Enhanced AT–CTI authorizes institutions to provide the same training provided by the FAA. After passing the Air Traffic Skills Assessment, meeting the FAA's medical and security requirements, passing performance evaluations, and receiving an endorsement certificate, Enhanced AT–CTI graduates can report directly to an FAA facility to begin their on-the-job training.

The benefits of the many investments in controller training and hiring will not be limited to just FAA facilities. We also expect these investments to assist staffing at critical Federal Contract Towers as we grow the controller workforce.

ASI hiring is also essential to our ability to execute our safety mission. ASIs are the frontline in safety oversight. Congressional direction for the FAA to use direct-hire authority (*e.g.,* on-the-spot hiring authority) has enabled the FAA to continue targeted recruitment for these mission-critical positions, and it allows the FAA to accept resumes outside of the normal announcement process for all service locations. Use of on-the-spot hiring authority is an effective tool in hiring ASI positions. On-the-spot hiring authority will continue to enable the FAA to accelerate the hiring process by extending offers of employment to fully mission-qualified candidates faster in a highly competitive labor market.

Airports

Our nation's airports are vital to connecting communities, sustaining jobs, and moving people and goods where they need to go. The FAA appreciates the increase in the Airport Improvement Program (AIP) authorization to $4 billion for Fiscal

[9] *Id.,* § 818.
[10] *Id., § K* 437.
[11] *See id.,* §§ 428, 430.

Years 2025 through 2028 to invest in airports across the country so that communities, large and small, can continue to safely and efficiently connect with the rest of the world.[12] AIP grants support projects that improve safety and efficiency and keep the pavement of our Nation's airports in good, safe condition for pilots and the flying public; preserve and improve critical airfield infrastructure at more than 3,200 public-use airports nationwide to support a continued focus on safety-related development projects; and facilitate the safe and efficient integration of new and innovative technologies into airport operations.

We're also working hard to implement other requirements, such as updating AIP guidance that will benefit airport operators,[13] continuing to support the transition to fluorine-free firefighting foam,[14] and updating guidance for vertiports,[15] which will support future integration of AAM.

Runway Safety

Runway safety remains one of our highest priorities. We made substantial progress in implementing section 347 of the Act, which expresses our shared intent with Congress to eliminate all dangerous runway incidents. In November 2024, the Air Traffic Organization briefed the Runway Safety Council on airport surface safety technologies. The council identified the Surface Awareness Initiative as an additional tool that expands surface situational awareness for controllers at 18 airports without existing surface surveillance capabilities. Since the briefing in November 2024, all 18 sites are operational, with more than 30 additional sites planned to go operational by the end of calendar year 2025. In addition, we announced that we are rolling out new enhanced safety technology at more than 70 airports. Runway Incursion Devices are memory aids for air traffic controllers that indicate when a runway is occupied or closed. Runway Incursion Devices are one of three situational-awareness solutions in the FAA's fast-tracked surface safety portfolio.

Conclusion

The FAA is committed to implementing the provisions of the FAA Reauthorization Act of 2024. Our employees work hard to achieve the goals and directives mandated by Congress in the Act. We are confident that we are making substantial and meaningful progress, and we intend to keep Congress apprised of that progress regularly. Thank you again for the opportunity to address the Committee. We look forward to answering your questions.

Chairman CRUZ. Thank you, Ms. Baker. I appreciate that. All right. I am going to start with questions for Mr. McIntosh.

On April 25, for the first time since the January 28 midair collision, the Army resumed flying in the National Capital region. Less than a week later, air traffic control had to command two commercial aircraft on final approach to abort their landing at DCA due to an Army Black Hawk on an apparent training mission at the Pentagon, having wandered far too close to the commercial aircraft flight path. Shortly thereafter, and just 10 days after having resumed limited flight in the National Capital region, the Army Aviation Brigade suspended operations in the D.C. area.

Mr. McIntosh, I have been told that prior to the Army Aviation Brigade's decision to suspend operations on May 5, the FAA was preparing to suspend the Letter of Agreement between the Army and the FAA that gives the Army the ability to operate in the D.C. airspace without having to first ask for FAA clearance for each flight.

Was the FAA prepared to suspend the Letter of Agreement and if so, what was concerning enough to justify such a decision?

Mr. MCINTOSH. Thank you for the question, Senator Cruz. Like yourself, we were extremely troubled by the incident that occurred, especially in light of DCA and the events that led up to the acci-

[12] *Id.,* § 101.
[13] *See id.,* §§ 733 and 737.
[14] *See id.,* § 767.
[15] *Id.,* § 958.

dent. To be quite honest with you, we were ready to deploy any option available that we could use or that we felt was necessary to bring safety measures and better behaviors from the DoD in this instance.

To answer your question, we were ready to do any option available, to include what you just spoke to, which was removing the ability to fly.

Chairman CRUZ. So just to be clear, does that mean the FAA did actually draft an order suspending the Army's ability to fly in the D.C. area?

Mr. MCINTOSH. I am not 100 percent aware if we drafted an order, sir, but we did have discussions if that was an option that we wanted to pursue. I do know that the DoD came back and suspended operations on their own, based on that event, so we are still working with DoD to improve that process.

Chairman CRUZ. Well, I commend your vigilance in protecting the flying public, particularly in and around DCA, given the horrific accident that occurred earlier this year.

Is it true that the hotline, the direct line between the Pentagon air traffic control and the DCA tower, has been inoperable since March 2022?

Mr. MCINTOSH. Yes, sir, that is correct.

Chairman CRUZ. Who maintains that hotline?

Mr. MCINTOSH. I believe the DoD maintains that hotline, but I think the next question would be why were we not aware of it and insist upon it being fixed.

Chairman CRUZ. I did not have that written down but it is a good one.

[Laughter.]

Mr. MCINTOSH. So we take safety responsibilities extremely seriously in the FAA, and those were the questions we were asking. And we were not aware, but we became aware after that event. And now that we became aware after that event, we are insisting upon that line to be fixed before we resume any operations out of the Pentagon.

Chairman CRUZ. Do you have a timeline for when that line will be operational?

Mr. MCINTOSH. To be honest with you, Senator, I would expect the DoD to expedite that timeline so they can begin our operations.

Chairman CRUZ. And while Army flights were ongoing, if the hotline was not operational, how did controllers communicate?

Mr. MCINTOSH. That is a great question, Senator. We still have landline abilities. We can make phone calls from the helipad to the operation, where the supervisor or even the controller in charge can answer. So we are aware of the activity. And if there was a departure clearance needed we would be able to relay it via that mechanism.

Chairman CRUZ. Is it also true that the air traffic control positions for local traffic and helicopters were combined early, just as they were on the day of the midair collision?

Mr. MCINTOSH. Yes, sir, it was.

Chairman CRUZ. Let me say, the developments at DCA and its airspace are extremely concerning, and together with Senators Cantwell, Duckworth, and Moran, this Committee remains laser-fo-

cused on monitoring a safe return to operations at DCA and making sure all users in the airspace are operating responsibly.

Let's turn to Newark. Newark International Airport has been beset by delays after the radar system malfunctioned, leaving controllers unable to see or communicate with aircraft in their sector for approximately 90 seconds. What broke down, and how did the system become this deteriorated in the first place?

Mr. MCINTOSH. Thank you, Senator. To answer your question, we were obviously very concerned about the disruptions that occurred in Newark airspace, as well, for the 90 seconds that it occurred. When we did our investigation, what we found out was our telecommunications provider that provides network lines into that area, there are two lines, Senator, that provide data and transmission feeds. The primary line that came in failed. We have a secondary, redundant line that provides the radar transmissions and our voice capabilities, that redundant line is supposed to assume that load, and it is supposed to be instantaneous, where if we were to have a fiber cut of a line or a copper cut of a line, something along those regards, then that redundant line is supposed to kick in.

When we lost that first line, the second line did not kick in like it was designed to do. That is what caused the disruption. The disruption was for 90 seconds. I am an air traffic controller by trade, so I am just going to talk like an air traffic controller, if that is OK.

Chairman CRUZ. Yes.

Mr. MCINTOSH. Air traffic controllers provide positive separation between aircraft. That is what we do. And what I mean by that is we never point aircraft head-on at the same altitude. We ensure we have appropriate levels of separation. In the event that we have something like a NORDO aircraft that has a stuck mic, that could jam up the frequencies, or if we have something like that.

So we did not have a loss of separation based on some of our procedures that we have installed and the techniques that we use as controllers. I do want to highlight that.

But 90 seconds is a long time for an air traffic controller. So although we have contingencies in place that we use to make sure that we keep aircraft safe, it is a long disruption for a radar screen to go blank or not to be able to talk to aircraft. That was something that we wanted to take a look at, and we have put in corrective measures since that happened, to ensure that those redundancies are better for that airspace.

We have the system across the United States, feeding radar data like this, where we have a line and a redundant line, and we have not had a failure like this, to this degree, in my memory. So we had to put together, along with the local vendor that was responsible for the telecommunications, to provide a more resistant or better contingency to ensure that if it ever happened again that we feel good about those processes. We were able to implement a new contingency, and we are working with the telco provider, along with Secretary Duffy's leadership, to actually bring in a third line of redundancy into that area, to prevent this from happening again.

Chairman CRUZ. So when the system was down, what was the degree of danger the flying public faced?

Mr. MCINTOSH. The real danger to the flying public would be if our techniques were not good, if our controllers did not put aircraft on positive vectors, if we could not quick look or talk to an aircraft via another way—because we have the ability to go, via emergency frequencies. We can use PET–2000s that are at our disposal at some of our remote towers. If all those fail at the same time, then we would have to assure that the aircraft follow what they are supposed to do, which is lost com procedures, where they could go in a holding, or they could go back to their return frequencies. But if all those start failing all at one time, then all of a sudden the danger to the flying public is, and all of a sudden you are going to have to rely on the pilots to do what they do, which is rely on their TCAS systems onboard, which is their traffic collision systems.

Chairman CRUZ. So I guess what I am trying to get at is during those 90 seconds was there a significantly heightened danger to the flying public?

Mr. MCINTOSH. I do not believe there was a heightened significant danger to the flying public. But with that being said, from where I sit, we want to remove all risks to the flying public, and that is what is concerning to me is how do we remove any bit of that risk. And we need to make sure our contingencies are better placed.

Chairman CRUZ. Thank you. Senator Duckworth.

Senator DUCKWORTH. Thank you, Mr. Chairman. I am going to follow up on your line of questioning. Basically, unreliable backup means there is no backup as far as I am concerned. In aviation safety, critical systems need to be redundant and resilient. I know FAA has since implemented a software update to fix the works backup, but it never should have had a chance to fail in the first place.

And there is absolutely no question that we need to fix our antiquated air traffic control facilities and equipment. Each one of you have been vocal voices for fixing the system across multiple administrations.

We held a hearing examining that very issue last year, but a technological overhaul would take years, and we need to know what FAA is doing now to fix this.

Mr. McIntosh, how often does FAA inspect air traffic control infrastructure at airports across the country to ensure that the backup systems will immediately kick in, in the event of a radar and/or communications failure? Basically, how often do you simulate the main system going down and to make sure and test the redundant system to make sure that it actually does kick in?

Mr. MCINTOSH. There are required maintenance checks that our technicians do, and they are very vigilant in doing that. To answer your question, Senator Duckworth, I am not aware if we have checks to make sure if we have two lines that go down at the same time. I will have to do an IOU and follow up on that to make sure I answer your question appropriately.

Senator DUCKWORTH. If you could that would be helpful.

Mr. MCINTOSH. Yes, ma'am.

Senator DUCKWORTH. And if not, I would highly encourage that those checks happen. We all know that now.

Prior to the April radar and communications outages affecting Newark, when was the last time FAA inspected the air traffic control infrastructure in Philadelphia and Newark to ensure that the backup system would kick in, in the event of radar and/or communications failure? And you can add that too.

Mr. MCINTOSH. Yes, ma'am.

Senator DUCKWORTH. Thank you. After the deadly crash near Reagan National Airport, FAA closed the helicopter route involved, but a lack of coordination between FAA and the Department of Defense has continued to put the flying public at risk, and we had this conversation already.

If, for some reason, a military aircraft could not land at the Pentagon, I do not understand why it would circle around the building, putting itself into the flight path of DCA without being directed to do so by ATC. There are many procedures that are not published procedures but are accepted at an airport. I mean, I used to land to Midway Airport where the procedure was circle around the tower, land to taxiway alpha, blow over all of the small aircraft parked there. But even though that was established and was something we did routinely, I would never, ever have executed that procedure without ATC directing me to do so. I could offer it to ATC, like, "Hey, how about, to avoid aircraft, can I just circle around the tower, land to taxiway alpha?" But then I would never do it unless I was given permission to do so.

Mr. McIntosh, FAA is responsible for establishing those routes. Has FAA established a helicopter route that circles the Pentagon? Is that an established landing procedure? Circle to land, is that a procedure around the Pentagon?

Mr. MCINTOSH. Yes, ma'am. To answer your question—and you are a pilot and I am a controller so I will be very frank with you—we have asked that question via our Letter of Agreement. And I think the larger question here, to be honest with you and to your point, what we need to make sure that we assure is that everybody knows their responsibilities, which is as a pilot, or even a heliport tower, you had an aircraft that you did not give a landing clearance to or that aircraft aborted the landing, whatever occurred. That aircraft went back and entered Class Bravo airspace. That aircraft is not supposed to enter Class Bravo airspace without permission of air traffic control. That did not occur.

My question, and I think the larger question is, is why did that not occur? Without compliance to our procedures and our policies, this is where safety drift starts to happen, and that is where my line of questioning is starting, is even if absent a published go-around procedure, if we want to call it that, pilots and controllers have shared responsibilities. You do not enter Class Bravo airspace without authorization from air traffic control, and that is the question that we are asking.

Senator DUCKWORTH. Thank you. So as we have established today, there clearly continues to be a serious lack of coordination between FAA and DoD on airspace near DCA. Will FAA produce a copy of the Memorandum of Understanding to this Committee. If

portions of this Memorandum need to remain non-public the Committee can make arrangements for that. Can FAA do that?

Mr. MCINTOSH. Senator Duckworth, I will make sure that we get the information that you are requesting.

Senator DUCKWORTH. Thank you. And how often are FAA air traffic controllers trained on the policies and procedures established in this MOU that governs the military's flight operations near DCA?

Mr. MCINTOSH. I am sorry, ma'am. How often——

Senator DUCKWORTH. Are they trained up on this particular Memorandum? Are they aware of it? Is it something that gets reviewed?

Mr. MCINTOSH. We train on our Letters of Agreement and SOPs, our Standard Operating Procedures, through our training process, and then it is the application of Letter of Agreement that we do every day. So I would not say that this is something new, but absent an aircraft entering Class Bravo airspace and a pilot deviation, what the controllers would do is exactly what you saw them do that night, which is shared situational awareness of what is going. We have an aircraft or a pilot that is doing something that they are not supposed to be doing, and those controllers did exactly what they should have, which was give two aircraft a go-around to ensure that we kept separation, or safe separation, between those two aircraft, versus letting that continue.

So while we had, in what is my opinion, as a pilot deviation, I do want to comment the controller at the time for their actions for ensuring they gave a timely go-around to those two aircraft.

Senator DUCKWORTH. I want to join you in commending those air traffic controllers for their vigilance in that, and it was timely and appropriate. Thank you.

Thank you, Mr. Chairman.

Chairman CRUZ. Thank you. Senator Moran.

STATEMENT OF HON. JERRY MORAN,
U.S. SENATOR FROM KANSAS

Senator MORAN. Mr. Chairman, thank you. Thank you and Senator Cantwell for having this hearing what is clearly occurring at a critical time. I want to first indicate that your Subcommittee on Aviation and Space intends to have a DoD, FAA, and NTSB discussion, roundtable, once again. The date we have zeroed in on June 11, in which we have another understanding from the investigator and the FAA and the Department of Defense what is transpiring since the incident and tragedy of January 29.

I also want to indicate that I have introduced legislation that may be of interest to others on the Committee to join, and that would require all aircraft in Class B, high-volume airspace to utilize ADS-B In and Out, something that was a significant item of discussion and concern on the night of January 29, in regard to the Black Hawk.

Let me ask a question, an issue that bothered me in the past, and I highlighted this in our last hearing. NTSB's—and I suppose this is for you. Well, let me leave it open to whoever wants to answer it. NTSB's preliminary investigation highlighted 15,214 events, October of 2021 to December of 2024, of commercial planes

and helicopters that were separated by less than 1 nautical mile. That information that NTSB provided came from the computer records of the FAA, and those numbers, as well as other statistical facts that were told to us demonstrated to me a continuing problem, a continuing circumstance in which there is close proximity between aircraft at DCA. That is troubling, in and of itself, but troubling to me is if it is in the FAA's computer records, is that something that the FAA monitors to know the trends so that actions can be taken to reduce the risks?

I do not know whether that is—Mr. McIntosh, you seem to be on the seat today.

Mr. MCINTOSH. Senator Moran, if it is OK, both myself and myself, Ms. Baker, will tag-team this question to make sure we give you an appropriate answer.

Reference FAA databases, we are required, any loss of separation we are required to enter what is called a Mandatory Occurrence Report for further review. Anything that is considered to be a near mid-air collision must be investigated. Any pilot reports of close proximity we investigate. And we do keep records of that. We also keep records of our Voluntary Safety Reporting Program, or our ATSAPs, that come from our controllers, and analyze that.

I will say that I am concerned, and I acknowledge that we missed something at DCA. Our mitigations failed because we do have quality assurance and quality control processes, where through the data analysis we are supposed to develop corrective action plans.

I know that Acting Administrator Rocheleau talked about what we would like to do to ensure that we have better analysis of our data trends, and I am going to follow up with exactly what he said, which is updating the Aviation Safety Information Analysis and Sharing tool with artificial intelligence and machine learning to do a better analysis of the trends involving mixed aircraft types—helicopters and fixed wing.

When we look over 10 years of data, I think if you get a report once per month or something like twice per month over the year, of 10 years, I think some trends may escape someone, and I think some of these tools that we have available to us will help us spot these trends better, so we can be more proactive in our mitigations versus reacting to an event, because that is really what a safety organization is supposed to do.

So I really want to make sure that we continue to quantify the data and make surgical improvements to our safety processes and those surgical having the biggest benefits on making sure that we have better processes and better procedures in place to ensure safety to the flying public.

Senator MORAN. Are you saying—I want to make sure I understand what you are saying—that that data is sufficiently alarming that it should have raised more awareness and action than it did?

Mr. MCINTOSH. Yes, sir.

Senator MORAN. Thank you. Anything else, Ms. Baker?

Ms. BAKER. I just wanted to add that holistically we are looking at data across the FAA. Mr. McIntosh describes specific datasets within the air traffic organizations. But what we want to do is bring together datasets across the FAA. That requires more com-

puting power, because more datasets just require more computing power to bring them all together. But we also need to apply artificial intelligence-type tools and large language models to help us spot emerging trends that may not be visible to individuals on a one- or two-incident basis over a multitude of years. As well as we have a lot of reports that are text-based, and right now those have to be reviewed by analysis. So the application of large language models helps us sort through those things and bring together related information faster.

Senator MORAN. Does the Secretary's announcement, is there any consequence to the ability to do what you just described, with the resources that are being talked about, or is that going someplace else, to the absence of this need?

Ms. BAKER. We are already committed to that, and this announcement does not impact the resources there.

Senator MORAN. Let me just finally say that if it is a problem at DCA, and there are helicopters and fixed-wing aircraft at many airports across the country, I assume that the FAA is also doing the same kind of examination and soul searching across the country, not just focused on DCA. Is that true?

Mr. MCINTOSH. That is 100 percent accurate, Senator. We are looking at right now 10 airports or 10 cities with airports that have charted airport routes, and we have done, I feel, is a very important body of work, to your point. And what we are doing is we are assessing that data, and we are already having actual items, case in point, Las Vegas. Las Vegas has got some charted helicopter routes that are close to the International Airport. Based on our analysis and what we saw we have already established lateral and vertical boundaries for those helicopter routes to keep them separated from aircraft landing and departing the airport, as well as working with our labor partners to work on making sure that traffic advisories are well timed and well placed, so that the helicopter pilots and that the commercial pilots know exactly where the helicopter routes are and have situational awareness.

But the biggest thing is the lateral confines of those helicopter routes, to make sure that they are separated from our arriving and departing aircraft. That is big for us. And that is an example of what I expect from our datasets, to lead to the appropriate corrective action plans that we want to see put in place, to actually mitigate any potential issues on the front side. And that is where we need to be.

Senator MORAN. Thank you.

Chairman CRUZ. Thank you. Senator Klobuchar.

STATEMENT OF HON. AMY KLOBUCHAR,
U.S. SENATOR FROM MINNESOTA

Senator KLOBUCHAR. Thank you very much, Mr. Chairman. Thank you, Ms. Duckworth, Senator Duckworth, for your leadership, as well.

So we have been rightfully focused on the tragedy, the loss of life with the American Airlines flight. But as has been pointed out by my colleagues, so many problems at Newark, and as we go into the summer season it is hard to believe that they will not get worse. And then just across the country.

There was one incident, a near miss, recently. It was on March 28, between a Delta flight and a military aircraft, shortly after the tragedy, actually, where the military flight was just 500 feet below the Delta flight, and the Delta pilot said, "Is this—," and I am paraphrasing, but it was picked up from air traffic control, "Is there actually a flight 500 feet below us?" That flight was headed to Minneapolis and contained a bunch of Minnesotans, families. One of my staff members was on that flight. And I had asked, and I appreciated that the DOT got back to me close after it, but I am still waiting for a final answer about what happened.

Do you know? Could any of you give me a timeline on that?

Mr. MCINTOSH. Yes, ma'am, I believe I can. What occurred was the military flight was doing a national flyover over Arlington, and it was the opposite direction to departure traffic at DCA. Potomac TRACON, which is the radar approach control that feeds all the aircraft into DCA, was working the military flight, and there was a communication exchange between the supervisor at Potomac and the supervisor at DCA. And what I mean is, the Potomac supervisor coordinated with DCA to stop departures at a certain time. And that stop time, you stop departures and let the flyover proceed. You sterilize the airspace, essentially, to keep traffic safe.

The controller or the CIC that was at DCA misunderstood the time or misunderstood the verbiage on what that stop time was, so they let one more aircraft go, versus holding that aircraft on the ground. In reviewing that we said we have to clean up the phraseology in how we give times to ensure that we know exactly which aircraft we are going to stop and keep that kind of incident from occurring.

So what we did was we put both of those facilities together, along with the management team, to ensure that we had a better process in place to keep that from happening again. That was, unfortunately, an event that happened, but we improved the procedures to keep something like that from happening again, ma'am.

Senator KLOBUCHAR. OK. And then what about, as you look at changing the processes and protocols, how about the number of people that are working there? Just in general, what are the FAA's hiring targets for the next 3 years when it comes to air traffic control, for 2026, 2027, 2028?

Mr. MCINTOSH. Thank you for the question, ma'am. So this year it is 2,000, next year it is 2,200, the following year it is 2,300, and the following year after that it is 2,400. Those are the FAA hiring goals. And it is quite robust, but with Secretary Duffy's supercharged hiring I believe that is a target that, quite honestly, we will achieve.

