FIRESCOPE
COMMUNICATIONS SPECIALIST GROUP

JUNE 14-15, 2004
ORANGE COUNTY FIRE AUTHORITY – IRVINE, CA
MINUTES

Welcome and Introductions

Chair Tim McClelland called the meeting to order. Vice-Chair Craig Kinoshita welcomed the group to the Orange County Fire Authority.

Chief Praytor was in attendance representing the FIRESCOPE Task Force (absent 2nd day due to a conflict with the Task Force Meeting.)

Members In Attendance -

David Bail	Telecom. Mtce. Sup.	State of CA – DGS – Telecommunications Division
Brent Finster	Telecom. Manager	Contra Costa County Fire Chiefs Association
Gary Fisher	Fire Chief	Vista Fire
Mike Gunderman	Electronics Technician	USFS – F&AM – South Cache (Alternate)
Bob Harris	Technical Supervisor	USFS – F&AM – South Cache
Chris Hinshaw	Assistant Manager	San Diego Co. Sheriff/Imperial Valley Fire Chiefs Assoc.
Craig Kinoshita	Battalion Chief	Orange County Fire
Peter Lawrence	Battalion Chief	Oceanside Fire
Tim McClelland	Assistant Chief	CDF South Ops
Kevin Nida	Battalion Chief	LA City Fire (late arrival)
Don Root	Deputy Chief, Telecom.	OES Telecommunications (absent 2nd day)
Mike Sidlinger	Battalion Chief	Ventura County Fire
Jim Swanson	Captain	Santa Clara County Fire

Members Absent –

Mike Burton	Division Chief	Riverside County Fire
Tim Henry	Battalion Chief	Fresno City Fire
Lee Kraft	Captain	Clovis Fire
Eric Martinez		USFS – San Bernardino NF
Frank McCarthy	Captain	LA County Fire
Denny Neville	Deputy Chief, ret.	Elfin Forest Fire
Tom Reaves	Fire Chief	Foster City Fire
Don Stabler	Sr. Dispatcher/Chair	CA Fire Chiefs Assoc. Communications - North Section
Michael Urquides	Division Chief	Salinas Rural Fire

Guest Discussion

The Vice-Chair introduced Robert Stoffel of the Orange County Sheriff's Department Communications Section. Mr. Stoffel presented a plan in which Orange County intends to offer the ability for fire agencies to utilize a VHF radio channel for interoperability. The channel, once used for San Onofre events, will be built-out as a simulcasted repeater system county-wide that would be patchable to the Orange County

800 MHz. Trunked Radio System. The group discussed that this likely will be a channel recommended to be programmed in all state mutual aid radios as part of the larger frequency discussion to be held under Old Business.

Mr. Stoffel requested that the CSG look at changing the policy concerning the patching of the White Channels. There was consensus that using the new narrowband VHF Interoperability channels for these types of patches might be more suitable than the White channels. The Chair will also discuss with Mr. Stoffel about the possibility of a local-state partnership in the building out a CDF Command 4 repeater system in Orange County to improve interoperability. It was suggested that other CDF Command repeater pairs might be appropriate to build-out in other counties to improve interoperability through local-state partnerships.

Communications Specialist Group (CSG) Logistics

Approval of April meeting minutes - The Chair asked for any comments or corrections on the April meeting minutes. The group unanimously approved the minutes, as distributed, with no changes.

Roster - Two personnel were dropped as members at the request of their agency representatives (Jim Arledge from Ventura County and Tom Tornell from Santa Clara County.) Mike Sidlinger will take Jim Arledge's spot. One additional person was added by the Task Force (David Bail, Telecommunications Maintenance Supervisor, representing the State of California Department of General Services - Telecommunications Division. The current roster was reviewed and the current copy is attached to this document. <Members should inform the Secretary of any changes and should note missing information identified by the fields highlighted in yellow.>

Email List Server - The Email list server has experienced problems associated with a firewall issue in the State's new OES computer system. The problem should be resolved soon according to Don Root.

Reports

FIRESCOPE Task Force/Operations/Board of Directors – Chief Praytor advised the group on issues concerning FIRESCOPE. There has not been a meeting of the Task Force since the last CSG meeting, therefore not much new information was available. The Task Force meets on June 15th and will likely discuss the last CSG meeting including the draft CSG Charter. There will likely be several tasks related to the Blue Ribbon Commission assigned to the CSG, which may require work over the fire season. Chief Praytor offered use of the OES conference call system in order to conduct CSG business without the need to meet in person.

FIRESCOPE Communications Technical Advisory Group – This sub-group of members had not met and there was no report. Chris Hinshaw was assigned the task of being the lead for the CTAG and requested that he organize the sub-group and make them a viable option as a resource for FIRESCOPE questions. CTAG consists of Mike Burton, Don Root, and Bob Harris.

OES Fire & Rescue – No additional information was provided that is not covered by an agenda item.

OES Telecommunications/CALSIEC - Don Root advised that the second meeting of California State Interoperability Executive Committee (CALSIEC) occurred last week. Working Groups, in addition to the Fire Working Group, have been established and have been charged with various tasks. The Fire Working Group was tasked with the following items by OES out of the Governor's Blue Ribbon Fire Commission:

Multi-Jurisdictional Recommendation 4, Page 71 recommending the "Updating of Mutual Aid and Cooperative agreements."

State Recommendation 3, Page 79 recommending "Each engine crew and Chief Officer to have capability to effectively communicate across multiple bands."

Work on these two items was tabled by the Chair to be handled as New Business.

In addition, Don Root was asked to provide guidance for the usage of the new VHF Interoperability channels to include a map or list of areas in which the channels could be used today versus used on January 1st, 2005 when they become primary status. Don explained that the channels could be used by any fire service agency as they are "licensed by Rule" for mobile use. To use as a base station or repeater, a license will be necessary which will need to be coordinated and maintained by OES.

CDF COMPLAG – The Chair summarized the recent CDF Communications Planning Group (COMPLAG) meeting held in Sacramento. Among the issues discussed was the Cal-OSHA mandated upgrades to the State's Mobile Communications Centers (MCC's), status of re-programming CDF radios to meet the narrowbanding mandate, status of licensing of new frequencies by CDF, CTCSS tone protection of CDF repeaters, Command Center technology updates, a new COMPLAG charter, Communications Unit Leader Competency (see new business), and a discussion of the specifications for the new generation CDF mobile and portable radios and portable repeaters.

MCC Comm 31 that was previously assigned to the Riverside Unit is being transferred to the San Diego Unit and will become Comm 33 located at the Monte Vista Emergency Command Center. Chief Praytor also mentioned that a new BLM Communications trailer is available for use from the Moreno Valley BLM office.

A new CDF/OES Kenwood TK-790 frequency list is contained in **Annex #1**.

For additional information on these or other CDF issues contact Tim McClelland.

USFS - Bob Harris advised the group that the narrowbanding of USFS equipment must be done by the end of 2004 and is currently between one-third and one-half complete depending on the forest. Air Guard and Travel Net will be narrowbanded soon. A new Region 5 Cache frequency list was distributed (see **Annex #2**). Rick Cartoscelli and Frank Ealand are sharing the duties of full-time Region 5 Communications Coordinator position recently vacated by Mike Wingate. Wingate's position will probably not be filled, if it is filled at all, until the outcome of the A76 Private Sector study. Wingate is currently contracted by Region 5 to monitor the Mexico interference issues.

