National Air Traffic Controllers Association
AFL-CIO

TESTIMONY OF

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BEFORE THE

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REGARDING

FEDERAL AVIATION ADMINISTRATION (FAA) REAUTHORIZATION: AIR TRAFFIC CONTROL MODERNIZATION AND REFORM

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INTRODUCTION:

Chairman Thune, Senator Nelson, members of the Committee, thank you for inviting me to testify before you today on the reauthorization of the Federal Aviation Administration (FAA).

The National Air Traffic Controllers Association (NATCA) is the exclusive representative of nearly 20,000 aviation safety professionals, including nearly 14,000 air traffic controllers employed by the FAA, the Department of Defense (DOD), and the private sector in the FAA's Federal Contract Tower program. In addition, NATCA represents FAA's Alaska flight service station air traffic control 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. Every day, air traffic controllers handle over two million passengers traveling within 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, aviation safety professionals work to improve safety procedures, modernize the NAS, and implement new technology. We have professional controllers involved in nearly every FAA program related to modernization and Next Generation Air Transportation System (NextGen).

The NAS is an integral part of our national infrastructure and an essential driver of our economy. Each and every day, millions of individuals and businesses in the U.S. economy rely on the services provided by our complex web of aviation routes. Aviation drives nearly 12 million jobs and contributes $1.5 trillion to the nation's economy.

THE FAA NEEDS A STABLE, PREDICTABLE FUNDING STREAM:

For years the FAA has been faced with an unstable, unpredictable funding stream, and each interruption has negatively affected all aspects of the FAA. The FAA has had to spread its resources thinly between fully staffing its 24/7 operation, modernizing the airspace, and performing the daily maintenance required to sustain an aging infrastructure. When sequestration cuts were implemented, the situation became even more dire. The FAA was forced to furlough its employees, including air traffic controllers, place preventative maintenance on hold, and consider closing federal and contract towers, curtailing air traffic services in smaller markets. The cuts also prevented the FAA from hiring new trainees to replace the certified controllers who retired, adding stress to an already understaffed workforce. Sequestration cuts did not affect the FAA's budget for fiscal years (FY) 2014 and 2015, but the cuts will return in FY 2016.

The upcoming FAA Reauthorization bill must address the lack of a predictable, stable funding stream to support a safety-focused 24/7 operational system. We understand that addressing these stop-and-go funding problems may lead to an examination of potential structural changes for the FAA, but we implore this committee not to merely examine the structure of the FAA. Any change that fails to guarantee a stable, predictable funding stream could create new unintended consequences, without solving the true dilemma.

As members of the aviation community, we must be precise in identifying 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 provides a stable and predictable funding stream while also protecting the air traffic control system and its future growth. 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—certainly not perfect for a system as large, complicated, and diverse as ours. Any new model must be mission-driven and must ensure robust, continued aviation sector growth throughout every segment of our industry and country. We must protect and strengthen the great national asset that is our air traffic control system.

EXISTING PROBLEMS AT THE FAA:

The lack of a stable, predicable funding stream has led to serious problems at the FAA. We have all seen these issues, which have been especially serious over the last five years. We believe that problems for FAA are not caused by the failure of Congressional appropriators to provide sufficient funding to the system, rather they result from a broken process resulting in short-term funding bills, government shutdowns, partial FAA shutdowns, threatened government-wide and FAA specific shutdowns, sequestration, and 23 short-term authorization extensions to name a few. The NAS is held hostage by this unpredictable and unstable funding stream.

FAA operations and redundancy: The lack of a stable, predictable funding stream means that the FAA has had to prioritize the basic maintenance and repairs that ensure current operations over maintaining safety redundancies and making improvements to the system. This is a slippery slope because, when stressed, 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 forced a fix-on-fail maintenance policy. 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. Even a grounded aircraft or an off-line facility without communications ability were not necessarily considered sufficient justifications.

Staffing: The system has lost close to 1,000 air traffic controllers (6.2 percent of the workforce) between May 2013 and today, down to 13,902 from 14,793. This loss exacerbates an already tenuous staffing situation, in which 3,025 of 13,902 controllers are eligible to retire today. Of the 13,902 total controllers, 1,680 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 to adequately cover all needed positions. In some cases, those facilities do not have the staffing, even with overtime, to open all of the necessary positions. Any further staffing reductions will likely have a detrimental and immediate effect on capacity, meaning fewer planes in the sky and greater potential for delays.

For example, New York TRACON (N90) and Chicago TRACON (C90) present a unique problem. New hires who become FAA training academy graduates rarely, if ever, achieve full certification at these facilities, due to the complexity of their respective airspaces. As of May 1, 2015, N90 had 148 Certified Professional Controllers (CPCs), compared to 160 in 2010. Today, 53 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 May 1, 2015, 18 of the 37 CPCs (or 48 percent) who provide radar approach control services for Newark Airport are eligible to retire. It would not be possible to safely maintain the same number of operations per day into and out of Newark Airport if all 18 were to retire before anyone is trained to replace them.

