

# AVIATION WEEK PROGRAM EXCELLENCE AWARDS

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Thank you for participating,



Gregory Hamilton  
President  
Aviation Week Network

Acknowledged, agreed, and submitted by



Nominee's Signature

Date 6.30.25

Nominee's Name (please print): **Scott Ferris** \_\_\_\_\_

Title (please print): **Director of Calibrate Apprenticeship Program** \_\_\_\_\_

Company (please print): **United Airlines** \_\_\_\_\_

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**NOMINATION FORM**  
**Calibrate Apprenticeship Program**

Name of Program: \_\_\_\_\_

Name of Program Leader: **Scott Ferris** \_\_\_\_\_

Phone Number: **872-400-0316** \_\_\_\_\_

Email: **scott.ferris@united.com** \_\_\_\_\_

Category: **Special Projects** \_\_\_\_\_

Postal Address: **233 S wacker Dr. Chicago IL. 60606** \_\_\_\_\_

☐ Customer Approved

○ Date: \_\_\_\_\_

○ Customer Contact (name/title/organization/phone): \_\_\_\_\_

☐ Supplier Approved (if named in this nomination form)

○ Date: \_\_\_\_\_

○ Supplier Contact (name/title/organization/phone): \_\_\_\_\_

**PLEASE REFER TO PROGRAM EXCELLENCE DIRECTIONS  
AS YOU COMPLETE THIS FORM.**

## SECTION 1: EXECUTIVE SUMMARY

Launched in 2022, the United Airlines Calibrate Apprenticeship Program is a strategic workforce development initiative created to address the nationwide shortage of FAA-certified aircraft maintenance technicians. The program offers a structured, multi-year, earn-while-you-learn pathway that embeds apprentices directly into Part 121 operations from day one.

Designed to build a diverse and sustainable talent pipeline, Calibrate provides hands-on training, classroom instruction, and real-world experience under the guidance of experienced United maintenance professionals. By integrating apprentices into live operational environments early in their development, the program accelerates skills acquisition while supporting United's ongoing commitment to safety, reliability, and workforce readiness.

The program offers a structured, multi-year, debt-free "learn-and-earn" pathway that combines hands-on, on-the-job training (OJT) with classroom instruction and digital progress-tracking tools. Delivered in partnership with a high-performing Part 147 school, the program enables participants to earn while they learn—graduating in 24 months through an accelerated model designed to fast-track motivated individuals into licensed technician roles..

In just three years, Calibrate has:

- Produced 150+ Aviation, Facilities and GSE Technicians with a 94 percent first-time FAA pass rate.
- Expanded to nine stations with planned further launches planned for AMTs while maintaining zero FAA audit findings.
- Strengthening workforce capacity to meet fleet maintenance and safety demands.
- Building long-term career pathways within United Airlines' technical operations.

Under Calibrate Team's servant-leadership, cross-functional teams co-developed digital innovations, integrated training days into station man-hour rosters, and executed "station tours" at several United Airlines stations to tailor rollouts. By weaving apprentices into real-world workloads routine checks, B-checks, Base Maintenance and Line Maintenance and leveraging ACS (Airman Certification Standards) code-enabled task lists, Calibrate exemplifies best practices in Aircraft Maintenance. This nomination illustrates how Calibrate's vision, innovation, and measurable impact deliver enduring value to United, its customers, and the broader aviation community.

### **Make the Case for Excellence**

*Value: 10 points*

Use 12 pt. Times Roman typeface.

Key Differentiators:

- **Industry First FAA-Approved Airline Apprenticeship**  
The only program of its kind to embed apprentices in live airline maintenance operations, combining regulatory oversight from Part 65 and Part 121.
- **Accelerated Competency**  
Real-time digital logging and performance tracking enable faster progression, reducing certification timelines by 12 months.

- **Inclusive Design**  
The program welcomes internal hourly employees, women, veterans, and career-changers—expanding access and fostering diversity in technical roles.
- **Lean, Scalable Model**  
Cloud-based tools reduce administrative workload, supporting rapid expansion from 1 to 9 maintenance stations with minimal added resources.

**What is the vision for this program/project? What unique characteristics and properties qualify this program for consideration?**

The vision of the Calibrate Program is to redefine aviation maintenance career pathways by creating a scalable, inclusive, and accelerated model that equips the next generation of AMTs with the technical skills, certifications, and real-world experience needed to keep the aviation industry safe, efficient, and prepared for the future.

The Calibrate Apprenticeship Program sustains and elevates the performance of United’s in-service fleet by delivering a continuous pipeline of FAA-certified Aircraft Maintenance Technicians (AMTs). By integrating apprentices directly into live maintenance operations, the program ensures alignment with key operational metrics, including customer-driven dispatch reliability and safety performance.

