

AGENDA

Communications Advisory Committee

Date: June 12, 2007
Time: 1:00 P.M.
Place: Regional Fire Training Center Rm. 108
1220 Fire Science Lane
Modesto, California 95351

I. CALL MEETING TO ORDER

- 1.1 Welcome and Instructions by the committee chairperson
- 1.2 Roll Call

II. APPROVAL OF CONSENT CALENDAR

Items on Consent Calendar may be pulled from the Consent Calendar and discussed at the request of a Director.

- 2.1 Approval of Agenda - No prior agenda
- 2.2 Approval of Minutes - No prior minutes

III. PUBLIC COMMENT PERIOD

- 3.1 As necessary

IV. AGENDA ITEMS

- 4.1 Discuss the Countywide Apparatus Numbering document.
- 4.2 Discuss Fire Frequency Sharing.
- 4.3 Discuss the Master Frequency List.
- 4.4 Discuss the Countywide Radio Maintenance Agreement.
- 4.5 Discuss the Countywide Communications Coverage Study.
- 4.6 Discuss the interoperability/replacement project.
- 4.7 CAD System Update.
- 4.8 Discuss the Communications Survey Report.
- 4.8 Discuss future meeting topics.

V. ANNOUNCEMENTS

- 5.1 Next Regular Scheduled Meeting.

VI. CORRESPONDENCE

- 6.1 No correspondence submitted.

VII. ADJOURNMENT

Dated: June 8, 2007

Chad Homme

Stanislaus County Fire Chief's Association

Fire Apparatus Numbering System

DRAFT Policy May 23, 2007

The Stanislaus County fire Chief's Association has adopted the "Fire Apparatus Numbering System" policy as a countywide standard. This policy sets the standard for all fire agencies in Stanislaus County.

Purpose: To Standardize how fire apparatus is identified in Stanislaus County.

I. Description:

A. "Kind" Of Apparatus

The "Kind" of Apparatus will be identified by the standardized list below.

A="Airport"- All types of Airport Rescue Firefighting vehicles

BC="Battalion"-Battalion Chiefs

C="Chief"-Fire Chiefs

CA= "Captain"

CO="Communications"- Communications Officer

DC="Division" or "Deputy"- Division or Deputy Chiefs

EN="Engine"

Engines:

E="Engine"-Type I Engine

P="Pump"-Type II Engine

B="Brush"-Type III Engine

G="Grass"-Type IV Engine

FF="Firefighter"

H="HazMat"- Hazardous Material units

I="Investigator"-Fire Investigator

LI="Lieutenant"

M="Mechanic"-Fire Mechanic

PR="Prevention"-Fire Prevention Officer

R="Rescue"-All types of Rescue

SQ="Squad"-Specialty Units not otherwise listed

T="Truck"-All types of Trucks

S="Safety"-Incident Safety Officer

TR="Training"-Training Officer

U="Utility"- Miscellaneous vehicles

Q="Quint"- Quint Apparatus

W="Water Tender"-All types of Water Tenders

WR="Water Rescue"- All types of Water Rescue units

WR01-Modesto

WR02-Ceres

WR03-Hughson

WR04-Oakdale Rural

WR05-Oakdale City

WR06-Patterson

WR07-Salida

WR08-Stanislaus (St. 34)

WR09-Stanislaus (St. 36)

B. "Type" of Apparatus

The "Type" of Apparatus will be identified in CAD only. (With the exception of Engines, who will also be identified by name.)

1. It is suggested that a designated body of the Stanislaus County Fire Chief's Association verify the typing of all Fire Apparatus. Additionally, FIRESCOPE should be used as the standard.

C. "Number" of Apparatus

The "Number" of the Apparatus will be the choice of the Owner Agency.

1. The exception to this would be "Water Rescue" units. For ease of coordination, these units are assigned specific numbers throughout the County.
 - a. Additionally, each boat assigned to the "Water Rescue" units will be identified by the Owner "Agency" and a "Number". (Modesto Boat 1 or Ceres Boat 2.)

