

FilConn filters

Fighting back with custom connectors

Engineering manager in the Ordnance Electric Laboratory at Maryland's Naval Air Station, Pat Caldwell, explained: "We had a rapid reaction, six-month project to take Vietnam-era aircraft, update the technology and field it, so it could be tested in a real wartime scenario."

The team needed a small quantity of custom connectors on which they—and the military personnel flying the OV-10 Bronco aircraft—could depend. Broncos, were first used during the Vietnam War. They are slower and lower flying than newer aircraft, making them better able to support ground troops, as well as being more cost-effective to fly.

Caldwell said: "Because it was such an old aircraft, things didn't fit. The planes were never designed to carry newer technology. FilConn came out, we came up with a solution and it was ready to go within eight weeks. We flat out couldn't have done it if we didn't have someone to build the custom parts so quickly."

Rapid turnaround

In fact, Arizona-based FilConn specializes in precision filtered custom connectors for the military, aerospace, medical, transit and oil/gas industries in harsh environments that include sand, deep water, heat and other extremes. Director of sales, Jason Pedruzzi, said: "We're known for low volumes and quick response times with call-backs within 24 hours, models within a few days and working samples within a few weeks. It's really unheard of in this industry.

"For military projects, we may not even know what the connectors are going into, but we know they can make or break a mission. If a rocket doesn't fire properly, or a pilot loses

control of the aircraft, lives are at stake. Our connectors have to work."

In May 2016, FilConn was acquired by assembler of precision connectors, PEI-Genesis, in what Pedruzzi describes as a 'match made in connector heaven'.

Pedruzzi commented: "PEI-Genesis is huge, with a worldwide sales force and organizational skills we don't have. Putting that engine behind our highly technical team is a huge win."

Steven Fisher, Chairman, President and CEO, PEI-Genesis, added: "FilConn has a tremendous group of engineers who are not only clever but also customer focused. They have good integration design software and expert machining capabilities and they're specialists in high density packaging. Along with FilConn, we can now approach any customer in the world with complete confidence that, for any harsh environment, even if it's a low volume, one-off situation, we can respond to their connector needs faster and better than anyone else in the industry."

Low volumes

Customers agree, including Ron Bailey, principal electrical engineer for Strata-G Solutions, a group of engineers, designers and technical specialists based in Huntsville, Alabama. Ron explained: "Usually, larger companies do have a division for custom solutions, but the minimum quantity might be 1,000 parts. Strata-G Solutions works on projects for the US Department of Defense and other federal and commercial clients. When we need something custom, quickly, with a small minimum order, there's no one else who can do that."

When the US military brought decades-old turbo-prop planes out of retirement, Filconn engineers helped outfit the aircraft with modern technology



FilConn specializes in precision filtered custom connectors

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Innovations such as the FilConn flower backshell lower assembly time and improve quality

Strata-G Solutions and FilConn are now working on a project for military-grade helicopters used for customs and water protection in the US. With space in the aircraft limited, there is no room for traditional terminal blocks and splice groups so the team created a connector with internal splices built right in.

Fisher concluded: "We've been working on design innovations that reduce the weight and size of connectors, that lower assembly time and improve quality for customers. With the added capabilities of FilConn, we can manufacture a solution the customer

needs, even if it's only one piece, and ship it faster than anyone else. It's a huge win for us, for our customers, and for our franchise partners, as well."

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