



FIRESCOPE COMMUNICATIONS SPECIALIST GROUP

SEPTEMBER 26-27, 2006
CONTRA COSTA COUNTY FIRE
MINUTES (Approved)

Welcome and Introductions

Contra Costa County Fire Telecommunications Manager Brent Finster welcomed the group to the Contra Costa Regional Fire Training Center. Chair Tim McClelland presided over the meeting. Vice-Chair Peter Lawrence was in attendance. Chiefs Dan Drake and Dave Stone (9/26 only) from FIRESCOPE were also present.

Members In Attendance:

Chet Ashbaugh	Telecom. Manager	Riverside County Fire (<u>audio bridge</u>)
David Bail	Telecom. Mtce. Sup.	State of CA–DGS Telecom
Brent Finster	Telecom. Manager	Contra Costa County Fire Chiefs Assc.
Chris Hinshaw	Manager	San Diego Sheriff/Imperial Fire Chiefs (<u>audio bridge</u>)
Steve Hobbs	Captain	Santa Barbara County Fire (<u>audio bridge</u>)
Kody Kerwin	Telecom. Specialist	Contra Costa County Fire Chiefs Assc. (<i>alt. to Finster</i>)
Peter Lawrence	Battalion Chief	Oceanside Fire
George Lowry	Assistant Chief	State of CA – OES Telecom
Tim McClelland	Assistant Chief	State of CA – CDF San Bernardino
Rick McClung	Comm. Liaison	Fresno Fire (<i>alternate to Henry</i>)
Kevin Nida	Battalion Chief	Los Angeles City Fire (<u>audio bridge</u>)
Matt Nilsen	Captain	San Diego Fire-Rescue (<u>audio bridge</u>)
Geoff Pemberton	Captain/COML	Riverside County Fire (<i>alternate to Ashbaugh</i>)
Rick Robinson	Battalion Chief	Orange County Fire
Glen Savage	Telecom. Manager	State of CA – CDF Telecommunications
Rick Smith	Captain/COML	Santa Maria Fire (<i>alternate to Hobbs</i>)
Don Stabler	Chair	CA Fire Chiefs Assoc. Comm – North (9/26 only)
Hampton Stewart	Frequency Coordinator	State of CA – CDF (<i>alternate to Savage</i>)
Don Turos	Telecom. Director	State of CA – National Guard (<i>alternate to Santangelo</i>)

Guests in Attendance:

Paul Clay	Technical Trainer	State of CA – DGS Telecommunications
Erinn Evans	Comm. Supervisor	Contra Costa County Sheriff's Office
Sam Lafferty	Telecom. Supervisor	State of CA – DGS Telecommunications
Mike Towns		Foster City Fire
Ian Wallace		Santa Clara County Fire

Members Absent:

Frank Ealand	Radio Program Mgr.	United States Forest Service (<i>no alternate designated</i>)
Kevin Harper	Captain	Kern County Fire (<i>no alternate designated</i>)
Tim Henry	Battalion Chief	Fresno City Fire (<i>alternate present</i>)
Lee Kraft	Captain	Clovis Fire (<i>alternate absent</i>)
Frank McCarthy	Captain	Los Angeles County Fire (<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>)
Sal Santangelo	Sergeant Major	State of CA - Army National Guard (<i>alternate present</i>)

Mike Sidlinger

Battalion Chief

Ventura County Fire (*alternate absent*)

FIREScope Communications Specialist Group (FCSG) Logistics

Approval of May FCSG minutes – The minutes of the May 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 – FCSG is still in need of a tribal and BLM representative. Chief Drake advised that there will be no need for representation from State Office of Homeland Security or the FIREScope Aviation Specialist Group on the FCSG. George Lowry will represent OES Telecommunications.

FCSG Email List Server – Lowry will check on the status of the OES email server.

Agency Reports

FIREScope Operations/Task Force/Board of Directors – Most of FIREScope's attention is directed towards the revision of the FOG around the first of the year. FCSG will need to provide a revision for Appendix A prior to the deadline.

OES Fire & Rescue – No report.

OES Telecommunications – Lowry advised that OES T-comm is being handicapped by a number of vacancies currently.

CDF COMPLAG – Glen Savage gave a report on CDF Telecommunications activities. <Secretary was not able to provide minutes on this section>

NIFC/NIICD – No report as John Moulder was absent. Pete Lawrence did have some comments and questions regarding the tone protection of NIFC repeaters that will be tabled until the next meeting.