D. Owner "Agency" of Apparatus

The Owner "Agency" of the Apparatus will be identified in CAD. SR911 will assign identifying letters to the CAD ID. It is recommended that when the new CAD is installed, these "Agency" ID's mirror FIRESCOPE's MAC designations. (MST=Modesto, CES=Ceres)

1. The Owner "Agency" name should be used during radio traffic. (Stanislaus Engine 24)

II. Examples:

Stanislaus Engine 27= Type I Engine from Stanislaus Consolidated
Ceres Brush 1= Type III Engine from Ceres
Patterson Rescue 81= Rescue from Patterson (Typed in CAD)
Modesto Airport 8= ARFF from Modesto (Typed in CAD)
Woodland Water Tender 1= Water Tender from Woodland (Typed in CAD)
Modesto Investigator 3= Fire Investigator from Modesto
Salida Captain12= Individual Officer from Salida

III. Conclusion:

This proposed Apparatus Numbering System was established at the request of the Stanislaus County Fire Chief's Association. The Communications Standardization Committee was directed to build a system that was simple and easy to use. Additionally, the system was not to be cost prohibitive for the individual Agencies.

IV. Recommendations:

The Communications Standardization Committee recommends that upon approval by the body of the Fire Chiefs, this numbering system be implemented with the Modesto Fire Department immediately. This will give the system a trial period to work any problems out prior to the start up of the new CAD. After the new CAD is up and operating, it is recommended that the remaining fire agencies adopt this policy.



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Stanislaus County Fire Frequency Implementation Plan

TENTATIVE TARGET IMPLEMENTATION DATE: NOVEMBER 7TH, 2007

SECTIONS
A. RADIO
B. CAD
C. OPERATIONS
D. CUTOVER

A. RADIO:

Items that need to be accomplished:

1. Programming of mobiles and portables with standardized channel list to include all command and tactical frequencies.
2. Program all alerting receivers/transceivers to operation on County Fire Channel one.
3. What frequency will the man-down signal transmit on (MDC 1200 signaling)? Will this be a universal change or deviate from agency to agency? Currently MFD is the only agency using this technology.
4. MFD tone paging plan needs to be integrated with the County fire paging plan. Need to confirm whether any of the current MFD tones will conflict with current county tones.
5. Re-programming of Dispatch Orbacom Consoles.

Suggestions:

1. Complete revision of the county paging plan to allow for group/agency calls, county wide all call and avoiding use of extreme high and low tones that we have now which will allow transmitting equipment to function more efficiently

Comments:

1. Will we need additional suitcases for command channel frequencies?

TENTATIVE FREQUENCY PLAN:

#	New Name	Tx Freq	Tx PL	Rx Freq	Rx PL
1	Dispatch - Co Fire 1	153.770	123.0	153.770	123.0
2	Command 2 - Co Fire 2	154.055	123.0	154.430	123.0
3	Command 3 - New Freq	153.875	343	151.010	343
4	Command 4 - New Freq	156.090	464	155.085	464
5	Command 5 - White 1	154.280	123.0	154.280	CSQ
6	Tac 6 - MFD 1	154.145	123.0	155.940	123.0
7	Tac 7 - MFD 2	154.370	123.0	154.370	123.0
8	Tac 8 - MFD 3	153.905	123.0	153.905	123.0
9	Tac 9 - OFD	154.325	123.0	154.325	123.0
10	Tac 10 - Co Fire 3	153.890	123.0	153.890	123.0
11	Tac 11 - MFD New	154.415	131	154.415	131
12	Tac 12 - TFD	154.190	123.0	154.190	123.0
13	Tac 13 - Calcord	156.075	123.0	156.075	CSQ
14	Tac 14 - Inter-Op	151.115	723	159.015	723
15	Tac 15 - White 2	154.265	123.0	154.265	CSQ
16	Tac 16 - White 3	154.295	123.0	154.295	CSQ

B. CAD:

1. Re-programming of FIRE-RESP.odd to incorporate new tones for MFD. FIRE-RESP.odd is the application that sends the tone string to Orbacom. Modifying this application and copying over to CADLIVE will require a CAD restart.
2. Re-programming of CADI.inc to re-direct all fire incidents to appropriate fire CAD terminal. What terminal will this be (FD01, FD02 or FD03)?

