

COMMUNICATIONS PROCEDURES	COLORADO SPRINGS FIRE DEPARTMENT STANDARD OPERATING PROCEDURES  SECTION: 500.01 20 August 01  Page 1 of 26
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## I. OVERVIEW

A. Introduction. The Pikes Peak Regional Communications Network (PPRCN) is a mixed mode (analog and digital) 800 MHz trunked radio system for public safety and public service agencies in El Paso County, and the City of Colorado Springs.

1. The system is comprised of 9 radio/tower sites linked together through a Master Controller at the Colorado Springs Police Operations Center (POC). A Microwave network provides the Wide Area Network (WAN) so radios can communicate throughout El Paso County and sites in Teller County at Woodland Park, and Park County at Badger Mountain.
2. The PPRCN System uses “trunking” which allows many agencies, departments, and users to share the radio same frequencies and communicate with one another.

B. Purpose. The purpose of this document is to: (1) define the Colorado Springs Fire Department (CSFD) radio talk groups, and (2) provide guidelines for routine and emergency operational use of the PPRCN.

## II. DEFINITIONS

A. Terms. Reference Appendix 1 for a list of definitions used throughout this document when referring to PPRCN operations.

B. Talk Groups. The talk groups programmed into CSFD radios are shown in Table 1.

## III. OPERATIONS

### A. Radio Allocation

1. Radios are assigned to all seat positions on each piece of CSFD apparatus. The dedicated position and assignment is necessary to facilitate individual identification and consistency in the event of an Emergency Alert activation. And compliant with NFPA Standard ????
2. Apparatus positions/radio assignments are as shown in Table 2.
3. Radios are assigned to each position to allow all personnel to:
  - a. remain informed of an incident's activities and safety related information,

- b. communicate with others as necessary to conduct their duties, and
  - c. be able to obtain emergency assistance should they be faced with an unanticipated, life threatening situation.
4. Each individual is responsible to have in their possession on every alarm the radio assigned to their position.
  5. Radio talk groups can easily become congested unless users exercise restraint in their use of the radio.
    - a. Generally, only supervisors, company officers or work team leaders will transmit on radios to communicate with each other and with Fire Dispatch.
    - b. Non-supervisory personnel will limit their transmissions to those that are absolutely necessary or of an emergent nature.
    - c. or to reply to communications generated from a. above.
  6. Unless a specific rank/position is mentioned in a radio transmission, the assumption must be that the communication is addressing the supervisor of the company or work team.
- B. General Radio Etiquette. Whenever using the PPRCN personnel will comply with the following general rules of etiquette.
1. All radio transmissions are to be performed in a professional manner.
  2. Disputes are not to be addressed by radio and should be resolved after completion of the incident or task at hand.
  3. CSFD personnel will conduct communications during normal operations on the talk groups assigned the CSFD. Unless circumstances demand it, CSFD personnel are to avoid using the talk groups of other sections.
  4. Incident related radio traffic has priority over non-incident radio traffic.
  5. Radio users should briefly summarize radio transmissions received from others so that the sender can verify the message was correctly received.
    - a. Example:

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E18: "Dispatch from Engine 18. Send an additional ambulance, for a total of two."

Dispatch: "Dispatch copies, one more ambulance - total of two."

b. Example:

Dispatch: "Engine 18 from Dispatch. The calling party requests you enter through the north doors of the shopping center."

E18: "Engine 18 copy. Enter through north doors."

6. "Plain language" radio messages should be used in preference to numerical codes to facilitate understanding. (Exception: Code 2, Code 3, Code 4 and Code 20 will be used as described below).
7. Before transmitting know what you are going to say. Use precise terms to communicate the desired message as clearly and briefly as possible without wasting air time.
8. Prioritize your messages. Let critical messages go first. Maintain an awareness of the overall situation and how you fit into it.
9. Do not interrupt conversations unless you have Emergency Traffic. Listen before transmitting and wait until a message transaction has been completed.
10. If you have to interject a message of importance, wait for a natural pause over the air and state "Break for "UNIT x" – then state your message.

C. Operations

1. CSFD personnel will normally conduct communications on the talk groups assigned specifically to CSFD. (See Table 1 for a list of CSFD radio talk groups and a brief description of their intended use.)
  - a. Unless attempting to contact a person assigned to another section, or extenuating circumstances demand it, users are to avoid using talk groups assigned to other sections.
  - b. Normal traffic, including the transmission of alarms, and single company alarm response information, will be conducted over the CSFD Primary 1 talk group (position A-1 on portable radios).