## DIRECTIONS

- Do not exceed 10 pages in responding to the following four descriptions.
  - Allocate these 10 pages as you deem appropriate, but it is important that you respond to all four sections.
- DO NOT REMOVE THE GUIDANCE PROVIDED FOR EACH SECTION.
- Use 12 pt. Times Roman typeface throughout.
- Include graphics and photos if appropriate; do not change margins.

## SECTION 2: VALUE CREATION

Value: 15 points

Please respond to the following prompt:

- **Clearly define the value of this program/project for the corporation; quantify appropriately**

### For United Airlines:

- **Strategic Talent Pipeline:** United is onboarding apprentices under FAA 14-CFR Part 65 oversight, the Calibrate Program ensures a consistent pipeline of highly trained and FAA-certified Aircraft Maintenance Technicians (AMTs) into our Tech Ops workforce. United is investing in the future of aviation maintenance by leveraging the experience and knowledge of tenured technicians to train the next generation of AMTs. This proactive approach directly addresses the industry-wide projected 30% technician shortfall by 2028, strengthening both operational readiness and long-term talent sustainability.
- **Cost Savings:** The Calibrate Program helps reduce turnover and recruitment expenses by reinvesting in our current employees, providing them with clear career pathways and development opportunities within United. This reduces the need for constant external hiring, background checks, onboarding, and training costs ultimately saving United money on workforce acquisition and reducing operational disruptions. The long-term cost savings of United Airlines' Calibrate program comes from developing highly skilled technicians through comprehensive, hands-on training and real-world experience. This level of preparation leads to greater precision, fewer errors, and enhanced safety in maintenance operations. By embedding practical learning into daily workflows, Calibrate ensures that technicians are ready to perform complex tasks efficiently from day one. Over time, this reduces costly rework, minimizes downtime, and improves overall aircraft reliability resulting in significant financial benefits and operational resilience for the airline. Beyond technical readiness, Calibrate also cultivates a pipeline of future leaders graduates of the program are well-positioned to step into leadership roles, bringing with them a deep understanding of the operation and a strong foundation in safety, quality, and team collaboration.

➤ **Clearly define the value of this program/project to your customer**

**For Our Customers:**

- **Enhanced Reliability:** Apprentices contribute to service checks, B-checks, C-check and line operations through out their journey. Calibrate apprentices are exposed early to United Airlines' strong maintenance programs, quality and safety culture. They understand early on that quality is conformance, while adhering to the highest standards.
- **Sustained Experience:** Apprentices quickly attain proficiency levels matching experienced hires. While Part 147 graduates bring essential foundational knowledge, calibrate apprentices consistently deliver superior operational proficiency and initiative, stressing the value of immersive, on-the-job training.

➤ **Clearly define the value of this program/project to members of your team; quantify if possible**

**For Our Teams:**

- **Mentorship Culture:** Apprentice Qualified Designated Trainers (AQDSTs) and technicians serve as coaches deepening institutional knowledge and fostering a culture of continuous learning.
- **Digital Efficiency:** The Calibrate App and tracking dashboard provide real-time visibility into each apprentice's progress against ACS (Airman Certification Standards) tasks, enabling targeted coaching and rapid remediation.

➤ **Clearly define the contribution of this program/project to the greater good (society, security, etc.)**

**Greater Good (Society & Security):**

Calibrate opens doors for high-potential individuals veterans, women, career-changers enabling socioeconomic mobility, closing skill-gap disparities, and strengthening U.S. aviation resilience. By offering a clear, structured path into high-demand aviation maintenance roles especially to individuals from underserved or nontraditional backgrounds Calibrate helps:

- **Break generational cycles of limited opportunity** by providing a stable, well-paying career.
- **Strengthen the skilled labor workforce**, which is vital to the safety and efficiency of air travel and national infrastructure





Pictured above is Stacey Rudser and Veronica Leacock from the Calibrate Team along with our Apprentices and AQ-DST's from our IAD (Dulles International Airport) station visit.

### SECTION 3: ORGANIZATIONAL BEST PRACTICES AND TEAM LEADERSHIP

Value: 35 points

Use 12 pt. Times Roman typeface

Please respond to the following prompts:

➤ **15 points:** Describe the innovative tools and systems used by your team, how they contributed to performance and why

- **Calibrate App:** The Calibrate team worked closely with our internal digital technology group to develop a software application that provides real-time tracking of each apprentice's progress toward completing the Airman Certification Standards (ACS) tasks. While FAA Part 65 requires apprentices to demonstrate proficiency in at least 50% of ACS tasks, Calibrate apprentices consistently exceed expectations by gaining demonstrated knowledge in over 75%. This elevated standard not only surpasses FAA requirements but also significantly enhances their readiness for A&P certification and long-term success in the field
- **Tracking Dashboard - TOBI (To Business Intelligence):** Provides executive-level visibility into apprentice progress, including alerts on training gaps, forecasted certification timelines, and compliance risk—enabling proactive workforce planning and risk mitigation.
- **System Integration:** United technicians are equipped with iPads that provide instant access to maintenance manuals and documentation on the ramp, enhancing accuracy, speed, and compliance during real-time aircraft servicing.

