S. HRG. 115–66

FAA REAUTHORIZATION: PERSPECTIVES ON RURAL AIR SERVICE AND THE GENERAL AVIATION COMMUNITY

HEARING

BEFORE THE

SUBCOMMITTEE ON AVIATION OPERATIONS, SAFETY, AND SECURITY

OF THE

COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION
UNITED STATES SENATE

ONE HUNDRED FIFTEENTH CONGRESS

FIRST SESSION

APRIL 6, 2017

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ONE HUNDRED FIFTEENTH CONGRESS

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FAA REAUTHORIZATION: PERSPECTIVES ON RURAL AIR SERVICE AND THE GENERAL AVIATION COMMUNITY

THURSDAY, APRIL 6, 2017

U.S. SENATE,
SUBCOMMITTEE ON AVIATION OPERATIONS, SAFETY, AND SECURITY,
COMMITTEE ON COMMERCE, SCIENCE, AND TRANSPORTATION,
Washington, DC.

The Subcommittee met, pursuant to notice, at 10:01 a.m. in room SR–253, Russell Senate Office Building, Hon. Roy Blunt, Chairman of the Subcommittee, presiding.

Present: Senators Blunt [presiding], Thune, Wicker, Fischer, Moran, Inhofe, Capito, Gardner, Young, Cantwell, Klobuchar, Booker, Peters, and Hassan.

OPENING STATEMENT OF HON. ROY BLUNT, U.S. SENATOR FROM MISSOURI

Senator BLUNT. The hearing will come to order. Based on Senator Cantwell's staff assurance that we can start without her and she is on the way, we are going to do that.

We have an 11 o'clock vote scheduled today, and because of that, we have asked the witnesses to give us an opportunity to look at your written testimony and ask questions, and so we will be moving quickly here as we get started.

We are certainly glad our witnesses are here today. The Honorable Laurie Gill, the Mayor of Pierre, South Dakota. How we get someone from Pierre to be here with Chairman Thune, the Chairman of the Full Committee, is a shock to all of us. But, Mayor, we are glad you are here. Spencer Dickerson, the Executive Director of the U.S. Contract Tower Association, which is an affiliate organization of the American Association of Airport Executives. Mr. Mark Baker, the President and CEO of the Aircraft Owners and Pilots Association. And Dr. Guy Smith, Professor Emeritus at Embry-Riddle Aeronautical University.

We are pleased that you are all here.

I certainly want to recognize that there are family members here of the victims of Colgan Air Flight 3407. Your presence here today is a reminder to us that aviation safety must be the primary goal of this subcommittee and the Congress as it deals with FAA issues.

This hearing is part of a series of hearings on the reauthorization of the Federal Aviation Administration.

Civil aviation, obviously, is critically important to our economy and particularly important to small and rural communities. It is estimated that the overall economic impact of reliable air service in small communities is roughly $121 billion, and it supports over 1.1 million jobs.

Quality air service links smaller communities to the broader economy and global transportation networks. Small and non-hub airports provide a lifeline for local businesses, for transportation of service members, and others.

A perfect example of that would be the Waynesville-St. Robert Regional Airport at Forney Field, at Fort Leonard Wood, Missouri, located in central Missouri. This is a joint use facility which provides reliable, accessible air service for members of the military serving on post and thousands of their family members who attend annually the regular training graduations there. It also links local businesses to Lambert International Airport at St. Louis. It supports tourism at the Mahaffey Museum complex on base.

And that is only one of a lot of small airport stories around America where the airport being linked up to the greater network makes all the difference in the world and where commercial air service at those airports really matters.

General aviation also is an important part of the responsibility we have here. It encompasses a range of noncommercial operations, including private pilots that fly small planes, gliders, hot air balloons, homemade aircraft, as well as sophisticated jet aircraft, as part of the daily business flow of the country.

General aviation plays an important role in connecting rural areas to the rest of the Nation's air transportation system. It is also estimated to support over a million jobs and accounts for over $2 billion in total economic activity.

There is no question that the importance of regional air service and general aviation needs to be one of our priorities. From 2007 to 2016, small and non-hub airports experienced significant declines in departure seats and connectivity. Additionally, in 2014, the Government Accountability Office testified that regional airlines were having difficulties finding sufficient numbers of qualified pilots.

Reduced service in rural airports is alarming, and a number of members of this subcommittee are concerned about that.

I am going to submit the rest of my remarks for the record.

We, of course, are going to be looking at and want to talk about the Contract Tower Program, small community air service, some of the elements that we put in the Senate version of FAA reauthorization last year that turned out to be more of a temporary extension.

Senator Cantwell and I are both committed to having the best bill we can possibly produce and, if possible, get that done by the end of this current extension of FAA. And I am glad that she and I are working together on this committee, and I turn to her for her remarks.

[The prepared statement of Senator Blunt follows:]

PREPARED STATEMENT OF ROY BLUNT, U.S. SENATOR FROM MISSOURI

Good morning.

Thank you to the witnesses for appearing before this Subcommittee today to discuss their perspectives on rural air service and the general aviation community.

We have before us: The Honorable Laurie Gill, Mayor, Pierre, South Dakota; Mr. Spencer Dickerson, Executive Director, U.S. Contract Tower Association, an affiliated organization of the American Association of Airport Executives; Mr. Mark Baker, President and CEO, Aircraft Owners and Pilots Association; and Dr. Guy Smith, Professor Emeritus, Embry-Riddle Aeronautical University.

I would also like to recognize the family members of the victims of Colgan Air Flight 3407. Your presence is a steadfast reminder that aviation safety must be the primary goal of this subcommittee.

This hearing is one of a series on reauthorization of the Federal Aviation Administration (FAA).

As we've previously noted, civil aviation is a critically important sector for the economy in general, and in rural and small communities in particular. It is estimated that the overall economic impact of reliable air service in small communities is roughly $121 billion, and it supports over 1.1 million jobs.

Quality air service links smaller communities to the broader economy and global transportation networks. Small, and non-hub airports provide lifelines for local businesses, transportation for service members and their families, and bolster local tourism. A perfect example of this is the Waynesville-St. Robert Regional Airport at Forney Field, Fort Leonard Wood.

Located in central Missouri, this joint-use facility provides reliable, accessible air service for members of the military serving on-post and thousands of their family members who attend annually for training graduations. It also links the local businesses in Ft. Leonard Wood's surrounding communities to Lambert International in St. Louis, and supports tourism for the Mahaffey Museum Complex.

In addition to commercial air service at regional airports, we also want to highlight the important role of General Aviation (GA). GA encompasses a range of non-commercial operations, including private pilots that fly small planes, gliders, hot air balloons, homebuilt aircraft, as well as sophisticated jet aircraft. GA plays an important role connecting rural areas to the rest of the Nation's air transportation system, and it's estimated that GA supports 1.1 million jobs and accounts for $219 billion in total economic output.

There's no question about the importance of regional air service and general aviation, but we must also recognize and address the challenges they face.

From 2007 to 2016, small and non-hub airports experienced significant declines in departures, seats, and connectivity. Additionally, in 2014, the Government Accountability Office testified that regional airlines were having difficulties finding sufficient numbers of qualified pilots.

Reduced service to rural airports is alarming.

In addition to reduced service, and insufficient availability of pilots, we must also examine Federal programs that support air service at smaller airports to determine if they are working as Congress intended.

These programs include: The Federal Contract Tower program, which allows FAA to contract with private air traffic control providers at 253 airports nationwide, including five in Missouri; Essential Air Service, which provides a safety net to ensure rural areas have air service, including four in Missouri; and The Small Community Air Service Development Program, which provides grants to communities for strategies to improve availability and price of air service, including multiple airports in Missouri.

This Subcommittee is mindful of the anxiety in rural communities that hear talk about funding cuts in Washington to these programs.

Proposed cuts to rural aviation programs are a perennial request of both Republican and Democratic administrations.

While a president has the right to propose cuts in spending, the Constitution gives Congress the power to actually set spending.

The purpose of this hearing is to examine what's working for rural aviation, and what can be improved. To that end, we need to think of rural aviation and general aviation issues holistically.

I was pleased with provisions included in the short-term FAA Extension, Safety, and Security Act that require the Department of Transportation to convene a working group and issue a report to Congress by July 15, 2017.

The focus of the Working Group is to consider whether funding for existing rural aviation programs is sufficient, and to identify initiatives to support pilot training and aviation safety for small communities. The Subcommittee eagerly awaits the

working group's report, and we look forward to hearing from our witnesses today. I want to thank my Subcommittee counterpart, Maria Cantwell, for being here today as we continue to work in a bipartisan manner to advance rural aviation and safety as part of a comprehensive FAA reauthorization.

I turn now to Ranking Member Cantwell for any remarks she would like to make.

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

Senator CANTWELL. Thank you, Mr. Chairman. I know we are on a quick time schedule this morning, so I am going to be brief and submit my fuller statement for the record.

But, I too, want to recognize the families who are here of the victims of the Colgan Air Flight 3407. Your constant presence as we look at aviation security issues and safety issues is so appreciated. Thank you for constantly doing that.

Obviously, we are here today to talk about the interconnectedness of our system and making aviation and general aviation safer. NextGen will provide better data and weather and traffic information to drive that safety. Obviously, the FAA's new Part 23 rules I am sure will be discussed here.

The Chairman mentioned briefly the SCASDP grant program. I cannot tell you how much we appreciate this program in Washington State. It has been able to help us continue to grow and launch great services, which have been very stabilized after the SCASDP grant, so very, very interested in that.

And obviously, if I could just say, contract tower, contract tower, contract tower three times to get everybody to realize how important these contract towers are to communities. We are going to get a chance to ask questions about this from a safety perspective, but I am sure many of my colleagues here have the same concerns about these contract towers, so we want to make sure that they remain.

But rural airports are vital connections. I will just give one example.

In Pullman, Washington, Schweitzer Engineering has its headquarters there with more than 2,000 employees, but it is just a town of 32,000 people. So the fact that their fleet can move in and out, getting their employees and customers—and these high 2,000 paying jobs in the community are all supported because of that small airport.

So I want to make sure we are continuing the economic development that is associated with our airports throughout our state.

So, thank you, Mr. Chairman. I will submit my fuller statement.

[The prepared statement of Senator Cantwell follows:]

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

Thank you to the witnesses for being here today to discuss matters pertaining to rural aviation and general aviation. I would especially like to acknowledge the families of the victims of Colgan Air Flight 3407, many of whom are here with us today. We all appreciate the tireless work you do to make the aviation system safer.

As we think about our national airspace as an interconnected system, we must look at ways to make aviation, and especially general aviation, safer. NextGen will provide better data on weather and traffic, but we should look for other opportunities to drive safety.

One area where we have seen progress for general aviation came with the release this past December of the FAA's new Part 23 rules. The new rules, which apply to

GA planes under 19,000 pounds, apply a performance-based certification standard to new safety-enhancing technologies that can be brought into the cockpits of GA aircraft. The new rules should reduce the time and the cost of moving these technologies through the certification process, and the system as a whole will benefit as a result.

Importantly, the new Part 23 rules come at a time when aviation authorities across the globe are working toward common certification standards, meaning that safety technology developed here in the United States can be quickly adopted into GA fleets worldwide.

Following on the heels of the new Part 23 rules, we should consider other areas for improving existing regulations. The FAA reauthorization provides an opportunity to identify areas where we can enhance, streamline, or refocus regulation to improve safety.

This committee has done much to ensure access to our commercial air system for rural areas, especially through its strong support for the Essential Air Service program, and the Small Community Air Service Development Grant Program (SCASDP, pron. SCAS–DAP).

In Washington state, SCASDP has had a tremendous impact. Six Washington state airports have been awarded SCASDP grants in the last six years, and the results have made a real difference. New routes have been launched through revenue guarantees, and marketing campaigns have led to increased tourism and higher load factors to the benefit of these communities.

Rural airports allow vital connections between small towns and the global economy. In Pullman, Washington for example, Schweitzer Engineering Laboratories has its headquarters, a major manufacturing facility, and more than 2,000 employees—all in a town of just 32,000 people. SEL's fleet of 5 Pullman-based aircraft have flown about half of the company's 4,000-strong global workforce among their more than 100 locations in the last 15 years. Without the ability to access locations far and near, big and small, Schweitzer Labs would be unable to respond to their customers' needs, and they certainly wouldn't be able to offer 2,000 well-paying jobs.

My state serves as an example of how the Federal Government can work with small and rural communities to ensure that they are able to take full advantage of our national airspace. For Washington state, SCASDP accomplishes this purpose. For other members of this committee, on both sides of the aisle, the Essential Air Service (EAS) program is important. That is why I was disappointed in the Administration's proposal to eliminate the EAS program, which would have a very negative impact on small and rural communities across the country. I am sure many members with affected communities will be sharing their views on the Administration's proposal.

With that, I look forward to your testimony.

Senator BLUNT. Thank you, Senator Cantwell.

I think I will defer my questions until later so we can get started.

We have asked the witnesses to do us the favor of not providing their testimony verbally. We have the written testimony, so we will go right to questions.

And, Senator Fischer, we will start with you.

STATEMENT OF HON. DEB FISCHER, U.S. SENATOR FROM NEBRASKA

Senator FISCHER. Thank you, Mr. Chairman and Ranking Member Cantwell.

If I could, I would like to begin with you, Mayor Gill. You discussed the AIP funding challenges that small, rural communities face in dropping enplanements because of unreliable air service.

Scotts Bluff, which is in the panhandle of Nebraska, faces this same challenge. And I was pleased to provide relief to rural airports in the FAA extension bill.

Since you raised this in your testimony, do you have additional suggestions on how Congress can craft AIP funding distribution so

that it recognizes small community airports that face this very difficult situation?

Ms. GILL. Yes, certainly. Thank you so much for that question.

In Pierre, as you are familiar with and have already mentioned, we have seen disruption in our service and changes in the reliability in the service over the last several years. And as that has happened, our enplanements have fallen below the 10,000-threshold level.

What that means to a community like ours is the difference in over $1 million annually in money coming in from the AIP program that we can use for infrastructure dropping down to $150,000 a year. So that kind of a dip is drastic. It is dramatic. And $150,000 does not give us much to work on in keeping the infrastructure up.

So in response to your question, what I would recommend is that the Airport Improvement Program funding distribution should be looked at and crafted in a way that recognizes that small community airports may have suffered enplanement reductions due to pilot supply issues following implementation of the 1,500-hour rule. And when an airport's enplanements drop, it is extreme under the current formula.

Legislation, I believe, should be established to provide a more gradual reduction, or a delay in reduction, or some other meaningful response to the program to allow us to adapt to the scenario that we are facing.

Senator FISCHER. Thank you.

And as a follow-up, I share your support for strengthening the EAS program. Nebraska has seven rural communities that receive critical commercial air service because of EAS. And you talked about how Pierre was able to use the EAS funding to increase the number of enplanements.

Would you elaborate on how the EAS improved that air service, which increased enplanements and the airport's ability to serve your community?

Ms. GILL. Certainly. Just to put this in perspective, what happened for us was that, in the summer of 2013, when the Federal rule change went into place, the year of 2013, Pierre had 14,500 enplanements. Just 3 years later, our traffic had plummeted more than 60 percent to less than 6,400, and our commercial air service provider at the time could not staff their flights because they could not find enough pilots eligible under the new rule. Consequently, our reliability of our service suffered.

After the regulation change, by 2015, a full 20 percent of our flights out of Pierre were canceled, and 40 percent were not on time. The number of flights that we had per day dropped from eight to three. Our customers lost confidence in the service that was being provided, and that caused enplanements to decline even more.

So what happened was, as a result, Pierre applied for funding under the Essential Air Service program. And in 2016, that was reinstated and funded.

As a result, we have been able to receive service now from a new carrier using 50-seat regional jets in twice-daily service to Denver. Enplanements are recovering, and it looks like we are on track to exceed that 10,000-enplanement threshold in 2017.

So we feel like we have a success story with EAS and that it has reinstated the lifeline for Pierre to the rest of the Nation.

Senator FISCHER. That is good news. I have used your airport in the past. I live 2 hours south of Pierre, so I have used it.

Mr. Baker, in your written testimony, you mentioned the difficulty in utilizing the nonprimary entitlement funding for general aviation airports. In Nebraska, we have 60 of these airports that qualify for NPE funding.

Could you please provide the Subcommittee with your perspective on how to improve the effectiveness of this funding program for GA airports?

Mr. BAKER. Thank you. I would be happy to.

You know, if you look at the history of the $150,000 a year for these NPE airports, nonprimary entitlement airports, it was well-intended. If you go back 15 years ago, there was only about, call it about $18 million left over at the end of the year. But as we have gone on, costs have risen to update taxiways, lighting systems, other things that these general aviation airports require, the 5,000 public use ones that are out there in the countryside.

We are now giving back—over $300 million a year is being returned because the program does not work anymore.

We would really like this committee to take a look at how we can use that money—it has already been allocated, the $300-plus million—and use it in more systematic and significant programs to update these airports and keep the infrastructure alive. The money has already been allocated, and it is just, unfortunately, being turned back into the FAA—to think about other programs.

So we think a real committee effort to pull this together and say how should we spend this money and redo the $150,000 a year for 4 years, which equals $600,000 for programs, into more significant programs at a limited number of airports every year to keep this money being employed and take care of this infrastructure that is really outdated.

Senator FISCHER. Thank you, sir.

Thank you, Mr. Chair.

Senator BLUNT. Senator Cantwell.

Senator CANTWELL. Thank you, Mr. Chairman.

I mentioned contract towers. Currently, there are 253 airports in 46 states that participate in this program. Of the 16 towers in the cost-share program, seven of them are operated at airports that support regularly scheduled commercial air service. It is the cost-share contract program generally and the cost-share contract of these towers, seven of which I want to focus on.

Walla Walla Regional Airport, it will cost I think this year $84,700 to participate in the Contract Tower Program. In 2014, airports had a total, this particular airport, of 72,000. I think that is passenger count.

Similarly, costs at Joplin Regional Airport in Missouri and Grand Island in Nebraska supported even larger commercial air enplanements. Yet, they too were required to have the local match.

So I can understand the cost-share at a contract tower with no commercial air service, but those that are, I would submit that when you have a contract tower support regular commercial air service flights—so we need to look at this a little differently.

So, Mr. Dickerson, I have heard a discussion of formulas being looked at. How can we best support these contract towers in the entire system in places like Walla Walla?

Mr. DICKERSON. Thank you, Senator. First off, I would like to thank this Subcommittee and the Commerce Committee for its great support of this program over the past several years.

As you said, it is a lifeline that is very important to small community rural air service and general aviation.

The cost-share program was established by Congress about 15 years ago as a safety net for airports that did not qualify for the fully funded program primarily based on their traffic level. And that, from our perspective, worked very well.

It was based on the percentage, so if you were at a 0.8 on a benefit-cost ratio, the locals would pay 20 percent. Congress put in a limit of 20 percent several years ago.

What has happened recently, the last several years, is FAA has not run these benefit-cost ratios on any of the towers, including the benefit-cost of towers. It affects Joplin, as you said, Walla Walla, Grand Island.

A lot of these airports have had an increase in airline service and passenger traffic over that period of time, probably 7 or 8 years since they ran the BCs. Many of them could go into the fully funded program, eliminating the need for the local cost-share payment, but FAA has not run these towers, BCs on these towers. They put a moratorium on any new applicants for the program, nontowered airports, in 2014, which has been very frustrating for the industry.

So a lot of the provisions you had in your bill last year exempted cost-share towers that had 25,000 enplanements. That would benefit Walla Walla, Joplin, Grand Island. That is a great provision. We are very supportive of that.

You also included a number of reforms to the program to get FAA off the dime and get moving. We believe FAA is going to wait for Congress to act. We just need closure on this program in terms of the new airports that want to get in the program and the cost-share facilities.

Senator CANTWELL. We obviously want good programs that work. But in this case, I do think the language we submitted that was in the Senate version but did not make it into the final version really would help these airports that are growing. And we are helping them grow.

So they are almost moving—they are doing what we want them to do for our communities and for the air service program. They are growing. But then they are still being charged under a system that is very punitive, as opposed to being able to move up, just because of the moratorium.

So we would hope that we could figure out a way to get the FAA to look—we will give direction. I am definitely for giving direction, but we hope that we can resolve this so these airports can continue to grow in a cost-effective way. And that is really what we are asking.

I do not know the details of Joplin or this site in Nebraska. But I can tell you from Walla Walla's perspective, it is going to continue to grow. It is just about how you make the next phase and the next leap.

And since, for us, this is our wine industry, a very burgeoning wine industry, tourism industry, we want those enplanements to grow. But we have to have a cost-effective way for the airport to meet that demand and not be under a system that uses an old formula that penalizes them.

Thank you, Mr. Chairman.

Senator BLUNT. Senator Moran.

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

Senator MORAN. Mr. Chairman, thank you very much.

I thank our panel for being with us.

I think a number of us on this Committee and in the U.S. Senate have a reputation of being supporters of general aviation. I sometimes think that people would perceive me as a general aviation supporter because we manufacture so many airplanes in Kansas, Wichita, the air capital of the world, home of many, many planes being made that are flown across the country and around the globe.

That certainly is a component of my view on these issues about rural airports, but the point that we always try to make is it is not just about manufacturing airplanes. We need airports and pilots who fly those planes. And particularly in rural America, the places that all of us come from, our ability to connect with the rest of the world is often determined by access to air service—commercial and private.

And so I can name dozens of communities and businesses in those communities that are only there, can only remain there, if they can connect with the rest of the world because the hometown airport is there that brings in their customers and clients and allows them to service their customers and clients around the globe.

So if you care about rural America, you better care about rural America's airports.

And I appreciate the testimony. I had the chance to review it. I normally wait until you tell me what you are going to say. I had to read it this time to find out what you are going to say, and I appreciate that.

I want to list just a few issues that seemed to me to be front and center, and make sure that I am not missing anything when we come to the topics that we care about in preserving GA and regional commercial service at airports across rural America and small towns.

EAS is often front and center, and that is critical to our commercial service. The Contract Tower Program has been mentioned here numerous times, but it is, again, toward the top of the list of things that matter. Airport infrastructure, our ability to get the funds to maintain our airports, matter greatly to us, and the ability for a local community or county to fully fund those airports is limited without the assistance of the Federal Government and the FAA.

More pilots is a critical one to us. The Mayor talked about consequences. We have had similar circumstances in which we lose commercial service. The EAS subsidy is insufficient to keep an airline flying if they cannot provide quality service in a timely way. And often at least their explanation for their inability to do so is pilots, a pilot shortage.

And we need to make certain that our small airports who, through no fault of their own, do not lose Essential Air Service funding because of a gap, or they do not receive the infrastructure funding because they have fallen in number of enplanements through no fault of their own. The airline just cannot provide the service, did not provide the service, or it went away. So we need to have a period of time in which airports can recover, return to commercial service.

And then, finally, TSA is an issue that has occurred, and when that has happened, loss of service, then to convince TSA to come back with screening to a small airport has been a topic of concern in a number of instances.

So that is kind of my outline of those issues that matter, that should matter to me as somebody who wants to make sure that rural America stays alive and well.

What am I missing?

I like that answer.

[Laughter.]

Senator MORAN. Then let me take my comments one step further. There is an issue that is pending that is not the topic of this hearing, but the issue of privatization of air traffic control. And I would be interested if anyone would be interested in sharing their view of what concerns or lack of concerns they have about this program with air service and airports in rural America.

This one I do expect an answer.

Mr. BAKER. I will weigh in on a view from over 300,000 pilots and members from AOPA.

The air traffic control services, whether it be tower or en route, is a very effective system, and we do not get any complaints from our members, from general aviation and small business aviation on the current system as it is employed for moving those 200,000-plus general aviation aircraft out there today.

So from our perspective, we just want to make sure there are no additional user fees that get impacted by whatever change may come down the line.

But from identifying the problem, we do not see the problem with the current air traffic control from a general aviation perspective.

Senator MORAN. Thank you.

Anyone else?

Mr. DICKERSON. Senator, a couple points.

AAA does not have a position on the ATC nonprofit corporation. There are several concerns we have about the bill that was introduced last year in the House.

Number one, we need to make sure the AIP program, the airport grant program, has a long-term viability to it for the small airports, as you mentioned, and Senator Cantwell mentioned.

PFCs, Passenger Facility Charge, we think that needs to be adjusted. That will allow large airports to leverage their funds with private investment. It also helps smaller airports because the bigger airports give back some of their entitlement funds to the smaller airports.

The governance of the ATC board, the bill introduced last year in the House did not have an airport representative, and we just think it is critically important to make sure that airports are rep-

resented on this board that is going to potentially manage the air traffic control systems. It is not only about the airspace. It is about what is on the ground as well.

And the last thing, we have to make sure there is a protection for the Contract Tower Program. As you mentioned and as Senator Cantwell mentioned, it is a very, very important program for rural America's small airports. We need to make sure that program is viable in the future, if Congress moves forward with the corporation.

Senator MORAN. Mayor, I do not know whether you have anything to say.

Mr. Chairman, I would ask unanimous consent, I have a letter that is addressed to the Chairman, Chairman Thune and Ranking Member Nelson, from 150 mayors across the country who expressed concern with this issue, and I would ask unanimous consent that it be made part of the record.

Senator BLUNT. Without objection.

[The information referred to follows:]

March 6, 2017

Hon. JOHN THUNE,
Chairman,
Committee on Commerce, Science, and Transportation,
United States Senate
Washington, DC.

Hon. BILL NELSON,
Ranking Member,
Committee on Commerce, Science, and Transportation,
United States Senate
Washington, DC.

Dear Chairman Thune and Ranking Member Nelson:

As you debate reauthorization of the Federal Aviation Administration (FAA), I write to ask you to reject any risky plans to privatize our air traffic control system and take away Congressional oversight of this important public system.

Over the last year, proposals have recently been forwarded to put this vital infrastructure under the control of a private entity dominated by the commercial airlines. On behalf of the tens of thousands of communities around the country, we are concerned about the very real and dire ramifications of eliminating Congressional oversight-of this public air transportation infrastructure.

For tens of thousands of communities such as ours around the country, we depend on our local airport and all sectors of transportation to reach far-off markets and access critical services such as law enforcement, disaster relief, and medical care. Small aircraft and airports are utilized on a daily basis to help transport blood and organs to residents in rural communities, reunite veterans back from overseas with their families, maintain power lines, and help our companies reach customers in far-off markets, among many other priorities.