Senator KLOBUCHAR. And so how many down will we be, even with those targets?

Mr. MCINTOSH. So for the first time—are you asking me about 100 percent staffing——

Senator KLOBUCHAR. Mm-hmm.

Mr. MCINTOSH. —or do you think we are going to have further attrition?

Senator KLOBUCHAR. Yes, 100 percent staffing.

Mr. MCINTOSH. Right now I believe the number is that we are 3,000 short controllers, I believe is what the number was. And

right now we have 3,100 trainees that are in the pipeline. We have to account for attrition, meaning we are going to see controllers retire, controllers separate. With the numbers that I am speaking to I think we will finally start gaining tracking. This year we outpaced attribution, and we will start seeing, over the next 18 to 24 months where we actually see a positive gain in the controllers, and we start feeling better about where our staffing targets are and how we are staffing the facility.

Senator Klobuchar, I am sure you can appreciate that it takes time to make a quality air traffic controller. It is a high-skilled position. The average time to certify across the country is approximately 2 years from when they graduate. So it is going to take some time to get this process done——

Senator KLOBUCHAR. I understand.

Mr. MCINTOSH.—and make sure we have——

Senator KLOBUCHAR. It is one of the reasons, as we look at the FAA reauthorization from a year ago, that we decided, on a bipartisan basis, to add funding. And it is just one of the things that bothers me, outside of the air traffic control world, is just when the Administration engages in a tax on government employees, just wholesale, or says, "Hey, we want everyone to be fired that has only been there 2 years," or whatever it is, it does not exactly make it an enticing place to work. So I hope you bring that back to the Administration, in general, because it just keeps happening, and then people do not want to work there. They do not think they have job security. It does not seem like a great place to go. And then we do not get people to work there, and then you do not get medical devices approved, or you do not get planes to leave on time, or worse. So that is just one of the things I want to pass on.

I have one last question, Mr. Chair. It is very short. Mr. Heibeck, I have been working to get Federal funding for the third-oldest air traffic control tower in the country, that is in Duluth, Minnesota. Representative Stauber, Republican from the House, and I and Senator Smith have joined forces on this. We have seen flooding, and there is an airbase up there. There is a National Guard airbase. Cirrus is up there, that makes jets. And then we, of course, have an airport. So just anything you can do. We just got a grant, which was helpful, and got one last year, as well. But we have only about 20 percent in and we need more funding for that, because it really is the third-oldest tower in the Nation.

Mr. HEIBECK. I am glad that we could provide grant funding to start that project, and we will see if we can continue to support it.

Senator KLOBUCHAR. OK. Thank you.

Chairman CRUZ. Thank you. Senator Sullivan.

STATEMENT OF HON. DAN SULLIVAN,
U.S. SENATOR FROM ALASKA

Senator SULLIVAN. Thank you, Mr. Chairman, and I appreciate the witnesses today.

By the way, I am a big fan of our military. I am on the Armed Services Committee. But I will say, the Army needs to really up its game on being more forthcoming on this latest incident. I have actually requested, from my position on the Armed Services Committee, a briefing. I certainly hope it is not some big-shot general

who thinks he needs a quick trip over the Pentagon and will blow off the FAA safety requirements. That better not be what happened. But they need to start giving answers to this Committee and other committees, because what happened was just unacceptable. So we will continue to press them on that, but they really have not been that forthcoming.

I want to focus on the Alaska Safety Initiative that the FAA has worked with me and this Committee on. This was the outgrowth of a 10-year study by the NTSB. It showed we had crash rates that were almost 2.5 times the rate of the rest of the country. Fatality rates were much higher than the rest of the country, as well.

So working with the FAA we instituted the Alaska Aviation Safety Initiative, FAASI, and in last year's FAA reauthorization we were able to get a whole bunch of things in that bill that related to Alaska aviation safety. A goal of reducing the rate of fatal aircraft accidents by 90 percent through 2033, requires the FAA to improve maintenance of weather equipment. And growing those weather equipment issues, as you know, many of our rural airports do not have any weather reporting, which in the Lower 48 nobody would accept that. Dozens and dozens.

And I will say I want to compliment Secretary Duffy. He is delivering on these promises. So is the President. The FAA announced a $25 million investment in the FAASI initiative at the beginning of April, and a significant expansion of the FAA's use of satellites in Alaska to help support connectivity and weather monitoring.

The President actually announced, with Secretary Duffy, just on May 8 in their press conference, a dramatic increase in the number of new weather observation stations in Alaska, so we really, really appreciated that. Of course, Senator Cruz mentioned all the other upgrades that they both announced at this very important press conference last week that I am fully supportive of. So I want to thank Secretary Duffy, the FAA, the President, on really focusing on delivering on a number of these issues.

Can I ask you, on the weather observation systems, in the maintenance, you know, we do not have enough. The President and Secretary Duffy acknowledge that with this dramatic announcement. But where are we on the maintenance issues for maintaining our weather systems? As you know, we will have a weather reporting AWOS system that goes down in a small rural community that has an airport, and it will take a long time to get an FAA official out there to fix it.

So do we have an update on that? I think that was required in the FAA bill for 60 days after an enactment.

Mr. MCINTOSH. Senator Sullivan, I am going to have to take an IOU on that one. I am sorry, I do not have an answer. I do know that we talk about this all the time. When we do have an outage I often speak with my team, and usually the hardest thing is the accessibility to get there, not via any of our transportation mechanisms but sometimes it is the weather or some of the terrain.

Senator SULLIVAN. A lot of these communities, we have over 230 communities in Alaska that are not connected by roads.

Mr. MCINTOSH. Yes, sir.

Senator SULLIVAN. A lot of people do not know that. So the only way to get in is through an airplane, or a boat if the community

is on a river. So that is why this is so important. And if you do not have weather reporting, then you have no idea what it is like to fly in there, and you know we have some pretty nasty weather in my state.

Mr. MCINTOSH. We do recognize aviation is the primary form of transportation for Alaska and that the need to provide support for resources, food, and medical supplies is paramount. We recognize that, and we definitely want to make sure that we are doing everything we can so the people that are relying on us have the faith that we are doing what we need to do.

We are pursuing the large body of work that you are speaking to, and at the Secretary's request we are doing critical investments in the things that you are speaking to, with deploying dozens of AWOSs, Automated Weather Observing Systems, and also the VWOSs, the Visual Weather Observation Systems, and numerous weather cameras to make sure that there is better accessibility to the items that you are talking about.

But I will take an IOU, if that is OK, sir, as far as what the repair times look like.

Mr. HEIBECK. Senator Sullivan, if I could add, I am happy to report that we are in consultation for finalizing guidance to our Alaska office regarding the expansion of airport improvement program funding for the funding of AWOS for airports across Alaska, as well as another provision, I believe you championed, special justifications for runway projects in Alaska——

Senator SULLIVAN. Great.

Mr. HEIBECK.—to support community needs.

Senator SULLIVAN. Thank you, and I appreciate that. And again, I want to thank Secretary Duffy and the President. You know, he is the one who made the announcement on the weather observation systems in Alaska and the dramatic upgrade.

Very quick, Mr. Chairman, one final question. I have been working with some of the controllers on legislation to create a shot clock for updating the ATC system from copper wiring to fiber optic technology. Would that kind of push from us help you guys? I know you need the funding. But this issue of copper wires, the Chairman just mentioned it, the Secretary has been mentioning it. It is something about speed for data that we need, and unfortunately our systems are really slow. What do you think about something like that?

Mr. MCINTOSH. Senator Sullivan, I will say that we would appreciate bipartisan support for our infrastructure. It is sorely needed. And fiber is a large piece of the infrastructure improvements that we are asking for to replace copper that is currently there.

Senator SULLIVAN. Great. Thank you. Thank you, Mr. Chairman.

Chairman CRUZ. Thank you. Senator Kim.

STATEMENT OF HON. ANDY KIM,
U.S. SENATOR FROM NEW JERSEY

Senator KIM. Thank you, Chair. I will just pick up where my colleague left off. I mean, obviously, in my home state of New Jersey a lot on the minds about safety, about infrastructure. I was at the Philly TRACON and Newark Airport this past weekend, and what I hear from the tech folks on the ground there is they still have

not heard a real diagnosis of specifics of what the telcom problems are. They have not heard from FTI in terms of that.

So Mr. McIntosh, it sounded like you are saying that there has been an investigation, so do you feel like there is, on the FAA side, a clear understanding of what the problem is?

Mr. MCINTOSH. From this outage, Senator Kim, yes, sir, I do. And if that was relayed to you then that is something that I need to address. And the reason why I am saying that is I actually—we, the FAA—has sent senior leadership from Technical Operations who help liaison between our vendor who provides telecommunication——

Senator KIM. And who is that vendor again?

Mr. MCINTOSH. We have two vendors that provide telecommunication efforts for Philadelphia Area C. That would be Verizon and Crown Castle.

Senator KIM. OK. So yes, if you can close that loop with those that are there on the ground. And what is the timeline of the fixes that you were mentioning in terms of both the primary and the secondary and then adding a potential tertiary?

Mr. MCINTOSH. Right now, in our conversations, the Administrator and the Secretary have asked us to assemble a task force to work with those vendors to improve those redundancies. And that task force started meeting yesterday, and we are expecting those redundancies to be put in place this summer.

Senator KIM. This summer.

Mr. MCINTOSH. Yes, sir.

Senator KIM. What I was told when I was there at the TRACON was that the main fix to be able to prevent blackouts—I mean, if our goal is to prevent blackouts from happening—it is going to require a switch and a realignment of the STAR system, direct from Newark to Philly TRACON rather than routed through N90. Is that correct?

Mr. MCINTOSH. There are going to be different levels that are going to help increase our infrastructure there, and STARS is one of the items that we plan on putting to harden that area. And I know that Secretary Duffy actually announced that in his press conference, as well. And we are, right now, having discussions on putting that in place.

Senator KIM. Is there a timeline for that switch to STARS?

Mr. MCINTOSH. I was asked to do it as soon as possible, and we are having that conversation now on how quickly we can get it done. It is, right now, a piece of adaptation. What I mean by adaptation is we have got to build the software to make sure that Newark, the Philadelphia Area C TRACON can talk to the N90 TRACON. So that adaptation piece and software changes is really what we need to get done.

Senator KIM. I wanted to make sure you were tracking it, because I was told that theoretically you could do this in 6 to 8 weeks. But without the software enhancements, which is so much needed, that could potentially be a 6-month to 12-month timeline in terms of the testing as well as the development of the software. Does that sound roughly right?

Mr. MCINTOSH. I think the 12-month timeline is very, very conservative. When we take a look at adaptations we already have a

team that is going down to the Tech Center to work on the adaptations next week.

Senator KIM. So I would like to stay in touch with you about this, because we need to be able to tell the people in New Jersey, and frankly around the country, just what we can expect when it comes to the goal of zero blackouts, in terms of being able to make sure that they could have assurances there. Because I really do feel like this has become an issue that is undermining confidence, not just in the Newark Airport but just in our system writ large.

One other issue that is continuing to come up is about staffing. I know we were talking about it nationally. But at least at Philly TRACON what I was told is when it was at N90, roughly 32 CPCs, down to about 22 now. But that the TDY, the temporary duty that they are going to have ends July 28, 2026, about 15, 16 of them could very well move out at that point.

The pipeline does not sound like it is keeping up. I was told at least it is kind of in the single digits right now. Does that track with your understanding? Do you have greater confidence that this isn't going to be some cliff come July 28, 2026, when it comes to Area C of the Philly TRACON?

Mr. MCINTOSH. No, Senator, that does not track with my information, actually. We moved the airspace to improve the pipeline. I currently have 10 individuals that are in the TRACON that are actively training. I have got another 6 that are in the simulation lab, that are going to go to the floor in June of this year. And every training class that I have signed up through the middle of 2026 is filled with CPC ITs. So my pipeline is actually robust, which is the whole reason why we moved the airspace.

Senator KIM. Yes, look, that is what we want to make sure we are hearing. So if you don't mind, if I can follow up with you, just kind of deconflict our numbers. Because again, I just think that is the kind of information that can hopefully put us at greater ease that we are trying to deal with a short-term problem right now, ensure there are zero blackouts, but also make sure we are not falling over a cliff. So is that something you can work with me on?

Mr. MCINTOSH. Absolutely, sir.

Senator KIM. OK, great. Thank you. And with that I yield back, Mr. Chair.

Chairman CRUZ. Thank you. Senator Budd.

STATEMENT OF HON. TED BUDD, U.S. SENATOR FROM NORTH CAROLINA

Senator BUDD. Thank you, Chairman. First, I want to thank President Trump, Secretary Duffy, and you, Chairman Cruz, for your leadership on much-needed ATC modernization. It comes at a particularly important time in the history of American aviation, with so many new technologies coming to our airspace.

For example, today Wing Aviation and DoorDash are launching a joint operation in Charlotte. This marks the first new market for Wing after a successful year in Dallas-Ft. Worth.

Sadly, the drone industry continues to be stifled by regulatory uncertainty from the FAA, which has failed to publish a proposed rule on BVLOS, or beyond visual line-of-sight operations.

Ms. Baker, why has it taken so long for the Agency to act, given clear deadlines, and can you commit that the FAA will advance a proposed rule by this summer?

Ms. BAKER. We are very excited to get the BVLOS rule out, as well. We are excited about this new industry segment and what it can do. We are working very hard to get that rule out. It is in review.

Senator BUDD. Thank you. While the Chinese Communist Party has been extremely forward looking, unfortunately I am concerned that, as we are discussing today, the somewhat outdated ATC system might be yet another challenge to the full integration of these new technologies.

Mr. McIntosh, I have appreciated the clarity that you have brought this morning to many areas. As we work to modernize ATC, is the FAA thinking about how to future-proof the system so that new technologies can be more smoothly integrated into the national airspace?

Mr. MCINTOSH. Thank you for the question. Absolutely, Senator. The ATO policy is get to yes but get to yes safely, and when it comes to integration of these kinds of things that you are speaking to, we will work tirelessly to make that happen.

Senator BUDD. Thank you. Companies like Boom Supersonic are on the leading edge of civil supersonic revival. In January, Boom's XB–1 aircraft demonstrated that it can fly faster than the speed of sound, but without any audible sonic boom reaching the ground.

Despite this innovation, current FAA regulations sets an arbitrary speed limit in the skies. Companies trying to bring back supersonic flight for the first time since the Concorde have to ask for special permission from the FAA to operate their aircraft above Mach 1, and they can only fly them in specific flight testing areas, even if they do so quietly like Boom.

Today, the U.S. has the only flying civil supersonic aircraft, but China is already making clones of Western airliners, and they recently announced its own supersonic passenger plane. So unless we invent and build the next generation of aircraft here in the U.S., our leadership will pass from America to Asia.

Today, together with my colleagues, Senator Sheehy, Senator Tillis, and Senator Lee, I am introducing the Supersonic Aviation Modernization Act. This bill directs the Administrator to issue or revise regulations to allow companies like Boom to operate their aircraft above Mach 1 within the United States, as long as no sonic boom reaches the ground.

The supersonic race has begun, and it is critical that America wins. My bill will ensure that innovative companies like Boom have the regulatory certainty that they need to continue innovating, and I look forward to working with my colleagues on this Committee to make sure the U.S. maintains its leadership in civil supersonic flight.

Thank you, Chairman.

Chairman CRUZ. Thank you. Senator Markey.

STATEMENT OF HON. EDWARD MARKEY,
U.S. SENATOR FROM MASSACHUSETTS

Senator MARKEY. Thank you, Mr. Chairman. I would like to talk about the Trump administration's cuts to the Federal Aviation Administration's workforce. Over the last few months, the Department of Transportation has twice sent early retirement offers to its employees and then attempted to fire its probationary workers. In total, more than 1,000 FAA employees either accepted the buyout or were probationary employees that the Administration tried to fire. I understand that the Department of Transportation exempted safety-related positions from these personnel moves, but these reductions can still severely impact FAA operations.

For each of the witnesses, how many employees in your respective offices either accepted a buyout offer or were fired probationary employees?

Ms. BAKER. Right now the process of accepting the deferred resignation program is still in process. We do not have our final numbers at this point. As you mentioned correctly, our safety-critical employees were excepted, so within aviation safety that meant our inspectors, our engineers, doctors——

Senator MARKEY. So how many have accepted so far?

Ms. BAKER. I do not have those numbers at this time.

Senator MARKEY. OK. Could you get me the numbers, please?

Ms. BAKER. We will find out what we can get.

Senator MARKEY. OK. That is fine. Yes, Mr. McIntosh?

Mr. MCINTOSH. I was going to echo Ms. Baker's same comments. We are still waiting for the DRPs to be exercised. But again, our safety-critical positions——

Senator MARKEY. No, I appreciate that. What are the numbers for the employees? Do you have that?

Mr. MCINTOSH. We will not have that number until after everyone has time to either accept or decline the DRP process. We have not yet hit that deadline yet, sir.

Senator MARKEY. OK. What is the deadline?

Mr. HEIBECK. The deadline would depend on when each individual received their agreement to sign. Most employees have a 45-day period.

Senator MARKEY. So we are coming up pretty close to the end of the deadline, huh?

Mr. HEIBECK. Yes. As with any personnel——

Senator MARKEY. Excuse me?

Mr. HEIBECK. As with any personnel matter, we will need to take that back and see what data we can—to make a determination of what data we can provide.

Senator MARKEY. Yes. Did your offices each conduct an internal analysis or risk assessments of how these workforce cuts will impact aviation safety or oversight? Did you do an internal analysis?

Mr. HEIBECK. I would say for the Office of Airports we are watching that very closely.

Senator MARKEY. Did you do an internal analysis?

Mr. HEIBECK. Yes. We have done an internal analysis, and we are working across geographic boundaries, when we see a need, to make sure that we are providing the same level of service to our airport sponsors and to all of our——

Senator MARKEY. OK. Will you provide that analysis to the Committee, please, the analysis that you have done in terms of——

Mr. HEIBECK. Again——

Senator MARKEY. Have you done that analysis? Do you have it?

Mr. HEIBECK. Yes, we have done that analysis. Again, with any personnel matter I would——

Senator MARKEY. OK. Please provide that analysis in terms of what the impact is, of any of those cuts on aviation safety, just so we will have that. The same for you, Ms. Baker. Can you do that for us, too?

Ms. BAKER. We have had conversations around how we will fill critical vacancies——

Senator MARKEY. Do have data, though. Do you have data that you have developed——

Ms. BAKER. At this point we do not have final data.

Senator MARKEY. OK. Please send that to the Committee. Mr. McIntosh?

Mr. MCINTOSH. No, sir. We have not done an internal analysis. The Air Traffic Organization has been fortunate, as the largest number of our individuals are safety-exempt employees, and the one that are not, the majority will be needed for continuity of operations.

Senator MARKEY. Great. Well, again, send us the analysis in terms of the support people, in terms of what your conclusion is in terms of their role in safety. And I do support cutting fraud and waste and ensuring that the Department is operating efficiently. But the Trump administration is forcing agencies to blindly cut their workforces without regard to merit or experience. They are not targeting probationary employees because they are the least efficient or effective. They are targeting them because they are the easiest to fire. They actually might have had a good role, important role, to play. And given the tragic crash in Washington, D.C., in January, and the recent air traffic control outages in Newark, now is not the time to be taking chances with personnel levels. We can see the chaos, confusion growing, and growing month by month, since Trump has taken over.

And finally, earlier this year I asked Secretary Duffy a written question about whether he would convene stakeholders to discuss raising the wages and benefits of airport service workers. These workers are the unsung heroes of our aviation system, and I was pleased that the Secretary agreed to bring together a group for such a discussion.

Mr. Heibeck, are you able to provide any update on the Secretary's commitment to convene stakeholders on this issue?

Mr. HEIBECK. No, I am not very familiar with that issue, and I will need to circle back with you, if that is OK.

Senator MARKEY. OK. I need you to do that, if you could, as promptly as you could. I appreciate that.

And in terms of my law last year, that included my legislation with Senator Vance to ban family seating fees, under our bill the Department of Transportation is required to issue a rule prohibiting airlines from charging parents a fee to sit with their children. Can any of the witnesses provide an update on that rulemaking?

Ms. BAKER. I am a mother. I have two kids. This one means a lot to me. This is something that is being managed by the Aviation Consumer Protection Division at the Department of Transportation, and we are happy to facilitate any kind of communication on that.

Senator MARKEY. Yes, I think it is very important for the Agency to update the Committee. That is a very important issue. And again, I did that issue with Vice President Vance, and so would love to see those protections go into effect, and hopefully hear from the Department of Commerce.

Thank you, Mr. Chairman.

Chairman CRUZ. Thank you. Senator Schmitt.

STATEMENT OF HON. ERIC SCHMITT,
U.S. SENATOR FROM MISSOURI

Senator SCHMITT. Thank you, Mr. Chairman. Mr. McIntosh, I will start with you, and maybe you have answered this question for numerous Senators before. But I did want to get, given the recent news and some of the concerns that are out there, about how outdated some of our systems are, can you give an update on where we are at with modernization and safety?

Mr. MCINTOSH. In regard to modernization, we continue to have several surface safety portfolios that are going to help us maintain some safety standards. I am going to speak strictly for what we are doing for runway safety. Some of the things that we are deploying now is a Surface Awareness Initiative that has ADS-B technology, to give controllers situational awareness of what is going on on the surface.

Runway Incursion Devices are now being deployed at several of our facilities that alert controllers when a runway has been closed or we have an aircraft on a runway for a prescribed amount of time that could be concerning, and we want to make sure we clear that aircraft.

And a third thing that we have actually deployed recently is something called an Approach Runway Verification that alerts controllers when we may have a misalignment to a closed taxiway or an active taxiway or lining up for the wrong runway.

All three of these tools, if you were to stack them on top of one another, actually gives us better awareness of what is going on.

I think the larger question, though, is how are we going to fix the current infrastructure and some of the older things that we have in place. We have facilities that are more than 60 years old, and a lot of technologies in those facilities are extremely antiquated. Our goal, or our hope, is that we get bipartisan support to move Secretary Duffy's request forward so we can start bringing controllers and managers the newest equipment that we can bring in, from automation, from radar, and from voice switching, where we are better at our jobs and providing safety services.

Senator SCHMITT. How long will that take to implement? Let's say we did that in the next 2 months. How long would that take to implement?

Mr. MCINTOSH. The Agency would have a goal of deploying that within 4 years, sir. And what I mean by 4 years is putting those items in place and——

Senator SCHMITT. Does that mean it takes 4 years everywhere, or it is staged so LaGuardia is updated before LAX, or something like that? How does that work?

Mr. MCINTOSH. We would prioritize the facilities based on needs. I do know one of the facilities that Secretary Duffy has prioritized already is Philadelphia Area C and the Newark airspace, based on some of the outages that we have seen.

Senator SCHMITT. OK. Ms. Baker, I want to turn to you with the time I have, and I do want to ask Mr. Heibeck a question too, as it relates to the DCA tragedy. And we had a hearing. The Chairman thankfully convened a hearing on that, and some of the revelations were shocking about the number of near misses that happen at DCA—I mean, across the country but specifically at DCA.

