Auxiliary Communications Emergency Services "ACES"

SPECS

Saturday, January 30, 2016

Your Presenters

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What Is The Project?

- The Santa Clara County Fire Department (SCCFD), in cooperation with the Cupertino Amateur Radio Emergency Services (CARES) and Los Altos Prepare has:
  - Purchased and is installing amateur radio equipment in fire stations in Cupertino and Los Altos.
  - Working on a volunteer program to activate and operate these radio stations during a disaster response.

Why Is This Project Being Done?

- To respond to the needs of the community post disaster more effectively
- To be ready to interact with the public at locations (fire stations) where we can expect people to go for assistance
- To make the best use of available facilities post disaster with highly skilled RACES volunteers

Background

- Planned deployment of RACES volunteers – Where can we expect to find our people?
  - In the field at various locations
  - At the City Emergency Operations Center (EOC)
  - Not at fire stations, until now
- Problem – fire stations are natural locations for people to go to after a disaster and typically they will be vacant

What Is Going On At The Fire Stations?

- The fire crews won't be there.
  - Especially after an earthquake, the crews will leave
  - Fire crews will do windshield surveys of their assigned area, respond to emergencies, and the stations will be vacant
- People will expect some kind of services at fire stations
  - They may need help, perhaps urgently
  - Creates a very bad PR situation if help is needed and nobody is there to provide it

The Solution To The Problem

- Create a system where CERT & RACES volunteers can access the fire stations
- Use equipment installed there for their use ahead of time
- Include packet radio capabilities
- Use power off the grid, with battery/generator backup
- Design the radio package so that it is portable

Project Goals

- Install and/or upgrade amateur radio equipment at five fire stations in Cupertino and Los Altos
  - Radios
  - Laptop computer
  - Printer
  - Coaxial cable
  - Antennas

Project Goals

- Train and organize CERT and RACES volunteers who will form a new and distinct volunteer group under the direction and authority of the SCCFD
  - Auxiliary Communications Emergency Services (ACES)
- Background check and fingerprint volunteers
- Provide volunteers the means to enter and use SCCFD facilities when activated

Chronology

- October 2000 – SCCFD & CARES sign an MOU to do what is being accomplished now
- 2013 – Informal conversations begin between SCCFD & CARES personnel to design and implement the project
- January 2014 – SCCFD leadership approved and funded the project

Chronology (cont.)

- January 2014 to date – Design, fund, purchase, and build out the equipment packages
- December 2014 – Cupertino fire station package is built, and antenna upgrades are started
- As of January 2016, 6 systems have been built
- Pending – Cabling/Antennas at some stations, Implementation of volunteer organization and training

Response Procedures/Methods Of Operation

- ACES volunteers will activate at the same time as SCCFD personnel and RACES volunteers
- Community Emergency Response Team (CERT) volunteers will be part of this system
- CERT volunteers will interact with people who come to the fire stations for help
- RACES volunteers will manage voice and data communications equipment

Further Considerations

- We all know that major disasters only happen on sunny days with mild temperatures
- WRONG – the next disaster could easily happen during one of our frequent rainy days
- Of course, it's also possible that our next quake could happen during a July or August heat wave when the temps are near or above 100°

Fire Stations Are Good Places To Go

- We can anticipate people going there anyway
- They provide the volunteers a greater sense of security – it's nice to be able to close the door if need be
- It's a good volunteer workplace if it's pouring down rain, cold, or hotter than hot

Equipment & Technology

0 2 4 6 8 10 12 14 16 18 20 22 24 26

Santa Clara County Fire
Volunteer Comm Package

Drawings

Open Questions, ToDos

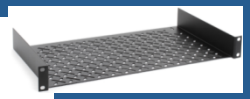
1. ..
2. ..
3. ..
4. ..

REVISION	DATE	AUTHOR	
1.0	11/9/2014	J Oberhofer	Ok
1.1	12/05/14	J Oberhofer	As Built

0 4 8 12 16 20 24 28 32 36 40 44 48 52

28
24
20
16
12
8
4
0

1. 6U Gator Box; From bottom to top
    1. 2U Drawer
    2. 1U Shelf #1. Situated above the Drawer
    3. 1U Shelf #2. Situated 2U below Light Bar/Power Conditioner; installed upside down.
    4. 1U Light Bar/Power Conditioner
    5. All Radios are positioned in the shelves as shown.
    6. Radio lateral placement on the shelves is to be determined based on the ability to get to the mounting screws.
    7.



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Fire Station Communications

Fire Station Communications

Cupertino Station #71

Seven Springs Station #72

Seven Springs Station #72

Seven Springs Station #72

Monta Vista Station #77

Monta Vista Station #77

“Build Party”

“Build Party”

Next Steps

- Installation of similar equipment in all SCCFD stations
  - Cupertino was been the original beta city for this project
  - It has expanded to Los Altos
  - After work in those two cities is complete, the SCCFD will evaluate the project, and decide if it should be extended throughout all served cities
- Recruitment and training of local volunteers in each of the cities served by the SCCFD to work in fire stations during a disaster response

Questions?