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 that he has new job duties at work and will be able to dedicate more time to the group. Pete Lawrence, Rick Smith, and Geoff Pemberton will be working with Nilsen. He has been in contact with NIFC Communications Training Coordinator Mark Hilton. The group will be providing draft work products by the next FCSG meeting in January 2007 including training information regarding the cross-cloning of BK Radios, a Radio Operator (RADO) training curriculum, and a communications component to be part of the RT-130 annual refresher training.

Channel Advisory Group (CAG) – Pete Lawrence and Steve Hobbs have decided that a better way to complete the mutual aid frequency list is to ask the Operational Area Coordinators to assign a representative for their Operational Area to work directly with them. This will allow the Operational Area to identify the channels and fill out the form before submission to FCSG for final review. The information that was already received will be placed into the Operational Area format and provided to whomever is identified as the representative. Hobbs will be attempting to draft the letter for review and distribution before the end of the year.

ICS Form 205 Revision Group (FCSG205) – The draft ICS 205, created by the Revision Group, was used successfully by many wildland fire incidents in California this summer as well as the Department of Homeland Security's Tactical Interoperability Communications Plan validation exercises held throughout the country. The comments from users were positive and a few suggestions to improve the revision have been incorporated.

Brent Finster presented a PowerPoint presentation on the Basics of Creation of an ICS 205 which includes introduction to a new form, the ICS 217A. The ICS 217A COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET is a form that is used to standardize the way in which channels potentially available for incident use are listed/inventoried. Communications Unit Leaders can take information from an ICS 217A and directly paste it onto an incident's ICS 205. The PowerPoint was used in ICTAP training with great success.

Chief Drake advised that the communications-specific ICS 205 and ICS 217A forms did not need to be formally approved or adopted by the Task Force or Board of Directors. He advised that FCSG can recommend revision of the existing ICS 205 and approval of the new ICS 217A form directly to NWCG. After discussion, a motion was made and passed to approve the revised ICS 205 and new ICS 217A for use in California and to initiate the formal NWCG ICS form process.

CALSIEC Fire Working Group

Interoperability Channel Nomenclature – Chief John Penido with California Fire Chiefs Association provided background information as to the issue and its current status. After a great deal of discussion, a position paper was drafted for consideration by the FIRESCOPE Board of Directors. Penido stated that CalChiefs will review the draft position paper and then a joint product will move forward to both the FIRESCOPE Board and the CalChiefs Board. The joint position paper is attached in [Annex A](#)

Adhoc rules for VHF and UHF interoperability channels – This topic was tabled until the next meeting.

Regional Planning Group Meetings – Brent Finster advised that much of CALSIEC's efforts this year are to get the various Regional Planning group meetings off the ground. All FCSG members are encouraged to attend their area's meeting. Information is available on the CALSIEC website www.calsiec.org

Statewide Strategic Interoperability Plan – This topic was tabled until the next meeting.

Old Business

Recommendation-800 MHz. radios for Fire Service – Chief Drake advised that this will need to be tabled until the next FCSG meeting due to a lack of action/information.

Incident Communications Conference – Fall/Winter 2006-2007 – The group discussed how successful the Communications Unit Leader summits were in LA and Contra Costa earlier in the year. FCSG is committed to due an Incident Communications Conference but for it to be successful, all members will need to be involved in the planning and execution. Putting on the conference during the previously identified timeframe is no longer practical. This will be placed back on the agenda for the January meeting to determine when, where and if there are enough FCSG members volunteering to work on it.

Travel Net – Glen Savage, George Lowry and Dave Bail advised that they had found a solution for the Travel Net issue. They advised that the use of the California Emergency Services Radio Network (CESRS) was waiting for approval from OES management. The use of CESRS would have advantages because it used as a travel net for any public safety resource (EMS and Law Enforcement) in addition to its use for the California Fire Service. The CESRS radio infrastructure is being upgraded currently

because some of it is over 15 years old. There are approximately 32 repeaters throughout the state in current use. CDF has ownership of 11 old Travel Net repeaters that might be able to be converted to CESRS frequencies to expand coverage. CESRS can also be used in the Direct talkaround mode for close contacts. An OES Bulletin will go out when all the details are finalized.

Incident Dispatcher Program – Don Stabler advised that he had made two attempts to contact State Fire Training regarding getting the Incident Dispatcher curriculum formally adopted by the State. He advised that he will be contacting the State Fire Marshal's office along with Alameda County Training Officer TJ Welch after fire season for a final effort. If there is a lack of response then, the plan will be to go to the CalChiefs Board of Directors for their further advice or direction.