Where do we stand with the grounding of helicopter traffic? And I know this is an Army conversation too, but what is your understanding of where we are at with that right now?

Ms. BAKER. I think I am going to actually defer that to Mr. McIntosh.

Senator SCHMITT. OK. Sure.

Mr. MCINTOSH. In regard to just with the Army helicopters in the Pentagon?

Senator SCHMITT. At DCA.

Mr. MCINTOSH. Yes, sir. We are having communications with DoD right now to ensure compliance. Right now they are not flying out of the Pentagon until we have further conversations and some of the equipment issues that we experienced the other day are fixed.

As far as total grounding, that may be part of the conversation, but right now we have not had to go and pursue that, as right now the DoD is working with the FAA to make sure that we have safety thresholds in place after the latest outage, sir.

Senator SCHMITT. OK. I know that is something, that a lot of Committee members are very focused on, and I wanted to come and get a lay of the land.

Mr. Heibeck, I wanted to ask you specifically about, you know, Kansas City just had a new airport completed. I think it has been very well received. I fly in and out of there occasionally, but I live in the St. Louis area so Lambert is top of mind always. This is a little bit more closer to home, a little bit more parochial.

The FAA approved a master plan in 2023. Could you just give me an update on the FAA's engagement in St. Louis? It is a pretty unique opportunity. St. Louis has a rich history. I grew up in the shadow of that airport. There are a lot of great opportunities for modernization and for the consolidation there. But can you just give me an idea of your engagement, where things stand?

Mr. HEIBECK. Yes, absolutely. A lot of exciting things happening in St. Louis, including the construction of the new fighter jet there by Boeing.

Senator SCHMITT. Yes.

Mr. HEIBECK. Our Central Regional Office has a great working relationship with the city. We are currently working with them closely to finalize their application under the Airport Terminal Program for the $7 million that they have applied for. We are working with them to get bids, and I know that will facilitate the consolida-

tion of their two terminals, as is called for in the master plan. Lots of other programs that we are participating in, as well, including the deicing pad there, some taxiway reconstruction, and I also believe we are also participating in a snow removal equipment building. And on the horizon they have an airfield maintenance facility. I know that is in their capital airport plan.

So we are tracking very closely the many needs at St. Louis Lambert International Airport and have a great working relationship with them.

Senator SCHMITT. It is pretty unique. I mean, it is a pretty unique asset, and it is right in the middle of the metro. They have got a billion-dollar runway that let's just say is underutilized. It was built right before TWA left the building. So there are a lot of opportunities for growth there. I know my office will be working with you and working with the airport on that to make sure that that is a world-class facility. So thanks for the update.

Mr. HEIBECK. We look forward to working with your office and the airport.

Senator SCHMITT. Thank you, Mr. Chairman.

Chairman CRUZ. Thank you. Senator Rosen.

STATEMENT OF HON. JACKY ROSEN,
U.S. SENATOR FROM NEVADA

Senator ROSEN. Thank you, Chair Cruz, for holding this hearing today. I want to thank the witnesses for testifying.

I am going to talk a little bit about airspace obstruction. In response to the unique airspace challenges over Harry Reid International Airport in Las Vegas, I authored a section, Section 744, of last year's FAA's Reauthorization, to improve the Agency's airspace obstruction analysis. The law now requires the FAA to undertake a robust analysis of potential airspace hazards near certain airports due to factors like building and hotel construction near the runways. However, nearly a year after the reauthorization bill was signed into law, there seems to be little progress in implementing this statutory requirement.

So Mr. Heibeck, can you please provide the Committee with an update about where the FAA is on enforcement of Section 44, and will you commit to ensuring that the FAA follows the law and implements this critical aspect of FAA reauthorization and continue to keep us informed?

Mr. HEIBECK. Yes, Senator. The Office of Airports is responsible for on-airport evaluations, and I am going to defer to my colleague, Frank McIntosh——

Senator ROSEN. Thank you.

Mr. HEIBECK.—on this particular provision.

Mr. MCINTOSH. Thank you, Wayne. I do know that it has been slow, ma'am, but I have checked in with the team. I have looked at the obstruction clearances and making sure this is done. And I will say that while it is slow going, they are incorporating the two statutes that were in the authorization bill, and in regard to Las Vegas, that is moving forward.

Senator ROSEN. And so, can we reach out to your office for a status update on that, please?

Mr. MCINTOSH. We would love to.

Senator ROSEN. Thank you. I am also going to talk a little bit about capacity at Harry Reid Airport, because Las Vegas has long been the world's leading entertainment destination. We are quickly becoming a global destination for sports as well, and the city is hosting nearly 40 significant sporting events. We hosted them just last year. These major events bring tourists and participants from all over the world who travel on the larger jet planes, as well as private jets, to our airports. Harry Reid International, we were proud to welcome over 58 million visitors in 2024, the most in our history.

While we still want more visitors to the Silver State, at this rate experts expect Las Vegas airport to reach capacity within 5 years, at which point the airport will not be able to handle any additional flights.

So Mr. Heibeck, I assume you are aware that officials from Clark County, Nevada, where Harry Reid International Airport is located, have been working with the FAA for years to build a new supplemental airport in Southern Nevada, which the local economy greatly needs. I know FAA has made great progress on the issue. I would really like your commitment to keeping officials at Harry Reid International Airport, my team, directly informed. Do I have your commitment to do this?

Mr. HEIBECK. Yes. We will continue to work with the airport sponsor. I have been engaging directly with this with our regional director, and we are preparing to issue a Notice of Intent to conduct the Environmental Impact Statement on the Southern Nevada supplemental airport, and I will keep your office informed.

Senator ROSEN. That is fantastic. We need it sooner rather than later. And in my minute left, I am going to talk about what is a lot of topic today, aging infrastructure, at all of our airports. So the average FAA air traffic control facility we all know is about 60 years old, more than half of terminal facilities over 40 years old. These facilities regularly operate with degraded technology systems. It results in lack of accurate wind speed, direction calculations, the failure of radio frequencies. We have seen this within congested airspace, the malfunctioning of runway lights; terrible at night. And many airports, they lack functioning radar systems to track airborne and taxiing planes, meaning that some controllers have no visual awareness of the aircraft they are directing, especially in poor weather conditions.

Last year's FAA reauthorization requires the FAA to deploy the latest airport surface situational awareness technologies that track runway and aircraft vehicle movements in order to prevent collisions. We have been seeing them in the news. We want increased deployment of surface surveillance technology at all large and medium hub airports.

So again, Mr. Heibeck or whoever else think they can answer this in a proper way, can you provide us with an update about how the deployment and implementation of this is going?

Mr. MCINTOSH. I believe you are referring to the Service Awareness Initiative, ma'am?

Senator ROSEN. Yes.

Mr. MCINTOSH. Yes, it is going very well. I know that we have already deployed it at over 30 sites so far, and we are on target to, I believe it is another 70. Is that right, Jody?

Ms. BAKER. [Inaudible.]

Mr. MCINTOSH. I will get you the numbers.

Senator ROSEN. Thank you.

Mr. MCINTOSH. But I will tell you this. We are very excited about this new technology. It uses the newest technology available to us, which is ADS-B, so it allows us to deploy this new capability much more economically, but also much more efficiently, and it gets it in the hands of the controllers that really, really need it. So we are excited about this technology and we want to get it deployed as quickly as you do. But we are on target, yes, ma'am.

Senator ROSEN. Thank you. I appreciate it. I yield back.

Chairman CRUZ. Thank you. Senator Peters.

STATEMENT OF HON. GARY PETERS,
U.S. SENATOR FROM MICHIGAN

Senator PETERS. Thank you, Mr. Chairman, and I will thank our witnesses for being here today.

Before I get into my questions, there are two issues that are critical to Michigan I just want to highlight, despite the fact we do not have DOT leadership responsible for them present at today's hearing. The first is the implementation of key workforce provisions that I championed in the FAA reauthorization, like the Promoting Women in Aviation Act and the expansion of the FAA Workforce Development Grant program, both of which I believe must be implemented to address the aviation workforce shortages that we have.

The second is the Essential Air Service program, or EAS. Michigan has nine rural airports served by EAS. It is the most in the lower 48 states. Last year's FAA bill included strong bipartisan reauthorization of this program, which guarantees air service to rural communities. Despite this, President Trump's budget calls for a $308 million cut to EAS. This could rob hundreds of rural communities from access to air service. I do not think you should have to live in a big city in order to get on an airplane, and so I am going to continue to fight for rural air service and against these harmful cuts to the program.

Mr. McIntosh, Gerald Ford International Airport in Grand Rapids, in Michigan, is the second-largest airport in my state. It sees well over 200 aircraft operations per day, and it serves as a growing part of our state, rapidly growing western area. However, even as Grand Rapids serves a record number of passengers, it has been stymied in its efforts to expand and modernize its 62-year-old FAA air traffic control tower that the Agency has not acted to replace.

As you well know, Grand Rapids is not alone. Towers across the country are awaiting replacement. FAA's efforts to address this backlog have only been further restricted by budgetary constraints.

So my question for you, sir, Secretary Duffy put out a plan to address a facilities backlog at FAA, but he failed to include how much that will cost. So my question is, do you have an estimate of what level of funding it would take to address the air traffic control tower modernization backlog specifically? And additionally, can you

discuss how aging facilities are complicating the job of air traffic control?

Mr. MCINTOSH. I apologize, Senator Peters, but I do not have that information for you. If it is OK, can I circle back with your staff and get you the information exactly what you are looking for?

Senator PETERS. Yes, happy to have that. Thank you.

Mr. MCINTOSH. Thank you, sir.

Senator PETERS. Good, thank you.

Mr. Heibeck, I have long advocated for the FAA to transition away from the use of toxic PFAS-containing firefighting foams. The FAA Reauthorization Act includes a provision that I championed to ensure a quick transition to new non-PFAS firefighting foam, alongside financial resources for the airports necessary to make that transition.

Michigan airports continue to lead the way on this issue, but they need a strong partner at the FAA to support the transition away from the use of PFAS and protect our communities from further contamination. In order for the FAA to be that partner, it must have the appropriate funding, obviously, to implement that transition.

So my question to you is, could you speak to the importance of providing the necessary resources for airports to make this transition? And additionally, what is the timeline for implementation of the PFAS replacement program for airports currently?

Mr. HEIBECK. Yes, Senator, and I appreciate your support on this important reauthorization provision. We have made great progress in implementing the requirements of reauthorization. We have met the requirement in the bill to develop and publish a transition plan to fluorine-free foams. That is up on our website, along with a lot of guidance to airport sponsors and forums and YouTubes and other pieces of guidance that could help them transition.

We have established the framework for the transition grant program, the non-PFAS foam transition grant program, including consultation with the EPA. The only thing that we would need there to start awarding grants in that area would be the appropriation. Those are more operational costs, not capital costs, eligible under the Airport Improvement Program, so we need a special appropriation to do things like clean equipment to dispose of PFAS foams and to acquire non-PFAS foams.

Senator PETERS. Great, thank you. Thank you, Mr. Chairman.

Chairman CRUZ. Thank you. Senator Hickenlooper.

STATEMENT OF HON. JOHN HICKENLOOPER,
U.S. SENATOR FROM COLORADO

Senator HICKENLOOPER. Thank you, Mr. Chair. Thank you for calling this. I thank each of you for all your hard work.

Let me start with Mr. McIntosh, and I know we have talked already. You have been asked questions about the two copper wires and the issues around Newark. I want to just take a moment and just lay out what I recognize. It seems to me, I fly a lot, too much, back and forth every week. It is not uncommon that we would get diverted and circle a couple of times. The last time I checked, we are still using TCAS, the Traffic Collision Avoidance Systems, that some of my constituents have been calling and saying, "Are we less

safe?" And to me, in a funny way, what we are dealing with when we have what happened in Newark, is people, they circle. It is not like they almost landed on somebody. They lost connection, and their TCAS is still working, so as they circle in space, they know exactly where everyone else is and the Collision Avoidance System is still working.

Am I correct in communicating that confidence that everyone should continue flying, feel that they are absolutely safe when they are flying?

Mr. MCINTOSH. Senator Hickenlooper, absolutely, people are safe when they fly. I fly like you do every single—I fly every week. I go back and forth, and I have utmost confidence in our air traffic controllers and our managers and how the system works with the redundancies put in place.

Senator HICKENLOOPER. I agree. I think it seems there are redundancies everywhere. Obviously, the point of this hearing is we have got a lot of infrastructure that needs to be upgraded and we have got a lot of work to do. You guys should maybe see psychoanalysts about whether you really want these jobs or not, given the restrictions on funding these days. There is a lot to be done. But I want to emphasize that the system is safe, that people should get on planes. It is such a crucial part of our economy. When people suddenly decide they are not going to fly, they feel uncertain about flying, the entire economy slows down.

Mr. MCINTOSH. Yes, sir, it does. And from an air traffic controller perspective, we love the job. What we really want is better equipment to go along with it, and that is really what it comes down to. A lot of our equipment, it is antiquated, and the FAA has been known as having the safest and most efficient airspace in the world, but we need to advance our systems to ensure we keep that standard.

Senator HICKENLOOPER. I agree. Perfect. Now, I want to get specific with you. We have got some rural communities, like Northern Colorado Regional Airport in Fort Collins, are working to be able to do their traffic control without a controller. The State of Colorado, the Northern Colorado Regional Airport, have made investments in remote tower technology, and these investments are waiting to be realized because of ongoing testing at the FAA's Technology Center in New Jersey. So can we get an update on that and where are we and how quickly can we get that stuff approved?

Mr. MCINTOSH. Yes, sir. I am very excited about the remote towers. I think the technology is incredible. We do have a vendor at Atlantic City at the Tech Venter. They are doing the safety case and the business case now, and the FAA is ready to validate that safety case, credential that system, and as soon as that occurs, then the airports will be able to go and purchase that system.

I got an update just yesterday and I believe they plan on doing an Industry Day sometime this summer for people to come and take a look at the new technology that is out there with how this works, and it really is incredible.

Senator HICKENLOOPER. Well, that is great, and that is promotional. I am just trying to urge a sense of urgency.

Mr. MCINTOSH. Yes, sir.

Senator HICKENLOOPER. I find a lot of my time is spent urging a sense of urgency around here.

Mr. Heibeck, as you know, many regional airports are the single most important connectivity hub to the rest of their state or the rest of the country, and we worked closely with Senator Fischer to enact the Sustainable Regional Air Travel Act as part of FAA reauthorization in 2024. That was an obviously bipartisan bill that commissioned a Federal study that will be published next month to examine those factors that impact air service to regional airports, including pilot availability, air traffic control systems, as we have talked about, and other issues.

Can you describe what you think are the most pressing issues that regional airports are facing today? Because they are such a huge part, of not just Colorado, but pretty much every western state and really almost every state.

Mr. HEIBECK. Yes, Senator. I think the Reauthorization Act seeks to provide or expand the types of funding under the Airport Improvement Program, to fund critical safety infrastructure development projects at the small rural airports, and I think the funding challenges continue to persist there. But the Reauthorization Act does a really good job making some changes to the Small Airport Fund and in other areas to focus on non-hub airports and non-primary airports. One particular example is the state apportionment is expanded there, and I think that will help meet some of the funding challenges at the smaller airports in the system.

Senator HICKENLOOPER. Great. Well, thank you again. Ms. Baker, I am out of time, but I will submit—I have got a couple of questions for you too. I will submit them in written form. Thank you. I yield back to the Chair.

Chairman CRUZ. Thank you. Ranking Member Cantwell.

STATEMENT OF HON. MARIA CANTWELL,
U.S. SENATOR FROM WASHINGTON

Senator CANTWELL. Thank you, Mr. Chairman. I want to mention I heard that you said that there is great bipartisan support on working on DCA and the problems around DCA, and that is very true, and we remain committed to understanding what has transpired and continuing to get answers. I think Senator Moran might have mentioned that he thinks we are going to do a roundtable to get further information.

But Mr. McIntosh, on this point—well, first of all, I wish Acting Administrator Rocheleau was here. I am not sure why he is not here. I think having somebody who is in charge of the operations and answering to that is very important.

The NTSB report obviously was quite damning, with a lot of information about close calls beyond the accident that happened. And so it begs the question about the ATO process that is in place, the safety risk management system that is supposed to be there. And now, post the accident, we have had this other incident.

So why is your system not working? Why is the FAA's oversight of this not working?

Mr. MCINTOSH. Thank you for the question, Senator Cantwell. The SMS process the ATO utilizes is quite robust. We have independent reviews from different levels of the organization to ensure

that we do not have any human biases. And what I mean by that is, we are required to review all events, at all of our FAA facilities, so any significant event is required to be entered into a mandatory occurrence report and then a subsequent investigation.

Senator CANTWELL. OK, so are you saying nobody is investigating this? Because we, I have to get through about five issues here. So, all I am saying is, if you had all those alarms going off, if you had all of that oversight, and you had a safety risk management system, but nobody read the data and nobody said anything. We have already asked this of the FAA, so now I want an answer from the Acting Administrator—I am pretty sure he already promised me an answer which I still do not have, which is, what is your process for then saying this is a problem and we are going to put a stop to it? I think the answer right now is, "Oh no, no, no, I'm going to call air traffic controllers."

That is not the answer. The answer is, this is too big of a risk, and we are not going to continue to do this, and we are going to set up better separations and more standards. And you have not done that. And so that is question number one.

OK, Newark. There have been reports in the press that maybe there were only three people in the tower. Isn't there a requirement that there should be seven people in the tower? Isn't DCA here similarly—isn't it about seven air traffic controllers to staff a tower like either of these towers? Is that right?

Mr. MCINTOSH. Are you speaking to Newark tower or to Philadelphia Area C TRACON?

Senator CANTWELL. Either.

Mr. MCINTOSH. We have basic watch schedule guidelines. This is a number that we try to get to.

Senator CANTWELL. Which is what?

Mr. MCINTOSH. Depends on by facility and how many positions we open. Now, I believe you are well aware that we do have some critical staffing shortfalls.

Senator CANTWELL. I cannot tell you how hard I worked to get the 3,000 increase, and I would have gotten more. But back to this question.

Mr. MCINTOSH. Yes, ma'am. Well, we——

Senator CANTWELL. What I am pinpointing is, if the *New York Post* is wrong, I do not know whether they are. Maybe there were three people there. But if your number is seven and you do not have seven, what is the FAA doing every day to monitor that situation and say, "This is a problem"? This is not, "I'm going to call the head of the air traffic controllers union." This is, what is the FAA going to do to fix the system?

You are going to hear a rejoining theme through all of my questions. This is about this agency playing the aggressive role that we need you to play.

Mr. MCINTOSH. Yes, ma'am, and thank you for that question. I wish to address it.

Senator CANTWELL. OK.

Mr. MCINTOSH. When we have a staffing shortage and we cannot open enough positions, we put in traffic management initiatives to slow the aircraft down. That is exactly what we did that night at Philadelphia Area C. We put in a ground delay program to keep

traffic manageable. We do the same thing at DCA. When we have too much volume, we put in a ground delay program. We do this on a daily basis.

Senator CANTWELL. Did you think you only had three people in that tower, controlling that airspace?

Mr. MCINTOSH. In that TRACON, for one hour, we did go down to that number, and we put in the appropriate traffic management initiative to keep things safe.

Senator CANTWELL. OK. Why did we go from seven, which is a requirement, down to three? I am for safety first, for sure, but then at the same time, I am trying to understand why is it that we are now down from seven, which is basically what you think you need, down to three?

Mr. MCINTOSH. It comes down to a staffing shortage, ma'am. We did lose some controllers in that area due to either some sick leave that was unscheduled or some other leave that was not scheduled. When those things happen, ma'am, we have to essentially keep things safe, and we will put in the appropriate traffic management initiatives to keep the flying public safe and make sure that we put controllers in the position to be successful.

Senator CANTWELL. Well, I definitely would not have been firing the safety oversight team that we had as part of our FAA safety bill that we implemented. These are people who help us at a very big-picture level. And I certainly would not have cut back on staffing, in general, at the FAA. I think it is a time when we need people to be doing their job.

I need to turn to the ODA. So I sent you a letter. I finally got a response last night. I do not really think it is satisfactory, but what is it that—this process of the FAA and the manufacturer working together, what is the criteria that you are going to look for in an ODA Agreement related to aviation manufacturing?

Ms. BAKER. Thank you for the question and thank you for your patience in the response. We are looking for criteria that the ODA is performing its functions. So, how is it performing? Is it meeting the requirements that we would hold—ODA unit members are performing work that the FAA would perform, so we want to make sure that they are performing to that same high standard. And we want to ensure that incidents of undue influence or undue pressure are minimized, and when they do occur, that they are properly researched and corrective actions are put in place.

We are also looking for Boeing to continue their implementation of the safety management system.

Senator CANTWELL. A mandatory.

Ms. BAKER. Excuse me?

Senator CANTWELL. A mandatory.

Ms. BAKER. It is mandatory for them, but——

Senator CANTWELL. No, no. A mandatory safety management system, not, it is mandatory, you get one, and then you decide to make it voluntary. There is a difference.

Ms. BAKER. Correct. They will meet the standards.

Senator CANTWELL. I am a little concerned your General Counsel is confused by this, because he was confused before and let them off the hook. And now, I want to make sure we are not confused. It is a mandatory——

Ms. BAKER. A Part 5 SMS.

Senator CANTWELL. OK. So what is it on the employee input? What are you looking for? Because part of the issue here was intimidation of employees speaking up and the FAA not backing them up. And so what are you recommending? What is it you want to see in the ODA that would say, "Yes, I understand now that the company is listening to the input from the employees." When we asked former Administrator Whitaker if, in fact, the FAA should have some foresight into that, he said yes. So we want to see an employee feedback system that the FAA has some access to.

Ms. BAKER. Administrator Whitaker did invite the Boeing employees to leverage the FAA hotline, and so we did see an uptick in that. We did have employees directly communicating with the FAA. In addition, we have inspectors on the floor every day in the factories, having direct interaction with the workforce and inviting the workforce to interact with them, as well as what I mentioned, with the undue pressure and the ODAs, we have assigned direct advisors, so the ODA members have someone within FAA that they can reach out to directly. And again, we monitor any reports of undue pressure in the associated investigations.

Senator CANTWELL. I would like it if you could address this in a written response: What is it that you think the FAA believes makes for the right ODA Agreement related to the employee feedback? This Committee receives lots of whistleblower testimony. This Committee receives lots of input about how the employees were bringing up issues and the FAA was not supporting them. So we want a clear process with the FAA that the FAA is knowledgeable, not after the fact, or not hoodwinked. Basically when it comes to, like the MCAS system we want, there were people raising the questions about MCAS all the way along. I mean, very senior people. And I think it would have been an interesting point if somehow that had surfaced to the FAA at that point in time. At least an alarm bell would have gone on at the FAA, "Oh. MCAS, better pay attention to this. This is a bigger sea change than we think." Correct?

