



Boarding Team Communications

NEXT GENERATION TACTICAL NETWORKING

Boarding teams play a critical role in port security, harbor defense and coastal-warfare operations. A boarding party needs to rapidly set up mobile mesh networks that permit them to search for dangerous and illegal materials, such as radioactive materials, drugs, or explosives, while maintaining communications with headquarters and collaborating with remotely located experts.

CoCo's boarding team solution is designed for highly mobile ad-hoc networks with rapidly changing topologies and unreliable network connections, while addressing the most critical issues for boarding personnel:

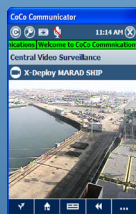
- **Improve safety through continuous communications:** Ensure the safety of your boarding team personnel by extending the backhaul connection from the "rail" to the most obscure nook or cranny.
- **Deploy in minutes:** Quickly and easily set up and use CoCo tactical products because they are lightweight, man portable and deploy with the push of a button.
- **Extend communication capabilities to the tactical edge of your network:** Deliver commands from decision makers at HQ to boarding teams for quick tactical response.
- **Provide situational awareness to remote locations:** Relay information gathered below deck during a boarding operation to HQ for real time decision making.



Key Solution Components



CoCo® Tactical Radio Gateways (TRG) enable different radio systems to interoperate with each other and are built to ruggedized standards.



CoCo® Communicator is a voice, video, and data softphone application designed for easy use on PDAs and PCs.



CoCo® Tactical Mesh Routers (TMR) are lightweight, deploy with a touch of a button, and are built to ruggedized standards.

"Regular VHF radio doesn't work below deck too well, but CoCo enables Coast Guard personnel to maintain 100 percent wireless connectivity"

-LT Michael Doyal
U.S. Coast Guard

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A NEW APPROACH TO NETWORKING



The Challenge

The CoCo Boarding Team Solution was developed in conjunction with the U.S. Coast Guard Research and Development Center to solve the U.S. Coast Guard (USCG) Boarding Teams (BT) below-decks connectivity problem. Previously, team members were not able to communicate when searching or inspecting below-decks on large vessels (> 600 feet), which significantly impacted team safety and situational awareness.

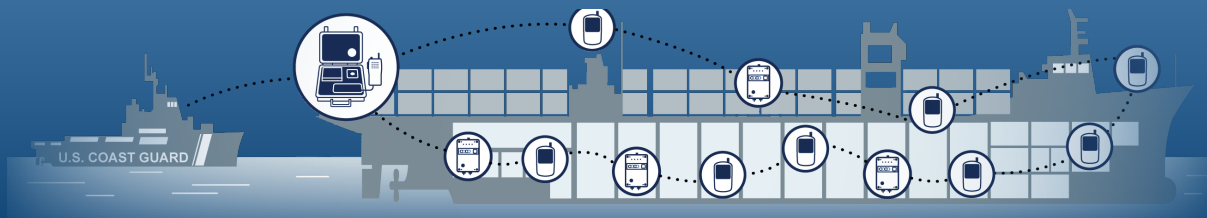
The USCG Research and Development Center documented the inadequacy of radios currently in use by BT members in a test which showed that they worked less than half the time in a shipboard below-decks environment and could not provide the coverage needed for BT safety (Dewey, 2004).

A survey of BT members found they wanted a system that provides effective connectivity anywhere on a vessel to all members of the team and back to the small boat, airborne units, command centers and to other agencies. Also, the system must be lightweight, battery powered, portable, waterproof, secure and affordable.

The CoCo Boarding Team Solution

The CoCo Boarding Team Solution for the U.S. Coast Guard, BT COMMS, is a wireless ad-hoc mesh network solution that eliminates traditional below-decks connectivity problems. BT COMMS work where UHF/VHF radios do not and overcome the problems associated with conventional radio frequency voice repeaters. Our solution has been tested at the 2006 and 2007 Joint Interoperability Test Command's (JITC) DoD Interoperability Communications Exercise (DICE). BT COMMS:

- Provide 100 percent connectivity in critical boarding areas during exercises on a variety of vessels.
- Use a cryptographic overlay mesh protocol that is loaded onto the system components, enabling scalable, mobile, secure and interoperable communication, and is FIPS 140-2 validated.
- Operate on the 802.11 band and can transmit voice, video and data.
- Are "transport agnostic" in that they can travel over any system (e.g., satellite, VHF, UHF or wired networks).
- Create a plug-and-play wide area adaptive network with global reach back capabilities.



To learn more visit us at www.cococorp.com or call a CoCo sales representative at 1-866-575-4128