

**REGULAR MEETING OF THE
INTEROPERABILITY NETWORK OF THE SOUTH BAY
JOINT POWERS AUTHORITY TECHNICAL COMMITTEE
TUESDAY, JULY 10, 2018, 10:00 AM
SOUTH BAY REGIONAL PUBLIC COMMUNICATIONS AUTHORITY
SECOND FLOOR CONFERENCE ROOM
4440 W. BROADWAY, HAWTHORNE, CA**

1. **CALL TO ORDER**

2. **ROLL CALL**

3. **POSTING OF THE AGENDA**

4. **PUBLIC COMMENT**

5. **ACTION ITEMS**

- 5a. Approval of Minutes – June 12, 2018
- 5b. System IDs, Talk Groups and Subscriber Units
- 5c. Control Channels
- 5d. Console Status at the 3 Dispatch Centers
- 5e. Generator Needs at El Segundo Site
- 5f. Security at El Segundo Site
- 5g. New Quote from Motorola Re: Additional Equipment and Installations at Water Tank Sites

6. **REPORTS**

- 6a. Update on Motorola Site Installations
- 6b. Update on Checklist for All Acceptance Testing Tasks

7. **ORAL COMMUNICATIONS**

8. **ADJOURNMENT**

ATTACHMENT #1

Agenda Item 5a

**MINUTES OF A REGULAR MEETING
OF THE INTEROPERABILITY NETWORK
OF THE SOUTH BAY TECHNICAL COMMITTEE**

1. **CALL TO ORDER**

The Interoperability Network of the South Bay (INSB) Technical Committee convened in a regular session at 10:05 AM on Tuesday, June 12, 2018, in the second floor conference room of the South Bay Regional Public Communications Authority, 4440 W. Broadway, Hawthorne, CA 90250.

2. **ROLL CALL**

Present: Member Josh Armstrong, City of Hawthorne
Member Shawn Bonfield, City of El Segundo
Alternate Member Dennis Faro, City of Torrance
Member Andy Harrod, City of Manhattan Beach
Member Debra Kochheim, City of Redondo Beach
Member Erick Lee, City of Gardena

Absent: City of Hermosa Beach

Also Present: Wireless Technician Joel Dalguntas, City of Torrance
Executive Director Ernest Gallo, INSB Governance Board
Alternate Member John Krok, City of Gardena
Alternate Member Scott Martinez, City of El Segundo
Officer Matt Slawson, Torrance Police Department
Jeff Fukasawa, Commline
Victor Bowers, Commline

3. **POSTING OF THE AGENDA**

Executive Secretary Weeks confirmed that the agenda for this meeting was posted per Brown Act requirements.

4. **PUBLIC COMMENT**

None.

5. **ACTION ITEMS**

5a. Approval of Minutes – May 8, 2018

MOTION: Member Armstrong moved to approve the Interoperability Network of the South Bay (INSB) Technical Committee minutes of May 8, 2018 as written. The motion was seconded by Member Kochheim and passed by unanimous voice vote, absent the City of Hermosa Beach.

5b. Update on Motorola Bid Re: El Segundo Water Tower Sixth Site

Member Lee explained that, because various items are not covered under the Urban Area Security Initiative (UASI) 16 Grant, the costs for the sixth site at the El Segundo Water Tower were divided into two parts (written material distributed at the meeting) as follows: (1) the additional services in the amount of \$41,644 needed to support the El Segundo Water Tower tank, which will be funded by the UASI 16 Grant; and (2) the site requirements for the El Segundo Water Tower, including a shelter, a new air conditioning unit, electrical improvements and a chemical ground system, in the amount of \$54,897.25, which will be funded by the INSB JPA.

Jeff Fukasawa, Commline, confirmed that point-to-point connectivity was included as part of the project costs.

Member Lee clarified that the items amounting to \$54,897.25 will be handled in the form of a new purchase order from INSB to Motorola.

MOTION: Member Armstrong moved to recommend expenditures in the amount of \$41,644 for additional services to support the El Segundo Water Tower tank to be funded by Urban Area Security Initiative (UASI) 16 Grant; and (2) \$54,897.25 for various site requirements, such as a shelter, a new air conditioning unit, electrical improvements and a chemical ground system, for the El Segundo Water Tower site, to be funded by the Interoperability Network of the South Bay (INSB). The motion was seconded by Member Harrod and passed by unanimous voice vote, absent the City of Hermosa Beach.

5c. Project Update for the Governance Board

Member Lee related Executive Director Gallo's request for the Interoperability Network of the South Bay (INSB) Technical Committee to provide updates on the status of the project timeline to the INSB Governance Board on a regular basis. Noting his plans to share updated information on the project timeline to the INSB Governance Board at the next Governance Board meeting, Member Lee invited INSB Technical Committee members to contact him if they are interested in assisting with this process.

Jeff Fukasawa, Commline, advised that he will provide a Gantt chart to the chair prior to the next meeting of the Technical Committee.

Executive Director Gallo noted that the INSB Operations Committee will also be asked to provide regular updates to the INSB Governance Board.

6. **REPORTS**

6a. Request for Security Improvements at El Segundo Site

Executive Director Gallo reported on El Segundo Public Works' Department's request for security improvements at the El Segundo Water Tower site. He confirmed that no delays in the project timeline are anticipated as a result of these improvements.

In answer to a question from Officer Slawson, Torrance Police Department, Victor Bowers, Commline, explained that the Interoperability Network of the South Bay (INSB) will not go live until all the sites are up and running.

Jeff Fukasawa, Commline, estimated that the best-case scenario for the INSB to go live will be September 2018 and the worst-case scenario will be January 2019.

Member Lee advised that the Grant reimbursement request must be submitted by the end of January 2019.

7. **ORAL COMMUNICATIONS**

7a. Alternate Member Krok shared information on the remote access points (RAPs) that will facilitate programming of the mobile and portable radios over secured Wi-Fi networks to ensure operability on the Interoperability Network of the South Bay (INSB) network.

