

	TRAVIS COUNTY ESD #5 MANCHACA FIRE RESCUE Department Best Practices	B104
	Authorized by:  Fire Chief Chris Barron	Effective: 2/13/2018 Rescinds: Reference: AFD B104.1 Application: Shift Personnel
Lost Firefighter Survival Strategies		

I. Purpose

To provide the firefighter who becomes lost or trapped inside of a structure with guidelines for increasing their chance of survival and rescue.

II. Background

The rescue of trapped or lost firefighters inside an IDLH atmosphere is time sensitive. There is a very narrow window of survivability as SCBA air supplies become exhausted and the toxic and thermal environments increase in intensity. Firefighters must not delay reporting distress should they become lost, disoriented, trapped, or in need of assistance.

This document is a direct adaptation of the Austin Fire Department SOG on Lost Firefighter Survival Strategies. 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. **Implementation.** Any firefighter who becomes lost, disoriented, trapped or in need of assistance while operating inside a structure should employ as many of the following self-survival techniques as possible in order to maximize the probability of discovery and rescue.

IV. Best Practices

A. **Guidelines for not becoming lost.**

1. **Handlight.** A firefighter entering a structure should carry a hand light, even in the daytime.
2. **Tool.** A firefighter entering a structure should carry a tool; forcible entry tool, nozzle, etc.

3. **Radio.** A firefighter entering a structure should carry a portable radio. It is vital that the assigned fireground talkgroup is selected on the radio, as this will determine the emergency ID talkgroup, which will be monitored by the RIC team.
4. **Maintain company integrity.** Do not enter a structure alone. The minimum entry team is two persons, equipped with a portable radio. The Two-in/Two-out rule should be observed anytime firefighters enter an IDLH atmosphere.
5. **Hoseline or rope.** If at all possible, maintain contact with either a hoseline or a search rope when advancing into the interior of a structure.
6. **Radio and PASS operation with gloves.** Firefighters should practice manipulating portable radios and PASS alarms while wearing gloves. The portable radio Emergency ID button should be activated with gloved hand during training evolutions to ensure that firefighters are aware of the pressure needed for activation.

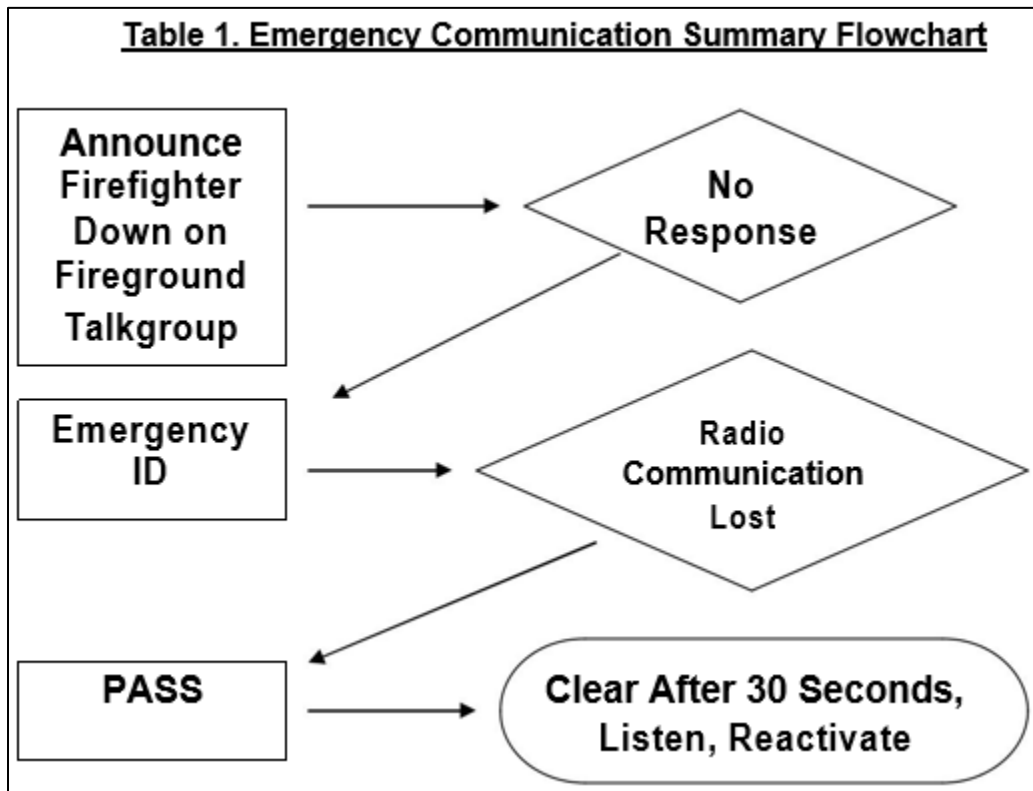
B. Guidelines to follow if lost, disoriented, or trapped.