Privatization would hand over decisions about infrastructure funding, taxes and fees, consumer complaints, noise, and many other priorities, to a board of private interests dominated by the commercial airlines. These are the same airlines that have cut back flights to smaller communities by more than 20 percent in recent years, and have stated their intent to divert investment from small and mid-sized communities to large ones where the airlines are most profitable.

We are also concerned about costs and access. For example, the Canadian, privatized system, which is often held up as the system the U.S. should emulate, is more expensive than the system we have in the U.S. by miles flown. In the U.K., that system has seen "more delays, higher fares and reduced connectivity" at London's airports since privatization. So while we all agree that modernizing our air traffic control system and investing in American infrastructure should be among our highest priorities, privatization is not the answer.

We look forward to working with you throughout this process to ensure that our air transportation system protects communities of all sizes and keeps passengers flying safely and efficiently.

Sincerely,

Elmira, NY—Mayor Daniel J. Mandell

Clarksburg, WV—Mayor Catherine A. Goings

Ocala, FL—Mayor Kent Guinn
Corning, NY—Mayor Richard P. Negri
Mitchell, SD—Mayor Jerry Toomey
Fairmont, WV—Mayor Ronald J. Straight Sr.
Edgemont, SD—Mayor Carl A. Shaw
Warwick, NY—Michael J. Newhard
Texarkana, AR—Mayor Ruth Penney Bell
Easton, MD—Mayor Robert C. Willey
Watertown, SD—Mayor Steve Thorson
Fayetteville, AR—Mayor Lioneld Jordan
Huron, SD—Mayor Paul Aylward
Texarkana, TX—Mayor Bob Bruggeman
Bloomington, IL—Mayor Tari Renner
Chillicothe, MO—Mayor Charles E. Haney
Lewisburg, WV—Mayor John Manchester
Worcester, MA—Mayor Joseph M. Petty
Elkins, WV Mayor Van T. Broughton
Wall, SD—Mayor Marty Huether
Sturgis, SD—Mayor Mark C. Carstensen
Longmont, CO—Mayor Dennis Coombs
Albert Lea, MN—Mayor Vern Rasmussen Jr.
Lake Wales, FL—Mayor Eugene Fultz
Santa Barbara, CA—Mayor Helene Schneider
Riverside, CA—Mayor William Bailey
McCall, ID—Mayor Jackie J. Aymon
Sioux Falls, SD—Mayor Mike Huether
Concord, NC—Mayor Scott Padgett
Prospect Heights, IL—Mayor Nicholas Helmer
Mountain Home, ID—Mayor Rich Sykes
Lewiston, ID—Mayor Jim Kleeburg
Florence, SC—Mayor Stephen J. Wukela
Fernley, NV—Mayor Roy G. Edgington Jr.
Huntington, WV—Mayor Steve Williams
Morristown, NJ—Mayor Timothy Dougherty
Macomb, IL—Mayor Michael J. Inman
Kamiah, ID—Mayor Dale Schneider
Mesquite, NV—Mayor Allan Litman
Mount Pleasant, SC—Mayor Linda Page
Newport, OR—Mayor Sandy Roumagoux
Jacksonville, IL—Mayor Andy Ezard
Broomfield, CO—Mayor Randy Ahrens
Petaluma, CA—Mayor David Glass
DeLand, FL—Mayor Robert F. Apgar
Jackson, TN—Mayor Jerry Gist
Gainesville, FL—Mayor Lauren Poe
Annapolis, MD—Mayor Mike Pantelides
Fernandina Beach, FL—Mayor John A. Miller
Naples, FL—Mayor Bill Barnett
Fargo, ND—Mayor Tim Mahoney
Sedalia, MO—Mayor Stephen Galliher
Wenatchee, WA—Mayor Frank Kuntz
Coeur d'Alene, ID—Mayor Steve Widmyer
Cumberland, MD—Mayor Brian Grim
Keene, NH—Mayor Kendall Lane
Zanesville, OH—Mayor Jeff Tilton
Youngstown, OH—Mayor John McNally IV
Henderson, NV—Mayor Andy Hafen
Big Rapids, MI—Mayor Mark Warba
Pinedale, WY—Mayor Bob Jones
Pekin, IL—Mayor John McCabe
Hermiston, OR—Dr. Dave Drotzmann, Mayor
Wausau, WI—Mayor Robert Mielke
Danbury, CT—Mayor Mark D. Boughton
New London, CT—Mayor Michael Passero
Idaho Falls, ID—Mayor Rebecca L. Noah Casper
Valdez, AK-Mayor Ruth E. Knight
Brigham City, UT—Mayor Tyler Vincent
Salisbury, MD—Mayor Jacob R. Day
Ely, MN—Mayor Chuck Novak
Winona, MN—Mayor Mark Peterson
New Ulm, MN—Mayor Robert J. Beussman
Wasilla, AK—Mayor Bert Cottle
Barre, VT—Mayor Thom Lauzon
Yerington, NV—Mayor George Dini
Taos, NM—Mayor Daniel Barrone
Arlington, WA—Mayor Barbara Tolbert
Boulder, CO—Mayor Suzanne Jones
Pullman, WA—Mayor Glenn A. Johnson, Ph.D.
Abilene, TX—Mayor Norm Archibald
Monroe, NC—Mayor Bobby Kilgore
Moscow, ID—Mayor Bill Lambert
Georgetown, DE—Mayor William E. West
Kenai, AK—Mayor Brian G. Gabriel, Sr.
Riverton, WY—Mayor John 'Lars' Baker
Grant, NE—Mayor Michael Wyatt
Findlay, OH—Mayor Lydia Mihalik
Martinsburg, WV—Mayor George Karos
Bingen, WA—Mayor Betty J. Barnes
Zephyrhills, FL Mayor Gene Whitfield
Terre Haute, IN—Mayor Duke Bennett
Carrollton, GA—Mayor Walt Hollingsworth
Altus, OK—Mayor Jack Smiley
Wheeling, WV—Mayor Glenn F. Elliott, Jr.
Salinas, CA—Mayor Joe Gunter
Hays, KS—Mayor Shaun Musil
Augusta, ME—Mayor David Rollins
Pendleton, OR—Mayor Phillip W. Houk
Hot Springs, AR—Mayor Ruth Carney
Fallon, NV—Mayor Ken Tedford Jr.
Latrobe, PA—Mayor Rosie Wolford
Le Mars, IA—Mayor Dick Kirchoff
Hutchinson, KS—Mayor Jon Daveline
Council Bluffs, IA—Mayor Matt Walsh
Salina, KS—Mayor Kaye J. Crawford
Henderson, KY—Mayor Steve Austin
Kaua'i County, HI—Mayor Bernard Carvalho
Natchitoches, LA—Mayor Lee Posey
Jonesville, VA—Mayor Jim Ewing
Cottonwood, AZ—Mayor Tim Elinski
Tuscaloosa, AL—Mayor Walt Maddox
Tucson, AZ—Mayor Jonathan Rothschild
Clarksdale, MS—Mayor Bill Luckett

Baker, MT—Mayor JoDee Pratt
Great Falls, MT—Mayor Bob Kelly
Middletown, RI—Town Council President Robert Sylvia
Wichita, KS—Mayor Jeff Longwell
Newport, RI—Mayor Henry F. Winthrop
Cumberland, RI—Mayor William Murray

Senator BLUNT. Senator Inhofe.

STATEMENT OF HON. JIM INHOFE, U.S. SENATOR FROM OKLAHOMA

Senator INHOFE. Thank you, Mr. Chairman.

First of all, Mr. Baker, thank you for all your help in the efforts that we have put forth for general aviation. When we go back and review real quickly the Pilot's Bill of Rights that was successful 3 years ago, certainly your organization was instrumental in getting that passed.

Then when we did the Pilot's Bill of Rights 2, there are certain things that were not properly addressed in Pilot's Bill of Rights 1 in terms of what the courts might do and all of that, so we had the second one.

But the one issue in there that got everyone's attention, of course, was the reform of the third class medical.

Now there are several other things that were in that bill, and we were considering bringing it up in a separate bill this week when we had a business session and decided we would wait until the next time to make sure that we did not overlook anything. So we have the second bill that is going to come up.

It will take care of the problems that were addressed but were not acted upon when the third class medical reform went in, such as de novo review, so that if an appeal is made through the district courts, they have to start from scratch—they do not just automatically take what is handed to them by FAA or by NTSB; the transparency issue on re-examinations, which you are very familiar with; and then the last thing, the updates of the NOTAM program, that is Notice to Airmen.

Since I had a personal experience with that a few years ago, only to find that there were no NOTAMs where they said they were NOTAMs, and yet we had no fallback position. That is a reform that is going to have to be done.

All three of those reforms are going to be found in the bill that will be marked up by this committee at the next business hearing.

Any comments on that bill?

Mr. BAKER. First off, to you, Senator Inhofe, and this Committee, it has been remarkable the difference we feel in general aviation with the support of the third class reform, which was signed into law last July. And by the way, the FAA has risen to the occasion and has met every deadline and maybe even exceeded it. It will be effective as of May 1st. And there are tens of thousands of aviators that will be back in the game over the next coming years, so thank you to this committee and to the full Senate for approving that, and your leadership particularly on it.

The final part of the Bill of Rights 2, which you have been a leader on and we have been very concerned about, is this whole due process part. It is very important that as a citizen we have the opportunity to have real review of issues. And that is why we very much support the Pilot's Bill of Rights 2 and getting it signed off,

as well as understanding these NOTAMs and what they call at the very end of the NOTAM, which means Notices to Airmen, it says you cannot trust it at the very end, because we do not know if it has actually been depicted correctly, a Presidential TFR or any of these things. And yet the airmen can be violated for entering that airspace.

So there is a lot of work that needs to be done to get that so that it is clear and concise, and for the pilot to have due process.

So thanks for your leadership on that. We look forward to that passing.

Senator INHOFE. Yes. And I think we have the support to get it passed, a lot of that thanks to you.

They were talking about the NPE program. I was proud to be a part of that back in 2000. In fact, that was the amendment to bring the general aviation airports into a position where they could compete and have some benefits.

Mr. Dickerson, I think sometimes about what would have happened in the State of Oklahoma had we not had the contract towers. Our two major cities, in terms of football games, are Norman, Oklahoma; and Stillwater, Oklahoma. On football day, it is swamped. We without the contracts alternative that we had, we would be stuck without any help during that time. Your friend Walt Strong tells that story all the time.

So, right now, there are some problems with it that we are going to try to address having to do with some of the benefits and reforming the FAA's benefit and cost analysis process.

Would you address that for us and the benefits that you see that need to be improved there?

Mr. DICKERSON. Yes, sir. Thank you, Senator. And thank you for your leadership along with Senator Blumenthal on the contract tower funding letter that you generated 35 Senators on board——

Senator INHOFE. Yes, that is right. The lead Democrat was Senator Blumenthal.

Mr. DICKERSON. So the benefit-cost ratio, we have had some specific recommendations, many of which, to Senator Cantwell's question, were included in the reauthorization bill last year and did not make it into the extension.

What we think it does, right now, the FAA's thumb is on the scale against airport safety. It is leaning toward these broad, abstract economic models. And control towers provide such important, critical safety, we should be erring on the side of safety, not abstract economic models.

Some of our specific recommendations are, unless you your traffic drops significantly at an airport, you should not be subjected to the annual benefit-cost ratios. The costs that would disappear from the FAA's budget if a tower was closed, those are legitimate costs to use in the analysis. But indirect, nonsite-specific costs that FAA wants to put in the model should not be included. Again, we should be erring on the side of safety.

We have recommended lifting the cap on AIP use for building contract towers. Right now, it is $2 million.

We think airports should have adequate time to respond to any BCs that the FAA puts out.

So we have a number of measures that were in my written testimony, and many of which were in the bill last year that the Senate passed. We hope we can continue to work with the Commerce Committee to keep building on that success.

Senator INHOFE. Excellent answer. Thank you very much.

Thank you, Mr. Chairman.

Senator BLUNT. Thank you.

Senator Booker.

STATEMENT OF HON. CORY BOOKER,
U.S. SENATOR FROM NEW JERSEY

Senator BOOKER. Thank you, Mr. Chairman. And it is so appropriate the order that you have chosen this morning: Kansas, Nebraska, Oklahoma, and New Jersey in that order. These are four states that have so much in common.

But I do want to say that general aviation is of extreme importance to my state as well. And while most of our high school football teams drive to their games, the reality is we have about 2.5 million general aviation operations annually. It is a critical part of our overall economy.

But more than that, more than the almost $3 billion of our economy, it has actually proved, and I saw this during Hurricane Sandy, as a critical way of getting resources in and out of our state.

So it is something that is of great value and interest to me but also, as much as I might joke about the differences amongst our states, we are one United States, we are interwoven, integrated lifelines whose arteries are our rail systems, our intermodal freight operations, but also general aviation.

And so I am very concerned about this as a part of our overall infrastructure view, and I have worried that it is not getting the kind of attention.

I was really grateful that Ranking Member Cantwell and other Democratic leaders released a $1 trillion infrastructure blueprint that included $30 billion in funding and upgrading and improving our Nation's airports. We have even heard our President talk about our airports and often comparing them to what we are seeing in other nations, in terms of their infrastructure investments.

So I was wondering, can any of you speak to me about the importance of public investment in the general aviation community and how that can help us become more productive economically, and how would the $30 billion investment that was put into our investment infrastructure vision help general aviation needs?

Mr. BAKER. I will take a first shot at that, if you do not mind.

I think if you look at it strategically, and you point out very correctly, general aviation's relief to places that the highway infrastructure is interrupted, the rail infrastructure is interrupted, it is the only way to bring relief, whether it is in Louisiana with hurricanes, New Jersey, potentially earthquakes in Carolina. It is essential to have a high-quality airport with high-capacity in that zone of relief. It is the only way to bring in quick relief, whether it is medical, whatever kind of relief is needed, and supplies.

So we are very much involved with the idea that we should make sure that that infrastructure is being invested in, and it can be supported for the long-term growth of aviation because businesses

also tend to locate next to an airport. Whether it is a factory or warehouse or whatever it is, and I have done that myself running other businesses. You need to go in and out. You need to make sure you can get there effectively and efficiently, and make sure you have a safe flight.

If we fail to invest in that infrastructure, we are losing commerce.

Senator BOOKER. Thank you.

Anybody else?

Ms. GILL. Yes. Senator, I completely understand where you are coming from in terms of the economic importance of general aviation.

In rural America, where we have large open areas and the towns are far between, without that aviation and air service, folks have to potentially travel hundreds of miles to get to other reliable service, which adds other safety concerns.

But for us, we are talking about the thread that holds together economic development opportunities in small, rural communities. Modern business demands adequate air service, and we have many business operations that are going on in our community that depend upon the ability to be connected to the rest of the world.

So in all parts of the Nation, depending on all our different scenarios, economic development is very much dependent on air service.

Senator BOOKER. So then let me maybe—Mr. Dickerson, I really do appreciate that. I am one of these people that is appalled that we are still doing aviation in this country with 1940s technology. It causes horrible environmental realities, in terms of the quality of the air that people in communities like mine and others breathe in. It is horribly inefficient.

So the NextGen implementation, to me, it is something I have been pounding on since I have become a United States Senator.

Can you just maybe conclude by telling me how NextGen would help the general aviation industry to improve? And what does Congress need to do? Do we need to be investing more to get this actually done and implemented nationally?

Mr. DICKERSON. Well, investing more Federal money is always important in the aviation sense. Congress has been very supportive of the NextGen efforts that FAA has put forward.

In your area, in the Port Authority of New York and New Jersey, with Newark and Kennedy and LaGuardia, it is absolutely critical in New Jersey to get NextGen going. A rising tide lifts all boats. If we get NextGen going, it is going to provide a lot more efficiencies in the system, particularly dealing with the delays that we have in the New York-New Jersey metropolitan area, Chicago, L.A., and that is going to give more access for general aviation into larger communities.

On the airport infrastructure side, we cannot forget about the ground. There is a lot of focus on the administration's proposal on ATC corporations in the air. We have to worry about what is on the ground, and we have to make sure that airports have the necessary funds to deal with the increased demand that we are all seeing.

We mentioned the PFC adjustment we think is needed. AIP, the airport grant program, that FAA says there is a $7 billion a year in needs and eligible projects, and AIP right now is just a little bit over $3 billion, so we are not even quite halfway there.

So more Federal resources would definitely be welcome.

Senator BOOKER. Thank you.

Mr. Chairman, thank you very much.

I think you would probably want to correct for the record, out of deference to the Senator from New Jersey, he said the Port Authority of New York and New Jersey. He should have said the Port Authority of New Jersey and New York.

[Laughter.]

Mr. DICKERSON. Corrected.

Senator BLUNT. I am glad to get that straightened out.

Senator Hassan.

STATEMENT OF HON. MAGGIE HASSAN,
U.S. SENATOR FROM NEW HAMPSHIRE

Senator HASSAN. Thank you, Mr. Chair.

Good morning to all of you.

I am just going to echo the comments you have already heard from so many of us on the Subcommittee about the importance of rural airports and the EAS program.

I also wanted to just touch on one point, to build on what we have been discussing around the contract towers. We have one in Nashua, New Hampshire, and one in Lebanon. And I was pleased to join my colleagues on the letter led by Senators Inhofe and Blumenthal in support of those.

There is no question that they have a positive impact.

I was hoping, Mr. Dickerson, that you could speak to the role these contract tower airports play in supporting the United States military.

Mr. DICKERSON. Thank you, Senator. I appreciate that question.

In fact, Senator Inhofe, Senator Manchin, and Senator McCain did a letter to the Commerce Committee in November 2015 that outlined the critical importance of military and national security with contract towers.

It is interesting. Forty-seven percent of all military operations, almost half of all the military operations at civilian airports, occur at contract towers.

The other point about the program is the support of the program toward our veterans. Seventy percent—70 percent—of all the contract controllers are veterans.

So the military counts on contract towers for their operations, and it makes sense because they do not want to be in the major metropolitan areas, in terms of training and flight operations, be in the smaller communities. So a very, very strong partnership between the Department of Defense, national security, and contract tower airports.

Senator HASSAN. Thank you very much.

I will submit the remaining questions I have for the record.

Thank you all for being here.

Senator BLUNT. Mr. Dickerson, did you say that 70 percent of people who operate contract towers are veterans? What was your 70 percent?

Mr. DICKERSON. Seventy percent of all contract controllers. So the 253 airports that have contract towers, there are about 1,200 to 1,500 total controllers that work for these three companies, and 70 percent of those are veterans.

Senator BLUNT. And almost half of the military installations are supported by contract towers?

Mr. DICKERSON. Half of the military operations that occur at civilian airports, not bases, but civilian airports, are contract towers, correct.

Senator Capito.

STATEMENT OF HON. SHELLEY MOORE CAPITO, U.S. SENATOR FROM WEST VIRGINIA

Senator CAPITO. Thank you, Chairman Blunt. And I would like to thank the Ranking Member for holding this hearing as well.

I want to begin by flagging an issue of great importance. We all obviously talk about our states, but we had a very unusual occurrence at our Yeager Airport in Charleston.

If any of you all have ever flown into Yeager Airport, you know it is on the top of three mountains. And a large portion in 2015, a large portion of the Yeager Airport EMAS, which is the emergency system to catch overruns, fell into the valley. And the collapse—luckily, nobody was hurt. But it collapsed onto a church and resulted in a major safety concern and has stymied our ability to grow at Yeager until we can fix this issue.

You can imagine the expense of something like this and also making sure that we get it done right for the safety of that particular airport.

We are hoping and we are working together, Senator Manchin and I are working together, to make sure that we can get the AIP program looking at this, maybe some of the reconfigured dollars, which brings me to the question that, Mr. Baker, in your testimony, you mentioned that you did not think—and I know Yeager does not get the NPE grants because it does not qualify for that. It gets the primary grants.

But you mentioned in your testimony that some of this money is not used as efficiently, and it goes back into a national pool. Some people cannot get the match. The projects, the money that they are able to access is too small to be able to cover a larger project.

Could you kind of expand on improvements that could be done to that, so that airports in and around all of our states could access these more efficiently?

Mr. BAKER. Sure can, Senator. As a matter of fact, I have used that airport, Yeager field, to fly Special Olympics kids into that event. It is a great airport. But, as you know, it is on top of a mountain, and you do need as much runway as you can get.

Senator CAPITO. You do. You do not want to go over.

Mr. BAKER. That is right.

So our proposal, our thinking here, is that, for the NPE airports, the $150,000 a year, which they can roll over for 4 years, which equals $600,000, but also requires local support up to 10 percent,

when we end up turning back in over $300 million a year into the general fund, it seems like we are not doing what was intended.

If you go back to when the NPE Program was started, only about $18 million a year were being carried over and that's because the airports could take on some of these smaller projects that would kind of fit into that couple hundred thousand dollar program.

So I think there is an ask here for the Committee to look at and we want to work with you on this. How do we take that money and deploy it back in these airports that really need it and take bigger projects on and use the money where it was intended, to invest in those airports so that we can have an infrastructure that is sustainable for a long period of time?

Senator CAPITO. Do you happen to know if primary and nonprimary dollars in that program can be interchanged if there is overflow from the year, or it is returned back because it is unused?

Mr. BAKER. As I understand it, the NPE dollars are carried over to the FAA's discretionary fund and, in some cases, are allocated to other non-NPE airports.

Senator CAPITO. OK. Thank you.

Mr. Baker, we also suffered a pretty devastating flood in June 2016. Many of you all will remember. It resulted in the loss of 23 lives, and 1,200 homes were damaged in that flood.

I really learned a lot during the flood process in terms of where you need to have resources and what type of resources you need to have. I was interested in your comments on the ability of some of these airports and certainly the resources there to be able to be used in emergency situations.

You mentioned Hurricane Sandy, in particular. Could you talk a little bit about that as well?

Mr. BAKER. Sure can. It is a really important part. People do not necessarily understand the value until it is that time.

Senator CAPITO. Right.

Mr. BAKER. When I was living in Southern California back in the 1990s when we had the earthquake, that was very significant. The only way the first responders could get into that part of L.A. was using the Santa Monica Airport because the bridges were gone. They were not available to be used. So all first responders had to be flown into Santa Monica.

As you look at those opportunities around the country and where that can happen, whether it is hurricanes, floods, tornadoes, that first response has to come through aviation, whether they are helicoptered in or flown in by fixed-wing, because the only way you can really bring in big volumes of relief is through fixed-wing aircraft, which require 3,000 to 5,000 feet.

Senator CAPITO. Right.

Mr. BAKER. So we think of this as strategic relief, and too often, it is kind of forgotten about until the need occurs.

And Hurricane Sandy is a perfect example where the only way you could get first responders in there, because the roads were destroyed, full of sand, was by using aviation.

So we want to have a thought process about how we make sure that network is protected in those high-risk zones.

Senator CAPITO. Right. Thank you.

Thank you all very much.

Senator BLUNT. Senator Wicker.

STATEMENT OF HON. ROGER F. WICKER,
U.S. SENATOR FROM MISSISSIPPI

Senator WICKER. Thank you.

Mr. Dickerson, I understand the contract tower concept has been thoroughly discussed at this hearing, so I will not ask you about that except to note that, in my neck of the woods, it is quite popular among the people who use general aviation. So I just wanted to note that while I move on to other topics that perhaps have not been discussed quite as thoroughly.

Mr. Baker, you know there is a proposed ATC reform that would create an independent private corporation to operate air traffic services and eliminate the FAA's ability to provide oversight of the ATC system. There has been a letter signed by Senators Cochran, Leahy, Collins, and Reed to the Chair of the Full Committee expressing opposition to this proposal. And there has been a good deal of discussion with regard to what this proposal would do to the general aviation community and to rural America.

So would you discuss how this initiative would affect our economy and what changes would it result in, pros and cons?

Mr. BAKER. It is a very interesting question. Again, when we look at where we see problems, we do not see any from our perspective in general aviation and business aviation as it relates to air traffic control towers. They work very efficiently and very well for movements of hundreds of thousands of general aviation aircraft.

We do think that if there are things that should be done differently, we should be open-minded about it. But one of the things we are not open-minded about at all is any kind of user fees.

We have a fuel tax we think is very efficient. As we look around the world and what has happened with privatization, it has not been a positive for general aviation and business aviation. When they go to fees, if they are for an instrument flight, it could even reduce safety because of people making decisions not to pay that fee.

There are things I think we can learn from and be smarter about how we become efficient and fund the ATC system and all of the FAA. But, at the moment, we do not see any issues with the current ATC system.

I sit on the NextGen Advisory Committee as well, so I am pretty knowledgeable about where the airlines have made decisions about priorities for the FAA to be responsive. And I think so far, I think the FAA has been doing a pretty good job of doing that work. And the airlines and general aviation and the rest of business aviation sit alongside that and make those priorities pretty clear.

So we remain concerned that if we are going to make a change, that the representation, the understanding of no user fees is clear.

Senator WICKER. Would this proposal result in less congressional oversight? Would that be a good thing or a bad thing?

Mr. BAKER. I think when you look, in reflection, about the FAA and how it has been supported, it has been funded pretty clearly by Congress, over $16 billion this fiscal year. I do not see a shortage of funding for the FAA myself, and I think Congress has done a pretty good job of that oversight.

Senator WICKER. Let me then switch, Mr. Baker, to another topic, and that would be pilot shortages.

Between 1980 and 2015, the number of active pilots has decreased from more than 827,000 to just over 590,000, a 30 percent decrease.

So tell us about this. What does it portend for the future?

Mr. BAKER. I am very concerned about that. It is an important number. Some of it is generational. In 1980, we had a lot of World War II, Korean, Vietnam veterans that were flying. We have lost many in that great group, that great generation.

I do not think we have to think about, call it boiling the ocean here and getting back to 800,000 pilots. What we are looking at is graduating, call it 17,000 or 18,000 pilots and we are still providing the best pilot training in the world here in the United States. And we export a lot of that training around the world.

I think we would be quite pleased if we get back to 25,000 or 30,000 net new pilots a year.

