



Use Case: City Fire Dispatch

Scenario

This scenario discusses the crisis management needs of a large city fire department located in an active earthquake zone. The department's coverage region encompasses large hills and valleys, and borders a body of water with ocean access. The city is equipped with a 911-CAD dispatching system with multiple dispatchers, which is interconnected to a multi-channel analog radio system with multiple voting receivers.

The CAD system uses a wireline station dispatching system which can activate lights and horns when an apparatus from the station is to respond. There are dozens of fire stations in the city.

The city Emergency Operations Center (EOC) in another building has dispatching terminals connected to the CAD system. The city has a standard CENTREX system linking all major city buildings.

The Problem

A major earthquake could take down the CAD system. When this happens the fire department will be unable to obtain status of its stations and apparatus. It will also be unable to readily dispatch alarms. There is no backup communications system that could be used to keep critical communications flowing. From the crisis management viewpoint, there isn't a means to establish secure voice conferences with first responders, public safety managers, and all who are involved in responding to the crisis

The Solution

The REDCOM CrucialConnect™ Crisis Conferencing Solution (CCS) can provide a backup and conferencing solution for the Fire Department. Here's how to implement it:

- Install the REDCOM SIP server
- Install the Fire Station hard phones, softphone, and PA interface
- Install the CrucialConnect consoles
- Install the hardphones in critical facilities
- Set up the LAN/WAN data network

Benefits

1. All stations, dispatchers and department officers, and critical industries officials, can now conference securely about incidents.
2. The SIP paging system, department-wide, can now be selected individually or as a group for dispatch functions should the primary CAD fail.
3. Many secure phone conferences can be set up:
 - A. All stations, post earthquake roll call, station status, apparatus status, personnel status
 - B. All officers (staff meeting)
 - C. Conference stations by battalions; Battalion Chiefs can talk to all stations under their command simultaneously
 - D. Incident Commander (IC) and Mobile Command Post support:
 - Planning conference (high-level response planning)
 - Logistics conference (resources coordination, dispatch, response coordination).
 - Operations conference (augments radio conversations; provides a means to securely talk over “what-if’s” and progress reports).
 - Field Command Post (FCP) support conference (conserves backhaul bandwidth to the FCP; conferencing resources at the main and/or standby nodes). If high speed bandwidth is available, a CrucialConnect CCS terminal can be located in the Field CP.
 - E. Media update conference bridge (halfhourly updates to media on a meet-me bridge)
 - F. Public officials update conference bridge (halfhourly updates to media on a meet-me bridge (ANI and password protected)
 - G. Dispatchers can verify what stations are actually participating in a conference
 - H. Backup alerting conference; stations acknowledge by watch-desk phone
 - I. If necessary, the dispatcher can move several members of a conference to a sub-conference for a sidebar discussion, and then put them back into the main conference.
 - J. If the TCP wants to talk directly to a fireman trapped in the red zone, the dispatcher could patch the Tactical Command Post (TCP) mobile phone directly to a fire radio on the fire operations channel, or the fire radio could be added to a conference bridge with either VOX or positive PTT keying.