

AVIATION WEEK PROGRAM EXCELLENCE AWARDS

INTELLECTUAL PROPERTY

(This section must be signed)

Individuals **outside your company**, including the companies listed above and other third parties, potentially including your competitors and others in your industry, may receive and/or review award submissions. All information submitted should address the program's management, leadership, and processes in a manner that you are comfortable sharing with third parties freely and without restriction, and may not include any classified or proprietary information or materials. Do not include any materials marked Confidential or Proprietary or bearing any similar legend. All responses and other submissions, whether in whole or in part ("Submissions"), shall be deemed not to be confidential, proprietary, and/or nonpublic information of any sort for any purpose.

Without limiting the foregoing, you hereby grant to Aviation Week Network, an Informa business, a perpetual, irrevocable, royalty-free, full paid-up, worldwide license to copy, reproduce, distribute, display, publicly perform, publish, republish, post, transmit, disseminate, edit, modify, and create compilations and/or derivative works of the Submissions (or any portion or excerpt thereof) in connection with its or any of its affiliates' business(es). Aviation Week Network agrees not to edit the Submissions in any way that materially alters their overall substantive meaning. Aviation Week Network may freely assign, license, transfer, and/or otherwise convey any or all of the rights and licenses granted hereunder.

Thank you for participating,



Gregory Hamilton
President
Aviation Week Network

Acknowledged, agreed, and submitted by

Nominee's Signature



June 30, 2025
Date

Nominee's Name (please print): Adam Grimm

Title (please print): President/COO

Company (please print): KIHOMAC

NOMINATION FORM

Name of Program: KIHOMAC MXU-1072/A Advanced Travel Pod

Name of Program Leader: Trey Munn

Phone Number: 801-540-7367

Email: trey.munn@kihomac.com

Postal Address: 3800 N. Fairfield Rd., Layton, UT 84041-4895

X Customer Approved

- Date: 27 June 2025
- Customer Contact (name/title/organization/phone): Mr. Kevin Vaughan, Program Manager, F-35A Fleet Management Office (AFLCMC/OZJ), 937.257.1570

☐ **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.**

Nomination Category: Supplier System Design and Development

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?

In light of an ever changing “Near Peer” threat with emerging technologies, the United States Air Force ushered in a new doctrine of highly distributed lethal operations called Agile Combat Employment (ACE). The ACE revolution has created a new set of needs for rapid self-support. The F-35 Lightning II is cornerstone to ACE operations. Single seat fighter aircraft such as the F-35 have increased needs for cargo carrying capacity to transport pilot gear, tools, equipment and spare parts for contingency ops.

Units transitioning to the F-35 identified a deficiency of available and serviceable cargo pods to support ACE operations. Legacy cargo pods have been out of production for a number of years and are becoming unserviceable and difficult to acquire. These pods, built from modified Vietnam era napalm canisters, have numerous design deficiencies. KIHOMAC’s Advanced Travel Pod (ATP) development program was designed to resolve the gap in available cargo pods by fielding a modern, fit for purpose pod that supports the needs of operators and maintainers.

The process of developing and fielding new equipment for carriage on a 5th generation fighter aircraft is challenging even for programs of record. The ATP program was a private development program completely funded by a small business in support of Air Force needs. The KIHOMAC team developed the first prototypes and worked with Air Force maintainers to conduct fit checks and evaluate design choices before presenting the finalized solution to Air Force leadership. Key Airmen-friendly design choices, including removable doors, symmetric end loading, and movable tiedown points, were incorporated into the design as a result of these productive dialogues with those who employ this product.

KIHOMAC’s development team presented the final product to both domestic and foreign partners to gain further feedback and gauge user interest in procurement. The feedback was overwhelmingly positive and helped convince Air Combat Command to fund and support the necessary Government activities to qualify and certify the pod for carriage on the F-35A.

The final product was recognized as a unique design and solution to an acute operational challenge that gained increasing urgency. The timely action carried out by KIHOMAC’s team of engineers and technicians provided the Air Force with a solution to fill a gap to supporting ACE operations. Key support from stakeholders across the enterprise brought together KIHOMAC, the Air Force and Lockheed Martin to overcome inherent technical and programmatic hurdles to fielding new equipment.

