

Signal strength



Argon ST brings critical communications intelligence capabilities to Boeing

By Richard Esposito

On a moonless night in the waters off Southern California, a team from a U.S. Coast Guard cutter is about to board and search a fishing trawler that's been suspiciously plying waters where there are no fish. It's an unpredictable situation, and that makes for dangerous work.

Fortunately, they are not going in blind.

The cutter is equipped with systems that not only detect radio-frequency emissions from other vessels but also help pinpoint specific signals from individual ships amid all the electromagnetic "noise" and traffic in busy near-shore waters.

Intelligence can be gleaned from within the signals. The trawler has been monitored for hours and the crew of the cutter has a clearer picture of who the people on this trawler are and what they might be expected to do. With this enhanced situational awareness comes an added measure of safety for crew members when they board the vessel.

The critical capability enabled by these systems is known as signals intelligence and it is a hallmark of Argon ST, which is now a wholly owned Boeing subsidiary and a division of Boeing Network & Space Systems. Argon was acquired by Boeing in August 2010.

"Our core capability is the exploitation of communications signals and the intelligence derived from those," explained Terry Collins, an Argon ST co-founder who today serves as vice president and general manager. "And the real difference between

that and all the other signals intelligence capabilities, such as exploiting radar or telemetry data, is that communications signals allow you to understand the content of what other people's intentions are, so they are a very high priority in the intelligence collection business."

Signals intelligence is part of a larger set of interrelated capabilities referred to as C4ISR—command, control, computers, communication, intelligence, surveillance and reconnaissance.

Argon ST is a longtime C4ISR supplier to the U.S. Navy and other U.S. military and intelligence customers. Other Argon ST products provide torpedo defense for the U.S. Navy and nearly two dozen other maritime partners around the world.

"One of the things we have brought to Boeing is a much larger presence with the Navy outside of naval aviation," Collins said. "Prior to the acquisition, Boeing didn't have much to do with the surface navy or the submarine navy. We have systems on all attack subs, well over 80 surface ships and 100 or so small platforms."

Argon ST's technical capabilities and customer base made it an attractive target for acquisition and the division promises to play a key role in Boeing Defense, Space & Security's goal to become a C4ISR market leader in the next few years, said Syd Blocher, a longtime Boeing mergers and acquisitions leader. He now heads up the Argon ST business development team.

"Argon ST was high on our list all along because it builds the sensors and software

architecture that we didn't have—the things you put on the platform that actually do the intelligence, surveillance and reconnaissance mission," Blocher said. "Mission equipment is a longer-term value stream. Airplanes will fly for generations, but the mission equipment is always being refreshed."

Becoming part of Boeing gave the smaller company vast new opportunities to "put sensors on airplanes"—both piloted and unmanned, said Argon ST Chief Engineer Stuart Ware. The acquisition also gave both companies something less tangible but critically important: the synergy that comes from combining two culturally similar organizations that share the same commitment to supporting their military customers' warfighting mission.

"The underlying cultures of Argon ST and Boeing are very compatible," said Jeff Brown, Argon ST's director for National Intelligence and Cyber Solutions.

Brown serves on a team of Boeing and Argon ST leaders who are shepherding Argon ST through a deliberately slow and patient integration into Boeing.

"Both companies do important work for the U.S. Department of Defense and the things we build go into combat, so we have an obligation to deliver products of excellent quality," Brown said. "We see in Boeing that same commitment to excellence, so we fit very well within Boeing." ■

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PHOTO: Training specialist Stephen Oliver adjusts a component of Argon ST's ship signals system. ARGON ST



PHOTO: Ship signals technology by Boeing subsidiary Argon ST is currently deployed on numerous U.S. Navy ships and submarines. U.S. NAVY



PHOTO: Production assembly technician Rod Guyton works on a submarine communications system. ARGON ST