



FIRESCOPE COMMUNICATIONS SPECIALIST GROUP

JANUARY 17-18, 2007
RIVERSIDE COUNTY FIRE – PALM DESERT
MINUTES (Approved)

Welcome and Introductions

Riverside County Fire Telecom. Manager Chet Ashbaugh welcomed the group to the Desert Willow Resort. Chair Tim McClelland presided over the meeting. Vice-Chair Peter Lawrence was in attendance (audio bridge on day one, in person on day two). Chiefs Dan Drake and Dave Stone (1/17 only) from FIRESCOPE were also present. Chief Drayer from OES Fire & Rescue was present (1/18 only).

Members in Attendance:

Chet Ashbaugh	Telecom. Manager	Riverside County Fire
David Bail	Telecom. Mtce. Sup.	State of CA–DGS Telecommunications
Brent Finster	Telecom. Manager	Contra Costa County Fire Chiefs Assc.
Kevin Harper	Captain	Kern County fire
Chris Hinshaw	Manager	San Diego Sheriff/Imperial Fire Chiefs
Steve Hobbs	Captain	Santa Barbara County Fire
John Hudson	Asst. Chief	State of CA – OES Telecom. (1/18 only)
Peter Lawrence	Battalion Chief	Oceanside Fire (1/17 audio bridge, 1/18 in person)
Frank McCarthy	Captain	Los Angeles County Fire
Tim McClelland	Assistant Chief	State of CA – CAL FIRE San Bernardino
Geoff Pemberton	Captain/COML	Riverside County Fire
Rick Robinson	Battalion Chief	Orange County Fire
Sal Santangelo	Sergeant Major	State of CA - Army National Guard
Glen Savage	Telecom. Manager	State of CA – CAL FIRE Telecommunications
Mike Sidlinger	Battalion Chief	Ventura County Fire
Don Stabler	Chair	CA Fire Chiefs Assoc. Comm – North (1/18 only)
Hampton Stewart	Frequency Coordinator	State of CA – CAL FIRE

Guests in Attendance:

Paul Clay	Technical Trainer	State of CA – DGS Telecommunications
Sam Lafferty	Telecom. Supervisor	State of CA – DGS Telecommunications
Mike Sweeney	ECC Battalion Chief	State of CA – CAL FIRE San Bernardino
John Penido	Fire Chief	CA Fire Chiefs Association (1/17 audio bridge)

Members Absent:

Tim Henry	Battalion Chief	Fresno City Fire (<i>alternate absent</i>)
Lee Kraft	Captain	Clovis Fire (<i>alternate absent</i>)
George Lowry	Assistant Chief	State of CA – OES Telecom (<i>alternate present</i>)
Eric Martinez	Technician	USFS Region V (<i>no alternate designated</i>)
John Moulder	CDO Coordinator	National Interagency Fire Center – Boise (<i>no alt. desig.</i>)
Denny Neville	Deputy Chief	Elfin Forest Volunteer Fire (<i>no alternate designated</i>)
Kevin Nida	Battalion Chief	Los Angeles City Fire (<i>no alternate designated</i>)
Matt Nilsen	Captain	San Diego Fire-Rescue (<i>no alternate designated</i>)

FIREScope Communications Specialist Group (FCSG) Logistics

Approval of September FCSG minutes – The minutes of the September 2006 meeting were approved.

FCSG Roster – Updated roster will be emailed out to the group. Any changes should be emailed to bfinster@cccfd.org

FCSG Membership Status – Chief Drake advised that the FCSG membership should match the FIREScope Board's makeup as much as possible. The Chair will contact Chief Drayer to emphasize the need for a representative to replace Frank Ealand from the USFS.

FCSG Email List Server – There has been no action to re-establish the email list server through the OES server.

Agency Reports

FIREScope Operations/Task Force/Board of Directors – Chief Drake updated the group on the recent activities of FIREScope. He also mentioned the Board's appreciation for the FCSG work on the NPSTC Nomenclature recommendation.

OES Fire & Rescue – Chief Drayer advised that FIREScope was working on an issue concerning the use of "MAYDAY" vs. "EMERGENCY TRAFFIC" when a radio channel should be cleared. He advised that two new assistant chiefs had been hired for OES Regions IV and VI. The Task Force is discussing whether FIREMARS and FIREMARS 2 was only available for fire-based EMS and not all EMS providers.

OES Telecommunications – No report as George Lowry was absent.

CAL FIRE – Glen Savage updated the group on CAL FIRE radio reprogramming which is to finish the Group 3 plan in mid-February with goal to start programming in March.

National Interagency Fire Center/National Interagency Incident Communications Division – No report as John Moulder was absent.

