A REVIEW OF THE FEDERAL AVIATION ADMINISTRATION'S AIR TRAFFIC CONTROLLER HIRING, STAFFING, AND TRAINING PLANS

HEARING

BEFORE THE

SUBCOMMITTEE ON AVIATION

OF THE

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE HOUSE OF REPRESENTATIVES

ONE HUNDRED FOURTEENTH CONGRESS

SECOND SESSION

JUNE 15, 2016

COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE

BILL SHUSTER, Pennsylvania, *Chairman*

DON YOUNG, Alaska
JOHN J. DUNCAN, JR., Tennessee,
  Vice Chair
JOHN L. MICA, Florida
FRANK A. LoBIONDO, New Jersey
SAM GRAVES, Missouri
CANDICE S. MILLER, Michigan
DUNCAN HUNTER, California
ERIC A. "RICK" CRAWFORD, Arkansas
LOU BARLETTA, Pennsylvania
BLAKE FARENTHOLD, Texas
BOB GIBBS, Ohio
RICHARD L. HANNA, New York
DANIEL WEBSTER, Florida
JEFF DENHAM, California
REID J. RIBBLE, Wisconsin
THOMAS MASSIE, Kentucky
MARK MEADOWS, North Carolina
SCOTT PERRY, Pennsylvania
RODNEY DAVIS, Illinois
MARK SANFORD, South Carolina
ROB WOODALL, Georgia
TODD ROKITA, Indiana
JOHN KATKO, New York
BRIAN BABIN, Texas
CRESENT HARDY, Nevada
RYAN A. COSTELLO, Pennsylvania
GARRET GRAVES, Louisiana
MIMI WALTERS, California
BARBARA COMSTOCK, Virginia
CARLOS CURBELO, Florida
DAVID ROUZER, North Carolina
LEE M. ZELDIN, New York
MIKE BOST, Illinois

PETER A. DeFAZIO, Oregon
ELEANOR HOLMES NORTON, District of
  Columbia
JERROLD NADLER, New York
CORRINE BROWN, Florida
EDDIE BERNICE JOHNSON, Texas
ELIJAH E. CUMMINGS, Maryland
RICK LARSEN, Washington
MICHAEL E. CAPUANO, Massachusetts
GRACE F. NAPOLITANO, California
DANIEL LIPINSKI, Illinois
STEVE COHEN, Tennessee
ALBIO SIRES, New Jersey
DONNA F. EDWARDS, Maryland
JOHN GARAMENDI, California
ANDRÉ CARSON, Indiana
JANICE HAHN, California
RICHARD M. NOLAN, Minnesota
ANN KIRKPATRICK, Arizona
DINA TITUS, Nevada
SEAN PATRICK MALONEY, New York
ELIZABETH H. ESTY, Connecticut
LOIS FRANKEL, Florida
CHERI BUSTOS, Illinois
JARED HUFFMAN, California
JULIA BROWNLEY, California

(III)

CONTENTS

Committee on Transportation and Infrastructure
U.S. House of Representatives
Washington, DC 20515

Bill Shuster
Chairman

Peter A. DeFazio
Ranking Member

Christopher P. Bertram, Staff Director

Katherine W. Dedrick, Democratic Staff Director

June 10, 2016

SUMMARY OF SUBJECT MATTER

TO: Members, Subcommittee on Aviation
FROM: Staff, Subcommittee on Aviation
RE: Hearing on A Review of the Federal Aviation Administration's Air Traffic Controller Hiring, Staffing and Training Plans

PURPOSE

The Subcommittee on Aviation will hold a hearing on Wednesday, June 15, 2016, at 10:00 a.m. in 2167 Rayburn House Office Building to review the Federal Aviation Administration's (FAA) air traffic controller hiring, staffing and training plans. The Subcommittee will hear from representatives of the Air Traffic Organization (ATO) of the FAA, the U.S. Department of Transportation Office of the Inspector General (DOT IG), the National Air Traffic Controllers Association (NATCA), and Southwest Airlines.

BACKGROUND

The United States' air traffic control (ATC) system manages the most complex and busy airspace in the world. The United States' ATC system is also among the safest in the world. The FAA currently employs over 14,000 controllers in 316 air traffic control (ATC) facilities.[1] These 316 facilities are comprised of airport traffic control towers (which manage traffic within 10 miles of the airport), terminal radar approach control (TRACON) facilities (which manage traffic within a 40 mile radius of a primary airport), and air route traffic control centers (which manage traffic outside of terminal airspace and provide approach control services to small airports where no terminal service is provided).[2] An additional 1,292 civilian contract controllers and more than

---

[1] U.S. Department of Transportation, Federal Aviation Administration, *"A Plan for the Future: 10-Year Strategy for the Air Traffic Control Workforce, 2016-2025,"* p. 10.
https://www.faa.gov/air_traffic/publications/controller_staffing/media/CWP_2016.pdf
[2] *Id.*

10,000 military controllers also provide air traffic services for the National Airspace System (NAS).[3] The average age of an air traffic controller is 38 with 13 years of service.[4]

FAA Air Traffic Controller Workforce Plan

Section 221 of *VISION 100 – Century of Aviation Reauthorization Act* (P.L. 108-176) required the FAA to release an annual report to Congress that describes the agency's overall air traffic controller workforce plan. The 2016 report provides staffing ranges for all of the FAA's ATC facilities and the number of onboard controllers as of September 19, 2015.[5] In setting controller staffing levels, the FAA "staffs to traffic," which means the FAA controller staffing levels are based on traffic volume and controller workload.[6] (See chart on page 6 below showing air traffic and controller staffing trends.) In "staff[ing] to traffic," the FAA must consider a variety of factors that are specific to each air traffic control facility.[7]

According to the FAA, proper staffing levels also depend on the efficient scheduling of employees, so the agency tracks a number of indicators as part of its ongoing review of controller staffing levels, including overtime, controllers' time on position (which is the total time spent managing traffic), leave usage, and the number of trainees.[8]

Status of Controller Staffing and Hiring

Air traffic demand has declined significantly since 2000, which was the peak year for air traffic.[9] According to the 2016 Controller Workforce Plan, since 2000, traffic volume has declined by 23 percent, with no expectation that traffic volume will return to peak levels in the near future. Despite this decline in traffic, the number of air traffic controllers has stayed constant[10] (See chart on page 6). The number of controllers eligible to retire, which peaked in 2007 due to the retirements of those controllers hired after the 1981 controller strike, is expected to continue to decline over the next decade.[11] In the last five years, 3,213 air traffic controllers have retired and 4,700 new controllers have been hired.[12]

The FAA has missed its annual hiring targets in each of the last six years, which compounded staffing difficulties. In 2015, FAA missed the hiring target by 187 controllers. Despite these lower than expected hires, the FAA maintains that it is on track to reach its fiscal year 2016 hiring targets.[13]

---

[3] *Id.*
[4] FAA Presentation to House Aviation Subcommittee staff, "*Air Traffic Control Specialists: Staffing Levels, Hiring and Training*," May 25, 2016, p. 10.
[5] *Supra* note 1 at p. 2.
[6] *Id.* at p. 4.
[7] *Id.*
[8] *Id.* at p. 12.
[9] *Id.* at p. 6.
[10] *Id.* at p. 7.
[11] *Id.* at p. 9.
[12] *Id.* at p. 5.
[13] *Supra* note 4 at p. 3.

It can take many years of training for an air traffic controller to become fully certified, therefore the FAA's hiring plan takes into account both the length of time it takes to complete training and training failures.[14] According to the FAA, in fiscal year 2015, Academy failures were significantly above the forecasted level (142 percent of forecast).[15] The FAA is still assessing the cause of this uptick in training failures.

Department of Transportation Inspector General Reports on Controller Hiring, Training, and Staffing

In January 2016, the U.S. Department of Transportation Office of Inspector General (DOT IG) issued a report on the challenges FAA continues to face in ensuring enough fully trained controllers at critical ATC facilities.[16] The DOT IG found that when excluding controllers-in-training, 13 of the 23 critical facilities reviewed had CPC levels below the facility's planned staffing range.[17] The DOT IG found "significant weaknesses" in the process that the FAA uses to determine the staffing ranges in its en route facilities—air route traffic control centers.[18] The DOT IG recommended that the FAA develop and implement a methodology with completion dates for determining en route facility staffing ranges, as suggested by the National Academy of Sciences.[19]

The DOT IG also found that FAA lacks accurate and complete data on optimal controller scheduling practices and fatigue.[20] Accordingly, the IG recommended that the FAA use the results of a commercially available, automated scheduling program used by other countries, including Australia, Canada, and Germany, called the Operational Planning and Scheduling (OPAS) tool.[21]

Lastly, the DOT IG concluded that the FAA has not yet established an effective process for balancing training requirements with pending retirements when managing its controller resources at critical ATC facilities.[22]

Since 2012, the DOT IG has raised concerns about staffing levels at critical ATC facilities such as TRACONs in Atlanta, Chicago, Dallas-Fort Worth, Houston and New York.[23] Specifically, the IG found that 15 of the 21 critical facilities it reviewed had a higher percentage of controllers in

---

[14] *Supra* note 1 at p. 7.

[15] FAA Presentation to House Aviation Subcommittee staff, *"2016 Controller Workforce Plan Update,"* May 3, 2016, p. 19.

[16] Office of Inspector General, U.S. Department of Transportation, *"FAA Continues to Face Challenges in Ensuring Enough Fully Trained Controllers at Critical Facilities,"* AV-2016-014, January 11, 2016.

[17] *Id.* at p. 2.

[18] *Id.*

[19] *Id.* at p. 13. Section 608 of the *FAA Modernization and Reform Act of 2012* (P.L. 112-95) required the Transportation Research Board (TRB) of the National Academy of Sciences to study "the air traffic controller standards used by the [FAA] to estimate staffing needs for FAA air traffic controllers to ensure the safe operation of the national airspace system in the most cost effective manner." The National Academy of Sciences study concluded that the design and execution of FAA's air route facility staffing model included unrealistic assumptions about controller workload. Transportation Research Board, National Academy of Sciences, Special Report 314, *"The Federal Aviation Administration's Approach for Determining Future Air Traffic Controller Staffing Needs,"* 2014, p. 2.

[20] *Supra* note 16 at pp. 6-8.

[21] *Id.* at p. 8.

[22] *Id.* at p. 9.

[23] Office of Inspector General, U.S. Department of Transportation, *"Enhanced Oversight of Staffing and Training at FAA's Critical Facilities is Needed to Maintain Continuity of Operations,"* AV-2012-039, January 12, 2012.

training than the national average.[24] Furthermore, the DOT IG found that between 2008 and 2010, critical ATC facilities lost roughly 40 percent of their trainees to attrition, compared to the national average of 24 percent.[25] The DOT IG also found that critical facilities had higher levels of controllers eligible to retire than the national average.[26] The DOT IG found that the FAA had not provided the staffing and training resources needed to retain new hires.[27]

Overview of the Revised Controller Hiring Process

Over the last few years, FAA has made significant changes to its air traffic controller hiring process.[28] The two most significant changes were the elimination of the hiring preference for graduates of FAA's ATC Collegiate Training Initiative (CTI) schools[29] and the introduction of a new Biographical Assessment (BA), a stand-alone, scored, multiple-choice exam that measures general and ATC-specific work experience, education and training, work habits, academic and other achievements.[30] The BA replaced an "experience questionnaire" that was part of the Air Traffic Selection and Training Test (AT-SAT), which is a pre-employment aptitude test that measures a candidate's ability to perform the role of air traffic controller.

Under the revised hiring process, candidates from CTI schools are grouped within a "Track I" applicant pool that consists of candidates from the general public.[31] Track I candidates must pass the BA as a prerequisite for taking the AT-SAT.[32] Applicants with at least 52 weeks of experience as a controller (i.e., former FAA or military controllers) are grouped separately within a "Track II" applicant pool.[33] Unlike Track I candidates, Track II candidates are not required to take the BA, AT-SAT, or attend the FAA Academy.[34]

The FAA maintains that the changes to the hiring process resulted in greater efficiencies and improved the process by ending the use of large inventories separated by applicant source, as well as opening a vacancy announcement available on the same terms to all U.S. citizens to ensure "equitable treatment."[35] Under its February 2015 Track I vacancy announcement, 18,302 candidates applied and 2,801 were selected.[36] Of the 2,300 candidates who applied under the FAA's March 2015 Track II vacancy announcement, 989 were selected.[37]

---

[24] *Id.* at p. 2.
[25] *Id.* at pp. 3-4.
[26] *Id.* at p. 4.
[27] *Id.* at p. 7.
[28] FAA White Paper Prepared for House Aviation Subcommittee staff, *"Changes to the Air Traffic Control Hiring Process,"* June 2016, pp. 1-2.
[29] https://www.faa.gov/jobs/students/schools
[30] http://faa.custhelp.com/app/answers/detail/a_id/428/related/1
[31] *Supra* note 28 at pp. 2-3.
[32] *Id.*
[33] *Id.*
[34] *Id.*
[35] *Id.*
[36] *Supra* note 4 at p. 2.
[37] *Id.*

X

WITNESS LIST

Panel I
The Honorable Randy Hultgren
United States Representative
Illinois

Panel II
Ms. Teri L. Bristol
Chief Operating Officer
Air Traffic Organization
Federal Aviation Administration
(accompanied by Mr. Rickie Cannon,
Deputy Assistant Administrator for Human Resource Management, FAA)

Mr. Matthew Hampton
Assistant Inspector General for Aviation Audits
Office of Inspector General
Department of Transportation

Mr. Paul Rinaldi
President
National Air Traffic Controllers Association

Mr. Randolph "Randy" Babbitt
Senior Vice President of Labor Relations
Southwest Airlines

FAA Air Traffic Controller Workforce Plan, 2017-2025

Air Traffic Forecast

*Total Workforce Operations = Tower + TRACON + Aircraft Handled by En Route Centers
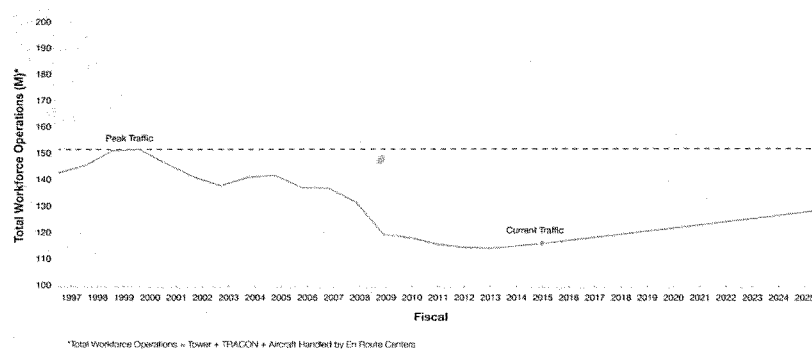
Source: FAA

System-Wide Traffic and Controller Trends
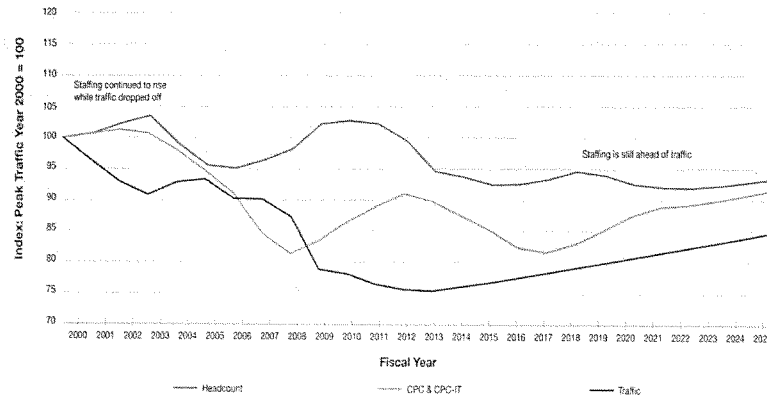
Source: FAA

A REVIEW OF THE FEDERAL AVIATION ADMINISTRATION'S AIR TRAFFIC CONTROLLER HIRING, STAFFING, AND TRAINING PLANS

WEDNESDAY, JUNE 15, 2016

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON AVIATION,
COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE,
Washington, DC.

The subcommittee met, pursuant to notice, at 10:01 a.m. in room 2167, Rayburn House Office Building, Hon. Frank A. LoBiondo (Chairman of the subcommittee) presiding.

Mr. LOBIONDO. Good morning. The subcommittee will come to order. I would like to thank you all for being here.

Before we proceed, I would like to welcome the Colgan family members who have been very faithful about coming to our hearings. And I assure you that it will be a top committee priority for safety and I remember the tragedy and the loss that you all suffered. And if any of you think that this hearing date was arbitrary, it is not. So please help me in recognizing Ranking Member Rick Larsen's birthday.

[Laughter.]

Mr. LOBIONDO. Rick, wish you happy birthday.

[Applause.]

Mr. LOBIONDO. I know you couldn't want to celebrate in any other way than having a hearing.

Mr. LARSEN. You know, for all my life I have thought if only my birthday we could have a hearing on air traffic control staffing.

[Laughter.]

Mr. LARSEN. And this is a dream come true.

Mr. LOBIONDO. Dreams come true, OK. So again, thank you all very much.

At a subcommittee roundtable in December the DOT [Department of Transportation] inspector general and the National Air Traffic Controllers Association highlighted a number of challenges the FAA [Federal Aviation Administration] continues to face in ensuring that our Nation's busiest air traffic control facilities are staffed with the most experienced and highly trained air traffic controllers, or CPCs [certified professional controllers].

Like most people, when I board a major airliner I assume the pilots are highly experienced and well trained, and that the flight, at least under today's air traffic control system, is going to be guided to its destination by a hard-working team of dedicated FAA air

traffic controllers. Like with airline pilots, we assume FAA's 14,000-plus controller workforce are highly trained and experienced.

However, in 2012 and in 2016 the DOT IG [inspector general] found that a high percentage of the controllers at our busiest ATC [air traffic control] facilities, including terminal radar approach control facilities in Atlanta, Chicago, Dallas/Fort Worth, Houston, and New York are so-called developmental controllers, or trainees, who cannot manage traffic without the direct supervision of a fully certified controller or a facility manager.

In addition, of the 14,000-plus controller workforce, just over 10,600 controllers are fully certified, which is a 27-year low.

We are also concerned about the safety implications of the rising workload for CPCs, many of whom are subject to mandatory 6-day workweeks and high rates of overtime. The drop in CPCs can be attributed to several factors.

Over the past several years the FAA has struggled to replace the thousands of controllers who were hired during the 1981 Professional Air Traffic Controllers Organization strike, most of whom have reached the agency's mandatory retirement age of 56. The FAA's hiring efforts were severely hampered in 2013, when the agency stopped training new hires at its training academy in Oklahoma City, due to sequestration.

In 2014, the FAA abruptly changed its controller hiring process, and made even further poorly executed changes in 2015. Consequently, the FAA has missed its controller hiring targets for 6 consecutive years. To its credit, in the past year the FAA has made some progress on the hiring front, with the agency stating it will reach its hiring goal this year.

Some of the internal bottlenecks that were highlighted at the December roundtable include prolonged security and medical reviews, and they have been addressed. The FAA has also worked with NATCA [National Air Traffic Controllers Association] on a revised policy to facilitate the transfer of fully certified controllers to the busiest ATC facilities.

That being said, we have a long way to go. In addition to seeing little improvement in the development of fully certified controllers, we are concerned that the agency's revamped controller hiring process is not putting forward the highest quality controller candidates, as evidenced by a 20-percent drop in the FAA Academy pass rate since the hiring process would change, with academy failures a whopping 142 percent above the fiscal year 2015 forecasted level.

Yesterday the parents and instructors of one of our Nation's many fine Collegiate Training Initiative, CTI, institutions, met with me to share their frustrations with the FAA's revamped controller hiring process. It is a story that I have heard many times over in the past 2 years, but one that is no less saddening. Their experiences led me to conclude that the current controller hiring process is underserving our Nation and the flying public.

Nearly 3,000 highly qualified CTI graduates who want to serve as air traffic controllers were left in the cold when the FAA changes were made in the hiring process, with many more abandoning their hopes because they have aged out. And they were left

in the cold basically with no notice of any kind that the changes were being made after expending, in some cases, huge sums of money.

And yet we are holding a hearing on inadequate controller staffing levels. I hope that our witnesses can explain why the FAA eliminated the CTI program preference. If further progress is not made in the areas of controller hiring, placement, and training, our Nation's ATC system may not be able to handle rising airline operations and passenger demand, which is expected to reach 1 billion passengers by the end of the next decade. Should the FAA not hire, train, and retain a sufficient number of controllers, the FAA may be forced to reduce airline operations to the detriment of passengers, shippers, and overall economy to ensure safety is not compromised.

We saw this scenario played out in April 2013, when the FAA curtailed ATC operations across the country due to sequestration-related controller furloughs, causing a week of historic airline delays and cancellations. So, I look forward to hearing from our witnesses on ways we can work together to address these long-standing problems.

Before I recognize my colleague, Mr. Larsen, for his comments I would like to ask unanimous consent that all Members may have 5 legislative days to revise and extend their remarks and include extraneous material for the record of this hearing.

[No response.]

Mr. LoBIONDO. Without objection, so ordered. Now I would like to yield to Mr. Larsen for any comments he may make.

Mr. LARSEN. Thank you, Mr. Chairman, and thanks for calling this hearing today to explore air traffic control staffing. Among other things, I hope this hearing will help inform and encourage progress on a timely FAA reauthorization bill. As we all know, the current extension expires July 15th.

But today we hear from witnesses with several perspectives regarding air traffic control staffing. And I welcome any discussion of what we need to keep our air space the safest and most efficient in the world.

The Office of the Inspector General, from whom we have a representative testifying today, provides a good starting point for our discussion. The OIG reported earlier this year that FAA continues to face challenges ensuring enough fully trained controllers at critical facilities. But before we get too far ahead of ourselves, we should consider the bigger picture.

There is no evidence of safety lapses associated with the staffing issues. We are living in the safest period of aviation history. Every day U.S. airlines safely transport about 2 million passengers around the country. At the same time, there is no evidence of decreased efficiency due to staffing. In fact, the Department of Transportation reported on Monday that airlines' on-time performance improved by 3 percentage points in April. That is the good news.

The healthy airline industry is critical for our international competitiveness. The airlines are doing well financially, the system is safe, and, by all accounts, the system is operating efficiently.

But I make these observations not to deny the need for continued oversight and vigilance on this subcommittee's part regarding

FAA's hiring, training, and staffing of air traffic controllers. Rather, I just think it is critical to keep this hearing in proper perspective.

That said, I am concerned about understaffing in critical facilities. Potential choke points in the air traffic control system, such as when passengers first feel the ripple effects of a line of thunderstorms over Nebraska, facilities like terminal radar approach control facilities in New York, Atlanta, Dallas/Fort Worth, Chicago all need more controllers.

On average, only about three-quarters of the controllers in these facilities are fully certified controllers. The rest are trainees. And many of the fully certified controllers are eligible for retirement. It is, therefore, critical that the FAA demonstrate two things: it is hiring enough controllers ahead of projected retirements, and it has the ability to shift controllers from other facilities to these critical facilities.

And while there is more work to be done, I am encouraged on some progress. The FAA is on pace to exceed its goal of hiring 1,619 controllers this year, and the agency has over 2,400 controllers available in Canada pools. The FAA, in collaboration with the National Air Traffic Controllers Association, or NATCA, has streamlined the process for transferring controllers between facilities more quickly, reducing the leg time, and certifying ready and able controllers in hard-to-staff facilities. But the FAA can make further improvements, and they should not hesitate to hire more controllers when staffing needs require it.

The FAA Academy, where inexperienced controllers have to train before being placed in a facility, has the capacity to matriculate only 1,998 controllers per year. And before controllers can attend, the FAA has to medically certify them and conduct a background check, and the FAA has the capacity to process about 300 per month.

This hearing is an important exercise of this subcommittee's oversight of the safety and efficiency of the air traffic control system. By all of the objective measures, facility-specific staffing shortages have not compromised safety or capacity today. But I do look forward to hearing from our witnesses on what we need to do to ensure that that remains the case.

So again, thank you, Mr. Chairman, for holding this hearing, and I yield back.

Mr. LoBiondo. Thank you, Mr. Larsen. I would like to welcome and recognize the chairman of the full committee, Mr. Shuster.

Mr. Shuster. Thank you, Chairman LoBiondo. And I want to start by welcoming a group of young people from my district. They are participating in the Pennsylvania Electric Co-op Youth Program. They are all the ones standing. They have young legs, so I think they can stand for a little bit.

Welcome to Washington. It is great that you are here, and seeing what is going on in your Federal Government, your Nation's capital.

Also I would like to say happy birthday to the other man from Everett, Mr. Larsen. For those of you from my district, he is from Everett, Washington. And as you know, I am from Everett, Pennsylvania. So we share that.

So happy birthday, Rick.

And also I want to say I am glad to see Mr. Hultgren here. He has been a real advocate for changing the system, for getting something done to make sure we can hire the controllers we need. So thanks for being here today.

Aviation safety is a top priority of this committee. And, in fact, across all of the modes it is a top priority for us. And the U.S. has one of the safest aviation systems in the world, and that is largely due to the dedicated and professional work of our air traffic controllers and the FAA safety personnel.

However, it is clear from numerous reports the FAA has not hired and trained enough fully certified controllers at our busiest ATC facilities to make up for the thousands of controllers hired during the 1981 strike who are reaching mandatory retirement. It is not clear why the FAA has dropped the ball. Many of the problems can be attributed to poor management of sequestration, as well as the timing and poor execution of significant—and questionable—changes to the controller hiring process.

This is another example of the FAA's longstanding inability to adequately manage its controller workforce. And that is a big reason, I believe one of the biggest reasons, why the ATC reform that I have proposed and we have passed out of this committee we should take up. And the FAA has a history, whether it is a hiring, not hiring of personnel, or being able to deploy a modern air traffic control system again, we ought to continue to work towards breaking out the ATC from the FAA, allowing it to operate as an entity that can hire, maintain, and deploy a modern and safe aviation system. So I will continue to push for that.

Again, under the status quo the passengers will suffer from the FAA's forced—to reduce air traffic flows across the country. And just imagine, we see the news reports today of the lines that the TSA [Transportation Security Administration] have. And that is causing some delays, but it's causing passengers, thousands and thousands of passengers, to miss their flights or miss their connections. Imagine if we don't have the flow of the air traffic control, the lines will be not in the airport, the lines will be on the tarmacs. Planes will be waiting with hundreds of passengers, waiting in line to get to the next destination, missing connections, missing—flights being canceled.

