EBRCSA
East Bay Regional Communications System Authority

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August 2011

## IN THIS ISSUE



## About EBRCSA

### *Overview*

The East Bay Regional Communications System Authority (EBRCSA) was officially created on September 11, 2007 with the formation of a Joint Powers Authority (JPA). In California State Statue, a JPA is viewed as an independent governmental agency with the same powers that accrue to one of the member agencies. Currently there are 38 member agencies consisting of both counties, 30 cities, 4 special districts, the University of California, and the California Department of Transportation serving a population of over 2.5 million people. The Board of Directors is made up of 23 representatives consisting of Elected Officials, Police Chiefs, Fire Chiefs, and City Managers who will be responsible for the overall development, operations and funding of the system.

Representatives from both counties have been working together for over 6 years using Homeland Security grants funds from the Bay Area Security Initiative (UASI), State Homeland Security (SHSGP) grant programs, and COPS grant funds to fund infrastructure build out while the JPA formation process moved forward. CTA Communications completed a detailed system design and operational cost model, the system is estimated to cost approximately $70 million. To date, the EBRCSA has secured close to $46 million in Federal Homeland Security grants to build out the infrastructure.

Photo of original Board of Directors at the first meeting of the Board on October 24, 2007, at the Dublin Office of Homeland Security and Emergency Services.

## *About the System*

EBRCSA, Motorola Solutions, and AECOM have long been working to finalize the site selection and coverage design for the two-county EBRCSA P25 trunked radio system. The EBRCSA system once completed in June 2012 will provide coverage and interoperability to all agencies operating on the EBRCSA system. This system will improve safety, eliminate duplication of overlapping independent systems, and provide effective interoperable voice communications. This will enable EBRCSA to provide improved public safety services.

The EBRCSA P25 System consists of an IP-based P25 Phase I simulcast subsystem and ASTRO 25 standalone repeater sites. The Motorola ASTRO 25 trunked system incorporates the latest technology, delivering the flexibility of an IP transport, FDMA operation and simulcast frequency efficiency. The site and channel count information for each simulcast cell has been identified below.

For site locations please use this link: **http://www.ebrcsa.org/site_maps.aspx**

**Alameda County East Simulcast Cell – 700Mhz- 10 Channel**

The Alameda County East simulcast cell (ALCO East) has four sites and ten channels per site configured for 700MHz operation. The four radio sites are the Doolan Prime Site, Sunol Ridge, Patterson Pass and East Dublin BART station. The ALCO East cell provides coverage in the Dublin, Livermore, and Pleasanton region.

### ALAMEDA COUNTY NORTHWEST SIMULCAST CELL – 700MHZ- 16 CHANNEL

The Alameda County Northwest simulcast system (ALCO Northwest) has four sites and sixteen channels per site configured for 700 MHz operation. The four radio sites in the ALCO Northwest are Glenn Dyer Prime Site, Seneca Reservoir, U.C.-Berkeley and Skyline Reservoir sites. The Northwest simulcast cell has been designed to provide coverage in Albany, Berkeley, Emeryville, Oakland, and Piedmont.

### ALAMEDA County Southwest Simulcast Cell – 700Mhz – 12 Channel

The Alameda County Southwest simulcast system (ALCO Southwest) has seven sites and twelve channels per site configured for 700MHz operation. The seven sites are San Leandro Hills Prime Site, Coyote Hills, Garin water tank, Fremont Police Department, Warm Springs BART station, Walpert Ridge and Hayward Police Department. The Southwest simulcast cell has been designed to provide coverage in Fremont, Hayward, Newark, San Leandro, and Union City.

### Contra Costa West Simulcast Cell – 800Mhz- 10 Channel

The Contra Costa West simulcast cell (CCCO West) has four sites and ten channels per site configured for 800 MHz operation. The four radio sites are Turquoise Prime Site, El Cerrito Police Department, Pearl Ridge Reservoir and Nichol Knob (Point Richmond). The CCCO West Cell provides coverage in El Cerrito, Hercules, Kensington, Pinole, Richmond, and San Pablo areas.

