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## Subcommittee on Aviation Operations, Safety, and Security of the U.S. Senate Committee on Commerce, Science, and Transportation

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Thank you, Chairman Thune, Ranking Member Nelson, Chair Ayotte, Ranking Member Cantwell, and other members of the committee. It is my great honor to appear today before the Subcommittee on Aviation Operations, Safety, and Security.

I have dedicated my entire adult life to aviation safety. I have served as a pilot for more than 40 years, logging more than 20,000 hours of flight experience. In fact, just last month marked the 48<sup>th</sup> anniversary of my first flying lesson. I have served as an airline check airman (flight instructor) and accident investigator, and continue to serve as an aviation safety expert.

And on January 15, 2009, I was the Captain on US Airways Flight 1549, which has been called the "Miracle on the Hudson." On that flight, multiple bird strikes caused both engines to fail and, in concert with my crew, including of course our First Officer Jeffrey Skiles, I conducted an emergency landing on the Hudson River saving the lives of all 155 people aboard. And Jeff is with us today in the hearing room. Jeff, I could not have had a better colleague that day or since.

I saw the birds just 100 seconds after takeoff, about two seconds before we hit them. We were traveling at 316 feet per second, and there was not enough time or distance to maneuver a jet airliner away from them. When they struck and damaged both engines, we had just 208 seconds to do something we had never trained for, and get it right the first time.

The fact that we landed a commercial airliner on the Hudson River with no engines and no fatalities was not a miracle, however. It was the result of teamwork, skill, in-depth knowledge, and the kind of judgment that comes only from experience.

As a result of all of this, I deeply understand what is at stake in questions of aviation safety; and I am uniquely qualified to talk about what works, what doesn't, and why it is so important that we get these rules right. The traveling public, whose lives we literally hold in our hands, deserves and expects nothing less.

I appear before you today knowing that the airline industry has their lobbyists and trade associations, but the traveling public does not. I consider it my professional responsibility and my personal duty to be an advocate for the safety of all air travelers. And as you consider the FAA Reauthorization Bill, I want to say it is critical that you maintain the requirement that newly hired commercial pilots—at both major and regional airlines—have an Airline Transport Pilot (ATP) certificate and a minimum of 1,500 hours of flight experience, as Congress has mandated in Public Law. Public safety absolutely demands it.

There are some who seek to roll back this requirement. They want to weaken it by allowing more credits for some non-flying activities or hours spent in flight school simulation to be counted as a substitute for real-world experience. They also claim that this safety standard is causing a pilot shortage among regional carriers and restricting flights to smaller cities.

They could not be more wrong. There are no shortcuts to experience. There is no shortcut to safety. The standards are the standards because they are necessary.

There are some in the industry who look upon safety improvements as a burden and a cost when they should be looking at them as the only way to keep their promise to do the very best they can to keep their passengers safe.

As airline professionals, aviation regulators, and legislators, we must have the integrity and courage to reject the merely expedient and the barely adequate as not good enough. We must not allow profit motives to undermine our clear obligation to do what is right to ensure public safety. And I assure you that public safety demands that every newly hired pilot have a minimum of 1,500 hours of flying experience before they are entrusted with protecting the lives of the traveling public.

I have seen first-hand the real costs—the human costs—of having inadequate levels of safety. These are costs that no family should ever have to bear. And no one knows this better than the families here with us today. These are some of the families of the victims of Continental Connection/Colgan Air Flight 3407, a regional flight from Newark, NJ, which crashed on approach to Buffalo, NY, on February 12, 2009, killing all 49 people onboard and one person on the ground.

It was a terrible tragedy that resulted from the performance of the crew and safety deficiencies. But even more concerning, the federal investigation into this crash revealed that these safety deficiencies reflected a systemic problem among some regional carriers that lacked the robust safety systems of major airlines.

This investigation confirmed what many of us know: that we have a two-class system in the airline industry. Major airlines reflect the gold-standard in best practices, training, and safety management programs while some regional airlines, in a race to the bottom that they seem to be winning, take shortcuts to save money wherever they can, often potentially negatively impacting safety.