Ms. BAKER. Part of the bill itself talked about how we are going to improve communication during the certification process, not just during the production process. And some of those provisions that we are putting in place are going to facilitate that, as well.

Senator CANTWELL. Please provide to me what is it you are going to expect in a process for certifying a new ODA? What is it you are looking for to make sure that there is employee input when, you know, they are identifying problems that they are concerned about? How the FAA knows about that and basically gets it on your radar screen that this is something the engineering staff believes you should pay attention to.

Thank you, Mr. Chairman. Sorry for going over.

Chairman CRUZ. Thank you. Senator Luján.

STATEMENT OF HON. BEN RAY LUJÁN, U.S. SENATOR FROM NEW MEXICO

Senator LUJÁN. Thank you, Mr. Chairman. Recently, we are seeing almost daily reports about issues at Newark Liberty International Airport, whether it is radar, air traffic control issues due

to outages or short staffing, or the most recent ground delay due to construction. These reports are deeply troubling and require immediate attention.

As you know right now, there are shortages in staffing, not just at Newark, but across the country, forcing air traffic controllers to work intense schedules, longer and longer hours. That should raise a concern to everyone for what is happening in our skies.

When we do not take care of our air traffic controllers, it puts the efficiency and safety of aviation at risk. Fortunately, the most recent FAA reauthorization included important provisions to improve the health of our air traffic control systems. I was proud to be a part of such pieces, two specifically, in the final reauthorization package. The Air Traffic Controllers Hiring Act and Air Traffic Control Workforce Transparency Act now both seek to improve the safety and staffing standards to ensure adequate numbers of fully qualified controllers.

While Secretary Duffy has said he is committed to fixing these issues, I would like to hear from you all as well. Mr. McIntosh, do you support efforts to ensure the FAA is hiring and training as many controllers as are needed each year to address existing shortages?

Mr. MCINTOSH. Senator Luján, I appreciate that question. As a former controller that was in the military and in the FAA, and a manager who had to oversee having enough staffing to ensure that we are able to do our job, I 100 percent support Secretary Duffy's supercharged hiring to maximize not just our hiring of FAA controllers over the next 4 or 5 years, but also ensuring that they come through the academy at a quick pace, that they are incentivized to recruit, meaning there is a 30 percent pay bump for our academy graduates, as well as some of the retention efforts that he has put forward there, as well. I think he has put the plan forward. It is now the FAA and the air traffic organization's job to move that forward. But to answer your question, yes, I wholeheartedly support this initiative.

Senator LUJÁN. Resounding yes. I appreciate that, sir. What is the status of the collaborative resources work group that seeks to determine the number of air traffic controllers needed at each tower and center?

Mr. MCINTOSH. It has been implemented according to the reauthorization bill.

Senator LUJÁN. What else can the FAA do to improve the recruitment hiring retention of air traffic controllers?

Mr. MCINTOSH. I think Secretary Duffy has already laid forth that plan in his efforts of what he has done. Now it is up for the FAA to execute that plan.

Senator LUJÁN. So with your expertise, I hope you would be advising the Secretary. You are the one that has done this. I served with the Secretary. I know him. But is there anything lacking or is that plan a hundred percent complete and that is all that is needed?

Mr. MCINTOSH. What we are committed to do or what I need from my vantage point, as long as we hire to those numbers, which he is committed to, and we continue to put through that throughput—he has already invested in our tower simulator systems. We

have already ensured that that is going to be in place according to the reauthorization bill as well. We just need to ensure that we execute at the facility level to make sure that we have certifications so we have enough people to work. That is going to be the number one cure to what is our fatigue issues that we see, and also ensuring that we have enough people to work the sectors.

Senator LUJÁN. I appreciate that, sir.

Ms. Baker, another provision I championed in the FAA reauthorization required the FAA to initiate a call to action to address ramp worker safety and publish training educational materials. Can you tell me what progress the FAA has made to initiate this call to action?

Ms. BAKER. Yes, absolutely. Aviation Safety is working in partnership actually with the Office of Airports. We are having a ramp safety call to action safety summit tomorrow as a matter of fact, where we are going to bring together air carriers, employees of ramp workers, along with FAA employees to identify best practices, areas of improvement and what we can make suggestions about what we can do to improve ramp worker safety.

Senator LUJÁN. And when do you expect to complete your review and submit your findings and safety recommendations for ramp workers to Congress?

Ms. BAKER. Shortly thereafter.

Senator LUJÁN. A week, two weeks, a month, a year?

Ms. BAKER. It will probably take more than a couple of weeks. We want to make sure we give a due diligence, but we will circle back with you when we get our plan.

Senator LUJÁN. Before August?

Ms. BAKER. We will work on it over the summer.

Senator LUJÁN. Before December?

Ms. BAKER. We will work on it over the summer.

Senator LUJÁN. Is it going to be a year then? Because you said shortly thereafter. So I am just trying to understand what shortly thereafter means.

Ms. BAKER. How big shortly is?

Senator LUJÁN. Is that a year? Is that by the end of Trump's term? What are we talking about?

Ms. BAKER. Without knowing what is going to be discussed tomorrow, it is hard to estimate how long it will take to make a complete report. But we are happy to get back with you about the findings of tomorrow's ramp?

Senator LUJÁN. I am sorry to push you, Ms. Baker, but dates matter. Is it fair to say no more than two years?

Ms. BAKER. Yes, absolutely.

Senator LUJÁN. I appreciate that. That is a timeline that we could work with.

Under the FAA reauthorization, the FAA was directed to collaborate with the National Academies of Science, Engineering and Medicine on a 12-month-long study focused on unsafe cabin temperatures and conditions. On January 7th of this year, the FAA gave an update saying that they have met the NASEM and, quote, "will finalize an agreement and funding for the project after defining the scope." Ms. Baker, what is the status of this research effort?

Ms. BAKER. We are working with NASEM right now.

Senator LUJÁN. Do you believe that more should be done to prevent unsafe temperatures in cabins?

Ms. BAKER. I believe that unsafe temperatures in cabins are definitely unpleasant. I think it is very challenging on the ground because aircraft are made basically to heat and cool in the air. I am looking forward to the recommendations we get from NASEM so we can identify what the next steps are.

Senator LUJÁN. Is it fair to say that they can be more than unpleasant and can actually cause someone a health problem or a health condition?

Ms. BAKER. I think what we get from NASEM will identify what those potential health challenges could be.

Senator LUJÁN. I do not know if you have ever been on a flight when it gets uncomfortable like that, but I have seen people that react uncomfortably and sometimes they have to call physicians or ask for volunteers that may be on the fight that have medical expertise. I would say it is more than uncomfortable, would be my response.

Ms. BAKER. I was a crew member for four years, so I understand.

Senator LUJÁN. Would you agree with me then?

Ms. BAKER. It can be very uncomfortable.

Senator LUJÁN. OK, then we do not agree. I think it can be deadly, not more just that it is uncomfortable, I can put a jacket on. I can fan myself with one of the pamphlets. It can be outright dangerous and cost someone their life.

Ms. BAKER. We are looking forward to the report from the National Academies.

Senator LUJÁN. Do we agree then Ms. Baker, that it could be more than just uncomfortable?

Ms. BAKER. I am looking forward to the report from the National Academies.

Senator LUJÁN. Thank you, Mr. Chairman. I appreciate the time today.

Chairman CRUZ. Thank you. Senator Fetterman.

STATEMENT OF HON. JOHN FETTERMAN,
U.S. SENATOR FROM PENNSYLVANIA

Senator FETTERMAN. Thank you, Mr. Chairman. Hi. So hi. Hello everybody. And now I think it really needs to be said more, flying in America is incredibly safe. It is incredibly safe. I mean, I, and I think most of my colleagues, many of them, I spend maybe 46, 47 weeks out of 52 flying in that. My plane was in that airspace about half an hour or so earlier before that tragedy in DCA. And that was really the first accident in, I guess, quite a while. So I really want to remind people that it is still incredibly safe and I refuse to play in the blame, it is his guy, that is his problem. It is this, that other thing. So I just really want to make sure we can agree that it is very bipartisan, we want to have make flying safer, but not turning it into a finger pointing thing.

So for me now, we have constantly heard there is a lot of shortage of air traffic controllers, and we know sometimes it might be difficult for the FAA to meet their staffing goals. Now we have what I would describe the Harvard of air traffic control schools in

Beaver County in my state, which plays a huge role in training the next generation of the air traffic controllers.

So Mr. McIntosh, can you speak to the importance of training schools like the ones that I addressed in the air traffic controller shortage?

Mr. MCINTOSH. I believe to your question, Senator—and thank you for the affirmation that it is still safe to fly. It is extremely safe to fly. Thank you for that.

In regard to schools that offer programs to be an air traffic controller, I 100 percent agree that these schools are essential for our continued pipeline. So whether it is a collegiate training initiative that you are speaking to or the enhanced collegiate training initiative, if this offers additional people into our training pipeline, that is pivotal for us to increase our candidate pool as well as ensuring that we have enough controllers.

Senator FETTERMAN. So are you able to commit to—again, you are going to support these kinds of programs. It makes a lot of sense, right? Obviously.

Mr. MCINTOSH. We support the collegiate training initiative and the enhanced one as well. Yes, Senator.

Senator FETTERMAN. OK. So essential air service is a lifeline in Pennsylvania, and it brings smaller communities that otherwise would not have those kinds of things. Now, in my state we have places like Altoona, Johnstown, or Lancaster, and I am not sure why we would have any kind of budget cuts that might impact these kinds of program or maybe up to 50 percent.

Mr. Heibeck, are we able to just make that point to the Administration just how important that is to make these very smart investments, in my opinion, into these small airports? Because again, ironically, it is not about politics, but all of those three communities that I referenced, they are all in red counties. So that to me, flying should be safer and it is bipartisan. So it is honestly, I think these kinds of investments are just smart and that is economic development and that. So if you can address, but that might be possible for those cuts.

Mr. HEIBECK. Yes, Senator Fetterman, as a fellow in Pennsylvania, I share your interest in the small rural airports in Pennsylvania. We in Airports do invest or make significant investments in small airports through our Small Airport Fund and other grant programs. The Essential Air Service Program is administered by the Department of Transportation, and I am happy to take your message back to our colleagues.

Senator FETTERMAN. Oh, yes, yes, no, I mean, I had the pleasure of meeting with the head of the Lancaster Airport and now it is like they really want to make these kinds of upgrades, and I fully support that. I grew up in York, so I know how close that area. That is an incredible amenity. So for me, again, it is really just about serving all the Pennsylvanians and have access to air travel.

But otherwise, no, thank you. And I cede that back to the Chair. Thank you all, both of you.

Chairman CRUZ. Thank you. Senator Blunt Rochester.

STATEMENT OF HON. LISA BLUNT ROCHESTER,
U.S. SENATOR FROM DELAWARE

Senator BLUNT ROCHESTER. Thank you, Mr. Chairman, and thank you so much to the witnesses. I have to say most of my colleagues have noted that we are at a critical juncture for aviation safety, for the sake of our families, our constituents, the flying public, and we must ensure that the FAA is equipped with every tool necessary to meet the mission, to provide the safest, most efficient aerospace system in the world. We know that we have seen some recent catastrophic incidents and near misses, and they have only underscored the urgency of strengthening oversight, improving coordination, and updating equipment including the FAA's IT systems.

But we cannot lose sight of the fact that there are other significant variables that drive this crisis, like the lack of a robust and well-supported aviation workforce. I just left another hearing where one of the nominees said that their son is now an air traffic controller, and that was some good news to hear. And as the former Secretary of Labor in the state of Delaware, I also was head of state personnel and I know that a well-prepared workforce is really the lifeblood of any organization. So I was pleased to see the inclusion of the aviation workforce development provisions in the reauthorization.

And I wanted to just ask some questions about workforce planning. We know that we have an issue beyond air traffic controllers and aviation safety inspectors, and I was curious if you could talk a little bit about your workforce planning. I know in your testimony it says, "We are reviewing our hiring, training, and placement processes as well as the FAA Academy withdrawals and failures to ensure our selection methods effectively identified candidates best suited for the controller profession."

So could you talk to me about what you're seeing in terms of people who are retiring, resigning? Where are your shortfalls? Where are those areas where you really need the help?

Mr. MCINTOSH. Thank you for the question. If you are all right, can I take this one? OK. So as far as recruitment for our best and our brightest, right now, our academy success rate is not where we would like it to be. We would like it to be much, much higher because quite honestly, if we are washing out 35 percent or 30 percent, we need to do better because we need more of those people in the field facilities to do that.

So I believe what you are referring to is what we call an air traffic skills assessment, and that basically judges somebody's cognitive skills and ability to multitask being an air traffic controller. And we want to review that asset test to make sure that it is identifying the right candidates that would have a high probability of success to be an air traffic controller. It does take some time to hire, select, and go through the medical process and the security process. Even though Secretary Duffy has done some things to speed that along, we still want to make sure that those selections have a higher rate of success.

If we were able to gain another 200 or 300 of those candidates and put them in the air traffic system, that would help with some of our staffing shortfalls.

And speaking with a lot of my friends who are my age, we actually went through training together at field facilities and they still love the job. They love being an air traffic controller. Their big thing right now is we need more staffing because they are getting tired, and I think we owe them a better quality of life.

I do feel that the new CRWG numbers that, with the help or our partnership with NACA, that we have implemented is definitely going to help that. And we are also waiting for the Transportation Research Board to provide their recommendations for our staffing model. And when that is implemented, we will be in a better place.

But the good news is with the new CRWG numbers, that is going to bridge that shortfall and we are putting enough people in the pipeline to actually give those controllers and those managers that better quality of life than I am speaking to.

Senator BLUNT ROCHESTER. Thank you. Also, in your testimony, you talked about leveraging partnerships with approved colleges and universities. Delaware State University has an incredible aviation program. Can you talk to us a little bit about who you are leveraging these partnerships with?

Mr. MCINTOSH. Right now, we are willing to leverage and partner with any university that has interest in the Collegiate Training Initiative. And if they want to take it one step further and do what we call the Enhanced Collegiate Training Initiative, that is where they have simulation training and enough of the training that would essentially equal to what they would get at our FAA Academy.

If colleges are wishing to do that, we will go assess, and if they do pass those standards, we will actually accredit them. And students who go through this program will no longer have to go through the academy. If they go through the program and successfully complete it and pass an ATSA test and, of course, receive the necessary medical clearance and the necessary security clearance, then they bypass the academy and they are placed at an FAA facility.

Senator BLUNT ROCHESTER. So for the record, questions for the record will be, number one, would love to understand what are the partnerships, would love to see the list of the partnerships. Second, would love to follow up with the program that we have at Delaware State University. Again, it is an aviation program, which I think is really, really important. And last, understand a little bit more how are you getting them in the door? What are the things that are getting them? I know you have mentioned financial incentives, but also mentioned that there are more creative things that you are doing here. So would love to follow up with you on the workforce aspect of it as well.

Thank you, Mr. Chairman, for your patience, and I yield back.

Chairman CRUZ. Thank you. One final question and we are going to wrap up. Airspace around Austin-Bergstrom International Airport has been impacted by a shortage of air traffic controllers assigned to that facility. The FAA bill included several provisions intended to improve air traffic controller staffing, and yet my staff recently received a report that Austin-Bergstrom Airport has only 33 air traffic controllers while the FAA recommends that it have

a total of 60 controllers. I am concerned about the impact that this will have on Texas airspace.

Mr. McIntosh, how is the FAA Air Traffic Organization working to fix air traffic control staffing issues across the country, including specifically at Austin-Bergstrom Airport?

Mr. MCINTOSH. Thank you for the question, Senator Cruz. And as you can probably tell, Austin is near and dear to my heart. I know that I spoke a lot about how we are fixing the broader issue of fixing the controller staffing that we have through supercharged hiring that Mr. Duffy has started.

To answer your question, the FAA along with our NACA partners, were proactive in increasing the numbers at Austin. The CPC numbers at Austin was 42, and to your point, we realized that the traffic was growing. So we proactively raised their numbers to 60, which is their new CRWG numbers, well ahead the implementation. So when you say 33 out of 42, that does not sound so bad. Thirty-three out of 60 sounds terrible. And that is something where I want to gauge our growth in CPCs versus percentages, because I think that is where we have to bridge that gap.

But by proactively increasing that number, Senator, what that allowed us to do was drive more trainees into that facility, and that was the goal.

Chairman CRUZ. We have actually got a vote closing on the floor. So sir, I thank you for that answer, sir, but I want to ask you to make it a priority to make sure that the air traffic controllers are there in Austin.

Mr. MCINTOSH. It is a priority, sir.

Chairman CRUZ. I want to thank each of the witnesses for your testimony. Senators will have until the close of business on Wednesday, May 21, to submit questions for the record.

And actually, I am not going to close it out. I am going to hand it over to Senator Sheehy to ask as many questions as he likes and then to close it out. But I am going to run and go vote. So congratulations, Mr. Chairman.

STATEMENT OF HON. TIM SHEEHY,
U.S. SENATOR FROM MONTANA

Senator SHEEHY [presiding]. Thank you, Mr. Chairman. We are both junior Senators from our state, so when we are Chairman, it is a special event.

Thanks, witnesses, for being here today. Thank you for the work you are doing at the FAA. I am a lifelong pilot, aviation business owner, commercial pilot instructor, and I have long told folks that the FAA is one of the beacons of light in the Federal Government. Sometimes dealing with the Federal Government can be highly frustrating, but I have always felt the FAA was a very competent organization and also very customer-friendly for the most part.

But we all know that, frankly, largely through no fault of your own, largely through the fault of this great legislative body for decades on end, we have not really addressed these sclerotic issues that we have been talking about for decades, as many of you alluded to in your statements. So unfortunately, events like the Colgan crash in 2009, and our D.C. disaster just a couple of months ago, that is what the public sees and that is what the public feels.

But most of us knows those events, although the final seconds are caused by something, a mechanical failure or human error, normally it is organizational failures that have built up over years and years that start that accident chain in the beginning. And no one knows that better than career FAA folks like yourself and of course our friends at the NTSB.

But many of these stressors that we are all feeling every day, whether it is outdated air traffic control systems, whether it is not enough controllers, not enough pilots, not enough maintainers, not enough FAA designated pile examiners or air worthiness representatives, I mean you name it. There is basically a shortage in every key manpower category that we need to stay innovative in aviation. And one of my biggest concerns as the mother and father for aviation, as America's the birthplace for aviation aerospace, these challenges that we are facing across the board are driving aviation innovation to other parts of the world.

Part 23, for example, which I understand does not fall necessarily under your purview directly, but Part 23 has been a challenge to certify a new clean-sheet aircraft for so long that we are seeing places like Brazil and Asia and Europe actually become now the hotbeds for next-generation aviation development. And that should concern us all, because if we are not the leaders of aviation anymore, that means somebody else is, and that is bad for all of us.

But specifically here, I do not have a whole lot of local questions, although I do have a couple of Montana-specific questions. But every time there has been the attempt to do the vast reorientation of the FAA, which of course does involve some private sector partnership, the term privatization is plastered over every billboard and in every hearing, and the effort is very quickly mobbed and killed by various different constituencies who do not want privatization to ever happen.

And of course there is a role for the government to always play in this, but how can we leverage private industry to hasten our ATC upgrades, which we have known have been coming for decades, that should have happened years ago? How do we use private industry to make sure our local airports, be they regional or large commercial facilities, are being upgraded and managed properly? And how do we leverage private partners to fix our dire staffing shortages, like taking the controller population we have in the military and helping them more quickly transition to civilian controllers? So no particular individual, but I would like to hear your ideas specifically on how we can leverage private industry to help us hasten the solutions to those problems.

Mr. MCINTOSH. I will speak to partnering with our military partners and having air traffic controllers. It is something that we a hundred percent agree with and it is something we have already signed up to do. Senator, I was a former military controller and I was actually a benefactor of being hired directly by the FAA. I did not have to go to the FAA Academy based on my credentials and I was able to go straight to an FAA facility. We are partnering with the military as well as looking at possibly using some of their simulations over at Keesler Air Force Base to kind of improve some of our throughput at the academy. That is one of the things that

we are looking at to help increase some of those staffing shortages and get people through. I definitely feel partnering with some of our DoD partners is something that we can leverage.

Ms. BAKER. And likewise in aviation safety, we definitely have relationships with military and try to facilitate paths to bring folks who have learned their skills in the military over to commercial aviation, whether it is through a restricted ATP with the military credit, whether it is through programs we are exploring right now about how do we transition military mechanics to get into the civilian system more easily. So there is definitely a role there.

I think around private partnerships, the fact that there is so much innovation happening in aviation, the opportunity for us to partner with the aviation innovators on training, we do what we call aviation skills enhancement with our engineering, where our engineers can go and go to these new manufacturers and new aircraft designers so that we can see and learn from them what they are doing and how they are doing it. I think that is a great opportunity for us.

And also as we are developing the new regulatory structure, new standards, new guidance, working with the industry via either formalized structure like aviation rulemaking committees or informal structure like Industry Days helps us learn more rapidly and helps us understand both where the system is going and how to manage the risks that are presenting themselves in the system. So I think there is a great role for partnership with the industry.

Senator SHEEHY. Well, and safety always has to be paramount, but safety has to work hand in hand with the ability to operate effectively. You can safety anything to death. You can find a reason not to fly. If you want to be safe you just don't fly.

Ms. BAKER. Don't fly.

Senator SHEEHY. Exactly. So ultimately, we are always told safety will always rule the day, but ultimately we have to get to where we are going. We have to move the cargo, have to complete the mission. So if we want to be ultimately safe, then we do not fly and we have to fly. That is the point of our National Airspace System, which I will add is the most advanced, safest in the history of the world. We should be very, very proud of what we have. I do not want to pile on and speak ill of what we have built because it is an incredible system, but it is straining under itself. We have to make sure we are evolving it.

And to that end, after the Colgan crash in 2009, this body, I was not a part of it then, of course, but passed a law for the 1,500-hour pilot rule. And if you know what the pilot hours were for both the pilots in the cockpit that day of that terrible event, it was about 3,000 and 2,500.

Ms. BAKER. I do not remember. I knew it was not 1,500.

Senator SHEEHY. Yes. So 1,500 had nothing to do with that accident and nothing to do with those pilots and their experience. The fact that they had, it was one case over double the amount of hours that the new law instituted really had nothing to do with that accident. So I think it is very important for you all to make very clear, candid responses to us so we do not make new laws that actually do not help the problem; it makes it worse. And I think within the agency, for example, recently the ability to do experimental aircraft

operations used to be delegated to DARs. And recently that was changed to where now a FSDO has to directly sign off on an experimental certificate being hung on an aircraft. On the surface that seems logical, we are adding another safety barrier. But the truth is that is just adding more bureaucracy to a process.

That is a perfect example of why folks want to innovate elsewhere now is because we are making that application process to experiment with new aviation technologies harder to do here. And that is a small example, but I think it is an indicator of, at times, the bureaucracy getting in the way of some common sense, specifically for ATC systems.

We hear a lot about radars and copper wire. How do we quickly evaluate and implement the more advanced and modern, in many cases, more accurate satellite-based, ADS-B capability, automated flight following, where we can open our ForeFlight apps and see aircraft moving in real time with pretty great precision and start injecting that technology in addition to real-time data sharing with the aircraft?

