



TESTIMONY OF

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BEFORE THE

**HOUSE COMMITTEE ON TRANSPORTATION AND INFRASTRUCTURE, SUBCOMMITTEE ON
AVIATION**

REGARDING

**THE FEDERAL AVIATION ADMINISTRATION (FAA) REAUTHORIZATION:
OPTIONS FOR FAA AIR TRAFFIC CONTROL REFORM**

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INTRODUCTION:

Chairman LoBiondo, Ranking Member Larsen, Members of the Subcommittee, thank you for inviting me to testify before you today on reauthorization of the Federal Aviation Administration (FAA), and specifically on the Options for Air Traffic Control Reform.

The National Air Traffic Controllers Association (NATCA) is the exclusive representative of nearly 20,000 aviation safety professionals, including more than 14,000 air traffic controllers serving the FAA, the Department of Defense (DOD), and the private sector. In addition, NATCA represents FAA's Alaska flight service specialists, engineers and architects, traffic management coordinators, Notice to Airmen (NOTAM) service, flight procedures specialists, aircraft certification professionals, agency operational support staff, aviation technical systems specialists, automation specialists, drug abatement employees, airports division, regional counsels, and personnel from FAA's logistics, budget, finance, acquisitions, and information technology divisions.

Air traffic controllers and other aviation safety professionals are dedicated to ensuring that our National Airspace System (NAS) is the safest and most efficient in the world. More than 70,000 flights and over two million passengers are handled daily by air traffic controllers in the busiest and most complex airspace in the world, with roughly 5,000 planes in the sky at any given moment. Domestic airlines served an estimated 756.3 million passengers in 2014. In order to maintain that safety and efficiency, the aviation safety professionals work to improve safety procedures, modernize the NAS, and promote new technology. We have professional controllers involved in nearly every modernization and Next Generation Air Transportation System (NextGen)-related program on which the FAA is currently working.

The NAS is an integral part of our national infrastructure and an essential driver of our economy. Every day millions of individuals and businesses in the U.S. economy rely on the services provided by a complex web of aviation routes. Aviation drives nearly 12 million jobs that contribute \$1.5 trillion to the nation's gross domestic product.

For years the FAA has been faced with unstable, unpredictable funding where interruptions in the funding stream have negatively affected all aspects of the FAA. The Agency has had to spread its resources thinly between fully staffing a 24/7 operation, as well as the modernization and daily maintenance required to sustain an aging infrastructure. When sequestration cuts were implemented, the situation became even worse. The FAA was forced to furlough its employees, including air traffic controllers, consider closing Federal and Contract towers curtailing air traffic services at smaller markets, place preventative maintenance on hold, and cut other services. The cuts also prevented the FAA from hiring new trainees to replace those certified controllers who retire, thus adding stress to an already understaffed workforce – the FAA Academy was shuttered for nearly a full year due to the sequestration cuts and the government shutdown. Sequestration cuts did not affect the FAA's budget for fiscal years (FY) 2014-15, but the cuts will return in FY 2016. This follows a five-year period of 23 authorization extensions for the FAA that included a partial shutdown of the FAA only then to have a full government shutdown on the heels of trying to recover from the impact of the 2013 sequester cuts.

NATCA believes that the upcoming FAA Reauthorization bill must address the lack of a predictable, stable funding stream for what is a continuous operational system focused on safety. We understand that addressing the stop-and-go funding problems may lead to an examination of potential structural changes

for the FAA. Any such structural change must be carefully examined to prevent unintended consequences from negatively affecting other aspects of the system. NATCA's priority is to ensure that we continue to safeguard the world's best air traffic control system during any transition, and that any potential change addresses the funding issue.