7b. Executive Director Gallo advised Derra Design's submitted first draft proposal for the El Segundo Water Tower site was received.

7c. Jeff Fukasawa, Commline, and Alternate Member Krok, assured Executive Director Gallo that Glendale is being kept up to date on the status of the go-live timeline for the Interoperability Network of the South Bay (INSB).

8. **ADJOURNMENT**

The meeting was adjourned at 10:30 AM.

ATTACHMENT #2

Agenda Item 6b

INSB RADIO COMMUNICATIONS UPGRADE - TOTAL PROJECT TIMELINE

ID	Task Name	Duration	Start	2017				2018				2019				
				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3		
1	Contract	1 day	Tue 9/19/17													
2	Equipment Staging / Delivery	53 days	Sun 10/1/17													
3	Project Kickoff	1 day	Thu 11/9/17													
4	Detailed Design Review	60 days	Tue 10/3/17													
5	CSSI Interface	119 days	Thu 11/2/17													
6	FCC Licensing	340 days	Sun 1/15/17													
7	Rack Installation - In Building	11 days	Mon 12/11/17													
8	Backhaul Testing	58 days	Thu 3/15/18													
9	Subscriber Programming, Round 1 - Analog / RM Implementation	118 days	Thu 2/1/18													
10	Obtain Antenna System **	67 days	Thu 6/14/18													
11	Antenna Installation	67 days	Mon 6/25/18													
12	El Segundo Water Tower Design / Approvals	81 days	Mon 3/12/18													
13	El Segundo Water Tower Buildout	44 days	Tue 7/3/18													
14	El Segundo Equipment Installation	45 days	Mon 9/3/18													
15	Battery Rectifier Installation	66 days	Sun 7/1/18													
16	System Integration / Testing	40 days	Mon 10/1/18													
17	Subscriber Programming, Round 2 - Transitional Codeplug	29 days	Mon 12/3/18													
18	Training	30 days	Mon 11/26/18													
19	Acceptance	20 days	Mon 1/7/19													
20	Cutover	10 days	Mon 2/4/19													
21	RCC Secondary Responders - Public Works / Public Services Installation and Programming	109 days	Fri 3/1/19													
22	Final Acceptance	1 day	Mon 2/18/19													
23	Subscriber Programming, Round 3 - Removal of Legacy Data / Modify Digital Codeplug	24 days	Wed 5/1/19													

Project: RCC Date: Fri 6/22/18	Task		Project Summary		Manual Task		Start-only		Finish-only		External Tasks		Manual Progress			Deadline	
	Split		Inactive Task		Duration-only		External Milestone									Progress	
	Milestone		Inactive Milestone		Manual Summary Rollup												Manual Progress
	Summary		Inactive Summary		Manual Summary												

INSB RADIO COMMUNICATIONS UPGRADE - TOTAL PROJECT TIMELINE

ID	Task Name	Duration	Start	2019						
				Q2	Q3	Q4	Q1	Q2	Q3	
1	Contract	1 day	Tue 9/19/17							
2	Equipment Staging / Delivery	53 days	Sun 10/1/17							
3	Project Kickoff	1 day	Thu 11/9/17							
4	Detailed Design Review	60 days	Tue 10/3/17							
5	CSSI Interface	119 days	Thu 11/2/17	█						
6	FCC Licensing	340 days	Sun 1/15/17	█						
7	Rack Installation - In Building	11 days	Mon 12/11/17							
8	Backhaul Testing	58 days	Thu 3/15/18	█						
9	Subscriber Programming, Round 1 - Analog / RM Implementation	118 days	Thu 2/1/18	█						
10	Obtain Antenna System **	67 days	Thu 6/14/18		█					
11	Antenna Installation	67 days	Mon 6/25/18		█					
12	El Segundo Water Tower Design / Approvals	81 days	Mon 3/12/18	█						
13	El Segundo Water Tower Buildout	44 days	Tue 7/3/18		█					
14	El Segundo Equipment Installation	45 days	Mon 9/3/18			█				
15	Battery Rectifier Installation	66 days	Sun 7/1/18		█					
16	System Integration / Testing	40 days	Mon 10/1/18			█				
17	Subscriber Programming, Round 2 - Transitional Codeplug	29 days	Mon 12/3/18				█			
18	Training	30 days	Mon 11/26/18				█			
19	Acceptance	20 days	Mon 1/7/19				█			
20	Cutover	10 days	Mon 2/4/19				█			
21	RCC Secondary Responders - Public Works / Public Services Installation and Programming	109 days	Fri 3/1/19						█	
22	Final Acceptance	1 day	Mon 2/18/19						█	
23	Subscriber Programming, Round 3 - Removal of Legacy Data / Modify Digital Codeplug	24 days	Wed 5/1/19							█

Project: RCC Date: Fri 6/22/18	Task		Project Summary		Manual Task		Start-only		Finish-only		Manual Progress		Deadline
	Split		Inactive Task		Duration-only		External Tasks			Manual Progress			Progress
	Milestone		Inactive Milestone		Manual Summary Rollup		External Milestone						
	Summary		Inactive Summary		Manual Summary		External Milestone						

ATTACHMENT #3

Agenda Item 6b

1.1 WIDE AREA TRUNKING - FDMA ONLY SITES

1.1.1 Talkgroup Call

1. DESCRIPTION

The Talkgroup is the primary level of organization for communications on a trunked radio system. Radios with Talkgroup call capability will be able to communicate with other members of the same Talkgroup. This provides the effect of a private channel down to the Talkgroup level.

This test will demonstrate that a Talkgroup transmission initiated by a radio user will only be heard by system users, which have, the same Talkgroup selected. As with other types of calls, Talkgroup calls can take place from anywhere in the system.

