

Program Management & Technical Expertise Spells Success for SATCOM Project



After winning a high-profile, military aircraft program, an industry leading advanced technology company assembled a crack team of communications technology companies for a secure satellite communications (SATCOM) system. The lead communications specialist did not have any [DO-178B certification](#) specialists in-house, so the advanced technology company turned to Esterline Control Systems - AVISTA.

Unlike civilian aircraft band communications, military aircraft band communications are far more elusive. Signals coming from a satellite are generally weak and contain static. A high power filter/amplifier provides signal selectivity to reduce static and interference. Because of the AVISTA team's past software development and verification experience in [military SATCOM](#) programs, the company was a perfect fit for working on the filter/amplifier project.

AVISTA services provided the critical DO-178B certification experience for the filter/amplifier project. Their software engineers led the DO-178B certification efforts, which included planning, documentation, requirements gathering, software quality assurance and formal reviews support. The AVISTA program manager also coordinated the work performed by the manufacturer's other vendors involved with this project.

Fast Facts

Company: An advanced technology company

Industry: [Aerospace](#) & [Defense](#)

Geography: United States

Project: Full life-cycle software development and verification for SATCOM filter/amplifier

Certification: DO-178B, Level D

Challenge: Aircraft manufacturer's SATCOM vendors lacked in-house DO-178B software development and certification expertise

Solution: AVISTA program management experts led certification and SQA effort, while coordinating all vendors working on this project

Results: With its expert program management capabilities, the project work came in on time and on budget



Esterline Control Systems - AVISTA Success Factors

“With AVISTA’s strengths in program management and technical expertise, we were able to bring in the project on time and under budget.”

In collaboration with the aircraft manufacturer and its subcontractors, the AVISTA team brought the following strengths to the project:

- **Expert knowledge of the requirements of DO-178B certification.** The well-known advanced technology company chose AVISTA services because of its long history in DO-178B certification, experience with military avionics, and satellite communications system expertise.
- **Program management expertise.** The team’s program management experts synchronized the work performed by all the teams involved in this project. When a schedule was delayed in coming, the team created the work schedule for themselves and for all the other companies involved to ensure timely completion and certification.
- **Industry certification.** AVISTA services holds [ISO 9001:2000 certification](#), the internationally recognized reference for quality management requirements, and a [SEI CMMI® Maturity Level 5](#) rating for software engineering. Both quality ratings were important to the client and their customer.
- **Full life-cycle software expertise.** The team provided guidance on many portions of software development including the authoring of DO-178B documentation, defining software requirements, describing the software design, creating software test cases, and performing software quality assurance. So the format would meet DO-178B guidelines, the team also reverse engineered the software requirements and software design that were initially created by the communications system contractor and re-created them for final certification.
- **Excellent communication skills.** The team and its leads maintained excellent relationships with all the vendors involved with the project as well as the client. AVISTA services gained the trust of the other teams and refined the processes between all the stakeholders – thus they were able to complete the project on time and under budget.

For more information about
AVISTA Services, visit
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