S. HRG. 118–652

NOMINATION OF MICHAEL G. WHITAKER, NOMINEE TO BE ADMINISTRATOR, FEDERAL AVIATION ADMINISTRATION

HEARING

BEFORE THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION UNITED STATES SENATE

ONE HUNDRED EIGHTEENTH CONGRESS

FIRST SESSION

OCTOBER 4, 2023

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SENATE COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION

ONE HUNDRED EIGHTEENTH CONGRESS

FIRST SESSION

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NOMINATION OF MICHAEL G. WHITAKER, NOMINEE TO BE ADMINISTRATOR, FEDERAL AVIATION ADMINISTRATION

WEDNESDAY, OCTOBER 4, 2023

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

The committee met, pursuant to notice, at 10:02 a.m., in room SR–253, Russell Senate Office Building, Hon. Maria Cantwell, Chair of the Committee, presiding.

Present: Senators Cantwell [presiding], Klobuchar, Markey, Baldwin, Duckworth, Tester, Sinema, Rosen, Luján, Hickenlooper, Warnock, Welch, Cruz, Thune, Wicker, Fischer, Moran, Sullivan, Blackburn, Young, Budd, Schmitt, Vance, and Capito.

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

The CHAIR. Good morning, everyone. The U.S. Senate Committee on Commerce, Science, and Transportation will come to order. This morning, we are here to consider the nomination of Michael G. Whitaker to be the Administrator of the Federal Aviation Administration.

I want to thank Mr. Whitaker for his willingness to serve. I am also grateful that the House Chairman, Senator—House Chairman Sam Graves is here, and we will hear from you soon. Chairman Graves, along with my colleague, Ranking Member Larson, have worked hard on a bipartisan bill to pass a long term FAA reauthorization, so we thank you for that.

And I am hopeful that we will be able to do the same here in a bipartisan fashion and finalize a bill into law before the end of 2023. This is a reminder that aviation safety and the job of running the FAA are not partisan endeavors.

They are ensuring strong leadership at the top of America's chief aviation regulator, and this should be our common goal. Mr. Whitaker's nomination has attracted broad support, not only from across the aisle, but from across the aviation community.

He is supported by the aviation workforce, pilots, flight attendants, machinists, and engineers, and enjoys a broad support from many in the private sector of aviation. This foundation of support will serve well because the FAA Administrator has a big job, over 44,000 workers across multiple lines of business, from airports to air traffic control, to aviation safety, and each day they help keep

Americans moving safely—25,000 U.S. airline flights carrying 2.5 million passengers across the country and around the world.

Today, he will come before the Committee with more than 30 years of a diverse experience in aviation, including executive leadership in the private sector, and 3 years serving as FAA Deputy Administrator.

He led the FAA's modernization of the National Airspace System, known shorthand as Next Gen, and I hope he will be able to illuminate today the progress that we have made and important milestones that we have achieved, and what we need to do to get it finally implemented.

Mr. Whitaker will bring a commitment to advancing aviation safety and appreciate his support by families who have lost loved ones and who have been very dedicated to improving aviation safety. But there are challenges that remain. America's aviation system is under stress, demonstrated by the number of near misses and close calls.

We need to hear today about a plan on how to tackle those safety issues across our skies. The FAA's workforce has changed and will continue to do so over the next several years, and we look forward to learning how he will be able to build a strong safety culture, attract new talent, and renew leadership at the FAA.

And like its workforce, FAA safety systems and technology must also be upgraded to 21st century innovations. And if confirmed, he will have the opportunity to lead the NAS modernization into the next era and telling us exactly how to get that done. To be the world leader in aviation, the United States must be a strong voice for safety at the International Civil Aviation Organization, ICAO.

You have over 30 years of experience in aviation, including executive roles on these important international issues, and we hope that your leadership will help the world community continue its safety focus. We need to learn how the FAA will effectively raise the global safety bar on pilot training and human factors.

The families of the 737 MAX tragedies were critical in helping Congress pass important legislation, the Aircraft Certification, Safety and Accountability Act. They support your nomination, as I mentioned, and we expect an understanding this morning on how you are going to carry out the further implementation of these critical safety reforms.

The American public deserves a safe, reliable, effective air transportation system. Our economy depends on it, and if confirmed, you will have the opportunity not only to lead the FAA, but shape America's future of aviation along with NASA.

These are challenging times, but the aviation community and the leadership across many spectrums have the ability to get this job done and get it done correctly. So, I welcome and thank you for your willingness to serve and take that leadership role in helping us.

I now am going to—I am waiting on my colleague who had to run to Judiciary, so I am going to allow our colleague, Senator Welch, to make an opening statement, and then I will turn to Representative Graves.

STATEMENT OF HON. PETER WELCH,
U.S. SENATOR FROM VERMONT

Senator WELCH. Madam Chair, you gave an excellent presentation of Mr. Whitaker's experience, but you left out one very important fact, he is my neighbor. Lives down the dirt road. You go down Bragg Hill and up over little Densmore Hill, and take a little left, and there they are, on the same dirt road, right down the street in Vermont.

So, it is wonderful to have Michael here, Mary, and Joe. You did outline his public experience, his private experience, and I was going to do that, but you have done it so well that I don't think we need to add to it.

But I do want to say a couple of things. With this extraordinary experience he has first as a pilot, a lifelong pilot, and with that, a constant concern about safety, because he has had people he loves in his own plane.

With his experience at the FAA, where you have this huge important agency, and he had the responsibility to make it work in the implementation of a very important program that you mentioned.

And then with his experience in the private sector, with United Airlines and the very responsible big jobs he had there, how can you have more experience in every phase of what is required to have our flight systems be safe, to have performance be solid, and to have the managerial experience to kind of create the team in the culture that is necessary for a well-functioning FAA, something that he and I spoke about at Dan and Whit's, which is a store where if you don't have it, you don't need it.

That is the Norwich famous country store. So, that broad depth of experience and that decision—and this is what I also really appreciate. At a time in his life when he was doing fine, he lives on a nice place that rarely anyone wants to come and see it. It is a nice place.

He wanted to serve, and we so need that in this country, to have people with the benefit of a lifelong career in the public and private sector deciding, you know what, I want to serve. So, that gives me just immense confidence that we are going to have a tremendous director, and I yield back.

The CHAIR. Thank you, Senator Welch. Thank you for that very personal view of the nominee, and good to know that—that road might come in handy some time for some.

[Laughter.]

The CHAIR. So, message delivery. Representative Graves, welcome before the Committee. Thank you so much. Unless Senator Moran, did you want to, as the Subcommittee Chair, make a statement?

[Technical problems.]

The CHAIR. Thank you. Representative Graves, thank you so much for being here.

STATEMENT OF REPRESENTATIVE SAM GRAVES, CHAIRMAN, HOUSE TRANSPORTATION COMMITTEE

Representative GRAVES. Of course. Thank you, Madam Chair, and members of the Committee. There are a lot of familiar faces on this committee, and I like that.

And I also very much appreciate the opportunity. It is an honor to be here today to support Michael Whitaker for Administrator to the Federal Aviation Administration. And this is a crucial time for aviation and for the FAA.

Steadfast leadership at the FAA is paramount if we as a nation are to remain the global leader in aviation safety and innovation, a goal that I know this committee and the nominee unequivocally support. It has been a year and a half since previous Administrator Steve Dickson stepped down.

And if you think about it, safety is dependent on consistency, and unfortunately, the only thing that has been consistent at the agency since the former Administrator departed is the growing list of acting positions across the agency. 18 months without an FAA Administrator is troubling.

The American people deserve a confirmed leader who has a deep knowledge in, and a passion for that matter, for aviation. And because of that, I am honored and pleased to introduce Michael Whitaker, he is a very qualified nominee, that has been put forward for your consideration.

Mr. Whitaker is currently the Chief Operating Officer for an advanced air mobility company, which is an aviation sector that is propelling American aviation to new heights and demands, both regulatory stability and innovation.

Having previously served as the FAA Deputy Administrator, Mr. Whitaker understands what it takes to helm the agency's—that he has been nominated to lead. And he has also served many years, obviously, in the travel and airline industries. And as a professional pilot myself, I appreciate the fact that he too is a GA pilot.

I have spoken to him on many occasions and visit with him about the need to pass on that passion to the next generation of young Americans and to be an advocate for aviation overall.

The bottom line is, is that having Mr. Whitaker confirmed as FAA Administrator will help provide much needed certainty for the FAA and the aviation industry, which is pivotal right now in this moment in history. In addition to the confirmation of an FAA nominee, I would be remiss if I didn't point out that enacting a long-term FAA reauthorization bill will bring much needed certainty to the aviation industry.

The bipartisan bill that passed out of the House in July by a vote of 351 to 69 is a 5-year bill. And while your committee works toward passage of companion legislation, our shared commitment to enactment of a long term FAA bill guarantees that the next Administrator will be charged with implementing the final product of our work.

This adds enormous consequence to the nomination responsibility of Mr. Whitaker, if he is confirmed. And I want to be clear, I fully expect that if Mr. Whitaker is confirmed as Administrator that we will not agree on everything. However, I do believe that we will

have a very strong working relationship, just as I have had with his predecessors.

And like his predecessors from both Democrat Administrations and Republican Administrations, I want to see him be successful in the role because that is what is in the best interests of the American aviation industry and in the best interest of the American people.

I fought hard against the previous nominee whose lack of relevant experience was greatly concerning, and that is also why I am here today supporting Mr. Whitaker, because I believe he is the right person for this job.

As the Chairman of the Transportation and Infrastructure Committee in the House, my job is to hold the Administration and any Administrator of the FAA accountable for their actions to conduct rigorous oversight and to ensure that they are following the legislative intent of any piece of legislation that Congress passes.

And rest assured, I will do just that. But I also want to express my support for this committee's consideration today of a nominee who has extensive qualifications in the aviation field and who is very familiar with the FAA, with its importance, with its intricacies, and with its shortcomings.

And I believe Mr. Whitaker has a level of experience the position of FAA Administrator demands, and prepared to deliver the strong leadership that is needed at the FAA today more than ever before. I want to thank you for your time, and I hope the Committee favorably approves Mr. Whitaker's nomination and acts swiftly on finalizing an FAA reauthorization.

So, thank you very much, and I yield back.

[The prepared statement of Representative Graves follows:]

PREPARED STATEMENT OF REPRESENTATIVE SAM GRAVES, CHAIRMAN, COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

Thank you, Chair Cantwell, Ranking Member Cruz, and Members of the Committee.

I appreciate the opportunity to introduce Michael Whitaker—the nominee for Administrator of the Federal Aviation Administration (FAA).

This is a critical time for aviation and for the FAA.

Steadfast leadership at the FAA is paramount if we—as a Nation—are to remain the global leader in aviation innovation and safety. A goal that I know this Committee and this nominee unequivocally support.

It's been a year-and-a-half since the previous Administrator, Steve Dickson, stepped down. This Administration has waited far too long to nominate a qualified nominee, leaving the more than 45,000 public servants at the FAA without a permanent leader, jeopardizing American leadership in aviation, and—frankly—risking public safety.

Safety is dependent on consistency, and unfortunately, the only thing that's been consistent at the agency since former Administrator Dickson's departure is the growing list of "acting" positions across the agency.

18 months without an FAA Administrator is unacceptable.

The American people deserve a confirmed leader who has a deep knowledge in, and passion for, aviation.

Because of that, I'm honored and pleased to introduce Michael Whitaker, a qualified nominee that has been put forward for your consideration.

Mr. Whitaker is currently the Chief Operating Officer for an advanced air mobility company—an aviation sector that is propelling American aviation to new heights and demands both regulatory stability and innovation.

Having previously served as the FAA Deputy Administrator, Mr. Whitaker understands what it takes to helm the agency he's been nominated to lead.

He has also served for many years in the travel and airline industries.

And I appreciate the fact that he, too, is a private pilot. Having spoken with and gotten to know Mr. Whitaker over the years, I know he understands the need to ensure that our shared passion for general aviation is passed on to the next generation of Americans.

The bottom line is that having Mr. Whitaker confirmed as FAA Administrator will help provide much needed certainty for the FAA and aviation industry at this pivotal moment in history.

In addition to confirmation of an FAA nominee, enacting a long-term FAA reauthorization bill will also bring much needed certainty to the aviation industry.

The bipartisan bill that passed out of the House in July by a vote of 351 to 69 is a five-year bill. And while your Committee works towards passage of companion legislation, our shared commitment to enactment of a long-term FAA bill guarantees that the next Administrator will be charged with implementing the final product of our work. This adds enormous consequence to this nomination and responsibility for Mr. Whitaker, if confirmed.

I want to be clear—I fully expect that if confirmed as the Administrator, Mr. Whitaker and I will not agree on everything. However, I believe we can and will have a strong working relationship, just as I have with his predecessors.

And like his predecessors from both Democrat and Republican Administrations, I want to see him be successful in this role because that is what is in the best interest of the American aviation industry and, more importantly, the American people.

It is why I fought hard against the previous nominee, whose lack of relevant experience was greatly concerning, and why I am here today supporting Mr. Whitaker. Because I believe he is the right man for the job.

As the Chairman of the House Transportation and Infrastructure Committee, my job is to hold the Administration, and any Administrator of the FAA, accountable for their actions, to conduct rigorous oversight, and to ensure they are following the legislative intent of any law Congress passes.

And rest assured, I will do just that.

But I also want to express my support for this Committee's consideration today of a nominee who has extensive qualifications in the aviation field and who is very familiar with the FAA—its importance, its intricacies, and its shortcomings.

I believe Mr. Whitaker has the level of experience that the position of FAA Administrator demands and is prepared to deliver the strong leadership that is needed at the FAA today more than ever before.

Thank you for your time. It is my hope the Committee favorably considers Mr. Whitaker's nomination and acts swiftly on finalizing its FAA reauthorization bill.

The CHAIR. Thank you, Representative Graves. And again, look forward to working with you in that bipartisan fashion to get this over the goal line legislatively by the end of the year. So, thank you for that. Senator Cruz.

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

Senator CRUZ. Thank you, Madam Chair. And I want to welcome my good friend Sam Graves. I am glad to see you slumming it on the other side of the Capitol. Welcome. I hope that we have been hospitable and maybe given you a decent cup of coffee this morning. You don't have to answer that. Good morning.

Welcome, everyone. Mr. Whitaker, welcome. A San Antonio native, something I am always glad to see. Every day, some 3 million passengers board commercial flights in and out of U.S. airports with the confidence that they will safely arrive at their destinations.

The public trust is the result of a nearly eight decade collaboration between the aviation industry and the Federal Aviation Administration. The FAA manages 29 million square miles of airspace.

It ensures that aircraft and pilots meet the highest safety standards, and it is the FAA that will ensure the safe integration of

drones, air taxis, and one day, commercial space flight. When it comes to aviation safety, the buck stops with the FAA.

We are here today to consider the nomination of Michael Whitaker for the FAA Administrator. This is a crucially important role. The next Administrator will face serious challenges in rebuilding the FAA after unfortunately, 18 months without a Senate confirmed leader.

Among those challenges, staffing critical air traffic control facilities, modernizing antiquated air traffic systems, and bringing FAA employees back in-person after 3 years of telework. Mr. Whitaker is President Biden's second nominee to be FAA Administrator.

The first was rejected by both Republicans and Democrats on this committee for his lack of relevant experience. I am glad that the Administration has heeded my advice and nominated a person with significant experience in aviation, Mr. Whitaker.

Mr. Whitaker previously served as the second in command at the FAA and has roughly three decades of aviation experience. As I have said since we received Mr. Whitaker's nomination, I am willing to keep an open mind and give him fair consideration on the merits. I want to hear how he is going to address the challenges facing the FAA and the aviation industry, should he be confirmed.

I also want to ensure that Mr. Whitaker will focus on the FAA's primary responsibility, ensuring the safety of our national aerospace system, while having the fortitude and the clarity of mind to question assumptions and to push back against special interests.

Congress gives the Administrator a 5-year term because the FAA is not a political organization, is not intended to be a political organization, and we must keep politics out of the FAA.

Today, Mr. Whitaker has the opportunity to explain to members of this committee his vision for a stagnant agency, one that is in desperate need of strong and independent leadership willing to challenge the status quo.

Mr. Whitaker, I look forward to hearing why you believe you are that independent leader and how you will meet the serious challenges faced by the FAA and the aviation industry. Thank you.

The CHAIR. Thank you, Senator Cruz. Again, Representative Graves, thank you for being here. Mr. Whitaker, if you would come up and take an opportunity to introduce anybody you would like to introduce this morning before you give your opening statement.

STATEMENT OF MICHAEL G. WHITAKER, NOMINEE TO BE ADMINISTRATOR, FEDERAL AVIATION ADMINISTRATION

Mr. WHITAKER. Thank you, Chair Cantwell, Ranking Member Cruz, members of the Committee. It is an honor to appear before you today as President Biden's nominee for Administrator of the FAA.

I am grateful for this bipartisan introduction, and support for my fellow Vermonter and neighbor, Senator Welch, and also from House Transportation Chairman Sam Graves, who has been very supportive throughout this process. I thank you both.

I would not be here today if it wasn't for the love and support of my family, especially my wife, Mary, who is here with me today, who has been patient and amazingly supportive throughout this

process, who is here with our son Joe. And our daughter Jordan, who is watching from Vermont.

To begin, I would like to acknowledge Secretary Buttigieg and Deputy Secretary Trottenberg for the exceptional leadership that they have shown ensuring the FAA remains focused on its critical mission to provide the safest and most efficient aerospace system in the world.

Throughout my career, I have believed in this mission, not only during my previous tenure at the FAA, but as an airline executive, and now as I focus on emerging technologies in our airspace. If confirmed, I will apply my 32 years of aviation experience to lead the 44,000 dedicated professionals at the FAA who work in every U.S. state and territory and across the globe to meet this mission.

I began my aviation career as an attorney for Transworld Airlines, then rose through the ranks of United Airlines from Senior Counsel in a regulatory group to Senior Vice President of alliances, international, and regulatory affairs.

More recently, I have worked with emerging aviation technologies such as small unmanned systems and electric propulsion. However, the key experience that qualifies me for this position and that will allow me to make an immediate impact at the FAA is my three-year tenure there as Deputy Administrator.

During this time, I gained significant technical knowledge of the complex systems that make up the national airspace. And while at FAA, I also earned my private pilot certificate to better understand the national airspace from the perspective of a user of that system. If confirmed, my priority will be the safety of the flying public.

They put their trust in the FAA to keep aviation the safest way to travel, and the world has looked to us for decades as the gold standard. To maintain that trust and that title, I would immediately focus on three things as Administrator.

First, I will work not just to maintain the safety record we have collectively achieved, but to build upon it. The two Boeing MAX crashes remind us that we must be ever vigilant. The FAA must finish implementing the remaining provisions of the certification reform legislation passed by Congress, thanks to the leadership of this committee.

These changes, along with other actions the FAA has taken, will ensure that the gaps in the certification process are fully closed and that we are able to catch risks even when they are not disclosed by a manufacturer.

We simply cannot become complacent, and we must continuously improve as an organization. In March, the FAA announced a new goal to end serious close calls. It is critical that we achieve this. It will not be accomplished overnight, but it is urgent work that must continue.

Second, we need to build the aviation system of the future. This requires the FAA to be agile and creative, and for all of us to make ongoing investments. When I was at the FAA just a few years ago, drones were new, commercial space launches were rare, and flying taxis were still only in cartoons.

All of this has changed, and it requires that the agency look forward, adapt quickly, and execute a plan for the future. Third, none of this can be achieved without making the FAA an employer of

choice where aviators want to build their careers. We must have a pipeline of dedicated public servants to achieve our mission.

Nowhere is this clearer than the ongoing work to catch up on air traffic controller hiring. The shortage has been years in the making, but you have my commitment to reduce this backlog. The FAA faces big challenges, and it will take innovators and dreamers who bring ideas from every part of our country to solve them.

Aviation has opened doors of opportunity for so many, including me. We must make sure it continues to do so for citizens in every corner of the country, no matter their background.

I am honored by the trust the President has placed in me with this nomination. If confirmed, I will remain committed to the FAA's mission and pledge to work with you and the Committee to get things done. Thank you for considering my nomination, and I am pleased to answer questions.

[The prepared statement and biographical information of Mr. Whitaker follow:]

PREPARED STATEMENT OF MICHAEL G. WHITAKER, NOMINEE TO BE ADMINISTRATOR, FEDERAL AVIATION ADMINISTRATION

Thank you, Chair Cantwell, Ranking Member Cruz, Members of the Committee. It is an honor to appear before you today as President Biden's nominee for Administrator of the FAA.

I'm grateful for the bipartisan introductions and support from my fellow Vermonter, Senator Welch, and from House Transportation Chairman Sam Graves, who has been very supportive throughout this process.

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I began my aviation career as an attorney for Trans World Airlines, then rose through the ranks of United Airlines from senior counsel in the regulatory group, to senior vice president of alliances, international and regulatory affairs. Most recently, I have worked with emerging aviation technologies, such as small unmanned systems and electric propulsion.

However, the key experience that qualifies me for this position, and that will allow me to make an immediate impact at the FAA, is my three-year tenure there as Deputy Administrator. During this time, I gained significant technical knowledge of the complex systems that make up our national airspace, such as ADS–B.

While at the FAA, I also earned my private pilot's certificate to better understand the national airspace from the perspective of a user of that system.

If confirmed, my priority will be the safety of the flying public. They have put their trust in the FAA to keep aviation the safest way to travel, and the world has looked to us for decades as the gold standard. To maintain that trust and that title, I would immediately focus on three things as administrator:

First, I will work to not just maintain the safety record we have collectively achieved, but build upon it.

The two Boeing MAX crashes remind us that we must be ever vigilant. The FAA must finish implementing the remaining provisions of the certification reform legislation passed by Congress, thanks to this committee's leadership. These changes, along with other actions the FAA has taken, will ensure that gaps in the certification process are fully closed, and that we are able to catch risks even when they are not disclosed.

We simply cannot become complacent, and we must continuously improve. In March, the FAA announced a new goal to end serious close calls. This is critical. We will not achieve this overnight, but it is urgent work that we must continue.

Second, we need to build the aviation system of the future. This requires the FAA to be agile and creative, and for all of us to make ongoing investments.

When I was at the FAA just a few years ago, drones were new, commercial space launches were rare and flying taxis were still only in cartoons. All of this has changed, and it requires that the agency be forward looking, adapt quickly, and execute a plan for the future.

Third, none of this can be achieved without making the FAA a place of choice where aviators want to build their careers.

We must have a pipeline of dedicated public servants to achieve our mission. Nowhere is this clearer than the ongoing work to catchup on air traffic controller training. The shortage has been years in the making, but you have my commitment to reduce this backlog.

The FAA faces big challenges, and it will take innovators and dreamers, who bring ideas from every part of our country, to solve them. Aviation has opened doors of opportunity to so many, including me. We must make sure it continues to do so for citizens in every corner of the country, no matter their background.

I am honored by the trust the President has placed in me with this nomination. If confirmed, I will remain committed to the FAA's mission and pledge to work with you and the Committee.

Thank you for considering my nomination today. I am pleased to answer any questions you have.

A. BIOGRAPHICAL INFORMATION

1. Name (Include any former names or nicknames used):

Michael Gordon Whitaker, ("Mike")

2. Position to which nominated: Administrator, Federal Aviation Administration.
3. Date of Nomination: July 10, 2023.
4. Address (List current place of residence and office addresses):

Residence: Information not released to the public.
Office: 1101 16th Street, NW, Washington, DC 20036.

5. Date and Place of Birth: June 21, 1961; San Antonio, TX.
6. Provide the name, position, and place of employment for your spouse (if married) and the names and ages of your children (including stepchildren and children by a previous marriage).

Mary Elizabeth Stevens, wife, Nurse Practitioner, retired
Joseph Anthony Sansone, 26, stepson
Jordan Elizabeth Sansone, 24, stepdaughter

7. List all college and graduate schools attended, whether or not you were granted a degree by the institution. Provide the name of the institution, the dates attended, the degree received, and the date of the degree.

Georgetown University Law Center 1984–1987
Juris Doctorate 1987

University of Louisville 1979–82, 1983–84
Bachelor of Arts 1984

Universite de Montpellier (France) 1982–83
Certificate of Attendance (Junior Year Abroad) 1983

8. List all post-undergraduate employment, including the job title, name of employer, and inclusive dates of employment, and highlight all management-level jobs held and any non-managerial jobs that relate to the position for which you are nominated.

Note: Explanations of experience that may be relevant to the position for which I am nominated are provided *in italics* after the relevant job listings below.

1985–86 Law Clerk, The Donohoe Companies (DC)

1986–87 Law Clerk, Grossberg, Yochelson, Fox and Beyda (DC)

1987–90 Associate, Stites and Harbison (KY)

1989–91 Adjunct Professor, University of Louisville (KY)

1990–91 Attorney, Self-employed, Louisville, KY

1991–94 Several Positions, Trans World Airlines (NY, DC)
Initially served as a litigation attorney; then was promoted to managing attorney for regulatory affairs, providing comments on pending regulations and DOT international route proceedings; then promoted to director of international affairs, where I was responsible for securing and safeguarding international route rights; then promoted to assistant general counsel, combining my previous two roles.

1994–2009 Several Positions, United Airlines (DC, IL)
I served as senior counsel, then managing director, then vice president of international affairs, where my duties included working with the DOT in international negotiations to acquire new flying rights abroad, as well as working with DOT and DOJ to secure antitrust immunity for commercial airline alliances. Then added commercial alliances to the existing portfolio and was promoted to senior vice president. Responsibilities included testifying before Congress and international governmental bodies on international aviation issues. Key accomplishments included:

- *Worked with U.S. Departments of Transportation and State to secure a significant expansion of international route rights for the company, including expansion in the UK, Europe, China, Japan, India and Latin America*
- *Recruited international airline alliance partners to Star Alliance, securing valuable traffic feed for United's international flights.*
- *Secured anti-trust immunity with U.S. and foreign regulators to allow closer airline cooperation toward more seamless international alliance travel.*

2007–2008 Adjunct Professor, DePaul University School of Law (IL)

2009–2012 Group CEO, InterGlobe Enterprises (India)
Served as Group CEO over four businesses owned and operated by InterGlobe, an Indian travel conglomerate and owner of India's largest airline, IndiGo (a low-cost carriers). The four businesses were;

- *Air Transport (a general sales agent operation)*
- *ITQ (the Indian franchise of the airline global distribution company TravelPort)*
- *InterGlobe Technologies (a software development and travel services provider)*
- *The Established (a sales organization representing general aviation manufacturers).*

Combined, these companies employed thousands of employees in over a dozen countries, and generated revenues of over $100 million annually. During my tenure, I led a rebranding of the parent company, aligned business practices among the companies, and upgraded accounting practices to prepare the companies for public offering. In 2011, I transitioned from group CEO to board member.

2013–2016 Deputy Administrator, Federal Aviation Administration (DC)
Position also included the role of chief NextGen officer, responsible for the transition from radar-based to satellite-based surveillance of air traffic, plus adjacent technologies. Key focus was on ensuring industry equipage of ADS–B (Out) transponders in aircraft fleets by 2020, working in collaboration with key industry and military sectors. Other key initiatives included overseeing the negotiation of a labor contract with the controllers' union (NATCA), standardizing access to agency data by external users, and standing up an internal organization to facilitate entry of new users into the National Air Space, including UAS operators and electric aircraft.

2016–2020 Principal, Whitaker Air Space (NH, VT)
Aviation consultancy. Advised companies and government on strategic matters relating to aviation, aerospace, air traffic management, certification, strategic planning and government relations.

2020 to present Chief Operating Officer, Supernal (a Hyundai company) (DC)
This start-up company founded by the Hyundai group is designing and will manufacture electric, vertical takeoff and landing (eVTOL) vehicles for the emerging advanced air mobility (AAM) market. As COO I am responsible for commercial operations as well as core business operations, such as human resources and information technology. Previous roles include chief commercial officer and chief policy officer.

9. Attach a copy of your résumé.
Attached as Addendum 1.

10. List any advisory, consultative, honorary, or other part-time service or positions with Federal, State, or local governments, other than those listed above after 18 years of age.

Board Member, Chicago Sister Cities (1996–2009)

11. List all positions held as an officer, director, trustee, partner, proprietor, agent, representative, or consultant of any corporation, company, firm, partnership, or other business, enterprise, educational, or other institution.

Co-founder, The Parisian Pantry (1983–88)

Vice President, United Airlines (1998–2006)

Senior Vice President, United Airlines (2006–2009)

Board Member, Chicago Sister Cities (1996–2009)

Board Member, San Francisco Opera (2007–2009)

Group CEO, InterGlobe Enterprises (2009–2011)

Board Member, InterGlobe Enterprises (2011–2012)

Advisory Board Member, Passur Aerospace (2017–2020)

Advisory Board Member, Aerion corporation (2017–2019)

Advisory Board Member, Insitu (2017–2018)

Consultant, United Airlines (2017–2020) (through Whitaker Air Space)

Editorial Board Member, Air and Space Law Journal (2017–2022)

Board Member, Matternet (2018 to present)

Board Member, ANRA Technologies (2018 to present)

Consultant, Ascension Global (2019–2020)

Officer, Supernal (2020 to present)

12. Please list each membership you have had after 18 years of age or currently hold with any civic, social, charitable, educational, political, professional, fraternal, benevolent or religiously affiliated organization, private club, or other membership organization. (For this question, you do not have to list your religious affiliation or membership in a religious house of worship or institution.). Include dates of membership and any positions you have held with any organization. Please note whether any such club or organization restricts membership on the basis of sex, race, color, religion, national origin, age, or disability.

Board Member, Chicago Sister Cities (1996–2009)

Board Member, San Francisco Opera (2007–2009)

American Bar Association (1987–1990)

Kentucky Bar Association (1987–2010)

Louisville Bar Association (1987–1991)

Upper Valley Flying Club, KLEB (2017–2020)

None of these organizations restricts membership on the basis of sex, race, color, religion, national origin, age, or disability

13. Have you ever been a candidate for and/or held a public office (elected, non-elected, or appointed)? If so, indicate whether any campaign has any outstanding debt, the amount, and whether you are personally liable for that debt. No.

14. List all memberships and offices held with and services rendered to, whether compensated or not, any political party or election committee within the past ten years. If you have held a paid position or served in a formal or official advisory position (whether compensated or not) in a political campaign within the past ten years, identify the particulars of the campaign, including the candidate, year of the campaign, and your title and responsibilities. None.

15. Itemize all political contributions to any individual, campaign organization, political party, political action committee, or similar entity of $200 or more for the past ten years. None.

16. List all scholarships, fellowships, honorary degrees, honorary society memberships, military medals, and any other special recognition for outstanding service or achievements.

University: Received a one-year study abroad scholarship (tuition, housing and food) through a Sister Cities program between Louisville, KY, and Montpellier, France; Received various departmental awards from the Political Science Department of the University of Louisville; was on the Dean's List multiple semes-

ters; Graduated with high honors and was named a member of the honor society.

Law School: graduated *cum laude* from Georgetown University Law Center

Louisville Bar Association: Award for Outstanding *pro bono* service arising from my representation of a death row inmate (approximately 1989).

17. List each book, article, column, letter to the editor, Internet blog posting, or other publication you have authored, individually or with others. Include a link to each publication when possible. If a link is not available, provide a digital copy of the publication when available. None.

18. List all speeches, panel discussions, and presentations (*e.g.,* PowerPoint) that you have given on topics relevant to the position for which you have been nominated. Include a link to each publication when possible. If a link is not available, provide a digital copy of the speech or presentation when available.

I have delivered numerous speeches and presentations, and participated in many panel discussions during the course of my career. Please see Addendum 2 for the most up-to-date list I have been able to compile. If additional speeches or remarks are identified following the submission of this Questionnaire, I will promptly let the Committee know and provide appropriate details.

See Addendum 2 (attached).

19. List all public statements you have made during the past ten years, including statements in news articles and radio and television appearances, which are on topics relevant to the position for which you have been nominated, including dates. Include a link to each statement when possible. If a link is not available, provide a digital copy of the statement when available.

I have made numerous media statements during the course of my career. Please see Addendum 3 for the most up-to-date list I have been able to compile. If additional statements are identified following the submission of this Questionnaire, I will promptly let the Committee know and provide appropriate details.

See Addendum 3 (attached).

20. List all digital platforms (including social media and other digital content sites) on which you currently or have formerly operated an account, regardless of whether or not the account was held in your name or an alias. Include the full name of an "alias" or "handle", including the complete URL and username with hyperlinks, you have used on each of the named platforms. Indicate whether the account is active, deleted, or dormant. Include a link to each account if possible.

LinkedIn: *https://www.linkedin.com/in/michael-whitaker-14329828/* (active)

Facebook: (terminated account several years ago—approximately 2017)

Twitter: @mgwhitaker (active account but rarely if ever used)

21. Please identify each instance in which you have testified orally or in writing before Congress in a governmental or non-governmental capacity and specify the date and subject matter of each testimony.

See Addendum 4 (attached).

22. Given the current mission, major programs, and major operational objectives of the department/agency to which you have been nominated, what in your background or employment experience do you believe affirmatively qualifies you for appointment to the position for which you have been nominated, and why do you wish to serve in that position?

I have spent the last 32 years in aviation, beginning as an attorney for Trans World Airlines, then rising through the ranks of United Airlines from senior counsel in the regulatory group to senior vice president of alliances, international and regulatory affairs. I have also worked with emerging aviation technologies, such as small unmanned systems as well as electric propulsion.

But the key experience I believe qualifies me for this position is my three-year tenure as deputy administrator of the FAA and its chief NextGen officer. This experience allowed me to significantly deepen my technical knowledge of the air traffic system, as well as the technologies that the FAA and industry have applied to achieve the highest standards of safety in the world, including safety management systems, just culture principles, and the use of data to identify emerging safety risks. Working in close partnership with Administrator Huerta, I co-managed the 47,000 employee workforce and helped drive the transition from radar-based surveillance to satellite-and ground-based ADS–B. I also earned my private pilot certificate during that period, which further enabled me to understand the workings of the national air space ("NAS") and the role of technology in increasing the levels of safety.

23. What do you believe are your responsibilities, if confirmed, to ensure that the department/agency has proper management and accounting controls, and what experience do you have in managing a large organization?

If confirmed, I will bring my previous experience of leading the 47,000 dedicated employees at the FAA to ensure the FAA stays focused on safety and properly prioritizes modernization efforts of the national airspace. I will rely on my three-plus decades of executive experience in aviation and aerospace organizations to provide leadership with appropriate management and financial controls over the budgets, operations and program management of the agency.

My experience encompasses a range of diverse organizations that have prepared me to lead large organizations. Those include start-ups such as Supernal where, as chief operating officer, I was responsible for overseeing the nascent operations as well as developing safety programs and policies and procedures to meet the need of a fast-growing electric aircraft manufacturer. At InterGlobe, India's largest travel conglomerate, I oversaw the restructuring of accounting and compliance policies and procedures in four companies to ensure they met international standards that would enable them to access public financial markets. And as Deputy Administrator of the FAA, I lead the successful implementation of key NextGen programs, ensuring that key milestones and budget targets were met during my tenure, enabling the scheduled cutover from radar to ADS–B surveillance in 2020.

24. What do you believe to be the top three challenges facing the department/agency, and why?

1. Maintaining the U.S. Aviation System as the Global Standard for Safety. Maintaining the highest standards of safety that the traveling public expects is the top priority and challenge for the agency. This involves providing adequate staffing in key functions, ensuring operators are compliant with current standards, and constant diligence in analyzing safety data to identify emerging threats and working with system users to mitigate those threats.
2. Rebuilding the FAA Workforce for the Future. Use all available means to increase qualified staffing of controllers, inspectors, and other safety and operational professionals to ensure our mission of safety and efficiency are met while creating a great place to work.
3. Maintain Global Leadership through Excellence. Build an organization that can meet the challenges of incorporating new users and technologies—small unmanned systems, advanced air mobility, distributed electric propulsion, commercial space—into the busiest and safest air space system in the world. Building a culture of continuous improvement will allow us to achieve a level of operational excellence as a regulator and an air traffic systems operator that ensures the FAA and U.S. companies maintain their long-established global leadership in aviation and aerospace.

B. POTENTIAL CONFLICTS OF INTEREST

1. Describe all financial arrangements, deferred compensation agreements, and other continuing dealings with business associates, clients, or customers. Please include information related to retirement accounts, such as a 401(k) or pension plan.

My arrangements are fully described in Part 3 of my Public Financial Disclosure Report.

2. Do you have any commitments or agreements, formal or informal, to maintain employment, affiliation, or practice with any business, association, or other organization during your appointment? If so, please explain.

No.

3. Indicate any investments, obligations, liabilities, or other relationships which could involve potential conflicts of interest in the position to which you have been nominated. Explain how you will resolve each potential conflict of interest.

In connection with the nomination process, I have consulted with the Office of Government Ethics and the Department of Transportation's Designated Agency Ethics Official to identify any potential conflicts of interest. Any potential conflicts of interest will continue to be resolved in accordance with the terms of an ethics agreement that I have entered into with the Department's Designated Agency Ethics Official and that has been provided to this Committee. I am not aware of any potential conflicts of interest.

4. Describe any business relationship, dealing, or financial transaction which you have had during the last ten years, whether for yourself, on behalf of a client, or acting as an agent, that could in any way constitute or result in a possible conflict of interest in the position to which you have been nominated. Explain how you will resolve each potential conflict of interest.

In connection with the nomination process, I have consulted with the Office of Government Ethics and the Department of Transportation's Designated Agency Ethics Official to identify any potential conflicts of interest. Any potential conflicts of interest will continue to be resolved in accordance with the terms of an ethics agreement that I have entered into with the Department's Designated Agency Ethics Official and that has been provided to this Committee. I am not aware of any potential conflicts of interest.

5. Identify any other potential conflicts of interest and explain how you will resolve each potential conflict of interest.

In connection with the nomination process, I have consulted with the Office of Government Ethics and the Department of Transportation's Designated Agency Ethics Official to identify any potential conflicts of interest. Any potential conflicts of interest will continue to be resolved in accordance with the terms of an ethics agreement that I have entered into with the Department's Designated Agency Ethics Official and that has been provided to this Committee. I am not aware of any potential conflicts of interest.

6. Describe any activity during the past ten years, including the names of clients represented, in which you have been engaged for the purpose of directly or indirectly influencing the passage, defeat, or modification of any legislation or affecting the administration and execution of law or public policy.

None, except as pertains to the executions of my duties as Deputy Administrator of the FAA from 2013 to 2016.

C. LEGAL MATTERS

1. Have you ever been disciplined or cited for a breach of ethics, professional misconduct, or retaliation by, or been the subject of a complaint to, any court, administrative agency, the Office of Special Counsel, an Inspector General, professional association, disciplinary committee, or other professional group? If yes:

a. Provide the name of court, agency, association, committee, or group;

b. Provide the date the citation, disciplinary action, complaint, or personnel action was issued or initiated;

c. Describe the citation, disciplinary action, complaint, or personnel action;

d. Provide the results of the citation, disciplinary action, complaint, or personnel action.

No.

2. Have you ever been investigated, arrested, charged, or held by any Federal, State, or other law enforcement authority of any Federal, State, county, or municipal entity, other than for a minor traffic offense? If so, please explain.

In June or July 1979 I was stopped in Louisville, KY, for "doing doughnuts" in a parking lot. I pled guilty to a charge and paid a $10 fine.

3. Have you or any business or nonprofit of which you are or were an officer ever been involved as a party in an administrative agency proceeding, criminal proceeding, or civil litigation? If so, please explain. No.

4. Have you ever been convicted (including pleas of guilty or *nolo contendere*) of any criminal violation other than a minor traffic offense? If so, please explain.

Please see C: Legal Matters: Question 2.

5. Have you ever been accused, formally or informally, of sexual harassment or discrimination on the basis of sex, race, religion, or any other basis? If so, please explain. No.

6. Please advise the Committee of any additional information, favorable or unfavorable, which you feel should be disclosed in connection with your nomination. None.

D. RELATIONSHIP WITH COMMITTEE

1. Will you ensure that your department/agency complies with deadlines for information set by congressional committees, and that your department/agency endeavors to timely comply with requests for information from individual Members of Congress, including requests from members in the minority? Yes.

2. Will you ensure that your department/agency does whatever it can to protect congressional witnesses and whistleblowers from reprisal for their testimony and disclosures? Yes.

3. Will you cooperate in providing the Committee with requested witnesses, including technical experts and career employees, with firsthand knowledge of matters of interest to the Committee? Yes.

4. Are you willing to appear and testify before any duly constituted committee of the Congress on such occasions as you may be reasonably requested to do so? Yes.

Addendum 1
Response Question A.18
Michael G. Whitaker

[redacted]

Career Highlights

FAA Deputy Administrator - Travel Company CEO - AAM Start Up COO
Airline Senior Executive - Public Speaker and University Lecturer - Private Pilot

Summary

Michael Whitaker has a unique blend of executive, government and international experience that allows him to recognize trends in time to influence outcomes. He is currently Chief Operating Officer of Supernal, a Hyundai company building an electric Advanced Air Mobility vehicle. Whitaker previously served as second-in-command at the Federal Aviation Administration during the Obama Administration, where he brought industry and government together to drive the successful transition of the nation's air traffic control system from radar to a space-based surveillance technology (ABS-B). Whitaker's success at FAA was enabled by his deep experience in aviation. In his 30s, Whitaker was promoted to vice president and then senior vice president at United Airlines, where his broad portfolio included commercial alliances and joint ventures, international and regulatory affairs, and strategic adviser to the chairman and CEO on international matters. He left United in 2009 to take the reins as Group CEO at InterGlobe Enterprises, India's largest travel conglomerate and operator of its largest and most successful airline, IndiGo. Whitaker, an honors law graduate of Georgetown University, is a prolific public speaker, has testified numerous times before Congress and various foreign governmental bodies, and has appeared on many major U.S. and foreign news outlets discussing aviation and aerospace policy.

Professional Experience

Supernal, a Hyundai company	Washington
Chief Operating Officer	*2023 - present*
Chief Commercial Officer	2022 – 2023
Chief Policy Officer	2020 – 2021

- Early key employee of start-up subsidiary of Korean conglomerate tasked with designing, certifying and manufacturing Advanced Air Mobility Vehicles: electric-propulsion, automated, vertical takeoff and landing passenger and cargo vehicles.
- Initially responsible for strategy to ensure the timely certification of the vehicle and vehicle production in the U.S. and key global markets.
- Promoted to Chief Commercial Officer with responsibility for commercial strategy and implementation, manufacturing and supply chain, safety, brand and communications.
- Responsible for ensuring the appropriate infrastructure is developed to allow commercial operations in key markets, including the development of vertiports, Unmanned Air Traffic Systems, and public acceptance of autonomous air vehicles.
- Promoted to Chief Operating Officer to lead all U.S. commercial and care operations.

Independent Board Member 2016–present

- Board Member, Flight Safety Foundation, an independent, nonprofit, international organization concerning research, education, advocacy, and communications in the field of aviation safety.
- Board Member, Matternet, a drone delivery company that connects healthcare facilities to medical labs and pharmacies to patients.
- Board Member, ANRA Technologies, an air traffic management start up focused on Unmanned Air Systems and work-flow management for drones.
- Editorial Board Member, Air and Space Law Journal, a Wolters-Kluwer Publication.

Independent Adviser 2016–2020

- Advised companies and government on strategic matters relating to aviation, aerospace, air traffic management, strategic planning and government relations.

FEDERAL AVIATION ADMINISTRATION Washington
Deputy Administrator, Chief NextGen Officer 2013–2016

- Presidential appointee responsible to Congress for implementation of NextGen, the 20-year, $20B modernization of the U.S. air traffic control system.
- Partnered with the Administrator to manage $15B annual budget and 47,000 employees throughout the United States and abroad.
- Reset the NextGen modernization program, the largest and most complex public infrastructure project in the U.S., through better technical engagement with stakeholders and more focused project management and reporting.
- Successfully directed the preparation, strategy and negotiation of new six-year labor contract with National Air Traffic Controllers Association.
- Established and Chaired the internal FAA board that sets strategy and oversees execution of policies to integrate unmanned aircraft into U.S. airspace.
- Drove a streamlined regulatory approach to rulemaking and product certification, leading to reduced time-to-market for general aviation safety avionics and a more flexible regulatory regime for unmanned aircraft.
- Drove comprehensive agency-wide approach to management and mitigation of cyber security threats.
- Served as Chair of the Business Council, comprised of heads of business and staff offices; responsible for the business and budgetary decisions of the agency.
- Initiated an industry Call to Action with more than 100 participants to examine issues, barriers, and progress toward meeting forthcoming federal aircraft equipage requirement. Resulting initiative eliminated all substantial barriers to ADS-B equipage for U.S. commercial, general aviation and military fleets.
- Oversaw world-class research facilities in Atlantic City and Oklahoma City.
- Chaired interagency committee with NASA, DOD, NOAA and DHS that coordinated research and implementation of operational, safety and security enhancements to the air space.
- Launched a data initiative, working with industry to make agency data available in a timely manner and standard format to enable development of private sector aviation products and services.

INTERGLOBE ENTERPRISES (India's largest travel conglomerate) New Delhi
Board Member, Business Development Consultant 2011–2012
Group CEO 2009–2011

- Prepared four companies within the group to meet public offering requirements.
- Implemented best practices in accounting, governance, and branding while maintaining double-digit revenue and earnings growth during three years of service.
- Led and provided direction to four CEOs within India's largest travel conglomerate, including InterGlobe Air Transport, ITQ, InterGlobe Technologies, and The Established.
- Directed parent company's marketing organization, successful rebranding the 50-year old company based on an extensive brand strategy review.
- Restructured one company within the conglomerate, selling the service division and expanding the product line allowing the business to leverage existing customers for sales of additional premium goods.

UNITED AIRLINES Chicago and Washington
Sr. Vice President, Alliances, International & Regulatory Affairs 2006–2009
Vice President, Alliances, International & Regulatory Affairs 2004–2005
Vice President, International & Regulatory Affairs 1998–2004
Managing Director, International & Regulatory Affairs 1995–1998
Senior Counsel, International & Regulatory Affairs 1994–1995

- Managed the recruitment of international partners for Star Alliance while also building existing relationships; resulting alliances created as much as $100M in revenue for each partner and enhanced customer service by expanding the route network. Served on the Star Alliance Management Board.
- Acquired valuable route rights that facilitated the company's international network expansion. New routes enabled significant route expansion in Asia, including around-the-world service, making United Airlines the first global network among U.S. airlines.
- Assumed public-facing role to lead multimillion-dollar, comprehensive campaign in Washington, DC, resulting in award of sought-after airline route to China valued at over $100M, securing airline's position as leading carrier between the U.S. and Asia.
- Successfully recruited Continental Airlines to change alliances; served to significantly increase revenue and prepare organization for eventual merger.
- Served as member of the Industry Affairs Committee of the International Air Transport Association, focused on international aviation policy and standardization of regulation.
- Obtained antitrust immunity on behalf of the company, allowing United Airlines and its European partner, Lufthansa, to operate and price as a single airline, resulting in operational efficiencies and increased revenue.
- Successfully advocated and supported government efforts to liberalize several international air service agreements, which opened several dozen new markets around the world.
- Member of team that renegotiated the collective bargaining agreement with the airline's pilots to secure union permission to expand cooperative airline agreements.
- Key contributor in restructuring efforts and Chapter 11 reorganization after the hijacking and destruction of two United Airline jets on September 11, 2001.
- Led negotiations to monetize key company assets, including leasing of landing slots at foreign airports and monetizing portions of the airline's international route network.

TRANS WORLD AIRLINES Washington and New York
Assistant General Counsel, International Affairs 1994
Director, International Affairs 1993
Managing Attorney, Regulatory Affairs 1992
Senior Attorney, Litigation 1991

- Safeguarded valuable international rights, allowing the company to remain viable and enabling a strategic position for acquisition negotiations with largest competitor.
- Successfully negotiated with Egyptian and Saudi Arabian governments to allow TWA service between Cairo and Riyadh, which rapidly became TWA's most profitable international route.
- Managed all company filings with the U.S. Department of Transportation and the FAA.

Education

- J.D., *cum laude*, Georgetown University Law Center, Washington, DC
- B.A. with High Honors, Political Science and French, University of Louisville, KY

Select Presentations

- U.S. House and Senate Testimonies: Air Traffic Modernization (NextGen); Unmanned Aircraft; Lifting Restrictions on Foreign Ownership of Airlines
- European Commission: Defending the United-Lufthansa Immunized Alliance
- UK House of Commons: US-UK Aviation Negotiations
- Multiple television and radio appearances, including CNBC, BBC, CNN, Australia Broadcasting Corporation, Al Jazeera and CCTV media appearances.

Additional Information

- Private pilot
- Languages: English (fluent), French (basic).
- Co-Founder, International Aviation Law Institute, DePaul College (2004)
- Adjunct Professor of International Trade Law, DePaul College of Law (2003-05)
- Adjunct Professor of Political Science, University of Louisville (1989-91)

ADDENDUM 2
RESPONSE QUESTION A.18

List all speeches, panel discussions, and presentations (*e.g.*, PowerPoint) that you have given on topics relevant to the position for which you have been nominated. Include a link to each publication when possible. If a link is not available, provide a digital copy of the speech or presentation when available.

I have delivered numerous speeches and presentations, and participated in many panel discussions during the course of my career. If additional speeches or remarks are identified following the submission of this Questionnaire, I will promptly let the Committee know and provide appropriate details.

There are three time periods where I would have made public statements responsive to this request: my work as an officer at United Airlines, where I was a public advocate for policy positions of the company (1994–2009); my time as Deputy Administrator of the FAA (2013–2016); and my time since leaving FAA (2016 through present). These are outlined below with as much specificity as possible:

United Airlines (1994–2009)

March 2003, Presentation to ICAO Worldwide Air Transport Conference: "Aviation in Transition: Challenges and Opportunities of Liberalization." *https://www.icao.int/Meetings/ATConf5/Documents/Whitaker.pdf#search=whitaker*

August 14, 2003, Competitive Enterprise Institute: State of Airline Competition *https://www.c-span.org/video/?177797-1/state-airline-competition*

FAA (2013–2016)

Please reference Attachment 1: FAA Speeches

Post-FAA (2016–present)

October 12, 2017, CAPA Centre for Aviation (London): Renegotiating the North Atlantic multilateral post-Brexit. No recording available

November 26, 2018, CAPA Centre for Aviation (Berlin): The Outlook for UK-Europe, the Transatlantic and Open Skies—How Are Airlines Preparing for the Post-Brexit World? *https://centreforaviation.com/analysis/video/the-outlook-for-uk-europe-the-trans-atlantic-and-open-skies-how-are-airlines-preparing-for-the-post-brexit-world-912*

February 2021 CAPA Centre for Aviation (Virtual conference): USDOT—which aviation policies will (and should) Secretary Buttigieg pursue? *https://centreforaviation.com/analysis/video/usdot-which-aviation-policies-will-and-should-secretary-buttigieg-pursue-1357*

April 21, 2021, ICAO Drone Enable (Virtual), Panel on Regulatory and technical challenges of Advanced Air Mobility—No recording available

July 19, 2022, Farnborough Air Show, Panel on Advanced Air Mobility. No recording available

September 2022, NBAA Webinar on Advanced Air Mobility. *https://nbaa.org/aircraft-operations/emerging-technologies/uas/nbaa-webinar-its-a-bird-a-plane-building-public-trust-in-all-new-flying-vehicles/*

ADDENDUM 3 RESPONSE QUESTION A.19

List all public statements you have made during the past ten years, including statements in news articles and radio and television appearances, which are on topics relevant to the position for which you have been nominated, including dates. Include a link to each statement when possible. If a link is not available, provide a digital copy of the statement when available.

United Airlines (1994–2009)

December 23, 2001, O'Hare may feel pain of Detroit Metro's gains. *https://www.chicagotribune.com/news/ct-xpm-2001-12-23-0112230375-story.html*

September 25, 2007, United awarded daily nonstop flight to Guangzhou, China. *https://www.sfgate.com/business/article/United-awarded-daily-nonstop-flights-to-2538607.php*

April 8, 2008, Aer Lingus Partnership With United Airlines. *https://www.globenewswire.com/en/news-release/2008/04/08/1394104/0/en/Aer-Lingus-Partnership-With-United-Airlines.html*

May 14, 2008, United Airlines Offers Inter-Island Hawaii Flights with New Hawaiian Airlines Codeshare Agreement. *https://newsroom.hawaiianairlines.com/re-*

leases/united-airlines-offers-inter-island-hawaii-flights-with-new-hawaiian-airlines-codeshare-agreement

FAA (2013–2016)

Please reference Attachment 2: FAA Public Statements

Post-FAA (2016–2023)

July 24, 2019, Aviation News Talk podcast (ep.115): NextGen and General Aviation *https://aviationnewstalk.com/podcast/115-former-faa-deputy-administrator-on-nextgen-and-general-aviation-interview-mike-whitaker/*

September 5, 2020, NBAA Webinar: It's a Bird? A Plane? Building Public Trust in All-New Flying Vehicles. *https://nbaa.org/aircraft-operations/emerging-technologies/uas/nbaa-webinar-its-a-bird-a-plane-building-public-trust-in-all-new-flying-vehicles/*

October 27, 2021, Airlines Confidential Podcast *https://podcasts.apple.com/gb/podcast/107-mike-whitaker-chief-policy-officer-hyundai-air/id1488637686?i=1000539841583*

December 4, 2021, Vertical Space Podcast *https://theverticalspace.buzzsprout.com/1875560/9661801-3-mike-whitaker-from-supernal-a-hyundai-company*

October 20, 2022, CEO and CCO of Hyundai's Supernal Talk eVTOL Development. *CEO and CCO of Hyundai's Supernal Talk eVTOL Development—Avionics International (aviationtoday.com)*

January 12, 2023, NPR: Discussion of NOTAM system failure. *https://www.npr.org/2023/01/12/1148633630/planes-are-back-in-the-sky-but-what-is-going-on-with-u-s-aviation*

January 12, 2023, Supernal to Utilize Microsoft Azure for eVTOL Development. *Supernal to Utilize Microsoft Azure for eVTOL Development—Avionics International (aviationtoday.com)*

ADDENDUM 4 RESPONSE QUESTION A.21

Please identify each instance in which you have testified orally or in writing before Congress in a governmental or non-governmental capacity and specify the date and subject matter of each testimony.

November 19, 2013, House Aviation Subcommittee: NextGen Listening Session. *https://www.congress.gov/congressional-report/113th-congress/house-report/718/1*

March 11, 2014, House Committee on Transportation and Infrastructure: Modernizing the Aviation System—Leveraging the Assets of the FAA's William J. Hughes Technical Center *https://transportation.house.gov/calendar/eventsingle.aspx?EventID=369763*

June 25, 2014, Senate Commerce, Science, and Transportation Committee Subcommittee on Aviation Operations, Safety, and Security: Nextgen: A Review of Progress, Challenges, and Opportunities for Improving Aviation Safety and Efficiency. *https://www.govinfo.gov/content/pkg/CHRG-113shrg95362/pdf/CHRG-113shrg95362.pdf*

June 17, 2015, House Oversight and Government Reform Committee: Commercial Drone Regulation *https://www.c-span.org/video/?326612-1/commercial-drone-regulation*

October 7, 2015, House Aviation Subcommittee of the Transportation and Infrastructure Committee: Drone Safety *https://www.c-span.org/video/?328622-1/drone-safety*

Thanks, Paul.

Intro comments

I had the privilege of speaking a few weeks ago at the Women in Aviation International conference in Orlando. That conference was attended by a lot of young people—high school and college students looking at aviation as a career. I was asked to talk about why aviation is such a great career.

This is a tricky topic for someone of my generation, because by any measure the last 25–30 years in the aviation business have been anything but smooth! If you are a pilot—and I know we have a lot of pilots at this conference—you likely would have endured one or more layoffs over the past 25, 30 years, because of bankruptcies, mergers, recessions, fuel spikes, 9/11. If you were an airline employee of any kind, you probably lost your pension . . . . and you learned what PBGC stands for. . . .

At that Orlando conference, I made the observation that I had joined the airline business at the worst possible moment in history, which was 1991, just after Eastern shut down, just as PanAm was shutting down, and I had the foresight to join TWA . . . . . right before its first bankruptcy.