FCSG Sub-committee Reports

FCSG Technical Advisory Group (CTAG) – CTAG Chair Chris Hinshaw advised that there had been no need for a meeting of CTAG as there had been no inquiries referred to the group. CTAG group members are Rick Robinson, Peter Lawrence, and Geoff Pemberton.

FCSG Training Group (COMMTRAIN) – COMMTRAIN Chair Matt Nilsen advised via email that the annual RT-130 communications training curriculum had been sent out. Since not everyone had received it or had the opportunity to review it, Nilsen will be requested to re-send it to Brent who will then send it out to the entire FCSG email list. Comments will be due back to Nilsen by February 1st. The COMMTRAIN group consists of Pete Lawrence, Rick Smith, and Geoff Pemberton.

Channel Advisory Group (CAG) – Steve Hobbs has prepared a draft document ([See ANNEX A](#)) to be distributed through the OES transmittal system requesting Operational Areas to provide local channels that could be used for mutual aid during the first operational period.

ICS Form 205 Revision Group (FCSG205) – Brent Finster is developing the ICS 230-2 instructions to go with the draft ICS 205 and ICS 217A form. He has been in contact with John Moulder who, upon receipt of the drafts, will post them to the NIICD website and initiate the NWCG approval process.

CALSIEC Fire Working Group

Interoperability Channel Nomenclature – The FCSG, in conjunction with Chief John Penido on the phone, reviewed the recommendation that had been submitted to NPSTC for the February meeting in Orlando. FIREScope BOD Chair, Chief Freeman from has sent a letter supporting the recommendation to the IAFC. A discussion was held as to why the FCSG recommendation was better than the existing standard. The Orlando Team consisting of Tim McClelland, Brent Finster, Glen Savage and Chet Ashbaugh will have a conference call with Chief Penido on January 24th to finalize the action plan for the meeting.

Adhoc rules for VHF and UHF interoperability channels – Additional considerations for the use of the V-CALL and U-CALL interoperability channels include no agency-specific CTCSS tones should be used and that these channels should only be used in an incident environment (managed through an ICS 205).

Old Business

Recommendation-800 MHz. radios for Fire Service – Chief Drayer advised that Chief Zagaris has the recommendation and will determine any next steps.

Travel Net – Glen Savage advised that the CESRS Memorandum of Understanding has still not been executed however it is “okay” to use CESRS in Direct mode immediately. OES has placed a work order with DGS to upgrade the decoders statewide. FCC licensing is in progress for the CAL FIRE command centers. It was suggested that FCSG draft a memo for the OES transmittal process that described the appropriate uses of CESRS as a travel net.

Communications Resource Database – Pete Lawrence described the current options for maintaining this information. It appears that the existing OES Fire & Rescue database cannot accept the information necessary to be collected (channels, communications equipment, personnel). Chris Hinshaw and Brent Finster described the CASM/CAM tools available through ICTAP and suggested that these might meet the needs. Chris will followup with ICTAP to determine its availability for statewide use.

Incident Dispatcher Program – Don Stabler advised that he had been unsuccessful meeting with the State Board of Fire Training regarding the formal establishment of the Incident Dispatcher program. Don was advised by Chief Drayer and Chief Drake that he could go directly to the Task Force with a proposal for consideration if the current process is not successful.

S-358 Re-Write/NIMS Communications Unit Leader Training – Brent Finster advised that the S-358 COML Re-Write group would be meeting at NIFC in Boise in February. It will be a minimum of another six months before that group is finished with the NWCG re-write process which will be complete when a Beta course is delivered at a location to be determined. The NIMS COML training curriculum has been contracted to SEARCH and the six month contract should be complete in early summer. Alpha and Beta courses are planned in Los Angeles County during that time period.

Review of FIREScope Communications Work Products/Appendix A – The printing of the new FOG will be this summer with a deadline of approval by the BOD at their April 11th meeting. There was a discussion of a few changes that should be incorporated into the new Appendix A if the timeline permits a revision to what was submitted previously. These include elimination of the CTCSS tones on the receive side of the VCALL & UCALL channels, and inclusion that FRS radios may not be used on state incidents as well as federal incidents.

VCALL Narrowband Interoperability Channel Limitation - George Lowry advised that he will ensure that the information is disseminated to fire and law enforcement agencies via the OES process.

Gateway Limitations – Based on comments from Pete Lawrence, a new draft of the Gateway Limitations document will be created ([See Annex B](#)). It was suggested that this information could/should be included in FOG Appendix A as well. However, it was determined that a better plan would be to develop an operational training manual for the fire service use of gateways. This will be added to the FCSG work plan.

