Frontier Electronics Systems Corp. has a proven history of supporting U.S. Missile Defense Systems. Most recently, FES supported the Army’s Patriot Advanced Capability Third Generation (PAC-3) missile program with Automated Test System support. We also provided “turn-key” production support, including parts acquisition and manufacturing, for guidance system electronics for Missile Defense Agency’s Standard Missile Third Generation (SM-3) programs. In 2009, Frontier earned Boeing’s Avionics Supplier of the Year award for performance excellence on the SM-3 program.

Full Turn-Key Production Support

Boeing’s Avionics Supplier of the Year
SM-3 Program 2009

Frontier Electronic Systems Corp. has provided proven technology and reliable testing equipment for the U.S. Missile Defense program for over a decade, and we continue to lead the way in proven technology and support for the defense of our country.

Frontier supports both the Aegis Ballistic Missile Defense Program’s SM-3 and the PAC-3 Programs. Frontier Electronic Systems Corp. provides turn-key manufacture of the guidance system circuit cards for the SM-3 Block 1A/1B and test systems and software support for the PAC 3. Frontier’s performance excellence on the SM-3 program resulted in Frontier’s 3rd Boeing Supplier of the Year award in 2009.
Proven Success!

FES was selected for the production of the Interface Test Adapters (ITA) for PAC-3 missile depot missile test systems in 2003. The program began as a “build-to-print” program only, but expanded to include design for manufacturing because of Frontier’s engineering initiatives focused on improving both quality and efficiency in the build process.

The ITAs produced for this program connect the customer’s Units Under Test (UUT) to the Flexible Test and Measurement System (FTMS). Following the completion of the initial sets of ITAs for this program, Frontier was selected to design, qualify and manufacture a suite of Factory Acceptance and Test (FAT) equipment for the PAC-3 circuit card production facility. The purpose of this FAT is to verify circuit card electronics performance during environmental stress screening and vibration testing. FES continues to provide customer software support for this system.

In 2007, FES was competitively selected to manufacture Circuit Card Assemblies (CCAs) for the SM-3 guidance system. The program required development and certification of each manufacturing process step, substantial capital equipment investment, facilities modifications, and customer oversight.

Frontier integrated automated manufacturing and inspection processes into the production flow to improve first-time quality and reduce production cycle time. Based on FES’s performance excellence, materials engineering expertise, and certifications for acquisition of high reliability space flight parts, we were selected to procure 100% of the material for these CCAs in 2009. We are currently producing CCAs for both SM-3 Block IA and IB programs.

Capabilities

- Manufacture of hi-reliability, complex electronics for Missile systems (Aegis Ballistic Missile Systems Block 1A & 1B)
- Turn Key acquisition of high reliability electronics, circuit card assemblies and metal work for missile systems (ABMD Block 1A & 1B, PAC-3)
- Development and certification of highly efficient processes for custom manufacture of missile systems electronics (ABMD Block 1A & 1B & PAC-3)
- Design For Manufacturing & Manufacture of Missile Systems Interface Test adapters & factory test systems (PAC-3)
- Obsolescence and supplier management (ABMD & PAC-3)
- Engineering design, development, production, customer site integration, and customer support
- Multiple test system configurations