Written Testimony of
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Before the

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

"FAA Reauthorization: Navigating the Comprehensive Passenger Experience"

Thank you for the opportunity to testify on behalf of the National Air Traffic Controllers Association, AFL-CIO (NATCA) at today's hearing titled "FAA Reauthorization: Navigating the Comprehensive Passenger Experience."

NATCA is the exclusive representative for nearly 20,000 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.

I. Executive Summary

The National Airspace System (NAS) moves over 45,000 flights and 2.9 million passengers every day across more than 29 million square miles of airspace. Although it is the safest, most efficient, and most complex system in the world, we should always strive to improve efficiency and mitigate risk.

Our system continues to be hampered by funding instability. For more than a decade, consistent disruptions to FAA authorization and appropriations have taken a cumulative toll on all aspects of the NAS. Recently, it has become apparent that although FAA has received funding consistent with the recent Administrations' appropriations requests, those requests have failed to keep up with inflation, account for controller staffing attrition, and keep pace with the changing needs of the agency regarding modernization and infrastructure programs.

NATCA believes that funding instability is one of the most serious challenges facing the FAA and the NAS. Without a stable and sufficient funding stream, the FAA will be hard-pressed to maintain capacity, let alone modernize the physical and technological infrastructure of the system while expanding it for new users such as uncrewed aircraft systems, advanced air mobility systems, commercial space launches, and supersonic aircraft.

NATCA's testimony will focus on: the need for stable and sufficient funding authorization to overcome current controller staffing shortages and training challenges; and the effect budgetary shortfalls continue to have on modernization and infrastructure programs.

II. Controller Staffing Challenges Will Require Commitment to Increased Hiring & Collaborative Training Initiatives

For years, NATCA has been explaining how controller staffing shortages negatively affect all aspects of the NAS. When there are too few fully certified controllers, positions have to be combined, resulting in divided attention between different responsibilities. Most commonly, controller staffing shortages can be mitigated through reducing efficiency – meaning flight delays. Moreover, chronically understaffed facilities also introduce unnecessary safety risks into the system.

Despite meeting its self-imposed air traffic controller hiring goals for much of the past decade[1], the FAA has not kept up with attrition. The NAS remains near a 30-year low in the number of fully certified controllers. By the end of Fiscal Year (FY) 2022, there were 1,200 fewer Certified Professional Controllers (CPCs) employed by the FAA than a decade earlier and 6% of those who remain are eligible to retire.

Recently, the FAA has upwardly adjusted its hiring goal for each of FY 2024-2026 to 1,800 new hires – a positive development. But, hiring more trainees in the short term will not immediately solve this staffing crisis because it takes 1-3 years of on-the-job training for controllers to become fully certified after graduating from the FAA's training academy in Oklahoma City. Moreover, only about 60% of all controller trainees reach full certification within three years. The other 40% are removed, resign, or remain in training. As a result, this increased hiring goal will take several years to have any effect on CPC totals. All of these factors, coupled with missing its hiring goals from 2012-2015, has resulted in 10% fewer fully certified controllers than a decade ago.

Recognizing controller staffing to be a challenge, this past December, Acting Administrator Billy Nolen directed the FAA's Air Traffic Organization (ATO) to restart the Collaborative Resource Workgroup (CRWG) and partner with NATCA to collaboratively determine the number of CPCs needed to meet operational, statutory, and contractual requirements, including resources to develop, evaluate, and implement processes and initiatives affecting the NAS. In the weeks that followed, the parties diligently worked with the MITRE Corporation's Center for Advanced Aviation Development to develop CPC operational staffing targets at each of FAA's 313 air traffic control facilities. The CRWG completed its work at the end of January and presented its report to the Acting Administrator and NATCA President in mid-February.

Now that the CRWG's work is complete, the FAA must use the jointly developed CPC targets in its annual Controller Workforce Plan (CWP) to provide Congress with a more complete and transparent view of FAA's operational workforce needs.

As it is currently constructed, the CWP is flawed because it relies on a "finance driven" staffing model that the FAA uses to develop facility-by-facility "staffing ranges." That model, developed by FAA's Office of Finance and Management (AFN) improperly combines CPCs and CPC-ITs (controllers who were fully certified at a previous facility but are "in training" and not yet fully certified at their new facility). The CWP also ignores existing CPC staffing targets that were developed nearly ten years ago, which the reconstituted CRWG report updated based on current needs.