So we see that a lot in Europe now where instead of voice communications, which as we saw with DCA can be stepped on, they can be garbled, they can be misheard, they can be misread back. When the data is actually sent to the aircraft with their flight path instructions, it is much harder to have an error based on that. How do we start adopting those things quickly in American airspace, and is more private sector involvement the answer for that?

Mr. MCINTOSH. In regard to issuing a command to an aircraft versus a pilot and accepting that, we call that datacom part of the next-gen technology. And that has been implemented in all of our 20 centers that are within the CONUS. And we are expecting full IOC, meaning full operations capability here within the year, and that is a very conservative estimate. I expect it to be much more aggressive than that. So the good news is that has been used, and we are getting some very good feedback on how that is using.

We also have our ability to upload clearances to aircraft at the gates without having to do a verbal transmission. We call that CPDLC. We are getting very positive feedback on that, as well.

So I do believe a lot of these technologies that you are seeing, while it has taken a long time to actually get it implemented, it is actually coming to fruition now.

Senator SHEEHY. Great. Any other comments on those points or questions?

And then finally what I would say is some of our rural airports, which you hear a lot about here, obviously Senator Sullivan from Alaska has a very unique position, but it is true also in places like Montana where I am from, where we do have airports where the most critical service they provide to some of these rural and Tribal communities is medevac, where they could be in multiple hours' drive from a hospital. Our ability to get aircraft in there and get them to a facility quickly is dependent on their access to air. And implementing some of our newer GPS approaches to some of these airfields that are not going to be able to afford an ILS system, but that also depends on radar capability and ADC capability from some of our regional airports like Helena, which is only one of two regional airports in the country that does not have radar service.

So as part of this modernization effort, I agree we have to prioritize incredibly congested areas like DCA and, of course, Newark and others, but for many of our rural communities, this is key. So I would ask for your commitment to look into that.

And I would also ask just for general open-mindedness. Sometimes open-mindedness and non-conventional thinking do not go hand in hand with safety in the traditional sense. But the truth is we have to start re-imagining how the FAA can operate in the 21st century, and that means looking at our FARs, thinking how they fit better around the more broader envelope of aviation we are seeing now from UAS to now new types of aerial vehicles that are going to start challenging our existing systems in different ways.

So thanks for your testimony today. I appreciate you taking the time to speak to us, and thanks for all the work you are doing.

Mr. MCINTOSH. Thank you, Senator.

Senator SHEEHY. All right, we will close out the hearing. Thanks to the witnesses for the testimony today. Senators will have until close the business on Wednesday, May 21, to submit questions for the record. Witnesses will be allowed until close of business on Wednesday, June 4, to respond to those questions.

This concludes today's hearing. The Committee stands adjourned.

[Whereupon, at 12:12 p.m., the hearing was adjourned.]

A P P E N D I X

PREPARED STATEMENT FROM THE ASSOCIATION FOR UNCREWED VEHICLE SYSTEMS INTERNATIONAL (AUVSI)

On behalf of the Association for Uncrewed Vehicle Systems International (AUVSI), thank you for the opportunity to submit this testimony as you evaluate the implementation of the Federal Aviation Administration (FAA) Reauthorization Act of 2024 (P.L. 118–63). Swift implementation of this legislation is critical to ensuring the meaningful integration of safe, secure, and scalable uncrewed and advanced aviation technologies into American skies.

AUVSI is the world's largest non-profit organization dedicated to advancing uncrewed systems, autonomy, and robotics. AUVSI represents over four hundred corporations and eight thousand professionals across more than sixty countries in industry, government, and academia. AUVSI's members span the defense, civil, and commercial sectors and multiple transportation domains, inclusive of hardware and software companies. Our member companies design, build, and operate uncrewed aircraft systems (UAS, or drones) as well as counter-UAS systems for detecting and mitigating drones. We also represent leaders in advanced air mobility (AAM), including manufacturers, aircraft autonomy providers, component suppliers, and infrastructure developers.

P.L 116–83 was a landmark step forward for the entire aviation and aerospace industry. It contained critical provisions intended to accelerate the integration of drones and AAM technologies into the national airspace system (NAS). AUVSI commends Congress for its leadership in crafting a future-ready aviation framework. However, significant portions of P.L. 118–63 implementation remain off track, and delayed action by the FAA on several mandates risks undermining U.S. leadership in global aerospace innovation as our competitors, and adversaries, race ahead.

We are at a pivotal moment in aviation history, with drones and AAM aircraft (which include both regional and urban passenger and cargo carrying applications) offering the potential to unlock significant benefits in both safety and technological leadership. With those benefits will come tremendous economic activity and workforce opportunities. Drones offer a cost-effective solution for critical operations including public safety, package delivery, precision agriculture, utilities maintenance, infrastructure inspections, and much more. AAM is revolutionizing propulsion systems, battery technology, and flight controls, unlocking new opportunities in both metropolitan and rural areas not served by traditional aviation, and enhancing workforce productivity and safety. Companies are opening high-rate production facilities and creating thousands of high-quality manufacturing jobs at an increasing rate.

The UAS and AAM industries require enabling rules and regulations given the new technologies entering service. Safety, not bureaucracy must drive this process—new regulations in this space will enable rather than restrict U.S. innovation and leadership. We encourage Congress and the FAA to streamline the rulemaking process generally, and specifically across UAS and AAM initiatives. The current regulatory structure for UAS and AAM is overly burdensome because it was created with traditional aircraft in mind. Updated enabling rules and regulations will act as a means of deregulation that enables these innovative technologies to flourish.

A critical step toward streamlining the FAA's rulemaking process is the swift implementation of Section 202 of P.L. 118–63, which requires the FAA Administrator to create an Office of Rulemaking and Regulatory Improvement headed by an appointed Assistant Administrator. The creation of the office and the elevation of rulemaking within FAA will help to ensure accountability and responsibility for rulemaking timeliness, which are often presently lacking.

Without timely regulatory clarity, the promise both UAS and AAM technologies will remain unrealized, and we will continue to see nations like China win the global aviation competitiveness race. The FAA must move swiftly to implement new rules for beyond visual line of sight (BVLOS) drone operations, aircraft certification, and airspace integration technologies such as UAS traffic management (UTM). It

must also ensure that operational approvals for emerging AAM aircraft are efficient, transparent, and based on performance rather than legacy prescriptive frameworks.

While AUVSI's diverse membership is deeply invested in the implementation of several P.L. 118–63 provisions, we want to take a moment to focus on the BVLOS draft safety rule/final rule and how the associated costly delays.

> The drone industry is standing on the precipice of a new era. With the right regulatory framework, the U.S. can lead the world in drone innovation and integration. The timely issuance of BVLOS safety rules will unlock the scalability of high-value operations. According to various studies, the drone industry is projected to contribute billions of dollars to the U.S. economy over the next decade. But, without the BVLOS rule in place, much of this potential will remain untapped.
>
> Unfortunately, the BVLOS draft safety rule, and therefore the BVLOS final rule, has languished, plagued by bureaucratic delays. The deadline for the FAA to release the BVLOS draft safety rule no later than four months after the enactment of P.L. 118–63 has come and gone, and the industry is feeling those impacts. Importantly, this means that unless the FAA issues the BVLOS draft safety rule in the very near term, the FAA's issuance of the final rule will undoubtedly slide to the right in the calendar, which will ensure the U.S. falls further behind other nations in the deployment of advanced aviation technologies.
>
> It is important to note that the notice of proposed rulemaking (NPRM) has already been written and began undergoing the White House Office of Information and Regulatory Affairs (OIRA) interagency review process last year, and AUVSI conducted multiple meetings with OIRA and various segments of the UAS industry to make the case for the issuance of the NPRM. Unfortunately, the draft safety rule was not issued for public comment before the January 20 change in administrations and the associated moratorium on rulemaking activities.
>
> Releasing the NPRM and final rule in a timely manner is a requirement of Section 930 of P.L 118–63, which was enacted into law almost exactly one year ago. The expeditious release of the BVLOS NPRM and subsequent final rule, pursuant to Section 930 referenced above, would build on the drone policy agenda of the first Trump Administration, which was the last time that enabling drone regulations were promulgated. In the meantime, the FAA needs to maintain the current process for authorizing the limited drone operations that are in the pipeline before the BVLOS rule is final, so operators can continue to effectively plan and make informed business decisions.
>
> Today, drone operations BVLOS require costly, lengthy, case-by-case FAA approval processes which inhibit companies from scaling in the United States and can make beneficial operations cost-prohibitive. The rapid expansion of drone technology in sectors such as public safety, agriculture, infrastructure inspection, and delivery services have the potential to transform key areas of the economy and provide significant societal benefit, as we have witnessed most recently in the hurricane response efforts.
>
> This expansion is also necessary to buttress domestic manufacturing efforts while supporting our national security. Drones can be used for ongoing surveillance of large areas during events like natural disasters, potentially reducing the need for extensive ground patrols. They can enter buildings and disaster zones where it would be unsafe to send in a human. Drones can monitor fires and wildfires, enabling more effective decision-making and resource allocation. Drones are deployed to assess damage, monitor hazards, survey affected areas, and deliver aid following disasters such as tornadoes, hurricanes, earthquakes, wildfires, and infrastructure collapses. They provide valuable situational awareness to emergency responders and help them coordinate relief efforts.
>
> Further delays to the BVLOS rules will continue to hamper the drone industry from scaling to new heights. We encourage Congress to work hand-in-hand with the Trump Administration to issue the draft safety rule as soon as possible for public comment—the vitality of this industry depends on it.

Moreover, we urge Congress to conduct robust oversight of FAA leadership to ensure they are fully activating the tools Congress provided in this legislation to expand real-world testing environments, strengthen industry-academic research partnerships, and fund state and local planning for UAS and AAM infrastructure. Equally vital is investment in workforce development. The FAA has been entrusted with meaningful resources to prepare our current and future workforce for careers in uncrewed systems. It is imperative these funds be deployed strategically and

promptly, in collaboration with community colleges, universities, and training organizations.

AUVSI supports the FAA's safety mission and recognizes the challenge of keeping pace with transformative technologies while maintaining rigorous standards. However, innovation cannot be deferred indefinitely in the name of caution. Industry is not seeking shortcuts—we are seeking certainty. The rules, processes, and systems that enable growth must be defined, tested, and deployed.

As the Committee continues its oversight of P.L. 118–63 implementation, we respectfully urge you to press for transparency, stakeholder engagement, and measurable progress. The next generation of aviation is not on the horizon—it is here. The decisions we make today will shape the United States' competitiveness, resilience, and global leadership for decades to come.

In conclusion, AUVSI urges the Committee to prioritize oversight of Title IX, Subtitles A and B of P.L. 118–63, to ensure the FAA is keeping up with mandate timelines, with a keen focus on the following specific provisions throughout the legislation:

General

- Establishing the Unmanned and Autonomous Flight Advisory Committee—Section 916
- Make maximum use of the recently announced Center for Advanced Aviation Technologies to support emerging aviation technologies—Section 961
- Center of Excellence for UAS—Section 1006
- FAA UAS and AAM research and development—Section 1044

UAS

- Electronic conspicuity study—Section 906
- Remote identification alternative means of compliance—Section 907
- Improving the Part 107 waiver process—Section 908
- Pilot program for UAS inspections of FAA infrastructure—Section 911
- Drone Infrastructure Inspection Grant Program—Section 912
- Drone Education and Workforce Training Grant Program—Section 913
- Extension of the Know Before You Fly initiative—Section 922
- Extension and expansion of UAS test ranges—Section 925
- Extension of authorities under Section 44807 and transferring those authorities to FAA—Section 927
- Directing the FAA to issue a BVLOS NPRM and final rule expeditiously—Section 930
- Expeditious approvals of third-party service providers—Section 932
- Operations Over the High Seas—Section 934
- Prohibiting Department of Transportation (DOT) funds from being used on contracts/grants for covered UAS—Section 936

AAM

- Establishing the Advanced Aviation Technology/Innovation Steering Committee—Section 229
- Shifting AAM regulatory functions from the FAA NextGen Office to the Office of Aviation Safety—Section 206
- Allowing airport energy assessments to include power demands for airside and landside operations, with funding support for related projects—Section 742
- Establishing program guidance for the AIP Pilot Program for AAM ground support equipment—Section 745
- Streamlining environmental approvals for vertiports by applying or establishing categorical exclusions under the National Environmental Policy Act—Section 953
- Expanding and extending the AAM Infrastructure Pilot Program through 2026—Section 960

Thank you for your commitment to innovation, safety, and a strong U.S. aviation ecosystem. AUVSI and our members stand ready to work with Congress, the FAA, DOT, and all partners to realize this vision.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TED CRUZ TO
JODI BAKER, WAYNE HEIBECK, AND FRANKLIN MCINTOSH

Integration with Safety Risk Management Panels

Question 1. How will the new advanced analytics tools within Aviation Safety Information Analysis and Sharing (ASIAS) be integrated into FAA's Safety Risk Management (SRM) panels, particularly those addressing mixed traffic operations, airspace redesign, or commercial spaceflight interactions?

Answer. ASIAS is one of the data sources the FAA uses to both identify and analyze potential safety issues as part of safety risk management and its risk identification and mitigation tools, including SRM panels. When ASIAS has information pertinent to a potential safety issue, including in relation to planned changes, analysts use that data to identify trends and anomalies that may indicate a vulnerability in the aerospace system.

Consistent with the FAA Reauthorization Act of 2024, we are making a host of improvements to ASIAS. Such improvements include integrating rotorcraft community data, Artificial Intelligence or machine learning, air traffic control voice data, and additional FAA Enterprise Information Management data into ASIAS. Not only will these improvements expand the data sources available to ASIAS but also enhance the quality and speed of data, therefore increasing the benefits of ASIAS data to support safety risk management.

General Aviation and Non-Airline Participation

Question 2. Does the FAA have plans to expand the scope of ASIAS participation beyond commercial airlines—for example, to general aviation, rotorcraft, or UAS operators—and what technical or policy challenges would need to be addressed to do so?

Answer. Expansion of ASIAS beyond commercial operations began over a decade ago. Currently, ASIAS partners with general aviation and rotorcraft operators, in addition to commercial air carriers. We are always looking to improve and, consistent with the FAA Reauthorization Act of 2024, we are making a host of improvements to ASIAS. Such improvements include integrating rotorcraft community data, Artificial Intelligence or machine learning, air traffic control voice data, and additional FAA Enterprise Information Management data into ASIAS. We are actively integrating rotorcraft safety data into ASIAS, with key milestones planned throughout FY26. This includes initiating rotorcraft onboarding, such as establishing agreements, data pipelines, and portal features, in Q1 FY26, and finalizing tools for benchmarking and visualization in Q2. The FAA also is actively working to expand ASIAS' reach within the UAS community. The FAA is working to build a drone data analyses capability in FY2025 and to integrate UAS safety data into ASIAS to conduct aggregate safety risk analysis beginning in FY2026. Planning for UAS onboarding is targeted for Q3 FY26, followed by expansion of the study pipeline and integration of advanced tools and UAS data in Q4.

Key technical and policy challenges include ensuring secure data exchange mechanisms, protecting proprietary and sensitive data, developing onboarding strategies for diverse stakeholder communities, and aligning new data sources with ASIAS' existing governance frameworks.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN THUNE TO
JODI BAKER, WAYNE HEIBECK, AND FRANKLIN MCINTOSH

Question 1. Section 372 of the Federal Aviation Administration (FAA) Reauthorization Act of 2024 requires the FAA Administrator to establish requirements for an Enhanced Qualification Program (EQP) for prospective pilots within six months of enactment. EQP is a structured program meant to integrate several benchmarks prospective pilots must meet—including receiving their multiengine and type ratings—into one comprehensive curriculum that prepares them for entry into air carrier new hire training. This thorough, detailed course of instruction, paired with advanced simulator training from seasoned airline pilots, would expose trainees to the cockpits of the jets they would actually be flying and, importantly, allow them to experience what it is like to handle challenging and dangerous situations in those cockpits, including those which lead to the close calls we have seen recently.

The swift implementation of this program is critical to ensuring we have an adequate supply of highly trained, qualified pilots especially in rural areas.

Please detail your plan to ensure that this important program is implemented and provide an expected timeline for implementation.

Answer. We are focused on establishing the requirements for airlines to implement the Enhanced Qualification Program (EQP), which we plan to publish in an

Advisory Circular (AC) later this year. As part of our process, we will seek public comment on the AC, after which it will be finalized.

Question 2a. As you know, Section 930 of the Federal Aviation Administration (FAA) Reauthorization Act of 2024 requires the FAA to establish regulations governing beyond visual line-of-sight (BVLOS) operations for certain unmanned aircraft systems (UAS), a crucial step in unleashing the commercial potential of these aircraft. Under the law, the FAA must issue a notice of proposed rulemaking (NPRM) within four months and a final rule within 20 months of the date of enactment. While we appreciate the FAA's continued work in advancing the integration of UAS into the National Airspace System (NAS), with the statutory NPRM deadline having passed, we write today to request an update on the publication of this proposed rule.

What timeline can we expect for a publication of a BVLOS NPRM? After publication, when can we expect a final rule?

Answer. The BVLOS NPRM was published on August 5, 2025. As highlighted in President Trump's Executive Order (EO) 14307, Unleashing American Drone Dominance, this rule is a Trump Administration priority. The FAA will expeditiously address public comments on the NPRM and intends to meet the 240-day timeline in the EO for publication of a final BVLOS rule.

Question 2(b). It is my understanding that the FAA has been in the process of developing the BVLOS rule for some time, well before the enactment of the FAA Reauthorization Act of 2024. Can you provide an explanation for the continued delay in developing this rule?

Answer. Developing rules and policies that balance the needs and concerns of stakeholder groups, transitioning to the normalization of beyond visual line of sight operations, and creating reliable pathways for technology as risk mitigation has been complex and challenging. Under the direction of President Trump and Secretary Duffy's leadership, the FAA was able to issue the NPRM on August 5, 2025, notwithstanding previous delays.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JERRY MORAN TO JODI BAKER, WAYNE HEIBECK, AND FRANKLIN MCINTOSH

Question 1. FAA's Contract Tower Program is one of the most successful government/industry partnerships for the agency, continually receiving high marks from the DOT Inspector General. What assurance can you offer that contract towers will remain a high priority for FAA?

Answer. Federal Contract Towers (FCT) play a vital role in our national airspace system, and we are committed to continuously strengthening the program. Secretary Duffy's initiative to accelerate the hiring and training of air traffic controllers is important, not just for FAA-operated facilities but also for FCTs, which rely on a robust, well-trained workforce. One major step we are taking is expanding the Enhanced CTI program. By broadening the pipeline of qualified candidates, this initiative not only supports FAA staffing but also opens new recruitment opportunities for contract towers. Additionally, the FAA Reauthorization Act of 2024 includes a requirement that FCTs serving small and medium hub airports be staffed to support at least two controllers per tower operating shift. We made the necessary adjustments, and that change will go into effect on schedule, in full alignment with the legislation.

Question 2. A few years ago, the FAA moved the administration of the Federal Contract Tower program to the Program Management Office, separating from air traffic services. What was the justification for moving to the PMO?

Answer. The FAA shifted administration of the FCT Program to the Program Management Office (PMO) to enhance program oversight, streamline operations, and better align with broader agency modernization efforts.

Question 3. Please describe where the FAA is in implementing Sections 440 and 441 (Aviation Workforce Development Grants) of the FAA Reauthorization.

Answer. Regarding section 440 of the FAA Reauthorization Act of 2024, the FY 2025 Aviation Workforce Development NOFOs have been updated to align with the Trump Administration's priorities, and we anticipate that they will be announced in the near future. The Office of the Secretary of Transportation is overseeing the implementation of section 441 of the Act.

Question 4. The FAA Reauthorization focused on the importance of sufficient resources and training for FAA's certification workforce. What efforts have been undertaken to bolster certification personnel in their critical safety oversight responsibilities?

Answer. Aviation Safety Inspectors (ASI) are the frontline in safety oversight. Congressional direction for the FAA to use direct-hire authority (*e.g.,* on-the-spot hiring authority) has enabled the FAA to continue targeted recruitment for these mission-critical positions, and it allows the FAA to accept resumes outside of the normal announcement process for all service locations. Use of on-the-spot hiring authority is an effective tool in hiring ASI positions. On-the-spot hiring authority will continue to enable the FAA to accelerate the hiring process by extending offers of employment to fully mission-qualified candidates faster in a highly competitive labor market.

Flight Standards (FS) and Aircraft Certification Service (AIR) manage all technical training courses that safety inspectors need to attend to ensure they have the proper training based on their job responsibilities. FS and AIR continuously review changes in policies, processes, and technologies to identify any gaps or changes that impact inspector training. Where necessary, FS and AIR develop or update existing training to provide the necessary training needed to support the critical safety oversight responsibilities of the Aviation Safety Inspector workforce. Topics include Organization Designation Authorization, expansion of safety management systems, and training in new aviation technologies.

In January 2025, FS completed a major redesign of the On-the-Job Training Program, transitioning to a streamlined, task-based approach that aligns with real field requirements, strengthens safety oversight through robust lesson plans, and accelerates ASI qualification. The updated structure improves consistency across the workforce, accelerates ASI readiness, and enhances FS' ability to meet its safety oversight responsibilities. Subsequent phases will focus on policy alignment, performance metrics, and integration with national tracking systems to ensure long-term sustainability and accountability.

Question 5. The FAA Reauthorization Act requires the agency to conduct a study on the future state of the type certification process. What is the progress of this study? What steps are being taken to leverage modern tools and technology systems to improve safety through a more effective and efficient certification process?

Answer. Section 310 of the FAA Reauthorization Act of 2024 requires the agency to enter into an agreement with a federally funded research and development center or other independent nonprofit organization to study and make recommendations regarding the agency's approach to type certification processes. In January of 2025, the FAA awarded a contract to MITRE, consistent with this requirement. In accordance with section 310, the report containing the results of the study and recommendations is due to the FAA by November 2025.

Question 6. When will the framework from my Advanced Air Mobility Coordination and Leadership Act be released?

Answer. The Office of the Secretary of Transportation is overseeing the implementation of this requirement.

Question 7. I have heard some concerns about drone activity at public venues that fall below FAA's 30,000-seat threshold and sporting event requirement for flight restrictions. How can FAA and my office find a reasonable path forward that improves safety at smaller public venues?

Answer. Section 935 of the FAA Reauthorization Act of 2024 provides a framework for the FAA to issue temporary flight restrictions over eligible large public gatherings. The FAA is currently implementing the requirements of Sec. 935 and will continue to do so. We further note that existing FAA regulations provide requirements for safe drone operations. And if there is an emergent safety issue, the FAA has the tools to address it.

Question 8. Prior to the Army Aviation Brigade resuming helicopters operations in the National Capital Region in late April, how was the FAA coordinating with DOD to review and approve these operations?