2. Radio users of emergency response apparatus are not to change talk groups without first notifying Dispatch of the change.
  - a. This is necessary to allow Dispatch to maintain contact with the unit and to advise the user if there is a reason why the specified talk group should not be used. (I.E. When the talk group is in use by Incident Command, an operational exercise, etc.)
  - b. Exceptions:
    - (1) A member of a company or work team may change talk groups to communicate with a hospital or to conduct other necessary business without notifying Fire Dispatch. When this takes place, it is important for the company officer or other team member to remain on the assigned talk group in case Fire Dispatch attempts to make contact with the company.
    - (2) Incident Commanders manage the use of radio talk groups associated with routine fireground incidents and may assign users under his or her direction to specific A Switch talk groups, as needed.
3. Radio users may use the B Switch Interagency talk groups for special purposes, but must notify Fire Dispatch prior to switching to a B Switch talk group, and upon returning to their primary talk group. *Note: This needs to be rephrased I don't think we want dispatch notified every time someone switches to a hospital talkgroup.*
4. Radio users may request use of C Switch interoperability talk groups by contacting the El Paso County Sheriff's Office on talk group C-1, EPSO Red.
  - a. The El Paso County Sheriff's Office Dispatch is responsible for monitoring and coordinating use of the C Switch talk groups.
  - b. The PPRCN policy dictates the controlled use of C Switch talk groups. (See the "Pikes Peak Regional Communications Network Policy and Procedures" document, Appendix 2, regarding C Switch Policy.)
  - c. To establish communications with a unit outside of the department, CSFD personnel are to do the following:
    - (1) Advise Fire Dispatch that you will be going to "EPSO RED" to establish communication with [state the agency/unit desired].

- (2) Select EPSO RED (C-1 on portable radios), and monitor the activity on that talk group to make certain a conversation between other users is not in process, then establish contact with the El Paso County Sheriff's Office (EPSO) Dispatcher.
    - (a) When communicating on the C Switch Interoperability talk groups, always identify yourself as "Springs Fire" before stating your unit identifier.
    - (b) Example: "El Paso County Dispatch, this is Springs Fire Engine 11."
  - (3) Request the use and assignment of an interagency talk group and specify the user(s) you wish to be contacted to join you there.
  - (4) The EPSO RED dispatcher will assign the requesting member an interagency talk group and, upon making contact with the requested party, direct them also to that talk group. If the EPSO RED dispatcher is unable to process a request due to radio traffic volume or other reason, the radio user is to select the secondary control point for the interagency talk groups, which is CSFD 2 (C-16).
  - (5) Once the requesting member has concluded interagency communications, they are responsible for contacting the EPSO dispatcher on C-1 and advising them that the assigned talk group is clear for use.
  - (6) Return to the assigned CSFD talk group and advise Fire Dispatch that you have returned from EPSO RED.
5. Talk group assignments for single company responses.
- a. All single company responses will communicate over the CSFD Primary 1 talk group (CSFD PRI 1) unless assigned another by Fire Dispatch.
  - b. If the company officer desires the use of a different talk group, he or she will make the request to Fire Dispatch, at which time dispatch will make another assignment based on overall operational demands at the time.
  - c. Exception: A member of a company or work team may change talk groups to communicate with a hospital or to conduct other necessary business without notifying Fire Dispatch. When this takes place, it is important for the company officer or other team member to remain on the assigned talk group in case Fire Dispatch attempts to make contact with the company.
6. Talk group assignments for a multi company response.

- a. Fire Dispatch will assign all multi-company responses a talk group at the same time the initial alarm response information is transmitted.
- b. Talk groups will be assigned as described below:
  - (1) Initial multi-company response.
    - (a) The initial multi-company response will be assigned to CSFD COM 3.
    - (b) CSFD COM 3 is automatically grouped with CSFD TAC 4 and CSFD FG 5 (simplex).
    - (c) CSFD TAC 4 and CSFD FG 5 (simplex) can be assigned by the IC for fireground operations without requesting the assignment through dispatch.
  - (2) Second multi-company response.
    - (a) The second multi-company response will be assigned to CSFD COM 6.
    - (b) CSFD COM 6 is automatically grouped with CSFD TAC 7 and CSFD FG 8 (simplex).
    - (c) CSFD TAC 7 and CSFD FG 8 (simplex) can be assigned by the IC for fireground operations without requesting the assignment through dispatch.
  - (3) Third multi-company response.
    - (a) The third multi-company response will be assigned to CSFD COM 9.
    - (b) CSFD COM 9 is automatically grouped with CSFD TAC 10 and CSFD FG 11 (simplex).
    - (c) CSFD TAC 10 and CSFD FG 11 (simplex) can be assigned by the IC for fireground operations without requesting the assignment through dispatch.
  - (4) Fire Dispatch will assign each succeeding multi-company response to other talk groups as operational considerations allow. If an incident is assigned to CSFD COM 3, 6, or 9, Fire Dispatch will need to obtain permission from the IC before assigning a talk group associated with a Command talk group (specifically, TAC 4, TAC 7, and TAC 10).