Early this year, my wife, Lorrie, and I visited the site of the crash in Buffalo and met with the families of the victims, many of whom—in the wake of these findings, went to Capitol Hill, to advocate for improved safety measures. Knocking on doors at major federal agencies and meeting with hundreds of people, including President Obama, their goal was to strengthen safety rules on behalf of all members of the traveling public because they didn't want anyone else to ever again pay the terrible price they did for lapses in regional airline safety. Against insurmountable odds, they succeeded—inspiring an overwhelming number of the 111<sup>th</sup> Congress to pass the Airline Safety and Federal Aviation Administration Extension Act of 2010. Every member of the flying public owes them a debt of gratitude. We also owe you, the members of Congress, our thanks for getting this right.

One of the most important elements of this Act was the establishment of the 1,500-hour standard for airline pilots. Yet just two years since this safety standard went

into effect, airline lobbyists are trying to weaken the provision because they consider it a burden or cost.

With the immediacy of that 2009 tragedy having passed, they also are appealing to new members of Congress and staffers who may not remember the Buffalo crash. Putting self-interest over public safety, they are trying to gain your support in rolling back the essential progress that has been made for airline safety.

Some lobbyists would like you to significantly roll back the 1,500-hour minimum. Short of that, they want the FAA to allow simulator and academic training hours to count toward meeting the 1,500-hour minimum. They see this as an easier, more convenient, less expensive path to getting young pilots into regional airline cockpits.

But there are no shortcuts to experience. There is no shortcut to safety. The standards are the standards because they are necessary.

Throughout the entire 112-year history of powered flight, one thing has been true. The most important safety device in any airliner is a well-trained, experienced pilot. That is even more true today, especially as we transition from my generation of pilots to the next. We must make sure that each generation of pilots has the same well learned, deeply internalized fundamental flying skills, the in-depth knowledge, experience, and judgment. And that is why pilot preparation, qualifications, screening, training—and experience are so important.

On behalf of traveling Americans, I want to thank you for the Airline Safety and Federal Aviation Administration Extension Act of 2010. You got it right, and I urge you and all members of this committee to continue to uphold these essential safety standards now and reject the claims of those who would urge you to put profits over the safety of

the American people. We must all behave as if the victims of the Continental Connection/Colgan Air Flight 3407 crash are watching and judging our integrity and courage this very moment—as their families are.

I now want to more specifically address the arguments that some have made for undercutting these essential safety regulations—and why each one is wrong, dead wrong.

First, lobbyists are seeking to roll back the experience requirement that Congress wisely mandated in 2010 to protect the safety of the traveling public. This is preposterous.

Let me tell you why we cannot have pilots with less than the required experience flying passengers. Pilots with less than the required experience may only have seen one cycle of the seasons of the year as a pilot —one season of thunderstorms, one winter of ice and snow. He or she may never have had a plane de-iced before, may never have landed with a gusty crosswind exceeding 30 knots, and may never have had to land on a rainy night when the glare off a wet surface makes it difficult to tell exactly where you are. And if they received all their flight training in a warm dry climate, they may never even have flown in a cloud before! I would not want my family members in a plane operated by someone with as little experience as that, and I don't think you would either.

Some of these lobbyists go on to say there is nothing magical about the 1,500hour standard because, to earn the hours, pilots waste their time, merely drag banners by the beach. This is a catchy sound bite but it is a big lie. In the whole country, perhaps a few hundred pilots fly banners; it is a miniscule percentage of the commercial aviation industry. There are, and always have been, good and valuable pathways to develop the

experience required to fly a commercial airliner under a variety of conditions, such as flight instruction, charter and cargo operation, and corporate flying.

Those who argue to reduce the flight hours required of newly hired pilots also imply that First Officers do not need to have the same level of competence as the Captain. But it has been 80 years since the airline industry has had apprentices in the right seat of airliners. For all that time, we have had qualified pilots in both seats, and we absolutely must continue to do so. The safety systems that the industry has developed and implemented over the last twenty years are based on the assumption of two fully trained, capable and experienced pilots in the cockpit, with each pilot able to be the absolute master of the aircraft in every possible situation at every moment. The value of these practices cannot be questioned. The last fatal accident of a U. S. carrier fully adopting these practices was in November 2001. We have had fourteen years of perfect safety from major carriers employing two fully trained and most importantly, experienced, pilots. The intent of the 2010 safety language was to raise the level of safety in the regional airline industry by requiring the adoption of proven safety systems. Raising the basic requirement for pilot experience was central to this effort.