Comments:

Suggestion #1 under the radio portion might create a large amount of work for run-cards if the alias tone table is modified.

PAGER.sfl is the data file that stores the conversion table for CAD. It translates the tones in CAD to the single button page in Orbacom (i.e. 1577 = single button page 046).

C. OPERATIONS:

1. Policies and Procedures – New fire dispatch procedures outlined.

Once the original incident is dispatched on the command channel, does the CAD incident remain assigned to the original CAD dispatch terminal or is it re-directed/reassigned to the assigned command channel dispatch terminal?

2. Additional Staff – 5 additional persons to staff a third fire position.
3. Training – MFD has began a training document and Chief Kraus will supply us with a copy.

Four hour training to be accomplished in a current training day or separate for both A and B squads and possibly a make-up day.

Suggestions:

Comments:

Modify the Shift Managers Red Book with proper procedures and a new position book will be required at the dispatch position.

D. CUTOVER:

1. Operations –
 - a. Extra fire dispatchers that day
 - b. Fire resource officer on duty that day
2. Technical –
 - a. CAD Restart – Copy over images to CADLIVE (IDDSP.exe, ISTART.exe, ISTARD.exe and ILOAD.exe)

Countywide Radio Maintenance Contract

Background

- Need has been identified for a countywide radio maintenance contract.
- RFP has been posted for contractors to apply for contract.
- A countywide maintenance contract would help ensure parts availability and fast service.

The Proposal

- All vendors that wanted to apply must attend the pre-bidders conference.
- Only one vendor attended the pre-bidders conference.
- Only one vendor has submitted a proposal.

Level of Service

- The vendor has proposed 24 hour availability for the communications center.
- The vendor has proposed both business hour and after hour levels of service.
- The vendor has proposed mail-in, drop off, and ship in levels of service.

Supported Equipment

- The vendor has established a proposed list of supported equipment. This list is not all that will be supported, however, this list is of the components that they have parts available in stock.
- Supported makes are Motorola, Kenwood, and Bendix King.

Proposed Service

- Proposed prices are:
- \$105.00 per hour mobile rate
- \$90.00 per hour shop rate
- \$157.50 per hour after hours support
- Travel time (business hours) \$105.00
- Travel time (after hours) \$157.50

Proposed Replacement Parts

- Parts must be replaced by OEM or equivalent quality parts.
- Parts for Motorola and Kenwood equipment will be 12% off of list price.

Conclusion...

- Questions

Countywide Communications Study

Countywide Communications Study

- Goal is to improve radio coverage throughout Stanislaus County.
- Study will benefit all agencies within the county.
- Study will provide current system as well as recommend improvements.

Scope of Work

- Evaluate existing radio backbone equipment.
- Evaluate radio towers, antenna mounting, and inventory.
- Evaluate site buildings and equipment locations.
- Evaluate site security.
- Evaluate AC power.
- Evaluate current radio and microwave systems capabilities, limitations, and reliability.

Scope of Work (cont.)

- Report will develop and present a county wide comparison of different frequency bands (VHF, UHF, 700-800Mhz, etc.)
- Contractor will make recommendation based on coverage maps and available frequencies.
- System proposed must be P25 compliant.
- Contractor will work with county to develop a needs assessment for a new radio system.

Scope of Work (cont.)

- Contractor will make a case study that compares different manufacturers equipment and identifies strength and weakness. Will be based on design, performance, capabilities, and cost.
- Contractor will develop a plan to build the conceptual system over time.