So this is a serious problem that we have to address. And again, I appreciate Chairman LoBiondo holding this hearing, and I look forward to hearing from our witnesses today.

Thank you, I yield back.

Mr. LoBiondo. Thank you, Mr. Shuster. And we are pleased to welcome and recognize Mr. DeFazio.

Mr. DeFazio. Thank you, Mr. Chairman. You know, our air traffic controllers are doing a phenomenal job. Some of them are being forced into mandatory overtime, 6-day weeks. That is not sustainable, and it certainly doesn't help recruitment into some of the busiest areas of the country, particularly New York and others. We have to look at new ways to induce, you know, fully qualified controllers to move there. And, you know, we also have to facilitate the hiring of qualified people and their full certification.

You know, there is legislation, and I have spoken to the chairman about this—I am trying to remember the number—introduced by Mr. Curbelo and Mr. Maloney, H.R. 5292, which would help in the hiring process, particularly targeting veterans and otherwise experienced controllers to move on and get to work.

So I would hope that we would take up that bill. I think it is a noncontroversial bill. I would suggest, since we are doing a lot of pretend legislation around here on the floor, maybe we should do some real legislation, and put that bill through before Congress embarks on yet another one of its long breaks in this year, which is more breaks than work.

The issue is critical. You know, many people have been talking about this for years. We have seen this shortage, the aging of the workforce, coming. And it is past time to do something about it. But despite all that, to hear air traffic controllers are doing such an extraordinary job that, you know, the number of air traffic control-related flight delays actually decreased by 17.5 percent in the last 2 years, I think that is an extraordinary testimony to them and the work they are doing. But I think it is not sustainable without an adequate workforce, so I am very worried that this will, you know, hurt our retention, if we don't bring in some more help.

The chairman also mentioned TSA. I have a bill on that. I recommend it to members of the committee. Every American is taxed every time they buy a ticket. And in its infinite wisdom, the Congress put through one of those really bad yearend budget deals written by Speaker Ryan and Patty Murray—so bipartisan problem—which decided to divert $1 billion, $1.2 billion a year, from security fees into the ether—so-called deficit reduction, or some other part of Government.

You know, to get enough TSA agents out there, according to the head of the union, would cost about one-third of the money that is being diverted. It is not right to tax people for something and then take the money away. So I would also recommend that. That does relate to our system and its efficiency. Unfortunately, it is no longer under the jurisdiction of this committee. But I would recommend it to my colleagues, if they are concerned about that.

With that, I look forward to hearing from the witnesses.

Mr. LOBIONDO. Thank you, Mr. DeFazio. Now we are going to turn to our first panel with just one witness, and it is Congressman Randy Hultgren. And as Chairman Shuster said, Randy has been very passionate about this issue, and we welcome hearing from you, Randy.

TESTIMONY OF HON. RANDY HULTGREN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ILLINOIS

Mr. HULTGREN. Chairman LoBiondo, Chairman Shuster, thank you so much for your leadership on this. Ranking Member Larsen, happy birthday. Thank you for letting me be here this morning and to make some remarks.

This is an issue that I have carefully scrutinized over the last 3 years, and it is very important to me, my constituents, and air traffic controllers nationwide. As a former member of this Aviation Subcommittee—and I also represent several hundred air traffic controllers in the 14th District of Illinois, which is the largest num-

ber in Illinois—I have met with many of them, and many others who aspire to become ATCs.

These dedicated students have put in long hours with our Nation's military and reputable and accredited institutions to gain the skills and education to be entrusted with the public safety which is bestowed on our air traffic controllers.

As a weekly commuter from O'Hare to Reagan, I personally am invested in making sure that our skies are safe, as are all of us. We are facing critically low staffing levels of air traffic controllers within our towers. Only 30 percent of trainees at the Chicago TRACON [Terminal Radar Approach Control facilities] reach full certification. Ensuring we have a sufficient number of air traffic controllers in our towers is paramount to secure air travel. Insufficient air traffic controllers means cutting back travel and hurting our economy.

No controllers means no flights, and that is why I was surprised and confused with the FAA when they changed their longstanding hiring procedures without warning in 2014, and launched an unnecessary social science experiment. Students, teachers, and administrators of the Collegiate Training Initiative, or CTI, were also blindsided by the FAA's decision, and told me of its negative effects.

For decades, the CTI training program established by the FAA itself was the recognized and trusted pipeline for highly qualified candidates and military veterans. Most disturbingly, I believe the new hiring standards jeopardize air travel safety by diverting the hiring process around highly qualified air traffic controller candidates and veterans in an attempt to elevate off-the-street candidates. Why the FAA did this remains unclear.

What is clear is that the FAA has been less than transparent and open. A 6-month investigation revealed the adverse effects of these modifications, not only on aspiring air traffic controllers, but on the legitimacy of the hiring process itself. The investigation also revealed that FAA or aviation-related employees may have assisted in giving potential recruits special access to answers on key admissions tests to help them gain jobs with the FAA.

Yet the FAA has refused to respond to audio, video, and witness accounts of misconduct. They conducted a self-audit of the allegation and cleared themselves of any wrongdoing. This is no way to run an agency that is responsible for the well-being of thousands of lives every day.

In regards to the biographical assessment, a new and confusing psychological test, the FAA has repeatedly been opaque and nonresponsive. That is why, since 2014, I have called for a congressional hearing on these issues, and I am so grateful to Chairman LoBiondo for inviting me to speak here today.

We still have more questions than answers. Today we need answers. We need answers about the alleged cheating. Administrator Michael Huerta has stated that he tasked two internal officers within the FAA to conduct thorough investigations of the alleged cheating. Not surprisingly, the internal investigations failed to uncover what was demonstrated clearly on audio recordings. Yet, at the same time, the FAA has never publicly denied the cheating allegations. So, which is it?

Further, this past March the FAA filed a motion in Federal court admitting that the agency is unable to recover missing and corrupted emails at the center of the alleged cheating. Do these emails demonstrate whether or not the FAA knew someone on the inside was helping people cheat? When will Administrator Huerta come forward with the results of the investigation?

Further, we need answers about the discredited biographical assessment psychological test. Who wrote the BioQ and who validated it, if anyone? How did some candidates fail the biographical questionnaire in 2014 and then pass it in 2015? Why were these candidates allowed to sit for the BioQ in an unsecured location without showing proof of ID?

As a result of the FAA's changes, many clearly qualified CTI graduates and military veterans were disqualified by a test they don't understand and cannot improve upon, even after years of education and experience. Many have now aged out of the process, forever losing their chance to join the ranks of air traffic controllers. Where is the relief for these dedicated individuals? Americans deserve an answer.

So where do we go from here? I introduced H.R. 1964, the Air Traffic Controllers Hiring Act of 2015, to reverse the effects of the FAA's policies and restore safety and confidence to air travel.

I would like to thank Mr. Rinaldi on behalf of NATCA for their support and collaboration throughout the years on my bill. I also want to thank Chairman LoBiondo for his co-sponsorship of this legislation.

My bill restores preferred hiring status for CTI graduates, qualified veterans, and experienced controllers, and it provides relief for those aged out of the process. It eliminates the use of the biographical assessment.

My colleague, Congressman Curbelo, has introduced similar legislation this Congress, H.R. 5292, the Air Traffic Controller Hiring Improvement Act. I thank Mr. Curbelo for our shared interest on this issue, and I agree with the vast majority of his legislation. His legislation creates two separate hiring pools, one consisting of veterans and CTI graduates and another of all interested U.S. citizens. The hires from these two pools may not exceed a 10-percent difference.

However, I have concerns that, should the FAA hire from these pools equally, it would disadvantage our CTI graduates and military veterans. I have worked tirelessly with NATCA to instead create a three-pool system of CTI graduates, veterans, and off-the-street hires, which would alleviate this problem and maintain a speedy hiring process.

I welcome continued conversations with NATCA and understand the politics and rationale for their two-pool approach. This isn't just about securing a fair job application process or the status quo, this is about Americans feeling and being safe and secure when flying. This is about transparency and openness from an agency which is accountable to the American people and their Representatives.

I am grateful for all of you for your attention and work on this issue, and I look forward to reaching solutions that provide fairness and safety and security for all.

Thank you, Chairman, and I yield back.

Mr. LOBIONDO. Thank you, Randy, very much. Now we are going to move to the second panel, so we will give the staff a second to set up.

And while they are doing that I will introduce the second panel, which includes Ms. Teri Bristol, chief operating officer of the Air Traffic Organization at FAA, who is accompanied by Mr. Rickie Cannon, deputy assistant administrator for human resource management at the FAA.

We are also joined by Mr. Matt Hampton, who we are pleased to welcome back again, assistant inspector general for aviation audits, United States Department of Transportation.

Mr. Paul Rinaldi, president of the National Air Traffic Controllers Association.

And Mr. Randy Babbitt, senior vice president of labor relations for Southwest Airlines.

We thank you all for being here. And Ms. Bristol, if you are ready, you are now recognized for your statement. Microphone, please.

Ms. BRISTOL. OK, OK.

TESTIMONY OF TERI L. BRISTOL, CHIEF OPERATING OFFICER, AIR TRAFFIC ORGANIZATION, FEDERAL AVIATION ADMINISTRATION, ACCOMPANIED BY RICKIE CANNON, DEPUTY ASSISTANT ADMINISTRATOR FOR HUMAN RESOURCE MANAGEMENT, FEDERAL AVIATION ADMINISTRATION; MATTHEW E. HAMPTON, ASSISTANT INSPECTOR GENERAL FOR AVIATION AUDITS, OFFICE OF INSPECTOR GENERAL, U.S. DEPARTMENT OF TRANSPORTATION; PAUL M. RINALDI, PRESIDENT, NATIONAL AIR TRAFFIC CONTROLLERS ASSOCIATION; AND J. RANDOLPH "RANDY" BABBITT, SENIOR VICE PRESIDENT OF LABOR RELATIONS, SOUTHWEST AIRLINES

Ms. BRISTOL. Chairman, Ranking Member, and members of the subcommittee, thank you for the opportunity to appear before you today to discuss our air traffic controller workforce.

Our controllers are proud professionals who are entrusted with our mission to run the safest, most efficient airspace system in the world. The National Airspace System is an extremely complex operation. We need to continually meet both the ongoing and the emerging needs of the aviation community. Therefore, we must remain committed to hiring, training, and supporting the best controller workforce in the world.

Today I would like to discuss four key areas of the FAA's controller staffing process: hiring, training, placement, and our collaboration with the National Air Traffic Controllers Association, or NATCA.

Let me start by discussing hiring. The agency has created two hiring tracks. One track is focused on reaching candidates with no previous air traffic experience. Candidates must meet the position's minimum qualifications and pass validated occupational tests, which include the biographical assessment and the Air Traffic Selection and Training test. The second track is a specialized air traffic control experience track. It focuses on reaching candidates with operational experience, such as military veterans with at least 1 year of air traffic control experience.

With these changes in our hiring process, the ATO [Air Traffic Organization] is on track not only to meet, but to exceed the fiscal year 2016 hiring goal. This hiring process better addresses the agency's current hiring needs. It also ensures equitable treatment in the broadest pool of qualified candidates. We will continue to monitor and refine the process as necessary to ensure the best possible individuals are selected to maintain the safety and efficiency of the NAS [National Airspace System].

Our robust training program at the FAA Academy and in our facilities provides a strong foundation for our new controllers. We have made continual improvements in our training curriculum in the last 5 years. The FAA Administrator recently convened an Aviation Rulemaking Advisory Committee with 11 experts from industry and the academic community. They will work with the FAA to evaluate innovative approaches for future hiring and training of air traffic controllers.

As with our hiring processes, the FAA continually strives to improve the training we provide our controllers. The Air Traffic Organization supports the air traffic controller basic qualification training working group under the Aviation Rulemaking Advisory Committee structure. We are also establishing a Center of Excellence for Technical Training and Human Performance. This will enable us to explore opportunities for cost share research and grants that could be used to help shape the future of air traffic controller training.

Along with hiring and training, we are also focused on placing new controllers in the right facilities. The FAA uses a priority placement tool to forecast and prioritize controller staffing requirements. It captures the latest priority ranking of all 315 facilities and it is sorted in order of greatest staffing need. We place trainees where we need them.

Collaboration is paramount to our success. The best way to meet staffing challenges is to collaborate with our labor partners. This means building relationships, establishing trust, and working together to make better decisions. Our collaboration with NATCA supports our ability to place controllers where we need them. We are jointly defining our priorities and working to improve the process by which controllers request reassignments to other facilities. And, in addition, we have established a collaborative resource working group with NATCA that is reviewing the staffing models that we have in place.

In conclusion, I believe that the FAA has a solid and comprehensive plan in place to address controller hiring, training, placement, and we collaborate with NATCA to ensure success. We have made tremendous progress in recent months, and I believe we are on the right track. While we are always looking for ways to improve, the air traffic system in the United States is extremely safe and efficient, and it remains the envy of the world.

We look forward to working with our Government and industry partners to consider even better ways to meet air traffic needs of the future. This concludes my statement, and I will be happy to answer your questions. Thank you.

Mr. LoBiondo. Thank you, Ms. Bristol.

And now we will turn to Mr. Hampton for your statement. Thank you for being here.

Mr. HAMPTON. Chairman Shuster, Chairman LoBiondo, and Ranking Member Larsen, thank you for inviting me to testify today on the key challenges facing FAA's air traffic controller workforce. My remarks today are based on a report we published earlier this year, and our ongoing work for the committee.

Today the total number of fully certified controllers stands at about 10,600. This is at the very bottom edge of FAA's overall controller staffing range at the national level. Furthermore, a look at individual facilities highlights a number of pressing challenges that demand FAA's urgent attention.

Our analysis of FAA's most critical air traffic control facilities, the most complex and busiest ones in the National Airspace System, shows that over half of the 23 facilities have certified controller staffing levels well below minimal requirements. These include New York, Atlanta, Dallas, and Chicago TRACONs. These facilities are also stressed by large percentages of controllers in training and controllers eligible to retire.

We found that these problems are the result of several factors, including the lack of precision with FAA's model for estimating staffing requirements for facilities that manage high-altitude operations; not fully utilizing systems to maximize controller scheduling; a lack of accurate and complete data on planned retirements and training times; and poor communication between headquarters and the field.

In terms of hiring, FAA introduced several changes to its controller hiring process over 2 years ago, in February 2014, based on internal and external reviews. These changes included standardizing the minimum qualifications for all applicants; centralizing the processes in the Office of Human Resources; and introducing a new screening mechanism known as the biographical assessment.

However, the agency lacked an effective implementation strategy for the new policies. And as the committee is well aware, stakeholders have expressed concerns that FAA implemented the new process only a little over a month after announcing the changes, even though the changes were significant.

In addition, FAA did not establish an effective tracking system to monitor candidates as they move through the pipeline. It is too soon to assess the overall impact of FAA's new hiring process and whether it will lead to successful outcomes in getting new controllers certified faster at facilities, given the length of time it takes to train new controllers. Our work shows that FAA continues to face challenges in meeting its hiring goals.

Further, the agency lacks metrics on the time it should take an applicant to advance through the hiring process. In addition, many of the new hires selected through the new process have not yet completed required onboarding processes, contributing to delays. We expect to complete our report later this year with our recommendations for corrective action.

There are also several issues that will materially affect the controller workforce in the near term that require attention.

First, implementing scheduling tools to help facility managers better manage resources, particularly at large, complex facilities.

We recommended and FAA agreed to adopt a tool that is widely used in other countries. This will help significantly.

Second, accelerating efforts to develop procedures, training, and tools to help controllers safely manage unmanned aircraft systems in the same airspace as other aircraft. FAA is taking steps to address our recommendations.

Finally, assessing the workload and productivity impact of new NextGen technologies like the $1.6 billion DataComm effort that will allow controllers to communicate with pilots via text messaging. This is important because studies suggest that this technology could allow controllers to handle 30 percent more aircraft.

In summary, controller training, hiring, and staffing issues are longstanding concerns and require sustained FAA management attention and action.

Mr. Chairman, this concludes my statement, and I would be happy to answer any questions you or the members of the subcommittee may have. Thank you.

Mr. LoBIONDO. Thank you very much, Mr. Hampton.

Mr. Rinaldi, you are recognized.

Mr. RINALDI. Good morning, Chairman LoBiondo. Happy birthday, Ranking Member Larsen. Chairman Shuster, Ranking Member DeFazio, and members of the Aviation Subcommittee, thank you for the opportunity to testify about one of the most critical problems facing our National Airspace System.

We all have a stake in our National Airspace System. It's an economic engine contributing $1.5 trillion annually to our gross domestic product and providing over 12 million American jobs. Currently, we run the largest, safest, most efficient, most complex, most diverse airspace system in the world. Our system is unique, unequaled, and unrivaled by any other country. This is due in large part to the impeccable work of the men and women I represent who run this system.

The United States airspace system is considered the gold standard in the world aviation community. And yet the air traffic controller staffing crisis puts this status at risk.

In 2015 this committee held a roundtable meeting to discuss air traffic control staffing. That event served as the catalyst between NATCA and the FAA to collaborate in developing solutions on many aspects of this staffing crisis. But the changes we have made are small steps in the right direction. Air traffic control staffing has been a concern for many years, but it has now reached a crisis level.

We are at a 27-year low of fully certified air traffic controllers. Controller staffing has fallen nearly 10 percent since 2011. And the FAA has missed its hiring goal in each of the last 7 years. With one-third of the current workforce eligible to retire, the bureaucratic structure is failing us.

Stop-and-go funding has contributed to staffing problems. In 2013, due to sequestration, the FAA froze hiring, shut down the FAA Academy, and since then it has not been able to catch up. After sequestration of 2013 cuts, the FAA expunged approximately 3,000 well-qualified candidates in order to institute its biographical questionnaire, or what we call BQ, which is fundamentally flawed.

NATCA worked with the FAA to validate the second BQ with a large group of controller workforce before it used it in its 2015 vacancy announcement. Then, for some reason, in July of 2015 the FAA HR department terminated the Retired Military Controller program, which we know as RMC. Piling on, FAA HR decided that the Air Traffic Selection and Training test, or ATSAT, could not be used again.

NATCA has worked hard and encouraged our members to help validate a new exam. This exam is a full-day test. And with our controller staffing crisis, this has not been an easy task. The validation is not complete yet, and the FAA will not post an all-sources vacancy announcement until it is. These bureaucratic, self-inflicted wounds have significantly delayed the hiring of new employees.

Since the roundtable discussion in December, NATCA and the FAA have collaborated to make some progress. But the job is far from complete. NATCA believes that the FAA must take a holistic, collaborative approach to resolve our staffing issues. We must be very careful not to do anything that would make the current situation worse, or delay hiring or slow training or reduce these staffing targets. NATCA doesn't just come with a concern; we believe that everybody in this room can work together and get a solution.

Congress needs to pass an FAA reauthorization bill that provides the necessary stable, predictable funding to operate a fully staffed National Airspace System. Sequestration must be fixed, or the FAA should be exempted. Otherwise, we will see another hiring freeze, reducing staffing, see furloughs, delays, and reduced capacity.

NATCA supports the passage of H.R. 5292, which would streamline the hiring process by ensuring a path of experienced controllers will be hired quickly with fewer bureaucratic hurdles, and allow military veterans and CTI graduates to be hired without being subject to the bio data questionnaire—biographical questionnaire.

The FAA needs to hire as many experienced controllers that are qualified. In addition, it should be hiring 2,000 inexperienced employees per year to maximize the throughput through the FAA Academy. Our controllers are dedicated, highly skilled professionals, the best in the world, who are forced to shoulder the burden of chronically understaffed facilities. They are doing an amazing job every day under this staffing crisis, but it is time for some relief.

No one wants interruptions in service, delays, decreased capacity, least of all our air traffic controllers.

I want to thank you for calling this hearing and continuing to keep our staffing crisis front and center. We must remain vigilant and continue to move the ball forward. Otherwise, we will be hard pressed to maintain the current capacity, let alone expand and modernize our system.

I thank you for the opportunity to testify today, and I look forward to answering any of your questions.

Mr. LoBiondo. Thank you, Mr. Rinaldi.

Now we will turn to Mr. Babbitt for your statement. You are recognized.

Mr. Babbitt. Well, thank you. And Chairman LoBiondo, Chairman Shuster, Mr. Larsen, and Mr. DeFazio, members of the Avia-

tion Subcommittee, thank you for the opportunity to appear before the subcommittee today to discuss the issues that are related to air traffic controller hiring, staffing, and training.

I come before this body today actually wearing a number of hats that I have collected over the years, almost five decades in aviation. Those hats are current airline executive, a former Administrator of the FAA, a former president of an airline union, and a former commercial airline pilot. And because of my former lives, if you would, in aviation, I think I offer a unique perspective on a number of these issues.

But first and foremost, I am here today as a senior executive from Southwest Airlines. Southwest is, as you may know, the Nation's largest domestic carrier, in terms of carrying passengers in the country: roughly 150 million passengers, customers, annually, with a combination of low fares, no annoying fees, and friendly customer service that is developed by outstanding people and a safe and reliable operation.

We operate at Southwest a fleet of over 700 Boeing 737 aircraft operating nearly 4,000 flights a day to over 87 U.S. destinations and 11 international destinations. And every single one of those flights is in controlled airspace. So, to say the least, we are dependent upon and highly appreciative of a robust, highly skilled air traffic controller workforce.

In my prior roles as the FAA Administrator and as a commercial airline pilot, I was proud to interact daily with the professional men and women of the U.S. air traffic controller workforce. Their dedication to aviation safety, operational efficiency, and professional integrity is truly remarkable. And it leads to the fact that we all must have confidence in this ATC system. And during my 50 years of flying, I never have lost that confidence, and it is in large measure due to the skill and professionalism of the Nation's air traffic controllers.

Now, with that said, my confidence in the overall ATC system today is a little bit shaky. I have no concern—let me underscore, no concern—from a safety perspective. The safety of the ATC system is never in doubt. But I do question the reliability of the overall ATC system from an operational and customer service perspective.

The U.S. aviation system is both labor and capital intensive. And like other modes of transportation and other sectors in the aviation industry, prolonged underfunding of staffing needs and system improvements will eventually take its toll, as it has with the DC Metro and the TSA's security apparatus, as two examples.

All of this produces concern about whether the current ATC system can be sustained in its present form. Eventually, without major structural changes and greater funding and staffing certainty, serious inconvenience to aircraft operators and ultimately to our customers and your constituents will result.

Specifically, in delivering to the beneficial NextGen technologies more quickly, and in order to avoid the crisis confronting TSA and DC Metro, the Federal Government needs to do more to address the supply of certified controllers, as well as providing the required training to fully utilize the NextGen capabilities that are available today. Principally, performance-based navigation and other capa-

bilities that are expected to be rolled out in the near future. For example, data communications in the en route environment.

Aviation traffic is forecast to grow steadily. And certainly, having our certified controller staffing levels continue to decline with no relief in sight is not going to be helpful. This seems to be particularly problematic at critical ATC facilities which require the most experienced controllers to manage the complex operations skillfully and efficiently. And as the Nation's largest domestic airline, it concerns us and it challenges our promise to our customers that we will provide friendly, reliable, and on-time service.

Due to our concerns with the future capabilities of the ATC system and the current pace of progress with regard to the NextGen program, Southwest has joined most of the airline community and several aviation unions, including NATCA, to support significant structural, financing, procurement reforms, all contained within the House version of the FAA Reauthorization Act.

The U.S. ATC system is a 24/7 operation. And, as Paul noted earlier, it contributes $1.5 trillion to the Nation's gross domestic product, and generates more than 12 million jobs. But we believe that such an important economic engine will struggle to meet future demand under the current system challenged by the fits and starts of the annual appropriations process and the threat of sequestration or Government shutdowns. So we applaud the committee in looking for these important issues to be resolved, and at least recognizing that the status quo is not acceptable.

So, hopefully, a bipartisan solution to these issues can be achieved sooner, rather than later.

So, on behalf of Southwest Airlines, I thank you for this opportunity to testify, and I will be happy to answer any questions later. Thank you.

Mr. LoBIONDO. Mr. Babbitt, thank you very much. We will now turn to Mr. Shuster for questions.

Mr. SHUSTER. Thank you, Chairman LoBiondo. And let me start off by saying, first of all, I know, Mr. Babbitt, in your long distinguished career you were on the 1993 commission that recommended the type of ATC reform that we have proposed here and passed out of committee. So I appreciate you being here today, your long service, and your wisdom in trying to figure out how we change this system and right this ship so we can have an even safer, more efficient air traffic control system and airspace in America.

Mr. BABBITT. Thank you.

Mr. SHUSTER. So far this morning we have learned that the FAA has missed its own controller hiring targets in each of the last 6 years, and that the percentage of controller trainees being used are at near record levels in some of our busiest air traffic controlled facilities.

In an effort to right this ship, Ms. Bristol, you said you have changed—revamped your controller hiring process. In fact, twice in less than 3 years this has happened. I, for one, am very skeptical and doubtful that, with a record of 6 years not being able to meet—I think the latest numbers I got is you are behind in hiring the type of people that we need to get in the facilities.

So I would like the witnesses—at least Mr. Hampton, Mr. Rinaldi, and Mr. Babbitt, if you would, give the FAA, on a scale of an A to an F, their performance in hiring, placing, and training over the last 5 years.

Mr. Hampton, are you willing to grade them?

Mr. HAMPTON. That is a dangerous thing, to ask an IG to give a grade. But anyway, on this one, given the work we have done over the years on FAA's critical facilities, we would have to give them an incomplete. We think it is a longstanding issue that needs continued management attention. That is a stinging grade from an IG; I am sorry about that.

Mr. SHUSTER. What did you say, the last thing?

Mr. HAMPTON. It is an incomplete. It is a stinging grade.

Mr. SHUSTER. It sounds like you are a politician.

[Laughter.]

Mr. SHUSTER. I would have expected you to, you know, come down hard one way or the other.

Mr. Rinaldi?

Mr. RINALDI. I am going to go with the incomplete, also, if that is appropriate. You said A through F, but I will go with the incomplete, because, you know, the self-inflicted bureaucratic processes that they put in place, I still can't consciously figure out why they would decide to do such a thing. But at the end of the day they are trying to make changes.

And this year we are—since the roundtable discussion, we are seeing some changes. But keep in mind—not that I would grade this great body—stop-and-go funding does impact it.