But as I prepared for this conference it occurred to me maybe 1991 wasn't the low point. Maybe it was 1981. I was a college student at the time hitch-hiking around Europe—until I got stuck at Heathrow for a week after the President of the United States fired the air traffic controllers.

But of course actually the worst year was 2001—9/11 . . . which was then followed by the financial collapse in 2008.

Then followed by 2013—with the sequestration, the budget battles and the government shutdown!

- Bottom line: it has been a very rocky ride. There are no guarantees in this business.
- And like most of you here, I wouldn't trade a career in aviation for anything!

But this leads me to two observations.

One—and maybe all of us in the aviation business are optimist by nature—but the worst may be behind us. Maybe 2013 is the last of the bad years. There are several factors that suggest the next 25 years will be much better than the last 25 years.

And two, in a very real sense, we are at a pivotal moment in the industry that feels very much like a generational handoff. As Administrator Huerta has said, the decisions we make today—those of us in this room: FAA, NATCA, other stakeholders—will shape aviation for the decades to come.

Some of those pivotal decisions were discussed with the panel David Grizzle and Trish moderated—should the ATC system be privatized? So I would like to talk briefly about these two things: why I think the next 25 years will be so interesting—interesting in a good way!—and why this is such a pivotal moment.

THE NEXT 25 YEARS

What will the next 25 years look like? Well, it looks like it will be a good time to be a pilot. Our annual forecast shows the Nation's aviation system will continue to grow over the next two decades with a greater number of people expected to fly more miles each year. The rounds of mergers and bankruptcies that began after deregulation seem to have reached a stable state. It's unlikely we'll see many more mergers—except at the margins. The demand for experienced pilots is clearly growing.

And it's a good time to be a controller, or to work for the FAA generally. This generational handoff shows up in the age of our workforce. Because many controllers were hired in the '80s, there is a wave of retirements coming up. We plan to bring on approximately 6000 controllers over the next five years *[verify].* Agency-wide, in fact, there will be a lot of retirements: a third of our workforce will retire in the next several years.

The next 25 years also promise to be interesting because of new technologies and users being introduced into the system. Unmanned aircraft—UAS—will have many commercial uses: agriculture, pipeline inspections, construction, media. Each of these vehicles will have an operator—a pilot—and there will be many jobs created in the design, manufacture, sale and maintenance of these aircraft.

For us, the challenge will be to ensure these operations are conducted safely, and to equitably balance their needs with the needs of current airspace users. We're currently working to develop the regulations to accommodate these users . . . and we're researching and developing a collision avoidance system called ACAS-Xu—similar to TCAS—to accommodate them technologically.

Another exciting opportunity—and challenge for us—is the integration of commercial space operations into the system. Commercial operators are launching payload into space on almost a weekly basis *[accurate?].* And the last technological challenges are being conquered to allow commercial passenger flights into space. We are also working on how to integrate these vertical operators into our horizontal system.

PIVOT POINT

So the next 25 years offers a lot of promise, but it also presents us with a lot of challenges. As we just heard in the industry leadership panel before lunch, there is some debate about what the air traffic system will look like in the future. Does it stay governmentally run, or should it be privatized, or semi-autonomous? But we shouldn't get too focused on the form it takes. Whatever it looks like, we still need to work closely together. We need to build the air traffic system of the future, regardless of how it is structured. The work we have to do doesn't change.

Here I think there are three key areas where we can takes steps now to deliver a better air traffic system to the next generation. Those are: delivering on NextGen, right-sizing the NAS, and continuing to drive down safety risk. The FAA and NATCA have a unique opportunity to really shape the future . . . by continuing the collaboration that has been so successful the last few years.

NextGen

On NextGen, we are making substantial progress.

- We're on schedule to complete NextGen's foundational programs by 2015. Last week, we completed installation of our ADS–B radios throughout the U.S. We will continue to add additional stations in Alaska and the Gulf of Mexico.
- We will complete the deployment of ERAM at 20 of our en route facilities and TAMR at key terminal sites by March of next year. Sixteen of these 20 en route centers are already operating ERAM continuously to control air traffic.
- TAMR is now in full production mode. This effort involves implementing the STARS platform at over 150 TRACONs throughout the country.

But to keep the momentum going we need to continue to deliver benefits to users. We've been working with the NextGen Advisory Committee, which is made up of members from a cross-section of the industry, on accelerating these benefits. We are focusing on four areas: Performance Based Navigation . . . the sharing of surface operations data with industry . . . implementing multiple runway operations . . . and Data Communications. These four areas offer the greatest opportunity to deliver benefits in the short term without requiring additional cockpit equipage.

Right-sizing

But as we build these new capabilities, we need to also work to better match our assets and services with the demands of the system—in other words, we need to right-size the NAS. We need to pull out redundant systems, downsize airports that were overbuilt, consolidate facilities, and run the system more efficiently. And we need to do this whether we are corporatized or remain a government agency.

Safety

Finally, we must continue to drive down safety risk. Our goal is to make use of the wealth of safety data now available—from voluntary safety reports by controllers, technicians, pilots and other aviation industry employees . . . automated collection of air traffic operations data . . . and also through the exchange of safety data with industry.

We envision evolving the way we conduct safety oversight to take into account safety practices within the industry. We'll work with operators that have strong Safety Management Systems of their own. Through Safety Management Systems, we'll discover risks and monitor the steps they take to mitigate or manage the risk. This way, we can achieve compliance more efficiently. And we will be able to apply more of our oversight resources to areas of greater risk.

On the air traffic side, we'll continue to build on our proactive safety culture. NATCA and our workforce have contributed in so many ways to our success in driving down safety risk. Through your ATSAP reports, we've already made more than 260 safety enhancements. The *Professional Standards* program is also a great peer-to-peer effort for controllers to maintain the highest levels of professionalism.

The *Turn Off, Tune* In campaign—launched last year at this conference—has been a big success. Together, the FAA and NATCA have made great progress in raising awareness about the risk of distractions, including electronic distractions—which continues to be on the NTSB Transportation Most Wanted list for the second year in a row. Paul Rinaldi said it pretty well—"No text . . . no call . . . no update is worth your career or the safety of the flying public." The campaign is getting some international buzz too. Our counterparts in Hong Kong, Kenya and the Bahamas want to model our efforts. And now we have airlines asking us to use the campaign.

Several facilities have been very creative in promoting *Turn Off, Tune In.* At Charlotte Tower and TRACON, for example, they've created stations outside the control room where employees can charge their cell phones. It's a subtle reminder that there's no room for distractions in the operational area. Speaking of charging up, the *Fully Charged* campaign—being launched here this week—will also make a big difference. *Fully Charged* is a collaborative effort among PASS, NATCA and the FAA to reduce the risk posed by fatigue. By using de-identified data gathered from ATSAP, operational event data and other sources, we're gaining a more scientific understanding of the factors that increase fatigue hazards. *Fully Charged* will help us take steps to reduce the risk, both as individuals and as an agency.

In closing, I think the aviation industry is moving into a new period with lots of change and great opportunities. The FAA and NATCA have to stay on top of these changes. Let's continue to work together in the areas of safety . . . modernization . . . and integrating new vehicles. As we do that, we'll shape the future of aviation for decades to come. And we'll make sure the FAA remains the gold standard in aviation, here and around the world.

SMU Air Law Symposium
Dallas, TX
Mike Whitaker
April 3, 2014

Thanks, Charles (Tarpley—chair of the SMU Law Review board of advisors).

It's great to be here at SMU . . . and back in the company of aviation law professionals. I feel right at home.

I entered the airline industry through the legal door . . . but moved to the business side about 20 years ago. But I have maintained strong ties with the aviation bar, and it is always a pleasure for me to speak at events like this.

I spent my entire career in the private sector—first with a law firm, then with airlines—until I joined the FAA last June. I feel very privileged to hold my current position. I took the position in order to devote my efforts to moving NextGen forward—and I will talk a bit about NextGen in my remarks. But I also took the appointment because I thought it sounded exceptionally interesting and I thought I would also learn allow—seeing government from the inside.

And it certainly has been interesting!

- Watching the rulemaking process
- Participating in a variety of Hearings
- The government shutdown
- Watching the budget process

I have gained a lot of insight seeing government from the inside—none of which I will share with you today! That speech will have to wait until I am long out of government!

But I would like to share some insights into the airline business—where it has been and where I think it is going—as I approach 25 years in the business.

Last month, I had the privilege of speaking at the Women in Aviation International conference in Orlando.

- That conference was attended by a lot of young people—high school and college students looking at aviation as a career.
- I was asked to talk about why aviation is such a great career.

This is a tricky topic for someone of my generation, because by any measure the last 25-30 years in the aviation business have been anything but smooth!

- I think I may have joined the airline business at the worst possible moment in history.
- It was 1991, just after Eastern shut down, just as PanAm was shutting down, and I had the foresight to join TWA—right before its first bankruptcy.
- I joined the Legal Department as a litigator . . . right before TWA filed its first Chapter 11
- I used that opportunity to move out of the Legal Dept. and join the business side of the airline—which was better than getting laid off.

The tumultuous last 25 years can be directly traced to the deregulation of the airline industry in 1978.

- Within the first few years, it was obvious to most observers that a round of mergers and bankruptcies was inevitable . . . but no one imagined it would take over 30 years to complete the process
- During that time every major airline went through bankruptcy—some went through twice; TWA holds the record with three
- Employees were furloughed and many lost their pensions
- And that was BEFORE 9–11 happened
- Which was followed by the financial collapse, which was followed by sequestration
- You get the picture

So as I was addressing the students and those in the early part of their careers at the Orlando conference, I was tasked with telling them why aviation is such a great career!

- And of course it is!
- I wouldn't trade it for anything!

But as I thought about it, I think there are several factors that suggest the next 25 years will be much better than the last 25 years.

- Our annual forecast shows the Nation's aviation system will continue to grow over the next two decades with a greater number of people expected to fly more miles each year.
- The rounds of mergers and bankruptcies that began after deregulation seem to have reached a stable state.
- It's unlikely we'll see many more mergers—except at the margins.

The next 25 years also promise to be interesting because of new technologies and users being introduced into the system.

- I want to talk about three of these technologies that I think are game changers . . . and will give us a more prosperous next 25 years.
- In other words, aviation law will no longer be a sub-category of bankruptcy law.

UAS

- Unmanned aircraft—UAS—will have many commercial uses: agriculture, pipeline inspections, construction, media.
- You may have heard in the news that some want to use unmanned aircraft to deliver beer to ice fishers.
- We expect there will be many jobs created in the design, manufacture, sale and maintenance of these aircraft.
- For us, the challenge will be to ensure these operations are conducted safely, and to equitably balance their needs with the needs of current airspace users.
- We're currently working to develop the regulations to integrate these users . . . and we're working with industry to develop a system to detect and avoid other aircraft using on board computers and sensors. This is the key technology needed for unmanned aircraft to integrate into our airspace.

COMMERCIAL SPACE

- Commercial operators are launching payload into space at an unprecedented rate. The second week of January had as many launches as all of 2012.
- And the last technological challenges are being conquered to allow commercial passenger flights into space.
- Some launches take off down a runway . . . most are traditional rocket launches.
- As we look to enable more operations—we have to think about how to accommodate a vertical operation into a horizontal airspace system.

NEXTGEN

The third technology that impacts the future in a positive way is NextGen

- NextGen is a comprehensive upgrade of our air traffic control system—and I believe it is the most important infrastructure project in the U.S. today.
- It is a 20-year, $40 billion project that enables us to move from a radar-based air traffic system to a satellite-based system.

The first phase of this endeavor has been to upgrade the basic infrastructure of the system—the hardware and software in our 20 high altitude centers and in our regional approach towers.

- Much of this technology was from the 1980s—or early—and needed to be replaced—all while continuing to operate the system.
- That work is being completed over the next 24 months.

We also needed to install ground radio transceivers for the satellite system

- The FAA just achieved a major milestone this past month. We completed the baseline installation of our ADS–B transceivers throughout the United States.

As this foundational infrastructure is complete, it will enable us to build additional capabilities into the system, including data communications, time-based me-

tering, closer spacing, additional runway operations, better weather information, and more operational flexibility and direct routings.

We have already begun to see benefits in various cities across the country . . . and I'll just give you a few examples:

At Dallas/Fort Worth International Airport, we put in place a NextGen procedure we call *RNAV Off the Ground.*

- Flights can now take off with 1 nautical mile distance between each aircraft, compared to the standard 3 nautical miles.
- This procedure enables a 15–20 percent increase in departures per hour.
- In fact, American Airlines is saving $10 to $12 million dollars in annual fuel costs at Dallas/Fort Worth [1].

North Texas is also one of the areas in our Metroplex Initiative.

- Metroplex is a targeted application of NextGen procedures to decrease congestion in busy metropolitan areas.
- These efforts will make North Texas airspace more efficient and improve access to airports like Dallas-Fort Worth, Dallas Love, and other regional airports.
- We have similar efforts under way in other metro areas including: Houston, northern and southern California, Atlanta, Charlotte, Phoenix, Cleveland and Detroit, South and Central Florida, and Washington, D.C.

We're also seeing NextGen's benefits in places like Memphis and Louisville.

- In the fall of 2012, we revised wake turbulence separation standards at *Memphis Airport*.
- This means that aircraft can safely land and depart—one behind another—slightly closer than before.
- This has resulted in an increase in airport capacity by more than 20 percent.
- Of course, less time waiting to take off or land, means less fuel burned.
- FedEx is reporting a fuel savings of $1.8 million dollars per month.
- Building on that, we implemented new wake standards at *Louisville International Airport* this past September. Here, UPS is seeing 52,000 pounds of fuel savings per night on arrivals [2].

In the Denver area, we now have 51 satellite-based NextGen procedures in place.

- The FAA estimates these procedures will annually save operators $4 million dollars on arrivals and departures, from using more than 1.3 million gallons less fuel [3].
- And United Airlines estimates a savings of 100–200 pounds of fuel on each arrival into Denver International Airport [4].
- We plan to deliver more benefits like these throughout the entire country.

NextGen certainly offers many benefits for General Aviation as well.

- For instance, NextGen ensures greater access to many airports when visibility to the runway is reduced because of fog, clouds, heavy rain or other conditions like these.
- We have what we call LPV approaches—the full term is "Localizer Performance with Vertical Guidance approaches."
- LPV's provides pilots with a precise landing path that they can see on their cockpit instrument panel.
- It's beneficial for smaller aircraft including business aircraft, helicopters, and rescue aircraft that need access to smaller and medium-sized airports that can't afford expensive ground-based landing equipment.

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[1] NextGen Performance snapshots—*http://www.faa.gov/nextgen/snapshots/stories/?slide=28*

[2] Jeff Tittsworth, FAA Terminal Services, Wake Turbulence Research Program Manager, Feb. 20, 2014.

[3] Seth Wenchel, MITRE. MITRE Denver Post-Implementation Analysis briefing to AJV–1. Feb. 21, 2014

[4] NextGen Performance Snapshots—*http://www.faa.gov/nextgen/ snapshots/slides/?slide=24*

- Nationwide, we've already published more than 3,300 LPV procedures, in place at more than 1,660 airports[5].

In closing, I think the aviation industry is moving into a new period with lots of change and great opportunities.

- Through NextGen, we're making aviation safer, greener, more cost effective, and more efficient.
- The FAA is committed to expanding these benefits throughout the country.
- And we're working to safely and efficiently expand the use of unmanned aircraft and commercial spacecraft.
- As we do that, we'll shape the future of aviation for decades to come.

FINAL 6/17/2014 5:10 PM

Mike Whitaker
ASO Town Hall Meeting
ASO Regional Office, Atlanta, GA
June 19, 2014

Thanks Doug [*Murphy*]. I'm glad to be here.

- I've been at the FAA for a year now . . . and I'm proud to work alongside people who are so skilled and dedicated.
- As Doug said, I serve as the agency's Chief NextGen Officer.
- NextGen is one of the largest infrastructure projects in the country.
- Before I take your questions, I'd like to talk about a few topics today—NextGen . . . the budget . . . and our efforts to right size the national airspace system.

NextGen

This past year, we've made great progress with NextGen and its foundational programs.

- This includes automation upgrades at our en route and key terminal facilities.
- By next spring, all 20 en route centers will be using ERAM continuously.
- Through the TAMR program, we're upgrading and standardizing the computer systems at more than 150 terminal facilities throughout the country.
- All of this leads to a greater capacity for air traffic controllers to more effectively handle their aircraft in their sectors. It leads to improved efficiency for the entire airspace system.
- I'm proud to say that in March, the FAA completed the baseline installation of the Automatic Dependent Surveillance Broadcast, or ADS–B ground infrastructure.
- We now have ADS–B coverage nearly everywhere there is radar coverage. And in some places where there isn't radar coverage, such as the Gulf of Mexico, mountainous regions of Colorado and low altitude airspace in Alaska.
- Last month, we flipped the switch on the Houston metroplex. Airspace users can now benefit from 61 new satellite-based procedures in the Houston area.
- Our data communications trials in Memphis and Newark are coming along very well. We're on schedule for deployment at 56 airports starting in 2016, including at Hartsfield-Jackson.
- With these milestones accomplished, we're in a position to really unleash the benefits of NextGen.

Going forward, the FAA's NextGen Advisory Committee has recommended that we prioritize our efforts toward four areas:

- Increasing the use of Performance Based Navigation . . . making multiple runway operations more efficient . . . improving surface operations . . . and implementing Data Communications.
- We believe, and industry agrees, that progress in these areas can benefit the aviation community right away, without requiring additional cockpit equipage.

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[5] *http://www.faa.gov/about/office_org/headquarters_offices/ato/service_units/techops/navservices/gnss/approaches/*

While we're making excellent progress, our challenge has been to convey all that NextGen does.

- We have been talking about programs, but we have to talk about what it means in terms of benefits for the user and the public.
- This is important because we want to encourage the user community to equip with NextGen avionics in a timely manner.
- And we want the public to understand why NextGen benefits them as taxpayers.

So we're turning to YOU—our employees. We have an Idea Hub NextGen challenge underway.

- We're looking for you to send us a 90-second elevator speech. From your perspective, tell us how NextGen is making the system better, safer or more efficient.
- How does NextGen make your job better?
- How does your work help us deliver NextGen?
- The challenge runs until July 6 . . . and we look forward to hearing from all of you.
- You can send a video, or a photo of old equipment and new equipment. You can write a letter or a haiku. We'll read it.

Before I turn to budget issues—let me also mention that we recently launched a general aviation weather safety campaign called *Got Weather*.

- I'm happy to report that at the end of May, we were 18 percent below our not-to-exceed metric for fatal GA accidents this year.
- We still have work to do. Nearly 75 percent of weather-related GA accidents are fatal, according to our partners at AOPA.
- GA safety depends on the active involvement of the GA community.
- With that in mind, we launched a joint weather safety campaign with many GA organizations last month in Alaska.
- We already have more than a dozen partners, including AOPA, EAA and NBAA as well as NTSB.
- NOAA features *Got Weather* on its website, which gets 13 million hits daily.
- *Got Weather* features a new topic each month. This month, we're looking at summer flying, which means thunderstorms.
- I ask you to reach out to the pilots you know and ask them to connect with us on Facebook and Twitter. And take a look at the *Got Weather* campaign website at *www.faa.gov/go/gotweather*.

Budget

The good news here is that Congress passed a two-year budget in December, which provides some fiscal certainty.

- It temporarily avoids the cuts we would have had to make under the sequester.
- But unless there's another fix, the sequester will be with us again in 2016.

And even with the budget we have, it's still going to be a huge challenge.

- In 2011, we expected to have about $3.6 billion in the Facilities and Equipment budget by now.
- But instead, we're at $2.6 billion.
- The F&E budget is what pays for NextGen and the maintenance of our current airspace infrastructure.
- So if we cut back on NextGen investments, we'll have to spend more on sustaining our current infrastructure. Cutback will delay the implementation of much needed technical upgrades to make the system more efficient.
- And we're already facing a backlog of deferred maintenance of our facilities and equipment.

Rightsizing the NAS/MAC work

This tight fiscal climate, along with last year's sequester and shutdown has prompted a discussion about the need for greater budget certainty for the FAA.

- Some are saying the FAA's structure should be changed—that the Air Traffic Organization should be privatized or made semi-autonomous (*e.g.,* a not-for-profit government corporation).
- We think these conversations are premature.
- We first need to determine what problem we're trying to solve. Is it funding? Do we need to rescope the services the FAA provides?
- Once that has been determined, a change in structure, if one is necessary, will emerge.

We believe there is a fundamental disconnect between the services we provide and how we are funded.

- In addition to air traffic control, we've traditionally provided a variety of services to airspace users including flight plans, weather briefings, updated navigation charts, aircraft certification and pilot certificates.
- We are increasingly being asked to do more with less.
- In this budget atmosphere, we have to prioritize our efforts—knowing that we cannot continue to provide all of the services we have in the past.
- We're looking at what services we might be able to stop doing, or do differently, through innovative business methods and technologies.

On the question of what changes to make, if any, to our services, funding, and governance structure, we're working to build a consensus within the aviation community.

- We've asked the FAA's Management Advisory Council (MAC)—which include members from industry and labor throughout the aviation community—to help us with this process.
- Over the past three months, the MAC has spent a lot of time gathering the input of our external stakeholders as well as the agency's top leadership.
- The MAC will build on this work to provide us with some recommendations as we prepare for reauthorization next year.

Innovative Savings Initiative—*Pay for Success*

- As we think about being more cost effective at the agency level, we know that there are cost savings to be realized at the local level.
- You know your facilities and offices best . . . and you know where you can find cost savings.
- As part of this initiative, we're giving facilities and offices a chance to identify local ways to save money . . . and there's an incentive—you can reinvest a portion of these savings at the local level.
- We're going to begin this initiative with a limited number of facilities, offices and services as part of the test program developed as a response to our "Right-Sizing the NAS" initiative.
- The Air Traffic Organization is leading the way with a pilot program in Indianapolis . . . Salt Lake . . . Orlando . . . and at flight inspection and service centers, including Eastern Service Center here in Atlanta [1].
- Let's take this opportunity to be creative. How can we be more innovative and efficient in how we do our jobs?
- In support of these goals, the aviation safety office held an Idea Hub challenge earlier this year. They asked their employees how they could streamline efforts without affecting safety.
- AVS employees responded with 70 ideas that are now being reviewed.
- We know we'll see that kind of response with this initiative throughout the FAA.

In closing, let me just recap.

- We're making great progress with NextGen.

[1] Facilities include Indianapolis Center and Indianapolis Tower/TRACON; Salt Lake Center and Salt Lake TRACON; Orlando geographic area—Central Florida TRACON, Orlando ATCT, Sanford, Orlando Executive; All three ATO Service Centers, and Flight Inspection Services.

- We have to start communicating more effectively about tangible benefits, and we look to you to help us do it.
- Our budget situation continues to be a big challenge . . . and we're in the process of reevaluating the services we provide and how we should be funded, as we prepare for the agency's reauthorization next year.

Now, what's on your mind?

Q&A

UAS Test Sites

- As part of the current reauthorization, Congress mandated that the FAA would work to integrate unmanned aircraft systems into our Nation's airspace. We are meeting this mandate.
- Last week, we announced that the State of Nevada's unmanned aircraft systems test site is ready to conduct research. That's the third of six congressionally mandated test sites to become operational.
- This site will use a ScanEagle, a fixed-wing unmanned aircraft system. Nevada will focus on how air traffic control procedures will evolve with the introduction of UAS into the civil environment. They'll also monitor how these aircraft will integrate with NextGen.
- Earlier this spring, unmanned aircraft were cleared to fly at test sites in North Dakota and Alaska.
- In North Dakota, the unmanned Draganflyer will check soil quality and the status of crops. And during the summer it will collect data to help develop an automated count of North Dakota's deer, elk, and bison populations.
- The University of Alaska will conduct flights of the unmanned Aeryon Scout—a 2.5 pound helicopter with cameras. It will test the ability to locate, recognize and count populations of wild caribou, reindeer, and musk ox.
- These test sites will help us identify operational goals as well as safety issues that we must consider when planning to expand the use of unmanned aircraft into our airspace.
- Even while we're in the testing phase, there are businesses that already want to use unmanned vehicles for commercial purposes. Section 333 of the FAA reauthorization provides a bridge before the small UAS rule is finalized to be able to authorize certain UAS operations on a case-by-case basis.
- On June 2, seven film companies, in conjunction with the Motion Picture Association of America, petitioned for exemptions under Section 333 to let them operate before the small UAS rulemaking is finalized.
- Since then, we have also received petitions for precision agriculture and flare stack inspections.
- We might be able to expand these and other commercial operations in tightly controlled, low-risk situations. The point here is that this industry is really growing, and we are working hard to make sure that it does so safely.
- And earlier this month, we had the second commercial operation by an unmanned aircraft system over the Arctic and the first flight over land. This supports our congressional mandate to expand Arctic small UAS operations. This industry is evolving before our eyes.

VERA/VSIP Announcement [2]—why wasn't it more widely offered?

- This year, a total of 1781 positions in various occupational series have been identified as eligible for VERA and VSIP pools.
- The primary rationale for selecting candidates into the pool include restructuring to consolidate or realign functions, reducing the supervisor to employee ratio, and changing the mix of employee skill sets.
- Last year, there were more offers because of the significant budget pressures we were facing. Some lines of business had a strong need to offer these early outs and buy outs, and those needs were met.
- Compared to last year, this year's need is not as great, and thus, there were fewer positions identified as eligible.

[2] An announcement should go out on 6/17 announcing this round of VSIP/VERA pools, pending briefing to NATCA

The FAA's New Performance Management Program is called *Valuing Performance (VP).*

- The FAA is committed to attracting, retaining, and motivating a high performing workforce necessary to successfully achieve the FAA's mission.
- Valuing Performance (VP) is a new performance management program that was developed in response to feedback received on our current Performance Management System (PMS) from commentary on IdeaHub and in Town Hall meetings.
- The new program includes changes for the FAA's non-bargaining unit employees.
- It will go into effect on October 1, 2014.
- VP streamlines the performance management process by consolidating the Performance Management System (PMS) and the Superior Contribution Increase (SCI) processes into one program to reduce administrative workload.
- We'll replace the current pass/fail system with a four-tier rating system [3].
- We'll provide a consistent criteria and definitions for each of our ratings.
- This will enable managers to assign ratings based on employee performance which is tied to well-defined standards.
- You can learn more about this new program on the *Valuing Performance* website at my.faa.gov/go/vp

Air Traffic Controller Hiring.

- As you know, the agency plans to hire more than 6,000 new controllers over the next five years to keep pace with expected attrition and air traffic growth.
- In the last year, we have spent some time examining our hiring process and determined that we need to make improvements to the way we select, train, and assign air traffic controllers. Our goal is to recruit a better qualified candidate and reduce costs associated with testing and training. This is important, because it's a big investment.
- We've taken steps to increase the objectivity in the assessment of candidates. In February, we issued the agency's first nationwide vacancy announcement since 2009. In the course of two weeks, we received more than 28,000 applications for 1,700 positions.
- We also developed a new pre-employment tool, called the bio-data assessment, designed in cooperation with the FAA Civil Aerospace Medical Institute, or CAMI. The test was validated by outside experts and it helped us narrow the pool of candidates to those likely to have the greatest success as air traffic controllers. It offers a more cost effective approach, reducing the number of AT–SAT tests we administer.
- An advantage to this process is that we'll no longer keep a waiting list of candidates who made it through the AT–SAT test but were not hired. We will not keep people in limbo for years. In fact, we are moving toward an annual hiring process that allows people to reapply if they weren't successful in a previous screening.
- It's good news that we're hiring again and that the academy is up and running after last year's closure. We are also hiring aviation safety inspectors and others.

POST-SPEECH TRANSCRIPT **10/16/2014 12:50 PM**

Michael Huerta and Mike Whitaker
Employee Town Hall
FAA Auditorium
October 9, 2014

Michael Huerta: Good afternoon, everyone. I'd like to welcome everyone to our Town Hall meeting today. And I'd like to say hello to those who are watching online. I think these meetings help us to communicate with one another and stay connected and to have a clear sense of what's going on around the agency. So I appreciated your taking the time to spend with us this afternoon. These meetings help us all stay on the same page. In an organization that's as big as the FAA, with a mission this critical as it is to the nation, it's important that we're all pulling in the same direction.

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[3] Four tiers are: *Does not meet, meets, exceeds,* or *significantly exceeds* minimum required goals and job requirements.

Today, I'd like to discuss our strategic vision and initiatives. I'd like to reiterate *what* we're doing . . . *why* we're doing it . . . and the *progress* that we're making. I know we've discussed this with you in the past. But there are still a lot of questions about it. I want to continue this conversation with all of you now, and with our senior leaders as well.

But before I go there, let me talk a bit about the fire at Chicago Center and our response to it. The fire at Chicago Center on September 26 was absolutely devastating. But it also was a reminder to me why the FAA is such an incredible organization. First and foremost, everyone was able to evacuate the building safely. Second, our team throughout the Midwest and throughout the Nation made sure that operations remained safe.

Because of the fire, resulting smoke, and water from the sprinkler system, there was extensive damage to a key part of our air traffic equipment, including the communication system. When FAA's Telecommunications Infrastructure—the FTI system—goes down, the facility can't provide air traffic services.

Chicago Center activated their contingency plans, transferring control of en route traffic to neighboring control centers in Minneapolis, Kansas City, Cleveland and Indianapolis, as well as a very large number of terminal facilities in the region. These facilities stepped in right away.

The Centers are working flights longer than they normally would. And the terminals are working flights they normally wouldn't even see. In fact, several TRACONs have doubled their traffic count over the last week. To support this effort, more than 140 Chicago Center controllers have deployed to these locations and are providing their expertise of Chicago Center's airspace.

Within a few days, we were able to build back Chicago airspace operations to near normal levels. I want to thank all of our employees who continue to make this contingency effort a success. People are working very, very hard. They're doing a fantastic job in managing under very difficult circumstances.

I also want to thank the many employees and the many contractors who are helping to bring Chicago Center back up on its feet. The FAA has 97 Federal employees and 92 contractors from multiple technical specialties and vendors working around the clock to clean and restore the equipment and systems. In addition to the onsite activities, there are more than 60 employees and 60 contractors providing support services from different sites around the Nation including our Tech Center, the Command Center, the Aeronautical Center, and many other locations throughout the system.

They're making great progress in a very short amount of time. Remember this only happened on September 26th. We've set up 25 racks of equipment. We've replaced about 10 *miles* of cable . . . and we're restoring 835 distinct circuits. And we're in the process of configuring and testing all of that equipment. Our target is to have service restored to Chicago Center by this Monday, October 13th, and we're on track to meet that.

In light of this incident, we're reviewing the agency's contingency plans, our resiliency plans, and our security protocols, to make sure we do everything possible to mitigate the risk of a future incident like this one.

Teri Bristol, ATO leadership and I remain very focused on Chicago's contingency operations and the Center's restoration efforts.

Last week, several of us traveled to the Midwest. I visit Cleveland Center, Midway Tower, Chicago TRACON, Kansas City Center and Chicago Center to thank all of the people that are rebuilding the infrastructure and are keeping our system running safely.

At each facility I think all of us encountered the same thing. I couldn't tell who was management . . . who was labor . . . who was a controller . . . or who was a technician—all I saw was a team. One Team—One Goal.

And while visiting these facilities, we all heard the same stories about adjacent facilities like South Bend, Indiana, or Cedar Rapids, Iowa, who have managed historic levels of traffic over the last week and a half.

Mike visited our colleagues in Minneapolis and in Indianapolis, Chicago Center and O'Hare Tower . . . and Mike, I know you have some stories to tell as well.

Mike Whitaker: Thank you, Michael and good afternoon. I would just echo what the Administrator said. Teri and I visited I think four days after the event, to Chicago Center, to the tower at O'Hare, Minneapolis and Indianapolis. The term we heard most often was esprit de corps, and the really coming together of groups that don't often get along too well, and don't necessarily always work well together, and someone put it, there were some employees that left their attitudes at home throughout this whole thing. As tragic as the event was, it was really nice to see that teamwork and pulling together. I'll just mention one more thing to validate that. We just had a luncheon this afternoon and the head of A4A spoke. He opened

his remarks by complimenting the FAA on how they have handled the crisis, the sabotage in Chicago, and how quickly they got traffic levels back up, and how quickly they're rebuilding, so I think that's quite a testament to everybody's work.

Michael Huerta: Thank you, Mike.

I was looking at some numbers just before coming to this. Teri, I'm wondering how we're doing it, because O'Hare is apparently running, as of midday, traffic loads that are about 104 percent of a normal Thursday. But it really is a testament to the work that everyone is doing.

We all know that we're very effective when we are focused on the mission, finding solutions to the challenges we face. We get incredibly creative, and we find very innovative solutions to very complex problems. It's who we are, and that's why we all came to the FAA years ago when we all joined. We may hold different positions. We may work in different facilities. We have different job tasks, but it's what we all share in common. How do we keep this system safe and how do we keep it efficient?

That is the spirit of the FAA.

A spirit behind a mission that's profound and simple at the same time. And it's in keeping with that mission, we have to focus not just on today. Not just on how we recover from the events of Chicago Center. We also have to focus on the long-term, and that's where our strategic initiatives come in. Let me turn to those now.

Our air traffic system is built on an infrastructure that we all know is 50 years old and it's located in areas that made sense 50 years ago. It doesn't necessarily match with our stakeholder's changing needs. Technological advances enable us to reconsider how and where we can most effectively provide the services that we provide.

We see emerging segments of the industry—like unmanned aircraft and like commercial space operations—that are looking for access to airspace they may not have had before.

We see the growing influence of other nations with rapidly developing aviation systems.

We see our own workforce changing and in the midst of a retirement wave.

And we have to deal with all of these changes, and all of these trends, and at the same time do all of our work, in an increasingly tight budget environment that forces us to make choices and to prioritize.

Just think, it was a year ago that we were in a shutdown. And since then we have been able to keep things on track and maintain a very safe and a very efficient system. This isn't a time to stand pat and congratulate ourselves on how well we are doing. We are in fact the gold standard in aviation. But it's a time to ask the question "what do we need to do to keep it that way for future generations and in the years ahead?"

Either we stay on top, or we fall behind. Just as the aviation industry has changed . . . the technology has changed . . . we need to continue to change in terms of HOW we do what we do.

And that's where our four strategic initiatives come in, and that's what they are designed to do.

Let me recap what they are:

We're going to make aviation safer and smarter by consistently applying a risk-based approach to making decisions.

We're going to deliver greater benefits through technology, through infrastructure, and through more efficient and more streamlined services.

We'll enhance global leadership by prioritizing our international efforts.

And we'll recruit and develop a highly-skilled workforce that enables us to meet the demands of the future.

The common thread that is running through all four of these is that we will better *target* and *prioritize* our activities and our resources, that we will rely on data in order to base our decisions. This will include doing a better job of matching resources to needs and changing how we provide a lot of the services that we provide. But it also includes something else. It includes *stopping* some of the activities we've traditionally done and adjusting them to fit the new environment. As we all know that is a very, very hard thing for us to do.

Now at first glance, and I've heard it from many of you, it's tempting to think that these four priorities are a lot like the agency's previous strategic plans. Isn't this like the *Flight Plan* ten years ago? Or isn't this like *Destination 2025* five years ago? But that's true only if you look at the headlines.

Make no mistake. This is NOT a "flavor of the month." This is a fundamental shift in HOW we do our jobs. And that is what is different.

Let me explain. If we're really going to make safety decisions based on a level of risk, then that means we have to shift resources *away from* lower risk areas *to-*

ward higher risk areas. That means that we're not treating everyone exactly the same, and we're not treating every problem in exactly the same way. That's a big change in how we go about a lot of our work. Our task is to figure out where we need to focus. What are the areas of highest risk? What does the industry need? And how do we direct resources toward that.

If we are going to build NextGen, and we are . . . if we're going to devote resources to new user entrants, and we are . . . and if we're going to better match our services to the needs of our stakeholders, then we have to STOP providing certain services that are no longer vital to our mission, or conduct them differently through innovative technologies.

Figuring out what we're going to STOP doing is a big challenge for us. We've all lived it, particularly as we've looked at the last couple years. But after all, we certainly didn't become the best in the world by doing things that were of no value.

One of our colleagues recently described the FAA as a lot like an all-you-can-eat buffet. We keep adding things to our plate, but nothing ever gets taken away.

Well that may be the status quo, but we know that that is unsustainable. Doing things, simply because "that's the way we've always done it," is not something that we can afford to do anymore.

In our agency's history, if we look back, we have successfully made these kinds of changes.

Certainly, when radar came along, we stopped lighting bonfires . . . shining beacons . . . and using shrimp boat markers for air traffic control. When I was in Kansas City last week, a local manager gave me one of the original shrimp boats, which apparently are quite rare, but that's how we used to control air traffic not that long ago.

When we started using e-mail, we did actually start buying fewer stamps.

It's especially important now to prioritize our activities and our services given the budget environment that we're in. The fact that we're starting off the Fiscal Year with a Continuing Resolution that keeps us at our 2014 funding levels through December 11th is a challenge for us. And with the budget agreement passed by Congress last December, we were only able to *temporarily* suspend a lot of the cuts we faced under the sequester. Unless there's another fix, the sequester will be with us again in 2016.

Since we announced our strategic initiatives, we've been working hard to lay a foundation that will enable us to realize the vision.

For instance, as part of our risk-based decision making initiative, we're in the process of taking the great relationship with industry and developing an even closer relationship where we will identify safety hazards and mitigate the risk together. In doing so, we'll be able to achieve safety compliance much more efficiently. This is part of our effort to evolve our safety oversight model to prioritize safety inspection efforts based on risk. We will determine the areas of highest risk and we need to focus our resources on those items rather than on everything.

Mike is going to discuss some our efforts and progress with the NAS initiative in a moment.

I'd like to briefly talk about the other two.

To support our global leadership initiative, we've set up an agency-wide governing structure so that we can make decisions about international efforts in a data-informed and collaborative manner. And we've drafted an international strategic plan that states our international priorities and identifies the resources we need to execute it.

To support our workforce initiative, we've set up two agency-wide steering committees, a senior level committee and one that includes labor and management. These committees will help drive our collaborative decision making on issues important to our current and our future workforce. We've also started efforts to implement a more effective, a more engaging and a more consistent on-boarding process, so that new employees know right off the bat what it is they need to know, and what's expected of them once they get here. And we stood up the FAA's Leadership and Learning Institute, replacing what many of us knew as CMEL, for manager and executive training.

These are just a few examples of how we've been laying the groundwork over the past few months. Our task now, starting in the new Fiscal Year, is to institutionalize these processes so they become part of a new culture.

We need to bring a much greater sense of urgency around these initiatives, and I'm looking forward to discussing this more fully with our leadership team at our executive off-site meeting scheduled in December. Our task is to realize as much of this strategic vision as possible by 2018. We need to start by thinking from the end state, and then walking back to identify all the things that we need to do between now and then.

We need to be ambitious here, but many of you have heard me say this, we cannot let the perfect be the enemy of good. Ultimately, we're putting in place a new culture that will prevail beyond 2018 and continue for many decades to come.

Before I turn it over to Mike, let me say that the need for change in the aviation industry, in government, and in the FAA is clear. But we also have to be willing to make those changes. I know we can do it, because it's in our DNA. And we've seen it on display for the last week and a half in Chicago. And we do it each and every day as we manage the safest, and the most efficient aerospace system in the world. That's why we continue to be the gold standard in aviation.

We have an opportunity to make changes today that will have a lasting impact on the industry and our Nation in the years ahead.

As we commit to these strategic initiatives, I have every confidence that we're going to be successful in getting there.

Thank you, and let me ask Mike to talk about the NAS initiative.

Mike Whitaker: Thank you, Michael. As you all know, the NAS Initiative is a very large initiative. It includes a number of elements including the rightsizing initiative that Michael has mentioned. It includes integrating new users into the NAS. And it includes NextGen, and what I want to do is focus on NextGen because there have been several very significant events taking place in October so I want to run through those three particularly significant events.

The first is that yesterday, MITRE corporation released a report which is an independent assessment of how we're doing in NextGen. This was initiated at the request of Ed Bolton, our Assistant Administrator for NextGen. And was designed to give us a check in as we get to the point where we are four or five years into rolling out NextGen to see how we're doing.

The headline is that it really validated what you've heard us talk about recently in that we are to the point where we are completing the foundational part of NextGen . . . and in essence we are on track with where we need to be with this phase of NextGen. We have completed, as you know, the ADS–B infrastructure this year. We are completing ERAM in the spring. And the TAMR program in the TRACON's is also on track. You've often heard us talk about this as building the iPad. This is the basic foundation for NextGen that will allow other capabilities to be run in the system. It's a necessary part, and a very expensive and long process but we're coming to the conclusion of that section of NextGen. The MITRE report acknowledges that and acknowledges that we're now to the point that we need to focus on rolling out capabilities for users.

That brings us to the second significant event also yesterday. We had a meeting of the NAC, which is the NextGen Advisory Committee. This is our primary interface with industry. We meet three times a year. At the NAC yesterday, we completed basically what has been a year's worth of work where we reached out to the NAC right during the pre-government shutdown time and said tell us what you think the industry's top priorities are. Since that time, we've worked very intensively with the NAC and with industry, with over a hundred companies participating in a whole series of working groups to develop very concrete plans to roll out benefits in four particular areas: performance-based navigation, multiple runway operations, surface data sharing, and Data Comm.

This has resulted in identifying locations, milestones, and very definitive work plans for the FAA and for industry to complete work over the next 24 to 36 months. That work was also rolled out yesterday. It was presented at the NAC. We have agreed with industry on all of these. It wasn't always obvious that we were going to be able to get to that point—huge amount of work by all parties involved but an important milestone. Some of the things that are captured in that work include the Metroplex programs. You heard Houston Metroplex rolled out earlier this year with great success—over sixty new procedures in Houston. And then at the end of September, the North Texas Metroplex rolled out again to great success. So we've got really good work underway in this next phase of NextGen delivering benefits. We will take that work with the NAC and we will present it to Congress at this point next week, and the real work will continue over the next couple of years.

The third thing I'll mention on NextGen for this month is that as we complete the foundational portion, as we focus on benefits to users, we also have to keep out eye on the future. We're very focused on the 2020 equipage mandate for ADS–B Out. This is a major milestone in the rollout of NextGen. Our main focus right now is to make it very clear that we have no intention of letting that date shift. The 2020 mandate is vital to keep NextGen on track.

Later this month, we're going to have an industry call to action that we will host here at FAA. We are bringing all of the stakeholders together to discuss the roll out of ADS–B, what are the barriers, what are the issues. As we individually engage with stakeholders we get a lot of finger pointing the other way so we want to get

everyone in the same room and talk about it. I can say that if you every worried about having a party where no one shows up, this is not one of those parties. We have a very long list of people trying to get in, and we're managing what's going to be certainly a very lively, but I think productive event.

AVS has taken the laboring ore on this and has already done a huge amount of work in understanding what the technical issues are . . . what sort of issues we can anticipate, but I think on October 28th we'll probably learn some new things as well.

So three really big events, and I think showing really good progress on keeping NextGen on track.

Thanks.

[Michael take the podium]

Michael Huerta: Thanks a lot, Mike. One thing I would like to talk about before we open it up for questions is you've been reading a lot in the newspaper about the agency's role with respect to Ebola, and what's been happening as part of our larger government-wide effort. I would like to talk a little bit about that since I know that many of you have questions about it.

First point is that this is a very big challenge, not just for the United States but for the world. It's an international effort, and here in the United States, it's very much an interagency effort. This is a significant public health issue, and given its focus as a public health issue, that necessitates that our colleagues at the Centers for Disease Control and Prevention play a leading role in making the determination of what the entire government's response is going to be. We are working very, very closely with our colleagues at CDC.

The FAA's interests and the FAA's role in that is secondary to these broader public issues and concerns, but nonetheless, we do play an important role, and it's essentially in a couple of different areas. You heard from the President that the Nation is going to increase, and we've already started to increase, screening of inbound passengers coming into the United States. It's not the FAA that is conducting that screening. It's being conducted by our colleagues at CDC and the Customs and Border Protection. There is a plan that is in place for extending these activities to other gateway airports around the country. But as the principal proponent and regulator of the airport community, we play an important information-sharing role with our colleagues that operate airports all around the country, and are facilitating communication between them and the public health authorities as well as the other Federal agencies that we're dealing with in that regard.

Second point is, we're doing a lot of communication with our stakeholders—the airlines, the pilots and flight attendants that serve as their crews, and ensuring that they have the information that they need that's provided to them by our public health colleagues. Again, it's not up to us to establish how best to combat an epidemic or an issue such as this but it's ensuring that we serve as a vehicle for communication and making sure that they have what they need. This is something that is a very tightly integrated effort. It's something that is evolving very, very fast, and it's something that has the highest attention of the Administration. While we play a role in it, ours is not the primary role. Our role is to support the great work that's taking place by our colleagues at HHS, Centers for Disease Control and Prevention, Customs and Border Protection, as part of a larger administration strategy on how we deal with an important public health issue.

So with that, we'd like to open it up for questions. . .

DRAFT—NOT FOR RELEASE 11/3/2014 3:27 PM

Mike Whitaker
FAA Central Region—Veteran's Recognition
November 5, 2014
Kansas City, MO

Thank you, Joe [*Miniace*].[1] I'm glad to be here for today's veterans recognition.

When our veterans sign up, they commit themselves to a cause greater than self. Some of you have to put off plans for family or education so you can serve your country. Some of you aren't able to see your families for months or even years at a time.

Often, it's tough on your families. Spouses have to be both a mom and a dad when you're on deployment. Sometimes they have to move to a new city with each new assignment. Or they might be taking care of a wounded soldier.

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[1] Central Regional Administrator

As we mark Veteran's Day, let's make a point of expressing our gratitude to our veterans when we have the opportunity. I'd like to take this moment do so. Could all of our veterans please stand and be recognized?

[*Lead Applause*]

When many of our veterans leave active duty, they find new ways to serve. In the Transportation Department, veterans make up more than one quarter of our workforce [2]. In the FAA alone, we have about 15,000 veterans.

I'd like to highlight a few of our DOT veterans who work here in the regional office [3].

First, I'd like to recognize and thank Tim Coronado for his service. Tim is a motor power and equipment safety inspector in the Federal Railway Administration. He inspects freight rail cars and locomotives for safety compliance. He has been a part of our military for 29 years. Tim was in the Army, active duty for five years . . . and continues to serve in the Army National Guard.

In 2005–2006, Tim was part of Operation Iraqi Freedom, stationed in the City of Ramadi, where he worked as an engineering equipment warrant officer.

Tim ran a shop that provided maintenance support for an engineering battalion. His group was involved in building roads and other infrastructure projects. They also repaired Humvees, bulldozers, power generators and other motor equipment. They had to do their work while facing the threat of incoming rockets and mortar fire—about 2–3 times a week.

Tim says that the military helped him learn how to operate in a safety-conscious environment, which enables him to better serve the public as a safety inspector.

I'd also like to recognize and thank Donald Harper for this service. Donald works in the FAA's Airports Division. He's an airport engineer and supports the Airport Improvement Program here in the region. He signed up with the Air Force, active duty for five years, and he continues to serve in Kansas Air National Guard.

In 2004, Donald was deployed to Iraq—stationed at Kirkuk Air Base, and then at Camp Victory near Baghdad in 2006. Donald was a project engineer, and supported efforts to build infrastructure, including repaving roads and conducting large drainage projects. He helped to set up trauma centers and hospitals that treated injured American soldiers. Like Tim, Donald and his service members faced the threat of rockets and mortars several times a week, very often at night.

In 2010, Donald supported relief efforts in Haiti after the Earthquake struck. You remember how terrible that was—7.0 on the Richter scale . . . more than 200,000 dead . . . and 1.5 million people displaced.

Donald worked to set up living quarters for U.S. military personnel, which were essentially rows of tents with electrical generators and shower units. He also helped set up hospitals for Haitian citizens to get treatment.

And Donald was part of a team to manage the airport—making sure it had lighting, and helping relief agencies like the Salvation Army and the American Red Cross get their flights in and out.

Donald says that through the military, he honed the skills of discipline, managing priorities and paying attention to detail. He reinforced core values including integrity and honesty—all of which enable him to continue serving the public at the FAA.

Finally, I'd like to recognize and thank Oronde [*Oh—RON—DAY*] Smith for his service. Oronde is an assistant manager in the FAA's Flight Standards Division. His team provides administrative support for our safety inspector workforce. Oronde has served in the military for 19 years. He was in the Air Force, active duty for 10 years, where he was on the ROTC faculty at Kansas State University. His job was to prepare students to be fighter pilots, cargo pilots, and support staff.

Now, Oronde is a member of the reserves. He is a First Sergeant in the 303rd fighter squadron, where he advises the commander on a wide range of topics including the health, professional development and wellbeing of all assigned pilots and enlisted members. He works to make sure that pilots meet their physical and academic requirements, and maintain their flight hours and their type rating.

In comparing his military service to his service at the FAA, Oronde says, "It's the same fight, just a different mission. In both jobs, you make sure that aircraft and pilots and passengers are safe and can get from point A to point B."

Tim, Donald, and Oronde are only a few of the DOT's veterans who are making great contributions for our Nation.

All of our veterans have given so much to us. Let's make a point of giving back. There's many ways to do that. Maybe we can help a returning vet find a job. Or

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[2] Cynthia M. Vaughan, Director, Departmental Office of Human Resource Management, October 28, 2014.

[3] All three should be present in the audience.

help them with medical assistance . . . or do something to help their families, especially if their loves ones are deployed.

And let's definitely thank our veterans for their service . . . and for fighting for the freedom we all value so much as Americans.

Thank you very much.

DRAFT—NOT FOR RELEASE 12/5/2014 11:36 AM

Mike Whitaker
AAAE Runway Safety Summit
December 9, 2014

Thank you, Randy [*Berg, AAAE Chairman*]. I'm glad to be here.

Commercial aviation is a very safe industry.

- We've driven down the rate of commercial airline accidents to an exceedingly low level.
- But as good as the record is, the FAA is not satisfied.
- We know there is still risk in the aerospace system—both in the air and on the surface.

Runway safety continues to be a priority for the FAA.

- Congress . . . The National Transportation Safety Board . . . the Transportation Department's Office of the Inspector General . . . and the FAA's own data shows that this is an area that requires a continued focus.

The FAA takes a proactive approach that focuses on reducing safety risk.

- We're committed to preventing accidents long before they can happen.
- Our approach can be summed up in three parts: *we collect . . . we find . . . and we fix.*
  - First, we *collect* safety data from many sources—including automated air traffic data gathering tools . . . and voluntary safety reports from pilots, air traffic controllers, technicians and other sources.
  - Then, we *find* the potential safety hazards and assess the risk. We also determine the root causes and precursors of accidents.
  - And last, we *fix* the problem by putting in place corrective actions.

Today, I'd like to talk about how we're employing this proactive approach to ensure runway safety.

Let me start by saying that we've made great progress in reducing serious runway incursions.

- The number of serious runway incursions has gone down 77 percent since 2000.
- The nationwide rate of serious runway incursions was .282 per million operations at the end of FY 2014 [1].

Yet, an article published last month in USA Today painted a false picture, I would argue.

- The article reports that runway incursions have increased substantially in the past decade.
- But it's not always intuitive.
- I'll say it again—*serious* runway incursions have gone down 77 percent since 2000 . . . and most of the incursions we count involve no risk of collision.
- The article's claims of an "increase" in overall runway incursions is explained in part by changes the FAA made in the way we *count* incursions. In 2007, the FAA reclassified it's runway incursion count to include additional types of surface incidents, in order to be consistent with international aviation standards.
- Then in 2012, the FAA implemented improved reporting systems that have enabled us to capture more safety data than ever before. More data means we're identifying more incursions—even ones that pose no risk of collision.
- So we're documenting more incursions because we're counting more things and capturing more data.
- This is a good thing—we're in a better position to nip potentially serious problems in the bud.

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[1] This is below the FAA's performance limit of .395 incursions per million operations.

This proactive, data-driven, risk-based approach is working—take for example our efforts to reduce safety risk associated with converging runway operations.

- This includes those operations with non-intersecting runways with intersecting flight paths.
- Our safety data showed that there was a higher risk when aircraft execute a go around that conflicted with another aircraft departing from a non-intersecting runway, creating the potential for collision.
- To address the problem, we worked with our stakeholders, and put in place policy changes and new automation tools at 140 airports where this risk was identified. This was one of the most significant reductions in safety risk we've made over the past decade.

And we're making many other efforts, both using technology and partnerships with airports.

First, Technology. . .

We're deploying a program called Runway Status Lights, or RWSL.

- RWSLs are a series of red lights embedded in the runway pavement.
- These lights provide a visual signal to pilots and vehicle operators indicating that it is unsafe to enter, cross, or begin takeoff on a runway.
- We've deployed RWSL at 8 airports, including Orlando, Washington Dulles, Phoenix, Houston, Minneapolis, Seattle, Las Vegas, and Charlotte . . . and we plan to deploy it at a total of 17 airports by 2017.

We are also working together with airports and port authorities to implement another technology—ADS–B Out Vehicle Squitters.

- These units are installed on ground vehicles, including fire trucks and snow plows.
- Like the transponder on an aircraft, these units allow the control tower and the airport operations center to see the ground vehicle's position.
- With a tablet computer, the ground vehicle operators can see their own position as well.
- This capability helps to ensure the safety of the vehicle operator and the aircraft on the airport surface.

Second, Collaboration. . .

The FAA is working collaboratively with airports and the aviation community to address runway safety risk.

- For example, we teamed up with the Aircraft Owners and Pilots Association to create an online runway safety training course for General Aviation pilots.
- The course helps pilots see the potential factors that could lead to a runway incursion, and how to prevent it.
- Since the launch in 2009, there have been nearly 61,000 completions of the course . . . and next month, we expect the new, updated course to be available.

The FAA also requires a Runway Safety Action Team (RSAT) meeting at each towered airport once a year.

- These teams include air traffic personnel, the airport operator, and often other stakeholders like pilot groups.
- The team identifies potential problem areas on the airport surface and takes specific actions to mitigate the risk. These actions could include: enhancing surface markings and signage . . . vehicle driver training programs . . . and pilot education and awareness.

Looking ahead, the FAA's Airports office is starting a new 15-year initiative to improve taxiway geometry to reduce the likelihood of runway incursions.

- Through our safety data analysis, we've identified specific intersections at airports around the country where there is some safety risk associated with the geometry—it could be something with the angle or number of taxiways intersecting the runway at a specific location . . . a direct access from a ramp onto a runway . . . or because the width of the pavement causes the signs to be far away . . . or other things like this.

- We want to address these "hotspots" before it can result in an incident or accident.
- For corrective actions, we'll use a risk-based decision making approach—we will prioritize the locations based on the frequency of the incursions taking place . . . the number of operations at that airport . . . and the type of geometry causing the most issues.
- In 2015, we'll begin reaching out to the airport community and work with them to determine corrective options and recommend improvements.

Runway Excursions. . .

We're taking specific steps to address runway excursions as well.

- Of course, this is when a departing or landing aircraft veers off or overruns the runway surface.
- Runway excursions are the most common runway accidents to occur and account for the majority of runway fatalities.
- The number of excursions has not decreased in more than 20 years, according to the International Civil Aviation Organization.
- Just like with incursions . . . and just like with all aviation safety problems . . . we want to know the root causes, so we can mitigate the risk.

We're actively working to improve runway safety areas, so that they conform to a standard length, which is 1,000 feet from the runway end at larger airports.

- In some places, however, this is not practical because of lack of land or other obstruction.
- So we're employing other options. *EMAS* is one alternative—it stands for *Engineered Material Arresting System.*
- The FAA has obligated funds to put EMAS in at some airports.
- EMAS uses crushable material placed at the end of a runway to stop an aircraft that overruns the runway.
- Currently, EMAS is installed at 83 runway ends at 53 airports . . . and we're continuing the deployment at additional airports.
- To date, EMAS has safely stopped nine overrunning aircraft with a total of 243 crew and passengers aboard those flights.

These are just a few of the many efforts the FAA is making to ensure runway safety.

In closing. . .

- Just as we've made midair collisions almost nonexistent . . . and just as we've driven down the rate of commercial airline accidents and fatalities . . . we have to continue to take the next big leap in safety.
- The FAA is taking aim at runway safety problems . . . and we're doing it through a proactive data-driven, risk-based approach.
- In doing so, we'll continue to maintain a very safe aerospace system.

