

Silvus Technologies and SSL Communications Team Up to Demonstrate Complete Wireless Coverage of Large Cargo Ship



Figure 1. Cargo Ship

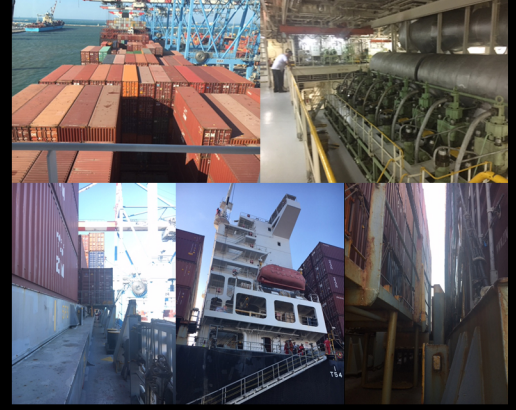


Figure 2. Onboard Cargo Ship

Background

A government organization who conducts inspections of cargo ships has been looking for a system capable of providing voice, video, and data connectivity for teams that are rapidly deployed to inspect transiting vessels. Their procedures include placing a commander on the bridge to ensure control of the vessel, while other team members, equipped with bodyworn cameras and audio headsets, conduct a thorough search of the ship. Uninterrupted voice and video connectivity among team members is critical for mission success.

Test Scenario

The goal of the test was to demonstrate complete wireless coverage of all areas of a cargo ship, using only 3 StreamCaster™ 4200 radios. The bridge was utilized as the main receive location, where video was monitored by the commander while an operator with an SC4200 body worn kit, including Push-To-Talk (PTT) and HD camera, searched the ship. A third radio was later placed in a stairwell on the main deck level to extend coverage. Radio locations are shown in Figure 3 below.

Silvus Results

After boarding the vessel and setting up the command station on the bridge, the mobile operator conducted a thorough search of the entire outside deck of the ship. Once this area was cleared, the operator placed an additional SC4200 with 2dBi omni in the stairwell and proceeded to search the below deck areas. The Silvus network provided complete coverage of all decks of the ship, including coverage inside the engine compartment. The relay radio was only needed to cover the lowest decks of the ship. Throughout the entire exercise, the commander on the bridge was able to view uninterrupted HD video on a wirelessly connected tablet and smartphone while maintaining voice communications with the search operator. The network maintained a minimum of 8Mbps throughput capacity at all times.

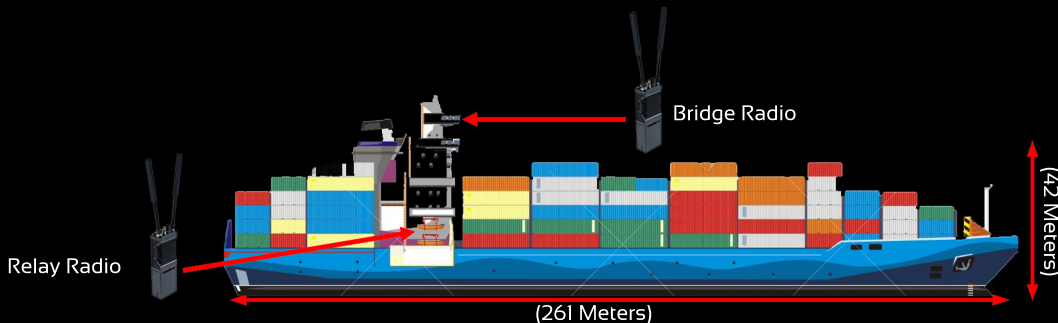


Figure 3. Radio Locations

Summary

Silvus Technologies along with their partner SSL Communications were able to quickly and easily provide a solution that the inspection team has been unable to find in other systems. Using just 3 radios, a small team was able to effectively board and search an entire suspect vessel while sharing video and voice communications.