

Table of Contents

OPERATIONS MANUAL

STANDARD INSTRUCTION 03 COMMUNICATIONS

SECTION 12 RADIO SYSTEM FAILURE PROTOCOLS

I.	PURPOSE.....	1
II.	SCOPE.....	1
III.	AUTHORITY.....	1
IV.	DEFINITIONS.....	1
V.	POLICY	1
A.	General Policies During Communications Failures.....	1
B.	General Communications Procedures during Communications Failures.....	2
C.	Specific Communications Procedures during Communications Failures.....	3
D.	800 MHz Direct Oscar Channel	4

TITLE OPERATIONS MANUAL	STANDARD INSTRUCTION 03		DEPARTMENT FIRE-RESCUE
SUBJECT COMMUNICATIONS: RADIO SYSTEM FAILURE PROTOCOLS	SECTION 12	PAGE 1 of 6	EFFECTIVE DATE TBD

I. PURPOSE

This policy will provide guidelines for radio use during failures of the 800MHz and/or VHF radio systems.

II. SCOPE

This policy shall apply to all sworn San Diego Fire-Rescue Department (SDFD) personnel, except lifeguards.

III. AUTHORITY

The fire chief authorizes the information within this policy.

IV. DEFINITIONS

A. 800MHz Failsoft

1. This is a backup system of the 800MHz system when only part of the trunking system fails.
2. The user's radio will beep a tone every ten seconds and the 800MHz radios will now work in a conventional (direct line of sight) manner.
3. The talkgroups will share channels and radio users will hear other radio channel traffic.
4. For example, Zone 8 and 9 may become one talkgroup.
5. Radio discipline is crucial while operating under Failsoft.

B. 800MHz Complete Failure

The 800MHz system has completely failed and provides no voice communications capabilities.

V. POLICY

A. General Policies During Communications Failures

1. Outside Activities
 - a. During any form of communications failure, outside activities are cancelled and all units are to return to quarters unless directed otherwise.
 - b. Dispatch and chief officers may rely on a combination of landline telephone calls, cell phones and/or station alerting to communicate and dispatch units during outages.
 - c. All units are to reduce their phone calls into the Emergency Command and Data Center (ECDC) during all radio failures as dispatch operations are severely impacted.
2. Confirming Positive Communications
 - a. During any form of communications failure, determining a method of positive communications with all personnel lies with the ECDC deputy chief and the on-duty deputy chief of operations.

TITLE OPERATIONS MANUAL	STANDARD INSTRUCTION 03		DEPARTMENT FIRE-RESCUE
SUBJECT COMMUNICATIONS: RADIO SYSTEM FAILURE PROTOCOLS	SECTION 12	PAGE 2 of 6	EFFECTIVE DATE TBD

- b. Although the procedures in this section are meant to provide direction during a communications failure, actual positive communications with all units must be verified during such an event.
 - 3. ECDC will contact each battalion chief to determine:
 - a. Primary method of communicating [800 MHz, VHF or Regional Communication System (RCS)]
 - b. Time communications were confirmed, lost and reestablished
 - c. Alternate methods of communicating
 - 4. Battalion Operations
 - a. Battalion chiefs will serve as the main point of contact for their respective battalions and will confirm communications with their respective units.
 - b. The battalion chief will notify ECDC which units they are able to contact and which units they are unable to contact.
 - 1) ECDC will attempt to make direct contact with those units that the battalion chief has been unable to contact.
 - 2) If ECDC is unable to establish communications with those units, the battalion chief may be required to drive to the unit's last known location to establish communication.
 - 5. Communication Mobile Command Post (COM1)
 - a. During any communications failure, COM1 will be staffed and initially report to ECDC.
 - b. COM1 or equipment from COM1 may be deployed to the various high spots in the city to enhance or provide coverage.
 - c. An engine company may be assigned to staff COM1 and provide personnel to serve as human repeaters if necessary.
- B. General Communications Procedures during Communications Failures
 - 1. Failsoft (partial 800 MHz radio failure) will require the following procedures:
 - a. Continue to operate on the city 800MHz channels using strict radio discipline
 - b. Users should place their radios on the dispatch channel and remain there unless directed otherwise or while on incident
 - c. Implement RCS and/or VHF back-up procedures listed below
 - d. Use of RCS and VHF may depend upon the unit's geographical location in the Metro Zone
 - 2. Complete 800MHz system failure requires the following procedures:
 - a. Implement RCS and/or VHF back-up use procedures below
 - b. Use of RCS and VHF may depend upon the unit's geographical location in the Metro Zone
 - c. Attempt non-conventional communications methods (cell phones, texting, pagers, station alerting) if RCS or VHF are unusable