Due to the critical staffing levels, the controllers work six-day workweeks and are often held over for additional overtime. The workforce suffers from significant fatigue problems due to extended workdays and workweeks. The National Transportation Safety Board (NTSB) identified this as one of its highest priority safety concerns. 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, resulting in furloughs for FAA employees. Those cuts also led the FAA to institute a hiring freeze between March 2013 and December 2013. The FAA training academy in Oklahoma City was closed for most of 2013 as a result of sequestration, so the FAA has not been able to keep up with the pace of attrition. Even if the FAA hired at its maximum rate in 2015 and 2016, it will still 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 improvements in the placement and transfer processes. There is an estimated 25 percent failure rate at the Academy, and additional trainees fail once they are assigned to their facilities. Moreover, the Academy graduates who are successful in becoming CPCs 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 modern technology, and efficiently control traffic.

Once new hires graduate from the FAA Academy, the FAA's flawed and inefficient employee placement and transfer process also presents challenges. Many facilities are in desperate need of qualified transfers, and many employees want to transfer to higher level facilities that need additional staffing. Historically, the FAA has placed air traffic control trainees from the Academy into higher level facilities, which typically have a higher failure rate than the nationwide average of 25 percent. This works against the FAA's efforts to efficiently hire, train and retain new controllers. Fully certified controllers should be encouraged to transfer to the most important and critically staffed facilities in the NAS. Their path to do so should be eased while new trainees backfill positions at lower activity facilities.

Modernization delays: Air traffic controllers and NATCA are working closely with the FAA to fully realize the benefits of NextGen modernization projects. We have made significant strides recently, including the complete implementation of En Route Automation Modernization (ERAM), which became fully operational at the final air route traffic control center at the end of March 2015. 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, the FAA implemented 61 new procedures in the Houston area and 77 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 management specialists, and frontline managers, and allows them access to airport surface data that was previously unavailable outside of a tower cab.

NextGen is already having beneficial effects 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 of the OAPM project at nine test sites across the country. Final implementation at the Houston test site had been scheduled for December 2013. Implementation and its associated benefits were delayed until May 2014 due to the furloughs.

The FAA is making progress on NextGen, and has successfully reached significant milestones, but the funding stream needs to be addressed to prevent further time and financial overruns. We have made progress, but all of our successes will be delayed and more expensive as long as the funding stream remains unstable and unpredictable. As you know, stop-and-start funding impedes the FAA's ability to properly staff collaborative workgroups tasked with the design, testing, and implementation of new technologies and procedures. These recent successes are important, but we cannot forget that each of them faced numerous setbacks due to uncertain funding. The NAS is a 24/7 operation, and the aviation safety professionals at the FAA 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 over 230 towers under consideration for closure. Ultimately the FAA was able to avoid tower closures, but closures could once again become a necessity. General aviation, military exercises, and flight school services at these airports would be at risk, and we would see a reduction in services for airlines, commercial interests, and private pilots who rely on towers at smaller airports for air traffic services and for secondary services like pilot training.

Sequestration budget caps or cuts could potentially lead to another significant consequence. More than 100 of the Federal Contract Towers (FCT) throughout the country could be closed. This would affect general aviation and rural communities that depend on the services those towers provide. While funding for the FCT program is currently moving through the appropriations process, we are concerned that future sequestration cuts could ultimately shut down many of the towers. Employees at FAA facilities would see their workload increase dramatically because FAA facilities would have to take over the services that many of the FCTs currently provide. This would add stress just as those FAA facilities face reduced staffing due to sequestration cuts and the resultant furloughs. Contract towers also provide crucial support to our nation's military and private enterprises. For example, one of only two Apache helicopter maintenance units in the country is located at Lone Star Executive Airport in Texas.

Physical infrastructure: The FAA cannot keep up with replacing its outdated infrastructure and technology at current budget levels. The average age of facilities in the NAS is 50 years, and FAA officials have testified that the agency already struggles with the maintenance of existing infrastructure.

The FAA recognizes that it cannot expect all aging infrastructure to be replaced simultaneously, even though many facilities were originally built at the same time.

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, negatively affecting maintenance to infrastructure as well as the FAA's modernization efforts. With 70 percent of the technical workforce furloughed, important projects were delayed at some of the nation's busiest airports.