Scope of Work – MDC's

- Contractor will work with county to develop a needs assessment for a new mobile data system.
- Contractor must evaluate different public systems (AT&T, Verizon, Clear Wire, Nextel, etc) and develop criteria to rank the systems.
- Study will include coverage, reliability, throughput, and cost.

Conclusion...

- Questions



Fire Communications

Needs Assessment for Stanislaus County

Completed by Chad Homme

Presented to Regional Fire Authority

June 7, 2007

The Survey Process...

In preparation to determine the specific communications needs within Stanislaus County, a Communications Needs Survey was conducted. The goal of the survey was to identify common needs and common goals of the various agencies within Stanislaus County. Of the agencies within Stanislaus County, 13 of the 18 were available during the survey process.

The following agencies were surveyed in the process:

- Burbank Paradise Fire District
- City of Ceres
- Denair Fire Protection District
- Keyes Fire District
- City of Modesto
- Mountain View Fire Protection District
- City of Oakdale
- Oakdale Rural Fire Protection District
- Salida Fire District
- Stanislaus Consolidated Fire District
- Turlock Rural Fire District
- Westport Fire District
- Woodland Avenue Fire District

The Survey...

The surveys that were completed consisted of ten common questions. The questions that were surveyed among the agencies were:

1. Who is currently handling your department's communications needs?
2. What communications needs do you foresee within your department?
3. Who programs your radio equipment?
4. Who services your radio equipment (service contract)? Would you be interested in a Countywide Radio Maintenance Agreement on a time and materials basis?
5. Do you have MDC's? If not, are you interested in obtaining MDC's? If so, what timeframe?
6. Are you familiar with Fire Frequency Sharing? Do you have concerns?
7. Who will be your department's contact for Fire Frequency Sharing?
8. Who will be your department's contact for run cards and CAD?
9. Do you use a RMS program and if so, which one?
10. What type of connection do you have between your department and SR-911?
Any station to station connectivity?

The Survey Results...

Who is currently handling your department's communications needs?

Of the thirteen agencies that were surveyed, every agency, with the exception of one, is handling initial communications needs internally. The only agency that is outsourcing all communications needs is doing so due to a lack of having pager programmers and the capability to program the various radio systems that are in use by that department.

What communications needs do you foresee within your department?

Of the agencies surveyed, there were various responses to communications needs. The needs that were given were: MDC's, support and assistance for the Fire Frequency Sharing implementation (radio programming and training), pager programming assistance, connectivity to remote stations and to SR-911, better radio coverage, and lastly, assistance with P25 digital-capable radio equipment purchases.

Who programs your radio equipment?

Of the agencies surveyed, every agency with the exception of one, program their radios internally. The one agency that is outsourcing radio programming is sending them to Ray's Radio to be programmed.

Who services your radio equipment (service contract)? Would you be interested in a Countywide Radio Maintenance Agreement on a time and materials basis?

Throughout Stanislaus County there are various companies being used to service radio equipment. The current companies being used are Ray's Radio, Delta Wireless, 10-4 Communications, Silverado Avionics, and Columbia Communications. When asked about a Countywide Radio Maintenance Agreement, 12 of the 13 agencies indicated an interest. The one that did not express an interest is currently in an existing city-wide radio maintenance agreement.

Do you have MDC's? If not, are you interested in obtaining MDC's? If so, what timeframe?

Of the agencies that were surveyed, four agencies within Stanislaus County have MDC's. Of the remaining nine agencies, all are interested in obtaining MDC's. The prohibitive factors that were identified by all agencies were cost and cellular connectivity coverage. None of the agencies had a timeframe for purchase as funds are not secured for this purchase.

Are you familiar with Fire Frequency Sharing? Do you have concerns?

Of the agencies that were surveyed, only one agency was not aware of the upcoming Fire Frequency Sharing. Of the other agencies, all agencies were very supportive of the

project. The only concern identified was that one dispatch channel may not be enough and two departments have requested that dispatches be repeated at dispatch time.