The AFN-developed CWP uses staffing numbers that are inaccurate and misleading because they are based on actual on-board numbers ("headcount"), rather than using the operational CPC staffing targets. These headcount numbers deceptively include developmental stage trainees (who have never been certified at any FAA air traffic control facility and who may not successfully complete training at that facility), as well as CPC-ITs. This methodology does not take into account the functional day-to-day operational needs of each facility when it comes to

[1] In 2016-2018, 2020, and 2022 FAA met its original hiring goals, however it reduced its hiring goals by over one-third in 2019 due to the 35-day government shutdown and by 45% in 2021 due to the COVID-19 pandemic, achieving only the reduced goals.

staffing all operational positions, as well as carrying out other functions that only CPCs can perform such as training developmental controllers and serving as the controller-in-charge (CIC) to provide watch supervision when a supervisor is not available. Furthermore, only CPCs can serve as subject matter experts to develop new air traffic procedures as well as to design, develop, and implement modernization programs. Finally, CPCs are the only employees qualified to fill other positions in the agency, such as traffic management coordinators and specialists, staff support specialists, and front line supervisors and operations managers.

In order to meet the operational needs of the NAS and to enable NAS modernization, the FAA needs to use the updated CRWG's facility-level CPC staffing targets to properly set hiring goals, effectively place trainees, and improve distribution of the operational workforce to address the evolving needs of the NAS.

To help illustrate this issue with a practical example, at the Jacksonville Air Route Traffic Control Center (ZJX), which handles airspace covering parts of Florida, Georgia, Alabama, South Carolina, and North Carolina as well as portions of the Atlantic Ocean and Gulf of Mexico, the current operational CPC staffing target is 275. However, as of March 8, 2023, there were only 206 CPCs assigned to ZJX. In the 2022-31 CWP, the most recent version transmitted to Congress, FAA lists a staffing range of 235-287 controllers but deceptively reported 241 currently on-board (which includes 33 trainees who may or may not ever become fully certified at ZJX). Based on the CWP, it would appear as if ZJX is appropriately staffed at the bottom of its staffing range, when in reality the facility is *short 29 CPCs* compared to its staffing range minimum and nearly 70 CPCs (25%) short of the current, jointly-developed operational staffing target used by the ATO for placement and transfers. This CPC staffing target will be updated upon adoption of the CRWG report.

In 2022, FAA, in collaboration with NATCA and after meeting with other aviation stakeholders about the delays in ZJX's airspace, agreed to increase ZJX's CPC staffing target (from 241 to the current 275), well-beyond what is currently called for in the CWP—further demonstrating its shortcomings. However, relying solely on the CWP would have allowed the FAA to staff ZJX anywhere within its staffing range, even though we know that the staffing at ZJX is insufficient based on recent NAS disruptions in its airspace. These disruptions contributed to delays in Florida throughout 2022 when combined with a variety of other factors such as unprecedented convective weather and airline operational challenges. Staffing ZJX according to the CWP's current staffing range likely will continue to cause disruptions in the NAS.[2] It also will place a heavy burden on the current CPCs at ZJX, leading to excessive overtime and significant delays in training for developmental controllers, all of which exacerbate this staffing situation.

Another example is Atlanta TRACON (A80), which handles approach and departure radar operations into and out of Atlanta Hartsfield-Jackson Atlanta International Airport (ATL) as well as other regional airports, where currently the operational CPC staffing target is 102. However, there are currently only 69 CPCs assigned to A80. In the 2022-31 CWP, the FAA lists a staffing range of 92-113 controllers but deceptively reported 94 currently on-board (which includes 14 trainees who may or may not ever become fully certified at A80). Based on the CWP, it would

[2] Although we anticipate AFN to increase its range in the upcoming CWP, at the time of the collaborative review, AFN suggested increasing staffing by only one additional controller.

appear as if A80 is appropriately staffed at the bottom of its staffing range minimum, when in reality the facility is *short 23 CPCs* compared to its staffing range and nearly 33 CPCs (32%) short of the current, jointly-developed operational staffing target used by the ATO for placement and transfers. This target will be updated upon adoption of the CRWG report.