For civil aviation and for military aviation to get into the airline or business aviation world, it probably has never been a better time in my experience of flying for 40 years. The careers are finally starting to evolve, whether it is engineering or actually flying or being a controller.

Senator WICKER. How are we going to do that?

Mr. BAKER. We are going to need a big, significant program. We, AOPA, are starting a program for high schools called STEM, actually what we call STEAM—science, technology, engineering, aviation, and math.

We are kicking that off this fall in a number of high schools, because we need to introduce young people to the careers in aviation that can be profitable and engaging levels of potential pilots that have not occurred for probably 30 or 40 years.

We are going to need a lot of help to get this kicked off at the high school level. We want to work with industry and government to make sure that aviation careers and opportunities can be significant here in the U.S. I am pretty excited about the growth in the pilot population that we can help impact.

But we are also concerned about costs in aviation, whether it is a consolidation of some FBOs, some other things that are occurring that impose high costs in aviation and that are important for us to manage and maintain, because this is not an inexpensive journey to become a pilot.

Senator WICKER. If anybody wants to weigh in on the 1,500-flight-hour rule, I would be happy for you to do that on the record. That would be helpful to us.

Thank you, Mr. Chairman.

Senator BLUNT. Thank you, Senator Wicker.

Senator Peters, then followed by the Chairman of the Full Committee, Senator Thune.

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

Senator PETERS. Thank you, Mr. Chairman.

And thanks to each of our panelists here today for your testimony. It is important.

I may sound like I am belaboring an issue, but I think it is worth belaboring, and that is Essential Air Service, and certainly the fact at how floored I was to have the Trump administration basically zeroing out this money.

To me, the title speaks for itself as "essential." This is the Essential Air Service for our rural areas. And in the state of Michigan, I actually have nine airports that would be impacted as a result of these cuts.

I think we are second only to the state of Alaska, in terms of the impact on it. Many people think of Michigan as an industrial manufacturing state, which we are. We are proud of it. But we are also a very rural state. It is the largest state east of the Mississippi with very large rural areas that are served by Essential Air Service carriers.

And certainly, the panel has talked about the economic impact this would have. And certainly, Mayor Gill, you spoke quite a bit, and others, about the economic impact to these areas.

At a time when our rural communities are hurting now, we have actually seen declines in our rural areas, this is quite a slap in the face to something that is absolutely critical for their continued economic development.

This morning, I sent a bipartisan letter, so we came together in a bipartisan way, to the Senate appropriators, calling for the continued support and funding of this program. We have 19 Senators on board. And I am sure if we had the letter out further, we would have a whole lot more on board. I think there is strong support here.

But I think it is important that we continue to put in the record as to how important, essential, again, with the focus on Essential Air Service is.

I know many of you have already made comments, but I want to give you an opportunity. Is there anything else that we should have in the record to make it crystal clear how devastating this cut would be to many of our rural areas?

I will start with you, Mayor Gill, because I know you deal with this on a regular basis.

Ms. GILL. Yes, thank you. Senator, I have been talking about the impact of air service on rural America.

I just would like to reiterate that if you want us in rural America and towns like Pierre to be economic contributors, then we need to have access to air service to keep us connected to the rest of the Nation.

With that, I believe that there are things that Congress can do. They can keep safety at the very front of the decisionmaking, but yet make some other modifications that can allow us to have meaningful air service. The pilot shortage, we have talked about that. There are things we can do to try to get more pilots into the pipeline, and staying there, and making it a viable career for them.

We need to be connected to the FAA, so that there is oversight, safety oversight, to those kinds of modifications.

But with all of that said, I think that we need to consider fully funding the EAS program, because EAS does provide that lifeline to rural America. And I think there are ways to review it, make

sure it is sustainable and functioning efficiently, but yet it is very important to our economic feasibility.

Thank you.

Senator PETERS. Thank you.

Just one other issue, and that is small airport enplanement, AIP eligibility. I know some of my colleagues have brought up this issue as well.

We have a situation in Michigan as well where airports face this cliff, if they do not hit the 10,000, and often through no fault of their own, but it is pretty significant. We have been able to postpone that for a period of time. I do not know how long that will continue.

Perhaps some thoughts from the panel as to, is there an alternative? Should we perhaps have a gradual, proportionate change?

But certainly, I would think all of you agree that the cliff that we have right now is simply not fair. It really is detrimental to our smaller, rural airports. If anyone would care to comment?

Ms. GILL. Well, I would just make a quick comment on that, that, yes, when we are threatened with going below 10,000 enplanements in a small airport, the difference between $1 million annually and $150,000 is huge.

Senator PETERS. It is a big deal.

Ms. GILL. It makes it very difficult for an airport to be able to continue to make those infrastructure improvements.

So a recommendation that I would suggest would be to look at legislation that should establish a more gradual reduction or a delay in reduction or some other meaningful response to the problem.

Mr. DICKERSON. Senator, one of the obvious ways to address this is increase AIP funding. I mean, we are a little bit over $3 billion. We talked about earlier the $7 billion in needs that the FAA has identified.

This Committee has always been a great supporter of AIP. We hope, in the next reauthorization bill, you can get to at least $4 billion in AIP annually. That would help a lot in terms of small airports. As you said, they are so dependent upon the airport grant funding.

Senator PETERS. Thank you very much.

Thank you.

Senator BLUNT. Thank you, Senator Peters.

Senator Thune.

STATEMENT OF HON. JOHN THUNE,
U.S. SENATOR FROM SOUTH DAKOTA

The CHAIRMAN. Thank you, Mr. Chairman. I want to appreciate you holding this hearing on these very important subjects in my state of South Dakota.

I especially want to thank the distinguished panel of witnesses, and particularly Mayor Laurie Gill from our State capital of Pierre.

It is nice to have you here. Welcome, Laurie.

Access to the national air transportation system is a serious concern for those who live or work long distances from even the smallest airports, so connectivity is, for small and rural communities, vital to the economy. Those important connections can take many

forms. Sometimes it is in the form of reliable and timely passenger air service by airlines. Sometimes it is in the form of a robust general aviation community. But all depend upon solid infrastructure.

And the condition of the regional airline industry, which has changed quite a bit in the last decade, is an important factor in maintaining that connectivity. One of the issues that we keep hearing about is the ability of those carriers to hire and retain a quality supply of pilots.

I hope we can learn a little bit more about that issue today. I know that many of you have spoken on that on some level already.

But safety is always the top priority when it comes to air travel. I want to be sure that safety measures are put in place that are having their intended effects. And that is actual safety, not the appearance of safety, which is most important.

So, Mayor, I would just ask you first off—and thank you by the way for participating in the DOT Small Community Working Group. As the author of that provision, I look forward to hearing more about the working group's recommendations when they are released.

As we think about the issue of pathways for individuals to become commercial airline pilots, do you agree that safety remains the most important consideration?

Ms. GILL. Thank you. Chairman Thune, first of all, I want to say thank you for your ongoing efforts to continue to improve air service in rural America. Your efforts have been duly noted. Thank you.

I think that part of what we are facing and what has put pressure on the carriers that have served Pierre have been the issue of finding enough pilots. So I absolutely agree that we need to do things that can continue to look at ways to get, first of all, people interested in being a pilot as a career knowing the current environment coming in. They have to, first of all, want to do that.

And then when they get into the training programs, to continue to look at ways to modify what counts toward the 1,500 hours that pilots currently need for certification. And I do believe that there might be ways to look at, for instance, allowing training provided by the industry to be able to use in ways that it is not now to count for those hours.

We need safety to remain first in the forefront, so any recommendations I would make would be connected to FAA approval for safety and FAA determination of the number of hours to be credited.

Another thing regarding pilots that comes to mind for me is having FAA consider broadening its view of what qualifies as academic experience worthy of credit hours. Again, FAA would make a safety determination as to what would qualify and how many hours.

So those are just thoughts that come to mind, but I do think there needs to be an emphasis on looking at how we can continue to have pilots funneling into that pipeline because we are going to see more and more retirements coming that are going to help make this problem even deeper.

The CHAIRMAN. With safety being the number one consideration.

Ms. GILL. Absolutely. Safety, and everything that I would recommend would be tied in some way to FAA oversight to determine

if any changes that are being made keep safety at the first, very first forefront.

The CHAIRMAN. As the Mayor of Pierre, you are no doubt helping lead the economic development efforts of the city. Can you give any real-world examples of how access to and reliability of air service has impacted the community's economic development efforts, especially with respect to attracting businesses and employees to the community?

Ms. GILL. Certainly. You know, we are the State capital, and so, obviously, we are a government town. In our top 10 employers, we have State Government, Federal Government, and city government. There are a lot of those folks that need to get in and out to do business, whether it be at a regional office in Denver or in Washington, D.C. So we have the need to do that.

We also are the gateway many times into the state of South Dakota, and people are coming from all over the world to come in to do their business.

We have people that live in our community that work all over the Nation. And it is a wonderful thing about our country, that people can live where they want to and fly in and out and do the work that they need to do, whether they be a consultant or work for a national company. And many people live in central South Dakota and depend on that air service to get to where they need to.

Then we also have talked to many businesses that we are working to entice to come into our community, and one of the things that they are checking out as they are looking at a community is they are checking out what the access to service is, where they can get to, how many flights, and is it accessible.

So that very much is on the forefront of any decisions for a company that is making a business decision, looking at our community.

The CHAIRMAN. Dr. Smith, we are glad to have your expertise representing Embry-Riddle, which is in aviation, obviously, a key institution in our country when it comes to these issues. I know on aviation safety, you have been a leader, in terms of the research there.

Could you perhaps give us some idea about what factors to weigh most or least when it comes to producing the best and the safest pilots possible? What are some of the things that you think that we need to be focused on?

Dr. SMITH. Thank you, sir. I appreciate your emphasis on safety because everything that we do in university education, aviation education, and what we did in the pilot source study focused on the concept of safety first.

What we found in the study, that hours themselves was not an indicator of performance, just the term hours. We felt that we really needed to go back and look at, where did those hours come from? What was the kind of experience that those pilots had in order to make them eligible to become first officers?

In the industry, we are looking at two possible descriptors of training or background that would help. One of them is the concept of structured flying, structured flying under some kind of operating manual, under some kind of supervision.

The other one is called "disciplined flying." It is one of the reasons why the FAA allowed the military pilots to be eligible at 750

hours, because they know that all of the flying those pilots do is disciplined.

So what I would like you to look at is the concept that hours themselves without any kind of descriptor of where those hours come from is insufficient evidence that a pilot is either going to perform well or is going to be safe.

The CHAIRMAN. Mr. Chairman, thank you. I appreciate, again, you having this hearing.

Great panel. I know there will be a lot of questions for the record, and I know that you have had to expedite this because of votes.

But we appreciate your flexibility and understanding that, and I look forward—I know I have some questions I would like to submit for the record too, as well.

So thank you, Mr. Chairman.

Senator BLUNT. Thank you, Chairman. I think we have put a lot of information on the record today with the help of our witnesses.

Let me ask two or three more questions, since I have not done that yet.

So, Dr. Smith, you are saying that the quality of hours is every bit as important as the number of hours.

Dr. SMITH. And probably more important because some of our young folks have figured ways to get hours. They go to the airline, and they are totally unprepared because they have not had those quality hours.

Senator BLUNT. So I am assuming from that that if you go to the airport and rent a little plane and fly around for some hours, that is not necessarily the kind of disciplined hours that you think matter.

Dr. SMITH. That is right, not disciplined or structured. Whereas flight instruction (many of our students graduate from college, get their certificates and become flight instructors) under most of those circumstances, that is a very disciplined way of flying, and it is very structured. And those flight instructors in our study did show that they performed better than those who did not have that kind of experience.

Senator BLUNT. So you mentioned military hours. Are there other background influences that are likely to create a better pilot than others?

Dr. SMITH. We had several of them in our study.

Number one, the one that showed the most effect size, was the years since graduation, so that gap that the rule put into place between when a pilot gets his or her certificates and when a pilot is eligible for hiring at a regional airline, what do they do during that gap? And that is what we are looking at, the possibility that this flying experience is disciplined or structured.

We found that those who filled that gap very quickly, most of them are doing it by flight instruction, performed better.

Pilots who had total time, surprisingly less than 1,500 hours in many cases, did better. And that is because they went straight from their training program through some kind of flight instruction or some kind of experience like that, and directly into airlines, whereas many of the pilots in this study were second-career pilots,

did something else for quite a bit of time before they went to work for the regional airlines.

Senator BLUNT. OK. I think we have to figure out how we qualify what creates the safest pilot here as much as we can and err on the side of that rather than on the side of just accumulating time. That is what your study appears to verify.

Dr. SMITH. And the FAA instituted the restricted ATP to give credit to pilots who come from the structured type of programs and education efforts, and also to military pilots. I think they could look at more of those, that the restricted ATP could be expanded to more of those organizations that provide structured or disciplined type of flying experience.

Senator BLUNT. Mr. Baker, you said you are on the NextGen Advisory Committee?

Mr. BAKER. That is correct.

Senator BLUNT. Are you satisfied with the speed of progress there up until now?

Mr. BAKER. The speed is never fast enough, and the cost is always higher than you would like. But I do think the NAC actually works pretty well at identifying the priorities, and the workgroups identify the pathways to get those priorities accomplished.

The feedback loop that occurs with all my partners in the airlines and business aviation and others in the industry, I think there is general agreement that the NAC, as a committee, is a pretty successful one. I think the leadership—currently, we have FedEx leading that group and previous to that was Delta, and Alaska before that.

I see the way the NAC works and it creates good consensus, and then the FAA knows what the priorities are, so it does work.

Senator BLUNT. And what do we need to do to make it work more quickly? Should the Congress be providing more incentive? More funding? More oversight? What do you think we need to do to close the gap between where we are now and where we would like to be?

Mr. BAKER. In some cases, I think that communication could be much improved but it is actually working, whether it is the PBN, the performance-based navigation systems, at some airports or understanding some of the other system complications. However, we are going to need Congress to weigh in on some others—noise and other things that are not part of the purview, if you will, of the NextGen Advisory Committee. When you are trying to make more efficient approaches and departures from these airports, some of the other challenges that seem to get rolled into this thing are noise and other kinds of performance issues that are outside of the purview.

Senator BLUNT. And you mentioned the amount of money in, I believe, the Airport Improvement Program funding. I think at that point you said that perhaps the local match was too high for small airports. Do you think there should be a local match?

Mr. BAKER. I do think there should be some, call it skin in the game, that this group has to align and say that these projects are recognized as adding value to that community. But maybe it can be spread out over some period of time. It can be, instead of being 10 percent, something less than that, particularly when you have

safety opportunities to improve for the national network, for the transient neighbors coming in and out of that airport.

So I think there is a way to look at it that would be much improved.

I do want to add one other comment about safety, if you have one second, which is general aviation just came through its safest year ever in 2016 in terms of general aviation safety. I think it was a recognition from the work that FAA had done, NTSB, AOPA, and others. But general aviation has become a lot safer over the last half-dozen years.

Senator BLUNT. And, Mr. Dickerson, did you say that you thought the FAA had a thumb on the scale against safety?

Mr. DICKERSON. Yes, sir. I think in terms of their analysis, they want to focus more on, as I said earlier, abstract economic models in terms of benefit-cost versus the benefits of a control tower.

Senator BLUNT. I think at the time you also mentioned these abstract models included things that were not near the site where the aviation question was to be engaged, right?

Mr. DICKERSON. That is correct, nonsite-specific, indirect costs. No problem with costs associated with that tower, controller costs, telecommunication costs. But as I said, if we are going to err, we need to err on the side of safety, not on the these broad, abstract economic——

Senator BLUNT. And the nonsite-specific costs would include things like what?

Mr. DICKERSON. Depreciation costs, airway facility costs, things that are spread across the whole system of FAA, not specific to that airport.

Senator BLUNT. OK.

Well, I am sure there will be questions for the record. I think we put a lot on the record today. The hearing record will remain open for 2 weeks. Senators will be asked to submit any questions, and, hopefully, you will be responsive to those.

We want to conclude the hearing and thank our witnesses. The hearing is adjourned.

[Whereupon, at 11:12 a.m., the hearing was adjourned.]

A P P E N D I X

PREPARED STATEMENT OF HON. LAURIE GILL, MAYOR, PIERRE, SOUTH DAKOTA

Chairman Blunt, Ranking Member Cantwell, and Members of the Subcommittee:

I am Laurie Gill, Mayor of Pierre, South Dakota. Through my statement today, I hope to add to the subcommittee's understanding of the challenges facing rural communities in achieving and maintaining reasonable air service. I'll also offer some thoughts on how Congress can address these challenges. At the outset, I also want to thank Chairman Thune for his sustained efforts to maintain and improve rural air service.

Air Service and Pierre

Pierre is the capital of South Dakota and has a population of approximately 14,000. It is located in the center of our state, far from our state's population centers and from large hub airports. Without adequate air service to Pierre, our citizens and businesses face the following drives for meaningful scheduled air service options:

Sioux Falls, 226 miles;
Rapid City, 171 miles;
Minneapolis, 453 miles; and
Denver, 540 miles.

The distances alone make clear that our citizens and our State Government need reasonable air service in Pierre to be connected.

But distances are only part of the story. What's important is that businesses and people and communities be connected to the region, the country, and the world though reasonable air service. Businesses are not eager to locate or stay in communities with inadequate air service. Whether a business locates, leaves, or stays in Pierre or similar small cities has a very important multiplier effect on the local economy. In addition, growth breeds growth; losses can be hard to stop once they begin. So, achieving and maintaining reasonable air service is important to our economy. Air service is also important to individuals. Our residents, like people everywhere, sometimes have to travel long distances to visit family or medical specialists, attend special events, or meet other needs.

In short, air service is a necessity for Pierre and similar cities and the program to help ensure such service is aptly named the Essential Air Service program.

Let me turn now to a summary of recent air service in Pierre, beginning with annual enplanement data.

2013	14,507
2014	9,504
2015	6,572
2016	6,382

The numbers show a huge decline in enplanements after 2013. It was in the summer of 2013 that FAA rules took effect that require a first officer in a 14 CFR part 121 air carrier operation to have 1,500 flight hours (or flight hours plus certain credits toward flight hours equaling 1,500 hours).

There was also a decline in the reliability of air service to and from Pierre after the rule took effect. More flights were canceled and fewer were on time. In 2015 nearly one in five flights was canceled and over 40 percent were not on time. The number of daily flights plummeted from 8 to 3. Commercial air service was challenged to find a sufficient supply of pilots that qualified under the new rule. Prior to the rule's effect, Pierre had 19 seat service four times a day to Minneapolis and four times a day to Denver. After the change, the carrier tried to cope in part by changing the service to offer only 9 seats. That may have put that plane outside the reach of the 1,500 hour rule, but the smaller configuration did not inspire confidence in the community in the service.

As commercial air services continued to degrade, our customer complaints skyrocketed and enplanements at Pierre plummeted. Individuals responded in part by making the long drives to other airports. And long drives in winter weather are an additional safety concern. This trend placed further downward pressure on enplanement totals in Pierre and carrier profitability, which can have a downward pressure on service. During this period, Pierre lost eastbound service to Minneapolis and Denver service frequency was reduced.

That kind of decline in service triggers additional problems. It has adverse implications for the physical infrastructure of our airport. Under the Airport Improvement Program (AIP), an airport with 10,000 or more enplanements in a year receives an annual apportionment of at least $1,000,000 for eligible airfield infrastructure. To fall below 10,000 enplanements drops the minimum annual apportionment to $150,000—a reduction of 85 percent. With this steep cliff in the structure of the apportionments to airports, over the long term, an airport with fewer than 10,000 enplanements faces challenges in obtaining funds to maintain infrastructure that will attract or retain scheduled air service providers.

Lack of reliable air service has additional implications for EAS communities. As I've mentioned, unreliable service can lead to fewer passengers, leading to higher per passenger EAS subsidy costs and, ultimately, a risk that EAS payments for service could be terminated if per passenger costs exceed per passenger subsidy maximums applicable to the EAS program.

Important Help From the EAS Program

From 2006 through the summer of 2016, Pierre was an EAS eligible community but did not receive EAS subsidy. After the 1,500 hour rule took effect and reliability plummeted, in 2016 the City of Pierre requested EAS subsidy in an effort to regain air service reliability. The request for EAS funding was granted. As a result, last summer Pierre began to receive service from a new carrier using 50 seat regional jets, in twice daily service to Denver. The more modern and larger plane has increased community and passenger confidence. Enplanements are recovering and may well exceed 10,000 in 2017. It is important to note that this development is directly related to Pierre service receiving subsidy under the EAS program. EAS payments facilitate the carrier's use of the larger plane and pilot staffing and service has been much more reliable. Given the long history of uncertainty surrounding air service in Pierre after implementation of the 1,500 hour rule, we remain very alert to air service issues and simply cannot assume that we've achieved a permanent solution. Moreover, at this point the improvement is only westbound to Denver. We still have no eastbound service to Minneapolis out of Pierre.

Rural America Deserves a Prompt and Constructive Response from Congress

There are ways Congress can address the small community air service issues I've described today.

Congress should respond to the service declines that followed implementation of the 1,500 hour rule. This must be done in a way that maintains safety—and as a public official, and as a wife, mother, and grandmother, I am absolutely committed to safety. And that includes concern over long winter drives.

Possibilities include allowing hours of credit towards the 1,500 hours for training provided by air carriers in their training programs, subject to FAA approval. Such training clearly has at least the potential to be valuable and highly professional, just as current rules have found value in experience in the military and in graduating from certain institutions of higher education. This new approach to receiving credit hours towards the 1,500 hours should be subject to FAA approval, however, as well as to an FAA determination of the number of hours to be credited. In addition, the FAA, with or without direction from Congress, should consider providing additional hours of credit for academic and military training and consider broadening its view of what qualifies as academic experience deserving hours of credit. Again, all such actions would be subject to FAA making a finding supporting the safety of the approach, including as to the hours to be credited towards the 1,500 hours.

Financial support for students studying to be pilots, or for pilots struggling to pay back student loans, could also help address pilot supply. Such actions could well encourage individuals to pursue, or continue to pursue, a career as a pilot.

What I am sure of as to pilot supply is that rural America's aviation needs are for safety and service, not safety and less service. So, I have offered some ideas that should help improve service and that are fully consistent with safety.

Similarly, full funding for the EAS program is warranted and very important. Congress should address the unforeseen consequences of the 1,500 hour rule on

service before considering reductions in EAS funding. Such an approach could well increase enplanements, help contain costs, and reduce long drives to other airports. It would be a win, win. There would be better service, bringing about economic growth in the affected communities. The likely increased ridership would hold down budget costs. If constructive reforms to EAS can be fashioned, fine. Some points may warrant more service, others may warrant a seasonal reduction in service. But now, of all times, is not the time for EAS reductions, much less wholesale reductions.

In addition, AIP funding distribution should be crafted in a way that recognizes that small community airports may have suffered enplanement reductions due to pilot supply issues following implementation of the 1,500 hour rule. A drop in annual apportionments from $1 million to $150,000 is extreme. Legislation should establish a more gradual reduction, or a delay in reduction, or some other meaningful response to this problem.

Conclusion

Rural small communities face aviation service challenges but there are sound ways for Congress to respond, as I have outlined today. Your consideration is deeply appreciated.

That concludes my statement. Thanks very much for the opportunity to testify.

Note: Mayor Gill is a Member of the Working Group on Improving Air Service to Small Communities authorized by section 2303 of the FAA Extension, Safety, and Security Act of 2016, Public Law No. 114–190. This statement is presented in her capacity as Mayor of Pierre, SD, and does not purport in any way to speak for any other entity.

PREPARED STATEMENT OF SPENCER DICKERSON, SENIOR EXECUTIVE VICE PRESIDENT —GLOBAL OPERATIONS, AMERICAN ASSOCIATION OF AIRPORT EXECUTIVES, AND EXECUTIVE DIRECTOR, U.S. CONTRACT TOWER ASSOCIATION

Chairman Blunt, Ranking Member Cantwell, and members of the Senate Commerce Subcommittee on Aviation Operations, Safety, and Security, thank you for inviting me to participate in today's hearing on rural air service. It is an honor for me to be here today.

My name is Spencer Dickerson. I am the Senior Executive Vice President—Global Operations for the American Association of Airport Executives (AAAE) and the Executive Director of the U.S. Contract Tower Association. AAAE is the world's largest professional organization representing the men and women who manage commercial service, reliever, and general aviation airports.

The Contract Tower Association represents 253 airports that participate in the Federal Aviation Administration (FAA) Contract Tower Program. This cost-effective program allows commercial service airports in smaller communities and general aviation airports to have air traffic control services. AAAE created the Contract Tower Association in 1996 to promote the program and to enhance aviation safety at smaller airports around the country.

Mr. Chairman, before discussing the Contract Tower Program in greater detail, I would like to thank you and your colleagues for your leadership on small community air service issues. The Senate Commerce Committee has a long tradition of standing up for small communities and supporting those programs that enhance aviation safety and ensure that people who live in rural parts of the country are connected to our national aviation system.

One example stands out for our members who participate in the Contract Tower Program: Four years ago during the sequestration battle, members of this subcommittee played a critical role to beat back efforts to close 149 contract towers. We deeply appreciated your leadership then and all the steps that you have taken since then to ensure the long-term viability of the Contract Tower Program.

I would also like to thank all you for the enormous amount of work that you and staffs did on the FAA reauthorization bill and the temporary extension last year. The bipartisan FAA bill that this subcommittee and the Senate overwhelmingly approved last year included a number of welcome provisions to help small communities. Our members appreciate that they have lawmakers who are looking out for them and the small communities they serve.

We undoubtedly will need your leadership on rural air service issues again this year. As all you know, the Administration is proposing to reduce transportation spending by 13 percent in Fiscal Year 2018 and eliminate the Essential Air Service (EAS) program. If enacted into law, this proposal would likely end commercial air service at many airports around the country.

We look forward to working with you to determine how the Administration's complete budget request could impact rural air service and airport-related programs. We also hope to work with you on two broader airport initiatives that would help large and small airports—eliminating the Federal cap on local Passenger Facility Charges (PFCs) and increasing funding for the Federal Airport Improvement Program (AIP).

Today, I would like to focus on how the FAA's Contract Tower Program improves aviation safety at participating airports and benefits small communities in rural America and less populated areas of the country. I would also like to touch on the EAS and Small Community Air Service Development Programs and describe some of our recommendations for the next FAA reauthorization bill.