SETUP

RADIO-1 - SITE 1 - TALKGROUP 1
RADIO-2 - SITE 2 - TALKGROUP 1
RADIO-3 - SITE 1 - TALKGROUP 2
RADIO-4 - SITE 2 - TALKGROUP 2

VERSION #1.040

2. TEST

- Step 1. Initiate a Wide Area Call with RADIO-1 in TALKGROUP 1.
- Step 2. Observe that only RADIO-2 will be able to monitor and respond to the call.
- Step 3. Initiate a Wide Area Call with RADIO-3 in TALKGROUP 2.
- Step 4. Observe that only RADIO-4 will be able to monitor and respond the call.

Pass ____ Fail ____

Wide Area Trunking - FDMA Only Sites

1.1.2 Secure Operation

1. DESCRIPTION

Digital encryption is used to scramble a transmission so only properly equipped and configured radios can monitor the conversation. A "Key" is used to encrypt the transmit audio. Only radios with the same "Key" can decrypt the audio and listen to it.

SETUP

RADIO-1 - TALKGROUP 1 (SECURE TX MODE)
RADIO-2 - TALKGROUP 1 (SECURE TX MODE)
RADIO-3 - TALKGROUP 1 (SECURE MODE and no, or incorrect key)
RADIO-4 - TALKGROUP 1 (Clear TX Mode)

Note: The identical secure mode must be programmed into RADIO-1, RADIO-2, RADIO-4 and that RADIO-3 has no secure code loaded or has a unique secure code from the other testing radios.

VERSION #1.020

2. TEST

- Step 1. Initiate a secure wide area call with RADIO-1 on TALKGROUP 1. Keep this call in progress until instructed to end the call.
- Step 2. Observe that RADIO-2 will be able to monitor the call.
- Step 3. Observe that RADIO-3 does not receive the call.
- Step 4. Observe that RADIO-4 will also receive the call even with the secure switch set to the non-secure mode of operation.
- Step 5. End the call from RADIO-1.
- Step 6. Respond with RADIO-2 and verify that RADIO-1 receives the response audio but RADIO-3 cannot.

Pass ____ Fail ____

Wide Area Trunking - FDMA Only Sites

1.1.3 Continuous Assignment Updating

1. DESCRIPTION

When a talkgroup is assigned a voice channel, the site controller continues to transmit the channel assignment on the control channel for the duration of the talkgroup call. Radios coming into use on the system are automatically sent to voice channels with conversations in progress involving their selected talkgroups.

SETUP

RADIO-1 - TALKGROUP 1
RADIO-2 - TALKGROUP 1
RADIO-3 - TALKGROUP 1

VERSION #1.010

2. TEST

- Step 1. Turn OFF RADIO-1.
- Step 2. Initiate a Talkgroup Call using RADIO-2 and verify RADIO-3 hears the audio.
- Step 3. While the Talkgroup Call is in progress, turn ON RADIO-1.
- Step 4. Observe RADIO-1, which was just brought back into service, joins the Talkgroup Call already in progress.
- Step 5. End the talkgroup call.
- Step 6. Switch RADIO-1 to another talkgroup.
- Step 7. Initiate a Talkgroup Call from RADIO-2 to RADIO-3.
- Step 8. While the Talkgroup Call is in progress, set RADIO-1 back to TALKGROUP 1.
- Step 9. Observe that RADIO-1 joins the Talkgroup Call already in progress.

Pass ____ **Fail** ____

Wide Area Trunking - FDMA Only Sites

1.1.4 Multigroup Call in Wait Mode

1. DESCRIPTION

This trunking feature allows an equipped radio user to transmit an announcement to several different talkgroups simultaneously. The multigroup (ATG) call can be flagged for Wait Mode in the Provisioning Manager (PM) database forcing all attached talkgroups to finish calls in progress before the trunked system will process the multigroup call. The system does not permit inactive, attached talkgroups to initiate Talkgroup Calls during the "wait" timeframe. As with other types of calls, multigroup calls can take place from anywhere in the system.

SETUP

RADIO-1 - TALKGROUP 1
RADIO-2 - TALKGROUP 2
RADIO-3 - RANDOM (Not part of MG)
RADIO-4 - ATG 1

* TALKGROUP 1 and TALKGROUP 2 are members of ATG 1.

* RANDOM is any talkgroup not a member of ATG 1.

* Multigroups are set up through both the Provisioning Manager (PM) and the Subscriber Programming software.

VERSION #1.020

2. TEST

- Step 1. Verify ATG 1 is set for the Wait mode.
- Step 2. Using RADIO-1, initiate a call on TALKGROUP 1.
- Step 3. While RADIO-1 is keyed, attempt to initiate a multigroup call using RADIO-4 on ATG 1. Verify RADIO-4 receives a busy tone because one of the talkgroups attached to ATG 1 is involved in a Talkgroup Call.
- Step 4. Key RADIO-2 and verify that a busy tone is received because the ATG 1 call is in queue.
- Step 5. Dekey RADIO-1 and verify RADIO-4 receives a callback.
- Step 6. Key RADIO-4 and verify both RADIO-1 and RADIO-2 hear the multigroup call while RADIO-3 does not unmute.

Pass____ Fail____

Wide Area Trunking - FDMA Only Sites

1.1.5 Multigroup Call in Interrupt Mode

1. DESCRIPTION

This trunking feature allows an equipped radio user to transmit an announcement to several different talkgroups simultaneously. When the multigroup (MG) is flagged for Interrupt Mode the trunked system does not wait for attached talkgroups to finish calls in progress. Upon dekeying, the interrupted radios will join the multigroup call in progress. As with other types of calls, multigroup calls can take place from anywhere in the system.

NOTE: A receiver interference failure may appear if RADIO-1 is not immediately dekeyed. This test is not recommended for single site systems as RF contention will occur.

SETUP

RADIO-1 - TALKGROUP 3
RADIO-1 - SITE - SITE 1
RADIO-2 - TALKGROUP 4
RADIO-2 - SITE - SITE 1
RADIO-3 - RANDOM (Not part of MG)
RADIO-3 - SITE - SITE 2
RADIO-4 - ATG 2
RADIO-4 - SITE - SITE 2

* TALKGROUP 3 and TALKGROUP 4 are members of ATG 2.