Chicago O'Hare Tower (ORD) is also an example to illustrate that this problem exists across the NAS and within facilities of various types and locations. ORD's current operational CPC staffing target is 68. However, there are currently only 56 CPCs assigned to ORD. In the 2022-31 CWP, the FAA lists a staffing range of 63-76 controllers but deceptively reported 66 currently on-board (which includes 14 trainees who may or may not ever become fully certified at ORD). Based on the CWP, it would appear as if ORD is appropriately staffed at the bottom of its staffing range, when in reality the facility is *short 7 CPCs* compared to its staffing range minimum and 12 CPCs (18%) short of the current, jointly-developed operational staffing target used by the ATO for placement and transfers. This target will be updated upon adoption of the CRWG report.

Some of FAA's towers and TRACONs that provide services to airports with a higher general aviation presence have significantly increased in air traffic volume over the past decade. Generally speaking, for facilities with increased traffic since 2014, the updated CRWG CPC staffing targets likely will increase.

In addition to increased controller hiring, as well as using the CRWG's updated CPC operational staffing targets, the FAA must be funded sufficiently in order to appropriately and successfully train each of the 1,800 new hires annually, including at the FAA's academy in Oklahoma City and in the classroom, simulator, and on-the-job training instruction once they reach their assigned facilities.

The National Training Initiative (NTI), which began in July 2019 and paused for COVID, was restarted in April 2022. The NTI is a collaborative initiative between FAA and NATCA dedicated to a more efficient training progression for developmental controllers. That said, CPCs train new hires, often taking those controllers away from their primary job of separating traffic, complicating an already critical staffing issue at some facilities.

III. NATCA Urges Support for a Stable & Sufficient Funding Authorization

Stable and sufficient FAA funding has become increasingly critical to maintaining the safety and efficiency of the NAS. With this upcoming FAA reauthorization bill, Congress has the opportunity to put FAA on the path toward stability and meet the needs of an evolving NAS by providing the agency with the resources that it requires in order to overcome a controller staffing crisis and significant budgetary shortfalls. Overcoming this uncertainty will prevent the NAS from falling behind on safety, efficiency, and capacity.

Traditionally, the FAA has been funded consistent with its budget requests. However, those requests often have failed to keep up with inflation for both the Operations (OPS) and Facilities and Equipment (F&E) budget lines. The FAA's next reauthorization bill must account for current *and* future funding needs to prevent further budget shortfalls that could jeopardize hiring,

training, modernization and sustainment of critical equipment and programs, and physical infrastructure.

A robust authorization bill also will help protect the $5 billion in Air Traffic Control facility repairs and upgrades that Congress provided in the Infrastructure Investment and Jobs Act (IIJA). NATCA believes IIJA funding should remain supplemental, as Congress intended, and should not serve as a replacement for base appropriations.

IV. Robust Funding Authorization Critical For Modernization & Infrastructure Programs

The FAA's Facilities and Equipment (F&E) budget has not kept pace with inflation over the past 14 years. In FY 2009, the F&E budget was $2.942 billion. It subsequently was lower than that in each fiscal year through 2017, before it peaked at $3.3 billion in 2018. However, since then it has remained just above or below $3 billion. Estimating for a modest 2% average annual inflation rate over the last 14 years, the FAA's F&E budget should be over $3.8 billion based on its 2009 budget.

This loss of spending and buying power for modernization and infrastructure programs has forced FAA into a "fix-on-fail" model by requiring it to prioritize mandatory costs such as subscription services and leases, basic ATC facility sustainment, salaries, travel, and major support contracts, along with NAS system sustainment. This prioritization leaves little to no money for important programs such as ATC facility replacement, the NAS facility sustainment backlog, the NAS system sustainment backlog, NAS system improvements, radar and surveillance sustainment and replacement, and Air Route Traffic Control Center (ARTCC) and Terminal Radar Approach Control facility (TRACON) consolidation, just to name a few.

In order to meet all of the FAA's capital needs, our analysis indicates that the F&E budget would need to be over $4.5 billion in FY 2023 alone. Even if funding provided by the IIJA theoretically could help fill the funding gaps in FY 2023, that was not IIJA's intended purpose and the FAA would still experience significant budgetary shortfalls.