I can tell you that US Airways Flight 1549 would have had a very different ending had my First Officer Jeff Skiles been a less experienced pilot. Like me, Jeff had more than 20,000 hours of flying experience when we lost the engines on that flight. His extensive experience is what enabled him to intuitively know what he needed to do in that emergency, when the work load and time pressure were so extreme that we did not have time to talk about what had just happened and what we needed to do about it, or for me to direct his every action. If he were a relatively inexperienced pilot, we could not

have had the same outcome and people likely would have died. Experience is what made the difference between death for some and life for all.

Recent events have also made tragically clear why it is so important that newly hired pilots have a minimum of 1,500 hours of flying experience. The First Officer on the Germanwings flight that crashed in the Alps last month had only about 600 hours of flying time. Under existing standards, he would not have qualified as an Air Carrier pilot in the United States and would not have been in a position to accomplish his dark and heinous act. By requiring more experience there is an opportunity to evaluate a prospective candidate over time and in many cases among several employers.

The point is this: Any reduction in today's standard reduces the time a pilot can be observed as a competent, reliable, and trustworthy person before being entrusted with the controls of a commercial airliner full of passengers. With a 1,500-hour standard, employers are able to know more about new pilots, able to have more people screening and observing them over a longer period of time, and able to make a more informed decision about whether they have proven themselves worthy of the public's trust.

When I served as a check airman (an instructor responsible for evaluating pilots) sometimes their performance would be just at the threshold of acceptable. In those cases, I would ask myself this question: When he or she is in the 14<sup>th</sup> hour of his or her duty day, flying at night in bad weather into an airport he or she has never seen before, would I want my family on that airplane? If the answer was yes, then he or she met the standard. If the answer was no, he or she did not. Those are the kinds of judgments that can only be made when there is adequate time to observe someone in an operational environment.

And that is the kind of judgment that Congress made in mandating the ATP with 1500 hours.

A second tactic lobbyists are using to try to weaken the standard is by suggesting that more non-flying training count toward the 1,500 hours in place of actual flying experience. Here's what's wrong with this line of thinking: Training experiences are highly scripted, highly supervised, and sterile environments where you know what is coming. Real world experiences are not. They are messy and ambiguous and you don't have anyone holding your hand every step of the way. To propose that training situations are a substitute for real world experience is like saying that studying driving in a classroom is the same as having driven on a busy highway in inclement weather. There is just no substitute for real world experience.

Third, lobbyists who want to weaken today's safety standards say that they are creating a pilot shortage because regional carriers cannot find enough qualified applicants. They also say that the 1,500-hour requirement is threatening air service to small communities and imposing an economic hardship. The implication is that you should reduce the safety requirement so that they can hire less qualified applicants.

This flies in the face of logic. Would we allow some airlines to buy jet fuel that is below specification because it was too inconvenient or costly to buy jet fuel that fully met all the critical safety standards? Would we allow some airlines to underinsure because they didn't want to pay so much for insurance? If there were not enough doctors to serve rural areas, would we advocate a two-year medical degree? Why would we ever allow less qualified pilots to serve small communities? Are the lives of those from rural areas worth less than passengers in large cities?

People traveling to small communities deserve to be no less safe than people traveling to large cities. They must not be forced to entrust their lives to less experienced pilots, or airlines that make smaller investments in training or safety management programs than those serving metropolitan areas.

What is really going on is this: There is not a pilot shortage, but there is a shortage of pilots willing to enter, or continue employment in, the airline industry under the current economic model. The standard for entry to the airline cockpit is rightly a high bar and requires significant personal and financial investment to achieve the standards necessary to serve and protect the safety of the traveling public. Currently the rewards of an airline career don't match the investment required. This in turn makes other careers in and outside of aviation—more attractive, exacerbating airline pilot recruitment.

Worse yet, this untenable economic model turns away the best and brightest at the door when they are first considering a career in aviation. Like doctors, pilots make a significant financial investment in their education and training, in some cases upwards of \$200,000; and like doctors, they should see a career path worthy of that investment.