Answer. Ronald Reagan Washington National Airport (DCA) is in a Class B surface area. All entry into the area by helicopters must be requested and granted based on current traffic demands. Other than those requests, there was no additional coordination with DOD.

a. Why did the FAA not notify the Aviation Subcommittee of these resumed operations, as requested by my February 4th letter to FAA?

Answer. The FAA did not resume simultaneous operation of fixed-wing and helicopter operations in certain areas in the vicinity of DCA; those operations remain restricted. The operation of Priority Air Transport flights around DCA were not restricted by the FAA other than in areas described above or based on workload allowing for Class B airspace clearances to be issued.

Question 9. Is there an approved helicopter route for around the Pentagon? Would this route be part of an MOU between FAA and DOD?

Answer. Yes, there are approved helicopter routes/transitions for and around the Pentagon. These routes/transitions would be part of a Letter of Agreement between FAA and DOD.

Question 10. The results from the audit of legacy systems authorized in section 622 are due in three months. Please provide the Committee an update on the outreach to industry as required by Section 622.

Answer. Section 622 of the FAA Reauthorization Act of 2024 directs the FAA to conduct an audit of legacy systems within the National Airspace System (NAS), specifically targeting systems installed before 2000. To fulfill this mandate, the FAA contracted with MITRE, a federally funded research and development center, to carry out the audit. MITRE completed the audit in August 2025, in accordance with the statutory deadline. FAA leadership met monthly with MITRE to monitor progress and ensure the audit remained aligned with congressional intent and safety priorities. MITRE leveraged data from the NAS Operations Risk Assessment (NORA) Dashboard to identify legacy NAS systems (FAA-owned systems deployed before 2000) to analyze system operational safety and efficiency risks. The team also used data from NAS Performance Analysis System (NASPAS), Sustain, Enhance, Replace Initiative (SERI), and Resource Planning Documents (RPDs). MITRE also reviewed the recent Government Accountability Office (GAO) report.

Industry consultation is a component of the development of a plan to accelerate drawdown, replacement, or enhancement of legacy systems identified in the audit as outdated, insufficient, unsafe, or unstable. The development of this plan follows the completion of the audit and a report on the findings and recommendations of the audit.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DAN SULLIVAN TO JODI BAKER, WAYNE HEIBECK, AND FRANKLIN MCINTOSH

Section 627 of the FAA Reauthorization Act of 2024 requires the FAA to initiate a rulemaking process, no later than 3 years from enactment, to establish or update low-altitude IFR routes and procedures for rotorcraft and powered-lift aircraft, leveraging performance-based navigation.

Following the tragic midair collision over Washington, D.C., and the FAA's recent Rotorcraft Safety Roundtable—which identified clear deficiencies in low-altitude route structure, vertical/lateral definitions, and traffic deconfliction—how is the FAA ensuring that current efforts to improve low-altitude safety are integrated with the implementation of Section 627?

Specifically:

Has the FAA initiated internal planning or pre-rulemaking activities toward fulfilling the Section 627 mandate? If so, what is the timeline for stakeholder consultation and formal rulemaking initiation?

Answer. Section 627 requires the FAA to initiate a rulemaking process to establish or update, as appropriate, low altitude routes and flight procedures to ensure safe rotorcraft and powered-lift aircraft operations in the NAS no later than May 2027. The FAA currently has a process administered under 14 C.F.R. § 71.13(b)(3), which classifies Air Traffic Service (ATS) routes, including low-altitude routes, as either VOR Federal airways or Area navigation (RNAV) routes that the Agency determined address the requirements of section 627. The FAA is in the process of setting up discussions with stakeholders including the United States Helicopter Safety Team, and NATCA to consult on these processes in accordance with the requirements in section 627.

How is the agency prioritizing congested airspace for early action under Section 627?

Answer. In addition to the actions for section 627, the FAA is reviewing active low altitude routes and flight procedures to ensure safe rotorcraft and powered-lift aircraft operations.

Following the DCA accident, the FAA is conducting a comprehensive review of all helicopter visual flight rules (VFR) charts. Currently, the FAA is working with aviation partners to update the DCA helicopter chart by addressing safety concerns and recommendations from the National Transportation Safety Board. This includes developing, modifying, or canceling routes and transitions, updating police operating zones, and adding new advisory notes and information to the chart. Once these updates to the DCA chart are completed, the FAA will apply similar updates to the other helicopter charts, as needed.

To what extent will implementation of Section 627 focus on modernizing and improving the FAA's Helicopter Route Chart Program, including revisions to existing routes and publication practices to reflect performance-based navigation capabilities?

Answer. Section 627(b) specifically addresses the utilization of existing processes to establish or update low-altitude instrument flight rules (IFR) routes (generally helicopter RNAV/TK routes) for rotorcraft and powered-lift aircraft as depicted on IFR low-altitude charts. Helicopter route charts and VFR routes are separate and primarily support visual navigation unless those IFR routes are contained within the charted area where both VFR and IFR routes will be depicted to provide specific deconfliction and supporting information. This initiative integrates IFR operations into the low-altitude environment using performance-based navigation infrastructure, with a focus on developing new IFR routes supported by advanced Global Navigation Satellite System (GNSS) which includes the U.S. Global Positioning System (GPS). The goal is to provide safe and efficient navigation for rotorcraft while maintaining proper separation from higher-altitude fixed-wing aircraft.

How is this work being aligned with the DOT's recently announced effort to modernize the U.S. air traffic control system, particularly with respect to enabling digital separation and route optimization in low-altitude corridors?

Answer. The FAA's initiatives under section 627 align with DOT's broader air traffic control modernization by updating supporting infrastructure and airspace constructs to include the development of low-altitude IFR routes for helicopters and powered-lift. These routes could benefit from evolving digital separation concepts and technologies under development. By implementing performance-based navigation, the FAA improves safety and operational efficiency, while supporting multiple aircraft types within the airspace.

Does the FAA currently have the technical, budgetary, and staffing resources required to carry out the mandates of Section 627 on schedule? If not, what specific support would be required to accelerate implementation—particularly in high-density, mixed-use airspace environments?

Answer. Currently, yes. However, the FAA must ensure it has sufficient technical, budgetary, and staffing resources as the scope and scale increase and to accelerate the development of these IFR routes, especially in high-density airspace and across multiple geographic locations simultaneously to ensure safety and prepare for future demands. The route development process requires collaboration across multiple stakeholders to include manufacturers, operators, air traffic controllers, and communities to minimize operational conflicts and community impacts.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARSHA BLACKBURN TO JODI BAKER, WAYNE HEIBECK, AND FRANKLIN MCINTOSH

Question 1. In 2023, Senator Luján and I sent a letter to the FAA Administrator raising concerns that some airlines would not be able to retrofit airplane altimeters in time to allow 5G operations near and on airplanes. The wireless industry paused 5G operations for a significant period of time to resolve this issue with the FAA. Since that letter, industry has come together with government to ensure that we can have both wireless service and flight safety. I was pleased that our provision establishing an R&D program to assist with the development and testing of next-gen radio altimeters for aircraft was included in the FAA Reauthorization. What is the status of this R&D program? What hurdles might still exist for airlines to meet the January 2028 deadline?

Answer.

"January 2028 deadline"

Current safe coexistence between radio altimeters (RAs) and wireless transmissions in the lower C-Band (3.7–3.98 GHz) is dependent upon the voluntary agreements entered into by the wireless industry and the aviation industry's response to the requirements in airworthiness directives issued by the FAA. This safe environment was achieved due to extensive work by the aviation and wireless industries to identify the transmission characteristics necessary to define wireless service limits voluntarily agreed to by the wireless licensees. The aviation industry has already completed extraordinary efforts to develop, produce, certify, and install thousands of modified RA with filtering that are tolerant to interference from current 5G C-Band emissions with the voluntary wireless service limits in place.

Work is underway to develop RAs with suitable performance and interference tolerance to support long-term safe coexistence with commercial wireless transmitters in the neighboring spectrum. Currently, RTCA is developing minimum operational

performance standards (MOPS) for an RA system that is an efficient user of its assigned spectrum and achieves the best possible performance that is currently technologically attainable.

Once the MOPS are completed, the FAA will need to mandate these new RA systems on thousands of U.S. registered aircraft as well as other aircraft operating in the National Airspace System. However, the FAA does not anticipate these RA systems to be available before January 1, 2028.

Ultimately, the current voluntary agreement will need to be extended beyond January 1, 2028 to protect current aviation operations to ensure near-term operational and economic stability and provide aviation stakeholders with sufficient time to design, produce, certify, and install tens of thousands of necessary RAs. In addition, some of these voluntary operating conditions may continue to be necessary for future RA systems that meet the MOPS.

Research and Development Program

Regarding the research and development program, the FAA entered into an agreement with the University of Oklahoma to conduct research that supports the validation of the minimum operational performance standards (MOPS). The University is partnering with various avionics companies to conduct testing and provide results to validate or improve the MOPS. This activity reduces the risk for any potential issues identified that could affect the standard or its schedule for completion.

Question 2. By law, air traffic controllers ***must*** retire at age 56. The Secretary of Transportation has the authority to extend that mandatory retirement age to 61 and this could help make up for the shortage of 3,000 air traffic controllers. I believe Congress should give the Secretary the authority to exempt air traffic controllers from the mandatory retirement age for as long as they are able-bodied and mentally fit. In your opinion, will using this exemption authority help solve the air traffic controller shortage in this country?

Answer. The FAA is using every tool available to hire and retain qualified people to serve as air traffic controllers and exemptions from the mandatory retirement age is just one element of the current process. We are incentivizing hiring with a 30 percent salary increase for candidates going to the FAA Academy, as well as offering incentives to controllers willing to go to hard-to-staff facilities and to retain experienced controllers.

Question 3. Tennessee is home to countless large-scale outdoor events, Titans' football and the Bonnaroo Music Festival for example. Americans deserve to feel safe when they attend an event with their loved ones. When drones interrupt events and performances, it can be incredibly frustrating for fans. I was pleased that the FAA Reauthorization Act enhanced the FAA's authority to issue temporary flight restrictions for drones flying over large events. Can you commit that the FAA will do everything in its power to protect these large-scale outdoor events and implement this provision of the FAA Reauthorization Act?

Answer. Yes. Section 935 of the FAA Reauthorization Act of 2024 provides a clear framework for the FAA to issue temporary flight restrictions over eligible large public gatherings. The FAA is actively implementing the requirements of section 935.

Question 4. Last year, Congress passed the Federal Aviation Administration Reauthorization Act of 2024 which included a number of provisions aimed at UAS. One of these provisions, sec. 935, expanded FAA's authority to create temporary flight restrictions (TFR) around large public gatherings such as outdoor sporting events, concerts, and festivals. With the rise of domestic drone usage, expanding such TFR authority is more important than ever. How will you work with local law enforcement and the organizers of these public events to ensure that there is a streamlined way for them to apply and receive a TFR in a timely fashion?

Answer. Section 935 of the FAA Reauthorization Act of 2024 provides an important framework for issuing temporary flight restrictions over large public gatherings, such as outdoor sporting events and concerts. The FAA is actively implementing this provision and is committed to ensuring the process is efficient, accessible, and responsive to stakeholder needs. The FAA is working to streamline the TFR application process. We are evaluating ways to simplify and expedite requests, including improving communication channels and developing clearer guidance for applicants. The FAA welcomes continued feedback from users and remains focused on ensuring that TFRs can be issued in a timely manner.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. ERIC SCHMITT TO JODI BAKER, WAYNE HEIBECK, AND FRANKLIN MCINTOSH

Question 1. During the hearing, you discussed various ways that the FAA intends to modernize the national airspace system. In doing so, it is highly critical that smaller airports like those in Missouri are not left behind. It's precisely these airports that do not have 24/7 ATC staffing that rely the most on critical automated systems such as the Automated Weather Observing System (AWOS) and ASOS (Automated Surface Observing System). These weather reporting systems ensure that operations can be carried out safely at all hours. With this in mind, can you provide some more detail as to how you plan to ensure that smaller airports that rely on these systems the most—those outside of the core 30 largest—are prioritized in any system modernization efforts moving forward.

Answer. Modernization is a priority across the NAS, and we look forward to working with you on this effort. The FAA also recognizes the criticality of tools such as Automated Weather Observing Systems (AWOS) and Automated Surface Observing Systems (ASOS) for smaller airports. Accordingly, we are working to implement the requirements of section 332 of the FAA Reauthorization Act of 2024, which requires the FAA to publish on a website, real-time service status for all AWOS/ASOS. In addition, consistent with section 419 of the Act, the FAA plans to provide non-federal weather observer training for airport personnel who will be available to backstop AWOS/ASOS in the event of an outage or error.

Question 2. In order to combat the continued shortage of pilots and the inconsistencies in the training/supply pipeline, Sec. 372 of the 2024 FAA Reauthorization bill mandated that the FAA establish requirements for an "Enhanced Qualification Program for Restricted Airline Transport Pilot Certificate" or EQP. This program would, among other things, allow for a modernized training approach by potentially allowing advanced simulator time to play a more direct role in training and allow airlines to sponsor and train potential pilots specific to their aircraft type earlier in the pipeline. Can you please provide an update on the status and timeline for final guidance pertaining to the EQP program, as this is an essential step forward for establishing a robust and well-trained pilot pipeline?

Answer. We are focused on establishing the requirements for airlines to implement the Enhanced Qualification Program (EQP), which we plan to publish in an Advisory Circular (AC) later this year. As part of our process, we will seek public comment on the AC, after which it will be finalized.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO JODI BAKER, WAYNE HEIBECK, AND FRANKLIN MCINTOSH

FAA Workforce Reductions. The FAA's ability to carry out this law is seriously hindered by the current Administration's attacks on the Federal workforce. Both the FAA Reauthorization Law of 2024 and the 2020 Aircraft Certification, Safety, and Accountability Act (ACSAA) call for more safety staff, not less. In this law, we required the FAA to set maximum hiring targets to increase air traffic controller staffing, and while I recognize the administration's efforts in this area, there are other safety critical and safety technical staffing shortages addressed in the law that also deserve concerted implementation efforts.

Acting Administrator Rocheleau has told the FAA workforce to expect a Reduction in Force announcement at the end of May saying quote: "We will be leaner in a year, two years. It's the fact." As required by the law, we must constantly invest in training and recruiting a highly skilled workforce at FAA including maintenance technicians, aircraft certification experts, safety specialists, and more that maintain our gold standard in aviation safety.

Question 1. In light of staffing cuts, and reductions from the deferred resignation program, please explain how FAA staffing levels in your line of business are meeting requisite agency targets for safety critical positions.

Answer. *Aviation Safety:* President Trump has continuously indicated his support for aviation safety and, with Secretary Duffy, secured an unprecedented investment in the safety of America's aviation infrastructure. President Trump also issued an Executive order on January 20, 2025, directing an immediate assessment of aviation safety and, on January 21, directed FAA to refocus from non-safety related DEI to safety and merit-based hiring. The FAA under President Trump is focused exclusively on safety.

FAA staff in critical safety-related positions, including aviation safety inspectors (ASI) and aerospace engineers (ASE), were not eligible to participate in the deferred resignation program. Congressional direction for the FAA to use direct-hire author-

ity (*e.g.,* on-the-spot hiring authority) has enabled the FAA to continue targeted recruitment for these mission-critical positions, and it allows the FAA to accept resumes outside of the normal announcement process for all service locations. Use of on-the-spot hiring authority is an effective tool in hiring for these positions. On-the-spot hiring authority will continue to enable the FAA to accelerate the hiring process by extending offers of employment to fully mission-qualified candidates faster in a highly competitive labor market.

Airports: FAA staff in critical safety-related positions, including Airport Certification Safety Inspectors (ACSIs) and airport engineers, were not eligible to participate in the deferred resignation program. The Office of Airports continues to ensure that ACSIs responsible for airport safety compliance at our Part 139 airports are properly trained and we continue to hire ACSIs and airport engineers.

Air Traffic Organization: Controller staffing is a top priority for this Administration. The FAA is in the midst of a multi-year hiring and training surge to ensure the level of certified air traffic controllers needed to meet current and future traffic demands. We are filling every seat at the Academy, bolstering the Enhanced Air Traffic Collegiate Training Initiative (AT–CTI), and offering more opportunities for experienced military controllers to join the workforce. By addressing the ongoing air traffic controller shortage through this multi-pronged approach, the FAA is working to improve staffing levels and increase the safety of the NAS. FAA staff in critical safety-related positions, including air traffic controllers and NAS technicians, were not eligible to participate in the deferred resignation program.

FAA Workforce Reductions. The FAA's ability to carry out this law is seriously hindered by the current Administration's attacks on the Federal workforce. Both the FAA Reauthorization Law of 2024 and the 2020 Aircraft Certification, Safety, and Accountability Act (ACSAA) call for more safety staff, not less. In this law, we required the FAA to set maximum hiring targets to increase air traffic controller staffing, and while I recognize the administration's efforts in this area, there are other safety critical and safety technical staffing shortages addressed in the law that also deserve concerted implementation efforts.

Acting Administrator Rocheleau has told the FAA workforce to expect a Reduction in Force announcement at the end of May saying quote: "We will be leaner in a year, two years. It's the fact." As required by the law, we must constantly invest in training and recruiting a highly skilled workforce at FAA including maintenance technicians, aircraft certification experts, safety specialists, and more that maintain our gold standard in aviation safety.

Question 1. How are staff cuts and the deferred resignation program affecting the Aircraft Certification service's ability to evaluate and safely certify aircraft? How is this affecting FAA's ability to ensure strong oversight of aviation manufacturers?

Answer. FAA staff in critical safety-related positions, including ASIs and ASEs, were not eligible to participate in the deferred resignation program. And, as safety remains the FAA's top priority, we continue to closely monitor onboard staffing levels.

Boeing Quality Inspection Process Changes. The FAA approved changes to Boeing's quality inspection process—known as Verification Optimization—to allow Boeing to avoid regular inspections by trained quality inspectors based on a risk assessment process. Instead of having quality personnel determine whether a job on the assembly line complies with FAA regulations, manufacturing personnel—such as mechanics—are now responsible for making this decision.

This means mechanics have to inspect and sign off on their own work. And an additional inspection performed by a quality inspector—to add one more layer of redundancy—is not happening as much as it should on the production line. Despite knowing of quality lapses throughout Boeing's production system, the FAA still approved this reduction in quality inspections.

Question 1. How is FAA ensuring that Boeing is meeting inspection requirements if a mechanic is not trained in the same manner as quality assurance personnel to perform the quality inspection?

Answer. The FAA received this allegation previously, conducted a formal investigation, and required Boeing to implement corrective actions that effectively addressed the FAA's findings.

In July 2020, the FAA received allegations that Boeing removed quality inspections without the required approvals, assigned inspections to manufacturing personnel without the appropriate training, and used process surveillance in lieu of direct inspections to make conformance decisions. Based on the findings of the investigation, the FAA identified that Boeing had not removed inspections, but that

Boeing's quality organization had authorized manufacturing to make the verification.

In response to the FAA's investigation, Boeing committed to a set of corrective actions that the FAA closely monitored for implementation. As part of the corrective actions, the FAA required Boeing to assess the training provided to maintenance technicians and quality technicians. Boeing's assessment found the training to be equivalent.

In May 2023, the FAA completed verification of Boeing's implementation of the corrective actions, including verifying Boeing's assessment of their training. As a result of the investigation and implemented corrective actions, quality technician required inspection points have increased across all models. Furthermore, as part of the Boeing Safety and Quality Plan, Boeing continues to enhance their manufacturing technician and quality technician classroom and on-the-job training requirements.

Question 2. In FAA's view, does reducing inspections align with FAA's requirements for Boeing associated with the company's Safety and Quality Plan?

Answer. Quality Technician required inspection points have increased across all models. Additionally, as part of Boeing's Safety and Quality plan, Boeing is executing work instruction adherence checks and design build audits to ensure product conformity.

Question 3. Given reduced quality inspections at Boeing, how is FAA ensuring that Boeing airplanes conform to their approved designs?

Answer. Quality technician required inspection points have increased across all models. Furthermore, the FAA has made improvements to our oversight model since the January 5, 2024, Alaska Airlines accident. We have increased our on-site presence, adding more ASIs at Boeing facilities. Our oversight activities include more direct engagement with company employees, additional inspections at critical points in the production process including "no-notice" inspections, and increased auditing of Boeing's quality system processes and procedures.

FAA Oversight of Boeing ODA Regarding Manufacturing and Design Defects. Boeing's Organization Designation Authorization (ODA), which enables certain Boeing employees to make compliance findings on behalf of FAA, is set to expire at the end of May. In 2022, the FAA granted Boeing a three-year ODA extension instead of the typical five years, reflecting concerns about the ODA and Boeing's implementation of its SMS following the 737 MAX crashes. FAA required a series of improvements from Boeing in exchange for extending its ODA.

The DOT Inspector General has raised serious red flags about FAA's oversight. In August 2023—the same month the defective Alaska Airlines flight 1282 fuselage with faulty rivets was being shipped to Seattle—FAA officials were already trying to delegate final safety inspections of aircraft coming off the production line to Boeing, despite ongoing manufacturing quality issues.

I sent a letter on this issue to FAA to make sure FAA is exercising strong oversight to closely analyze and verify Boeing's progress in meeting these requirements.

The entire purpose of an ODA is to ensure compliance with FAA safety regulations. Yet we keep learning about instances where Boeing designs and manufacturing do not meet the requirements.

Question 1. The 737 MAX's Engine Anti-Ice System, which overheats, can result in the engine cowl failing and possibly causing the airplane to crash. Boeing tried to get an exemption to allow this defect on the MAX–7 and MAX–10.

What is FAA doing now to make sure this issue gets fixed and when will it be fixed?

Answer. Boeing expects to finalize the configuration for the Engine Anti-Ice (EAI) system type design change by the end of summer 2025. The FAA will be directly involved in reviewing the proposed type design changes and substantiating data necessary for addressing the EAI issue per the type certification process before the design change will be implemented. The EAI design change will be incorporated first into 737 MAX production model airplanes in 2025, followed by 737–7 and 737–10 models as part of their amended type certification projects.

Question 2. The 737 MAX's Engine Load Reduction Device, which can allow dense smoke to enter the cabin and flight deck when there is a fan blade failure. This was the subject of urgent recommendations by FAA's Office of Accident Investigation and Prevention.

What is FAA doing now to make sure this issue gets fixed and when will it be fixed?

Answer. On November 26, 2024, the FAA held a Corrective Action Review Board (CARB) and determined the issue to be an unsafe condition that will require a man-

dated airworthiness action. Boeing and CFM are developing a software change that will significantly minimize the flow of engine oil into the cabin air conditioning system during a Load Reduction Device (LRD) activation event. Boeing and CFM have agreed to complete the software update by March 2027. As determined by the CARB, the FAA will mandate the incorporation of this design change into the fleet through airworthiness directives.

To mitigate issues while the software is under development, Boeing updated operational checklists for engine out procedures and updated the Flight Crew Operating Manual (FCOM) and Quick Reference Handbook (QRH) to include a description of the LRD and provide clarification to the Engine Fire and Engine Severe Damage checklists. Air carriers have incorporated the FCOM updates into their procedures so that an engine is manually shutdown sooner when accompanied by the presence of smoke in the cockpit or cabin.

