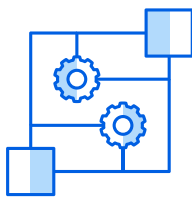




Technical Support for the U.S. Coast Guard's C5ISC Systems



Akima delivers trusted solutions in systems engineering and integration for the U.S. military and the Department of Homeland Security to help safeguard our land, sea, and air space.

Whether supporting and improving existing technical systems or building new software, our experts have the technical knowledge and experience to keep programs running at peak performance. This capability includes Command, Control, Computers, Communications, Cyber, Intelligence, Surveillance, and Reconnaissance (C5ISR); equipment maintenance; research and development support; CONUS/OCONUS support; and wired and satellite telecommunication services.

Featured Contract: Command, Control, Communications, Computers, Cyber, and Intelligence Service Center (C5ISC) Systems

The recently formed the C5ISC — the largest Coast Guard unit reorganization in 10 years — delivers technology solutions to help the Coast Guard protect our waters and our people. More than 800 military and civilian personnel are working on C5ISC, including the team from Akima operating company RiverTech.

Mission

Across the country, the U.S. Coast Guard works around the clock to enforce maritime laws, guard our coastlines and ports, protect the marine environment, and perform life-saving missions. To get the job done, they require the latest technology and an array of interwoven systems to do their job. That's where the Akima team at RiverTech comes in: to support the Coast Guard's C5ISC in the technical details of its waterway monitoring systems.

Strategy

The C5ISC encompasses multiple product line and core technologies, explains Elvin Bruce, project manager at RiverTech. Projects include:

- **Watchkeeper**, software used by the Coast Guard (in junction with local police, fire departments, and other local agencies) to monitor vessels entering and leaving the harbor. "A vessel coming in early or trying to leave early sends off an alert that there may be a problem," says Robert Rapp, recently retired senior program manager for RiverTech. Watchkeeper also tracks ships' passenger lists, cargo inventories, and other maritime information; the software program analyzes the data and, if needed, can alert officials to investigate and intercept.

- Watchkeeper will soon merge with **CG1V**, the standard for the Coast Guard's visual display in all its operations, including search and rescue, vessel traffic control, and more. "They want one view that looks the same, so that anyone on duty can sit down at a monitor and know what they're looking at," says Robert.
- Another system, the **Unclassified Common Operational Picture (UCOP)**, collects data — such as geographic data, intelligence, imagery, and environmental data — from vessels and parses it out to systems like Watchkeeper and CG1V.
- **Nationwide AIS** is a system of antennas across the U.S. "Every ship has to squawk — or transmit — who they are, information about their vessel, and Nationwide AIS collects that information from the ships and sends it to UCOP, or the Army Corp of Engineers, or directly to a system," explains Robert. Just like cars have a license plate, each boat can be tracked through the AIS system, which tracks the vessel size, type, and location, so that support can be dispatched if needed, explains Elvin. AIS technology also helps ships navigate the unseen underwater landscape and channels — which used to be marked with physical channel markers that could shift during storms or hurricanes — with a virtual electronic display of the channel.
- Akima's team also helps maintain the Coast Guard's communication equipment — including electronics, antenna systems, and UHF/VHF/MF/HF/satellite communication systems — through **System Life Cycle Support**.

Expertise

While software experts bring logic-oriented expertise to writing programs, Akima's team also includes system administrators, network engineers, testers, data analysts, and information assurance professionals (who ensure systems security). The team features a balance of experienced Coast Guard retirees and younger technology experts, notes Elvin, who is retired from a 30-year career in the Coast Guard. "To me, that Coast Guard experience mixed with that greener vision helps RiverTech to better support the customer."

Solution

Ever-changing technology evolves more quickly than government processes, policies, and standards, explains Elvin. That means the team must constantly strive to stay current on software and systems that the Coast Guard depends on 24/7. "We're using the latest technologies out there — so we're constantly trying to make those systems faster, more reliable, and more secure," Robert says.

Results

With today's faster technology, Elvin explains, the Coast Guard can more quickly and precisely respond to incoming calls or concerns. "Whether it's search-and-rescue, drug intervention, or protecting our borders, these systems provide the data that the Coast Guard personnel need to accomplish those missions," Robert says.

Akima is proud to support the Coast Guard's mission through C5ISC.