We must be precise in addressing the current problems, and we must also work together to find solutions that create a predictable funding stream while maintaining the safety and efficiency of the system. NATCA looks forward to working with Congress and other stakeholders to determine a solution that protects air traffic control and secures it for future growth. Before we can support any change, we must carefully examine all of the specifics. Details matter in this process. No system is like the United States' National Airspace System and no model used elsewhere in the world is perfect, much less perfect for a system as large, complicated, and diverse as ours. Any new model must be mission driven and must ensure continued robust aviation sector growth throughout every segment of our industry and throughout the entire country. We must protect and strengthen our great national asset that is the air traffic control system.

EXISTING PROBLEMS AT THE FAA:

The lack of stable, predictable funding has led to serious problems at the FAA. We have all seen these issues, which have been especially serious over the last four years. We believe that problems for FAA are not caused by the failure of Congressional appropriators to provide proper funding to the system, rather they result from a process where funding is affected by short-term funding bills, government shutdowns, partial FAA shutdowns, threatened government-wide and FAA specific shutdowns, sequestration, and 23 authorization extensions to name a few. Outlined below are the negative impacts on the NAS as a result of this unpredictable and unstable funding.

FAA operations and redundancy: The lack of stable, predictable funding means that the FAA has had to prioritize maintenance and basic repairs to ensure basic operations over maintaining safety redundancies and improvements in the system. This is a slippery slope because, when under stress, the existing system cannot maintain its safety and efficiency without such redundancies and continual improvements. The 2013 government shutdown forced the FAA to halt important maintenance, and low priority was given to preventative maintenance. Additionally, FAA working groups were unable to meet or travel during the shutdown, delaying implementation of new airspace and safety procedures.

In the spring of 2013, the FAA made sequester cuts by delaying non-critical repairs and the requisition of new replacement parts. The FAA designated a list of 56 airports and critical facilities. Any facility not on the list was subjected to a very strict requisition standard – a requisition would be granted only in extremely critical situations with a high potential to negatively affect safety or disrupt the expeditious flow of air traffic, have a high public visibility, or have the potential for creating a real and present danger to the flying public. An aircraft being grounded or a facility being off-the-air without communications ability was not a sufficient justification.

Staffing: The system has lost close to 1,000 air traffic controllers (6.2 percent of the workforce) between May 2013 and today, down from 14,793 to 13,882. That loss exacerbates an already tenuous staffing situation, in which 2,240 of 13,882 controllers are eligible to retire today. Of the 13,882 total controllers, 1,688 are still in training meaning they have varying levels of independence controlling traffic. If the current situation continues unchecked, the NAS will see an increased number of inadequately staffed and even critically staffed facilities. Such facilities require controllers to work overtime simply to provide adequate coverage of all needed positions and unfortunately in some cases do not have the staffing, even

with overtime, to open positions that need to be opened and staffed. Any further staffing reduction can have a detrimental and immediate effect on capacity, meaning fewer planes in the sky and greater potential for delays. Unfortunately, facilities that provide services in some of the busiest and most complex airspaces are already inadequately or critically staffed.

For example, New York TRACON (N90) and Chicago TRACON (C90) present a unique problem. Academy graduates rarely, if ever, achieve full certification at these facilities due to the complexity of their respective airspace. As of March 1, 2015, N90 had 146 Certified Professional Controllers (CPCs), compared to 160 in 2010. Today, 52 are eligible to retire, meaning roughly 36 percent of N90's fully trained controllers could leave at any time. N90 has five airspace areas and as of March 1, 2015, 17 of the 36 CPCs (or 47 percent) who provide radar approach control services for Newark Airport, are eligible to retire. If all 17 were to retire before anyone is trained to replace them, it would not be possible to safely maintain the same number of operations per day.

Due to the critical staffing levels, the controllers work six-day workweeks and are often held over for additional overtime. Extended workdays and workweeks lead to significant fatigue problems for the workforce, one of the highest priority safety concerns identified by the National Transportation Safety Board (NTSB). Understaffing also hinders facilities throughout the country from deploying NextGen programs, procedures, and equipment.

