

# DOTHAN FIRE DEPARTMENT STANDARD OPERATING GUIDELINE

## OPERATIONAL GUIDELINE # 13

**SUBJECT:** Part 1. "2 In/2 Out"; Part 2. Rapid Intervention Crews;  
Part 3. "Mayday"; Part 4. Emergency Evacuation Signal

**DATE:** September 26, 1998

**PURPOSE:** This guideline is intended to increase the overall level of safety for all members of the Dothan Fire Department when operating at an emergency scene. This guideline should integrate with guidelines that are already in effect.

### **"2 IN/2 OUT"**

#### **SECTION 1**

The "2 in/2 out" procedure has been established to provide direction for operations in Immediate Danger to Life and Health (IDLH) or potential IDLH atmospheres, in accordance with NFPA 1500, OSHA 29CFR 1910.120 and 1910.134, when operating in and around hazardous environments.

#### **SECTION 2**

IDLH is an atmospheric concentration of any toxic, corrosive, or asphyxiant substance, or:  
1) poses an immediate threat to life; 2) would cause irreversible or delayed adverse health effects; 3) would interfere with an individuals ability to escape from a dangerous atmosphere. Atmospheres with a concentration of oxygen by volume of less than 19.5 % will be considered as IDLH. An atmosphere will be considered IDLH until proven otherwise.

#### **SECTION 3**

A "2 in/2 out" team requires a two person entry team "in" the hazardous area and the required two person stand-by team positioned "outside" the hazardous area. It is the policy of our Fire Department that the "buddy system" be used whenever an entry into any hazard area is made.

**A minimum of two.**

#### **SECTION 4**

Personnel that are operating in an IDLH area will be in full personal protective equipment, with SCBA donned (see SOG #4) and operating before entering an IDLH or potential IDLH area. Personnel that are required to enter an IDLH area, will at all times utilize the "buddy" system of teams of 2 or more. **Personnel will not enter an IDLH area alone.**

## **SECTION 5**

A team leader will be designated for each "buddy" team. The team leader will be equipped with a portable radio and will notify Command in the event of an emergency. While operating in an IDLH area, team members must remain in direct visual, voice or tethered contact with one another at all times. At no time will team members be separated from one another.

## **SECTION 6**

Each team member will be required to:

1. Provide fellow members with assistance.
2. Warn of hazards encountered.
3. Routinely check on welfare of fellow team members.
4. Routinely advise Command of conditions. (**Team Leader**)
5. Provide accountability (PAR) reports to Command. (**Team Leader**)

## **SECTION 7**

Prior to personnel entering an IDLH area, an **initial** rapid intervention crew (RIC) must be assembled outside the hazardous area. The **initial** RIC is to provide assistance to the interior personnel in the event of an emergency. The **initial** RIC will consist of 2 or more personnel in full personal protective equipment with donned SCBA and ready for immediate service. The **initial** RIC will have a separate hose line in place (if required), along with any equipment needed to initiate a possible rescue of Fire-Rescue personnel. The **initial** RIC will monitor by radio, the activities of the interior team and maintain visual or voice contact with them.

## **SECTION 8**

The **initial** RIC members may be assigned other duties provided that such duties do not interfere with their ability to perform the specific function of an **initial** RIC or cause them to abandon their position. Examples may include but are not limited to: flaking of hoselines, ground level exterior ventilation, equipment retrieval (if apparatus is within 50' of stand-by team position), lighting, exposure protection and exterior fire attack (if appropriate). However, once a **dedicated** rapid intervention crew (RIC) is established, no other duties shall be assigned to this crew.

## **SECTION 9**

Additional duties assigned to an **initial** RIC member will not include pump operations. Additional duties will be restricted so as not to require the abandonment of the **initial** RIC position directly outside the hazardous area. In the event the **initial** RIC must perform functions that would interfere with their mission, such as performing CPR, they will inform Command and Command will advise the interior personnel to exit the IDLH area. The interior personnel will immediately withdraw from the IDLH area until another **initial** RIC can be assembled.

