



INTELLECTUAL PROPERTY

(This section must be signed)

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Thank you for participating,

A handwritten signature in black ink, appearing to read 'G. Hamilton'.

Gregory Hamilton
President
Aviation Week Network

Acknowledged, agreed, and submitted by

A handwritten signature in blue ink, appearing to read 'Michael Zada'.

Nominee’s Signature

7/15/2024

Date

Nominee’s Name (please print): Michael Zada _____

Title (please print): Chief Project Officer _____

Company (please print): West Star Aviation _____

NOMINATION FORM

Name of Program: West Star Aviation Academy

Name of Program Leader: Katie Johnson & Michael Zada _____

Phone Number: 630-336-8091 _____

Email: mzada@wsa.aero _____

Postal Address: 2 Airline Court, East Alton, IL 62024

Customer Approved

○ Date: Not Applicable _____

○ Customer Contact (name/title/organization/phone): Not Applicable _____

Supplier Approved (if named in this nomination form)

○ Date: Not Applicable _____

○ Supplier Contact (name/title/organization/phone): Not Applicable _____

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

SECTION 1: EXECUTIVE SUMMARY

Make the Case for Excellence

Value: 10 points

Use 12 pt. Times Roman typeface.

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

West Star Aviation Academy (“WSAA”), is West Star Aviation’s innovative solution to addressing the Aircraft Maintenance Technician shortage and West Star Aviation’s projected growth. WSAA enables more women, men, and transitioning Military members to enter the aviation workforce by streamlining the old apprenticeship model and removing the financial barrier to obtain necessary skills and education to become a work-ready and licensed Aircraft Maintenance Technician (“AMT”).

WSAA was selected for the Program Excellence award in the Special Projects category based on its unique approach to solving an enterprise-wide labor shortage issue, and the rapid and unique approach we used to bring the vision to life.

Historically, WSA's Registered Apprenticeship Program offered apprentices two avenues to become licensed aircraft maintenance technicians. These included part-time apprenticeship while enrolled in an external Airframe and Powerplant (A&P) school, and full-time apprenticeship working to earn their A&P license through on-the-job training which averaged between 18 and 30 months respectively for apprentices to achieve their licenses. The long pathway and high tuition costs often created financial barriers for individuals looking to enter the aviation industry. WSAA opened a third pathway that significantly accelerates the licensing process to 7.5 months by providing an intensive classroom experience, coupled with focused and structure hands on training. WSAA also helps remove the financial barrier by paying our WSAA apprentices as employees and covering the costs for their tuition.

The vision for this project was rooted in our concerns about the current and projected workforce shortage. West Star’s Leadership Team identified both the relatively long apprenticeship process as well as the significant up-front investments apprentices must make in training as key barriers to both attract and retain talent that desired a career in the aviation industry. The West Star team set out to identify a solution that accelerated training, produced highly skilled and work-ready licensed technicians, and mitigated the effects of the workforce shortage on our operations. We arrived at the solution of developing an in-house academy and rapidly launched the process of developing our program.

The Aircraft Maintenance Technician curriculum is regulated by the FAA and must be taught by certified instructors. To accelerate the process of developing curriculum, West Star Aviation expanded its partnership with a local A&P school, Southwestern Illinois College (SWIC). The existing partnership and proximity of SWIC to West Star Aviation allowed us co-locate a program at our facility on the St. Louis Regional Airport which included a dedicated hangar and a classroom space. Additionally, West Star Aviation donated its Falcon 10 aircraft to the program to further enhance the hands-on learning experience. West Star Aviation also took the opportunity to expand upon the FAA’s approved curriculum by creating learning modules which are specific to West Star’s operations (The West Star Way), enabling students to hit the ground running and begin their careers immediately after graduation.

Once the program was announced in late 2023, WSAA received over 200 applications for the 25 available slots. By late December, we had selected and made offers to the first 25 technicians to join the program and launch a workforce.