The FAA will continue to support the NTSB in its investigation and review any new information that may warrant additional assessments.

Question 3. The 737's Rudder Actuator, which is susceptible to freezing and makes it impossible for the pilots to move the rudder. NTSB issued an urgent safety recommendation in September 2024 to address this.

What is FAA doing now to make sure this issue gets fixed and when will it be fixed?

Answer. The FAA held a Corrective Action Review Board (CARB) on September 26, 2024. The CARB reviewed the available technical data, safety risk analysis, and the interim safety recommendations issued by the NTSB, and concluded that further investigation was necessary and that no interim action was needed.

On October 10, 2024, Boeing conducted a simulator evaluation with participation from the FAA and the NTSB. The FAA held a second CARB on October 30, 2024, with additional information from the safety investigation, including the simulator evaluation. The CARB determined that there was no safety issue.

The FAA will continue to support the NTSB in its investigation and review any new information that may warrant additional assessments.

Whistleblower Protections. FAA Administrators have repeatedly testified before this Committee that retaliation against whistleblowers in the aviation industry who report safety concerns will not be tolerated. But FAA has had legal authority to impose civil penalties against companies that retaliate against those who report safety concerns since 2000 but has rarely used it. That's why we took action in our 2024 FAA law and gave FAA additional authority to impose civil penalties through its administrative enforcement program. However, FAA counsel recently took the position that it had no such authority.

Congress also gave FAA more enforcement power in the FAA law to provide a stronger deterrent against future violations of whistleblower rights.

Question 1. Do you commit to ensuring that FAA uses and leverages this enforcement authority to pursue violations against individuals who report safety concerns?

Answer. The FAA is committed to whistleblower protections. We take allegations of whistleblower retaliation seriously, as a strong reporting culture is critical to aviation safety. The FAA investigates the underlying safety concerns raised by whistleblowers, while the Department of Labor investigates allegations of retaliation. In the FAA Reauthorization Act of 2024, Congress provided the Administrator with additional civil penalty authority. Specifically, 49 U.S.C. § 46301 now authorizes the Administrator to impose civil penalties when an aviation employer fails to comply with a final order issued by the Department of Labor under 49 U.S.C. § 42121, following a determination that an employer unlawfully retaliated against an employee for reporting aviation safety concerns.

Question 2. How is the FAA communicating to the entities it regulates its expectations and consequences related to violations of FAA's AIR21 whistleblower protection statute?

Answer. The agency shares information regarding the whistleblower protections under the Wendell H. Ford Aviation Investment and Reform Act for the 21st Century (AIR21) on the FAA website (*https://www.faa.gov/about/initiatives/whistleblower*). In addition, the Administrator and agency leadership have emphasized the importance of a strong safety reporting culture through public outreach, industry engagement, and direct communication with regulated entities.

PFAS Replacement Program. In the FAA Reauthorization Act of 2024, we directed the FAA to establish the PFAS Replacement Program to provide airports with resources to switch away from firefighting foam containing PFAS chemicals to fluorine-free alternatives. While PFAS firefighting foams have been used for decades, we now know the severe hazard they pose to our Nation's firefighters, communities,

and the environment, leaving no justification for their continued use. We created this $350 million program to help airports across the Nation accelerate their transition to safer firefighting foams including through grants and cost reimbursement for equipment replacement. This includes providing critical help to Washington state communities that have been particularly affected by PFAS use at airports including Spokane International Airport and the area surrounding Seattle-Tacoma International Airport.

Question 1. In your view, how will the PFAS Replacement Program help accelerate the use of PFAS-free firefighting alternatives at our Nation's airports?

Answer. The PFAS Replacement Program, authorized by section 767 of the FAA Reauthorization Act of 2024, would accelerate the transition from PFAS-containing aqueous film forming foam to fluorine-free foam by supporting covered transition costs at eligible airports.

Authorized at $350 million over 5 years, the program would help airports cover costs that are generally not AIP-eligible, including purchasing new foam, disposing of old foam, cleaning existing equipment, acquiring new required equipment, and other related costs.

Question 2. Please explain why the program has not been established yet. What are the reasons for the delay? Will you commit to pushing the Office of Airports to establish this important program as soon as possible?

Answer. The FAA has developed a programmatic framework. However, the $350 million authorized over 5 years for this program has not been appropriated yet.

Question 3. To what degree is FAA offering assistance to airports right now as they look to transition away from PFAS firefighting foams to fluorine-free alternatives?

Answer. The FAA has not mandated that airports transition to fluorine-free foam (F3), but we have provided references and training for airports to use in deciding how and when to transition to F3 foam.

- FAA Transition Plan: This plan was developed in coordination with other Federal agencies, airport environmental professionals, firefighters, and industry representatives. The document addresses items for airports to consider prior to transitioning, including, but not limited to, types of F3, renting/borrowing Aircraft Rescue and Firefighting (ARFF) vehicles during transition, training, EPA guidelines, etc.
- FAA-sponsored Webinar: The FAA held three webinars with over 800 participants describing F3 transition considerations, suggested training, and updated firefighting tactics to use with F3. These webinars were recorded and are available to view on the FAA ARFF webpage linked below.
- Training Handout: The FAA developed a training PowerPoint presentation and a video depicting tactics and techniques for utilizing F3 to assist ARFF personnel.
- The FAA has extended the funding program for airports to acquire input-based foam proportioner testing systems, which test an ARFF vehicle without the need to discharge foam into the environment.
  - The FAA will continue to provide 100 percent Federal funding to civilian airports for the purchase of this testing equipment to eliminate the financial strain on airports.
- The FAA transition plan can be found on the FAA ARFF webpage: *Fluorine-Free Foam (F3) Transition for Aircraft Firefighting* | Federal Aviation Administration

ATO Technical Operations Workforce Shortage. According to the Professional Aviation Safety Specialists, AFL–CIO (PASS), FAA's Air Traffic Organization (ATO) Technical Operations unit is short about 800 technicians. But we know the Technical Operations unit is made up of personnel with many other job codes that perform important functions to support, maintain, and fix critical air traffic control equipment and systems.

Question 1. How are staff cuts and the deferred resignation program affecting the ATO's Technical Operations workforce and ATO's ability to address and fix systems and equipment outages in the air traffic control system?

Answer. FAA staff in critical safety-related positions, including NAS technicians, were not eligible to participate in the deferred resignation program.

Newark Airport Disruptions and ATC Infrastructure Modernization. The crisis at Newark Airport following the Philadelphia TRACON outages on April 28 and May 9, 2025, dramatically illustrate the consequences of our aging ATC infrastructure.

These outages, caused by outdated copper wiring and radar systems, led to controllers temporarily losing all radar and communications with aircraft, resulted in thousands of flight delays, and prompted at least five controllers to take trauma leave.

A 2019 GAO report identified FAA critical systems in need of replacement but noted FAA had "no documented plans to modernize" them. Five years later, GAO's 2024 report found that FAA still lacked near-term modernization plans in place for certain at-risk systems. This prompted our mandate in section 622 of the FAA law requiring an outside audit of legacy systems installed before 2000, followed by prioritized replacement based on safety risks. Secretary Duffy recently announced plans for a three-to four-year ATC modernization plan that builds upon the foundation we put in the FAA law.

Question 1. What is the specific status and timeline for completing this audit, and what actions are you taking to address the most critical systems identified by the GAO?

Answer. Section 622 of the FAA Reauthorization Act of 2024 directs the FAA to conduct an audit of legacy systems within the NAS, specifically targeting systems installed before 2000. To fulfill this mandate, the FAA contracted with MITRE, a federally funded research and development center, to carry out the audit. MITRE completed the audit in August 2025, in accordance with the statutory deadline. FAA leadership met monthly with MITRE to monitor progress and ensure the audit remained aligned with congressional intent and safety priorities.

Meanwhile, the FAA is on track to meet the statutory timeline for the remaining provisions of this section. The FAA has been taking steps to proactively assess and mitigate risks in systems already identified as critical. We are coordinating with operational staff and technical experts to triage systems that pose the highest safety or operational risks and identify immediate stabilization or upgrade actions where feasible. In parallel, Secretary Duffy's brand-new air traffic control initiative provides an essential framework for accelerating long-overdue investments. This effort builds directly upon the foundation laid by Congress in the FAA Reauthorization Act and is intended to create a more resilient, technology-forward air traffic system. While the full transition to a brand-new air traffic system will take time, we are committed to prioritizing safety-driven modernization and leveraging both the audit findings and congressional direction to guide our next steps.

Question 2. What short-term and long-term actions is FAA taking to address the specific vulnerabilities at the Philadelphia TRACON and Newark to prevent further system and equipment outages and ensure fulsome Certified Professional Controller (CPC) staffing, especially given reports that staffing has fallen to concerning levels?

Answer. The FAA is prioritizing infrastructure upgrades at critical facilities like Philadelphia TRACON by addressing legacy systems, improving telecommunications reliability, and ensuring adequate staffing through targeted hiring and retention efforts. To address concerns, the FAA established a taskforce with Verizon and L3Harris. The taskforce meets regularly to ensure the airport is a safe, efficient, and functional gateway for passengers and air carriers. As part of ongoing progress at Newark, FAA has limited the rate of arrivals and departures through December 31, 2025, following productive discussions with airlines and the conclusion of a public comment period. The confirmed reduced rates will maintain safety while alleviating excessive flight delays at the airport due to staffing and equipment challenges. The early completion of runway construction at the airport (that added to the delays) will also contribute to a more efficient operation. The FAA improved Newark operations by adding three new, high-bandwidth telecommunications connections between the New York-based hubs and the Philadelphia TRACON. This provides more speed, reliability and redundancy. The agency is also establishing a Standard Terminal Automation Replacement System (STARS) hub at the Philadelphia TRACON so that the facility does not depend on a telecommunications feed from the New York STARS hub. The FAA also is increasing controller staffing. Philadelphia TRACON Area C, which directs aircraft in and out of Newark, has 20 fully certified controllers and 5 fully certified supervisors at this time. We have a healthy pipeline of controllers ready to work at Philadelphia TRACON, with an additional 29 controllers and supervisors currently in training.

Question 3. How is the FAA incorporating redundancies into legacy systems during this transition period between upgrades, and what lessons from the Newark crisis are informing your approach to ensuring aging critical systems don't experience similar failures?

Answer. The FAA is committed to modernizing technology and continuously evaluates resource allocation based on evolving priorities, safety considerations, and stakeholder input. We continue to make excellent progress toward upgrading the communications network to create more resilient and redundant communication

links to the Philadelphia TRACON, which directs aircraft into and out of Newark. Earlier this summer, we activated a temporary mobile satellite communications system at the Philadelphia TRACON to provide communications redundancy for the TRACON while we complete the infrastructure work.

Question 4. How does Secretary Duffy's air traffic control system modernization announcement align with the Sec. 622 audit requirements in the FAA Reauthorization Act, and what specific steps are you taking to ensure the billions already allocated by Congress address the most pressing safety concerns?

Answer. Section 622 of the FAA Reauthorization Act of 2024 directs the FAA to conduct an audit of legacy systems within the NAS, specifically targeting systems installed before 2000. To fulfill this mandate, the FAA contracted with MITRE, a federally funded research and development center, to carry out the audit. MITRE completed the audit in August 2025, in accordance with the statutory deadline. In parallel, Secretary Duffy's brand-new air traffic control initiative provides an essential framework for accelerating long-overdue investments. This effort builds directly upon the foundation laid by Congress in the FAA Reauthorization Act and is intended to create a more resilient, technology-forward air traffic system. While the full transition to a brand-new air traffic system will take time, we are committed to prioritizing safety-driven modernization and leveraging both the audit findings and congressional direction to guide our next steps.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. GARY PETERS TO JODI BAKER, WAYNE HEIBECK, AND FRANKLIN MCINTOSH

Question 1. Designated Mechanic Examiners play a critical role in ensuring that there are enough mechanics to address aviation maintenance backlogs. Ensuring that there are enough DMEs to accommodate the needs of communities across the country is critical in sustaining the aviation workforce.

a. Ms. Baker how is the FAA is ensuring that there are enough DMEs to certify maintenance workers, especially in rural areas?

Answer. The FAA assesses capacity and coverage needs based on regional demand. FAA data shows that for Fiscal Year 2024, 268 DMEs completed approximately 17,896 activities. This averages 67 activities conducted per designee per year or 5.6 activities per month. As noted in our Designee Management Policy (FAA Order 8000.95), the FAA expects Designees to perform a sufficient number of their functions within the bounds of their managing office's area of responsibility to support required oversight. We recognize that applicants in some regions may face longer travel or scheduling times. To provide flexibility, FAA policy allows applicants up to 24 months to complete the testing sequence once it begins, and it authorizes DMEs to perform testing at multiple locations (up to five) to allow better testing coverage for these areas.

Question 2. In December 2024, the U.S. Office of Special Counsel completed an investigation into a controversial, and potentially dangerous, landing approach being used at the Detroit Metropolitan Airport (DTW). The Special Counsel found that the approach "may create a danger for landing aircraft and the flying public" and directed FAA "to further review the safety issues associated with this approach, including the location of offset localizers at DTW, and take steps necessary to resolve them."

a. Can you provide my office with an update on FAA's review of this issue and next steps?

Answer. The FAA conducted multiple safety assessments of the ILS–Y approach at DTW, including Safety Risk Management Panels (SRMPs) in 2015 and 2018, which included participation from industry stakeholders and technical experts.

Both panels concluded that, with existing mitigations and controls in place, the use of the ILS–Y approach at DTW can be safely managed within the National Airspace System (NAS). In response to OSC's concerns, the FAA provided supplemental reports and responses, most recently in November 2023, incorporating input from relevant stakeholders and further validating the safety measures in place. The FAA remains committed to the safety of the flying public at DTW and across the NAS. We continue to review all safety data, engage with stakeholders, and implement mitigations as needed. Should further safety enhancements be identified, we will take prompt action.

Air Traffic Organization

Question 1. Mr. McIntosh, Secretary Duffy put out a plan to address a broad facilities and technology modernization backlog at FAA, but did not include how much that will cost.

a. Do you have an estimate of what level of funding it would take to address the FAA-owned Air Traffic Control tower modernization backlog specifically?

Answer. The agency has nearly 200 FAA-owned terminal facilities over forty years old that require modernization. The projected average cost to replace a terminal facility, which includes air traffic control towers (ATCT) and terminal radar approach control facilities (TRACON), ranges from $74 million to $189 million depending on size and complexity.

Question 2. Mr. McIntosh as I mentioned during the hearing Michigan's second largest airport, Gerald R. Ford Airport in Grand Rapids, has been stymied in its efforts to expand and modernize because of a 62-year-old FAA air traffic control tower that the agency has not acted to replace.

a. Will you commit to working with my office to better understand the timeline for Grand Rapids' Tower replacement?

Answer. I understand the frustration that comes with operating in an aging facility and the concerns you have for your constituents in Grand Rapids. I will ensure that you receive a comprehensive briefing on the FAA methodology for identifying and selecting ATCT facilities for replacement, as well as the criteria used in the evaluation process. At this time, Grand Rapids is not slated for replacement in the near future, and I want to ensure that you have a better understanding of how decisions are made to prioritize facilities for modernization or replacement.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TAMMY DUCKWORTH TO JODI BAKER, WAYNE HEIBECK, AND FRANKLIN MCINTOSH

Question Topic: FAA Staffing Cuts

Question 1. The Secretary of Transportation has been clear that FAA needs more air traffic controllers and better facilities and equipment. I agree. But I can't see how slashing the FAA workforce is going to help.

FAA has said it won't cut employees who are performing safety critical functions. Yet, it's been reported that terminated probationary workers included personnel responsible for FAA radar, landing and navigational maintenance.

Aviation safety relies on redundancy, not an Elon Musk-style "efficiency is everything" approach, where you break things to see what happens. Redundancy is the point, not the problem. Redundancy saves lives.

Aviation Safety

A. Your organization's mission is literally "Aviation Safety." What jobs in your organization do not help ensure the safety of the flying public?

Answer. Maintaining a highly qualified workforce is key to the FAA's safety mission. We have a deep reserve of experienced talent and we are confident in our ability to continue to implement the FAA's mission of providing the safest, most efficient aerospace system in the world. Additionally, the FAA closely monitors staffing levels and continues hiring for critical safety roles, such as air traffic controllers, aviation safety inspectors, and aerospace engineers.

B. Can you guarantee to this committee that FAA will meet all FAA Reauthorization implementation deadlines regardless of a reduction in force?

Answer. The FAA intends to meet the implementation deadlines in the FAA Reauthorization Act of 2024.

Airports

A. We keep seeing runway incursions and other surface incidents at airports. What jobs in your organization do not help ensure the safety of the flying public?

Answer. The mission of the Office of Airports is to support a safe and efficient national airport system and every role in the organization supports this mission, in which safety is paramount. Notably, the Office of Airports works collaboratively across the FAA to mitigate runway incursions and surface events on airports. Our employees continue to actively conduct inspections at airports across the country to ensure applicable FAA safety standards are met. The Runway Incursion Mitigation (RIM) Program is a key initiative by the Office of Airports to reduce runway incursions at runway/taxiway intersections where at least three incursions have occurred in a single calendar year, or that average at least one incursion a year over the last 10 years, at towered airports throughout the country. The FAA is in the process of mitigating incursions at more than 130 locations and has completed mitigation activities at more than 108 RIM locations. The program has a proven track record of success. At the locations considered mitigated, runway incursions are down 80 percent on average. Our employees are also working to provide critical funding to our airports to improve airfield safety with important infrastructure projects in mark-

ing, lighting, signage and pavement reconfigurations. We recently issued guidance to provide funding to airports to equip ground vehicles with Vehicle Movement Area Transmitters to support the Surface Awareness Initiative as well as Runway Incursion Warning Systems.

B. Can you guarantee this committee that FAA will meet all FAA Reauthorization implementation deadlines?

Answer. The FAA intends to meet the implementation deadlines in the FAA Reauthorization Act of 2024.

Air Traffic Organization

I would think the Air Traffic Organization would need more resources at this point not less.

A. What jobs in the Air Traffic Organization do not help ensure the safety of the flying public?

Answer. Maintaining a highly qualified workforce is key to the FAA's safety mission. We have a deep reserve of experienced talent and we are confident in our ability to continue to implement the FAA's mission of providing the safest, most efficient aerospace system in the world. Additionally, the FAA closely monitors staffing levels and continues hiring for critical safety roles, such as air traffic controllers and NAS technicians.

B. Can you guarantee to this committee that FAA will meet all FAA Reauthorization implementation deadlines regardless of a reduction in force?

Answer. The FAA intends to meet the implementation deadlines in the FAA Reauthorization Act of 2024.

Question Topic: Aircraft Evacuations

Question 1. The FAA Reauthorization Act requires FAA to update aircraft evacuation standards to account for real world conditions—like the presence of carry-on bags and passengers who may be seniors, children or people with disabilities.

In March, an engine on a Boeing 737 caught fire as it was taxing to a gate in Denver. We saw evacuated passengers standing on the wing waiting for help.

In April, an engine fire on an Airbus A330 with nearly 300 people onboard required an evacuation on the tarmac in Orlando.

A. When can we expect FAA to complete implementation of Section 365 of the FAA Reauthorization Act, which requires updated evacuation standards?

Answer. The initial step under section 365 was to study improvements to the safety and efficiency of aircraft evacuation standards for transport category airplanes. The FAA has completed the initial portion of this study. The FAA sought the assistance of the National Academies of Sciences, Engineering, and Medicine (NASEM) to conduct an external review of the CAMI research on seat pitch and width before completion. NASEM made several recommendations, and the FAA is working to address them. FAA will finalize the study portion of this section with the completion of that work. If appropriate, rulemaking to revise existing evacuation standards would follow several additional mandates to the Administrator in section 365 including convening an aviation rulemaking committee (ARC), evaluating ARC analysis and recommendations, and determining ARC recommendations to implement and reporting to Congress on such determinations.

Question Topic: Workforce Development Grant Program

Question 1. With broad bipartisan support, the FAA Reauthorization law includes a major expansion of FAA's Aviation Workforce Development Program. This program is critical to recruit, educate and train future pilots, mechanics and manufacturing technical workers.

Yet, the Trump administration chose to waste time revising the notice of funding opportunity and delay the start of the aviation manufacturing technical worker grants.

This is not the way to fix our aviation manufacturing problems.

A. When will FAA complete FY25 and FY26 grant disbursements from the Aviation Workforce Development Grant Program?

Answer. Regarding section 440 of the FAA Reauthorization Act of 2024, the FY 2025 Aviation Workforce Development Notices Of Funding Opportunities (NOFO) have been updated to align with the Administration's priorities, and we anticipate that they will be announced in the near future. For FY 2026, we are in the process of developing a NOFO, which is intended to include the expanded areas of the Aviation Workforce Development Program from the Reauthorization Act of 2024.

Question Topic: Boeing Oversight

Question 1. In October, the Department of Transportation's Inspector General (DOT OIG) found FAA's oversight of Boeing production was not effective. FAA's oversight was so bad, the Inspector General issued 16 separate recommendations to FAA to fix its process.

There were many terrible findings in the report, but one of the most shocking was that shortly before the door plug blowout, individuals within FAA wanted to delegate airplane airworthiness inspection authority back to Boeing. Even worse, these individuals at FAA wanted to do this without any criteria by which to assess whether Boeing could be trusted to properly carry out these inspections.

This isn't just unacceptable. It is a dereliction of duty.

Prior to the 737 MAX crashes, and production problems with the 787, FAA allowed Boeing to self-inspect their aircraft for conformity with their FAA-approved type design.

However, in the wake of the MAX crashes, we learned that Boeing had abused this authority. Boeing had knowingly and repeatedly produced 737 MAX aircraft with nonfunctioning Angle of Attack Disagree alerts—in blatant violation of the plane's approved type design.

FAA should not delegate airworthiness inspection authority back to Boeing until FAA fixes its ineffective oversight of Boeing's production.

DOT OIG currently lists all 16 of its recommendations to FAA as "open."

A. Will FAA commit to not delegating airworthiness inspection authority back to Boeing until FAA has implemented all 16 of DOT OIG's recommendations and DOT OIG considers them closed?

Answer. The FAA takes the recommendations from the DOT Office of Inspector General (OIG) and is actively working to address all 16 recommendations. The FAA is committed to thoroughly evaluating and implementing appropriate measures to enhance oversight and ensure aviation safety. The FAA continuously monitors Boeing's performance closely, alongside evaluating the allocation and capacity of its own airworthiness inspectors.

Regarding delegating airworthiness inspection authority back to Boeing, the FAA operates under a risk-based, data-driven approach to oversight. Any decisions about delegation involve careful consideration of the agency's confidence in Boeing's compliance and the effectiveness of FAA's continued direct oversight.

Question Topic: FAA Review of Helicopter Routes

Question 1. Following the crash near Reagan National Airport, my colleagues and I asked FAA to review helicopter traffic in other areas of congested airspace across the country.

A. When will FAA complete its review of helicopter traffic in congested airspace around the country?

Answer. FAA's review of helicopter traffic in congested airspaces around the country is ongoing.