* RANDOM is any talkgroup not a member of ATG 2.

VERSION #1.010

2. TEST

- Step 1. Verify ATG 2 is set for the Interrupt mode.
- Step 2. Using RADIO-1, initiate a call on TALKGROUP 3.
- Step 3. While RADIO-1 is keyed, initiate a multigroup call using RADIO-4 on ATG 2. Verify RADIO-2 receives the call but RADIO-3 does not unmute.
- Step 4. Dekey RADIO-1 and verify RADIO-1 unmutes and joins the multigroup call in progress.

Pass ____ Fail ____

Wide Area Trunking - FDMA Only Sites

1.1.6 Call Alert

1. DESCRIPTION

Call Alert is a tone page that allows a user to selectively alert another radio unit. The initiating radio will receive notification from the trunked system as to whether or not the page was received by the target radio. Units receiving a Call Alert will sound an alert tone. As with other types of calls, Call Alerts can take place from anywhere in the system.

SETUP

RADIO-1 - TALKGROUP 1
RADIO-2 - TALKGROUP 2
RADIO-3 - TALKGROUP 3

VERSION #1.010

2. TEST

- Step 1. Using RADIO-1, press the page button.
- Step 2. Enter the unit ID of RADIO-2 with the keypad, or scroll to the location where this ID is stored
- Step 3. Press the PTT to initiate the call alert. Verify that the RADIO-1 user receives audible indication that the Call Alert was sent.
- Step 4. Verify that RADIO-2 user receives an audible indication of an incoming Call Alert was sent but RADIO-3 does not.
- Step 5. Verify RADIO-1 gets an audible indication that the Call Alert was successfully received at the target radio.
- Step 6. Turn off RADIO-2. Send a Call Alert from RADIO-1 to RADIO-2.
- Step 7. Verify that the RADIO-1 user receives audible indication that the Call Alert was sent.
- Step 8. Verify RADIO-1 receives a "No Acknowledgement" indication that the Call Alert was not received at the target radio.

Pass____ Fail____

Wide Area Trunking - FDMA Only Sites

1.1.7 Private Call

1. DESCRIPTION

Private Call is a selective calling feature that allows a radio user to carry on one-to-one conversation that is only heard by the 2 parties involved. Subscriber units receiving a private call will sound an alert tone. As with other types of calls, Private Calls can take place from anywhere in the system.

SETUP

RADIO-1 - TALKGROUP 1
RADIO-2 - TALKGROUP 1
RADIO-3 - TALKGROUP 1

VERSION #1.020

2. TEST

- Step 1. Using RADIO-1, press the Private Call (Call) button.
- Step 2. Enter the unit ID of RADIO-2 with the keypad, or scroll to the location where this ID is stored.
- Step 3. Press the PTT to initiate the Private Call.
- Step 4. Verify that RADIO-2 hears tones and the display indicates that a Private Call has been received, but RADIO-3 receives no indications.
- Step 5. Answer the call at RADIO-2 by pressing the Private Call (Call)/Respond button. If RADIO-2 has a display, verify it shows the ID number or Alias of the calling unit.
- Step 6. Press the PTT switch on RADIO-2 and respond to the Private Call. Note that if you do not press the Private Call button before pressing PTT, your audio will be heard by all members of the talkgroup, and not just by the radio initiating the Private Call.
- Step 7. Verify that RADIO-2 can communicate with RADIO-1.
- Step 8. Verify that RADIO-3 does not monitor the Private Call.
- Step 9. End the Private Call by pressing the "home" key and return to normal talkgroup operation.

Pass ____ Fail ____

Wide Area Trunking - FDMA Only Sites

1.1.8 Emergency Alarm and Call with Top of Queue

1. DESCRIPTION

Users in life threatening situations can use the Emergency button on the radio to immediately send a signal to the dispatcher and be assigned the next available voice channel. An Emergency Call can be set to either Top of Queue or Ruthless Preemption operation. During an emergency call the Emergency ID will appear on the display of the subscribers. To demonstrate this, an Emergency Alarm and Call will be initiated from a subscriber which will be received by a subscriber on the same talkgroup, affiliated at any site of any zone in the system.

NOTE: If the subscriber does not have the Display option, the Emergency ID will not be displayed.

SETUP

RADIO-1 - TALKGROUP 1
RADIO-1 - SITE - SITE 1
RADIO-2 - TALKGROUP 1
RADIO-2 - SITE - Any Site
RADIO-3 - TALKGROUP 2
RADIO-3 - SITE - SITE 1
RADIO-4 - TALKGROUP 3
RADIO-4 - SITE - SITE 1

All radios and talkgroups should start with default priorities. Default is 10.

VERSION #1.010

2. TEST

- Step 1. Verify the emergency type for TALKGROUP 1's template is set up as Top of Queue.
- Step 2. Simulate a busy system by disabling all channels at SITE 1 with the exception of the control channel and one voice channel.
- Step 3. Press the PTT to initiate a call with RADIO-3 and hold the PTT switch until instructed to release.
- Step 4. Key RADIO-4 and verify the radio receives a busy tone. Release the PTT switch on RADIO-4.
- Step 5. Using RADIO-1 send an Emergency Call by depressing the emergency switch and then the PTT switch.
- Step 6. Observe that RADIO-1 cannot transmit due to the voice channel being busy.
- Step 7. Release the PTT switch on RADIO-3.
- Step 8. Observe that RADIO-1 receives the call back before RADIO-4 and is able to proceed with the call. Also observe that the display on RADIO-2 denotes an emergency and the unit ID or alias of RADIO-1.
- Step 9. Dekey RADIO-1 and end the Emergency Call by holding down the Emergency button on RADIO-1 until an alert tone sounds. Verify RADIO-1 returns to normal operation and that RADIO-4 receives a callback.
- Step 10. Return the system to normal operation by enabling all the channels at SITE 1.