The air traffic control tower at Tampa International Airport (TPA) provides an enlightening example. At a recent hearing of the Transportation, Housing, and Urban Development (THUD) Subcommittee of the U.S. House of Representatives Committee on Appropriations, Rep. 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 lifespan. New, modern equipment is unable to fit into the aging tower, and its condition is declining rapidly. This creates obvious challenges for the FAA, as the agency must choose between the pressure to modernize and the immediate need to repair and maintain facilities such as TPA.

BROAD CORE PRINCIPLES:

A discussion on reform must take place in a well-reasoned and rational manner. Rushing into any structural changes could lead to unintended consequences. Change for the sake of change that does not guarantee a stable, predictable funding stream does nothing more than create a different bureaucracy. NATCA will oppose any overhaul that creates a private, for-profit entity to oversee air traffic control services. That would simply create a new funding problem in place of the old one. Any reform must ultimately ensure the following:

1. Safety and efficiency must remain the top priorities;

2. Stable, predictable funding must 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 of the aviation system is ensured; and

4. A dynamic aviation system 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.

It is critical that the specifics of any reform are vetted among all stakeholders, and NATCA will not commit to any concepts in a vacuum. Not only do the principles of reform need to be sufficient to meet the needs of the NAS, but so do the details of any overhaul. We are concerned that the transition to a new system could cause disruptions in service that could negatively affect aviation as an economic engine. It is especially important that any transition is well planned and thoughtfully designed in order to limit any disruptions – there simply cannot be a disruption in services during a transition. The transition period must also be sufficient. Change cannot be made by flipping a switch. Given the National Airspace System's 24/7 activities, any transition, no matter how small, must be seamless and deliberate. NATCA will support nothing less.

PROPOSED MODELS BEING DISCUSSED IN PUBLIC DOMAIN:

Over the years, NATCA, other industry stakeholders, and this Committee have observed that 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 of each and a discussion 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 the FAA, in whole or in part, out of the Department of Transportation, 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 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 will not 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 have seen increased bureaucracy. Restructuring has created more overhead and non-operations jobs, effectively increasing the time to get results. One example of this is in the procurement process. 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, modernization efforts, and other safety related services.

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, which 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 methods 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, could save money, and technology could be updated 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 Model
The positive aspects of this model include it being single-mission focused, allowing for a more streamlined procurement process, greater flexibility for technology development and less bureaucracy than the current FAA.

The cons include requiring a long transition period to create a not-for-profit model. This model may also very difficult to apply to our NAS because the U.S. system is so diverse and complex.

This model also poses risks regarding the protection of the greater good. A not-for-profit model must still be cost-conscious and may be forced to diminish services to rural areas because they do not offer high returns. This would only be a problem for a model completely separate from the government, however; any model that is maintained within the government can be insulated from these types of concerns.

The NAS is a national asset that is essential to communities that rely on air traffic services, and it benefits even those who do not fly. 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, and we will not 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. Cutting corners to save costs could ultimately compromise safety. A profit-driven system would likely 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 into a for-profit entity, and the transfer of assets would be a complicated process as well.

Other Air Navigation Services Providers (ANSPs)
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.

- **NavCanada in Canada:** This privately owned, not-for-profit company established in 1996 controls the operations of the air traffic control system in Canada. Its revenue source is user fees.

The advantage of this system is its single-mission focus that prioritizes efficiency. However, NavCanada had a difficult and lengthy transition period. 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. For example, the U.S. controls 132 million flights annually (2012), compared to 12 million in Canada in an area a fraction of the size of our NAS. The U.S. 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 eight of the top 10 busiest airports in the world, and 15 in the top 30. Canada has one: Toronto, which comes in at number 16.

We are not just concerned about the scalability for the ANSP, but also for the Civil Aviation Authority that would be left behind to conduct the governmental safety and regulatory oversight of the ANSP and the NAS as a whole. Additionally, a seamless transition would be more complex in the U.S. due to the size of our system compared to that of Canada.

- **NATS in the UK:** This private, for-profit corporation includes the government in 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 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 controls air traffic services, 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 cover operations and modernization efforts. Likewise, DFS improved productivity and operational efficiency through investments in facilities and equipment. At the time of air traffic services' transfer to DFS, Germany's federal budget constrained efforts to modernize the air traffic control infrastructure.

CONCLUSION:

Many in Congress, as well as several key stakeholders, including the FAA, agree that interruptions to the funding stream are detrimental to the operations of the NAS. The status quo is unacceptable, and something must be done to ensure 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 top priorities, and any proposed changes cannot jeopardize them.

While considering possible reforms, we must protect and strengthen this national asset; our National Airspace System is a treasure. We must continue to create an environment that encourages the growth of the aviation sector, allowing the integration of new users, new innovation, and new technology, while continuing to maintain our global leadership. There is much at stake. We must find the path that improves the system without causing unintended consequences that set us back. The U.S. has always led 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.