AVIATION WEEK
PROGRAM EXCELLENCE AWARDS

INTELLECTUAL PROPERTY

(This section must be signed)

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Thank you for participating,

Gregory Hamilton
President
Aviation Week Network

Acknowledged, agreed, and submitted by

Nominee's Signature

6/30/2025
Date

Nominee's Name (please print): Marcelo Tocci

Title (please print): Director, E-Freighter Program

Company (please print): Embraer

NOMINATION FORM

Name of Program: E-Freighter

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☐ 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

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?

[LIMIT YOUR NARRATIVE TO THIS PAGE.]

The E-Freighter Program (E1F) represents a pivotal moment in Embraer's history, marking the company's entry into the cargo conversion market and laying the groundwork for its next evolution in developing, managing, and delivering complex aircraft solutions. Built on the proven E-Jet platform, the E190F freighters offer a compelling combination of performance, efficiency, and flexibility. With a payload of up to 13,150 kg, a range of over 2,100 nm, and compatibility with standard ULDs, the E-Freighter is uniquely positioned to serve the fast-growing e-commerce and regional logistics sectors, helping connect smaller cities and develop their economies.

This was also the first time Embraer converted a passenger jet into a freighter. Despite the novelty, the E-Freighter received EASA STC certification on December 20, 2024, concluding the triple certification (STC approval by ANAC, FAA, and EASA) with 29 months of development, which is 15 to 20% faster than industry benchmarks. This achievement underscores the strength of our integrated planning, execution discipline, and cross-functional collaboration and management.

Beyond the aircraft itself, the program catalyzed a cultural and operational evolution in Embraer's internal culture, supplier relationships, and program management maturity. The E2 aircraft program development best practices were the E1F primary management reference. The E2 received many awards, including the Aviation Week Program Excellence finalist award and the PMI Project of the Year Award.

The E1F Program is a joint venture between the Commercial Aviation and Services & Support business units. The program broke down silos and fostered a One Team mindset across engineering, industrial operations, MRO (Maintenance, Repair, and Overhaul), and supply chain functions. It introduced new levels of agility, with lean practices like full-kit readiness, Gemba walks, and the "roda de samba" agile/scrum daily stand-ups driving real-time problem-solving on the shop floor.

The program also showcased Embraer's digital engineering capabilities. The perfect first-trial assembly of the main cargo door on a 10+-year-old aircraft—enabled by high-fidelity digital mockups and structural modeling—demonstrated the maturity of Embraer's design and integration processes and digital tools. Predictive tools, such as fever charts, were used to manage schedule risks. At the same time, physical progress was tracked through a structured Schedule Journal, enabling proactive decision-making and early mitigation of bottlenecks.

Externally, the program opened a new market segment for Embraer and strengthened its aftermarket business by extending the life and value of its existing fleet. Internally, it created leadership opportunities, accelerated talent development, and reinforced Embraer's commitment to social development, diversity, and inclusion through initiatives like Embrace and the GP Jr (young project managers) volunteer program. The program's success was celebrated not just as a technical achievement but as a cultural milestone—one that showcased once again how quickly and effectively Embraer can develop and deliver a new program.

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 E-Freighter Program delivers strategic value to Embraer by enabling the company to extend the operational life and revenue-generating potential of its existing E-Jets fleet, with more than 1,700 aircraft delivered since 2004, including 380 E190s that are 10 years or older. By converting legacy passenger aircraft into freighters, Embraer ensures these assets continue to fly and generate value through aftermarket services and support.

This program also serves as a commercial lever to enhance the attractiveness of the E2 family. By offering a freighter solution for older-generation aircraft, Embraer provides a natural path for fleet evolution, encouraging operators to modernize with newer E2 models while maintaining continuity in operations and support.

Additionally, the E-Freighter opens a new market segment for Embraer in the cargo conversion space, a forecasted market of 600 aircraft with potential revenue of USD 3 billion, thereby expanding the company's footprint in the logistics and express delivery sectors.