Pass____ Fail____

Wide Area Trunking - FDMA Only Sites

1.1.9 Emergency Alarm and Call with Ruthless Preemption

1. DESCRIPTION

Users in life threatening situations can use the Emergency button on the radio to immediately send a signal to the dispatcher and be assigned the next available voice channel. An Emergency Call can be set to either Top of Queue or Ruthless Preemption operation. To demonstrate this, an Emergency Alarm and Call will be initiated from a subscriber which will be received by a subscriber, on the same talkgroup, affiliated at any site of any zone in the system.

NOTE : If the subscriber does not have the Display option, the Emergency ID will not be displayed. This test is not recommended for single site systems as RF contention will occur.

SETUP

RADIO-1 - TALKGROUP 5
RADIO-1 - SITE - SITE 1
RADIO-2 - TALKGROUP 5
RADIO-2 - SITE - SITE 2
RADIO-3 - TALKGROUP 2
RADIO-3 - SITE - SITE 1
RADIO-4 - TALKGROUP 2
RADIO-4 - SITE - SITE 2
CONSOLE-1 - TALKGROUP 5

VERSION #1.030

2. TEST

- Step 1. Verify the emergency type for TALKGROUP 5's template is configured for Ruthless Preemption.
- Step 2. Simulate a busy system by disabling all channels at SITE 1 with the exception of the control channel and one voice channel.
- Step 3. Press the PTT on RADIO-4 to initiate a call on TALKGROUP 2 and hold the PTT switch until instructed to release. Verify RADIO-3 receives the call.
- Step 4. Key RADIO-1 and verify the radio receives a busy tone. Release the PTT switch on RADIO-1.
- Step 5. Using RADIO-1 send an Emergency Call by pressing the emergency switch and then the PTT switch.
- Step 6. Observe that RADIO-1 is granted the channel immediately and the Talkgroup Call is dropped for RADIO-3. Verify an Emergency Alarm is displayed at CONSOLE-1 on TALKGROUP 5. Dekey RADIO-4.
- Step 7. Key RADIO-3 and verify the radio receives a busy tone. Release the PTT switch on RADIO-3.
- Step 8. End the Emergency Call by holding down the Emergency button on RADIO-1 until an alert tone sounds. Verify RADIO-1 returns to normal operation and that RADIO-3 receives a callback after the emergency hang time expires.
- Step 9. Enable the disabled channels at SITE 1 to return the system to normal operation.

Pass____ Fail____

Wide Area Trunking - FDMA Only Sites

1.1.10 Busy Queuing and Callback with Ten Talkgroup Priority Levels

1. DESCRIPTION

If no voice channel resources are available, radios requesting channels for new conversations are placed in a queue. Users of the same priority will move through the queue in a FIFO (first in, first out) sequence; however, users of higher priority will be inserted ahead of lower priority users in queue.

When a voice channel becomes available, the radio at the top of the busy queue gets a channel assignment and generates a callback tone. The callback tone alerts the user that a channel assignment was made and transmitting is now possible on the selected talkgroup. An Emergency Call has the highest priority at level 1. The highest assignable priority is 2 and 10 is the lowest.

NOTE: All radios and talkgroups should start with default priorities. Default is 10.

SETUP

RADIO-1 - TALKGROUP 1
RADIO-1 - SITE - SITE 1
RADIO-2 - TALKGROUP 6
RADIO-2 - SITE - SITE 1
RADIO-3 - TALKGROUP 3
RADIO-3 - SITE - SITE 1
RADIO-4 - TALKGROUP 6
RADIO-4 - SITE - Any Site

VERSION #1.020

2. TEST

- Step 1. Simulate a busy system by disabling all channels at SITE 1 with the exception of the control channel and one voice channel.
- Step 2. Verify the priority level for TALKGROUP 6's template as priority 9.
- Step 3. Initiate a Talkgroup Call with RADIO-1. Keep this call in progress until instructed to end the call.
- Step 4. Key RADIO-3 and observe that the radio receives a busy.
- Step 5. Key RADIO-2 and observe that the radio receives a busy.
- Step 6. End the Talkgroup Call established in Step 3.
- Step 7. Observe RADIO-2 receives the first callback and can now make a call to RADIO-4 upon receipt of the callback indication.
- Step 8. End the call between RADIO-2 and RADIO-4.
- Step 9. Observe RADIO-3 now receives a callback and can make a call upon receipt of the callback indication.
- Step 10. Return all the channels in the system to service.

Pass ____ Fail ____

1.2 SITE TRUNKING - FDMA ONLY SITES

1.2.1 Site Trunking Indication

1. DESCRIPTION

When a remote site loses its link or does not have a link to the Zone Controller, the affected site will enter "Site Trunking" mode of operation. Radios locked onto this site will be serviced locally within this site's coverage area.

NOTE: If the subscriber does not have the Display option, the "Site Trunking" indication will not be displayed.

SETUP

RADIO-1 - TALKGROUP 1
RADIO-1 - SITE - SITE 1
RADIO-2 - TALKGROUP 2
RADIO-2 - SITE - SITE 1
Lock the subscribers to SITE 1 if more than one site exists on the system.

VERSION #1.010

2. TEST

- Step 1. Place SITE 1 into the Site Trunking mode.
- Step 2. Verify that RADIO-1 and RADIO-2 are displaying the "Site Trunking" indication.
- Step 3. Return the site to Wide Area Trunking unless the next test requires Site Trunking.

Pass____ Fail____

Site Trunking - FDMA Only Sites

1.2.2 Talkgroup Call

1. DESCRIPTION

When a site goes into Site Trunking, radios with Talkgroup Call capability will be able to communicate with other members of the same talkgroup at that same site. Members of the same talkgroup at other sites will not be able to monitor those conversations.

