

Foresight Over Firefighting: How Otto Aerospace Built Its Certification Backbone with Jama Connect®

A fast-growing developer of fuel-efficient aircraft connected requirements, verification, and FAA certification evidence in one place — before scale could turn small gaps into expensive delays.

~30 → 200

Team members onboarded on Jama Connect as Otto scaled.

4-in-1

Requirements, certification, test, and instrumentation in one model.

API-powered

Certification and supplier documentation generated from connect Jama Connect data.

About Otto Aerospace

Otto Aerospace, headquartered in Fort Worth, Texas, is developing the Phantom 3500, a clean-sheet business jet built around transonic laminar flow technology that cuts fuel burn by more than 60 percent compared to similar aircraft. The program has completed its Preliminary Design Review and established its FAA certification basis under 14 CFR Part 23, with first flight targeted for 2027 and certification and entry into service planned for 2030.

WITH JAMA CONNECT, USERS EXPERIENCE:

- End-to-End Requirements Traceability
- One Connected Engineering Environment
- Easy Onboarding at Scale
- Unified Requirements, Verification, Certification

“At the very beginning, when you’re just doing concept work, it’s okay to keep requirements high level. But when you need to start doing proper design assurance and requirement decomposition, I knew the current tool set wouldn’t scale up.

- Juan Pablo Gaviria, Manager of System Integration and Simulation Test,
Otto Aerospace

The Challenge: Building a Certification Program from Zero

Otto Aerospace didn't inherit a legacy toolchain — the team was starting from a clean sheet, in every sense. In the earliest concept phase, standard office tools like Excel, Word, and SharePoint were the only options available. But the team recognized from the outset that disconnected documents could never support the design assurance, requirement decomposition, and certification evidence a clean-sheet FAA program demands.

Juan Pablo Gaviria, Manager of System Integration and Simulation Test at Otto Aerospace, had seen firsthand why that approach breaks down:

"I'd have a nice test database in SharePoint, but it wouldn't connect easily to the requirements the engineers were building in Excel."

Rather than waiting for those gaps to appear at scale, Otto Aerospace went looking for a purpose-built solution before detailed design began.

Why Jama Connect

Rather than implementing separate tools for requirements, verification, and certification planning, Otto Aerospace wanted a single connected engineering environment that could scale with the program. The team evaluated several approaches, including expanding capabilities within existing engineering tools, dedicated test planning solutions, and internally developed options. Ultimately, they selected Jama Connect because it could support their engineering and certification processes while providing a connected, traceable model spanning requirements, verification, reviews, baselines, and certification evidence.

Jama Connect also gave Otto Aerospace the freedom to configure the platform around its FAA certification workflow instead of forcing engineers to adapt to a predefined structure. The team created custom certification item types and fields to capture revision history, applicable systems, FAA involvement, and other certification-specific data needed throughout development.

“That ability to customize all those items and all those fields is very, very powerful, on top of the baselines, reviews, comments, and collaboration. If anybody's working in Word, SharePoint, or an Access database, Jama Connect can do a much, much better job, and it's easy to set up.

- Juan Pablo Gaviria, Manager of System Integration and Simulation Test,
Otto Aerospace

That flexibility became apparent early. After configuring Jama Connect to capture certification information, the Otto Aerospace team invested in building a custom export pipeline on top of the Jama Connect REST API — extracting connected engineering data and transforming it into the documentation needed to support certification planning.

“*I entered certification data, created a custom export, and it came out looking like a compliance matrix in the format the FAA wants. People said, ‘Wow, this is powerful.’ That was one of the drivers.*

- Juan Pablo Gaviria, Manager of System Integration and Simulation Test, Otto Aerospace

Putting It To Work

As with most enterprise software implementations, adoption took time. Some engineering teams embraced the new process immediately, while others needed workflows that fit existing supplier documentation and reporting requirements.

To support adoption, Otto Aerospace extended Jama Connect using the REST API to generate supplier-ready documentation while also establishing recurring “Jama Connect office hours” where engineers could ask questions, share best practices, and learn from one another.

Today, Otto Aerospace manages requirements, certification activities, testing, and instrumentation within a single connected environment, creating greater visibility across engineering disciplines.

Results: Certification Readiness from Day One

Although Otto Aerospace is still progressing toward first flight and FAA certification, the company has already established a scalable foundation for managing increasingly complex engineering data.

Rather than focusing on short-term ROI, the value comes from knowing that requirements, verification activities, and certification evidence remain connected throughout development.

“*It’s less about ROI and more about peace of mind. I know a requirement is traced all the way from the certification requirement down to the test report I hand back to the FAA, validated and verified, with the full history along the way.*

— Juan Pablo Gaviria, Manager of System Integration and Simulation Test, Otto Aerospace

The team has found certification planning to be one of Jama Connect's strongest use cases. Assembling compliance data is traditionally a manual, painstaking process; generating it from connected engineering information in Jama Connect is far faster, with revisions, baselines, and reviews captured automatically along the way.

Additional benefits include:

- A single source of truth for engineering, testing, certification, and instrumentation activities.
- Consistent traceability across engineering disciplines, helping fuel, propulsion, avionics, and other teams remain aligned throughout development.
- Easier onboarding as the organization expanded from approximately 30 employees to nearly 200, giving new engineers a structured environment instead of disconnected folders and spreadsheets.

As Juan Pablo explains:

"It's much easier to onboard new people now. Honestly, onboarding the first 30 was harder than the next 100."

Looking Ahead

With the Phantom 3500's certification basis now established and first flight targeted for 2027, Otto Aerospace believes implementing Jama Connect early helped establish a scalable engineering foundation before process gaps could create costly delays. As the program moves from defining requirements to demonstrating compliance, that connected foundation becomes even more valuable.

"We're thankful we adopted it early, before we hit a gap that could cause a delay."

For aerospace organizations starting clean-sheet programs — or still managing requirements across spreadsheets and disconnected documents — Otto Aerospace's experience demonstrates that investing early in a connected engineering foundation reduces program risk, strengthens collaboration across disciplines, and keeps certification evidence connected as complexity grows. That's the difference between foresight and firefighting.

Building toward certification on spreadsheets? See how Jama Connect helps aerospace and defense teams set up traceability and certification readiness from the start.

[Request a demo.](#)

ABOUT JAMA SOFTWARE

Jama Software is focused on accelerating product velocity with AI-driven development across multidisciplinary engineering organizations. Using Jama Connect, engineering organizations can now adopt AI-driven development while intelligently managing the complexity and compliance of parallel development, automated pipelines, and industry standards. Our rapidly growing customer base spans aerospace & defense, automotive, medtech & life sciences, semiconductor, industrial manufacturing, consumer electronics, infrastructure, robotics, and energy. For more information about Jama Connect services, please visit www.jamasoftware.com.