TITLE OPERATIONS MANUAL	STANDARD INSTRUCTION 03		DEPARTMENT FIRE-RESCUE
SUBJECT COMMUNICATIONS: RADIO SYSTEM FAILURE PROTOCOLS	SECTION 12	PAGE 3 of 6	EFFECTIVE DATE TBD

C. Specific Communications Procedures during Communications Failures

1. RCS System
 - a. Personnel are directed to monitor RCS channels (zone 6)
 - b. Crews and personnel should NOT contact ECDC on this channel, unless directed to do so, due to the large number of units that will be using the same channel
2. VHF System Scanning Procedures
 - a. SDFD has three VHF channels
 - 1) XSD CMD 4 is a repeated channel that serves as a backup administrative and dispatch channel
 - 2) XSD TAC 3 and XSD TAC 4 are non-repeated channels that will be used for field operations in the same manner
 - b. San Diego County VHF network which includes XSD CMD 1, XSD TAC 1 and XSD TAC 2, which SDFD can access.
 - c. During a partial or complete 800MHz system failure, personnel are directed to operate under the following guidelines immediately following identification of the failure:
 - a. Immediately create a VHF scan list and monitor the following channels:
 - 1) XSD CMD 4
 - 2) XSD TAC 3
 - 3) XSD TAC 4
 - 4) XSD CMD 1
 - 5) XSD TAC 1
 - 6) XSD TAC 2
 - 7) AIR GUARD
 - b. Additional channels may be added to the scan list in response to the nature of the failure, incidents, and the inclusion of mutual aid resources.
3. VHF Emergency Operational Procedures
 - a. In the event of a complete 800MHz system failure of both the city and RCS, the following procedures will be implemented:
 - 1) XSD CMD 4
 - a) Will be monitored by all personnel while not on incident
 - b) Will be used for administrative, dispatch and system status level traffic
 - c) ECDC will use this channel to coordinate all field units
 - d) Dispatches will not be repeated unless requested

TITLE OPERATIONS MANUAL	STANDARD INSTRUCTION 03		DEPARTMENT FIRE-RESCUE
SUBJECT COMMUNICATIONS: RADIO SYSTEM FAILURE PROTOCOLS	SECTION 12	PAGE 4 of 6	EFFECTIVE DATE TBD

- e) Personnel should be constantly monitoring this channel and prepared to copy any dispatches or unit specific traffic
- f) All administrative traffic from units to ECDC shall occur on this channel
- g) If communications cannot be established with ECDC using the above procedures, personnel may be contacted by ECDC alternately

2) XSD TAC 3

- a) Used as the Command channel on incidents
- b) This channel is line-of-sight so multiple incidents can be run on this one channel with little to no interference
- c) This channel can also be used by field units as a tactical channel as needed
- d) ECDC can monitor this channel and XSD TAC 3 could be used by ECDC to coordinate multiple incidents.

3) XSD TAC 4 and VFIRE 23

- a) Can be used as incident tactical channels
- b) Line of sight and cannot be monitored by ECDC

4) AIR GUARD

- a) May be used as a last resort to communicate with regional and national air resources
- b) Attempts to communicate on this channel should be made only as a last resort
- c) This is the VHF emergency channel
- d) Air resources may be deployed to serve as repeaters from the air to contact ground forces via this channel as a last resort
- e) If communications are initiated on this channel, the resources involved should immediately establish another channel (air-to-ground, tactical, etc.) to continue communicating

D. 800 MHz Direct Oscar Channel

1. All 800MHz zones have an "OSCAR" channel which is direct line of sight (not repeated)
2. These channels are County RCS XSD 8DIR and SND 8DIR (70, 80, 90)
3. This direct channel is a conventional line of sight channel and cannot be scanned

TITLE OPERATIONS MANUAL	STANDARD INSTRUCTION 03		DEPARTMENT FIRE-RESCUE
SUBJECT COMMUNICATIONS: RADIO SYSTEM FAILURE PROTOCOLS	SECTION 12	PAGE 5 of 6	EFFECTIVE DATE TBD

4. Use when repeated radio transmissions are ineffective, such as when in a high rise, basement, etc.
5. This requires company officers to carry both radios