Mr. SHUSTER. I would do that, and I would—being the politician here asking the questions, I would give Congress a D-minus on what we have done over the last 20 or 30 years on the funding level, the different pieces of legislation that we have passed, that we have not—with our oversight of the FAA, but—so I would give us a D-minus—maybe a D, since it is Larsen's birthday today, I will be a little bit easier.

Mr. Babbitt? Now you are in the trickiest position of all, because you got to deal with the FAA every single day. So——

Mr. BABBITT. So I am going to default to the fail/pass voting method, and give them a passing grade. But as a good teacher, mentor might try to do, I say that with caveats. I think it is unfair sometimes to, in this situation, ask someone to perform without the adequate tools they need for the performance of what we have asked them to do.

And again, the funding, the changing of any number of external circumstances for them, being forced to furlough, all of that is detracted from their grade, but not their fault. And so I guess I will default to the point of stabilizing the funding, having a clear path, and having the ability to put your hand up occasionally and say, "Look, we need more money to do this. This is a critical piece, and we can't do it with the funding and the budgets you have set for us." And I think all of those would help them improve that grade and, you know, get into a good college.

Mr. SHUSTER. OK, great. Ms. Bristol, I won't ask you to grade yourself, but again, why should we assume, after 6 years of failure, after the last 2, 3 years—changing the system twice, you know,

what—tell us the metric we need to look for in the next couple of months, several months, to prove that you are moving forward in a positive way.

Ms. BRISTOL. OK, thank you very much. So I think that the first metric to make is to make our hiring targets each year. We are on track to do that this year. We will probably exceed our goal, upwards——

Mr. SHUSTER. When will that—when will we see that?

Ms. BRISTOL. We have already met the goal, and we expect to exceed it by any number of applicants, probably in the high 1600s, for this fiscal year.

And I think that we have had some challenges over the years, and I think sequestration played a part in that, but I know that there have been a number of changes. And I think we are making progress. I think the changes that we have put into place, both process and tools, I think will continue to bear positive results as we move forward now and into the future.

My organization, the Air Traffic Organization, is working very closely with other parts of the FAA, including my colleague, Mr. Rickie Cannon, who is our deputy assistant administrator for human resource management. Our folks are working very closely together. And hiring and training is one of our highest priorities in the agency.

We are also working very closely with my colleague, Paul Rinaldi, and his team. We have put in place a number of changes in the way that we are working together on how we move people throughout the system, ensuring that we address the highest need facilities first and foremost, and really focus on putting our new hires in the lower level facilities.

Mr. SHUSTER. OK. Well, know we are watching closely, and know that this problem has to be solved now, because the real damaging effects come down the road if it is not addressed——

Ms. BRISTOL. Right.

Mr. SHUSTER [continuing]. Today. So again, thank you for being here. Thank you all for being here.

Ms. BRISTOL. Thank you.

Mr. LOBIONDO. Mr. DeFazio?

Mr. DEFAZIO. Thanks. I will move on quickly to the controller issue, but I just want to correct the record. Mr. Babbitt, you can help with this. You served on the 1993 commission, that is correct?

Mr. BABBITT. Sorry?

Mr. DEFAZIO. The 1993 commission, you served on it, looking at the—changing the ATO governance.

Mr. BABBITT. I believe that was the 1992 commission.

Mr. DEFAZIO. Yes, yes, you did, OK. Was the conclusion to go to a private corporation, or was the conclusion to establish an independent Government corporation?

Mr. BABBITT. I will plead a fair amount of distance between 1992 and——

Mr. DEFAZIO. OK. Well, I have it here, and it actually—although Ms. Robyn and others keep saying, "We were there, this is what they wanted to do," it actually came to the conclusion it should be an independent Government corporation removed from the Federal

budget process. Not a private, not-for-profit corporation. Just wanted to correct the record on that——

Mr. BABBITT. All the——

Mr. DEFAZIO. Let's move on to air traffic controllers, thank you.

Ms. Bristol, why was this BA [biographical assessment] created? My understanding is the ATSAT had been compromised, and that was part of the rationale for the BA.

Ms. BRISTOL. You want to——

Mr. DEFAZIO. Or Mr. Cannon?

Mr. CANNON. Congressman DeFazio, I will attempt to answer your question.

The biographical assessment was created to provide some initial screening as applicants matriculated through the process. When we decided to change the process——

Mr. DEFAZIO. It is not because the ATSAT had been compromised?

Mr. CANNON. Well, we can talk about the ATSAT a little later, but let me try to answer——

Mr. DEFAZIO. Yes, OK. Well, here—all right, let me just get to my point.

Mr. CANNON. OK.

Mr. DEFAZIO. I met a person at the last NATCA event here on the Hill who went through the CTI, is working as a military controller, but can't come aboard with the FAA because she can't pass the BA and the BA seems to be designed to determine whether you have the temperament to be a controller or not. So if someone has gone to the school, successfully completed the school, and is working without reservation, without problems, as a military air traffic controller, is that test valid?

Mr. CANNON. Yes, sir. The test is valid. Both versions of the biographical assessment——

Mr. DEFAZIO. I thought that you had to go out—you hadn't validated the first one with the workforce, and then you redid the BA and it has been somewhat validated, but there are still questions in my mind about that validation.

Mr. CANNON. No, sir.

Mr. DEFAZIO. I mean, well, why would you then want to screen out a person who is fully qualified, working as an air traffic controller, trained? Why would we want to screen her out with a biographical assessment?

Mr. CANNON. Well, I don't believe we want to screen——

Mr. DEFAZIO. Yes, but I mean——

Mr. CANNON [continuing]. Any particular individual.

Mr. DEFAZIO [continuing]. There seems to be a problem. I mean what is the goal? I mean if the goal is to get people—you know, because it becomes more expensive as you go through the process. You have to apply the ATSAT. My understanding is it costs you $139 per ATSAT, compared to $45 for the SAT.

So I am really kind of wondering about this whole process, the BA, the ATSAT, and whether we need two processes, or whether we should have one simplified process, which is, "Do you have the skills necessary, yes or no," and we are going to give you an ATSAT, we are going to keep it secure, so it doesn't get com-

promised, in terms of answers. Maybe we can get Princeton to do it for us for $45 a person, as opposed to $139.

I mean this whole process is aggravating. I mean I think we are screening out, potentially—at least one, and I am sure there is more than one—qualified people from becoming controllers. I mean you are totally confident in this process as the best way to go? BA and then the ATSAT?

Mr. CANNON. Yes, sir, I am. And I think it is producing results. And Ms. Bristol just said, we will exceed our hiring target this year.

Mr. DEFAZIO. OK, well——

Mr. CANNON. And we have a good start——

Mr. DEFAZIO. I have a question for Ms. Bristol. Why is the target less than 2,000? The academy has the capability of processing 2,000. Why—and we have a severe shortage in many of our critical centers, and it is going to take people 3 years to get there. Why are we hiring less than 2,000?

Ms. BRISTOL. Right. So, as we stepped from 2015 to 2016, we transitioned to a new controller training contract. We wanted to ensure that we didn't have more trainees in the field than could go right into training. In other words, we track where individuals are and how many training resources are available to move those people through the——

Mr. DEFAZIO. So you are saying that your target is because of restrictions in terms of supervision of entry-level controllers.

Ms. BRISTOL. It was one consideration. As we move into next year, we are looking to bump that, and max out the academy, as well, in addition to bringing on previous-experience controllers over and above that number.

Mr. DEFAZIO. Right. And the FAA has a target minimum headcount, which is set by some sort of mathematical algorithm by the finance people. Doesn't sound ideal to me, because the green eyeshades probably have something else in mind. And then we have the CRWG CPC working group, which came up with more robust levels.

Ms. BRISTOL. So——

Mr. DEFAZIO. So if we had a, actually, applied working group that drilled down into each center and came up with higher numbers, why do we even bother with the mathematical algorithm that popped out of the finance department with the target minimum headcount?

Ms. BRISTOL. That would be the controller workforce plan. It is put out every year. It is a 10-year document. It is strategic, it is very high level.

The ATO worked with NATCA, and that CRWG, which is a controller resource working group, it was ATO and NATCA——

Mr. DEFAZIO. Right. So it was actually practitioners, you know, working with the bureaucrats to come up with real numbers, as opposed to numbers that were created by a mathematical algorithm.

Ms. BRISTOL. It doesn't take into account everyone that is in a facility. What it does is average out the certified professional controllers, and we set targets on how we are going to staff to that level and move people through the system to—from our more

healthy to less healthy facilities. But we have to account for the developmentals that are also in the building.

So, in working together, I am very confident that is how we have a laser approach on who we are putting into which facilities.

Mr. DEFAZIO. OK. Mr. Rinaldi, can you comment on this BA process? I mean when they did the control, how many—do you know how many controllers took the test and what their pass and fail rate was with the BA, actually working controllers?

Mr. RINALDI. Sure. I thank you, sir. When they did the first one in 2014, 28,511 applicants took the BQ; 2,407 passed. So, you know, roughly 10 percent passed.

Then we found out later on that—and I am not a scientist, but all you have to do is read the first page about a biographical assessment. It says that the test must be validated with a large group of incumbents. And being the only person who represents a large group of air traffic controllers, it was never validated with us. So we asked the FAA, "If you are going to do this again, you probably need to validate this test," and they did. We did it together, and validated it, and roughly 18,000 took it and roughly 5,000 passed the BQ, about 28 percent. Again, I don't know much about the science, but I do know there are a lot of qualified people out there that are actually doing the job today that have not passed it.

Mr. DEFAZIO. OK, thank you. Thank you, Mr. Chairman. I am over my time.

Mr. LoBIONDO. Just very briefly, I want to strongly associate with Mr. DeFazio's comments on the revised hiring process.

And Ms. Bristol and Mr. Cannon, do you realize when we are talking about a military air traffic controller that can't be qualified for civilian air traffic control, and you are telling this committee and the rest of the world that you are justifying that your process is valid, and trying to make all of us understand how that is OK, how absurd and ridiculous it is to us, that somehow you don't kind of regroup and say, "Look, maybe we have got to relook at this, and if we have got military air traffic controllers that have gone through CTI, maybe we have done something wrong here"? So this—you are hurting yourself by doing this.

Very briefly, we are going to go to Mr. Rokita, but Mr. Shuster asked to make a brief comment.

Mr. SHUSTER. I also want to strongly associate myself with Mr. DeFazio, what he said. He has hit the nail right on the head. So I appreciate that.

But I also want to make sure that the record reflects that in my ATC reform it accomplishes everything that we want—that he wants, I think, too—except for it is not in a failed—the history of America has been failed Government corporations. And it takes it out of that. And we have seen around the world that this system will work. So I just want to make sure that stands in the record, too. Thank you.

Mr. LoBIONDO. Mr. Rokita, you are recognized.

Mr. ROKITA. I thank the chairman. And Ms. Bristol, so the military training program doesn't suffice? Military controllers can't pass your processes and cannot work in the civil——

Mr. CANNON. No, sir. We are hiring any number of former military controllers. In fact, our most recent track 2 announcement, we

did an all-sources announcement open and continuous back last December. Air Traffic Organization recently hired 260 and they are all veterans, all former military.

Mr. ROKITA. All right.

Mr. CANNON. Controllers.

Mr. ROKITA. Well, why can't—why do they fail?

Mr. CANNON. Sir, the biographical assessment, like any test, is basically—it predicts success at the academy, and CPC at first facility. It is not flawless, like all other tests. so——

Mr. ROKITA. So you agree to correct the flaws?

Mr. CANNON. Well, what we have done is we have done—our consultants have done the validation work to ensure that the test is valid. That is legally an obligation we have as an agency, that any selection procedure or tool we use must be validated under the uniform guidelines——

Mr. ROKITA. Mr. Rinaldi—thank you—do you have a comment on this?

Mr. RINALDI. Just—Mr. Cannon said something about an open and continuous bid, and that is—that was closed in March. So if it is open and continuous, it would be open all the time, I would think. So it is not. It is actually closed. They have not issued another open continuous bid for experienced controllers or direct hires out of the military.

The individual that Mr. DeFazio was speaking about is a actual CTI graduate, highly recommended from the school, and is working in one of our Federal contract towers, actually performing air traffic control, and is not able to pass the BQ, either.

Mr. ROKITA. Roger, thank you.

Continuing on with the CTI schools, Mr. Cannon, can you explain why the FAA decided to use a BA, bachelor of arts, for general public candidates, including graduates of CTI schools? And second, can you explain why the FAA modified the BA so quickly?

Mr. CANNON. Modified the BA?

Mr. ROKITA. Yes.

Mr. CANNON. And why we use it? Again, we created and used the biographical assessment for the 2014 announcement because it is a good screen, and it is validated for success at the academy and success at CPC at first facility.

We modified the biographical assessment in 2015 because between the 2014 and the 2015 announcement we had enough time to do a job task analysis to take a deeper look at the occupation to see if it had changed.

Mr. ROKITA. Why did you use the same contractor for the biographical analysis?

Mr. CANNON. Why would we use the same contractor?

Mr. ROKITA. Yes, when the—that contractor failed the first time.

Mr. CANNON. Well, I don't——

Mr. ROKITA. Failed to do the job correctly the first time.

Mr. CANNON. Well, the contractor did not fail to do the job correctly the first time, sir.

Mr. ROKITA. Mr. Rinaldi, is that your opinion?

Mr. RINALDI. That is certainly not my opinion. The test was never validated with air traffic controllers. So it wasn't valid, and that is why it had such a horrible success rate.

More importantly, they did have time. They had 3,000 qualified CTI students on a list that they basically expunged. They could have hired them for that year and given us the opportunity to validate the test.

My executive vice president brought this up to who was the head of HR who is no longer there at this time, and they basically put the hand up and said, "We know exactly what we are doing, this science doesn't lie." It did lie. It was flawed.

Mr. ROKITA. Thank you very much for that testimony.

Ms. Bristol, Purdue University in my district is one of the 36 schools approved to participate in the Collegiate Training Initiative. When the hiring process was changed, CTI students no longer received a bonus on their application, whatever that looks like, for completing the program.

Why do you think that is right, that is the right decision, not to give priority to these students who were specifically trained to do air traffic control at what—you know, unless you are a hard IU [Indiana University] fan, wouldn't agree that Purdue is not a good place to get that kind of work done, that kind of training done?

Mr. CANNON. Sir, CTI students never got a bonus. What they had was a separate announcement in which they were placed in the inventory. The only thing we have done, if you really look at it closely, is we have taken them, and they are just competing in the pool with the rest of the U.S. citizens——

Mr. ROKITA. Well, there is a——

Mr. CANNON [continuing]. And they are doing very, very well.

Mr. ROKITA. There is a shortage, sir. Why not—you have these people trained already. Why not get them to the front of the line and get them in a tower, or get them in a TRACON?

Mr. CANNON. Sir——

Mr. ROKITA. I don't get it.

Mr. CANNON. Sir, they are actually doing better. If you can indulge me just for a second, they are actually doing better than they ever have. Let me give you just a few examples.

In fiscal year 2008 the FAA hired 2,196 controllers; 823 of those were CTI students. These numbers, by the way, are reported in the controller workforce plan. That is 37 percent. In fiscal year 2009 FAA hired 1,731 controllers, and only 335 were CTI students, 19 percent.

And then, in fiscal year 2010 and 2011, in the independent panel review report that was commissioned by Mr. Babbitt, and when he was the FAA Administrator, the FAA was roundly criticized because in fiscal year 2010 and 2011 out of 1,000 controller selections only 33 percent were CTI students.

Now, in fiscal year 2014, 47 percent of the 1,593 people selected were CTI grads or had some CTI education. And fiscal year 2015 that number ballooned to 50 percent. There were 1,452 out of 2,895 people who referred. So that is a 50-percent growth doing nothing at all but putting this new process in place.

Mr. ROKITA. I thank the chairman for his time. I yield back. Apparently we don't need to have this hearing, Chairman.

Mr. LoBIONDO. Mr. Lipinski.

Mr. LIPINSKI. Thank you, Mr. Chairman. Been a lot of discussion about whether or not there are shortages or not or—I think a cou-

ple things I want to make sure we focus on. Thirteen of twenty-three critical facilities were found by the IG to be below the facility's planning staffing range. And two of these facilities are Chicago TRACON and Chicago O'Hare Tower, which are below the minimum level for CPCs. So we are talking about some of the busiest terminal airspace in the entire world.

Now, in the Chicago TRACON/Chicago Center O'Hare Tower, the percentage of retirement-eligible controllers ranged from 43 to 50 percent. So, clearly, we see problems right now, and certainly issues in the future with having shortages. I have great concerns about what has been done with the changes to the system for hiring controllers. I know that I have one of the best CTI schools in the country in my district, Lewis University in Romeoville. Professor Bill Parrot is here today. We talked about this yesterday.

I want to point out that there is a 2013 report by the FAA Civil Aerospace Medical Institute that said, "Based on training performance, a preference for CTI graduates over general applications seems warranted." And another in 2014 that said, "Overall, larger proportions of CTI hires achieved professional controller status than the general public hires."

Now, I know that in—you know, hiring procedures were changed in 2013. There was an alarming increase in the number of academy failures in 2015. So it just seems common sense to me, as others have noted, that it is common sense to hire from CTI graduates and veterans first.

So, Ms. Bristol, can you tell me how veterans and CTI graduates' performance and training compares with those from the general population?

Ms. BRISTOL. Congressman, I don't have those statistics with me. I would have to provide those to you.

Mr. LIPINSKI. OK. I would very much like to see that, because it seems like something we would want to know, especially when we see this increase in academy failures. And we want to know who is performing best, and really is succeeding in the process.

Now, I want to associate myself with Mr. Hultgren's comments when he spoke before this panel. We need to figure this out. We cannot have—I understand that because of the current and coming potential shortages of air traffic controllers we don't want to slow the system down. But we have to get at how we do this best to keep our aviation safe. We need to get at a lot of those things Mr. Hultgren talked about. We need to get under—back—we need to understand the alleged cheating that went on to know what happened there.

I think Mr. Hultgren's bill that I worked with him on, H.R. 1964, is the best way to go about doing this. I am also a cosponsor of Mr. Curbelo's and Mr. Maloney's bill, although one of the reasons Mr. Hultgren laid out there I think his bill is—I prefer that bill. But we need to do a much better job here.

One question I want to ask, and there is probably not any information on it. I am not sure if it is directly related to what we are talking about here. But, Ms. Bristol, around midnight on June 4th an incoming commercial flight was unable to reach air traffic controllers in Chicago Midway Tower. The flight diverted to Mil-

waukee, and two other incoming flights were directed to enter holding patterns until communications were reestablished.

Now, during this time the crews remained in contact with TRACON in Elgin, so it wasn't a—you know, any direct safety issue. But I wanted to know if the FAA has determined the cause of this communications difficulty.

Ms. BRISTOL. Yes. Thank you, Congressman. We are investigating that matter. We expect to wrap up that investigation in the next 2 to 3 days. And we will certainly circle back with your office to share that information.

Mr. LIPINSKI. It is, obviously, very, very critical that we get to the bottom of this incident and also—but getting back, we need to make sure—I want to find the answer to the question about how the CTI and veterans perform. And with that I will yield back.

Mr. LOBIONDO. Thank you, Mr. Lipinski.

Mr. Mica?

Mr. MICA. Thank you, Mr. Chairman, and thank you for letting me go ahead. I do have another obligation shortly.

We have been talking about training of air traffic controllers for as long as I have been here, and we set up a system that is flawed.

Ms. Bristol, how many people do we have that have applied to be air traffic controllers? Don't we have a waiting list or something? Do you——

Ms. BRISTOL. Do you want to——

Mr. MICA. Can you answer it, Mr. Cannon?

Mr. CANNON. Yes.

Mr. MICA. How many?

Mr. CANNON. How many people do we have——

Mr. MICA. Well, we had a list to apply to get in. How many do we have on the list currently? Or—I know we had thousands at one point. Do we still have thousands?

Mr. CANNON. Yes, right——

Mr. MICA. We have thousands.

Mr. CANNON. Yes. Right now, sir, we——

Mr. MICA. What is the capacity to run through the school at Oklahoma?

Ms. BRISTOL. 2,000.

Mr. MICA. How many?

Ms. BRISTOL. 2,000.

Mr. MICA. Is that—and during what period of time?

Ms. BRISTOL. That would be during the fiscal year we——

Mr. MICA. One year you can do 2,000.

Ms. BRISTOL. Plus we can also put experienced controllers directly into——

Mr. MICA. And your——

Ms. BRISTOL [continuing]. The field to train them——

Mr. MICA. And your washout rate, I understand, is still pretty high from those that come out of Oklahoma. Is that correct?

Ms. BRISTOL. It——

Mr. MICA. Who knows the washout rate?

Ms. BRISTOL. In the en route option the failure rate at the academy is around 30 percent.

Mr. MICA. About 30 percent. So one-third waste. We have dozens of colleges, university—I don't have it in my district—Embry-Rid-

dle, who can teach these courses. Why can't FAA set the standards for colleges and universities?

Right now aren't we paying—we were paying them money to go to this school, and this big mechanism and a 30-percent washout rate. Are we still paying them to go to school?

Ms. BRISTOL. Yes, sir, we——

Mr. MICA. Yes, OK. All this money we are spending and we have the washout rate, and we can't fill the positions. We have plenty of schools that can teach these people if the FAA can get out of that business. And there is a role for Oklahoma City.

When they come out of the colleges or the military air traffic control or something, they should be tested, they should be brought up to date on the very latest protocols, and then they should be dispersed to the vacancies, correct?

Ms. BRISTOL. Yes.

Mr. MICA. So we need to get FAA out of that business. They are not doing it right.

Ms. BRISTOL. Right. We have embarked——

Mr. MICA. If the——

Ms. BRISTOL [continuing]. Upon——

Mr. MICA. If the colleges and universities and schools that can do this, they will pay for it themselves. They come out—see someone in the past behind Mr. Rinaldi that told me that excellent performance of those that come out of the schools with a full education. So if FAA can do its job in setting the protocols, the standards, the courses, and the certifications and get the hell out of the business, don't you think we can do a better job?

Ms. BRISTOL. Sir, we have started that process. We——

Mr. MICA. Where is the——

Ms. BRISTOL. We have started a controller working group——

Mr. MICA. Let's totally get out of it. It is nice, the legislation that is pending, but it doesn't solve the problem. The problem is basic, that the structure that we have is fundamentally flawed, OK?

So we need to get out, Members. Listen to this, Members. Introduce legislation that changes the role of Oklahoma City and directs FAA to set the standards, the certification, and you can do checks on these people. There is a very small washout rate. They are better performers. They are better equipped in many ways to get on the job and fill those gaps.

Anybody disagree with me? Mr. Rinaldi? You like it?

Mr. RINALDI. Do I disagree with you, sir?

Mr. MICA. Yes.

Mr. RINALDI. I think that there is a fairness issue when a student goes into a college. I am paying for two college tuitions right now. If they are going into a college program to be specifically an air traffic controller, and then they come out and they have to take a biographical questionnaire or assessment——

Mr. MICA. Well, to go back into that, I think you can recraft the role of Oklahoma City to test them, to make certain that they are competent, and to see where their skills best match the vacancies that we have in the system.

But where—you know, there is an unfairness, yes. But right now the taxpayer is paying for a 30-percent washout rate to a system that doesn't get people on the job. So I think we need to transition

again to a system that can produce them. And why should we be paying for this system of failure? It just goes on and on.

So I have got to run to another function. But, Mr. Chairman and members of the committee, we need to reform this whole process. Anything less, you are just messing around.

Mr. LOBIONDO. Thank you. Mr. Larsen?

Mr. LARSEN. Thank you.

Mr. Rinaldi, from all accounts the NATCA's workforce continues to help the FAA fulfill its mission in providing the safest and most efficient aerospace system in the world. Can you point to any safety lapses in the last year that you would associate with controller staffing levels?

Mr. RINALDI. No, sir. The controllers plug in to their position day in and day out to maintain, first and foremost, the safety of the National Airspace System. If they are working double positions combined up because staffing is short, then capacity will have to be appropriately reduced to make sure that they are not in a safety concern.

Mr. LARSEN. So the first option would be to reduce capacity, as opposed to trying to keep capacity levels the same if there is an issue in the staffing.

Mr. RINALDI. Absolutely.

Mr. LARSEN. Yes. Mr. Babbitt as well, apart from the service reductions associated with sequestration, can Southwest Airlines point to any other air traffic control-related delays or service reductions?

Mr. BABBITT. Well, we certainly have our suspicions. We rely somewhat on anecdotal data or information, I guess——

Mr. LARSEN. Be sure to get right in the microphone there. Just—yes.

Mr. BABBITT. We do have our suspicions. We don't have clear insight into a lot of the granular pieces when an air traffic control facility begins to increase spacing, things like that, ground stops; we don't necessarily know what the issue is within that station.

We do know of a couple, though. A good example is the Chicago Center, which has a metering station that has been somewhat short-staffed. The problem for us is they have adjacent sector vectoring, so that aircraft coming out of Chicago Center going into the Minneapolis Center must follow a protocol. Well, if there is not staffing in either of those centers, it doesn't happen. And it is not happening.

And what that leads to for us is increased vectoring, increased fuel burn, longer en route times. It is a delay. I mean we pay the financial penalty. We burn 2 billion gallons of fuel a year, and it is expensive. And so, any time we can reduce that and use the enhanced procedures, we welcome it. And those are the kinds of restrictions.

Midway Tower itself has the same issue. They sometimes cannot staff a ground metering system that they use for lack of personnel in the tower. So it leads to us having increased tarmac times; you just sit longer on the ramp, burning fuel, delaying passengers. Not anything we look forward to.

Mr. LARSEN. OK. Thanks.

Ms. Bristol, there is some criticism of the controller workforce plan staffing ranges as unreliable. Can you just enlighten me a little bit? When we are talking about the shortage, what—from your perspective, what is the baseline we are supposed to use? And in fairness, I am going to ask Mr. Rinaldi to comment on that same question, as well. What is the baseline?

Ms. BRISTOL. Right. Well, you know, right now we are—we have got—in the entire system, 14,376 folks that are working their way through the process, from the early levels through the top. We are striving right now to get our certified professional controllers in a range that is in the 80- to 85-percent rate, which we would feel is more healthy.

And so, we are focused on, in facilities that are above that, helping them—if they desire to go to a facility that is below that level, help them get there more quickly, so that we can start getting everybody up to that range.

Mr. LARSEN. Yes. Mr. Rinaldi, how should we assess this?