1. **Calling MAYDAY.** A firefighter should not delay notifying Command or Fire Dispatch of distress. As soon as a firefighter THINKS they are lost, they should report “Firefighter Down” on the assigned fireground talkgroup by utilizing the emergency communication term “MAYDAY”. Refer to MFR Best Practices B402 Emergency Terminology. Lost, disoriented, or trapped firefighters should calmly and clearly relay information regarding:
 - a. **Who** they are
 - b. **How many** firefighters are lost or trapped
 - c. Their **last known location**, and
 - d. The best estimate as to their **current location**.
2. **Emergency ID activation.** If the “Firefighter Down” notification was unsuccessful, the firefighter should attempt to activate their portable radio Emergency ID button. *The button on the APX 7000 XE portable radio is designed to be pressed with a gloved hand and is immediately adjacent to the antenna so the user can use the antenna as a guide to finding the emergency ID button.* There may also be an Emergency ID button on the collar mic.
 - a. **Activate the Emergency ID button.** If the radio signal is getting out, the Emergency I.D. and unit identifier (example: ENG501 LT) will be transmitted to Fire Dispatch within a few seconds.
 - b. **Emergency channel.** Once the Emergency ID is activated, the radio will automatically change the channel to an Emergency talkgroup. Activating the Emergency ID on a Portable radio will cause the radio to automatically transmit with a ‘hot microphone’ which will broadcast any voice and/or ambient sound for 8-10 seconds after activation.

- c. **Monitoring of the emergency channel.** Fire Dispatch and the RIC will be monitoring the Emergency talkgroup and should receive the emergency message.
- d. **Dispatch response.** If, after ten seconds, Fire Dispatch has not received a transmission from the radio activating the Emergency ID, Fire Dispatch will attempt to contact that radio with “Signal 4” on both the Emergency talkgroup and the fireground talkgroup. Signal 4 is the message for, “Is there an emergency?” At incidents with Command established, Fire Dispatch will contact and advise Command of the Signal 4. Refer to MFR Best Practices B403 Emergency ID Activation for further details.

3. The PASS alarm.

- a. **PASS activation.** If radio communication has been lost, or a radio is not available, the firefighter should manually activate the PASS alarm. Press the button with the red circle around it, located on the front of the PASS. This should be done as soon as the firefighter recognizes being lost, disoriented, or trapped. Reset the PASS (press the button with yellow circle around it twice, located on the side of the PASS) intermittently to listen for search crews.
- b. **Intermittent PASS use.** If radio communications are intact, the firefighter may be asked to activate the PASS. The PASS should be cleared and radio communication reestablished every 30 seconds.



Note: If the firefighter feels that they will soon be incapacitated, they should activate the PASS alarm and not reset it.

4. **Search for exit.** A lost firefighter should continue to search for an exit utilizing any means available. The firefighter should listen for sounds of firefighters working. They should feel for doors, windows, and other openings.
5. **Search patterns.** A lost firefighter should locate an exterior wall and avoid becoming stranded in an open area. Rescuers normally will use search patterns that place them in close contact with walls and perimeters of areas.
6. **Area of refuge.** If an exit is not readily found, but an area of refuge away from the fire is located (protected room or floor), the firefighter should attempt to remain there. If radio communication is intact, the firefighter should advise rescuers of such action. The firefighter should continue to provide rescuers with the best estimate of their location. An area of refuge may be found through interior wall breaching techniques.
7. **Controlled breathing.** The firefighter must remain calm and control breathing to conserve air.
8. **Air conservation.** It may be necessary for the firefighter to employ air conservation techniques that attempt to regulate or moderate breathing in order to conserve the air supply.
9. **Depletion of air.** If the SCBA air is depleted, the protective hood can be used as a limited filter. The firefighter should remove the face piece regulator and place the protective hood over the face piece opening.
10. **Positioning to maximize discovery.** If the firefighter cannot locate an exit, and is close to physical collapse or is almost out of air, they should assume a horizontal position on the floor that maximizes the audible effects of the PASS alarm. The best location for this firefighter is at an exterior wall, doorway, or hallway. If capable, the firefighter should disconnect the waist strap of their SCBA and reconnect it between their legs to aid rescuers by forming a three-point harness.
11. **Use of light and sound.** While assuming a horizontal position, the firefighter should place a handlight, pointing up, in order to enhance the possibility of rescuers seeing the light beam. If the firefighter is aware of the direction of rescuers, they should aim the light beam in their direction. Also, the firefighter should attempt to make tapping noises to help guide rescuers.