SETUP

RADIO-1 - TALKGROUP 1
RADIO-1 - SITE - SITE 1
RADIO-2 - TALKGROUP 1
RADIO-2 - SITE - SITE 1
RADIO-3 - TALKGROUP 1
RADIO-3 - SITE - SITE 2
RADIO-4 - TALKGROUP 1
RADIO-4 - SITE - SITE 2

Note: All Radios should be "Site Locked"

VERSION #1.010

2. TEST

- Step 1. Place SITE 1 into the Site Trunking mode.
- Step 2. Initiate a Talkgroup Call with RADIO-1 on TALKGROUP 1 at SITE 1.
- Step 3. Observe that only RADIO-2 will be able to monitor and respond to the call. Note that RADIO-3 and RADIO-4 are not able to monitor the call since the site is not in wide area operation.
- Step 4. Initiate a Talkgroup Call with RADIO-3 on TALKGROUP 1 at SITE 2.
- Step 5. Observe that only RADIO-4 will be able to monitor and respond to the call.

Pass____ Fail____

Site Trunking - FDMA Only Sites

1.2.3 Call Alert

1. DESCRIPTION

Call Alert is a tone page that allows a user to selectively alert another radio unit. When a site is in Site Trunking, Radios at the site will only be able to Call Alert other radios at the same site. The initiating radio will receive notification from the trunked system as to whether or not the page was received by the target radio.

SETUP

RADIO-1 - TALKGROUP 1
RADIO-1 - SITE - SITE 1
RADIO-2 - TALKGROUP 2
RADIO-2 - SITE - SITE 1

Note: All Radios should be "Site Locked"

VERSION #1.010

2. TEST

- Step 1. Place SITE 1 into the Site Trunking mode.
- Step 2. Using RADIO-1, press the page button.
- Step 3. Enter the Unit ID of RADIO-2 with the keypad, or scroll to the location where this ID is stored.
- Step 4. Press the PTT to initiate the Call Alert.
- Step 5. Verify that RADIO-2 received the Call Alert.
- Step 6. Exit the Call Alert mode and return to normal talkgroup mode.
- Step 7. Return the site to Wide Area Trunking unless the next test requires Site Trunking.

Pass____ Fail____

Site Trunking - FDMA Only Sites

1.2.4 Private Call

1. DESCRIPTION

Private Call is a selective calling feature that allows a dispatcher or radio user to carry on one-to-one conversation that is only heard by the 2 parties involved. When a site is in Site Trunking, Radios at the site will only be able to Private Call other radios at the same site.

SETUP

RADIO-1 - TALKGROUP 1
RADIO-1 - SITE - SITE 1
RADIO-2 - TALKGROUP 1
RADIO-2 - SITE - SITE 1
RADIO-3 - TALKGROUP 1
RADIO-3 - SITE - SITE 1

Note: All Radios should be "Site Locked"

VERSION #1.020

2. TEST

- Step 1. Place SITE 1 into the Site Trunking mode.
- Step 2. Using RADIO-1, press the Private Call button.
- Step 3. Enter the Unit ID of RADIO-2 with the keypad, or scroll to the location where this ID is stored.
- Step 4. Press the PTT to initiate the call.
- Step 5. Verify that at RADIO-2 only tones are heard and the display indicates that a call has been received.
- Step 6. Answer the call at RADIO-2 by pressing the Private Call/Respond button. Verify its display shows the ID number or alias of the calling unit.
- Step 7. Press the PTT switch on RADIO-2 and respond to the call. Note that if you do not press the Private Call button before pressing PTT, your audio will be heard by all members of the talkgroup, and not by the radio initiating the Private Call.
- Step 8. Verify only RADIO-1 hears the audio from RADIO-2.
- Step 9. End the Private Call. Return the site to Wide Area Trunking unless the next test requires Site Trunking.

Pass____ Fail____

Site Trunking - FDMA Only Sites

1.2.5 Continuous Assignment Updating

1. DESCRIPTION

When a talkgroup is assigned a voice channel, the site controller continues to transmit the channel assignment on the control channel for the duration of the Talkgroup Call. Radios coming into use on the system are automatically sent to voice channels with conversations in progress involving their selected talkgroups.

SETUP

RADIO-1 - TALKGROUP 1
RADIO-1 - SITE - SITE 1
RADIO-2 - TALKGROUP 1
RADIO-2 - SITE - SITE 1
RADIO-3 - TALKGROUP 1
RADIO-3 - SITE - SITE 1

Note: All Radios should be "Site Locked"

VERSION #1.010

2. TEST

- Step 1. Place SITE 1 into the Site Trunking mode.
- Step 2. Turn OFF RADIO-1.
- Step 3. Initiate a Talkgroup Call using RADIO-2.
- Step 4. While the Talkgroup Call is in progress, turn on RADIO-1.
- Step 5. Observe that RADIO-1, which was just brought back into service, joins the Talkgroup Call already in progress.
- Step 6. Release the PTT of RADIO-2. Switch RADIO-1 to TALKGROUP 2.
- Step 7. Initiate a Talkgroup Call using RADIO-2.
- Step 8. While the Talkgroup Call is in progress, turn RADIO-1 back to TALKGROUP 1.
- Step 9. Observe that RADIO-1, which was just set back to TALKGROUP 1, joins the Talkgroup Call already in progress.
- Step 10. Return the site to Wide Area Trunking unless the next test requires Site Trunking.

Pass____ Fail____

Site Trunking - FDMA Only Sites

1.2.6 Wide Area Recovery

1. DESCRIPTION

A site in Site Trunking will transition to Wide Area Trunking when all failures have been cleared. All subscribers should transition from Site Trunking to Wide Area Trunking and continue to process calls.