- (a) Permission must be obtained from the IC on CSFD COM 3 for Fire Dispatch to assign units to CSFD TAC 4.
  - (b) Permission must be obtained from the IC on CSFD COM 6 for Fire Dispatch to assign units to CSFD TAC 7.
  - (c) Permission must be obtained from the IC on CSFD COM 9 for Fire Dispatch to assign units to CSFD TAC 10.
- c. Unusually large or complex incidents, Heavy/Technical Rescue, High Angle Rescue, and Hazmat incidents may require special talk group combinations or talk groups that use simplex operation (removing the users from the trunked system). When these conditions exist:
- (1) The IC can request through Fire Dispatch, the use of any number of talk groups that fit the tactical plans of the operation.  
*Note: there should be discussion of Staging and Special Assignment Talkgroups 13 & 14*  
*Note: there must be a discussion of **continual monitoring by the IC or accountability officer** once a fireground channels is placed in use.*
  - (2) Fire Dispatch may assign or reassign talk groups as dictated by the number or type of incidents as well as the escalation or de-escalation of an incident.
  - (3) Upon completion of the incident the IC will release all talk groups back to Fire Dispatch.
- d. Fire Dispatch is limited in the number of talk groups they are able to monitor simultaneously. Should their workload not allow them to monitor a talk group in use, the dispatcher will advise the affected Incident Commanders/Companies and identify the talk group the IC should use if contact with Fire Dispatch is needed.
7. Talk group assignments for dual jurisdictional incidents within city limits.
- a. Radios of non-city fire departments contain only a few of the CSFD talk groups.
  - b. Fire departments which border the city limits of Colorado Springs (Cimarron Hills FD, Manitou Springs FD, Stratmoor Hills FD and, Donald Wescott FD) have the following CSFD talk groups programmed into their radios:

- (1) CSFD PRI 1.
  - (2) CSFD SEC 2.
  - (3) CSFD COM 9.
  - (4) CSFD TAC 10.
- c. Talk group assignments for single unit response dual jurisdictional incidents within city limits.
- (1) When possible, these incidents will remain assigned to the CSFD PRI 1 talk group.
  - (2) If the incident needs to be moved off CSFD PRI 1, Fire Dispatch may assign the responders to CSFD SEC 2 or CSFD COM 9.
    - (a) CSFD SEC 2 will be used if the incident is not complex or multi-response.
    - (b) If the incident develops into a complex or multi-response incident, responders will be assigned CSFD COM 9.
- d. Talk group assignments for multi-response dual jurisdictional incidents within city limits.
- (1) All dual jurisdictional, multi company incidents within city limits will be assigned to CSFD COM 9. This is necessary to allow the outside agencies to respond and communicate directly with CSFD apparatus and the IC (if applicable).
  - (2) If CSFD COM 9 is already in use for another incident and a dual jurisdictional, in town incident is received, Fire Dispatch will attempt to place the new incident on CSFD SEC 2 (A-2 and C16 on CSFD portable radios).
8. Fort Carson Fire Department will continue to operate on their existing VHF channels until at least 2004? *I think now 2003*. CSFD units desiring to communicate with a Fort Carson fire unit are to follow the procedure described below:
- a. Contact Fire Dispatch on CSFD SEC 2 and request that the Fort Carson channel be patched to the desired talk group for the incident or conversation.



- (1) Avoid making the patch using the CSFD PRI 1 talk group.
  - (2) Any available command or tactical talk group may be used.
  - (3) If multiple agencies are expected to be involved request an interagency talk group.
- b. The dispatcher will contact Fort Carson on their channel and request permission to patch the channel to CSFD Unit(s) operating on the [named] talk group.
  - c. Upon receiving permission for the patch, the dispatcher will then patch the channel and talk group together and notify CSFD unit(s) that the patch is complete on the requested talk group.
  - d. Communications between CSFD and Fort Carson units may proceed as normal. Any transmission occurring on the patched CSFD talk group should also be aired on Fort Carson's VHF repeated channel.
  - e. When the incident or conversation is completed, the CSFD Unit requesting the patch must contact Fire Dispatch once again on CSFD SEC 2 and request the Fort Carson patch be removed.
  - f. If a Fort Carson unit desires to initiate a radio conversation with a CSFD unit, Ft Carson will need to call Fire Dispatch by telephone to make the request. The dispatcher will then determine the proper talk group to patch with Fort Carson.
9. All talk group assignments not otherwise defined in this section will be coordinated through the Fire Dispatchers.
- D. Knox Box Procedures. To release the Knox key from the keybox, the company officer must perform the following.
1. Locate the ID number on the keybox.
  2. Contact Fire Dispatch and request them to "unlock Knox Box number ####."
  3. Dispatch will acknowledge the request by directing the company to go to the Knox talkgroup and stand by for tones and repeat the number of the Knox Box to be opened. (e.g. "Engine 8, go to the Knox channel and stand by for tones 1234.")

