



CASE STUDY:

San Francisco Bay Area Achieves Interoperability with Satellite Communications

The Situation

The San Francisco Bay Area is a thriving metropolis consisting of nine counties, 101 cities, 7,000 square miles and a population of nearly seven million. It is also a region prone to natural disasters such as earthquakes, flooding, windstorms, wildfires, mudslides and landslides.

The Challenge

Like many major metropolitan areas, communicating between the various public safety and government agencies located throughout the San Francisco region is challenging. Not only are there numerous public safety and government agencies operating in the region; but, they each have their own infrastructure, making it challenging for various agencies to connect during a regional or state emergency.

The San Francisco Bay Area needed a reliable, interoperable communications solution that would allow agencies to coordinate public safety and public service efforts during both day-to-day and emergency operations.

The Solution

Remote Satellite Systems International (RSSI), a value added reseller for satellite communications technologies, realized the critical need for a redundant communications system that would allow its customers — public safety and government agencies throughout the San Francisco area — to connect with each other, even when terrestrial and cellular networks are damaged or congested.



The Golden Gate Bridge looking south toward San Francisco

After speaking with several customers about the idea, RSSI began setting up satellite talkgroups using SkyTerra's MSAT-G2 push-to-talk satellite phones.

"The MSAT-G2 satellite telephone was the perfect solution for these users because of its one-to-one and one-to-many push-to-talk satellite radio capabilities," explains Robert Rosen, president of RSSI. "In addition, it makes extremely efficient use of the satellite network resources — allowing up to 9,999 users to share the same talkgroup. This translates into less network congestion. Additionally, the SkyTerra network operates well when terrestrial networks are damaged or congested."

While RSSI helped establish the first talkgroup with SkyTerra's equipment in 1995, the concept of achieving interoperability among agencies throughout the region took off in 2006.



That is when RSSI won a contract with the Metropolitan Transportation Commission (MTC). MTC, which has jurisdiction over the nine counties in the San Francisco Bay Area, wanted to establish a satellite talkgroup that would allow its officials to easily communicate with each other as well as other agencies operating in the region.



SkyTerra G-2 "Go-Kit"

"The San Francisco Bay Area is prone to earthquakes and other major disasters, making interoperability among agencies in the area critical to protecting the public," says Rosen. "With the development of the MTC talkgroup operating over SkyTerra's satellite network, public safety and public service officials in the region have a communications system they can rely upon."

To ensure agencies are prepared to use the equipment, RSSI frequently visits customer sites, providing training to customers. In addition to fixed-site installations — installing antennas on buildings so that the MSAT-G2 equipment can be used indoors — most agencies have also purchased MSAT-G2 "Go-Kits," which is a portable kit that allows users the flexibility of communicating on the go.

Because of the foresight and initiative of Remote Satellite Systems International, satellite communications has become essential to quick disaster response and coordination of rescue efforts among multiple municipalities and agencies operating in the San Francisco Bay Area.



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