DRAFT—NOT FOR RELEASE **3/13/2015 10:34 AM**

Mike Whitaker
Equip 2020 meeting
Portals 3 Room
March 18, 2015

Reviewed by: Bruce DeCleene, James Marks

Thanks Hoot. I'm glad to be here.

- At the FAA's Call to Action in October, many arrived with great concerns and individual interests.
- But we've been able to come together—operators, industry, and government—to identify and resolve barriers to the equipage of ADS–B Out.
- We're making great progress.

In general aviation, we are seeing a marked uptick in equipage

- More than 3,500 GA aircraft [1] have equipped since October: A more than 50 percent spike.
- I want to thank the GA Working Group for their efforts to address the cost concerns voiced by GA pilots and operators.
- Competition amongst avionics manufacturers has led to a dramatic cost reduction in equipage—over a 50 percent price drop since October.
- Several sources now exist for units at prices lower than $2,000.[2]

We're making progress on airline equipage.

- Four airlines publicly declared they will meet the 2020 deadline—Delta . . . American . . . Jet Blue . . . and FedEx (At the Feb. 26th NAC meeting).
- I want to commend the work done by the GPS Receiver Working Group.
  - You reached an agreement that allows air carriers with first and second generation receivers (*e.g.,* SA aware) to continue to use them until 2025, recognizing their dedication in adopting early and it provides time to upgrade to the best available receiver technology.
  - It also recognizes that we want to reward—not punish—early adopters of technology. We want to ensure earlier equippers have flexibility in compliance with final standards.
  - This has been an unresolved issue for three years . . . but after the Call to Action, we got an agreement in about 60 days. It's a good example of what can be accomplished when experts work together as a team.

I want to credit Equip 2020 for developing an equipage tracking database.

- With this effort, you'll be able to capture data from suppliers (the solutions and products they're offering) . . . and you'll be able capture data from the air carriers (what are they buying?, when are they buying it?, etc.)[3].
- With this information, you'll be able to track the equipage trends . . . specifically, by comparing supplier plans with air carrier plans and spot potential risks to achieving equipage compliance by the deadline.
- This way, we'll know if we're on track for 2020 . . . and if not, redouble our efforts accordingly.

I also want to credit the Education and Information Working Group for developing a strategic communications plan to encourage equipage.

- It's especially important for the GA community. We need to let them know what the benefits of equipage are, what the options are, etc.
- The FAA Safety Teams are a key part of the FAA's outreach to the GA folks. They will continue to provide aircraft owners and operators with ADS–B equipage information.
- We must continue to reach out to GA at key venues like AirVenture, as we did last year.

Equip 2020 has accomplished a lot in just 4 ½ months. And there's still much more to do.

- There will be another month of hard work as you continue to establish agreements and build the specific plans.
- Then, I understand you'll be shifting to bi-monthly or quarterly meetings to assess progress and make any necessary changes.
- I look forward to staying in close touch to see the great results in the months ahead.

Closing.

- Again, I want to thank everyone for your efforts and teamwork.

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[1] James Marks, Aviation Safety Inspector, ADS–B/EFVS/TCAS, Flight Standards Service, Avionics Branch (AFS–360), March 6, 2015.

[2] In February, the FAA also published a technical correction to the rule to address concerns from the experimental aircraft community. Experimental aircraft are not certified by the FAA, but we had inadvertently implied that their ADS–B equipment had to be certified. Manufacturers have already announced solutions for this market for under $1000 (Source: Bruce DeCleene, February 17, 2015).

[3] The supplier database will include info on all aircraft types (air carrier, GA). The carrier database will only include air carriers, as it is not possible to acquire info from every GA operator. (Bruce DeCleene, Feb. 17, 2015).

- We're developing solutions for tough problems.
- When all said and done, everyone here will have a lot to be proud of.

DRAFT—NOT FOR RELEASE 3/13/2015 3:37 PM

Mike Whitaker
Jeppesen CONNECT
March 17, 2015

Reviewed by: Mary Lou Pickel, Jesse Wijntjes, Jim Robb, Erik Amend, Jim Linney, Brian Hint, Lynn Ray, Lisa Zagaroli, Steve Bradford

As you know, NextGen is the FAA's plan to modernize the U.S. airspace system.

- We're moving from a radar-based system to a satellite-based system to control air traffic.
- We're moving from largely voice communications, to less error-prone digital communications. We're adding new tools that give pilots, controllers and other users more information at the right time.
- NextGen provides greater efficiency and predictability to our system. It will enhance safety, and help us be greener by reducing fuel consumption and emissions.
- NextGen is happening now. It's being integrated into the airspace system every day.

NextGen's Foundation

- We're on the verge of finalizing automation upgrades at 20 planned en route centers.
- We're in full production mode with automation upgrades in our terminal facilities.
  - With these new systems, we can process more flight data, more efficiently, from more sensors.
  - All of this leads to improved efficiency for the entire airspace and gives us the foundation to employ other NextGen tools that track aircraft much more precisely than radar—like ADS–B.
- Last year, we completed the installation of 634 radios that make up the ground infrastructure for ADS–B—which enables more efficient separation of aircraft . . . and provides coverage in the mountains and over water.
- SWIM provides airspace users with a one-stop shop for real-time data products, including weather and air traffic information.
  - SWIM includes more than 60 information products that the FAA makes available to the airlines, the Department of Defense, and air traffic facilities . . . and we expect to have about 115 products by the end of the year.
  - Last year, we completed feasibility demonstrations with Virgin America and United Airlines to enable airborne access to SWIM products through Electronic Flight Bags (EFBs [1]), to provide air crews with the same information available to air traffic controllers (info on weather, NOTAMS about runway closures or procedural changes at the airport). This year, we are continuing to expand on the concept by demonstrating improved collaboration through bi-directional information exchange between aircraft and SWIM. Pilots can submit information including about turbulence, temperature, and wind, to their dispatchers and they can come up with flight preferences that they can submit to air traffic for clearance through voice or data communications.

NextGen's Capabilities—these are like apps that we can run on this foundation.

Navigation (PBN)

- We have implemented more than 7,000 performance-based procedures and routes around the nation, which exceeds the number of traditional procedures. These procedures enable more direct routes . . . cut flight time . . . cut fuel burn and emissions . . . and improve access to airports.

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[1] This can be on the cockpit display or through commercial off the shelf products like iPad or other smart tablets.

- The FAA's Metroplex program is a way to target the benefits of PBN in busy metro areas.
- This past year, we implemented scores of new satellite-based procedures in the Houston, North Texas and Washington DC metro areas.
- These procedures include ones that enable planes to climb and descend without leveling off, reducing fuel usage and emissions.
- In Houston, where we put in place 61 new satellite-based procedures, post-implementation data analysis shows an annual savings of $6 million from reduced fuel consumption.
- We're in the process of conducting post analysis in North Texas, where we put in place 80 satellite-based procedures.
- For the Washington DC metroplex, we will implement a total of 49 new satellite-based procedures by June 25 . . . and we project that airspace users will annually save 2.5 million gallons of fuel . . . $6.4 million in fuel costs . . . and a reduction of 25,000 metric tons of carbon dioxide.

Communications (Data Comm)

- Through Data Communications, controllers and pilots will be able to communicate by exchanging digital messages, to supplement current voice communication.
- We have trials underway at two U.S. airports (Memphis and Newark) to test Data Comm's departure clearance capability.
- Each site is using Data Comm, 24/7, to conduct as many as 80 operations a day.
- Our airline partners include United, FedEx, UPS, British Airways, Lufthansa, and Scandinavian Airlines.
- In these trials, we're seeing reduced communications time, resulting in faster taxi outs, reduced delays, and reduced pilot and controller workload.
- When fully implemented, Data Comm will enable more dynamic rerouting, both in the pre-departure and airborne phases of flight.
- Our plan is to deploy Data Comm's tower services at Salt Lake airport and Houston's Bush and Hobby airports this year, and at 53 more airports in 2016. This schedule represents an acceleration of our plans to deploy this service into the national airspace system.
- We plan to deploy Data Comm's en route services starting in 2019.
- On February 25th, the FAA made an adjustment to its 2008 flight recorder improvement rule that should help facilitate aircraft equipage of Data Comm.
- The application of the data link recording rule was confusing and inconsistent for older aircraft. Also, the cost of equipping older aircraft with data link recording as part of Data Comm was reducing industry participation.
- The new policy applies the recorder rule only to new aircraft, manufactured after the effective date of the rule (2010 for air carriers), and to those aircraft which did not have any data link solutions available before the effective date.
- This new policy will allow the rule to be applied in a consistent and predictable manner, and it enables thousands of older aircraft to affordably access the safety and efficiency benefits of data communications.

In NextGen, we're concentrating our efforts on four priorities in the next one to three years.

- 1.) increasing the availability and use of Performance Based Navigation,
- 2.) making multiple runway operations more efficient,
- 3.) improving surface operations, and
- 4.) implementing Data Communications.
- We believe, and the aviation industry agrees, that progress in these areas can benefit all of us in the near term.
- This past October, we submitted a plan to Congress with specific commitments, including locations and dates, to deliver capabilities in these four areas.

Integrated System (by 2025)

The systems we're putting in place are enabling a more networked airspace system, in which information is more easily shared between air traffic facilities and with airspace users, enabling greater flexibility and collaboration.

- For instance, because of ERAM, en route centers will have the same access to all flight plans filed in the system. So instead of one en route center telling the next en route center that an aircraft is on its way, air traffic controllers will already have better knowledge of what to expect, which will enable them to make decisions to optimize performance.
- In the future, we're also moving our voice system and our radar surveillance sensors onto a communications network. So if one facility has an outage, other facilities can pick up and manage their air traffic in a timelier manner.

4D Trajectory (4DT) is what the future looks like and where NextGen is leading us.

- With 4DT, we'll have a more precise description of the aircraft path (latitude, longitude, altitude, and time).
- Under this concept, the airspace user submits a plan to fly a preferred route. Air Traffic can check it against the current constraints of the system, and then issue a clearance. Air Traffic may provide a required time of arrival—(*i.e.,* the aircraft will be obliged to reach certain points at defined times.)
- Through SWIM, everyone will have a common set of information and therefore common situational awareness (about weather, runway construction, ground delays/stops, altitude restrictions, speed restrictions, etc.). With common information, air traffic and airspace users can negotiate preferences digitally through a pilot's iPad or smart tablet, and come up with the most efficient, deconflicted reroutes around bad weather, all before the controller issues the final clearance (which they can do through Data Comm, enabling more efficiency.)
- This kind of trajectory management will allow the aircraft to move at its maximum performance, making air traffic operations more efficient and increase overall predictability of the air traffic system.

In this future state, we will be able to apply these same capabilities for larger unmanned aircraft, as they will be sharing the same airspace as the passenger planes.

For now, we're taking steps to integrate small unmanned aircraft into the airspace system.

- This is an exciting new technology with wide-ranging applications from aerial photography . . . crop monitoring . . . moviemaking . . . search and rescue . . . and many more.
- On February 15, we proposed new rules permitting the use of small unmanned aircraft—those that weigh less than 55 pounds—for non-recreational purposes. These rules are now available for public comment.
- The rule limits small UAS to daylight flights and requires the operator to maintain visual line of site. The rule also proposes qualifications that an operator would need to fly a small UAS, and proposes operating limits to minimize risks to other aircraft and people and property on the ground.
- Before we can permit a wider level of integration, we still have to answer additional questions, including those related to system safety, command and control link, and "sense and avoid" capability.
- We'll be able to answer these questions from ongoing research being done by the FAA, NASA, the Department of Defense, and six FAA-approved test sites around the country[2].

Unknowns?

DRAFT—NOT FOR RELEASE 3/18/2015 3:13 PM

Mike Whitaker
MITRE AAC meeting
March 20, 2015

Reviewed by: Mark House, Bob Schramm, Mary Lou Pickel, Erik Amend, Lynn Ray, Jesse Wijntjes, Raquel Girvin, Pamela Gomez, Lorne Cass

[2] The University of Alaska-Fairbanks, the State of Nevada, New York's Griffiss International Airport, the North Dakota Department of Commerce, Texas A&M University-Corpus Christi, and Virginia Tech.

Thank you, Jane [*Garvey*]. It's good to be here.

- The FAA continues to believe strongly in the importance of collaboration with the aviation community, including labor, industry and international partners.
- We all have a stake in maintaining a 21st century airspace system . . . and we need to continue to work together—whether it be on NextGen priorities . . . establishing a consensus on the services FAA should provide . . . and continuing to foster America's leadership in global aviation.
- Today, I'd like to update you on four fronts: NextGen . . . small UAS rule . . . the FAA's Reauthorization . . . and our Budget.

NextGen's Foundation/Equipage.

- We're on the verge of finalizing automation upgrades at 20 planned en route centers. This is one of the biggest technological transformations in the agency's history.
- We're in full production mode with automation upgrades in our terminal facilities.
- As you know, last year, we completed the ground infrastructure for ADS–B. We're working through Equip 2020 to accomplish more rapid equipage of ADS–B Out (consistent with one of MITRE's recommendations from their NextGen assessment report last year).
  - We've seen a more than 50 percent spike in GA aircraft that have equipped since the FAA's Call to Action in October. More significantly, we've seen a 50 percent price drop since then—Several sources now exist for units at prices lower than $2,000.[1]
- Four airlines have publicly declared they will meet the 2020 deadline—Delta . . . American . . . Jet Blue . . . and FedEx (At the Feb. NAC meeting). We've reached an agreement to allow air carriers with first and second generation receivers (*e.g.,* SA aware) to continue to use them until 2025, recognizing their dedication in adopting early and it provides time to upgrade to the best available receiver technology.

For NextGen, we submitted a plan to Congress this past October, outlining specific commitments in four key priority areas:

- 1.) increasing the availability and use of Performance Based Navigation,
- 2.) making multiple runway operations more efficient,
- 3.) improving surface operations, and
- 4.) implementing Data Communications.

Since the plan was submitted, we've made a lot of progress.

In the PBN area:

- This past year, as part of the FAA's Metroplex program, we implemented scores of new satellite-based procedures in the Houston and North Texas metropolitan areas.
- In Houston, where we put in place 61 new satellite-based procedures, post-implementation data analysis shows an annual savings of $6 million from reduced fuel consumption.
- We're in the process of conducting post analysis in North Texas, where we put in place 80 satellite-based procedures.
- For the Washington DC metroplex, we will implement a total of 49 new satellite-based procedures by June 25 . . . and we project that airspace users will annually save 2.5 million gallons of fuel . . . $6.4 million in fuel costs . . . and a reduction of 25,000 metric tons of carbon dioxide.

In the Multiple Runway area:

- We completed Wake RECAT in Houston in December . . . and in the New York area, just this month.
- We're seeing great results in Atlanta. The FAA has improved the arrival rate at Atlanta by approximately five percent by using Wake RECAT.

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[1] In February, the FAA also published a technical correction to the rule to address concerns from the experimental aircraft community. Experimental aircraft are not certified by the FAA, but we had inadvertently implied that their ADS–B equipment had to be certified. Manufacturers have already announced solutions for this market for under $1000 (Source: Bruce DeCleene, February 17, 2015).

- These results are having a tremendous impact and increasing our stakeholder confidence in NextGen.

In the Surface area:

- We are working to increase predictability and provide actionable and measurable surface efficiency improvements by sharing more data with air traffic facilities.
- This effort includes expanding the deployment of the SWIM Surface Visualization Tool (SVT), which is giving TRACON controllers a visual depiction of the surface activity at airports equipped with ASDE–X. This month, we'll complete the deployment of this tool at eight TRACONS, plus the Command Center.[2]
- At the February NAC meeting, the FAA announced it will deploy Advanced Electronic Flight Strips (AEFS) at Newark Tower in 2016. AEFS replaces paper flight strips, reducing controller workload, and improving taxi-out and departure clearance times.

In the Data Comm area:

- Our plan is to deploy Data Comm's tower services at Salt Lake airport and Houston's Bush and Hobby airports this year, and at 53 more airports in 2016. This schedule represents an acceleration of our plans to deploy this service into the national airspace system.
- We completed a final investment decision for initial en-route services for Data Comm . . . and we plan to deploy these services at en route facilities starting in 2019.
- On February 25th, the FAA made an adjustment to its 2008 flight recorder improvement rule that should help facilitate aircraft equipage of Data Comm.
- The application of the data link recording rule was confusing and inconsistent for older aircraft. Also, the cost of equipping older aircraft with data link recording as part of Data Comm was reducing industry participation.
- The new policy applies the recorder rule only to new aircraft, manufactured after the effective date of the rule (2010 for air carriers), and to those aircraft which did not have any data link solutions available before the effective date.
- This new policy will allow the rule to be applied in a consistent and predictable manner, and it enables thousands of older aircraft to affordably access the safety and efficiency benefits of data communications.

FAA will need MITRE's help in continuing to assess the performance impacts these priorities are having in the airspace system.

- This analysis helps us document benefits and give the user community continued confidence in the success of NextGen.

We're taking steps to integrate small unmanned aircraft into the airspace system.

- On February 15, we proposed a new rule permitting the use of small unmanned aircraft—those that weigh less than 55 pounds—for non-recreational purposes. These rules are now available for public comment.
- The rule allows small UAS during daylight and requires the operator to maintain visual line of site. Rather than requiring a private pilot's license, we propose that operators obtain a newly created FAA unmanned aircraft operator's certificate by passing a knowledge test focusing on the rules of the air. The operator must renew their certificate every two years by passing a written proficiency test. The rule also proposes operating limits to minimize risks to other aircraft and people and property on the ground.
- Before we can permit a wider level of integration, we still have to answer additional questions, including those related to system safety, command and control link, and "detect and avoid" capability.
- We'll be able to answer these questions from ongoing research being done by the FAA, NASA, the Department of Defense, and six FAA-approved test sites around the country[3].

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[2] SoCal, NoCal, Houston, Louisville, Boston, New York, Chicago, Potomac, plus the FAA Command Center

[3] The University of Alaska-Fairbanks, the State of Nevada, New York's Griffiss International Airport, the North Dakota Department of Commerce, Texas A&M University-Corpus Christi, and Virginia Tech.

Reauthorization

- The FAA's current authorization expires on September 30, 2015.
- We have a joint responsibility—government and industry—to pull together to create the air traffic system that will carry this Nation well into the 21st century.
- The United States stands as a leader in aviation internationally, and we intend to remain the gold standard. We are truly unique in that we have the most diverse aviation community, which includes new users like unmanned aircraft and commercial space vehicles.
- Domestically, the FAA faces several challenges:
  - Competing priorities among our stakeholders—one of the byproducts of a healthy, diverse system.
  - Having to navigate a constrained fiscal environment in recent years, with nearly two dozen short term extensions prior to our 2012 reauthorization.
- To maintain our global leadership and to continue to reap the economic benefits of the aviation industry, we should use the upcoming reauthorization to provide the FAA with the tools necessary to meet the pressing demands of the future:
  - Stable funding for core air traffic control operations, NextGen investments, and efficient recapitalization and right-sizing of aging facilities.
  - Flexibility to prioritize resources and leverage new technology to respond nimbly to evolving challenges.
- Success will require compromise and setting aside many of the differences between different sectors and stakeholders.

To that end, the Administration has developed a set of principles that we believe will improve our Nation's airspace system and set the course for future progress:

- Reauthorization should maintain our excellent safety record and foster the use of data and analysis to focus our precious resources on the areas of highest risk in our aviation system.
- We must continue the modernization of our air traffic control system. Part of that effort is to ensure stable funding for core operations and NextGen investments.
- We should secure appropriate funding for our Nation's airports.
- Reauthorization should enable the integration of new users into our airspace system and support the agency in fostering a culture of innovation and efficiency.
- The FAA also needs to realign today's airspace system with current demands (*i.e.* rightsizing/more efficient, streamlined services). We need the flexibility to make investment choices that further the health of our airspace system so everyone can benefit.
- And we need to maintain our position of aviation leadership on the world stage. This means the FAA needs to remain at the table to shape and harmonize international aviation standards that promote seamless travel around the world.
- The Administration looks forward to working with Congress on FAA's reauthorization.

IF ASKED About Governance Changes:

- There have been conversations on alternative models for FAA governance by some stakeholders and in Congress. The Secretary and the Administrator have expressed openness to taking part in these conversations.
- We need to be sure that any governance changes would work to solve the challenges FAA faces.
- Any movement away from the present model needs to ensure more direct accountability to users of the National Airspace System (NAS) and be mindful of the linkage and integration of safety, NextGen, airport infrastructure, and other functions.
- We need to get to a place that best positions us to advance safety improvements, make the national airspace system more efficient, improve service for air travelers and other stakeholders, and enhance America's leadership in aviation.
- Proposed solutions will need to ensure that we make improvements in all aspects of FAA's mission and that any change does not set us back in the progress that we have made.

Budget

- The FAA's total FY 2016 budget request of $15.83 billion will support our ongoing mission and a continued, but measured, transition to the future.
- This budget request supports today's infrastructure while deploying key NextGen benefits to our stakeholders and upholding our critical safety programs. This budget enables us to continue supporting the Nation's airports . . . and to safely integrate unmanned aircraft systems and commercial space launches into the airspace system.
- The FY 2016 request includes $2.85 billion for Facilities & Equipment and restores the program to a healthier, more balanced level after the major sequester reductions in FY 2013 that were then continued in FY 2014 and FY 2015. The $255 million (nearly 10 percent) increase provides funding for the four near-term NextGen priorities, maintenance of the existing infrastructure, as well as forward movement on unmanned aircraft systems and commercial space transportation.
- The FY 2016 Research, Engineering & Development budget request of $166 million is a $9.3 million (6 percent) increase over the FY 2015 enacted level. This request supports our continued efforts to make aviation more fuel efficient and greener . . . and conduct necessary research on unmanned aircraft integration and commercial space transportation.
- The FY 2016 budget includes a total of $956 million for NextGen. This funding will enable our continued commitment to deploying performance-based navigation capabilities . . . continue the integration of ADS–B applications . . . and deploy Data Communications, among other investments.

In closing . .

- Let me reiterate that we're making very good progress with NextGen.
- We value our partnership with MITRE. We look forward to continuing that relationship. . .and we look forward to working with the aviation community in the months and years ahead.

FINAL 3/24/2015 4:00 PM

Mike Whitaker
Senior Executive Service Video Teleconference
Washington, DC
March 25, 2015

Thank you, Michael. I'm glad to be here.

As you said, NextGen implementation is one of our top priorities as an agency. And thanks to the hard work of our team, and a successful collaboration with industry, we're successfully delivering the benefits of it—today.

So, I'd like to give everyone a few quick updates on where some of our most important initiatives stand.

ERAM

- We've made tremendous progress with transitioning our air traffic automation platform over to ERAM, which represents one of the largest technology upgrades the FAA has ever undertaken.
- ERAM is the backbone of our airspace system—processing flight and radar data, providing communications, and generating data for controllers' screens.
- By enabling a more networked airspace system, ERAM will allow us to move more air traffic more efficiently.
  - We'll know when aircraft are approaching, where they're going, and where bottlenecks are likely to develop due to congestion or bad weather.
  - This will help air traffic controllers safely space aircraft and reroute them quickly when needed.
- We're on the verge of completing the transition to ERAM at 20 U.S. en route centers.
  - Atlanta declared Operational Readiness earlier this month. And by the end of March, our last two centers in New York and metro D.C. will operate on ERAM and be turning off the old HOST system.
- ERAM will also allow us to continue implementing other NextGen technologies.
- We'll begin initial integration testing with ERAM to deploy DataComm at select airports this summer.

- This will help us replace the labor-intensive voice communications between pilots and controllers with direct digital communications.
- ERAM will also help us continue making progress with our transition to ADS–B.

ADS–B Equipage

- Automatic Dependent Surveillance Broadcast is one of the most important foundational technologies of NextGen—moving us from a ground-based radar navigation system to a more accurate, satellite-based system.
- ADS–B will allow aircraft to fly more directly from point A to point B, saving time, money, and fuel burn. We can also use it on the ground to monitor airport traffic, reducing the risk of runway incursions—and increasing safety.
- Needless to say, this is groundbreaking technology—which is why we're working to make sure all of the users in our airspace are equipped and ready to use it as soon as possible.
- We've set a deadline that mandates all aircraft flying in certain controlled airspace must be equipped with ADS–B Out by January 1, 2020.
- And we've been working closely with all of our industry stakeholders to stay on track for meeting that deadline.
  - Four airlines have publicly declared that they'll be fully equipped by 2020—Delta, American, jetBlue, and FedEx.
- Our Equip 2020 team also reached an agreement that allows air carriers with first and second generation receivers to continue using them until 2025—ensuring we don't punish early adopters of new technologies.
- We're seeing positive trends in general aviation, as well.
  - More than 3,500 GA aircraft have equipped in the last six months—a more than 50 percent spike.
  - And competition between avionics manufacturers has led to a dramatic reduction in the cost of ADS–B equipment. There are now units available for less than $2,000 that comply with the rule—so we hope to see those GA equipage rates continue to rise.

All of these developments show that the FAA is making good progress on its promise to deliver real-world NextGen benefits—making air travel safer and more efficient for all users.

And I once again applaud our team for all they've done to make that happen.

Back to you, Michael.

FINAL 4/13/2015 5:00 PM

Mike Whitaker
InfoShare Pittsburgh, PA
April 14, 2015

Thank you for the introduction, Warren [*Randolph, FAA's Manager of Integrated Safety Teams*].

It's great to be here with all of you today—and it's great to see how this conference has grown in the last six years. InfoShare started as a small gathering of nearly a hundred attendees. This year, more than 800 have registered. I think that deserves a round of applause.

All of us are here today because safety is our number one priority, and we believe in collaborating and sharing data to reduce risk and enhance safety.

Thanks to the work of the Commercial Aviation Safety Team and the Aviation Safety Information Analysis and Sharing program, we have unprecedented insight into how our system is running. By leveraging data from across the industry, we can connect the dots to identify patterns we otherwise might not see.

Let me give you an example of the importance of sharing data.

Last year, an airline identified an issue involving an incorrect takeoff configuration setting through its voluntary safety program. The airline shared that knowledge with ASIAS to determine if it was a unique occurrence, or had been seen by other carriers. ASIAS was able to analyze a larger pool of data and find that, while infrequent, other airlines had experienced similar issues. Working closely with industry partners, CAST initiated a study to identify contributing factors. In the interim, we issued a Safety Alert for Operators to let them know about this potential problem. When the study is completed, CAST will adopt mitigations, as needed, to address the issue moving forward.

In another instance, operators here at InfoShare alerted us to potential risks involving RNAV departures. After analyzing this information in ASIAS, we were able to identify opportunities to improve how we design these procedures, as well as potential enhancements to pilot and controller training.

The fact is, solid data is the foundation for making good decisions. Now, with 45 carriers covering 99 percent of U.S. passenger operations feeding information into ASIAS, the data we're getting is better than ever. It's helping us keep commercial aviation *safer* than ever.

But, as all of us in the safety business know, our work is never done. We must continue building on our momentum as we look to improve aviation's safety culture.

Reaching the next level of safety is already a priority for many airlines, and I commend them for taking the lead on implementing Safety Management Systems, or SMS. SMS helps to minimize aviation risk. In fact, more than half of the presentations at InfoShare have come from these voluntary safety programs.

I'm pleased to report that, because of the success of these programs, the FAA has codified what has become industry practice in many cases—issuing a final rule requiring most U.S. commercial carriers to have Safety Management Systems in place by 2018.

At the FAA, we are committed to embedding risk-based decision-making into our culture. We know that it's not enough to analyze data from an accident after it happens. We need to analyze data from the entire spectrum of our operations. This will help us identify areas of risk and mitigate them *before* an incident occurs.

To be successful in this effort, we must continue our work together. That's why your participation in forums like InfoShare is critical. We need government and industry to continue to have an ongoing conversation that includes sharing data, ideas, and best practices. That's how we've built the best aviation system in the world. And as we look to tackle the challenges we'll face in the years ahead, our partnerships will be more important than ever.

I'm sure the next few days of presentations will be informative. There's so much we can learn from each other. With all of us sharing the same bedrock commitment to safety and finding ways to improve, I know there's so much more we can—and will—accomplish.

Thank you.

FINAL 4/22/2015 12:00 PM

Mike Whitaker
Sun 'n Fun "Meet the FAA" Session
Lakeland, FL
April 23, 2015

Thank you for that introduction, Dennis [*Roberts, Regional Administrator for the Southern Region*]. Congratulations on your new position.

Hello, everyone. It's great to be back with you at Sun 'n Fun. I'm particularly excited this year to be speaking with you, not only as the Deputy Administrator for the FAA, but also as a new pilot.

Earning my pilot certificate last year gave me a whole new appreciation and love for general aviation. For seven months, I spent much of my free time studying and flying a Cessna 172 out of Freeway Airport located between Washington, D.C. and Annapolis, Maryland.

Being a pilot is giving me a better perspective on our work at the FAA. Today, I'd like to talk about this and share a story with you about how one of my experiences in the cockpit gave me an opportunity to apply firsthand some of our new technologies and best practices.

During my training, I set out to do one of my night flights with my instructor. We were only in the air for a few minutes when the sky lit up with lightning. Baltimore Tower contacted us to let us know that weather was ahead, but that they could re-route us directly through to our destination in Lancaster, Pennsylvania.

I was tempted to do just that. But, because we were flying in a plane equipped with ADS–B weather capabilities in the cockpit, I was able to pull up a picture and see just how big the storm was.

Because of ADS–B, I made the call to turn around and try again another night. I can't stress enough how valuable that kind of situational awareness is. And it's available now to all general aviation pilots who get equipped.

ADS–B brings free weather and traffic updates from coast to coast directly to the cockpit. This means you're getting the most up-to-date information on hazardous weather, temporary flight restrictions, and notices to airmen when you need it most.

Additionally, ADS–B's satellite-based technology helps controllers determine your aircraft's location with far greater accuracy. So if you operate in remote areas where radar coverage is limited, like Alaska or the Gulf of Mexico, ADS–B will make flying safer. If you run into trouble, it helps us take the "search" out of search-and-rescue—a potentially life-saving benefit.

I'm sure everyone here is aware of the January 1, 2020 deadline to equip for ADS–B Out in controlled airspace. Many of you have asked about that deadline, and if it might be extended. The answer is no—the date is set—so I want to strongly encourage all of you to make plans to get equipped as soon as possible. You don't want to end up grounded in the early months of 2020 because of a parts or installation delay.

I've been so pleased to see a number of avionics manufacturers stepping up to produce equipment that complies with the ADS–B Out mandate. A great result of this increased competition is that it has driven costs down considerably. Some units are now available for less than $2,000.

If you haven't researched getting ADS–B equipment for a while, now is a great time to take a second look. In fact, you can even talk with manufacturers and check out the latest technology in the exhibitor's area right here at Sun 'n Fun.

Since our Call to Action last October, more than 8,000 GA aircraft have equipped—a really promising start. And we hope to see those equipage rates continue to rise.

Let's go back to my night flight and the benefits of having ADS–B in my plane. Because of this technology, I had a better picture of the weather front I was heading into. However, the decision about what to *do* with that information was on me. I turned to my personal minimums—the checklist of questions I ask myself before deciding to fly.

I faced a night filled with storms. And I knew that if we got delayed in Lancaster, I might not be flying back until two or three in the morning. Bad weather and potential fatigue—two items on my checklist—were immediate indications that the safe move was to turn around and head home for the night.

You might say, "Well, people tend to be very cautious when they're first learning how to fly—you'll get more comfortable." But the fact is, no matter how long you've been a pilot, it's actually a good thing to be extra vigilant—or a little "uncomfortable"—whenever you're flying.

We need to consider safety *every time* we sit in the cockpit. Being a pilot isn't a right—it's a responsibility. That means every time we take flight, we have a responsibility—to ourselves, to our families, and to the people on the ground—to make sure we're doing it safely.

It's a responsibility the FAA shares with you. We want to help you in your efforts to fly safely. That's reflected in a goal we've set to reduce the GA fatality rate by 10 percent by 2018. I'm happy to report that our efforts, along with our collaboration with the General Aviation Joint Steering Committee, are resulting in good progress toward this goal.

Another example of our efforts to support pilots in flying safely is the *"Got Weather?"* campaign we ran last year. The program reminded pilots about potential weather challenges they might face, and provided tips on how to best deal with them. The campaign reached 4.5 million people—a big success—and I want to thank all of you here today who participated in this effort.

In order for us to keep making progress on safety, we constantly need your help and engagement.

If there's one thing I've learned in the last year, it's that there's a lot more to flying than just knowing the rules and pushing buttons. It takes discipline. It requires skill. And it demands a true sense of professionalism—not the kind that comes from getting a paycheck, but from a deep, unwavering commitment to doing the right thing.

I know everyone here today shares that commitment. By working together, I know we can make general aviation safer.

So I hope that—whether you're a Master Pilot like the ones we honored earlier, or a newcomer to flying like me—you'll always embrace that feeling I mentioned earlier, of being just a little "uncomfortable" in the cockpit. It'll keep you focused, and it'll keep you safe.

As for me, I'll be putting my pilot certificate to good use this summer as I log more hours and pursue my instrument rating. Being here at Sun 'n Fun is definitely inspiring me to continue sharpening my skills so that I can keep up with all of you.

I'm going to conclude on that point. The main reason I came today is to talk with you. Before I take your questions, I'm going to ask a few of my colleagues from the FAA to come up here and join me. Thanks so much for having me, and I'm eager to hear from you.

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DRAFT—NOT FOR RELEASE 4/28/2015 5:01 PM

Mike Whitaker
Labor Management Forum
Room 9AB
April 29, 2015

Reviewed by: Raquel Girvin, Hoot Gibson, Lisa Zagaroli, Jessica Sypniewski, Mary Lou Pickel

Thanks, Michele [*Coppedge*]. I'm glad to be here.

- I want to thank everyone here for the leadership, engagement and collaboration you've all shown.
- We've made progress together on many fronts—deploying NextGen, completing the new Valuing Performance system, and many others.

Today, I'd like to talk about some of the progress we've made on NextGen since the last time we met on January 28th. Specifically, I'd like to talk about:

- ERAM
- ADS–B
- Our near-term NextGen priorities . . .
- . . . and I'd also like to talk about the FAA's Reauthorization efforts.

Last month, we finalized the deployment of ERAM at 20 en route traffic control centers across the continental United States.

- This effort was one of the largest technology changeovers in the FAA's history.
- With ERAM in place, we're able to process more air traffic data, more efficiently, from more sensors.
- En route controllers can now track 1,900 aircraft at a time, instead of the previous 1,100. And ERAM provides our en route centers with the same access to all flight plans filed in the system. Transitions between sectors and centers will be automatic, even when planes divert from their planned course.
- All of this means increased capacity and improved efficiency for the U.S. airspace system.

Tomorrow [*April 30*], we will be holding a press event at National Airport to publicize ERAM's completion.

- Transportation Secretary Foxx, Administrator Huerta, our COO Teri Bristol, and NATCA representative Julio Henriques will be speaking.
- They'll talk about what ERAM means for the traveling public, what it means for air traffic operations, and how labor-management collaboration was essential to making it a success.

Let me briefly speak about the collaboration on ERAM.

- Labor and management worked together, as part of the National User Team.
- This team ensured that controllers had early input in ERAM's development.
- Through this input, we were able to more effectively communicate to our vendor, Lockheed Martin, what improvements should be made, and just as importantly, *how* these changes should be made.
- This approach saved us millions of dollars, resulted in performance improvements for ERAM, and gave Congress and the Transportation Department more confidence in our ability to handle large-scale deployments.

ERAM is a key part of NextGen's foundation. So is ADS–B, and we're making progress there too.

- As you know, last year, we completed the nationwide deployment of 634 radios that make up the ground infrastructure for ADS–B.
- We've done our part, and we're looking to industry to do its part by equipping with ADS–B Out avionics.
- The deadline is January 1, 2020. We've been emphatic in saying publicly that this deadline is certain. It will not change.

We're currently making efforts to spur more rapid equipage of ADS–B Out.

- As you know, we held a Call to Action last October, bringing together industry, operators, and government to identify existing barriers to equipage, and find solutions.
- From that meeting, we stood up the Equip 2020 working group, a public-private partnership.
- Since the last time this forum met, the Equip 2020 group has accomplished a great deal.
- Equip 2020 worked to address the cost concerns voiced by the GA community. Competition among avionics manufacturers has led to a dramatic cost reduction in equipage—over a 50 percent price drop since October. Several companies are selling units at prices lower than $2,000.
- In support of airline equipage, the Equip 2020 team reached an agreement that *would potentially* allow air carriers with first and second generation receivers (SA aware) to continue to use these until 2025 [1]. This agreement would provide time to upgrade to the best available receiver technology.
- At the FAA's NextGen Advisory Committee meeting in February, four airlines have publicly declared they will meet the 2020 deadline—Delta . . . American . . . Jet Blue . . . and FedEx.
- These developments are very encouraging, and we look forward to seeing greater progress.

We submitted a focused NextGen plan to Congress this past October, outlining specific commitments in four key priority areas:

- 1.) increasing the availability and use of Performance Based Navigation,
- 2.) making multiple runway operations more efficient,
- 3.) improving surface operations, and
- 4.) implementing Data Communications.
- We determined these priorities, in collaboration with the aviation industry, through our NextGen Advisory Committee.
- We believe, and industry agrees, that progress in these areas can benefit all of us in the near term.
- We submitted a plan to Congress last fall outlining specific activities for these areas, which includes commitments by both the FAA and the aviation industry.
- To date, we have already met 17 milestones, and are delivering capabilities that are saving time and fuel in some of these priority areas. Some of this progress includes work done for our Metroplex initiative, and safely reducing wake turbulence separation standards at airports around the country.

We're gearing up for the FAA's Reauthorization.

- We've had to navigate a constrained fiscal environment in recent years, with nearly two dozen short term extensions prior to our 2012 reauthorization, as well as the sequester, furloughs, and a complete government shutdown.
- The FAA's current authorization expires on September 30, 2015.
- We should use the upcoming reauthorization to provide the FAA with the tools necessary to meet the pressing demands of the future. Two broad things we need are:
  - Stable funding for core air traffic control operations, NextGen investments, and efficient recapitalization of equipment and of aging facilities.
  - Flexibility to prioritize resources and leverage new technology to respond nimbly to evolving challenges.

To that end, the Administration is continuing work on a set of principles that we believe will improve our Nation's airspace system and set the course for future progress:

- Reauthorization should maintain our excellent safety record and foster the use of data and analysis to focus our precious resources on the areas of highest risk in our aviation system.
- We must continue the modernization of our air traffic control system. Part of that effort is to ensure stable funding for core operations and NextGen investments.

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[1] Bruce DeCleene stresses that you should say "potentially," because Equip 2020 does not have regulatory authority.

- We should secure appropriate funding for our Nation's airports.
- Reauthorization should enable the integration of new users into our airspace system and support the agency in fostering a culture of innovation and efficiency.
- The FAA also needs to realign today's airspace system with current demands. We need the flexibility to make investment choices that further the health of our airspace system so everyone can benefit.
- And we need to maintain our position of aviation leadership on the world stage. This means the FAA needs to participate actively in shaping international aviation standards that promote seamless travel around the world.
- We look forward to working with our stakeholders, and Congress on reauthorization.

The FAA's Management Advisory Council is working to provide us with potential recommendations as we prepare for reauthorization.

- The MAC agrees with us that there is a need for continuity of funding given the work and nature of investments made by the FAA. They are also looking at ways to further improve our processes around certification and regulatory functions, and looking at scenarios for the FAA's structure and governance (removing the Air Traffic Organization from FAA, creating a Federal Corporation incorporating a full set of functions within FAA, or no change)
- The MAC is continuing its work and we look forward to their potential recommendations.

[*If asked*]

We all know there have been conversations on alternative models for FAA governance by some stakeholders and Congress.

- The Secretary and the Administrator have expressed openness to taking part in these conversations.
- We need to be sure that any governance changes would work to solve the challenges the FAA faces.
- Any movement away from the present model needs to ensure more direct accountability to users of the National Airspace System (NAS) and be mindful of the linkage and integration of safety, NextGen, airport infrastructure, and other functions.
- We need to get to a place that best positions us to advance safety improvements, make the national airspace system more efficient, improve service for air travelers and other stakeholders, and enhance America's leadership in aviation.
- Proposed solutions will need to ensure that we make improvements in all aspects of FAA's mission and that any change does not result in unintended consequences or that sets us back in the progress that we have made. Our aviation system is too vital for our economy, our Nation's wellbeing, and our global leadership.

DRAFT 06/01/15 at 12 P.M.

Mike Whitaker
NextGen Advisory Committee
Washington, D.C.
June 05, 2015

Introduction

Thank you, Richard (Anderson, NAC Chairman). Good morning everyone. It's great to be here with you today.

This morning I want to update you on important events since we last met in February, then use some of my time for a continued discussion around PBN strategy and direction, picking up on a conversation we started in Atlanta in February.

Earlier this week we filed our Annual NextGen Update to Congress. You should have copies of that document at your place. It is designed to be a brief and readable recap of what we have achieved over the past year. Much of that focuses on the work of the NAC and what we have been able to accomplish together.

Since we met in February, our partnership has led to substantial progress with several key NextGen technologies. I'd like to take a moment to share these important milestones with you.

In April, thanks to our partners in this room, particularly NATCA, PASS and Lockheed Martin, we completed one of the most complex technological projects in agency history. ERAM is now fully operational at 20 en route centers.

As you know, ERAM is the backbone of the Nation's air traffic control system, serving as the operating platform for critical NextGen technologies such as ADS–B and Data Comm.

It enables controllers to handle more aircraft over larger sections of the sky, increasing capacity and efficiency while enhancing safety in what is already the world's safest aviation system. It is also incredibly reliable: ERAM has been running for well over 300,000 hours since December 2011 with an availability of 99.9997 percent.

Data Comm

Last month, thanks to our partners in this room—including Fed Ex, UPS, United, Harris and Thales—we celebrated successful trials of Data Comm at Memphis and Newark. We took reporters into the tower and onto flight decks of aircraft owned by FedEx, UPS and United to show them how pilots and controllers are communicating through the instant, accurate exchange of data rather than a two-way voice conversation.

Data Comm is a game-changer. Especially during bad weather. Pilots simply press "wilco" to accept re-routes, which are then immediately loaded into onboard systems and sent to their operations centers.

Judging by the coverage we received, the reporters were as impressed with this technology as we are. And Memphis and Newark are just the beginning. This summer Data Comm will be rolled out at Houston's two major airports, as well as Salt Lake City.

Next year, 53 more airports will get this revolutionary technology.

ADS–B

A couple of weeks ago—thanks to our partners in this room, including JetBlue, NATCA and PASS—we conducted a successful, live demonstration of ADS–B with a JetBlue aircraft flying far off the East Coast in airspace where radar coverage was limited. The ERAM system at New York Center seamlessly switched from traditional ground-based radar to satellite-based ADS–B, tracking the JetBlue aircraft with the pinpoint accuracy that is the hallmark of this next leap in air traffic control.

As we move toward the January 1, 2020 deadline to install ADSB-Out in all aircraft that operate in controlled airspace, we continue to work with all of you to identify and resolve barriers to equipage. We appreciate the support from AOPA and all of our other industry partners who are actively encouraging their members to take this step so we may fully realize the benefits of ADS–B.

A recent survey conducted by Embry Riddle found that about 56 percent of General Aviation aircraft owners surveyed indicated that they don't plan to install ADS–B until the price comes down. This survey of course pre-dates the 50 percent price drop we've seen for GA ADS–B products over the last several months. But this shows more than 100,000 aircraft owners are sitting on the fence.

It doesn't take a mathematician to figure out that not all of these operators will be able to wait until 2019 and still expect to get their airplanes out of the shop by the deadline. As the price of equipment has now dropped below $2000, we appreciate the push NAC members are making in support of equipage.

We are working closely with these organizations through our Equip 2020 working group and the NAC ADS–B Ad Hoc group to identify and get past any barriers standing in the way. You'll hear more about this later today.

Benefits to everyone as we continue to build the system

Overall, we're building a strong foundation for NextGen while delivering benefits to *everyone* who uses our airspace system. As many of you know, we worked with McKinsey Consulting to identify specific benefits that airlines are getting from the NextGen technologies and procedures already in place.

We found through this data-driven survey that we've already realized $1.6 billion in benefits system-wide. More than $500 million of this goes directly to aircraft operators. These benefits are being generated by improvements such as ELSO, Wake Recat, PBN routing and Time Based Flow Management.

We expect that these capabilities will continue to produce an additional $11.4 billion in benefits over the next 15 years. This is a return on investments that we've already made.

Importance of NAC partnership

You've heard me use the words "partners" and "partnership" several times already today. Without the cooperation of the people in this room, we wouldn't be anywhere close to maintaining our schedule on what we all agree is the necessary modernization of our Nation's air traffic control system.

Time and again, we have rolled up our sleeves and collaborated with labor and the aviation industry to achieve great things. Our work here on the NAC is an excellent example of what we can accomplish when government and industry partner on common goals.

The joint implementation plan we developed last year prioritized four NextGen areas where we can deliver concrete benefits over the next three years. In 2014, we collectively delivered on 19 of our commitments—three ahead of schedule. You will hear more about that in some detail today.

PBN Strategy

PBN is another area where we have worked closely with the NAC—and its predecessor—to implement satellite procedures throughout the NAS. With your help, we have so far implemented more than 7,000 satellite-based procedures in the National Airspace System. We now have more satellite-based procedures than radar-based procedures.

Last year, we successfully implemented our Houston and North Texas Metroplex plans, flipping the switch overnight on dozens of NextGen procedures in each of these busy areas. This year, we did the same thing with the Washington, D.C., and Northern California areas.

Although the vast majority of our NextGen projects have gone without a hitch, we are aware that some of them have been—and continue to be—controversial with the general public. We have done noise modeling on all of these projects. In all of them, the modeling indicates that there would be no significant noise impacts as a result of the proposed changes. Nevertheless, earlier this week the City of Phoenix filed a law suit against the FAA over the new departure procedures at that airport.

We are always striving to get better at what we do, and part of that is learning from experience. While our mandate is for safety and efficiency, we are very conscious of the noise issue as it relates to the improvements we're making for the flying public.

In the meantime, we will continue our transition from ground-based to satellite-based procedures. We began a discussion at the last NAC meeting about the future of PBN, and if and how do we get to an all-PBN NAS. A fully implemented NAS based on PBN would minimize the risks and consequences of maintaining two navigation systems—particularly as one of them is equipment-intensive and continues to become more costly and complex to keep in working order.

At the FAA we continue to look at options for our PBN strategy, looking at key navigation capabilities and operations that we'll need over the next 15 years. We want to continue to include the NAC in that conversation as we develop a roadmap for deploying and effectively using PBN in the NAS while ensuring safety and efficiency.

It's important that the FAA and industry agree on a strategy that will allow for a transition that effectively integrates PBN and related technologies and ensures that these technologies work together as a system.

Now, I'm going to hand things over to FAA PBN Program Manager Josh Gustin and FAA Flight Technologies and Procedures Division Manager Bruce DeCleene, who will share our thinking on PBN strategy.

[JOSH GUSTIN AND BRUCE DECLEENE DELIVERS REMARKS]

[YOU WRAP UP]

Thank you, Josh and Bruce.

Conclusion: Staying the course will require steady funding

Finally, a word about funding.

We remain confident that the benefits of NextGen will only increase as more capabilities come on line, but this will only happen if we can secure a continuous, reliable source of funding to deliver the next milestones.

That's where you, as members of the NextGen Advisory Committee, can help us stress the importance of keeping this vital initiative on schedule.

Over the last few years, we carved up our capital investments into increasingly smaller pieces to make them affordable after we received lower-than-planned funding from Congress. This might help with near-term budget constraints, but it makes it difficult to know when we'll achieve the anticipated benefits.

For example, Data Comm is a multi-year program with a multi-year budget. When we originally included DataComm as a NextGen priority, we planned to make a single investment decision for en route services. But when we saw the budget outlook, it was apparent that we could not predict a stable funding stream.

Last November, we had to split the en route investment into two packages, raising questions about when we will be able to complete the program. The second package is pending a firm decision later this year.

But Data Comm is just one of the four NextGen priorities we have set with industry through the NAC. So it comes down to trade-offs.

We all understand that trade-offs are a part of every budgeting process, whether it's here in the government or in your own boardrooms. Our immediate concern with NextGen is that—within our current funding environment—the trade-offs we are forced to make are cutting deeper and may require us to choose among NextGen improvements.

At the February NAC meeting in Atlanta, the FAA's Chief Financial Officer presented our five-year capital investment plan. Since that time, we received the initial Fiscal Year 2016 budget markup from the House of Representatives.

Unfortunately, that includes a capital account $355 million below our budget request—and $100 million lower than our appropriations for the current fiscal year. We are now waiting to see what happens with the Senate and conference committee.

This will obviously affect our NextGen plans. We need the support of you, our partners, to help us ensure sufficient funding.

Reauthorization

As we wait to see what happens with the budget, we're also keeping a watchful eye on the FAA's upcoming reauthorization. Our current authorization expires on Sept. 30, and we are committed to working closely with Congress to pass a long-term bill.

Although we don't know what it will exactly look like, we do know that it must embrace a few key principles, such as making it possible for us to maintain our exceptional safety record, securing appropriate funding for airports, and strengthening America's global aviation leadership.

Most notably for this group, reauthorization must enable us to continue our progress in modernizing the air traffic system.

We have all seen how sequestration and lapses in funding make it hard for us to plan and execute these critical projects. Now is the time for us to build on our momentum—not slow it down.

Thank you. That concludes the FAA report.

FINAL 6/29/2015 3:00 PM

Mike Whitaker
General Aviation Safety Summit
Washington, DC
June 30, 2015

Introduction

- Good morning, everyone. Thank you for joining us.
- We're here today to talk about general aviation safety, and how to improve it.
- Before we get into numbers and accident rates, I first want to talk a bit about responsibility.
- Everyone in this room has a role to play when it comes to improving general aviation safety.
- We also have to recognize how important education and training are.
- When a pilot's judgment, experience, or awareness fails, the result is often catastrophic, sometimes fatal, and all too often a repeat of incidents we've seen before.
- We can and must work together to address this.
- In 2009, we set a goal is to reduce the GA fatality rate by 10 percent by 2018.
- While the number of fatal GA accidents over the last decade has gone down, so have the number of total GA flight hours.
- The fatal accident rate has remained stubbornly high—and too many lives are being lost.
- Last year, 434 people were killed in 251 GA accidents. We missed our annual goal for reducing fatal accidents by nine incidents.
- We need to find new ways to move the needle.
- I know I can count on this group to help find a way to do it.

- You've dedicated time and resources to making the General Aviation Joint Steering Committee a success.
- The Committee has been instrumental in developing risk mitigations and promoting important safety technologies and best practices.
- Thanks to your efforts, we have a good foundation of accomplishments that should help us build momentum and bring the GA fatal accident rate down in the years to come.

Making Safety Enhancements

- The GA Joint Steering Committee has been instrumental in promoting important safety technologies and best practices.
- You designed and implemented a campaign to educate pilots about the safety benefits of Angle of Attack indicators, which can help prevent stalls by providing more reliable information about airflow over the wing of an aircraft.
- These campaign materials, along with accident case studies on Loss of Control and AOPA's online education course on AOA, have been viewed by more than 50,000 pilots. That's a big accomplishment.
- You've also done important work to raise awareness about the effects different medications can have on pilots when they fly.
- The FAA has issued recommendations and guidance on the appropriate use of medications while flying in order to ensure pilots remain alert and capable in the cockpit.
- Thanks to your efforts, the FAA, Jeppesen, and other flight training organizations will include medication awareness training for all pilots in their curriculums.
- Medical organizations will also be encouraged to remind physicians about the importance of finding out if patients are pilots—and educating them if the medication they're prescribing could be a hazard to safe flight.

Supporting the Got Weather Campaign

- I also want to thank you for being such invaluable partners in our Got Weather campaign last year. We reached 4.5 million people.
- Got Weather reminded pilots about potential weather challenges they might face and provided tips on how to best deal with them.
- This year, we're looking to do even better on another key issue: Loss of Control.

Launching the Fly Safe Campaign

- Earlier this month, the FAA and industry launched a new national safety campaign to educate the GA community on how to avoid Loss of Control accidents. We're calling it *Fly Safe*.
- Loss of Control is the number one cause of fatal GA accidents and is on the NTSB's Most Wanted list.
- *Fly Safe* will highlight different Loss of Control causes and tips each month.
- For June, we've highlighted Angle of Attack indicators and the importance of transition training.
- Over the next year, we'll highlight:
  - The best ways to manage unexpected events, like weather;
  - Survival tips in the event of an accident;
  - Technologies like Enhanced Vision Systems;
  - And much more.
- We'll be promoting this campaign on our website and across all of our social media platforms, including Facebook, Twitter, and Instagram.
- In order to make *Fly Safe* a success, we need your help.
- The GA community looks to your organizations for guidance and best practices.
- I hope you'll work with us to promote *Fly Safe* by liking the campaign on Facebook, sharing our posts, and re-tweeting on Twitter.

Supporting Runway Safety Call to Action Initiatives

- I also want to update you on another important safety initiative the FAA is working on with industry.
- Last week, the FAA hosted a Runway Safety Call to Action that brought together a wide range of aviation partners to discuss ways to cut down on runway incursions.

- Runway incursions are a particularly serious issue for the general aviation community, and I appreciate all of you who attended and contributed.
- We received a number of useful ideas and recommendations that the FAA is going to be reviewing in the weeks and months to come.
- For example, we heard a lot about the distractions GA pilots have to deal with during take-offs and landings. So one recommendation was to create a campaign that reminds GA pilots to focus on what's happening in and around their aircraft during these critical flight moments.
- Another idea involved creating guidance that would help inform air traffic controllers if a pilot is flying into or out of an unfamiliar airport. This would give them an opportunity to offer the pilot extra instructions.
- These are just a few of the valuable suggestions we received, and I'm hopeful that they will help us reduce the number of future runway incursions in our system.
- I also hope we can count on you to work with us as we set out to review and implement these ideas.

Equipping for ADS–B

- Finally, I want to thank all of you for continuing to support our efforts to get GA pilots to equip for ADS–B Out in advance of the January 1, 2020 deadline.
- We all know ADS–B provides real safety benefits for GA pilots.
- It allows air traffic controllers to pinpoint aircraft with far greater accuracy—which is especially important in areas where radar coverage is limited, like Alaska or the Gulf of Mexico.
- ADS–B also provides free weather and traffic updates that help pilots make better-informed decisions in the cockpit.
- The FAA will continue to partner closely with all of you through our Equip 2020 working group to identify and resolve the barriers delaying pilots from getting equipped.
- Fortunately, one of the most common barriers—cost—is becoming less of an issue.
- A number of manufacturers are bringing equipment that complies with the ADS–B Out mandate to market—and this competition is driving prices down. Some units are now available for less than $2,000.
- We hope this means we'll see equipage rates continue to rise. Since our Call to Action last October, the number of equipped GA aircraft has more than doubled.

Conclusion

- Before we get to today's discussion, let me leave you with this thought.
- All of the initiatives I just mentioned are a testament to how much we can accomplish when government and industry work together.
- Summits like this one give us a unique opportunity to share ideas and find solutions that will help us achieve our common goal: making general aviation in America as safe as possible.
- I'm eager to hear from all of you—so don't hold back.

At End of Summit

- Acknowledge any action items that came out of the discussion.
- Reiterate request for support on the *Fly Safe* campaign, which will be running all year.
- Thank group for their continued partnership and efforts to improve general aviation safety.
- Challenge attendees to make more safety enhancements, consider ways to assess or measure their effectiveness, and report what findings might be available the results at the next GA Safety Summit.

DRAFT—NOT FOR RELEASE 9/14/2015 2:32 PM

Mike Whitaker
Equip 2020
September 15, 2015
Alexandra, VA

Reviewed by: Bruce DeCleene, Jessica Sypniewski, Jenny Rosenberg, Hoot Gibson

Thanks Hoot.

- Hello everyone. I'm glad to be here.
- Hoot, I want to thank you for your leadership in Equip 2020.
- Hoot was selected for a position to assist the FAA with the integration of unmanned aircraft into the airspace system.
- He'll be very busy in this new role. We look forward having him do for unmanned aircraft what he's done for ADS–B equipage.
- But we remain fully committed to continuing Equip 2020s important work. The details of the transition will be forthcoming.