Hiring and training: Sequestration forced the FAA to cut its Operations budget, which resulted in furloughs for all FAA employees. Those cuts also led the FAA to institute a hiring freeze between March 2013 and December 2013. With the FAA training Academy in Oklahoma City closed for most of 2013 as a result of sequestration, we are only now seeing a resumption in hiring to replace retiring controllers. The FAA still cannot keep up with the pace of attrition. Due to the lost year, even maximum hiring in 2015 and 2016 will not make up for the attrition seen in 2013 through 2016 and will not adequately staff our facilities in the near term without a higher priority placed on training, and placement/transfer processes. There is an estimated 25 percent failure rate at the Academy and additional failures once these trainees are assigned to their facilities. Moreover, the Academy graduates that are successful in becoming fully certified air traffic controllers take two to four years to progress through the on-the-job-training requirements. The combined effects of these constraints result in a shortage of fully certified air traffic controllers and negatively affects the FAA's ability to train new hires, develop and implement modernized technology, and efficiently control traffic.

Once new hires graduate from the FAA Academy, another challenge comes in the form of the FAA's flawed and inefficient placement and transfer process of employees. Many facilities are in desperate need of qualified transfers, and many employees want to transfer to higher-level facilities that need additional staffing. Instead, historically the FAA has placed air traffic control trainees from the Academy to higher-level facilities, which typically have a higher attrition rate than the nationwide average of 25 percent for trainees. This works against the FAA's efforts to efficiently hire, train and retain new controllers.

Modernization delays: En Route Automation Modernization (ERAM) is set to be completed at the final two FAA facilities by the end of this month. Terminal Automation Modernization and Replacement (TAMR) and Standard Terminal Automation Replacement System (STARS) equipment were successfully implemented at multiple facilities throughout the country in 2014 (21 facilities are scheduled for installations in 2015, and 90 facilities through 2018).

Last year, 61 new procedures were implemented in the Houston area and 77 were successfully implemented in North Texas as part of the growing Optimization of Airspace and Procedures in the

Metroplex (OAPM) project. The System Wide Information Management (SWIM) Visualization Tool (SVT) is a new product that was installed last year at Southern California TRACON (SCT). It provides Surface Situational Awareness to controllers, traffic managers, and frontline managers and allows them access to surface data that was previously unavailable outside of a tower cab.

Wake Re-categorization (RECAT) has been successfully implemented in Atlanta, Louisville, Cincinnati, Houston, Memphis, and most recently at New York-Kennedy, New York-LaGuardia, Newark, Teterboro, with plans for imminent implementation of the procedures at Charlotte-Douglas, Chicago O'Hare, Midway and San Francisco. Wake RECAT has increased efficiency of flights, while maintaining the same high standard of safety the users of the NAS enjoy today. Specifically in Memphis, FAA data cites that FedEx boosted its capacity by 20 percent after controllers started using Wake RECAT in November 2012. The airline burns 4.17 million gallons less fuel each year and emits 39,992 fewer metric tons of CO₂. FAA cites this as the equivalent of taking 8,421 cars off the road or the energy used by 3,650 homes per year. In Atlanta, the benefits are also clear: Delta reports two minutes of taxi time reduction per aircraft, and credits RECAT in providing the airline with a higher degree of predictability, which allows for more accurate scheduling.

These are just a few of many examples demonstrating that NextGen is having a beneficial impact on air travel in our nation, yet we cannot overlook the difficulties that interruptions in the funding stream have created for these modernization projects. Lack of a stable funding stream makes planning for multi-year projects almost impossible. As a result, we have seen significant delays and inefficiencies in modernization. For example, ERAM, which was scheduled to fully replace the old system in August 2014 at 20 FAA Air Route Traffic Control Centers nationwide, was pushed back to March 2015 due to the April 2013 furloughs. That delay cost more than \$42 million. Likewise, the sequester furloughs and government shutdown significantly slowed the progress that was being made at nine test sites across the country for the OAPM project. The Houston test site was due to begin final implementation in December 2013. Implementation, and any associated benefit, was delayed until May 2014 due to the April 2013 furloughs.