➤ **10 points:** Define the **unique** practices and process you used to develop, lead and manage people?

Calibrate team members implemented a hybrid training model that integrates both digital and live, hands-on experiences to ensure consistent learning outcomes across nine operational stations. Each Calibrate cohort rotates through structured learning phases designed to promote uniform standards in technical training, mentorship, and access to tools—regardless of location. This approach fosters fairness, scalability, and a strong foundation for workforce development.

In a first-of-its-kind initiative within the industry, the Calibrate team also partnered with a Part 147 school to deliver the required Powerplant curriculum, allowing apprentices to receive FAA-approved instruction while actively working in the field. This collaboration not only enhances the technical depth of the program but also accelerates readiness for A&P certification.

**Experienced Trainers:** Each apprentice is paired with certified, high-performing maintenance professionals who provide coaching, oversight, and performance evaluations.

**Leadership Involvement:** Supervisors and station managers use the developed tracking dashboards for high-level visibility into team development, training gaps, and certification readiness.

**Accountability:** Apprentices are held to airline operational standards for quality, safety, and professionalism throughout the program.



**Internal Advancement:** The program is also open to internal hourly employees, enabling upward mobility and long-term career investment.

**Talent Development:** The Calibrate program received a 98% cohort satisfaction rating based surveys provided to Apprentices.

**Union Partnerships:** Engaged union leadership and support to ensure reciprocity and fair representation of internal candidates.

➤ **10 points:** How did you leverage skills and technologies of your suppliers?

Calibrate was originally developed as a comprehensive Part 65 apprenticeship program with a standard completion timeline of 36 months. By leveraging strategic partnerships, advanced digital tracking tools, and a fully integrated training model, the program successfully reduced the time to completion to just 24 months—a 33% acceleration—without compromising training quality or FAA compliance.

- **Accredited Part 147 school:** Leverging the skills and knowledge of a highly successful Part 147 school United’s Calibrate team was able to develop a first of it’s kind program that for our apprentices.
- **Digital Tech Team:** Co-development of app and traking dashboard; Calibrate has conducted several surveys and feedback summits for continuous improvement.

**Calibrate operates lean:** The Calibrate team, along with apprentices and trainers, embraces a growth-oriented mindset that encourages stepping beyond traditional roles. Each cohort actively co-designs their learning journey, fostering a sense of ownership, accountability, and engagement. This collaborative approach is reflected in the program’s 98% apprentice satisfaction rating.

#### SECTION 4: DEALING WITH PROGRAM COMPLEXITY

(VOLATILITY, UNCERTAINTY, COMPLEXITY, AMBIGUITY, or VUCA)

Value: 25 points

Use 12 pt. Times Roman typeface

Please respond to the following prompts:

➤ **10 points:** Describe UNIQUE areas of VUCA faced by your program and why. (Please avoid the issues surrounding Covid-19 pandemic, which was faced by all programs.)

- **Volatility:** Workload variation across stations handled by dynamic roster integration apprentices select tasks aligned to real-time man-hours.
- **Uncertainty:** Navigating FAA Part 65 rules within a Part 121 environment demanded precise ACS (Airman Certification Standards) mapping and continuous FAA engagement. Calibrate responded by co-authoring LOA (Letters of Agreement) letters, SOP (Standard Operating producers) manuals, training workflows, and compliance reviews yielding zero regulatory findings.

- **Complexity:** Station Tours and visits: Scaling from one hub to nine stations Calibrate tailored launch plans with station-readiness scorecards. Scaling from one hub to nine stations introduced logistical challenges.
- **Ambiguity:** Cross-functional forums (15+ stakeholders) to align Operations, Safety, Training, Union representatives with monthly resolution cycles. Tech-Ops stations vary in workload and resources. Calibrate's flexible roster integration ensures apprentices gain hands-on tasks from tire pressure checks to dent blending by embedding training days directly into man-hour systems.

➤ **15 points:** Explain how your team responded to these challenges. What changes did you make, what were the results?