## **SECTION 10**

The Dothan Fire Department requires a total of five personnel to be assembled at the incident scene prior to entry into the IDLH area when the situation requires the use of hoselines.

1. 2 - entry team members
2. 2 - **initial** RIC members
3. 1 - pump operator

During operations where IDLH environments do not require the use of hoselines, entry can be made when four personnel are on the scene. The only exception of entry of a crew into an IDLH without an established **initial** RIC is, when there is a need to perform an immediate rescue of suspected occupants.

## **SECTION 11**

The first arriving units, while waiting will perform exterior operations for the assembly of adequate personnel for entry. These may include, but are not limited to:

1. Size-up the incident and give an appropriate Brief Initial Report (BIR)
2. Establish command
3. Request additional resources
4. Exterior rescue and fire attack
5. Exterior utilities control
6. Exposure protection
7. Medical assistance for victims
8. Isolation and evacuation
9. Establish water supply
10. Denying access to the hazardous area

As the incident progresses and higher numbers of personnel arrive on the scene, and operations expand, a **dedicated** RIC will be established to replace the **initial** RIC.

## **RAPID INTERVENTION CREW (RIC)**

### **SECTION 1**

The objective of the **dedicated** RIC is to have a fully equipped rescue team on-site, in a ready state, to immediately react and respond to rescue injured or trapped Fire - Rescue personnel. The **dedicated** RIC will have the same duties and functions as the **initial** RIC with the following changes:

1. The **dedicated** RIC will be established as soon as possible. Typically, upon arrival of the second in engine company.
2. The **dedicated** RIC will be a unit with a minimum of two personnel, in full personal protective equipment (see SOG #4), stationed just outside the hazardous area or as assigned by the Incident Commander, and ready for immediate entry. The **dedicated** RIC will have a charged hoseline in place (if required) and will have the appropriate rescue tools available for immediate use.
3. The **dedicated** RIC will not be given any additional duties. Their sole mission will be to provide emergency assistance for the interior personnel in the event of a lost, trapped or missing fire fighter(s).
4. The **dedicated** RIC will be maintained until the IC determines that they are no longer needed. Typically, this will be when there is no longer an IDLH atmosphere and the incident has been declared "under control".

## **SECTION 2**

A **dedicated** RIC will be established at all incidents where fire department members are subject to hazards that would be immediately dangerous to life and health. Examples of special hazards include, but are not limited to:

1. Offensive Fire Operations
2. Hazardous Materials Incidents
3. Trench Rescue
4. Confined Space Rescue
5. Dive/Water Rescue
6. Any other incident having significant risks

## **SECTION 3**

The second in engine will normally assume the role of **dedicated** RIC after arriving on the scene. Further, the second in engine company is responsible for providing an adequate water supply for the first arriving company.

## **SECTION 4**

Upon a report of a lost, trapped or missing fire fighter(s), Command should dispatch the **dedicated** RIC to the last reported location of the lost/trapped/missing fire fighter(s). The Incident Commander will immediately obtain a PAR of all companies that are working at the incident.

## **SECTION 5**

Once the Incident Commander establishes a **dedicated** RIC, the **dedicated** RIC team leader should announce the names of the members that will be performing **dedicated** RIC duties. Example: "Jones and Helms are assuming rapid intervention". When a company is to assume the duties of the **dedicated** RIC, they should announce: "Paramedic Engine 8 is assuming rapid intervention". This radio transmission should be directed to Command and Emergency Communications. Emergency Communications shall rebroadcast this vital information.

## **"MAYDAY"**

## **SECTION 1**

The rescue of lost, trapped or missing fire fighter(s) in a burning or collapsed building is especially time sensitive. There is a very narrow window of survivability for a firefighter(s) who is out of air supply, trapped by approaching fire or by heavy structural collapse. Therefore, rapid, concise decisions and actions must be taken to increase survivability. The MAYDAY program is designed to prepare all personnel for any sudden life threatening occurrence that may injure, trap, disorient or distress any emergency response personnel during an emergency incident.