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**

A 2023 Oliver Wyman study of Maintenance, Repair, and Overhaul (MRO) companies projected a shortfall of Aircraft Maintenance Technicians peaking at a deficit of 43,000 – 48,000 by 2027. The WSAA program created a pipeline of trained aircraft technicians on an expedited path to certification. Offering paid employment and benefits while students attend WSAA enables students to pursue a career in aviation maintenance while removing the cost barrier and in turn improves retention by solidifying a 3-year agreement from each student to remain with the company upon completion.

Prior to starting WSAA, West Star Aviation followed a relatively standard path for onboarding and training new Aircraft Maintenance Technicians, specifically training them through on-the-job (OJT) learning, or through local A&P schools. Given the fierce competition for licensed Aircraft Maintenance Technicians in the St. Louis area, West Star Aviation realized that we needed a more creative solution to build our pipeline of talent. Starting our own academy enabled us to train and grow 25 new technicians and build a pathway to full time employment upon their completion of the program. As part of the program, our apprentices are taught the Part-147 FAA approved curriculum. In addition we created and added custom components, termed ‘The West Star Way’ which included training on West Star Aviation specific procedures and practices ensuring that when apprentices graduate, they are able to hit the ground running as an integral part of the team.

An analysis done by West Star Aviation while creating the business case for WSAA determined the cost would be the same whether employing 25 academy apprentices or employing 25 apprentices completing OJT. This analysis also identified operational benefits by reducing the time senior technicians would spend training apprentices on basic skills which can be learned in a classroom, allowing them to focus on training for higher impact / higher value activities and supporting our customers.

The pilot of WSAA opens the door for continued cohorts in the future with the potential for 25 licensed technicians to join the West Star Aviation workforce every 7.5 months while retaining them for at least 3 years.

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

Customers are a top priority in our business. West Star Aviation is proud to support our new and long-term dedicated customers that to return to West Star Aviation for its breadth of experience. To support our customers and their needs, we recognize that we must grow our workforce of skilled A&P technicians allowing us to deliver their aircraft on time, squawk free, and safely. WSAA enables us to accelerate the training for our AMTs without compromising on their learning experience, or the customer experience we provide.

In our traditional apprentice model, senior technicians were paired with apprentices to pass down knowledge and train them on both basic, as well as complex tasks through on-the-job training. This training was completed in real time and limited by the types of projects we were performing. The WSAA training model allows us to provide a more well-balanced training baseline for our apprentices, further enhancing our opportunity to serve our customers.

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

West Star Aviation has directly felt the impact of the Aircraft Maintenance Technician shortage, often stretching our current workforce to deliver for our customers. Further, we've identified that we will need to significantly increase our team of qualified and licensed technicians over the next five years. Creating a confident pipeline of trained, work-ready, and self-sufficient Aircraft Maintenance Technicians helps our team members by augmenting their teams with trained, work ready peers, rather than placing the onboarding/training burden on existing team members.

Our East Alton, IL (ALN) location has expansion plans to meet customer demands to include the addition of a new maintenance hangar opening in 2024. This expansion will create more space to serve our customers, which in turn creates more demand for aircraft maintenance jobs. As part of the overall hiring plan for this expansion, we leveraged WSAA to build a pipeline to support the growth across the ALN Site. Given the shortage of aircraft maintenance personnel in the industry, both hiring and retention are challenges that must be addressed creatively in order to be successful. We experience turnover for various reasons, but the pipeline of technicians that will come from the academy will help ALN meet staffing goals now and in the long-term.

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

The idea of WSAA was formed in response to the workforce shortage of Aircraft Maintenance Technicians in the Aviation industry. Opening our own academy created a framework for our other locations and companies within the industry to follow suit to mitigate the shortage into the future. Located in East Alton, IL, 25 opportunities to earn and learn were created. Each WSAA apprentice is hired as a West Star Aviation employee on day one, which means they earn an hourly wage while attending school. This also increases the earning potential of each student after schooling ends and their career starts. In addition, West Star Aviation also partnered with the Madison County Workforce Development WIOA program to identify and enroll individuals that may have been discouraged by the high cost of A&P training. For the first cohort, we had 3 individuals qualify for the WIOA program.

