

	TRAVIS COUNTY ESD #5 MANCHACA FIRE RESCUE Department Best Practices	B401
	Authorized by:  Fire Chief Chris Barron	Effective: 2/13/2018 Rescinds: Reference: AFD 401.1 Application: Shift Personnel
Radio Communications		

I. Purpose

To establish procedures for radio communications and for the assignment and use of radio channels.

II. Background

This document is a direct adaptation of the Austin Fire Department Policy on Radio Communications. It has been adopted by Manchaca Fire Rescue as an Auto Aid partner to maximize standardization between partner agencies. Variations and additions to the language from the parent AFD document will be signified by text in italics. Generic changes that do not affect content such as formatting and changing “AFD” to “MFR” will not be noted.

III. Policy

- A. **Scope.** All MFR radio communications will adhere to this policy, be only for MFR business purposes, and be professional in nature.
- B. **Home channel.** Companies operating north of the river *within the City of Austin* will utilize Firecom North as their home channel. Companies operating south of the river *within the City of Austin* will utilize Firecom South as their home channel. *Companies operating east of Mopac in Travis County will utilize Firecom East as their home channel. Companies operating west of Mopac in Travis County will utilize Firecom West as their home channel.*
- C. **Dispatched channel.** When assigned to emergency incidents, Companies will change their radio to the channel designated by Fire Dispatch for the incident.
- D. **Tactical channels.** Channels will be assigned in sets of three for incidents requiring tactical communications (Box Alarms, Vehicle Rescues etc.). The three channels will be utilized as follows: a primary tactical channel, an alternate tactical channel and an incident emergency radio channel. This set of channels will normally be assigned at initial dispatch, but may be requested by Companies on the scene of an incident if needed.

- E. **Announcements at tactical incidents.** Upon arrival at the incident, all first alarm Companies on multiple unit incidents shall report on scene over the radio and ensure that the MDC status is changed to “on scene.” For fire incidents, first alarm Companies will also announce their initial tactical assignment per MFR Best Practices A101 Fireground Operations.
- F. **Emergency communications plan.** All working incidents will have an emergency communications plan established and Command shall communicate the plan to all personnel
- G. **Regional channels.** When units are dispatched to incidents outside of Travis County, Dispatch may assign a regional channel for the responding units. Responding companies should utilized the assigned regional channel for incident communications.

IV. Best Practices

- A. **Home channel.** Companies operating north of the river *within the City of Austin* will utilize Firecom North as their home channel. Companies operating south of the river *within the City of Austin* will utilize Firecom South as their home channel. *Companies operating east of Mopac in Travis County will utilize Firecom East as their home channel. Companies operating west of Mopac in Travis County will utilize Firecom West as their home channel.*
- B. **Utility channels.** *MFR has access to two utility channels for internal use on non-emergency incidents. These channels are designed to be used for administrative functions as to not occupy the home channels with excessive radio traffic. The utility channels, ESD5-A and ESD5-B are available in Zone 1 and Zone 5 of the radio. These channels are not monitored by Dispatch.*
- C. **Dispatched channel.** When assigned to emergency incidents, Companies will change their radio to the channel designated by Fire Dispatch for their incident. Upon being dispatched to an incident, all Companies should verify the designated radio channel(s) for the incident. The designated channel can be determined by listening to the information broadcast by Locution, by listening to the information rebroadcast by Fire Dispatch while units are responding, or by referring to the incident details on the Company’s MDC. Note that only the rebroadcast information will be correct when responding to multiple alarm incidents (refer to IV.F. below). Companies should not assume the channel based on the alarm type. There are many situations that would cause Fire Dispatch to utilize a channel different from the one most commonly used. For example, do not assume that all Box alarms will be assigned on the first channel in the first tactical zone. Multiple Company response incidents may be assigned on any of the tactical channels and may even be in a different zone.
- D. **Tactical channels.** Tactical channels (channels in zones 2, 3 and 4) shall be issued in sets of three. The primary tactical channel will be the first in the set. The next sequential channel will be the alternate for the incident. The third channel is the emergency channel dedicated to that incident. For example:
 - 1. 201 Primary Tactical Channel
 - 2. 202 Alternate Tactical Channel