Internally, the program has driven the evolution and expansion of the latest lean and program/project management practices with knowledge transfer (Yokoten) of best practices developed with the E190F across Embraer different areas and sites, including maintenance facilities in São José dos Campos, Sorocaba, and Gavião Peixoto, as well as industrial operations sites in São José dos Campos and Botucatu, reinforcing a culture of continuous improvement and operational excellence. Additionally, the insights and lessons learned from the program were shared with the entire company through the Project Management Practices Community, ensuring the diffusion of knowledge across Embraer.

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

The E-Freighter offers cargo operators a compelling and cost-effective alternative to both turboprop freighters and larger narrowbody conversions. Compared to cargo turboprops, the E-Freighter provides over 40% more volume capacity and nearly three times the range, enabling operators to serve longer routes and more destinations without compromising payload. When compared to larger narrowbody aircraft like 737-300F, the E-Freighter delivers up to 30% lower operating costs, making it an ideal solution for regional and mid-density routes.

With a maximum gross structural payload of 13,150 kg for the E190F, the aircraft combines under-floor bulk cargo and main deck capacity to offer flexible loading options. This makes it particularly well-suited for e-commerce, express delivery, and time-sensitive logistics operations.

Customers also benefit from Embraer's global support network and deep maintenance expertise, ensuring high dispatch reliability and streamlined maintenance. The E-Freighter's commonality with existing E-Jet fleets further reduces training and operational transition costs, allowing operators to integrate the aircraft seamlessly into their networks.

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

The E-Freighter Program has created meaningful opportunities for Embraer's workforce by enabling team members to contribute to the development of a new aircraft solution—one that combines engineering innovation with operational pragmatism. This has allowed employees to apply their skills in a fresh context while expanding their technical abilities, such as MRO process and STC certification.

The program has also served as a platform for leadership development. Team members receive training and mentoring in project and program management, developing their skills in interacting with new suppliers, negotiations, and decision-making. They have also taken on new responsibilities, led cross-functional initiatives, and participated in key program decisions. These experiences have accelerated professional growth and strengthened Embraer's internal talent pipeline.

Additionally, the program has contributed to Embraer's strong workplace culture. The collaborative environment, sense of purpose, and visible impact of the work have all contributed to high levels of employee engagement, as reflected in Embraer's strong performance in the Great Places to Work certification. The passionate celebration of the Program milestones proved that the E-Freighter Program exemplified how meaningful, challenging work can drive both individual fulfillment and organizational excellence.

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

The E-Freighter Program contributes to the greater good by promoting economic development, education, and social responsibility. By converting existing aircraft into freighters, the program supports the sustainability of Embraer's industrial ecosystem and stimulates job creation across its worldwide supply chain. Several sub-tier suppliers have expanded their capabilities and workforce, underscoring the role of aerospace manufacturing as a driver of skilled employment in the US, Brazil, and globally.

Beyond its industrial impact, the E-Freighter team has also made a lasting contribution to the community through its sponsorship of the GP Jr volunteer project. This unique initiative started in partnership with PMI, Embraer's high school, and Embraer E-Freighter program and project managers, providing low-income families' students with hands-on experience in project management and engineering fundamentals. This program has trained 640 students over the last three years, delivered 64 social projects as part of the students' course conclusion, and is entering its 4th edition. It continues even after the E-Freighter's first delivery, fostering long-term educational engagement and inspiring the next generation of professionals.

Together, these efforts reflect Embraer's commitment to inclusive growth, knowledge sharing, and social development—extending the value of the E-Freighter Program well beyond the aircraft itself.

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 E-Freighter Program capitalized on Embraer's robust digital and operational ecosystem to deliver a complex passenger-to-freighter conversion with agility and precision. A suite of integrated tools and systems was deployed to ensure alignment, traceability, and performance across engineering, manufacturing, supply chain, and aftermarket domains.