Old Business

OES Memo to Fire Agencies Concerning Radio Communications – Chief Praytor stated that the memo from Chief Zagaris to the California Fire Service agencies concerning narrowbanding had been distributed. The only change was the referral to the OES Fire & Rescue telephone number for questions rather than the FIRESCOPE website. Copy of the memo is attached as **Annex #3.** The memo has generated a significant number of phone calls to OES with most questions dealing with technical issues.

FOG Appendix A – Status of New FOG printing – The new Field Operations Guide is going to the printer next week.

CSG Charter Draft – Status of Approval by Task Force – A conference call was held with the Task Force. Several changes were made to the CSG by the Task Force. A final version will be submitted for approval by the Task Force (see **Annex #4**).

Frequency Issues - narrowbanding, interoperability, begin preliminary work on setting a new minimum number of recommended FIRESCOPE channels, etc. – *(This item was the only item discussed during the 2nd Day in addition to the Good of the Order).*

Currently FIRESCOPE has identified 32 channels as a minimum that agencies should have pre-programmed into any radios used for statewide mutual aid. The list developed at the last meeting was meant to be a stopgap measure to be put in place for the 2004 fire season.

The CSG determined that any new VHF radio purchased by agencies of the California Fire Service that would be used for statewide Mutual Aid should be specified to be a minimum of 500 channels and should be at least capable of conversion to digital Project 25. In addition, the CSG determined the following communications standards:

- Radios should display the Program Version Number on a particular channel
- Annual radio training refresher for operational personnel/end user
    - Mutual aid use (channel usage, multi-PL, scanning)
    - Conventional channels when Trunked system is normally used
    - BK NIFC/Region 5 Cache radios
    - CSG develops base curriculum
    - PowerPoint available on FIRESCOPE website
    - Customizable based on local agency's needs
- S-330 Strike Team Leader class needs more communications familiarity
- FIRESCOPE provides recommendation of channels not a channel configuration which is left up to the specific agency for determination

The CSG discussed how to add groups of channels to that list, prioritized by potential need, to add to the original 32 channels. The following groups were identified:

Priority #1 Original 32 FIRESCOPE recommended channels
Priority #2 VHF Interoperability channels
Priority #3 CDF tacticals & command channels
Priority #4 Expanded CDF/OES channel plan

See **Annex #5** for a draft of the new FIRESCOPE recommended channels. In order to develop Priority #4, CSG will develop a letter that OES can send out to OES Regional Coordinators to obtain input on specific frequencies within each Operational Area that should be included in a statewide FIRESCOPE plan. A list will then be created and distributed for Priority #4 (the expanded CDF/OES channel plan.)

The group discussed that the integration of 800 MHz. Radios and a recommended channel plan be added to the agenda for the next meeting.

The following draft language is also to be considered:

"FIRESCOPE CSG has previously established VHF High band as the standard for mutual aid communications in the State of California. All fire agencies should have VHF High band capability in units that respond to mutual aid incidents.

FIRESCOPE CSG encourages the procurement of 800 MHz. conventional analog radios with the I-CALL/I-TAC channels to provide additional Command Net options for large incidents specifically within areas using Trunked Radio Systems."

CSG Membership Expansion – Members are encouraged to discuss the need to expand CSG participation with members of the National Park Service, BLM, and tribal governments. In addition, some additional representation on the part of Northern California agencies is needed. Nominations should be sent to Chief Praytor for consideration by the Task Force. Approved members may appoint their own delegates and are encouraged to do so by sending information to the CSG Secretary.

New Business

Determine Scope of Work for CSG – This item was tabled pending direction from the Task Force.

COML Competency – Brent Finster distributed a memo that has been previously distributed to CDF COMPLAG and California Fire Chiefs Association concerning the competency, standards and training of Communications Unit Leaders and other Comm Unit ICS personnel. A copy of the memo is attached as **Annex #6**. In addition, Brent distributed a copy of a memo (**see Annex #7**) from the USFS Acting Director of Information Resources Management in which a recommendation of a new ICS position of Communications Chief be created to help deal with the complexity and importance of communications issues during major incidents.

For information of the members, this is a list of the Communications Unit positions:

COMC	Communications Coordinator (reports to NICC)
COML	Communications Unit Leader
COMT	Incident Communications Technician
INCM	Incident Communications Manager
INDI	Incident Dispatcher
RADO	Radio Operator

There was much discussion and agreement that this was a serious problem facing the California Fire Service. The following ideas were suggested:

- CICCS adoption by CDF to include Comm Unit positions
- NWCG COML course should be expanded on either a national basis or there should be an additional California-specific module focusing on all-risk incidents, interoperability with local/state systems including trunked radio systems
- Training and utilization of USAR Communications Specialists as COML's
- Refresher courses to focus on new technology (interoperability gateways, Trunked Radio Systems, narrowbanding, Project 25, etc.) and interoperability between federal, state and local government on Urban Interface fires and All-Risk incidents
- Undertake a comprehensive audit of the personnel that the MIRPS and ROSS systems show as qualified for Communications Unit positions
- Determine standards for resource typing skills of COML's (Type 1, Type 2, etc.)
- Consider a unified COML function between an IMT COML and a local COML

It was further suggested that the CSG establish a Communications Standards & Training Group (CSTG) that would deal with this issue on a comprehensive basis.

This problem with the associated ideas for resolution will be taken to the Task Force as part of the FIRESCOPE Decision Process.

Blue Ribbon/CALSIEC Recommendations – The Chair reiterated that the CSG may only work on issues presented to them by the Task Force. He felt it appropriate to discuss these recommendations with the Task Force Liaison prior to taking action in the CSG. At the request of some members present, the Chair will clarify with the Task Force Liaison concerning the OES-defined role of the CSG as a Fire Working Group of CALSIEC versus needing to receive direction from the Task Force regarding future CSG issues.

Good of the Order

Each member updated the CSG on items of local and regional interest.

Schedule Next Meeting

The next meeting of the FIRESCOPE Communications Specialist Group has not been scheduled. Email and FIRESCOPE website posting will occur when the meeting date/time has been determined. Unless desires of the FIRESCOPE Task Force cause the need for an earlier meeting, the timeframe will probably be around the first of November. ***Agenda items for the next meeting should be sent to the FIRESCOPE Communications Specialist Group Secretary at email bfinster@cccfpd.org***