3. 203 Incident Emergency Channel

- E. **Additional tactical sets.** Fire Dispatch will only announce the designated primary channel *of a tactical set*. If the Incident Commander needs more than the initial set of three channels, Command may request additional tactical sets dependent on the needs of the incident. Fire Dispatch shall assign additional channels as available.
- F. **Use of primary channel.** All Companies assigned to the incident shall communicate on the designated primary tactical channel unless directed by Command to move to the alternate channel. An example would be for the Logistics Chief to communicate with the Incident Base Manager or Rehab Manager on the alternate channel.
- G. **Multiple alarm companies.** Multiple alarm Companies responding to an incident or arriving at the Incident Base shall communicate on the alternate tactical channel or as directed by Fire Dispatch.
- H. **Move-ups.** Companies executing move-ups will execute those moves on the MDC and communicate those on either Firecom North, South, East, or West depending on the location of the station to which they are moving.
- I. **Radio syntax.** All radio communications shall utilize “plain English”. Radio communications with an apparatus Officer shall be directed to the “apparatus number” of the Company the Officer is assigned to. Communications directed to the Driver/Operator shall be directed to “apparatus number + driver”, and the communications with an apparatus’ firefighter shall be directed to “apparatus number + firefighter + task” (if task is appropriate to distinguish between firefighters).
- J. **Format and terminology.** All members should use standard department format and terminology when communicating on the radio.
 - 1. **Hailing units.** When beginning communication with another Company or Member, the radio traffic will start by identifying the Company or Member to which the message is intended. It will be immediately followed by identifying the Company or Member initiating the communication. For example: “Engine 6, from Fire Dispatch.”
 - 2. **Reception of message.** When a Company or Member is identified for a radio communication, that Company or Member shall identify themselves on the radio to indicate that they are ready to receive the message. For example: “This is Engine 6.” During periods of heavy radio traffic, the Company or Member may also identify the Company or Member they are to receive the message from. For example: “Go ahead Fire Dispatch, this is Engine 6.”
 - 3. **Terminology.** The following are standard radio communication terms used by AFD:
 - a. **Received.** This term should be used to indicate that a message was understood and would normally be followed by a short summary of the message received.

- b. **Direct copy.** This term indicates that a message was received by a Company or Member by listening to a radio communication transmitted to another Company or Member and would normally be followed by a short summary of the message “direct copied”.
 - c. **Clear.** This term indicates that a Company is leaving an incident and returning to service. This term should **not** be used to indicate that a message was understood (i.e. “I’m clear on that”).
 - d. **Emergency terms.** For emergency radio terms, refer to MFR Best Practices B402 Emergency Terminology.
- K. **Communication within ICS structure.** Tactical radio communications from Companies assigned to the Operations Section shall normally be directed up through their proper chain of command. Companies in a division or group, should communicate with their Division, or Group Supervisors. Division and Group Supervisors should communicate with the Operations Chief. The Operations Chief communicates with Command.
- L. **Liaison and support communications at tactical incidents.** Radio traffic on the primary tactical channel by Companies and individuals other than those assigned to the Operations Section shall be kept to a minimum. Additional radio traffic by Liaison and Support Personnel shall normally be conducted on Firecom *home channels* or channels other than the primary tactical channel.
- M. **Priority radio traffic only.** At large or complex incidents, the amount of radio traffic may initially overwhelm the primary tactical channel. In this situation, until there are personnel available to monitor additional tactical channels, Command may order “Priority Radio Traffic Only” for the primary tactical channel. When this announcement is made, Fire Dispatch will acknowledge and repeat this order.

The following restrictions are in place during Priority Radio Traffic Only:

1. **Face to face communications.** Any communication that can be done face to face on the incident scene instead of on the radio should be done that way.
2. **Authorized to communicate by radio.** Only officers, Fire Dispatch and members in an ICS position may communicate by radio on the primary channel. The only exception is that any member may acknowledge that an order given by an officer was received or report a Mayday, if necessary.
3. **Priority users.** Command and Operations have priority on the primary tactical channel. When Command/Operations is calling or communicating with a unit, all others shall standby.
4. **Dispatch parroting.** Fire Dispatch will discontinue repeating radio traffic.
5. **Message acknowledgements.** Radio traffic to acknowledge a message received should transmitted with a very short summary of the message received.

When Command wishes to end Priority Radio Traffic Only, he/she shall announce **“Resume Normal Radio Traffic.”** Fire Dispatch will acknowledge and repeat this order.