To be clear, the FAA is making progress on NextGen, and has successfully reached significant milestones, but the funding component needs to be addressed with the utmost urgency. The NAS is a 24/7 operation, and the FAA's aviation safety professionals must continue to run that system while simultaneously working on research, development, testing, and the implementation of technology modernization.

Potential tower closures, reduced hours of operation, and loss of towers: Funding shortages threaten services to rural and small communities that benefit from the business that air service brings. When sequestration cuts were initially announced, the FAA was prepared to close towers and even released a list of towers under consideration for closure. Ultimately tower closures were avoided, but they could again become a necessity. Service could become unavailable for general aviation, military exercises and flight schools at these airports, and we would see a reduction in services for airlines, commercial interests and private pilots who rely on towers at smaller airports and for secondary services like pilot training.

Another consequence of continued sequestration cuts could be closure of more than 100 of the Federal Contract Towers (FCT) throughout the country. This would affect general aviation and rural communities that depend on the services provided. Workload would increase dramatically for the FAA facilities that would have to take over the services of the FCTs just as those FAA facilities will be facing reduced staffing due to sequestration cuts resulting in furloughs. Contract towers also provide crucial support to

our nation's military and private enterprises. For example, the tower at Lone Star Executive Airport in Texas is home to one of only two Apache helicopter maintenance units in the country.

Physical infrastructure: The FAA cannot keep up with replacing outdated infrastructure and technology at current budget levels. The average age of facilities in the NAS is 50 years, and the FAA has testified that it struggles with the maintenance of existing infrastructure. The FAA recognizes that we cannot expect all aging infrastructure to be replaced, because most facilities were built at the same time, and the FAA's ability to invest in new towers and radar facilities faces increasing pressure.

The 2013 government shutdown disrupted the maintenance of NAS infrastructure, at which point many projects were delayed due to the furlough of FAA employees, including engineers, architects, and aircraft certification and airport division employees. Safety-related equipment modifications to aircraft, as well as engineering and testing services were also threatened, all of which negatively affect maintenance to infrastructure as well as the FAA's modernization efforts. With 70 percent of the technical workforce furloughed, projects at some of the nation's busiest airports were delayed.

One current example of the aging infrastructure is the air traffic control tower at Tampa International Airport (TPA). At a recent House Appropriations hearing in the Transportation, Housing, and Urban Development (THUD) Subcommittee, Representative Jolly of Florida highlighted the current condition of NAS facilities across the country. The Congressman noted that TPA is about to "fall over the cliff" in terms of its expected life span. New modernization equipment is unable to fit into the aging tower as its condition drastically declines. This creates obvious challenges for the FAA, as it must choose between the pressure to modernize and the immediate need to fix facilities such as TPA.

BROAD CORE PRINCIPLES:

NATCA believes a discussion on any type of reform must take place in a well-reasoned and rational manner, without rushing into any structural changes. We agree that the current funding situation is unacceptable and we would like to explore alternative models that could address these problems. Any reform must ultimately ensure the following:

1. Safety and efficiency remain the mission;
2. Stable, predictable funding to adequately support air traffic control services, staffing, hiring and training, long-term modernization projects, preventative maintenance, and ongoing modernization to the physical infrastructure;
3. Robust and continued growth in the aviation system; and,
4. A dynamic aviation system that continues to provide services to all segments of the aviation community, from commercial passenger carriers and cargo haulers, to business jets, to general aviation, from the major airports to those in rural America.