Mr. RINALDI. So I would just say that the most accurate assessment of each facility is your onboard staffing of your fully certified professional controllers. These are the individuals that can plug in and work any position. These are the individuals that will train the other people in the building, that are learning to be air traffic controllers. These are the individuals that will fill in for supervisory functions and be controllers in charge. These are the individuals we take off the boards to actually help us modernize the system and develop real-time efficiencies in NextGen.

That is the goal, is to actually measure that. What the controller workforce plan—it is just bodies in the building. And all too often they give you a number and it is misleading, at best. That—they said, "Well, at Atlanta TRACON we have 95 people on board," but really you only have—and if our CPC number is 100, and you have 95 people on board, you would think, well, we are OK, we are only 5 under. But really, you only have 68 people that can fully work all the positions, and those other people are in some form of training, which—their success rate in Atlanta is less than 40 percent.

So you are counting people that will never be successful in the building, and it is almost a charade. They are just saying, "Well, we are fully staffed there," and the people will never certify there. So the number is flawed, is—if you go strictly by certified professional controllers is the best way to see the healthiness of a building.

Mr. LARSEN. Yes. Mr. Chairman, could I just have—ask the same question of Mr. Hampton? Is——

Mr. LOBIONDO. It is your birthday; whatever you want.

Mr. LARSEN. It is my birthday, great. I have got another 15 minutes' worth of questions.

[Laughter.]

Mr. LARSEN. One for every birthday.

Matt, could you talk a little bit—what is—have you looked at the right number?

Mr. HAMPTON. We don't know exactly what the right number is, but let me give you a different perspective. When we visit the field, we talk to the facility manager who runs the place day to day, and is responsible for running multiple shifts. And Mr. Rinaldi is quite

correct, the certified controller is much like a utility infielder. He trains controllers and can work all segments of the airspace. So that gives a facility manager tremendous flexibility.

I think it is important for the FAA to communicate to the Congress a specific number, particularly in the controller workforce plan. What is the right number at the right facility? Particularly at the critical facilities. We have looked at this for a number of years.

So the CPC count is a very important number. That is our take on it. It matters to the facility manager, the guy that runs the facility, particularly at Chicago, Atlanta, and other most critical facilities.

Mr. LARSEN. All right, thank you.

Thank you, Mr. Chairman.

Mr. LoBIONDO. Mr. Rinaldi, at the roundtable we held in December you outlined some steps that you thought the FAA should take to improve the hiring and training and placement. Can you tell us any specific improvements in this area over the last 6 months?

Mr. RINALDI. So, after the roundtable hearing we had in December, the agency actually opened up the continuous bid for a couple months, which helped get streamlined certified—or military controllers into the system, and get them into—directly into the facilities. And so that helped.

What also helped is we have come to an agreement on what we call an ERR [employee requested reassignment] policy, which is basically a national release policy in moving controllers from mid-level and lower level facilities to the higher level facilities, where we have the shortage, in a very streamlined way so it is not 314 fiefdoms, but it is actually a very national overlook, and making sure that the system is staffed correctly and the facilities are getting the resources they need to do.

So these are some steps we have taken. H.R. 5292 will give the agency the ability to continue to hire—maximize the academy and hire straight from the military and actually give the ability for the CTI students to get right into the academy also, and get that—and that is why we actually support the passage of H.R. 5292.

Mr. LoBIONDO. Ms. Bristol, I want to commend you and the team for the collaboration with Mr. Rinaldi and NATCA. It seems like that is going to be crucial and essential.

But can you explain the difference between the staffing targets your team developed with NATCA and the recommended staffing ranges included in the FAA's annual controller workforce plan?

Ms. BRISTOL. Yes. The annual controller workforce plan that is put out, it is a very high level—it is a strategic target. And it does give ranges, it gives a high and a low as an indicator of, you know, health, if you will, in a facility.

When we look at managing facilities every day, and how we move our controllers through the system and inside the buildings, it was clear that we needed a much more tactical tool, and that is why we worked with NATCA to laser in on individual facilities and how we place and recognize there are also people moving through the facility at the same time as they become more proficient.

So, the controller workforce plan, I think, serves a purpose. But for day-to-day management in the system, our organization works

with that interim target on how we move and place people in the system.

Mr. LoBiondo. Mr. Hampton or Mr. Rinaldi, care to comment?

Mr. Rinaldi. The—as I said earlier, the controller workforce plan just gives you a headcount. What we did in our collaborative resource working group is actually laser in how many CPCs we want on the mission. And the mission is running air traffic control, actually getting recurrent training and mandatory briefing items, doing OJTI, doing CIC, helping modernization in the system.

So we went with a CPAC number, and Ms. Bristol is correct, of actually—what is a good number to actually move somebody through the system? And we came with 85 percent CPC number. And that is why that number seems to be working for us.

But if you just look—if you just went on the controller workforce plan, as I said, with Atlanta—but we could do it with Chicago, also—about 30 percent of the people in the building that come in as new developmentals become fully certified. Controller workforce—CPC target is 100. That is the number we came up with collaboratively.

But you know, they would right now say that we are within range, because their range is from 81 to 100, or—and right now there are 83 people there, except for the fact there are only 64 that could actually work position. The others are in some stage of training. But they are counting them as a full body. And if you were going to schedule that person to work a shift, you certainly would not schedule a group of those, you know, 20 people that can't work by themselves all alone on a shift.

So it is disingenuous to say they are OK, they have 84 people on board. The workforce plan, to me, it just gives a false depiction of what is actually going on in a facility. The healthiness of a facility and the staffing of a facility goes right to the CPC number, and what accomplishes the mission of moving air traffic control safely throughout our system.

Mr. Hampton. I think that is encouraging, that FAA and NATCA are working together. But I think it is important in the future that they clearly communicate to this committee and other committees what number they are measuring, particularly at the critical facilities. Are we measuring CPCs or are we measuring total controllers? I think that is an important distinction.

So it is a positive step, but going forward, it is important to clarify what measurement we are using. And I do think as Mr. Rinaldi said, the CPC number is important and it is OK to express it in ranges. There is a level of precision that is not easy to get here.

I think it is a positive development, but it is important, going forward, to see whether the next plan they put forward in 2017 will reflect that. It will be important to communicate the health of a facility by that measurement in the future.

Mr. LoBiondo. Thank you.

Ms. Bristol, according to Mr. Rinaldi, controllers are working mandatory 6-day workweeks at TRACONs in Atlanta, Chicago, Dallas/Fort Worth, and New York. And according to your agency, controller overtime expenditures have jumped from $54 million in 2011 to $78 million in 2015.

Do you share our concern with the pressure being put on controllers, the safety and operational implications of increasing their workloads? And how long can this be kept up this way before we have some kind of a breaking point?

Ms. BRISTOL. Well, thank you, Congressman. I think that is one of the priority reasons that we are so focused on moving our experienced controllers into some of our most critically staffing-challenged facilities.

There are different levels of overtime in every facility. And, you know, hours can vary. You know, my—I do not like to see people working more overtime than they need to. And that is why it is a priority for me to ensure that we get bodies as quickly as possible in, and then move bodies to where they really need to be to support the workforce that is already there.

Mr. LoBIONDO. Mr. Hampton or Mr. Rinaldi, care to comment?

Mr. HAMPTON. Overall, overtime nationwide is 2.6 percent. Most facility managers tell us if it is in the 4- to 6-percent range, it is manageable. However, at some of the critical facilities, overtime rates do exceed 10 percent.

New York TRACON, almost 15 percent; Dallas TRACON, 12 percent; Atlanta TRACON and Chicago TRACONs are 11 percent. So that shows a level of stress at a facility. It is questionable how long that can be sustained. It shows signs of staffing shortages.

Mr. Rinaldi?

Mr. RINALDI. I would agree with the numbers the IG put out. Those are accurate, and it does—it is a—it does fatigue the workforce if you are working 6-day workweeks, 10-hour days, and maxing out on that. It is a high-stress occupation, and it is not something we should rely on as a normal part of our day-to-day operation.

Mr. LoBIONDO. OK. Thank you. Now turn to Mr. Maloney.

Mr. MALONEY. Thank you, Mr. Chairman. And happy birthday to our colleague, Mr. Larsen, proof that the Aviation Subcommittee really is the secret to staying forever young.

Mr. Rinaldi, I appreciate the kind words on the bipartisan legislation that my colleague, Mr. Curbelo, and I have introduced to address some of the issues you have been discussing this morning: H.R. 5292, known as the Air Traffic Control Hiring Improvement Act. You have done a better job in your testimony than I could of outlining some of the merits of the legislation, but I would love to ask you about a couple of issues that are covered by our bipartisan legislation, as I am sure my colleague, Mr. Curbelo, may, as well.

And let me also say thank you to your members at NATCA for the extraordinary work they do day in and day out that ensure millions of us who travel every year—and every week, in many cases—arrive at our destinations safe and sound. So thank you for that, and thank you for your efforts in advancing my legislation.

But let me focus you specifically on the new biographical assessment test conducted by FAA. Could you speak to some of the ways that this test has led to qualified controllers, including veterans, being rejected from potential ATC positions? I am not sure people fully understand this issue.

Mr. RINALDI. Well, thank you, sir, and thank you for your leadership on H.R. 5292. We do really appreciate it. We think it is the

right piece of legislation to move forward to help us with the hiring.

The biographical assessment was established to help cull a list, basically, of 28,000 applicants. And it took—it didn't take into account, regardless of any schooling you would have or any actual on-the-job function of being an air traffic controller you have been doing for years in the military or years in the FAA, and really just put everybody into one pool. And I don't know how they graded it. I do know some people that did take the test, they were just told if they passed or failed. Weren't told what they answered correctly or incorrectly, and it really seemed—it doesn't seem like a fairness issue.

Like I started to say earlier, I pay for two college tuitions, and I would like to know if my child can actually do the job before I am actually paying for the college tuition, especially something as precise and specific as air traffic control. You can't come out of Embry-Riddle with an air traffic control degree and then fail a BQ. And there are not many other places you can turn to. So it is a fairness issue of allowing CTI students not to be lumped in with off-the-street.

Same as military that are actually providing day-to-day air traffic control services in the military. To actually then put them and treat them and put them into the biographical questionnaire seems silly.

Mr. MALONEY. Thank you. And, if you would, also expound on how it unnecessarily restricts military and Department of Defense civilian controllers, and if that is contributing to the staffing crisis we have heard quite a bit about this morning and we are seeing in places like New York.

Mr. RINALDI. Well, it—to be an air traffic controller in large TRACONs is a very, very hard task. You really can't come out of the academy and make it into one of those busy facilities. The success rate is very, very low.

Depending on what you are actually—your job function is in the military, if you are actually a tower controller, you are probably best suited to go into a tower environment in—near FAA. If you are a range controller, you are probably best to go into the academy and learn exactly air traffic control in civilian world.

But really, what it comes down to for New York TRACON, Atlanta TRACON, Dallas TRACON, Chicago TRACON, and the other busy TRACONs, we need to move controllers through the mid-level facilities, and that is what the ERR process does do. It gives us the ability to place appropriately out of an academy into the lower level facilities, where you can develop and hone skills so that you can actually make it into the big leagues, very similar to a system—not to simplify it, but what we would do in the major leagues in baseball: A, AA, AAA, and then majors.

Mr. MALONEY. And in the time I have remaining, I would also appreciate it if you would just say a word about how allowing FAA to directly notice ATC vacancies to historically black colleges, Hispanic-serving institutions, and other minority-serving institutions would help ensure that we are promoting a diverse workforce among air traffic controllers, while working on the staffing shortages.

Mr. RINALDI. Well, we truly believe in having a very diverse workforce. I think you get the best workforce if you reach from all areas of our community.

What I think that—there is a way to do that with H.R. 5292, because you can hire directly out of the military, which is very diverse. You can hire from the CTI students, and you could still do off-the-street hiring. You can have a three-way track to make sure you are making your mark at the FAA Academy each time. And you could use the BQ to cull a list of someone who has no experience.

Mr. MALONEY. Thank you very much.

Mr. LoBIONDO. Mr. Farenthold.

Mr. FARENTHOLD. Thank you very much, Mr. Chairman, and I would like to thank the witnesses for participating.

I hear consistently and believe we have a shortage of air traffic controllers, yet it seems like we are putting up more and more barriers to entry there. I understand the issue of the cost associated with training someone. Is it also a difficulty—and I will ask Mr. Cannon this, I guess—is there a difficult with folks washing out or getting rid of bad apples, once they get in? Or not even—bad apples probably isn't the right word, but people who are not performing, or not able to move up through the farm team Mr. Rinaldi talked about.

Mr. CANNON. Well, I will speak first to the academy, and then I think my colleague can speak once we get to the facility.

Anyone going to the academy is on a temporary appointment, so they don't—they are not in the bargaining unit at that point, they have very limited appeal rights. So if they don't—if they are not successful at the academy, both in classroom, indoor behavior, or conduct, they can be gotten rid of very, very quickly. And there are some that go that way.

Mr. FARENTHOLD. All right. Go ahead, ma'am.

Ms. BRISTOL. No, I would love to see every trainee be 100 percent successful and move, you know, through the academy and out and into our facilities and, again, you know, have that kind of a trajectory. We have a graduated process that we are working with, our students at the academy. And once they move into our facilities, again, we have got——

Mr. FARENTHOLD. I mean how difficult is it to get rid of somebody that isn't performing, once you have hired them? Is there a probation period?

Ms. BRISTOL. Yes, I——

Mr. FARENTHOLD. Then after that——

Ms. BRISTOL. I don't think it is. No, I don't think it is hard to get rid of someone. I think that——

Mr. FARENTHOLD. All right. So then, what is the—why, then, do we put these big barriers to entry, these tests and all? If somebody is able to perform through the academy and you are able to get rid of them if they aren't—why do we have these huge barriers to entry at the very beginning, especially for people who have already worked in the military or in contract towers and have some experience? It seems like you are shooting yourself in the foot meeting your hiring goals.

Mr. CANNON. Well, sir, I take your point. And we certainly have not sought to put up barriers.

After the 2014 announcement, we did look back at the initial process we put in place. It was always called the interim process. That is why we pulled the track 2 out. We did say let's not have people who already have experience have to go through a biographical assessment. And those people, when hired, can go direct to the facility.

So we have incrementally tried to improve what we started since 2014, and I think we have made some improvements there.

Mr. FARENTHOLD. All right, thank you. And I am going to—Mr. Babbitt, you have—came out of the FAA, you have worked in industry now. Let's assume President Obama or whoever the next President is reappoints you there. How do you fix this problem?

Mr. BABBITT. Well, once we got past "no"——

[Laughter.]

Mr. BABBITT. No, I would——

Mr. FARENTHOLD. I don't blame you, I wouldn't want to move out of Texas, either.

Mr. BABBITT. Well, I appreciate the question. I think we were faced with a very similar situation in 2009. We had a mass of retirements, clearly had to ramp up and address the problem with increased training and a broader network, more focus on the CTI programs and so forth.

I think today that one of the things when I look back in defense of the FAA would be, you know, stable funding. Do we know what we are going to do? Do we know precisely what our needs are? You can work the problem backwards; it is not high math.

Mr. FARENTHOLD. And that is an interesting question. Let me go back over to our folks from the FAA. Are we not paying these people enough? Is that the—is it—it doesn't look like we have a shortage of applicants. Are we not paying our air traffic controllers enough?

Ms. BRISTOL. No, I think our controllers are very well compensated.

Mr. FARENTHOLD. All right. So is it age retirement and tough screening is why we have the—is what I am taking away as a general shortage.

Let me just go back to Mr. Rinaldi. You are a union guy, you have been with the air traffic controllers for—I am going to promote you to FAA Administrator. What do you do?

Mr. RINALDI. Jump off a bridge.

[Laughter.]

Mr. RINALDI. You know, I think that—I think H.R. 5292 is a good start. I think——

Mr. FARENTHOLD. No, that is us. What do you do as FAA Administrator under current law?

Mr. RINALDI. Well, I would do—you know, under current law I believe the Administrator could actually do H.R. 5292 and start hiring directly out of military, bypass CTI students that have a well-qualified or recommendation, they can move—but the problem is, being the FAA Administrator, you are governed by lots of lines of bureaucratic pressure, and passing H.R. 5292 will give us—give

him or her, whoever that might be, the ability to do these stream-lined procedures to hire enough air traffic controllers.

Mr. FARENTHOLD. Or spinning them off into an outside entity.

Anyway, I yield back the remainder of my time.

Mr. LoBIONDO. We are going to go to Ms. Johnson next, but just very quickly, Mr. Cannon, you are hearing a lot about this, but, you know, the CTI students, without any notice, without any ability to grandfather, in some cases spent tens of thousands of dollars to go through the system and just—the ax fell down, and that is it. And there—it just—there is not a good answer for that.

Ms. Johnson?

Ms. JOHNSON. Thank you very much, Mr. Chairman. And thanks to all of the witnesses for being here.

As you know, the air traffic controller staffing shortages are impacting critical airports all across the United States, and especially those in the Dallas Metroplex that I have to fly out of on a weekly basis. A good example is the Dallas/Fort Worth International Airport has 42 fully certified controllers on staff, and this falls way below the minimum headcount target of 48 CPCs established by the controller workforce plan, which is updated by FAA on an annual basis.

The Dallas/Fort Worth TRACON handles all arrivals and departures into and out of DFW, Dallas Love Field, and many other smaller airports in the Metroplex at 17,000 feet and below and at a radius of approximately 40 miles from DFW Airport.

The DFW TRACON is also chronically understaffed, with only 57 CPCs on staff, which is far below the target minimum of 78 CPCs. Staffing at the Dallas Love Field is also dangerously close to the established minimum of 19, with only 20 fully certified on staff. Even if we consider the CPC targets established by the joint NATCA and FAA working group, which Mr. Rinaldi referred to in his testimony, the DFW and DFW TRACON both fall far short of the minimum standing targets, regardless of the standards used. This is a dangerous precedent, which I have mentioned earlier when you were here.

My first question is, Ms. Bristol or Mr. Hampton—Ms. Bristol, you said in your testimony discussing support for facility-to-facility transfers, "I believe such transfers can serve as a quick and viable alternative to finding certified controllers to fill in at facilities with the greatest need." Can either of you speak to some of the barriers preventing FAA from quickly moving staff from facilities above 90 percent of the facility-specific target for the CPCs? I have asked this question before, but I still don't have an answer. What actions are you taking to overcome these challenges? That's one.

Retirement eligibility is another serious issue facing our traffic controllers. I have had a number of them come to me to ask me to recommend they be extended. Most are, but quite a few, especially those that are noisy, are never extended. According to the FAA's own estimates, almost one-quarter, or 24 percent of the fully certified controllers nationwide, were eligible for retirement as of September 2015. And even more alarming is Mr. Hampton's statement that FAA does not sufficiently consider facility-specific information when trying to anticipate future retirement trends.

I would like to know whether the reason for this is due to the lack of available data, or if the FAA has simply failed to act when facility managers would express these concerns.

I know I have asked more than one question, but I would like an answer to all of them, especially what official steps has FAA taken to address any of the two issues that I brought up.

Ms. BRISTOL. OK. Well, thank you, Congresswoman. The national team that my organization is working with, with NATCA, to place certified professional controllers into other facilities, our teams have met twice now and we have done two rounds of controllers that we can look to be moving. Some are shorter term, some are a little bit longer. We have got two selections that would go into Dallas/Fort Worth TRACON that you had mentioned. So that is certainly a high priority for us, is looking to expedite the movement of controllers where we can into the more challenged facilities.

As far as the retirement eligibility, sometimes it is difficult. I mean we can estimate when controllers can retire. Certainly they have to go to their HR office to actually fill out the paperwork, and they are the only organizations, typically, that know for sure when. We know that controllers have to retire by the time they are 56. In some cases, especially in our critically challenged facilities, if we have controllers that want to work a little bit longer, we can grant waivers to do that, and it is not something that we do very often, but sometimes we do in those critically staffed places.

So again, we are trying to expedite our processes, staying on top of the hiring, and go through the entire process with training. It is something that I am committed to, and I know that my colleagues in the FAA and NATCA, as well—it is one of our highest priorities.

Ms. JOHNSON. What is your percentage of those that request to go beyond retirement?

Ms. BRISTOL. It is actually pretty low. It is——

Ms. JOHNSON. What is it?

Ms. BRISTOL. I would have to get back to you. I don't have that number on the top of my head.

Ms. JOHNSON. Anybody?

Mr. HAMPTON. Ms. Johnson, yes, thank you for the question.

On the first question on the transfer, since the roundtable when you raised the issue, FAA and NATCA have worked very well. We don't have the numbers, but FAA has begun taking action, and we will get back to you and we will watch very closely on how well the situation is working.

Given the hiring situation, and the questions of how that will work, I think that is one of the most important approaches to address the critical facilities' staffing and CPC issues.

You raise a very important question on the retirement issue. Overall, FAA has been fairly accurate on estimating retirements. But again, at some of the critical facilities like New York TRACON, 39 percent; Houston, 30 percent; 34 percent of their CPCs are eligible to retire. This calls for very careful monitoring. When these retirements happen, they can have a dramatic effect on a facility.

So that is something that FAA has to watch, and I think it bears an important point that we made in our report, the need for work-

ing very closely with headquarters and the local facilities, particularly at the 23 critical facilities that we have reviewed over the years.

Ms. JOHNSON. Thank you very much, Mr. Chairman.

Mr. LOBIONDO. Mr. Davis.

Mr. DAVIS. Thank you, Mr. Chairman. I am very pleased we are holding this hearing today, because it is imperative that we address this looming shortage in air traffic controllers before it is too late. And I am very proud to cosponsor my friend, Mr. Curbelo's, bill that I will let him talk about more in detail, H.R. 5292, because it—but it makes a couple of commonsense changes to the air traffic control hiring process.

One provision of that bill that I want to focus on that I believe will have an immediate impact is that it will raise the maximum entry age for experienced controllers, those with a minimum of 52 weeks of experience, from 31 to 35 years of age. Importantly, it will also promote the hiring of veterans, and many in minority communities.

My question to the panel. You know, I am very frustrated by much of what has been discussed today. You look at Chicago TRACON that I fly in and out of on a regular basis. You know, the FAA can—the Chicago Center's agreed-upon number with the FAA for controller staff is, I believe, 321. As of today, there are 297 controllers at Chicago Center and it is projected by 2018 that number will be under 250. I think the implications of this controller shortage can have a tremendous impact on safety. You know, we are all here to make sure the passengers get from point A to point B safely and come back.

My question to the panel—and I will start with you, Mr. Rinaldi—is if another act of sabotage of what we saw in Chicago were to take place in the future, would there be enough resources and manpower left to keep air traffic moving and return the system to full capacity as soon as the repairs are made?

Mr. RINALDI. Well, thank you, sir. I certainly hope we never experience what we did in Chicago in September of 2014. We are down in our staffing numbers since 2014, and it would be a challenge to accomplish what we did back then.

Mr. DAVIS. So, in your opinion, basically, the—much of the air traffic control system, if we were to see another act of sabotage like this would be much more difficult with the staffing levels that we have now to do what you did.

Mr. RINALDI. We worked very collaboratively with a lot of facilities and most of our facilities throughout the country were at a 27-year low in CPCs. Most of our facilities across the country are very short with certified professional controllers, so it would be a challenge to continue to keep the capacity that we did.

Mr. DAVIS. Well, thank you. And thanks to all your members for getting traffic back to as normal as it can be.

A common theme in today's hearing is that controller staffing problems just—they appear to be chronic. The FAA has missed its controller hiring targets in each of the last 6 years. Controller staffing has fallen nearly 10 percent since 2011. The FAA's bureaucratic structure is clearly failing us.

In February, the committee passed the Aviation Innovation, Reform, and Reauthorization Act of 2016, which would separate ATC functions from the FAA and establish an independent not-for-profit entity to provide air traffic control services, including the staffing, placement, and training of controllers.

I would like Mr. Hampton, Mr. Rinaldi, and Mr. Babbitt to respond simply yes or no if they believe we would face these long-standing controller hiring and staffing problems if ATC services were provided by an independent, nongovernmental entity.

Mr. Hampton?

Mr. HAMPTON. Yes.

Mr. DAVIS. Mr. Rinaldi?

Mr. RINALDI. No.

Mr. DAVIS. Mr. Babbitt?

Mr. BABBITT. No.

Mr. DAVIS. Thank you. Yield back the balance of my time.

Mr. LOBIONDO. Mr. Carson?

Mr. CARSON. Thank you, Mr. Chairman. I would like to hear from everyone. What are your views regarding an additional physical barricade outside of the cockpit? I have heard proponents point out that this measure could be effective and not especially expensive, but we have also heard objections, as you know.

So, I offered an amendment to add a secondary barrier to all U.S. passenger carriers manufactured going forward. What do you guys think of this idea, or concept?

Ms. BRISTOL. Sir, my colleagues in aviation safety would probably be more up to speed and involved in that kind of a matter. I would have to defer to them, since they are the experts, and certainly have them circle back with you and your team.

Mr. CARSON. OK.

Ms. BRISTOL. Thank you.

Mr. HAMPTON. Thank you for the question. We are currently working on an audit concerning cockpit security and safety. We would be more than happy to brief you at another time in the subcommittee in a less open forum. I would feel more comfortable with that, sir. Is that OK?

Mr. CARSON. Thank you, thank you. Secondly, how does the explosion of drones into our national airspace factor into air traffic control staffing and management? Some have suggested that the possible use of geofencing or even other techniques to keep airport approaches and takeoffs safe and unimpeded by amateur drone operators—to keep them out of our airspace.

But what is the safety plan to avoid drone accidents that could easily hurt people on the ground, or even interfere with other operations? And won't air traffic controllers be needed to keep drone operations safe? How do you guys see this being factored into our proposal today?

Ms. BRISTOL. Well, our workforce has been dealing with drones for quite some time. We work closely with DOD [Department of Defense], DHS [Department of Homeland Security], other organizations for larger vehicles. The agency expects to pass a small UAS rule, as you know. And we will work in a very graduated manner on how we roll those vehicles into the National Airspace System.

We are working closely with NATCA on this matter, as well. I want to ensure that my workforce is trained, that they have the proper resources, and so we have a lot of activity in this area. I would say that we are going to move in a graduated manner to ensure that we have a very safe system, as we do today. Thank you.