- N. **Communications plan.** A Radio Communications Plan shall be incorporated into the Incident Action Plan. The Communications Plan shall include announcing the primary tactical channel by Command during the initial size up and upon each subsequent transfer of command. The primary channel shall be written on the IAP for reference. An emergency backup radio communications plan shall be incorporated into every IAP. A primary tactical channel shall be designated, and a backup to the primary tactical channel, in case of failure of the primary channel, shall be designated. The backup channel shall normally be the alternate channel assigned to the incident.
- O. **Regional channels.** *For incidents outside of Travis County, Dispatch may assign a regional channel for responding units. Regional channels help provide common communications with agencies from the counties surrounding Travis County. Typically, Dispatch will use the Regional Public Safety channels in Zone E1 of the radio. This channel will then be patched to the operating tactical channel in the home jurisdiction of the incident. Responders should keep in mind that the emergency ID feature does not function while on a Regional channel.*
- P. **System failures.** The radio system is built with several layers of redundancy, which in many cases will allow continued use of radios. However, different types of failures will require different adjustments in strategy. Four scenarios are listed below in order of severity.
1. **Isolated loss of primary channel.** In the event the primary tactical channel becomes unusable (open microphone from wet radio or other equipment or user malfunction), Fire Dispatch shall announce “Emergency Traffic - Failure of Primary channel” over all three radio channels in the set. All tactical radios shall switch to the designated back-up channel. Command shall initiate an immediate PAR and an immediate review of strategy shall be undertaken.
 2. **Site trunking.** The Zone Controller at CTECC acts as the “traffic cop” for our radio system. If this component goes down, our system is designed to have individual repeater sites take over this function. Radios will beep once and display “Site Trunking.” This should not have a significant affect on radio functionality on the fireground. Dispatch will lose console functionality (which includes ability to identify Emergency ID’s) but they have backup radios in place which will allow them to continue to monitor fireground activities and provide support. Command shall initiate an immediate PAR and an immediate review of strategy shall be undertaken.
 3. **Fail soft.** If the radio system goes in to “Fail Soft” mode, all trunking ability is lost. All radios on a tactical channel will transmit and receive on a single frequency and will be affiliated with a single repeater. While communications on the fireground should remain intact, ability to communicate with dispatch and units in other areas of town will be lost. Additionally, if there is another incident operating on a tactical channel nearby, both incidents will be placed on the same frequency. Command shall initiate an immediate PAR and an immediate review of strategy shall be undertaken.

- a. **Dispatch console functionality.** Fail-soft or Site Trunking is a system failure that will exclude the dispatchers from using the standard console equipment at Fire Dispatch, However, there are several back up handheld radios on the dispatch floor that will be used by dispatchers in the event console functionality is lost.
4. **Total system failure.** Total system failure is highly unlikely due to the way the system was designed. However, if the system experiences total failure, position 16 (*labeled 8TAC95D*) on all Fire zones is a conventional radio channel and will continue to function, much like a “walkie-talkie.” *This channel may be referred to as “direct 16” since it is a direct (non-repeater) channel in position 16 of the radios.* Range is limited (approximately 1.5 miles) and the radio will be unable to contact dispatch.
- a. **Strategy evaluation.** Withdrawal and defensive operations shall normally follow a total radio system failure. Withdrawal should be communicated by a continuous blast of apparatus air horn (multiple apparatus if possible). The air horn blasts should last 30-45 seconds, be repeated after approximately one minute, and continue until Command is confident all personnel have been withdrawn.
 - b. **Monitoring 8TAC95D.** A radio at the Command Post shall be on “Direct 16” (*8TAC95D*) in the event that a company on a scene needs to transmit on “Direct 16.”
 - c. **Cell phone availability.** Command shall have a cellular phone turned on whenever a Command Post is designated. The cellular phone shall serve as an alternate means of communication between Fire Dispatch and the Incident Commander in the event of radio failures.
 - d. **Communications group.** Command shall immediately designate a Communications Group. The Communications Group shall serve as information gatherers/delivery runners for Command. Face-to-face communications will be critical to ensure personnel safety.
- Q. **Alternate use of 8TAC95D.** Direct 16 (*8TAC95D*) may also be utilized when the system is fully operational but radios at the incident on a regular channel are receiving a system unavailable signal. This can occur when attempting to transmit in an area that the radio signals cannot reach the repeater, such as when below ground or in some high-rise buildings