Help Preserve Safe Operations at Airports By Preserving the Contract Tower Program

Mr. Chairman, on behalf of the airports with FAA contract towers at their facilities, I would like to thank members of this subcommittee for your strong support for the Contract Tower Program. This successful public-private sector partnership allows airports to have cost-effective air traffic control services that enhance aviation safety and improve air traffic efficiency.

Currently, 253 airports in 46 states participate in the program, including 237 that participate in the fully funded program. Another 16 airports participate in the cost-share program, which requires local airports to pay for a portion of their contract controller costs. Every Commerce Committee member has at least one contract tower in his or her state. A total of 126 contract towers are located in your states, including 23 in Texas and 25 in Florida.

As you know, the Contract Tower Program continues to enjoy strong bipartisan and bicameral support for the way it enhances aviation safety and provides significant cost savings to the FAA and U.S. taxpayers. The significant benefits of this highly-regarded government-industry partnership have been validated repeatedly by audits of the Department of Transportation (DOT) Office of Inspector General.

To illustrate the cost-effectiveness of the program to taxpayers, contract towers handle approximately 28 percent of all U.S. tower operations, but they account for just 14 percent of FAA's overall budget allotted to air traffic control tower operations. Additionally, the Contract Tower Program provides FAA and taxpayers annual savings of approximately $200 million.

The FAA controls and oversees all aspects of the contract tower program, including operating procedures, staffing plans, certification and medical tests of contract controllers, security and facility evaluations. All contract controllers are certified by the FAA, and they meet the identical training and operating standards as FAA controllers.

It is important to note that contract tower airports provide significant funds to operate and maintain their towers, including maintenance, utilities, janitorial and other expenses. Additionally, many participating airports have provided substantial local and state funds to construct their towers over the past 10 to 15 years.

Contract towers operate together with FAA-staffed facilities throughout the country as part of an integrated national air traffic control system. The Contract Tower Association works closely with our friends and colleagues at the National Air Traffic Controllers Association to find ways that contract towers and FAA-staffed towers can work together effectively and efficiently for the traveling public.

The contract tower program enjoys strong support from a wide array of aviation groups, including the Aircraft Owners and Pilots Association, Regional Airline Association, Airports Council International-North America, National Air Transportation Association, Cargo Airline Association, National Business Aviation Association, National Association of State Aviation Officials, and Air Traffic Control Association.

Contract Towers at Commercial Service and Reliever Airports: Mr. Chairman, contract towers are widely known for providing air traffic services for small airports including those in rural America. Some who may not be familiar with the program may get the wrong impression that airports with contract towers are largely general aviation facilities. But there are a number of contract tower airports with a significant amount of commercial airline traffic.

Of the 253 airports that participate in the Contract Tower Program, almost 90 are small hub or non-hub commercial service airports. For instance, the Lihue Airport in Kauai and the Kona International Airport on the Big Island are two small hub airports that are served by contract towers. According to the FAA, each Hawaiian airport had almost 1.5 million enplanements in 2015.

The Northwest Arkansas Regional Airport is another small hub airport that participates in the Contract Tower Program. The Arkansas airport had 629,000 enplanements in 2015. Needless to say, contract towers play a key role at those air-

ports and their ability to have safe and reliable commercial airline service, which directly impacts their local economies.

Contract towers also play an important role in reducing congestion at large commercial service airports. Many reliever airports scattered throughout the country participate in the Contract Tower Program. These airports relieve air traffic in major metropolitan areas including Atlanta, Los Angeles, Chicago, Dallas, San Francisco, Las Vegas, Phoenix, Miami, Seattle, and Minneapolis.

Without our system of reliever airports—including those with contract towers—large commercial service airports around the country likely would face increasing congestion and delays. At a time when passenger boardings and operations are rising, it's critical that we continue to increase aviation capacity. We can do that, in part, by expediting the implementation of NextGen, increasing funding for airport infrastructure projects, and by maintaining a strong contract tower program.

Contract Towers Serve Our Military: The United States military is a long-time partner with airports that participate in the Contract Tower Program. According to the FAA, 47 percent of all military operations at civilian airports in the United States occur at contract tower airports.

That's why any proposal to shutter or cut the Contract Tower Program could have a significant impact on our Nation's military and national security.

In a letter to Senate Commerce Committee leaders in late 2015, Senators James Inhofe, Joe Manchin, and John McCain described how many contract tower airports are located near military bases and "serve as significant readiness or training facilities" for active military, national guard, and reserve units. They pointed out that the collaboration between civilian contract towers and military units strengthens our national security.

"Without the Federal Contract Tower Program, the vast majority of these airports would be unable to continue operating a tower," the three Senators wrote. "As a result, the military units actively using these airports would be forced to significantly curtail their activities or operate from more distant, busier airports that support substantial commercial aviation operations."

Since the 1980s, the Army, Air Force, Navy, Marines, National Guard, and Reserves also have recognized that airports with contract towers provide cost-effective and reliable solutions for flight operations and pilot training. The following list includes some of the contract tower airports with extensive military and national security operations:

- *Kenai, Alaska:* U.S. Air Force and Air National Guard.
- *Jacksonville Cecil Field, Florida:* U.S. Coast Guard, Customs and Border Protection, Army National Guard.
- *Kona, Hawaii:* Air National Guard (154th Wing) Air Force (15th Wing), Coast Guard (District 14).
- *Bloomington, Indiana:* Naval Surface Warfare Center Crane Division.
- *Topeka, Kansas:* Air National Guard (190th Air Refueling Wing), Air Force Reserve (KC–135 Tanker Squadron).
- *Columbus, Mississippi:* Pilot training for Columbus Air Force Base.
- *Branson, Missouri:* Pilot training for Vance, Columbus and Randolph Air Force Bases.
- *Lawton, Oklahoma:* Aerial point of embarkation for Ft. Sill Air Force Base.
- *Rapid City, South Dakota:* Ellsworth Air Force Base and National Guard.
- *Ogden, Utah:* Flight training for Hill Air Force Base, Army National Guard.

In addition to providing a critical service for the United States military, the contract tower program supports our Nation's veterans. Approximately 70 percent of all contract controllers are veterans. The fact that so many men and women who have served our country find a home in the Contract Tower Program is a key reason why many of us believe this the program is so successful.

Cost-Benefit Eligibility Criteria: The FAA has been working to revise the cost-benefit eligibility criteria for the contract tower program in a manner that could close some contract towers and/or unfairly shift tower staffing costs to contract towers airports. The airport industry has tried extremely hard over the past few years to work collaboratively with FAA on these reforms without any tangible results.

To complicate matters, the FAA in 2014 placed a moratorium on new airport applicants and cost-share applicants for the program. This has prevented some airports currently without air traffic control services from being able to participate in the Contract Tower Program. The moratorium has also prevented some airports from possibly being able to move from the cost-share program to the fully-funded Contract Tower Program.

Our members strongly believe that the FAA should err on the side of safety, not abstract economic models when considering the future of the Contract Tower Program. This program is not just about dollars and cents—it is about what's in the best interest of advancing aviation safety throughout the Nation. That's why we continue to seek your help to preserve this program.

The Contract Tower Association is continuing to propose a number of cost-benefit reforms that would provide stability for contract tower communities and promote aviation safety and economic growth. We continue to believe that a fair and balanced cost-benefit analysis for contract towers should take into account the broad array of significant benefits the program provides to individual communities and to the Nation in terms of enhanced safety, cost savings, economic development, and job creation.

Recommendations for the FAA Reauthorization Bill: We are grateful that the FAA reauthorization bill that this subcommittee and the Senate approved last year included a number of welcome provisions to help contract towers and their surrounding communities. I hope that we can continue to work together to build on that legislation as you resume consideration of the FAA bill this year.

Mr. Chairman, the following includes some of the specific recommendations that the Contract Tower Association is proposing again this year. You'll notice that our list hasn't changed in the past year. Many of our proposals still are aimed at ensuring that the FAA moves forward with a fair and balanced cost-benefit analysis to ensure that small airports can continue to participate in the successful and cost-effective program.

First, we believe that fully funded contract towers should not be subject to unnecessary annual cost-benefit analyses unless their traffic drops by more than 25 percent in single year or 60 percent over a three year period. Once the FAA accepts an airport into the Contract Tower Program, the airport should be allowed to continue to participate in the program unless it suffers a significant decrease in aircraft traffic. Additionally, we support the provision in the Senate-passed FAA bill that proposed to exempt airports with more than 25,000 passenger enplanements from cost share payments.

We also urge you to prohibit the FAA from adding non-site specific or indirect costs to its cost-benefit analysis. The agency should be allowed to consider those costs that would disappear if the tower closed. But the FAA should not be permitted to consider indirect costs as a basis for closing a contract tower since those costs will remain in FAA's operations budget even if the tower is closed.

When the FAA performs a cost-benefit analysis it should give full consideration to the safety and economic benefits of having an air traffic control tower. We recommend that the agency do this by adding a 10 percentage point margin of error to its cost-benefit calculations to account for these hard to quantify benefits. The Senate-passed FAA bill would have added five percentage points.

The FAA should have procedures in place to ensure that airports have an adequate opportunity to respond to an unfavorable cost-benefit analysis before they lose their air traffic controllers. The Contract Tower Program is a successful public private partnership. But in order for that partnership to continue to succeed, contract towers should be allowed to provide their side of the story when the FAA conducts its costs-benefit analysis.

We also urge you to remove the $2 million cap on AIP eligibility for contract tower construction. Eliminating that unnecessary cap would make contract tower construction consistent with other AIP-funded projects. Although the FAA bill that the House Transportation and Infrastructure Committee approved last year proposed to eliminate the $2 million cap, the Senate-passed version of the bill would have raised it to $4 million.

Finally, we continue to urge Congress to end the moratorium on the FAA for considering applicable non-towered airports and non-federal towered airports for the contact tower program and run cost-benefit ratios on the cost-share contract towers.

Air Traffic Control Reform: Mr. Chairman, we realize that Congress and the Administration will continue to debate a proposal that calls for a not-for-profit corporation to operate our air traffic control system. If Congress moves forward with this plan in the next FAA reauthorization bill, we urge you to include explicit protections for the Contract Tower Program. Whether Congress decides to have the FAA or a non-for-profit corporation in charge of our air traffic control system, we hope all of you will agree that the Contract Tower Program should remain intact.

Our members are concerned that an air traffic control corporation could unilaterally decide to close some or all contract towers. To avoid that possible scenario, we believe that Congress should require the corporation to receive approval from the local airport operator before being allowed to close its contract tower. Since the 253 FAA contract towers represent half of all towers in the country, handle almost 30

percent of all tower operations nationwide, and control 47 percent of military traffic at civilian airports, we firmly believe there contract towers should be protected.

In an increasingly global marketplace, we cannot afford to take a step backward. Our communities desire and deserve the benefits that FAA contract towers provide. We are encouraged by the successful and highly effective partnership that airports, contract controllers, air traffic control contractors, and the FAA have developed over the past three decades, and we urge this subcommittee and Congress to continue to support this vital program.

Support Other Small Community Air Service Programs

Fully Fund Essential Air Service Program: We would like to thank this subcommittee for its long-standing support for the EAS program. The FAA reauthorization bill that this committee and the Senate approved last year authorized $155 million in discretionary funding for EAS in Fiscal Years 2016 and 2017.

Congress created the EAS program as part of the Airline Deregulation Act of 1978 to ensure that small communities could maintain a minimal level of scheduled air service. Since then, this program successfully has allowed people who live in rural and less populated areas to have access to our national aviation system.

According to DOT, 173 communities participate in the EAS program, including three in South Dakota, four in Missouri, and 61 in Alaska. However, President Trump's Fiscal Year 2018 Budget Request proposes to eliminate funding for this program—a move that would likely end commercial air service to EAS communities around the country.

As members of this subcommittee well know, commercial air service is not just a matter of convenience for leisure travelers. It is also critical to economic development efforts in communities around the country. Without the EAS program it would be difficult for many small communities to retain commercial air service and attract businesses that promote economic development and support jobs.

The EAS program is funded by a combination of annual appropriations and revenue from overflight fees. On behalf of EAS communities around the country, we urge you to continue to support this program and reject the Administration's proposal to eliminate commercial air service to communities around the country.

Continue to Back the Small Community Air Service Development Program: AAAE has been a strong supporter of the Small Community Air Service Development Program. Since Congress created the program in 2000, it has helped numerous small communities suffering from insufficient air service or unreasonably high fares.

DOT officials have pointed out that small community grants fund a variety of projects, including financial incentives for airlines and marketing initiatives. At a time when small airports are trying to do everything they can to hold on to commercial air service and attract new service, the Small Community Air Service Development Program can provide small communities with a much-needed boost.

It is worth noting that small communities that participate in the program bring significant local funds to the table. When announcing new grant recipients last year, DOT noted that "nearly all the communities pledged local cash and/or in-kind contributions from local, state, airport, or private sources to complement their requests for Federal assistance."

The FAA reauthorization bill that the Senate approved last year included $10 million for the Small Community Air Service Development Program in both FY16 and FY17. That amount is $4 million more than the previous authorized level and $5 million more than Congress appropriated for the program in FY16. I urge you to include at least that amount in the next FAA reauthorization bill.

Additionally, we would like to thank this committee for including a provision in the Senate-approved FAA bill to allow current small hub and smaller airports to be eligible to participate in the program—not just those that were classified as small airports in 1997. We encourage you to include that same provision in the next FAA bill.

Address Small Community Challenges: Airport operators around the country also urge this subcommittee to work with them, airlines, and other aviation stakeholders to address the ongoing pilot shortage and other small community challenges while maintaining the highest level of aviation safety.

There may be a number of reasons why many small communities are struggling to retain and attract commercial air service, including industry consolidation and the changing fleet size. But small and medium-sized communities are continuing to experience commercial air service reductions, in part, because carriers say that there are not enough qualified pilots to operate their flights.

The last FAA extension required DOT to establish a "Working Group on Improving Air Service to Small Communities." As part of its assignment, the panel is expected to examine "obstacles to attracting and maintaining air transportation serv-

ices to and from small communities." It is our understanding that the group has been working hard and meeting regularly. Airport operators look forward to its findings and recommendations.

We are hopeful that the small community panel can help Congress, the Administration, and other aviation stakeholders come up with reasonable proposals that enhance small community air service and ensure that we have enough pilots in the pipeline while maintaining the highest level of aviation safety.

Help General Aviation and Commercial Service Airports Repair Aging Facilities; Build Infrastructure Projects

Mr. Chairman, this subcommittee also can help small commercial service and general aviation airports by providing them with the resources they need to repair aging facilities and build critical infrastructure projects. The following includes some key actions that this subcommittee can take to prepare airports for the challenges ahead.

Increase AIP Funding: Increasing AIP funding, which this subcommittee proposed to do last year, would help fund critical safety, security, and capacity projects at all sizes of airport. AIP is a particularly key source of revenue for general aviation and smaller commercial airports that have limited funding options.

The Senate-passed version of the FAA reauthorization bill proposed to increase AIP funding from $3.35 billion to $3.75 billion in FY17—a welcome $400 million increase. The bill that the House Transportation and Infrastructure Committee approved last year called for a slightly higher $4 billion funding level by FY22.

The FAA's 2017 National Plan of Integrated Airport Systems indicates that airports will have $32.5 billion in AIP-eligible projects between 2017 and 2021—approximately $6.5 billion per year. That's twice the $3.2 billion designated for airport capital projects as part of the program's $3.35 billion annual funding level.

Considering the enormous amount of capital needs, airports are encouraging Congress to increase AIP funding to at least $4 billion annually—the same amount that the House Transportation and Infrastructure Committee approved last year.

Eliminate the PFC Cap: Perhaps the single most important action that Congress can take to help build airport infrastructure projects is by eliminating the PFC cap. Congress hasn't adjusted the cap in 17 years. Eliminating the cap now would be the easiest way to provide more funding for capital projects at airports throughout the country.

PFCs are an important source of revenue for large and small airports alike. As members of this subcommittee know, small commercial service airports often rely on PFCs to pay their local match for Federal AIP funds, to upgrade aging facilities, and to pay for other critical infrastructure projects.

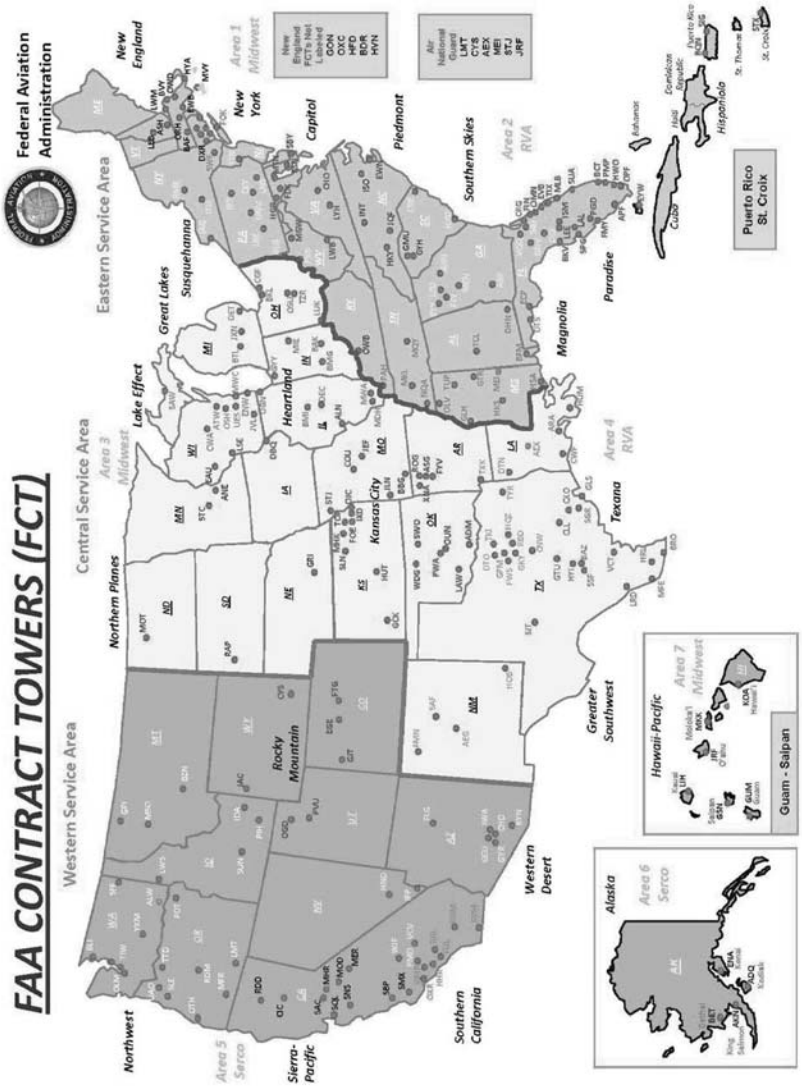
Although general aviation airports don't collect PFCs, they benefit from those commercial services airports that do. Large and medium hub airports that collect PFCs have up to 75 percent of their AIP entitlements withheld. The FAA then distributes 87.5 percent of those funds to general aviation and small commercial service airports through the Small Airport Fund.

Small airports currently receive about $500 million annually from the Small Airport Fund. But they could benefit even more if Congress adjusted the PFC cap and focused limited Federal funds on smaller airports that need Federal assistance the most. Airport executives are continuing to urge Congress to eliminate the PFC cap as part of the next FAA reauthorization bill.

Conclusion

Chairman Blunt, Ranking Member Cantwell, and members of the Subcommittee on Aviation Operations, Safety, and Security, thank you again for inviting me to participate in this important hearing on rural air service and contract towers. We greatly appreciate your long-standing support of the Nation's airports and look forward to working with you and your staff as we seek to enhance rural air service and general aviation operations nationwide.

ATTACHMENTS: MAP AND LIST OF FAA CONTRACT TOWERS



FAA Contract Tower List

253 TOWERS AS OF JANUARY 1, 2016. 16 TOWERS MARKED WITH AN ASTERISK ARE IN THE COST-SHARING PROGRAM.

AIRPORT NAME	STATE
Bethel	AK
Kenai Municipal	AK
King Salmon	AK
Kodiak	AK
Brookley (Mobile)	AL
Dothan	AL
Tuscaloosa Regional	AL
Fayetteville	AR
Northwest Arkansas Regional	AR
*Rogers Municipal-Carter Field	AR
*Springdale	AR
Texarkana Mun./Webb Field	AR
Chandler	AZ
Flagstaff Pulliam	AZ
Glendale	AZ
Goodyear (Phoenix)	AZ
Laughlin/Bullhead City	AZ
Phoenix-Mesa Gateway	AZ
Ryan (Tucson)	AZ
Castle	CA
Chico	CA
Fullerton	CA
Hawthorne	CA
Mather (Sacramento)	CA
Modesto	CA
Oxnard	CA
Palmdale	CA
Ramona Airport	CA
Redding Municipal	CA
Riverside	CA
Sacramento Executive	CA
Salinas Municipal	CA
San Carlos	CA
Brown Field (San Diego)	CA
San Luis Obispo	CA
Santa Maria	CA
Victorville	CA
Whiteman (Los Angeles)	CA
William J. Fox (Lancaster)	CA
Eagle County	CO
Front Range	CO
Grand Junction	CO
Bridgeport	CT
Danbury	CT
New London (Groton)	CT
Brainard (Hartford)	CT
Tweed-New Haven	CT
Waterbury/Oxford	CT
Albert Whitted (St. Petersburg)	FL
Boca Raton	FL

AIRPORT NAME	STATE
Cecil Field (Jacksonville)	FL
Charlotte County	FL
Gainesville	FL
Hernando County	FL
Hollywood	FL
Craig (Jacksonville)	FL
Key West	FL
Kissimmee	FL
Lakeland Municipal	FL
Leesburg International	FL
Melbourne	FL
Naples	FL
New Smyrna Beach Mun.	FL
Ocala	FL
Opa Locka (Miami)	FL
Ormond Beach Mun.	FL
Page Field	FL
Palm Coast/Flagler County	FL
Panama City/Bay Co.	FL
Pompano Beach	FL
St. Augustine	FL
Stuart/Whitham	FL
Titusville/Cocoa	FL
Athens Municipal	GA
Fulton County	GA
Gwinnett County	GA
Macon	GA
McCollum	GA
SW Georgia/Albany-Dougherty	GA
Agana	Guam
Kalaeloa	HI
Kona/Keahole	HI
Lihue	HI
Molokai	HI
Dubuque	IA
Friedman Memorial (Hailey)	ID
Idaho Falls	ID
Lewiston-Nez Perce Co.	ID
Pocatello Municipal	ID
Bloomington/Normal	IL
Decatur	IL
So. Illinois/Carbondale	IL
St. Louis Regional	IL
Waukegan Regional	IL
*Williamson County (Marion)	IL
Columbus Municipal	IN
Gary Regional	IN
*Monroe County/Bloomington	IN
*Muncie/Delaware County	IN
Forbes Field (Topeka)	KS
*Garden City	KS

AIRPORT NAME	STATE
Hutchinson Mun.	KS
Johnson Co. Exec.	KS
Manhattan	KS
New Century Air Center (Olathe)	KS
Philip Billard Mun. (Topeka)	KS
Salina Municipal	KS
Barkley Regional (Paducah)	KY
Owensboro/Daviess Co.	KY
Acadiana Regional	LA
Alexandria	LA
Chennault	LA
Houma	LA
Shreveport Downtown	LA
Barnes Municipal	MA
Beverly	MA
Hyannis	MA
Lawrence	MA
Martha's Vineyard	MA
New Bedford	MA
Norwood	MA
Worcester	MA
Easton	MD
Frederick Municipal	MD
Martin State (Baltimore)	MD
Salisbury-Wicomico	MD
Washington Co. (Hagerstown)	MD
Battle Creek	MI
Detroit City	MI
*Jackson	MI
Sawyer	MI
Anoka (Minneapolis)	MN
St. Cloud Regional	MN
Branson	MO
Columbia	MO
*Jefferson City	MO
*Joplin Regional	MO
Rosecrans Mem'l (St. Joseph)	MO
Saipan International	MP
Golden Triangle Regional	MS
Greenville Municipal	MS
Hawkins Field (Jackson)	MS
Meridian/Key Field	MS
Olive Branch	MS
Stennis International Airport	MS
Tupelo Regional	MS
Gallatin Field (Bozeman)	MT
Kalispell	MT
Missoula	MT
Concord	NC
Hickory Regional	NC
Kinston	NC
New Bern	NC
Smith Reynolds (Win.-Salem)	NC

AIRPORT NAME	STATE
Minot	ND
*Central Neb. (Grand Island)	NE
Boire Field (Nashua)	NH
Lebanon Municipal	NH
Trenton	NJ
Double Eagle II	NM
Farmington Municipal	NM
*Lea County/Hobbs	NM
Santa Fe Co. Mun.	NM
Henderson (Las Vegas)	NV
Francis F. Gabreski	NY
Tompkins County	NY
Niagara Falls	NY
Rome-Griffiss	NY
Stewart	NY
Bolton Field (Columbus)	OH
Burke Lakefront (Cleveland)	OH
Cuyahoga County (Cleveland)	OH
Lunken Mun. (Cincinnati)	OH
Ohio State University	OH
*Ardmore Municipal	OK
Enid Woodring Mun.	OK
Lawton-Ft. Sill Regional	OK
Univ. of Oklahoma/Westheimer	OK
Stillwater	OK
Wiley Post	OK
Aurora State Airport	OR
Klamath Falls	OR
McNary Field (Salem)	OR
Medford	OR
North Bend	OR
Pendleton	OR
Redmond	OR
Troutdale (Portland)	OR
Capital City (Harrisburg)	PA
Lancaster	PA
Latrobe	PA
University Park	PA
*Williamsport/Lycoming Co.	PA
Isla Grande	Puerto Rico
Rafael Hernandez Airport	Puerto Rico
Greenville Donaldson Center	SC
Grand Strand/Myrtle Beach	SC
Greenville Downtown	SC
Hilton Head Airport	SC
Rapid City Regional	SD
Millington	TN
Smyrna	TN
McKeller-Sipes (Jackson)	TN
Arlington Municipal	TX
Brownsville Int'l	TX
Denton Municipal	TX
Easterwood	TX

AIRPORT NAME	STATE
*Fort Worth-Spinks	TX
Galveston	TX
Georgetown	TX
*Grand Prairie	TX
Laredo International	TX
Lone Star Executive (Conroe)	TX
McAllen	TX
McKinney Municipal	TX
Mesquite	TX
New Braunfels Municipal	TX
Redbird	TX
Rio Grande Valley (Harlingen)	TX
San Angelo	TX
San Marco	TX
Stinson Municipal (San Antonio)	TX
Sugar Land	TX
Tyler	TX
Victoria	TX
Waco TSTC	TX
Ogden-Hinckley	UT
Provo Municipal	UT
Charlottesville-Albemarle	VA
Lynchburg	VA

AIRPORT NAME	STATE
Henry E. Rohlsen (St. Croix)	Virgin Islands
Bellingham Int'l	WA
Felts Field (Spokane)	WA
Olympia	WA
Renton	WA
Tacoma Narrows	WA
*Walla Walla Regional	WA
Yakima	WA
Appleton	WI
Central Wisconsin	WI
Chippewa Valley	WI
Kenosha Municipal	WI
Lacrosse	WI
Rock County (Janesville)	WI
Timmerman (Milwaukee)	WI
Waukesha County Airport	WI
Wittman Regional (Oshkosh)	WI
Greenbrier Valley	WV
Morgantown	WV
Parkersburg	WV
Wheeling Ohio Co.	WV
Cheyenne	WY
Jackson Hole	WY

PREPARED STATEMENT OF MARK BAKER, PRESIDENT AND CEO,
AIRCRAFT OWNERS AND PILOTS ASSOCIATION

General Aviation and Airports in Rural America

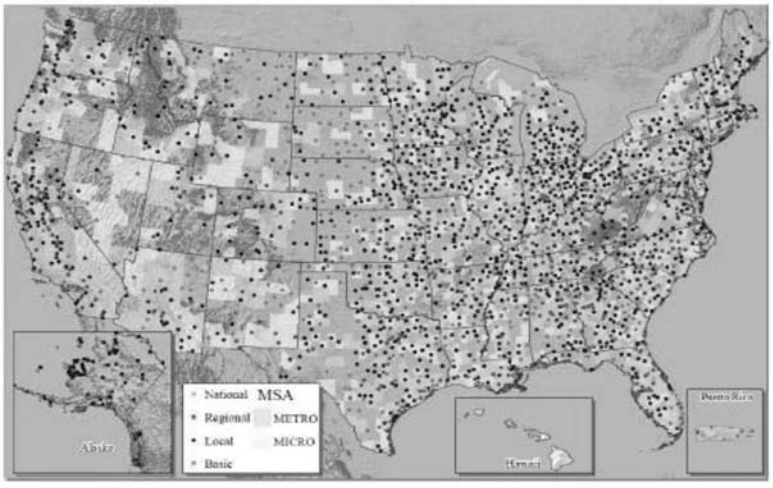
The Aircraft Owners and Pilots Association (AOPA) represents more than 300,000 of America's pilots and aviation enthusiasts and we believe that nothing better represents the foundational spirit of freedom than taking to America's skies. And the most necessary element of the freedom to fly is America's network of airports. Local airports, many of which are in rural communities and are not served by commercial aviation, are economic engines that allow towns to tap into the 1.1 million jobs and $219 billion in economic output that general aviation (GA) is responsible for in today's economy.