A doctors, however, only hold one life in their hands at any given moment. As the tragedy of the Germanwings accident shows, pilots hold the responsibility for many more. Passengers entrust their lives to pilots. Why would they not expect the same training and professional experience from their pilot as they would from their surgeon? The First Officer of the ill-fated Continental Connection/Colgan Air Flight 3407 earned \$16,400 a year before taxes, clearly an unbelievably low salary for someone who literally holds the lives of their passengers in their hands.

Traditionally an airline career has attracted applicants with experience well in excess of even today's minimum required hours. In fact, pilots applying for a job with a commercial airline would typically have had several thousand hours of flight experience. Only recently have some regional carriers lowered their experience requirements to meet the dictates of an unsustainable economic model. As Gordon Bethune, former CEO of Continental Airlines said, "You can make a pizza so cheap, nobody will eat it. You can make an airline so cheap, nobody will fly it."

Since the regional airline industry has insisted on trying to use this broken economic model, they have created their own problems. We must not lower the required standards to enable them to continue to do so.

It is not in anyone's best interest—not regional airlines, not major airlines, and certainly not the traveling public—to have the aviation industry lower commonsense safety requirements to meet an unsupportable business model.

Regional carriers often compete on the basis of cost to be the affiliate of major airlines. Let me tell you what that means to you as a passenger: It means you are flying on the lowest bidder. Would you want your surgeon to be the lowest bidder? But there is no shortcut to safety. That is what FAA minimums have been designed to ensure. And since many operators have lowered their standards to the FAA minimum, we must make sure that those minimum standards are genuinely adequate to protect our passengers.

Quality vs. quantity is a false dichotomy. When it comes to airline safety, we need not and must not choose between quality and quantity, because we can and must have both. There are existing methods for pilots to get the requisite experience. There always have been. And since the 1,500-hour standard has been put in effect, flight schools,

regional airlines and major airlines have been working together to create a true career path that benefits the industry and most importantly, the traveling public. This is being accomplished by creating partnerships between aviation training academies and regional carriers such as the career program at the aptly named ATP Flight School where a beginning pilot is interviewed and provisionally hired by a regional carrier early in their career. Once an airline makes an offer of employment the pilot continues on at the flight school as a flight instructor building time and experience while training the next generation of pilots to enter the field. The regional carrier even contributes financially to the pilot's education, and most importantly, the prospective airline pilot can be observed, evaluated, and nurtured while they attain the required flight time necessary for a restricted ATP.

The second piece of the pathway is Flow Through agreements between regional carriers and major airlines allowing pilots from the regional to matriculate upwards to a major airline cockpit. Today a person considering a career in aviation can see a defined path forward worthy of the necessary personal and financial investment.

The industry has created these healthy pathways—not in spite of the 1,500-hour standard--but because of it. It allows airlines the time to make good judgments regarding the skills and temperament of a pilot that are good for both pilots' career and for the safety of the traveling public.

Finally, as aviation has become safer, some people seem to think that being a pilot has become an easier job, requiring less skill, knowledge, training, experience, and judgment. Nothing could be further from the truth.

In spite of how commonplace air travel is today, we must never forget that what we are actually doing is pushing a tube filled with people through the upper atmosphere, seven or eight miles above the earth, traveling at 80% of the speed of sound, in a hostile environment with outside air pressure one-quarter that on the ground, and outside temperatures to 70 degrees below zero; and we must return it safely to the surface every time.

Professional pilots make it look easy but it's not. It's hard. If it were easy, anyone, everyone could do it. And that is just not the case. It takes deeply internalized welllearned fundamental skills, in-depth knowledge, and the kind of judgment that comes only from experience.

When pilots enter this noble profession that I consider a calling, they make a tacit promise to all their future passengers that they will keep them safe. And every airline executive, every aviation regulator, every legislator who oversees aviation should feel the same obligation and keep that same promise.

Honoring that promise requires us to acknowledge that there are no shortcuts to experience. There is no shortcut to safety. The standards are the standards because they are necessary. And, the traveling public deserves and expects one level of safety: not one level for major airlines, and another for regional airlines.

I urge you to stand with me in showing the right judgment by upholding the 1,500-hour standard for the safety of all Americans.

Thank you.