This program stands out as KIHOMAC’s most successful internal research and development program in the company’s 22-year history. It was the brainchild of a KIHOMAC employee who understood the need and was able to bring together a coalition of the willing to get the solution design finalized, certified, accepted and moved into production. As a result of this program, KIHOMAC developed a true growing export business, and has started work on derivative products to keep the company busy for years to come.

The project was placed into the Supplier System Design and Development category because it is a piece of equipment that can be carried by an end-item aircraft. The primary activities over the timeframe of this award were the design and development activities. They represent the efforts to finalize the design, gain certification and start the full rate production process.

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**

The development of the MXU-1072/A Advanced Travel Pod resulted in significant value creation for KIHOMAC. The new pod has become the de facto standard for all F-35 operators and opened a new line of manufactured products for the corporation. This program created value along all axes, including increased profitable revenue, new intellectual property, and expanded markets.

The travel pod product line created financial value for KIHOMAC in terms of both revenue and profitability. Pod orders have increased company revenue by 15% year over year, generating stepwise growth for the company and driving corporate revenue over \$60 million. The pod has also proven to be a profitable project, increasing company profitability and providing a consistent manufacturing basis for workforce stability.

The MXU-1072/A has also created value for KIHOMAC with new intellectual property with a strong and defensible moat for future development. KIHOMAC was awarded a U.S. patent for the unique design features of the pod, which has provided a defensible position for continued production and development of derivative designs for other applications. The design itself was created entirely at KIHOMAC's expense, allowing the company to maintain the data rights and produce pods without direct competition.

Finally, this pod provides KIHOMAC with access to new markets that have not previously been within reach. The company was able to build new business with both the Air Force and the Navy F-35 communities and has built relationships with the Marine Corps F-35 community that provides the basis for future business. KIHOMAC has also developed numerous international relationships with the numerous partner and foreign military sales countries flying the F-35 overseas. Developing international business is creating both relationships and the skills necessary to maintain an export business. KIHOMAC has already completed a first international sale to Japan and is in the process of finalizing orders for additional exports to countries such as Finland, Norway and Italy.

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

Travel pods are a commonly-used piece of equipment for fighter aircraft. Fighters do not typically provide storage space for pilot luggage or other items required during deployments or off-station travel. The travel pod provides a way for carrying needed equipment on a weapon station without dedicating

precious aircraft space to storage. The Air Force's legacy MXU-648 pods are converted napalm canister designs at the end of their useful lives and have significant limitations in utility and durability.

KIHOMAC's MXU-1072/A Advanced Travel Pod provides a leap in capabilities over the legacy design, with an increased carrying capacity, user-friendly doors and handles, anti-roll feet for stability when unloaded from the aircraft, and configurable tie-downs to secure loads absent in legacy pods (Figure 1).