ANNEX #1

CDF/OES VHF CHANNEL PLAN – JUNE 2004

RX FREQ	RX CTCSS	TX FREQ	TX CTCSS	PWR	W/N	DISPLAY	NOTES
151.3550	0.0	159.3000	0.0	H	W	1 CDF C1	CDF COMMAND 1
151.2650	0.0	159.3300	0.0	H	W	2 CDF C2	CDF COMMAND 2
151.3400	0.0	159.3450	0.0	H	W	3 CDF C3	CDF COMMAND 3
151.4000	0.0	159.3750	0.0	H	W	4 CDF C4	CDF COMMAND 4
151.3700	0.0	159.2850	0.0	H	W	5 CDF C5	CDF COMMAND 5
151.2500	0.0	159.3600	0.0	H	W	6 CDF C6	CDF COMMAND 6
151.4600	0.0	159.3900	0.0	H	W	7 CDF C7	CDF COMMAND 7
151.4450	0.0	159.3450	0.0	H	W	8 CDF C8	CDF COMMAND 8
151.1750	0.0	159.4500	0.0	H	W	9 CDF C9	CDF COMMAND 9
151.1900	0.0	159.2250	0.0	H	W	10 CDF C10	CDF COMMAND 10
151.3850	0.0	159.2700	0.0	H	W	11 MEU L	CDF MEU LOCAL NET
151.2500	0.0	159.4050	0.0	H	W	12 HUU L	CDF HUU LOCAL NET
151.3400	0.0	159.3150	0.0	H	W	13 LNU EAST	CDF LNU EAST NET
151.4600	0.0	159.3900	0.0	H	W	14 LNU WEST	CDF LNU WEST NET
151.0400	0.0	159.1800	0.0	H	W	15 MRN	MARIN CO. MU AID NET
151.4450	0.0	159.3450	0.0	H	W	16 SCU L	CDF SCU LOCAL
151.3700	0.0	159.2850	0.0	H	W	17 CZU L	CDF CZU LOCAL
169.1250	0.0	168.3250	0.0	H	N	20 TRAVEL	CA TRAVEL NET
151.4000	0.0	159.3750	0.0	H	W	21 BTU L	CDF BTU LOCAL NET
151.2500	0.0	159.4050	0.0	H	W	22 LMU L	CDF LMU LOCAL NET
151.3250	0.0	159.3600	0.0	H	W	23 NEU WEST	CDF NEU LOCAL NET
151.1600	0.0	159.2700	0.0	H	W	24 SHU L	CDF SHU LOCAL NET
151.3700	0.0	159.2850	0.0	H	W	25 TGU L	CDF TGU LOCAL NET
151.3250	0.0	159.3600	0.0	H	W	26 SKU L	CDF SKU LOCAL NET
154.1300	131.8	159.4950	0.0	H	W	27 NEU EAST	NEU EAST NET
154.4150	123.0	159.0000	0.0	H	W	28 BTU SUPP	CDF BUTTE SUPPORT NET
151.1300	0.0	158.9250	0.0	H	W	30 RRU 3	CDF RRU LOCAL NET #3
151.3850	0.0	159.3600	0.0	H	W	31 RRU 1	CDF RRU LOCAL NET #1
151.1750	0.0	159.2850	0.0	H	W	32 RRU 2	CDF RRU LOCAL NET #2
151.1900	0.0	159.2250	0.0	H	W	33 MVU L	CDF MVU LOCAL NET
151.3250	0.0	159.3150	0.0	H	W	34 SLU L	CDF SLU CMD NET
151.4450	0.0	159.3900	0.0	H	W	35 BDU 1	CDF BDU LOCAL NET #1
151.3250	0.0	159.3150	0.0	H	W	36 BDU 2	CDF BDU LOCAL NET #2
151.2500	0.0	159.4050	0.0	H	W	37 BDU 3	CDF BDU LOCAL NET #3
154.3850	0.0	156.0300	82.5	H	W	38 SLC	SLC/SLU LOCAL DISPATCH
151.1900	0.0	159.2250	0.0	H	W	41 TUU L	CDF TUU LOCAL NET
151.4600	0.0	159.3900	0.0	H	W	42 MMU L	CDF MMU LOCAL NET
151.3850	0.0	159.2700	0.0	H	W	43 FKU 1	CDF FKU WEST NET
151.1750	0.0	159.4500	0.0	H	W	44 TCU L	CDF TCU LOCAL NET
151.1900	0.0	159.2250	0.0	H	W	45 AEU L	CDF AEU LOCAL NET
151.2500	0.0	159.4050	0.0	H	W	46 BEU L	CDF BEU LOCAL NET
151.1600	0.0	159.3600	0.0	H	W	47 FKU 2	CDF FKU EAST NET

154.4300	186.2	159.2700	0.0	**H**	**W**	**48 XED CMD**	El Dorado OA CMD Net
153.9350	123.0	158.8800	0.0	**H**	**W**	**49 XAM CMD**	Amador OA CMD Net
151.1450	0.0	151.1450	0.0	**H**	**N**	**51 CDF T1**	CDF TAC 1
151.1600	0.0	151.1600	0.0	**H**	**W**	**52 CDF T2**	CDF TAC 2
151.1750	0.0	151.1750	0.0	**H**	**W**	**53 CDF T3**	CDF TAC 3
151.1900	0.0	151.1900	0.0	**H**	**W**	**54 CDF T4**	CDF TAC 4
151.2500	0.0	151.2500	0.0	**H**	**W**	**55 CDF T5**	CDF TAC 5
151.3250	0.0	151.3250	0.0	**H**	**W**	**56 CDF T6**	CDF TAC 6
151.3400	0.0	151.3400	0.0	**H**	**W**	**57 CDF T7**	CDF TAC 7
151.3700	0.0	151.3700	0.0	**H**	**W**	**58 CDF T8**	CDF TAC 8
151.3850	0.0	151.3850	0.0	**H**	**W**	**59 CDF T9**	CDF TAC 9
151.4000	0.0	151.4000	0.0	**H**	**W**	**60 CDF T10**	CDF TAC 10
151.4450	0.0	151.4450	0.0	**H**	**W**	**61 CDF T11**	CDF TAC 11
151.4600	0.0	151.4600	0.0	**H**	**W**	**62 CDF T12**	CDF TAC 12
151.4750	0.0	151.4750	0.0	**H**	**W**	**63 CDF T13**	CDF TAC 13
159.2250	0.0	159.2250	0.0	**H**	**W**	**64 CDF T14**	CDF TAC 14
159.2700	0.0	159.2700	0.0	**H**	**W**	**65 CDF T15**	CDF TAC 15
159.2850	0.0	159.2850	0.0	**H**	**W**	**66 CDF T16**	CDF TAC 16
159.3150	0.0	159.3150	0.0	**H**	**W**	**67 CDF T17**	CDF TAC 17
159.3450	0.0	159.3450	0.0	**H**	**W**	**68 CDF T18**	CDF TAC 18
159.3600	0.0	159.3600	0.0	**H**	**W**	**69 CDF T19**	CDF TAC 19
159.3750	0.0	159.3750	0.0	**H**	**W**	**70 CDF T20**	CDF TAC 20
159.3900	0.0	159.3900	0.0	**H**	**W**	**71 CDF T21**	CDF TAC 21
159.4050	0.0	159.4050	0.0	**H**	**W**	**72 CDF T22**	CDF TAC 22
159.4500	0.0	159.4500	0.0	**H**	**W**	**73 CDF T23**	CDF TAC 23
162.4000	0.0	0.0000	0.0	**X**	**W**	**74 NWR 1**	NOAA WX RADIO F1
162.4250	0.0	0.0000	0.0	**X**	**W**	**75 NWR 2**	NOAA WX RADIO F2
162.4500	0.0	0.0000	0.0	**X**	**W**	**76 NWR 3**	NOAA WX RADIO F3
162.4750	0.0	0.0000	0.0	**X**	**W**	**77 NWR 4**	NOAA WX RADIO F4
162.5000	0.0	0.0000	0.0	**X**	**W**	**78 NWR 5**	NOAA WX RADIO F5
162.5500	0.0	0.0000	0.0	**X**	**W**	**79 NWR 7**	NOAA WX RADIO F7
171.5250	0.0	169.9500	0.0	**H**	**N**	**80 FS ENF**	USFS El Dorado NF
164.1750	0.0	164.9750	0.0	**H**	**N**	**81 FS KNF**	USFS Klamath NF
172.2250	0.0	171.4750	0.0	**H**	**N**	**82 FS LNF**	USFS Lassen NF
169.1750	0.0	169.9750	0.0	**H**	**N**	**83 FS MNF**	USFS Mendocino NF
168.7500	0.0	170.1750	0.0	**H**	**N**	**84 FS MDF**	USFS Modoc NF
170.5500	0.0	169.9000	0.0	**H**	**N**	**85 FS PNF**	USFS Plumas NF
171.5750	0.0	169.1000	0.0	**H**	**N**	**86 FS SHF**	USFS Shasta-Trinity NF
168.7250	0.0	170.1250	0.0	**H**	**N**	**87 FS SRF**	USFS Six Rivers NF
168.7500	0.0	170.5000	0.0	**H**	**N**	**88 FS STF**	USFS Stanislaus NF
168.7750	0.0	170.5750	0.0	**H**	**N**	**89 FS TNF**	USFS Tahoe NF
172.3750	0.0	169.9500	0.0	**H**	**N**	**90 FS ANF**	USFS Angeles NF
168.7500	0.0	170.5000	0.0	**H**	**N**	**91 FS CNF**	USFS Cleveland NF
168.1250	0.0	168.7250	0.0	**H**	**N**	**92 FS INF**	USFS Inyo NF
170.5500	0.0	169.9000	0.0	**H**	**N**	**93 FS LPF**	USFS Los Padres NF
171.4750	0.0	169.8750	0.0	**H**	**N**	**94 FS BDF**	USFS San Bernardino NF
168.7750	0.0	170.6000	0.0	**H**	**N**	**95 FS SQF**	USFS Sequoia NF
172.2250	0.0	169.9250	0.0	**H**	**N**	**96 FS SNF**	USFS Sierra NF