Key tools included:

- MS Project with ProChain – Facilitates the implementation of Critical Chain Project Management, improving schedule reliability and resource coordination across complex programs.
- JIRA – Enabled agile task tracking and sprint planning across cross-functional teams, integrated with CCPM (Critical Chain Project Management) for real-time progress visibility.
- 3DEXPERIENCE (Dassault Systèmes) – Used for digital mockups, structural reconfiguration, and cargo door integration, ensuring design accuracy and manufacturability.
- Windchill – Managed configuration control and engineering change orders, ensuring traceability across design iterations.
- SAP – Supported full-kit logistics and material readiness, reducing delays and ensuring lean flow through the assembly line.
- MS Copilot – Embedded MS Office 365 used for meeting notes and lessons learned.
- The integration of Artificial Intelligence (AI) into the lessons learned process for the E-Freighter Program has significantly enhanced the team's ability to capture, synthesize, and communicate insights across the program lifecycle. This also enables more effective sharing with other Embraer areas, paving the best practices for future programs.

These tools were not only deployed in isolation but integrated into a digital thread that connected engineering, industrial operations, and MRO teams. This allowed for real-time monitoring of aircraft status and proactive issue resolution. The program also leveraged predictive dashboards and burn-down charts to track delivery performance and buffer consumption, enabling proactive decision-making.

A highlight of the program's digital engineering success was the perfect first-time assembly of the new fuselage section and main cargo door— a major structural modification—on a more than 10-years-old aircraft. This achievement was made possible using high-fidelity digital mockups and precise structural modeling, which ensured that the door frame and surrounding reinforcements aligned flawlessly with the existing fuselage. The result was a seamless installation with no need for rework, validating the accuracy and maturity of the digital design process, and paving the way to a fast schedule.

The first flight of the E190F on April 5, 2024, marked a pivotal achievement in the E-Freighter Program, showcasing the aircraft's advanced maturity and readiness for operational deployment. The flight lasted 1 hour and 55 minutes, during which the plane completed its full flight envelope, reaching a maximum altitude of 41,000 feet and a top speed of Mach 0.82. All flight systems were tested and validated, including the AMS environmental system, pressurization, and ventilation of the main deck, which would be typically planned for the second flight. These results underscored the robustness of the conversion process and the precision of Embraer's engineering.

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

The E-Freighter Program fostered a culture of agility, ownership, and inclusion through a set of structured practices and people-focused initiatives. At the heart of daily operations was the "roda de samba" — a daily Agile/Scrum stand-up meeting held directly on the hangar floor, where team focal points gathered around a visual dashboard to review KPIs, identify restrictions, and drive immediate cross-functional problem-solving. This ritual ensured alignment, transparency, and a shared sense of urgency across engineering, industrial operations, supply chain, and services/support teams.

The program also incorporated Gemba walks and Lean turnaround principles, encouraging leaders to engage directly with frontline teams and remove obstacles in real time. The use of full-kit readiness ensured that the aircraft entered the conversion line with all necessary parts and documentation, minimizing delays and rework.

Program Review Meetings were held regularly with employees from different areas across Embraer and worldwide suppliers from Asia, Europe, North America, and Brazil, reinforcing a One Team culture and enabling joint accountability for results and engagement. These sessions combined strategy, vision, and deployment, as well as the latest team achievements, updated plans, traditional metrics such as physical progress, and predictive indicators, including fever charts. This fusion of real-time data and forward-looking insights enabled proactive decision-making and early mitigation of potential issues.

From a cultural standpoint, the program also served as a platform for advancing Embraer's Embrace diversity, equity, and inclusion initiatives. The team composition reflected a commitment to representation and opportunity, and the program environment fostered open dialogue, mutual respect, and shared success. Every key program step was celebrated with One Team pictures, driving engagement, creating good memories and stories to tell, and fostering pride in the great work co-created by a brilliant team.

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

The E-Freighter Program involved over 1,000 people globally, including suppliers across Asia, Europe, North America, and Brazil, reinforcing Embraer's global collaboration model.

The E-Freighter Program's success was rooted in early and strategic collaboration with key suppliers, enabling faster development cycles, reduced risk, and high-quality integration. A standout example was the "Sea Horse" initiative (it got this name because the structural part looks like a Sea Horse). Embraer partnered with a supplier to co-develop a critical structural solution that was on the program's critical path, and the team perceived that as our greatest challenge. By applying lean and theory of constraints principles, the team drastically reduced the development cycle (by 60%) and achieved early delivery with seamless integration into the conversion line.