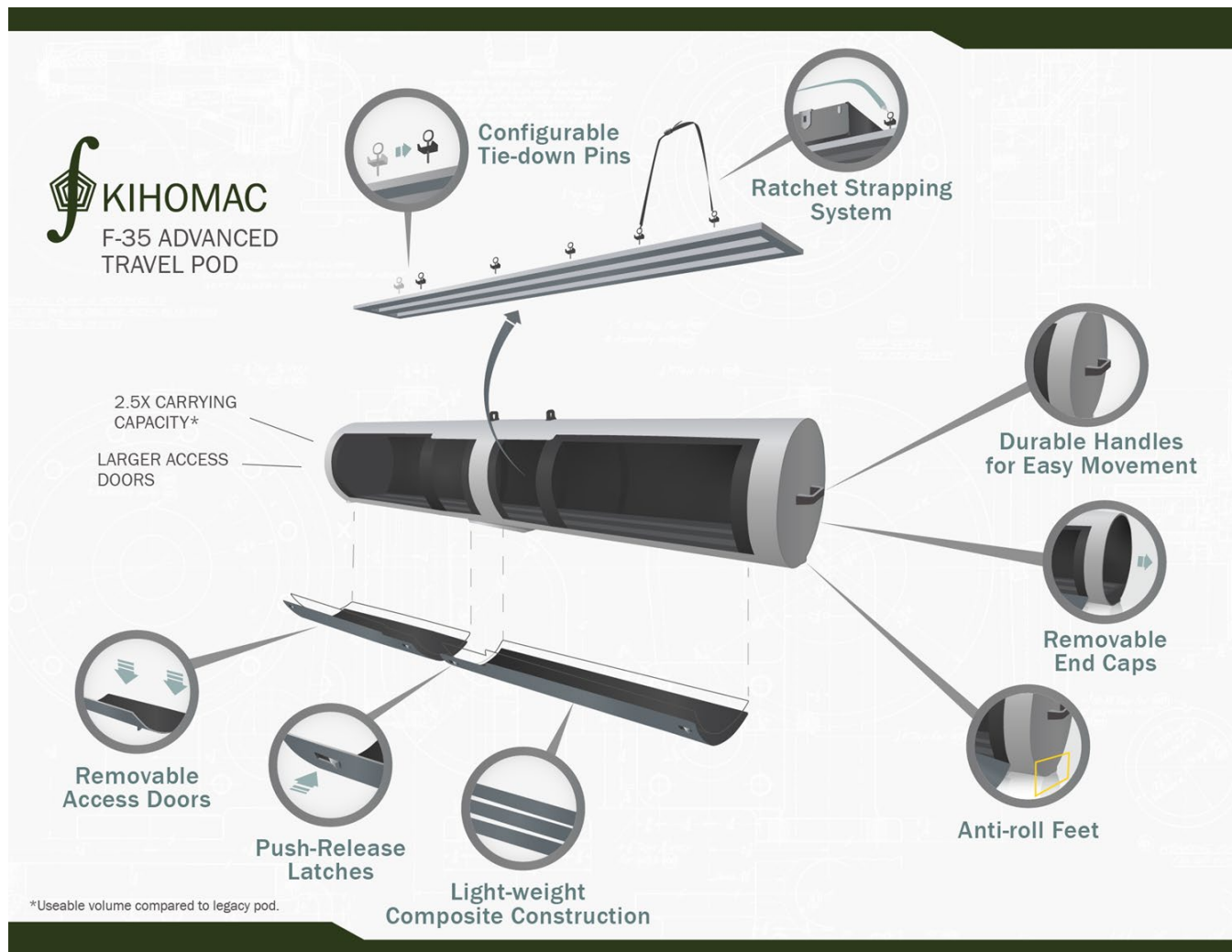


Figure 1 The MXU-1072/A Advanced Travel Pod is a generational improvement on legacy designs

The value to the warfighter is a modern pod that is light, easy to mount on the aircraft, easy to load with equipment, easy to repair, and easy to manage at a deployed location. Additionally, it is procurable and less expensive than legacy designs.

At an operational level, the new pod brings value to the user as a force-multiplier for Agile Combat Employment (ACE) operations and the dispersal of deployment packages into smaller units operating from remote locations. ACE requires F-35 units to self-support by transporting tools, spare parts and test equipment from a central location to a dispersed location. The unavailability and limited capacity of legacy travel pods was an unforeseen limiting factor in the employment of the ACE doctrine.

KIHOMAC's Advanced Travel Pod provides direct value to Air Force planners by providing the key piece of equipment necessary for self-support critical to enabling forward deployment and follow-on rapid generation of aircraft for employment.

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

KIHOMAC is a values-driven company with service at the heart of our company culture. Our company's purpose statement, below, informs the value that we place on the projects we undertake. The Advanced Travel Pod supports our purpose directly through service to our customer, employees and aerospace.

KIHOMAC's purpose is to grow an enduring great company that:

Serves our Customers,

Through innovative, high-quality products and solutions delivered on time and on budget.

Employees,

Through dependable, meaningful work with fair pay, benefits and quality of work-life.

and Communities,

Through meaningful local investments, responsible growth and charitable works.

with Aerospace at our heart.

Aerospace is a transformational and inspirational industry that drives innovation, captures our imagination and is integral to the safety, security and economic development of our communities.

The value of this program to our customers directly creates value for the members of our team. Designing and manufacturing an innovative product that solves a direct operational need while also improving the lives of enlisted maintainers is an achievement of great meaning to our team. We have a significant workforce of veterans who understand how products like this benefit warfighters and we take great value from being able to complete projects like this one.