New Business

Elections – Annual elections were held. The results are the same slate as last year: Chair Tim McClelland, Vice-Chair Pete Lawrence, and Secretary Brent Finster.

LA County Mutual Aid Situation – Tim McClelland led a discussion advised of an email he had received regarding the issue of incidents in LA County using UHF channels and a situation in which there was a lack of communication between some mutual aid resources. Frank McCarthy advised that all Battalion Chiefs are equipped with a small cache in each BC vehicle which includes 6 UHF and 2 VHF radios to ensure that the problems as stated in the email don't occur. Frank will ensure that his department is aware of the proper way in which that incident should have happened.

Next meeting

The next FCSG meeting will be in Sacramento at Mather OES Headquarters (pending availability of the facility) on Wednesday, May 2, 2007 1300 to 1700 hours and Thursday, May 3, 2007 0900 to 1500 hours.

ANNEX A

OES Transmittal Draft - Local Agency Radio Channels

One of the FIRESCOPE goals has always been to improve interoperability through common communications and terminology. To this end, FIRESCOPE is partnering with the OES Operational Area Coordinators to identify radio channels in each Operational Area that could be used during major all hazard incidents. These channels would only be used with specific authorization from the jurisdiction where the channels are licensed, during large mutual aid incidents within the jurisdiction holding the license.

The concept is to document appropriate local government fire radio channels that might typically be used during the first operational period of a large incident. These radio channels would be used until a NIFC or CAL FIRE type radio cache could be implemented. Essentially, the plan would include radio channels organized by Operational Area and OES Region in a Mutual Aid communications plan. The purpose of the plan would be to give Mutual Aid partners a resource from which to develop radio channel plans based on available space in the radio and proximity to a Regional or Operational Area mutual aid partner.

FIRESCOPE has reviewed the radio channels that were submitted as a result of the December 22, 2004 transmittal and determined that additional clarification and information is needed. Please provide a contact person or persons that will have intimate knowledge of the radio systems in your respective Operational Area. The appropriate contact person or persons would have a specific understanding of the radio systems, including channels, bands, licensing, tones, repeater locations, coverage area, use (command or tactical) etc. in your respective Operational Area.

Please submit the contact information, including name, title, telephone number, fax number and email address, via email to steve.hobbs@sbcfire.com or fax to (805) 681-5563. Deadline for submission is (***insert date two weeks from release by OES Fire & Rescue***).

ANNEX B

GATEWAY BEST PRACTICES – revised February 2007 (to be included in a FIREScope Communications Specialist Group Operational Training Manual under development in 2007)

“Gateway” systems interconnect channels of different systems (whether on different bands or modes), allowing first responders to use their existing radios and channels to be interconnected with the channels of other users outside of their agency.

- Gateway use must be requested from the Dispatch Center in the appropriate jurisdiction.
- Agencies will identify themselves by agency name and designated call sign/radio designator. Agency name shall precede unit identifier.
- All radio traffic should be in plain language. The use of 10-Codes and specific agency acronyms is prohibited. Radio codes, acronyms and abbreviations are to be avoided as they may cause confusion between agencies. Requests for assistance or backup should clarify the reason for the request.
- All encrypted radio users will be required to work in the “clear” mode unless otherwise arranged in advance. Never assume encryption carries across the gateway.
- The use of interoperability channels as opposed to local agency channels should be considered to maximum access to the gateway.
- Gateways should only be deployed by personnel who have received adequate training by appropriate factory-trained personnel.
- Gateways should be deployed as part of a formal ICS 205 Incident Radio Communications Plan.
- The Incident Commander will ensure that each activated interoperability channel is monitored.
- The Incident Commander/Communications Unit Leader must be aware that multiple gateway activations in support of an incident can result in mutual interference. Interference issues are best resolved by the technical support team assigned to the gateways.
- During critical incidents, any requests for use of a gateway should go through the Communications Unit Leader or designee.
- Once authorization has been granted, each agency should follow their internal procedures for activating the connectivity. Procedures for establishing communications connectivity may include:
 - Selection of a channel or talkgroup on your home system if necessary
 - Verifying system-wide availability of required resources – coordination among control point Communications Center