The national network of airports is made up of some 5,200 public-use community airports and only around ten percent of those airports have commercial service, meaning they rely on GA alone to connect the 170 million GA passengers every year and serve the needs of the medical and law enforcement communities as well as support everything from agriculture, fishing, and pest control to forestry and wildlife management. It all comes down to access and rural America relies on GA airports.

The following are the four categories of GA Airports according to the FAA and a map of the airports from the FAA 2012 ASSET Report.

Figure 2: General Aviation Airport Categories

Map of the General Aviation Airports in the Four Categories



General Aviation Airport Funding

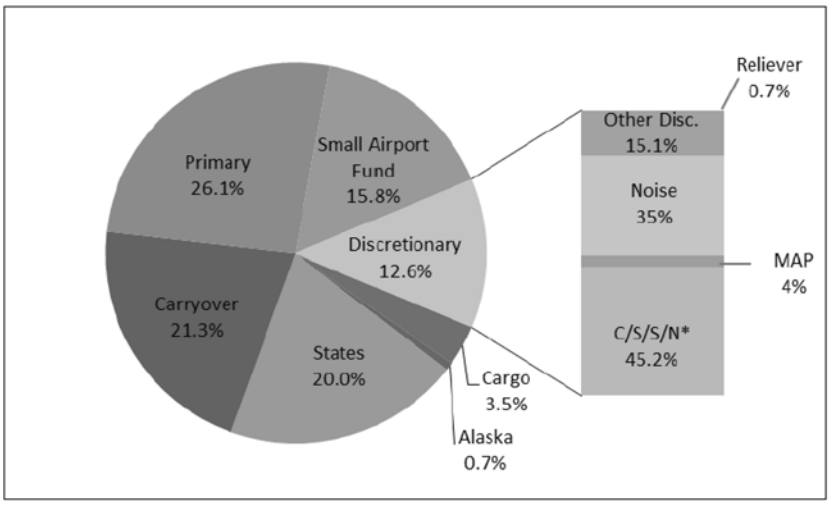
The Federal Aviation Administration's National Plan of Integrated Airport Systems (NPIAS) consists of 3,340 airports including 2,950 non-primary airports most

of which do not have commercial service. Funding for these non-primary airports comes from Non-Primary Entitlement (NPE) grants under the Airport Improvement Program (AIP) to improve safety, capacity, and security or meet environmental concerns. The AIP does not receive any general fund revenue and instead is financed by a series of national airspace system fees including taxes on aviation fuels.

Under NPE, each non-primary airport receives $150,000 per year for capital projects. An airport may "bank" their unspent NPE for up to four years for a potential total amount of $600,000 in the fourth year. By the fifth year, the amount available to the airport returns to $150,000. Considering the NPE is not indexed, the value of grants has been decreasing since inception of the program in 2001.

Many GA airports have had difficulty using their NPE funds for two reasons. First, the amount available in any given year is too low to complete needed projects. Second, often the cash strapped airport sponsors struggle to provide the ten percent local match requirement for a project. Also, NPE funds are limited to airside projects such as lighting, runways, and taxiways and cannot be used for other airport projects such as terminals or hangar construction.

When a non-primary airport does not use its entitlement in a fiscal year, the funds are returned to the FAA discretionary fund and spent on current year projects including at larger primary airports which benefit from this cycle. As a result, hundreds of millions of NPE dollars are not being spent on their intended purpose, to help small GA airports, mostly in rural America. Of the $442 million in total NPE funds last year, 2016, $329 million were carried over to the discretionary fund. Between 2006 and 2016, more than $2 billion in NPE funds have been carried over. AOPA would like to work with the Committee to ensure that NPE funds are being used as Congress intended and to protect the airport ecosystem for small communities across the United States.



Source: CRS Report titled "Reauthorization of the Federal Aviation Administration in the 115th Congress", March 20, 2017.

Public-Private Partnerships

Certain airports have recognized the advantages of establishing public-private partnerships to meet the needs of the local aviation community and generate additional revenue. The result is a win-win—businesses realize and capitalize on opportunities and the airport becomes more self-sustaining. However, many airports lack the resources to effectively market these opportunities to the private sector. The Metropolitan Airport Commission, which owns and operates seven airports in the Minneapolis area, has proven the concept and accomplished extensive hangar development at their GA airports relying solely on private capital.

Public-private partnerships can go a long way to help cash strapped local communities rebuild and reinvigorate their airports and increase economic output to the benefit of taxpayers and users of the airport.

There is significant demand for hangar development at airports across the country but in most cases their construction and refurbishment may not be financed by AIP

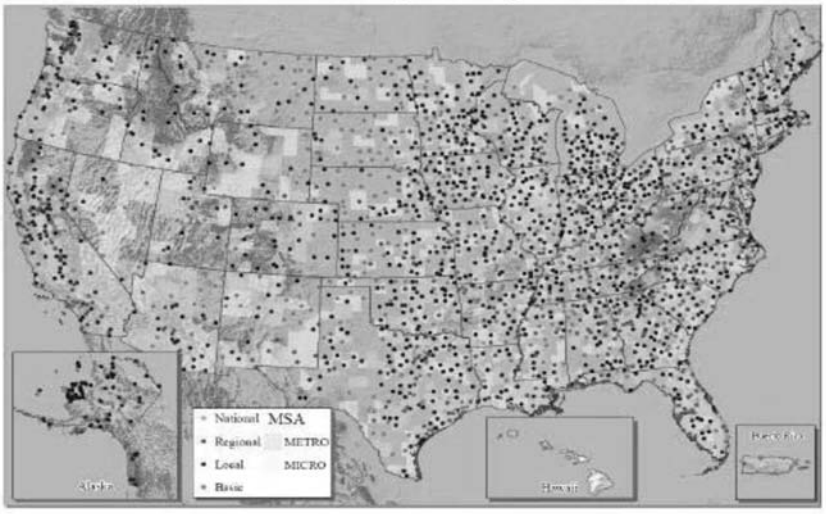
grants. Many airports have long waiting lists for hangars and what hangars they have are often old and in need of repair.

AOPA would like to work with the Committee, the FAA, and industry to help airports take advantage of public-private partnership opportunities to increase traffic, expand facilities, and maximize revenue potential.

General Aviation Airports—Health, Safety, and Security

General aviation airports play a vital role in our national airspace system especially during emergencies. Professionals in law enforcement, national security, border security, and healthcare use GA airports, even where larger airports are available, because of accessibility and lower costs and congestion. As the FAA said in a 2012 report on GA airports, "It is faster, easier on the patient, and far less expensive to operate these lifesaving services from a general aviation airport."

Figure 3: General Aviation Airports Serving Aeromedical Flights[4]



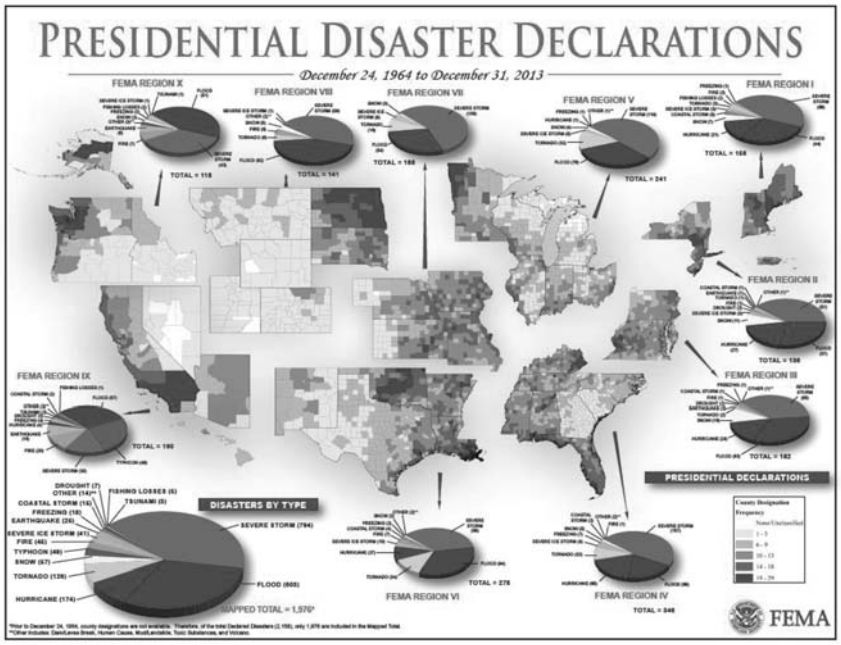
[4] Metropolitan or Micropolitan Statistical Areas are geographic entities defined by the Office of Management and Budget for use by Federal statistical agencies in collecting, tabulating, and publishing Federal statistics.

In natural disasters, including earthquakes, hurricanes, floods, and wildfires, the extensive system of GA airports provides a staging area to support relief and rescue efforts. For example, Eagle's Nest Airport in New Jersey became one of the only ways to quickly and efficiently deliver supplies to the area in the aftermath of Hurricane Sandy.

Volunteers, not just professionals, use GA airports every day to provide services and care. Programs including the Civil Air Patrol, Pilots & Paws, Patient Airlift Services, Veterans Airlift Command to help transport wounded warriors, the Air Care Alliance, Disaster Airlift Response Teams, and many others help those in need connect with those who have a passion for aviation and giving back.

GA airports also serve as an emergency diversionary location. From passenger illness to deteriorating weather, there are times in all segments of aviation where an aircraft needs to land quickly, and a broad system of airports gives pilots better options in emergencies. For example, the U.S. Forest Service has designated certain GA airports as staging areas to fight fires. Using aircraft to fight large fires spread over a wide geographic area is often the safest and most cost-effective solution, saving property and lives.

As indicated by the FEMA chart below of Presidential Disaster Declarations from 1964 to 2013, every region of the U.S. has been impacted by some type of natural disaster. Again, AOPA would like to work with the Committee to ensure that GA airports are available and prepared to assist in times of natural disasters.



Contract Towers

AOPA strongly supports the Contract Tower Program, which is one of the FAA's most effective public-private partnerships. The program provides essential air traffic services at 253 airports in 46 states, and handles approximately 28 percent of all air traffic control tower aircraft operations in the U.S. but only accounts for around 14 percent of FAA's overall budget allotted for tower operations. Federal contract towers operate together with FAA-staffed facilities throughout the country as part of a unified national air traffic control system that benefits and connects smaller airports and rural communities.

Contract towers have also produced a stellar safety record equal to or better than FAA-run control towers based on FAA audits and reviews by the Department of Transportation Inspector General, and the National Transportation Safety Board. In addition, numerous studies have validated what we in GA know to be true, that airports are economic engines for communities, and establishing an air traffic control tower drives even greater economic development and job creation. Maintaining funding for the contract tower program is vital to aviation safety and the economic viability of countless communities.

General Aviation Pilot Population

Whether individuals fly for business, personal reasons or intend to fly for a living one day, most pilots start out in general aviation. GA faces a number of very real challenges including rising costs of aircraft ownership and training as well as a burdensome regulatory environment and subsequently the U.S. pilot population has been declining for decades.

According to the FAA, in 1980 there were 827,071 active pilots. By 2015 that figure had fallen to 590,039—a nearly 30 percent decline. The FAA issued 50,458 private pilot certificates in 1980 and by 2015 that number was just 16,473—a 67 percent decline. Additionally, AOPA estimates there were almost 500,000 lapsed pilots under the age of 70 in 2015 and 70 to 80 percent of students who start flight training drop out without earning a pilot certificate. This drop in the number of pilots comes as demand and job opportunities are on the rise; the U.S. airline industry will need 95,000 new pilots between 2015 and 2034 according to a Boeing analysis.

AOPA is also committed to helping all pilots fly more safely which is why the AOPA Air Safety Institute has been producing free safety education programs for over 60 years. From groundbreaking online courses to popular live seminars and

videos, ASI covers the spectrum of aviation safety education. AOPA is committed to safety and it is embedded in our organization's culture.

To reverse the decline in the pilot population, AOPA created the You Can Fly program to build a stronger, more vibrant, and more resilient pilot community. You Can Fly is based on extensive research and real-world experience and is made up of a series of initiatives to support flying clubs, encourage best practices in flight training, get lapsed pilots back in the air, bring AOPA's resources and expertise to pilot groups across the country, and invite high school students to learn more about careers in aviation and aerospace.

Congress, and more specifically this Committee, has already taken a big step to reduce costs and bureaucracy for pilots by passing third class medical reform legislation last year which was signed into law by President Obama. This was the biggest reform for pilots in recent history and this Committee work will have an enormous positive impact on GA for decades. The FAA's Regulatory Impact Analysis estimates that 327,324 pilots that have a valid FAA medical certificate may benefit from and utilize the improved regulations, now called BasicMed, that could save pilots over $380 million from 2017 to 2026.

General aviation airports play a crucial role in the economy and the daily lives of millions of people. They make a multi-billion impact on America's GDP and contribute more than one million jobs. Much of this directly supports rural communities. We support needed reforms to the Non-Primary Entitlement program to ensure continued access to these communities, and we strongly encourage public-private partnerships to help relieve the financial burden on airport sponsors and to build our airports of the future. We need to move America's small airports to a place beyond simply surviving and toward thriving. Additionally, by understanding the role of general aviation in the economy and the access that small airports provide, as well as their importance to our citizens when disasters strike, we gain perspective on what our small airports do for us today and their incredible future potential.

PREPARED STATEMENT OF DR. GUY M. SMITH, PROFESSOR EMERITUS, EMBRY-RIDDLE AERONAUTICAL UNIVERSITY

2015 PILOT SOURCE STUDY

Co-Principal Investigators:

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Dr. Cody Christensen—South Dakota State University

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Dr. Paul Craig—Middle Tennessee State University

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Background

In February 2010, the Federal Aviation Administration (FAA) issued an Advance Notice of Proposed Rulemaking (ANPRM) titled "New Pilot Certification Requirements for Air Carrier Operations" that proposed changes to regulations relating to the certification of pilots conducting domestic, flag, and supplemental operations. Industry and educator members commissioned the first *Pilot Source Study (PSS) 2010* to answer one ANPRM question, "Are aviation/pilot graduates from accredited aviation university degree programs likely to have a more solid academic knowledge base than other pilots hired for air carrier operations?" The research question was, "What are the background characteristics (education, flight experience, etc.) of pilots and how did their backgrounds (source) influence their success in regional airline training? Background and performance data for 2,156 pilots hired by regional airlines between 2005 and 2009, a convenience sampling of six regional airlines, showed that pilots who experienced fewer extra training events and fewer non-completions were pilots who: (a) graduated from a flight program accredited by the Aviation Accreditation Board International (AABI), (b) had an aviation degree, (c) completed their flight training in a collegiate program, (d) had a CFI certificate, or (e) *had between 501–1,000 total flight hours.*

In February 2012, the FAA issued a Notice of Proposed Rulemaking (NPRM) that would require first officers in Part 121 operations to hold an ATP certificate and type rating for the aircraft to be flown, with restricted privileges for pilots with an aviation degree or military pilot experience. Industry and educator members commissioned the second *Pilot Source Study 2012* with the same research question, expanding the data to include other regional airlines. Background and performance data for these 4,024 pilots hired between 2005 and 2011, a convenience sampling of seven regional airlines not included in the previous study, showed that pilots who experienced fewer extra training events and fewer non-completions were pilots who: (a) graduated from an AABI-accredited flight program, (b) had an aviation degree, (c) completed their flight training in a collegiate program, (d) had a CFI certificate, or (e*) had between 1,001–1,500 total flight hours. With the exception of total hours, the results of PSS 2012 were consistent with the results of PSS 2010.*

On August 1, 2010, the U.S. Congress passed *Public Law 111–216,* titled the "Airline Safety and Federal Aviation Administration Extension Act." On July 15, 2013, the FAA issued the *"Pilot Certification and Qualification Requirements for Air Carrier Operations" rule (FOQ Rule)* that abruptly changed the pilot hiring situation for U.S. air carriers operating under Part 121. The FOQ Rule required all pilots operating in a Part 121 airline to have an ATP certificate that requires them to be at least 23 years old and have at least 1,500 hours total flight time. Other changes required by the FOQ Rule were that all Part 121 pilots must complete the Airline Transport Pilot Certification Training Program (ATP CTP), have 50 hours of multi-engine experience, and possess an aircraft type rating. The FOQ Rule which became effective on August 1, 2013, provided an avenue for alternatively-trained first officers to fly as required crewmembers under *Restricted Airline Transport Pilot (R–ATP) privileges* at the age of 21 instead of 23 years old if they:

- graduated from an FAA-approved R–ATP Bachelor's degree program with 60 approved credit hours and had 1,000 hours total time, or
- graduated from an FAA-approved R–ATP Bachelor's degree program or Associate's degree program with 30 approved credit hours and had 1,250 hours total time, or
- were prior U.S. Military pilots and had 750 hours total time

In essence, P.L. 111–216 and the FOQ Rule inserted a gap between completing pilot certification and becoming eligible to be an airline first officer. The Pilot Source Study 2015 collected data on this "Gap"—what pilots did between earning their certificates and being eligible for airline training.

PSS 2015 Protocol

In January 2015, industry and educator members at the "Pilot Supply Summit" requested the Pilot Source Study researchers to conduct a new study to answer the question, *"What is the effect of P.L. 111–216 and the FOQ Rule on pilot hiring and pilot training in U.S. regional airlines?"* The new study, *Pilot Source Study 2015,* was conceived as a replication study, involving the same 13 airlines that provided data for the two previous studies. To accommodate a very condensed timeframe, two research teams were assembled—a Data Collection Team and a Data Analysis Team, both led by co-principal investigators, Dr. Guy M. Smith from Embry-Riddle Aeronautical University and Dr. Elizabeth Bjerke from the University of North Dakota. In May, the PSS Data Collection Team, at the Regional Airline Association (RAA) Annual Convention in Cleveland, OH, briefed the RAA Board of Directors, the Regional Operations Council, and the Flight Training Committee to request permission to come to the airlines to collect data for the study. Acknowledging an urgent need for the study, the senior management of many airlines applauded the research effort, promising to cooperate with the Data Collection Team, including airlines not included in Pilot Source Study 2010 or 2012. Urged by this enthusiastic

response, the PSS Data Collection Team redesigned the study into a *population study* that would include virtually *all U.S. regional airlines and all pilots hired by these airlines from August 1, 2013 to the date of data collection.* AABI managed a separate Pilot Source Study fund to cover travel costs for the Data Collection Team—a principal investigator (professor), a data collection manager (graduate student), and additional data collectors, as necessary. The data collection manager and additional data collectors received a stipend of $100 per day; the principal investigators did not receive any payment beyond reimbursement of travel expenses. The researchers on the Data Analysis Team did not receive any payment for their work on the Pilot Source Study. The donors to the Pilot Source Study fund were two universities, five major airlines, an association, and a consulting firm. To maintain objectivity, the Pilot Source Study fund did not request or accept any contributions from AABI, RAA, or any regional airline.

Two documents were critical to the study. At the beginning of every visit, all members of the Data Collection Team signed a *non-disclosure agreement,* asserting that "all data shall remain in the airline's control, except de-identified data specifically released by the airline for the purposes of the Pilot Source Study." Another document explained the *research protocol* that would be strictly followed at each airline: the Data Collection Manager would collect identified background data from Human Resources or Pilot Recruiting records; the Principal Investigator would collect identified performance data on Training, Initial Operating Experience (IOE), and Recurrent Training from training or operational records; the Data Collection Manager, after combining the two identified records, would *delete all identifying information* (name, ID number, age, gender, ethnicity, etc.) and deliver the de-identified dataset to the Pilot Source Study data repository. *The Data Collection Team visited 22 U.S. regional airlines from April to October 2015, collecting 7,073 pilot records.* These data were combined into two composite spreadsheets for analysis. The data from *19 Part 121 airlines (6,734 records)* were analyzed by the Data Analysis Team consisting of six researchers from different universities and one independent research consultant. The data from t*hree Part 135 airlines (339 records)* were analyzed separately because the restrictions of the FOQ Rule did not pertain to these airlines.

PSS 2015 Results—Part 121 Airlines

For analysis, the *background data* was combined into two categories*: Educational Background* (college degree, AABI-accredited flight degree, aviation degree, and college GPA) and *Experience Background* (years since graduation, previous employment, CFI certificate, military pilot, ATP certificate, and aeronautical experience). Four indicators of *performance (outcomes) were analyzed: non-completions, extra training events, extra IOE, and extra recurrent training.* Significant results of the study are summarized in Table A at the end of the document and are described here.

For *College Degree* (graduate 8 percent, bachelors 63 percent, associate 9 percent, high school 18 percent, unknown 2 percent), pilots with a *bachelor's degree* had fewer non-completions and less extra training than expected; pilots with an associate degree had more non-completions, more extra training events and more extra IOE than expected; and pilots with *no degree* (high school) had more non-completions and more extra training events than expected.

In the dataset, 23 percent of the pilots graduated from *AABI-accredited flight programs.* These pilots had fewer non-completions, less extra training, less extra IOE, and less extra recurrent training than expected.

The variable, *Aviation Degree* (48 percent), included graduates from AABI-accredited flight programs, graduates from other flight programs, and graduates from aviation disciplines other than flight. Pilots with an aviation degree had fewer non-completions, less extra training, and less extra recurrent training than expected. Pilots with a *non-aviation degree* had more non-completions, more extra training events, and more extra recurrent training than expected.

Only 38 percent of the pilot records had college GPA information. Pilots whose college *GPA was 3.0 or lower* had more extra training events, more extra IOE, and more extra recurrent training than expected.

In the dataset, 55 percent of the records included graduation dates, which was converted to *Years since Graduation.* Pilots with *fewer than four years since graduation* had fewer non-completions, less extra training, and less extra recurrent training than expected. *Pilots with more than 10 years since graduation* had more non-completions, more extra training events, more extra IOE, and more extra recurrent training than expected.

For *Previous Employment* (26 percent Part 121, 16 percent Part 135, 8 percent Part 91, 36 percent flight instructor, and 14 percent other), pilots who were *pre-*

viously flight instructors had fewer non-completions than expected but they required more extra IOE and more extra recurrent training than expected. Pilots who were previously employed in *Part 121 operations* had less extra training, less extra IOE, and less extra recurrent training than expected. Pilots who were previously employed in *Part 91 operations* had more non-completions and more extra training events than expected.

In *contrast with Pilot Source Study 2010 and 2012,* having a CFI certificate did not show any significant advantage over the expected outcomes for pilots in the 2015 study. However, pilots who did not have a CFI certificate had more non-completions and more extra training events than expected.

In the dataset, *12 percent were prior military pilots.* They had less extra training than expected.

As required by the FOQ Rule, all pilots had an *ATP certificate* (2 percent military R–ATP, 15 percent institutional authority R–ATP, and 83 percent traditional ATP). Pilots with an *institutional authority R–ATP* had fewer non-completions, less extra training, and less extra recurrent training than expected.