4. Upon hearing this acknowledgement, the company officer will immediately press the Mode Up button until "KNOX BOX" appears on the radio display.
5. After selecting the KNOX BOX channel on the mobile radio, the company should transmit that they are ready to receive the tones. (e.g. "Engine is 8 ready for Knox tones.")
6. Dispatch will send the tones twice to the company, in immediate succession, with no voice transmission in between attempts.
  - a. If the tones failed to open the keybox, the company officer will immediately request another attempt while remaining on the "Knox Box" talk group.
  - b. If the tones open the keybox, the company officer will acknowledge receipt and immediately return to their assigned talk group reporting their return to Fire Dispatch.
7. Dispatchers will assume that sending the tones twice properly released the key unless the company officers report otherwise.

E. Medical Communication Procedures

1. CSFD personnel can communicate directly with any of the area hospitals (Memorial, Penrose Main, Penrose Community, Air Force Academy, and Fort Carson/Evans) from either hand-held or mobile 800 MHz radios as follows:
  - a. Select the "B" position of the A-B-C Switch (on portable radios) and/or select the appropriate talk group for the desired hospital. (Verify that the proper hospital talk group has been selected by viewing the hospital alias on the LCD display on the face of the radio.)
  - b. Monitor this talk group and ensure it is free of radio traffic. Once the talk group is free proceed with the following.
    - (1) Below the hospital alias and to the left is the word "PAGE" - press the keypad button directly below the word "PAGE".
    - (2) Press the right arrow keypad button one time. The desired hospital alias will be highlighted on the display followed by the word "PAGE".
    - (3) Press the "Push To Talk" button and the page will be sent.

- c. The emergency room of the hospital of choice will receive an alert tone indicating your attempt to contact them by radio.
  - d. When hospital personnel acknowledge your page, proceed with verbal information exchange as usual.
2. Direct communication with American Medical Response (AMR) Dispatch can be achieved as follows:
    - a. Select the “B” position of the A-B-C Switch and talk group position 7 “AMR DSP”.
    - b. The AMR dispatcher will coordinate incident-related communications between CSFD units and AMR units on this talk group.

F. Emergency Traffic and Welfare Checks

1. Emergency Traffic – Verbal Communication.
  - a. Any Fire Department unit or the Communications Center shall use the term “Break for Emergency Traffic” when immediate radio priority is required for emergency traffic. This is normally triggered when personnel encounter an immediate and perilous situation (both fire and non-fire related incidents).
  - b. All other radio transmissions shall cease when emergency traffic is broadcast.
  - c. The Officer overseeing incident operations will determine the type and extent of the emergency and provide necessary assistance.
  - d. In the event an individual requires emergent assistance and cannot recall or cannot configure his or her radio to their assigned talk group, he or she should perform the following:
    - (1) Turn the radio selection knob to the extreme clockwise or counterclockwise position in either the A, B or C position, which will establish contact with a dispatcher.

[Note: The PPRCN is configured such that talk groups at the extreme clockwise or counterclockwise position of the selection knob on all A, B, or C positions will contact either a CSFD, CSPD, or EPSO dispatcher 24 hours/day, 7 days/week.]

- (2) Give as much information to the dispatcher as possible that will permit him or her to assist you in contacting the appropriate personnel or in directing assistance to you.
2. Fire Department Requests for Police Department Help or Assistance. CSFD personnel will use the following terminology when requesting Colorado Springs Police Department assistance.
  - a. "FIREFIGHTER NEEDS ASSISTANCE" - This phrase shall be broadcast (on what?) when police assistance is needed because of aggressive crowd action or interference, or some other activity not involving direct physical threats to the firefighters. Firefighters believe they would be able to retreat from the incident to a position of safety, if it were to become necessary.
    - (1) When possible, provide Fire Dispatch with a brief description of the circumstances with which fire personnel are dealing.
    - (2) A police department unit shall be dispatched non-emergent (Code 2) and other available patrol units in the vicinity will also respond, as available, to the firefighters' location.
  - b. "FIREFIGHTER NEEDS HELP" - This emergency call shall be broadcast when immediate police assistance is needed because firefighters are being attacked, attack is imminent, or some other emergency exists.
    - (1) When possible, provide Fire Dispatch with a brief description of the circumstances that are placing the fire personnel at risk.
    - (2) A police unit shall be dispatched emergent (Code 3) and other available units in the vicinity shall respond non-emergent. (Also see the section on activation of the radio's Emergency Alert button.)
    - (3) Fire Dispatch will also notify the supervisor of the firefighter(s) requesting emergent assistance (Section Supervisor, District Chiefs, Deputy Chief, etc.).
  - c. "CODE TWENTY" - This shall be broadcast to request emergency help when the use of clear speech will cause an undesirable reaction from the person(s) with whom the firefighter is in contact. This emergency code shall only be broadcast when immediate police assistance is needed because firefighters are being held against their will, attacked, attack is imminent, or some other emergency exists.