169.8750	0.0	170.4750	0.0	H	N	**97 FS TOF**	USFS Toiyabe NF
172.3750	0.0	171.5750	0.0	H	N	**98 FS TMU**	USFS Lake Tahoe Mgmt Unit
168.3000	0.0	168.3000	0.0	H	N	**100 BLM SOA**	BLM SCENE OF ACTION
168.0500	0.0	168.0500	0.0	L	N	**101 NIFC T1**	NIFC TAC 1
168.2000	0.0	168.2000	0.0	L	N	**102 NIFC T2**	NIFC TAC 2
168.6000	0.0	168.6000	0.0	L	N	**103 NIFC T3**	NIFC TAC 3
164.1375	0.0	164.1375	0.0	L	N	**104 NIFC T4**	NIFC TAC 4
166.7250	0.0	166.7250	0.0	L	N	**105 NIFC T5**	NIFC TAC 5
166.7750	0.0	166.7750	0.0	L	N	**106 NIFC T6**	NIFC TAC 6
168.2500	0.0	168.2500	0.0	L	N	**107 NIFC T7**	NIFC TAC 7
173.9125	0.0	173.9125	0.0	L	N	**108 FSR5 T4**	USFS RGN 5 TAC 4
173.9625	0.0	173.9625	0.0	L	N	**109 FSR5 T5**	USFS RGN 5 TAC 5
173.9875	0.0	173.9875	0.0	L	N	**110 FSR5 T6**	USFS RGN 5 TAC 6
168.7000	0.0	170.9750	0.0	L	N	**111 NIFC C1**	NIFC CMD 1
168.1000	0.0	170.4500	0.0	L	N	**112 NIFC C2**	NIFC CMD 2
168.0750	0.0	170.4250	0.0	L	N	**113 NIFC C3**	NIFC CMD 3
166.6125	0.0	168.4000	0.0	L	N	**114 NIFC C4**	NIFC CMD 4
167.1000	0.0	169.7500	0.0	L	N	**115 NIFC C5**	NIFC CMD 5
168.4750	0.0	173.8125	0.0	L	N	**116 NIFC C6**	NIFC CMD 6
162.9625	0.0	171.7875	0.0	L	N	**117 NIFC C7**	NIFC CMD 7
166.7500	0.0	172.7250	0.0	H	N	**118 BLM LAW**	BLM LAW NET
166.3750	0.0	166.9750	0.0	H	N	**119 BLM ADM**	BLM ADMIN NET
166.4875	0.0	167.0750	0.0	H	N	**120 BLMFIRE**	BLM FIRE NET
151.2200	0.0	151.2200	0.0	H	W	**121 CDF A/G**	CDF AIR TO GND NET
167.9500	0.0	167.9500	0.0	H	N	**122 BLM A/G**	BLM AIR TO GND NET
170.0000	0.0	170.0000	0.0	H	N	**123 FS A/G**	USFS AIR TO GND NET
166.6750	0.0	0.0000	0.0	X	N	**124 AIR T1**	AIR TACTICS 1 RX ONLY
169.1500	0.0	0.0000	0.0	X	N	**125 AIR T2**	AIR TACTICS 2 RX ONLY
169.2000	0.0	0.0000	0.0	X	N	**126 AIR T3**	AIR TACTICS 3 RX ONLY
151.2800	0.0	0.0000	0.0	X	W	**127 AIR T4**	AIR TACTICS 4 RX ONLY
151.2950	0.0	0.0000	0.0	X	W	**128 AIR T5**	AIR TACTICS 5 RX ONLY
151.3100	0.0	0.0000	0.0	X	W	**129 AIR T6**	AIR TACTICS 6 RX ONLY
165.1625	0.0	164.4250	0.0	H	N	**130 RWP**	NPS Redwood NP
170.0500	0.0	169.4000	0.0	H	N	**131 RNP**	NPS Point Reyes NP
164.8000	0.0	164.1000	0.0	H	N	**132 GNP**	NPS Golden Gate NRA
164.8000	0.0	164.4000	0.0	H	N	**133 JMP**	NPS John Muir NHS
171.7500	0.0	172.4500	0.0	H	N	**134 BNP**	NPS Lava Beds NP
165.3125	0.0	164.4250	0.0	H	N	**135 WNP**	NPS Whiskeytown NRA
170.0750	0.0	169.7250	0.0	H	N	**136 LNP**	NPS Lassen Volcanic NP
172.0250	0.0	172.6500	0.0	H	N	**137 YNP**	NPS Yosemite NP
170.0500	0.0	169.4000	0.0	H	N	**138 PIP**	NPS Pinnacles NM
164.7500	0.0	164.2500	0.0	H	N	**139 KNP 1**	NPS Sequoia-Kings Cyn 1
164.8000	0.0	164.2500	0.0	H	N	**140 KNP 2**	NPS S-K Cyn Net 2
170.1000	0.0	169.5500	0.0	H	N	**141 DVP**	NPS Death Valley NP
171.7000	0.0	172.4000	0.0	H	N	**142 CNP**	NPS Channel Is. NP
171.6750	0.0	172.6750	0.0	H	N	**143 JTP**	NPS Joshua Tree NP
172.5250	0.0	171.7250	0.0	H	N	**144 SMP**	NPS Santa Monica Mtns NP