Total Time was binned into the following categories: 27 percent with 1,500 hours or fewer; 42 percent between 1,501 and 3,000 hours; 14 percent between 3,001 and 4,500 hours; and 17 percent with more than 4,500 hours. *Pilots with 1,500 hours or fewer* had fewer non-completions, fewer extra training events, and less extra recurrent training than expected. *Pilots with more than 4,500 hours* had more non-completions but less extra recurrent training than expected. Pilots with between 1,501 and 3,000 hours had more extra recurrent training than expected.

Pilots with *less piloting experience* (instrument hours, cross-country hours, pilot-in-command hours, second-in-command hours, multi-engine hours, turbine hours, dual-given hours, and total time) had fewer non-completions and fewer extra training events than expected. Pilots with more experience had less extra IOE and less extra recurrent training than expected.

Comparing the backgrounds of the pilots in PSS 2015 to pilots in the combined 2010 and 2102 datasets, there was no difference in highest degree (bachelor, associate, or no degree). There were significantly fewer pilots with an aviation degree, fewer pilots with an AABI-accredited flight degree, more military pilots, and fewer CFI certificates with more hours of dual-given. By law, none of the 2015 PSS pilots had commercial pilot certificates but *17 percent had R–ATP certificates.* Also by law, the 2015 PSS dataset had significantly fewer pilots with less than 1,500 total flight hours.

Comparing outcomes between the PSS 2015 pilots (Post-Law) and the 2010/2102 pilots (Pre-Law), Post-Law pilots had more non-completions and required more extra training. Having an AABI-accredited flight degree, an aviation degree, or a CFI certificate had a positive effect on the number of extra training events for Post-Law pilots. *Post-Law completions were positively affected by having a bachelor's degree, an AABI-accredited flight degree, an aviation degree, or being a CFI.* The additional total hours required by the FOQ Rule was less beneficial to regional airline training for Post-Law pilots; as the number of total hours increased, so did the proportion of non-completions and extra training events. *Most importantly, completions decreased from 93.4 percent in the Pre-Law dataset to 83.6 percent in the Post-Law dataset, and the Post-Law pilots required significantly more extra training.* Using approximate costs of training from seven regional airlines, the Data Analysis Team estimated an airline's *average expenditure per pilot who did not complete training to be $38,464 with zero return-on-investment* to the airline.

In *Summary, ranked* by the magnitude or size of the effect, in the Pilot Source Study 2015, pilots with best training performance in Part 121 airlines (fewer non-completions and fewer extra training events) were:

- *pilots with fewer than four years since graduation,*
- *pilots with 1,500 or fewer total flight hours,*
- *pilots who graduated from an AABI-accredited flight program,*
- *pilots with an institutional authority R–ATP,*
- *pilots with an aviation degree,*
- *pilots with a bachelor's degree,*
- *pilots whose previous employment was in a Part 121 operation, and*
- *prior military pilots*

PSS 2015 Results—Part 135 Airlines

Three airlines, operating under *14 CFR Part 135,* were included in the Pilot Source Study 2015. These airlines were not restricted by P.L. 111–216 or the 1,500-hour FOQ rule; however, they were impacted by some *unintended consequences* of

the law. *Most Part 135 operations do not need first officers;* they are single-pilot operations requiring a captain (with ATP and at least 1,500 flight hours). So, *first officers fly for these airlines in training to become captains.* Part 135 first officers do not need an ATP certificate or even an R–ATP certificate; they must have a commercial pilot certificate with instrument rating and at least 250 flight hours. Part 135 pilot training is nearly identical to Part 121 pilot training. Therefore, the Pilot Source Study used the same protocols, data, and procedures for both Part 135 and Part 121 airlines. The Part 135 research question was: *How do the background characteristics of the Post-Law pilots affect their success (outcomes) at a Part 135 Regional Airline?* The population was *339 new-hire first officers hired by three Part 135 airlines from August 1, 2013 to summer 2015.*

For the *educational background* variables, the following significant results were noted: 1) Pilots who performed best in Part 135 airline training were *graduates from AABI-accredited flight programs and pilots who graduated after 2010, or more recently.* 2) Pilots who needed significantly more extra training were pilots who had only high school diplomas and pilots with a GPA less than 3.0.

For the *experience background* variables, the following significant results were noted: 1) *Pilots who performed best* in Part 135 airline training were those who had previous employment experience as flight instructors, and had *fewer than 500 total flight hours.* Pilots who required significantly more Extra Training were the pilots who held CFI certificates but had no flight instructor experience.

The most important results from Part 135 airlines are in the outcome variables (Completions and Extra Training). A startling result is that 42 percent of the pilots, hired in the two-year period, 2013–2015, left the airline. Many of these pilots did not fail training; they most likely opted to leave the Part 135 airline because they had the necessary flight hours to apply to a Part 121 airline.

Small Communities Served by Part 135 Airlines

Only 37 percent of the Part 135 pilots did not need any extra training. In fact, 18 percent of these pilots needed 7 or more extra training events. In summary, for Part 135 airlines, the training investment is analogous to pouring water on sand.

Small Communities Served by Part 135 Airlines

Conclusions

- The study affirmed the *value of a college degree.* The most successful pilots had a bachelor's degree, principally from an AABI-Accredited Flight Program or at least a degree in aviation. Recent college graduates were more successful than second-career pilots.
- The FOQ Rule requires only 50 hours of multiengine flight time. Many pilots in the study had minimal multiengine experience. An unintended consequence of the FOQ Rule is a *shortage of multiengine flight instructors* throughout aviation education. Also, the reduction of pilot-in-command multiengine experience requires additional training at the airline.
- Most importantly, all three Pilot Source Studies concluded that *"FLIGHT HOURS" is not a reliable predictor of performance by pilots.*

Table A – Summary of the Results of the Study – PART 121 Airlines

Highest Degree	Non-Completions	Extra Training	Extra IOE	Extra Recurrent
Positive Outcome	Bachelor's – FEWER	Bachelor's – LESS	-	-
Negative Outcome	High School – MORE Associate – MORE	High School – MORE Associate – MORE	Associate – MORE -	- -
AABI Flight	Non-Completions	Extra Training	Extra IOE	Extra Recurrent
Positive Outcome	AABI-FEWER	AABI-LESS	AABI-LESS	AABI-LESS
Negative Outcome	-	-	-	-
Aviation Degree	Non-Completions	Extra Training	Extra IOE	Extra Recurrent
Positive Outcome	Aviation -FEWER	Aviation -LESS	-	Aviation -LESS
Negative Outcome	Non-Aviation – MORE	Non-Aviation – MORE		Non-Aviation – MORE
College GPA	Non-Completions	Extra Training	Extra IOE	Extra Recurrent
Positive Outcome	-	-	-	-
Negative Outcome	-	< 3.0 – MORE	< 3.0 – MORE	< 3.0 – MORE
Years Since Grad	Non-Completions	Extra Training	Extra IOE	Extra Recurrent
Positive Outcome	≤ 4 Yrs. – FEWER	≤ 4 Yrs. – LESS	-	≤ 4 Yrs. – LESS
Negative Outcome	> 10 Yrs. – MORE	> 10 Yrs. – MORE	> 10 Yrs. – MORE	> 10 Yrs. – MORE
Pre-Employment	Non-Completions	Extra Training	Extra IOE	Extra Recurrent
Positive Outcome	Flt Instr. – FEWER	Part 121 – LESS	Part 121 – LESS	Part 121 – LESS
Negative Outcome	Part 91 – MORE	Part 91 – MORE	Flt Instr. – MORE	Flt Instr. – MORE
CFI Certificate	Non-Completions	Extra Training	Extra IOE	Extra Recurrent
Positive Outcome	-	-	-	-
Negative Outcome	Non-CFI – MORE	Non-CFI – MORE	-	-
Military Pilot	Non-Completions	Extra Training	Extra IOE	Extra Recurrent
Positive Outcome	-	Military Pilot – LESS	-	-
Negative Outcome	-	-	-	-
ATP Certificate	Non-Completions	Extra Training	Extra IOE	Extra Recurrent
Positive Outcome	IA R-ATP – FEWER	IA R-ATP – LESS	-	IA R-ATP – LESS
Negative Outcome	-	-	-	-
Total Time-1500 HR	Non-Completions	Extra Training	Extra IOE	Extra Recurrent
Positive Outcome	< 1500 HR – FEWER	< 1500 HR – LESS	-	< 1500 HR – LESS
	-	-	-	> 4500 HR – LESS
Negative Outcome	> 4500 HR – MORE	-	-	1501-3000 HR – MORE

NOTE: References and links to published articles – http://pilotsourcestudy.org/

ALASKA AIR CARRIERS ASSOCIATION
Anchorage, AK, April 4, 2017

U.S. Sen. ROY BLUNT (R-Mo.),
Chairman of the Subcommittee on Aviation Operations, Safety, and Security

The Alaska Air Carriers Association (AACA) is a membership organization whose mission is to support and advocate for the commercial aviation community. Our members include Part 121, 135, 125, and commercial Part 91 Alaskan air carrier operators and associate members that support them.

The most current economic data representing the Alaskan aviation industry estimates there is about $3.5B worth of economic activity, generated through 47,000 jobs and comprising 8 percent of Alaska's gross state product. 82 percent of the communities in Alaska are dependent on commercial air carrier transportation for routine transportation.

AACA is writing to you today regarding issues important to Alaskan air carriers and the communities they serve.

Essential Air Service

Essential Air Service program allows 61 communities in Alaska to be connected to life-sustaining services. The EAS program underwrites scheduled flight service where it may otherwise prove economically infeasible. EAS provides a vital lifeline for communities off the road system, offering regular U.S. mail service, transportation for business and leisure travelers who support these fragile rural economies, and the most fundamental link—connection to a larger city with healthcare and emergency resources.

The role of Essential Air Service in Alaska lies in sharp contrast to its function in the Lower 48. While some Alaska EAS communities may be totally inaccessible except by an hours or days-long boat or snow machine ride, several EAS communities in the Lower 48 lay within a reasonable drive from an international airport.

This disparity underscores the need for the U.S. Department of Transportation (USDOT) to prioritize Alaska EAS funding when making decisions about where to preserve service, and where to allow market forces to take over routes which have outlived the need to remain federally subsidized.

We appreciate all the time and effort the USDOT Essential Air Service program administrators spend on maintaining these critical air service links in our vast state. We stand ready to work with them, and you, to ensure our rural Alaska communities' lifelines are protected as you work through the FAA reauthorization process.

Alaska includes approximately 1/3 of the communities served under EAS contracts. Eighty-two percent of our communities are not accessible by road and rely on air transport for all life sustaining goods and services. Alaska's people travel by air eight times more often per capita than those in rural areas of the Lower 48, and ship 39 times more freight per capita—nearly one ton per person per year.

Please help insure that the viability of communities in Alaska and small businesses struggling to survive are not categorized alongside communities on road systems in the contiguous 48 states.

AACA urges the sub-committee consider creating two categories of EAS. EAS would provide for transportation support in communities with other forms of public transportation such as roads and Alaska EAS would provide assistance to communities that rely solely on air transportation.

Aviation Weather, Procedure Development and Infrastructure Outages

Aviation weather information is limited in Alaska! It's been estimated that over 200 new Automated Weather Observation Stations (AWOS) are needed in Alaska to meet the density of aviation weather currently available in the contiguous 48 states where alternate means of access via roads is readily available.

Aviation weather is vital for instrument approach procedures, encouraged by the FAA to provide a higher level of safety. Currently, there are 31 airports in Alaska with instrument approach procedures that cannot be used due to lack of aviation weather. More communities in Alaska desire instrument procedures but lack weather, airport surveys or procedure development. For one community in Alaska, the time necessary to complete an airport survey and develop the instrument procedure is estimated at five years.

Of the 750 total airports, public and private use, registered with FAA in Alaska only 134 of those airports are served by aviation certified AWOS/ASOS weather. Due to frequent AWOS/ASOS weather outages and new requirements for Part 121 operators to have certified weather for flights operated when visual flight rules apply, back up weather at all airports may be necessary.

AACA encourages the sub-committee to support program grant funds through AACA to site and develop necessary aviation weather in Alaska.

Federal Aviation Excise Taxes

IRS collection practices target small Alaskan air taxis. Multiple members have been fined from $250,000 to $1.8 million on inconsistent interpretation of ambiguous language in the law. Senator Murkowski's proposed draft language is supported by AACA.

Even after receiving IRS interpretive documents on the issue, much confusion exists in the business aviation community over the application of the excise tax rules caused by terminology differences between the IRS (the agency that imposes the tax and administers to the rules) and the FAA. Commercial operators are very familiar with FAA rules and definitions but unlike their ability to deal with FAA requirements, the interpretation and application of IRS rules and definitions becomes unclear and in some instances creates insurmountable financial obligations for some operators. In addition, legal and accounting professionals give their clients varying and conflicting advice regarding the application and collection of FET's.

AACA urges the sub-committee support the excise tax language proposed by Senator Murkowski that clearly articulates obligations for Part 135 on-demand and commuter operators on excise taxes.

Service Animals

FAA certificates Part 135 operators to transport passengers on-demand or on a published schedule. Aircraft typical to the Alaskan Part 135 industry are generally small and equipped with 9 seats or less. A typical Part 135 fleet could include Cessna 185/206/207, Cessna 208 Caravans, DE Havilland Beaver and others. Part 135 operators are based at every hub in Alaska and provide schedule or on-demand transportation to any community or remote off field locations. Alaska's tourism industry relies on Part 135 operators for flight seeing, hunters and fisherman or other tourism related transportation. Common to all of these aircraft is the lack of a secure access door to the pilot cabin.

Carriers are mandated to transport service and emotional support animals alongside their owner and other passengers in the aircraft cabin. Conversely, the Federal Aviation Administration (FAA) regulations mandate carriers secure all items inside the cabin during all flights (see Part 135.87 below).

In small Part 135 aircraft, turbulence or other disruption of flight is common and everyone including the pilot is at risk for injury as the animal could be tossed about the cabin and even into the cockpit. In addition, unsecured animals could hinder passenger access to exit routes and doors.

AACA seeks resolution for Part 135 air carriers who desire to provide transportation services in compliance with all USDOT requirements and where the safety of all passengers and flight crew is protected. One solution is to exempt Part 135 operators whose aircraft are not equipped with a cockpit security access door from the requirements of this law. There may be other solutions and AACA seeks your guidance and assistance to solve this significant safety issue.

Thank you again for your attention to this matter.

Best regards,

MATT ATKINSON,
Board Chair ,
Alaska Air Carriers Association.

JANE DALE,
Director,
Alaska Air Carriers Association.

Cc: Congressman Don Young
Senator Dan Sullivan
Senator Lisa Murkowski
Alaskan FAA Administrator Kerry Long
Alaska Legislature

ALLIANCE FOR AVIATION ACROSS AMERICA
April 6, 2017

Hon. JOHN THUNE,
Chairman,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Hon. BILL NELSON,
Ranking Member,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

Hon. ROY BLUNT,
Chairman,
Committee on Commerce, Science, and Transportation,
Subcommittee on Aviation Operations, Safety, and Security,
United States Senate,
Washington, DC.

Hon. MARIA CANTWELL,
Ranking Member,
Committee on Commerce, Science, and Transportation,
Subcommittee on Aviation Operations, Safety, and Security,
United States Senate,
Washington, DC.

Dear Chairman Thune, Ranking Member Nelson, Chairman Blunt and Ranking Member Cantwell:

In light of your hearing today entitled, *"FAA Reauthorization: Perspectives on Rural Air Service and the General Aviation Community,"* we write regarding the critical importance of general aviation and small and mid-size airports to the connectivity of rural communities to our Nation's airspace.

Specifically, on behalf of thousands of local communities, elected officials, businesses, and charitable organizations around the country, we have serious concerns about the current proposal being pushed by the commercial airline lobby to privatize our Nation's air traffic control system and make it accountable to private interests, as opposed to public citizens and communities of all sizes.

For rural areas of the country in particular, general aviation and local airports are a literal lifeline to thousands of communities with little to no commercial air service. Small aircraft and airports help public utility companies to oversee our power lines, they support businesses in transporting personnel and specialized equipment, and they allow farms and ranches to survey and manage their crops and farmland—about 71 million acres per year. These aircraft and airports also help first responders and volunteer pilots to respond quickly to help to fight wildfires, transport blood, organ and platelets, reunite veterans with their families and help to bring patients to medical treatment when other forms of transportation are inaccessible. With 46.7 million Americans living more than an hour away from a Level 1 or 2 trauma center, general aviation plays an increasingly significant role in ensuring that patients in rural areas of the country have access to the medical care they need.

These aircraft and airports also support critically-needed U.S. jobs and economic activity. Many companies use general aviation to reach far-off plants, customers and job-sites, and reach multiple locations in a day; all of which help them to increase efficiency and compete in an increasingly global economy. The airports that these aircraft utilize are also economic drivers for the local community. For example, general aviation aircraft and airports support over 1.1 million jobs and over $219 billion in economic activity—and, the general aviation industry is one of the few manufacturing sectors that contributes positively to the balance of U.S. trade.

However, these businesses and organizations would be decimated by a privatized air traffic control system funded by new user fees and governed by an unaccountable entity with limitless authority to raise taxes. Given that this new entity would also have the authority to direct resources, investments and access, general aviation would also likely face limited access to airspace and airports, and a lack of investment in smaller airports resulting from a system that caters to the biggest commercial airlines, instead of the public good. These are the same commercial airlines that have stated explicitly that their push for privatization is about gaining "control" of the system, and that there is "no point'" in deploying NextGen technology to regions outside of New York City. According to the Government Accountability Office (GAO), scheduled departures at medium-hub airports have already decreased nearly 24 percent between 2007 and 2013, and by about 20 percent at small-hub airports. Meanwhile, the airlines continue to push new, endless fees totaling $6.8 billion in 2015 alone. *The big commercial airlines have made their priorities clear and they do not include* consumers or rural America.

It is for all these reasons that consumer groups, local Mayors, Chambers of Commerce, rural and free market groups and businesses have all voiced concerns with

this risky proposal. Moreover, by an overwhelming margin, Americans oppose this proposal to privatize our Nation's air traffic control system and turn it over to a non-profit corporation. With debate about to ensue in Congress about investments in our Nation's infrastructure and reauthorization of the Federal Aviation Administration (FAA), we welcome the opportunity to participate in a constructive debate about modernization of our nation's air traffic control system, rather than the same old tired push by the commercial airline lobby for privatization.

Thank you for the opportunity to offer our perspectives and we look forward to working with you on issues important to general aviation and rural communities.

Sincerely,

SELENA SHILAD,
Executive Director,
Alliance for Aviation Across America.

EMBRY-RIDDLE AERONAUTICAL UNIVERSITY
Daytona Beach, FL, June 30, 2017

Hon. JOHN THUNE,
Chairman,
Committee on Commerce, Science, and Transportation,
United States Senate,
Washington, DC.

RE: Proposed Amendment to Section 217(d) of Public Law 111–216 (49 U.S.C. 44701 note)

Dear Senator:

On June 28, I expressed support for the subject proposed amendment. Unfortunately, we have become aware of some additional information that must be considered by the university before offering our endorsement of the amendment.

Thus, *please accept this letter withholding our support.*

I appreciate your understanding.

Sincerely,

ALAN J. STOLZER, Ph.D., FRAeS,
Dean and Professor.

cc: Senator Bill Nelson

WRITTEN STATEMENT OF AIR LINE PILOTS ASSOCIATION, INTERNATIONAL

The Air Line Pilots Association, International (ALPA) represents more than 55,000 airline pilots who fly for 32 airlines in the United States and Canada. ALPA is the largest pilots' union in the world, and we also operate the largest nongovernmental aviation safety and security organization in the world.

The subject of today's hearing is very important. We applaud you for taking the time to place a high degree of focus on the issues surrounding small communities and their access to the world through air transportation.

Whether passengers and cargo begin and end their travel at a large hub airport or a small, single-runway gravel strip, air transportation services must be safe. The industry has come a long way in ensuring that when a traveler boards an airliner, they do not need to worry about arriving at their destination safely. They just take it for granted. However, the safety of our skies is no accident. It is the result of hard work and the lessons learned from tragedy—as well as the bold action of the United States Congress.

Prior to the passage of the Airline Safety and FAA Extension Act of 2010, the United States experienced four high profile fatal airline accidents over a six-year period, including the Colgan Air Flight 3407 accident on February 12, 2009, just outside of Buffalo, NY. These airline accidents, which killed scores of passengers, focused the Nation's attention on how to increase aviation safety, and professionals at the Federal Aviation Administration, the National Transportation Safety Board and the U.S. Congress all responded.

Since passage of this landmark legislation, our country has not had a single passenger fatality on a large, scheduled U.S. passenger airline (Part 121). This law significantly improved training and qualification requirements for first officers—and improved the safety of our skies. It is a measure that was written in blood and should not be weakened in any way, shape, or form.

As FAA Administrator Huerta likes to point out, there are no longer kiosks in airports for purchasing airplane crash insurance. He has also remarked that travelers worry more about whether the flight will be on-time, or whether the Wi-Fi will be working, than the safety of the flight. As airline pilots, we show up at work every day with the primary focus of working our very best to ensure that passengers can continue to take the safety of airline travel for granted.

Essential Air Service

The primary reason for our testimony today is to discuss the Administration's initial plans for the Fiscal Year 2018 Budget, in which the President has called for the elimination of the Essential Air Service (EAS) program, and the potential ramifications of that action.

Looking back over the history of EAS and other small community air service programs, it is easy to find many times where elimination or significant reductions in the program have been proposed. These proposals muddy the waters about small community access to air transportation, and they create uncertainty about air transportation.

Nearly 30 Years of Essential Air Service

One of the unfortunate effects of airline deregulation in 1978 was the certitude that some smaller cities and towns would lose scheduled airline service as airline companies began to make routing and service operations a business decision. To mitigate that outcome, the Essential Air Service (EAS) program was enacted that same year as a temporary program. Congress later determined that the EAS program should continue past its initial 10-year life and wrote it into law in 1987, effectively expanding and extending it for an additional 10 years. This has been repeated several more times, and now the program is approaching the 30-year mark, one temporary extension at a time.

ALPA members have a vested interest in the EAS program because our airlines are EAS participants so some of our members operate flights to and from EAS communities. Further, our members live in all corners of the United States, including in and around many of the EAS communities. As such, we have a strong connection with smaller cities and towns and an interest in ensuring that they have safe access to the national airspace system.

Should Essential Air Service Be a Permanent DOT Program?

ALPA strongly supports making the Essential Air Service program permanent and fully funding it in this year's budget. There are many communities that rely on air transportation simply to survive. These communities are frequently unable to generate enough passenger air travel for airlines to profitably serve those communities, thus the need for subsidies. Many of the communities are found in rural

Alaska, where a lack of highways and roads means that air transportation is the only form of access to the world beyond the edge of their community.

In the contiguous 48 states, there is also a large number of small communities that are a long distance from scheduled airline services, and yet the communities are growing due to the presence of natural resources, manufacturing, and related jobs that propel our Nation's economy forward. Some of these communities need EAS to ensure continual airline service and will continue to do so indefinitely.

While originally viewed as a "temporary" fix, it is now obvious that EAS could be recognized as a permanent and important piece of the Nation's air transportation policy framework. A permanent program would allow Congress and policymakers to take the necessary steps to refine the program and ensure that those small communities that truly need it have access to the same high levels of safe, affordable air transportation as any other American citizen.

One area that has been a point of contention in the past is the proximity of EAS airports to other airports where airline service is available. Our call to consider a permanent program must address this and other such issues.

Once EAS Is Permanent, Airlines Can Adjust Business Models

Just like other segments of the aviation industry, stable and reliable revenue streams are important for service sustainment of air transportation to small communities. The economic conditions in small communities often change quickly, and airlines are unable to react quickly to the changing landscape. Such may be the case when small communities are dependent on a single segment of our Nation's economy, for example the energy sector. Small communities often grow rapidly when oil prices spike, but they can also decline just as rapidly when economic changes occur, both of which influence the level of air services.

The EAS or a similar program needs to be designed so that it can ensure stable and reliable revenue streams that airlines need in order to ride out the out the ups and downs of small community economic change. As a result, the airlines would be much better positioned to offer pay to their workforce that is consistent with the pay of airlines that do not operate at the small communities.

Safety: The Number One Consideration When It Comes to Air Service

Ensuring safety begins and ends with a well-trained, appropriately experienced, and highly skilled flight crew in the cockpit. It truly is the pilots who make the difference. Similar to the One-Level-Of-Safety campaign that raised the level of safety in our regional airline network, the history of accidents that plagued our industry for decades has also served as a catalyst for a complex and carefully created set of safety regulations that increase pilot qualification and training standards that are "written in blood," and which are designed to ensure that we do not repeat that history. The rules we have in place from accidents involving flights to or from small communities now serve as the lifeblood for safety going forward.

Some of the airlines that are struggling to provide sustainable air transportation services to small communities are the same airlines that pay their pilots poverty wages, then complain they can't find qualified pilots. To add insult to injury, they spend money in Washington on lobbyists trying to roll back air safety requirements. We shouldn't listen to the special interests when it comes to air safety, but rather listen to the air safety experts.

To suggest that passengers be asked to accept a reduced level of safety in exchange for access to air transportation is nearly unthinkable. And, this line of thinking is diametrically opposed to the industry's top concern of placing safety as the highest priority, above all others.

The special-interest groups advocating for rolling back safety rules are quick to dismiss the effectiveness of the most recent rule changes, those that Congress established in 2010 as part of the Airline Safety and Federal Aviation Administration Extension Act of 2010, Public Law (P.L.) 111–216.

As noted, in the six-plus years since P.L. 111–216 became law on August 1, 2010, there have been no Part 121 passenger airline accidents where a passenger fatality was recorded. In the six plus years prior to the August 1, 2010, law, there were hundreds of fatalities, many of them on flights serving small communities.

This remarkable safety record was not achievable without the requirements called for in P.L. 111–216. It is no coincidence that the package of rules, including the first officer qualification (FOQ) requirements, have directly and noticeably improved passenger airline safety. We vehemently guard those rules against any efforts by airlines, airports, or other organizations which are willing to put profits ahead of safety.

Rather than rolling back safety rules, we continue to urge our industry counterparts to identify policies and changes that will ensure that safety is maintained.