Who will your department's contact be for Fire Frequency Sharing?

All of the departments that were contacted have company officers that are serving as the contact for Fire Frequency Sharing.

Who will be your department's contact for run cards and CAD?

All of the departments that were contacted have company officers that are serving as the contact for run cards and CAD. In many of the smaller agencies the Fire Chief is the contact. In some of the larger agencies this is being handled by Administrative Captains, etc.

Do you use a RMS program and if so, which one?

Of the agencies surveyed, three use the NFIRS RMS program, five use the Bio-Key RMS program, four use the Firehouse RMS program, and lastly, there are two agencies that are not using a RMS program.

What type of connection do you have between your department and SR-911? Any connectivity station to station?

Of the departments surveyed, four have dial-up as their primary means for connecting to the internet. The remainder of the agencies have high speed internet ranging from Clearwire to cable internet, DSL, and several T1 lines. Connections back to SR-911 range from dial-up to ISDN to T1 lines as well.

Communications Plan...

MDC's

MDC's were identified by three of the agencies as a need. The reason prohibiting the implementation of MDC computers at these agencies is cost (both initial and recurring). The Communications Coordinator has advised these agencies that once the new CAD system is implemented there will be a new licensing model so they may want to hold off purchasing MDC's until the new CAD system is up and operational. At that time, at least re-evaluating the possibility of implementing MDC's at these agencies should be revisited.

MDC Connectivity Issues

Of the agencies that have MDC's, most of them have indicated that coverage with the existing provider is less than desirable in many areas within the county. Currently, there is a Request for Proposal (RFP) for a communications coverage study. This study will include test coverage for radio communications and pagers, as well as cellular coverage that is used with the MDC computers. The MDC connectivity issues will be an action item at the MDC Users Group. Overall, users of the MDC appear to be very satisfied with how the MDC's perform and how they work as a tool for the fire service.

Improved Radio Coverage

Several of the agencies have indicated that radio coverage in several areas of the county is intermittent. Areas that have been identified are in the east side of the county as well as the Diablo Grande area on the west side. These areas have been identified in the communications group and will be discussed at the Communications Advisory Group meeting. The coverage study that will be performed in the county should identify many of the areas in the county that have poor service and allow us to look into possibilities for improving the service.

Radio and Pager Programming

Several of the agencies within the county have indicated that they are sending out pagers and radios to be programmed. Thru the Regional Communications Coordinator, assistance can be provided to these agencies to program radios and pagers. If the software to program the radios is not available, then it may become necessary to continue to send the equipment out to be programmed. Currently, the Communications Coordinator has the software to program most of the Kenwood, Motorola, and Bendix King radios that are in use throughout the county.

Radio Service

Of the agencies surveyed throughout the county, it was determined that there were several different service companies being used to work on the radio equipment

throughout Stanislaus County. Users were asked if they would be interested in a countywide radio maintenance agreement. Every agency except one expressed an interest in a countywide radio maintenance agreement (and that agency is in a mandatory city contract). It was explained that there is currently a RFP in process to obtain a Countywide Radio Maintenance Agreement. This agreement will be on a time and materials basis. This would not be a mandatory contract for agencies; however, the goal of such a contract would be to ensure parts availability, service levels, and a competitive price. If repairs can be performed at less of a cost, agencies can choose whether to use the contract or go thru an outside vendor.

Fire Frequency Sharing

Of all the agencies surveyed within Stanislaus County, support for the upcoming Fire Frequency Sharing, scheduled to be implemented November 7, 2007, has been unanimous. The concerns expressed include an implementation plan, programming radios, and user training. All of these concerns will be addressed in the Communications Advisory Group meetings. It has been explained to all agencies that the implementation plan will cover training on usage (train the trainer) as well as programming assistance to agencies to get radio frequency lists reconfigured to support the Fire Frequency Sharing. At the Communications Advisory Group meetings, agencies will be provided with a suggested portable radio program load as well as a suggested mobile radio programming group.