New Business

NIMS Communications Unit Leader Training – Brent Finster advised that DHS is close to awarding the contract for curriculum development. While waiting for that to happen, behind the scenes there has been a great deal of pre-work done regarding what should or should not be a part of that training curriculum. As soon as the contract is let, actual work product drafts should be available for review on a rapid timeline.

Review of FIRESCOPE Communications Work Products/Appendix A – A conference call to work on the revised Appendix A is scheduled for October 24th. It was decided to include the use of the ICS 217A in Appendix A.

VCALL Narrowband Interoperability Channel Limitation - It was pointed out that some radios including all models of the Bendix-King EPH and some Kenwood models do not program correctly to be used on VCALL, VTAC 2 and VTAC 4 channels. The problem is that the FCC designated those channels with frequencies that are not consistent with the normal tuning steps used by some of these radios. The reason that this is very important is that the EPH radios are the current model used by the NIFC, CDF, and OES caches. After much discussion, it was decided to emphasize this potential problem in the revision to the Appendix A. It was also decided that an OES Bulletin on this subject might be prudent. DGS and CDF advised that they had already investigated this problem in 2004 and provided information to their departments via a memo. Glen Savage and David Bail will retrieve that information and provide it to George Lowry for consideration.

Gateway Limitations – Pete Lawrence stated that there were many potential problems when using gateways without proper training or incorporation into an ICS 205. After discussion, it was decided to capture some of the best practices on a document for either publication by FIRESCOPE or to CALSIEC as part of their yet to be activated Gateway Working Group. A draft Gateway Best Practices document is attached in [Annex B](#).

Next meeting

The next FCSG meeting will be in Riverside County (specific location TBD) on Wednesday, January 17, 2007 1300 to 1700 hours and Thursday, January 18, 2006 0900 to 1500 hours.

ANNEX A

CALIFORNIA FIRE CHIEFS ASSOCIATION and FIREScope COMMUNICATIONS SPECIALIST GROUP

JOINT POSITION ON PROPOSED NOMENCLATURE FOR RADIO INTEROPERABILITY CHANNELS September 28, 2006

This paper establishes the joint position of the California Fire Chiefs Association and the FIREScope Communications Specialist Group, an element of the Fire and Rescue Branch of the Governor's Office of Emergency Services. (FIREScope establishes the standards for interoperability for the California fire service.) Both organizations are represented on the California Statewide Interoperability Executive Committee (CalSIEC).

BACKGROUND

On March 6, 2006, CalSIEC was asked by Chair John Powell to approve the nomenclature proposed several years ago by NCC and later endorsed by NPSTC. The FCC subsequently declined repeated requests from NPSTC to mandate that the NCC naming scheme be made part of FCC Rules. Instead, the FCC deferred to the states to adopt common nomenclature.

At the March 6, 2006 meeting of CalSIEC, state and local fire service representatives objected to the complexity of the NCC proposal, fearing that it would confuse frontline public safety personnel. The Chair represented that the NCC scheme had already been adopted by 11 states; therefore, no other course of action was feasible. At the urging of the Chair, who cited the impending re-banding of 800MHz radio systems, CalSIEC voted to adopt the NCC scheme for 800 MHz interoperability channels only, and to table discussion of other bands pending further discussion.

A subsequent survey of regional planning coordinators revealed:

- Most are using the NCC nomenclature for 700 MHz ONLY. They will continue to use existing I-CALL/I-TAC names for 800 MHz for the foreseeable future. There is a lot of resistance to changing what currently exists.
- Only two states have adopted the NCC names at 800 MHz.: Florida and California.
- New Hampshire has postponed reprogramming in order to study the dissent regarding the NCC nomenclature.
- There is no evidence/information that any state has plans to use the NCC channel names for frequencies below 700 MHz.

In addition, a review of several state interoperable communications plans via the APCO International website, indicates the use of the V-CALL/U-CALL/I-CALL nomenclature (as listed in FCC Docket #00-348) is common.

At their September 27, 2006 meeting, the FIRESCOPE Communications Specialist Group recommended to the FIRESCOPE Board of Directors that they request that CalSIEC:

- 1) Delay any further action or adoption of a standard until a national consensus is built.
- 2) Reverse its March 6, 2006 decision to adopt the NCC nomenclature for 800 MHz.
- 3) Continue the use of the current V-Call/U-Call/I-Call nomenclature until a national standard is established

The California Fire Chiefs Association and FIRESCOPE Communications Specialist Group are committed to the development of a national standard for radio interoperability channel nomenclature that is simple and practical, thereby enhancing interoperability between public safety personnel in the field.



ANNEX B

GATEWAY BEST PRACTICES

“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 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
- 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.