## Contra Costa Central Simulcast Cell- 700Mhz- 10 Channel

The Contra Costa Central simulcast cell (CCCO Central) has eight sites and ten channels per site configured for 700 MHz. The eight radio sites are Cummings Peak Prime Site, 651 Pine Street in Martinez, Bald Peak, Highland Peak, Peter's Ranch Road / Apollo, Sydney Drive, Kregor Peak and Alta Mesa Moraga. (Note that Kregor Peak is a shared site with the CCCO East simulcast cell.) The CCCO Central cell will provide coverage in the areas of Walnut Creek, Clayton, Concord, Danville, Lafayette, Martinez, Moraga, Orinda, San Ramon and Pleasant Hill.

## Contra Costa East Simulcast System- 700Mhz- 7 Channel

The Contra Costa East simulcast cell (CCCO East) has three sites and seven channels per site configured for 700MHz operation. The three radio sites are Kregor Peak Prime Site, Shadybrook and Los Vaqueros. The CCCO East Cell will provide coverage in the east county areas of Antioch, Pittsburg, Brentwood, and Oakley/Knightsen.

## Stand Alone Repeater Sites

Motorola has included six Astro 25 stand-alone repeater sites to provide fill-in coverage in rural areas in both Alameda and Contra Costa Counties. Many of these sites provide seamless coverage in canyons and rural areas not covered by the EBRCSA simulcast cells identified above.

These stand alone repeater sites in Alameda County are:

- EB Parks (Gwin)- 4 Channel-800 MHz
- Crane ridge- 4 Channel-800 MHz
- Niles Canyon- 5 Channel - 800 MHz

In Contra Costa the stand alone repeater sites are:

- Marsh Creek Detention Facility- 4 Channel-800 MHz
- Old Fire Station 53- 3 Channel-800 MHz
- Crockett - 6 Channel-800 MHz

# EBRCS Site Matrix

| Status | Region | Site Name | Status |
|---|---|---|---|
| | ALCO Northwest | **Glenn Dyer (Prime)** | Installed |
| | ALCO Northwest | Seneca | Warehouse |
| | ALCO Northwest | UC Berkeley | Warehouse |
| | ALCO Northwest | Skyline Reservoir | Warehouse |
| | ALCO Southwest | **San Leandro Hills (Prime)** | Installed |
| | ALCO Southwest | Fremont PD | Partial Install |
| | ALCO Southwest | Garin | Installed |
| | ALCO Southwest | Warm Springs BART | Warehouse |
| | ALCO Southwest | Coyote Hills | Installed |
| | ALCO Southwest | Walpert | Installed |
| | ALCO Southwest | Hayward PD | Warehouse |
| | ALCO East | **Doolan (Prime)** | Installed |
| | ALCO East | Sunol | Installed |
| | ALCO East | East Dublin BART | Installed |
| | ALCO East | Patterson Pass (Altamont) | Installed |
| | CCCO West | **Turquoise (Prime)** | Installed |
| | CCCO West | El Cerrito PD (10900 San Pablo) | Installed |
| | CCCO West | Pearl Reservoir | Installed |
| | CCCO West | Nichol Knob | Installed |
| | CCCO Central | **Cummings Peak(Prime)** | Installed |
| | CCCO Central | 651 Pine Street, Martinez | Ordered |
| | CCCO Central | Bald Peak | Installed |
| | CCCO Central | Highland Peak | Installed |
| | CCCO Central | Peters Ranch | Warehouse |
| | CCCO Central | Sydney Drive | Warehouse |
| | CCCO Central | Kregor | Installed |
| | CCCO Central | Alta Mesa Moraga | Warehouse |
| | CCCO East | **Kregor (Prime)** | Installed |
| | CCCO East | Shadybrook | Delivered |
| | CCCO East | Los Vaqueros | Warehouse |
| | ALCO East | Crane Ridge | Installed |
| | CCCO Central | Crockett (Crockett Fire Station) | Stored |
| | CCCO East | Fire Station 53 | Warehouse |
| | ALCO Northwest | EB Parks (Gwen) | Warehouse |
| | CCCO East | Marsh Creek | Warehouse |
| | ALCO Southwest | Niles Canyon | Warehouse |

