



Acquisition Directorate

Rescue 21 Project



Rescue 21 Alaska

September 2008

Overview

Rescue 21 Alaska, the Coast Guard's enhanced communications system for the Seventeenth District, will bring expanded VHF-FM marine coverage and clearer communications to 'The Great Land.'

Currently in Full Rate Production in the continental United States, Hawaii, Guam and Puerto Rico, Rescue 21 is standing the watch and saving lives with upgraded communications tools and capabilities in many Coast Guard Sectors. The Coast Guard is deploying a modified Rescue 21 system design in the state of Alaska, which will result in a more cost effective and realistic solution for the state's unique coastal operating environment. The Coast Guard identified over 50 critical sites in Southeast Alaska, Prince William Sound, Cook Inlet, Kenai Peninsula, Kodiak Island, Shelikof Straight, Bristol Bay, Alaska Peninsula, the Aleutian Chain and Nome at which expanded VHF-FM and UHF communications coverage will be installed. All work in Alaska is scheduled for completion by the end of 2017.

The suite of Rescue 21 technologies being deployed in Alaska are heavily influenced by supportability, weather, environment, habitability, terrain, power and bandwidth issues unique to the state. The most notable difference between Rescue 21 Alaska and the system being deployed outside the state will be in direction finding (DF) capabilities. Due to technical feasibility, it is expected that very limited DF service will be implemented.

Rescue 21 Alaska will enable the Coast Guard to continuously monitor Digital Selective Calling (DSC), VHF-Channel 70. By using a VHF-marine band radio equipped with DSC that has been properly registered with a Mobile Maritime Security Identity (MMSI) number and interfaced with GPS or LORAN, the mariner can transmit a distress call with vital vessel information and position with the push of a single button. More information on DSC can be found at www.uscg.mil/rescue21/benefits.asp.

When completed, this vital major systems acquisition will provide leading-edge VHF-FM and UHF communications replacing the legacy National Distress and Response System that has been in use since the 1970s. By replacing outdated legacy technology with a fully integrated system, Rescue 21 Alaska will provide the Coast Guard with an upgraded tool and technology suite with which to better protect the state's 33,000 miles of coastline and inland waterways.

Capabilities:

- Supports Digital Selective Calling for registered users
- Enhances clarity of distress calls
- Allows simultaneous channel monitoring
- Upgrades playback and recording of distress calls
- Reduces coverage gaps for coastal communications
- Automates transmission of marine information broadcasts

History and Timeline

- 1970s: National Distress System (legacy system) installed to receive and respond to VHF distress calls.
- May 1994: Mission Analysis Report includes new system requirements, noting gaps within the legacy coastal communications system.
- July 1995: The acquisition project is chartered as the National Distress and Response System Modernization Project (NDRSMP).
- December 1997: 'Morning Dew' incident, in Charleston, SC, validates need for a new VHF-FM system for the Coast Guard.
- September 2002: Rescue 21 production contract awarded.
- January 2007: Coast Guard assumed role of system integrator in Alaska.
- August 2007: Project Resident Office commissioned in Juneau, Alaska.
- July 2008: Alaska implementation coverage requirements and site functionality were approved by District 17, Rescue 21 Project Manager and Rescue 21 Project Sponsor.



As shown by this Alaska remote tower site, construction season, accessibility for maintenance and repairs, equipment structure and durability are all challenges faced in Rescue 21 Alaska system design and deployment.

Mission execution begins here.