In the coming years, FAA will face unprecedented technological challenges. The continued development and rapid proliferation of advanced air mobility, drones, and other new entrants could jeopardize NAS safety and efficiency if not integrated properly. NATCA must be involved in all discussions surrounding the safe and efficient integration of these programs.

Moreover, recent events have brought into focus airport surface detection systems, the Federal Notice to Air Missions (NOTAM) system, and controller information display systems.

NATCA believes that the FAA needs to resume modernization efforts related to the implementation and development of technologies that provide air traffic controllers with an early warning system designed to mitigate the risk of aircraft landing on the incorrect surface (i.e., runway, a taxiway, or wrong airport). The FAA must support and fund airport surface detection systems in order to maintain the highest level of safety and ensure the greatest level of redundancy.

For instance, airport surface detection systems such as Airport Surface Detection System Model X (ASDE-X) and Airport Surface Surveillance Capability (ASSC) are currently deployed runway safety enhancement tools that help prevent wrong surface landings. However, ASDE-X and ASSC are fully deployed at only 43 airports, funding for these programs has expired, and currently they are in a sustainment-only posture. Additional funding is needed to expand existing systems and to develop new surface surveillance systems to deploy at airports that currently lack this type of technology.

In addition, Federal Notice to Air Missions (NOTAM) System modernization is an FAA Top 5 safety priority and will require appropriate funding levels in order to sustain and upgrade the system. This issue is underscored by the recent NOTAMS outage on January 11, 2023, which caused widespread flight delays and cancellations throughout the NAS. A subsequent reduction in NOTAMS availability roughly two weeks later further emphasized the need for secure and robust NOTAMS infrastructure.

NATCA also supports improved weather information, beyond precipitation, on a controller's primary radar display. FAA facilities currently utilize several different systems that are beyond the "end of lifecycle" stage and replacement parts are becoming harder to acquire. Additionally, there have been multiple safety reports of issues related to legacy Information Display Systems (IDS) from FAA's ATC facilities. It is important that funding for legacy IDS be maintained until Enterprise Information Display Systems (E-IDS) can be deployed in approximately 2025-27. E-IDS will provide a wide variety of information to air traffic controllers such as current weather, airspace delegation, access to approach plates, NOTAMS, SIGMETS, flight route verification, and aircraft information, once deployment is complete.

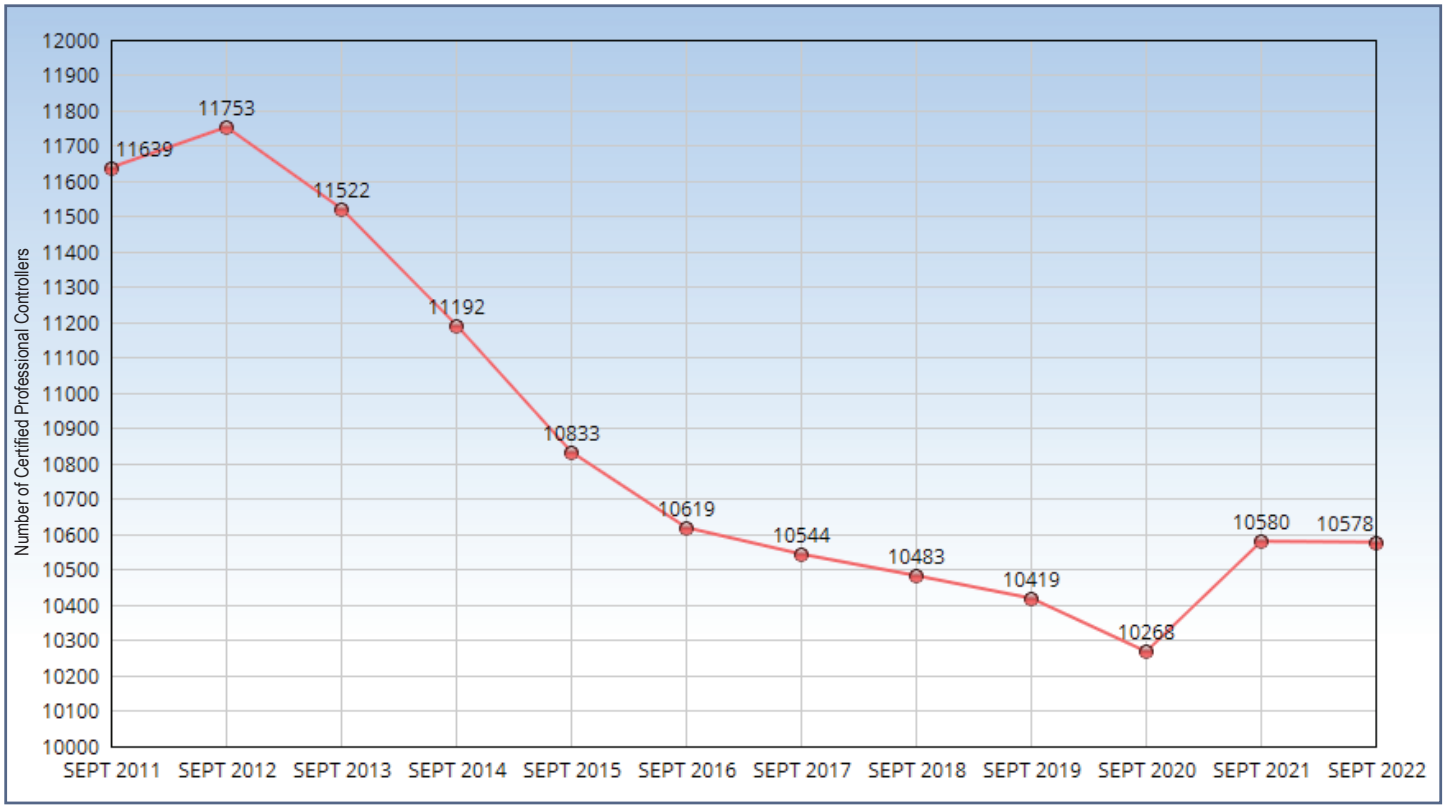
Additional dedicated funding is needed to expand, sustain, and/or upgrade each of these systems and many others, especially in light of the FAA's "fix-on-fail" system sustainment posture.