RMS Support

During the course of the survey, it was determined that there are currently three RMS programs being used within Stanislaus County. The packages currently being used are Firehouse, Bio-Key, and the NFIRS program. There are also several agencies within the county that are currently not using any RMS package. Of the agencies not using an RMS package, all have a computer, and at a minimum, dial-up internet access. The recommendation has been made for the agencies that are currently not using the NFIRS program (<http://nfirs.fema.gov/>) to go online and begin reporting incidents thru application. For the agencies using Firehouse, support is being provided by the Communications Coordinator. Currently the support extends to the Firehouse and NFIRS program and not to Bio-Key. Existing support contracts thru Bio-Key should provide needed technical assistance.

Regional RMS System

One of the surveyed items was used to determine if there is an interest in a regional approach to a RMS system. Every agency surveyed has expressed an interest in a regional RMS approach. The benefits to a regional system are many. Several of the benefits to a regional RMS system are:

- Centralized, uniform reporting.
- Centralized Investigation and Prevention data tracking. This would ensure that all of the data is in a centralized repository and give Investigations and Prevention

the capability to have a mobile component, enabling them to take the information with them into the field.

- Lower cost to implement and maintain than implementing a RMS system at each agency. By implementing a centralized RMS system, the need for a server at agencies would be reduced to one or two servers to support a countywide system.
- Lower support costs. Support costs for a centralized RMS system would be less than maintaining individual support agreements for all of the agencies separate RMS systems.
- CAD to RMS Interface. In order for CAD to pre-populate the various RMS systems throughout the county, a high-speed connection between the CAD system and the RMS system will need to exist. Currently, there are only a few agencies within Stanislaus County that have direct connections to SR-911. The other agencies use dial-up technology to dial into SR-911 to get call information. A typical install is a T1 line, direct to SR-911, which can become very costly (\$400+ per month, depending on the distance from SR-911). By going to a centralized RMS system, there would only be one CAD to RMS interface, which would exist at SR-911 where the regional RMS system would be installed.
- Internet, web-based solution. This would ensure that end users have the full functionality of the RMS package and would be able to operate on a dial-up connection. This would ensure that everyone's existing connections would work and upgrading to higher speed connections (dsl, cable internet, wireless internet) would work as well with the system.
- Reduced cost. Currently, various links exist between agencies and SR-911 ranging from dial-up and ISDN lines to T-1 lines. If a centralized RMS system was installed, many of these connections to SR-911 would no longer be necessary (unless stations are using the connectivity for rip and run features).

CAD Implementation

Currently, the contract between Stanislaus County and a CAD vendor is in the negotiating stages. Various interfaces are currently being discussed and requirements for the new system are being determined. From the county standpoint, the Communications Coordinator is representing the fire agencies within the county. As of current, implementation and cutover to the new CAD system will take place in early 2009. If anyone has questions, concerns, or wants to discuss the CAD implementation in relation to the fire service, please contact the Communications Coordinator.

Station Connectivity

During the surveys, it was determined that there is currently a wide range of connectivity being used throughout Stanislaus County. These connections range from dial-up to cable internet, dsl, wireless internet, and several other options. Every agency that has dial-up connectivity has expressed an interest in obtaining a high speed solution for their agency. The Communications Coordinator is working with these agencies to identify affordable high speed solutions for their connectivity needs ranging from wireless internet solutions, cable internet, dsl internet, to cellular internet.

Conclusion...

The Regional Communications Coordinator is here to serve you! If you have any communications needs, questions, or would like to discuss, feel free to contact the Communications Coordinator.

The www.salidafire.com web site has a Communications section. Check for periodic updates, Power Point presentations, and various other items of interest to the communications community. If there is something you would like to see published or have questions about, please don't hesitate to contact the Communications Coordinator. Chances are you aren't the only one that has the question!