Recap Equip 2020s Success.

- It's been nearly a year since the FAA held its ADS–B Call to Action.
- It rose out of a conversation with Paula Derks and Ric Peri. The goal was to bring stakeholders together to identify barriers to equipage and develop solutions.
- Equip 2020 has been instrumental in this effort.
- *I want to thank everyone here for your dedication and teamwork.*
- Of the 43 initial tasks we established, 23 are complete, and 17 are nearly complete.
- Last month, the FAA granted A4A's petition to allow air carriers with first and second generation receivers to continue to use it until 2025. This provides them with five years to transition to the best available receiver technology.
  - We're making it clear that this is not an extension. It's an acknowledgement that these operators equipped early, and we want to reward and encourage that.
  - This exemption would assure that the FAA's investment in NextGen is useable by operators and allows the FAA to maintain its NextGen schedule with no safety impact.
- This group succeeded in bringing the cost down for GA equipage. Units are now priced as low as $1,500 and there is also greater diversity of product out there. At this price, AOPA was able to promote early equipage to their members.
- Also, Equip 2020 helped developed a GA outreach plan which has worked to address the needs of aircraft owners. We have seen a very positive response to the introduction of the Google Airspace Map, which you are familiar with[1].
- We have also developed an equipage tracking database, which enables us to capture data from both suppliers and operators. This way, we can track the equipage trends and make sure we're on target for the 2020 deadline.
- So we've accomplished a lot. It's taken a lot of cooperation by both government and industry.

More work to do.

- Equipage trends still lag expectations.
- About 13,500 GA aircraft have been equipped, with about 6,300 being equipped since last fall's Call to Action[2].
- We want to accelerate these numbers.
- I've spoken to the Aircraft Electronics folks, Regional Airlines, and other groups.
- The Administrator has been to AirVenture and other places.

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[1] The FAA created a Google Earth –based application that provides an interactive 3–D map of the United States and it depicts all the commercial and private airports as well as airspace that will require ADS–B Out as of 2020. We created it in response to a GA desire to understand where ADS–B airspace exists in relation to the airports and airspace where they typically fly. Source: Scott Foose, NextGen Office, September 11, 2015.

[2] James Marks, ADS–B Focus Team Lead, AFS–360, September 9, 2015.

- We've been making it clear to both industry and Congress that the deadline is firm. It will not change.
- We're urging operators not to wait until the last minute.
- The Aircraft Electronics Association has been encouraging operators to sign up for a slot, even if they're not certain they'll equip at that time. This helps make it more real for them.
- The regional carriers are stepping up their efforts.
  - This morning, Perry Solmonson from Horizon Air will give us an update on this progress.
  - I want to thank Perry for his leadership.
  - In fact, Horizon Air has been a model for early adoption. They were one of the very first U.S. air carriers to obtain RNP operational approval and to equip with WAAS, and are now leading the way for the regional airline community on ADS–B Out equipage.
- On the international front, IATA is getting more involved now. Japan Air Lines has also expressed interest in being part of Equip 2020. We welcome participation from other international partners, and look forward to further engagement with the global community.
- I know we have to resolve other issues. The helicopter community has concerns about equipping older model aircraft.
- Groups like NBAA have raised privacy concerns.[3]
- As you know, these can be thorny issues, and it highlights the need for us to stay committed and bring forth creative solutions.

Closing

- We've accomplished a lot in less than 12 months.
- Again, I want to thank everyone here for all of your hard work and dedication and I look forward to celebrating more success in months ahead.

FINAL 10/6/2015 5:34 PM

Mike Whitaker
NextGen Advisory Committee Meeting—FAA Report
Memphis, TN
October 8, 2015

Introduction

Thank you, Richard [*Anderson, NAC Chairman*]. Good morning, everyone. It's great to be here with you today, and I look forward to updating the Committee on important events since our last meeting in June.

David [*Cunningham, FedEx Express Chief Operating Officer*], our thanks go out to you and FedEx for hosting today's event.

FedEx has been supporting our efforts to demonstrate NextGen capabilities for many years, and we value that partnership. You've been leaders in Controller Pilot Data Link Communications, and a key participant in our efforts to enable Data Comm capabilities in the NAS. Wake RECAT was also born here, as FedEx likes to say, and we are all very excited about the benefits we are seeing with it.

We also heard this morning about the benefits of low-visibility capabilities like enhanced flight vision. The FAA continues to pursue a rulemaking on Enhanced Flight Vision Systems, which will help reduce our ground infrastructure requirements and lead to lower NAS maintenance costs. In fact, NASA is hosting a workshop next week highlighting its research in this area, as well as a session on next steps for using flight vision technologies in a NextGen environment.

This type of interagency collaboration is important to the future of NextGen. That's why I'm pleased that we've added Dr. Jaiwon Shin [*JAY-won Shin*], Associate Administrator for NASA's Aeronautics Research Mission Directorate, as a new member of the NAC. Dr. Shin sends his regrets that he couldn't make today's meeting, but he looks forward to working closely with the Committee in the future.

I also want to give a warm welcome to our other new NAC member: Jim Bowman, the Senior Vice President at FedEx, Flight Operations.

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[3] NBAA has expressed concerns about the privacy of passengers on business jets, being violated through the ADS–B signals. Equip 2020 is evaluating possible short term and long term solutions to address this issue.

FAA News

Now before I get into the FAA's NextGen report, I want to briefly update you on some of the most important issues currently facing the agency.

Reauthorization

First, I have to address one of the foremost topics on everyone's mind: reauthorization.

As you all know, Congress passed a six-month extension of the FAA's authority last week. This buys Congress some time to enact a longer-term bill. As part of that, there have been a lot of conversations happening on Capitol Hill about what a new FAA reauthorization should look like. We're committed to working closely with Congress to pass a bill that embraces a few key principles.

- Reauthorization must help us maintain our exceptional safety record by providing more opportunities to use risk-based decision-making.
- It should strengthen America's global leadership on aviation.
- It should allow us to continue to integrate new users in the NAS, and realign our airspace system with current demands.
- Reauthorization must provide further support for the modernization of our air traffic control system with stable funding for our core operations and NextGen investments.

As Congress works on a bill in the months ahead, discussions are likely to continue about the structure of the FAA and our air traffic operations. We're open to having these conversations, but we must ensure that any potential changes under consideration provide long-term, stable funding for our air traffic operations and help us maintain the safest airspace system in the world.

Congress has approved a Continuing Resolution, or CR, to keep the government funded through December 11—a two-and-one-half month extension of our funding. Needless to say, we will continue to push for a long-term reauthorization bill, and long-term funding. We don't want a return to the days before our 2012 authorization, when we had 23 short-term extensions. We need a long-term bill that will provide stable, reliable funding for the critical projects we're supporting and help us maintain America's role as a global aviation leader.

Compliance Philosophy

I'd also like to update you on an announcement Administrator Huerta made earlier this week about the FAA's new Compliance Philosophy.

It's often said that America is the gold standard in aviation. One reason for this is the dramatic improvements we've made *together* on safety. In recent years, our approach has matured to focus on identifying areas of risk and mitigating them before an incident occurs. As part of this shift to risk-based decision-making, our enforcement efforts are evolving as well.

The Compliance Philosophy cements in writing what much of the agency has been doing for quite some time. It's based on open and transparent exchange of information and data between the FAA and industry.

Our goal is to have safe operators, not operators who inadvertently make a mistake and then hide it because they're afraid of being punished. If there is a failing, whether human or mechanical, we want to know about it, learn from it, and make the changes necessary to prevent it from happening again.

By aiming for compliance with the standard first, we free up our inspectors to spend more time identifying and correcting problems, rather than putting together enforcement cases for unintentional infractions.

This doesn't mean we're going to go easy on compliance, or ignore minor issues, or let anyone believe they have a free pass. We will continue to have zero tolerance for intentionally reckless behavior, repeat failures, or deviation from regulatory standards. We will continue to vigorously pursue enforcement action in these circumstances.

In fact, earlier this week, the FAA proposed a $1.9 million civil penalty against a company that knowingly conducted dozens of unauthorized flights with an unmanned aircraft over Chicago and New York for the purposes of aerial photography. This is the largest proposed civil penalty to date against an unmanned aircraft operator.

But in cases where we find flawed procedures, simple mistakes, a lack of understanding, or diminished skills, we will use tools like training or documented improvements to procedures to ensure compliance.

This approach recognizes that all aviation stakeholders have a vested interest in the safety of our system. That's what Compliance Philosophy is all about.

Unmanned Aircraft

I'd also like to update you today on the actions the FAA is taking in one of the fastest changing areas of the aviation industry: unmanned aircraft.

Yesterday, I testified at a House Aviation Subcommittee hearing on our UAS efforts. [*AD LIB IMPRESSIONS FROM HEARING. 1/2 PAGE SPACE FOR NOTES.*]

Integrating unmanned aircraft into our airspace is a big job, and it's one the FAA is determined to get right. We recently filled two executive-level positions that are going to build on our momentum and help us accomplish this goal.

One of them is familiar to everyone in this room. Hoot Gibson, who worked with us very effectively in leading the Equip 2020 effort, has been chosen to serve as the FAA's Senior Advisor on UAS Integration. He will focus on external outreach and education, as well as interagency initiatives.

As all of you know, Hoot is coming to us from the NextGen Institute, where he showed tremendous leadership as the Executive Director. With his departure and the substantial progress we've made on the Institute's goals, the FAA will be transitioning the NextGen Institute's activities into the agency in the months ahead as we continue to work closely with industry through similar entities like RTCA.

We've also tapped Earl Lawrence as the Director of the UAS Integration Office within the FAA's Aviation Safety organization. Earl previously served as the Manager of the FAA Small Airplane Directorate. In his new role, he'll lead our efforts to safely and effectively integrate unmanned aircraft into our Nation's airspace.

Earlier this year, we took an important step forward on that goal by releasing a proposed rule that laid out a flexible framework for allowing the routine use of small unmanned aircraft. The FAA received more than 4,500 public comments on this proposal, and we're working to address them before finalizing the rule.

This, however, is a lengthy process—so we're simultaneously pursuing other ways to expand the use of unmanned aircraft.

We've accommodated more than 1,800 requests for commercial operations under our Section 333 exemption process.

NextGen Progress

Now, I'd like to move on and share some recent highlights from our work implementing NextGen.

Infrastructure Progress

As I detailed at our last meeting, the FAA has made tremendous progress on building the infrastructure that supports all of our NextGen capabilities.

ERAM is now installed and operational at all 20 of our planned en route control centers. We've finished the coast-to-coast installation of the ADS–B network, and ADS–B is integrated at all of our en route centers. And last month, we took a big step forward on Data Communications, one of our key NextGen technologies and one of our four NextGen priority focus areas.

We reached initial operating capability for Data Comm's departure clearance services at our three key site towers: Salt Lake City, and both Houston airports. These sites are in addition to the highly successful Data Comm trials that we implemented at Newark and here in Memphis.

This is an exciting milestone, and there are many people who deserve credit for getting us to this point. Everyone at the Salt Lake, Bush, and Hobby control towers, as well as at the Salt Lake, Houston, and Atlanta Air Route Traffic Control Centers, worked hard to install, test, train on, and manage this capability. Our labor partners at both the national and local facility levels also made invaluable contributions to accomplishing this milestone.

Additionally, I have to thank our industry partners, including FedEx, Southwest, United, and UPS, who provided dedicated flight crews so we could test this new capability prior to Data Comm activation at these three airports. We're also working closely with the Air Force, which has an air national guard base at Salt Lake International.

As we continue to roll out these new NextGen technologies, we also experience the occasional glitch—as we did with ERAM at the Washington Air Route Traffic Control Center in August. I've asked Teri Bristol, our Chief Operating Officer at the FAA's Air Traffic Organization, to update the group on that incident, as well as our cyber security strategy for Data Comm.

[TERI BRISTOL DELIVERS REMARKS]

Today's Agenda

We've got a number of other interesting topics on the agenda for today.

We will start with an update on our joint priorities. Thanks to the work we have done in partnership with the NAC, we continue to be successful in delivering on these priorities together.

Over the past year, we have implemented wake recategorization at numerous locations. We have implemented new performance based navigation procedures. We have published national standards. We have improved data sharing. We have also used the results of our studies and assessments to identify additional next steps for work that is important to industry.

Most recently, as I mentioned, we completed implementation of our first Data Comm key sites. Starting next year, we will deploy Data Comm in more than 50 of our air traffic control towers.

We've made significant progress in surface operations and data sharing this summer thanks to industry leadership. They've brought in airport operators to the collaborative decision-making process, and they've made sure that all users have real-time air traffic control and flight movement information to manage air operations more effectively.

Industry has also worked closely with the FAA to simplify the application process for System Wide Information Management data—a much-needed improvement in our ability to access this important information.

I continue to be impressed with the collaborative work at the subcommittee level and among the NextGen Integration Working Group leadership as well.

Over the last few months, we interviewed more than 20 industry and FAA leaders who were involved in the effort to set priorities over the last year. You will hear the highlights from those interviews this morning.

As a result, the NextGen Integration Working Group leaders have been talking about how we can move forward and ensure our plan remains current and relevant to our ever-changing industry.

While we've had a successful year, this is only the beginning. We want to maximize our NextGen capabilities and the benefits we're delivering, and we continue to make progress on our efforts to measure these impacts.

The FAA and industry leads for the NextGen Priorities will be providing updates on our milestones later this morning, and I know we are all looking forward to their report.

While we're all very focused on the priorities outlined in our Joint Implementation Plan, NextGen is more than just these four focus areas. Following a request made at the last NAC, Paul Fontaine is going to provide a high-level overview of the full scope of our NextGen capabilities. With some new NAC members joining us, this is a good opportunity to review the overall breadth of our NextGen plans.

We'll also be delivering on an IOU from our last NAC meeting by providing an update on ADS–B equipage progress and trends. John Hickey has our team ready to brief you today on where we are with the key issues the Equip 2020 team is working on. Equipage rates are increasing, but as you will see, we still have a lot of hard work to do to ensure we make that important 2020 deadline.

With Hoot Gibson's move to my office to lead our UAS outreach efforts, I want to reiterate the FAA's commitment to supporting Equip 2020. Quarterly meetings will be held as planned, and we will continue to provide logistics and technical support.

We all know what important work this group is doing—and we're not the only ones. Last week, we received word that the Air Traffic Control Association will be presenting the Chairman's Citation of Merit Award to the Equip 2020 team at their annual conference next month. This recognition would not have been possible without your participation and leadership, so thank you and congratulations.

I also want to thank all of our industry partners for their work promoting ADS–B equipage. I am confident that aligning our messaging—like we did with the NextGen Institute, AOPA, GAMA, and the Aircraft Electronics Association at the FAA Safety Center in Oshkosh this year—will deliver the results we're after.

Jim Linney and Bruce DeCleene will also provide an ADS–B surveillance roadmap, including:

- The status of the ground infrastructure and airborne equipage activity for ADS–B Out;
- The definition and status of initial applications for ADS–B In; and
- Proposed future ADS–B In applications.

Jim will also cover the FAA's work on space-based ADS–B and our progress toward a common weather picture.

Additionally, you'll have the opportunity to hear from Mark Bradley on our work to formulate a new PBN Strategy. At the FAA's request, the PARC kicked off a

technical review of this PBN Strategy document in August. They've identified two non-technical areas where they would like support from this Committee. Not surprisingly, one of those areas is traffic flow.

Traffic flow management is essential to optimizing the flow of aircraft as they approach and depart congested airspace. The FAA has been working on this issue using Time Based Flow Management, or TBFM.

We're on target to publish a set of national procedures this December that includes a policy for the use of TBFM to support PBN implementation. We've conducted an in-depth study on the soft skills and culture changes that will be necessary to make TBFM a success. We held our first TBFM Customer Forum in August, and we'll be holding discussions on how to measure TBFM performance and activities going forward.

While the importance of flow management and its associated automation capabilities are well known, the PARC agreed that additional focus from the NAC in this area is needed.

Community Engagement on Noise

Finally, we can't discuss PBN without also engaging on the issue of noise.

There are now more satellite-based procedures than conventional procedures in our skies, and the vast majority of PBN procedures have been implemented seamlessly and without controversy.

Over the last two decades, we've made significant progress in reducing the noise footprint for people living around airports. This has been accomplished with advances in aircraft technology, operational procedures, and programs to work with airports to mitigate noise.

But as individual aircraft noise levels have decreased, we've seen increases in the number of operations, particularly during nighttime hours, and in the number of people living around airports. Our procedural actions as we implement NextGen also sometimes result in changing flight patterns and noise for communities around airports.

As a result, we've seen an increasing level of public debate, political interest, and even litigation related to aircraft noise. Given these trends, the FAA's engagement with communities is more important than ever.

Efforts are already under way within the FAA to improve our ability to interact with communities on noise issues in ways that are transparent, inclusive, responsive, and productive. We're committed to being smart and thoughtful about educating, involving, and getting input from residents—building on good past practices and using new techniques, including social media.

In Southern California, for example, we just today closed an unprecedented 120-day public comment period for the Southern California Metroplex Draft Environmental Assessment. We've held more than twice as many public workshops as we have for any other Metroplex project. And we've made a number of online tools available that let residents look up noise levels for their communities and see current and proposed flight tracks on Google Earth maps.

We're also conducting early outreach to airport authorities to help us identify local environmental sensitivities and improve decision-making. Additionally, we are starting to introduce environmental considerations earlier in the procedural design process to better understand interdependencies and consequences.

But this issue won't be solved by the FAA alone. We need to work together to ensure that NextGen enhancements are successful and provide a sustainable environment for underlying communities.

We *all* have to lean in.

We need the entire aviation industry to work with us on engaging communities, getting them comfortable with proposed changes, and explaining the capacity and efficiency benefits of new procedures.

By working together, we can make sure NextGen has a net positive impact for everyone.

Conclusion

Thank you for the opportunity to address you today. This concludes the FAA report.

DRAFT—NOT FOR RELEASE **10/7/2015 11:15 AM**

Mike Whitaker
ICAO NACC meeting
October 13, 2015
Montego Bay, Jamaica

Reviewed by: Carey Fagan, Krista Berquist, Michelle Westover

Thank you, Mr. Chairman.

Hello everyone.

- I regret that I will be unable to stay until the end of the meeting, but a few hours in a place like this is worth the trip. My thanks to Mr. Nari (NAR-e) Williams-Singh and the JCAA for their gracious welcome and their hospitality.
- On behalf of the United States, I am pleased to present Working Paper 1.
- The United States is a proud member of the NACC region.
- We're eager to partner with our neighbors to ensure the safety and efficiency of aviation in this region.
- In this working paper, we want to highlight some priority areas in need of additional attention to meet our shared goals.

Regional Air Traffic Data

- Nearly 75 percent of international flights from the U.S. are headed for destinations in the Western Hemisphere region.
- Of that traffic, nearly 17 percent are going to the Caribbean.
- In 2014, more than 7 million passengers originating in the U.S. flew to the Caribbean.
- We also have more than 900,000 aircraft that cross 7 adjacent flight information regions in the Central American and Caribbean (CAR) region.

Forecasted Growth

- Looking to the future, the traffic between the United States and the CAR region will likely outpace the growth with other regions.
- In fact, air traffic in the Caribbean is expected to grow rapidly, between 5–6 percent over the next two decades; the region is second in the world behind the Middle East in terms of aviation.[1]
- Looking behind these numbers—we see trade, tourism, and greater prosperity for our respective countries.
- We want to enable this growth in a way that ensures safety and maximizes efficiency.

Port of Spain Declaration

- In 2013, the NACC Member States approved the Port of Spain Declaration to prioritize regional implementation of ICAO standards aligned with the Global Air Navigation Plan (GANP) and the Global Aviation Safety Plan (GASP).
- We've seen, however, a lack of effective regional implementation of standards in the area of aerodrome safety, and slow implementation of Aviation Safety Block Upgrade (ASBU)-related technologies.
- As identified in Paragraph 2 of Working Paper 1, let me cover these areas a bit more.

Aerodrome Safety

- The Port of Spain Declaration includes a performance target to increase the number of certified aerodromes in the region.
- The region also has identified deficiencies related to aerodrome certification, runway safety, and wildlife mitigation programs.
- Addressing aerodrome safety matters is critical to creating a safe airfield environment for operating aircraft and to minimize risks related to runway excursions and their consequences.

Air Navigation

- Region-wide Air Traffic Flow Management (ATFM) implementation is a key goal in the Port of Spain Declaration, and significant support is needed to support Member States on this initiative.

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[1] According to the International Air Transport Association

- This region is characterized by multiple air navigation service providers operating in a non-integrated network.
- Highly variable weather patterns and system complexities contribute to schedule uncertainties and delays.
- The FAA has been a strong advocate for the global implementation of Collaborative Decision Making (CDM) within an integrated ATFM system. The development of a regional ATFM/CDM network in collaboration with ICAO and industry partners would contribute to greater operational efficiency in the Caribbean Region.

System Wide Information Management

- The FAA recommends greater regional implementation of System Wide Information Management (SWIM).
- SWIM will provide the region with increased capacity for exchanging information on traffic flow constraints such as ground delays and ground stops.
- SWIM implementation also provides the ability to automatically distribute weather-related pilot observations to controllers, which will further enhance safety and capacity.

FAA Support for Regional Initiatives

- The FAA and other regional members have provided technical expertise as part of ICAO's CAR Project, which aims to support regional ASBU implementation and remedy air navigation deficiencies.
- In terms of regional achievements, I want to point out the welcome developments in the normalization of U.S. relations with Cuba. This administration believes that the most effective way of working with our neighbors is through engagement and the FAA is proud of its track record in support of this.
- I am happy to say that the years of engagement have proven successful and have guaranteed safe passage between our adjoining airspaces for millions of passengers.
- In fact, this week the FAA has an expert in Cuba to support a CAR Project on runway safety. Also, this past July, we sent someone to Cuba to assist with ATFM capabilities.

In Closing. . .

- The Port of Spain declaration is a strategic plan for implementation of the GANP and the GASP, but it can be challenging to complete critical targets on your own.
- Working Paper 1 provides two recommended actions. The first encourages all NACC Member States to consider the Port of Spain Declaration regional performance targets and take action in meeting these goals. What can we do by 2016 to make real progress on these goals?
- The second recommended action strongly encourages the ICAO Council, through application of the "No Country Left Behind" initiative, to give attention and resources to regional initiatives that are aligned with regional performance targets. Specifically, priority goals related to aerodrome certification and air navigation improvements should be a major focus.
- Providing needed attention to these issues will ultimately improve aviation on a system-wide basis throughout the NACC, and ultimately contribute to a more effective global aviation system.

ADMINISTRATOR MICHAEL HUERTA
DEPUTY ADMINISTRATOR MIKE WHITAKER
FAA TOWN HALL
WASHINGTON, DC
DECEMBER 3, 2015

OPENING: THE "BEST OF" FAA (1/2)
[HUERTA LEADS]

- It's hard to believe the end of 2015 is almost here.
- You know what that means—"Best of 2015" lists are popping up all over the place.

- People are debating the best movies, best restaurants, best albums—I'm personally partial to [*AD LIB*].
- This, of course, got me thinking about our own "Best of" list.
- It was certainly a big year for the aviation industry as a whole.
  - The American Airlines—US Airways merger closed.
  - Delta bolted from Airlines for America.
  - A gyrocopter took a trip down the National Mall.
  - And Mike and I got called to testify at more Congressional hearings than we can even recall.
- But when I think about our year here at the FAA, I'm filled with a tremendous amount of pride.
- We accomplished a lot—so today, Mike and I are going to make our own "Best of" list:
  - Five areas where we think we made the most progress in 2015, and
  - What we see on the horizon for 2016.
- Then we'll get to your questions.
- This year, I've made a number of trips abroad—from London and Paris to Dubai. I even have a series of meetings scheduled in Israel in a few weeks.
- Meeting with our international counterparts is an important opportunity to *advance America's aviation interests abroad.*
- Since safety is our top priority, I *shared best practices for maintaining strong regulatory oversight and manufacturing standards* in growing markets like the Middle East while I was in Dubai.
- In Paris, I focused on *harmonization agreements* that ensure NextGen will be interoperable with other air traffic modernization systems like SESAR in Europe.
- Other countries often wrestle with the same issues we do, so these meetings also *let us learn from each other.* In London, we discussed the challenges of integrating unmanned aircraft and commercial space, as well as working with communities on environmental issues associated with performance based navigation.
- International engagement also helps us find ways we can work together to promote aviation safety around the globe.
  - In the aftermath of the disappearance of MH370, the FAA committed to working with ICAO to find a way to make *global flight tracking* a reality.
  - We're also working with other ICAO members to *share more information about conflict zones* that may threaten civil aviation.
- The FAA made tremendous progress in *building the infrastructure that supports NextGen* this year.
  - *ERAM* is now installed and operational at all 20 of our planned en route control centers.
  - *ADS–B* is now integrated at all of our en route centers.
  - *Data Communications* is now in use at Newark, Memphis, Salt Lake City, and both Houston airports.
- *We continue to work closely with the NextGen Advisory Committee to deliver measureable benefits to consumers, industry, and aviation stakeholders across the country.*
  - Over the past year, we've implemented new *performance based navigation procedures* and *wake re-categorization* at numerous locations.
  - *We've also improved data sharing and identified next steps for work that is important to industry.*
- We made progress on our commitment to *making aviation more environmentally-friendly,* as well.
  - We *kicked off CLEEN II* by selecting eight companies to develop technologies that reduce fuel consumption, emissions, and noise.
  - We also stepped up our efforts to *engage with communities on noise issues,* like we did with the Northern California Metroplex.
- The FAA's new Compliance Philosophy is designed to help us *achieve a higher level of safety.*
- The goal of the Compliance Philosophy is to:

- Find problems before they result in an incident
- Use the most appropriate tools to fix those problems, and
- Monitor the situation to ensure they stay fixed.

- The success of the Compliance Philosophy relies on *buy-in from FAA employees*—and we're already seeing good results as we roll it out across the agency.
- In October, the Flight Standards and Aircraft Certification teams took more than *300 compliance actions* in total.
- This means that issues were identified and documented, and corrective actions were applied—without having to take enforcement actions.
- *This doesn't mean enforcement actions are off the table.* They are still being used when it's appropriate—like when we find intentional or reckless deviations from regulatory standards or patterns of negative behavior or performance that represent an unacceptable risk to safety.
- But the data shows us that there's been *a decrease in the use of enforcement between October and November.*
- We'll continue to monitor the metrics, but initial indications show our new Compliance Philosophy is *delivering positive results* from a safety, resource, and efficiency perspective.
- Our Compliance Philosophy is just one part of our overall efforts to *improve safety by embracing risk-based decision-making* at the FAA.
- Earlier this year, we *finalized a rule* requiring most U.S. commercial carriers to have *Safety Management Systems* in place by 2018.
  - This formalizes what many airlines are already doing voluntarily and brings those who aren't already involved on board.
- We *hosted a Runway Safety Call to Action* that brought together a wide range of aviation partners to discuss ways to cut down on runway incursions.
  - I also want to thank all of our employees who submitted ideas through our Runway Safety Idea Challenge on IdeaHub.
- We also made important strides forward in *general aviation safety.*
- This summer, *we launched* ***Fly Safe,*** a new national safety campaign to educate the GA community on how to avoid Loss of Control accidents.
- We also continue to *promote ADS–B equipage* in advance of the January 2020 deadline.
  - *ADS–B provides real safety benefits for GA pilots*—allowing air traffic controllers to pinpoint their aircraft with far greater accuracy and providing free weather and traffic updates that improves situational awareness.
- The FAA is committed to create a *strong culture of safety and responsibility* in the unmanned aircraft community through:
  - *Registration.* We're considering task force recommendations and public comments, and we will have a system in place soon. FAA employees will soon have an opportunity to test this registration system, and I encourage everyone to participate so we can make improvements before the public launch.
  - *Education.* We're working with government and industry partners to conduct outreach through the Know Before You Fly and No Drone Zone campaigns. We also launched a beta version of the B4UFLY app.
  - *Enforcement.* We're pursuing penalties and enforcement actions against people who don't operate within the law.
- We're also working to put a regulatory framework in place for commercial unmanned aircraft operations.
  - Earlier this year, we *proposed a rule that would allow small UAS operations* we know are safe.
  - We've *approved more than 2,200 requests for commercial operations* under our Section 333 authority.
  - We *launched the Pathfinder Program,* a public-private partnership that will help us expand UAS operations beyond the parameters of the small UAS rule.
- As we look to the future, we know that our approach to integrating unmanned aircraft must be as nimble as the technology itself.
- While it's important to reflect on all we've accomplished at this time of year, it's also an opportunity to look toward the future.
- For example, in 2016:
  - Congress will consider our reauthorization bill.

- We'll finalize our small unmanned aircraft rule.
- We'll release our long-awaited re-write of Part 23.
- We'll ramp up work on our new Caribbean Strategy, which will help our neighbors mature their aviation systems.

- If we're going to be successful in tackling these, and so many other issues, we're going to need help from each and every one of our employees.
- I would ask each of you to think about how we can work safer, smarter, better, and together—every day.
- As an organization, the FAA can't achieve any of its goals if we don't have the right people to work on them.
- That's why we're committed to building the Workforce of the Future and developing employees into the leaders the FAA needs to be successful.
  - This year, we *rolled out a New Hire Orientation program* that helps new employees better understand the FAA's mission and their role supporting it.
  - The FAA Leadership and Learning Institute also *launched new and updated curriculum for management trainees.*
- With Annie Andrews, our new Assistant Administrator for Human Resource Management, on board, I know we'll be able to build on this momentum in 2016.
- What makes America's aviation system the best in the world is all of you—our employees.
- So let me close by simply saying: thank you.
- Mike and I, along with the entire FAA leadership team, value your service, and your feedback.
- Now, let's get to your questions.
- As Michael points out, we continue to accomplish a lot as congress and industry debate this bill. YOU continue to accomplish a lot and keep our system safe.
- During our last town hall, Michael and I discussed some of the FAA's achievements in 2015.
  - Building the infrastructure that supports NextGen:
  - ERAM was completed last year—we now have cutting edge technology running the heart of our ATC system
  - The ADS–B ground infrastructure has been fully installed
  - We continue to reach higher levels of safety with SMS and our new Compliance Philosophy; and
  - We're preparing our workforce for the future with new onboarding and training initiatives.
- That good work continues this year as we finalize the small unmanned aircraft rule,
  - and release our long-awaited rewrite of Part 23.
- Even with the uncertainty surrounding reauthorization right now, we must continue working toward these goals.
- And as Michael said, those goals are evolving as the aviation industry rapidly changes.
- Much of this change relates to our efforts to incorporate new users in the NAS—commercial space and UAS—both of which are part of our strategic priorities.
- Last week, I spoke at the Commercial Space Transportation Conference, and discussed the fact that in 2012 there were only three licensed commercial space transportation operations. This year, that number will be close to 50.
- The President's budget reflects this tremendous growth by requesting additional resources to support our commercial space integration efforts.
- For UAS, as you all know, our employees undertook a heroic effort—working weekends and holidays—to build and launch a registration system in record time.
- Employees from across the agency stepped up to do this.
- This was a major step in our efforts to create a culture of safety and responsibility in the unmanned aircraft community, and the speed at which you accomplished this is a true testament to your dedication.
- We're already seeing great results from your hard work.

- To date more than 330,000 pilots have registered.
- You may also be aware that we've teamed with various outside entities on our No Drone Zone campaign. One of the public service announcements we produced aired on the scoreboard before the Super Bowl, reaching a wide and diverse audience.
- All of this success is a credit to you. No matter the situation, the FAA workforce is known for its unwavering focus on maintaining the safest and most efficient aerospace system in the world.
- I have no doubt you'll maintain that focus in the days and weeks ahead.

[HAND BACK TO MICHAEL FOR ADDITIONAL REMARKS]

FINAL 3/7/2016 1:00 PM

Mike Whitaker
AOC All-Hands Meeting
Washington, DC
March 8, 2016

- As Jenny mentioned, AOC accomplished a lot last year—working with every line of business to promote the FAA's mission of providing the safest, most efficient airspace system in the world.
- [*REFLECT ON WHAT YOU HEARD DURING PRESENTATION.*]
- In 2016, we're not slowing down.
- The FAA is working on a lot of high-profile issues—from NextGen to unmanned aircraft—and the American people are looking to our agency for guidance.
- So as we innovate the way we manage air traffic in this country, we should also think about how we can innovate the way we communicate with the people who care about our work.
- We need to find new ways to reach our audience—whether it's Congress, manufacturing and industry stakeholders, or a hobbyist who just bought their first drone.
- We also need to find new ways to work together—because whether you work in internal or external communications, we all need to be speaking with the same voice.
- AOC is a small office, but its impacts can be felt in every corner of the FAA. Thank you, and keep up the good work.

DEPUTY ADMINISTRATOR MIKE WHITAKER
GA SAFETY SUMMIT
WASHINGTON, DC
MARCH 31, 2016

- Hello everyone. Thank you for joining us.
- Before we get started, I want to briefly mention that we announced the selection of Shell and Swift Fuels as finalists for testing an unleaded replacement for avgas earlier this week.
- This is an important step forward in our efforts to eliminate the GA community's reliance on leaded fuel, which I know many of you are interested in and have been supportive of.
- We're on track for testing to begin this summer and conclude in 2018, and we're looking forward to seeing the results.
- Now let's get to our reason for being here today: general aviation safety.
- In 2009, we committed to reducing the GA fatal accident rate by 10 percent by 2018.
- Today, I'm happy to share some good news: last year, we hit our goal for the first time.
- And 2016 is off to a great start—we're already meeting our numbers for this year.
- Our gains are impressive—and they're a testament to the work being done by the GA Joint Steering Committee, which Griff will talk about in a few minutes.
- But we still have more work to do. Last year, 384 people died in 238 general aviation accidents.

- We're approaching this from a few different angles—some of them technological, some of them regulatory, and some of them educational.
- On the technology side, I got to see some of the benefits firsthand when I went airplane shopping recently and checked out a Cirrus SR20 that came equipped with an Angle of Attack indicator, as well as ADS–B In and Out.
- There's no question that ADS–B is one of NextGen's most important safety technologies, and we're continuing to work closely with the Equip 2020 team to get it into more general aviation aircraft.
  - As of March 1st, more than 13,000 GA aircraft currently have rule-compliant ADS–B equipment.
  - We estimate as many as 140,000 additional aircraft must be modified in advance of the January 2020 deadline.
  - We'll be working with the GA community to announce some ideas about how to increase early equipage in the coming weeks.
- We're also looking for better ways to help the private sector access aeronautical data currently provided by the FAA, as well as identify additional data we could provide.
  - Our goal is to help industry be in a position to create innovative products and technologies that are intended to improve safety and efficiency in the aviation industry.
  - We'll begin the conversation at Sun 'n Fun, and we'll be contacting you in the next few months for feedback on how the GA industry can work together to ensure the FAA is providing the data you need.
- On the regulatory side, we've made considerable progress on a few notable issues.
- As you all know, we recently released our proposed rewrite of Part 23, which would overhaul the airworthiness standards for small GA aircraft.
  - We hope to help incorporate emerging technologies into the marketplace, as well as encourage new, safer product designs.
  - I want to thank all of you who worked closely with us on this rewrite.
- Another policy we've been working on will streamline the approval process for Non-Required Safety Enhancing Equipment.
  - We're reviewing the public comments on our draft proposal now and will issue the final policy in the coming months.
  - Ultimately, this will make it easier to get safety-enhancing equipment into GA aircraft.
- We're also updating key elements of the airman certification system by replacing the practical test standards with certification standards that focus on risk management.
  - This will help pilots understand how knowledge, skill, and risk assessment work together to ensure safe operations.
- Finally, we all know how important education and training are to improving general aviation safety.
- I want to thank all of you for continuing to collaborate on the Fly Safe campaign, which is educating the GA community on how to avoid Loss of Control accidents.
  - Together we have reached 35 million followers on our social media platforms, including Twitter, Facebook, LinkedIn, Instagram, and YouTube.
- When government and industry work together, like we are doing through the GA Joint Steering Committee and the U.S. Helicopter Safety Team, we can make a significant difference.
- Summits like this provide an excellent opportunity to continue building on the momentum by sharing ideas and working on solutions.
- Thank you again for being here today, and I look forward to our discussion.

DEPUTY ADMINISTRATOR MIKE WHITAKER
SUN 'N FUN EXTERNAL DATA ACCESS INITIATIVE LISTENING SESSION
WASHINGTON, DC
APRIL 7, 2016

INTRODUCTION

- Some of you probably showed up today expecting to hear from John and Martha King—and instead, you're stuck with me.
- And I'm here to talk about data! Wait, don't all head for the doors at once.
- I know it can be hard to get excited about massive spreadsheets and a bunch of ones and zeros.
- But data is the foundation for *everything* we do at the FAA.
- It helps us maintain the safest aviation system in the world, and it allows us to make our processes more effective and efficient.
- We also believe this data has the potential to spur innovation in the marketplace via the creation of new applications and services that aviation users want and need.
- That's why we recently launched a new initiative—Got Data?—to increase the public's access to the FAA's aeronautical data.
- We're reaching out to stakeholders who have used this type of data in the past, as well as companies that may be interested in using it in the future.
- Today, we want to hear from all of you.
  - What types of additional aeronautical data would you like the FAA to provide to the public?
  - How can we improve your access to aeronautical data, and in what formats?
  - With better access to data, what kinds of products and services do you think could be developed to advance the aviation industry?
- But before we get to that, I think it'd be valuable to provide some context on the FAA's current data sharing practices.
- I'm going to turn things over to Larry Grossman, the FAA's Deputy Director for Information Security and Privacy, who will talk briefly about what data you currently have access to.
- Then he'll open it up for discussion.

CONCLUSION

- Thank you all for being here today. This has been a productive discussion, and I look forward to taking your feedback to our team at the FAA.
- Today is only the beginning of this conversation about data access—and we've got a few ways you can continue to provide input.
  - You can arrange a one-on-one meeting with a member of our team, which Larry can help you set up.
  - You can also let Larry know if you'd like to participate in a stakeholder task force meeting in Washington, DC, at the end of April.
  - And if you know anyone who isn't here today who would like to provide input, you can direct them to the online survey we've created. We've got the details and the web address on some flyers up here.

FINAL 4/6/2016 2:00 PM

Mike Whitaker
Sun 'n Fun
Lakeland, FL
April 8, 2016

Thank you for that introduction, Dennis [*Roberts, Regional Administrator for the Southern Region*].

It's great to be back here for Sun 'n Fun. This is always one of my favorite events, both as Deputy Administrator of the FAA, and as a pilot.

Being surrounded by all of you—people who live and breathe aviation—is an inspiration to me. I can only hope one day I'll have accomplished half as much as the Master Pilots we honored earlier. I'm already counting the minutes until I can climb into the cockpit again.

When I got here yesterday, I made sure I had plenty of time to check out all of the aircraft and exhibits—and there was plenty of innovation on display. [*AD LIB impressions from tour.*]

Yesterday wasn't just about checking out the latest and greatest technologies, though—I also fit in some time for business. I held a listening session on the FAA's new "Got Data?" initiative.

I know, I know—it sounds pretty boring. It's tough to get excited about data—massive spreadsheets and a bunch of ones and zeros. But data is the foundation for everything we do at the FAA. And our data often makes its way into the tools you rely on in the cockpit every time you fly.

Avionics manufacturers turn the navigational charts and instrument approaches the FAA produces into a wide variety of electronic products. These feed into your flight management systems and iPads. The biggest advantage of these new products is that they enable pilots to have greater awareness about where they are, and what lies ahead, than ever before. And it all fits in the space of a silicon chip.

Now imagine what could be possible if we opened up more of our data to more partners in more formats. That's the idea behind Got Data. We want to find better ways to help the private sector access aeronautical data currently offered by the FAA. We also want to identify additional data resources we could provide. Our goal is to help industry be in a position to create innovative products and technologies that are intended to improve safety and efficiency in the aviation industry.

We got great feedback at our listening session. [*AD LIB impressions from meeting.*]

That's one of the many things I love about Sun 'n Fun. The general aviation community doesn't hesitate to speak up. And the FAA is listening to what you have to say.

One area we heard you loud and clear on was pilot testing. As someone who got his pilot certificate not too long ago, I think we can all agree that there was plenty of room for improvement on the knowledge test. It focused too much on memorizing things you didn't really need to know to be a safe pilot. And it didn't ask anything about risk management, which every pilot needs to use in real-world operations.

That's changing. This June, we're starting the rollout of our new Airman Certification Standards. By integrating knowledge and risk management with practical skills, these standards define what a pilot needs to know, consider, and do to fly safely in America's complex airspace.

This is good news, whether you're planning to get a new certificate or you've had your pilot's license as long as some of our Master Pilots. By keeping knowledge questions current and incorporating risk management into pilot training and testing, we can ensure our airspace is safer for everyone.

We're not just improving our approach to pilot certification. Hobbyists and manufacturers alike have asked the FAA to revisit our small airplane certification standards for years.

Last month, we took a significant step forward by releasing our proposed rule to rewrite Part 23. Instead of requiring certain design elements on specific technologies, the new Part 23 will define the safety outcomes we want to achieve. This approach recognizes there's more than one way to deliver on safety—and it provides room for flexibility and innovation in the marketplace.

Our Part 23 rewrite will overhaul how we certify aircraft in the future. But we also recognize how important it is to modernize the existing general aviation fleet.

In 2014, we developed a streamlined process for installing angle of attack indicator systems. Last year, we clarified the process for installing electronic attitude indicators. We're now building on this progress with a new policy that will make it easier to install other non-required safety-enhancing equipment in GA aircraft.

We want to reduce unnecessary regulatory barriers that make it costly and time-consuming to develop and install these exciting technologies. They might not be required by a rule, but these tools still provide a number of valuable safety benefits—and we want to make sure you can easily take advantage of them.

Of course, some tools are so revolutionary that the FAA does require them for all aircraft. ADS–B is one of these technologies.

I've talked here before about ADS–B and all of its benefits. I got to see them first-hand when I went airplane shopping recently and checked out a Cirrus SR20 that came equipped with ADS–B In and Out. It gives a GA pilot a view that's similar to what a commercial jetliner pilot can see with the Traffic Alert and Collision Avoidance System. And it's particularly useful—and enhances safety—in busy airspace.

All of us have been in the sky and had a controller tell us something like: you've got traffic at 2 o'clock, at an altitude of 400 feet below you. The response is almost

always the same: you start craning your neck and peering into the distance so you can report, "Traffic in sight."

With ADS–B, that traffic will be displayed on your screen. You'll know exactly where that other aircraft is, the other pilot will know where you are, and you'll both have a good idea of what the controller is seeing as well.

But this only works if everyone in our airspace is using the technology. That's why we're holding firm on the January 1, 2020 equipage deadline.

I know the issue with this, obviously. If someone tells me I have to do something by 2020, that means I'm not thinking about it until 2019—late 2018 at the earliest. Unfortunately, since there's likely to be a capacity issue at repair stations as we get closer to the deadline, this approach may end up leaving your aircraft grounded for the early part of 2020.

My advice is: don't wait until the last minute. This is a great time to get your aircraft in ahead of the crowds. Prices on ADS–B equipment have fallen considerably—some units can be found for as low as $1,500. So visit some of the manufacturers here at Sun 'n Fun. Make an appointment with your local repair shop. The time to equip is now.

There's one theme at the heart of all of the initiatives I just mentioned: safety. It's the common goal that unites the FAA with every level of the aviation industry. And it's the principle that unites each of us—pilot to pilot.

I hope you'll join me today in making a personal commitment to safety. It's our responsibility to keep our skills sharp and operate safely every time we sit in the cockpit. No matter how long you've been flying, a safety refresher is always a good idea. I hope you'll consider checking out our Fly Safe campaign, which we launched last year on FAA.gov to help prevent Loss of Control accidents. We have a lot of terrific resources available for you to take advantage of.

Thanks for being here today. Now it's time for my favorite part of the day: hearing from you. I'm going to ask a few of my colleagues from the FAA to come up here and join me so we can answer some of your questions.

FINAL 4/6/2016 2:00 PM

Mike Whitaker
Sun 'n Fun Outline
Lakeland, FL
April 8, 2016

Sun 'n Fun is one of my favorite events as both Deputy Administrator and as a pilot.

- Impressions from exhibits on Thursday.

Yesterday I held a listening session on the FAA's new Got Data? Initiative.

- Data feeds valuable tools we use in the cockpit.
- Got Data? goals:
  - Improve industry access to aeronautical data the FAA currently provides.
  - Identify additional data we could provide.
  - Support industry's creation of innovative tools that are intended to improve safety and efficiency.

The GA community doesn't hesitate to speak up, and we've heard you on a number of issues.

- Pilot Testing
- Small Airplane Certification
- Safety Technologies

In June, we're rolling out new Airman Certification Standards.

- Integrates knowledge and risk management with practical skills.
- Tests pilots on what they need to know and do to operate safely in real-world scenarios.

We're revamping our small airplane certification standards.

- Published rule to rewrite Part 23 early last month.
- Moves from prescriptive design requirements to a new performance-based standard.
- Ensures safety while allowing for industry innovation and flexibility.

We also support modernizing the existing GA fleet.

- 2014: Streamlined process for installing angle of attack indicators.
- 2015: Clarified process for installing electronic attitude indicators.
- 2016: Building on this progress with new NORSEE policy.
  - NORSEE = Non-Required Safety Enhancing Equipment.
  - Makes it easier to get safety-enhancing equipment into GA aircraft.
  - Expect final policy in the coming months.

ADS–B is a revolutionary technology—that's why the FAA is requiring it for all aircraft.

- Impressions from using ADS–B In and Out in the cockpit.
- Full benefits require everyone to be equipped.
- January 1, 2020 deadline is set.
- Don't wait until the last minute to equip.
  - Prices as low as $1,500.
  - Get in ahead of the crowds at repair stations.

Safety is at the heart of all the initiatives I just mentioned.

- Make a personal commitment to safety.
- Check out Fly Safe campaign on FAA.gov.

FINAL 6/3/2016 12:00 PM

Mike Whitaker
ADS–B Rebate Program Launch Conference Call
Washington, DC
June 6, 2016

Thank you, Mr. Secretary.

Automatic Dependent Surveillance—Broadcast consists of two pieces: ADS–B Out, and ADS–B In.

ADS–B Out transmits information about a plane's altitude, speed, and location to air traffic control and other nearby aircraft.

ADS–B In allows aircraft to receive traffic and weather information from ground stations and see nearby aircraft that are broadcasting their positions through ADS–B Out.

As the Secretary mentioned, we've set a January 1, 2020 deadline for aircraft to be equipped with ADS–B Out. Owners can choose to install ADS–B Out equipment to meet this requirement, or they can purchase an integrated system that includes ADS–B In.

Our new $500 rebate will help offset the cost of purchasing this equipment.

Owners of U.S.-registered, fixed-wing, single-engine piston aircraft can take advantage of this offer, provided they purchase equipment that meets the FAA's technical standards. To be in compliance, an aircraft must have installed an approved GPS receiver and an ADS–B Out system.

Only installations performed after the program launches this fall will be eligible for the rebate. New aircraft or aircraft that have already been equipped with ADS–B will not be able to participate.

We'll be issuing 20,000 rebates on a first-come, first-serve basis for one year starting this fall, or until all 20,000 rebates are claimed—whichever comes first.

So our message to general aviation aircraft owners is pretty simple: it's time to equip. The 2020 deadline will not change. Apply as soon as the rebate system is launched to reserve your spot and get a rebate.

It's particularly important for owners to contact their local repair shops and schedule an installation appointment, as well.

There's likely to be capacity issues at repair stations as we get closer to the deadline. We don't want pilots to end up grounded in the early months of 2020 because of an installation delay.

We'll be working closely with the Aircraft Owners and Pilots Association, the Aircraft Electronics Association, and the General Aviation Manufacturers Association to help get the word out about our new rebate incentive.

Full details about the program and application process can be found on our website, and I'd encourage aircraft owners to sign up to be notified as additional information and deadlines become available in the coming months.

Thank you.

DEPUTY ADMINISTRATOR MIKE WHITAKER
EXECUTIVE OFF-SITE
CAMBRIDGE, MD
JUNE 28, 2016

DAY 1: UNMANNED AIRCRAFT REGISTRY CASE STUDY SESSION

- In late October, Secretary Foxx laid out an ambitious goal for our team: to create and launch a registration system for unmanned aircraft before Christmas.
- This was no easy feat.
  - We had to convene a task force of government and industry stakeholders to get their feedback.
  - We had to review their recommendations.
  - We had to write an interim final rule.
  - We had to build and test a new registration system that would be easy for consumers to use.
  - And we had to do everything in less than two months.
- This kind of project—on that kind of timeline—isn't supposed to be possible in government.
- But we set the goal and put a stake in the ground.
- We brought all hands on deck, from many different lines of business.
- Everyone stepped up—working long hours and going above and beyond to help get this project across the finish line.
- Some even worked weekends and holidays.
- And we got it done.
- Thanks to the efforts of our team, almost 500,000 unmanned aircraft owners from across the county have already registered their devices.
- This wasn't just a huge accomplishment for the FAA as an agency.
- It was an example of government innovating, cutting through red tape, and using technology to tackle emerging risks.
- Now I'd like to ask Jim Eck and some of his team members who are here on stage to talk about this project from their own perspective.

[JIM ECK & TEAM SPEAK]

- We need to see more of this type of problem-solving—of taking a blank sheet of paper and figuring out the best way to tackle an issue before trying to fit it into one of our existing processes.
- We know it isn't possible to tackle every project within the timeline of the unmanned aircraft registry, but we can approach our work with the clarity and focus that the team just talked about.
- The question for us to explore today is: How could we make it easier to work this way? Are there barriers to remove? Are there new processes to put in place?