## **SECTION 2**

MAYDAY will be the radio signal used for any distressed fire fighter needing assistance for any reason. No other term shall be substituted.

## **A. DECLARING A MAYDAY**

### **SECTION 1**

When an emergency responder identifies that he/she, or a member of his/her team, is lost, trapped, missing, disoriented or injured and in need of assistance, he/she shall (if possible) transmit a verbal message on the tactical channel to Command and state, "MAYDAY, MAYDAY, MAYDAY".

### **SECTION 2**

The person transmitting the MAYDAY shall, if possible, advise the following:

1. WHO THEY ARE: such as Interior Sector and number of members in distress. Identify the trapped/distressed member(s) by name if possible.
2. LOCATION: such as floor, room, side of building, etc. Be specific as possible.
3. PROBLEM: such as trapped, lost, disoriented, out of air, etc.
4. NEEDS: such as hoseline, ladder, shovels, air cylinders and rescue tools, etc.

### **SECTION 3**

If a fire fighter(s) is unable to communicate verbally, he/she should activate the EMERGENCY button on his/her portable radio. This will immediately lock the portable radio and transmit a signal into the Communications Center. Communications will immediately contact Command on tactical channel and provide as much information as is known in reference to the emergency. The fire fighter(s) shall activate the alarm on his/her PASS device.

## **B. COMMAND'S RESPONSE TO MAYDAY**

### **SECTION 1**

Upon receipt/recognition of a MAYDAY, Command shall notify Communications via the fire dispatch channel. Communications shall immediately transmit an alert tone followed by a verbal message on the Fire Department "All Call" channel indicating that a MAYDAY has been transmitted. The Communications Center will immediately advise all personnel that all non-emergency radio traffic must cease. There should not be any delay in controlling the Fire Department radio channels once a MAYDAY has been called. Only traffic pertinent to the MAYDAY shall be permitted on the tactical channel until a separate radio channel is assigned for the rescue operation (if needed).

## **C. COMMUNICATION'S CENTER'S RESPONSIBILITIES**

### **SECTION 1**

The Senior Dispatcher at Communications shall dedicate an additional fire dispatcher to the fire radio frequency during a MAYDAY situation. All non-emergency activity will cease on all fire channels, and all channels shall be monitored closely for any transmissions by the missing fire fighter(s).

## **SECTION 2**

If the missing fire fighter(s) come up on a channel other than the tactical channel, the fire dispatcher shall remain with that fire fighter, and Communications shall immediately notify Command. It is essential that once communications have been established with the trapped or missing fire fighter(s), they are not lost.

## **IV. FIREFIGHTER'S RESPONSIBILITIES**

### **SECTION 1**

Fire fighters must not hesitate to declare a MAYDAY if they become lost, trapped, disoriented and/or are in need of assistance. This should occur as soon as the individual thinks that he/she may be in trouble.

### **SECTION 2**

Upon recognition that a MAYDAY situation exists, the fire fighter should activate his/her PASS device manually to sound an audible alarm. The device should remain active until members of the RIC reach the member(s) or the member(s) are able to reach safety. If the device interferes with radio communications, it may be turned off temporarily, but must be re-activated to sound the audible alarm. **Lost or trapped crew(s) should remain together.**

### **SECTION 3**

Lost or trapped fire fighter(s) should always attempt to get out of a building by whatever means possible. Where doors, windows or other egress are not available, fire fighters should attempt to reach an exterior wall. Once at the wall, a search for doorways, windows and hallways will generally lead to the outside. Rescuers will first search hallways, around walls, and around windows and doors before sweeping large interior areas. Where the fire fighter(s) cannot find a way out, but there is safe refuge (protective room or floor) away from the fire to which the fire fighter(s) can retreat, he/she should take advantage of this location. Command and rescuers should then be advised of the location by whatever means possible. In the event one firefighter becomes trapped or otherwise incapacitated, crew member(s) must consider leaving the trapped or incapacitated member in an attempt to secure help. Every practical effort should be made by all firefighters to save themselves and their partners.