154.1600	0.0	154.1600	0.0	**H**	**W**	**148 OES 1**	OES FIRE 1
154.2200	0.0	154.2200	0.0	**H**	**W**	**149 OES 2**	OES FIRE 2
156.0750	0.0	156.0750	0.0	**H**	**W**	**150 CALCORD**	CALCORD
155.7525	0.0	155.7525	156.7	**H**	**N**	**151 VCALL**	VHF INTEROP
151.1375	0.0	151.1375	156.7	**L**	**N**	**152 VTAC 1**	VHF INTEROP
154.4525	0.0	154.4525	156.7	**L**	**N**	**153 VTAC 2**	VHF INTEROP
158.7375	0.0	158.7375	156.7	**L**	**N**	**154 VTAC 3**	VHF INTEROP
159.4725	0.0	159.4725	156.7	**L**	**N**	**155 VTAC 4**	VHF INTEROP
154.2800	0.0	154.2800	0.0	**H**	**W**	**156 WHITE 1**	WHITE 1
154.2650	0.0	154.2650	0.0	**H**	**W**	**157 WHITE 2**	WHITE 2
154.2950	0.0	154.2950	0.0	**H**	**W**	**158 WHITE 3**	WHITE 3
162.5250	0.0	0.0000	0.0	**X**	**W**	**VER 790v4a**	PGM VERSION MARKER

"PWR" - TX Power level

H = Normal
L = Low (5-10 watts)
X = No TX authorized

"W/N" = Bandwidth

W = Wide (16K0F3E)
N = Narrow
(11K2F3E)

ANNEX #2

Pacific Southwest Region Radio Cache

REV 04/01/2004

		GROUP 1		GROUP 2		GROUP 3		GROUP 4	
CH		RCVR	XMTR	RCVR	XMTR	RCVR	XMTR	RCVR	XMTR
1		168.0500	168.0500	166.7250	166.7250	166.6750	166.6750	168.3500	168.3500
2		168.2000	168.2000	166.7750	166.7750	169.1500	169.1500	163.1000	163.1000
3		168.6000	168.6000	168.2500	168.2500	169.2000	169.2000	168.5500	168.5500
4		164.1375	164.1375			170.0000	170.0000	163.7125	163.7125
5		168.7000	168.7000	167.1000	167.1000	167.9500	167.9500	168.6125	168.6125
6	C1	168.7000	170.9750	C5	167.1000	169.7500	166.6875	166.6875	
7		168.1000	168.1000	168.4750	168.4750	171.1375	171.1375		
8	C2	168.1000	170.4500	C6	168.4750	173.8125			
9		168.0750	168.0750	162.9625	162.9625				
10	C3	168.0750	170.4250	C7	162.9625	171.7875			
11		166.6125	166.6125	173.9125	173.9125*				
12	C4	166.6125	168.4000	173.9625	173.9625*				
13				173.9875	173.9875*				
14		168.6250 (14 Channel King)	168.6250	168.6250 (14 Channel King)	168.6250	168.6250 (14 Channel King)	168.6250	168.6250 (14 Channel King)	168.6250
15									
16		168.6250	168.6250	168.6250	168.6250	168.6250	168.6250	168.6250	168.6250

All frequencies must be cleared through the National Interagency Incident Communications Division (NIICD) Communications Duty Officer (CDO).

GROUP 1 AND 2: Contains the NIRSC command/tactical frequencies
***R5 Tacs 4,5,6 173.9125, 173.9625, 173.9875 CA use only!**

GROUP 3: Contains the National air frequencies.

GROUP 4: Channel 1 and 2 – Government wide frequencies (to be used on a non-interference basis), not for Air-to-Ground use.
Channel 3 – **Used as initial contact frequency for smoke jumpers, this frequency must be cleared through the NIICD CDO.**

NOTE: Air Guard frequency appears on the last channel of all groups with a transmit tone of 110.9.

NOTE: All frequencies are narrow band.

ANNEX #3

State of California
Governor's Office of Emergency Services (OES)

Transmittal

May 24, 2004

TO: Regional Fire and Rescue Mutual Aid Coordinators

FROM: Kim Zagaris, Chief

SUBJECT: Important Communications Issues for the 2004 Fire Season

Effective with the 2004 fire season, ALL VHF radios used on Federal and some State of California radio channels must be re-programmed.

The National Telecommunications and Information Administration (the Federal Government's frequency manager) have mandated that Federal agency VHF frequencies must be narrow-banded by January 1, 2005. Although the FCC rules provide that most state and local government frequencies are not required to be narrow-banded until sometime in the future, this migration affects state and local government agencies immediately.

During the fall of 2003, Federal wildland fire agencies started the process of narrow-banding all VHF communications systems. NIFC has implemented the same changes to the National Interagency Radio Support Cache. In addition to the Federal changes, certain State of California frequencies have been converted to narrow-band operation.

It is imperative that qualified service personnel inspect all mobile and portable VHF radio communications equipment immediately in order to determine if it is capable of, and programmed for, narrow-band operation. Of particular importance is the inspection of all VHF radio equipment manufactured prior to January 1, 2000.

Any non-compliant radio equipment used on narrow-band channels may present a life-safety hazard for all users.

The FIRESCOPE Communications Specialist Group and the California Statewide Interoperability Executive Committee (CALSIEC) are formulating revised standards for radio equipment and frequency utilization to address interoperability concerns within the California Fire Service.

For additional information, your agency's radio service personnel, or contact either the OES Telecommunications Interoperability Programs Unit at (916) 845-8630, or OES Fire and Rescue Dispatch at (916) 845-8723.

~ O E S ~

ANNEX #4

FIRESCOPE
COMMUNICATIONS SPECIALIST GROUP
CHARTER – DRAFT 6/25/2004

MISSION STATEMENT

The FIRESCOPE Communications Specialists Group consists of communications technology, operations, and administrative professionals. The Group's mission is to improve communications from both an operational and technical perspective. The group achieves this mission by evaluating and making recommendations regarding existing and future wireless voice and data communications technologies and procedures to the FIRESCOPE Decision Process.

RESPONSIBILITIES

1. Evaluate existing and future technologies for application to the California Emergency Services
2. Facilitate communications interoperability
3. Provide periodic reports for the FIRESCOPE Decision Process
4. Develop, review, and recommend plans, procedures, and standards related to Emergency Services communications
5. Develop, review, and recommend cooperative agreements
6. Maintain products developed by the FIRESCOPE Communications Specialist Group
7. Maintain coordination with other organizations and act as a conduit for information exchange
8. Perform other communications-related duties as assigned by the FIRESCOPE Task Force

SUB-GROUPS

1. Sub-groups will be established by the Group when appropriate.
2. Maintain a subgroup known as the Fire Service Working Group (CALSIEC-FIRE) of the California Statewide Interoperability Executive Committee
3. Maintain a subgroup known as the Communications Technical Advisory Group (CTAG) to act as a resource for California Emergency Service agencies regarding communications technology issues

MEMBERSHIP

Membership in the FIRESCOPE Communications Specialist Group will be representative of federal, military, tribal, state and local fire service agencies including mutual aid regions, cities and counties within California. Members will be responsible for achieving all elements of the Charter and the tasks contained in the annual

Communications Specialist Group Plan of Work. Participants in this category will be voting members and have authority and responsibility to speak for their agency in all matters relating to communications issues. Members are appointed to the Group by the FIRESCOPE Task Force.