This program also directly supports employee value through the creation of a new product line that will provide meaningful and dependable work for years to come. Our market analysis indicates that this product and its derivatives should be in full rate production for at least 10 years. This level of production creates valuable stability and core workload for our production team. The long-term manufacture of this product also creates opportunities for production efficiencies and development of new skills and techniques. The continued growth and maturity of KIHOMAC's manufacturing capabilities represents great value to our team and the improvement of their work lives.

The aerospace innovation that this pod represents is valuable to the KIHOMAC team because it reinforces our position as an aerospace company that brings new ideas into the market. As a product developed directly from a suggestion made by one of KIHOMAC's employees, the Advanced Travel Pod represents the value of team member engagement in the research and development programs KIHOMAC undertakes to support aerospace.

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

The communities within which KIHOMAC operates are improved through the development of products requiring advanced manufacturing. This program created a stable future for aerospace composites manufacturing that benefits the local community with good manufacturing jobs and the further solidification of aerospace manufacturing as a viable cornerstone of the local economy.

The improvement of F-35 operations also contributes to the security of the United States and its allies. ACE concepts are at the forefront of current thinking for utilizing the unique capabilities of the F-35 to its fullest in defense of the interests of all partner nations. The Advanced Travel Pod enables international security as part of the larger F-35 ecosystem while acting as a greater deterrent to international aggression by foreign bad actors.

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

The development of new equipment for on-aircraft carriage requires a significant and detailed engineering process. As a supplier developing new equipment for the F-35, KIHOMAC did not initially have access to the key technical data needed to design and qualify a new pod. The team developed new engineering tools to create a generic certification baseline sufficient to complete the project and pursue Air Force approval and certification.

The Advanced Travel Pod design team utilized digital design techniques to create the design for the pod. They began with a clean sheet, working with customer stakeholders and company experts to determine key design features. The result of this effort was a representative prototype, built to the digital model, that incorporated revolutionary new features in a travel pod. The team's focus on useability and fit for purpose resulted in improvements such as a light weight durable composite body with large, ergonomic handles and anti-roll feet that bring travel pod design into the 21st century.

The KIHOMAC team created an innovative coalition of supporters across the Air Force to provide feedback and support to our development effort (Figure 2). These supporters helped the team complete useability analyses, completed key Air Force processes necessary for fielding, and ultimately helped perform the final flight testing required to complete certification and move to production.



Figure 2 Flight testing of the Advanced Travel Pod at Edwards AFB was the culmination of a significant effort by KIHOMAC and Air Force personnel working together to finalize the fielding of the first new U.S. travel pod design in over 20 years.

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

The development of the Advanced Travel Pod program grew out of KIHOMAC's internal research and development (IR&D) program. KIHOMAC's IR&D program is a bottoms-up effort to harness the best ideas from across the company. KIHOMAC budgets for IR&D each year and encourages employees to apply for funding to develop their concepts. This "open call" approach brings a multitude of ideas from diverse employees with broad experience and insight into customer needs.

The Advanced Travel Pod program represents KIHOMAC's most ambitious IR&D program, stemming from the vision of Mr. Trey Munn, a retired Air Force CMSgt, who led the beddown of the first F-35s at

Hill AFB. Mr. Munn was acutely aware of the challenges facing the Air Force due to the lack of a modern, supportable travel pod. He brought the idea to KIHOMAC's IR&D council and requested funding to develop the proof of concept and determine whether a new pod would be commercially viable.

The size and complexity of this IR&D program drove a unique set of practices in bringing together diverse skill sets to design, build and test the new pod. The association of the program with KIHOMAC's value set prompted a significant coalition of employees to build new engineering and design processes for each other during the process of designing the pod.

The scale of the investment required to develop this new product also drove the development of a unique iterative approach to IR&D. This approach is characterized by the incremental release of funding, based on empirical observations of customer need and ability to acquire the product. The development team scheduled regular check-ins with Air Force and Lockheed Martin stakeholders to continue to gauge interest and acquisition planning. Each check-in generated data that was relayed to KIHOMAC's IR&D lead for incremental funding approval. This approach greatly increased corporate confidence that the program would successfully find a market and be able to recoup investment costs.

