

SUCCESS STORY:

Accelerating aerospace evolution

A product lifecycle management journey

CLIENT HIGHLIGHT



AeroTEC designs, tests, and certifies new aircraft and aerospace products, including hybrid/electric, hydrogen technology, supersonic, and eVTOLS. It leverages its integrated assets to help its worldwide customers bring products to market quickly and efficiently.

While headquartered in Seattle, Washington, AeroTEC has two additional campuses: the AeroTEC Flight Test Center in Moses Lake, Washington and an Engineering Center in Wichita, Kansas.

AT A GLANCE



The challenge

- Use of two CAD systems segregating designers
- Past file storage systems limiting design capacity
- Evolving aerospace industry and the need to lean into new tools and digitalization strategies.



The solution

- Siemens Teamcenter
- Siemens NX CAD
- Siemens Simcenter tools for advanced simulation applications
- Top tier support from Applied CAX experts



The impact

- Standardized data systems
- Native information stream promotes team agility
- One design software to streamline design process



The challenge

Fragmented information systems

The aerospace industry is continuously evolving, and as an industry leader, AeroTEC recognized the need to enhance its tool integration to stay at the forefront of innovation.

AeroTEC's PLM journey started years ago with a file and folder-based storage system for its CAD data. This manual system limited control over design data and prevented streamlining of internal processes.

Up until recently, AeroTEC utilized two CAD systems, which split designers into mutually exclusive groups. This system required data to be transformed into different formats and prevented cross-collaboration, overall lengthening the product development process.



The solution

Embracing digital transformation

To combat the challenges of the rapidly evolving aerospace industry, AeroTEC implemented Siemens Teamcenter to manage the entire product lifecycle and maintain configuration control, and converged its CAD system around NX to standardize and streamline product development.

AeroTEC also implemented Siemens Simcenter Tools for advanced simulation applications. It utilizes STAR-CCM+ for CFD analysis, Simcenter Femap for FEA, Simcenter 3D, and Amesim for 1D system simulation and system performance analysis.

The engineering software is provided by Siemens in partnership with Applied CAX, a Siemens Smart Expert Partner that provides consulting and technical support.

As an innovative company unencumbered by legacy tools, AeroTEC is able to stay agile and adapt to the latest technology. Applied CAX provided support with both general implementation and specific customization needs for AeroTEC's Siemens ecosystem.



The impact

Connecting digital threads

With AeroTEC's strengthened design approach using Teamcenter and NX's structured methodology, the company can focus more on standardizing and improving its design process.

With goals to be a leader in the industry, AeroTEC is using this digital transformation as a launch pad to accelerate aerospace evolution. The company is able to innovate thanks to its use of advanced engineering software from Siemens Digital Industries Software.

AeroTEC can now keep data in its native format, saving time by eliminating the need to translate and transform it into different formats during product development.

By focusing on immediate needs, the handling of AeroTEC's ITAR-restricted data and Change Management processes were digitalized.

Choosing to invest in the Siemens ecosystem and focus on NX for design software enabled AeroTEC to standardize processes, policies, and templates, furthering its design cycle.



At Applied CAX, we use Teamcenter, NX, Simcenter Femap, STAR-CCM+, and other Siemens digital engineering tools in our work every day.

Recognized by Siemens as North American Partner of the Year in 2023, 2020, and 2016, we have decades of experience with PLM and NX, and our Femap and CAE experts are renowned for being the best available. Our team is ready to support you, from general digital transformation strategy to specific tactical needs like creating custom post-processors and simulation kits.



It's time to unleash your potential

Contact us and let us know what we can do for you. Visit our website at AppliedCAX.com for more information.