The FIRESCOPE Task Force will provide a Liaison, and an Alternate Liaison, to the Communication Specialist Group. The Task Force Liaison will ensure close coordination with other implementation efforts and the Decision Process.

OFFICERS

Officers of the FIRESCOPE Communications Specialist Group are the positions of Chair, Vice-Chair, and Secretary. Officers must be active members of the Group. Officers will be elected annually on a calendar year basis, January 1 to December 31.

The Chair will be responsible for managing the Group to accomplish the annual plans of work and reports in accordance with the FIRESCOPE Decision Process.

MEETINGS

Meetings will be called by the Chair and will be held as necessary to accomplish the goals and objectives as determined by the annual Communications Specialist Group Plan of Work. Meetings should not conflict with scheduled Task Force meetings.

ANNEX #5
FIRESCOPE STATEWIDE VHF CHANNEL PLAN – JUNE 2004

1st Priority Channels

Channel ID	Receive and Xmit Direct	Repeater Transmit	Band-Width	Transmit Power	Usage Notes
WHITE 1	154.2800		WIDE	HIGH	1
WHITE 2	154.2650		WIDE	HIGH	1
WHITE 3	154.2950		WIDE	HIGH	1
CALCORD	156.0750		WIDE	HIGH	2
CDF COMMAND 1	151.3550	159.3000	WIDE	HIGH	3
CDF COMMAND 2	151.2650	159.3300	WIDE	HIGH	3
CDF COMMAND 3	151.3400	159.3450	WIDE	HIGH	3
CA TRAVEL NET	169.1250	168.3250	NARROW	HIGH	3, 4
OES 1	154.1600		WIDE	HIGH	
OES 2	154.2200		WIDE	HIGH	
CDF TAC 2	151.1600		WIDE	HIGH	
CDF TAC 10	151.4000		WIDE	HIGH	
NIFC COMMAND 1	168.7000	170.9750	NARROW	LOW	3, 4, 5, 6
NIFC COMMAND 2	168.1000	170.4500	NARROW	LOW	3, 4, 5, 6
NIFC COMMAND 3	168.0750	170.4250	NARROW	LOW	3, 4, 5, 6
NIFC COMMAND 4	166.6125	168.4000	NARROW	LOW	3, 4, 5, 6
NIFC COMMAND 5	167.1000	169.7500	NARROW	LOW	3, 4, 5, 6
NIFC COMMAND 6	168.4750	173.8125	NARROW	LOW	3, 4, 5, 6
NIFC COMMAND 7	162.9625	171.7875	NARROW	LOW	3, 4, 5, 6
NIFC TAC 1	168.0500		NARROW	LOW	4, 5, 6
NIFC TAC 2	168.2000		NARROW	LOW	4, 5, 6
NIFC TAC 3	168.6000		NARROW	LOW	4, 5, 6
NIFC TAC 4	164.1375		NARROW	LOW	4, 5, 6
NIFC TAC 5	166.7250		NARROW	LOW	4, 5, 6
NIFC TAC 6	166.7750		NARROW	LOW	4, 5, 6
NIFC TAC 7	168.2500		NARROW	LOW	4, 5, 6
USFS R5 TAC 4	173.9125		NARROW	LOW	5, 6
USFS R5 TAC 5	173.9625		NARROW	LOW	5, 6
USFS R5 TAC 6	173.9875		NARROW	LOW	5, 6
USFS AIR-GROUND	170.0000		NARROW	LOW	5, 6
CDF AIR-GROUND	151.2200		WIDE	LOW	5
BLM AIR-GROUND	167.9500		NARROW	LOW	5, 6

2nd Priority Channels – Narrowband VHF Interoperability Channels Available for primary usage on January 1, 2005

VCALL	168.6000		NARROW	HIGH	8
VTAC 1	164.1375		NARROW	LOW	5, 8
VTAC 2	166.7250		NARROW	LOW	5, 8
VTAC 3	166.7750		NARROW	LOW	5, 8
VTAC 4	168.2500		NARROW	LOW	5, 8

3rd Priority Channels – CDF Tactical Channels and CDF Command Channels (excluding CDF Tacticals 2 and 10 and Commands 1, 2, and 3 already contained in 1st Priority)

CDF TAC 1	151.1450		NARROW	HIGH	
CDF TAC 3	151.1750		WIDE	HIGH	
CDF TAC 4	151.1900		WIDE	HIGH	
CDF TAC 5	151.2500		WIDE	HIGH	
CDF TAC 6	151.3250		WIDE	HIGH	
CDF TAC 7	151.3400		WIDE	HIGH	
CDF TAC 8	151.3700		WIDE	HIGH	
CDF TAC 9	151.3850		WIDE	HIGH	
CDF TAC 11	151.4450		WIDE	HIGH	
CDF TAC 12	151.4600		WIDE	HIGH	
CDF TAC 13	151.4750		WIDE	HIGH	
CDF TAC 14	159.2250		WIDE	HIGH	
CDF TAC 15	159.2700		WIDE	HIGH	
CDF TAC 16	159.2850		WIDE	HIGH	
CDF TAC 17	159.3150		WIDE	HIGH	
CDF TAC 18	159.3450		WIDE	HIGH	
CDF TAC 19	159.3600		WIDE	HIGH	
CDF TAC 20	159.3750		WIDE	HIGH	
CDF TAC 21	159.3900		WIDE	HIGH	
CDF TAC 22	159.4050		WIDE	HIGH	
CDF TAC 23	159.4500		WIDE	HIGH	
CDF COMMAND 4	151.4000	159.3750	WIDE	HIGH	7
CDF COMMAND 5	151.3700	159.2850	WIDE	HIGH	7
CDF COMMAND 6	151.2500	159.3600	WIDE	HIGH	7
CDF COMMAND 7	151.4600	159.3900	WIDE	HIGH	7
CDF COMMAND 8	151.4450	159.3450	WIDE	HIGH	7
CDF COMMAND 9	151.1750	159.4500	WIDE	HIGH	7
CDF COMMAND 10	151.1900	159.2250	WIDE	HIGH	7

4th Priority Channels – United States Forest Service Administration and Support Nets, BLM, National Parks, and Statewide Operational Area Mutual Aid Channels

To be determined as a result of a statewide audit of appropriate mutual aid channels by Operational Area.					

USAGE NOTES:

1) The White channels require individual agency licensing from the FCC. White Channel operational policies are outlined in OES Fire Operations Bulletin 28.

2) Use of CALCORD is subject to the CALCORD Plan, under an executed CALCORD agreement with OES. Contact OES Telecommunications (916-845-8630) for information.

3) Federal and State of California agencies use the following sixteen standard tones for repeater access. These must be included for repeater use. These tones must be programmed on the transmit side ***only*** of mobile and portable radios.