Beyond the technical achievement, the Sea Horse initiative also marked a cultural transformation in the supply chain. The collaborative environment, shared goals, and exposure to Embraer's lean practices led to a shift in mindset—from reactive execution to proactive ownership. This cultural evolution was recognized internally with the creation of the Sea Horse Trophy, awarded to the supplier and supplier´s management teams as a symbol of leadership, resilience, and excellence in execution

Due to the tight schedule and as a result of effective risk management processes, Embraer developed national suppliers to manufacture high-precision parts that had never been produced in Brazil before, serving as a second source for European suppliers.

The program also benefited from Embraer's Fit for Growth (F4G) initiative, which promotes long-term supplier partnerships through joint capability development, performance alignment, and shared innovation. This framework empowered suppliers to contribute not only components but also process improvements and digital integration strategies.

Key suppliers, including Honeywell (Avionics), Héroux-Devtek (Cargo Door Actuator), and US Cargo Systems (Cargo Loading System), were engaged from the earliest stages of the program. Their early involvement ensured alignment on technical requirements, interface definitions, and certification pathways. US Cargo, for example, developed the Supplemental Type Certificate (STC) for the cargo loading system, which was seamlessly integrated with Embraer's service bulletin for the passenger-to-freighter transformation.

A highlight of how Embraer leverages our suppliers is the partnership between Embraer and Honeywell, which showcases the synergy of technical expertise and operational innovation. Honeywell's EPIC Avionics software was seamlessly integrated into the E-Freighter Program, supporting new functionalities specific to freighter operations while adhering to tight schedules without compromising safety. This collaboration facilitated real-time problem-solving through co-located engineering teams and achieved milestones, including the delivery of Red Label software with zero findings. Embraer and Honeywell have implemented a robust risk management strategy, applying lessons learned from previous projects. At each testing stage, optimizations for subsequent steps were verified. This iterative process was supported by a robust risk management system with mitigation plans for each potential outcome. This resulted in the fastest avionics software development ever achieved in partnership with Embraer products. Embraer's agile execution framework, combined with Honeywell's iterative development model, set new benchmarks for efficiency and precision in aviation project management.

Honeywell's EPIC Avionics software was seamlessly integrated into the E-Freighter Program, enhancing freighter-specific functionalities and adhering to tight schedules without compromising safety. This collaboration fostered a dynamic environment for real-time problem-solving through co-located engineering teams, achieving milestones such as the delivery of Red Label software with zero findings. Embraer and Honeywell implemented a robust risk management strategy, applying lessons learned from previous projects to optimize each testing stage and validate improvements for subsequent steps. This iterative process, supported by detailed mitigation plans for potential risks, resulted in the fastest avionics software development ever achieved in partnership with Embraer products. By combining Embraer's agile execution framework with Honeywell's iterative development model, the collaboration set new benchmarks for efficiency and precision in aviation project management.

Beyond technical achievements, the partnership reinforced cultural alignment and mutual growth through a "One Program Team" ethos, promoting shared accountability and minimizing handoffs. Together, Embraer and Honeywell not only delivered a high-quality freighter solution but also advanced sustainability goals, talent development, and operational excellence. This proactive engagement enabled the smoother integration of avionics, cargo door actuator systems, and cargo handling systems, minimizing rework and accelerating the overall timeline.

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

Complexity: Embraer and Customer Collaboration

The E-Freighter Program was built on a strong partnership between Embraer and its customer. The aircraft selected for conversion had been parked for an extended period, and its condition was uncertain. Its arrival at Embraer's maintenance facility was a celebrated "welcome back to the nest" milestone, and it also marked the beginning of a series of technical and operational challenges.

Response to the Challenge: These challenges were addressed collaboratively, with both Embraer and the customer working side by side to resolve issues as they emerged. This close cooperation was essential to ensure that all systems were airworthy and that no inspection or certification deadlines were missed. The shared commitment to safety and quality—core values at Embraer—was evident throughout the process. This collaboration was also key to the Farnborough Air Show 2024.