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- (1) A police unit shall be dispatched emergent (Code 3) and other available units in the vicinity shall respond non-emergent. (Also see the section on activation of the radio's Emergency Alert button.)
- (2) Fire Dispatch will also notify the supervisor of the firefighter(s) requesting emergent assistance (Section Supervisor, District Chiefs, Deputy Chief, etc.).

3. Emergency Traffic – Radio Emergency Button.

- a. The Emergency Button, located on the top of the radio, is to be activated only in response to an immediate life threatening emergency and only when transmitting the situation verbally would:
  - (1) be ineffective, or
  - (2) place the user in jeopardy.
- b. Pushing the emergency button transmits the radio ID/alias to the Communication Center alerting a Fire Dispatcher.
- c. The radio will then automatically switch internally to the CSFD Secondary talk group (CSFD SEC 2). The radio will only be able to converse on CSFD SEC 2, until reset by the user.
- d. The dispatcher receiving the Alert will verbally acknowledge the Alert signal and initiate a welfare check, stating, “(Radio Call Sign), are you Code 4?”
  - (1) If the user of the activated radio does not respond to the welfare check, after two attempts, the dispatcher will notify an IC, supervisor or crewmember of the alerting user, whichever is appropriate.
    - (a) If the user is assigned to an incident, the officer overseeing incident operations will determine the type and extent of the emergency and provide necessary assistance upon notification by the Fire Dispatcher.
    - (b) If the user of the alerting radio is not operating at an incident or activity where an IC or other crewmembers can be notified to check their welfare, the Dispatcher will notify the individuals listed below, based upon the alias prefix of the alerting radio:

Radio Alias Prefix      Person(s) to Notify \_\_\_\_\_

All Apparatus	On Duty Battalion Chiefs
CHAP	Inv. Shumaker - X97 or Inv. Captain - X92
CHF	On Duty Battalion Chiefs
FP	Fire Marshal - 101*
INV	Inv. Captain - X92*
TRN	Training Director - 61*
OEM	OEM Manager - 80*
IS	On Duty Battalion Chiefs
MED	Medical Captain - 72*
PUB	Fire Marshal - 101*
LTC	Logistics & Transportation Chief - 31*
OPS	On Duty Battalion Chiefs
SUP	Deputy Chief of Support Services - 20*

\* If the individual listed is not readily available, notify the on duty Battalion Chiefs.

1. Dispatch will provide the individual above with the best information available concerning the last know location of the alerting user and what actions (radio, pager, cell phone) have been taken to contact them, with no results.
2. The individual notified will be responsible for coordinating all activities necessary to ascertain the safety of the alerting radio user. Actions that may be taken include, but are not limited to, the following:
  - a. Continue attempting to contact the alerting user on the CSFD SEC 2 talk group.
  - b. If a probable location of the user can be identified, Fire Dispatch is to create a "Check the Welfare" call for service and dispatch both police and fire resources.
  - c. Call the user's cell phone and pager if applicable.
  - d. Call the alerting radio user's office telephone number.
  - e. Contact another member of their unit/section at their workplace to learn what the users planned activities of the day included and to ask them to check the users office.

- f. Contact the user's residence by phone.
- (2) If Fire Dispatch is unable to make a timely notification of the alerting radio's IC, supervisor, or crewmember, they are to immediately dispatch a Police Officer to the alerting radio's last know location to check their welfare.
- (a) At this point, the alert of the radio is to be considered as if the user reported a "Code 20" request for emergency help.
- (b) A Chief Officer may also approve dispatching CSFD units to check the welfare of personnel.
- e. If the radio user has a life-threatening emergency he or she is to immediately respond to the welfare check by indicating the location and nature of the emergency, if possible.
- f. If the radio user does not have a life-threatening emergency and has accidentally activated the Emergency Alert, he or she is to immediately contact Fire Dispatch on the radio to inform them that there is no emergency. (Do not turn off the radio)
- (1) The radio user should then advise the Fire Dispatcher that they are going to reset their Emergency Alert button.
- (2) Depressing the Emergency Alert Button and holding it down for three seconds, until a confirming tone is heard, will reset it and return the radio to its "pre-alert" configuration.

#### IV. RADIO PROCEDURES DURING SYSTEM FAILURES

##### A. General.

1. Normally the PPRCN is expected to be a reliable system, but in any system of this complexity failures can occur which will affect radio communications.
2. The following paragraphs describe system limitations, constraints, and operator actions during various types of failures.

