National Air Traffic Controllers Association
AFL-CIO

Written Testimony of

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June 15, 2016

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

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

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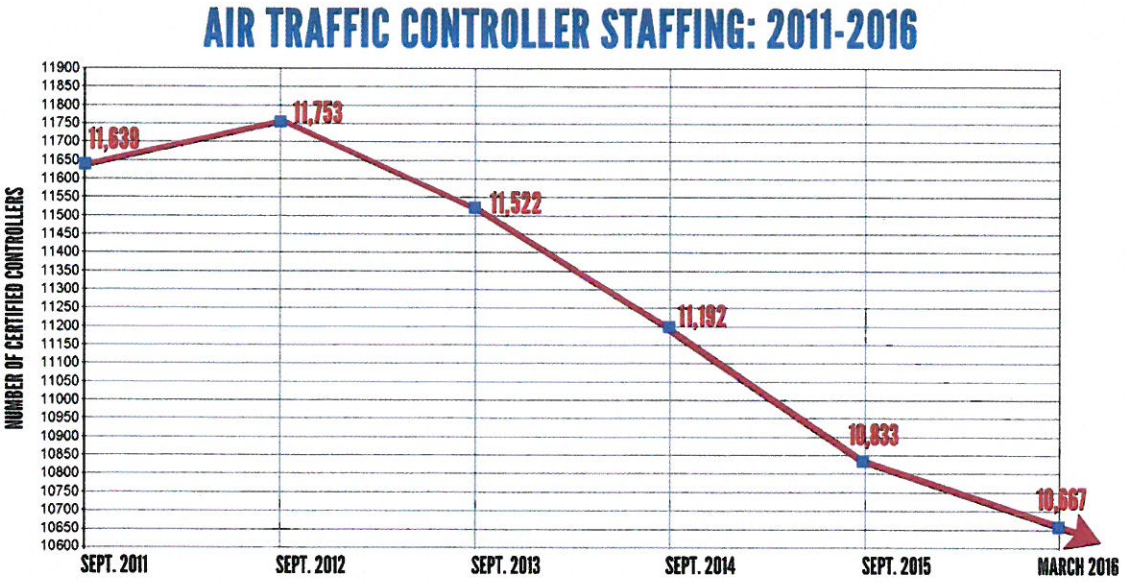
Thank you for the opportunity to testify today on behalf of the National Air Traffic Controllers Association, AFL-CIO (NATCA) about the current air traffic controller staffing crisis. NATCA is the exclusive representative for over 19,000 employees, including the Federal Aviation Administration's (FAA)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

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

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

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



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

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

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

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

CPC: Certified Professional Controller
CPC-IT: Certified Professional Controller in Training (fully certified elsewhere, transferred to a new facility and began training there)
DEV: Developmental (trainee)
AG: Graduate of the FAA Initial Classroom Training Academy in Oklahoma City, newly hired, and started at their first facility as a trainee

**Numbers through March 19, 2016*
*** Approximate number, through first half of Fiscal Year 2016.*

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

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

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

Progress Through Collaboration

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

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

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

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

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

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

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

Bureaucratic Delays in the Hiring Process

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

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

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

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

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

Air Traffic Controller Training

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

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

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

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

The Flawed and Misleading FAA Air Traffic Controller Workforce Plan

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

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

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

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

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

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

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

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

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

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

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

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

Effects of Staffing Shortages

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

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

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

Proposed Solutions

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

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

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

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

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

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

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

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

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

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

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

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