As a result, Congress must ensure robust authorized funding levels and plan ahead for expected future budgetary needs – especially for the OPS and F&E budgets – while protecting the $5 billion authorized for ATC upgrades in the IIJA. As is the case in most fiscal years, the OPS budget also will need to be increased to accommodate increased personnel and other fixed costs that are integral to the safe and efficient operation of the NAS.

V. Conclusion

We hope that Congress will see the upcoming FAA Reauthorization bill as an opportunity to enhance the safety and efficiency of the NAS, by improving the FAA's ability to adequately staff the sytem with fully certified controllers and train the next generation of controllers who will be hired in the next few years. We further hope that FAA has the authorization and funding to modernize the NAS in order to enhance safety, while at the same time expanding capacity and integrating new users into the system. NATCA looks forward to working with this Subcommittee, the full Transportation and Infrastructure Committee, aviation stakeholders, and the FAA to achieve these goals.

Air Traffic Controller Staffing: 2011-2022



FISCAL YEAR	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
On-Board	15,236	15,063	14,461	14,059	14,010	14,050	14,009	14,285	14,193	13,830	13,715	13,418
CPC	11,639	11,753	11,522	11,192	10,833	10,619	10,544	10,483	10,419	10,268	10,580	10,578
CPC-IT	965	1,143	1,187	1,200	1,218	1,259	1,205	1,320	1,414	1,309	1,031	943
DEV (Including AG)	2,632	2,167	1,741	1,667	1,959	2,172	2,260	2,482	2,360	2,253	2,104	1,897
AG	676	671	440	665	936	878	883	980	882	873	917	643
Retirement Eligible	3,064	3,224	3,077	2,982	3,355	2,915	2,410	1,842	1,004	1,143	≈1,000	631
FAA Planned To Hire	829	981	1,315	1,286	1,772	1,619	1,781	1,701	1,431*	910	910**	1,020
FAA Actually Hired	824	925	554	1,112	1,345	1,680	1,880	1,786	1,010	920	510	1,026

Source: FAA Finance Staffing Data Snapshot

**FAA reduced its FY 2019 hiring target from 1,431 to 907 following the 35-day government shutdown.*

***FAA reduced its FY 2021 hiring target from 910 to 500 due to the COVID-19 pandemic and increased its hiring targets for FY 2022 – 2024.*

These data are prior to the Collaborative Resource Workgroup's recommendation to establish new CPC staffing targets for FAA's 313 air traffic control facilities.

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