NATCA believes that it is critical that the specifics of any reform are vetted among all of the stakeholders. NATCA cannot commit to any concepts in a vacuum. Not only do the principles need to be sufficient to meet the needs of the NAS, but so do the details of any overhaul, regardless of how significant. We cannot afford a mistake that upsets this critical engine of economic growth. There cannot be a disruption in services during a transition. Given the National Airspace System's 24/7 activities, any transition, no matter how small, must be seamless. NATCA will support nothing less.

PROPOSED MODELS BEING DISCUSSED IN PUBLIC DOMAIN:

As NATCA, other industry stakeholders, and this Committee have observed over the years, funding challenges have become the norm. Year-to-year the FAA has experienced continuous challenges and faced significant problems because of a lack of a predictable funding stream. As a result, stakeholders, think tanks, and others have been looking at alternative funding and structural models that could address these funding problems. Here are some of those alternatives followed by a brief description. A discussion follows regarding their advantages and disadvantages.

- **Status Quo Model:** In this model, the FAA would remain as-is with the same funding and structure. Governance would remain within the U.S. Department of Transportation (DOT).
- **Enhanced Status Quo Model:** In this model, governance would remain within the U.S. Department of Transportation (DOT) but changes would be needed to address the manner in which the FAA is funded without changing it structurally.
- **Government Corporation or Independent Agency:** This model would pull out the entire FAA, or parts of the FAA, and create a government corporation or independent agency. The government corporation model would require a Governing Board that includes stakeholders and government officials. This model would leave air traffic control functions within the government, but would remove them from the DOT.
- **Not-For-Profit Private Model:** This model would require a Governing Board with stakeholders and government officials. An example of this would be NavCanada whose Board has three Directors elected by the Government of Canada. In this model, safety oversight and regulatory functions would remain within the FAA.

FINDINGS & ANALYSIS:

Below are some key points on the potential structural models that have been discussed for the FAA, and the effects these changes would have on air traffic control. NATCA cannot endorse a particular system without knowing all of the details and ensuring a seamless transition.

Status Quo Model

Simply restructuring the FAA should not be an option because it does not solve the funding problems. The FAA has been restructured numerous times, and with each restructuring we see increased bureaucracy. Restructuring has created more overhead and non-operations jobs that increase the time to get results. One example of this is in the procurement model. The FAA is exempt from the normal government procurement process, but has developed its own bureaucratic process that mirrors the rest of government. Unfortunately, this process is inappropriately slow and complicated for a system that needs new technology as quickly as possible.

Enhanced Status Quo Model

For this model to succeed the FAA must have multi-year appropriations and long-term authorization, budget flexibility, mandatory funding for FAA employees, and no disruptions to operations, other safety related services, and modernization efforts.

Government Corporation/Independent Agency Model

There is no profit motive in this model, and the national interest would be preserved without risk. This model could be funded in a manner similar to the Aviation Trust Fund. This would fund a system that supports operations, training, and modernization, with the benefit of a leaner bureaucracy and fewer obstacles to implement changes.

A significant benefit of this model is the potential for an alternative funding process, meaning that politics would be less likely to interfere with the safety and efficiency of operations. Several additional routes could be utilized to generate revenue, such as raising funds through public-private partnerships that use lease-backs of facilities. Consolidation and realignment, when properly designed, can be used to save money and update technology more efficiently without compromising the safety of the system. This model could also encourage innovation from within the organization, as has happened in other non-profit Air Navigation Service Providers (ANSPs).

One concern is that a different funding model could be a deterrent to General Aviation (GA), which is sensitive to changes in services and generally uses facilities that have lower traffic volume.

Not-for-Profit Private Model

The positive aspects of this model include it being a single focused mission, allowing for greater flexibility for technology development, less bureaucratic than the current FAA, and allowing for a more streamlined procurement process.

The cons include requiring a long transition period to create a private model. This model is also very difficult to apply to the U.S. NAS because our system is so diverse and complex.