West Star Aviation is the 2nd largest employer in the East Alton, IL area, providing over 600 jobs in the community. WSAA adds to this number of jobs while creating career pathways for individuals in the community, removing the barrier of school costs and providing the opportunity to focus on their education in an earn and learn format. Being able to offer a paid education opens the opportunity to individuals that may not otherwise have the funds or time to attend a traditional school.

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

When narrowing down 200+ candidates to a group of 25, we implemented new tools to select candidates that would be the best fit for the academy and a long-term career in aviation. West Star Aviation regularly invests in tools and systems to support our workforce performance and employee development, however as part of launching WSAA we partnered with external subject matter experts to develop and pilot new selection processes - specifically a mechanical aptitude test and the use of the Predictive Index talent optimization tool. Since then, West Star Aviation has adopted these tools throughout its hiring processes.

Predictive Index is a talent optimization tool that measures behavioral drives in addition to cognitive ability. By understanding the needs of the role, we were able to create a job target that matches what we were looking for within the academy and our future workforce. Each candidate completed an assessment which created data indicating if they would be a behavioral fit for the role (1-10). The data was used as a metric to narrow down the candidates.

Testing for mechanical aptitude was identified as another key indicator of future AMT success. We partnered with the experts at Ramsay Mechanical Aptitude testing to implement their test which was designed to measure a person's ability to understand and apply mechanical concepts, as well as their proficiency in working with tools and machinery. As part of the selection process, once candidates reached a certain stage in the process, we tested the mechanical aptitude of each candidate to provide a better indication of their overall mechanical knowledge.

These tools, in addition to an in-person tool identification test, fraction test, and torque test as part of their interview were used in determining their fit for the position and narrowing down to 25 candidates.

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

The first unique component of the program is how it was incepted and created. From vision to announcement, to opening day, the program took ~3.5 months to bring to life. The project team leveraged practices from agile software development to rapidly assess the business case, identify the needs, define the plan, align team members and deliver across disciplines to bring the program to life. The unique approach allowed all team members involved to remain situationally aware while driving progress in their respective lanes.

WSAA is also unique in how it is leveraged to develop and lead the individuals in the program. The 25 individuals are students of SWIC but also employees of West Star Aviation which required us to adopt to SWICs policies and procedures while also upholding the standards and expectations of West Star Aviation employees. As employees, students are held to our policies and are also provided with benefits. To further support their individual development, each student was assigned a manager within the department they will work in after completing school. Every other Friday, managers join students in the academy space where they meet with their team members to build relationships and answer questions. In addition, each WSAA apprentice was assigned a mentor (a senior technician outside of the apprentice's leadership structure) to supercharge their future department. Apprentices shadow their mentor on non-school days which provides additional opportunities to observe and apply their learnings in a real operational MRO environment.

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

An integral part of creating WSAA, was finding a Part-147 FAA approved school to teach the curriculum. We explored a couple options nationwide, including our local school, SWIC. When it came time to decide, our longstanding relationship with SWIC and desire to keep our business within our local community made the decision easy. Many of our current employees attended SWIC's Airframe & Powerplant program, providing familiarity with the instructors that are now teaching at the academy. Their contribution and partnership throughout the process of the first cohort was essential to its success.

Additionally, we leveraged our technology partners and suppliers to expedite the creation of the program. We partnered with our primary operational software provider to create an offline version of the primary software which is used to run West Star Aviation's operations. This allowed our apprentices to learn our core application in a relatively low-risk environment.

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.)

There are specific challenges faced when starting a program as complex as WSAA.