Volatility e Ambiguity: Farnborough Air Show 2024

The decision to exhibit the E190F at the Farnborough Air Show 2024 was a pivotal moment in the E-Freighter Program. As one of the most prestigious aerospace global events of the year, Farnborough offered Embraer a high-visibility platform to introduce its first jet freighter conversion to the market. This was done in parallel with the certification campaign, generating ambiguity between certification activities and preparation for the show. The E190F's presence at the show was not just symbolic—it was strategic. It marked the aircraft's global debut, positioning Embraer as a serious contender in the cargo conversion space. A new livery was also required for the event.

Response to the Challenge: Internally, the campaign to prepare the aircraft for Farnborough was treated as a standalone project. A dedicated kickoff plan outlined objectives such as increasing product awareness, validating the aircraft's readiness, and securing visibility with potential customers and regulators. The plan also addressed logistical and regulatory challenges, including the need for a Special Airworthiness Certificate demonstration, and market surveys. The timeline was very aggressive and required intense one-team collaboration. The aircraft had to be painted, inspected, and transferred to the UK within a narrow window. Several plans were developed since the kickoff to meet the static display deadline of July 18th, just days before the show opened. To ensure this, a painting provider (GOL's MRO) was developed to support Embraer paint requirements, and an impediment matrix methodology was created, enabling agile tracking and resolution of blockers, with escalation paths simplified by a flat organization (two levels), multi-disciplinary team. Even spare equipment was provisioned to mitigate risks during the demo tour and the aircraft's return to Brazil.

Uncertainty: Heavy Maintenance Check and Parallel Execution
Given the aircraft's long period of inactivity, a Heavy Maintenance Check was required. Rather than treating this as a separate effort, Embraer made the strategic decision to execute the maintenance check in parallel with the freighter conversion to save time. This approach introduced additional risk—particularly the possibility of discovering rework needs mid-process—but it also created synergy between engineering and MRO operations.
Response to the Challenge: By integrating both efforts, the team was able to reduce the overall schedule and cost while maintaining control over quality and compliance. The use of full-kit readiness in an integrated master schedule ensured that all necessary parts, tools, and documentation were in place before the aircraft entered the conversion line, minimizing delays and rework. This proactive approach allowed the team to maintain high productivity even during the parallel execution of heavy maintenance and conversion tasks.

Complexity: Collaboration with the Global Supply Chain
The program's success depended on seamless coordination with a global supply chain. Suppliers from around the world were engaged to deliver parts, services, and technical support under tight timelines. Embraer's well-established Core Teams methodology played a critical role in aligning stakeholders, enabling real-time decisions, and resolving issues quickly. These teams included internal departments, suppliers, testing labs, other Embraer sites, and the customer.
Response to the Challenge: The Core Teams methodology facilitated real-time decisions and quick resolution of issues. This approach ensured that all stakeholders were aligned and could respond promptly to any challenges that arose. The collaboration between internal departments, suppliers, their critical sub-tiers, testing labs, other Embraer sites, and the customer was crucial in maintaining the program's momentum and achieving its goals.

Uncertainty: Embraer's First Jet Freighter Conversion
This was the first time Embraer had converted a jet aircraft from passenger to freighter configuration — a milestone that brought both excitement and complexity, as it developed this new product on a customer airplane instead of a prototype. Every step of the process, from structural modifications to systems integration, required pioneering solutions and close coordination with aviation authorities.
Response to the Challenge: The teams worked diligently to ensure the aircraft met all regulatory requirements and performance expectations. The experience not only demonstrated Embraer's technical and operational capabilities but also laid the foundation for future freighter programs.