##### B. Site Trunking. If the PPRCN System or a particular radio site fails to "Site Trunking" mode, your radio will display "SITE TRUNKING" and a beep will sound every 10 seconds.

1. The following conditions can be expected during "site trunking" operations.

- a. The Emergency button will not function.
  - b. Status Heads will not work.
  - c. You will lose communications with the Fire Dispatcher.
  - d. You will lose communication with other users on your talk groups that are operating off other radio sites (towers).
  - e. You may or may not be able to communicate with other Fire Fighters on scene.
2. When this situation occurs:
- a. Try to establish communications with Incident Command on your current talk group.
  - b. If the radios on scene can communicate in "Site Trunking" continue operating in that mode.
  - c. IC will direct communications to a Fire Ground (simplex) talk group if necessary.
  - d. If unable to establish communications, switch to the Fire Ground talk group associated with your incident's command talk group (simplex: FG 5, FG 8, or FG 11) and attempt contact. See the following example.
    - (1) Assume a multi company alarm. The IC has assigned the Roof Group to CSFD COM 3 and the Interior Division to TAC 4.

IC (on COM 3): "Roof Group from IC with a comm check."  
Roof (on COM 3): "IC from Roof, we read you loud and clear."  
IC (on TAC 4): "Interior from IC with a comm check."
    - (2) All radios fail to "Site Trunking" and give the appropriate indications.
    - (3) If Interior still has communications, operations may proceed with caution. If communications with Interior is lost:

IC (on all incident talk groups sequentially): "IC to all companies, switch to Fire Ground 5." REPEAT.



- (4) As soon as the Interior Group's radios fail to "Site Trunking" they will monitor their current talk group for IC polling of companies. If they do not hear the IC in a reasonable amount of time they will perform the following.

Interior (On assigned talk group): "IC from Interior with a comm check." No response:

Interior (On assigned talk group): "Interior to all interior companies, switch to Fire Ground 5." REPEAT.

- (5) All Interior personnel and/or everyone on the fire ground not able to communicate with the IC will switch to CSFD FG 5.

- (6) The IC will give a reasonable amount of time for all companies and personnel to recognize the radio failure and switch to CSFD FG 5 at which time he/she will initiate a Personnel Accountability Report.

e. If unable to contact Command and in a hazardous area, leave the area and make direct contact with the IC or other users in a safe location.

f. Contact Dispatch immediately by any means available to notify them that a site is operating in the "Site Trunking" mode.

C. Failsoft. If the PPRCN fails to "Failsoft" mode, your radio will display "FAILSOFT" and a beep will sound every 3 seconds. When this situation occurs:

1. Switch all radios back to CSFD PRI 1 talk group. Note: SEC 2 can also be assigned by Dispatch for radios that may have a stronger signal when operating in the Austin Bluffs area.
2. Status Heads will not work.
3. You will lose communications to Dispatch.
4. Fire Ground talk groups FG 5, FG 8, and FG 11 (all simplex) should continue to operate normally.

- D. Out of Range. If you travel out of range of the radio system, your radio will display "OUT OF RANGE" and you will hear a solid tone when you try to talk. When this situation occurs:
1. Attempt to move back into the operating range of the radio system.
  2. If you must establish communications from a location that is out of range of the regional system, you may be successful in contacting a communications center by using the ICALL talk group (position C-10 on PPRCN radios).
  3. If you are responding to an incident known to be out of range of the radio system, you will be assigned to an ITAC (C-11 through C-14) talk group to communicate with units from other agencies.
- E. PPRCN Radio/Coverage Deficiency Report. Appendix 3 contains an example of the PPRCN Radio/Coverage Deficiency Report form. This form should be completed and forwarded to the individual's dispatch agency for all suspected PPRCN problems.

A-B-C Switch, Position A

#	Radio Display	Explanation
1	CSFD PRI 1	CSFD Fire Dispatch (Primary)
2	CSFD SEC 2	CSFD Fire Dispatch (Secondary)
3	CSFD COM 3	Fire Command 3
4	CSFD TAC 4	Tactical Talk Group 4
5	CSFD FG 5	Fire Ground Talk Group/ 5 (ITAC 1 Simplex)
6	CSFD COM 6	Fire Command 6
7	CSFD TAC 7	Tactical Talk Group 7
8	CSFD FG 8	Fire Ground Talk Group 8 (ITAC 2 Simplex)
9	CSFD COM 9	Fire Command 9
10	CSFD TAC 10	Tactical Talk Group 10
11	CSFD FG 11	Fire Ground Talk Group 11 (ITAC 3 Simplex)
12	CSFD STAG 12	Staging Talk Group 12
13	CSFD SAC 13	Special Assignment Talk Group 13
14	CSFD SAC 14	Special Assignment Talk Group 14 (ITAC 4 Simplex)
15	EOC COM	Emergency Operations Center Common
16	CSFD PRI 1	CSFD Fire Dispatch (Primary)