- 1. Volatility & Uncertainty:** Recruiting young mechanics can be a volatile process given the wide range of talent and mechanical aptitude of the applicant pool. There were several unknowns surrounding attracting and selecting candidates that would be the best long-term fit for the company. We were confident that we would receive a fair number of applicants, but we understood the uncertainty of selecting the best candidates that would excel in the program and fit West Star Aviation's culture. West Star Aviation has also observed varying degrees of success in onboarding and retaining new mechanics, often related to external factors which we cannot control, but also related to an apprentice's ability and desire to complete training their programs. Given the financial

investment West Star Aviation made to set up the school, convert a hangar space into classroom space, create curriculum, provide an airplane, cover tuition, and the compensation packages for each apprentice, removing the volatility and uncertainty of retention became a key priority.

2. **Complexity:** Partnering with outside agencies to achieve our goals always creates complexity. In the case of WSAA, we encountered complexity in blending SWIC's policies and expectations and our own. It required constant communication with the college administrators and instructors, as well as West Star Aviation's People and Learning teams to ensure a united front was presented to the apprentices. Finding a balance between the two was crucial to the success of staffing and launching the program. In addition, having the school on the West Star Aviation campus meant dealing with the additional security complexities of having students learning at a working MRO facility. Lastly, sourcing the tools, materials, and learning aids for the on-the-job training portion of the academy proved to be a unique challenge as they are not readily accessible. These learning aids can be expensive and difficult to source so we sought out a solution to fill need creatively.
3. **Ambiguity:** The 25 WSAA apprentices were assigned 3 different department managers. Each of these teams are very similar in structure and style but different needs from AMTs. This creates a variation in expectations and crucial learning points across departments. While the airframe curriculum is FAA regulated, the hands-on application and follow up WSA Way training must be flexible enough to be applicable across all departments.

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

1. To mitigate the uncertainty and acknowledge the investment, each apprentice signed a 3-year commitment to remain with West Star Aviation ensuring they remain dedicated to completing the program and doing well in school. West Star also evolved its recruiting processes to include mechanical aptitude testing, as well implemented the Performance Index tool to validate that we selected the best candidates for the program. Additionally, we structured more regular connection through a bi-weekly lunch with the managers and apprentices where they have the opportunity to meet with their future manager, the General Manager and Human Resources to discuss any concerns or needed support. The bi-weekly manager lunches allow for open communication with apprentices and their manager to share information and best practices, and job shadow days enable the apprentices to see their future team in action and apply what they've learned to specific scenarios on their airframe.
2. We also evolved our approach to recruiting by partnering with local high schools and workforce development agencies to spread the word about the academy, in addition to our own internal marketing team. The buzz created helped us ensure we had a strong pool of candidates to fill the 25 spots, and that we could build ongoing buzz for the next cohorts of apprentices.
3. While West Star Aviation and SWIC both have their own policies and procedures to abide by, we merged them to ensure the best overall experience for the apprentices. For the materials and job aids, West Star Aviation was able to donate an aircraft that was no longer utilized. This aircraft is one of the airframes worked on by our technicians so donating it to the academy as a learning aid was a great solution. Additionally, one of our program managers built out practice job aids for the academy to utilize, resulting in a large cost savings for WSAA.
4. West Star Aviation also created specific "WSA Way" training modules which are taught at the end of the course. These were custom developed by our internal Technical Trainers to train and equip the apprentices with proprietary processes and procedures. This allowed us to improve the overall onboarding experience and reduce ambiguity for our apprentices.

