

## Outsourced Legacy Product Life-Cycle Management



A leading Fortune 500 avionics company wanted to streamline product life-cycle management for a legacy 5ATI Multi-Functional Display (MFD) application. However, the company did not want to use their internal engineering staff to manage this legacy program, but instead focus their engineering staff on managing core businesses.

Esterline Control Systems - AVISTA had experience with software verification on the 5ATI configurable primary flight display system, and had the required comprehensive understanding of cockpit avionics. This product is certified to the highest level (Level A) of the DO-178B development standard. Initially, the team supported a number of upgrades for the legacy product line, completed on time and within budget. Over time, the avionics company saw an opportunity to completely outsource product life-cycle management for the display.

The AVISTA team became a cost-effective, high-quality strategic outsourcing partner, growing to assume responsibility for all phases of the product life-cycle — including planning and certification documentation, systems requirements definition, software requirements definition, software architecture and design, software implementation and integration, software requirements-based functional testing, structural coverage analysis and system-level validation.

## **Fast Facts**

**Company**: Fortune 500 avionics equipment manufacturer

Industry: Aerospace

Geography: International

**Project**: Full life-cycle development for 5ATI Multi-Functional

Display (MFD)

Certification: DO-178B, Level A

**Challenge**: Serving legacy avionics customers while maximizing internal engineering staff for new, strategic product development

**Solution**: The AVISTA team updated application and managed subsequent releases of a display product line

**Results**: Successful completion of many product releases on time and within budget, and upheld the manufacturer's high service standards for over ten years



## **Esterline Control Systems - AVISTA Success Factors**

"We were able to focus on core projects; we had that much trust that AVISTA would be as good or better than if this project stayed in-house."

Taking on the task of updating and managing the legacy product for more than ten years, the AVISTA team brought the following strengths to the project:

- Long term partnership with customer. Initially, the team performed just Level A DO-178B software verification activities. Over time, they were assigned additional responsibility, and developed expert knowledge of the overall system architecture. With the latest releases of the MFD, the manufacturer requested that the team take complete control of the software life-cycle activities of the project, including project management and direct contact with the end customer.
- Knowledge of client's products and processes.
   The quality of the team's work and their in-depth knowledge of particular product lines led the avionics firm to engage them to manage the complete software life-cycle of the MFD aircraft display product while performing to the customer's internal processes.

- Experienced program managers and software engineers. Esterline Control Systems AVISTA provided project management staff to ensure successful project completion, reducing the need for customer project management. A dedicated engineering staff was retained to support this effort throughout the life of the product line thereby maximizing the retained knowledge base and experience for each future release. The team enabled the customer to achieve a critical deadline and completed the project on-time, within budget, and to the required quality standards.
- Expert knowledge of the requirements for DO-178B certification levels. The MFD product successfully achieved several Technical Standard Order (TSO) certifications by completing <u>DO-178B Level A</u> software development and verification activities.

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