A-B-C Switch, position B

#	Radio Display	Explanation
1	CSFD PRI 1	CSFD Fire Dispatch (Primary)
2	MEMO ER	Memorial Hospital
3	PEN M ER	Penrose Main Hospital
4	PEN C ER	Penrose Community Hospital
5	EVANS ER	Evans (Ft Carson) Hospital
6	AFA ER	Air Force Academy Hospital
7	AMR DISP	AMR Dispatch
8	CSFD ADMIN	Fire Administration
9	CSFD TRAIN	Fire Training
10	CSFD F PREV	Fire Prevention
11	AIRPORT OPS	CS Airport General Operations
12	CSFD INVEST	Fire Investigations (Investigator radios only)
13	UNPROGRAMMED	(hold for additional Area Command
14	CSPD GOLD	Gold Hills Area Command – Dispatch
15	CSPD FALCON	Falcon Area Command – Dispatch
16	CSPD SAND	Sand Creek Area Command – Dispatch

A-B-C Switch, position C

#	Radio Display	Explanation
1	EPSO RED	El Paso S O Fire Dispatch
2	BLUE COM	Incident 1 Command Talk Group
3	BLUE OPS	Incident 1 Operations Talk Group
4	RUBY COM	Incident 2 Command Talk Group
5	RUBY OPS	Incident 2 Operations Talk Group
6	GRAY COM	Incident 3 Command Talk Group
7	GRAY OPS	Incident 3 Operations Talk Group
8	BROWN TAC	Interagency Talk Group 1
9	ORANGE TAC	Interagency Talk Group 2
10	I CALL	National conventional hailing Talk Group
11	I TAC 1	National conventional tactical Talk Group
12	I TAC 2	National conventional tactical Talk Group
13	I TAC 3	National conventional tactical Talk Group
14	I TAC 4	National conventional tactical Talk Group
15	CSU DISP	Colorado Springs Utility Dispatch
16	CSFD SEC 2	CSFD Fire Dispatch (Secondary)

NOTE: Mobile (vehicle mounted) radios do not have an A-B-C Switch. All channels listed above are programmed sequentially on mobile radios and are selected using the Mode Up or Mode Down button.

CSFD PROGRAMMED RADIO TALK GROUPS  
TABLE 1

Engine Companies:

ENG XX OFFICER (front right)  
ENG XX DRIVER (front left)  
ENG XX TECHNICAL (jump seat behind officer - paramedic or senior FF)  
ENG XX FIREFIGHTER (jump seat behind driver)

Truck Companies:

TRK XX OFFICER (front right)  
TRK XX DRIVER (front left)  
TRK XX IRONS (jump seat behind officer)  
TRK XX LADDER (jump seat behind driver)

Trauma Squad:

TS 07 OFFICER (front right)  
TS 07 DRIVER (front left)  
TS 07 TECHNICAL (jump seat)  
TEMS 01 (for tactical missions)  
TEMS 02 “  
TEMS 03 “  
TEMS 04 “

District Chiefs:

DIST XX HT

Hazmat:

HAZ 06 OFFICER (front right)  
HAZ 06 DRIVER (front left)  
HAZ 06 TECHNICAL (jump seat behind officer - paramedic or senior FF)  
HAZ 06 FIREFIGHTER (jump seat behind driver)

Heavy Rescue:

HR 09 OFFICER (front right)  
HR 09 DRIVER (front left)  
HR 09 IRON (jump seat behind officer)  
HR 09 LADDER (jump seat behind driver)

Brush Engines:

BR XX OFFICER (front right)  
BR XX DRIVER (front left)

Decon Vehicle:	
DCON 02 OFFICER	(front right)
DCON 02 DRIVER	(front left)
Hose Wagon:	
HWGN 03 OFFICER	(front right)
HWGN 03 DRIVER	(front left)
Wildland Engine:	
WLND 04 OFFICER	(front right)
WLND 04 DRIVER	(front left)
WLND 04 TECHNICAL	(jump seat behind officer)
WLND 04 FIREFIGHTER	(jump seat behind driver)
Squads:	
SQ 11 OFFICER	(front right)
SQ 11 DRIVER	(front left)
SQ 11 TECHNICAL	(jump seat behind officer)
Air Apparatus:	
AIR 15 OFFICER	(front right)
AIR 15 DRIVER	(front left)
AIR 15 TECHNICAL	(jump seat behind officer)
AIR 15 FIREFIGHTER	(jump seat behind driver)

EQUIPMENT ALLOCATION/RADIO PLACEMENT  
TABLE 2

COMMUNICATIONS PROCEDURES	COLORADO SPRINGS FIRE DEPARTMENT STANDARD OPERATING PROCEDURES  SECTION: 500.01 20 August 01  Page 23 of 26
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## Appendix 1 - Definitions

**A-B-C Switch:** A three position (A, B, and C) toggle switch located on the top of handheld radios. This switch is used in conjunction with the selector knob to itemize the desired talk group for radio communication.