Site development Ready / Complete
Site development underway
Agreements / Plans / Site development

## Dispatch Console System

The EBRCSA is using a combination of upgraded gold elite and the IP based MCC 7500 consoles. Both consoles feature an easy to use Graphical User Interface (GUI). The seamless integration of the dispatch console into the radio system gives dispatchers full access to system functionality, allowing access and control of the Project 25 trunked resources, as well as superior audio quality.

**MCC7500 Console Sites and positions:**

- 5 Livermore dispatch center
- 5 Pleasanton dispatch center
- 27 Contra Costa Sheriff
- 9 Contra Costa Fire
- 6 Richmond dispatch center
- 3 Pinole dispatch center
- 2 Martinez Police
- 3 Pleasant Hill Police
- 6 Walnut Creek Police
- 8 Concord Police
- 4 San Ramon Valley Fire
- 2 Albany Police
- 8 Berkeley Police
- 2 Emeryville Police
- 4 East Bay Parks
- 2 UC Berkeley (Lakeside)

**Gold Elite Consoles to be migrated to the P25 System:**

- 3 Newark Police
- 9 Fremont Police
- 4 Union City Police
- 5 Alameda County Sheriff
- 3 San Leandro Police
- 5 Alameda City Police
- 2 ALCO EOC
- 9 ALCO Fire Lawrence Livermore Labs

## Working Groups

**EBRCS Technical Advisory Committee (TAG)**

- Alameda County Law Representative
- Contra Costa County Law Representative
- Alameda County Fire Representative
- Contra Costa County Fire Representative
- Public Services/Special District Representative
- Alameda County Technical Representative
- Contra Costa County Technical Representative
- Combined Dispatch Representative
- EBRCSA Executive Director

Bob Simmons
**CDX Wireless, Inc.**
**Technology Consultants**
Phone: 925-218-4213
Fax: 925-397-6799
Web: www.cdxwireless.com

## Scheduled Events

### MAJOR MILESTONE EVENTS

- Contra Costa West Cell Coverage Testing by CTA/AECOM- June 2011
- Centralized Nice Logger Integration – October 2011
- Master Site Functional Testing – October 2011
- Contra Costa West Cell Functional Testing – October 2011
- Alameda East Cell Functional Testing – October 2011
- Alameda East Cell Coverage Testing by Motorola Solutions – November 2011
- MCC 7500 Console System Staging – November 2011
- EBRCS RF Infrastructure System Complete – June 2012

## Upcoming Articles

Please tell us what you are most interested in. Use the link below for your suggestions:
http://www.ebrcsa.org/Lists/ContactUs/NewForm_ContactUs.aspx

## FAQ's

**Question: When will the system be completed?**
Answer: July 1, 2012

**Question: Where do I go to find more information and status of the project?**
Answer: www.EBRCSA.org

Please submit your questions using the link below:

http://www.ebrcsa.org/Lists/ContactUs/NewForm_ContactUs.aspx

Please visit the www.EBRCSA.org for all FAQ's.

If you have suggestions for the EBRCSA Newsletter, please submit them via the link below:

http://www.ebrcsa.org/Lists/ContactUs/NewForm_ContactUs.aspx

## Contacts

**William J. McCammon**, Executive Director
East Bay Regional Communications System Authority
4985 Broder Blvd.
Dublin CA 94568
ebrcsa.org
(925) 803-7802
Bill.McCammon@acgov.org

**Gary Durbin**, Project Manager
Motorola Solutions Systems Integration
(925) 813-1902
Email: Gary.Durbin@MotorolaSolutions.com

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