

## Chapter 10-7

### Standard Operating Guideline for RAPID INTERVENTION TEAMS AND PERSONNEL ACCOUNTABILITY

effective 1/1/03

rev. 04/12/07

#### 1. Purpose

This SOG is intended to outline PVFD's procedure for assuring firefighter safety while operating in hazardous emergency environments. Specifically addressed in this SOG is the preparation and response for emergencies that involve firefighters while they are operating at an incident scene. Guidance for these procedures comes from NFPA 1500, OSHA CFR 1926, Working Fire <sup>TM</sup>, and other relevant information sources.

#### 2. Background

Due to the dangerous nature of fire and rescue activities that a fire department is called upon to handle, it is vitally important that there are safety measures in place to deal with emergencies involving firefighters working on an incident scene *before* such an emergency occurs. The type or size of the incident will determine the appropriate level of preparedness. The tactical assignment created to deal with firefighter emergencies is referred to as a  
**Rapid Intervention Team (RIT)**

#### 3. Definitions

The following terms will be used throughout this standard, and should be included in actual use of the standard.

**Accountability Officer** = a person assigned to keep track of the working locations of all crews on the fire scene, using the accountability tags assigned to each firefighter and crew.

**Entry team** = a crew of at least 2 firefighters that is working on the fireground.

**Fireground** = *incident action area* of a fire scene.

**Firefighter emergency** = unsafe condition caused by the original incident that has trapped, injured, or otherwise caused harm to firefighters operating on the fireground.

**IC** = Incident Commander

**IDLH** = Immediately Dangerous to Life & Health; conditions that pose an immediate threat to health, or would cause irreversible adverse health effects. The following are considered IDLH environments:

- Structure fire, beyond the incipient stage
- Oxygen level below 19.5% or above 22.5%
- Lower Explosive Limit (LEL) above 10%
- Toxic atmosphere in excess of the Permissible Exposure Level (PEL)
- Confined Space, or any other situation recognized to be unstable which could cause injury or death

**Incident** = the original emergency situation which PVFD was called to control.

**Incident action area** = any area of an incident that requires personnel to wear PPE for safe operations. During a Haz-Mat, this is the same as the **Hot Zone**.

**Level 1 RIT** = The initial crew (of at least 2 people) assigned to begin the process of establishing RIT, and fulfilling the 2-in/2-out requirement.

**Level 2 RIT** = The team of at least 4 people whose duties are to track and rescue, if necessary, emergency personnel working on the fireground.

**MAYDAY** = The term used to signal that a firefighter emergency has occurred, and the person reporting the MAYDAY needs immediate assistance.

**PAR** = Personnel Accountability Report; A process of checking the welfare of each crew, and having the crew leader report back with their location, status, and number of people.

**PPE** = personal protective equipment. PPE required to be worn will depend on the type of incident, the function of the person, and the location of the person on the scene.

**RIT** = Rapid Intervention Team; The generic term for a group of at least 2 persons with the training, tools, and PPE necessary to perform rescue of firefighters from any part of the incident action area.

**RIT Crew** = 2 people working together as half of a RIT Team.

**RIT Equipment** = The desired equipment to be gathered and placed on stand-by for use by the RIT team. Equipment includes: RIT kit, secured handline, portable radio for each RIT crew, forcible entry tools, large handlight, TIC, stokes basket.

**RIT Group Leader** = The officer whose sole function is to command the RIT team(s). The RIT Group Leader reports directly to Command in the ICS chain of command.

**RIT Kit** = A kit containing a complete SCBA, search ropes, flashlight, hauling equipment, and hand tools, used for initial response to a firefighter in distress.

**Safety Officer** = A person assigned to monitor the overall incident from the safety perspective. This person must have a thorough understanding of fire department operations, building construction, effects of fire, and concepts of assuring the safety of all personnel on a fire scene. The safety officer has the authority to point out safety problems and halt any activity that compromises the safety of personnel or civilians.

**TIC** = Thermal Imaging Camera

#### 4. 2 in / 2 out rule

State OSHA law requires that any time a fire crew enters a hazardous environment, there must be at least 2 persons outside the hazard area, immediately ready for rescue of firefighters. During structure fires, the benchmark for the need of 2 in/ 2 out is the use of SCBA. If SCBA is needed to enter the building, the rule is in effect.