**A Switch** (see A-B-C Switch): Term used to describe a set of Talk Groups dedicated for CSFD operational use.

**B Switch** (see A-B-C Switch): Term used to describe a set of Talk Groups dedicated for Interagency communications.

**C Switch** (see A-B-C Switch): Term used to describe a set of Talk Groups dedicated for Interoperability communications.

**Code 2:** A radio code that identifies an emergency vehicles' response as non-emergent, following all applicable Colorado Motor Vehicle Laws, Colorado Springs Codes and Ordinances, and Policies and Procedures of the Department. The only time exemptions are granted for adherence to the rules of the road is during a "Code 3" response.

**Code 3:** A radio code that identifies an emergency vehicles' response as emergent using all warning lights and a siren. Lights and siren must be used whenever it is necessary to disregard provisions of the Code of the City of Colorado Springs and the Colorado Motor Vehicle Laws. Operators of vehicles responding Code 3 must exercise due care to safeguard the personnel on the responding apparatus, as well as all other motorists and pedestrians.

**Code 4:** A radio code used by fire and police personnel to indicate that a situation is secured and personnel are not in immediate danger.

**Code 20:** A radio code used by fire and police personnel to indicate that a situation is not secured and personnel are in immediate danger and require assistance.

**Failsoft:** A major system failure mode in which radio communications revert back to using a single preselected Site (CSFD PRI 1).

**ICALL:** A national, mutual aid, interoperability 800 MHz talk group for initial contact and coordination of communications on large interagency incidents or incidents geographically beyond the scope of the PPRCN. The agency responsible for area monitoring of this talk group will assign a specific ITAC for operational use.

**ID/Alias:** A descriptive, abbreviated identification of the radio user which is displayed on the control screen at Fire Dispatch.

**ITAC:** A national, mutual aid, interoperability 800 MHz talk group to be used during tactical operations at large interagency incidents or incidents geographically beyond the scope of the PPRCN.

**Simplex Talk group:** A talk group which allows direct radio-to-radio communication without signal processing by repeaters or system controllers. These talk groups are “off-line” from the Trunked System and must be monitored locally.

**Site:** One of nine radio/microwave tower locations in El Paso County. Each site has multiple talk groups available for assignment to users by the trunked system controller.

**Site Trunking:** A preliminary failure mode in which communication between a Site and the Master Controller is interrupted causing the Site to operate independently of the Master Controller in assigning available talk groups to users within range.

**Talk Group:** A set of Trunked Radio system users who communicate with each other. A computer generated “talk group”, a group of radio users may select a programmed position on a radio to enable communication with each other.

**Trunking System:** A system in which radio communication requests are assigned to a talk group by a central controller at the time a radio user initiates communication. This allows automatic sharing of communications paths with multiple users.



Appendix 2  
Pikes Peak Regional Communications Network Policy and Procedures

(NOTE: APPENDIX TO BE INSERTED AT A LATER TIME)

# PPRCN RADIO / COVERAGE DEFICIENCY REPORT

<b>Date/Time of occurrence</b>	<b>Person experiencing deficiency</b>	<b>Phone #</b>
<b>Agency of person experiencing deficiency</b>		<b>Shift or location</b>
<b>Location of occurrence</b> ( Include floor, room or other descriptive information)		
<b>Model or type of Radio</b>	<b>Talk group involved</b>	<b>Serial Number of Radio</b>
<b>Describe type of problem:</b> (ex: Unable to contact dispatch on talk group XX, Garbled reception / transmission, Radio programming problem, ) Give as much information as possible.		
<b>Describe activity involved in during occurrence:</b> (ex: Laying on ground operating hose line, sitting in cruiser, on bike patrol)		
<b>Public safety microphone in use</b> <b>YES</b> <b>NO</b>		<b>Remote speaker microphone in use</b> <b>YES</b> <b>NO</b>
<b>Describe position of radio if portable:</b> (ex: carried on equipment belt w/ remote microphone)		
<b>Describe programming problem:</b>		
<b>PPRCN USE – Person receiving report</b>		<b>Date report received:</b>
<b>Results of attempt at simulation of problem:</b>		
<b>Resolution:</b>		
<b>Person filing report contacted:</b>		<b>Date:</b>

**Please send this form to the communication center, which dispatches your agency.**