Michael G. Whitaker U.S. Senate Committee on Commerce, Science, and Transportation

Questions, Speeches, Panel Discussions and Presentations

Year	Month	Date	Organization	Location	Type
2013	June	6/27/13	Runway Safety Improvements at Boston Logan International Airport	Boston, MA	Speech
2013	July	7/9/13	RTCA Policy Board	Washington, D.C.	Remarks
2013	July	7/16/13	JPDO Board meeting	Washington, D.C.	Board meeting
2013	July	7/18/13	ALPA—Air Safety Forum—closing remarks	Washington, D.C.	Forum
2013	July	7/24/13	Tech Center Town Hall	Atlantic City	Remarks
2013	July	7/25/13	NextGen Institute Meeting	Washington, D.C.	Remarks
2013	August	8/7/13	ALPA—flight and duty time symposium	Washington, D.C.	Speech
2013	August	8/12/13	Commercial Aviation Panel Discussion: Global Outlook, Opportunities, Challenges	Los Angeles	Panel Discussion
2013	August	8/13/13	AWP—Los Angeles Town Hall	Los Angeles	Town Hall
2013	August	8/14/13	Oklahoma Town Hall	Oklahoma City	Town Hall

Michael G. Whitaker U.S. Senate Committee on Commerce, Science, and Transportation—Continued

Questions, Speeches, Panel Discussions and Presentations

Year	Month	Date	Organization	Location	Type
2013	August	8/20/13	First Annual AFN Awards Ceremony	Washington, D.C.	Award Ceremony
2013	September	9/10/13	Aviation Week, NextGen Air Traffic Modernization conference	Washington, D.C.	Speech
2013	September	9/12/13	AVS Awards Ceremony	Washington, D.C.	Award Ceremony
2013	September	9/18/13	Great Lakes Recognition	Chicago, IL	Remarks
2013	September	9/19/13	NextGen Advisory Committee	Washington, D.C.	Speech
2013	October	10/21/13	ATCA Speech	National Harbor	Speech
2013	November	11/14/13	ALTA meeting in Mexico	Cancun, Mexico	Keynote speaker
2013	November	11/21/13	AIA	Phoenix	Remarks
2013	December	12/2/13	7th Triennial International Aircraft and Fire Cabin Safety Research Conference	Philadelphia	Speech
2013	December	12/11/13	COMSTAC	Washington, D.C.	Speech
2013	December	12/20/13	Many Advancements, New Challenges	Washington, D.C.	Speech
2014	January	1/15/14	TRB Panel	Washington, D.C.	Remarks
2014	January	1/24/14	European Aviation Club: Overview of NextGen	Brussels	Remarks
2014	February	2/5/14	17th Annual Commercial Space Transportation Conference	Washington, D.C.	Speech
2014	February	2/20/14	NextGen Advisory Board	Phoenix	Speech
2014	February	2/27/14	Roundtable on NextGen Priorities	Washington, D.C.	Remarks
2014	March	3/8/14	Women in Aviation	Lake Buena Vista, FL	Remarks
2014	March	3/13/14	Western Hemisphere Flight Standards Conference	Washington, D.C.	Remarks
2014	March	3/18/14	Southern California TRACON 20th Anniversary	California	Remarks
2014	March	3/20/14	NBAA Board Meeting	Washington, DC	Discussion
2014	March	3/26/14	NATCA's 2014 Communicating for Safety Conference	Las Vegas, NV	Remarks
2014	March	3/27/14	ACI–NA/AAAE Annual Washington Legislative Conference	Washington, D.C.	Remarks
2014	April	4/3/14	SMU Air and Space Law Conference	Dallas	Speech
2014	April	4/4/14	Sun 'n Fun: Master Pilo and Mechanics Awards	Lakeland, FL	Remarks
2014	April	4/14/14	Air Carrier Training Steering Group opening meeting	Washington, D.C.	Remarks
2014	April	4/17/14	REDAC Meeting	Washington, D.C.	Remarks
2014	May	5/12/14	Town Hall and Recognition for Houston I90 TRACON	Dallas, TX	Remarks
2014	May	5/13/14	North Texas FSDO and Employee All Hands Meeting	North TX	Remarks
2014	May	5/13/14	Fort Worth Center All Hands meeting	Fort Worth, TX	Remarks
2014	May	5/14/14	Awards Ceremony in OKC	Oklahoma City, OK	Remarks
2014	May	5/14/14	Town Hall at OKC	Oklahoma City, OK	Remarks
2014	June	6/3/14	NAC meeting, FAA report	Washington, D.C.	Talking points
2014	June	6/4/14	RTCA Symposium, 11:30 a.m.	Washington, D.C.	Q&A
2014	June	6/19/14	Town Hall, Southern Region	Atlanta, GA	Speech
2014	June	6/19/14	2014 AIAA Aviation Conference	Atlanta, GA	Speech
2014	June	6/24/14	MAC Meeting—ANG sent powerpoint 6/16/14	Washington	NextGen talking points
2014	August	8/4/14	Congressional workshop for regional folks, sponsored by AGI.	Washington, D.C.	Remarks
2014	August	8/5/14	National Hispanic Coalition	Washington, D.C.	Remarks
2014	September	9/4/14	Seattle Town Hall	Seattle	Remarks
2014	September	9/9/14	Alaska Aviation Coordination Council	Anchorage	Remarks
2014	September	9/16/14	NextGen Test Bed event	Daytona Beach, Fla.	Remarks
2014	September	9/19/14	NextGen Institute's Annual Public Meeting	Washington, DC	Speech
2014	October	10/8/14	NextGen Advisory Committee	Washington, D.C.	Speech
2014	October	10/9/14	Employee Town Hall	Washington, DC	Speech

Michael G. Whitaker U.S. Senate Committee on Commerce, Science, and Transportation—Continued

Questions, Speeches, Panel Discussions and Presentations

Year	Month	Date	Organization	Location	Type
2014	October	10/22/14	IALI, International, Aviation Law Institute, 10th Anniversary Luncheon	Chicago, IL	Speech
2014	October	10/24/14	Labor Management Forum	Washington, D.C.	Remarks
2014	October	10/28/14	ADS–B Call to Action	Washington, D.C.	Remarks
2014	November	11/5/14	Veteran's Day Ceremony	Trip to Central Region	Speech
2014	November	11/6/14	NATA	Washington, D.C.	Remarks
2014	November	11/8/14	GAMA, Board of Directors	South Carolina	Remarks
2014	November	11/18/14	Volpe—Transportation and the Economy Speakers Series	Cambridge, MA	Speech
2014	December	12/4/14	NBAA Board of Directors Meeting		Remarks
2014	December	12/9/14	AAAE Annual Runway Safety Summit	Salt Lake City, Utah	Speech
2014	December	12/11/14	Town Hall, Oklahoma City	Oklahoma City	Remarks
2014	February	2/26/04	CAPA	Washington, D.C.	Remarks
2014	April	4/27–4/30	5th meeting of Directors of Civil Aviation of the International Civil Aviation Organization's (ICAO) North America	Trinidad and Tobago	Chief delegate for the U.S.
2014	September	9/8–9/14	Alaska Town Hall	Anchorage	Remarks
2015	February	2/3/15	Budget Stakeholder Calls 1 p.m.	Washington, D.C.	Q&A
2015	February	2/18/15	Equip 2020 Meeting	Washington, D.C.	Speech
2015	February	2/27/15	NAC Meeting	Atlanta	Speech
2015	March	3/17/15	Jeppensen Connect	Charlotte, N.C.	Speech
2015	March	3/18/15	Equip 2020 Meeting	Washington, D.C.	Remarks
2015	March	3/20/15	MITRE—Aviation Advisory Committee	McLean, VA	Speech
2015	March	3/23/15	ICAO Remotely Piloted Vehicles	Montreal	Speech
2015	March	3/25/15	SES Video Teleconference	Washington, D.C.	Speech
2015	April	4/8/15	Aircraft Electronics Association Convention	Dallas	Speech
2015	April	4/9/15	Southwest Region Town Hall	Fort Worth	Remarks
2015	April	4/14/15	InfoShare	Pennsylvania	Speech
2015	April	4/21/15	World Aviation Training Symposium	Orlando, Fla.	Speech
2015	April	4/21/15	WATS: The Evolving Role of Training in Aviation Safety	Orlando, Fla.	Speech
2015	April	4/22/15	Sun 'N Fun	Lakeland, Fla.	Speech
2015	April	4/29/15	Labor Management Forum	Washington, D.C.	Remarks
2015	May	5/13/15	Regional Airline Association Convention	Cleveland, Ohio	Speech
2015	June	6/5/15	NAC	Washington, D.C.	Speech
2015	June	6/30/15	GA Safety Summit	Washington, D.C.	Speech
2015	August	8/11/15	ANE All Hands	Wakefield, MA	Remarks
2015	August	8/14/15	UAS Symposium w/Sen Wyden	Portland, OR	Remarks
2015	September	9/15/15	Equip 2020	Washington, DC	Speech
2015	October	10/8/15	NAC	Memphis, TN	Speech
2015	October	10/13/15	NACC/DCA meeting	Montego Bay, Jamaica	Speech
2015	October	10/15/15	ORD Runway Commissioning	Chicago, IL	Remarks
2015	October	10/20/15	FAAMA	Las Vegas, NV	Remarks
2015	November	11/19/15	Aerospace Industries Association (AIA)	San Diego	Remarks
2015	December	12/1/15	ATO Leadership Meeting	Ft McNair	Remarks
2015	December	12/3/15	Town Hall	FAA HQ	Speech
2015	December	12/14/15	Small Unmanned Aircraft Registration Rule Press Call	Washington, DC	Speech
2015	November	11/1—4/2015	ATCA 60th Annual Conference	Gaylord Convention Center	Remarks
2015	July	7/20–7/26	AirVenture	Oshkosh	Remarks
2016	February	2/2/16	19th Annual Commercial Space Transportation Conference	Washington, DC	Speech
2016	February	2/11/16	FAA Town Hall (Reauthorization)	Washington, DC	Speech
2016	February	2/25/16	NAC Meeting	Atlanta, GA	Speech
2016	March	3/8/16	AOC All-Hands	FAA HQ	Speech
2016	March	3/23/16	NATCA 2016 Communicating for Safety conference	Las Vegas, NV	Speech

Michael G. Whitaker U.S. Senate Committee on Commerce, Science, and Transportation—Continued

Questions, Speeches, Panel Discussions and Presentations

Year	Month	Date	Organization	Location	Type
2016	March	3/31/16	GA Summit	FAA HQ	Speech
2016	April	4/7/16	Sun 'N Fun: External Data Access Initiative Listening Session	Lakeland, FL	Speech
2016	April	4/8/16	Sun 'N Fun	Lakeland, FL	Keynote Speech
2016	April	4/15/16	IFALPA	New Orleans, LA	Keynote Speaker
2016	April	4/28/16	Aero Club of Northern California	Silicon Valley, CA	Remarks
2016	May	5/11/16	Labor Management Forum	FAA HQ	Remarks
2016	June	6/2/16	Charlotte Tower Groundbreaking	Charlotte, NC	Remarks
2016	June	6/6/16	ADS–B Rebate Program Launch Conference Call	Washington, DC	Remarks
2016	June	6/7/16	New England Regional Administrator's Awards ceremony	ANE Regional office	Remarks
2016	June	6/28/16	Executive Off-Site	Cambridge, MD	Remarks

Michael G. Whitaker U.S. Senate Committee on Commerce, Science, and Transportation

Public Statements

Year	Date	Organization	Type
2013	7-Sep	Experts say stricter FAA rules for pilots too costly, won't improve safety	Press
2014	1-Apr	FAA Inaugurates New Houston Air-Traffic Facility	Press
2014	2-Apr	Houston TRACON Dedication	Event
2014	4-Jun	NextGen Enters Critical Era	Press
2014	10-Jun	United Airlines Starts NextGen Flight Procedures in Houston	Press
2014	18-Sep	FAA Calls on the Aviation Industry to Equip for NextGen and Help Increase Safety and Efficiency	Press
2014	18-Sep	FAA Calls On The Aviation Industry To Equip For NextGen and Help Increase Safety and Efficiency	Press
2014	19-Sep	FAA asks industry to equip for NextGen, help to increase safety and efficiency	Press
2014	19-Sep	FAA Calls on the aviation industry to equip for NextGen	Press
2014	19-Sep	FAA calls on the aviation industry to equip for NextGen and help increase safety and efficiency	Press
2014	19-Sep	FAA: Aviation industry needs to embrace ADS–B, NextGen initiatives	Press
2014	19-Sep	Much Remains to be Seen: The Future of NextGen	Press
2014	21-Sep	FAA Calls ADS–B 'Summit'	Press
2014	21-Sep	FAA Calls on the aviation industry to equip for NextGen, increase safety and efficiency	Press
2014	23-Sep	FAA calls on aviation industry to equip for NextGen	Press
2014	24-Sep	FAA Calls on the Aviation Industry for Help	Press
2014	26-Sep	FAA preps NextGen summit, but questions remain about drones	Press
2014	29-Sep	FAA Issues "Call to Action" on NextGen Equipage	Event
2014	4-Oct	AOPA Fly In Town Hall: Third Class Medical Reform	Event
2014	24-Oct	FAA Denies Bell Canada appeal for 429 weight increase	Letter
2014	30-Oct	The Three-Year NextGen Plan: DataComm, MRO, PBN and Surface Ops	Press
2014	4-Nov	Safety News | November 2014	Press
2014	18-Dec	AOPA Magazine: FAA Deputy Administrator a New Pilot by Sarah Deener	Interview
2015	9-Jan	Got ADS–B?	Press
2015	7-Apr	Airline GPS Receiver Issues Being Resolved Through Equip 2020	Press
2015	9-Apr	North America Remains Largest Market for GA Avionics Sales	Press
2015	23-Apr	Equip 2020: The Latest on ADS–B Equipage, Pricing, Privacy Issues	Press
2015	28-Apr	Do You Have What it Takes To Be a Political Appointee? By Mark A. Abramson and Paul R. Lawrence.	Interview
2015	6-Jun	AOPA Fly In Town Hall: Lessons from a Hard Landing	Event
2015	8-Jun	FAA and GA Community Launch Fly Safe Campaign	FAA Press
2015	16-Jun	Fly Safe: Prevent Loss of Control Accidents	FAA Press
2015	17-Jun	Amazon Says it wants to use drones to deliver packages in 30 minutes	Press
2015	17-Jun	Amazon says its 30 minute drone delivery service will be ready in a year—if FAA changes it rules on flights	Press
2015	17-Jun	Congress warned that drones present 'a nightmare scenario for civil liberties'	Press
2015	17-Jun	Delivery by drone in 30 minutes or less?	Press
2015	17-Jun	Delivery by drone in 30 minutes? Amazon says it's coming	Press

Michael G. Whitaker U.S. Senate Committee on Commerce, Science, and Transportation—Continued

Public Statements

Year	Date	Organization	Type
2015	17-Jun	Delivery by drone in 30 minutes? Amazon says it's coming	Press
2015	17-Jun	Delivery by drone in 30 minutes? Amazon says it's coming	Press
2015	17-Jun	Delivery by drone in 30 minutes? Amazon says it's coming	Press
2015	17-Jun	Delivery by drone in 30 minutes? Amazon says it's coming.	Press
2015	17-Jun	Delivery by drone in 30 minutes? Amazon says it's coming	Press
2015	17-Jun	Delivery by drone in 30 minutes? Amazon says it's coming	Press
2015	17-Jun	Delivery by drone in 30 minutes? Amazon says it's coming	Press
2015	18-Jun	Delivery by drone in 30 minutes? Amazon says it's coming	Press
2015	18-Jun	Delivery by Drone in 30 Minutes? Amazon Says It's Coming	Press
2015	18-Jun	FAA Expects to Issue Commercial UAS Rule in 2016	Press
2015	22-Jun	Centaur Flies Unmanned at New York UAS Test Site	Press
2015	22-Jun	Centaur Flies Unmanned at New York UAS Test Site	Press
2015	24-Jun	Amazon Says States Should Not Undermine FAA Rules	Press
2015	27-Jun	Remote-controlled passenger flights 5 years away, CEO says.	Press
2015	1-Jul	FAA and GA Community Focus on Safety	FAA Press
2015	2-Jul	Amazon Scanning Backyards In Seattle, Suggesting Drone Delivery In Its Sights.	Press
2015	6-Jul	Fly Safe: Prevent Loss of Control Accidents	FAA Press
2015	2-Aug	Franklin startup at heart of drone industry's cutting edge.	Testimony
2015	3-Aug	Fly Safe: Prevent Loss of Control Accidents	FAA Press
2015	1-Sep	Fly Safe: Prevent Loss of Control Accidents	FAA Press
2015	2-Sep	Drone incidents may cast shadow on remote-control aviators in Phoenix area.	Interview/Quote
2015	2-Sep	Why it's so hard for DC to make rules for drones	Press
2015	14-Sep	Amazon: A Prime Time for Drone Delivery	Press
2015	1-Oct	Fly Safe: Prevent Loss of Control Accidents	FAA Press
2015	7-Oct	Drone use booms, but one collision with an airplane could ground industry	Press
2015	7-Oct	FAA Expands Unmanned Aircraft Pathfinder Efforts	FAA Press
2015	7-Oct	The Government Is Testing Military-Grade Technology to Keep Drones Away From Airports	Press
2015	7-Oct	NBAA: House Hearing Highlights Need for Action on UAS Regulations	Press
2015	8-Oct	Congressional Hearing Tackles Drone Safety	Press
2015	8-Oct	FAA assessing drone tracking technology	Press
2015	8-Oct	FAA Testing Technology to Track Drones Near Airports.	Press
2015	15-Oct	Chicago O'Hare opens new runway, control tower.	Event
2015	15-Oct	Latest runway opens in decadelong modernization	Event
2015	15-Oct	O'Hare opens latest new runway in decadelong modernization	Event
2015	15-Oct	O'Hare opens latest new runway in decadelong modernization	Event
2015	19-Oct	Government Hailed for Strides in Modernising Air Transport Sector.	Event
2015	19-Oct	O'Hare (Finally) Opens New Runway	Press
2015	19-Oct	O'Hare opens latest new runway in decadelong modernization.	Event
2015	20-Oct	Drone Legal Issues	Press
2015	23-Oct	U.S. Indonesia Agreement on Sustainable Air Transportation and Aviation Alternative Fuels	FAA Press
2015	26-Oct	Exclusive—Wal-Mart seeks to test drones for home delivery, pick-up	Press
2015	26-Oct	Get ready for the battle of the home delivery drones: Wal-Mart set to take on Amazon and Google with fleet of unmanned craft	Press
2015	26-Oct	Walmart applies to test drones for home delivery	Press
2015	26-Oct	Wal-Mart Seeks to Test Drones for Home Delivery, Pickup	Press
2015	26-Oct	Wal-Mart Seeks To Test Drones For Home Delivery, Pickup	Press
2015	26-Oct	Wal-Mart seeks to test drones for home delivery, pickup	Press
2015	26-Oct	Wal-Mart Seeks to Test Drones for Home Delivery, Pickup	Press
2015	26-Oct	Wal-Mart Wants to Test Delivery Drones	Press
2015	26-Oct	Walmart wants to test drones for home delivery	Press
2015	26-Oct	Wal-Mart Wants to Test Drones for Home Delivery	Press
2015	27-Oct	Exclusive: Wal-Mart seeks to test drones for home delivery, pick-up.	Press
2015	27-Oct	How Will We Handle a Sky Full of Drones?	Press
2015	27-Oct	Wal-Mart applies to test delivery drones	Press
2015	27-Oct	Wal-Mart seeks permit to test drones for home delivery	Press
2015	27-Oct	Wal-Mart To Challenge Amazon On Drone Delivery	Press
2015	1-Nov	From the Hill: ALPA Tells Congress UAS Need Greater Oversight	Press
2015	2-Nov	Google reveals its drone package delivery service set to begin in 2017	Press
2015	2-Nov	Fly Safe: Prevent Loss of Control Accidents	FAA Press
2015	9-Nov	FAA expands effort to detect unmanned aircraft near airports	Press
2015	25-Nov	FAA Task Force Recommends UAS Registration Requirements	Press
2015	8-Dec	Fly Safe: Prevent Loss of Control Accidents	FAA Press

Michael G. Whitaker U.S. Senate Committee on Commerce, Science, and Transportation—Continued

Public Statements

Year	Date	Organization	Type
2015	14-Dec	Controversial drone rules announced	Press
2015	14-Dec	Expecting a drone this holiday season? The FAA wants to know about it.	Press
2015	14-Dec	FAA and DOT Announce Recreational Drone Registration Process—Gadget Guru Editorial	Press
2015	14-Dec	FAA announces drone requirements	Press
2015	14-Dec	FAA to require most drones to be registered and marked	Press
2015	14-Dec	FAA to require most drones to be registered and marked	Press
2015	14-Dec	Hobbyists Required to Register UAS Under New IFR	Press
2015	14-Dec	Is Your Drone Naughty or Nice? The FAA Begins Drone Registry Requirement on December 21	Press
2015	14-Dec	NPR: Small drone integration	Interview
2015	14-Dec	Press Call on Small Unmanned Aircraft Registration Rule	FAA Press
2015	14-Dec	FAA, DOT Unveil Small, Unmanned Aircraft System Registration Requirements	Press
2015	15-Dec	Drone questions up in the air	Press
2015	15-Dec	New rules for drones	Press
2015	17-Dec	Hobbyists required to register drones	Press
2015	18-Dec	New FAA Rule: Drone Operators Are Aviators and Need to Register by Feb. 2016	Press
2015	19-Dec	New rules for drones	Press
2015	21-Dec	Unmanned Aircraft Registration System Takes Flight	Press
2015	22-Dec	Golden Gate Bridge to Become 'No Drone Zone'	Press
2015	22-Dec	No Drone Zone' Signs Go Up Around Golden Gate Bridge	Press
2016	1-Jan	Drones and the Law: What you Need to Know	Press
2016	4-Jan	2015 Drone Year in Review	Press
2016	5-Jan	Wal-Mart Seeks to Test Drones for Home Delivery, Pickup	Press
2016	8-Feb	FAA says there are now more registered drone operators than licensed pilots.	FAA Press
2016	23-Mar	FAA TV: NextGen Update	FAA Press
2016	31-Mar	FAA and GA Community Are Making the Skies Safer	FAA Press
2016	31-Mar	FAA, NBAA Recognize Advances, Opportunities to Improve Safety	Press
2016	1-Apr	FAA: Voluntary Safety Measures 'Making Difference'	Press
2016	2-Apr	Fatal U.S. Small Plane Accidents Declined in 2015.	Event
2016	2-Apr	Fatal U.S. Small Plane Accidents Declined in 2015.	Press
2016	8-Apr	FAA and GA Community Are Making the Skies Safer	Press
2016	12-Apr	Sun 'N Fun Air Show: Got Data?	Press
2016	2-May	Delivery by drone in 30 minutes? Amazon says it's coming	Press
2016	12-May	Transportation Research Circular: Transformational Technologies in Transportation	Report
2016	16-May	Drone delivery start-up Flirtey taking on Google, Amazon in race to satisfy safety regulators	Press
2016	18-May	Drone delivery start-up Flirtey taking on Google, Amazon in race to satisfy safety regulators	Press
2016	20-May	Fly Safe: Prevent Loss of Control Accidents	FAA Press
2016	1-Jun	A Conversation with FAA Deputy Administrator about the challenges and opportunities facing the FAA	Interview
2016	1-Jun	The FAA Gave Us a List of Every Drone Pilot Who Has Ever Been Fined	Press
2016	1-Jun	The FAA Has Never Fined Anyone for Flying a Drone Commercially	Press
2016	2-Jun	FAA Breaks Ground for New Air Traffic Control Tower at Charlotte Douglas International Airport	Press
2016	2-Jun	FAA Breaks Ground for New Air Traffic Control Tower at Charlotte Douglas International Airport	FAA Press
2016	7-Jun	FAA Offers ADS–B Incentive Program	Press
2016	12-Jun	He Flew a Drone to Take Photos for a Friend. Now He's Facing $55K in Government Fines.	Press
2016	8-Sep-16	AOPA Responds to Crash Report: NBC Story Lacks Context, Clarity. Event A Brief History of Unmanned Aeriel	Event
2015/ 2016	N/A	Vehicles AKA Drones	Press

DATE	OUTLET	SOURCE TYPE
4/24/22	http://dronelife.com/	Press
4/25/22	http://aerospacetestinginternational.com/	Press
5/6/22	http://naijaloaded.com.ng/	Press
5/8/22	http://architecturaldigest.in/	Press
5/18/22	http://luxurylifestyle.com/	Press
5/3/22	http://ien.com/	Press

DATE	OUTLET	SOURCE TYPE
5/3/22	http://impomag.com/	Press
5/3/22	http://manufacturing.net/	Press
5/3/22	http://designdevelopmenttoday.com/	Press
5/3/22	http://mbtmag.com/	Press
7/18/22	http://aiaa.org/	Press
7/21/22	http://pressnewsagency.org/	Press
7/21/22	http://newswwc.com/	Press
7/21/22	http://newstocheck.com/	Press
7/21/22	http://henryclubs.com/	Press
7/21/22	http://politico.eu/	Press
7/21/22	http://newswwc.com/	Press
7/21/22	http://agadir-group.com/	Press
7/28/22	http://politico.eu/	Press
5/14/22	http://wsj.com/	Press
5/14/22	http://newsupdate.uk/	Press
5/14/22	http://newsbit.us/	Press
5/14/22	http://techilive.in/	Press
5/14/22	http://newsazi.com/	Press
5/14/22	http://blogspot.com/	Press
5/15/22	http://topmostpopular.com/	Press
5/15/22	http://dellyranks.com/	Press
5/1/22	http://euronews.com/	Press
5/1/22	http://akilligundem.com/	Press
5/1/22	http://blogspot.com/	Press
5/2/22	http://vervetimes.com/	Press
5/1/22	http://ctvnews.ca/	Press
5/2/22	http://abc17news.com/	Press
5/2/22	http://kesq.com/	Press
5/2/22	http://ktvz.com/	Press
5/2/22	http://openjaw.com/	Press
5/2/22	http://newslanes.com/	Press
5/10/22	http://impactlab.com/	Press
4/25/22	http://evaint.com/	Press
4/25/22	http://yahoo.com/	Press
4/25/22	http://yahoo.com/	Press
4/25/22	http://businessairportinternational.com/	Press
4/25/22	http://air101.co.uk/	Press
4/27/22	http://iotworldtoday.com/	Press
4/27/22	http://designboom.com/	Press
4/27/22	http://africapearl.com/	Press
4/28/22	http://businessairnews.com/	Press
5/1/22	http://btnews.co.uk/	Press
4/26/22	http://indiatimes.com/	Press
4/25/22	http://breitbart.com/	Press
4/25/22	http://menafn.com/	Press
4/25/22	http://techxplore.com/	Press
4/25/22	http://newsbit.us/	Press
4/25/22	http://barrons.com/	Press
4/25/22	http://ibtimes.com/	Press
4/25/22	http://digitaljournal.com/	Press
4/25/22	http://rfi.fr/	Press
4/25/22	http://newsazi.com/	Press
4/25/22	http://rtl.lu/	Press
4/25/22	http://newsupdate.uk/	Press
4/25/22	http://sharjah24.ae/	Press
4/25/22	http://mb.com.ph/	Press
4/25/22	http://thenews.com.pk/	Press
4/25/22	http://pledgetimes.com/	Press
4/26/22	http://easterneye.biz/	Press
4/26/22	http://newswwc.com/	Press
4/26/22	http://newswwc.com/	Press
4/26/22	http://cyberworldtechnologies.co.in/	Press
4/26/22	http://newsbit.us/	Press
4/26/22	http://indiaweekly.biz/	Press
4/26/22	http://asiantimes.biz/	Press
4/26/22	http://gg2.net/	Press
4/26/22	http://bangladeshweekly.com/	Press
4/26/22	http://urallnews.com/	Press
4/26/22	http://indiatimes.com/	Press
4/28/22	http://hamariweb.com/	Press
4/28/22	http://suchtv.pk/	Press
4/28/22	http://urduwire.com/	Press
4/28/22	http://urduwire.com/	Press
4/28/22	http://hamariweb.com/	Press
4/28/22	http://blogspot.com/	Press
4/28/22	http://timesofnews.com/	Press

DATE	OUTLET	SOURCE TYPE
6/19/22	http://desi123.com/	Press
4/24/22	http://moodiedavittreport.com/	Press
4/24/22	http://itsinternational.com/	Press
4/24/22	http://adsadvance.co.uk/	Press
4/25/22	http://airport-world.com/	Press
4/25/22	http://airtrafficmanagement.net/	Press
4/25/22	http://airwaysmag.com/	Press
4/25/22	http://fuelcellsworks.com/	Press
4/25/22	http://edie.net/	Press
4/25/22	http://theweek.in/	Press
4/25/22	http://tradebrains.in/	Press
4/25/22	http://forecourttrader.co.uk/	Press
4/25/22	http://latestly.com/	Press
4/25/22	http://devdiscourse.com/	Press
4/25/22	http://indiatimes.com/	Press
4/25/22	http://flyingmag.com/	Press
4/25/22	http://50skyshades.com/	Press
4/25/22	http://urallnews.com/	Press
4/25/22	http://theweek.in/	Press
4/25/22	http://coventry.gov.uk/	Press
4/25/22	http://aviation24.be/	Press
4/25/22	http://bobrtimes.com/	Press
4/26/22	http://aviation.com.ua/	Press
4/26/22	http://uasvision.com/	Press
4/26/22	http://india.com/	Press
4/26/22	http://greenfleet.net/	Press
4/26/22	http://traffictechnologytoday.com/	Press
4/26/22	http://wonderfulengineering.com/	Press
4/26/22	http://thebusinessdesk.com/	Press
4/26/22	http://blogspot.com/	Press
4/27/22	http://passengerterminaltoday.com/	Press
4/27/22	http://businessgreen.com/	Press
4/29/22	http://mrobusinesstoday.com/	Press
10/25/22	http://latestnigeriannews.com/	Press
1/12/23	http://wyso.org/	Press
1/12/23	http://wuwf.org/	Press
1/12/23	http://southcarolinapublicradio.org/	Press
1/12/23	http://wuwm.com/	Press
1/12/23	http://publicradioeast.org/	Press
1/12/23	http://northernpublicradio.org/	Press
1/12/23	http://klcc.org/	Press
1/12/23	http://delawarepublic.org/	Press
1/12/23	http://apr.org/	Press
1/12/23	http://wjct.org/	Press
1/12/23	http://ktep.org/	Press
1/12/23	http://wvtf.org/	Press
1/12/23	http://wqcs.org/	Press
1/12/23	http://capeandislands.org/	Press
1/12/23	http://wkyufm.org/	Press
1/12/23	http://redriverradio.org/	Press
1/12/23	http://wcbe.org/	Press
1/12/23	http://tspr.org/	Press
1/12/23	http://krwg.org/	Press
1/12/23	http://wuky.org/	Press
1/12/23	http://aspenpublicradio.org/	Press
1/12/23	http://wvasfm.org/	Press
1/12/23	http://spokanepublicradio.org/	Press
1/12/23	http://wsiu.org/	Press
1/12/23	http://kwbu.org/	Press
1/12/23	http://wjsu.org/	Press
1/12/23	http://wboi.org/	Press
1/12/23	http://wuot.org/	Press
1/12/23	http://kvnf.org/	Press
1/12/23	http://ksjd.org/	Press
1/12/23	http://nhpr.org/	Press
1/12/23	http://wmra.org/	Press
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1/12/23	http://ksmu.org/	Press
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1/12/23	http://kasu.org/	Press
1/12/23	http://wfae.org/	Press
1/12/23	http://kvcrnews.org/	Press
1/12/23	http://wmfe.org/	Press
1/12/23	http://kunm.org/	Press

DATE	OUTLET	SOURCE TYPE
1/12/23	http://wknofm.org/	Press
1/12/23	http://wxxinews.org/	Press
1/12/23	http://ypradio.org/	Press
1/12/23	http://kunr.org/	Press
1/12/23	http://ksut.org/	Press
1/12/23	http://wpsu.org/	Press
1/12/23	http://wyomingpublicmedia.org/	Press
1/12/23	http://wcmu.org/	Press
1/12/23	http://wlrn.org/	Press
1/12/23	http://mtpr.org/	Press
1/12/23	http://ctpublic.org/	Press
1/12/23	http://usf.edu/	Press
1/12/23	http://weku.org/	Press
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The CHAIR. Thank you. Thank you, Mr. Whitaker. So appreciate you and your willingness to serve, and your many years of experience. You mentioned your commitment to implementing the safety certification program, which some of it has been implemented, but there is more to do.

And I guess I would just say as a summation that the world of aviation, since you left the FAA, has changed significantly. You mentioned the 737 MAX crashes, the COVID pandemic. We kept the airlines moving during that time period.

Recently, the NOTAM system outages, near-misses, things of that nature. What the FAA needs to do, I think are even greater challenges since when you were there before. So, I want to—I appreciate you saying you wanted to fully implement the law, so thank you.

Thank you for that. What are your strategies for building a resilient safety culture at the FAA, and what do you think it takes at this point in time to have that safety culture? I just want to mention we were able to implement the Samya Stumo Air Grant Program, and I see it already paying dividends on Capitol Hill and at agencies because we have the smartest technology people here helping on the very technical details of aviation.

The underlying ACSA bill has the integrated project team. Sometimes around here we call them the gray beards. While I am anxious to see how the gray beards assess technology, as you mentioned in your statement, that may not be disclosed by a manufac-

turer, and yet you have to understand the huge technology change that is happening. I mean, I wonder at some time if we shouldn't be looking at a CTO.

In some ways, NASA is our CTO, but maybe on the implementation of things, as we look at the NOTAM outage and other things, I mean, maybe in addition to the forward thinking that NASA does for the agency, maybe a CTO or these integrated project team leaders are a key to our future.

But if you could talk about what it is that you think we need to build in that intersection of changes of technology and safety?

Mr. WHITAKER. Thank you, Senator Cantwell. It is a great question. I think there are a number of aspects to this. We need to build a strong leadership team, make sure we have the right people in the right positions and make sure they are permanent.

And we need a strong bench. So, I think focusing on making sure we have the expertise in the organization is going to be key. Safety culture doesn't create itself, and I think you have to constantly emphasize that it is our first mission above all else, and everything has to be focused on that.

We have to hold the line on pressure to reduce standards and make sure we are keeping the system as safe as possible. The technology issue is a very interesting one. There are a lot of new technologies coming into the agency that you can't prove out through flight testing necessarily.

Software is a good example of that. New technologies that interact with each other in ways that maybe we haven't experienced in the past. So, I think it is good to look at having somebody with the appropriate technology experience who can see the big picture when a new aircraft or new technology comes in, how the pieces fit together and where we can look for risks that may not be apparent otherwise.

The CHAIR. So, you are fully committed to the integrated project team and getting them on board, and their oversight in the certification process?

Mr. WHITAKER. I think further integration in the certification process between groups, including technology, is a key reform from ACSA and we will certainly implement that, and look for ways to even go beyond that.

The CHAIR. What else do we need to do here on Capitol Hill—you mentioned a bench. I would just call it a resilient workforce. How do we communicate to people what the workforce needs of the FAA are so that we can build this?

I think it is one of your key priorities. You mentioned it in your statement, but we—we are like every other workforce in the Nation. We need the right people, and we need them now. So, what can we do to better enable this FAA workforce?

Mr. WHITAKER. I think assessing the workforce will be one of the first goals that I have within the agency, and I would look forward to finding ways that we can increase ways to bring people into the agency. I think it is a tight workforce right now in aerospace and we recruit in the same places that private industry does, and we have got to figure out a way to be competitive to bring the right talent into the agency.

The CHAIR. Will you work with us on the ability of the FAA to communicate these outcomes? I think we get in this role between the legislative branch and the agency, and we have had to push for a lot of discussions so that people understand impacts. And so, I hope you will commit to being a frequent communicator.

I think my former colleague, Senator Wicker, had his levels of frustration many times before the Committee in cooperation with the FAA on information. And what we need is we are the authorizers, but we are not the appropriators.

And what needs to be clear to the appropriators is what a shortfall an impact at the FAA will mean for us to do any aspect of the job at the FAA. So, if you will commit to that?

Mr. WHITAKER. I will. I think communicating better with stakeholders all around will be an important priority as well.

The CHAIR. Thank you. Senator Cruz.

Senator CRUZ. Thank you, Madam Chair. Mr. Whitaker, you and Chair Cantwell just a moment ago were talking about the need to recruit excellent talent at the FAA, which is certainly a pressing need, I agree.

The number of air traffic controllers was a significant concern during your tenure as Deputy Administrator at FAA. You repeatedly touted the FAA's plans to hire 6,000 controllers over 5 years.

Years later, unfortunately, the shortage has only grown worse, leading to congestion and frequent delays, especially in the New York airspace. As you know, all newly hired air traffic controllers must complete a training program at the current FAA academy, but that academy is limited to only about 1,800 individuals per year, and it takes several years to fully train an air traffic controller.

Realistically, considering that the attrition rate at the academy and the field training process, we need to hire significantly more than 1,800 each year for several years. If you are confirmed as FAA Administrator, and you look at the issue of controller training and you find what has been consistently said to be the case, that a major choke point in the controller pipeline is the physical limits of the ATC academy, would you support a second ATC academy to increase throughput?

Mr. WHITAKER. Yes, Senator Cruz. I certainly would. And as we have discussed, looking at those chokepoints and understanding where the problems lie will be an early priority, and we just simply need to solve this problem and figure out how to get it done.

Senator CRUZ. I appreciate that commitment. Given that our system is facing a critical air traffic controller shortage, I would hope that one of the first things you would do would be to address this issue.

And if you are confirmed quickly by the Senate, can you commit to addressing it and trying to turn it around by the end of the year?

Mr. WHITAKER. I will. Assuming I have enough time to do that, I will, sir.

Senator CRUZ. Thank you. Let me turn to a different question. When you were Deputy Administrator of the FAA, how many days a week did you go into the office?

Mr. WHITAKER. Every day, sir.

Senator CRUZ. Every day. In late July, the FAA said that employees had to be in the office at least 3 days a week by October 9. But two weeks later, after the FAA hired a senior labor policy adviser for the first time, the agency put that in-person expectation on hold because of union pushback. Do you believe it is important that the FAA return to in-person work?

Mr. WHITAKER. I do believe it is important to be in-person for collaboration and working together. And it—when I get into the agency—this has been a challenging issue for all organizations, private or public.

And I think what needs to happen is after understanding of the situation that we are in and the limitations that might be there, issuing very clear guidance on what the expectations are to get people in the office.

Senator CRUZ. Well, and I will say there is a sharp differential, I think, between private and public. When I talk to businesses in the private sector, virtually all of them, the employees are going back to work, and they are physically present.

And yet throughout the Biden Administration, we have a pattern in just about every agency where large portions of the workforce have apparently decided going to the office is optional.

And I think that seriously limits the effectiveness of an agency, and particularly an agency whose mission is protecting people's lives in the airspace. If confirmed. Will you commit to working diligently to bring FAA employees back to the office?

Mr. WHITAKER. I will, sir.

Senator CRUZ. When you were Deputy Administrator of FAA, the certification of the Boeing 737 MAX was underway. What was your involvement in the certification of the 737 MAX?

Mr. WHITAKER. I didn't have any involvement in the certification of the MAX. I wish I had in retrospect, but the issues around the safety of the MCAS were unknown at that time, at least at the executive level, so they were not raised.

Senator CRUZ. So, what went wrong with the certification of the MAX?

Mr. WHITAKER. Well, I think, of course, this has been well studied by this committee and others, but I think it is—I have to say it was a failure all around. It was a failure at Boeing. It was a failure at the system to catch information that was not disclosed by Boeing. And I think the ACSA has done a commendable job of plugging a lot of those holes, but I think there is more work to do, and we need to make sure that never happens again.

Senator CRUZ. As a technical matter, what caused the two air crashes with the 737 MAX?

Mr. WHITAKER. Well, I think there are a number of issues. I think the functioning of the MCAS and the characteristics of the MCAS, pilot training, or I should say lack of pilot training, lack of awareness of the system was a major contributor. So, there were a number of causes.

Senator CRUZ. And let me ask you, what is your level of confidence that the FAA has changed how it approaches those issues so that prospectively there will not be another disaster like we had with the 737 MAX?

Mr. WHITAKER. I won't fully know the answer to that question until I am there. I understand about two-thirds of the reforms in ACSA have been implemented. But it will be a top priority to make sure that is done, and we go beyond that and bring extra vigilance to the situation.

Senator CRUZ. Thank you.

Mr. WHITAKER. Thank you, sir.

The CHAIR. Senator Klobuchar.

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

Senator KLOBUCHAR. Thank you very much, Madam Chair. And Mr. Whitaker, I enjoyed our discussion earlier, and I also am excited about the experience you will bring to this job, and hopefully you will get confirmed swiftly like everyone gets confirmed in the Senate. OK, that was a sarcastic joke.

But I think we all know that this couldn't be more important. I appreciated Senator Cruz's remarks about the need for the air traffic controllers. Senator Braun and I just introduced something on this, and I understand you want to see more—a bigger aviation workforce.

A bunch of us are working on this with grants and things like that. Tell us what would be most helpful to get the aviation workforce we need?

Mr. WHITAKER. I think the grants are very helpful. I would view my role as Administrator as chief recruitment officer, certainly for FAA, but also for the industry. And I think we need to really build interest in people becoming pilots, or controllers, or mechanics, or flight attendants. It is a great industry, and we need to push the word out a little bit and really cast a broad net to build as broad a pipeline as we can to bring people into aviation.

Senator KLOBUCHAR. Right. And Senator Cantwell had mentioned the need to focus on what we saw out of the—with the systemwide failure that morning that we will never forget. Senator Moran and I were on the phone with the Acting Director that day.

Could you talk about your commitment to carry out some upgrades to our air mission system? I—Senator Moran and I and Capito passed a bill on this actually to include all the stakeholders that represents jobbers—was carrying. Could you quickly answer that? Then I have a real fun like Gong Show-off question.

Mr. WHITAKER. Sure. No, that is—I am committed, and I have been briefed on the matter from FAA, and I understand that work is underway.

Senator KLOBUCHAR. OK. Very good. When it comes to the Essential Air Service, we talked about that. Do you agree that we need to ensure that air service reaches travelers outside of urban areas and continue that program?

Mr. WHITAKER. I do. I think our network of airports in the U.S. is a treasure, and it needs to be—we need to invest in it and keep them viable.

Senator KLOBUCHAR. Right. Contract Tower Program provides critical air traffic control safety benefits to 256 smaller airports across the country, including in Saint Cloud, Minnesota, Anoka County Airport. Do you support this program?

Mr. WHITAKER. I do.

Senator KLOBUCHAR. OK, very good. Here is one that really interests me, sustainable aviation fuels. A lot of our airlines, and certainly farmers in Minnesota, and many are interested in this.

And decarbonizing commercial flight is one of the greatest challenges facing modern aviation. You can't use a plug in plane. Could you talk about how renewable fuels are a key pathway? Renewable fuels offer an opportunity to reduce emissions and also use homegrown fuel.

Mr. WHITAKER. I think it is part of the number of initiatives underway to decarbonize. And I know the airline industry is very supportive of that transition. There are other technologies out there, including electric aircraft, that help in that mission as well.

Senator KLOBUCHAR. Senator—Secretary Vilsack actually would be a good one to talk to about this because it has been one of our big priorities when it comes to renewable fuels.

And finally, the Safe Skies Act and Senator Cantwell, with her great leadership in aviation, has been supportive of this, to take the rest requirements that are put in place for passenger pilots, applying them to cargo pilots that currently have looser rest requirements, but they are all still flying planes in the same airspace.

Could you talk about cargo pilots and the work that I think needs to be done from the safety standpoint?

Mr. WHITAKER. I am happy to look into that issue. It is not something I am currently familiar with, but I will look into that.

Senator KLOBUCHAR. OK. Very good. You can talk to Sully Sullenberger about that. But anyway——

Mr. WHITAKER. Thank you.

Senator KLOBUCHAR. All right. I hope you get confirmed swiftly. I think it would be a really—a tribute to this committee and our leadership if we are able to get this done strongly in a bipartisan basis. And so, I toss it back to the Chairwoman here.

The CHAIR. Thank you. Thank you, Senator Klobuchar. Senator Thune.

STATEMENT OF HON. JOHN THUNE,
U.S. SENATOR FROM SOUTH DAKOTA

Senator THUNE. Thank you, Madam Chair, for holding this important hearing. And I would just say, to put it simply, the FAA has its work cut out for it.

On top of implementing the last FAA reauthorization and the certification reform bill, the agency is contending with an increasingly complex national air space system, which must accommodate the growth in commercial space activity and the integration of drones and advanced air mobility aircraft.

And managing all of those challenges while maintaining the highest level of safety in the world's busiest aviation system requires a skilled leader with extensive aviation experience. So, I look forward to today's discussion. Mr. Whitaker, thank you for being here today and for being willing to take on this role.

I have a whole bunch of questions on contract towers, airspace, UAS integration, and some other subjects that I would probably submit for the record. But I want to talk about the current training for transport pilots, airline transport pilots, requires the vast ma-

jority of flight hours be accumulated in the cockpit, and I fully recognize the value of cockpit experience and see time in real aircraft is an essential part of training airline pilots.

However, I am concerned that little to none of the currently required flight hours are accumulated in the type of aircraft these pilots will be flying, should they get a job with an airline. Instead, they are typically accumulated in small single engine aircraft.

To address this issue, Senator Sinema and I have offered an amendment to the Senate FAA reauthorization, codifying the recommendations of the air carrier training, or ARC, to create a 2-month enhanced qualification program completed in exchange for a 250 hour credit toward the requisite aeronautical experience.

The EQP's use of simulator training, whose proven value has resulted in extensive use by the military and instruction I would add from seasoned airline pilots, would give trainees exposure to the cockpits and the jets that they would actually be flying, and crucially allow them to experience what it is like to handle challenging and dangerous situations in these cockpits.

So, there is a bipartisan group of former FAA Administrators and ALPA Presidents who recently called on Congress to expand the use of similar training, stating that and I quote, "requiring the repeated practice of the prevention of and recovery from myriad real world accident scenarios in full motion flight simulators will make better pilots."

So, Mr. Whitaker, I frankly find it hard to believe that anyone would disagree with the statement from a respected group of aviation safety officials. Just like the adoption of ADSB, which you championed when you were last at FAA, the agency's leadership in adopting new technologies has significantly benefited aviation safety, time and time again making the U.S. aviation system the safest in the world.

So, having said all that, my question is, can you describe how, if confirmed, you would work to ensure the FAA takes the same leadership role in expanding the use of flight simulators to ensure that new pilots are well rounded and best prepared to fly safely in airline operations?

Mr. WHITAKER. Thank you, Senator, for the question. I think, I guess there are a couple of pieces to this. I think the 15 hour—1500 hour rule has been, of course, it is legislated, so it is—we follow the law and implement that rule.

But I think since it has been passed, it is an important fabric of our safety network, if you will, and it has yielded good results in our operating system. The simulator issue is an interesting one.

It involves a lot of different technologies and a lot of open questions, and there is an ARC that has been formed at FAA to look at how that might be used and how we might look at pathways for reaching that 1500 hours.

I know from my time at United Airlines, there are simulators and there are simulators. Some of the ones you mentioned, the full motion 777 simulator that the United Airlines would operate is an incredibly valuable tool for training airline pilots and running through scenarios and accidents and the like.

But there are also multi-multi-million dollar machines that wouldn't normally be available for a pilot trying to get 1500 hours. I know that the technology has developed in simulators.

We know that a desktop computer is not an adequate simulator for flight training, but understanding what the possible uses are, I think is something that we should leave to the experts in the ARC, take their recommendations, and consider those.

Senator THUNE. OK. Well, and I hope you will. I mean, that is essentially what we are operating off of here.

Mr. WHITAKER. Yes.

Senator THUNE. All right. Very quickly, talk a little bit about UAS. If confirmed, you describe how you will work to create a beyond visual line of sight regulatory framework and otherwise streamline the airworthiness approval process for UAS?

Mr. WHITAKER. I think the next step with the BV laws is getting a rule out. I am not—I don't have access to where that process stands right now, but it seems to me that the time has come to do that and move as quickly as we can.

Senator THUNE. We have got a bill, Senator Warner and I, that addresses this issue, which I hope you all will take a look at. But I just think this is something that stakeholders, everybody have been waiting for us to address, and I hope that as you undertake this new responsibility, that you will work to implement a system that is not only safe but is something that can accommodate the—what we are going to see in terms of increased use, I think, of those types of aircraft for lots of different applications.

Mr. WHITAKER. I agree, sir, and I will.

Senator THUNE. Thank you.

The CHAIR. Senator Duckworth.

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

Senator DUCKWORTH. Thank you, Madam Chair. Mr. Whittaker, thank you for being here today, and for your willingness and your family's willingness to serve to ensure our Nation's aviation system is safer, especially at a time when we are experiencing alarming safety crises.

The FAA needs a leader who will be proactively strengthening the post-Colgan era safety system and work with Congress to secure transformational investments that will enable America to recruit and train the next generation of air traffic controllers and pilots and mechanics.

Airlines broke the pilot pipeline when they decided that the best strategy to deal with the 1500 hour rule, that they claim is causing the pilot shortage, was to spend their hard earned cash on mass buyouts that resulted in tens of thousands of their most experienced pilots exiting the system—the workforce.

The mass exodus of pilot experience was compounded by a wave of retirement of air traffic controllers, many possessing decades worth of experience. And being from Illinois, we are very familiar with tornadoes.

And just like warm air and cold air colliding together to create a tornado, plummeting aviation experience levels combined with a

post-pandemic surge in travel that created a perfect storm we are witnessing now in all these near-misses and safety incidents.

The aviation system's margin of safety has been reduced and the results are downright terrifying. According to the *New York Times,* in a 12 month period, there were 300 accounts of near collisions involving Part 121 carriers.

That is almost one near-miss per day so far this year. Yet despite the alarming evidence that we must raise experience levels and bolster training across the aviation workforce, some airlines are continuing their years long campaign to weaken or water down the post-Colgan era reforms.

Mr. Whitaker, if confirmed, you will face heavy pressure from cost cutting carriers looking to water down experience requirements. You will hear arguments that the 1500 hour role is too rigorous because foreign countries require much less time. But I don't want our Nation's aviation system to morn—to mimic foreign regulations.

I want the United States to operate the safest airspace in the world, and I am assured you do as well. I want the FAA to commit to doing everything in its power to ensure that the next set of safety reforms are not written in the blood of passengers killed in an aviation incident.

Complacency kills. That is why the next FAA Administrator must proactively work to increase experience and training requirements before our luck runs out and this year's near-misses turn into next year's deadly collisions.

Mr. Whitaker, if confirmed, will you protect the post-Colgan era safety system by rejecting efforts to water down the 1500 hour rule that requires a pilot build at least 1500 flight hours to earn an ATP certificate?

Mr. WHITAKER. Yes, Senator. The—of course, the 1500 hour rule is legislative, and we will certainly work to maintain its integrity. It has been an important part of the safety system, and any changes I would recommend would go through an ARC process to make sure we are not lowering the bar in any way.

Senator DUCKWORTH. Thank you. Debates over the 1500 hour rule often provoke intense disagreement, yet carriers and safety advocates alike appear skeptical of the value of so-called diploma mill institutions, which enable pilots to efficiently earn the 1500 hours of flying, as I have been told, circles and cloudless blue skies without a gust of wind.

But you can do the same thing in the simulator where you are not practicing the exact maneuvers needed, and you can be also flying 15 hours—endless hours in blue skies and God knows what type of simulator.

So, we would need to specify exactly what type of simulator usage, what type of procedures are being practiced. Mr. Whitaker, if confirmed, will you work to enhance safety by strengthening the 1500 hour rule, specifically by refining what type of flight hours count toward meeting the rules, such as, for example, requiring more than 50 hours be spent flying in the class of airplane for the rating that will be sought, something that the airlines have talked to me about, which I agree with, which is precisely the type of experience that these regional carriers are asking for.

Mr. WHITAKER. I think those are excellent points, and I think they specifically apply to any use of simulators so that we are very clear on what constitutes a simulator, what is acceptable, and how do you log the time, and what sort of maneuvers. You can't just go for a pleasure flight on your simulator. It doesn't really add much to the equation. So, I think those are excellent points.

Senator DUCKWORTH. Exactly. I think this is why a very vague proposed language such a structured training in a simulator is—causes me to be very skeptical. If you don't specifically say you need, you know, exact hours of flying an actual IMC, if you don't have actual requirement to fly the exact type of aircraft, all of these lead to lack of pilot experience.

And I have to say, you know, in all the years that I flew, the top types of simulators that the Army had, full motion, everything, not once did we ever practice the procedure that resulted in my surviving the RPG that hit my aircraft.

And in fact, when I was told that had I experienced that—every time we were in the aircraft and we simulated experiencing what we experienced, a total loss of our avionics, we were told, you are just going to die and then you pause the simulator.

But it was the years of experience that caused us to be able to land that aircraft, and that is what I want from our air traffic control system. I hope it is the same for you.

Mr. WHITAKER. Yes. Thank you, Senator, and thank you for your service.

Senator DUCKWORTH. Thank you. And I have one more question for the record on the 737 MAX, but I will submit that. Thank you, Madam Chair.

The CHAIR. Thank you. Senator Moran.

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

Senator MORAN. Senator Cantwell, thank you. Thank you to you and Senator Cruz for rescheduling today's hearing from tomorrow to today.

It would be a terrible mistake if we lost another couple of weeks in our efforts to get a confirmed and capable Director, or Administrator of the FAA, and I am glad to see that you share that priority.

I also want to associate myself with the remarks of Senator Cruz in a couple of—particularly in a couple of instances in which he spoke about the importance of workforce and returning to the office. That needs to be a Federal wide circumstance, but I hope you will fully take the lead that you described to Senator Cruz to see that that happens at the Federal Aviation Administration.

And also, it baffles my mind that we desperately need air traffic controllers so critically, and yet the gap that is created by a lack of educational facilities and training remains. And so, I appreciated your answer to both of Senator Cruz's questions.

Let me ask a couple of questions. You are nominated at a unique time in the history of the FAA. Airspace is congested and new entrants are arriving daily. As the demand for aviation continues to grow, coupled with unprecedented challenges the industry has faced over the past few years, what lessons did you learn, what les-

sons did you learn as the Deputy Administrator that prepare you to be the Administrator in these days?

Mr. WHITAKER. Thank you, Senator Moran. I learned an infinite amount during those 3 years. It was really quite instructive, both on the technical side. I learned particularly to appreciate the 5,000 airports that we have in this country, some of them dating back to World War II and military uses.

And I know from my experience with some startups that are looking at new technologies, these airports present structure of infrastructure that is an opportunity, a business opportunity.

I know BETA from Vermont is already building charging stations and the like in small airports to create their own network of connectivity. So, I think my experience, particularly in the airspace, will help me chart a path forward for integrating a lot of these new technologies going forward.

Senator MORAN. Your experience as Chief Operating Officer at Supernal, can you identify ways you will shepherd exciting technologies, AAM in particular, safely and efficiently into our national airspace?

Mr. WHITAKER. So, safety will always be the number one priority. But we can't use that as an excuse not to move more quickly. I think the key is to have an integrated vision for how these various new entrants, whether it is commercial space launch, supersonic travel, small drones, or vertical takeoffs that turn into horizontal flight can fit into our existing system. I think that is going to involve some technologies in the system that we haven't had before, and it is going to involve a roadmap on how to implement those technologies.

Senator MORAN. Senator Duckworth and I and others have been fully engaged in air mobility issues, and it seems things move at a glacially slow pace. And the difficulty we face—certainly no one could disagree with your comments about safety, it is the priority.

But we operate in a world in which competitors cannot have the advantage of a regulatory system that moves much more rapidly than what I have seen in our circumstance, and it is true beyond just these new advanced technologies. We need to be competitive in this world, as we manufacture, develop, research, and engineer new entrants into the realm. I would ask you a final question.

Assure me that you will take charge and be a strong and determined leader in a circumstance in which there is lots of bureaucracy and backlog that makes that a challenge?

Mr. WHITAKER. Senator, I can give you that assurance, and I feel like my time at FAA gives me some real advantage. I am known in the agency, and I know a lot of people there, and I have a pretty clear vision for the mission. And I know it is a hard job, and I know it is an important job, and I embrace that.

Senator MORAN. Well, Mr. Whitaker, you will have a tough job, if confirmed, ahead of you. I have not said this publicly. You and I have met. You and I have had a telephone conversation and today's hearing. Everything I know about you suggests that you should be confirmed, and my intention is to vote for your confirmation and encourage my colleagues to do so as well.

Mr. WHITAKER. Thank you, Senator.

The CHAIR. Senator Peters.

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

Senator PETERS. Thank you, Madam Chair. Mr. Whitaker, congratulations on your nomination and your willingness to take what is truly a challenging job, so we appreciate that.

Mr. WHITAKER. Thank you, sir.

Senator PETERS. Mr. Whitaker, as Michigan Senator, I have the privilege of representing nine rural airports that are served by Essential Air Service Program. That is the most of any state in the lower 48. And many of those airports are in Northern Michigan and the Upper Peninsula, and host only a couple of roundtrips per day.

Looks like I am going to take one of those aircraft on Friday up to one of those Northern Michigan cities that is serviced through EAS. The proposed Senate FAA Reauthorization bill this year includes a provision that I championed that would hold airlines accountable when they break their contracts with these small communities who rely on them for service.

It is absolutely essential that they continue to get the service. And under the proposed new EAS rules, it would be harder for airlines to terminate contracts early, and the Department of Transportation would be empowered to penalize airlines that abandon these EAS communities. I believe this is essential to preventing uncertainty and lapses in services in communities like Holton, Michigan, which experienced this very issue last year.

So, my question for you, sir, is, if confirmed, will you work with Congress to protect the Essential Air Service Program and hold airlines accountable to the communities that they serve in rural areas, not just in my state, but all across the country?

Mr. WHITAKER. Yes, sir. I believe that the EAS program in our network of smaller airports is really key to our system, and I will do—work with you to support the appropriate safety mechanisms and infrastructure in those airports, and then work with DOT on administrating the EAS program.

Senator PETERS. Good. Thank you. Mr. Whitaker, Gerald R. Ford International Airport in Grand Rapids, Michigan, is Michigan's second largest airport. It sees well over 200 aircraft operations each and every day, and it serves a very—rapidly growing part of our State as well.

However, even as Grand Rapids serves record numbers of passengers, it has been stymied in its efforts to expand and modernize because of a 60 year old FAA air traffic control tower that the agency has not acted to replace.

And that is why last year I secured $5 million in Congressionally directed spending for the airport to begin the design process to replace the tower. But clearly, the job is not done yet. My question for you is, will you commit to working with me and the Grand Rapids Airport to ensure that there is a plan to replace their tower in a timely fashion, if confirmed?

Mr. WHITAKER. Yes, sir, I will.

Senator PETERS. Well, thank you. I have also long advocated for the FAA to transition away from the use of toxic PFAS containing firefighting foams. Last year, President Biden signed into law my Preventing PFAS Runoff at Airports Act, which will allow airports

to purchase the equipment they need to test their firefighting response without discharging toxic PFAS chemicals.

This year, the proposed FAA Reauthorization Bill includes provisions that I championed to ensure a quick transition to these new non-PFAS firefighting foam, alongside financial resources for airports to make that transition.

Michigan airports continue to lead the way on this issue, but they need a strong partner in the FAA to fully transition away from the use of these chemicals to protect our communities, to protect their firefighters from contamination.

So, if confirmed, I would like certainly get your commitment to work with airports to end the use of PFAS in aviation and your thoughts generally on this challenge?

Mr. WHITAKER. Thank you, Senator. I am new to the issue, but I understand the FAA has been doing work and following the DOD guidance on transitioning from the fluorine free foams, and also looking for new forms of product to fight fires effectively, so we will continue to have that engagement with you.

Senator PETERS. Right. Thank you. Mr. Whitaker, in your questionnaire, you said one of your top three priorities is rebuilding the FAA workforce for the future.

And I certainly agree that our focus must be on building a robust workforce of air traffic controllers, pilots, maintenance technicians, aviation engineers, and other workers. I also believe we can't meet this goal without doing more to recruit and retain women in these fields.

Currently, 5 percent of airline pilots are women, and even fewer serve in the other aviation fields. I have heard directly from a Michigander who served on the FAA's Women in Aviation Advisory Board, Kelly Yost, about the work the board did to direct FAA industry and Congressional action to support women in industry, and that is why I introduced the Promoting Women in Aviation Act, and I am fighting to have it included in the FAA reauthorization package.

Can you speak to the importance of building a strong aviation workforce pipeline and finding ways to recruit and retain women in these critical positions?

Mr. WHITAKER. I think casting as broader net as we can and making it as inclusive as possible is necessary. We need a lot of folks to have interest in aviation and all those jobs you have mentioned, so I do support that.

Senator PETERS. All right. Thank you, Madam Chair.

The CHAIR. Thank you. Senator Blackburn.

STATEMENT OF HON. MARSHA BLACKBURN,
U.S. SENATOR FROM TENNESSEE

Senator BLACKBURN. Thank you, Madam Chairman, and thank you for the hearing today. Mr. Whitaker, thank you for being with us, and thank you for the time to visit by phone. And I—Madam Chairman, I hope we can move soon to the FAA Reauthorization Act and get that finished.

The House passed their mark on that bill back in July and we need to take that up so we can all move forward. Mr. Whitaker let's talk a little bit about drones, which we did as we visited last

week. As we noted, DOD, CISA, let's see, Interior, Commerce, and Treasury have all warned about the threat that are there as we look at Chinese drones.

And because of that, I introduced the Stop Illicit Drones Act, and it would prohibit the FAA from operating or providing Federal funds to certain foreign drone companies. And this is all to protect us and our country.

And I would like to hear from you, if you are confirmed, what will you do to guard against this threat that we have from Chinese drones? And how are you going to raise awareness on this issue?

Mr. WHITAKER. Thank you, Senator Blackburn. And thanks for taking the time last week for us to meet. This is a very serious issue and I think national security, protecting our airspace, protecting our intellectual property as an economy are all very important issues.

The FAA's role here is to really work with various other agencies, law enforcement officers or agencies, to make sure we have the adequate protections in place, regardless of where the drone is manufactured to protect, particularly from my perspective, the airspace.

Senator BLACKBURN. OK. And Chinese drones, specifically. Would you agree with prohibiting Federal funds for the purchase of these drones?

Mr. WHITAKER. I will certainly defer to this body on the legislation that they put forward, and I will defer to the law enforcement agencies on how to best approach it. But clearly, there are risks associated with drones in that category, yes.

Senator BLACKBURN. OK. I want to talk with you about 5G, because I have an amendment that I filed to the Reauthorization Act to create an R&D Grant Program to develop, test, and certify standards for ensuring the telecom industry and the FAA can meet installation requirements for Next Gen radio by 2024. So, do you believe that this would help mitigate the FAA broadband carrier dispute over 5G in planes?