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?**
- **How did you perform against these metrics?**
- **How do your predictive metrics drive action toward program excellence? Please provide examples.**

Time to Market: The Primary Metric

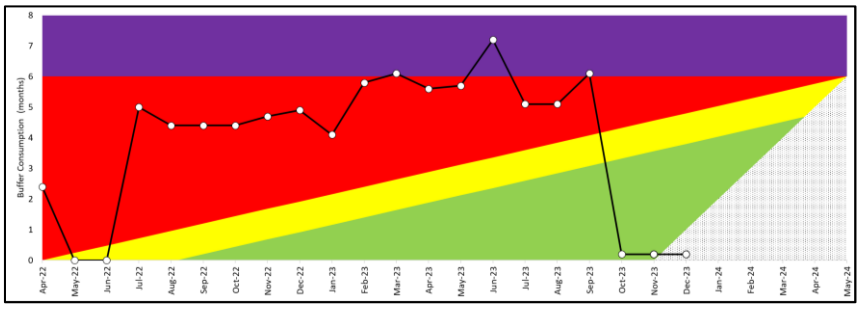
The E-Freighter Program development was guided by a sales opportunity that led to a clear and ambitious goal: to deliver Embraer's first jet freighter conversion faster than any comparable program in the industry. Time to Market (TTM) was established as one of the program's primary success metrics. Against this benchmark, the team delivered exceptional results — achieving a 15% reduction in TTM compared to the industry benchmark. This performance was not incidental; it was the result of disciplined planning, predictive control, and real-time responsiveness enabled by two core process Metrics: The Fever Chart and the MRO Full Kit.

Fever Chart: Predictive Risk Management in Action

The Fever Chart was the program's central predictive tool for managing schedule risk. It tracked buffer consumption across the critical chain and key milestones—such as first flight, and certification events. By visualizing the relationship between actual progress and remaining buffer, the chart provided early warnings of potential key milestone delays.
Throughout the program, the fever chart enabled the team to:

- Detect early risk of delay signs to initiate schedule compression, as shown during the lead-up to the Farnborough Air Show milestone.
- Resequencing tasks and reallocating resources to protect and improve the critical path.
- Focus attention on high-risk work packages—such as aircraft structural conversion, documentation and certification—where buffer consumption was trending red.

The E-Freighter Program's success was significantly driven by its robust use of predictive metrics, particularly the Fever Chart. This tool was central to managing schedule risks, tracking buffer consumption across the critical chain, and key milestones. One notable example was the collaboration with a critical supplier. When the Fever Chart flagged a high buffer consumption, the team intensified internal reviews and worked closely with this supplier to recover the schedule and maintain alignment with program goals. This proactive approach ensured that potential delays were identified early, allowing the team to initiate schedule compression and reallocate resources effectively recovering 12.5 months out of its 24-month schedule.



Similarly, the partnership with Honeywell showcased the synergy of technical expertise and operational innovation. Honeywell's EPIC Avionics software was seamlessly integrated into the E-Freighter Program, supporting new functionalities specific to freighter operations while adhering to tight schedules without compromising safety. The Fever Chart played a crucial role in this collaboration, providing early warnings of potential delays and enabling real-time problem-solving through co-located engineering teams. This iterative development model set new benchmarks for efficiency and precision in aviation project management, ultimately contributing to the program's standout result of a 15% faster Time to Market than the industry benchmark.

MRO Full Kit: Enabling Flow and Eliminating Delays

The MRO Full Kit metric was equally critical in ensuring that aircraft entered the conversion line with all required multi-functional team, parts, tools/tooling, and documentation in place. This proactive readiness model minimized rework and idle time, enabling a lean pull system with predictable flow through the hangar.

The Full Kit approach allowed the team to:

- Synchronize logistics and engineering deliverables with the aircraft conversion ahead of schedule.
- Avoid disruptions caused by missing components or incomplete instructions.
- Maintain high productivity even during the parallel execution of heavy maintenance and conversion tasks.

Burn-down charts were also created to monitor the progress of key activities like document creation.

Driving Program Excellence

Together, the Fever Chart and MRO Full Kit metrics formed the backbone of a proactive, data-driven management system. They enabled the team to anticipate risks, act decisively, and maintain momentum across a complex, multi-site program. More than just tracking tools, they were catalysts for cross-functional alignment, real-time decision-making, and continuous improvement.

By integrating these metrics into daily routines—from stand-ups to executive reviews—the E-Freighter team fostered a culture of passion, transparency, accountability, and agility. This culture, in turn, was instrumental in achieving the program's standout result: a new competitive, fast, flexible, and capable high-quality freighter, developed 15% faster Time to Market than the industry benchmark.