Calibrate effectively addressed key operational challenges by implementing dynamic roster integration to manage workload volatility and ensure apprentices gain hands-on experience aligned with real-time man-hours. Close collaboration with the FAA and our Union partnership, including co-authoring LOAs and SOPs, allowed the program to navigate regulatory uncertainty with zero findings. Tailored station launch plans and monthly cross-functional forums enabled smooth scaling across nine stations, despite complexity and ambiguity in resources and workflows.

To support consistency across locations, Calibrate developed station readiness scorecards and integrated digital tools like the Calibrate App and Tracking Dashboard to provide real-time visibility into apprentice progress and training gaps. These tools streamlined communication, reduced administrative burden, and enabled performance tracking aligned with operational needs.

In response to feedback and operational insights, we regionalized the internal Calibrate team to provide more tailored, responsive support at the station level. We also implemented program enhancements based on trainer and apprentice surveys, allowing for real-time adjustments and continuous improvement. As a result, we've seen higher trainer engagement and early signs of strong FAA pass rates among the first four cohorts who have entered testing.

## SECTION 5: METRICS

Value: 15 points

Use 12 pt. Times Roman typeface

Please respond to the following prompts, where predictive metrics indicate items that provide a view of how yesterday's actions and today's actions will affect the future timeline, cost or other requirement.

Provide charts/graphs that illustrate performance to these metrics:

➤ **What are your predictive metrics?**

- **Time-to-Certification:** Reduced by 33% (36 → 24 months).
- **First time Testing Pass Rate:** 94%.
- **Apprentice Throughput:** From 0 apprentices in 2022 to over 150 in year 3, with plans for new enrollees in 2025.
- **Operational Impact:** Apprentices contributed labor hours in 2024, augmenting station maintenance capacity.

➤ **How did you perform against these metrics?**

Since its launch, the Calibrate Apprenticeship Program has demonstrated measurable impact across key performance areas. By redesigning the training model and integrating digital tools, the program reduced time-to-certification by 33%, shortening the traditional 36-month pathway to just 24 months without compromising quality or FAA compliance. Calibrate has been pleased to see a 94% first time pass rate for testing of both Genreals and Airframe certification, reflecting strong apprentice engagement, support systems, and job satisfaction. From its initial launch with zero participants in 2022, the program has rapidly scaled to support over 150 apprentices by its third year, with additional enrollments planned for 2025. Most significantly, Calibrate apprentices began contributing meaningful labor hours in 2024, directly augmenting station maintenance capacity and demonstrating the program's growing operational value.

➤ **How do your predictive metrics drive action toward program excellence? Please provide examples.**

Predictive metrics play a critical role in driving continuous improvement and excellence within the Calibrate Program. By closely monitoring key performance indicators such as Operational Impact, Apprentice Throughput, and First-Time Testing Pass Rates, we're able to make data-informed decisions that directly enhance program outcomes. By leveraging these metrics proactively, the Calibrate team can identify trends before they become issues, implement timely interventions, and continually refine our approach to meet both regulatory and operational demands. This data-driven mindset ensures we remain focused on excellence, while also building a highly skilled and certified AMT workforce to support United's long-term success.

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## Conclusion & Justification for Award

The Calibrate Team's conviction and servant-leadership have driven an unprecedented transformation in airline maintenance training. Calibrate's blend of innovative technology, inclusive apprenticeship design, and rigorous FAA compliance has delivered measurable improvements in time-to-certification, debt-free careers for 150+ apprentices.

Calibrate exemplifies program excellence solving an industry challenge never solved at scale.

From a leadership perspective, the Calibrate program is a blueprint for strategic foresight, operational excellence, and intentional workforce development. It not only meets United Airlines' current demand for skilled aviation technicians but also establishes a resilient, future-ready talent pipeline that aligns seamlessly with the company's long-term vision.

What sets Calibrate apart is its immersive, values-driven approach. Apprentices are developed in real-world operational settings, where they learn side by side with experienced professionals. This model embeds a culture of safety, accountability, and quality from the very beginning ensuring each apprentice not only gains technical proficiency but internalizes the performance standards and core values that define United.

Calibrate is also a powerful tool for leadership development. These apprentices aren't just learning how to perform tasks, they're being prepared to lead. By engaging in cross-functional collaboration, real-time problem-solving, and exposure to key operational decisions, they're building the foundational skills needed to become future crew leads, supervisors, and strategic contributors.

Equally important, the program exemplifies strong cross-departmental alignment. The collaboration between Operations, Safety, Training, and Labor Relations reflects a unified commitment to growing talent from within efficiently, sustainably, and with purpose.

In essence, Calibrate is not just a training program it's a long-term leadership investment that United has made and a clear demonstration of how United is shaping the future of aviation maintenance from the inside out.