Mr. HAMPTON. We specifically made a recommendation to FAA last year that controllers needed better training and information to deal with unmanned aircraft. FAA is taking steps to address our recommendation, and they are going to get back to us some time in September. That is an excellent point, and it will impact the controller workforce. It is reflected, and I think Mr. Rinaldi would agree with that.

Mr. RINALDI. Yes, integrating unmanned vehicles into our system is a big challenge. Obviously, controllers are going to need to identify and see them on the radar glass, going to need to know exactly what their mission is, and where they are going in route of flight, in order to continue to vector and keep airplanes separated from them so there is not a safety issue.

Mr. BABBITT. From commercial airline operation, it is a pretty serious issue for us, as well. You have seen what a 2½-pound goose can do to an airplane and an engine; you can imagine what a 50-pound drone will do to an aircraft engine.

I think the bigger issue is the technology that we are going to have to refine, it is one thing to track and be aware of the unmanned aerial vehicle, but having it be controlled and responsive in the airspace is going to be key to ensuring that you can provide separation. It is one thing to watch it, but if we have no control over it, then that becomes the difference between being unmanned and uncontrolled.

Mr. CARSON. Thank you all.

I yield back, Mr. Chairman.

Mr. DAVIS [presiding]. Mr. Nolan is recognized for 5 minutes.

Mr. NOLAN. Thank you, Mr. Chairman. I have a question, and perhaps Ms. Bristol, Mr. Cannon, Mr. Hampton, Mr. Rinaldi, I would like you all to consider it.

I am perplexed, the way veterans are dealt with in this employment process. You have this shortage here. Unless my information is incorrect, there are approximately 10,000 military air controllers working and operating and helping to manage our skies. And you know, your last application period for veterans to apply was described as long-term, and it was, like, for 3 months, March of—December—or, excuse me, December 2015 to March of 2016.

Number one question is why wouldn't you open that up for them all year long, since you have a shortage and you have all these experienced, seasoned people out there? So that would be question number one.

And then help me understand. As I understand, is it correct that you—after age 31 you cannot apply, veteran or otherwise?

Mr. CANNON. They have to have not turned 31 by the original appointment, yes.

Mr. NOLAN. Yes. So, you know, I remind you what Ralph Waldo Emerson once said about a foolish consistency. You know, why would you not consider a formula whereby 31, unless you had, you know, 1 year of successful experience and which you are going to

be 32. If you had 5 years of successful operating experience, you know, it could be 36. If you had 10 years, it could be 41. It is not like they are—you know, just walked into the environment.

Why are we not coming up with a better plan to utilize and create opportunities for these men and women who have served to protect and serve us, and they have obviously—if they performed well and have a good record of performance, why wouldn't we be looking for more ways to expand the period of opportunity for them to make that decision, to—which is a tough decision. They have already been in the military for some considerable amount of time. They are trying to decide, you know, "Do I want to go for 20," or, "Do I want to enter into the civilian?"

There is an opportunity here to provide them with a longer term way to continue their service to the public, and it just doesn't seem to me that we are looking to create those opportunities that are just there, ready, prepared, experienced, seasoned. They know what they are doing, they have done it before. And here we have this shortage. Why can't we find some better ways to access that pool of talent of men and women who have served, and are ready to serve, and wanting to serve more in a civilian capacity?

Mr. CANNON. Well, sir, I certainly agree with you and pay all respect to those who served this country.

With regard to the age, I believe there is proposed legislation that would take that age up to 35. I don't think there is any disagreement because it would still allow 20-plus years on the back end for a full ATC retirement for those individuals.

With regard to the announcement last December from which some 260 of those individuals who were selected—it was an open and continuous announcement. I think there is sometimes a misunderstanding when we say open and continuous. It doesn't mean it is open every day all the time. Because there still has to be some balance with how many people air traffic can then put into those facilities from those announcements. We are certainly working with our customer, air traffic, very close. And I expect we will have another one of those announcements out very, very, very soon.

But from that last announcement, all those selections were the individuals that—I think both you and I both—260, and they are matriculating through the security and medical process right now. Those individuals, sir, are also capable of applying on the entry level announcement. They actually have two bites at the apple.

So, if they don't get in or choose not to apply on the experienced announcement, they can apply under the entry level announcement, as well. So we provide two opportunities for them to come into the process.

Mr. NOLAN. Well, you know, I appreciate——

Mr. DAVIS. The gentleman's time has expired.

Mr. NOLAN. I was going to—is my time expired?

Mr. DAVIS. Yes.

Mr. NOLAN. Thank you.

Mr. DAVIS. Mr. Curbelo is recognized for 5 minutes.

Mr. CURBELO. Thank you, Mr. Chairman. And I am going to be very brief, because my colleague, Mr. Maloney, who joined me in filing H.R. 5292, asked a lot of the questions that I wanted to raise.

But I will just say Mr. Rinaldi earlier described a situation in Atlanta which resembles a situation that we are experiencing in Miami. Of course Miami International Airport is the main economic driver in south Florida, and we have 91 positions, but only 58 fully certified controllers. So exactly what Mr. Rinaldi explained in Atlanta, this is a crisis for us. And that is why Mr. Maloney and I came together to introduce H.R. 5292. We believe that it is going to give the FAA a clear mandate, clear direction to solve this hiring crisis once and for all.

So I would just like to ask all of my colleagues who have not yet cosponsored the legislation, we are up to 122 bipartisan cosponsors. If you are not on yet, get on. And I would like to ask our leadership in both chambers, here in the House on both sides, Republican and Democrat, to help us advance this legislation. Because if my colleagues think that this TSA line issue is a problem, if we don't get this right, this is going to become a much greater problem for our air transportation system in this country.

So I want to thank Mr. Rinaldi for all his comments today in support of this legislation. I want to thank the chairman, the ranking member, for holding this very timely hearing on this matter.

Thank you, Mr. Chairman. I yield back.

Mr. DAVIS. Well, you are welcome, Mr. Curbelo. Thank you.

I would like to take some time to ask a followup real quick. Mr. Hampton, I asked you to give a simple yes or a no on whether you think the ATC reform package would affect—how it would—or would it positively affect the hiring process. Can you expand on your answer of yes?

Mr. HAMPTON. Thank you. This has been a longstanding issue at FAA, and I think it is a policy question. If the new entity was established, it would be a first priority for that entity to address the staffing challenges at the critical facilities.

I would think an entity that was totally focused on air traffic would stand a much better chance of addressing it than the current structure.

Mr. DAVIS. Thank you. Mr. Cannon, the pass rate at the FAA Academy was higher than 90 percent between 2005 and 2011, but dropped significantly since the controller hiring process was revised to 79 percent in 2014 and just 65 percent in 2015. Has the FAA determined the reasons why an increasing number of its controller candidates are not making the grade?

Ms. BRISTOL. That would be mine, sir.

Mr. DAVIS. Ms. Bristol, I apologize.

Ms. BRISTOL. That is OK, thank you. I think it is still too soon to say, because it takes time for controllers to work through the entire training process. But I will say that at the academy we had some curriculum changes, as well, between the terminal and en route courses, and it had to do with the way we do our performance verification. We wanted to standardize it more so that we didn't see as many failures in the field.

If a trainee can't make it through, we would rather see that happen earlier in the process than later in the process, because we continue to pay for that employee's development. So I think that is contributing, as well. And we don't see that necessarily as a bad

thing. But completely? I don't think we have enough information yet to understand.

Mr. DAVIS. Is there any nexus between the rising failure rates and the agency's revised hiring process, specifically the requirement that applicants with no ATC experience must pass a biographical assessment?

Ms. BRISTOL. Again, I don't think we know for certain yet.

Mr. DAVIS. Can you look into that matter——

Ms. BRISTOL. Yes.

Mr. DAVIS [continuing]. And report back to the subcommittee? All right, thank you.

I now recognize Ms. Titus for 5 minutes.

Ms. TITUS. Thank you, Mr. Chairman. I would like to just follow up.

Mr. Hampton, I wonder—your comment about focusing on the understaffing and this private entity, I wonder if your staff specifically researched whether in Canada or in Great Britain they have looked at the understaffing problem, or if they have explored understaffing in relation to people not wanting to go to these tough, expensive areas like we have heard is a problem in the U.S. Have you all specifically studied that?

Mr. HAMPTON. No.

Ms. TITUS. OK, thank you. Now I have another question.

[Laughter.]

Ms. TITUS. This question is directed to Ms. Bristol and Mr. Rinaldi. And it is related to staffing, but it is more about the equipment and the ongoing efforts by the FAA to modernize the control towers.

Last week there was an article in the AP. It ran across the country and including in my district, in Las Vegas, and the article was entitled, "Union: New Airport Towers Must be Remodeled Before Opening." In the article, Mr. Rinaldi, you specifically identified the new control tower in Las Vegas, saying it requires an overhaul before it can be operational.

I reached out to our local controllers, our safety engineers, and the FAA because I am concerned that this overdue project is now going to have to be delayed even further, due to a failure by the FAA, and I am also worried that people around the country are going to read that there might be a problem flying in to Las Vegas and not want to come there, and we certainly can't have that.

So, what I learned is that our controllers there were given a role and a responsibility in designing the system that is in place, and the tower in Las Vegas can operate with both the paper flight strips and an electronic system, once it is chosen to be put in place.

Now, I know there is a prototype that is being tested, and I think it is in Cleveland and in Phoenix, and you all are going to make that decision this summer. There may be concerns about that electronic system, that prototype. But I would ask Mr. Rinaldi if maybe this got framed in the wrong light in that article—it has been known to happen—by the press. I want to be able to figure out what is happening with our tower and reassure our potential visitors.

And then, Ms. Bristol, I would like to ask you to weigh in. I know we had a lot of problems with NextGen, but I want to know kind

of what the plan is with these—this tower prototype, because I think your comment to the press was, "Well, we will figure out what we need to do." That is not very reassuring.

So could the two of you address that article and let me know what is going on?

Mr. RINALDI. Sure. Thank you, Congresswoman. I will go first. And as you can imagine, for someone who has been in the press as much as you, sometimes your statement gets twisted and misconstrued.

We were talking—what I was talking about on the panel was two brand new facilities. Actually, we had an idea of bringing the prototype to those two facilities and be 100 percent electronic flight strip like the rest of the world is. But we have brand new facilities, and the prototype that we have been working in Phoenix and in Cleveland we have jointly made a decision that it is just not stable enough to bring into a new facility.

I then went on to talk about San Francisco Tower that went with very small counter spaces because it is a smaller tower cab than Las Vegas, and that they would need bigger counter spaces to put printers in and strip bays in. Now, in Las Vegas they have made that accommodation. So really, it was about San Francisco Tower, which is coming on roughly the same time as Las Vegas Tower is, also.

The challenge in Las Vegas Tower is that they did something very dynamic and we support tremendously, is actually put the controllers that will work the airplanes in the air a little higher, a few steps up, than the controllers working the ground view, so they can actually see straight down. So there is going to be a lot of movement with the controllers to hand strips back and forth, as opposed to being able to have an electronic flight strip program, where the controllers would never have to leave their position to move the control of that airplane.

That is kind of what I was capturing. Yes, it did get lost in that. It is not going to delay the opening of Las Vegas Tower, but it is a challenge, that the workforce is going to have to move paper strips around, when we have this beautiful, brand-new facility, and we should have the most modern equipment. That is my biggest concern.

Ms. TITUS. So it is not going to be delayed, and it is not a problem of safety for people flying into Las Vegas.

Mr. RINALDI. It is not.

Ms. TITUS. OK, that is——

Mr. RINALDI. And I fly to Las Vegas a lot.

Ms. TITUS. OK, thank you.

Ms. BRISTOL. And Congresswoman, that is why I answered that question that way. I never had any doubt that we would not be able to provide that capability. And so, we will make a determination if the prototype can come online at that facility. But regardless, it will not impact in the least, and certainly it is not a safety issue.

At the same time, this month we expect to award the contract for the production system of that electronic flight strip capability. And so only a few facilities will have the prototype, and they will

be the first ones to be replaced when we roll the production system out into the future.

Ms. TITUS. And are you listening to the air traffic controllers as you look at that prototype with any problems that they may have with it?

Ms. BRISTOL. Yes, ma'am, we are.

Mr. RINALDI. We are working together on that.

Ms. TITUS. Thank you, Mr. Chairman.

Mr. DAVIS. Thank you. Mr. Rinaldi, I am shocked that you would think that sometimes statements get misconstrued in the media. Just shocked.

Mr. RINALDI. It is always the headline that seems to say something completely that you didn't say in the article.

Mr. DAVIS. Well, we have—obviously, Dina and I have never had that happen.

Mr. RINALDI. Never, ever.

Mr. DAVIS. Never.

Mr. RINALDI. Sure.

Mr. DAVIS. Never. If there are no further questions, I would like to thank, once again, our participants for being here this morning. This has been a very informative hearing. We will continue to exercise vigorous oversight to ensure that our busiest ATC facilities are fully staffed with the most highly trained air traffic controllers in the world.

Thank you all for being here today.

[Whereupon, at 12:17 p.m., the subcommittee was adjourned.]

**Subcommittee on Aviation Hearing: A Review of the Federal Aviation Administration's
Air Traffic Controller Hiring, Staffing and Training Plans**
Remarks of the Honorable Randy Hultgren (IL-14) | June 15, 2016

- Thank you, Chairman Shuster and Chairman LoBiondo for holding this hearing this morning on air traffic controller hiring and staffing shortages.

- And thank you for allowing me time for remarks today. This is an issue that I have carefully scrutinized for the last three years and is very important to me, my constituents, and air traffic controllers nationwide.

- I appreciate your leadership on this issue.

- I am a former member of this Aviation Subcommittee, and I represent several hundred air traffic controllers in the 14th District—the most in Illinois.

- I have met with many of them, and many others who aspire to be them, since the FAA made changes to its hiring procedures in 2014.

- These dedicated students and have put in long hours with our nation's military and reputable and accredited institutions to gain the skills and education to be entrusted with the public's safety bestowed on our air traffic controllers.

- Some are veterans, gaining valuable experience serving in our nation's military here and overseas.

- They believe, as I do in, in putting the safety of air travel and passengers above all else.

- When you climb into an airliner, you trust the pilot, the crew and air traffic controllers will keep you safe.

- As a weekly commuter from O'Hare to Reagan National airport and back, I am personally invested in making sure our skies are safe—as are all of you.

- As we are all aware, we are facing critically low staffing levels of air traffic controllers within our towers.

- At the Chicago TRACON tower, only 30 percent of trainees at the Chicago TRACON reach full certification.

- Ensuring we have a sufficient number of air traffic controllers in our towers is paramount to secure air travel. Insufficient air traffic controllers means cutting back travel and hurting our economy.

- No controllers means no flights.

- That's why I was surprised and confused when the FAA's changed their long-standing hiring procedures without warning in 2014 and launched an unnecessary social science experiment.

- Students, teachers and administrators on the collegiate training initiative—CTI—were also blindsided by the FAA's decision and told me of its negative effects.

- For decades, the CTI training program, established by the FAA itself, was the recognized and trusted pipeline for highly-qualified candidates and military veterans.

- Yet after spending many hours and dollars in specialized training courses, aspiring air traffic controllers were thrown a curveball with the interim FAA hiring standards.

- Most disturbingly, I believe air travel safety was put at risk.
- The new hiring standards jeopardize air travel safety by diverting the hiring process around highly-qualified air traffic controller candidates and veterans in an attempt to elevate "off-the-street" candidates.
- The FAA's decision to do this was and remains unclear.
- What is clear is that throughout this entire process, the FAA has been less than transparent and open.
- An in-depth six-month investigation into the agency's modified hiring practices revealed the adverse effects of these modifications, not only aspiring air traffic controllers, but on the legitimacy of the hiring process itself.
- The investigation also revealed that FAA or aviation-related employees may have assisted in giving potential air traffic controller recruits special access to answers on a key admissions test to help them gain jobs with the FAA.
- Yet the FAA has refused to respond to audio, video and witness accounts of misconduct. They conducted a self-audit of the allegations and cleared themselves of any wrongdoing.
- That is no way to run an agency that is responsible for the well-being of thousands of lives every day.
- In regards to the Biographical Assessment—a new and confusing psychological test—the FAA has repeatedly been opaque and non-responsive.
- That's why since 2014 I have called for a congressional hearing on this issue and am grateful for Chairman LoBiondo inviting me here to speak today.
- We still have more questions than answers.

- We need answers about the alleged cheating.
- Administrator Michael Huerta has stated that he tasked two offices within the FAA to conduct thorough investigations of the alleged cheating.
- Not surprisingly the internal investigations failed to uncover what was demonstrated clearly on audio recordings.
- Yet, at the same time, the FAA has never publically denied the cheating allegations.
- So which is it?
- Further, this past March the FAA filed a motion in Federal Court, admitting that the agency is unable to recover missing and "corrupted" emails at the center of the cheating scandal.
- Do these emails demonstrate whether or not the FAA knew someone on the inside was helping people cheat?
- Do they reveal whether or not it was a tactic with a purpose: to ensure targeted populations would pass the test?
- How is it possible that yet another government entity is missing emails that would expose them to criticism, or worse?

- When will Administrator Huerta come forward with the results of the investigation?
- American deserve answers, and they deserve them today.
- Previous to this hearing, I have asked the Department of Transportation's IG office to run two additional investigations, an audit, and a full report into the cheating scandal, to be completed this spring.
- We await the results.

- Further, we need answers about the discredited Biographical Assessment psychological test.
- Diversity in the workforce is important. Yet the FAA has refused to explain to Congress the rationale behind their methods to boost diversity.
- As a part of the 2013 Barrier Analysis the FAA implemented to overhaul ATC hiring, and diversify the applicant pool, FAA Administrator Michael Huerta wrote to my colleague, Senator Ayotte, that "the revised hiring process as reflected significantly increased the representation of women who successfully completed the assessment process and to various extents increased the representation of racial and ethnic minorities."
- Yet where are the numbers, where are the qualifications of candidates, where is the transparency on this effort and its results?
- We can all agree this aim should not come at the expense of a highly qualified candidate pool and air travel safety.
- Unfortunately, we have all witnessed the results of an improperly administered Biographical Assessment.
- According to the FAA's own data in the 2014 February Announcement, of the 1,593 applicants that passed both the BioQ and the AT-SAT, 116 remain in training.
- Since 2014, we have asked the FAA to respond to simple and clear inquiries.
- Who wrote the BioQ, and who validated it (if anyone)?
- How did some candidates fail the biographical questionnaire in 2014, and then pass in 2015?
- Why were these candidates allowed to sit for the BioQ in an unsecured location, without showing proof of ID?
- Where is sufficient evidence of the effectiveness of this new testing tool?
- Psychological assessments are important, especially for high-stress jobs.
- But disqualifying highly-trained, certified graduates based on an yet-to-be validated and opaque test is ridiculous.
- As a result of the FAA's changes, many clearly qualified CTI graduates and military veterans were disqualified by a test they don't understand and cannot improve upon—even after years of education and experience.
- Many have now "aged-out" of the process, forever losing their chance to join the ranks of air traffic controllers.

- Where is the relief for these dedicated individuals?

- Americans deserve answers.

- So where do we go from here?

- This morning, the panel will be discussing potential changes to Air Traffic Controller hiring procedures.

- I introduced H.R. 1964, the Air Traffic Controllers Hiring Act of 2015, to reverse the effects of the FAA's policies and restore safety and confidence to air travel.

- I would like to thank Mr. Rinaldi, on behalf of NATCA, for their support and collaboration throughout the years on my bill, H.R. 1964.

- I also want to thank Chairman LoBiondo for his cosponsorship of this legislation.

- My bill restores preferred status for CTI graduations with school recommendations and qualified veterans back into the hiring process.

- My bill will ensure our towers are again operated by qualified veterans and graduates with specialized aviation degrees, provide relief for those who "aged out" of the process, and make sure the FAA is open and transparent about their hiring procedures.

- Qualified individuals maintaining practical air traffic control experience obtained at FAA air traffic control facilities and civilian installations of the Department of Defense would also receive preferential consideration.

- It eliminates the use of a Biographical Assessment that unduly disqualifies applicants.

- And, in an effort to improve transparency at the FAA, it requires public disclosure of the assessment's validation and criteria used before implementation.

- Lastly, it allows candidates who will have aged out from the interim hiring process, or were deemed unqualified by the Biographical Assessment, the chance to reapply.

- My colleague, Congressman Curbelo, has introduced similar legislation this Congress: H.R. 5292, the Air Traffic Controllers Hiring Improvement Act.

- I thank Mr. Curbelo for our shared interest in this issue.

- H.R. 5292 aims to create two separate hiring pools: one consisting of veterans and CTI graduates, another of all interested U.S. citizens.

- The hires from these two pools may not exceed a 10 percent difference.

- However, I have concerns that, should the FAA hire from these pools equally, it would disadvantage our CTI graduates and military veterans.

- For example: out of a total pool of 1,000 applicants, this 1-1 "match" of off-the-street hires against CTI graduates and veterans could eliminate CTI graduates if more than 500 veterans apply.

- I have worked tirelessly with NATCA to instead create a three-pool system of CTI graduates, veterans, and off-the-street hires, which would alleviate this problem and maintain a speedy hiring process.

- Based on the 2014 statistics shared by the FAA, only 61.4 percent have completed Academy training.

- As of November 18, 2014, approximately 45 students were already removed from Academy classes due to failed background checks. This led to instructors being laid off, and a waste of taxpayer funds.

- The FAA claims that the Biographical Assessment screening saves $7 million and shortens the hiring cycle.

- Yet how much did taxpayers spend on those who failed out of the Academy? How many failed their background checks? How many were found to be non-proficient in English following the removal of the interview panel?

- What about the thousands of dollars students committed to paying their CTI education, which puts them in no better position to get a job than those without it?

- Are these changes really about hiring the most qualified controllers, or just trying to get large quantities of individuals through the hiring process?

- GAO reports this February that the cost per student at the Academy in Oklahoma City costs $40,000. At 350 failures to date, this amounts to $17 million, not to mention the $290,000 in AT-SAT testing fees.

- I welcome continued conversations with NATCA and understand the politics and rationale of their two-pool approach.

- This isn't just about securing a fair job application process or the status quo.

- This is about the fundamental desire for Americans to feel safe and secure, and be safe and secure, when flying.

- This is about transparency and openness from an agency which is ultimately beholden to the people and their representatives.

- I am grateful for all of your attention and work on this issue, and look forward to reaching a solution that provides fairness, safety and security for all.

- Thank you.

STATEMENT OF TERI BRISTOL, CHIEF OPERATING OFFICER, AIR TRAFFIC ORGANIZATION, AND RICKIE CANNON, DEPUTY ASSISTANT ADMINISTRATOR FOR HUMAN RESOURCE MANAGEMENT, FEDERAL AVIATION ADMINISTRATION, BEFORE THE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE, ON AVIATION, ON A REVIEW OF THE FEDERAL AVIATION ADMINISTRATION'S AIR TRAFFIC CONTROLLER HIRING, STAFFING AND TRAINING PLANS, JUNE 15, 2016.

Chairman LoBiondo, Congressman Larsen, Members of the Subcommittee:

Thank you for the opportunity to appear before you today to discuss the agency's ongoing efforts to ensure that the Federal Aviation Administration (FAA) continues to provide the safest, most efficient air traffic control system in the world. The FAA's national airspace system (NAS) is an extremely complex operation. On any given day, FAA's air traffic controllers safely control more than 50,000 flights ranging from small general aviation to large commercial aircraft operations. In addition, the NAS is ever changing and we must be in a position to manage those changes that are occurring in aviation. For example, we are currently integrating new aviation technologies into the NAS, such as unmanned aircraft systems (UAS) and the emerging commercial space industry.

Delays in our hiring process, such as what we experienced in 2013 with sequestration, can create ripples across our training and placement process. We want the very best air traffic controllers and these are positions that involve the highest levels of public trust, so medical and security clearances take a considerable amount of time. We have made significant strides in recent months to ensure that our processes and our pipeline of applicants are as efficient as possible. These changes include filling slots at the FAA Academy more efficiently and placing trainees once they leave the Academy at facilities where the FAA needs them most, with preferences

dictated by their class ranking. All of these improvements have resulted in the fact that we are on target to meet or exceed our FY 2016 hiring plan.

Key to our ability to meet both the ongoing and emerging needs of the users of the system is our ability to attract, train and retain individuals who possess certain unique capabilities that translate into becoming proficient air traffic controllers. How best to identify those individuals has been the topic of many studies. We are applying a data driven approach to hiring air traffic controllers which we believe will result in a more accurate prediction of who can succeed at the job. Air traffic control is a highly sought after occupation where we typically have a lot more candidates than we have the capacity to hire.

Today, I would like to focus on four areas; how we hire controllers, how we train controllers, how we place controllers, and how we collaborate with the National Air Traffic Controllers Association (NATCA) to ensure everyone understands what we are doing and why. We think the processes and plans we have in place better target our ideal candidates, train them more effectively, and properly place them at the right facilities that will meet the needs of the NAS as a whole.

Hiring

In 2011, FAA Administrator Babbitt chartered an Independent Review Panel (IRP) that focused on the many facets of controller hiring, selection, training and professional standards. The IRP made 49 recommendations that the agency has been following up on. In 2012, the FAA undertook a comprehensive review of the Air Traffic Control Specialist (ATCS) Centralized Hiring Process as called for by the Equal Employment Opportunity Commission (EEOC). The

EEOC requires agencies to regularly evaluate their employment practices to identify barriers to equality of opportunity for all individuals. This review identified a number of concerns in the hiring process echoing some of the findings of the IRP. Consequently, in 2013, the FAA undertook a comprehensive analysis of how to improve the ATCS hiring process. This resulted in the development of both short- and long-term recommended improvements and an interim hiring process in 2014. The changes were intended to ensure that the agency selects applicants with the highest probability of successfully completing our rigorous air traffic controller training program and achieving final certification as ATCSs.

The interim process differed from prior agency practice for hiring ATCSs in two primary ways. First, we created a single, nation-wide vacancy announcement for entry-level air traffic controllers, and a single process to evaluate and assess those applicants, resulting in one set of qualifications for all applicants. Second, an applicant had to achieve a passing score on a new component of the hiring process, the Biographical Assessment. Upon passing the Biographical Assessment, applicants were eligible to take the Air Traffic Selection and Training (AT-SAT) exam, which they also had to pass in order to proceed. The goal was to create a national process that did not create different eligibility standards for the same entry-level air traffic controller position. More than fifteen hundred applicants were selected as a result of the interim process that was initiated in February 2014.