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

The KIHOMAC engineering and supply chain teams were cognizant of the need to identify key supply chain elements and involve their suppliers in the development of the new product. Two particular suppliers, one for carbon fiber and one for commercial off the shelf hardware, contributed significantly to the success of the effort.

Carbon fiber supplied is the most-used material in the pod. The KIHOMAC team worked with their carbon fiber supplier to identify pre-preg carbon fiber materials that would meet the strength requirements of the pod design without requiring an autoclave cure. Elimination of the autoclave saved both time and cost in the final design. Additionally, KIHOMAC's supply chain managers looked for materials that were being used in other full rate production programs to save cost through the use of combined purchases. The supplier was able to provide key recommendations and help KIHOMAC's design team select the correct material for the manufacture of the pod.

Another supplier with a key role was KIHOMAC's supplier of commercial off the shelf components. KIHOMAC's design team needed a tracking system to support the user's request for adjustable tie-down locations. The supplier was able to assist to the selection of seat track lengths as the material for providing the tie-downs. They helped the KIHOMAC team work through supplier conformance issues and avoid significant cost by keeping with the off the shelf product and not requiring the integration of a customer made component.

Additionally, KIHOMAC partnered with the state of Utah on a manufacturing modernization grant to purchase a high rail computer numerically controlled (CNC) router to automate composite trimming operations previously performed manually. KIHOMAC's machining capabilities at the beginning of the project did not include automated routing for composite material. The lack of composite routing necessitated the use of manual processes that were time consuming and created opportunities for defects and damaged material. The new automated process cut trimming operations by 85 percent and virtually eliminated defects and scrapped material.

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.)

The development of new equipment is a challenging task for any team. KIHOMAC faced significant volatility, uncertainty, complexity and ambiguity as a small business developing a key new system at private expense. The existence of each of these VUCA elements can confer a long-term advantage to a company willing to navigate them by creating a barrier to entry for competing businesses.

The KIHOMAC team faced actual and planned-for volatility in several areas. They assessed supply chain volatility and the likelihood of changes to key material and supply inputs. The design team reacted to one key supplier of commercial off the shelf components that introduced last-minute volatility by not being able to provide certificates of conformance that the component was manufactured from the correct materials. The team also had to contend with possible volatility in customer requirements, funding and fielding recommendations, driving significant activity to continually assess and plan around these issues.

Uncertainty is a constant in aerospace development. Without a defined budget or program of record, the KIHOMAC team knew that the future of the Advanced Travel Pod was uncertain throughout the development program. The team also faced the uncertainty of competition and the possibility of legacy manufacturers seeing the opportunity to re-energize manufacturing lines with already certified solutions.

The KIHOMAC team faced complexity in the form of a large number of stakeholders with diverse authorities, interests and budget capabilities. The complicated nature of the multi-service, multi-national F-35 program meant that we were faced with an ever evolving map of service, Joint and international stakeholders to understand and contend with.

Finally, ambiguity was present in this program as the team worked to define the path from concept to certification and sales. Ambiguous requirements and contracting strategies were a daily part of the program as the KIHOMAC team worked to complete the design. The internal KIHOMAC team was well aligned, but many of the Advanced Travel Pod stakeholders were not always able to align on a clear path forward to bring the solution to the field.

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

The KIHOMAC team worked hard to respond to and resolve each of these VUCA issues. The development of the Advanced Travel Pod spurred our team to grow in multiple ways, building deep strategies and better tools as we worked to bring the product to market.

The team addressed supply chain volatility by injecting supply chain considerations directly into the design process (Figure 3). Supply chain is often an afterthought and addressed during post-manufacture value engineering activities. The KIHOMAC team addressed this from the beginning, designing in materials that were common to multiple manufacturing programs in the same facility. Driving commonality of material – in particular, the carbon fiber material used for the body – reduced volatility by increasing KIHOMAC's purchases of material and allowing the company to negotiate long-term, cost-effective material buys.

The impact of the discovery of indeterminate material conformity in off the shelf seat tracks forced the team to immediately re-assess both the design baseline of the pod and the supplier base. The team loosened the design specifications after determining that any of the possible materials of the seat track would be acceptable. They also worked to qualify a second supplier to ensure the continued availability of components.