- Providing radio call sign/designator information to connected agencies as needed
- Assigning the requested unit/agency to that channel or talkgroup
- Utilizing your agency's internal procedures for establishing connectivity between the agencies
- The control point (gateway operator) will connect the agency to the appropriate talkgroup
- Announcing to users that interoperability is activated
- National Incident Management System – Use of an Incident Command System compliant with the National Incident Management System is recommended for use of any regional interoperability resource.
- The interoperability provided through a gateway provides the ability to link participating agencies but has the following limitations:
 - The number of simultaneous patches that can be supported by gateways will be limited by switch capacity and the number of lines connecting control centers and consoles. There are a maximum of two lines connecting a switch to any other switch, and a maximum of four lines connecting control center consoles to the respective co-located switch. As a result, a limited number of patches involving resources at different control points can be supported simultaneously. Likewise, a limited number of patches involving resources that are accessed through a communications center console may be supported simultaneously.
 - Home system coverage may limit communications: If agencies gain connectivity through one of the control points, agencies will only maintain interoperable communications when in their home system coverage area.
 - Agencies not included in the list of participating agencies will require additional planning to establish interoperable communications: Agencies not included in the table cannot establish direct interoperable communications with the link connected agencies without additional planning.
 - Additional time is required when a gateway has not been preprogrammed for outside agencies.
 - Gateways may not be outfitted with agency radios before the event. Therefore, all agencies will be required to bring a portable radio and charger to connect to the gateway for the length of the operation. Gateway managers will ensure appropriate cables exist for area radios. Setup and installation of all radios occurs on-scene.
- The Radio Communications Unit Leader should follow these procedures:

- Require participating agencies to check in at the command post and provide portable radios and frequency/talkgroup channels for use during the incident
- Assign radio call sign/designator information to connected agencies
- Instruct gateway operator on where to setup and operate the gateway
- Inform gateway operator what agencies are participating
- Provide gateway operator with agency provided radios and frequency/talkgroup channels to be used during the incident
- Confer with gateway operator concerning what command level or other specific talkgroups that need to be programmed into the gateway
- The gateway operator should follow these procedures:
 - Obtain agency radios and connect to the gateway with associated cables
 - Select the channel or talkgroup assigned by the agency
 - Assign the requested unit/agency to that channel or talkgroup as designated by the Incident Commander
- Gateway Deactivation
 - When interoperable communications are no longer required, agencies should follow these guidelines.
 - Participating agencies are responsible for retrieving the portable radio provided during the operation.
 - The Communications Unit Leader should follow these deactivation procedures:
 - Make an announcement on the command channel to all commanders to advise them the gateway is being deactivated
 - Contact the gateway operator to shut down the gateway
- The gateway operator should follow these deactivation procedures:
 - Ensure agencies retrieve their portable radios
 - Take inventory of equipment and note any needing repair or replacement
 - Return to pre-response location and make gateway ready for service

- The entire process should be “cleared” by returning the radios to a channel that has transmit disabled or a blank channel. The gateway should not be configured to instantly activate as soon as power is applied.
- Agencies are encouraged to work in the simplex mode
- Interoperability is encouraged for command level personnel only
- Note: Interconnecting encrypted and non-encrypted channels on a gateway can compromise operations or allow sensitive information to be intercepted because it is difficult to ensure all encrypted channel users are aware of when there are interconnections to non-encrypted channels. An encrypted channel user can mistakenly believe that their communication is secure, when in fact the communication is being broadcast in the “clear” over a non-encrypted channel through a gateway connection. For this reason, the default policy will be that encrypted channels will not be used where non-encrypted channels are being interconnected with a gateway
- Problem ID and Resolution
 - If you are having a problem functioning on one of the shared communication systems, contact your agency’s radio technician. The following guidelines shall govern gateway problem identification and resolution between agencies:
 - Agencies using interoperable equipment may report any problems with the specific equipment to the agency supplying that equipment.
 - The equipment owner is responsible for ensuring effective resolution to problems that exist with interoperability resources
 - During deployment, report problems with individual radios to the Technician and/or Communications Unit Leader who is at the scene.
 - Develop and update MOUs, sharing agreements, and procedures if necessary
- Gateway Limitations
 - Battery life of portable radios has a limited time of use: Gateways are designed to enable interoperable communications for short duration events or until a mobile command vehicle arrives. In the event that the gateways will need to be used for an extended period of time, precautions such as an additional power supplies, personal radio chargers, or other provisions should be considered.
 - Home system coverage may limit communications: Access to repeaters of an agency’s home system while en- route to or while on the scene of the incident will be dependent on the coverage of their home system. Alternate methods of communication (e.g., frequency sharing, use of a cellular phone) may be

- required to communicate with your agency's home system if you are outside the coverage of your home system.
- Interoperability connectivity needs to be planned in advance. For agencies to have interoperability on the scene of an incident they would need to have provided a portable radio in advance or provide one on the scene of the incident.
 - Agencies are encouraged to work in the simplex mode
 - Interoperability is encouraged for command level personnel only.
 - Before activating any specific gateways, the Radio Communications Unit Leader will obtain permission from participating agencies whose frequencies are going to be patched.