Mr. WHITAKER. I think there has been tremendous progress in resolving this issue. And I know that the industry has is equipped, I think the levels are over 90 percent now of equipage to include mitigations for any interference from the 5G. So, I think I will continue to work with you on making sure that is completed.

Senator BLACKBURN. OK. That is great because that is something we need to see completed. The *New York Post* earlier this year had an article on the epidemic surrounding aviation employees using their credentials and privileges to smuggle drugs through airports and onto airplanes.

And I, like many of my colleagues, have worked visiting different airports and looking at some of these issues. And so, how do you plan to work with TSA to counter these illegal operations that are being carried out on the tarmac at some of our Nation's airports?

Mr. WHITAKER. We would certainly follow the lead of TSA and any other law enforcement agencies involved in stopping those activities and contribute to that—stopping them as much as we could.

Senator BLACKBURN. Well, build on that a little bit. How would you work with other entities that are there in the aviation eco-

system to ensure that these guys are not going to be on the tarmac and are not going to be able to carry this out?

Mr. WHITAKER. So, our security folks at FAA have well-established networks of cooperation with the various agencies, so we can track that down through that network and find out how we can contribute to fighting this.

Senator BLACKBURN. I have got one other question I will submit to you, but it has to do with some of the bilateral aviation safety agreements that we have in place. And we have had some issues with the lack of leadership within the FAA as we look at these not honoring either the letter or the spirit of the law. I will send that to you for a written response. Thank you.

Mr. WHITAKER. Thank you, Senator.

The CHAIR. Thank you, Senator Blackburn. And I want to just say, we really do believe that fentanyl transported at airports is an issue, so we will work with Senator Blackburn and you on that. Senator Tester.

STATEMENT OF HON. JON TESTER,
U.S. SENATOR FROM MONTANA

Senator TESTER. Thank you, Madam Chair. And I want to thank you for being here today, Mr. Whitaker, and your willingness to serve the country.

Mr. WHITAKER. Thank you.

Senator TESTER. The FAA Administrator is a very, very important position, particularly if you are setting on this side of the rostrum, because we fly a lot, OK. So, the job you do impacts us daily, and it impacts the American people daily, so it is important.

Workforce is a major problem throughout this country, I don't care what industry, and finding workers is tough duty. The same is true with the folks who run our towers, who do a marvelous job, but we are seeing shortages there, too.

And my question to you is, is do you have any plans on how we can address that workforce shortage, because quite frankly, truly it is a life and death situation, if you have got folks that are working too many hours, and they are in a difficult situation. They do a great job, they work hard, there just ain't enough of them. How can we fix it?

Mr. WHITAKER. Senator, I am sorry, there is some noise behind me. Are you referring to the towers?

Senator TESTER. Yes.

Mr. WHITAKER. Yes. It is definitely an area that we need to focus on and we need to fix. It has been going on for too long, and I think it was exacerbated by COVID and not necessarily understanding the direction that air traffic was going to go during that time period. We have to have as wide a pipeline as we can to bring controllers into this space.

An air traffic controller is a very good job. I am sure there are a lot of people that would like to do it. Same with a lot of aviation jobs. So, it is time that we aggressively go after that. And I think part of my role will be chief recruiting officer for the agency and making the agency an employer of choice for people who are having an aviation career and are looking for an opportunity to enter.

Senator TESTER. Well, I think it is going to take some creative thinking, because you are right, I think there is a lot of people that want to be in the business, but we don't have enough people. And so, whatever you can do in that vein to get more folks available, I think, makes the skies a safer place, so thank you. Now I want to talk about pilots.

Mr. WHITAKER. Yes.

Senator TESTER. I come from a state where these are destinations, they are not hubs, the airports there. We have got fewer flight options. In fact, it is fair to say, at least in my case, that this is a different world. This flying world is a different world post-pandemic than it was pre-pandemic.

And it is not better, it is worse. And part of it is we don't have enough pilots. And I thought I had a beautiful solution after being in an American Airlines simulator. I thought, we can do this with simulators for a portion of it, until the lady to my right pointed out to me that all simulators aren't alike. Being a pilot, she knew that, and I went, oh, man, there goes that brilliant idea I had.

So, how can we fix this? How can we utilize ways to get more pilots into pipe—and we are paying them a decent amount of money. More pilots into the pipeline and still keep our airplanes safe, still have pilots behind the stick that know what they are doing, and move forward, so that I can get more flights into a place like Great Falls, Montana that, by the way, oftentimes, if I miss a night flight, the next flight in is the next night, OK. So, give me some hope.

Mr. WHITAKER. So, I think—thank you for the question. I think the pilot situation was long in the making. It for many years was a pretty rocky profession. It is very expensive to become a pilot, just like it is to become a doctor or a lawyer. It assumes a lot of debt often. And then the starting salaries were very, very low.

So, a regional pilot 15 years ago might have made $20,000 a year, while a lawyer in a law firm might have made $100,000. So, there was a pretty big disparity. Those salaries have gone up quite a bit, both at the entry level and at the airline level. So, I think the market is working and it is going to work and help correct that.

I think what we can do is look at other ways to facilitate people coming into the industry, and I think your point on simulators is a good one. It is a complicated issue. There are simulators and there are simulators.

And then how you spend your time is important, which is why we have got an ARC at FAA that is looking at this, safety professionals looking at it to see are there consensus avenues that we can create to 1500 hours.

Senator TESTER. OK, you have got—do we have—55 seconds? You have got a rulemaking committee that is going to make some recommendations to you and potentially even Congress. Is that correct?

Mr. WHITAKER. They make the recommendations to the FAA, but we will certainly work with Congress on those.

Senator TESTER. OK, that is good. But can you push that committee to do their due diligence but get a rule out sooner rather than later?

Mr. WHITAKER. I will do all I can to do that, yes.

Senator TESTER. Thank you very much. Thank you, Madam Chair.

The CHAIR. Thank you. Senator Fischer.

STATEMENT OF HON. DEB FISCHER,
U.S. SENATOR FROM NEBRASKA

Senator FISCHER. Thank you, Madam Chairman, and welcome, Mr. Whitaker.

Mr. WHITAKER. Thank you.

Senator FISCHER. I have heard from stakeholders that they are facing substantial delays in the certification and operational approval that could improve aviation safety. To address this, I worked on bipartisan language in the Senate FAA Reauthorization Bill, creating a new Associate Administrator for Advanced Aviation Technology and Innovation.

This FAA leadership level position would be charged with improving how the agency works across lines of business to certify advanced technologies more rapidly and break down barriers delaying the adoption of aviation technologies.

Drawing from your prior industry experience, do you believe that the FAA places enough emphasis on the certification of advanced technologies? And would this new position improve how the agency responds to the pace of innovation?

Mr. WHITAKER. Thank you, Senator. I think that is a very astute question, and certainly to the point, I think these new technologies coming into the agency are one of the biggest challenges we are facing.

We don't necessarily understand everything about them, especially when there is extensive software involved in interactions between new technologies, so we need to have resources put in, making sure there is a holistic understanding of how these systems interact and where the risks are and where the faults are.

So, I think that is a step in the right direction, certainly.

Senator FISCHER. Good. Also, the Nebraska Division of Aeronautics serves as the agent for airport sponsors seeking Federal grants. It has been noted that the interpretation of eligibility and requirements for projects are not uniformly enforced from region to region, State to State, and even between different FAA planners and engineers within the state.

So, what is—what can be done to straighten this out? How can you, as FAA Administrator, at that level, ensure that requirements are interpreted and administered uniformly across this country?

Mr. WHITAKER. I think it is important that we have a very transparent and uniform system to allocate funding across the system, so that it is applied fairly. And I would certainly provide direction to make sure that happens.

And then from that baseline, there are always exceptions for unique circumstances. We have to have the flexibility to adapt to that as well. But it needs to be a—it needs to be a completely fair and transparent system.

Senator FISCHER. You know, when we have some of these cases brought to our attention, though, if we are able to present that information to you, will you take a personal interest in trying to figure out just why maybe some of these discrepancies are happening?

Mr. WHITAKER. I would be happy to work with you on that, yes.

Senator FISCHER. Thank you. One of FAA's most successful Government industry partnerships is the FAA Contract Tower Program, and that includes one we have in Grand Island, Nebraska.

This critical air traffic safety program is important to maintain and develop air service in rural states like mine. There have been attempts in the past to shut down the Contract Tower Program over budget concerns.

Can you give me assurances that you will support the Contract Tower Program given its really vital importance to the national airspace system, and that contract towers will remain a high priority for the FAA if you are confirmed as Administrator?

Mr. WHITAKER. Yes, Senator, I can give you that assurance. I think contract towers are an important part of our network of smaller airports, and we need to maintain those and make sure they are viable.

Senator FISCHER. Thank you very much. Thank you, Madam Chair.

Mr. WHITAKER. Thank you.

The CHAIR. Thank you. Senator Sinema.

STATEMENT OF HON. KYRSTEN SINEMA,
U.S. SENATOR FROM ARIZONA

Senator SINEMA. Thank you, Chair Cantwell. And thank you, Mr. Whitaker, for joining us today. As you know, the FAA has lacked Senate confirmed with leadership for over a year and a half. It is essential that the leader has the right experience at this particularly tough time.

The next Administrator will need to effectively evaluate arguments over aviation safety and near-misses, air traffic controllers staffing, short and long term workforce development concerns, new technologies, novel regulatory questions, and more.

So, my first question to you, Mr. Whitaker, is I agree with you that safety is the top priority and the preeminent responsibility of the FAA. I appreciate your emphasis on not just maintaining the FAA safety record but continuing to build upon it.

I believe that updating our pilot training rules is a critical part of this, so the U.S. continues to lead the world in aviation safety. Rather than waiting around for a tragedy or deferring to unhelpful rhetoric, it is critical to build on our prior successes in training the world's best pilots. It is not just me who feels this way, but also each of the Senate confirmed FAA Administrator since 1997, including your former boss, Michael Huerta.

I am sure you saw their letter last month, which also were signed by two former Presidents of the Airline Pilots Association. These experts make clear that the significant technological advances in flight training in the nearly 15 years since the tragic Colgan Air crash require their use to ensure the best pilot training continues.

They argue, "incorporating this realistic training and experience in a structured and controlled way will add to the existing margin of safety in commercial operations." The Air Force also agrees. It has more than tripled the amount of simulator training for its new pilots, including at Luke Air Force Base in Arizona.

Now, current FAA rules appreciate the military pilot training regime so much that pilots leaving the military need only 750 rather than the standard 1500 hours for their certificate. So, credit is provided for what is considered superior military training, which incorporates superior simulator training.

So, Mr. Whitaker, do you agree with these experts and former FAA Administrators that properly using advanced simulators produces safer pilots without compromise?

Mr. WHITAKER. Thank you, Senator. I do agree that simulators are a hugely valuable training tool, and we have seen that in large airlines with full motion simulators that allow pilots to go through scenarios that you would not want to do in an actual aircraft.

I think the, you know, the 1500 hour rule is, of course, law, and we are open to any way to improve safety from that baseline. I think the challenge is that there are a variety of types of simulators.

There are open questions about what kind of training would be involved, how you would log that. And the FAA has an ARC that has been convened to look at those issues, and I would—I look forward to seeing their results from that work and hope we can continue to work on this issue.

Senator SINEMA. Well, thank you. Do you agree that as pilot training technology evolves, it is the responsibility of the FAA and policymakers to evolve with it by incorporating these simulators and other modern training systems into the existing pilot training regime? And do you believe that advanced simulators have a significant role to play in improving safety outcomes?

Mr. WHITAKER. I certainly agree that advanced simulators can have a significant role to play in improving safety outcomes. I think the challenges that the simulators that the airlines are using are much too expensive to be available to most young pilots or new pilots trying to reach 1500 hours.

So, I think the challenge is to define when is a simulator appropriate for that kind of training. And that is something that we should be leaving to the ARC. And then to your point, I think this technology evolves quickly and we have to figure out a way to keep up with it.

Senator SINEMA. Thank you. FAA leadership will also be tasked with rapid changes in technology and new entrants to the national airspace, including advanced air mobility. Now, I am a proponent of AAM technology, and I believe it holds incredible promise. Can you speak to how your experience at FAA with the Next Gen system, as well as your current work in the nascent AAM industry, prepares you to lead the industry at this critical time? And specifically, what do you believe are the most important things you must do, if confirmed, to foster AAM innovation without sacrificing safety?

Mr. WHITAKER. I think the Next Gen program was a successful and significant upgrade of the air traffic system that took many, many years to pull together. It was designed as a 15 year program.

But as we sit here today, traffic is controlled by satellite and communications are being pushed out for flight plans by data rather than voice.

So, I think it was a successful transition, but I think we are at a point where we need to talk about what is next, and what next is new capabilities, new technologies, what that platform looks like, and how we incorporate not only AAM but small UAS and commercial space and supersonic and other new entrants into the market.

So, that will be an immediate focus, but it is developing that long term vision in a collaborative way.

Senator SINEMA. Thank you. Thank you, Chair Cantwell.

Mr. WHITAKER. Thank you.

The CHAIR. Thank you. Senator Budd.

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

Senator BUDD. Thank you, Chair. Mr. Whitaker, good to see you. I enjoyed our meeting last week. And from that meeting, I understand that you are a private pilot. So does your experience as a private pilot in general aviation, does that help enhance your experience back from when you served as Deputy Administrator?

Mr. WHITAKER. It did, Senator. And thank you for taking the time last week. It was an extremely valuable thing. It helped me really understand the system and appreciate what is at stake when you are up there in that tin can.

Senator BUDD. We spoke about BasicMed. Back in 2017, pilots of smaller aircraft could use an alternate medical certification program known as BasicMed. More than 70,000 pilots have used BasicMed to maintain their flying privileges. In March, FAA reported to Congress that pilots flying under BasicMed are just as safe as pilots with a third class medical. So, what are your thoughts on the BasicMed Program?

Mr. WHITAKER. Thank you, Senator. So, I completed my BasicMed just a few weeks ago. I had gone through a regular medical examiner previously for the 2-year check.

And this time I did the BasicMed because I had a physical scheduled and tried it, printed out the form, took it to the doctor. Took the online course that you require, which I actually thought was quite useful.

So, I thought it was a very clever efficiency that actually, in my view, yielded more information and was more useful to the pilot.

Senator BUDD. Very good. I am so glad to hear your feedback on BasicMed. Now, you may remember this from your previous tenure at FAA, but if it were up to the FAA, BasicMed would have never happened.

Despite several requests for third class medical reform over more than 20 years, two decades, the FAA did not act until Congress mandated those reforms. So, I bring this example up because many enabling regulations come from Congress in FAA Reauthorization Bills, and they have a deadline attached to them.

Yet FAA routinely misses Congressionally mandated deadlines for these new rules. My office analysis found that the FAA missed Congressional rulemaking deadlines in the last three FAA Reauthorization Bills by an average of 543 days.

Even more concerning, there are still 14 mandatory rulemaking stretching back over a decade to the 2012 reauthorization that FAA has not yet completed to this day. FAA also missed reporting dead-

lines by an average of 554 days, depriving Congress of crucial information needed to legislate and conduct oversight.

Reports during your tenure as Deputy Administrator were 678 days late on average. If confirmed, what will you do to ensure that the FAA is meeting the deadlines that Congress places into law?

Mr. WHITAKER. Thank you for the question, Senator. I will do everything I can to make sure that we are on schedule. I think rulemaking is a very frustrating thing from every perspective. It is highly regulated under the Administrative Procedures Act. It takes a long time.

It is a frustration as we try to bring new entrants into the airspace and have to go through that onerous process, but I will do everything within my power and within the confines of that to move as quickly and communicate with this committee on the status of those.

Senator BUDD. Thank you. So, I share your concern about maintaining FAA's global leadership in aviation safety and regulation. That position greatly benefits our domestic aviation industry and allows companies to pioneer the next generation of aviation technology. I am proud that North Carolina is home to many of these companies.

But in order to innovate, industry needs to know the rules of the road, or the rules of the air. That goes back to the speed of new regulations. So, what can Congress, so our end, what can we do to help FAA speed up those enabling regulations that are necessary for these new industries to grow?

Mr. WHITAKER. I wish I had a good answer for that. Most of the review periods and the public commentary periods are set by statute. I think we can—I think we have power within the FAA and DOD and OMB to try to move that as fast as we can, and I would work those levers.

Senator BUDD. So, I hope you are hearing the question to you and the question about us as Congress, you hear a desire for us to work together.

So, if successful, I hope that we can continue to work together. So ever since the Wright brothers first flew at Kitty Hawk, North Carolina, America has been a world leader in the aviation industry.

The FAA sets the gold standard for aircraft certification standards in aviation safety. I am glad to see the Biden Administration finally put forward a qualified nominee to fill a vacancy that has lasted over 550 days.

Mr. Whitaker, if you are confirmed, I look forward to working with you to implement the upcoming FAA reauthorization and address the many challenges facing the aviation industry today. Thank you. I yield back.

Mr. WHITAKER. Thank you, sir.

The CHAIR. Senator Welch.

Senator WELCH. Thank you. And I have been to hearings that have been a little rougher on the person in your chair than this one. I think it is a testament to your qualifications, and I am delighted at the reception you are getting, but I think it reflects your experience. Just a couple of things.

Senator Budd was asking about your private pilot's license, and that was a concern that the Committee had with some of the prior

nominees, that they weren't a pilot, and I think you answered that pretty well.

But I am kind of interested in your decision to become a pilot. It was when you were at the FAA. So why did you make that decision? And just quickly, because you have addressed this, how does it inform what you are doing?

Mr. WHITAKER. Thank you, Senator. It really derived from my role as the Chief Next Gen Officer. All of that technology was around how the controllers interact with the pilot in that situation, and I wanted to understand it from that perspective.

And it helps to understand somewhat abstract principles around navigation if you actually go through it, so that was really the driving force.

Senator WELCH. OK. The second thing, the number of people brought up the delay issue and how long it takes, and I am with them on that, but it is a dilemma, I imagine, if you are the head of the agency where you absolutely can't compromise safety.

It is what Senator Duckworth has been the leader on this committee and focusing on. But there can be times where that becomes an excuse not to do your job——

Mr. WHITAKER. I agree.

Senator WELCH [continuing]. And act and make a decision. Not cut corners, but try to expedite it. Can you talk about the role you will play in maintaining that standard but not using—not allowing the agency to hide behind that standard rather than do their job in an efficient and prompt way?

Mr. WHITAKER. No, I think that is an excellent point, and I agree. And I think we can't allow safety to become an excuse for inaction, and I think that does happen. I think decisionmaking in a large organization is an interesting thing. You need to have accountability.

If you don't have clear leadership and visibility into where things are stuck, if you will, then they often don't get made, so.

Senator WELCH. OK, and just on that point, Senator Cruz is concerned about folks being back in the office, and I know that is an issue that is throughout America, not just public agencies, but private, and can you speak to that, because I think Senator Cruz has got a legitimate point there?

Mr. WHITAKER. No, I agree. Of course, a lot of our workforce is back there, air traffic controllers, and safety inspectors, and the like. But to build a cohesive leadership team and move forward, we need to have in-person encounters. So, that will be establishing a clear policy and enforcing that will be an early action.

Senator WELCH. OK. And then the last area that I want to ask is about advanced air—the advanced air mobility industry. And as you I am sure know, in Vermont, we have a new, very exciting company, BETA Technologies, that just yesterday opened up its production facility. It will be the largest one East of the Mississippi.

And our Governor was there, former Senator Leahy was there, the entire Congressional delegation. But that goes into the, that is electric planes, and it is going to require regulations, and can you tell me two things.

One, your thoughts about AAM. And number two, the role that the FAA has to play in facilitating that, while, of course, maintaining what I will call the Duckworth's standard of safety?

Mr. WHITAKER. Thank you, Senator. So, I think with AAM, there is an opportunity for certification under existing rules, and I believe that BETA is moving under those existing rules. But I think as that technology evolves and matures, we probably need a more aggressive set of rules to allow tighter operations and more application of technology for efficiency in those spaces.

Senator WELCH. OK. Thank you very much, and good luck to you.

Mr. WHITAKER. Thank you, sir.

Senator WELCH. And welcome. I yield back.

The CHAIR. Senator Capito.

STATEMENT OF HON. SHELLEY MOORE CAPITO, U.S. SENATOR FROM WEST VIRGINIA

Senator CAPITO. Thank you very much, Mr. Whitaker, for being here. And thank you for visiting my office. I am going to follow up on what my colleague from Vermont was talking about, because my local airport, Yeager Airport—I have just been to Vermont to look at this, and we are not using the same term that he used.

They use the EVTL, which is that electric vertical takeoff and landing vehicle. I am assuming we are talking about the same or similar thing. So, this would be next generation technology, but I think—it holds a lot of promise really for rural areas to be the centers of excellence and also the innovators here in terms of where we take this electrification on these types of vehicles.

What kind of ideas would you have in terms of where the FAA might be able to be helpful in terms of building out—it is a different infrastructure that would be needed, just like electric cars would be different. How do you envision something like that?

Mr. WHITAKER. Thank you for the question, Senator. In the case of BETA, it is an interesting case because I think they started as a EVTL company and now that is a fixed wing departure.

So, they are more of a traditional aircraft design. They are dealing with the infrastructure issue by installing their own infrastructure at airports. But I think for the FAA, we are following the path that is being set by the companies.

So as these companies need infrastructure for electric power and things, we need to be able to respond to that. But I do think it offers tremendous opportunity for smaller communities.

The cost of—the simplicity of operation, it means the cost is much lower, the maintenance is much lower on these types of vehicles. So, it lowers your unit cost and opens up more market, so I think it really is a potential opportunity for smaller communities.

Senator CAPITO. I do too. And it is, you know, it is a much less cluttered airspace too, to be able to handle the innovation.

Mr. WHITAKER. Absolutely. Right.

Senator CAPITO. In 2020, and it seems like this is another never ending story, but the FCC and the FAA and DOD have gotten into a fiasco over the 5G spectrum. This has created significant issues in this committee and elsewhere.

I am wondering, would you commit to being a strong advocate to try to seek to avoid these similar issues, sit down at the table, and work these things out so that we don't lay it at the table at the last minute to try to decide what direction to go?

Mr. WHITAKER. I would commit to that. I think collaboration is a good way to avoid a lot of misunderstanding and to reach alignment upfront on difficult issues like that. So, yes, I would.

Senator CAPITO. Let me go back to rural—thank you for that—rural air service. I can speak from experience that it is contracting, it is not expanding in terms of availabilities.

There have been some, you know, some different companies that have come into play to sort of do niche kinds of things, which are great—it is great for an area such as mine. Do you see the loss of rural air service as an urgent problem, and how could you work to address that?

Mr. WHITAKER. I think it is a serious issue that needs to be addressed. I think the pilot demand has been such that it has left smaller communities behind in some case. So, I think we want to try to encourage as many people into this profession as we can.

I think the rising salaries will help draw people into this profession, but we want to make sure we are supporting that effort as well by keeping the airports up to safety standards and improving them as is appropriate so you can attract traffic.

Senator CAPITO. Well, I think, too, on the pilot shortage issue, we just had a Women in Aviation, you know, Expo around the state to try to encourage and have a broader reach to recruit more women, but also different types of populations into becoming a pilot.

We have several pilot schools that have just kind of grown in the last several years, so I am very encouraged by that. Let me ask you, in your prior experience at FAA, how many visits to the tower, how important is that for you to have those onsite visits, and how does that kind of inform your work going forward?

Mr. WHITAKER. I was a frequent visitor to our facilities around the country, including towers, both in large urban areas but also in remote areas, including contract towers.

So, I think it is key to hear the voices on the ground. Usually there are opinions about what technology they should have, but they don't have. So, it is a good way to really understand at ground level how the system is operating.

Senator CAPITO. Well, I think, too, speaking from a—coming from a mountainous rural area, that having eyes on the runway is pretty significant in a place where I live. That fog can come in pretty quick like it did last week, and we had to go back around and try again.

Mr. WHITAKER. Right.

Senator CAPITO. So, I would just urge that—it is amazing how much better the weather predicting has gotten over the year and how much more accurate. But as we move forward, I think those rural airports need to have that basic attention paid to them. Thank you.

Mr. WHITAKER. Yes, I agree. Thank you.

The CHAIR. Senator Markey.

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

Senator MARKEY. Thank you, Madam Chair. Mr. Whittaker, I would like to discuss the resiliency of our aviation system. From melting runways in London last year to rising sea levels, threatening coastal airports, to increase turbulence on flights, climate change is significantly impacting our aviation system. Mr. Whitaker, do you agree that climate change poses new challenges for airlines, airports, and the FAA?

Mr. WHITAKER. I do, Senator. I think we saw that last week with New York and LaGuardia runways being flooded. And each airport has its own issues, but I think sometimes it is just a question of improving drainage. But I think we need to look at that resiliency.

Senator MARKEY. Do you agree that all parties in the aviation system need to invest in more resiliency? LaGuardia is a good example. New York City is a good example.

Mr. WHITAKER. And I think the airlines are investing in sustainable fuel. I think that is part of that equation.

Senator MARKEY. So that is why I have fought hard for two of my bills to address this issue. The first is the Airport Infrastructure Resiliency Act, which Senator Sullivan and I filed as an amendment to the FAA Reauthorization Bill, which would create a new grant program to improve airport resiliency.

Senators Fischer, Welch, Capito, and I have also introduced the Airline Operational Resiliency Act, which requires the Government Accountability Office to investigate airlines' plans for extreme weather events. We need to harden our aviation system against extreme weather events and natural disasters.

There is no time to lose. I want to turn to another issue related to airport resiliency, the airport service workers. These individuals are the unsung heroes of our aviation system, but they are often overworked and underpaid.

Our airports would not function if these essential workers, like baggage handlers, wheelchair attendants, and ramp agents, did not do their jobs. Mr. Whitaker, do you agree that airports service workers are critical to the operation and reliability of our aviation system?

Mr. WHITAKER. I certainly agree that they are critical to that system.

Senator MARKEY. Yes, I agree. And that is why with Senator Schumer, I have been fighting to include my Good Jobs for Good Airports Act in the FAA Reauthorization Bill.

The bill would help to ensure that airport service workers are paid a living wage and benefits. It is time that we repay the benefits that these workers deserve. We could see it during the pandemic where they had to go to work. They had to take the risks which others did not have to take.

It is absolutely imperative that we have a fairer distribution of the incredible benefits that are flowing to airports increasingly in terms of how it is shared. And that is not happening. And Senator Schumer and Chair Cantwell and I are committed to continuing to work in order to ensure that we can include that in the FAA reauthorization. And I would like to finally turn to aviation safety.

Over the past year, we have seen a scary number of near misses between aircraft. In fact, in one instance, two planes actually struck each other at Boston's Logan Airport in my home state. Fortunately, the two planes were barely moving when their wings clipped each other, and no one was injured.

But it was yet another reminder about the risk of air travel. So, and I know other members have asked you about it, but I would like you once again just to expand on the prioritization of safety that you will bring to the FAA?

Mr. WHITAKER. Thank you, Senator. Clearly, safety is the number one priority. These near-misses, these incursions they come in a number of categories, and I think what we need to do is really drive the most serious ones down to a level of zero. That has not been the case before, but that needs to be our target.

Senator MARKEY. When I was a boy, my Aunt Mary would travel around the world and would go to Logan Airport. My brothers and I would be taken by her over to a machine where she would buy an insurance policy on her life——

Mr. WHITAKER. I remember those days——

Senator MARKEY.—to fly out of Logan Airport, and then hand us the insurance policy on her life, which of course, as we were kissing her goodbye, left us with mixed emotion.

[Laughter.]

Senator MARKEY. What is about to happen to our Aunt Mary? And we have come a long way from that——

Mr. WHITAKER. Yes, we have.

Senator MARKEY.—at the airport. But still, there are families that justifiably are concerned about their safety, given the incidents now in airport after airport across the country. Thank you for your good work. Thank you, Madam Chair.

Mr. WHITAKER. Thank you, sir.

The CHAIR. Thank you. Seeing a lot of my colleagues on the other side are on the screen, we will go back to—keep on this side. Senator Baldwin.

STATEMENT OF HON. TAMMY BALDWIN,
U.S. SENATOR FROM WISCONSIN

Senator BALDWIN. Thank you, Madam Chair. Mr. Whitaker, thank you so much for your willingness to return to public service at this critical moment in—for the FAA. I wanted to ask you about the agency's ongoing efforts to support airports in their transition away from firefighting foams that contain PFAS.

I will say that the issue facing so many of my communities in Wisconsin, where public wells or municipal wells near airports have led to PFAS contamination in the drinking water systems has cost them millions of dollars in both short term and long term remediation efforts.

In early May, I sent a bipartisan letter with several of my colleagues on the Committee to the FAA asking that the agency complete its transition plan by early May, and I am encouraged to note that that transition plan was completed and the very first PFAS free foam was approved by the FAA last month.

However, many airports throughout Wisconsin continue to have questions about transition and are anxious for additional guidance

and clarity from the agency. We have fielded a number of questions and forwarded them to the agency.

So, will you commit to ensuring that this transition is a top priority for the agency, and the FAA is responsive to airports that have any questions and need guidance?

Mr. WHITAKER. Yes, Senator, I will. This is a new issue for me. I have come to learn about it in just—in recent weeks. But I understand the FAA is working closely with DOD to have an appropriate transition, and we will make sure that that continues.

Senator BALDWIN. I appreciate that. Another topic. Earlier this year, I worked with my colleague, Senator Sullivan, to introduce bipartisan legislation called the "Flight Education Access Act". This would ensure pilot—the pilot profession is accessible to more people by raising the amount of Federal student loans available.

It is a more costly educational program. This was one of the top recommendations of the Women in Aviation Advisory Board's final report, and I am encouraged by the strong support we have received for the legislation, including from a wide ranging groups of airlines and pilot unions.

Given your leadership in aviation, including at the FAA and at a major airline, do you believe that additional financial tools like student loans may help more people enter the aviation workforce?

Mr. WHITAKER. I do, and I think that as many initiatives as we can muster to make it easier for enter this profession—it is very expensive to become a pilot. It is an investment akin to becoming a lawyer or a doctor financially. So, I think if we want more pilots, we need to make that pathway more affordable.

Senator BALDWIN. Thank you. One final question. I have been working closely with Aviation subcommittee, Chair Duckworth, for years on access to air travel for individuals with disabilities.

In the last FAA Reauthorization Bill, we made progress on the issue, and we are hopeful that the reauthorization bill we are working on now will continue to make meaningful change in this arena.

Mr. Whitaker, I am interested in your thoughts about how FAA can continue to break down barriers for individuals with disabilities. And if confirmed, will you commit to making this a top priority?

Mr. WHITAKER. I will make it a top priority. I think, by all means, there is every reason to make sure we move as aggressively as possible in that space.

Senator BALDWIN. All right. Thank you.

The CHAIR. Thank you. Senator Luján.

Senator LUJÁN. Madam Chair, thank you very much. I believe that Senator Hickenlooper is going to be next.

The CHAIR. I am more than happy to call on Senator Hickenlooper.

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

Senator HICKENLOOPER. I apologize. And I appreciate the support of my peers. I have to go preside. We don't want the wheels of democracy to grind to a halt.

[Laughter.]

Senator HICKENLOOPER. Mr. Whitaker, thank you for your visit last week. Thank you for your willingness to serve. Communities in and around Centennial, Colorado, and across our state have to consistently deal with excessive noise from low flying aircraft getting worse and worse.

We are working to ensure a long-term authorization bill for the FAA gives communities a seat at the table to resolve noise-related concerns and have their concerns heard. If you are confirmed, will you work with us to ensure our communities are properly heard and responded to when dealing with the concerns of aircraft noise?

Mr. WHITAKER. Thank you, Senator. I certainly would. And I think engagement with the community in these circumstances is crucial and can often result in understandings about operational limitations that can alleviate some of that noise. So, I think that is a great initiative.

Senator HICKENLOOPER. Great. Perfect. Also, big deal in Colorado is regional air service. It is a lifeline in many cases to rural communities all around our state and around the country. A big part of their economic development.

In Colorado, some of our rural communities, such as Grand Junction, Cortez, have suffered dramatic reductions in air service over the last few years. We also need to strengthen the Essential Air Services, the EAS Program, as you know, to ensure airlines honor the contracts that they signed with these rural areas.

If you are confirmed, what improvements would you make to the EAS Program to improve—what improvements would you make to improve its long-term reliability?

Mr. WHITAKER. So, for the FAA, the role that we can play really is to make sure the airports have the proper infrastructure, the proper safety technology. The EAS program itself is administered, of course, out of the DOT.

But we can support DOT on that by having adequate airports, and I think also encouraging new technology that might be available for those—new technology, new forms of flight, electric, EVTL flights that I think are a service option for some of those locations, so we can help facilitate their entry into service.

Senator HICKENLOOPER. Great. My last question. Obviously, fighting climate change has become one of the greatest challenges we face. Cleaner aviation fuels, more efficient technologies are going to be able to reduce carbon and pollution coming out of the aviation sector.

We have heard a lot of Coloradoans come through our office talking about the impact of leaded aviation fuels on their public health, their air quality. We need to ensure that new types of aviation fuels and technologies are widely available and affordable, especially for regional airports, before we make their consumption a requirement, is my perspective on this.

If confirmed, how would you strike a balance between incentivizing and recognizing how important it is to use more efficient aviation fuels and technologies, but also ensuring that they are widely available for the entire aviation sector?

Mr. WHITAKER. Thank you, Senator. I know this is an issue that the FAA and industry, GA industry have worked on for many

years, and that there is a plan to try to make that transition by 2030.

So, I think we need to continue to get engaged with GA, with airports to make sure we make that transition, but also don't interrupt flight training, for example. So, I think it is going to involve a lot of collaboration to deliver that.

Senator HICKENLOOPER. Right. I sense that urgency in your voice, which is what I wanted to hear. I appreciate that. I yield back the floor, Madam Chair.

Mr. WHITAKER. Thank you, Senator.

The CHAIRMAN. Senator Luján.

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

Senator LUJÁN. Thank you, Chair Cantwell. And Mr. Whittaker, thank you for being here today and for accepting the responsibility as the representative laid out with coming forward to serve. Senator Welch also said something along those lines. So, thank you for accepting that responsibility.

Mr. WHITAKER. Thank you.

Senator LUJÁN. Now, as you know, I am from New Mexico, and New Mexico is known for many, many beautiful landscapes and our mountains and weather, our sunrises, our incredible airspace, which we protect.

But in the next few weeks, we are going to be celebrating the International Balloon Fiesta, which is the largest hot air balloon gathering in the world. And there comes responsibilities to the FAA pursuant to the International Balloon Fiesta.

And I have been proud to work with many of the balloonist community in this particular space, Mr. Whitaker, to ensure that the FAA would not bar Albuquerque balloon operators from flying in the city's Class C airspace.

However, as new technologies emerge, I know that these issues will continue to come up as the FAA works to keep our airspace safe. My question to you, Mr. Whitaker, is, if confirmed, do you pledge to keep in mind the unique needs and limitations facing hot air balloon operators as you roll out regulations related to new technologies and airspace access?

Mr. WHITAKER. Thank you, Senator. I think it is an interesting question. We have talked a lot about new entrants into the airspace.

That is a very old entrant, I think, in the airspace. So, I think that one of the key principles for the new entrants is that the existing services can operate efficiently and unimpeded by the new entrants.

So, I would categorize balloons as part of that. So yes, I can give you that commitment.

Senator LUJÁN. I appreciate that. And if there is one thing we can all agree on, is that the FAA needs strong leadership. After a winter and summer travel season rife with delays, technological disruptions, staffing issues, it is time that we confirm an FAA Administrator to get our aviation system back on track.

Now, one part of the aviation system that needs immediate attention is air traffic control, Mr. Whitaker, as you know. Right

now, there are shortages in staffing across the country, forcing our controllers to work intense schedules with long and longer hours.

When we do not take good care of our air traffic controllers, it puts the efficiency and safety of our aviation system at risk. Fortunately, there are some actions we can take together to improve the health of our air traffic control systems.

Now, Mr. Whitaker, yes or no, 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. WHITAKER. Yes, sir. That will be a top priority.

Senator LUJÁN. Mr. Whitaker, yes or no, do you support efforts to fix the way we calculate the number of air traffic controllers that our aviation system needs? This would mean counting those currently in training separately from fully trained controllers.

Mr. WHITAKER. I can commit to look into that issue. That is not an issue that I am familiar with, but I will certainly look into it.

Senator LUJÁN. I appreciate that. If we don't set the right targets for how many staff are at our air traffic control systems, it concerns me that we will not fix the problem. I will follow up with you in writing to make sure we continue to work closely in this space and to fully express why it is important.

Mr. WHITAKER. Right.

Senator LUJÁN. Now, Mr. Whitaker, the Albuquerque Air Traffic Control Center staffing numbers have consistently been below target for years. What can we do to address staffing challenges, especially at the centers that are struggling the most?

Mr. WHITAKER. I think that that is a common issue and an outcome of the shortage generally that we have. So, I think the most important thing is to really focus on expanding that pipeline and getting as many potential controllers into the system and training them as we can.

Senator LUJÁN. I appreciate that. And last, Mr. Whitaker, diversity matters to me as we work to establish a strong workforce, and in every aspect of the Federal Government as well.

And that is a space that I look forward to working with you on and working with colleagues as well to raise issues all across the country, but to ensure that we have the strongest teams available, possible trained, ready to go, and especially with retirement eligibility as well, that we pay close attention to many of these factors that need desperate attention just to keep us safe. So, I appreciate that very much, and Chair Cantwell, I yield back.

The CHAIR. Thank you. Senator Schmitt.

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

Senator SCHMITT. Thank you, Madam Chair. Welcome. And I heard TWA. As a St Louis guy, it is like a long lost ghost. TWA used to dominate, and I grew up by the airport in St. Louis.

Mr. WHITAKER. And I spent a lot of time in that airport back in the day, yes.

Senator SCHMITT. I want to start by just noting that since Joe Biden took office, we have had pilot shortages, air traffic controller shortages, widespread daily delays, the first nationwide ground

stop since 9/11, and near-misses at major airports throughout the country.

This Administration, the Biden Administration, has taken its eye off the ball and it has been a mess. Instead of focusing on thoughtful deregulation and incentivizing policies to promote technological innovation and improving safety, this Administration has been focused on superfluous changes, such as changing the name of the NOTAM system from Notices to Airmen to Notices to Air Mission, and spending millions on climate change, racial equity, and environmental justice.

Like many in the room and many of my constituents, I travel on a weekly basis. And I can tell you the last thing that I care about 30,000 feet in the air is virtue signaling. I can tell you that most Missourians feel the same way. All they want is to get home the quickest and safest way possible so they can get back to their families and put their kids to bed.

Unfortunately, I have heard more about DEI and radical climate agenda from this Administration when it comes to the priority list for the FAA than I have about safety. Mr. Whitaker, that said, I will say that it is refreshing to not see a single mention of the words diversity, equity, inclusion, or climate change in your testimony.

That is at least progress over the last nominee for the FAA we had just a few months ago. I want to read for you the FAA's mission statement provided on the agency's website for you. "Our continuing mission is to provide the safest, most efficient aerospace system in the world."

Mr. Whitaker, do you agree that the FAA's primary mission should be to provide for the safety and efficiency of America's national airspace system?

Mr. WHITAKER. I do agree that that is the mission of the FAA. Yes, sir.

Senator SCHMITT. OK. Mr. Whitaker, we have heard incessantly from this Administration about its blind obsession to promoting DEI.

One of the worst actors would indeed be your boss, potential boss, Secretary Buttigieg. In fact, at the end of August, Secretary Buttigieg announced 24 members to his

Advisory Committee on Transportation Equity to help implement, "an equity action plan across the Department of Transportation, including the FAA."

Mr. Whitaker, if confirmed as FAA Administrator, will you prioritize promoting practices to institutionalize equity over safety of America's flying public?

Mr. WHITAKER. If I am confirmed as Administrator, my number one priority will be safety, always.

Senator SCHMITT. Thank you, Mr. Whitaker. And last, your experience, I think, speaks for itself. And I am not here to question your expertise. However, this Administration has clearly lost sight of what really matters when it comes to the aviation sector.

If your nomination is successful, I hope that you will hold true to your commitments today, and we need a sense of urgency in promoting that kind of innovation, safety, and addressing workforce

shortages, as opposed to this radical agenda that this Administration has put forth that has nothing to do with any of those things.

And I look forward to continuing those conversations, if you are confirmed. Thank you.

The CHAIR. Senator Rosen.

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

Senator ROSEN. Thank you, Madam Chair. Really appreciate you holding the nomination hearing today. And Mr. Whitaker, thank you, again, like everyone has stated, your willingness to serve, and I look forward to today's discussion.

And so, I am going to talk a little bit about something that is impacting us in Nevada, which is airport obstruction. And we need some analysis on that because the safety of passengers and crew, it is a most important part of airport operations.

And, of course, if you have ever been to Las Vegas, Harry Reid International Airport really is at one end of the Las Vegas strip, with so many hotels right next door. Last year, in 2022, we saw a record 52 million visitors through there.

But our airport, like many others across the country, has been left unable to raise critical safety and security concerns about nearby obstructions through the FAA's current obstruction evaluation airport—airspace analysis process.

We must ensure that this process is robust, it involves all stakeholder input, and in particular, takes into account the safety and security and the concerns of the airport seriously.

So, Mr. Whitaker, I know when we met ahead of this hearing, I spoke with you about the need to consider more of a cumulative impact during the OEAAA process, and if confirmed, how will you ensure that this process is sufficient to account for major concerns as our Las Vegas strip is right there at the end of the runways, and all the ground safety that is—there are just the safety concerns in general raised by the TSA?

Mr. WHITAKER. Thank you, Senator, and I am glad we had a chance to talk about this issue a couple of weeks ago. I think that the processes that the FAA runs are designed to be a standard across the board.

But we do run into circumstances where we need to consider special geographies or special characteristics. Our focus is on safety. Security is a somewhat different bucket, but I think it is a valid issue that you are raising, given the geography of the airport and the proximity to the high rises in that area.

So, I think we can look at taking a more holistic look at that analysis.

Senator ROSEN. Thank you. I appreciate that. And on that note, we have a large stadium right there off the Las Vegas strip. We are going to be home to next year's Super Bowl. We are very proud of that. But of course, there are stadiums all across the country.

And since the September 11 terrorist attacks, Congress and the Executive Branch have recognized the need to protect stadiums and large sporting events. We have F1 race coming up around—Formula One around Thanksgiving.

So, like I said, it is home to the Las Vegas Raiders. We have the Super Bowl, NFL draft. We are really emerging as a sports capital in the Nation. And so, this makes Las Vegas a very rich target environment for bad actors.

And the FAA initially imposed temporary flight restrictions over stadium events, including for drones, and Congress subsequently strengthened and codified these requirements. However, sports leagues have reported an increase in violations of flight restrictions, particularly by drones.

So again, Mr. Whitaker, if you are confirmed, will you commit to working with my office to ensure that Federal policy continues these longstanding protections for stadiums, and ensure that the Federal Government is nimble as we face these evolving threats like drones?

Mr. WHITAKER. Yes, Senator, I can give you that commitment and we will work with the appropriate law enforcement agencies to cooperate in that endeavor.

Senator ROSEN. Thank you. And finally, I am going to just move on a little bit to cyberattacks, because, again, we are no stranger to when that happens, and the NOTAM system outage in January, it really made clear to all Americans how dependent the world's largest economy is on air travel.

And so, how dependent we are, how antiquated our computer system is, and just so many things laid bare, obviously, in January. So, while the incidents spanning January 10th and 11th was determined not to be the result of a cyberattack, it did, again, really reveal the vulnerabilities that the FAA's NOTAM system security, its architecture, and it does raise significant cybersecurity concerns that we must be proactive about.

So, can you talk about the FAA cybersecurity capabilities and how you would plan to improve in this space to prevent an attack?

Mr. WHITAKER. Thank you, Senator. My knowledge on the cybersecurity is about 7 years out of date. If I am confirmed and I am back in the secure realm there, I will be able to evaluate that more closely. But it is typically a very comprehensive cross-agency approach to identifying threats and mitigating those threats.

Senator ROSEN. Thank you. Appreciate your time, Madam Chair.

Mr. WHITAKER. Thank you.

The CHAIR. Senator Sullivan.

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

Senator SULLIVAN. Thank you, Madam Chair. And, Mr. Whitaker, congratulations——

Mr. WHITAKER. Thank you, sir.

Senator SULLIVAN.—for your nomination. I appreciated our extensive discussion last week on a lot of issues, national issues, but I want to dig into the Alaska issues that we talked about.

As you and I discussed, over 80 percent of the communities in my state are only accessible by air or boat, if you are on a river or snow machine. They are not connected by roads, and, you know, we work really well with the FAA, but there is this kind of one size fits all approach from Federal agencies.

A lot of times it just doesn't work in Alaska. And as you and I talked about, there are a lot of issues where we are trying to get the FAA to be a little bit more flexible, not to cut corners, but to actually increase safety. So, I want to just review a few of these. You know, there are the issues of weather observation and infrastructure that a lot of times the FAA can be like, well, that is kind of expensive.

Well, you know, give us roads to our communities and it wouldn't be that expensive, right. So, we feel like sometimes we are an afterthought. And the problem is, is that more people die and there are more crashes in my state relating to aviation than any other state by far.

So, you and I talked about that. I just want to submit for the record, Madam Chair, the February 2020 NTSB report that looked at a 10 year period of accident rates in Alaska, that was 2—almost 2.4 times higher, that is with an x, than the rest of the country.

And the fatal accident rate is almost 1.4 times higher than the rest of the country. I am sure you will agree that that is unacceptable.

The CHAIR. Without objection.

[The information referred to follows:]

National Transportation Safety Board
Washington, DC 20594

Safety Recommendation Report

Revise Processes to Implement Safety Enhancements for Alaska Aviation Operations

The National Transportation Safety Board (NTSB) is providing the following information to urge the Federal Aviation Administration (FAA) to act on the safety recommendation issued in this report. This recommendation is derived from discussions during our September 2019 Most Wanted List Roundtable: *Alaska Part 135 Flight Operations – Charting a Safer Course.*[1] Information supporting this recommendation is discussed below.

Background and Analysis

Because the NTSB continues to investigate the same types of accidents involving Title 14 C*ode of Federal Regulations* (*CFR*) Part 135 flight operations in Alaska, we convened, in September 2019, a panel of Part 135 operators, safety experts, and government officials to discuss what can be done to address Part 135 safety issues in the state.[2] Although the roundtable focused on Part 135 operations, some of the proposals discussed, such as improved pilot training (particularly concerning CFIT avoidance) and consistently managing weather risks, are applicable to all operations in Alaska, which has a higher overall aviation accident rate than the rest of the United States. Specifically, for the period from 2008 to 2017, the total accident rate in Alaska was 2.35 times higher than for the rest of the United States; the fatal accident rate in the state was 1.34 times higher.[3]

While multiple solutions have been proposed to improve aviation safety in Alaska, during the roundtable, participants discussed studies and plans that had been started by various parts of the FAA's organization or industry stakeholders to enhance the safety of Alaska aviation operations but had stalled. For example, the RTCA's August 2017 report, *Recommendations for the Performance Based Navigation (PBN) Route System*, (which was completed at the FAA's direction) contained 23 recommendations for improving Alaska flight operations.[4] It wasn't until 2019 that the FAA requested a feasibility study of the recommendations, which has since been delayed further. One roundtable participant, a member of the FAA's Navigation Programs senior management team, suggested that FAA staffing reorganizations in Alaska and a lack of

[1] The roundtable was led by the chairman of the NTSB, and the proceedings were transcribed. The transcript is available in the public docket for this event (NTSB number DCA19RT001) at https://dms.ntsb.gov/pubdms/.

[2] Controlled flight into terrain (CFIT), loss of control in-flight, midair collision, and unintended encounter with instrument meteorological conditions comprised about 80% of fatal Part 135 accidents in Alaska from 2008 to August 2019.

[3] The FAA didn't publish flight activity for 2011, which isn't included in the data for this period.

[4] Transcript of proceedings, p. 168.

coordination between FAA and industry safety initiatives were significant factors in the lack of progress in realizing safety enhancements from this study.[5]

Concerning a lack of coordination, the essence of several comments from roundtable participants was that the "silo"-like nature of the FAA's organization often made it difficult to develop a comprehensive plan for implementing and maintaining various safety efforts in Alaska, including potential consequences and costs for other parts of the organization; a recurring theme was that a safety "focal point" within Alaska was needed.[6] The manager of the FAA's Planning and Requirements group offered as an example the recent decision to purchase more automated weather observing systems (AWOS) for Alaska, as part of the FAA's reauthorization. Though funds had been earmarked to acquire new AWOSs, no funding was available for ongoing maintenance. The manager observed that "when we make decisions or we get things implemented, there's consequences that roll down the hill…that all have to be thought out."[7] Another participant similarly stated that stakeholders in Alaska "need to make sure we've got somebody at the FAA that can coordinate across different parts of the FAA to get something done."[8]

The longstanding effort to increase instrument flight rules (IFR) operations in Alaska is another area that continues to meet with obstacles.[9] The director of operations for an Alaska carrier stated that despite the increased availability of instrument approaches, the inability to comply with current FAA flight standards that are required throughout the United States, such as weather reporting requirements and terminal instrument procedures, render the approaches unusable for many operators.[10] A possible remedy would be to adjust the FAA's flight standards for Alaska to accommodate its unique aviation environment, which is a risk management decision requiring extensive knowledge of the environment; yet such an adjustment has yet to even be evaluated.

The safety programs noted above are examples of programs that could potentially address accidents involving CFIT and unintended encounters with instrument meteorological conditions. The NTSB is also aware of several safety enhancements drafted by the General Aviation Joint Steering Committee (GAJSC) that are focused on reducing CFIT accidents in general aviation, which would also benefit Alaska operations.[11] The NTSB believes that a revised FAA process for implementing safety enhancements in Alaska could better ensure the Alaska aviation industry's needs are appropriately considered and included in the broader GAJSC safety enhancement program. Thus, the NTSB concludes that the FAA's failure to fully implement needed safety programs in Alaska has resulted in aviation safety issues in Alaska persisting. Therefore, the NTSB recommends that the FAA work with stakeholders that service the Alaska aviation industry to

[5] Transcript of proceedings, p. 169.

[6] Transcript of proceedings, pp. 174, 175, 182, and 205.

[7] Transcript of proceedings, p. 185.

[8] Transcript of proceedings, p. 183.

[9] The NTSB's 1995 safety study, *Aviation Safety in Alaska*, identified inadvertent VFR flight into IMC as the leading safety problem for Alaskan commuter and air taxi flights for the review period. The category continued to account for about a third of fatal Part 135 accidents from January 2008 to August 2019; inadvertent VFR flight into IMC accounted for about 12% of all fatal aircraft accidents in Alaska for the same period.

[10] Transcript of proceedings, pp. 151-152.

[11] The GAJSC is "a public-private partnership working to improve general aviation safety" and "uses a data-driven, consensus-based approach to analyze aviation safety data and develop risk reduction efforts through implementation of GAJSC sponsored, safety enhancements."

implement a safety-focused working group to review, prioritize, and integrate Alaska's aviation safety needs into the FAA's safety enhancement process.

Recommendation

To the Federal Aviation Administration

Work with stakeholders that service the Alaska aviation industry to implement a safety-focused working group to review, prioritize, and integrate Alaska's aviation safety needs into the FAA's safety enhancement process. (A-20-11)

BY THE NATIONAL TRANSPORTATION SAFETY BOARD

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Report Date: February 13, 2020

Senator SULLIVAN. Thank you.

Mr. WHITAKER. I do, agree, sir. I appreciated the conversation we were able to have. And I have had a chance to visit a lot of the aviation facilities in Alaska, and I do recognize the importance of having a bespoke system in place to mitigate some of those risks.

Senator SULLIVAN. So, let me just try to walk through a couple of the commitments that you and I talked about. I think the first one is really easy. The FAA, Alaska Aviation Safety Initiative, FAASI, as we are calling it, was an attempt to try to address these, you know, highest crash and death rates in the country.

Will you commit to me and this committee to keep the FAA leadership on that? There has been some good work in that regard, but a lot more needs to happen in that with regard to keeping this FAASI initiative going?

Mr. WHITAKER. Yes, sir, I will.

Senator SULLIVAN. And in particular, I want to, as you and I discussed, the issue of weather observation, the reliability of weather equipment.

It is kind of crazy that when it goes down in, say, a remote community, then you don't have pilots who can see what the weather is, and the inflexibility of the FAA to enable people on the ground to go fix that equipment, as you and I have talked about, sometimes they will be down for months because the regs say, well, someone from

Washington, D.C. has got to fly 5,000 miles to Alaska to fix the weather observation equipment in a small remote village in Alaska, and so you don't have weather observation.

Can you commit to me to work with me and this committee to fix those kind of regulations? Again, we are trying to get more safety, not less safety, and some of the inflexible FAA regs prevent us from doing that.

Mr. WHITAKER. Yes, sir. I will make that commitment, yes.

Senator SULLIVAN. Your predecessor's first—just a month on the job, met with the Alaska air carriers. Will—you and I talked about that. Will you commit to coming to Alaska soon in your tenure, if confirmed, to meet with our air carriers, our aviation community, and get firsthand from them some of the big challenges that we are working on?

Mr. WHITAKER. Yes, sir. I would be happy to.

Senator SULLIVAN. And then, as I mentioned with regard to FAASI, would you work with this committee and me to make sure that—again, that is part of the FAA budget. One of the things that we get frustrated on—and by the way, the FAA reauth that we are working on right now has a lot of good stuff in it as it relates to infrastructure, weather observation. It was very bipartisan.

Most people realize, geez, you guys have this real challenge in Alaska, Dan, with infrastructure weather reporting. The rest of the lower 48 doesn't have that, so of course will help you.

So, it has been very bipartisan. But can I get your commitment, particularly when it relates to budget issues, to work with us on those kind of FAASI infrastructure and weather observation reporting issues?

Mr. WHITAKER. Yes, sir, you can.

Senator SULLIVAN. And then finally, I wanted to just revisit the discussion we had on the ARNP issue. I have a letter, Madam Chair, I would like to submit for the record from the Alaska Air Carriers Association requesting assistance to retract, amend, and reissue the guidance that we talked about with regard to the FAA and the approved instrument approach procedures.

Again, this is a community that is trying to get to more safety, not less. Will you take a hard look at that, if confirmed, to retract, or amend, or at least suspend that guidance until people have a better understanding of how that is negatively impacting Alaska? I don't think that was FAA's intention.

The CHAIR. Without objection.

[The information referred to follows:]

ALASKA AIR CARRIERS ASSOCIATION
2301 Merrill Field Drive A-3, Anchorage, Alaska 99501 (907) 277-0071 www.alaskaaircarriers.org

The Honorable Dan Sullivan
302 Hart Senate Office Building
Washington, DC 20510

Re: Alaska Navigational Safety using Advanced Required Navigation Performance (A-RNP) Instrument Approach Procedures

Alaska is infamous for its high rate of controlled flight into terrain (CFIT – *pronounced see-fit*) accidents in poor weather. To improve the status quo, in 2019, several Southeast Alaska-based air carriers created special instrument approach procedures (which help guide aircraft through the clouds and rain to the runway) at their own expense. The FAA subsequently approved the use of these Advanced RNP (A-RNP) instrument approach procedures to mitigate the hazard posed by controlled flight into terrain (CFIT) accidents. Since implementation, these procedures have been highly effective in mitigating CFIT accidents.

FAA Advisory Circular (AC) 90-119 says it best, "Alaska's unique geography, vast distances between settlements, sparse lines of communication, unforgiving terrain, and Arctic to sub-Arctic climate combine to create a unique and challenging aviation environment." The agency has always provided special allowances for Alaska operations such as SFAR No. 97 and the Capstone program. Advanced RNP for Alaska operators should be treated the same.

On June 22nd, 2023, the FAA released a letter that would prohibit most Part 135 air carriers in Alaska from using these procedures, which would cause them to lose a critical tool for providing safer operations in poor weather conditions and would also prevent future adoption of A-RNP procedures by other Part 135 operators.