### **SECTION 4**

A conscious effort must be made by the trapped fire fighter(s) to control breathing and remain calm. Unnecessary talking or physical activity must cease unless absolutely necessary. This will increase the likelihood of extending the supply of air until rescuers can find the trapped team member(s). If the fire fighter(s) can not get out, he/she should assume a horizontal position on the floor such that the audible effect of the PASS device is maximized. The fire fighter(s) should attempt to take this position at an exterior wall, doorway or hallway to maximize quick discovery by rescue crew.

## **SECTION 5**

In assuming a position to await rescuers, the fire fighter(s) should attempt to position his/her flashlight(s) toward the ceiling. This will enhance the rescuer's ability to see the light and locate the downed fire fighter(s).

### **A. GENERAL CONSIDERATIONS**

#### **SECTION 1**

Rescue needs generally fall into two categories:

1. Fire fighter(s) trapped by collapse.
2. Fire fighter(s) lost in a smoke filled and burning building.

#### **SECTION 2**

Most significant problems and difference between the two categories:

1. The search area can be substantially larger for a lost fire fighter than that encountered in a collapse situation.
2. A collapse may present a major extrication situation.

#### **SECTION 3**

Other considerations are:

1. Possible secondary collapse.
2. Separated and scattered crews.
3. Confusion over the last known location of the crew or member.

#### **SECTION 4**

There are specific actions that the Incident Commander must address quickly. They do not necessarily need to be accomplished in this order.

1. Change the incident action plan to a high priority rescue effort.
2. Initiate a PAR immediately to assess rescue requirements.
3. Commit the RIC to the most appropriate location to initiate a rescue
4. Ventilate early and often for life safety and consider the utilization of Positive Pressure Ventilation (PPV).
5. Immediately request an additional RIC.
6. Withdraw companies from the affected area (if needed).
7. Do not abandon firefighting positions, provide re-enforcement and ensure that sufficient resources are committed to ensure a safe working platform for the RIC.
8. Assign a Chief Officer to assume control of the rescue sector.
9. Call for additional resources early.
10. Utilize EMS personnel to establish treatment and transport sectors.
11. Open/unlock all exterior doors, if appropriate.
12. Ensure all media control is managed by the PIO.
13. Expand the Incident Management System to accommodate an expanding incident.
14. Closely monitor the structural stability of the building.
15. PROVIDE STRONG SUPERVISION AND CONTROL OF THE INCIDENT.

16. Conduct a risk assessment of the proposed rescue effort. Live rescuers shall not be sacrificed, even for fallen fire fighters.

17. Call an additional ambulance.

## **VI. EMERGENCY EVACUATION**

### **SECTION 1**

When the Incident Commander orders an emergency evacuation, **A ONE-MINUTE AIR HORN BLAST OF ALL ON SCENE APPARATUS** and a general announcement by the Communications Center shall be initiated. The Communications Center shall announce, "All units operating at (address) evacuate the building/area immediately and return to your assigned apparatus".

### **SECTION 2**

Once the emergency evacuation has been sounded, all members shall report to their assigned apparatus. When personnel arrive at their apparatus, the Incident Commander shall conduct a Personnel Accountability Report (PAR).

### **SECTION 3**

The revised action plan will be transmitted to all units by Command. Typically, the operation will become a defensive mode incident at this point. All units will operate outside the collapse zone when this situation occurs. Yellow fire line tape shall be used to determine the exclusionary area zone for the general public. This exclusionary area zone shall be described as "outside perimeter". A "inside perimeter" shall be marked off using Red fire line tape that will mark the collapse zone of the building for the operating fire fighters. The collapse zone shall be calculated by adding the height of the exterior walls to a safety factor of 20'. Example: A building with 30' exterior walls will have a interior perimeter of 50' (30'+20') established around the entire structure. **No** members will be allowed in the "inter perimeter" without specific permission from command. Companies will only go back to work after the Incident Commander has re-assigned them to do so. **Free-lancing will not be tolerated.**

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