1. 110.9	2. 123.0	3. 131.8	4. 136.5
5. 146.2	6. 156.7	7. 167.9	8. 103.5
9. 100.0	10. 107.2	11. 114.8	12. 127.3
13. 141.3	14. 151.4	15. 162.2	16. 192.8

4) In order to program California Travel Net, all “Note 4” channels (NIFC Command and Tactical channels) must be programmed in the radio.

5) Transmitters are to be set to lowest available power setting on this frequency.

6) For use when assigned by an Incident. Incident COML’s must obtain authorization for the use of these channels through the NIFC Communications Duty Officer (208-387-5644).

7) For use when assigned by an Incident. Incident COML’s must obtain authorization for the use of these channels through the CDF Southern Region or Northern Region Command Center.

8) Specific channel usage guidelines will be determined by the California Statewide Interoperability Executive Committee (CALSIEC). Tone 6 (156.7 Hz.) is used as the common tone (transmit and receive).

FIRESCOPE STATEWIDE 800 MHz. CHANNEL PLAN **– JUNE 2004**

The following Interoperability Channels in the 800 MHz band are available for use by the California Fire Service:

Channel ID	Receive and Xmit Direct	Repeater Transmit	Usage Notes
Int'l Calling Channel (ICALL)	866.0125	821.0125	9
Int'l Tactical Channel 1 (ITAC 1)	866.5125	821.5125	9
Int'l Tactical Channel 2 (ITAC 2)	867.0125	822.0125	9
Int'l Tactical Channel 3 (ITAC 3)	867.5125	822.5125	9
Int'l Tactical Channel 4 (ITAC 4)	868.0125	823.0125	9
Statewide Fire / EMS Tactical (FIREMARS)	868.9875	823.9875	10
Northern CA Fire / EMS Tactical (FIREMARS 2)	866.9125	821.9125	10, 11

USAGE NOTES:

9) These channels are for inter-agency / inter-discipline use. No single-agency, routine communications permitted. Tone 6 (156.7 Hz.) is used as the International common tone (transmit and receive).

10) Use as a Fire and EMS single-agency or strike-team common channel is permitted. Tone 6 (156.7 Hz.) is used as the common tone (transmit and receive). Use is subject to an executed use agreement with OES. Contact OES Telecommunications (916-845-8630) for information.

11) Not available for use **in Imperial, Kern, Los Angeles, Orange, Riverside, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, and Ventura counties.**

ANNEX #6

CONTRA COSTA REGIONAL FIRE COMMUNICATIONS CENTER

2010 Geary Rd.
Pleasant Hill, CA 94523

925-941-3340
925-941-3339 fax

Brent E. Finster
Telecommunications Manager

bfinster@cccfpd.org

To: FIRESCOPE Communications Specialist Group
CDF Communications Planning Group (COMPLAG)
California Fire Chiefs Association

From: Brent Finster, Telecommunications Manager

Date: June 1, 2004

Subject: Communications Unit Leader Competency

Incident Communications is much different than it was over a dozen years ago when I took my first Communications Unit Leader (COML) course at the National Interagency Fire Center (NIFC) in Boise. The class then was about two weeks long and consisted of setting up equipment contained in the National Interagency Radio Support Cache, using topo maps to determine the most advantageous locations to place a Command repeater, and how to fill out a General Message Form to order the correct number of AA batteries to support an incident for a week or two. We had an overnight field exercise that functioned as the real world application of the topo map/repeater placement exercise. There were no pre-requisites for the COML class back then. Many of the trainees were Forest Service or BLM employees that had no previous communications experience or training. We all graduated as COML's.

Sometime in the past decade, it was decided by NWCG to require personnel wishing to be COML's obtain qualification as an Incident Communications Technician (COMT) and Incident Communications Manager (INCM) before obtaining COML qualification. The COML class of old essentially incorporated these three positions into one but because the two-week class was overwhelming for those that had no communications background, the pre-requisites were established.

In California apparently there was an unofficial modification to these requirements. Applicants for the COML class were not required to be a COMT and INCM first. Their entire COML class consisted of 32 hours of training on repeater placement and

leadership skills. No pre-requisites or experience. Many of the COML's trained in California spent only a few hours receiving hands-on practice with the NIRSC equipment or learning communications technology. Even the COML class held in Sacramento in April 2004 did not require COMT or INCM qualifications for attendance.

In the mid 1990's a new term, *interoperability*, was coined and it was defined as the ability to
communicate in a routine, task force or mutual aid situation. In September 2001, we were introduced to tragic events caused by terrorists and the subsequent emphasis on effective communications interoperability. We heard the horror stories of communications interoperability in New York City and the kudos for how well the Pentagon situation was handled. The role of the COML became more complex that ugly September day.

New products….interoperability gateways, satellite communications, and 802.11 systems…were marketed to "solve" the problems that occur during major multi-agency disasters using first responders with disparate radio systems.

Recently, Project SAFECOM (a federal government interoperability initiative that followed in the footsteps of the Public Safety Wireless Network) and the Department of Homeland Security, has re-affirmed a single ICS position, the COML, as the focal point for training and implementation of effective plans to deal with the challenges of communications in an all-risk, multi-band and multi-mode world. A recent internal USFS memo has remarked that the Communications Section during an incident should achieve a level of priority on an equal footing as the Operations, Logistics, Plans, and Finance/Administration Sections.

In 2004, the Southern California fire siege re-wrote the book on how fast wildfire can spread in an Interface environment. Agencies with incompatible radio systems were at a loss as to how to communicate during these unprecedented events. The traditional NIFC concept of deploying portable Command repeaters to cover the fire area was flawed on this type of fire, as the fire raced up valleys and across ridges destroying everything in its path including established communications facilities.

The Blue Ribbon Committee showed us that the fire community, as well as the public, is now narrowing their sites on those responsible for inadequate communications. Communications technology has not been properly applied and procedures have not been properly developed to deal with situations of this magnitude.

At the center of this is the COML. Most of our existing COML's are woefully unprepared to deal with catastrophic incidents such as the So. Cal Fire Siege. COML's are not always a telecommunications professional by trade. Expertise in the telecommunications field often exists within the agencies. However, many times those personnel with the expertise are not directly involved in incident communications.

In a recent review of MIRPS, there are over 150 COML's based in the State of California. From those that have reviewed that list, the consensus is that the vast majority of those individuals were trained over five years ago, may never have gone on a training assignment let alone have been the COML of a real incident, may never have received anything other than their initial 32 hours of training, and may not even be aware of the recent changes of rules, technology and procedures affecting their position.

The COML's in 2004 may face fires and all-risk incidents in unprecedented numbers and with more complexity than ever before. The NWCG training requirements of the 1980's were probably fine back then. Communications Unit Leaders must be as competent in the field of incident communications as an Operations Chief is suppressing a wildland fire. To think that the training requirements in 2004 are the same as they were 20 years ago is crazy.

Lets work together to find ways to raise the bar. The public expects nothing less. We shouldn't either.