A-RNP has been in daily use for three years. There has not been a single incident nor accident, leading to vast safety and reliability improvements for residents living in the region and essential cargo deliveries they rely on. The FAA's new guidance will lead to a decrease in safety and community access in Alaska. In the June 2023 memo, the FAA stipulated that to use A-RNP procedures going forward, aircraft must be equipped with avionics systems that are unachievable by small Alaska Part 135 operators (and do not reflect the scaled risk-based regulatory environment for 135 operations - usually carrying nine passengers or less). Instead, they would require the same level of equipage as a large Boeing or Airbus airliner that carries hundreds of passengers at a time. While this may seem wise at face value, these systems are cost-prohibitive and lack approvals for use in smaller Part 135 fleets.

ALASKA AIR CARRIERS ASSOCIATION
2301 Merrill Field Drive A-3, Anchorage, Alaska 99501 (907) 277-0071 www.alaskaaircarriers.org

The FAA's course reversal stems from concern over the possibility of a GPS outage causing an aircraft navigating solely by GPS to lose spatial awareness and experience an increased risk of crashing. Aircraft using A-RNP procedures are no more vulnerable to these risks than those using longstanding, public GPS instrument approach procedures. However, the FAA's memo has only restricted Special A-RNP procedures and has not affected public GPS instrument approach procedures.

The 2020 A-RNP procedures—evaluated and approved by FAA FSDO inspectors—required pilots to be trained to use ground-based radio signals to continue navigating safely in case they lose GPS signal. For comparison, public GPS instrument approach procedures do not require pilots to train for GPS signal loss. The FAA refuses to accept the trained contingency procedures (specific to Alaska) as part of the June A-RNP memo stipulations despite the additional training required for A-RNP procedures.

Further highlighting the importance of improved navigation safety, In August of this year, DOT Secretary Buttigieg utilized the primary Part 135 air carrier in the region to complete his trip from Haines to Juneau, Alaska, safely. Using A-RNP, the Secretary flew from point to point using instrument flight rules (IFR) safely above terrain and in constant contact with Air Traffic Control. Without access to A-RNP, the Secretary would have had to fly low to the ground, near terrain and clouds, using visual flight rules (VFR), and inclement weather could have prevented his trip altogether.

Figure 1: DOT Sec. Pete Buttigieg & Senator Lisa Murkowski in Juneau, AK (A-RNP equipped PC-12 they flew in background)

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Bottom line: A-RNP instrument approach procedures have vastly improved safety and reliability. The FAA memo would regress Alaska's commercial aviation industry to an era when operators relied on riskier visual operations instead of being able to use A-RNP procedures to avoid CFIT accidents.

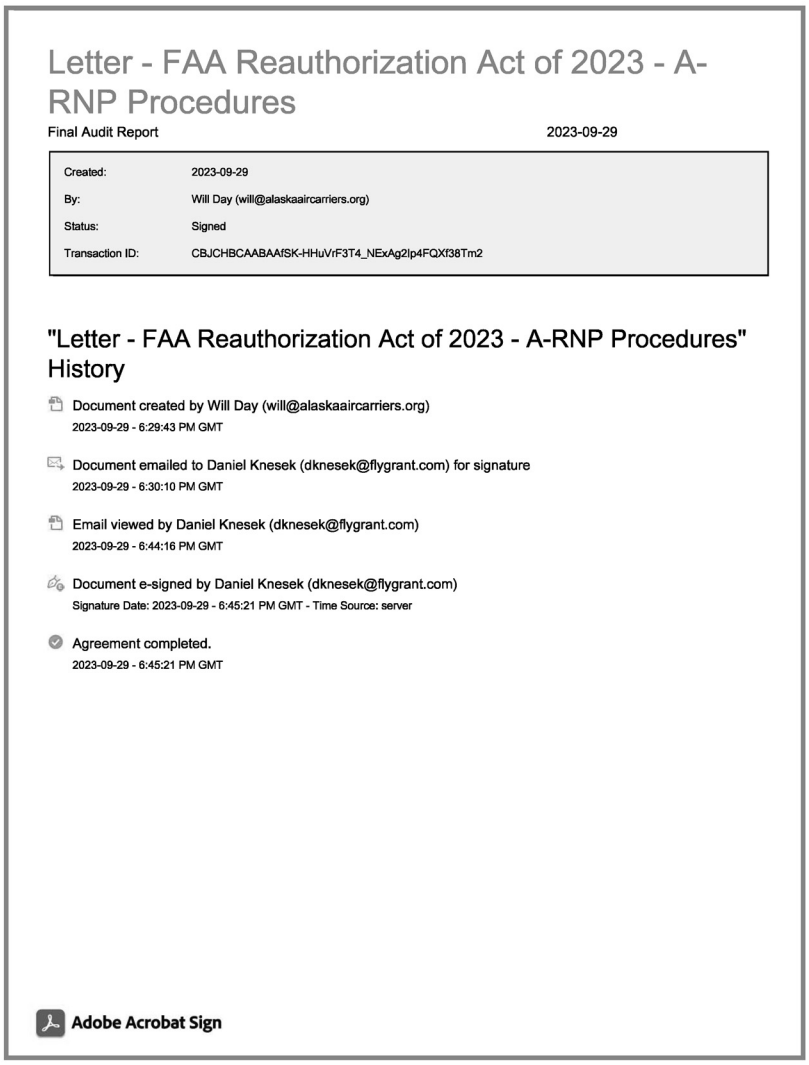
Ask: The June 22nd FAA A-RNP memo must be retracted, amended, and reissued to reflect the risk profile of (nine-seat) 135 operations, account for previous operator approvals, and for the continued use of A-RNP by Part 135 operators who have specialized GPS contingency procedures in place (along with dual WAAS GPS, ADAHRS, & Ground Based Navaid receivers) and have successfully demonstrated this capability to the FAA.

In solidarity,

Daniel Knesek (Sep 29, 2023 10:45 AKDT)

Dan Knesek
President & CEO, AACA

Will Day
Executive Director, AACA



Letter - FAA Reauthorization Act of 2023 - A-RNP Procedures

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Mr. WHITAKER. I certainly will look at it.
Senator SULLIVAN. Great. Thank you. Thank you, Madam Chair.
The CHAIR. Thank you. Senator Warnock.

STATEMENT OF HON. RAPHAEL WARNOCK,
U.S. SENATOR FROM GEORGIA

Senator WARNOCK. Thank you very much, Chair Cantwell. My colleagues on this committee may be tired of hearing me say it, and I may be a little bit biased, but I believe that Georgia is this country's most important aviation state. We are home to the world's busiest—I appreciate all the Amens in the——

[Laughter.]

Senator WARNOCK. Georgia is home to the world's busiest airport in Atlanta's Hartsfield-Jackson International Airport, the headquarters of Delta Airlines, and over 100 public use airports across the state.

According to the Georgia Department of Economic Development, airspace products—aerospace products are both the state's top export, and the second largest manufacturing industry responsible for $57 billion in annual economic impact. Most importantly, Georgia's aviation industry employs more than 108,000 people across more than 800 different companies.

That said, like many industries, aviation faces a widespread workforce shortage affecting both commercial aviation and the FAA's air traffic control staffing, which should concern all of us. Mr. Whitaker, how are you—how do we meet this moment and build a more sustainable, representative, and resilient aviation workforce?

Mr. WHITAKER. Thank you, Senator. I think building the workforce pipeline for the aviation industry is a key priority, starting with the controller workforce, but also in piloting mechanics, other professions. These are all good professions. We need to cast as wide a net as we can, and we need to build a pipeline of folks coming through to take these jobs. So, it is a priority.

Senator WARNOCK. I agree with you. And I want to zero in on that phrase that you just said. You said we need to cast a net. As wide as we can. And I couldn't agree with you more. And I believe that the best way to foster a well-trained aviation workforce is to invest in aviation education. I think often about a young man that I met down in Georgia a few months ago. His last name escapes me. Ezekiel was his first name.

And he had that light in his eye that you like to see in a young person. He had found that passion, that thing that, you know, you wake up in the morning wanting to do. He wanted to be a pilot, and he was very well-qualified, was making progress. But years into trying to become a pilot and thousands of dollars of his own money trying to meet the requirements, he was still struggling to get there.

And it is entirely too hard for too many of our young people. And he had this kind of persistence and passion that not everybody has. And so that is why I was proud to introduce the Airways Act earlier this year and why I am working with my colleagues to expand the FAA's workforce development grant programs in the FAA Reauthorization Act of 2023.

It is also my belief that once authorized, these grants should help more schools, including State and technical colleges, train students from rural and nontraditional communities to work in the aviation industry, all at a reasonable cost.

We need all of our talent. All of our brilliance of all of our young people, regardless of their zip code. If confirmed, will you commit to working with me to ensure that the FAA's Workforce Development Grant Program reaches students who don't typically enter the aviation field, whether they are mechanics, or pilots, or aviation engineers?

Mr. WHITAKER. I can, Senator, and I feel part of my job would be to be the chief recruiting officer for the FAA, but also for the industry, making FAA an employer of choice, so I would welcome that role.

Senator WARNOCK. Thank you so very much, and I look forward to working with you on this issue. On another matter, this past weekend, Congress narrowly avoided a Government shutdown. I commend my colleagues who supported this bipartisan funding bill, though I fear that we may find ourselves right back here in just a few short weeks.

A reckless Government shutdown would hurt countless Georgians, including the over 1,700 local TSA agents and almost 600 air traffic controllers in Georgia who would be required to work without pay during a shutdown. Mr. Whitaker, you may find yourself in the unenviable position of being confirmed as FAA Administrator and immediately facing the prospect of a Government shutdown.

How would a Government shutdown, in your opinion, affect the FAA? And if tasked with shepherding the FAA through a Government shutdown, how will you lead the agency through this manufactured chaos?

Mr. WHITAKER. Well, Senator, if it does happen, it won't be the first time it has happened because it happened when I was there before. I think the biggest impact that I would point out would be on the training of controllers that would come to a stop, and controllers who are in the training program would no longer be in the tower. So, I think that is not the result we would want in this situation.

Senator WARNOCK. Thank you so much.

Mr. WHITAKER. Thank you.

The CHAIR. Senator Vance.

STATEMENT OF HON. J. D. VANCE,
U.S. SENATOR FROM OHIO

Senator VANCE. Thank you, Madam Chair. And thank you, Mr. Whitaker, for being here and for being willing to serve. I appreciated our conversation yesterday, and I appreciate you coming in today. You know, one of the things that I worry about, not just at the FAA, but it is sort of the Government Administration more broadly, is that we focus on sort of bizarre questions of identification and language rather than the very real problems that you guys have to confront.

You guys have to address. You know, my colleagues on the Democratic side typically want Government to be a little bit maybe bigger or more aggressive than we do on our side. But I think pretty much all of us think that we want an FAA that is good at its job, preventing airlines and airplanes from crashing, one of the most important functions that exists in our Government, and I want it done well.

So, let me just sort of ask that with that sort of set up in mind, I have been a little bit worried about the focus on non-gendered language that exists in some of the FAA manuals and recent trainings. Just to give you an example, the FAA recently hosted an "inclusivity summit," where the spokeswoman stated, "aerospace is

for every one of the language we use matters. We launched an agency wide initiative to adopt gender neutral and inclusive aviation terminology."

Now, as an example of some of this, which I struggle not to laugh, the FAA has decided that it should stop using airman, it should start using pilot. And it should stop saying unmanned, it should start saying uncrewed.

And I guess generally the word "cockpit" is offensive and so should stop being used in the Federal Aviation Administration. And I am just curious, Mr. Whitaker, you seem like a very serious guy. Do you believe that the FAA should be focused on eliminating all references to gender-specific language like the ones I just mentioned?

Mr. WHITAKER. Thank you, Senator. I guess I would start by saying that the primary mission at FAA is going to be safety——

Senator VANCE. Sure.

Mr. WHITAKER.—and that will always be the top priority. I do think language evolves. You know, we went from stewardesses to flight attendants, and it doesn't strike me as necessarily out of the ordinary to do that. But again, my focus is going to be on safety and running the agency effectively.

Senator VANCE. I understand that, and I understand that language does sometimes evolve. I guess the concern that I have, if I am looking at this from the perspective of my constituents in the state of Ohio, they say—they see a Government agency that has an important function. Instead of focusing on that important function, it is focused on things like changing "unmanned" to "uncrewed". It just seems a little unserious.

I guess, I think I speak for a lot of people in the State of Ohio when I would say that I just want a lot of our Government agencies to be a little bit less weird and a little bit more focused on the mission.

And I hope that if you are confirmed, you will take a similar approach. You know, one way in which I think this is a particularly acute problem in the aviation industry, and you and I talked about this a little bit yesterday is, you know, traveling by air has become more and more miserable, it seems, over the past couple of years. I mean, it is because airlines are a little bit too unstaffed. It is because of some of the pent up demand, the latent demand from the COVID era.

But, you know, one thing that I have become aware of just in the last few months is that apparently travel times between certain major American cities has actually gone up over the last 50 years. We have this sense in America that we are on this pathway to sort of technological progress. It marches on and on and on. But apparently, 50 years ago, it took less time to fly from New York to Houston than it does today.

It seems kind of weird, right. Like why in an era of technological progress is it taking us longer to travel from one place to another? That seems to indict the aviation industry, or the people who regulate the aviation industry, or somebody who is involved in the aviation industry.

And so, I just encourage you to be focused on as many of the real problems instead of the fake problems. I think it will build trust

in your agency if you are able to do that. Let me just ask this final question. I mean, we—would you think it is fair that we are dealing with a labor shortage in the aviation industry, whether it is flight crews, pilots, or ground staff?

Mr. WHITAKER. Well, I think those—I think there are different causal factors for those situations, I think.

Senator VANCE. Sure.

Mr. WHITAKER. For pilots, for example, for many decades, it was not a particularly well-paid profession, particularly at the entry level. And it became well-paid at the very end of your career, but you started a very low salary.

So, I think we have seen those salaries go up pretty significantly over the past few years. So, the market I think is working fine. A lot more people are being attracted to that profession. I put that in a different category than the controller shortage, which is really a pipeline issue for hiring at FAA that needs to be fixed.

Senator VANCE. Yes, I understand. And recognizing my time is low here, I just ask, Mr. Whitaker, to the extent possible, I would ask you to be as focused as much as you can on the actual Administration, on the real problems, on the safety challenges, and not on these sort of weird language priorities. Again, I think it erodes confidence in Federal agencies. I also think it is a huge distraction. Thank you for being here.

The CHAIR. Senator Young.

STATEMENT OF HON. TODD YOUNG,
U.S. SENATOR FROM INDIANA

Senator YOUNG. I thank our Chair. Mr. Whitaker, congratulations——

Mr. WHITAKER. Thank you, sir.

Senator YOUNG.—on your nomination to this important position. I really appreciate it. And before I dive into a series of questions, just one threshold question for me. Would you commit to visit with Indiana's aviation stakeholders, should you be confirmed?

Mr. WHITAKER. Absolutely, sir.

Senator YOUNG. All right. Thank you. It is really important, as someone who has spent a lot of time focusing on innovation during my Senate term, that the approach you take this job lends itself to continue aviation. And I know from your background, you have recently focused quite a bit on emerging technologies.

Your previous experience at FAA suggests that. So, when balancing innovation on one hand and security on the other, they are really not two sides of a coin. I think oftentimes innovations lead to increased safety, which is rightly your top priority. But I just, I would kind of like to unpack this topic with you.

So, if confirmed, maybe you can tell me how you would ensure that the FAA continues to prioritize safety but doesn't unnecessarily stifle innovation?

Mr. WHITAKER. Thank you, Senator. I think that is the balance that we have to strike. And I think we view it as primarily safeguarding existing operations to make sure that as new entrants come in, they are not interfering with particularly the very busy airspace that we operate now.

So, it is—the goal is integration, not creating separate spaces for folks to operate. And that is going to take really fundamentally revising how we design the airspace and what we can accommodate. And it is going to take some time.

But I think we need to really develop a, sort of, a master vision for what that looks like, and what technologies are needed, and how we are going to deploy those technologies.

Senator YOUNG. Well, that could really be, you know, one of the hallmarks of your tenure is to get that right. Maybe you can speak to the importance of embarking down that path. Discuss some of the upside of these emerging technologies that you would like to incorporate into our airspace, drones, hydrogen, electric propulsion, advanced air mobility? There may be others.

Mr. WHITAKER. And I think those are good examples. And we are really following what the industry is doing and trying to understand at what pace they are going to come into the system. I think the FAA's role is to try to safely create an opportunity for those technologies to be proven out so that they can be incorporated into the airspace.

But it is—there is huge opportunity in all those things for really transforming travel and changing—you know, potentially changing the structure of aviation by opening up new markets that previously couldn't be served because it was unaffordable.

Senator YOUNG. So, you are interviewing today to be our Nation's head safety regulator. But this is an even bigger job than the title suggests. The FAA also has an important role leading international civil aviation community on aviation regulation and safety issues. And we have to maintain the FAA's global leadership in aviation. Do you believe we are currently the global leader in aviation?

Mr. WHITAKER. I think historically we have been. I think the last few years have put that somewhat in question.

Senator YOUNG. And you are specifically referring to what?

Mr. WHITAKER. To the MAX crashes.

Senator YOUNG. Yes. Are you concerned that we don't currently have a U.S. Ambassador to the International Civil Aviation Organization and have not had one since June 2022?

Mr. WHITAKER. I think it is important to fill that role. I think the ICAO organization is an excellent organization, one that we should work with closely to drive safety globally.

Senator YOUNG. Do you believe that this gap in leadership is hurting our ability to maintain global leadership in aviation?

Mr. WHITAKER. I will work to reassert that leadership regardless of whether that position is filled. I don't have a specific view on sort of recent months in that regard.

Senator YOUNG. The FAA has still not begun a rulemaking on beyond visual line of sight drone flights to allow for a safe and predictable process to ensure the U.S. remains globally competitive. If confirmed, will you commit to ensuring this happens in short order?

Mr. WHITAKER. It will be a top priority, yes.

Senator YOUNG. OK. Anything else you would like to say to me in my remaining 13 seconds?

Mr. WHITAKER. Thank you for your thoughtful questions, sir.

Senator YOUNG. All right, sir. I yield back.

[Laughter.]

The CHAIR. We will follow—I will use your 13 seconds. One thing we didn't cover, you are kind of Mr. Next Gen. Could you explain where you think we are? What has been implemented? What advantages that has given us, and what more advantages will it give us in aviation if we get that fully implemented under your watch?

Mr. WHITAKER. Thank you, Senator. I will—Next Gen is an often misunderstood designation. It is a collection of programs to upgrade the national airspace. We use the analogy of building an iPad.

So, we have put in an entirely new technology platform that allows us to now move traffic using satellite technology rather than radar, and to communicate with data rather than voice communications for routing.

So, it is a significant upgrade to the system. The early foundational investments allow us to continue to add new efficiencies into that system, new technologies to make it easier to control traffic. It was originally designed as a 2010 to 2025 program, so 15 years, and it is largely completed. Some of the programs will run beyond that.

So, Data Comm, for example, largely because it was expanded. It was such a popular technology that we have expanded it to additional facilities. So, I think it is largely coming to a close and it is time to really look at what is next for the airspace.

The CHAIR. So, you would say in general to somebody at home who may not quite understand this, we have moved off of radar on to satellite communications.

Mr. WHITAKER. We have moved from radar to satellite, yes.

The CHAIR. And guiding planes in a much more gradual approach and saving fuel and costs.

Mr. WHITAKER. And I think—that is right. I think many of us remember the step down approaches where you would feel a descent and level, and a descent and level, and now it is a much more efficient descent where you pull back the power and let the aircraft take its natural path down to the runway. Much more fuel efficient and much quieter.

The CHAIR. And what do you think that has benefited aviation—how do you think that has benefited aviation?

Mr. WHITAKER. I think fuel savings is a huge component of that. Noise reduction and block time savings for airlines. So, it was a big upfront investment, but it is yielding benefits and will continue to yield benefits.

The CHAIR. Well, I think I wanted to close with that just because I think you were at the beginning of a very big transformation, and yet we have more transformation to do. So, I think you are the guy with the experience of that Next Gen implementation that gives you the depth and breadth of how big a challenge can be, because certainly it was a big challenge moving our country on to a better system.

So, we will look forward to that full implementation because I agree with you, I think it could yield much bigger aviation advantages to the United States if we keep moving forward on this. I think you can see we had a very engaged committee today. I think you can see that this committee cares a lot about aviation.

We had, I think, a few people missing, probably because they are dealing with other big thorny problems at the moment, but nearly perfect attendance from everybody and very big engagement. I think I heard the words safety and workforce constantly from everyone. So, I think it tells you what we think the priorities are.

So again, thank you for your willingness to serve. Before we close the hearing, I have to again ask if you pledge to work collaboratively with the Committee, and that means timely responses for requests for information, and to address important policy issues, and appear before the Committee when requested?

Mr. WHITAKER. Yes, I will.

The CHAIR. Thank you. Senators will have until the close of business Monday, October 9, to submit questions for the record to the Committee. The witness will have until the close of business Monday, October 16, to respond to those questions. And that concludes our hearing.

Mr. WHITAKER. Thank you.

[Whereupon, at 12:27 p.m., the hearing was adjourned.]

A P P E N D I X

National Association of State Aviation Officials

October 4, 2023

The Honorable Maria Cantwell
Chair
Committee on Commerce, Science,
and Transportation
United States Senate
Washington, DC 20510

The Honorable Ted Cruz
Ranking Member
Committee on Commerce, Science,
and Transportation
United States Senate
Washington, DC 20510

Dear Chair Cantwell and Ranking Member Cruz:

On behalf of the National Association of State Aviation Officials (NASAO), we write in support of the nomination of Michael Whitaker as Administrator of the Federal Aviation Administration (FAA).

NASAO is the nationally recognized voice for the public interest in aviation on behalf of the states and territories. We represent state government aviation agencies in all 50 states, Guam, and Puerto Rico. Our mission is to encourage and foster cooperation throughout the public sector in the development and promotion of a national aviation system that safely and effectively serves the needs of citizens, commerce, and communities throughout the United States.

Mr. Whitaker is a widely respected leader in the aviation industry who can effectively bring his variety of experiences to bear in this position. He is an attorney, a former executive in the airline industry, and a former deputy administrator at the FAA, as well as a certificated pilot. Today, he is a leader at a company engaged in the advanced air mobility sector with a keen understanding of what is needed to bring this new and exciting sector to fruition. These experiences, combined with his demonstrated leadership and management skills should make him an effective leader for the FAA at a critical moment for our nation's airports, airlines, and aviation-related businesses.

We appreciate the Committee's action to move expeditiously on this nomination and encourage you and the entire Senate to quickly confirm Michael Whitaker as Administrator of the FAA. As always, we stand ready to work with you and him on critical issues facing our nation's aviation system.

Respectfully,

Gregory Pecoraro
NASAO President and CEO

National Association of State Aviation Officials
1390 Chain Bridge Road– #A106 • McLean, VA 22101
(202) 925-1337 • www.nasao.org

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARIA CANTWELL TO MICHAEL G. WHITAKER

Safety Vision

U.S. aviation has been through a difficult period. With the 737 MAX accidents, America's global leadership in aviation safety was called into question. Then the COVID–19 pandemic halted airline operations on an unprecedented scale. More recently, there have been a number of incidents, like the NOTAM shutdown to near-miss runway incursions, as discussed in the Committee's recent hearings. Additionally, it is clear that advanced technology adds more challenges and complexity. If there were a time for strong safety leadership at the FAA, it's now.

Question 1. What is your overall vision for improving and enhancing safety?

Answer. Maintaining the highest standards of safety that the traveling public expects is the top priority and challenge for the agency. This involves providing adequate staffing in key functions, ensuring operators are compliant with current standards, and constant diligence in analyzing safety data to identify emerging threats and working with system users to mitigate those threats.

Question 2. What is your plan to turn this vision into action to ensure the U.S. sets the global gold standard for aviation safety?

Answer. To ensure the U.S. sets the global gold standard for aviation safety, the FAA will need to lead through excellence. If confirmed, I will ensure the agency continues to prioritize implementation of the Aircraft Certification, Safety, and Accountability Act (ACSAA) and any subsequent authorization. Implementation of ACSAA is not just about completing the directives in each section but incorporating the spirit of the law throughout the agency. That means promoting transparency and insisting on thorough and uncompromising oversight of all regulated entities. It also means being a leader internationally to promote strong safety standards throughout the world and providing assistance to foreign Civil Aviation Agencies who may need it. I will work to build an organization that can meet the challenges of safely incorporating new users and technologies—small unmanned systems, advanced air mobility, distributed electric propulsion, commercial space—into the busiest and safest air space system in the world. This will also involve building a culture of continuous improvement to allow us to achieve a level of operational excellence as a regulator and an air traffic systems operator that ensures the FAA and U.S. companies maintain their long-established global leadership in aviation and aerospace.

Question 3. In the 2020 Aircraft Certification Safety and Accountability Act (ACSAA), Congress set forth specific improvements in FAA's safety oversight of aircraft manufacturers. If confirmed as Administrator, do you commit to fully implementing these safety reforms, on-time and consistent with Congressional intent?

Answer. If confirmed, I commit to fully implementing these safety reforms, on-time and consistent with Congressional intent, and I would keep Congress informed of progress in implementation.

Question 4. How would you ensure FAA develops and maintains a regulatory environment that puts safety first and listens to the voices of line aviation safety professionals?

Answer. If confirmed, I would ensure the FAA holds itself and the entities it regulates accountable. I will also ensure that every FAA employee understands my expectations of them as well as what they can expect from me.

Rulemaking

ACSAA contains several requirements for FAA to engage in rulemaking to adopt new regulations, and reviewers of the 737–MAX accidents have recommended several other regulatory changes. But in some cases, FAA's response has been to seek alternatives to rulemaking because rulemaking is difficult and time-consuming.

Question. If confirmed, what will you do to refocus FAA's efforts on adopting necessary regulatory changes and to improve the efficiency of this process?

Answer. If confirmed, I would examine ways to streamline the areas of the rulemaking process that the FAA controls, in accordance with the Administrative Procedures Act. To the extent possible, I will work within the FAA and with DOT and OMB to try to limit delays, and I will communicate progress with the Committee.

Improving FAA Safety Culture

Section 132 of the safety reform law requires the Administrator to conduct an annual safety culture assessment, through Fiscal Year 2031. This includes surveying all employees in the FAA's Aviation Safety organization ("AVS") to determine their

opinions regarding AVS' safety culture and implementation of any voluntary safety reporting program.

FAA has only completed one safety culture assessment so far—despite the Congressional mandate for an assessment to be conducted each year.

Question 1. I fully expect FAA will be completing and reporting safety culture surveys to Congress on time moving forward. Do I have your commitment to get this done?

Answer. If confirmed, I will determine the status of these safety culture surveys and ensure that going forward the FAA will complete and report safety culture surveys to Congress on time.

Question 2. The 2022 survey identified what the workforce considered serious weaknesses in FAA senior leadership performance. Specifically, employees identified slow decision-making and action from leadership, and a lack of transparency surrounding the logic behind decisions. Employees said when they identify problems their immediate supervisors normally help to correct them, but when looking beyond the direct supervisor level of leadership, results indicate a fear of blame for mistakes. If confirmed, what immediate actions would you take to address this issue?

Answer. If confirmed, I will review the safety culture survey results in depth with the Office of Aviation Safety. One of the first things I will do at the FAA is inform every employee of what they can expect of me and what I expect of them in meeting the FAA's safety mission.

Ensuring Supply Chain Compliance

In December 2021, the Committee released its Aviation Safety Whistleblower report which highlighted instances of line engineers with specific technical expertise who were not listened to during the certification process for the 737 MAX and 787 programs. Certain whistleblowers, including a senior engineer at Boeing, stressed warnings of supply chain non-compliances as part of the 787 project that were still not adequately addressed by Boeing or the FAA. Earlier this year, Spirit Aerosystems experienced production issues relating to Boeing 737 fuselage components, raising safety questions about such defects. Instances like these elicit serious concerns about aircraft manufacturing supply chains and whether FAA is exercising sufficient safety oversight to ensure that the production process and supply chains are safe and reliable.

Question. If confirmed, do you commit to conducting strong FAA safety oversight and ensuring robust compliance throughout the aircraft manufacturing process and supply chains?

Answer. If confirmed, I will commit to conducting FAA safety oversight and ensuring robust compliance throughout the aircraft manufacturing process and supply chains.

Raising International Safety Standards

The United States is in the midst of a global, competitive race for the future of aviation. From fostering the scalable production of sustainable aviation fuel, to investing in thermoplastics and composite materials and building the next great commercial aircraft, the United States must lead the way in order to maintain our competitive edge. Aviation has an important contribution to the economy. In the U.S., aviation contributes approximately 5 percent of GDP, supporting nearly 11 million jobs. It also is apparent that other countries will look to aviation to boost their connectivity and jumpstart their economies.

While we embrace this competition in the United States, we also need to make sure that the United States is working with the international aviation community to raise safety standards across the globe. Safety standards at ICAO, like those at the Federal Aviation Administration (FAA), can never slip and must always improve.

Question 1. How can the FAA better work with civil aviation authorities around the world to ensure the highest standards of safety throughout the system?

Answer. If confirmed, I will use my over 30 years of experience in aviation, many of those years working on aviation issues internationally, to work with civil aviation authorities around the world to ensure the highest standards of safety throughout the system. Whether it is through the IASA program, the provision of technical assistance or participation and leadership at ICAO, the FAA has tools to collaborate with our international partners to promote safety around the world. Utilizing those tools effectively would be a priority.

Question 2. Do you agree that the FAA should increase safety oversight over the maintenance of U.S.-registered aircraft abroad?

Answer. I agree that FAA should follow its commitment to "one level of safety" to include safety oversight over the maintenance of U.S.-registered aircraft abroad consistent with safety oversight over the maintenance of U.S.-registered aircraft here in the U.S.

Question 3. ICAO is critical for establishing global safety standards. What can FAA do to ensure that we are raising standards at ICAO on pilot training when facing trends towards automation and greater "efficiency" on the flight deck?

Answer. If confirmed, I will determine the status of ICAO discussions related to pilot training to ensure the U.S. maintains a critical leadership role as ICAO determines global safety standards for pilot training.

FAA Certification Projects and Workforce

Question 1. If confirmed, do you commit to providing the Committee a briefing on the Federal Aviation Administration's major outstanding certification projects involving commercial and general aviation programs?

Answer. If confirmed, I will commit to providing the Committee a briefing on the FAA's major outstanding certification projects involving commercial and general aviation programs.

Question 2. The FAA certification process is critical to ensuring the safety and competitiveness of the commercial aviation industry. If confirmed, how would you ensure that the FAA recruits and retains adequately skilled and well-trained certification staff to appropriately and efficiently review and approve new aircraft designs, technologies, and safety measures?

Answer. If confirmed, I will use all available means to increase qualified staffing of these certification staff, as well as inspectors and other safety professionals.

Near-Miss Safety Incidents

Aviation safety is at a critical waypoint. With workforce challenges, a faster-than-expected recovery in passenger demand, and the lag in training new pilots and controllers, the U.S. air transportation system is under stress. Over the past year, there has been an uptick in reported near-misses and close calls.

In March, the FAA convened a Safety Summit to take a serious look at these incidents and determine the actions that need to be taken in order to maintain the Nation's strong record in safety. Following this summit, the FAA took further action to examine strategies to improve the safety of the national airspace system, including convening an independent safety review team.

Question 1. What are your plans for addressing emerging safety trends or underlying root causes that are giving rise to these near-miss incidents?

Answer. If confirmed, I will immediately engage with relevant agency leaders including those in the Air Traffic Organization, Aviation Safety Organization and Office of Airports as well stakeholders to hear their perspectives on the increase in events earlier this year as well as their views on the most effective mitigations to avoid these events going forward. FAA announced a goal after the Safety Summit to reach zero close calls going into the future and I want to make sure we're taking the right policy actions and making the right investments to support that goal.

Question 2. Technology can play an important role in addressing close calls. What is your view on further implementing technologies such as airport surface surveillance systems, like ASDE–X, and aircraft collision avoidance warnings in reducing the risks to commercial aviation?

Answer. I support additional use of technology and agree it can play an important role in addressing close calls. I understand the Air Traffic Organization is moving toward making investments in the deployment of additional systems and if confirmed I would look forward to working with them on that effort.

Question 3. Many of these incidents come to light through voluntary disclosures into reporting systems maintained by the FAA and NASA, such as the Aviation Safety Reporting System (ASRS), the Aviation Safety Action Program (ASAP), and Service Difficulty Reports (SDRs). If confirmed, will you keep on top of this data and close the loop on any identified reports and safety trends?

Answer. If confirmed, I will stay on top of this data and close the loop on any identified reports and safety trends.

Question 4. The FAA continues to improve the Aviation Safety Information and Sharing (ASIAS) database, including incorporating rotorcraft data and voice data from air traffic control to support safety analyses. Pursuant to the Act, FAA has worked with the Transportation Research Board to identify, categorize, and analyze emerging safety trends in aviation and completed the first required report in August 2022. FAA has also partnered with the National Aeronautics and Space Administration to establish the framework for real-time data monitoring. If confirmed, will you

commit to prioritizing the emergency safety trends report in cooperation with TRB, take action to address any safety trends identified by this report, and keep Congress informed of these efforts?

Answer. If confirmed, I commit to working with FAA's Aviation Safety Organization to ensure necessary actions are taken to address safety trends whether they are identified by TRB or stakeholders using other reporting tools (*i.e.,* ASRS, ASAP, SDRs, etc).

Airplane Fuel Efficiency Certification Rulemaking

In June 2022, FAA published a notice of proposed rulemaking on Airplane Fuel Efficiency Certification. This is an important step towards ensuring U.S. manufactured aircraft remain competitive as international aviation emissions policies continue to develop. The rule will also bring us one step closer to reducing the amount of greenhouse gas emissions released by commercial airplanes and reaching the President's goal of net-zero greenhouse gas emissions from the U.S. aviation sector by 2050.

The FAA previously committed to finalizing this rule in the first quarter of this calendar year, but that timeline was pushed back into later in 2023. The European Union is ahead of the U.S.; it adopted its implementing regulations nearly 4 years ago and has begun to certify aircraft accordingly. Without a final rule, in addition to the environmental impacts, the FAA cannot move forward with certifying aircraft to the new standards, putting the U.S. commercial aviation industry at a competitive disadvantage in the global market.

Question. If confirmed, will you work to ensure that this rule is finalized by FAA as promised by the end of 2023?

Answer. Understanding that rulemaking timelines can be affected by factors outside of the agency's control, if confirmed, I will work toward finalizing this rule this year.

U.S. Flight Operations by Foreign Air Carriers

U.S. law provides that only U.S. owned and controlled carriers may market and provide air transportation between U.S. points. However, there have been concerns raised of air carriers that are subject to apparent foreign control, including with respect to offshore wind aircraft operations. The Department of Transportation (DOT) is chiefly responsible for overseeing compliance with foreign ownership and control laws. However, the FAA, in cooperation with the DOT, can play a role in helping to address any instances of non-compliance with these laws and ensuring the safety and security of the national airspace system.

Question. If confirmed, will you commit to aggressively investigate and prevent foreign controlled companies from operating between two U.S. points, consistent with U.S. law?

Answer. If confirmed, I commit to aggressively enforcing U.S. law including laws related to cabotage.

Remote Towers

For more than 16 years, remote towers have been researched by the FAA for use in the NAS while they have been operational in Europe for almost a decade. The 2018 FAA Reauthorization bill included a pilot program to test and evaluate remote towers in small communities. However, the FAA never fielded all six pilot sites that were authorized.

Question 1. What is your perspective on the value of remote towers as a means to provide air traffic control services to communities that are currently underserved?

Answer. The safe and reliable use of remote towers is something I believe the agency should continue to research and work in good faith with remote tower operators to determine if there are systems that can meet safety and reliability standards that pilots, crew and passengers count on.

Question 2. If confirmed, will you work to ensure that the FAA will utilize performance-based standards to advance this technology consistent with standards that the FAA was a party to in the development of standards developed by the European Organisation for Civil Aviation Equipment (EUROCAE)?

Answer. As, I stated above, I believe the agency should continue to research and work in good faith with remote tower operators to determine if there are systems that can meet safety and reliability standards that pilots, crew and passengers agree on. This can include the standards developed by the European Organisation for Civil Aviation Equipment.

Question 3. If confirmed, will you commit following the FAA's formal Advisory Circular process, ensuring that it is transparent to stakeholders and provides notice and opportunity to comment?

Answer. If confirmed, I will commit to ensuring the FAA follows a transparent process that provides notice and opportunity as appropriate and consistent with the Administrative Procedures Act.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BRIAN SCHATZ TO MICHAEL G. WHITAKER

Question 1. Please explain the impact of prior government shutdowns and austerity policies on the implementation of NextGen improvements.

Answer. If confirmed, I will work with the Office of NextGen to seek more specifics but I recall broadly that previous lapses in appropriations have resulted in the agency delaying funding decisions and further segmenting projects having the cumulative affect of delaying delivery of certain capabilities including Enroute Datacomm and deployment of PBN procedures.

Question 2. Airports in Hawaii, including Honolulu airport, are threatened by sea level rise and other natural hazards. Senator Budd and I have a bill that would make resiliency projects eligible for Airport Improvement Program funding.

Please describe how you will approach this problem as Administrator. Will you commit to directing the FAA to provide guidance, technical assistance, direction, and—to the extent possible—funding, to airports struggling to address sea level rise and other natural hazards, if you are confirmed?

Answer. Yes, I will commit to working with the Office of Airports leadership to update relevant guidance and provide direction, assistance, and to the extent possible, funding for airports pursuing resiliency projects.

Question 3. Unfortunately, Hawaii is disproportionately affected by air tour crashes. It has been a long road to push the FAA to make safety improvements and I hope with the coming reauthorization we will do so by passing my *Air Tour and Sport Parachuting Safety Improvement Act of 2023.* What more can the FAA do improve air tour safety as current authorities stand? If passed and if you are confirmed, do I have your commitment to quickly implement the provisions in my air tour safety bill?

Answer. If the bill is enacted and I am confirmed, I commit to quickly implement the provisions in your air tour safety bill. Beyond that, if legislation is not adopted, I commit to working with you to make progress. Using current authorities, the FAA can pursue an SMS requirement for Part 135 operators and can utilize expertise through Aviation Rulemaking Committees to seek recommendations on some of the topics covered in your legislation.

Question 4. Relatedly, air tour noise is a serious quality of life issue for many of my constituents. I have been working to include my *Hawaii Air Tour Management Act,* in its amended form, in the FAA reauthorization. What more could the FAA do to better manage air tours over my constituents under current authorities than it is currently doing? If you are confirmed and my bill passed, will you commit to quickly implementing its provisions?

Answer. If the provision is enacted and I am confirmed, I commit to quickly implement it. I would need to get more fully briefed on the operations specific to Hawaii, but broadly I can say robust engagement with Hawaii DOT leadership and operators in the state is something the agency should do to seek a mutually agreeable path forward.

Question 5. The FAA is currently undergoing an airspace modernization process for the airspace over Hawaii. Do you commit to a thorough stakeholder engagement process and to work with me to coordinate the FAA's efforts with critical Hawaii airspace stakeholders, if you are confirmed?

Answer. If confirmed, I do commit to a thorough stakeholder engagement process and to work with you to coordinate the FAA's efforts with critical Hawaii airspace stakeholders.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. GARY PETERS TO MICHAEL G. WHITAKER

Fuel Efficiency Certification Rulemaking

In June 2022, the Federal Aviation Administration (FAA) published a notice of proposed rulemaking on Airplane Fuel Efficiency Certification. This is an important

step in codifying greenhouse gas emissions standards developed by the International Civil Aviation Organization. Finalizing this rule is necessary to ensure that U.S. airplane manufacturers can compete on the global market. Without a final rule the FAA cannot move forward with certifying aircraft to the new standards, seriously disadvantaging the U.S. commercial aviation industry.

Finalizing the rule will also ensure we continue to move in the right direction on emissions standards in the aviation sector. The FAA previously committed to finalizing this rule in the first quarter of this calendar year, but that timeline was pushed back into later in 2023.

Question. If confirmed, will you work to ensure that this rule is finalized by the end of 2023?

Answer. Understanding that rulemaking timelines can be affected by factors outside of the agency's control, if confirmed, I will work toward finalizing this rule this year.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TAMMY DUCKWORTH TO MICHAEL G. WHITAKER

FAA Oversight of Aircraft Certification

The deadly Boeing 737 MAX scandal shattered our confidence in FAA's ability to safely certify aircraft. FAA's failure to effectively oversee the Boeing employees that conducted certification work on the agency's behalf is a key reason why Congress passed legislation that requires FAA to rigorously vet the corporate employees it authorizes to conduct such work.

The enclosed internal Boeing memo (Enclosure 1) demonstrates why this is so important. It documents an effort to conceal the existence of the MCAS system by hiding it within the existing Speed Trim System.

The memo provides a clear motive: *"If we emphasize MCAS as a new function there may be a greater certification and training impact."*

This is corporate-speak that expresses the fear if regulators discovered a new safety critical system, 737 MAX pilots might be required to undergo costly simulator training.

Perhaps most outrageous, toward the bottom of the memo, it shows that FAA's "Authorized Representative" was not only fully read into this plan to hide the existence of MCAS from a regulator, but he or she concurred with the plan.

Question 1. Do you agree that an FAA-authorized representative concurring with a plan to mislead a regulator about the true nature of a new safety critical system is unacceptable?

Answer. FAA-authorized representatives and Organization Designation Authorization (ODA) unit members represent the FAA and as such any involvement with plans to mislead the FAA or any other regulator about the true nature of a safety critical system is unacceptable.

Question 2. Will you commit to ensuring that any FAA designated representative found to have engaged in such improper conduct is permanently disqualified from ever serving in such an important role?

Answer. Utilizing the tools provided by the Aircraft Certification, Safety, and Accountability Act, I will ensure improper conduct by ODA unit members is not tolerated including disqualifying unit members and possible removal of a company's ODA status.

Airspace Safety and FAA's Air Traffic Legacy System Resiliency

As a pilot, one thing you learn is that a safety system should never be left vulnerable to a single point of failure. Never. Redundancy saves lives. In January of this year, the FAA's NOTAM system outage caused more than 10,000 flights to be delayed or cancelled. We know the FAA, and many stakeholders in the air travel system, use computer systems that are single threaded and based on very old technology. It is FAA's job to keep our airspace safe, but it is impossible for FAA to do this unless its systems have appropriate operational redundancies.

Our nation needs a strong FAA leader who will reject complacency and examine these legacy aviation systems that create operational risk and address these issues with a sense of urgency and an investigative approach to get to the root cause(s). This includes runway safety technologies, many of which are beyond their service life and need to be replaced, in addition to adding new runway safety technologies at locations that do not have it. It is a hard balance because we also need to be focused on building a roadmap for the future of all the new technologies.

Question. Will you commit to a thorough review of Air Traffic Organization's legacy systems to ensure operational risk is planned and mitigated and if so, when could we expect to see resiliency plans in place?

Answer. If confirmed, I will ensure the review of the Air Traffic Organization's legacy systems continues. Because of the volume of legacy systems, I cannot predict how long it will take to implement resiliency plans or whether the FAA will have all of the resources to do so, but I will keep the Committee informed of progress.

Preparation for Advanced Aviation Mobility

We know there is an influx of new aircraft entering into the airspace in the next five years. The Advanced Air Mobility Market was estimated to be $8.2 billion in 2022 and is expected to hit around $68.1 billion by 2032. It is poised to grow at an annual growth rate of 35.2 percent from 2022 to 2032. We know that we want the U.S. to be at the forefront of this manufacturing and in a position to export this new technology worldwide.

Question. What are the FAA's biggest challenges you hope to address with Advanced Air Mobility and what can Congress and this Committee do to support this important growing sector?

Answer. Finalizing the initial operational regulatory framework to support near term operations and integration into the National Air Space without disruption to legacy users of the system. Certification of these new vehicles is occurring using the existing certification framework and I know Congress has been explicit in its direction that the agency resource this effort in a way to facilitate certification of the first vehicle by December 2024. Critically, in the context of both certification of the vehicle and all aspects of the operation, the FAA must provide robust oversight and demand adherence to safety standards consistent with the agency's longstanding commitment to "one level of safety."

Sustainable Aviation Fuel

The Biden Administration's Sustainable Aviation Fuel (SAF) Grand Challenge has a goal to supply at least 3 billion gallons of SAF per year by 2030 as part of its broader effort to decarbonize the transport sector by achieving a 50 percent reduction in life cycle greenhouse gas emissions compared to conventional fuel. This government-wide Memorandum of Understanding (MOU) launched with Department of Energy (DOE), Department of Transportation (DOT) and U.S. Department of Agriculture (USDA) also has the goal of the SAF industry meeting 100 percent of aviation fuel demand at around 35 billion gallons per year by 2050.

Aviation is one of the hardest-to-abate sectors when it comes to reducing lifecycle emissions and SAF is currently the only way to decarbonize the industry at pace and at scale, which will require utilizing a wide range of feedstocks. According to the International Air Transport Association (IATA) total production of sustainable aviation fuel tripled in 2022, reaching at least 300 million liters or about 79.3 million gallons. The majority of this SAF's feedstock includes fats, oils and greases, followed by other biomass feedstocks, energy crops, crop and forestry residues and other waste. Therefore, without agriculturally derived feedstock, the production of SAF volumes plummets.

IATA states that government policy will be instrumental in SAF deployment, "the SAF industry is on the verge of an exponential capacity and production ramp-up by 2030, with the right supporting policies." IATA continues, "governments need to put in place SAF production incentives similar to what is already in place for biogas and biodiesel" but that these policies should be "technology and feedstock agnostic" and should "only be used if they are part of a broader strategy to increase the production of SAF".

It seems that the President and Agriculture Secretary Tom Vilsack among others, agree that agricultural feedstock plays a critical role in the future of our domestic SAF production and is critical to us meeting our SAF production and emissions goals. Secretary Vilsack stated the "(Grand Challenge) charts out actions to ensure crops used for fuel—that are grown here at home by hard-working Americans—can create opportunities for American farmers, business owners and rural communities." Then in August, President Biden stated "Mark my words: the next 20 years, farmers are going to be providing 95 percent of all the sustainable airline fuel."

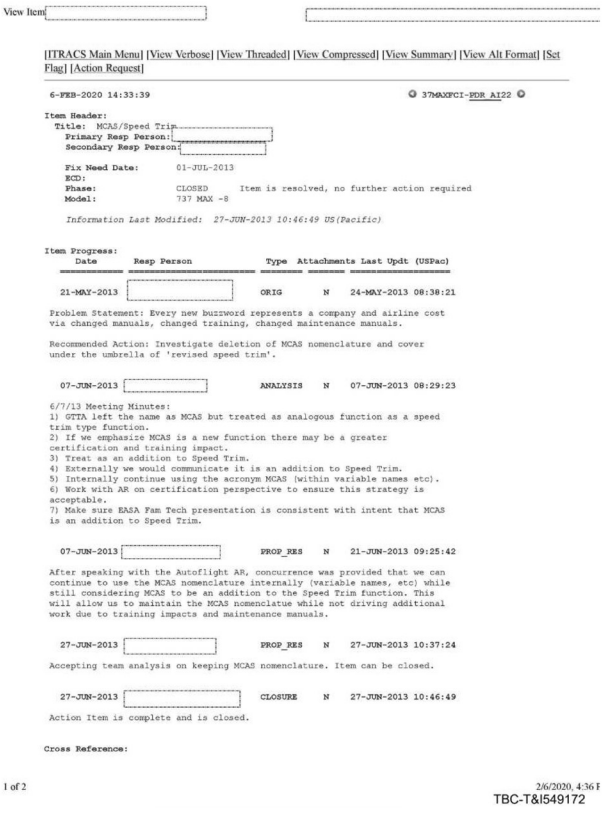
Yet efforts by some fringe environmental groups seek to ban agricultural feedstock SAF by preventing multiple models from being used to calculate lifecycle carbon emissions including, DOE's commissioned, Argonne National Lab's GREET (Greenhouse gases, Regulated Emissions, and Energy use in Technologies) Model. Instead, preferring models that are notorious for not being "technology and feedstock agnostic."

Banning the aviation industry from the most accessible SAF options will prevent us from achieving our global emissions goals, President Biden's emissions goals, inhibit the U.S. from being the global leaders on SAF and deprives American farmers of the chance to contribute to a new clean energy market.

Question. Do you agree with President Biden and Secretary Vilsack that agricultural feedstock SAF plays a critical role in the future of American SAF?

Answer. If confirmed, I will work closely within the Department and fellow Federal agencies to ensure that we are aligned on the use of agricultural feedstock SAF as the FAA implements the SAF FAST grants and other programs as directed by Congress.

Enclosure 1



View Item [redacted]

[ITRAC'S Main Menu] [View Verbose] [View Threaded] [View Compressed] [View Summary] [View Alt Format] [Set Flag] [Action Request]

6-FEB-2020 14:33:39 37MAXFCI-PDR_A122

Item Header:
Title: MCAS/Speed Trim
Primary Resp Person: [redacted]
Secondary Resp Person: [redacted]

Fix Need Date: 01-JUL-2013
ECD:
Phase: CLOSED Item is resolved, no further action required
Model: 737 MAX -8

Information Last Modified: 27-JUN-2013 10:46:49 US(Pacific)

Item Progress:

Date	Resp Person	Type	Attachments	Last Updt (USPac)
21-MAY-2013	[redacted]	ORIG	N	24-MAY-2013 08:38:21

Problem Statement: Every new buzzword represents a company and airline cost via changed manuals, changed training, changed maintenance manuals.

Recommended Action: Investigate deletion of MCAS nomenclature and cover under the umbrella of 'revised speed trim'.

07-JUN-2013	[redacted]	ANALYSIS	N	07-JUN-2013 08:29:23

6/7/13 Meeting Minutes:
1) GTTA left the name as MCAS but treated as analogous function as a speed trim type function.
2) If we emphasize MCAS is a new function there may be a greater certification and training impact.
3) Treat as an addition to Speed Trim.
4) Externally we would communicate it is an addition to Speed Trim.
5) Internally continue using the acronym MCAS (within variable names etc).
6) Work with AR on certification perspective to ensure this strategy is acceptable.
7) Make sure EASA Fam Tech presentation is consistent with intent that MCAS is an addition to Speed Trim.

07-JUN-2013	[redacted]	PROP_RES	N	21-JUN-2013 09:25:42

After speaking with the Autoflight AR, concurrence was provided that we can continue to use the MCAS nomenclature internally (variable names, etc) while still considering MCAS to be an addition to the Speed Trim function. This will allow us to maintain the MCAS nomenclatue while not driving additional work due to training impacts and maintenance manuals.

27-JUN-2013	[redacted]	PROP_RES	N	27-JUN-2013 10:37:24

Accepting team analysis on keeping MCAS nomenclature. Item can be closed.

27-JUN-2013	[redacted]	CLOSURE	N	27-JUN-2013 10:46:49

Action Item is complete and is closed.

Cross Reference:

1 of 2 2/6/2020, 4:36 F

TBC-T&I549172

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. JON TESTER TO MICHAEL G. WHITAKER

Contract Tower Staffing

Question. During the hearing you talked extensively about the nationwide shortage in air-traffic controllers (ATCs) and the actions FAA is taking to increase its ATC workforce. In anything, the staffing situation at airports served by FAA Contract Towers (FCTs) is event more dire. FAA's baseline staffing levels for its busier FCTs are well short of the levels at comparable FAA-operated towers. To drive the point home, Montana's three busiest airports by passenger counts are served by FCTs. Their staffing levels are half of what the FAA-operated towers in the state are allocated. On top of that, these are high cost-of-living areas, making it very challenging to keep positions filled. It's an untenable situation that is putting safety at risk.

As the FAA addresses the nationwide air traffic controller shortage, how will you work to make sure that FCTs are also able to recruit and maintain staff at levels appropriate to maintain safe operations? Can I get your commitment to review the FCT program to ensure that airports within the program are receiving ATC service that is comparable to FAA-operated towers?

Answer. If confirmed, one of the first things I would do is sit down with the Air Traffic Organization to clearly understand the issues you raised related to the contract tower program, and in particular a path to ensuring staffing levels that fit the demand.

Public Charter Rulemaking

Question. The FAA recently issued a Notice of Intent related to a potential future rulemaking on public charter operations. An FAA rulemaking effort on this topic is important and timely, but rulemaking is a slow process and in the meantime the pressure to increase air operations using the current regulatory framework has been intense, with multiple requests awaiting DOT or FAA decision.

How do you intend to address current requests pending before FAA that relate to public charter operations while the related rulemaking process is ongoing?

Answer. It is my understanding that the Department reviews any pending Part 380/public charter operations requests. If confirmed, my focus will be on FAA's role as a safety regulator for public charter and any other aircraft operations.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. KYRSTEN SINEMA TO MICHAEL G. WHITAKER

Contract Tower Program

The contract tower program is widely popular, enjoying broad bipartisan and bicameral support with 262 facilities in 46 states. Unfortunately, air traffic controller (ATC) staffing shortages are plaguing the system and these problems are made much worse in high-traffic, complex air space.

Arizona is home to Phoenix-Mesa Gateway Airport, the busiest contract tower and the 37th busiest tower overall in the country. Gateway sits in a major metropolitan area and was built entirely to FAA specifications, but cannot today become an FAA-staffed tower. Gateway is the largest, but this problem is seen throughout the country and will only get worse, particularly in areas sure to grow.

Under current law there is no mechanism for contract towers to become FAA-staffed towers. This leads to safety issues when there are not ATCs available to run the towers—often during periods of active takeoffs and landings. I understand this committee has received whistleblower complaints addressing these safety concerns and we have heard them from our constituents.

Question. Do you agree that the time has come to consider amendments to aspects of the contract power program, including minimum staffing requirements, ATC compensation, or piloting a program that would allow existing contract towers to convert into FAA staffed towers?

Answer. If confirmed, one of the first things I would do is sit down with the Air Traffic Organization to clearly understand the issues you raised related to the contract tower program, and in particular a path to ensuring staffing levels that fit the demand, compensation, and the conversion of contract towers into FAA staffed towers.

Aircraft Noise

I have heard from my constituents in Phoenix, Scottsdale, Tempe, and nearby areas who have been affected by aircraft noise. Many of these Arizonans previously

lived in areas that were not under flight paths but now face aircraft noise, following FAA changes to flight paths.

Five years ago, the D.C. Circuit struck down certain flight paths, determining that the FAA did not properly analyze the effects of flight path changes and did not consult nearby cities, residents, and elected officials. Despite the court ruling, this issue still remains a concern for many Arizonans.

Question. If confirmed, what will be your approach to community outreach as the FAA considers flight paths in Arizona and across the country?

Answer. I certainly understand and would want to work with you and the Committee on this if confirmed. I know the agency is updating its noise policy, which may be a place for us to partner. The agency is looking at how to measure noise and how to decide how much noise should trigger more environmental review. I think the key to all of this is transparency and honesty between the FAA, the airports, and the communities.

Bipartisan Infrastructure Law Implementation

As you may know, I was a lead negotiator on the Bipartisan Infrastructure Law (BIL). Since the law was signed into law in November 2021, I have been focused on ensuring smooth and efficient BIL implementation. For example, through BIL funding in 2022, Phoenix Sky Harbor International Airport has received over $41 million and Tucson International Airport has received over $6 million.

Question. If confirmed, how will you ensure BIL formula and discretionary grant funding is efficiently distributed to the appropriate recipients?

Answer. If confirmed, I will ensure that BIL formula and discretionary grant funding is efficiently distributed to the appropriate recipients in line with the requirements of the law. I will also commit to addressing any recommendations that may come from the Department of Transportation Office of Inspector General or other independent oversight of the BIL program.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. BEN RAY LUJÁN TO MICHAEL G. WHITAKER

Question 1. During the hearing we discussed the importance of improving the calculation mechanism to correctly target staffing needs in our air traffic control system. I am following up with some additional background on the issue.

Currently, a "finance-driven" staffing model in the FAA's annual Controller Workforce Plan (CWP) fails to use the latest data and incorporate all the various duties required of controllers, and thus does not fully reflect operational needs. If the FAA continues to use this "finance-driven" model, understaffing will continue to be an issue, because the hiring target for each center does not match the actual operational needs of the facility.