From my perspective, a change in the discussion is desperately needed. The pilot supply discussion is distracting the small community air transportation service experts from focusing on the primary issue that needs to be addressed: *Providing safe, scheduled air transportation to small communities is necessary, and the costs to provide that service are currently higher than some communities can support on their own.*

Until that single overarching issue is resolved, the airline industry and those who seek to pay qualified pilots on the cheap will continue to blame their woes on the supply of workers. Young people who are seriously considering an airline pilot career are increasingly unwilling to invest in an airline career pathway that offers inferior pay, an unrealistic work-life balance, and limited career progression.

The discussion that is being created by the special interest groups seeking to roll back safety rules is distracting the community from focusing on the important issues that need to be addressed to ensure that airlines can profitably serve the travel needs at small community airports. Until the real issues are put on the table, there is a good chance that we will be back here at some future date to discuss the same issues again, having made very little progress.

DOT Inspector General Cites Regional Airline Business Model

In a *March 2017 report* that analyzed regional airlines and pilot pay, the Department of Transportation Inspector General (DOT IG) reported its findings on pilot pay among regional airlines.

From my perspective, the DOT IG also took on a much broader set of issues when it discussed the challenging business landscape (page 2):

> Regional airlines operate in a very competitive environment, which often hinders their ability to adjust pilot compensation. Basic business models of regional carriers require them to keep costs low to remain competitive. These airlines usually operate under long-term, fixed-fee-capacity purchase agreements with their larger, domestic code-share partners, such as American Airlines, Delta Air Lines, and United Airlines. Under the agreements, mainline carriers pay regional carriers a fixed fee for each departure. These arrangements can be beneficial to regionals because they are sheltered from some business risks, such as fluctuations in fuel prices, ticket prices, and passengers. However, it also means that they do not generally benefit from upward trends in ticket prices (since mainline carriers retain ticket revenue), ancillary revenue (*e.g.,* baggage fees or selective seating fees), and passenger enplanements. Since regionals do not have the ability to charge or increase these fees to drive revenue, they often must focus on cost control as a way to become or stay profitable. As a result, they have found it difficult in many cases to increase pilot pay despite improved profitability at the mainline carriers.

The DOT IG observations about the regional airline business models, as well as the challenges with their difficulties in increasing pilot pay, are spot-on from our perspective. Additionally, the challenges of providing essential air service further compound the issues.

It could not be clearer. Attempts to reduce the level of safety by changes to rules that ensure safe airline travel for all passengers will continue to be a focal point, unless the broader issues of the regional airline business model and small community air services are addressed. This work must begin immediately.

Small Community Air Service Safety History Written in Blood

In the early 1990s, ALPA initiated its One Level of Safety (OLS) campaign aimed, in part, at bringing the regional airline industry's safety up to the same standards as those of the majors. A significant accomplishment in this regard was realized when the FAA instituted rulemaking that required scheduled airline operations using aircraft with greater than nine seats to comply with 14 CFR Part 121. The OLS initiative is still a work in progress, however, as the safety record of some regional carriers demonstrates:

1. In May 1997, Great Lakes Aviation suspended all flights following the FAA's expressed concerns about the adequacy of maintenance at the feeder airline. The FAA reported that airline personnel were not being properly trained. At the time, Great Lakes was operating 500 flights per day and carrying nearly a million passengers annually. The carrier suspended its flights voluntarily, but only after the FAA had notified the airline that it planned to suspend its operating authority. Although not related to the shutdown, a Great Lakes turboprop aircraft was involved in a runway collision at Quincy, IL, in 1996 that killed 14 people.

2. The Colgan accident at Buffalo, NY, on February 12, 2009, killed a total of 50 people. In the ensuing investigation, the National Transportation Safety Board (NTSB) identified a number of systemic failures at the company and within the industry at large. The results of that investigation generated a public outcry for numerous improvements to airline safety, and to its credit, this Subcommittee was responsible for writing legislation that addressed many of those outstanding deficiencies. Since then, the FAA has enacted new first officer qualifications and training requirements that increased the amount of education, training, and flight experience of pilots who are hired by Part 121 airlines, among other significant improvements. ALPA is a strong proponent of these new rules, along with other complementary regulations that have been adopted or proposed by Aviation Rulemaking Committees (ARCs) as an outcome of what was learned following the Colgan accident.

Comair 5191, Lexington, KY, August 27, 2016

The history of regional airline operations underscores the need to make safety the first and foremost consideration for service to small airline communities.

New First Officer Qualification Rules and the "Pilot Shortage"

We would like to address the outrageous claims of some regional airline operators regarding a putative pilot shortage that they say has required them to cancel flights and park airplanes. To put it very simply, there is currently *no shortage* of qualified pilots; the major airlines are hiring 3,500 to 4,000 new first officers each year from a variety of sources including regional carriers. Between the 7,500 to 9,000 new ATP-certificated pilots each year (over 9,300 in 2016) and approximately 2,400 pilots leaving the military annually, there are plenty of qualified pilots available to meet all of the U.S. airlines' needs. As we have said, however, *there is a shortage* of qualified pilots who are willing to fly for substandard wages, working conditions, and benefits.

Although some within the airline industry blame this Subcommittee's legislation and the resultant FAA airline pilot qualifications and training regulations for a pilot shortage, the airline industry actually helped craft those rules and supported their passage. Several accidents over a number of years, the most recent and arguably the most troubling of which was the aforementioned Colgan Airways accident in Buffalo, NY, in 2009 caused a justifiable groundswell of support for the new and safer increase in minimum qualifications for pilots to be hired by the airlines, the scope of which goes well beyond just the number of hours that a first officer must have in order to enter the Part 121 industry.

It should be noted that some in the regional airline industry did not adequately prepare for today's pilot hiring needs, which have been predictably compounded in the near term by pilot age-limited retirements and increased qualification requirements. This Subcommittee introduced legislation on first officer qualifications about seven years ago, and the industry was well represented on and agreed to the recommendations made by the FAA aviation rulemaking committee that created the new pilot qualifications and training rules. Further, the future impacts of the age-65 retirements that began in 2012 were well understood more than eight years ago. To reduce the potential for impacts on the pilot pool, Congress gave FAA the ability to grant flight-hour credit for specific academic training against the 1,500-hour requirement for the air transport pilot certificate (ATP). FAA did exactly that,, by es-

tablishing the "Restricted ATP" that an individual could qualify with as few as 750 flight hours.

A few airlines have understood for some time the need to create career pathways that will incentivize individuals to seek employment as airline pilots. More airlines are presently seeing this need and have created, or are in the process of creating, pathways that connect one or more accredited aviation universities or colleges with a regional airline and a legacy airline so that there is a clear and defined progression on which to create a career. As part of these pathways, some legacy airlines have "flow-through" agreements with their regional code-share partners that guarantee regional airline pilots an interview with the mainline carriers upon achieving certain career milestones. ALPA is a strong supporter of these and similar programs that help establish a larger and more qualified pool of pilot candidates to safely operate airline equipment.

Thousands of young adults learn to fly each year with the hopes of becoming airline pilots. Their total investment may exceed $150,000 for a college aviation education and flight training, but that outlay is made on the basis of potentially earning several million dollars over the course of a 40-year or longer career. These future aviators need to see evidence that their investment will be rewarded, otherwise—over the long term—we will see a genuine shortage of qualified workers in our aviation industry.

One impact on the availability of qualified pilots also serves as commentary on the present state of the U.S. airline industry. Thousands of experienced airline pilots with U.S. citizenship are opting to fly for foreign airlines instead of U.S. carriers because the stability, pay, and benefits are so much greater than those offered by U.S. carriers. As just one example, at U.S. legacy airlines, a first officer may have a starting salary of $61,000/year plus benefits, while a foreign airline may pay $80,000/year, plus provide housing allowances and other extraordinary benefits, such as personal chauffeured transportation to and from work and tuition assistance for the pilot's children.

Airline Industry-Funded Pilot Source Study Evaluates Training, Not the Value of Pilot Experience

The Pilot Source Study, conducted by various academic institutions, was sponsored by the very organizations who will benefit from the data they hoped it would provide. In the study, the training records of newly hired first officers were reviewed and found that compared to other times in recent history, newly hired pilots required more training than pilots did in the past.

What the study does not discuss is the increased quality of the pilots who possess significantly more flight experience than newly hired pilots of the past. The study investigates the need for additional training for the newly hired pilots to fit into the airline operations' way of doing things, not on how well the pilots made the correct decisions and skills that they may have developed with the flight experience that they brought with them to the job.

The study is really about the cost of training. Those who oppose the new first officer qualification rules as established by P.L. 111–216 do not want to invest the requisite time and costs associated with quality pilot training. The study makes no observations about the quality of the pilots from an experiential perspective, which was the prime motivator for requiring both pilots in Part 121 operations to hold an ATP certificate.

Perhaps most concerning is that the study makes the flawed conclusion that experience is not a predictor of competence. The study reaches that conclusion based on a pool of newly hired airline pilots in a single calendar year, shortly after the new ATP requirements became effective. Based on our insights into this class of newly hired airline pilots, many of them were second career pilots who already possessed an ATP certificate but had not recently experienced the flight training environment. It should have been no surprise to anyone, nor did a study really need to be conducted, to prove that these individuals required time to adapt to the learning environment. Naturally, students with very low flight time emerging from the flight training environment were likely more accustomed to learning in an environment that the airlines had created for those type of pilots.

Regional Airlines Have Required 1,500 Hours Minimum Experience in the Past

While many airlines now complain that they should be allowed to hire pilots with total flight time well below the current minimums needed to obtain an R–ATP or an ATP certificate, the very same airlines published minimum hourly flight requirements in excess of 1,500 hours to merely apply for a pilot position with their airline.

In the following graphics, the 1999 Airline Information and Address Directory lists the minimum hours required for pilots to submit their applications for employment at the regional airline shown as 2,500 hours to include extensive multiengine and turbine time. This very high minimum flight time is indicative of two factors: the supply and demand of pilots at that particular time. It is the same single factor that at times has resulted in airlines hiring pilots who have 250 or even fewer hours and scarcely any multiengine time.

Air Wisconsin
Attn: UPAS, Inc., 751 Miller Dr., Suite D-2, Leesburg, VA 20175
Total Pilots: 267.
Type of Operations: Passenger.
Fleet: 32: (1) BAe146s-100, (12) BAe146-200s, (5 BAe146-300s, (10) DO328s, (4) CRJ200s.
Orders/Options: 5/5: CRJ200-LRs.
Bases: Appleton, WI; Denver.
Minimum Requirements: 2,500 TT, 1,000 ME, 500 Tur bine. COMM, INST, ME, ATPw, & Part 121 expr pre ferred. ATPw must be taken & passed within 12 mos o employment. College preferred. FAA Class I.
Mo Salary: FO DO328 1st yr-$1,517. 2nd yr-$1,738. FC CRJ200/BAe146 3rd yr-$2,684. 4th yr-$2,765. 5th yr-$2,82(CPT BAe146 10th yr-$6,021. Max CPT pay-$7,268.
Mo Hr Guarantee: 75 line holder/69 relief line holde 65 reserve
Benefits: IS & Pass privileges. Paid life, medical, & dent

DOT IG Shows Pilot Pay Rising, By Using Marketing Schemes, Not Salary Increases

In their report issued last month, the DOT IG found that the lowest pay levels (presumably to newly hired first officers) were well below $23,000 per year in 2015. The IG also reported that compensation at these carriers since 2015 has increased and that some airlines advertise pay of much higher rates. But the IG points out that these advertised pay rates are a combination of salaries, one-time incentive offers, and other temporary measures that are currently being deployed by air carriers to attract pilots.

One of ALPA's biggest concerns is the temporary nature of the increased first-year pilot pay strategies. In some cases, the base salaries of first officers at regional airlines remains very low, which sends a discouraging message to those who may be considering an airline pilot career.

Potential students can easily recognize that the first-year incentives may be withdrawn at any time, without warning. Even those airlines that have struck agree-

ments with pilots on these incentives have limited the duration, obviously in hopes of withdrawing the incentives as soon as possible.

Pilot pay scales need to be adjusted permanently, not just with limited-time-offer gimmicks. Pilots look to regional airlines to provide career progression opportunities into airlines that offer broader diversity of flying.

GAO Report on Pilot Supply in 2014 Remains Relevant Today

If there was ever any doubt about the true nature of the shortage that may exist, the 2014 GAO report on the aviation workforce removed it. It supported the points that ALPA has made for several years concerning whether there is, or will be, a genuine shortage of airline pilots.

Following are a few of the comments contained in the GAO report supporting ALPA's long-held view that there is no near-term shortage of qualified pilots, but simply a shortage of qualified pilots who are willing to be employed by some U.S. airlines in light of their poor wages, working conditions, and benefits. Notes have been added below to update the data for 2017:

- Available data indicate that a large pool of qualified pilots exists relative to the projected demand, but whether such pilots are willing or available to work at wages being offered is unknown.
  - 2017 Note: Remains true today.
- Data on wage earnings and employment growth are not consistent with the existence of a shortage in the airline pilot occupation.
  - 2017 Note: Remains true today.
- GAO estimates that a range of roughly 1,900 to 4,500 new pilots will need to be hired annually over the next 10 years. In 2012, the FAA certificated 6,396 new ATPs, and that number is trending upward. Additionally, about 2,400 pilots separate from the military service branches each year. Note: This total of nearly 9,000 additional pilots becoming available annually, who could potentially fly for the airlines, is approximately double the maximum of what GAO says is needed by the airlines each year.
  - 2017 Note: In 2016 the FAA certificated over 7,000 new ATPs plus more than 2,000 restricted ATPs with multiengine privileges, for a total exceeding 9,000 pilots eligible to be hired as first officers.
- Two out of three studies reviewed by GAO on pilot supply trends suggest that a prolonged pilot shortage is unlikely to develop. One study noted that a shortage of entry-level first officers may temporarily emerge, but would likely be addressed within a few years.
  - 2017 Note: It appears that based on the number of ATP/R–ATP issued in 2016, the GAO predictions were initially correct.
- Avoiding a pilot shortage hinges on the ability to incentivize lower-certificated pilots to seek a higher certification, and pilots currently working abroad or elsewhere to seek U.S. airline jobs, should a genuine shortage arise. Analyses reviewed state or imply that airlines may need to provide financial incentives—for example, higher wages, benefits, or bonuses—to bring new pilots into the industry.
  - 2017 Note: Remains true today.
- Eleven of the 12 regional airlines interviewed by GAO have been unable to meet hiring targets for training classes formed since early 2013. Regional airlines currently pay on average about $24 per flight hour (approximately $24,000 annually) for new-hire first officers.
  - 2017 Note: The average salary has begun to rise, but not enough. The temporary incentives offered are a new development that does increase first-year pilot incomes.
  - Several airline CEOs have acknowledged that when airlines have taken steps to increase pay, they have seen increases in pilot applicants almost immediately.
- The mainline airlines interviewed by GAO report that they are not experiencing any difficulty in attracting qualified and desirable pilot candidates.
  - 2017 Note: Remains true today.

In short, the GAO study was on point and continues to serve as a marker from which we can track the development of pilot pay and hiring rates today.

Others Forecast a Pilot Shortage of Epic Levels

While most would acknowledge that the GAO provides an unbiased look at the future pilot needs in the United States, their forecast is not the only one. Another forecast that is broadly discussed is one published by the University of North Dakota (UND), which depicts that a pilot shortage began back in 2015, just one year after the GAO found that many pilots were available for hire. In 2016, the UND reduced their forecast shortage by 25 percent. The GAO studied the UND study methodology and assumptions.

One of the GAO observations about the UND study was that they inflated the cost of training estimates in out years excessively. The GAO acknowledged that while using historic trends to predict future changes is part of forecasting, in some cases, it can lead to results that may be unlikely. In this case, this method resulted in forecasted year-over-year changes in the cost of flight school of almost 8 percent above its historic mean by the year 2030, which is well above historic averages over the past 20 years.

- The GAO also noted that openings of other pilot schools could reduce this inflation.
- Using a different assumption regarding increases in training costs would also result in different outcomes with respect to the size of the forecasted shortage.
- GAO found that reducing the assumed rate of increase of inflation in the cost of flight training to only one to two points above its historic mean resulted in about 30,000 more CFI certifications, an indicator of pilots targeting airline employment. This added volume of pilots largely ameliorates the estimated shortage.

ALPA Analysis of Pilot Supply

While ALPA does not generate our own pilot supply forecast, we do track the regular updates of those that do. In short, the range of forecast demand for pilots over the next decade varies from a low of 1,900 pilots per year to a high of 5,200 pilots per year.

According to the FAA's 2016 certification data, the rate of issuance of ATP and R–ATP certificates has exceeded 6,000 per year since 1990, even when airline hiring was virtually nonexistent. Since P.L. 111–216 became effective in 2010, issuances per year have averaged more than 6,000. From ALPA's perspective, the market is responding to demand. Those who want to fly are finding jobs with less difficulty than in the past.

Conclusion and Recommendations

Small community airline service is an important subject that needs to become a permanent part of aviation's policy framework. After nearly 30 years of managing EAS as a temporary program, with various changes along the way, it is time for Congress, the DOT, and the industry to work together to assemble a small community airline service model that meets the needs of all involved in providing that service. This includes the pilots who fly the airplanes.

ALPA is ready to contribute to the design and implementation of a small community air service strategy that ensures and results in reliable airline travel, profitable airline operations, and employee pay and benefits that are on par with their peers across the airline industry.

We believe that the following actions are needed:

- *Establish a Permanent Small Community Airline Service Framework.* This includes establishing significant reforms and creating a long-term viable program to meet the needs of Americans who live in rural communities throughout all 50 states.
- *Ensure Consistent Reliable Funding for Airline Partners.* Congress should examine with DOT the Federal Government's EAS program and update it for the airlines that provide the air service so that the airlines can be successful.
- *Adjust Business Rules Not Safety Rules.* First, make no changes to the FOQ rules as they are currently established. To make reductions to these rules would be a reduction in safety. Second, seek industry input on the best ways to modify the excessive taxation and red tape that the airlines face. Congress can and should play a critical role by removing the current financial and regulatory barriers facing U.S. airlines to make it easier for them to generate sustained levels of profitability.

- *Ensure Airports Are Provided the Necessary Support to Promote Air Travel.* While ALPA would oppose any relaxation in the rules and standards that are designed to ensure safety, there are policies and programs that should be widely available for airports and their community partners to promote airline travel from their small communities. Best practices, proven methods, and other information sharing are low-cost and can broadly be applied in many locations.
- *Support Industry Efforts to Promote Aviation Professions.* Congress can assist by restoring loan guarantees for college and university students who are undergoing flight training as part of their degree curriculum. Congress should work with the airlines to create innovative means for them to offset pilots' flight training expenses, thereby helping to create a reliable pool of new first officer candidates.
- *Reject the Fallacious Argument of a Pilot Shortage.* Those who are claiming a pilot shortage, and are using that supposed shortage as a reason to roll back current pilot training safety requirements, do so without a factual basis. The argument harms small communities because it makes increased service levels contingent on decreasing the safety of the operation, instead of focusing on addressing the actual economic reasons for such service level reductions, of which there are many.

Thank you for the opportunity to share ALPA's perspective on this important topic. Our mission will continue to be moving passengers and cargo efficiently across the globe and delivering you and your constituents safely back home to communities large and small. *We Keep America Flying.*

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. JOHN THUNE TO
DR. GUY M. SMITH

Question. Dr. Smith, in written testimony submitted for the hearing record, the Air Line Pilots Association (ALPA) said that the Pilot Source Study "makes the flawed conclusion that experience is not a predictor of competence". Do you have a response to this comment or anything else stated by ALPA?

Answer.

Dear Senator Thune,

Thank you for the opportunity to respond to your question. Be assured there has always been an excellent relationship between ALPA and aviation academia. Many aviation college students benefit from ALPA's Ace Club and "Cleared to Dream" program; and ALPA has been an active partner of the Aviation Accreditation Board International (AABI) in setting and maintaining the highest standards for collegiate aviation education.

In their testimony, ALPA stated that the Pilot Source Study "makes the flawed conclusion that experience is not a predictor of competence." Several members of ALPA have attended briefings on the Pilot Source Study; however, the author of their testimony does not understand the study nor the rigorous research protocols employed. The Pilot Source Study did not study "experience" of pilots; experience is a broad construct that should be measured by one-on-one pilot interviews. We did not interview a single pilot; we visited regional airlines and did a comprehensive review of the pilots' HR records; we recorded their educational backgrounds and their flying records prior to being hired by the airline. The Pilot Source Study also did not study "competence"; in fact, researchers who have attempted to study the competence of a group usually fail; competence is an individual aspect that "indicates sufficiency of knowledge and skills that enable someone to act in a wide variety of situations".[1] Besides compiling information from HR records, the researchers collected data from pilots' training records to determine pilots' performance in training. Performance was measured primarily by determining whether a pilot successfully completed the training and whether they completed it within the scheduled footprint or if they needed extra training. The study concluded that there were several good indicators of pilot performance:

Years Since Graduation: ≤ 4 Years	Aviation Degree: YES
Total Time: ≤ 1,500 Hours	Highest Degree: Bachelor's
AABI Flight: YES	Previous Employment: Part 121
ATP Certificate: R–ATP	Military Pilot: YES

[1] Business Dictionary. (2017). Retrieved from *http://www.businessdictionary.com/definition/competence.html*

ALPA's testimony implies that the study is flawed because it doesn't show "what everyone knows"—that pilots with more flight hours have more experience and therefore are "better pilots." By their own admission, ALPA did not research their hypothesis. The Pilot Source Study showed that flight hours, as the sole measure of piloting skills, was not a good indicator of performance. *Rather, it showed that flight hours, associated with appropriate educational and experiential background, was a good indicator of performance.* In P.L. 111–216, Congress has already recognized the value of "appropriate academic background," and the industry is working to define "appropriate experiential background." As I mentioned in my verbal testimony, the industry is attempting to define "structured flying" and "disciplined flying." If we can determine that a pilot has successfully accumulated a sufficient number of flight hours in a structured, disciplined flying environment; we probably could state that the pilot is ready to be trained to be a safe and competent airline pilot.

After the hearing, I spoke for about 20 minutes with John Kausner of the Families of Continental Flight 3407. John asked me, "Why are you so much against the 1,500-hour requirement for airline pilots?" I told him emphatically that the Pilot Source Study does not disregard the 1,500-hour requirement; the study concludes that 1,500 flight hours (an arbitrary number) does not indicate, in itself, that a pilot is safe and competent. I have been in pilot training most of my adult life. I have flown with pilots who have thousands of hours and should never be airline pilots. I have also flown with pilots with only several hundred hours who are safe and competent; I would entrust my 3 daughters to fly on their airplanes. This statement resonated with John, since he mourns for his daughter, Ellyce, who died in the Colgan crash. I told John that our study did not contradict the 1,500-hour rule; the study showed that, if we consider flight hours and nothing else, pilots with more than 1,500 flight hours did not perform any better than pilots with 1,500 or fewer flight hours. John Kausner appeared to accept my response. We parted as friends.

As matter of professional pride, I am compelled to respond to ALPA's flawed statement that "the Pilot Source Study was sponsored by the very organizations who will benefit from the data." None of the seven researchers received a salary or stipend; the research was done as part of our academic contract. The graduate students who collected the data received a $100 per day stipend. These stipends and all travel expenses were paid from a fund donated by two universities and five major airlines. No funding for the Pilot Source Study came from a regional airline, the Regional Airline Association (RAA), or the Aviation Accreditation Board International (AABI).

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. RICHARD BLUMENTHAL TO DR. GUY M. SMITH

Question. In 2009, we witnessed the tragic crash of Colgan Air flight 3407 in Buffalo, New York. 50 people were killed, including Beverly Eckert of Stamford, who lost her life eight years after losing her husband on 9/11. We learned many things afterward, including the fact that the co-pilot may have had insufficient training.

So Congress took action. Congress required co-pilots to have 1,500 hours of real-world flying experience. Before then, they needed only 250. Some want to loosen this requirement. They say that this is too demanding, making it hard to hire pilots.

Captain Chesley Sullenberger—or "Sully"—the hero known for the Miracle on the Hudson—has argued before this committee there is no shortcut to safety, no shortcut to experience—and this rule should be maintained. He and many other safety advocates say that low pay may be the real culprit in problems with hiring good pilots. The first officer of the tragic Colgan crash earned approximately $16,200 a year.

I understand pay has risen since the Colgan tragedy, which is reassuring. But according to a recent analysis by the Department of Transportation Inspector General, pilot compensation is below $30,000 annually for many pilots at many airlines.

Does compensation have an important role attracting pilots to the profession?

Are current compensation levels sufficient to ensure a stable workforce of pilots?

Would testimony from pilots be important and relevant to this discussion?

Answer. Senator Blumenthal, thank you for the opportunity to address your questions. Before responding to your three questions, I would like to comment on one of your introductory remarks—"Congress required co-pilots to have 1,500 hours of real-world flying experience." I understand that your terminology, "real-world flying experience," might have been the intent of Congress; however, as implemented, the regulation for the ATP certificate specifies that 1,500 hours are required for the ATP, but there isn't a qualifying requirement for "real-world flying experience." The

Pilot Source Study supports your explanation of Congressional intent for "real-world flying experience"—*flight hours alone are not reliable predictors of pilot performance.* In my testimony before your committee, I suggested that those flight hours should be evaluated against criteria for "disciplined" and "structured" flying experience, which could include your wording, "real-world flying experience." Rather than advocating for changes in congressional laws or FAA regulations, I encourage the airline industry to define these qualifications.