According to the OSHA rule, if the IC and pump operator are geared up for entry into the hazard area, they may be counted as the RIT. PVFD will avoid using this method unless necessary. No PVFD member should be considered for use in the RIT if they are performing another essential function. Likewise, RIT members will not perform other activities that may impede their ability to immediately engage in RIT functions. The only exception to this is when there is a *known* rescue situation, and there are not yet 4 firefighters on scene. In this case, entry to the IDLH area may be done without the RIT in place.

If entry is made before the RIT is in place, the Incident Commander MUST report to OCD that there is a rescue situation. After the incident is over, the IC must also prepare a written report of the situation and why the entry without RIT was necessary.

#### 5. ICS Chain of Command for RIT and Team designations

The RIT is considered a "group" in the ICS system. For radio use, the leader of the RIT will be designated "RIT leader". RIT leader will report directly to "Command". If multiple RIT teams are established, they will be designated "RIT team A", "RIT team B", etc. If the scene is divided into divisions, a RIT team will usually be needed for each division. The letter assigned to each RIT team should correspond to the division where it is originally staged. Since multiple RIT teams may be established in the same division (or at the same point of entry), the RIT leader MUST be the only person to assign RIT team identities, to prevent duplication. RIT leader must coordinate these assignments with the Accountability Officer as well. Each RIT team reports to "RIT leader". Each part of the RIT will receive direction only through this chain of command.

To keep radio traffic clear, the letters used to designate the sides of the incident should be stated along with their "radio letter alphabet word". "A" is Alpha, "B" is Bravo, "C" is Charlie, "D" is Delta. For example, a RIT team on side A would be "RIT team A- Alpha".

## **6. Description of RIT team establishment**

Level 1 RIT will be established before fire crews enter any IDLH environment. The level 1 RIT will deploy an uncharged safety line, if one has not yet been established. The Level 1 RIT will then stand ready with full PPE, RIT kit, and basic tools, waiting for more personnel to establish Level 2 RIT. Personnel for level 1 RIT will usually be from a PVFD crew. As soon as Level 1 RIT is established, the IC shall notify OCD by radio of such.

Level 2 RIT will be established as soon as there are enough crews on scene to do so. Level 2 RIT will usually be accomplished using a crew from a mutual aid fire department. Level 2 RIT will be made of 4 person *teams*, split into 2 person *crews*. The teams will be identified using a *letter* to identify the team and a *number* to identify each crew within the team. For example, RIT team A "alpha" will consist of RIT crew A1 or "alpha 1", and RIT crew A2 or "alpha 2". The letter used may correspond to the side of the structure or division where the RIT team is staging (see section 5). All RIT crews must have at least 2 people and a radio.

If the fireground is very large, a RIT team will be deployed to monitor each area of entry into the fireground. This usually occurs when the scene is divided into multiple divisions.

The RIT teams will track the entry and exit of crews operating in their area unless and until the Accountability Officer assumes this task. The RIT teams shall also monitor the radio and scene for signs of trouble. All RIT teams will report to the RIT group leader, referred to on radio as "RIT Leader". As soon as Level 2 RIT is established, the IC shall notify OCD by radio of such.

The first level 1 and level 2 RIT teams will begin their assignment by reporting to the command post, unless given a different assignment. After briefing with the IC, the RIT team should perform a size-up of the scene and obtain more equipment that they think they may need. RIT equipment should then be staged on a tarp near the area where it is likely to be used. RIT team(s) may be utilized to perform non-essential fireground tasks such as obtaining equipment or raising ladders, as long as the activity does not prevent the team from being able to immediately go into action if needed.

## **7. RIT deployment**

The RIT will only be deployed on orders from the IC. If the RIT is called into action, a backup RIT will be established from available personnel. If further RIT teams are needed, this re-establishment will continue so that there is always a RIT team available for deployment. The situations that would prompt the deployment of the RIT are: a MAYDAY call, an entrapment witnessed by the RIT team, or a PAR that reveals a missing person.

When called to action, the RIT leader will confer with the Accountability Officer to determine the last known location of the crew in distress. A RIT crew will then be dispatched to search for the missing/distressed crew, using the most direct route possible. When the RIT crew finds the other crew, they will assess what is needed. The second RIT crew will then enter the scene, following the search rope laid by the first crew, with the requested equipment. If there is any threat of fire involvement, another crew will be ordered to advance the safety line to the emergency area to protect the crews and the search line. If the rescue process will be long, the IC will have fire crews switch their radios to a different channel for operations, leaving those involved with the rescue on the original operations channel.