Last year, Acting Administrator Billy Nolen directed the FAA's Air Traffic Organization (ATO) to restart the Collaborative Resources Workgroup (CRWG), to ensure they are partnering with the National Air Traffic Controllers Association (NATCA) to collaboratively determine the number of Certified Professional Controllers (CPCs) and Certified Professional Controllers in Training (CPC–ITs) needed to meet operational requirements at each ATO facility. Fortunately, the most recent CWP made some important changes, including fixing a previous issue in which the report did not distinguish between fully certified controllers and trainees.

However, the FAA did not adopt the recommended targets from the CRWG, relying instead on the "finance-driven" model they have traditionally used. The DOT Inspector General has been critical of the FAA's work on staffing while they have used this calculation method, reporting in June: "FAA has made limited efforts to ensure adequate controller staffing at critical air traffic control facilities" and warning that "while the United States has one of the safest air traffic systems in the world, the lack of fully certified controllers, operational supervisors, and traffic management coordinators pose a potential risk to air traffic operations."

I hope this additional sheds some light on the importance of supporting efforts to update and improve our air traffic control staffing. I am working with my colleagues to fix this issue through the FAA Reauthorization process, and I urge you to independently take on this issue if confirmed as FAA Administrator.

Question 1. If confirmed, do you commit to working with me to address this issue?

Answer. If confirmed, I will work with FAA's Air Traffic Organization and Office of Finance and Management, the National Air Traffic Controllers Association, and any other helpful experts on the issue of air traffic controller staffing numbers to ensure we have identified the appropriate staffing targets and strategies for meeting these targets.

Question 2. Our aviation system is powered by the aviation workforce. Our pilots, ground crews, air traffic control, maintenance crews, flight attendants, customer service representatives—they are the reason we have the safest and most advanced aviation system in the history of the world.

They're also the ones who know firsthand what needs improvement in our aviation system. If the FAA is making decisions around safety, consumer protection, security, accessibility, technology—the labor community MUST be at the table.

We have seen what happens when companies do not heed the warnings and concerns of their workforce. It is vital that the FAA can work with stakeholders to prevent safety issues and operations failures when we have the tools and the knowledge to prevent them.

If confirmed, do you commit to working closely with labor unions and workers on the front lines when making FAA policy?

Answer. Safety will continue to be a priority for the FAA, and if confirmed, I will ensure that these safety discussions include all aviation stakeholders including the workforce and labor unions.

Question 3. New Mexico's economy is powered by innovation. In our state, our national labs, research institutions, and small businesses work together to solve some of the Nation's greatest challenges.

New Mexico is ready to take hold of new developments in aviation, especially when it comes to renewable energy alternatives that set us up for the future.

Can you speak to the importance of working with our airlines and airports to pursue advanced air mobility innovation and alternative-energy aircraft?

Answer. It is important, and I think we are already seeing airlines and airports partner with companies and programs to deliver advanced air mobility innovation and alternative energy aircraft. If confirmed, I would like to ensure the agency is focused on what's next, including new capabilities, new technologies, what that platform looks like, and how we incorporate not only advanced air mobility and alternative energy aircraft, but small UAS and commercial space and supersonic and other new entrants into the market.

Question 4. I am a proponent that interagency coordination is key to good policymaking. Over the past three years, as the NTIA and FCC have worked to roll out 5G technology across our country, we've seen the consequences when our coordination fails.

a. If confirmed, do you commit to working directly with the NTIA as that Agency continues to work to safely and efficiently optimize use of Federal spectrum assets to support innovation and connectivity across America?

Answer. If confirmed, I will ensure the FAA continues to work directly with NTIA and other Federal agencies on the use of Federal spectrum assets. I will also ensure that in all of these discussions, the FAA is guided by securing the safety of the National Airspace System (NAS) and users of the NAS.

b. If confirmed, do you commit to making a plan with other relevant agencies—including NTIA, FCC, and DoD—for the development and rollout of 6G technology?

Answer. If confirmed, I will commit to working with these partners and other relevant Federal agencies as well as stakeholders for the development and rollout of 6G technology. I will also ensure that in all of these discussions, the FAA is guided by securing the safety of the National Airspace System (NAS) and users of the NAS.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. RAPHAEL WARNOCK TO MICHAEL G. WHITAKER

Advanced Air Mobility Airworthiness

Since July 2022, the FAA has made progress in developing standards to ensure that electronic Vertical Takeoff and Landing (eVTOL) aircrafts are safe to operate, that there is the necessary infrastructure needed to support their usage, and that pilots are certified to operate them.[1] Nearly one year ago, the FAA published proposed airworthiness criteria for certain companies developing eVTOL aircrafts.[2,3] To date, the FAA has not yet finalized airworthiness criteria for these companies.

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[1] *https://www.faa.gov/air-taxis*

[2] *https://www.federalregister.gov/documents/2022/12/20/2022-27445/airworthiness-criteria-special-class-airworthiness-criteria-for-the-archer-aviation-inc-model-m001*

[3] *https://www.federalregister.gov/documents/2022/11/08/2022-23962/airworthiness-criteria-special-class-airworthiness-criteria-for-the-joby-aero-inc-model-jas4-1*

Question. If confirmed as Administrator of the Federal Aviation Administration, what will you do to work with FAA staff and eVTOL manufacturers to streamline the agency's certification process?

Answer. If confirmed, I will work with the Aviation Safety Office to ensure the agency remains on track to type certify the first powered lift vehicle by December 2024 consistent with applicant expectations. I will also work with our career aviation safety professionals to determine if there are efficiencies to be gained in the process going forward while retaining critical safety standards. I will keep the Committee informed of the agency's progress.

Bilateral Aviation Safety Agreements

The FAA often uses bilateral aviation safety agreements to certify the airworthiness of aviation products imported and exported between different countries. As you know, the FAA plays a critical role in providing safety approvals for U.S.-made products and validating the safety approvals of foreign civil aviation authorities.[4] When certifying a project, international civil aviation authorities often work closely with the FAA to verify compliance. However, foreign authorities are often inconsistent in the amount of time they take to review FAA compliance work, which delays the ability of U.S. manufacturers to get products to market outside the U.S. This lack of predictability in the validation process for U.S. manufacturers can lead to delayed exports and financial penalties.

Question. If you are confirmed as Administrator, will you work with other civil aviation authorities to ensure that the certification work of the FAA is strongly supported abroad?

Answer. If confirmed, I will work with other civil aviation authorities (CAAs) and through the International Civil Aviation Organization (ICAO) to emphasize the importance of each country's adherence to our respective Bilateral Aviation Safety Agreements. It is important that CAA's—including the FAA—are free to insist on additional review when a legitimate safety need exists but to your point it is unacceptable to have extended timeframes become a routine practice.

Hypersonic Flight

Since the Supersonic Transport Concorde aircraft was retired nearly 20 years ago, numerous companies in the United States and abroad have been developing new technologies that will allow civil and military aircraft to fly even faster, including at hypersonic speeds above Mach 5.[5] Hypersonic technology is growing in importance as China and Russia invest heavily in the technology.[6] Moreover, hypersonic air travel has the potential to transform markets and entire industries in the way that airplanes have done over the past century. It is important for the United States to lead in the development and implementation of cutting-edge technologies like hypersonic aircraft for both national security reasons and to ensure our aerospace industry continues to be source of high-paying jobs and economic prosperity in states like Georgia.

Question. If confirmed as Administrator of the Federal Aviation Administration, how would you approach policymaking at the FAA for civil aviation technologies that are now under development so that the FAA will be ready certify and regulate the next generation of aircraft when the time comes?

Answer. I think we're at a point we need to talk about what's next—new capabilities, new technologies—what that platform looks like, and how we incorporate new entrants into the airspace while thoroughly addressing safety and environmental questions.

Sustainable Aviation Fuel

The Department of Transportation (DOT), in coordination with the Department of Energy and other Federal government agencies, has committed to develop a comprehensive strategy for scaling up new technologies and the production of sustainable aviation fuels (SAF) through the "Sustainable Aviation Fuel Grand Challenge." [7] The SAF Grand Challenge has set a goal of scaling U.S. production of SAFs that achieve a minimum of 50 percent reduction in life cycle greenhouse gas emissions compared to conventional fuel to 3 billion gallons per year by 2030.[8] The FAA will also be investing nearly $300 million through the Fueling Aviation's Sustainable Transition (FAST) grant program to build out infrastructure projects related

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[4] *https://www.faa.gov/aircraft/air_cert/international/bilateral_agreements/overview*
[5] *https://aviationweek.com/air-transport/investors-buy-commercial-hypersonic-plans*
[6] *https://www.cnn.com/travel/article/china-hypersonic-flights-cmd/index.html*
[7] *https://www.energy.gov/eere/bioenergy/sustainable-aviation-fuel-grand-challenge*
[8] Ibid.

to SAF production and the development of new aviation technologies to improve fuel efficiency and reduce emissions.[9]

Question. If confirmed as Administrator of the Federal Aviation Administration, what steps will you take to uphold the commitments DOT has made in the SAF Grand Challenge government-wide Memorandum of Understanding?

Answer. If confirmed, I will ensure the FAA remains a committed partner with the Departments of Energy and Agriculture in pursuit of the commitments each entity made as part of the MOU. I understand that the FAA recently opened the SAF FAST notice of funding opportunity. If confirmed, I will ensure these grant awards are issued as expeditiously as possible.

Near Misses

In recent months, several notable and high visibility near-miss events have occurred in the National Airspace System. The frequency and the potential severity of these events has raised concerns at the FAA and throughout the aviation community. According to the New York Times, close calls involving commercial airlines have been happening, on average, multiple times a week.[10] In March, the FAA responded to these worrisome statistics by hosting more than 200 safety leaders from across the aviation industry as part of a summit to discuss ways to enhance flight safety.[11] As the Senator representing the world's busiest airport in Atlanta's Hartsfield-Jackson International Airport, as well as over 100 public use airports, I am concerned about these apparent rise of these near-miss events considering volume of air traffic in and out of Georgia.

Question. If confirmed as Administrator of the Federal Aviation Administration, will you commit to working to minimize these events?

Answer. If confirmed, I will prioritize addressing and preventing these near miss events.

ADS–B and ADS–C

The efficiency, safety, and sustainability of air travel continue to be key issues for the FAA and the global aviation community. The FAA's ability to provide surveillance in U.S. oceanic airspace, and the effectiveness of various technologies used to provide that surveillance, is an issue that affects each of the key issues. The FAA's ability to provide accurate surveillance in U.S. oceanic airspace allows for more fuel efficient, and thereby expedient, oceanic flights, as well as increased safety on such flights. Therefore, the importance of providing accurate oceanic surveillance cannot be overstated.

Question. If confirmed as Administrator of the Federal Aviation Administration, will you commit to increasing airspace management efficiency in oceanic airspace using a performance-based approach that considers alternative technologies and comparable procedures?

Answer. ADS–B was one of my (and the talented FAA team that supported its development) greatest accomplishments as FAA Deputy Administrator. If confirmed, I will work with FAA's Office of NextGen and Air Traffic Organization to determine the current status of ADS–C.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TED CRUZ TO MICHAEL G. WHITAKER

Mask and Vaccine Mandates

Question. The COVID–19 pandemic resulted in a mask mandate for public transportation, and a draconian vaccine mandate that the Biden Administration imposed on employees of airlines by exploiting their government contracts. Does the FAA's statutory authority extend to public health, or is it instead focused on the safety of the traveling public? If FAA's statutory authority extends to public health issues (vaccine, masks, or otherwise), please cite to the specific statute.

Answer. The FAA's statutory authority does not extend to public health issues. My understanding is that the FAA did not itself direct a mask requirement to airlines but the agency did adhere to Federal public health directives.

Commercial Space

Question 1. There are several commercial space companies working to bring space vehicles to market. From an economic and national security perspective, it is impor-

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[9] *https://www.faa.gov/general/fueling-aviations-sustainable-transition-fast-grants*
[10] *https://www.nytimes.com/interactive/2023/08/21/business/airline-safety-close-calls.html*
[11] *https://www.faa.gov/aviation-safety-call-to-action*

tant to encourage such innovation. But these space companies are navigating a complicated web of government agencies with shared and, at times, overlapping jurisdiction.

a. How would you make the licensing and permitting review processes more transparent for applicants?

Answer. If confirmed, I would work with our Office of Commercial Space and Chief Counsel's office to communicate transparency is a priority and determine what steps may be possible.

b. Do you agree the FAA needs to identify inefficiencies and update its procedures to improve its licensing and permitting process?

Answer. I always believe it's important to root out inefficiencies and improve procedures so long as it will not decrease safety. To your point, the commercial space industry is growing rapidly and it is important that the FAA carry out its oversight and regulatory functions in a thoughtful manner that allows for safe growth in this industry.

c. Will you commit to working with Congress and industry to identify and implement changes in an expedient manner?

Answer. If confirmed, I will commit to working with Congress and industry and implement any necessary changes consistent with safety in an expedient manner.

Question 2. Given emerging entrants to the National Airspace System (NAS), what work is being done to modernize the tools used to manage the NAS to better integrate all users?

Answer. If confirmed I will need to work with leadership across the relevant Lines of Business and Staff Offices to be briefed on the status of that work but I know things like the Space Data Integrator is an example of the kind of tool the agency uses to facilitate safe operations while minimizing impacts to legacy users of the NAS. That overall idea—to facilitate new entrant operations while supporting legacy users of the system is one that I would adhere to.

Question 3. What FAA resources are currently dedicated to space launch and reentry licensing?

a. What resources are dedicated to non-licensing activity (*e.g.,* orbital debris rulemaking, human spaceflight regulations, etc.)?

Answer. If confirmed I would need to seek detailed information from the FAA's budget team and relevant program offices and I would be happy to follow up with your staff to provide this information.

Use of Airspace

Question. Commercial space launches, UAS operations, and, eventually, advanced air mobility require significant coordination by air traffic control and other stakeholders involved in maintaining a safe NAS. Should new users contribute financially to the system? If so, how?

Answer. If confirmed, I would want to work with our budget team, relevant program offices and seek input from the agency's Management Advisory Council (MAC) on this topic. The aviation system has traditionally relied on recipients of services to pay into the system to support that work and understanding we see an expanded number and type of users this is an important question.

Contract Tower Program

Question. One of FAA's most successful government-industry partnerships is the FAA Contract Tower Program. 262 airports are in the program, including 26 in Texas. Contract towers, which account for approximately one-third of all tower operations, are important for maintaining and developing air service at smaller airports. What measures can the FAA and the industry take together to address staffing shortages at contract towers?

Answer. If confirmed, one of the first things I would do is sit down with the Air Traffic Organization to discuss this issue. During my confirmation process I heard from a number of Members about adequate staffing levels not just at FAA-owned towers but at contract towers as well. These towers provide a critical service throughout the country and I want to see them continue to be successful.

Parts Manufacturer Approval (PMA)

Question. The Parts Manufacturer Approval (PMA) process is important to maintaining a robust and competitive supplier base for aircraft around the world. If confirmed, do you commit to strengthening the PMA process and making the process more efficient?

Answer. If confirmed, I would work with our Aviation Safety Office team to determine if there are ways we can support an efficient process while ensuring that any parts going onto an FAA type certified vehicle are safe and appropriate.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DEB FISCHER TO
MICHAEL G. WHITAKER

Question 1. Statistics that show that in offices like the Aircraft Certification Office, FAA has experienced dramatic turnover in recent years and they have many new employees who started at the agency during the pandemic. I expect these employees have been hindered in their ability to experience the kind of training, mentoring, and collaboration that integrates them into the agency because of this remote/virtual work experience. How would you address the need for in-office time, training, and collaboration to help ensure employee success and FAA meets its mission to advance safety and innovation in the U.S. and globally?

Answer. If confirmed, I would work with agency leadership, our labor unions, Department of Transportation leadership and across the agency's workforce to quickly establish the right balance of in-office presence and I would be happy to keep the committee updated on that work.

Question 2. FAA and industry have been collaborating on an important initiative—Eliminate Aviation Gasoline Lead Emissions (EAGLE)—that aims to eliminate the use of leaded aviation fuels for piston-engine aircraft in the U.S. by the end of 2030 or sooner without adversely impacting the safe and efficient operation of the existing GA fleet. Are you aware of this initiative and will you continue to support it, if confirmed?

Answer. I am aware of this important initiative and I will support it, if confirmed.

Question 3. In the Senate FAA reauthorization bill, I worked on an amendment that requires the agency to leverage existing technology to create a secure portal for tracking the status of these applications. This tracking portal is crucial, as without this data, neither the industry nor the FAA cannot effectively allocate resources or make certain deadlines are being met. As FAA Administrator, how would you implement this provision from the reauthorization bill, and do you believe that it would improve how the agency tracks applications?

Answer. I am not certain what kinds of applications are being referenced here but I do understand that stakeholders have had concerns about certification applications in terms of timelines and transparency. If confirmed, I will work with the agency's Aviation Safety Office leadership who I understand agree that concrete improvements have to be made in the near term. The ability to track applications seems like a reasonable policy and I would be happy to work with you on that.

Question 4. The FAA met its target to hire new air traffic controllers this year, with Congress authorizing the additional hiring of 1,800 controllers by fiscal 2025. If confirmed, how will you ensure that the agency meets its hiring goal each year?

Answer. If confirmed, ensuring controller hiring and training will be a priority and one I would pursue collaboratively. I will work closely with our Air Traffic Organization, our labor partners and our budget team to ensure the agency takes a strategic approach that aligns resources for hiring and training.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. DAN SULLIVAN
MICHAEL G. WHITAKER

FAA Alaska Safety Initiative

Question. Will you support the FAA Alaska Aviation Safety Initiative (FAASI) process and prioritization of the recommendations of the FAASI into the FAA budget?

Answer. If confirmed, I will support the FAASI process and will seek resources to execute on its recommendations.

Safety Briefing

As discussed during your hearing, a 2020 report issued by the National Transportation Safety Board (NTSB) called for the FAA to take a more comprehensive approach to improving aviation safety in Alaska.

The NTSB report points to a recent 10-year period where the total accident rate in Alaska was 2.35 times higher than the rest of the United States. During the same period, the fatal accident rate in Alaska was 1.34 times higher.

The last Senate confirmed Administrator, Steve Dickson, required staff to report to him personally every time there was an aviation accident in my state.

Question. Will you commit to do the same?

Answer. If confirmed, I commit to do the same.

Improve Availability and Reliability of Communications, Surveillance, Navigation Systems, and Weather Equipment

The remote, mountainous terrain of Alaska presents technical challenges for the FAA with installing and maintaining a robust Communications, Navigation, Surveillance system. In the FAA's own words from the 2021 FAA Alaska Aviation Safety Initiative (FAASI), "Maintaining the extensive Alaska National Airspace System (NAS) infrastructure, which consists of a mixture of old and new components, is a daunting task for FAA engineers and technicians."

Further, we are constantly fielding reports of weather and communications infrastructure being down, with difficulty sourcing parts often being the cause that can lead to delays for months.

Question. Will you commit to implementing mitigation methods to improve the availability and reliability of communications, surveillance, navigation systems, and weather observation systems and weather cameras?

Answer. If confirmed, I commit to working with leadership in our Air Traffic Organization on the issue of availability and reliability of parts in Alaska to find ways to improve on the agency's current performance.

Compliance Philosophy

The Compliance Program was introduced in 2015 when you were still FAA Deputy Administrator. It helped usher in a new approach to oversight, one built around transparency and collaboration. As part of the Aircraft Certification, Safety, and Accountability Act, this Committee took steps to establish a body to oversee the use and effectiveness of that Program.

Question. Can you share your approach to compliance and your thoughts on the important differences between this approach and enforcement-first compliance?

Answer. In aviation as a regulator it is important to maintain an atmosphere of data sharing and transparency in order to be able to see trends and adjust or mitigate accordingly, which I understand the compliance philosophy is meant to contribute to. As you know, ACSAA directed FAA to establish an Executive Council to oversee the use and effectiveness of compliance philosophy across the agency. I understand the Council is stood up and if confirmed, I would look forward to ensuring its effectiveness to ensure safety throughout the NAS.

Airport Improvement Program (AIP) Flexibility

The Airport Improvement Program is critical to keeping our airport system functioning and open, and yet, one-size-fits all guidance documents for eligible expenditures is undermining the effectiveness of the program and in many instances is creating dramatic safety implications.

FAA has policy that is resulting in shorter runways throughout my state. In order to be eligible to reconstruct a runway using Federal funds, the FAA requires that the airport must have received 500 operations per year from an aircraft that needs that size of runway. This is forcing the State, who manages over 240 airports, to fold to the Federal policy and rebuild airports to the shorter lengths.

This is not tenable in a state where in many locations fuel oil for heat is flown in twice per year, requiring greater runway length and safety areas. Reducing runway length will at minimum restrict the ability to deliver heating fuel and gasoline where other options for transport are unavailable.

This also limits the ability to get freight, mail, and basic goods into the community—and surrounding communities. When runways are shortened the community is limited from acting as a hub for other surrounding communities. 121 operators are unable to get into hubs as the shortened runways limit the amount of lift length.

Adequate runway length is needed to support aircraft necessary to support critical health needs of a community, remote fuel deliveries, and firefighting response. This has dramatic safety implications, as not only is the runway itself shrinking, but the runway lighting shrinks along with it.

This limitation is also crippling the ability of the State to develop new Airports for Economic Development, including runways for the Wasilla Airport, the Gulkana Airport, and the proposed new airport near the Denali National Park, as the rules do not allow you to expand or build airports to meet new demands unless it has already been served by larger aircraft.

Question 1. Do you think it is good policy to incentivize the shortening of runways in areas that have complete dependency on air travel, and are in locations with challenging weather, and often lack communications and navigational aids?

Answer. Promoting policies that balance safety and the reality of Alaska's unique environment is critical. Maintaining safe operations will be my focus throughout my

tenure and if confirmed, I look forward to a partnership with you to work toward that shared goal to include matters like this one.

Question 2. Will you support efforts to allow the State of Alaska to expand the flexibilities of the Airport Improvement Program for needs in Alaska, including but not limited to runway length?

Answer. If confirmed, I would be happy to work with you on this matter and others that present challenges in Alaska's unique environment. I will work with you and our Office of Airports on the policies that affect Federal investment in Alaska's airports to determine if new eligibilities are needed or if there are existing authorities that may be leveraged.

ADS–B

Alaska has historically been a testbed for avionics that have provided efficiency and safety benefits to the entire National Airspace System.

The Capstone Project was a joint industry and FAA research and development effort to improve aviation safety and efficiency in Alaska. Under Capstone, the FAA provided avionics equipment for aircraft and the supporting ground infrastructure. The Capstone Project operated from 1998 to 2006, and it demonstrated a 47 percent reduction in the aviation accident rate of Capstone avionics equipped aircraft compared to non-equipped aircraft in parts of the state that did not receive ground based equipment and equipped aircraft.

Our high accident rate is made up of a lot of Controlled Flight Into Terrain accidents and mid-air collisions—the type of accidents that this technology can prevent.

Alaska laid the groundwork for the nationwide deployment of ADS–B (or Automatic Dependent Surveillance-Broadcast) that is now providing our national airspace system with efficiency through satellite-based navigation and aircraft tracking. According to the FAA, ADS–B is transforming all segments of aviation by offering real-time precision, shared situational awareness, and advanced applications for pilots and controllers alike.

Real-time ADS–B is now the preferred method of surveillance for air traffic control in the NAS, and general aviation is safer with ADS–B traffic, weather, and flight-information services.

ADS–B improves safety and efficiency in the air and on runways, reduces costs, and lessens harmful effects on the environment. In fact, a recent study cited by the Aircraft Owners and Pilots Association found that ADS–B equipage reduces fatal accidents by 89 percent. (Collins, Mike. *Study Shows Accidents Less Likely with ADS–B In.* AOPA, April 18, 2019).

The NextGen system is now a multibillion-dollar program, primarily through FAA's Facilities & Equipment account. Meanwhile, the majority of my state is without coverage and the airspace is not classed to require coverage—even in some congested airspace, such as Bethel.

Section 321 of the FAA Reauthorization Act of 2018 (P.L. 115–254) directed FAA to conduct an evaluation of providing additional ADS–B ground-based transmitters along major flight routes in Alaska. In October 2019, aviation industry groups wrote to the FAA Surveillance and Broadcast Services program office supporting this initiative and urging additional investment in ADS–B ground stations to establish a Minimum Operational Network for ADS–B coverage in Alaska. They shared analysis supporting the Section 321 mandate that identified an additional 23 locations. I was pleased to see in the FAASI that the FAA will accelerate the deployment of ground based equipment for some of our high trafficked areas, and was pleased to hear of the FAA plans to add five sites in 2023.

Question 1. If confirmed, would you support the deployment of a minimum of an additional 23 ADS-B ground-based transmitters, as identified by the users of our NAS?

Answer. If confirmed, I will work with your office, the Alaska Regional Administrator and relevant program offices to understand the agency's deployment plan currently and determine if adjustments need to be made. I would be happy to keep you informed of those conversations.

Given that the majority of Alaska's airspace is not classified, the true safety benefits of additional ground based equipment remains to be dependent on the rate of private equipage of aircraft. While it is of obvious value for aircraft to improve situational awareness through ADS–B equipage, I caution that any large scale airspace reclassification would cripple mobility in my state, not be embraced by some pilots, and would be an unfunded mandate. However, the need for equipage remains.

Question 2. Given the safety benefits of ADS–B, what additional measures can FAA take to incentivize further ADS–B equipage?

Answer. If confirmed, I would be happy to work with you on this. During my tenure as Deputy Administrator the agency did administer an incentive program to help defer the costs of equipage so I have seen how that can work and understand the point that these capabilities are safety enhancing for pilots.

Question 3. The FAA previously ran an ADS–B Rebate program. If confirmed, would you consider restarting the ADS–B Out Rebate program—with greater incentives—to assist with improved equipage rates and further enhancing the safety of the National Airspace System?

Answer. If confirmed, I would be happy consider the feasibility of this idea and keep you apprised on that matter.

Question 4. Other technologies exist, such as TABS (or Traffic Awareness Beacon System), that can also bring about enhanced safety through improved traffic awareness. These technologies provide important alternatives to ADS–B for gliders, balloons and aircraft without electrical systems. If confirmed, would you consider taking measures to make these technologies more widely available in order to enhance the safety of the National Airspace System?

Answer. If confirmed, I would consult with leadership of our relevant program offices and can keep you apprised.

Instrument Flight Approaches—Section 322

Section 322 of the FAA Reauthorization Act of 2018 allows air carriers operating under Part 135 to carry out operations and instrument approaches in Alaska at destination airports without approved meteorological (METAR) observation data if area forecasts supplemented by noncertified local weather observations (including cameras and human observers) are available and an alternate airport with weather reporting is specified. As recognized and promoted by FAA, flying under IFR offers a higher level of safety and predictability to air service.

The value of this language was echoed by the NTSB in the February 2020 report on the safety of Part 135 operations in Alaska.

> "The longstanding effort to increase instrument flight rules (IFR) operations in Alaska is another area that continues to meet with obstacles. The director of operations for an Alaska carrier stated that despite the increased availability of instrument approaches, the inability to comply with current FAA flight standards that are required throughout the United States, such as weather reporting requirements and terminal instrument procedures, render the approaches unusable for many operators. A possible remedy would be to adjust the FAA's flight standards for Alaska to accommodate its unique aviation environment, which is a risk management decision requiring extensive knowledge of the environment; yet such an adjustment has yet to even be evaluated."

The Advisory Circular (135–45) to provide guidance on Section 322 undermined congressional intent by requiring unrealistic weather sources for locations in Alaska, including the requirement that carriers hire staff in the remote destination airports to launch balloons to determine a ceiling. This is unworkable in Alaska, and defeats the point of the law.

Question 1. If confirmed, will you revisit the guidance associated with Section 322 to ensure operators are able to benefit from the greater flexibility and safety benefits provided by congress for conducting flight operations using alternative weather data sources?

Answer. If confirmed, I will discuss this with our Aviation Safety Office leadership to understand why the guidance proceeded as written and determine if there are ways either through that document or other means to get at the underlying issue of making IFR procedures more broadly available in Alaska.

Instrument Approach Procedures—Advanced RNP

As we discussed in our meeting and at your nominations hearing, I need FAA to retract and amend guidance that was issued that would prohibit 135 operators in Alaska from using currently approved instrument approach procedures.

Alaska is renowned for high rate of accidents in poor weather. In 2019, several Southeast-based air carriers created specific instrument approach procedures at their own expense, and FAA approved these procedures—known as Advanced RNP (A–RNP) instrument approach procedures—to mitigate the hazard posed by controlled flight into terrain (CFIT) accidents. Since implementation, these procedures have been highly effective in mitigating CFIT accidents.

FAA's new guidance memorandum inappropriately requires that aircraft have to be equipped with avionics equipment that is unachievable by Part 135 operators, and do not reflect the scaled risk-based regulatory environment for 135 operations.

The FAA memorandum will result in our operators using less safe, visual operations, rather than the instrument approaches that were developed by the operators, and approved by FAA, to avoid controlled flight into terrain (CFIT) accidents.

As a testament to their safety, Secretary Buttigieg was able to fly these active A–RNP procedures during his trip to Alaska in August.

Question. I have requested that the FAA retract and amend the guidance document that was issued that would prohibit most of our air taxis in Alaska from using these procedures, and that the FAA initiate this process prior to confirmation. I ask that you see this through to completion once you are confirmed.

Answer. If confirmed, I will talk with leadership in our Aviation Safety Office to ensure a complete understanding of the rationale behind the FAA memo. It would be premature to commit to a given path until I get more detail about the matter but I do commit to keeping you apprised as these conversations occur.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. MARSHA BLACKBURN TO MICHAEL G. WHITAKER

Question 1. There is a concerning trend with foreign regulators not honoring the letter and spirit of the reciprocal certification recognition for aircraft parts and systems despite the Bilateral Aviation Safety Agreements the U.S. has in place.

What steps will you take to address this and how can the FAA Reauthorization better support enforcement and reciprocity?

Answer. If confirmed, I will work with other civil aviation authorities (CAAs) and through the International Civil Aviation Organization (ICAO) to emphasize the importance of each country's adherence to our respective Bilateral Aviation Safety Agreements. It is important that CAA's—including the FAA—are free to insist on additional review when a legitimate safety need exists but to your point it is unacceptable to have extended timeframes become a routine practice. As Administrator I have an important voice and I will work with our Aviation Safety Office leadership to communicate a strong message on this topic.

Question 2. I'm concerned there is a major issue surrounding some aviation employees using their credentials and privileges to smuggle narcotics through airports and on airplanes.

What is your plan to work with TSA to counter these illegal operations?

Answer. If confirmed, I can ensure the agency offers assistance to TSA. The credentials and privileges are governed by TSA processes and requirements but if there is a place TSA feels the FAA can be helpful we will stand ready.

Question 3. Bilateral agreements make certain the FAA's path for certification is accepted and ensures U.S. products can be sold and operated globally. However, with the emergence of powered-lift aircraft, the FAA has very limited bilateral agreements in place for this category.

To guarantee U.S. leadership in the next generation of civil aviation, what steps will you take to ensure the FAA efficiently establishes bilateral agreements for powered-lift aircraft?

Answer. If confirmed, I will establish strong relationships with my counterparts at foreign Civil Aviation Authorities as the U.S. and others move toward certification and operating standards for this industry. Ensuring safety while establishing the framework for this industry is a priority and I will work domestically and internationally toward progress as the first powered lift vehicle nears type certification.

Question 4. Will you commit to holding FAA accountable to meeting prescribed timelines as efficiently and expeditiously as practicable, and taking efforts to expedite the NEPA process? How will you accomplish this?

Answer. If confirmed, I will hold FAA accountable to meeting prescribed statutory timelines including those associated with NEPA and the Administrative Procedures Act as efficiently and expeditiously as practicable. Ensuring necessary resources is a piece and encouraging new ways to work through projects is another piece. While there are a lot of unique operations coming down the pike not everything needs to be considered a matter of first impression which is a concept I think the agency has acknowledged in recent months and which I would want to continue to emphasize, consistent with safety.

Question 5. If confirmed, what safeguards would you put in place to ensure American tax dollars do not go to Chinese drones?

Answer. I understand your office has crafted legislation which bans Federal funds being used for these purposes with an allowance for the FAA to complete R&D needed to support UAS integration, including the security aspects of UAS integration. If enacted, I will ensure implementation of your legislation.

Question 6. What do you anticipate the FAA's role will be in the siting, construction, maintenance, and operation of vertiports for Urban Air Mobility purposes?

Answer. I would expect the FAA to establish the requirements of vertiports to ensure safe operation of the different types of vehicles that may operate on it. I understand testing and research to support those standards is ongoing. Regarding operation of vertiports, I believe the conversation around whether those will be largely privately or publicly owned and operated by either a vendor or an entity like an airport authority is ongoing.

Question 7. The *Safe Skies Act* would apply the passenger flight and duty time rules to all-cargo carriers—circumventing the FAA's own analysis and safety data to make this change. We have heard previous FAA Administrators acknowledge that FAA has looked at this issue in depth over the past decade and they see no additional risk on the part of cargo operation. Contrary to some allegations, all-cargo airlines are fully subject to FAA fatigue rules under Part 121 and must submit a Fatigue Risk Management Plan for approval by the FAA.

a. Haven't cargo carriers made significant advancements in fatigue management programs and tools to address the needs of their operations?

Answer. If confirmed I will engage our Aviation Safety Office regarding the most recent advancements and what they see in this space both in terms of the role of Fatigue Risk Management Plans and the role of Part 121 operator's required Safety Management Systems to mitigate issues associated with fatigue.

b. Isn't it true that FAA has carefully analyzed changing the rest rules 3 times and found virtually zero benefit in applying the passenger fatigue rules of Part 117 to all-cargo carriers?

Answer. I believe it is true that when the FAA has considered this matter in the context of rulemaking the agency did not extend rest requirements beyond Part 121 operators. I would need to verify that it has been 3 separate times but would be happy to get that additional context to share with your office.

c. Is it true there has never been an all-cargo accident where NTSB found fatigue as a factor that Part 117 would have prevented?

Answer. I am not aware of such an accident but if confirmed I can verify and share with your office.

Question 8. We need to address the designated pilot examiner shortage. Pilot test applicants are waiting 6–12 weeks in order to secure a wide selection of practical tests.

Could you please outline your strategy for addressing the process of providing timely airman testing which impacts the pilot shortage and advancing the DPE appointment process to ensure a steady supply of qualified examiners?

Answer. If confirmed, I will work with our Aviation Safety Office regarding the agency's cadre of designated pilot examiners. I understand the agency received a number of recommendations and reforms after the 2018 reauthorization which they began actioning on but I would start with understanding where the agency is on those recommendations.

Question 9. 40 percent of aviation technician school graduates do not take the exam necessary to receive FAA mechanic certification-access to FAA-designated examiners is one of the largest barriers to student testing. The agency has proposed expansion of its Organization Designation Authorization program to include examiner delegations. Those efforts have been "in work" since 2018 and still, there is no relief in sight.

What would you do to address this bottleneck in the airman certification process that threatens to hinder our joint efforts to address the aviation mechanic shortage?

Answer. If confirmed, I would work with our Aviation Safety Office leadership on this matter. During the confirmation process I have heard from stakeholders that they have concern about the timelines associated with airman certification. I understand the agency has agreed with the broader concern and has initiated action to address it which I will continue to prioritize.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. TODD YOUNG TO MICHAEL G. WHITAKER

Question. For nearly 30 years, the FAA has successfully utilized Advisory or Rulemaking Committees to effectively engage with the public and industry experts to advance significant safety rulemakings. The FAA is currently looking at changes to the certification process through an update to the Changed Product Rule that will be wide ranging across aviation products, including general aviation, helicopters, transport category airplanes and engines. Historically, the Changed Product Rule

has been the mechanism to make changes to aircraft design, from technology upgrades for improvements to safety and sustainability to new interior configurations for passenger comfort and entertainment. Currently, FAA is coordinating with foreign regulators in a working group established in 2021 (ACSAA-directed) and has not yet engaged in an advisory process for consultation with industry experts as have other regulators. Foreign regulators, including the European Union Aviation Safety Agency, Brazil's National Civil Aviation Agency, Transport Canada's Civil Aviation Directorate, and the Civil Aviation Authority of China are discussing this critical certification process with their industry stakeholders.

If confirmed, do you commit to establishing an appropriate advisory or rulemaking committee to engage with aviation stakeholders on considerations to update FAA certification process and requirements for changed products?

Answer. If confirmed, I will ensure the agency fully complies with the directives of ACSAA as well as all statutory requirements surrounding rulemaking. I believe there was a public meeting held on this matter earlier this year but if confirmed I will talk with our Aviation Safety Office on the path forward with respect to the Changed Product Rule.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TED BUDD TO MICHAEL G. WHITAKER

Question 1. I appreciate your responses to Senators Klobuchar and Fischer supporting the contract tower program. North Carolina has six contract towers, serving Coastal Carolina Regional Airport in New Bern, Smith Reynolds Airport in Winston-Salem, Concord-Padgett Regional Airport, Albert J. Ellis Airport in Richlands, Hickory Regional Airport, and Kinston Regional Jetport, also known as Stallings Field, in Lenoir County. Can you go into further detail on the benefits you believe the contract towers program delivers to the aviation community?

Answer. The Federal Contract Tower Program enables lower activity airports that would not otherwise have FAA air traffic control services. The program also helps connect smaller airports and rural communities to the national air transportation system.

Question 2. I also appreciate your support for the BasicMed program. In the six years since FAA implemented the program, a growing list of popular destinations for general aviation pilots have recognized BasicMed's equivalent safety standards. These include Mexico, the Bahamas, and the Dominican Republic. However, pilots flying under BasicMed cannot operate in Canadian airspace. This prohibition applies even when transiting their airspace without landing, such as to/from Alaska and between the Northeast and Great Lakes states. Will you make it a priority to engage other countries and ICAO to promote greater acceptance of BasicMed for both transiting flights and flights within foreign countries?

Answer. I will work with our Office of Aviation Safety and Office of Policy, International Affairs, and Environment to address operations in Canadian airspace by pilots that have completed the BasicMed program.

Question 3. Remote Air Traffic Control Towers provide enhanced services and safety, including better vision in low visibility conditions, the ability to predict conflicts and determine if an aircraft is off the runway, and more efficient and resilient operations. They are also more adaptable when airport construction projects and new infrastructure create blind spots. These facilities can be built and maintained in a fraction of the time and cost of traditional brick and mortar towers. NAV CANADA, for example, is in the final stages of procurement to ultimately replace 80 brick and mortar towers with remote/digital systems as they recognize the operational benefits and much lower costs. Although remote towers have been researched by the FAA for more than 16 years, FAA does not have a pathway to certify this technology. The FAA recently imposed testing requirements that led the manufacturer of Leesburg Executive Airport's remote tower to shut down operations.

a. Mr. Whitaker, do you see the value of remote towers as a means to provide air traffic control services in the national airspace system?

Answer. The safe and reliable use of remote towers is something I believe the agency should continue to research and work in good faith with remote tower operators to determine if there are systems that can meet safety and reliability standards that pilots, crew and passengers count on.

b. Since remote towers can be located on or off airport, such as in existing buildings, do you believe it is sustainable to continue to build and replace costly brick and mortar towers with more brick and mortar towers?

Answer. I think the agency should continue its research and work to determine if there are systems that can meet safety and reliability standards that pilots, crew and passengers count on, and this research should include the appropriate facilities to house remote towers.

c. Section 161 of the FAA Reauthorization Act of 2018 directed FAA to establish a pilot program to operate remote towers at five airports. That program has not been fully implemented. Will you commit to promptly implementing this program and any remote tower programs included in the next FAA Reauthorization Act?

Answer. I will work with the leadership of the Office of NextGen, Air Traffic Organization, and Office of Airports to determine the status of implementation of the FAA Reauthorization Act of 2018 and identify any challenges in meeting the intent of the law.

Question 4. In the past few years, FAA has taken controversial positions in enforcement actions that have effectively changed how the Federal Aviation Regulations are interpreted. This "regulation by enforcement" is concerning to the aviation community that depends on a stable and dependable regulatory system. Some examples include (1) FAA redefining "flight training" such that all experimental aircraft owners, pilots, and their flight instructors must obtain a letter of deviation authority to give or receive flight training; and (2) narrowing the interpretation of 14 C.F.R. §91.119 to effectively ban inspection passes for off-airport landings. In response, Congress had to step in to address both of these errant interpretations. Legislative fixes were included in the James M. Inhofe National Defense Authorization Act for Fiscal Year 2023 (Pub. L. 117–263) and Securing Growth and Robust Leadership in American Aviation Act (as passed by the House of Representatives on July 20, 2023), respectively. Will you commit to using notice and comment rulemaking under the Administrative Procedure Act (5 U.S.C. §553) to amend regulations instead of reinterpreting regulations through enforcement actions?

Answer. If confirmed, I will ensure that regulatory changes comply with the Administrative Procedure Act and other Federal laws.

Question 5. As you will recall from your time as Chief NextGen Officer, one of the NextGen program's goals is direct routing and more efficient arrival and approach procedures. Such procedures save time and reduce fuel burn. An additional way to achieve these goals is direct routing through inactive special use airspace. Section 1085 of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Pub. L. 116–283) required FAA to, no later than July 1, 2021, coordinate with the Secretary of Defense to enable the automated public dissemination of information on the real-time status of special use airspace. This provision has yet to be fully implemented. Will you commit to expeditiously implementing this law?

Answer. If confirmed, I will work with the Air Traffic Organization to implement this and other special airspace use programs as directed by Congress.

Question 6. In your previous tenure at FAA, the agency took a big step forward in performance-based standards in aircraft design and product certification. This allowed safety-enhancing technology—particularly avionics—to be installed in general aviation aircraft. However, some of these benefits could only be realized in newly manufactured aircraft. According to the FAA, the average general aviation aircraft is more than 50 years old. Because many of these aircraft are personally owned, cost is a major factor when choosing to upgrade technology in the cockpit. What can the FAA do to make it easier for these aircraft to upgrade to cost-effective and safety-enhancing modern avionics?

Answer. In order to make it easier and more cost-effective for general aviation aircraft to upgrade safety-enhancing modern avionics, the FAA will need to work closely with stakeholders and manufacturers to provide certainty so that manufacturers will invest and lower prices. Another option would be grant programs directed at general aviation.

Question 7. During your time as Chief NextGen Officer, you oversaw implementation of the ADS–B equipage mandate. The ADS–B mandate was first announced in 2007 and became effective in 2020. This mandate required an ADS–B Out transponder on aircraft operating in Class A, B, and C airspace and above 10,000 feet. The ADS–B mandate covers nearly the same airspace that has required a Mode C transponder dating back to a 1975 mandate. At present, three years after the ADS–B mandate became effective, some are arguing to expand the ADS–B mandate to airspace that has never required an ADS–B or Mode C transponder. This proposal is meant to facilitate new entrants into the National Airspace System.

a. The FAA gave the aviation industry 13 years to come into compliance with the ADS–B mandate. If FAA expands the airspace that requires an ADS–B transponder,

will you commit to giving the aviation industry ample time to comply with such a mandate?

Answer. I think we can learn a lot from the collaborative work that FAA did with industry to address compliance with the ADS–B mandate. If confirmed, I will ensure that the FAA works collaboratively with industry to identify reachable deadlines while not compromising safety.

b. The ADS–B mandate's compliance cost was drastically reduced when companies produced innovative products that met the mandate's requirements without invasive (and expensive) aircraft modifications. Whether or not FAA expands the airspace that requires an ADS–B transponder, will you explore innovative products that can further reduce the cost of ADS–B equipage, such as those conceived of in section 226 of Securing Growth and Robust Leadership in American Aviation Act (as passed by the House of Representatives on July 20, 2023)?

Answer. As the FAA integrates new entrants into the airspace, if confirmed, I will explore innovative products that can reduce the cost of ADS–B equipage while meeting safety certification standards.

c. If enacted into law, will you commit to expeditiously implementing the provision passed by the House of Representatives as section 226 of Securing Growth and Robust Leadership in American Aviation Act?

Answer. I will need to work with FAA leadership to better understand this particular provision, but the FAA will do its best to expeditiously implement any provisions from the House FAA reauthorization that are ultimately signed into law.

Question 8. Section 383 of the FAA Reauthorization Act of 2018 (codified at 49 U.S.C. § 44810) requires FAA to coordinate with other Federal agencies to detect and mitigate risks from unauthorized unmanned aircraft system (UAS) operations near airports. Despite having this authority since 2018, the FAA has not created the mandatory plan nor initiated the required interagency coordination. This February, the FAA took the first step of creating this plan and operationalizing this coordination by establishing the Aviation Rulemaking Committee required by subsection (b)(3). Other Federal departments and agencies have publicly commented on how this slow proceeding has impeded their ability to exercise their authorities to detect, track, or mitigate UAS.

a. Will you commit to fully and promptly implementing 49 U.S.C. § 44810?

Answer. I will commit to implementing 49 U.S.C. 44810 and, once confirmed, I would be happy to provide you with an update on the current status of implementation.

b. Subsection (b)(1) requires a plan "for the certification, permitting, authorizing, or allowing of the deployment of technologies or systems for the detection and mitigation of unmanned aircraft systems." How will you ensure the plan considers the benefits of critical emerging technologies in the counter UAS industry?

Answer. My understanding is that the FAA has established the UAS Detection and Mitigation Systems Aviation Rulemaking Committee that includes stakeholders from government and industry, The FAA and its partner agencies are actively reviewing emerging technologies and I will ensure this continues.

Question 9. Despite the FAA's primary authority to regulate the use of United States airspace, *see* 49 U.S.C. § 40103, other Federal agencies have asserted the power to regulate airspace. Some agencies, such as the National Oceanic and Atmospheric Administration, have prohibited all flights over certain National Marine Sanctuaries. Others, such as the National Parks Service (NPS), have prohibited operating an unmanned aircraft system on lands and waters administered by NPS, including National Parks, National Monuments, National Recreation Areas. Congress has not granted either agency the authority to regulate aircraft or the airspace above managed lands. Mr. Whitaker, do you believe that the FAA should be the lead Federal agency in regulating the use of and restrictions in United States airspace?

Answer. The FAA regulates and is responsible for providing safe and efficient air navigation services to 29.4 million miles of airspace. The FAA will continue to be the lead Federal agency in accordance with Federal law.

Question 10. Since 1973, Federal law has required federally funded public use airports to charge fair and reasonable prices for aeronautical services. 49 U.S.C. § 40116(e) (also called the "Anti Head Tax Act of 1973"). Furthermore, Airport Improvement Program (AIP) Grant Assurance #22 requires participating airports and fixed-base operators to "[c]harge reasonable, and not unjustly discriminatory, prices for each unit or service." FEDERAL AVIATION ADMINISTRATION, ASSURANCES: AIRPORT SPONSORS 10–11 (May 2022), available at *https://www.faa.gov/sites/faa.gov/files/airports/new_england/airport_compliance/assurances-airport-sponsors-2022-05.pdf; see also* 49 U.S.C. § 47152(2). However, FAA has failed to closely monitor this grant

assurance requirement and has said it will decline to investigate violations unless an airport is accumulating excessive surplus revenue. Federal Aviation Administration, Airport Compliance Manual, Order 5190.6B p. 17–3 (2022), available at *https://www.faa.gov/documentLibrary/media/Order/Order-5190-6B-Change2-rev.pdf* ("The FAA will not ordinarily investigate the reasonableness of a general aviation airport's fees absent evidence of a progressive accumulation of surplus aeronautical revenues."). This policy has led Congress to create specific enforcement mechanisms (such as 49 U.S.C. § 47129, which applies to air carriers) in previous FAA Reauthorization acts. I have introduced legislation to create an alternate solution for general aviation pilots to access airports that have high parking fees. *See* General Aviation Airport Access Act, S. 1847, 118th Cong. (2023). Mr. Whitaker, what will be your approach to enforcing the requirements in current law—including the Anti Head Tax Act and AIP Grant Assurances—that require fair and reasonable fees for aeronautical services?

Answer. I will work with leadership in the Office of Airports to assess this issue and find a way to address allegations of unfair or unreasonable fees for aeronautical services.

Question 11. 100LL is the only widely available and approved fuel for piston engine aircraft. The aviation industry is working expeditiously to meet a 2030 goal to eliminate leaded aviation fuel by developing a drop-in replacement for 100LL. However, a drop-in replacement that does not require a supplemental type certificate is not yet widely commercially available. Further, the unleaded fuels that are commercially available have not been approved for all engines, particularly high compression engine models. Despite the lack of a fleet-wide replacement, airports are beginning to ban 100LL. A 100LL ban at Reid-Hillview Airport (KRHV) has already contributed to a serious airplane crash due to fuel exhaustion. Mr. Whitaker, in the transition to an unleaded aviation fuel, will you commit to making decisions based on safety rather than political concerns?

Answer. The FAA is committed to transitioning remaining aviation users to unleaded aviation fuel. Safety will always be my priority, and that is why the Eliminate Aviation Gasoline Lead Emissions (EAGLE) initiative launched by the FAA and industry is so important to the safe transition from leaded fuel to unleaded fuel in general aviation.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. J.D. VANCE TO MICHAEL G. WHITAKER

Appalachian AAM

The advanced air mobility industry is ready to expand operational testing of these new aircraft and related technologies beyond small, isolated pieces of airspace. There is an opportunity to test this technology along the Ohio and West Virginia borders.

I have heard from many constituents that are interested in developing the Advanced Air Mobility Appalachian Corridor in Ohio and West Virginia. This corridor would create a real-life operational environment where local, state and industry partners work together to address critical issues such as creating and maintaining connectivity in remote or mountainous regions; addressing the challenges of crossing a state border with certain UAS's and their supporting technologies; and discerning local and state policy and community acceptance implications of those larger, multi-state operations.

The planning, testing, and execution of AAM operations is too great of a challenge for the FAA to solve alone and addressing future testing in a piecemeal fashion, without imagining the full operational challenges of multi-state operations, is really going to impede AAM integration.

Industry has told me that the FAA is constantly saying . . . "we want to hear from industry, we want industry to assist in the development of safety data. . .".

Question. How do you anticipate bringing industry together with local and state governments to advance execution of AAM operations? Would you be supportive of developing an AAM testing corridor in Appalachia where the terrain would allow the true operational limits of AAM to best tested?

Answer. The FAA will need to work across lines of business to bring the right stakeholders from industry and state, local, and Tribal governments to prepare for the execution of AAM operations. I will need to work with the leaders of the Office of NextGen, Office of Airports, Office of Aviation Safety, and the Air Traffic Organization to identify testing coordinators beyond the FAA's William J. Hughes Tech-

nical Center, but a testing corridor in Appalachia could be well-suited to this type of purpose.

eVTOL Developments

I understand that you currently work at an eVOTL OEM. As I am sure you are aware, eVOTLs are a hot topic in Ohio right now after Joby's announcement that they will manufacture air taxis in Dayton. As in most emerging industries, the speed at which eVOTL innovation takes place in the private sector set is faster than the development of a regulatory framework. The FAA has been facing this situation for several years and the challenges are growing.

Question 1. As FAA Administrator, what could you do to ensure that the FAA better keeps pace with innovation? What specific steps would you take? Also, Congress has given the FAA broad discretion to make rules and policies on eVTOL rollout. What is the holdup?

Answer. Once confirmed, I will work with leadership across lines of business, and in particular with the Office of Aviation Safety and Office of NextGen, to determine the current status and next steps in certification and operation of these vehicles. At the same time, the FAA will need to work with eVTOL OEMs, many of whom are new to aviation, to ensure that the OEMs understand the safety and certification requirements of the FAA.

It is my understanding that the FAA is in the middle of *rulemaking* for the operations of eVTOL's, specifically for the powered-lift category. In April 2022, the *FAA changed the categorization* of eVTOL aircraft from "airplane" to "powered-lift." However, unlike the "airplane" category, the "powered-lift" category does not have operation rules, and as such, civil powered-lift aircraft are *not* current participants of the NAS. Recognizing the impacts of this change, the FAA promised to complete its rulemaking quickly (*i.e.,* by December 2024) and include a practical path forward for powered-lift aircraft and their operations.

The FAA's work on an SFAR for powered-lift operations is due by December 2024. While the timely publication is vital to our Nation's ability to be the leader in this technology, ensuring the language includes a practical path forward for operations is equally important.

Question 2. What steps will you take to ensure the timely integration of powered-lift aircraft into the National Airspace System (NAS) and ensure a practical path forward on rulemaking?

Answer. Finalizing the initial operational regulatory framework to support near term operations and integration into the National Air Space without disruption to legacy users of the system. Certification of these new vehicles is occurring using the existing certification framework and I know Congress has been explicit in its direction that the agency resource this effort in a way to facilitate certification of the first vehicle by December 2024. Critically, in the context of both certification of the vehicle and all aspects of the operation, the FAA must provide robust oversight and demand adherence to safety standards consistent with the agency's longstanding commitment to "one level of safety."

737–MAX–8 Oversight

In March, I raised questions with Acting Administrator Nolen about the 737–MAX–8 continuing to have issues with trim stabilizers despite being recertified by the FAA in 2020. At the time, Acting Administrator Nolen said that he did not want to prejudice the situation without looking into it. The Agency recently followed up with my office arguing that the issues were the result of failed breakers and relays and that the stabilizer trim issues were not "considered a safety of flight issue." It is my understanding that the 737-Max issues go beyond breakers and relays, so much so that Southwest Airlines and American Airlines replaced the stab trim motors on their aircraft after the incidents I raised with Acting Administrator Nolen.

What's more, a thorough review of the FAA's Service Difficulty Reporting (SDR) database showed that Alaska Airlines—who fly 53 737–MAX airplanes—submitted at least 1,230 reports on MAX airplanes that they began flying in 2021. Of the 10 Airbus A321 neo airplanes flown by Alaska Airlines, the company has only filed 25 reports.

Question 1. Can you provide an update on what the agency is doing to ensure the FAA is overseeing issues with the 737–MAX–8?

Answer. If confirmed, I will meet with leadership in the Aviation Safety Office to get a full description of the monitoring and oversight the agency is doing on the 737–8 and commit to make adjustments if needed.

Question 2. Can you assure me that the MAX is categorically safe, given the number of SDR reports and recent incidents?

Answer. The FAA determined the safety threshold for recertification was met, but I understand the interest in the reports associated with the performance of the aircraft. While I do not have direct knowledge of all the reports and incidents, if confirmed I would review those reports and I come into this position insisting on thorough and uncompromising oversight.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. SHELLEY MOORE CAPITO TO MICHAEL G. WHITAKER

ATC Staffing Solutions

The U.S. is currently experiencing an air traffic controller shortage that threatens to continue shrinking the capacity of flights in our airspace. The FAA recently requested that air carriers continue to fly 10 percent fewer flights to and from the New York metropolitan area and related DC airports because of the controller shortage.

Secretary Buttigieg indicated the FAA is understaffed by roughly 3,000 controllers. A key constraint on FAA's ability to hire more than 1,800 controllers annually is that there is a limit on how many controllers can be trained at the FAA's only training facility in the country. Plus, there this 3,000 number does not include either the number of those that washout before completing all of the requirements or the annual retirements.

This means it could take the FAA at least 6 years to reach what we might consider an adequate staffing level of certified controllers.

Question 1. As a supplement to maximizing the Academy, would you commit to reassessing and better utilizing the College Training Initiative (CTI) program, which has existed for decades?

Answer. In order to address the air traffic controller shortage, we will need to review all options. Once confirmed, I will meet with leadership from the Air Traffic Organization about ways to leverage the CTI program.

Question 2. Do you have other thoughts to address the controller shortage?

Answer. I think we will need to look at all stages of the air traffic controller hiring, training, and staffing process and consider all options. We also need to ensure there are enough supervisors in air traffic control facilities. This will take working with leadership in the Air Traffic Organization, Human Resource Management, the Office of Finance Management, and labor partners.

NextGen Implementation

I know that in your previous tenure at FAA you were focused on implementing newer technology through the NextGen program or "NeverGen" as some have called it. While I know the ADS–B system is a big improvement the implementation has been delayed and delayed for all new technologies. I know that the program was meant to take years and years, but is has faced challenges.

Question. What ways would you try to speed up NextGen and are there ways that costs could stay within forecasted estimates?

Answer. The early foundational investments allow us to continue to add new efficiencies into that system and new technologies to make it easier to control traffic. It was originally designed as a 2010 to 2025 program, and it's largely completed. Some of the programs will run beyond that. Our next immediate task will be to plan for what comes after NextGen and the types of technologies we will need to integrate new entrants into the national airspace safely and efficiently.

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