SETUP

RADIO-1 - TALKGROUP 1
RADIO-1 - SITE - SITE 1
RADIO-2 - TALKGROUP 1
RADIO-2 - SITE - SITE 1
RADIO-3 - TALKGROUP 1
RADIO-3 - SITE - SITE 2
RADIO-4 - TALKGROUP 1
RADIO-4 - SITE - SITE 2
CONSOLE-1 - TALKGROUP 1

Note: All Radios should be "Site Locked"

2. TEST

- Step 1. Set the status of SITE 1 to Wide Area and clear any system errors that may have placed SITE 1 into Site Trunking.
- Step 2. Verify that the status of SITE 1 has transitioned into Wide Area Trunking.
- Step 3. Verify that RADIO-1 and RADIO-2 no longer display Site Trunking.
- Step 4. Verify Wide Area communications between RADIO-1, RADIO-2, RADIO-3, RADIO-4 and CONSOLE-1.

Pass ____ Fail ____

VERSION #1.020

Site Trunking - FDMA Only Sites

1.2.7 Emergency Call and Alarm

1. DESCRIPTION

Emergency Alarms and Calls can be initiated by subscribers when the registered site is in Site Trunking. With all subscribers registered on a Site Trunking site, a subscriber will initiate an Emergency Alarm by pressing the Emergency button. By pressing the PTT, an Emergency Call will be issued and the ID of the initiator will be displayed with an Emergency indication by the other subscribers on the same talkgroup.

Note that for site trunking, Emergency Call operation is always Top of Queue.

SETUP

RADIO-1 - TALKGROUP 1
RADIO-1 - SITE - SITE 1
RADIO-2 - TALKGROUP 1
RADIO-2 - SITE - SITE 1
RADIO-3 - TALKGROUP 2
RADIO-3 - SITE - SITE 1
RADIO-4 - TALKGROUP 3
RADIO-4 - SITE - SITE 1

Note: All Radios should be "Site Locked"

VERSION #1.010

2. TEST

- Step 1. Place SITE 1 into the Site Trunking mode.
- Step 2. Simulate a busy system by disabling all channels at SITE 1 with the exception of the control channel and one voice channel.
- Step 3. Press the PTT on RADIO-3 and hold the PTT switch until instructed to release.
- Step 4. Key RADIO-4 and observe that the radio receives a busy.
- Step 5. Using RADIO-1, initiate an emergency alarm followed by an emergency call.
- Step 6. Observe that RADIO-1 cannot transmit due to the voice channel being busy.
- Step 7. Release the PTT switch on RADIO-3.
- Step 8. Observe that RADIO-1 can now proceed with the call and RADIO-2 receives the call. Also observe that the display on RADIO-2 denotes an emergency and the ID or Alias of the unit sending the emergency.
- Step 9. End the emergency call and verify that RADIO-4 gets a callback.
- Step 10. Restore all channels to service and return the site to Wide Area Trunking unless the next test requires Site Trunking.

Pass_____ Fail_____

1.3 CSSI 8000

1.3.1 Talkgroup Call

1. DESCRIPTION

This test will demonstrate that a group call initiated from a home radio in the local system that is affiliated to a home talkgroup can be heard by a CSSI third party console affiliated to the talkgroup home to the local system. This test will also demonstrate that a group call initiated from a CSSI third party console that is affiliated to a talkgroup home to the local system can be heard by a home radio in the local system affiliated to the home talkgroup.

SETUP

SYSTEM 1 (home of TALKGROUP 1)
RADIO-1 - TALKGROUP 1

RADIO-1 - (home to SYSTEM 1, located in SYSTEM 1) - TALKGROUP 1.
CONSOLE-1 is a CSSI third party console that is affiliated to TALKGROUP 1 and is located in the Third Party Console Subsystem.

VERSION #1.020

2. TEST

- Step 1. Initiate a group call from RADIO-1 on TALKGROUP 1.
- Step 2. Observe that CONSOLE-1 is able to monitor and respond to the call on TALKGROUP 1.
- Step 3. Initiate a group call from CONSOLE-1 on TALKGROUP 1.
- Step 4. Observe that RADIO-1 is able to monitor and respond to the call on TALKGROUP 1.

Pass ____ **Fail** ____

CSSI 8000

1.3.2 Secure Talkgroup Call

1. DESCRIPTION

This test will demonstrate that a secure group call initiated from a home radio in the local system that is affiliated to a home talkgroup can be heard by a CSSI third party console affiliated to the talkgroup home to the local system. This test will also demonstrate that a secure group call initiated from a CSSI third party console that is affiliated to a talkgroup home to the local system can be heard by a home radio in the local system affiliated to the home talkgroup.

SETUP

SYSTEM 1 (home of TALKGROUP 1)

RADIO-1 (home to SYSTEM 1, located in SYSTEM 1) - TALKGROUP 1 (Secure TX mode)

RADIO-2 (home to SYSTEM 1, located in SYSTEM 1) - TALKGROUP 1 (Secure TX mode incorrect or no keys loaded)

CONSOLE-1 is a CSSI third party console that is affiliated to TALKGROUP 1 and is located in the Third Party Console Subsystem.

Ensure the proper key has been loaded in RADIO-1 and CONSOLE-1.

VERSION #1.020

2. TEST

- Step 1. Initiate a secure group call from RADIO-1 on TALKGROUP 1.
- Step 2. Observe that CONSOLE-1 is able to monitor and respond to the call on TALKGROUP 1. Note that RADIO-2 is not able to monitor the call.
- Step 3. Initiate a secure group call from CONSOLE-1 on TALKGROUP 1.
- Step 4. Observe that RADIO-1 is able to monitor and respond to the call on TALKGROUP 1. Note that RADIO-2 is not able to monitor the call.

Pass____ Fail____

CSSI 8000

1.3.3 Emergency Alarm and Call

1. DESCRIPTION

This test demonstrates that emergency alarm and call initiated from a home radio in the local system that is affiliated to a home talkgroup can be received by a CSSI third party console that is affiliated to the talkgroup home to the local system.