This model also poses risks regarding the protection of the greater good. A private model must still be cost-conscious and may be forced to diminish services to rural areas because they do not offer high returns. Routes and towers could be eliminated because operating at a loss in certain areas creates a risk of bankruptcy. This would only be a problem for a model completely separate from the government; any model that is maintained within the government can be insulated from these types of concerns.

The NAS is a national asset that benefits even those who do not fly, and is essential to communities that rely on air traffic services. There is a national interest in maintaining aviation growth, and not only in those areas where profits can be made.

NATCA absolutely opposes any model that derives profit from air traffic control services. We cannot support a model that allows the operations to become a driver for profit. There are several reasons why air traffic control services should not become profit-driven. First, it could lead to compromising necessary operational redundancies to increase profit margins. Corners could be cut to save costs, which could ultimately compromise safety. A profit-driven private system, like a not-for-profit private system, might cut services to rural communities because of the lack of returns for shareholders. A profit-driven system might also be an impediment for our General Aviation (GA) sector, which is very sensitive to changes in services or increased costs.

In addition to the dangers of creating a profit motive, a for-profit model would be logistically difficult to create. There would inevitably be a lengthy transition period to turn the current FAA in to a for-profit entity, and the transfer of assets would be a complicated process as well.

Other Air Navigation Services Providers

As this discussion has progressed, many stakeholders have sought to examine how other ANSPs are structured, and how well they deliver air traffic control services. There has been significant discussion on the NavCanada model. While there may be benefits to the Canadian model, NATCA is uncertain if that model is scalable to the size, complexity, and diversity of our airspace.

- **NavCanada in Canada:** This privately owned, not-for-profit company established in 1996 works to control the operations of the air traffic control system. Its revenue source is user fees. The advantage of this system is its single-focused mission that prioritizes efficiency. The disadvantages were in its difficult and lengthy transition period. It may also be difficult to apply that model to one as diverse and complex as ours. For example, the United States controls 132 million flights annually (2012), compared to 12 million in Canada in an area a fraction of the size of the United States' NAS. The United States has 21 centers, compared to seven in Canada, and 315 towers compared to 42. According to Airport Council International's Top 30 Busiest Airports in the world (based on aircraft movements) the U.S. currently has 8 of the Top 10 busiest airports in the world, and 16 of the Top 30. Canada has one (1) – Toronto, which comes in at number 15.
- **NATS in the UK:** This private, for-profit corporation works with the government to create a public-private partnership. However, the profit motive remains. A December 2014 large-scale failure caused delays and cancellations. Some have attributed that incident to the cost-cutting efforts that have delayed upgrades. In addition, in the fall of 2014, NATS lost a bid to provide air traffic services for Gatwick Airport in the UK. Instead, the airport agreed to contract air traffic services to the German ANSP (described below).
- **Deutsche Flugsicherung in Germany:** In Germany, the government now has control of air traffic functions, which were transferred to a state-owned corporation, called Deutsche Flugsicherung (DFS), in 1993. The system is funded through user fees, which are sufficient enough to continue with modernization efforts. Likewise, it has seen improved productivity and operational efficiency through investments in facilities and equipment. At the time, Germany's federal budget constrained efforts to modernize the air traffic control infrastructure. According to a 2005 GAO study of ANSPs, Germany saw improved safety after its transition, although the report acknowledged that safety could not be adequately measured or forecasted at the time.

CONCLUSION:

NATCA appreciates the opportunity to be part of this discussion. Many in Congress, as well as many key stakeholders, including the FAA, agree that interruptions to the funding stream is detrimental to the operations of the NAS and something must be done to ensure the continuity of funding. NATCA believes the U.S. must have a mission-driven model. We cannot lose sight of the fact that any new model will need to continue running the safest, most efficient, most diverse and most complex airspace in the world. Safety and efficiency are our first priorities and any proposed changes cannot jeopardize these priorities. The United States leads the world in aviation and we must continue to do so.

NATCA appreciates the opportunity to appear before the Committee and participate in this dialogue.