SECTION 5: METRICS

Value: 15 points

Use 12 pt. Times Roman typeface

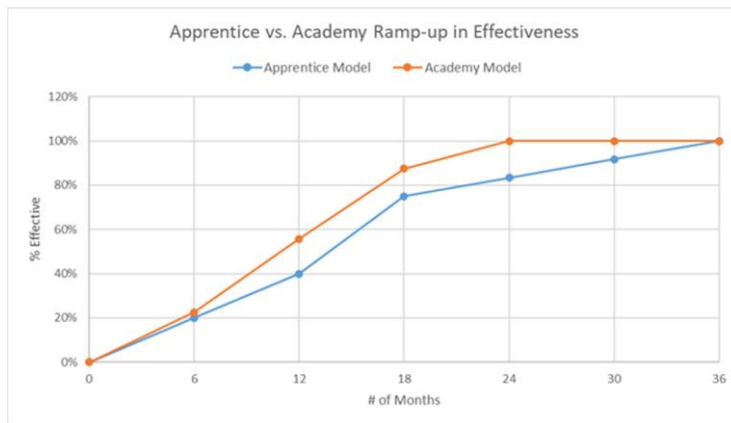
Please respond to the following prompts, where predictive metrics indicate items that provide a view of how yesterday's actions and today's actions will affect the future timeline, cost or other requirement.

Provide charts/graphs that illustrate performance to these metrics:

➤ What are your predictive metrics?

Our predictive metrics break down into three main categories: People, Operational, and Financial.

- Our predictive people metrics include candidate likelihood of success (mechanical aptitude + Predictive Index), post-graduation retention, worker satisfaction, and continued learning progress (after graduation). These will allow us to assess the overall likelihood of success for candidates which we evaluated for the program, their sentiment of apprentices during their education journey, and will help us monitor for success after their graduation. Additionally, we are monitoring how the program will help us contribute to enterprise hiring goals.
- Our operational metrics include technician ramp-up effectiveness and technician utilization. These will help us understand how effective the apprentice technicians are upon graduation, and how their contributions will affect overall operations once they are fully integrated into our operations. Our ramp-up effectiveness metric specifically will compare the traditional apprenticeship model utilizing OJT against the WSAA model.



Month	Apprentice	Academy
0	0%	0%
6	20%	23%
12	40%	56%
18	75%	88%
24	83%	100%
30	92%	100%
36	100%	100%

- Our financial metrics include overall training expense and our effective labor rates. These will allow us to measure the financial benefits of the accelerated program, compared to the traditional apprenticeship program.

➤ How did you perform against these metrics?

Most of our predictive metrics will not show the full extent of the program's success until the first cohort graduates. We do have some early indicators based on analysis, specifically applicant likelihood of success, program retention rates, and training costs.

People:

- Our predictive people metrics were critical in selecting the right people. Use of these selection metrics were so helpful that we rapidly worked to implement these tools and metrics across the enterprise to help improve our candidate selection process. Additionally, our program has a 92% retention rate to date, and we have the tools and processes in place to monitor for post-graduation learning progress.

Operational:

- The operational effectiveness metrics will be more accurately measured once the WSAA apprentices complete their schooling. Within this model, they attend 7.5 months of full-time school and move on to 6.5 months of training within their department and utilizing the competencies they learned in school. Their effectiveness in comparison to the projection will be determined at that point when comparing to the traditional apprenticeship model.

Financial:

- A financial analysis was done in the early stages of WSAA to predict the program's cost compared to the traditional apprentice program. The cost analysis included metrics on tuition and payroll hours for the students and ineffective labor wages for senior technicians. A side-by-side comparison was created to anticipate 3 years of the academy next to 3 years of the traditional apprentice program. To date, this has largely proved true and will be monitored as we implement future cohorts.

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

Our metrics keep the hiring teams and management informed on hiring and turnover progress while spotlighting operational trends or problem areas that need to be addressed. Many of the metrics used to measure the WSAA program are closely related to metrics we use to manage our business, hence highly relatable. Continuously monitoring our WSAA specific people, operational, and financial metrics have allowed us to take learnings from the program and apply them across our enterprise. As stated above, West Star Aviation has leveraged the predictive hiring metrics to inform our broader hiring strategy. We have also implemented our training completion metrics to measure the ongoing career development progress for our technicians which have already moved past the apprenticeship stage of their career. West Star Aviation intends to continue using data to drive our decisions and inform the implementation of best practices as we grow.