While using the interim process, the agency continued to incorporate more long-term recommendations for hiring in 2015 while retaining key features of the interim process. We completed an Occupational Job Task Analysis and Validation, updated the Biographical Assessment and initiated a study to replace the AT-SAT with a validated alternative test. The

agency also focused on hiring experienced ATCS candidates, creating two approaches, or tracks. The general experience/education track (entry-level ATCS) is open to all U.S. citizens who apply in response to a general public vacancy announcement. Our focus for this track is to reach candidates without air traffic experience, who nevertheless have the aptitude for ATCS work, evidenced by passing the position's minimum qualifications, including the Biographical Assessment and AT-SAT. These applicants are hired at the FG-1 (entry) level and attend FAA Academy training. The second track, the specialized ATC experience track, focuses on reaching candidates with operational experience, such as reinstating former FAA Certified Professional Controllers or military veterans with air traffic control experience. This group must have a minimum of 52 weeks of post-certification ATC experience and are hired at a higher pay level than the general experience/education track, reflecting the fact that the FAA will not have to invest the same amount of resources in training these applicants. Because of their specialized experience, this group does not take the biographical assessment or the AT-SAT. In addition, this group reports directly to a facility, rather than the FAA Academy.

We believe these changes will improve efficiencies and have addressed the concerns identified in our initial reviews of the hiring process. This process better addresses the agency's current hiring needs. It also ensures equitable treatment and the broadest pool of qualified candidates. The biographical assessment is a computerized test that measures important and demonstrably job-related personal characteristics of applicants. Replacing AT-SAT with a validated alternative air traffic skills assessment eliminates the possibility that AT-SAT has been over-exposed and is potentially compromised. We will continue to monitor and refine the process as necessary to ensure that the best possible individuals are selected to maintain the safety and efficiency of the NAS.

Controller needs in future years are driving current hiring decisions. The FAA uses a series of models to forecast staffing and develop hiring plans. The FY 2016 controller workforce plan, a plan we provide to Congress annually, reflects expected hiring based on operational needs. It reflects the fact that we hired below plan objectives in FY 2013 through FY 2015 due to the impact of sequestration initially, and then subsequent throughput issues with the hiring process. FAA has hired 4,759 new controllers over the past five years. We are on track to meet or exceed our hiring target for this year, which is 1,619 controllers. As of June 2, 2016, FAA has issued 1,653 firm offers to applicants, of which 1,277 have been hired, and the remaining 376 holding firm offers have a FY 2016 start date. More than 2,000 qualified candidates remain in the hiring pool.

It is important to understand that FAA's retirement forecast, and the other models we use to predict the needs of the NAS, have been extremely accurate. Over the past five years in aggregate, the forecast was 98.7% accurate. Consequently, the improved hiring process, which results in a better selection of candidates most likely to succeed in becoming a certified controller, will better focus the agency's investment in individuals who are the most likely to succeed. We are confident that our new approach, together with recent enhancements, has resulted in greater ability for the FAA to meet staffing goals moving forward.

Training

At the end of FY 2015, the FAA employed 10,947 certified professional controllers (CPC) plus an additional 2,964 personnel in ATC field qualification training for a total of 13, 911. New hires who do not possess previous air traffic control experience attend training at the FAA Academy in Oklahoma City where foundational air traffic control knowledge is obtained through

classroom and simulation training. ATCS training at the FAA Academy is basic in nature and is used to determine whether students can master rudimentary air traffic control skills before moving on to more advanced, facility-specific training. All new hires who report to the FAA Academy must successfully complete an air traffic control initial qualification training course in one of two options; Terminal (tower) or En Route, before graduating to the next phase of training where they will learn more advanced skills. Each option focuses on different aspects of air traffic control. FAA identifies an Academy throughput quota for each fiscal year for both Terminal and En Route options. For FY 2016, the Academy throughput quota for the Terminal option is 446 and the En Route option quota is 1,044. Pass rates for new hires at the Academy are approximately 74% for Terminal (tower) training and 68% for En Route. A cumulative grading system is utilized for all initial qualification training at the FAA Academy. This progressive grading system includes progress checks for students so they can better understand how well they are doing in comparison to a well-established standard as well as identifying areas for improvement throughout this process.

Upon successful completion of Academy training, graduates are assigned to air traffic control facilities based on FAA needs. At their assigned facilities, they must complete additional rigorous classroom, simulation, and on-the-job training to achieve final certification as a CPC. On-the-job training times vary based on the facilities' operational complexity. On average, on-the-job training takes 1.5 years at a tower, 2 years at terminal radar facilities (TRACON), and up to 3.5 years at an En Route facility. Even after final certification, all controllers are assigned periodic proficiency training, such as recurrent, refresher, or supplemental training.

In April 2015, after a full and open competition, a contract award was made to Science Applications International Corporation (SAIC) for air traffic controller training. The Controller Training Contract (CTC) incorporates the use of a resource management approach to training. This approach ensures that resources are aligned with national training needs and plans. The FAA developed the training requirements tool (TRT) to document and track all monthly training requirements and expenditures at both the FAA Academy and field facilities. The TRT also serves as a reporting engine used for forecasting future training budget needs. The contract calls for FAA to determine training requirements and to allocate funds for FAA Academy and field facilities based on training needs. We have established processes designed to provide program oversight along with a governance structure which ensures job analysis information and the training curriculum remains aligned and updated.

As with our hiring process, FAA continually strives to improve the training we provide our controllers. The Air Traffic Organization (ATO) supports the air traffic controller basic qualification training working group under the Aviation Rulemaking Advisory Committee (ARAC) structure. Currently, there is an 11-person volunteer panel representing a broad range of academic and industry stakeholders working with FAA experts tasked with evaluating possible alternative visions to national hiring and training.

We are also establishing a center of excellence (COE) for Technical Training and Human Performance. This will enable us to tap into innovation, motivation and technology resources for cost-share research on issues that contribute to safety and training improvements. Research from COE grants could be used to help shape the future of air traffic controller training.

Placement

The FAA national facility placement strategy is focused on having the right controller in the right place, in the right seat, at the right time. More centralized staffing decisions are the key to maximizing the agency's resources. The FAA uses its staffing standards to set overall hiring targets for a NAS-wide workforce, and also collaborates with NATCA on establishing facility-specific targets that are used for placing and transferring controllers strategically at facilities across the country.

The FAA uses a priority placement tool to forecast and prioritize controller staffing requirements. It captures the latest priority ranking of all 315 facilities and is sorted in order of greatest staffing need. This is based on current staffing, known gain and losses and projected attrition. Using data from the priority placement model, the FAA centralized the controller transfer process at the headquarters level in order to best implement a national prioritization process.

The FAA takes great pride in its safety record. Current Air Traffic Control Specialists acting as On the Job Instructors are very careful to ensure that individuals who are going through the certification process truly have what it takes to be successful. We place trainees where they are most likely to succeed. There are certain facilities that have a higher success rate in certifying trainees with limited FAA experience. These facilities provide further training before a controller moves to one of our more complex locations. It is our practice to place Academy graduates and non-FAA experienced candidates at En Route centers and terminal facilities that have a proven record of being able to certify trainees with limited Air Traffic Control experience. These are generally smaller, less busy towers. By placing our trainees in these facilities, it

permits more experienced controllers at those facilities the opportunity to move on to a larger, more complex facility with a higher pay level.

An integral part of the placement process is to support facility-to-facility transfers. To support this, we established a national release policy that identifies facilities that are able to release employees quickly based on two categories. The first category identifies facilities that are staffed above 90% of the facility-specific target for Certified Professional Controllers. These facilities are able to release employees within three months of selection at another facility, or up to six months at the election of the employee. The second category identifies facilities that are above the national average of CPCs. These facilities are able to release employees within one year of selection.

Also critical to the success of facility-to-facility transfers is widely distributing the priority placement tools so controllers looking to take advantage of opportunities available at other facilities are able to anticipate where they can transfer, rather than placing requests for transfers to facilities that are already properly staffed Our efforts have also refined staffing tools that have allowed us to obtain a much more granular understanding of the unique staffing scenarios that occur at individual facilities. Having tools such as temporary assignments out of the bargaining unit and Employee Requested Reassignment (ERR) in place paved the way for establishing a collaborative national centralized ERR placement team or National Centralized ERR Process Team (NCEPT). NATCA is a member of the team to review all requests for reassignment. This collaborative team will ensure the process works as intended, to staff our most challenged facilities with individuals who can transfer and, most important, certify as quickly as possible.

9

Collaboration

Change is always challenging, even when it is necessary. Our ability to meet the challenge requires collaboration with our labor partners and our colleagues across the FAA. This means building relationships, establishing trust, and working together to make better decisions. First and foremost, we have streamlined our placement process to incorporate best practices from the national priority placement tool, which helps us balance our workforce and allows controllers to rank their top choices from the availabilities on the national list. This reduces the time it takes to facilitate needed transfers and meet the changing needs of the NAS

We established a Collaborative Resource Workgroup with NATCA that is reviewing the staffing models that are in place. That review is underway, and the Workgroup also established facility-specific targets across the facilities that have allowed us to have a common and easy-to-understand placement strategy when it comes to balancing the Air Traffic Controller workforce. Facilities that are above the current CPC average are able to release controllers that are currently below the average.

Conclusion

The FAA has faced hiring and training challenges in the past several years due, in part, to resource constraints and process inefficiencies. We have worked very hard to refine our hiring, training, and placement processes to protect the future of the safety and efficiency of the NAS for its current and future users. We are confident that these continuing efforts have resulted in a sustainable hiring process which will meet our needs this year and in the future. The

improvements to training to ensure proficiency along with smarter placement strategies will ensure that staffing challenges, where they exist, are positively addressed.

We are now strategically placing new hires where we need them. We have collaboratively established CPC facility-specific targets that allow us to balance the workforce by executing staffing to the national average. We are posting this information online to make the information available to our workforce. We have implemented sophisticated automated tools, standardized processes, and a national ERR placement team to facilitate the transfer of experienced controllers. In addition, we have implemented a national release policy to expedite that movement to and from identified facilities.

The FAA has a solid and comprehensive plan in place to address controller hiring, training, and placement. While we are always looking to improve, the air traffic system in the United States is the envy of the world. The complexity of our system does not exist anywhere else. We are open to new ideas and are looking forward to working with our government and industry partners to consider improved ways to approach meeting the air traffic needs of the future.

This concludes my statement. I will be happy to answer your questions at this time.

Congressman Don Young of Alaska
Statement and Questions for the Record
"A Review of the Federal Aviation Administration's Air Traffic Controller Hiring, Staffing, and Training Plans"
June 15, 2016

Background statement and question for Ms. Teri Bristol, Chief Operating Officer of Air Traffic Org. at FAA:

Statement:

Ms. Bristol, I've taken pride in watching graduates of my UAA CTI program go onto to complete the ATC Academy and become air traffic controllers. For years, this relationship existed because the FAA wanted qualified candidates better prepared to complete the rigorous ATC Academy in Oklahoma before becoming professional controllers. CTI graduates were more likely to pass the Academy. It was working.

However, over the past few years, the FAA has seemingly tried to fix what wasn't broken. Your agency ended the preference for CTI graduates, threw them and veterans in together with general public applicants. You say putting CTI graduates and Mr. Joe Public in the same application process would be more efficient; and that using this new Biographical Survey would make sure the FAA still found qualified candidates to attend the Academy. However, several of my colleagues on this Committee and I have noticed; Academy failures have gone up.

Questions to Ms. Bristol:

What does the FAA attribute the recent spike in Academy failures to?

Would your Agency consider the elimination of CTI graduate preference and installation of the BioQ as a successful effort or not?

Would your Agency support a return to the status quo via HR 5292? If not, why?

Teri Bristol, Chief Operating Officer, Air Traffic Organization, Federal Aviation Administration
Responses to Questions for the Record
"A Review of the Federal Aviation Administration's Air Traffic Controller Hiring, Staffing, and Training Plans"
June 15, 2016

Questions from Hon. Don Young of Alaska:

Question: What does the FAA attribute the recent spike in Academy failures to?

- The FAA has not seen a recent spike in Academy failures. Rather, Academy failure rates began to rise in 2011 immediately following significant Academy changes to both its curricula and grading of En Route students in order to reduce later more costly failure rates of developmental ATCs in the field. The failure rate continued to rise consistently over the ensuing four years before the 2014 hires began their Academy training. The FAA made similar changes to its Tower training concurrently with entry of the 2014 hires. The observed and intended effect of these Academy grading changes has been to substantially increase the failure rate of new trainees while they are at the Academy rather than have them fail after being assigned to their first Tower or En Route Center. Failures at a facility incur greater costs to the Agency than failures occurring earlier in the training process.

- The FAA has made additional enhancements to its Academy training process since 2014. Definitively identifying the root cause of the increased Academy failure rates that began in 2011 will require extensive analysis that must account for multiple simultaneous decisions that could have affected pass rates. The FAA has not initiated this analysis.

Question: Would your Agency consider the elimination of CTI graduate preference and installation of the BioQ as a successful effort or not?

- Yes, the Agency considers the 2014 and 2015 changes to the ATCS hiring process a success. CTI graduates never enjoyed a hiring preference. Rather, they were one of six hiring sources that the FAA used to satisfy its hiring needs. Changes to the hiring process, including the elimination of separate hiring sources, merely allowed the Agency to adequately assess all entry-level ATCS applicants with the same validated tools.

- In effect, the Agency replaced a subjective and unvalidated selection process with professionally-developed tools that validated using incumbent air traffic controllers. The Biographical Assessment, both the 2014 and 2015 versions, were validated using incumbent air traffic controller data. This assessment measured critical job-related personal characteristics to predict success during training (Academy and field) and on the job performance—the very meaning of validity. Significantly, CTI students and graduates have fared well under this improved hiring process. Of the more than 2,100 entry-level hires in 2014 and 2015, more than 58% had some CTI-education, a higher rate of representation than at any point in the previous hiring process.

- Additionally, changes to the hiring process increased process efficiency leading to both cost and time savings. For instance, as a direct result of using the validated Biographical Assessment as a filter before the AT-SAT, the FAA saved over $7 million dollars in AT-SAT testing costs.

Teri Bristol, Chief Operating Officer, Air Traffic Organization, Federal Aviation Administration
Responses to Questions for the Record
"A Review of the Federal Aviation Administration's Air Traffic Controller Hiring, Staffing, and Training Plans"
June 15, 2016

Moreover, these changes also led to significant reductions in the time it took to assess and make hiring selections. Significantly, since changing the hiring process in 2014, the FAA has selected more than 5,000 qualified applicants, 3,000 of which have been hired. Indeed, the FAA is on pace to exceed its hiring goal for the first time since years before changes to the hiring process.

- Evaluating the success of a comprehensive change to the ATCS hiring process cannot be concluded by examining a single element of a multi-element change decision. As a whole, the changes to the ATCS hiring process have improved that process in several areas, including number of applicants applying for ATCS positions and number of qualified applicants selected. Academy success and CPC certification are important metrics that have yet to be definitively analyzed at this time. However, during the three hiring cycles, which cover 2014, 2015, and 2016, more than 5,000 qualified applicants have been selected and nearly 3,000 hired to date. The FAA is on pace to exceed the FY2016 hiring goal of 1,619, the highest number of ATCS hires in several years. Of the more than 2,100 entry-level hires in 2014 and 2015, more than 58% were CTI students or graduates. This hiring percentage of CTI students and graduates is higher than at any point in the legacy hiring process when the CTI-preference hiring source was in effect.

Question: Would your Agency support a return to the status quo via HR 5292? If not, why? (H.R. 5292 is the Air Traffic Controller Hiring Improvement Act introduced this year.)

- HR 5292 does not return the FAA to the status quo (the process before the 2014 hiring changes). The status quo gave the FAA flexibility to choose among any one of six hiring sources and to use a hiring process that identified those applicants most likely to succeed. HR 5292 eliminates that flexibility and forces the FAA to not use a professionally validated hiring tool (the Biographical Assessment) that both saved resources (time and money) and allowed for the hiring of those applicants most likely to succeed. Under 5292, the FAA will be forced to expend time, money and resources to develop a less effective/efficient hiring process with lower-quality applicants and may ultimately result in hiring shortfalls.

- We appreciate the contribution that CTI schools have made to the development of air traffic candidates over the years, however, we needed to innovate our approach to training. Furthermore, recent hiring trends suggest that the current process is producing the required number of candidates needed to successfully perform as ATCS, many of whom are either CTI graduates or have some CTI training.

- We are collaborating with CTI schools and others going forward and have established an Aviation Rulemaking Advisory Committee to explore the use of external training providers for basic air traffic controller training. We look forward to the recommendations that come from this effort and would support considering these recommendations.

Federal Aviation Administration
Response to Question for the Record (QFR)
"A Review of the Federal Aviation Administration's Air Traffic Controller Hiring, Staffing, and
Training Plans"
Subcommittee on Aviation
June 15, 2016
2167 Rayburn House Office Building
Washington, DC

Question submitted on behalf of Congressman Richard M. Nolan of Minnesota

QUESTION: Last year, the FAA cancelled the long-standing Retired Military Air Traffic Controllers program, whereby the Agency specially recruited and hired retired military air traffic controllers to the FAA via long-term temporary appointments. The FAA claimed that the program was no longer necessary.

In light of the FAA's prolonged, nationwide air traffic controller staffing crisis, and noting the substantial time and resources needed to fully train inexperienced candidates, can you explain why the FAA would cancel, rather than expand, a program specifically designed to draw on the knowledge, skills, and experience that trained and proven military air traffic controllers can offer to the short-staffed Agency?

ANSWER:
- The FAA maintains the safest and most efficient aerospace system in the world partly because we continuously evaluate and strengthen our ATCS hiring and training processes. The 2014 and 2015 changes to the ATCS hiring process furthered that commitment. This ensures that we use an efficient and fair process aimed at selecting those applicants with the highest probability of successfully completing our rigorous ATCS training program from among a large and diverse applicant pool. As part of those changes, the FAA discontinued use of discrete hiring sources, such as the RMC program, in lieu of a standardized two-track recruitment process for both experienced and entry-level ATCS applicants.

- For context, it is important to note prior to the 2014 and 2015 changes, the FAA hired approximately 145 RMCs over a 10-year period to temporary time-limited appointments. Roughly 60 RMCs out of an ATCS workforce of nearly 14,000 continue to serve in this capacity. To ensure FAA retained as many of those 60 RMCs as possible, in 2016, the FAA developed and implemented a policy to allow the Air Traffic Organization (ATO) to request one-year extensions for currently serving RMCs. This extension would be beyond their original temporary appointment tenure, not to exceed age 56, and is based on the agency's mission requirements and RMC performance. In addition, the FAA is finalizing a modification the agency's direct hire policy to include a provision allowing the FAA to recruit and hire, on a temporary basis, RMCs to critical, short-staffed, and hard-to-fill areas at any time the need arises. While not a reinstatement of the RMC program, this policy change allows the FAA to hire as many RMCs as needed to meet specific mission needs.

Federal Aviation Administration
Response to Question for the Record (QFR)
"A Review of the Federal Aviation Administration's Air Traffic Controller Hiring, Staffing, and
Training Plans"
Subcommittee on Aviation
June 15, 2016
2167 Rayburn House Office Building
Washington, DC

- Re-establishing or expanding a program specific to RMCs may appear to be an option for closing the gap in the agency's hiring needs for permanent ATCS. However, the use of long term temporary appointments does not afford the employee with retirement benefits equivalent to those hired under the experienced hire track two process. RMCs are not allowed to remain employed beyond the mandatory separation age of 56, even if they lack sufficient service to qualify for full ATCS retirement benefits. Therefore, any current or future RMCs will be required to leave their covered (Air Traffic) positions through separation or transfer to an uncovered position. Additionally, temporary and time-limited appointment employees do not possess the required tenure status to move into permanent appointments.

Before the Committee on Transportation and Infrastructure
Subcommittee on Aviation
United States House of Representatives

Key Issues Facing FAA's Air Traffic Controller Workforce

Statement of
Matthew E. Hampton
Assistant Inspector General for Aviation Audits
U.S. Department of Transportation

Chairman LoBiondo and Members of the Subcommittee:

Thank you for inviting me to testify on key issues facing the air traffic controller workforce. The safety and efficiency of our National Airspace System (NAS) depend in a great part on the efforts of our nation's air traffic controllers, who manage more than 70,000 flights a day in the busiest and most complex air transportation system in the world. As the Committee is well aware, maintaining a controller workforce requires the Federal Aviation Administration (FAA) to hire, train, and effectively place enough new controllers to offset retirements, particularly at some of the busiest facilities in the NAS.

However, as my office recently reported,[1] FAA continues to be challenged with effectively staffing its controllers, particularly at its most critical air traffic facilities. In addition, FAA recently implemented a new process for hiring air traffic controllers that changed how the Agency screens potential new controllers. We are currently conducting a review of FAA's new hiring policies at the request of this Committee and will publish our findings later this year. I am able to provide initial results, which are subject to modification as we complete the audit.

My testimony today will focus on three areas involving FAA's controller workforce: first, FAA's progress and challenges addressing its controller staffing levels at the Agency's most critical facilities; second, FAA's implementation of its new hiring process; and third, significant workforce issues that require top FAA management attention and action.

IN SUMMARY

While FAA has developed staffing plans for its air traffic control facilities, the Agency still faces challenges ensuring it has enough fully certified controllers to effectively balance controller training requirements with pending retirements, especially at its most critical facilities. This is in part because FAA does not consider facility-specific information when anticipating future retirements, and lacks sufficient data to determine how many controllers it needs to effectively operate the NAS. In addition, while FAA recently introduced a new process for hiring controllers, the Agency lacked an effective implementation strategy for the new policies, and continues to face challenges in meeting its hiring goals due to the lengthy process it takes to hire and train a controller. Going forward, several issues that will materially affect the controller workforce also require FAA senior management attention. These include effectively implementing a new scheduling tool, integrating Unmanned Aircraft Systems (UAS) into our airspace, and transitioning to new Next Generation Air Transportation System (NextGen) technologies.

---

[1] *FAA Continues To Face Challenges in Ensuring Enough Fully Trained Controllers at Critical Facilities* (OIG Report No. AV-2016-014), January 11, 2016. OIG reports are available on our Web site at http://www.dot.oig.gov .

BACKGROUND

There are about 14,000 controllers working at FAA air traffic facilities, nearly 10 percent fewer than in 2009. About 10,800 of these controllers are fully certified,[2] with the remaining number comprised of both newly hired trainees and certified controllers who transferred to a different facility but have yet to complete facility-specific training at their new location.

FAA establishes staffing ranges for its air traffic controllers in its Controller Workforce Plan (CWP), an annual report to Congress on the state of the controller workforce developed by FAA's Office of Labor Analysis. The CWP is FAA's primary plan to ensure it employs enough air traffic controllers to maintain continuity of operations. According to FAA, the current total number of fully certified controllers is near the Agency's minimum controller staffing range. However, the number of all controllers (including trainees) exceeds FAA's maximum number of controller requirements (see figure 1).

Figure 1. FAA's Air Traffic Controller and Certified Professional Controller Staffing, Calendar Years 2012 to 2016
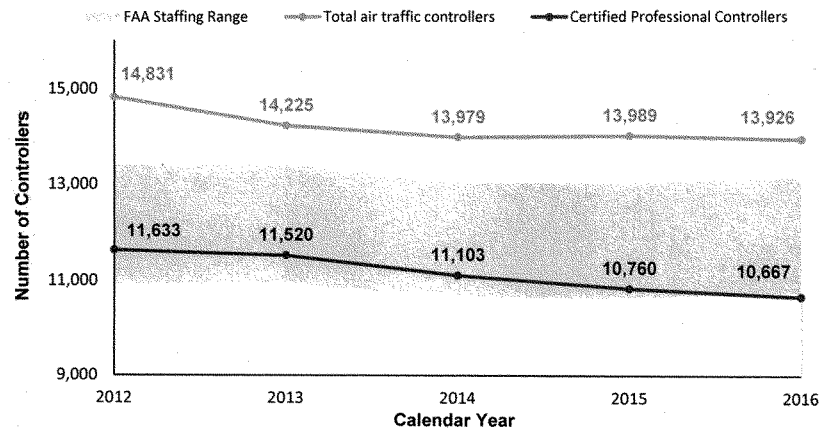
Source: OIG analysis of FAA air traffic controller staffing data as of March 19, 2016.

---

[2] Certified Professional Controllers (CPCs) are controllers who have achieved full certification on all positions within their assigned areas. They also act as On-the-Job Training Instructors for all new hires.

Although all air traffic facilities are important to the operation of the NAS, we focused our most recent review on the staffing and training resources for 23 critical facilities. We selected these facilities based on airspace complexity, number of operations, and air carriers serving that location. FAA agreed that the facilities on our list were critical, but this list is not all inclusive, and we acknowledge that other facilities may also be important for supporting the NAS.

FAA CONTINUES TO FACE CHALLENGES IN ENSURING ENOUGH FULLY CERTIFIED CONTROLLERS AT CRITICAL FACILITIES

Although FAA has established a staffing plan, the Agency continues to face challenges in managing its controller resources, especially at its most critical facilities. First, FAA cannot ensure it will successfully train enough controllers to offset retirements. Second, FAA does not take into consideration facility-specific information when anticipating future retirement trends at the facility level. Finally, FAA's staffing practices are hindered by a lack of accurate scheduling and performance data, which limits its ability to accurately determine how many controllers it needs and where.

FAA Cannot Ensure It Will Have Enough Certified Controllers To Offset Retirements

FAA has developed a staffing plan based on projected gains and losses at each facility that includes expected retirements, net non-retirement losses, and planned new hires. However, many critical facilities are below FAA's minimum staffing ranges for certified controllers, including several high-impact Terminal Radar Approach Control (TRACON) facilities, such as New York, Atlanta, and Chicago TRACONs. For example, as of September 2015, Atlanta TRACON had 70 certified controllers—well below FAA's staffing range of 81–100 controllers. (See the exhibit for more details on staffing at critical facilities.) However, the facility also had 20 controllers in training who were capable of managing air traffic on certain positions.

FAA's efforts to maintain its workforce depends on ensuring it will train enough new controllers to offset those who retire. Our work has found that training controllers remains a key challenge, particularly at critical facilities. For example, many of the individual critical facilities we reviewed have a higher percentage of trainees than the national average. When comparing the training levels of all the critical facilities, the total percentages appear reasonable—23 percent of controllers were in training at FAA's critical facilities, compared to the national average of nearly 23 percent, as of September 2015. However, significant variation exists between each individual facility. For example, six of the 23 critical facilities we reviewed—Chicago, Dallas, Las Vegas, and Anchorage TRACONs, and O'Hare and Miami Towers—had 30 percent or more of their controller workforce in training (see exhibit). This is significant because trainees can only control air traffic by themselves on positions for which they are qualified, thus limiting where a facility manager can schedule the trainee.