Finally, the team dealt with potential volatilities in stride. Programs such as this one are often subject to changing requirements, changing funding lines and changing certification bases. The team utilized robust digital risk matrix tools to track volatility risks to the program and determine the impacts if these areas changed. The team was fortunate in being able to complete the project without seeing significant changes in direction as a result of funding, requirements or certifications. The continued possibility, however, drove innovative thinking in design and certification, including the use of generic qualification requirements to cover multiple possible sets of certification requirements.

The Advanced Travel Pod development effort faced uncertainty throughout the program. Although the product had a clear need, it was never certain that the Air Force would be willing to certify and fund production of the pod after the design was complete. The project team understood the possibility that the legacy pod manufacturer could reopen the production line, or the Air Force could decide it would rather fund its own program for pod development. To combat this uncertainty, the team used a phased approach to the company-funded development effort by creating regular checks for continued relevancy and funding likelihood. The team defined a customer check-in event at the end of each phase that generated confirmation of continued support. Each of these check-ins revalidated that the travel pod development was on the right track, with the right product, and without a significant competitor that could damage the project's success.

One example of a successful customer check-in was the display of the pod at an F-35 Product Improvement Working Group. This event, held at Lockheed Martin in Fort Worth, TX, was an Air Force-sponsored event to bring together maintenance professionals from across the service, the Joint force and foreign partners, to address key maintenance issues. The availability of travel pods was of great interest to this forum and the KIHOMAC team brought a prototype pod to demonstrate to the assembled group. The pod received strong positive feedback from both U.S. and international partners, prompting the Air Force to begin the actions necessary to generate a formal requirement for the pod. The KIHOMAC team was able to take these results back and gain approval for the development to proceed to the next phase.

KIHOMAC's customer check-in activities also supported the team's response to the complexity of the F-35 environment. The F-35 program consists of three individual services working together in a Joint Program Office, the Air Force's F-35 Fleet Management Office, and some 19 international partners. In addition, the Air Force's requirements are generated from Air Combat Command and airworthiness for external stores is provided by the Air Force's SEEK EAGLE office. The complexity of this environment required a good stakeholder map for the development team to follow. The team communicated regularly and openly with all stakeholders and identified the critical ones to ensuring project success.

The team was ultimately able to determine that Air Combat Command and the Fleet Management Office were the two stakeholders most important to success. KIHOMAC worked with both offices to consult on requirements and timelines and help identify contract vehicles to move into production. The ultimate success of the project in gaining certification and production funding was based on reducing complexity

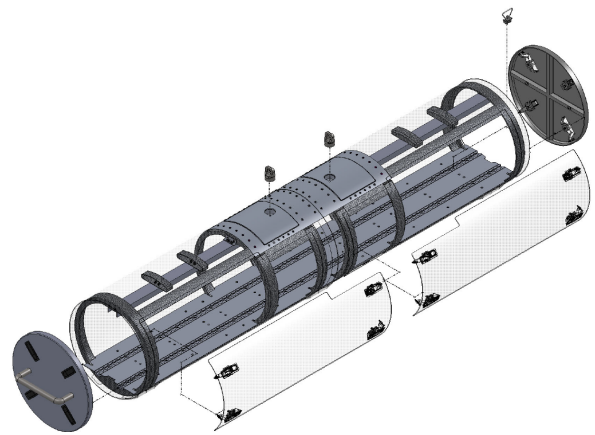


Figure 3 Each element in the pod's design was assessed for supply chain impacts to reduce volatility during production

with a focus on the key stakeholders, while keeping all stakeholders informed as to progress throughout the project.

The ambiguities in this program chiefly rose from the lack of a program of record during the development of the pod. The KIHOMAC team did not have a set of customer-validated requirements and the certification basis for airworthiness and SEEK EAGLE was unknown for much of the development. The team took a pragmatic approach to ambiguity by acknowledging the existence of unknowns and working to box them in with internal definitions. The team worked with Air Force stakeholders to review pod designs and ensure that the planned design choices would receive endorsement from active duty maintainers. This reduced ambiguity by allowing the engineers to maintain a digital requirements basis and providing a path for the design team to follow.