## **8. MAYDAY Procedure**

If a firefighter or crew becomes trapped, lost, or injured and they are in need of emergency assistance, they shall initiate the MAYDAY procedure. The crew in trouble shall calmly announce "MAYDAY, MAYDAY, MAYDAY" over their radio. They shall then contact the IC and describe the situation and their location to the best of their ability. If the distressed crew does not know their location, they shall describe the route they used to enter the scene. The crew shall then manually activate their PASS alarms so that searching crews can find them. If the distressed crew is lost, they shall stay still in a safe area and await the search crew. If a MAYDAY is enacted, the Accountability Officer shall immediately perform a PAR check to verify that all other personnel are safe and accounted for. When the RIT crew finds the distressed crew, they shall silence their PASS alarms and contact the RIT leader with a situation update

## **9. Identity of Persons Involved in a Firefighter Emergency**

As soon as a firefighter emergency develops, the IC should send the Safety Officer and the RIT leader to the area of the incident to determine the identity of the persons or crews involved. The purpose of this is to verify that the roll call is accurate, and that an emergency situation *does indeed exist*. It may be necessary to announce the name of the missing firefighter(s) on the radio so that everyone on the fire scene knows exactly who is missing. If another crew locates the named firefighter(s), they must notify RIT leader so that the RIT operation can be focused in the proper direction or cancelled as appropriate. If the identity of the missing person(s) can't be established at the scene, the ring of tags from the crew's truck will be obtained to verify who is part of that crew.

#### **10. Other Crews Operating During Use of the RIT**

If the RIT is called into action at an incident, other crews working at the scene SHALL NOT abandon their tasks to assist the RIT until ordered to do so. If a sudden event endangers a crew, the affected crew shall immediately attempt to move to a safe area and contact Command if further assistance is needed. The IC should immediately dispatch the RIT and perform a PAR of all crews on the scene. The IC will then reassign crews performing non-essential tasks to aid the RIT. Additional personnel will be moved from staging to fill vacated positions on the fireground and form more RIT crews. Crews in rehab shall then immediately replace staging personnel. Additional resources shall also be requested from OCD as needed.

#### **11. Safety Hose Line**

The second crew to arrive at a structure fire scene will immediately pull and man a second hose line, designated the "safety line". This crew will function as Level 1 RIT until relieved of RIT responsibility by the IC. *Interior* fire attack will not begin until this safety line is in place. The safety line will be charged at the discretion of the line's officer when positive water supply is established. The line may also be left dry, for mobility. Without positive water supply, the line *will not be charged* unless it is specifically needed.

#### **12. Training Necessary for RIT Members**

RIT members for a fire incident must have previous firefighting experience before being placed in this role. They must also have training in the following: fire control, ventilation, forcible entry, rescue, self rescue, firefighter rescue, ICS, building construction. Therefore, RIT members should be certified firefighters, with at least 2 years experience. Since RIT activities are very physically demanding, RIT personnel must have good strength and stamina.

RIT members for non-fire incidents must have had training specific to the type of situation encountered. Examples include complex auto rescue, trench rescue, low or high angle rope rescue, water rescue, electrical emergencies, EMS mass casualty incidents, and hazardous materials incidents.

#### **13. Accountability Control of Personnel on Fireground**

In order to easily account for the location and status of all personnel on the fireground, the following procedures shall be used. Each firefighter has issued to them 2-accountability "tags", to be stored on their turnout gear. Each time a run is made, both tags from each person will be given to their truck officer. The officer will place the tags on two rings that show the truck number. One ring will be left at the truck. The driver's tags should be placed with the tags that have the unit number and say "driver". The truck officer will take the second ring of tags to the person controlling entry to the scene (see section 14).

If an event occurs that may cause injury or entrapment of firefighters, the status of each crew will be checked by the IC (using the Accountability Officer) over the radio. Examples include building collapse, explosion, change from offensive to defensive (esp. use of the evacuation tone), long absence of communication with a crew, etc.

When an accountability check (PAR) is requested, all crews should cease unnecessary radio communication. The IC (or the Accountability Officer, if one has been appointed) should announce that "A PAR check is being done". Each crew leader should then check the status of each member of their crew. The IC will then call each crew on the radio. The crew leader shall respond that the crew is "PAR", and give the number of people in the crew, and their location. If

the crew is not intact, the crew leader shall report this, and immediately begin a search for the missing person. The RIT will then be deployed to find the missing person.