Moreover, at certain facilities, larger volumes of trainees exacerbate training challenges. Certified controllers are frequently diverted from managing air traffic to providing on-the-job and classroom training to new controllers. In our 2013[3] and 2015[4] reports on FAA's Air Traffic Controller Optimum Training Solutions (ATCOTS) contract, we recommended that FAA develop a plan to assess the availability of internal resources and verify whether controllers are available to teach training at each facility. This recommendation was aimed at helping FAA better define both its internal and external controller training requirements, but it remained open for 2 full years. FAA completed its actions to close the recommendation in 2016, well after the April 1, 2015, award of FAA's new air traffic controller training contract, known as the Controller Training Contract.

Further, high numbers of controllers in training leave uncertainty as to when a facility will achieve its target number of certified controllers. This is because training outcomes vary widely and it can be difficult to predict whether a specific individual will successfully complete training or how long it will take. There is a significant variation in the time it takes to train new controllers—training typically takes anywhere from 1 to 4 years. For example, in fiscal year 2012, en route controllers required an average of 3.1 years to complete training, and terminal controllers averaged 2.4 years.

Predicting how long it will take an individual controller to finish training is particularly difficult because each facility is unique in its size, number of operations, and complexity. Moreover, actual training times can vary widely even between trainees with a similar background at the same facility. For example, one trainee at Chicago Center took 6.4 years to complete training, while another trainee with a similar background took less than 1 year at the same facility. As a result, FAA cannot guarantee that it will have enough controllers who have completed training when it needs them.

FAA Does Not Consider Facility-Specific Information When Anticipating Future Retirement Trends at Critical Facilities

Another key staffing challenge for FAA is accurately determining how many controllers are eligible to retire and when those controllers will actually choose to retire. Accurately predicting retirements is a critical element in managing controller resources, as FAA uses these predictions when determining how many new controllers and trainees to assign to a facility. If more controllers retire in a given year than FAA anticipates, facilities could be left with significant shortages in certified controllers to manage traffic at a facility.

Anticipating retirements is of particular concern given the high number of controllers eligible to retire at FAA's most critical facilities. As of September 2015, FAA estimated that 27 percent of all fully certified controllers at critical facilities were eligible to retire.

---

[3] *FAA Needs To Improve ATCOTS Contract Management To Achieve Its Air Traffic Controller Training Goals* (OIG Report No. ZA-2014-018), December 18, 2013.
[4] *FAA Has Not Sufficiently Addressed Key Weaknesses Related to Its ATCOTS Contract* (OIG Report No. ZA 2016-010), December 10, 2015.

In contrast, only 24 percent of fully certified controllers nationwide were eligible for retirement. Moreover, some individual facilities have retirement eligibility rates well above the national average. For example, at New York TRACON, 39 percent of the controllers are eligible to retire. Other facilities where 30 percent or more of the controllers are eligible include Chicago Center, New York Center, Indianapolis Center, and Houston TRACON (see exhibit).

Despite the high rates of retirement eligibility at critical facilities, FAA does not sufficiently consider facility-specific factors when anticipating future retirements. Instead, after determining how many controllers are eligible to retire, FAA relies on nationwide historical data to anticipate when they will retire, regardless of the difficulty and stress of complex locations. For example, in fiscal year 2015, only 15.9 percent of all controllers retired in their first year of eligibility. Nationwide trends also show that the majority of controllers usually retire before reaching the mandatory retirement age of 56. However, at the facility level, actual retirements may not follow these national trends, since there are many factors involved in individual controller's decision regarding when to retire, including family and financial reasons.

To help better predict retirements at the facility level, facility managers may have additional information on retirement trends at their facilities. Yet most managers we interviewed stated that Headquarters did not effectively coordinate with them when determining retirement projections for their facility. For example, the facility manager at Chicago O'Hare Tower expressed concerns that his facility was only receiving 5 new controllers based on FAA's retirement projections, even though he stated 15 controllers had retired the previous year. As a result, he was concerned that the facility would not have enough experienced controllers to staff the two current control towers, which are among the busiest in the NAS. After we shared these concerns with FAA Headquarters, an FAA official took steps to address the issue.

FAA's Staffing Practices Lack Accurate Scheduling and Performance Data, Limiting Their Effectiveness

FAA also lacks a process for fully and accurately determining how many controllers it needs at each facility. FAA assigns staffing ranges for specific facilities in its CWP using two different staffing models: one for en route air traffic control centers and one for TRACONs and towers. However, as we reported in January 2016,[5] discrepancies between current facility staffing levels and FAA's plans are due in part to weaknesses in the method FAA uses to develop these models and ranges. While the model used for terminal air traffic facilities appears to be reasonable and accurate, the en route model does not yet effectively capture how many controllers are needed to manage high-altitude

---

[5] *FAA Continues To Face Challenges in Ensuring Enough Fully Trained Controllers at Critical Facilities* (OIG Report No. AV-2016-014), January 11, 2016.

air traffic. In a June 2014 study,[6] a National Academy of Sciences committee highlighted a number of concerns about the validity of the en route model, stating that FAA should develop a simpler model based on observing controllers managing traffic and performing specific tasks. In our report, we recommended that FAA develop and implement a methodology for determining en route staffing ranges. FAA agreed to complete this action by September 30, 2016.

FAA's staffing models are further hindered by data limitations. For example, FAA bases its staffing in part on data from its Labor Distribution System, which records the amount of time controllers spend on position (i.e., the number of hours they spend actively controlling traffic). Identifying how much time controllers actually spend on position and how much time they perform other duties—such as recurrent training, administrative tasks, and participation in workgroups—can help FAA determine how many controllers it needs to schedule and staff. However, our 2014 report[7] found that data control and entry weaknesses may limit the effectiveness and reliability of Labor Distribution System data, and certain codes used to track specific duties were too broad to be useful. We recommended that FAA ensure that all facilities implement and use new task codes designed to better differentiate the tasks that controllers are completing. FAA agreed to complete this action by December 31, 2016. Ultimately, this information is essential to developing safe and efficient controller work schedules, given the wide variety of critical duties they perform during each shift.

FAA LACKED AN EFFECTIVE PLAN TO TRANSITION TO ITS NEW CONTROLLER HIRING POLICIES

FAA is planning to hire more than 3,400 additional controllers over the next 2 years to offset estimated future retirements. The Agency faces the significant challenge of selecting these new controllers and assigning them to air traffic facilities where they will have the best opportunity to succeed. In February 2014, FAA made several significant changes to its controller hiring process. However, FAA transitioned to its new hiring policies without an effective plan or process for implementing the new policies. While it is too soon to assess whether FAA's new policies will allow the Agency to hire all the controllers it needs, the Agency continues to fall short of its overall hiring goals.

FAA Introduced Significant Changes to Its Controller Hiring Process

FAA's decision to revise its controller hiring process was based on both internal and external reviews of its policies. For example, FAA conducted annual internal assessments of its controller workforce from 2007 through 2012, as required by law.[8] In 2011, the

[6] National Research Council, Transportation Research Board Special Report 314. 2014. *The Federal Aviation Administration's Approach for Determining Future Air Traffic Controller Staffing Needs.* Washington, DC: The National Academies Press.
[7] *FAA Lacks the Metrics and Data Needed To Accurately Measure the Outcomes of Its Controller Productivity Initiatives* (OIG Report No. AV-2014-062), July 9, 2014.
[8] Equal Employment Opportunity Commission, Management Directive 715, requires all Federal agencies to perform barrier analyses to ensure the workplace is free of barriers that impede full opportunities to all persons in the workplace.

FAA Administrator also convened an Independent Review Panel (IRP) of industry and academic professionals to evaluate how the Agency hires, assigns, and trains new controllers.

According to FAA officials, these reviews triggered further analysis, which led to the following changes to improve the hiring process in February 2014:

- Established an Executive Steering committee responsible for providing oversight of the new hiring process and for implementing the recommendations identified in the analysis of potential barriers in the hiring process

- Established the Human Resources office as the single organization to take charge and centrally manage the process from announcement through placement into the FAA Academy (a process formerly conducted by the Air Traffic Organization)

- Standardized the hiring process, eliminated multiple announcements for multiple hiring sources, and standardized the minimum qualifications for all applicants

In addition, FAA's new process opened the competition for jobs up to the general public, whereas the Agency had traditionally relied mostly upon its announcements to veterans or graduates of the 36 FAA-designated Collegiate Training Initiative (CTI) schools.[9] Table 1 lists the differences between the prior and current hiring process:

Table 1. Comparison of FAA's Legacy Hiring Process to the New Hiring Process

Legacy Hiring Process[10]	New Hiring Process
Multiple Vacancy Announcements	Nationwide Vacancy Announcements
Multiple Qualifications/Eligibility Criteria Sets/No Biodata	One Set of Qualifications/Eligibility Criteria
AT-SAT	AT-SAT & Biographical Assessment
Candidates Placed by Their Location Preference	Candidates Placed by Agency Needs
Centralized Selection Panel	No Centralized Selection Panel
Interview	No Interview

Source: OIG analysis of FAA documents.

---

[9] Controller Training Initiative (CTI) schools offer 2- and 4- year non-engineering aviation degrees that teach basic courses in air traffic control and aviation administration. The program is designed to provide qualified candidates for developmental air traffic control specialist positions.
[10] FAA's Air Traffic Control Specialist hiring process, prior to February 2014.

A key change to the hiring process was the introduction of a new screening tool, referred to as the Biographical Assessment, which replaced the Experience Questionnaire[11] part of the Air Traffic Selection and Training (AT-SAT) test.[12] According to FAA, the Biographical Assessment predicts controller performance[13] through a process of asking individuals to recall and report their typical and sometimes specific behaviors or experiences, generally from an earlier time in their lives.

In February 2014, FAA implemented the Biographical Assessment with its first all-sources job announcement. FAA subsequently revised the assessment for its second all-sources job announcement in March 2015, after testing the assessment on over 1,700 certified professional controllers. FAA officials stated that testing on current controllers was conducted to improve the correlation of the questions to controller job performance.

FAA officials stated the Biographical Assessment was designed to address critical and important attributes that are key to controller performance. However, the effectiveness of the assessment will not be known until controllers hired under this process become fully certified, which could take several years.

FAA Transitioned to Its New Hiring Policies Without an Effective Implementation Process

FAA did not have a documented plan to implement its new controller hiring process. After announcing the new process in December 2013, FAA began implementing it in February 2014, a little over a month later. FAA officials stated that the Agency implemented the new process relatively quickly because the FAA Training Academy had been closed for several months due to sequestration, lending urgency to the need to hire new controllers. According to officials in FAA's Office of Human Resources, there were over 900 applicants waiting to be processed as controllers, and instead of relying on the old hiring process, the Executive Steering Committee[14] made the decision to implement the new hiring process with the first announcement in February 2014.

Stakeholders have expressed concerns about the sudden and unexpected implementation of the new hiring process. In particular, CTI program administrators[15] stated that FAA poorly managed the rollout by implementing it only 1 month after informing the CTI

---

[11] Assessed whether participants possess certain work-related attributes by asking questions about past experiences.

[12] A computerized aptitude test comprised of eight subtests that vary in composition, from traditional multiple-choice question to dynamic scenarios and simulations.

[13] OPM policy states that biographical data measures include items about past events and behaviors reflecting personality attributes, attitudes, experiences, interests, skills, and abilities validated as predictors of overall performance for a given occupation.

[14] Established by the FAA Administrator to provide oversight for the new hiring process and responsible for implementing recommendations identified in the Barrier Analysis. The Committee included the Deputy Administrator and the Head of Human Resources.

[15] CTI was designed to establish partnerships with higher educational institutions to broaden the employment opportunities in the aviation industry, particularly among air traffic controllers.

program administrators of the change, even though the new hiring process eliminated the role of the CTI program when hiring new controllers.

In addition to the changes introduced by the new hiring policies, FAA did not establish an effective tracking system to monitor candidates as they moved through the hiring process. According to FAA officials, many of the applicants were delayed entry by well over a year, and in some cases 2 years, because of the length of time it took applicants to complete the onboarding process. FAA officials told us that they cannot readily determine where applicants are at any time in the process and had to review three different databases (Human Resources, Security, and Medical) to determine an applicant's status.

According to FAA officials, the Agency is planning to address this issue but has not yet established a timeline for doing so. Specifically, in October 2015, approximately 20 months after implementing the new hiring process, FAA established an internal review team to identify noted inefficiencies with the new hiring process. The internal review team has recommended changes to improve the process, including how to better inform applicants of their responsibilities in completing the medical and security screening and track applicants through the process. However, FAA's timeline for implementing improvements remains uncertain, and FAA has not determined when or what further changes will be implemented.

While It Is Too Soon To Assess the Overall Impact of the New Hiring Policies, FAA Continues To Fall Short of Its Hiring Goals

FAA has not met its hiring goals since the implementation of the new hiring process. FAA told us this was due to several hiring and training challenges, which included restoring hiring activities following sequestration, reopening the Academy, and addressing concerns with the onboarding process. The FAA Academy was closed from April 2013 to December 2013, and FAA issued one controller hiring job announcement in fiscal year 2014 and two in fiscal year 2015. Given the length of time it takes to move a controller through the process, it is too soon to determine whether controllers hired through FAA's new hiring process will complete training at the Academy and the facility at a more successful and faster rate.

One of FAA's biggest challenges under the new process has been improving its timeline for bringing new controllers on board. Specifically, FAA experienced delays with moving applicants through the new process for the first vacancy in February 2014. Seven months after this announcement, about 10 percent (155) of the 1,593 applicants selected had progressed to the Academy, while over 90 percent remained somewhere within the hiring process. According to FAA, this was due in part to the difficulty of advancing applicants through the onboarding process. By October 2015, the situation improved, as 741, or roughly half, of the applicants progressed to the Academy or were placed at a facility. However, FAA still lacks metrics on the time it should take an applicant to

advance through the hiring process, and many remaining new hires have not initiated the onboarding process. As a result, FAA remains challenged in meeting its hiring goals and ensuring it has enough certified controllers to offset retirements.

FAA FACES SIGNIFICANT ISSUES THAT WILL AFFECT ITS CONTROLLER WORKFORCE

Going forward, a number of issues that will materially affect the controller workforce also require FAA's attention. Our office has made several recommendations aimed at improving FAA's ability to efficiently manage its workforce while at the same time meeting the demand for emerging technologies. In particular, FAA must implement a controller scheduling tool to increase productivity, prepare controllers to safely manage increasing UAS traffic, and determine the impacts of new NextGen technology on controller productivity and workload.

Effectively Implementing a Controller Scheduling Tool Could Increase Efficiencies and Productivity

Effective scheduling is critical to maximizing controller productivity and maintaining NAS efficiency. However, as we stated in our January 2016 report, significant disagreement exists between Headquarters staff and air traffic managers on staffing practices. Air traffic facility managers told us they did not understand or fully accept FAA's staffing plans and ranges, which are developed by FAA's Office of Labor Analysis. Examples of criticisms from the facility managers include not accounting for high training attrition, unusually long training times, and new technology deployment.

Ultimately, staffing decisions are driven by the work schedule, which determines the number of controllers that are allowed to take leave on a daily basis and how many are expected to work operational positions during each shift. In January 2016, we recommended that FAA make better use of a scheduling tool it already has some experience with, known as the Operational Planning and Scheduling (OPAS) tool. OPAS is a system that aims to optimize scheduling practices through a commercially available scheduling program used by other countries, including Australia, Canada, and Germany.

In at least one case, FAA has already tested OPAS to reevaluate the number of controllers it needs at one facility, Atlanta Center. As we reported, FAA's Office of Resource Optimization analyzed the current Atlanta Center controller work schedule structure using OPAS and concluded that some efficiency could be gained. However, FAA does not currently consider the tool's results when determining facility staffing ranges in the CWP. This leaves FAA with multiple methods for assessing staffing needs, large discrepancies between each method, and continued disagreement with facilities regarding staffing. FAA partially concurred with our recommendation to incorporate OPAS into its future schedule plans. While FAA agreed to develop a method to uniformly analyze the

scheduling practices at facilities by September 30, 2016, the Agency disagreed that OPAS was necessary to complete this.

Introducing UAS Technology Into the NAS Will Present New Challenges for Controllers

The rapidly expanding use of UAS technology is presenting new challenges for air traffic controllers. While FAA has approved over 5,000 small UAS for operations away from airports, the Agency has also approved some large UAS to operate in the NAS in airspace that manned traffic typically use. The challenges controllers will face as UAS integrate into the NAS were illustrated in a July 2012 FAA study, which simulated UAS operations at small- to medium-sized airports.[16] The study found that introducing only *four* unmanned aircraft into the simulated airspace system had significant impacts on safety, efficiency, and controller workload. As more UAS are approved, the influx of UAS operations will only further increase the challenges for controllers.

For example, FAA is still working to develop the procedures, training, and tools for controllers to effectively manage large UAS in the same airspace as other aircraft. Controllers told us they must segregate UAS from other traffic. For example, controllers at one air traffic control facility handling large UAS operations told us that they always shift manned aircraft away from UAS because they were not aware of the specifics of individual UAS missions and performance characteristics, such as differing airspeed capabilities and rates of climb.

While FAA has provided some guidance on air traffic policies and procedures, air traffic personnel expressed concerns about the lack of training and guidance in certain areas, such as how to handle a "lost link" event. In 2014,[17] we recommended that FAA establish a timeline for developing standardized training and procedures for air traffic controllers in managing UAS operations in the NAS. FAA concurred with our recommendation and plans to introduce additional training in July 2016, and complete it by December 2016.

We also recommended that FAA assess and determine the requirements for automated tools to assist air traffic controllers in managing UAS operations in the NAS. This is important because FAA's air traffic control equipment was not developed with UAS operations in mind. For example, controllers told us that the En Route Automation Modernization (ERAM) system, a controller automation system for processing flight data for high-altitude flights, cannot yet adequately manage UAS flight plans because they contain an unusually large amount of navigational data. This forces controllers to implement manual and time-consuming "work-arounds" for handing off UAS between facilities and airspace sectors. FAA concurred with our recommendation and expects to

---

[16] FAA, *Multi-UAS Operational Assessment: Class D Airspace Simulation Report*, July 2012. According to an FAA official, the purpose of the study was to intentionally stress the system to determine whether the Agency needs to develop new policies or perform further research. The study was conducted at the William J. Hughes Technical Center.

[17] *FAA Faces Significant Barriers To Safely Integrate Unmanned Aircraft Systems Into the National Airspace System* (OIG Report No. AV-2014-061), June 26, 2014.

complete actions to determine the requirements for automated tools to assist controllers by September 30, 2017.

NextGen Technologies Will Impact Controller Training and Productivity

Many of FAA's envisioned NextGen capabilities rely on a number of transformational programs that are expected to provide benefits and improve efficiency for airspace users and controllers. However, FAA has yet to determine the impact of these technologies on controller training, staffing, and productivity. For example, the $1.6 billion Data Communications (DataComm) program is expected to improve safety and boost controller productivity by allowing controllers to communicate with pilots via digital text messages, rather than relaying information by voice over radio, which is more time consuming and less precise. The productivity enhancements from DataComm technology could be substantial and could shed light on how much additional traffic the existing controller workforce could safely handle with a key NextGen technology. However, FAA has not yet fully quantified the expected benefits of this technology or the impacts on the size of the controller workforce.

Another example of new technology that will impact controllers is the $2.7 billion Automatic Dependent Surveillance–Broadcast (ADS-B) system, which is central to FAA's NextGen plans to transition from a ground-based radar system to a satellite-based system for monitoring and managing air traffic. ADS-B is expected to improve safety and increase capacity by allowing controllers to use the more precise ADS-B surveillance information to better aid pilots and controllers during all phases of flight. However, despite a mandate to equip with some ADS-B technology by 2020, airspace users have not equipped in large numbers of their aircraft, and FAA has not fully developed rules and procedures that would allow controllers to use ADS-B exclusively to separate and control air traffic in terminal and en route environments. In 2010, we recommended that FAA further quantify and validate the productivity enhancements from displaying ADS-B information on controller displays and the additional automation needed to maximize benefits of the technology. FAA is still working to address our recommendations.

FAA has also not yet determined or quantified the impact these new capabilities will have on air traffic controller workload and staffing. Our office is currently reviewing FAA's progress in realizing benefits from ADS-B, DataComm, and other NextGen transformational programs, and we expect to issue our report later this year.

CONCLUSION

Controller staffing has been a longstanding issue for FAA, yet the Agency continues to struggle to accurately determine how many controllers it needs, along with meeting its significant training and hiring goals, particularly at its critical facilities. Sustained senior management attention and actions to address our prior recommendations are needed to

ensure that FAA can maintain a robust workforce in a dynamic air traffic environment. Our office remains committed to helping FAA identify ways it can improve the efficiency, productivity, and effectiveness of its controller workforce, both now and into the future. We will continue to keep this Subcommittee apprised of our findings and recommendations in these important areas.

This concludes my prepared statement. I will be happy to answer any questions you or other Members of the Subcommittee may have.

EXHIBIT. STAFFING AT FAA'S CRITICAL FACILITIES AS OF SEPTEMBER 2015

| | Staffing Ranges | | | | | CPCs | Percent |
Facility	Min	Max	CPCs	Trainees	Percent Training	Retirement Eligible	CPCs Eligible
Anchorage Tower/TRACON	20	25	18	16	47%	1	6%
Atlanta TRACON	81	100	70	20	22%	15	21%
Atlanta Tower	42	51	44	6	12%	6	14%
Chicago TRACON	83	101	66	34	34%	15	23%
Denver TRACON	64	78	55	16	23%	5	9%
Dallas TRACON	78	95	54	38	41%	12	22%
Denver Tower	32	40	37	3	8%	8	22%
Newark Tower	28	34	27	9	25%	7	26%
Houston TRACON	79	96	71	18	20%	21	30%
John F. Kennedy Tower	29	35	27	8	23%	7	26%
Las Vegas TRACON	40	48	38	18	32%	2	5%
LaGuardia Tower	26	32	30	8	21%	7	23%
Miami Tower	81	99	60	29	33%	17	28%
New York TRACON	174	213	144	52	27%	56	39%
O'Hare Tower	59	72	49	23	32%	11	22%
Potomac TRACON	136	166	141	24	15%	19	13%
Southern California TRACON	193	235	204	39	16%	55	27%
Albuquerque Center	165	202	154	32	17%	30	19%
Chicago Center	279	341	313	61	16%	113	36%
Washington Center	253	310	281	33	11%	75	27%
Indianapolis Center	248	303	257	67	21%	83	32%
New York Center	236	288	225	83	27%	76	34%
Atlanta Center	314	384	325	38	10%	88	27%

Note: Highlight indicates CPC level below staffing range minimum. These numbers were updated from the September 2014 data we used in our January 2016 critical facilities report.

National Air Traffic Controllers Association
AFL-CIO

Written Testimony of

Paul M. Rinaldi
President
National Air Traffic Controllers Association, AFL-CIO (NATCA)

June 15, 2016

Before
The United States House of Representatives
The Committee on Transportation and Infrastructure
Subcommittee on Aviation

"A Review of the Federal Aviation Administration's
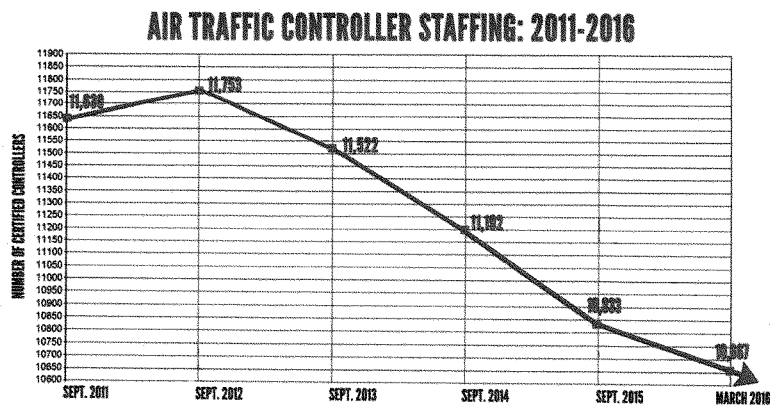Air Traffic Controller Hiring, Staffing and Training Plans"

Thank you for the opportunity to testify today on behalf of the National Air Traffic Controllers Association, AFL-CIO (NATCA) about the current air traffic controller staffing crisis. NATCA is the exclusive representative for over 19,000 employees, including the Federal Aviation Administration's (FAA) air traffic controllers, traffic management coordinators and specialists, flight service station air traffic controllers, staff support specialists, engineers and architects, and other aviation safety professionals, as well as Department of Defense (DOD) and Federal Contract Tower (FCT) air traffic controllers.

NATCA uses the word "crisis" when referring to the current controller staffing shortage because that's exactly what this is: a time of intense difficulty or trouble and a time when a difficult or important decision must be made. For the FAA and our National Airspace System (NAS), both definitions apply to the current state of air traffic controller staffing.

The safest, most complex and efficient airspace in the world requires a well-trained, highly qualified workforce of air traffic controllers who must work rapidly and efficiently under tremendous stress while maintaining complete concentration. Controllers guide approximately 70,000 flights per day in the U.S. while ensuring that nearly 900 million passengers a year arrive safely at their destinations. Unfortunately, budgetary missteps and the FAA's bureaucratic red tape have led to a shortage of air traffic controllers.

Controller staffing has been a concern for many years, but it has now reached a crisis level: the NAS has declined to a 27-year low for Certified Professional Controller (CPC) staffing. Controller staffing has fallen nearly 10 percent since 2011, and the FAA has missed its hiring goals in each of the last seven years. In fact, in fiscal year (FY) 2015, the FAA fell 24 percent short of its hiring goal. More controllers are eligible to retire today, specifically one-quarter of the workforce, than are in the pipeline to replace them. If this staffing crisis continues along its current trajectory, the FAA will be hard-pressed to maintain its current capacity, let alone expand and modernize the system through NextGen programs.