ANNEX #7

United States Department of Agriculture
Forest Service

Washington Office
14th & Independence SW
P.O. Box 96090
Washington, DC 20090-6090

File Code: 6640 **Date:** April 15, 2004
Route To:

Subject: Response to Chief's Incident Accountability Report and 2003 Action Plan

To: Deputy Chief for Business Operations

In response to the "Chief's Incident Accountability Report and 2003 Action Plan" letter dated March 19, 2003, the Washington Office, Information Resource Management Staff took the lead in providing guidance concerning the "Acquisition of Communication Devices" issue. The acquisition and use of communication devices has been cited as a problem on incidents. A considerable amount of money is expended annually on landline phones, cell phones, satellite phones, and various specialized radio and computer equipment to support incidents. While communications is vitally important, it is also important to ensure that expenditures are cost-efficient.

In an effort to review the telecommunications needs during fire incidents, and to provide our report of findings and recommendations, a team was established that reviewed existing communication policies, conducted field visits, sent out a questionnaire, reviewed and analyzed data.

Today's technology is much faster, more reliable, and at times, required in a short timeframe. Computers and networking have become necessary in incidents and the Internet has proven vital during incidents and connections with involved agencies. While we need to be more cost-efficient in our day-to-day activities, supporting an incident tends to have an urgent need, and as a result, negotiating for the best price or additional skill levels may not be the top priority at the given time.

The following findings and recommendations relate to how this team expects to decrease telecommunications costs paid to support incidents:

FINDING

According to information received from members of the incident teams supporting telecommunications activities, there appears to be breakdowns between the communications and computer incident staffs, especially when they are required to report to different unit leaders. These inadequacies are very apparent and have increased the costs of telecommunication services and equipment.

RECOMMENDATION

Establish a new Command and General Staff position being called Communications Chief, with telecommunications responsibilities over all telecommunication and computer activities. Integration of these units will keep a consistent flow of time, material, and equipment that in turn will save dollars.

FINDING

Long distance services installed on landlines supporting incidents are not utilizing the FTS2001 contract.

RECOMMENDATION

Establish Designated Agency Representatives (DARs) in Boise, Idaho, during the fire season to submit orders where appropriate for long distance services utilizing the FTS2001 contract. Request hierarchy codes be established with FTS2001 in advance, and paid for with a fire Miscellaneous Object (MO) code. In using the FTS2001 contract, long distance costs would decrease to 2 ½ cents per minute.

FINDING

Personnel have been reporting to incidents with their home unit cell phones that do not have national service on them which would provide them with the capability to call within the U.S. without incurring roaming charges. These individuals must obtain an "S" number from their camp to charge the costs incurred for calls and roaming charges for the time period the cell phone was used while on the incident. All roaming charges, as well as the cost of the calls, are paid out of the incident's budget, greatly impacting local budget/financing personnel to the extent that they spend more and more time on "S" numbers instead of their own current duties.

RECOMMENDATION

During incidents, cell phones are currently procured and supplied for use by communications staff holding key positions. Individuals reporting to incidents with home unit cell phones should be denied "S" numbers to pay for the use of their cell phones and roaming charges during the incident. If their home unit allows them to take cell phones with them during incidents, then the home units would pay for calls and roaming charges from their budget. If it is determined that an individual need to have access to a cell phone, then the Incident Commander should ensure that one is procured through the GSA Federal Telecommunications Wireless Service (FTWS) contract with the proper service plan required to support the incident. Additional guidelines for accountability and demobilization would be established. Additional ordering guidelines would be established utilizing the national GSA FTWS contract under an emergency predetermined plan.

We also recommend establishing a new supply code "T" for telecommunications services and equipment, separating these goods and services from the rest of the cache items. The "T" number should include the cell/satellite phone number. Landlines should be grouped under one T number. However, each telephone number should be listed separate for accountability purposes.

FINDING

Telephone sets and accessories are occasionally removed by group members, resulting in the next arriving group needing to purchase new telephone sets and accessories to support the same incident.

RECOMMENDATION

Telephone sets and accessories should be included as part of the cache and be procured in bulk, shipped to the incident at no additional cost, and accounted for during and after the end of an incident. See suggestions on cache items below:

Telecom Equipment List for National Caches

Phone Sets – Regular (Desk Set)
Phone Sets - Speaker
Phone Sets – Conference
Phone Wire – 2/4 pair (Cat 3) 1000'/Box
Phone Wire – Satin 2 pair 1000'/Box
Computer Wire – 4 pair (Cat 5/6) 1000'/Box
Computer Wire – Satin 4 pair 1000'/Box
Computer Hubs – 6 slots
Rj11 Connectors
Rj45 Connectors
Modular end Connectors
Scotch lock Connectors (Yellow/Red)
Crimping tools for both sizes
Wire cutting tools
Wall Jacks (6/8 pair)

Equipment without a National Fire Equipment System (NFES) number should not be returned to national caches, but sent to local telecommunication shops at the forest level to be cleaned, refurbished, repaired, and kept by that shop for future incidents, or destroyed. It is not cost-effective to return them to regional and national caches.

FINDING

The purchase of long distance service, telephone sets, and accessories connected to landlines used to support incidents are obtained individually from local vendors as opposed to obtaining them from the FTS2001 contract or at bulk rate.

RECOMMENDATION

The turnaround time for telephone lines to include FTS2001 long distance service is within 4 hours during the regular 9-5 workday, to 24 hours during off-duty and weekend hours. In cases where these services are not available, DARs would be responsible for checking with a local telephone company to ensure that the government secures the most cost-effective long distance service available in the area of the incident. Telephone sets and accessories should be purchased in advance and at bulk rate to produce cost savings to the government.

FINDING

Telephone sets and other telecommunications equipment are not accounted for at the end of the incident.

RECOMMENDATION

Picture IDs and/or smart credit cards with an individual's local information should be required from anyone obtaining telecommunication items (i.e., radios, batteries, cell phones, satellite phones, radio accessories, etc.) Require individuals to sign for equipment that they receive from telecommunications. By doing so, this will provide accountability and keep equipment from being lost at the end of a team's tour.

FINDING

Based on the responses we received back from the questionnaire we sent out, more landlines are sometimes installed than necessary, particularly in situations where the Incident Commander or others not knowledgeable in telecommunications made the decisions on the number of lines to be installed.

RECOMMENDATION

Procure and use key systems when available. The use of key systems will reduce the amount of lines needed and provide greater flexibility in using the lines to support the incident.

FINDING

The "excessive" landlines that were installed also included a bank of landlines for use by personnel to make personal calls using their calling cards. Telecommunications equipment such as key systems was not used to reduce the number of lines installed. This is partly due to the lack of knowledge of their communications personnel. Lacking experience within the telecommunications field at incidents is becoming more and more apparent. Most communications personnel sent out on incidents do not have the necessary telecommunications skills required. For that reason, upgrading their skills will help to lower the costs associated in the area of telecommunications.

RECOMMENDATION

Establish a bank of logistics phones (2-5 each) that are toll-restricted. Allow personnel to use these phones with calling cards for making personal calls.

Establish a recommended number of landlines, satellite phones, and cell phones to be installed based on the type and size of an incident. Require documentation signed by the Incident Commander for exceeding recommendations. Recommendations are as follows:

	LANDLINES/SATELLITE PHONES	CELL PHONES
TYPE I	12-35	0-25
TYPE II	6-20	0-15
TYPE III	0-4	0-3
AREA COMMAND	10-25	0-6

FINDING

No problem with satellite phones was cited. They should continue to be ordered, accounted for, and demobilized in the same manner as cell phones are under a single contract.

/s/ Joan B. Golden
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