If an incident becomes so severe that the entire scene must be abandoned, the IC shall find a safe meeting location and request all crews to report there. A PAR check shall then be done face-to-face with each crew. Examples include: large explosion, toxic gas release, tornado, uncontrollable wildfire, etc.

#### **14. Entry and Safety Control of Large Incidents**

During large incidents with multiple points of entry, the IC may request each RIT team to serve as the Accountability Officer for their division. This will be done through the use of each crew's accountability tag ring. Each crew entering the division shall give their tag ring to the RIT team assigned to that area. The tags shall be placed in a safe location near that point of entry. It is suggested that a road cone be placed to mark the location of the tags. When a crew leaves the hazard area, they should immediately retrieve their tag ring. Each crew should enter and leave through the same entry point if possible.

In addition to personnel tracking, RIT teams should also observe their area for safety problems. If a problem is noted, the safety officer should be requested to address the problem.

#### **15. Readiness of Personnel in Rehab**

Crews sent to Rehab should retain their readiness to work. Before going to rehab, each crew shall refill their SCBA. They shall then report to rehab and keep their gear and SCBA readily available. Personnel should not wander away from rehab in case they are needed for emergency service. As soon as crews are refreshed, they shall report to staging for additional assignment. There should never be more than two crews in rehab at any time.

#### **16. RIT Operations on the Fireground (outline)**

##### **A. RIT Preparedness**

1. Members wear full turnout gear and SCBA
  2. Focus on possible firefighter rescue situations
  3. Have the following tools in hand: irons, lights, radios, RIT Kit, TIC
  4. Have the following tools readily available: vent saw\*, closet/pike pole, K-12, porta power, handline \*not the same one being used for firefighting
- B. RIT Stand-by Location
1. RIT Leader maintains visual/verbal contact with Command Post/IC
  2. RIT teams maintain view of their incident action area
  3. Stay out of the way of other operations
  4. Maintain team discipline
- C. RIT Assignments
1. Team leader identified/liaison with IC
  2. Pull and man safety line, if not already done
  3. Team gathers needed tools
  3. Team assesses fireground
    - a. entrances and exits
    - b. available ladders
    - c. available hoselines
    - d. location of EMS stand-by crew
  4. Evaluate building construction concerns
  5. Monitor radio/scene
  6. If special operation, discuss special needs
- D. RIT Deployment
1. Mayday call
  2. Witnessed entrapment
  3. PAR check does not locate a crew/person
- E. RIT Termination
1. Only after IC approves termination and:
  2. After incident is declared "controlled" and:
  3. After life hazards to firefighters are under control
  4. Team may then be reassigned as needed

## 17. Typical Timeline for RIT Operations

- A. 1st officer arrives on scene
1. Initial size-up completed and transmitted to OCD.

2. Scene survey done, and entry points selected.
  3. Placement and assignment given to first arriving pumper.
- B. 1st pumper arrives on scene, and becomes the "attack pumper"
1. Crew deploys first attack line, and begins set-up of ventilation.
  2. If there is a delay in arrival of 2nd company, other exterior preparations are completed, such as deploying safety line and gathering RIT tools.
  3. If hydrant is close to attack pumper, driver and crew connect supply line.
- C. 2nd pumper arrives on scene
1. Crew establishes supply line, or supply to siamese.
  2. Crew deploys safety line, and becomes Level 1 RIT crew. *OCD is notified*  
INTERIOR ATTACK MAY NOW BEGIN.
- D. 3rd pumper arrives on scene
1. If building is sprinklered, 3rd engine will establish supply line to attack engine, if not already done.
  2. Crew is assigned to staff additional attack line or perform truck work as needed.
- E. 4th company (engine or other apparatus) arrives on scene
1. Crew becomes Level 2 RIT team
  2. Crew gathers additional tools as needed and confers with IC (see section 16). *OCD is notified that Level 2 RIT is in place*
  3. Crew of 2nd engine (Level 1 RIT crew) may be reassigned as needed, or used to form another Level 2 RIT team.
- F. Deployment of additional officers
1. 2nd officer to arrive confers with 1st officer, then assumes either Operations or Command position.
  2. 3rd officer to arrive assumes Safety position, and begins role of Accountability Officer. Safety will delegate the role of Accountability to the next available officer or unassigned firefighter.
  3. Additional ICS positions are staffed as needed.
- G. Deployment of additional fire companies
1. Additional crews report to Command Post, or Staging Area if established.
  2. Additional crews are assigned as needed based on incident.