SETUP

SYSTEM 1 (home of TALKGROUP 1)
RADIO-1 - TALKGROUP 1 (home to SYSTEM 1, located in SYSTEM 1) - TALKGROUP 1

Third Party Console Subsystem
CONSOLE-1 - TALKGROUP 1

CONSOLE-1 is a CSSI third party console that is affiliated to TALKGROUP 1 and is located in the Third Party Console Subsystem.

VERSION #1.020

2. TEST

- Step 1. Initiate an emergency alarm from RADIO-1 on TALKGROUP 1 by holding the emergency button.
- Step 2. Observe that CONSOLE-1 is able to receive the emergency alarm on TALKGROUP 1.
- Step 3. Key RADIO-1 to initiate an emergency call on TALKGROUP 1.
- Step 4. Observe that CONSOLE-1 is able to monitor and respond to the emergency call on TALKGROUP 1.
- Step 5. Exit emergency mode on RADIO-1 by holding the emergency button on the radio.

Pass____ Fail____

CSSI 8000

1.3.4 Call Alert

1. DESCRIPTION

This test demonstrates that a call alert initiated from a home radio in the local system can be received by a CSSI third party console. This test will also demonstrate that a call alert initiated from a CSSI third party console can be received by a home radio in the local system.

Note: Currently, CSSI call alert is only supported for one of the CSSI interfaces, and that third party console subsystem must have the same WACN and System ID as the local system.

SETUP

SYSTEM 1
RADIO-1 (home to SYSTEM 1 and is located in SYSTEM 1)

Third Party Console Subsystem
CONSOLE-1

CONSOLE-1 is a CSSI third party console that is located in the Third Party Console Subsystem.

VERSION #1.020

2. TEST

- Step 1. Initiate a call alert from RADIO-1 to CONSOLE-1.
- Step 2. Observe that CONSOLE-1 is able to receive the call alert.
- Step 3. Initiate a call alert from CONSOLE-1 to RADIO-1.
- Step 4. Observe that RADIO-1 is able to receive the call alert.

Pass_____ Fail_____

CSSI 8000

1.3.5 Private Call

1. DESCRIPTION

This test will demonstrate that a private call initiated from a home radio in the local system can be received by a CSSI third party console. This test will also demonstrate that a private call initiated from a CSSI third party console can be received by a home radio in the local system.

Note: Currently, CSSI private call is only supported for one of the CSSI interfaces, and that third party console subsystem must have the same WACN and System ID as the local system.

SETUP

SYSTEM 1
RADIO-1 (home to SYSTEM 1 and is located in SYSTEM 1)

Third Party Console Subsystem
CONSOLE-1

CONSOLE-1 is a CSSI third party console that is located in the Third Party Console Subsystem.

VERSION #1.020

2. TEST

- Step 1. Initiate a private call from RADIO-1 to CONSOLE-1.
- Step 2. Observe that CONSOLE-1 is able to receive and respond to the call.
- Step 3. Exit private call mode on RADIO-1.
- Step 4. Initiate a private call from CONSOLE-1 to RADIO-1.
- Step 5. Observe that RADIO-1 is able to receive and respond to the call.

Pass____ Fail____

CSSI 8000

1.3.6 Secure Private Call

1. DESCRIPTION

This test will demonstrate that a secure private call initiated from a home radio in the local system can be received by a CSSI third party console.

This test will also demonstrate that a secure private call initiated from a CSSI third party console can be received by a home radio in the local system.

Note: Currently, CSSI private call is only supported for one of the CSSI interfaces, and that third party console subsystem must have the same WACN and System ID as the local system.

SETUP

SYSTEM 1
RADIO-1 (home to SYSTEM 1 and is located in SYSTEM 1)

Third Party Console Subsystem
CONSOLE-1

CONSOLE-1 is a CSSI third party console that is located in the Third Party Console Subsystem.

Ensure the proper key has been loaded in the radio and console.

VERSION #1.020

2. TEST

- Step 1. Initiate a secure private call from RADIO-1 to CONSOLE-1.
- Step 2. Observe that CONSOLE-1 is able to receive and respond to the call.
- Step 3. Exit private call mode on RADIO-1.
- Step 4. Initiate a secure private call from CONSOLE-1 to RADIO-1.
- Step 5. Observe that RADIO-1 is able to receive and respond to the call.

Pass____ Fail____

ATTACHMENT #4

Agenda Item 6b

ATTACHMENT #5

Agenda Item 6b

RESPONSIBILITY MATRIX (12-20-2016)																	
Site Number	Site Name	Site address	Tower	Shelter	Gen (200A)	UPS	Grounding	MW	MPLS	Civil	Cable Tray	Third Party Equip Move	Antenna Mount	Trak DC Power	Conventional Combining	Grounding	County Responsibility Notes
1	Torrance City Hall	3031 Torrance Blvd. Torrance, CA 90503	INSB	INSB	INSB	INSB	INSB	INSB	MSI	INSB	MSI	INSB	MSI	INSB	MSI	INSB	
2	Punta Place	1700-1/2 Punta Place, Palos Verdes Estates, CA 90274	INSB	INSB	INSB	INSB	INSB	INSB	INSB	INSB	MSI	INSB	MSI	INSB	MSI	INSB	
3	Gardena PD	1718 West 162nd St., Gardena, CA 90247	INSB	INSB	INSB	INSB	INSB	INSB	INSB	INSB	MSI	INSB	MSI	INSB	MSI	INSB	
4	Manhattan Beach WT	1431 6th St. Manhattan Beach, CA 90266	INSB	INSB	INSB	INSB	INSB	INSB	INSB	INSB	MSI	INSB	MSI	N/A	MSI	INSB	
5	SBRPCA / RCC	4400 Broadway Blvd. Hawthorne, CA 90250	INSB	INSB	INSB	INSB	INSB	INSB	INSB	INSB	MSI	INSB	MSI	N/A	MSI	INSB	
6	Chevron	324 West El Segundo Blvd., el Segundo, CA 90245	INSB	INSB	INSB	INSB	INSB	INSB	INSB	INSB	MSI	INSB	MSI	N/A	MSI	INSB	