Figure 4 The KIHOMAC team performed a full suite of qualification testing – including 3-axis vibration – on the Advanced Travel Pod

Ambiguity in certification was a greater challenge for the design team. KIHOMAC's goal was to provide an airworthy and qualified pod to the Air Force for final SEEK EAGLE and airworthiness approvals. The Government was not able to provide the necessary certification and qualification requirements, however, so the KIHOMAC team was required to generate a generic basis that they believed would meet the most probable requirements prior to starting work with SEEK EAGLE. The generic qualification basis provided a fundamental set of environmental qualifications (Figure 4) and pod analyses under different load conditions to demonstrate safety and airworthiness. The approach to reducing ambiguity was successful and the KIHOMAC team was able to work with SEEK EAGLE with minimal re-work to gain the required approvals for carriage on the F-35.

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 yestrday'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?

The development team used a series of both technical and programmatic predictive metrics to track performance of the project. Key metrics included the final design margin of safety, manufacturing hours, and production quantity.

Margin of safety, as a predictive metric, grounded the design team and built confidence in the overall design of the pod (Figure 5). A higher margin of safety predicted a greater likelihood of success with SEEK EAGLE approval. The system design requirement was a margin of safety greater than or equal to 0.33.

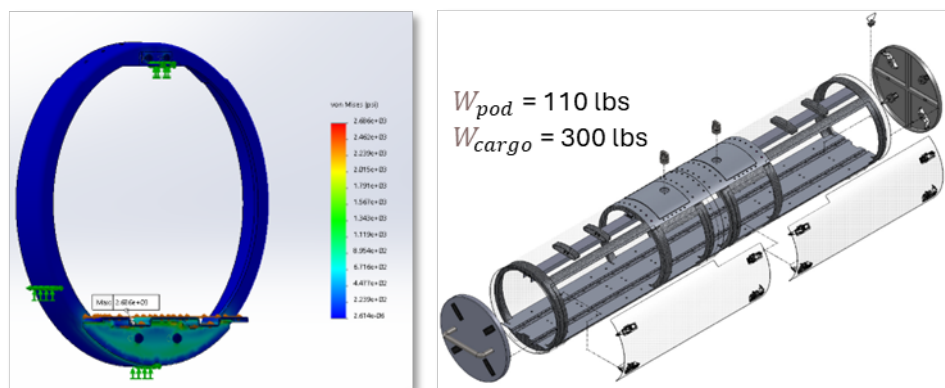


Figure 5 The KIHOMAC team used digital design techniques and analysis to calculate the margin of safety of the pod design

Manufacturing hours through development provided a leading indicator of both production throughput and final cost of the pod (Figure 6).

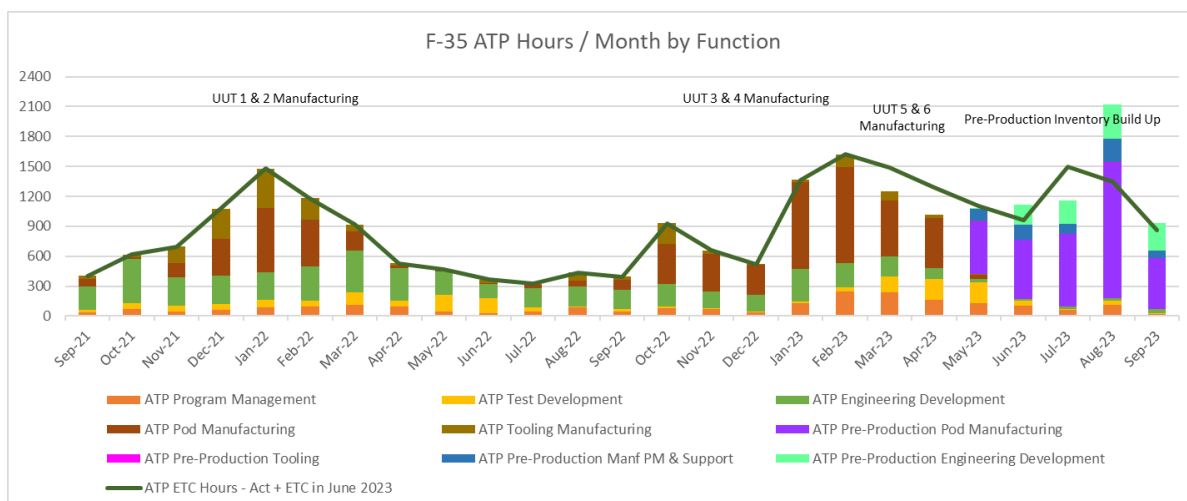


Figure 6 Manufacturing hours for each work section were tracked during the production of each pod

The KIHOMAC team's production quantity metric provides a snapshot of pods produced against the planned number of pods for a given timeframe (Figure 7). The metric predicts the cost of pod production as well as identifying potential schedule shortfalls.