B. Has the FAA identified any potential trouble spots, so far, as it has been conducting this review?

Answer. The FAA continues to assess airports located near charted helicopter routes in 10 cities and the Gulf of America. This is an important body of work, and we have taken actions to improve safety as a result. For example, in Las Vegas we are adding vertical and lateral boundaries to routes and mandating more traffic advisories from controllers to helicopter pilots.

Question Topic: FAA Reauthorization Act Implementation Status

Question 1. For each of the following sections of the FAA Reauthorization Act of 2024, please provide a status update on implementation, and indicate what impact a reduction in the FAA workforce will have on the timing and full completion of implementation.

A, Section 365—Improved Aircraft Evacuation Standards

Answer. The initial step under section 365 was to study improvements to the safety and efficiency of aircraft evacuation standards for transport category airplanes. The FAA has completed the initial portion of this study. The FAA sought the assistance of the National Academies of Sciences, Engineering, and Medicine (NASEM) to conduct an external review of the CAMI research on seat pitch and width before completion. NASEM made several recommendations, and the FAA is working to address those. FAA will finalize the study portion of this section with the completion of that work. If appropriate, rulemaking to revise existing evacuation standards would follow several additional mandates to the Administrator in section 365 including convening an aviation rulemaking committee (ARC), evaluating ARC analysis

and recommendations, and determining ARC recommendations to implement and reporting to Congress on such determinations.

B. Section 368—Passenger aircraft first aid and emergency medical kit equipment and training

Answer. The initial work of forming an expert panel to review the Emergency Medical Kits and Training was completed and the report sent to the Federal Air Surgeon on April 30, 2025. The FAA intends to meet the requirements of this section.

C. Section 440—Expanded Aviation Workforce Development Grants

Answer. The FY 2025 Aviation Workforce Development NOFOs have been updated to align with the Administration's priorities, and we anticipate that they will be announced in the near future.

D. Section 426—Streamlining transition from military to civilian aviation mechanical careers

Answer. In response to section 426 of the FAA Reauthorization of 2024 (P.L. 118–63), the FAA tasked ARAC to address the knowledge and skill differences between military aircraft maintenance versus civilian aircraft maintenance for the purpose of recommending airman certification standards and testing requirements.

E. Section 541—Extending Air Carrier Access Act Advisory Committee

Answer. The Office of the Secretary of Transportation is overseeing the implementation of this section.

F. Section 542—Training standards to prevent wheelchair damage

Answer. The Office of the Secretary of Transportation is overseeing the implementation of this section.

G. Section 543—Training standards for stowage of wheelchairs and scooters

Answer. The Office of the Secretary of Transportation is overseeing the implementation of this section.

H. Section 544—Mobility aids on board improve lives and empower all

Answer. The Office of the Secretary of Transportation is overseeing the implementation of this section. However, the FAA maintains a role with respect to research regarding the safety and feasibility of securing personal wheelchairs in the passenger seating area of the cabin.

I. Section 545—Prioritizing accountability and accessibility for aviation consumers

Answer. The Office of the Secretary of Transportation is overseeing the implementation of this section.

J. Section 546—Accommodations for qualified individuals with disabilities

Answer. The Office of the Secretary of Transportation is overseeing the implementation of this section.

K. Section 547—Equal accessibility to passenger portals

Answer. The Office of the Secretary of Transportation is overseeing the implementation of this section.

L. Section 548—Aircraft access standards

Answer. The Office of the Secretary of Transportation is overseeing the implementation of the mandates in this section. However, the FAA maintains a role with respect to the safety and feasibility of securing personal wheelchairs in the passenger seating area of the cabin and the associated rulemaking requirement in this provision.

M. Section 549—Investigation of complaints of discrimination against individuals with disabilities

Answer. The Office of the Secretary of Transportation is overseeing the implementation of this section.

N. Section 550—Removal of outdated references to passengers with disabilities

Answer. The Office of the Secretary of Transportation is overseeing the implementation of this section.

O. Section 551—Onboard wheelchairs in aircraft cabins

Answer. The Office of the Secretary of Transportation is overseeing the implementation of this section.

P. Section 552—Aircraft Accessibility

Answer. The Office of the Secretary of Transportation is overseeing the implementation of this section.

Q. Section 725—Pilot grant program to for airport upgrades to improve accessibility for passengers with disabilities

Answer. The FAA published a program guidance letter addressing the pilot program established under section 725 on May 14, 2025 (2025–R–PGL 25–07: Civil Rights).

Question 2. Section 546 of the FAA Reauthorization Act of 2024 requires that the Department establish a Known Service Animal Travel Pilot Program:

A. When does the Department anticipate reconvening the Air Carrier Access Act Advisory Committee (also referred to as the Air Access Committee) to support the program's rollout?

Answer. The Office of the Secretary of Transportation is overseeing the implementation of this section.

B. Is there a timeline for implementation of the pilot program?

Answer. The Office of the Secretary of Transportation is overseeing the implementation of this section.

Question 3.

A. As part of the implementation of Section 546 of the FAA Reauthorization Act of 2024, is the FAA considering the use of a digital ID—such as those currently issued by Assistance Dogs International (ADI) and the International Guide Dog Federation (IGDF)—as a recognized method of verifying service animals for air travel?

Answer. The Office of the Secretary of Transportation is overseeing the implementation of this section.

B. In developing the program, is the FAA considering the administrative burden, cost to airlines, and accessibility challenges and additional time required for passengers with disabilities to go through a third-party verification process?

Answer. The Office of the Secretary of Transportation is overseeing the implementation of this section.

Question Topic: Wheelchair Rule

According to data from the Department of Transportation, airlines mishandled 11,527 wheelchairs and scooters in 2023, leading to health and safety concerns for passengers with disabilities. In 2024, the Department finalized a rule, which set new, rigorous standards for assistance for passengers with disabilities—particularly those who use wheelchairs, mandated hands-on training for airline employees and contractors who physically assist passengers with disabilities and handle passengers' wheelchairs and specified actions that airlines must take to protect passengers when a wheelchair is damaged or delayed during transport. Notably, some of these requirements were included in the FAA Reauthorization Act of 2024. In February 2025, Airlines for America and its member companies filed a lawsuit with the U.S. Court of Appeals for the 5th Circuit, arguing that parts of the final regulation are "unlawful."

A. Does the Department of Transportation plan to defend the final rule, in part or in full?

Answer. The rulemaking that is subject to this litigation was issued under the authority of the Office of the Secretary of Transportation, which is overseeing this rulemaking and matters subject to litigation.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JACKY ROSEN TO JODI BAKER, WAYNE HEIBECK, AND FRANKLIN MCINTOSH

Question Topic: Updates for the Airport Improvement Program (AIP)

Question 1. Mr. Heibeck, when does the FAA anticipate that the AIP handbook will be updated? In the meantime, when can airports expect Program Guidance Letters (PGLs) regarding AIP eligibility?

Answer. The FAA has published all PGLs required by the FAA Reauthorization Act of 2024, which can be found at *https://www.faa.gov/airports/aip/guidance_*letters. The FAA is on track and intends to comply with the requirements in section 733 of the FAA Reauthorization Act of 2024 to publish a draft AIP Handbook for public review and comment by May 16, 2026, and publish a final AIP Handbook by May 16, 2027.

Question Topic: PFAS Replacement Grant Program

Question 1. Mr. Heibeck, what is the status of the PFAS Replacement Program?

Answer. Section 767 of the FAA Reauthorization Act of 2024 authorized $350 million over 5 years to help airports cover certain costs related to transitioning to fluorine-free foam, including purchasing new foam, disposing of old foam, cleaning existing equipment, and acquiring new required equipment, including new ARFF trucks when necessary. While the program has been authorized, funds have not yet been

appropriated for this program. The FAA has developed a programmatic framework and will be able to implement the program after it is appropriated.

Question Topic: Air Traffic Policies Regarding UAS

Question 1. Mr. McIntosh, can you provide an update on air traffic policies regarding advanced air mobility (AAM) and unmanned aerial systems (UAS) operations in and around controlled airspace?

Answer. The FAA is actively preparing for the safe integration of advanced air mobility (AAM) operations, including powered-lift aircraft, into the NAS. We are ready to accommodate powered-lift operations once these aircraft begin entering into service, and the FAA's Powered-Lift Final Rule establishes the regulatory framework for pilot certification and operating rules. This rule also outlines how powered-lift operations will be managed in and around controlled airspace, using existing air traffic procedures and infrastructure as a foundation while incorporating new capabilities as needed. Section 957 of the FAA Reauthorization Act of 2024 directs the FAA to continue developing performance-based regulations and certification pathways for AAM operating in complex airspace. As we implement this provision, we are working closely with industry, air traffic stakeholders, and other Federal partners to ensure these emerging technologies are integrated safely and efficiently without compromising current airspace operations.

For unmanned aircraft systems (UAS), current operations in controlled airspace are governed by 14 C.F.R. part 107, which requires UAS operators to obtain airspace authorizations through the Low Altitude Authorization and Notification Capability (LAANC) or the FAA DroneZone portal. In addition, recreational drone operators must follow specific statutory requirements under 49 U.S.C. § 44809, including airspace restrictions and coordination.

Question Topic: Runway Safety Council

Section 347 of the FAA Reauthorization Act of 2024 provides for greater investment in airport surface safety initiatives including the creation of a Runway Safety Council within 6 months of enactment and the deployment of an airport surface detection and surveillance system at all medium and large hub airports within 5 years.

Question 1. Mr. McIntosh, what is the status of the Runway Safety Council? What is the status of implementation of FAA's Surface Awareness Initiative? At how many airports has it been implemented thus far? How many airports are scheduled to have the Surface Awareness Initiative implemented during the remainder of 2025? How many FAA airports have no surface awareness technology and when do you expect it to be deployed to all FAA air traffic control towers?

Answer. Runway safety remains one of our highest priorities. The Runway Safety Council was briefed on airport surface safety technologies. The council identified the Surface Awareness Initiative as an additional tool that expands surface situational awareness for controllers at 18 airports without existing surface surveillance capabilities. Since the briefing in November 2024, all 18 sites are operational, with more than 30 additional sites planned to go operational by the end of calendar year 2025.

Question 2. Are there funding or regulatory barriers to getting a system like the Surface Awareness Initiative deployed and operational sooner than the 5 year timeline?

Answer. At this time, there are no funding or regulatory barriers.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BEN RAY LUJÁN TO JODI BAKER, WAYNE HEIBECK, AND FRANKLIN MCINTOSH

Question 1. The law requires the FAA to establishes a working group to review medical processes, policies and procedures to ensure timely and efficient certification of pilots. My understanding is that this working group was established in November of 2024.

a. Can you confirm that the Mental Health Task Group—a working group intended to support the mental health of the aviation workforce been established?

Answer. The Aviation Mental Health Task Group to oversee, monitor, and evaluate efforts of the administrator related to supporting the mental health of the aviation workforce was established in April 2025.

b. Can you explain why these working groups are crucial to keeping our airways safe?

Answer. Working groups provide a forum for the agency to obtain information and recommendations for consideration as the agency determines the policies relating to aviation safety.

c. When can we expect a report to Congress? Please be as specific as possible with your timeline, providing a month and year.

Answer. We anticipate that Congress and the FAA will receive the recommendations from the working group by the end of this calendar year.

Question 2. When do you expect to complete the review of a Call to Action to address ramp worker safety that was included in the FAA Reauthorization? At what point do you believe you will be able to submit your findings and safety recommendations for ramp workers to Congress? Please be as specific as possible with your timeline, providing a month and year.

Answer. We anticipate a two-year period, starting from this Fiscal Year (FY), to be necessary to complete the Call-to-Action safety review. Consistent with section 353 of the FAA Reauthorization Act of 2024, we expect to submit the report to Congress with our findings and safety recommendations 180 days after the conclusion of the safety review (within FY2027).

Question 3. How many times have individuals needed medical attention due to unsafe cabin temperatures in the last year? How many times in the last two years? How many times in the last 3 years?

How many times in the last four years?

Answer. Consistent with section 323 of the FAA Reauthorization Act of 2024, we are working with the National Academies of Sciences, Engineering, and Medicine to conduct a study on the health and safety impacts of cabin temperature. We note that the FAA investigates incidents and occurrences reported to the agency by air carriers operating under part 121 of title 14, Code of Federal Regulations; however, if a part 121 air carrier does not report a cabin temperature issue, then we would be unaware, or have incomplete data to share.

Question 4. You stated that the FAA began its collaboration with the National Academies of Sciences, Engineering, and Medicine (NASEM) to study unsafe cabin temperatures, what else is the FAA doing to address unsafe cabin temperatures? When can Congress expect a report with findings and recommendations to prevent unsafe cabin temperatures?

Answer. Consistent with the requirements in Sec. 323, the FAA entered into an agreement to work with NASEM to conduct a study on the health and safety impacts of cabin temperature. We expect a final report by May 2026.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JOHN HICKENLOOPER TO JODI BAKER, WAYNE HEIBECK, AND FRANKLIN MCINTOSH

Air Traffic Control Communications Outage—Colorado

Safety must always be prioritized across all elements of the National Airspace System (NAS). Last week, *reports* indicated that commercial pilots flying into Denver International Airport (DIA) temporarily lost communications with air traffic control (ATC) at the Denver Air Route Traffic Control Center (ARTCC) in Longmont, CO. While *local news outlets* report the communications outage lasted up to six minutes, you recently *testified to the House Committee on Transportation and Infrastructure* that the communications lapse only lasted approximately two minutes. While reports indicate backup communications frequencies were used between roughly 20 commercial aircraft approaching DIA and controllers at the Denver ARTCC during the outage, allegedly up to four layers of communications frequency channels failed or were offline. This forced Denver ARTCC to eventually contact one pilot on a guard line–used in situations of distress–to notify pilots about the correct communications frequency channel. *To be clear, any disruption to critical aviation safety communications is unacceptable and should be swiftly investigated and addressed.* Following the passage of the Infrastructure Investment and Jobs Act and the FAA Reauthorization Act of 2024–both of which were bipartisan efforts–it is clear the FAA must continue its work with Congress to upgrade communications infrastructure and grow the air traffic control workforce across the NAS.

Question. Mr. McIntosh, please provide specific details about your understanding of the timeline of events, and impact, from the communications outage at the Denver ARTCC. What training do ATC personnel receive for these kinds of communications outages, and what contingency procedures are performed during such outages? What assurances can you provide to assure the traveling public regarding appropriate redundancies across the ATC system?

Answer. On Monday, May 12, 2025, at approximately 1955 Zulu Time, Denver Center (ZDV) Sector 16 reported a brief loss of radio contact on frequency 120.57 via the backup emergency communication frequencies. In our review, we determined that the outage was approximately 90 seconds. During the outage, the controller

was able to rapidly recall aircraft using an alternate frequency, called guard frequency, 121.5. This is a common, readily available frequency that every aircraft is required to monitor, and every facility has immediate access to broadcast on.

This is a standard contingency that adds an additional layer of safety, which worked as designed during this incident. There were no impacts on the operation, and safety was not compromised.

Air Traffic Control Outages–FAA Reporting

While the National Airspace System (NAS) has dedicated communication, operational, and technological redundancies to maintain aviation safety, communications outages can impact local air traffic control towers, Terminal Radar Approach Control (TRACON) facilities, and national Air Route Traffic Control Center (ARTCC) facilities.

Recent communications failures across the NAS have highlighted the need to modernize our infrastructure (for example, replacing copper wire with fiber optic cable) to ensure that our systems are resilient and robust.

Question. Mr. McIntosh, does the FAA require controllers, airports, pilots, or other personnel to report communications outages when they occur? If so, does such reporting include time, date, and duration of any communications failure? What is the reporting structure? Where within the FAA is this communications outage information collected and analyzed?

Answer. The Joint Air Traffic Operations Command (JATOC) helps the Air Traffic Organization (ATO) effectively prepare for, respond to, and recover from, significant incidents in the National Airspace System (NAS). During an incident, the JATOC gathers details, including time, date, and duration, and provides a single source of integrated information and reliable communications to ATO leadership to make critical, informed, and responsible decisions.

The ATO adopts a systemic approach to safety within the NAS, focusing on understanding the underlying causes of safety events and identifying systemic risks rather than assigning blame. All ATO personnel involved in or supporting air traffic services or technical operations are responsible for reporting any suspected unsafe occurrences in these areas. Sharing this information is essential for the ATO to manage operations within the NAS safely and effectively, and it plays a critical role in the successful implementation of the ATO Safety Management System (SMS). Under FAA Order 7210.632A, Air Traffic Organization Occurrence Reporting, controllers are required to report "any instance in which communication with an aircraft was not established or not maintained as expected/intended." Employees must complete a Mandatory Occurrence Report, including the event date and time, by the end of their duty shift via an electronic submission that is maintained and analyzed by the ATO. The ATO monitors the corrective actions and conducts trend analysis as part of the ATO SMS.

In accordance with 14 C.F.R. §91.123, a pilot is required to comply with air traffic control instructions and clearance and "[w]hen a pilot is uncertain of an ATC clearance, that pilot shall immediately request clarification from ATC." All of the different classes of airspace have a requirement to maintain two-way radio communications with ATC. The Airman's Information Manual also has guidance on radio techniques, including loss of contact with ATC, and pilots are trained to report any deviations to regulations to the nearest FAA facility as soon as practical after they land.

Redundancies—FAA Review

During communications outages impacting ATC, the FAA has communications, operations, and technology redundancies in place to maintain aviation safety. For example, communications redundancies include direct pilot-controller communications on backup frequencies, and Terminal Radar Approach Control (TRACON) and nearby ATC facilities can assist during outages. Operational redundancies include ATC and pilots maintaining logs of last assigned altitudes and flight routes to preserve situational awareness in the airspace. Technological redundancies include each aircraft bearing traffic collision avoidance systems (TCAS) to notify pilots of nearby aircraft to avoid collisions and Automated Dependent Surveillance-Broadcast (ADS–B) systems to share an aircraft's speed, altitude, and location with air traffic controllers and aircraft. While these redundancies have been proven to serve their purpose, lessons learned and technological advancements provide windows into ways they can be improved.

Question. Mr. McIntosh, with each safety redundancy built into the ATC system, how often does the FAA conduct a review to identify possible communication, operational, or technological improvements?

Answer. The FAA takes a layered, proactive approach to reviewing and enhancing safety across the ATC system. While there isn't a single fixed schedule for all reviews, the agency conducts continuous safety assessments through multiple channels. Throughout daily operations, ATO personnel regularly conduct preventative maintenance checks for the early identification of safety issues, and the agency also conducts regular facility compliance audits, investigations, and safety assessments to implement corrective actions and to identify any systemic NAS issues. In addition, prior to implementing a fully tested and modeled new system or change to the NAS, safety risk management, independent operational, and operational risk management assessments are conducted to mitigate any effect that system or change could have on interfacing systems and the NAS as a whole. The robust processes ensure the new system/change is ready for the NAS, and the NAS is ready for the new system/change.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. ANDY KIM TO JODI BAKER, WAYNE HEIBECK, AND FRANKLIN MCINTOSH

Question 1. In the FAA Reauthorization hearing, Mr. McIntosh identified that maintenance on the primary and secondary telecommunications lines, and a potential addition of a tertiary line was one of the first steps necessary to resolve the outages at PHL TRACON. It is my understanding that controllers in the PHL TRACON did not yet receive a timeline for a completion date. What is the expected timeline to provide maintenance on the first and second lines and add a tertiary line? To what extent are you working with the controllers in the PHL TRACON to establish an effective timeline?

Answer. The FAA continues to make strong progress in upgrading the communications network supporting the Philadelphia TRACON, which is critical to operations at Newark and other major Northeast airports. Our priority has been to improve redundancy and resilience of communication links to prevent future outages like those experienced earlier this year. Most recently, we deployed a temporary mobile satellite communications system at Philadelphia TRACON to provide added redundancy. Longer-term upgrades are well underway. The physical infrastructure for the permanent solution is now in place, including three new fiber-optic connections linking the New York hubs with local access points serving Philadelphia TRACON. We transitioned services to a new protected Ethernet solution, which will provide resilient, redundant communications between New York TRACON (N90) and Philadelphia TRACON Area C, ensuring continued operations even if one line fails. We are also actively engaging with the controllers at Philadelphia TRACON to keep them informed and ensure the implementation aligns with operational needs.

Question 2. The PHL TRACON needs an urgent switch to the STARS system. This software provides the necessary enhancements for these systems to function at its highest level. In the hearing, Mr. McIntosh identified the 12-month timeline was a conservative estimate. It is my understanding that controllers in the PHL TRACON have not yet receive a timeline for a completion date. Can you identify an exact timeline for completion of this change to the STARS system?

Answer. We are actively working to establish a standalone Standard Terminal Automation Replacement System (STARS) hub at Philadelphia TRACON Area C. This upgrade will allow the facility to operate independently of the New York STARS hub, reducing vulnerability to future telecommunications disruptions like those that occurred earlier this year. While the previously cited 12-month timeline remains a conservative estimate, work on the transition is ongoing and will continue throughout the summer. Earlier this summer, we implemented an important interim enhancement to the current STARS configuration. This change allows controllers to select the Direct Service Feed (DSF) in the event of simultaneous failure of both primary and backup radar feeds. While the DSF does not enable full-service operations such as landings and departures, it does provide raw radar data and limited flight information, which helps controllers maintain situational awareness and aircraft separation during system outages. As we continue to develop the independent STARS hub at Philadelphia TRACON, we are also coordinating closely with NATCA and operational staff. This engagement is essential to ensuring a safe and effective transition but may impact the final implementation timeline. We remain focused on advancing this work as quickly and safely as possible and will keep stakeholders, including controllers, informed as the schedule becomes more defined.

Question 3. In the hearing, Mr. McIntosh identified that the FAA sent senior officials to work with telecommunications professionals at the PHL TRACON to form a task force to address these issues. Could you identify how many engagements the task force has held so far at/with the telecommunications professionals managing

the PHL TRACON? What steps has the task force established thus far to resolve the telecommunications issues?

Answer. To address urgent telecommunications concerns at the Philadelphia TRACON, Secretary Duffy established a joint task force composed of senior officials from the FAA, Verizon, and L3Harris. The task force functions as a central coordination body to streamline communication across agencies and vendors, prioritize maintenance events, and oversee implementation of corrective measures. Since its formation in May, the task force has met daily to monitor progress, troubleshoot emerging issues, and ensure alignment across technical teams.

Key outcomes overseen by the task force so far include:

- Activation of a temporary mobile satellite communications system at Philadelphia TRACON to provide interim redundancy.
- Deployment of three new fiber-optic connections between the New York hubs and the Philadelphia TRACON, forming the backbone of a more resilient network.
- Ongoing transition to a new protected Ethernet solution, expected to be operational by the end of the month, which will enable continued services in the event of a line failure.
- Coordination of efforts to establish an independent STARS hub at Philadelphia TRACON Area C, which will reduce dependency on the New York STARS hub and enhance overall system reliability.

These steps are being tracked and prioritized under the task force's direction to ensure the facility remains a safe and reliable hub for the region's air traffic operations.