On your first two questions concerning compensation for pilots, we have no data in the Pilot Source Study on compensation; so my response is my opinion, based on 45 years in aviation. My response pertains only to regional airlines, since compensation for pilots in the major airlines does not appear to be an issue. In their third-party submission, ALPA cited the March 2017 letter from the Department of Transportation Inspector General (DOT IG) which clearly stated why regional airlines are unable to increase pilot pay based on the current operating model, fee-for-departure. It is readily agreed in the industry that regional airline pilots' pay cannot be proportionate to the major airlines under this operating model. The real question is—if pay for regional airline pilots was commensurate with the major airlines, is there a sufficient supply of qualified professional pilots ready and willing to become regional airline pilots? This is a pilot supply question, and the Pilot Source Study is not a pilot supply study. There are two pilot forecast studies—also not pilot supply studies. The *2016 Boeing Pilot & Technician Outlook,* projects a need for 617,000 new commercial airline pilots over the next 20 years. The *UND Pilot Supply Forecast* predicts a shortfall between 2012 and 2031 of 38,178 pilots for all commercial operations. The *2014 GAO report* on the aviation workforce, also cited in the ALPA testimony, is a pilot supply study; however, it was completed before the full effects of P.L. 111–216 impacted the industry, beginning in August, 2013. It is opportune for the aviation industry to commission a comprehensive and valid pilot supply study. I have designed a pilot supply study that would involve gleaning de-identified data from the FAA Form 8500–8 (Application for Airman Medical Certificate). Such a study would need funding, permission from FAA for third-party access to the records, and involvement of all stakeholders (FAA, airlines, aviation associations, ALPA, etc.).

Concerning your third question, Senator Blumenthal, I'm not sure testimony from pilots would elucidate the pilot compensation issue. Any regional airline pilot will probably tell you that pay in the regional airlines is not sufficient. This would be blatantly clear if you asked for testimony from a regional airline pilot who is carrying over $100,000 in student debt for their pilot training—and there are many of these! However, Congress would get a true education on these issues by asking for testimony from directors of training or flight operations at the regional airlines. While conducting the Pilot Source Study in 2015, our teams interviewed training and operations managers who educated us on the issues they face. These pilots could tell you about the advances that regional airlines have made in compensation, bonuses, and hiring incentives. However, the essence of their testimony would give Congress a deeper understanding of the current pilot supply and the issues they address daily to ensure that safety remains paramount while delivering high-quality and appropriate training to maintain the viability of their airline.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TAMMY DUCKWORTH TO DR. GUY M. SMITH

Question 1. In terms of the objectivity of your study, universities like Embry-Riddle who offer a flight training program have been very critical of the new First Officer Qualification (FOQ) requirements, ostensibly because they could deter potential students from enrolling in their programs or lengthen their path to a regional airline cockpit. Your written testimony mentions two universities who contributed to financing this study; would you identify these universities and also whether they have flight training programs? Additionally, would you identify the association and consulting firm who helped underwrite this study as well? Finally, has there been any type of audit, review, or validation of the methodology or findings of this study by an independent, third party entity?

Universities like Embry-Riddle who offer a flight training program have been very critical of the new First Officer Qualification (FOQ) requirements.

Answer. Thank you, Senator Duckworth, for the opportunity to respond to your questions. On your first question, I am not a spokesperson for Embry-Riddle Aeronautical University; but I know there are many at Embry-Riddle and similar universities who benefit from a consequence of the FOQ Rule. Aviation graduates typically complete their certificates and ratings in 300–400 flight hours and are fully pre-

pared to begin their careers; however, because of the FOQ Rule, these universities are able to hire their most qualified graduates as junior flight instructors and gainfully employ them as flight instructors until they have acquired the requisite flight hours.

Question 1a. Your written testimony mentions two universities who contributed to financing this study; would you identify these universities and also whether they have flight training programs?

Answer. The Pilot Source Study showed that graduates from AABI-accredited flight programs performed better in regional airline training than any other aggregation of pilots. The two universities that provided funding for the Pilot Source Study were Embry-Riddle Aeronautical University (employer of Dr. Guy Smith, co-principal investigator) and the University of North Dakota (employer of Dr. Elizabeth Bjerke, co-principal investigator); both of these universities have AABI-accredited flight programs. Neither Dr. Smith nor Dr. Bjerke received any pay or stipend for the research project. Their universities paid only for travel expenses incurred by the researchers. It is common practice among universities to support the work of their research faculty without any influence on the results.

Question 1b. Additionally, would you identify the association and consulting firm who helped underwrite this study as well?

Answer. Travel expenses and stipends for graduate students ($100 per day) were contributed by the National Business Aviation Association (NBAA) and 5 major airlines: Alaska Air, American Airlines, Delta Air Lines, JetBlue Airways Corporation, and United Airlines. These were un-endorsed donations to a separate fund administered by AABI. To maintain objectivity, the Pilot Source Study fund did not request or accept any donations from AABI, RAA, or any regional airline. Dr. MaryJo Smith, a self-employed consultant for Ypsilon Associates, assisted in data collection at three regional airlines; she did not receive a salary or stipend and paid for some of the travel expenses.

Question 1c. Finally, has there been any type of audit, review, or validation of the methodology or findings of this study by an independent, third party entity?

Answer. Yes, the work is peer-reviewed. The official report of the Pilot Source Study consists of five research articles which have been submitted to *The Journal of Aviation Technology & Engineering* (JATE) (ISSN 2159–6670) published by Purdue University Press. The JATE is a refereed open-access publication serving the needs of collegiate and industrial scholars and researchers in the multidisciplinary fields of aviation technology, engineering, and human factors. The first three articles of the Pilot Source Study have been published in the JATE; Articles 2 and 3 are currently featured on the JATE front page, *http://docs.lib.purdue.edu/jate/*. The researchers are currently reviewing Articles 4 and 5; they will be submitted to the JATE review process this summer. Links to all of the pilot source study documents are available on the study's webpage: *https://www.pilotsourcestudy.org/*

Question 2. In current discussions about pilot supply in the U.S., some detractors of the new FOQ requirements seem to suggest they have driven potential aviators from pursuing the profession. Others indicate that poor working conditions, including salaries, benefits and scheduling over the course of the past two decades at regional airlines are the main culprit or that expenses associated with flight training are too steep. Would you comment on the effect of these different factors on pilot supply? Would you provide the Committee with enrollment numbers for Embry-Riddle's aviation program over the past 15 years to give us a better sense of these trends?

Answer. Senator Duckworth, my response to your second question is similar to my testimony in response to a question from Senator Blumenthal. We have no data in the Pilot Source Study on pilot working conditions, salaries, benefits, or scheduling. Based on 45 years in aviation, I can confirm that the conditions you mentioned are possibly a deterrent to pilots aspiring to be regional airline pilots. On the other hand, many of the pilots who graduate from our aviation universities are already committed to careers as airline pilots; they know they must start at a regional airline, regardless of pay, etc. We do not have an empirical pilot supply study that would determine if there is a sufficient supply of qualified professional pilots ready and willing to become regional airline pilots. A 2015 study by the University of North Dakota and the University of Nebraska Omaha, the Pilot Careers Aspiration Study, showed that, since 2013, there has been no large increase in the number of university students aspiring for a long term career as an airline pilot. The study concluded that salary, quality-of-life factors, upgrade time, and defined career paths were most influential to attract new pilots to an airline career.

Question 2a. Would you comment on the effect of these different factors on pilot supply?

Answer. People often mistake the Pilot Source Study as a pilot supply study. It is not. The population of the Pilot Source Study is pilots who have been hired by the regional airlines; the population of a pilot supply study is the pool of pilots who are eligible to be hired by the regional airlines. The aviation industry, lawmakers, and regulators urgently need a comprehensive and valid pilot supply study; otherwise, they could make decisions based on opinions rather than data. I have testified to a question from Senator Blumenthal that a pilot supply study would require funding, permission from FAA for third-party access to their records, and involvement of all stakeholders (FAA, airlines, aviation associations, ALPA, etc.). The publicly available sources for trending certificated airmen statistics present data quality concerns. The FAA's Airmen Certification Database and Annual U.S. Civil Airmen Statistics report offer limited insight into currently qualified airmen by failing to link airmen age with certificate(s) and medical class held. Additionally, thousands of certificated airmen records in the Airmen Certification Database do not list medical status at all, possibly creating an overstated number of qualified, available airmen. Having access to accurate and complete data is critical in order to capture and assess the magnitude of the pilot shortage.

From the aviation university perspective, the major deterrent for young people to obtain their pilot certificates and ratings from a top-tier aviation program accredited by AABI, is the cost of flight training. Though many students at these universities have some scholarship funding; the majority pay for their flight education with student loans, often exceeding $100,000, which they begin to pay back when they start flying for hire. This is a daunting future when these graduates face low wages as junior flight instructors. Though regional airlines have increased pay and added signing bonuses and other incentives, starting salaries at regional airlines do not offer sufficient relief from financial concerns, especially for pilots hoping to plan for young families.

Question 2b. Would you provide the Committee with enrollment numbers for Embry-Riddle's aviation program over the past 15 years to give us a better sense of these trends?

Answer. Below is a table of enrollments and graduations from the Bachelor of Aeronautical Science (BAS) program at the Embry-Riddle Aeronautical University campus in Daytona Beach, FL. I have been given permission by the Embry-Riddle Aeronautical Science Department to share these data with you. Aeronautical Science is the only AABI-accredited flight program at the Daytona Beach campus of Embry-Riddle. As you study the enrollment and graduation data; please understand that many aviation graduates are not planning to pursue employment with a U.S. regional airline; some are international students, and many U.S. students seek employment elsewhere—the military, business aviation, graduate degrees, permanent flight instructor positions, and non-flying aviation pursuits.

Daytona Beach Campus Only—Enrollments in Aeronautical Science

YEAR	*Total Enrollment (4-Years)*	
2017		1525
2016		1504
2015		1493
2014		1504
2013		1435
2012		1517
2011		1516
YEAR	*Total Enrollment (4-Years)*	
2010		1489
2009		1659
2008		1684
2007		1647
2006		1460
2005		1708
2004		1776
2003		2046

Daytona Beach Campus Only—Aeronautical Science Degrees Conferred

YEAR	*Total Graduates*	
16–17		(Partial data) 124
15–16		156
14–15		138
13–14		135
12–13		142
11–12		146
10–11		159
09–10		199
08–09		165
07–08		177
06–07		198

Question 3. Your written testimony highlights a "gap" that the FOQ rule has created between completing flight training and being eligible to be hired by a regional airline or other Part 121 carrier. Your testimony seems to imply that this gap degrades pilots' preparation to be regional airline first officers. In order to earn the additional flight hours by doing something such as flight instructing, I understand a prospective regional airline first officer is looking at a timeline of an additional 12–18 months. When compared to a profession like medicine, this gap does not seem unreasonable. Are you suggesting that the maturation and professional development accrued during these additional months are a detriment to one's career as a commercial airline pilot?

Answer. Senator Duckworth, please allow me to dispute your statement that the gap introduced by P.L. 111–216, degrades a pilot's preparation for regional airlines. The Pilot Source Study was primarily a study of the source of pilots' certificates—the first block in the figure below. This source of certificates could be the military, a flight training academy, an FAR Part 61 training program, an FAR Part 141 training program, a collegiate flight training program, or an AABI-accredited collegiate flight training program. The Pilot Source Study showed that graduates from AABI-accredited collegiate flight programs performed better in regional airline training than any other aggregation of pilots. The study also showed that the gap introduced by P.L. 111–216 reduced the effects of their degree—pilots with more than 4 years since graduation did not perform as well in regional airline training as pilots who spent a shorter amount of time building the requisite flight time. In the Pilot Source Study 2015, there were many pilots who had more than 10 years since graduation; understandably, many of these pilots needed extra training and some were unable to complete regional airline training. Therefore, the gap introduced by P.L. 111–216 and the FOQ Rule reduced some of the positive effects of pilots' educational backgrounds and total flight hours.

I like your comparison to the medical profession where doctors spend 3–7 years as interns or residents in their gap between medical school graduation and becoming a licensed doctor. These are structured, disciplined programs where doctors' practices are supervised and evaluated. We don't have a similar structure in the aviation industry. The only requirement that P.L. 111–216 and the FOQ rule inserted into the gap was an increase in the number of flight hours. There is no requirement for structured, disciplined flying experiences similar to the doctors' re-

quirements during internships and residencies. I don't think that congressional legislation or FAA regulation can solve this problem. It is up to industry to determine what kind of flying experience will increase the maturation and professional development of a pilot. The medical profession does this by the Medical Licensing Exam and specialty certification. The legal profession does this by a bar exam. Many professionals (nurses, accountants, aviation managers, etc.) are certified by public certification boards. The aviation industry is content to let flight hours be the sole qualifying factor for professional pilots. None of the three Pilot Source Studies (2010, 2012, and 2015) has shown that "HOURS," without any other qualifying factor, is a reliable predictor of performance by pilots.

Question 4. I am very concerned about the extremely low salaries offered by some of the lower-tier regional airlines. A recent IG report that surveyed five regional carriers found two of the five with starting salaries for first officers in the low $20,000/annual range and their average first officer salary below $30,000/annual. What are your thoughts on these types of salaries for a young pilot and any potential safety ramifications when it comes to pilot decisions on where and how they choose to live in relation to where they are based? Also important, what is the impact of salary ranges on pilot supply in terms of attracting young people to undertake flight training and pursue a career as a commercial pilot?

What are your thoughts on these types of salaries for a young pilot?

Answer. Senator Duckworth, I won't waste your time by repeating my previous testimony. The March 2017 letter from the Department of Transportation Inspector General (DOT IG) stated why regional airlines are unable to increase pilot pay based on the current operating model, fee-for-departure. The industry doesn't foresee a change in this operating model, so the regional airlines are engaged in self-help programs—partnerships, pay increases, bonuses, etc. The economy will have to adjust to any pilot shortage and to the upcoming wave of retirements, probably by severely reducing the number of regional airlines or by making regional airlines extinct. I do not consider reducing or eliminating an entire sector of the industry to be a tolerable solution.

Question 4a. What are your thoughts on . . . any potential safety ramifications?

Answer. This is probably the most challenging (and important) part of your question. In my visits to 22 regional airlines while collecting data for the Pilot Source Study 2015, I was encouraged by training managers who insisted that they did not compromise on their end product, a safe and competent line pilot. To achieve this outcome, these training managers were compelled to extend their training footprints and to disqualify some pilots, even after they had invested significant resources in training them. On the other hand, to fulfill operational requirements, pilot recruiters must fill classes and trainers must provide a sufficient number of safe pilots to meet operational requirements. Without these vital on-time assets, flights must be canceled and air service must be reduced. The question of potential safety ramifications deserves more attention from Congress. As I mentioned in my testimony to Senator Blumenthal's question, I urge you to obtain testimony from directors of training or flight operations at regional airlines who are truly cognizant of your principal concern—safety.

Question 4b. What is the impact of salary ranges on pilot supply in terms of attracting young people to undertake flight training and pursue a career as a commercial pilot?

Answer. I already mentioned the 2015 Pilot Careers Aspiration Study that concluded salary was the most influential to attract new pilots to an airline career. There are also many research projects that suggest that money does not appear to be a primary source of motivation in stimulating people to enter a profession, starting with Frederick Herzberg's theory nearly 50 years ago. In the short term, a substantial money increase will certainly attract more pilots to the regional airlines; however, if we want to attract more young people to undertake flight training and to pursue a career as a commercial pilot, we must make the whole experience attractive to them. This is not a matter for Congress to legislate or for the FAA to regulate; the aviation industry must wrestle with this challenge. Whether challenged to cross the Atlantic Ocean or to put a man on the moon, the Aviation/Aerospace industry has responded and achieved. I have faith that we will continue to do so with the current challenges.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. AMY KLOBUCHAR TO SPENCER DICKERSON

Question 1. As co-chair of the bipartisan Senate Tourism Caucus, I've been working on policies to boost tourism. Tourism generates about $13 billion per year and supports 250,000 jobs in Minnesota. In Duluth, Minnesota, the Airport Authority is partnering with the City's tourism agency, to attract a low cost carrier to begin service to Phoenix, Arizona. Direct flights to smaller, regional airports like this attract a steady stream of visitors, which benefit local restaurants, hotels and businesses.

Duluth International Airport is planning to apply for a Small Community Air Service Development Grant to help fund this tourism initiative. How can these types of efforts that increase demand for air travel help strengthen regional airports?

Answer. Senator, thank you for your ongoing efforts to promote tourism and for supporting programs that help small communities secure and retain commercial air service. We appreciate your leadership, your work on the Senate Commerce Committee, and all the assistance that you provide airports in Minnesota and around the country.

I commend the Duluth International Airport for partnering with the city's tourism agency in effort to attract low cost service to Phoenix. I completely agree with your assessment that commercial air service helps small communities attract tourists and businesses that promote economic development and support jobs.

Securing commercial air service in small communities is exceptionally challenging. That is why the American Association of Airport Executives strongly supports the Small Community Air Service Development and Essential Air Service programs. Both of these programs help small communities secure and retain commercial air service.

DOT officials have pointed out that small community grants fund a variety of projects including financial incentives for airlines and marketing initiatives. At a time when small airports are doing everything they can to hold on to commercial air service and attract new carriers and more routes, the Small Community Air Service Development Program can give airports a much-needed boost.

Small airports in Minnesota and throughout the country were pleased that the FAA reauthorization bill that the Senate approved last year authorized $10 million annually for the Small Community Air Service Development Program—a $5 million increase from the Fiscal Year 2016 enacted level—and $155 million annually for the Essential Air Service Program.

Airports are urging Congress to increase funding for these two programs as lawmakers resume consideration of the FAA reauthorization bill and take up the FY18 appropriations bill. Authorizing and appropriating additional funding for the Small Community Air Service Development Program would allow more airports in Minnesota and throughout the country to participate in this helpful program.

Question 2. In states like Minnesota with short construction seasons due to weather, delays in funding can postpone projects by months or even years. I've worked to address this issue by including a provision in the last FAA Reauthorization that directs the FAA to prioritize review of projects in cold weather states. Right now, because of the Continuing Resolution (CR) airports have not received the full amount of Airport Improvement Program (AIP) funds to which they are entitled. For Bemidji Regional Airport in my state, this could mean a significant delay in the completion of a new taxiway.

How do long-term funding bills improve an airport's ability to complete safety improvements or new construction projects?

Answer. Senator, thank you for helping airports in Minnesota and other states with short construction cycles. We deeply appreciate that the last FAA reauthorization bill included your proposal that requires the FAA to give priority consideration to construction projects in cold weather states. Your provision is helping airports in states like Minnesota move forward with their construction projects more quickly.

Even with that additional guidance, however, short-term FAA extensions and stop-gap continuing resolutions can adversely impact the FAA's ability to get AIP grants to airports in a timely manner. That's why we're pleased that Congress and the Administration finally finished the Fiscal Year 2017 appropriations process earlier this month. Completion of the omnibus spending bill should allow the FAA to distribute remaining Fiscal Year 2017 AIP grants.

As you know, the last FAA reauthorization bill took four-and-a-half years to complete and required 23 separate short-term extensions. Those numerous temporary measures proved incredibly disruptive to airport operators who routinely saw their AIP grants delayed because of prolonged uncertainty in Washington. Numerous fits and starts made it challenging for airports to plan and complete their infrastructure

projects. The stalled authorization process was particularly hard on smaller airports that rely on Federal funds and those in the northern part of the country that operate with short construction seasons.

Airport operators are hopeful that Congress will pass a multi-year FAA reauthorization bill before the current extension expires at the end of September. However, it Congress is unable to complete action on the multi-year bill before then, we urge lawmakers to pass a year-long extension instead. A 12-month extension would ensure that Federal funding for airport infrastructure remains on track as lawmakers continue to work on a comprehensive reauthorization bill.

RESPONSE TO WRITTEN QUESTION SUBMITTED BY HON. AMY KLOBUCHAR TO MARK BAKER

Question. The Metropolitan Airports Commission (MAC) was created by the Minnesota Legislature in 1943 to promote air transportation and commerce in a seven-county region. MAC is a public corporation that operates one of the largest airport systems in the nation, which includes Minneapolis—St. Paul International Airport (MSP) and six general aviation airports. They have used an innovative system to develop over 600 hangars at their general aviation airports. MAC leases land to individuals and corporations and they make investments in their own facilities.

Mr. Baker, I apologize that I couldn't ask you this question in person, but I had to leave the hearing for votes on the Senate floor related to the Supreme Court nominee. I understand you have had firsthand experience with MAC's hanger program, so you know how well it works. What can we do to encourage more of these private-public partnerships?

Answer. Senator Klobuchar, thank you for your question. The Metropolitan Airports Commission (MAC) was created by the Minnesota legislature in 1943 to provide a regional approach to developing and promoting safe, efficient, environmentally sound aviation services in the Minneapolis-St. Paul metropolitan area. Consistent with that role, the MAC owns and operates Minneapolis-St. Paul International Airport and six general aviation "reliever" airports in the Twin Cities metropolitan area.

One of the sound decisions made at the outset of the MAC was to develop its general aviation airports according to a true public-private partnership model. At many other airports, airport owners (typically city, township, or county governments) want to construct, own and maintain all buildings on the airport themselves, which requires significant capital expenditure and a large and ongoing maintenance budget.

In the case of the MAC, it's model provides the land, roads, airfield and other common-use infrastructure, and private entities build storage hangars and commercial enterprises on land they lease from the MAC. That way, tenants can build structures that comply with MAC standards and meet the tenant's needs.

Private owners can often build and maintain facilities cheaper than public entities can. Tenants can then recover and sometimes even make a significant profit on their investment when they are ready to sell. If they leased the buildings from the airport owner, as they do at many airports, they could not recover any of their investment in renting those buildings. All the rent paid would be a sunk investment. For its part, the MAC isn't faced with the significant capital investment and maintenance costs that it would be if it owned the buildings. And tenants can construct and make improvements to hangars without regard to the MAC's capital financing limitations. Even under the MAC model, the reality remains that tenants cannot afford to bear the full cost of developing airport infrastructure. For example, if they had to bear the full cost of bringing sewer and water services onto the airport, the cost in many cases could exceed what they paid to build their hangar at a MAC facility. There simply aren't enough tenants at most general aviation airports to pay the full cost of the facility's development, operation, and maintenance. The gap between the revenues generated by the airport and the cost of developing and maintaining the airport is generally covered through use of the immensely important Federal Airport Improvement Program grants, state airport funds or local funds (usually from city, township or county coffers, or in the MAC's case, from cash generated through operation of its airport system as a whole). For general aviation airports to be successful, they absolutely rely on those external funding sources to cover a portion of the costs of ensuring there is adequate, well maintained, and safe infrastructure in place for use by airport tenants. The MAC model helps minimize that gap and create a firm framework for meeting the goals of all involved. Ultimately, everyone benefits from the MAC model of airport operations. Private companies invest in the commission's airports, create jobs and business activity in their communities, and ultimately recover costs of their investment when they sell their

hangars or airport businesses. And the community gains from jobs and economic activity generated because of the airport's operations.

The MAC operates under a true public-private partnership model, which supports infrastructure development and improvements and tenants investing dollars in their own hangars and facilities at their airports. It is a model other airport operators would do well to emulate. It underscores the importance of public entities (airport owners and Federal and state entities providing infrastructure grant dollars) and the private aviation community coming together to create thriving airports.

AOPA would like to work with you and the Committee to develop a Public-Private Partnership General Aviation Pilot Program so that other airports across the country can take advantage of the benefits associated with attracting private sector investment and improving airport infrastructure through cooperation and collaboration.

RESPONSE TO WRITTEN QUESTIONS SUBMITTED BY HON. TAMMY DUCKWORTH TO HON. LAURIE GILL

Question 1. In terms of a suggested pilot shortage and the effect of the First Officer Qualification (FOQ) rule, am I correct in understanding that the carrier that serviced Pierre in 2013 at the outset of the FOQ rule, who blamed cancellations and delays at your airport on its inability to hire enough pilots, is no longer servicing Pierre?

Answer. Correct, Great Lakes Aviation is no longer servicing Pierre. According to Great Lakes Aviation, their crew base dropped from 300 pilots to less than 90 pilots following the FOQ rule change. Great Lakes Aviation said that many of their existing pilots were no longer qualified to fly under the new FOQ rules.

Consequently, our airport experienced a dramatic decline in flight dependability/customer service.

To maintain commercial air service in Pierre, we were forced to re-establish our Essential Air Service (EAS) designation (Great Lakes didn't utilize the EAS program for Pierre routes). Once the designation and associated subsidy was re-established, it became financially feasible to offer commercial flights in and out of Pierre.

Question 2. Am I also correct in inferring that your new carrier has not had the same problems with cancellations and delays, and therefore has been successful in fully staffing its flights?

Answer. Correct. To date, we have experienced very few crew-related delays or cancellations. Again, this was made possible by the EAS subsidy which allows ADI to utilize tenured charter pilots to operate scheduled air service flights.

Question 3. Is it possible that other factors like pilot pay, working conditions, and a company's prior history and reputation could have contributed to the first carrier's staffing issues and not the FOQ requirements?

Answer. Thank you for this question. I was honored to be a congressional appointee to the U.S. DOT Air Service Working Group. And that Working Group would certainly agree that the cause of the pilot shortage and associated current commercial airline challenges is multi-faceted.

FOQ Impact

First, based on the group's research, data does show that in 2013 dozens of small communities experienced an immediate and significant loss of air service following the FOQ rule change.

Financial Barriers

Even prior to the FOQ rule change, there was a significant financial barrier for would-be pilots. The cost of the education combined with the cost of achieving necessary training hours was, financially, very burdensome. The FOQ rule change exacerbated those financial barriers.

Additionally, the FOQ rule change, significantly altered the career path for new pilots. Under the current structure, the same number of flight hours is necessary for pilots whether they are working for a regional airline or a mainline carrier. To that end, the career path has changed, and eliminated the need for newly-qualified pilots to gain experience in smaller markets. The regional airline industry responded by increasing new hire pilot compensation by 105 percent and introduced other incentives like longevity bonuses. Those changes haven't been enough.

Supply and Demand

We have a supply and demand issue on our hands. Assuming the demand isn't going to decline, our option is to increase the supply. That's why when I testified

in front of the Congressional Subcommittee, I suggested two potential solutions to help reduce the financial barrier, and in turn, grow the pilot pool.

- Current rules see value in military experience and programming from higher education institutes. I'd ask that the FAA review the military and academic experience to consider broadening its view of what qualifies as experience worthy of credit hours.
- Additionally, given the nationwide pilot shortage, I'd encourage lawmakers to consider financial support for those studying to be pilots. Financial barriers are certainly a concern for aviation students and those who have already graduated and are working to pay back student loans.

Financial support could encourage more people to stay in the field or choose the field. It's something we already do for other high-need fields like medical professionals. Perhaps it should be considered for the aviation industry as well.