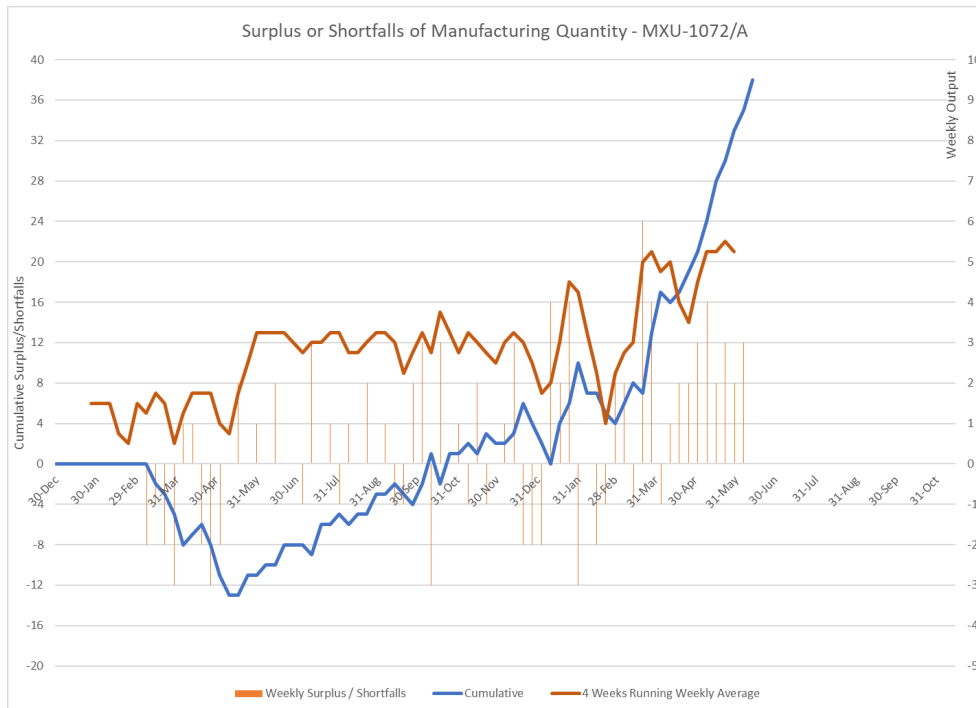


Figure 7 Manufacturing quantities by week provide a quick indicator of both cost and schedule during production

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

The KIHOMAC team performed well against all tracked metrics. The pod ultimately met the required margin of safety and was able to gain SEEK EAGLE recommendation. Production hours have varied as the program worked to complete test assets and transition to production, but the overall hours per pod have come down within the program baseline. Pod production itself struggled to meet initial planning targets, but it has since recovered, reinforcing the value of the team's design choices for manufacturability and supply chain readiness and is now greatly exceeding initial planning targets.

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

The success of this program was in its ability to develop and deliver a cleansheet travel pod design that was fit for purpose, airworthy, and cost competitive. The predictive metrics used by the KIHOMAC team drove action toward excellence by highlighting and measuring the teams progress towards those goals.

The technical metrics used for design margins and safety drove the engineering team to make design choices that would result in ultimate pod certification. The team added a longitudinal structural strengthener to reinforce the interior strength of the pod and increase the margin of safety for structural loads.

The programmatic metrics kept the program within schedule and budget by driving the team to consistently re-evaluate manufacturing processes and the supply chain. The team specifically looked at both manufacturing hours and production rate as catalysts for multiple lean manufacturing events to improve the flow of parts through the shop. The team also developed a set of supplementary production metrics to track the manufacture of the pod through each build step, driving close attention to the flow of pods at each point in support of the final objective of shipping pods to end customers.