AIR TRAFFIC CONTROLLER STAFFING: 2011-2016

1

Stop-and-go funding for the FAA has made this staffing shortage worse; sequestration forced the FAA to institute a hiring freeze and shutter the FAA Academy between March and December 2013. Even if the FAA hired the maximum number of employees in 2014, 2015, and 2016, it would not have made up for the lost year of hiring and training in 2013, and the attrition experienced from 2013 through 2016. But, even with goals well below maximum hiring capacity the FAA failed to reach its hiring targets in those years.

It is important to note that the FAA's goal of hiring just over 1,600 new employees in 2016 falls short of the FAA's maximum hiring capacity of training approximately 2,000 new employees at the FAA Academy – split between over 1,000 en route and over 900 terminal. The reality is that, in total, the FAA is over 1,400 controllers short of its cumulative annual hiring goals since 2011. While we recognize that some of the FAA's later years' hiring goals are higher than they would have been had the FAA not failed to meet its targets in earlier years, the FAA will never make up for its missed opportunities unless it hires to maximum capacity.

	2011	2012	2013	2014	2015	2016*
ON-BOARD	15,236	15,063	14,461	14,059	14,010	13,926
CPC	11,639	11,753	11,522	11,192	10,833	10,667
CPC-IT	965	1,143	1,187	1,200	1,218	1,239
DEV (INCLUDING AG)	2,632	2,167	1,741	1,667	1,959	2,020
AG	676	671	440	665	936	768
RETIREMENT ELIGIBLE	3,064	3,224	3,077	2,982	3,355	2,915
FAA PLANNED TO HIRE	829	981	1,315	1,286	1,772	1,619
FAA ACTUALLY HIRED	824	925	554	1,112	1,345	1,457**

CPC: Certified Professional Controller

Source: FAA Finance Staffing Data Snapshot, FAA Controller Workforce Plan

CPC-IT: Certified Professional Controller in Training (fully certified elsewhere, transferred to a new facility and began training there)

DEV: Developmental (trainee)

AG: Graduate of the FAA initial Classroom Training Academy in Oklahoma City, newly hired, and started at their first facility as a trainee

*Numbers through March 19, 2016

**Approximate number, through first half of Fiscal Year 2016.

As a result, the FAA remains unable to adequately staff many of its large, high-volume facilities. The 2013 hiring freeze further compounded an already tenuous staffing situation in which the FAA has been unable to replace retiring controllers. New hires who were admitted into the Academy beginning in January 2014 are just starting to become CPCs, because it takes between two and four years to become fully trained and capable of separating traffic on their own. Employees hired today will not reach full certification until mid-2018-to-2020. CPCs must train these new hires, often taking those controllers away from their primary job of separating traffic. Thus, facilities that are already at critical staffing levels (defined as requiring overtime and six-day weeks to fully staff all positions) are facing a dire situation, as retirement eligible controllers leave the FAA and those remaining on the job begin the time-intensive process of training Academy graduates.

Further staffing reductions could have an immediate detrimental effect on capacity, meaning fewer planes in the sky and greater potential for delays. Likewise, the FAA would continue to fall further behind in its development, testing, deployment and training for NextGen modernization programs, procedures, and equipment. If we do not act decisively and soon, I fear that our nation's air traffic control system will soon face the same challenges and consequences as D.C.'s Metro system, which has been plagued by deferred maintenance and chronic underfunding. Without a stable and predictable funding stream for the NAS, controller staffing is just the first of many NAS crises that Congress will need to resolve in the near future.

NATCA believes the FAA must take a holistic, collaborative approach to resolving these staffing issues and we are committed to working towards permanent, sustainable solutions. At the same time, we must be vigilant in defending against any action that could impede properly staffing the NAS, including the potential for future furloughs and another closure of the FAA's training Academy.

Progress Through Collaboration

Despite this grim outlook, in the months since this Subcommittee's roundtable, on December 8 of last year, regarding Air Traffic Controller Staffing, the FAA, in collaboration with NATCA, has made some progress. The roundtable discussion was certainly the pivotal point that has helped propel the FAA toward meeting its hiring goals for the first time in eight years. That said, the FAA's goal for FY 2016 is far short of the FAA Academy's maximum throughput. NATCA and the FAA's collaborative efforts on staffing touch on many areas, not just hiring.

For starters, NATCA and the FAA's Air Traffic Organization (ATO) worked collaboratively to develop CPC targets for each of the 314 air traffic facilities nationwide. These targets were jointly developed based upon traffic volume and operational needs, among other factors. The targets revealed which facilities were most short staffed.

NATCA and the FAA have also worked together to implement a better transfer and placement process. Although the FAA's attrition models have been consistently accurate, its transfer and placement system has been inherently flawed. For years, the FAA has placed many academy graduates/new hires into the most complex, highest volume Terminal Radar Approach Control facilities (TRACONs), which has led to extremely high training failure rates. NATCA has consistently maintained that there should be a career-growth pipeline. Employees assigned to the terminal option should begin their career at low volume terminal facilities, and, if they desire, transfer to more complex facilities, culminating in their progression to the most complex, highest volume facilities. Now that NATCA and the FAA have collaboratively established CPC targets and processes, we have been able to more successfully implement a transfer policy that encourages such a career progression.

This new transfer policy takes into account several factors. Prior to NATCA and the FAA's collaborative efforts, each facility manager dictated whether employees could be released at all, and if so, how long employees were required to stay before their transfer could be effectuated. In many facilities, managers regularly required employees to stay for two years, the

3

maximum amount of time allowed without higher-level approval. The prior policy also allowed each of the 314 facility managers to determine whether they had a need for additional employees and how many they needed. Now, those decisions are all resolved at the national level based on organizational need, with one coherent plan that includes every facility in the FAA, not 314 independent fiefdoms.

The new, jointly developed transfer process will also allow employees to transfer much more efficiently. For employees assigned to facilities that have at least 90 percent of the facility's jointly-developed CPC target, release dates will be within three months of selection, or at the election of the employee no later than within six months. For employees assigned to facilities that have at least the national average percentage of their facility's CPC target, release dates will be within 12 months of selection. Employees assigned to facilities below the national average ratio of CPCs to target CPCs will not be released until their facilities reach the national average. NATCA and the FAA agree that because of the significant staffing needs at New York TRACON (N90) and Chicago TRACON (C90), employees who meet the minimum qualifications for those facilities and who express a desire to transfer to those facilities will be released within three months.

Finally, NATCA and the FAA have also collaborated in order to eliminate bureaucratic problems within the FAA's Human Resources offices. Rather than having nine separate transfer rosters, maintained differently, and in several cases not maintained at all, the new process establishes one national employee requested transfer roster and a single process to administer it. This solution supports the singular national plan that prioritizes all facilities based upon need from an organizational perspective.

Bureaucratic Delays in the Hiring Process

Although it has not yet come to fruition, NATCA has been advocating for the FAA to post a continuously open vacancy announcement for experienced air traffic controllers. The FAA did post a vacancy announcement for experienced controllers earlier this year, however, there were flaws in the process. The FAA regularly uses its experienced vacancy announcement to supplement for shortfalls in its other hiring. The FAA's 2016 hiring goal of approximately 1,600 controllers includes both experienced controllers and new employees without any experience. But, in its most recent announcement, not all of the selected experienced controllers will be added to the FAA's rolls this year due to various delays in their start dates. Many qualified, experienced controllers were not hired at all. The FAA should remove all barriers to hiring qualified, experienced controllers immediately and they should not be used merely to supplement inadequate hiring from other pools.

One of the FAA's self-imposed barriers was its termination of the Retired Military Controller (RMC) program in July 2015. That program allowed the FAA to hire RMCs for term-limited periods without regard to the maximum entry age. FAA HR terminated that program without coordination with the ATO. This past Friday, FAA HR finally established a grandfather rule to extend current RMCs. We hope a new policy providing the hiring authority will follow in short order.

The FAA originally began its efforts to revise its hiring process in February 2014 in order to address what it considered a critical flaw that led to the exclusion of many qualified applicants from its hiring pool. However, because the FAA did not work collaboratively to include NATCA in the process, that change led to the exclusion of a wholly different group of qualified applicants. Hundreds, if not thousands, of qualified candidates were rejected as an unintended consequence of this new process, which included the use of a "Biographical Assessment" (also commonly known as the "Biographical Questionnaire" or "BQ"). The BQ was a newly-implemented questionnaire that was meant to evaluate a candidate's personality, background, and leadership aptitude in order to predict future success as an air traffic controller. Despite its objective, the first BQ had never been validated using the incumbent controller workforce.

The second BQ, which was implemented for the 2015 vacancy announcement, was validated – with the help of NATCA – on the controller workforce. But, in the interim period, many candidates who had already passed the FAA's prior screen, the Air Traffic Selection and Training (ATSAT) Test, were not offered positions. The ATSAT is still a required test, however, it now occurs after an employee passes the BQ.

Also, as part of its 2015 vacancy announcement, the FAA implemented a never before used ATSAT. That test had been validated at the same time as the original ATSAT, which had been in use for over a decade. After only one use, the FAA determined it needed a completely new ATSAT and ceased hiring candidates who have no experience until the new ATSAT can be developed and validated. NATCA, again, has been encouraging its members to participate in the ATSAT validation process, but this additional delay has prevented the FAA from posting another all-sources vacancy announcement for over a year.

Air Traffic Controller Training

The reality is that becoming an air traffic controller isn't easy. They must be hired by the FAA before their 31st birthday and retire by age 56. They also undergo rigorous and thorough training, which starts with three-to-four months at the FAA Academy in Oklahoma City. Thirty-four percent (34%) of new hires assigned to the en route option at the FAA Academy do not graduate. Nineteen percent (19%) of new hires assigned to the terminal option fail to graduate. With such significant attrition so early in the process, the FAA's already-reduced hiring pools shrink even further before a single employee reports to a short-staffed facility.

Upon graduation, trainees are assigned as developmental controllers at an air traffic control facility where they must complete several stages of additional training before full certification. The total process can take two-to-four years and at many of the FAA's most critically-staffed facilities the majority of newly assigned controllers - including internal transfer candidates, experienced new hires, and those without experience – do not succeed in training. Only one-quarter of trainees at the New York TRACON achieve full certification. At similar-type facilities in other parts of the country, the success rates are also quite low: Atlanta TRACON (A80) 47%; Chicago TRACON 30%; and Dallas/Fort Worth TRACON (D10) 52%.

Because of these high failure rates and the significant investment in new employees, NATCA and the FAA have collaborated to establish a process to reassign training failures to

facilities where they will have a higher likelihood of success, rather than terminating their employment and starting from scratch with a new hire. Employees who are unsuccessful in training are referred to the National Employee Services Team (NEST). Based upon the employee's demonstrated skills and abilities, the NEST makes a finding regarding retention or termination. If the NEST finds retention warranted, it makes a determination about the type and level of facility in which the employee has the highest likelihood of success.

The Flawed and Misleading FAA Air Traffic Controller Workforce Plan

The FAA's 2016 Air Traffic Controller Workforce Plan (CWP) illustrates how the FAA continues to ignore the harsh reality of its staffing shortages. If adopted through congressional action or tacitly endorsed by Congress, the FAA's CWP would allow the FAA to lower staffing at many of its critical, high-volume facilities that are already short-staffed of CPCs.

In particular, the FAA's CWP is problematic for a number of reasons. First, it ignores the CPC targets that were collaboratively developed by the FAA and NATCA to meet the Agency's operational resource needs in each facility. These collaborative CPC targets were developed to distribute controller staffing appropriately based on traffic throughout the NAS.

Second, the CWP, which was developed by FAA Financial Services, uses numbers that are inaccurate and misleading because they are based on actual on-board numbers ("headcount"), rather than using the operational staffing targets developed by ATO. These headcount/actual-on-board numbers deceptively include developmental stage trainees (who have never been certified at any FAA air traffic control facility), as well as CPC-ITs (who are CPCs "in training" at a new facility but who are not yet certified at that facility), alongside CPCs. This methodology does not take into account the functional day-to-day operational needs of each facility when it comes to staffing all positions, as well as carrying out other functions that only CPCs can perform like training developmental controllers and serving as the controller-in-charge (CIC). In its 2014 congressionally-mandated report, the National Academy of Sciences recognized this flaw in the CWP, writing, "(e)ach of these (chronically hard-to-staff) facilities is assigned CPC-ITs and developmental controllers to raise its total staffing level to at least the bottom of the range. However, new personnel are not qualified to staff all the positions at the facilities, and current CPCs must spend time training them." Transportation Research Board Special Report 314, *FAA's Approach for Determining Future Air Traffic Controller Staffing Needs*, 2014, at 84. (See Sec. 608, Pub. L. 112–95—Feb. 14, 2012)

Furthermore, not all developmental trainees and CPC-ITs achieve full certification. That is especially true in high volume, high complexity facilities, where the training failure rates can exceed 50%

Finally, the CWP's numbers are even more dubious because of the FAA's consistent practice of adjusting its definition of "controllers" within different reports in order to manipulate current and projected staffing levels. Sometimes it includes CPCs and CPC-ITs; other times it also includes developmental stage controllers. Such a practice is extremely detrimental to the process as it creates a moving target for all parties who are working toward a resolution.

To help illustrate these issues with practical examples, at the Newark Air Traffic Control Tower (EWR), the NATCA-FAA collaboratively developed CPC target is 34. There are currently only 28 CPCs assigned to EWR. In the 2016 CWP, it lists a range of 28-34 controllers and deceptively reports 36 currently on-board (including trainees). Based on the CWP, it would appear as if EWR already exceeds the maximum of the staffing range, when in reality that facility is short six CPCs. The CWP would allow the FAA to staff to the average (31) of the "high" and the "low" or even the bottom of its range (28), which could lead to even lower staffing at EWR. Such a result places a heavy burden on the CPCs at EWR and could lead to excessive overtime and delays in training for developmental controllers, which only exacerbates the already-dire staffing situation.

Furthermore, N90 provides radar approach and departure air traffic control services for EWR, as well as for John F. Kennedy (JFK), LaGuardia (LGA), and other regional airports. Despite operating in the most congested airspace in the nation, N90 is one of the most critically under-staffed facilities in the NAS. It has only 134 CPCs presently, but the NATCA-FAA collaborative target for CPCs is 226. The FAA's 2016 CWP staffing range for N90 is 174-to-213, with an actual on-board total of 196 (which includes developmental trainees and CPC-ITs). If FAA is allowed to staff N90 according to the average of its CWP range (197), the FAA will be able to claim that N90 is appropriately staffed, which could not be further from the truth. But this is not just a New York regional problem, it is a nation-wide systemic problem at the most busy, most complex TRACONs as illustrated by the following examples:

- The Atlanta TRACON (A80), which provides radar approach and departure air traffic control services into Hartsfield–Jackson Atlanta International Airport (ATL) and several regional airports, currently has 68 CPCs, while the NATCA-FAA collaborative target for CPCs is 102. The FAA's 2016 CWP staffing range for A90 is 81-to-100, and the CWP shows an actual on-board total of 90. However, like in the New York examples, this on-board number deceptively includes developmental trainees and CPC-ITs and makes it appear that A80 is appropriately staffed.

- The Chicago TRACON (C90), which provides radar approach and departure air traffic control services into Chicago O'Hare (ORD), Chicago Midway International Airport (MDW), and several regional airports in Illinois and Indiana, currently only has 64 CPCs, while the NATCA-FAA collaborative target for CPCs is 100. The FAA's 2016 CWP staffing range for C90 is 83-to-101, and the CWP shows an actual on-board total of 100, which includes developmental trainees and CPC-ITs.

- The Dallas-Fort Worth TRACON (D10), which provides radar approach and departure air traffic control services into Dallas/Fort Worth International Airport (DFW), Dallas Love Field (DAL), and several regional airports, currently has 57 CPCs, while the NATCA-FAA collaborative target for CPCs is 93. The FAA's 2016 CWP staffing range for D10 is 78-to-95, and the CWP shows an actual on-board total of 92, including developmental trainees and CPC-ITs.

If taken at face value, the FAA's 2016 CWP would show A80, C90, and D10 all as being properly staffed. But in reality, these are three of the most critically understaffed facilities in the

NAS. These staffing numbers are further corroborated by the amount of overtime that the CPCs must work at each of these facilities in order to provide adequate coverage of all needed positions. For reference, the amount of overtime used at the average facility within the NAS is about 2.8%, while large TRACONs such as these average about 4.4%. However, Chicago (C90) overtime usage is 9.3%, Atlanta (A80) uses 10.2%, Dallas-Fort Worth (D10) uses 11.5%, and New York (N90) uses a staggering 15.8%.

Effects of Staffing Shortages

These extended workdays and workweeks have led to significant fatigue problems for the workforce, according to the National Transportation Safety Board (NTSB), which has identified fatigue as one of its highest priority safety concerns. Although NATCA does not believe that the safety of the air traffic control system is at risk, without proper staffing at our facilities, efficiency and modernization efforts are being negatively affected, which could lead to further system inefficiencies, delays, and a reduction in air traffic services for the flying public.

For instance, the staffing crisis has been the cause of the FAA's frequent denials to release bargaining unit employees from their facilities' schedule in order to provide subject matter expertise (SME) for technological and modernization projects throughout the NAS. Within the last three months, the FAA has denied at least 15 separate requests due to staffing. Moreover, attempts to request SME support from facilities that we know are critically understaffed have ceased, such as C90, LAX, Chicago Air Route Traffic Control Center (ARTCC) (ZAU), Atlanta TRACON (A80), among many others, even though expertise of our workforce from our busiest facilities on these important projects would facilitate successful development, testing, and implementation on modernization projects.

In addition to these outright denials, project meetings and other project activities have been delayed because the FAA denied the SMEs' participation in follow-up activities due to staffing. For example, for the Remote Tower Winter Data Collection Project, the FAA, SAAB, and NATCA agreed that it would be best if the controllers involved were the same who participated in the initial Remote Tower Data Collection Project. However, due to staffing, the FAA denied 12 out of the 15 requests for SME participation in the winter round of data collection. As a result, only five controllers participated on that project, and two of them had not participated in the initial data collection. Similarly, the Information Display System Replacement Team (IDS-R Team) has experienced repeated instances of rescheduling activities due to the non-availability of SME team members due to staffing. These examples are just a glimpse into the greater systemic problems caused by the staffing crisis.

Proposed Solutions

Thankfully, bipartisan legislation was recently introduced in the House of Representatives that, if enacted, would help ease the ATC hiring aspect of the staffing crisis. H.R. 5292, The Air Traffic Control Hiring Improvement Act of 2016, would streamline the hiring process by ensuring a path for experienced controllers to be hired quickly with fewer bureaucratic hurdles and allow military Veterans and graduates of colleges and universities that

participate in the FAA's Collegiate Training Initiative (CTI) to be hired more expeditiously without causing any additional delays in the hiring process.

If enacted, H.R. 5292 would facilitate controller hiring instead of slowing down the hiring process, which is key to addressing the controller-staffing crisis. Specifically, H.R. 5292 addresses the hiring of CTI graduates and military Veterans. It would ensure that CTI graduates and Veterans are considered in a separate pool from the general public and requires the FAA to select them for vacancies without subjecting them to FAA's BQ.

Throughout this debate over FAA controller staffing and hiring, there have been efforts to create a "priority pool" within the hiring process. Setting a priority pool, whether it included only CTI graduates or CTI graduates and Veterans, would cause significant delays in the hiring of air traffic control candidates. Adding the additional hurdle of completely exhausting the CTI and Veterans pools before the FAA could select from the general public pool would cause significant delays and would make it difficult to fill slots at the FAA's training academy in Oklahoma City. H.R. 5292's proposed language, however, would ensure that the FAA has a steady flow of new hires filling classes at the FAA Academy from a variety of experiences and backgrounds.

H.R. 5292 also would increase the maximum entry age for controller with 52 weeks experience to 35 years of age. This would allow military controllers and those working in the Federal Contract Tower (FCT) program to transition to an FAA position later, while still maintaining their retirement eligibility and mandatory separation at age 56.

As noted above, the FAA currently uses the experienced controller vacancy announcement to make up for its shortfall of new employees without experience. This approach severely limits the FAA's ability to make up for seven consecutive years of missed hiring goals. This year, the FAA limited its hiring goal to approximately 1,600 new controllers, 300 of whom are experienced controllers. That means the FAA will only have about 1,300 new employees enrolled at the FAA Academy, a facility that can accommodate up to approximately 2,000 employees per year. The FAA must rise to the challenge and aggressively increase the number of Academy enrollments per year in order to address this staffing crisis.

The FAA also needs to aggressively recruit experienced former FAA controllers, military and civilian DOD controllers, and FCT controllers beyond enrolling the maximum throughput at the Academy in order to make up for its failure to achieve hiring goals in previous years.

The FAA must continue to cut through the bureaucratic inertia that is slowing the hiring process and take the final steps to ensure that a vacancy announcement for experienced controllers is open and continuously maintained 365 days per year. Only then will we begin to see the necessary gains across the entire system and not just within individual facilities.

In addition to fixing its hiring processes, the FAA and NATCA have recently asked the FAA's Human Performance Office to review the training process at N90. This should help highlight deficiencies in the training program that cause N90 to have the lowest training success rate in the NAS. That office should then be involved in helping to redesign the training programs at all of the facilities that have significantly below average success rates.

NATCA has consistently stated that the status quo is unacceptable when it comes to stop-and-go funding and air traffic controller staffing. There are many reasons that controller staffing has reached crisis level. Therefore, in addition to NATCA's recommendation that the FAA take a holistic, collaborative approach to resolve its critical staffing issues, Congress also needs to pass an FAA Reauthorization bill that provides the necessary stable, predicable funding.

At the very least, the FAA must be exempted from the sequestration cuts that are expected to be re-implemented beginning in October 2016. A new hiring freeze would absolutely cripple the FAA, and the FAA would likely have to furlough employees from its already short-staffed facilities. We all saw what kind of effect sequestration had on the system when, in April 2013, the FAA was forced to furlough every employee, including air traffic controllers, and to consider closing towers in order to achieve the mandated spending cuts. In addition to further crippling controller staffing, these sequestration-mandated furloughs caused massive delays. During the week of April 21-27, 2013, delays nearly tripled at our nation's airports, from 5,103 delays during the same week in 2012, to 13,694 in 2013, and then back to 5,110 in 2014. We cannot allow history to repeat itself.

In closing, I truly believe that the United States has the safest, most complex, and most efficient airspace system in the world, one that is vital to our nation's economy. However, this system needs a strong and growing air traffic controller workforce in order to modernize and expand the NAS into the 21st Century. I appreciate the opportunity to testify before you today about some of the challenges that we face along with solutions that will take our system from good to great. Thank you.

Statement of J. Randolph (Randy) Babbitt
Senior Vice President, Labor Relations
Southwest Airlines Co.
Before the Subcommittee on Aviation
Committee on Transportation & Infrastructure
U.S. House of Representatives
June 15, 2016

Chairman LoBiondo, Mr. Larsen, and Members of the Aviation Subcommittee:

Thank you for the opportunity to appear before this subcommittee today to discuss issues related to Air Traffic Controller hiring, staffing and training. Today, I come before this body wearing four "hats," which I have collected over my nearly five decades working in the aviation industry. Those "hats" are as a current airline executive, a former Administrator of the FAA, a former airline union president, and as a former commercial airline pilot.

Because of my current and prior "lives" in aviation, I believe I offer a unique perspective on these important issues. I am pleased the Subcommittee asked me to testify today and honored to join this distinguished panel. For your information, I have attached my biography to printed copies of this testimony and ask that it be included in the hearing record.

First and foremost, I am here today as a senior executive for Southwest Airlines. Southwest is the Nation's largest air carrier in terms of domestic passengers, serving roughly 150 million Customers annually with a combination of low fares and no annoying fees, friendly Customer Service delivered by outstanding People, and a safe and reliable operation.

Today, Southwest has a fleet of over 700 Boeing 737 aircraft, operating nearly 4,000 flights per day to 87 U.S. destinations and 11 international destinations – and every one of those flights are operated in controlled airspace. So, to say the least, we are very dependent on – and very appreciative of – a robust and highly-skilled Air Traffic Controller workforce.

In my prior roles as FAA Administrator and as a commercial airline pilot, I was proud to interact daily with the professional men and women of U.S. Air Traffic Controller workforce. Their dedication to aviation safety, operational efficiency and professional integrity is truly remarkable. We all must have confidence in the ATC system. And, during my 50 years flying, I have never lost that confidence – in large measure due to the skill and professionalism of our Nation's Controllers.

Now, with that said, my confidence in the ATC system itself is a little shaky these days. Although I have no concern from a safety perspective – the safety of the ATC system is never in doubt – I do question the reliability of the overall ATC system from an operational and customer service perspective.

The U.S. aviation system is both labor and capital-intensive. And, like other modes of transportation and other sectors of the aviation industry, prolonged underfunding of staffing needs and system improvements will take its toll as it has with the DC Metro System and the TSA security apparatus.

All of this produces concern about whether the current ATC system can move forward and be modernized in its present form. Eventually, without major structural changes and greater funding and staffing certainty, serious inconveniences to aircraft operators and ultimately to our Customers and your constituents will result.

Specifically, in addition to delivering beneficial NextGen technologies more quickly and in order to avoid the crisis confronting TSA or the DC Metro, the federal government needs do more to address the supply of certified Controllers, as well as providing the required training to fully utilize NextGen capabilities that are available today – principally, Performance Based Navigation – and other capabilities expected to be rolled out in the near future – for example, Data Communications in the en route environment.

Aviation traffic is forecasted to grow steadily, while certified Controller staffing levels continue to decline with no relief in sight. This seems to be particularly problematic at critical ATC facilities, which require the most experienced Controllers to manage complex operations skillfully and effectively. As the Nation's largest domestic airline, this concerns us and challenges our promise to our Customers to provide friendly, reliable and on-time service.

Due to our concerns with the future capabilities of the ATC system and the current pace of progress with regards to the NextGen program, Southwest has joined most of the airline community and several aviation unions – including NATCA – to support the significant structural, financing and procurement reforms contained in the House version of the FAA Reauthorization Act (H.R. 4441).

The U.S. ATC system is a 24/7 operation that contributes $1.5 trillion annually to the Nation's gross domestic product and generates over 12 million jobs. We believe such an important economic engine will struggle to meet future demand under the current system, challenged by the fits and starts of the annual appropriations process and the threat of sequestration or government shutdown. We applaud the Committee for looking at these important issues and at least recognizing that the status quo is not acceptable. Hopefully, a bipartisan solution to these issues can be achieved sooner rather than later.

On behalf of Southwest Airlines, thank you for this opportunity to testify. I will be happy to answer any questions.

○