



**ROTM May 2013**

**ROTM: “Disrupting the Flow Path Has Consequences.”  
(13-305) (Topical Relation: Disrupting Fire Flow Path)**

Good day.

Fireground operations require a well-coordinated, well-communicated and fully understood attack plan. A failure of any one of these three requirements magnifies the incident scene’s uncontrolled chaos to a level that exceeds on scene personnel’s capability to function effectively. Good information poured into a strong strategic, tactical and task plan, carried out by disciplined firefighters will result in a rapidly controlled fire that protects lives and minimizes loss.

This month’s near-miss report, [13-305](#), describes a dynamic fireground where a variety of factors collide when they should be working in concert. The result of the collision results in a bailout situation for interior crews, and reinforcement of some tried and true fireground tenets about accountability, assessing the action and reaction of fireground activities, and understanding the importance of a single action plan.

*“... units responded to a reported residential fire. The fire was reported by neighbors. Initially, there was some confusion regarding the address, which was cleared up quickly.*

*A staff unit arrived on scene to find heavy smoke and fire showing from the B/C corner of a two-story duplex during the 360. The staff unit advised over the radio that the residence was “all clear” of potential civilian victims. Shortly after the staff unit went on scene, the first-in engine arrived and established a personnel staging area. The first-in engine’s crew began to deploy two 1 3/4” lines for an offensive attack.*

*A rescue unit arrived and the captain assumed command. A mutual aid engine and mutual aid battalion chief had responded as automatic mutual aid. The mutual aid engine was directed to obtain a water supply by command. Crews from the first-in engine, med unit and rescue began an aggressive interior attack with a backup line manned on Side “A”. The first-in engine’s crew along with personnel from the med unit, and rescue quickly extinguished the fire on Division “1” and began moving to Division “2” to search for and extinguish the fire on Division “2”.*

*The first-in battalion chief and others arrived on scene. After a face to face with the battalion chief, the captain was assigned Interior and the battalion chief assumed command. A lieutenant was initially assigned to Safety by the captain when he was incident commander. The mutual aid battalion chief was assigned to Safety by the battalion chief and lieutenant (Safety) was changed to Accountability. Assignments*

*were made for additional lines manned by the mutual aid engine and RIT (Ladder crew). The third-in engine's crew was assigned to ventilation of the Division "2" windows on Side "A" and the roof. Command elected to deploy the second rescue's crew into a window near the "B/A" corner of Division "2" to assist interior crews with opening up the ceiling and walls. Additionally, the third-in engine's crew was advised to flow a hand line into the roof vent at the peak of the roof of Side "A". The line was also directed into the window of the involved part of the structure. Conditions became untenable where the second rescue's crew was and the captain gave the order for his crew to exit the structure by way of the ground ladder. At one point this crew was engulfed in fire prior to exiting the structure. One member fell about 15 feet when he was executing a ladder bailout. Command advised all members to exit the structure immediately to initiate defensive operations. After all members had exited the structure a PAR was conducted and confirmed. Defensive operations began and the main body of fire was knocked down. Immediately following the knock down, interior operations commenced and all "hot spots" were extinguished. Salvage and overhaul operations were completed with the residence being turned over to the investigator."*

Task assignments on the fireground can be doled out using several different models. Pre-determined assignments under an adopted standard operating procedure fall into one model. Assigning units to tasks as they arrive is a second model. Regardless of the model used, everyone has to know what the rules of engagement are. In addition, when assignments are given, the officer on the receiving end should check the assignment against his comprehension of the incident. This step should not take more than a few seconds and serves two purposes. First, it acts as a redundancy check for the incident commander's action plan and ensures the officer receiving the order understands what is being assigned. The emerging knowledge about fire growth and spread, and the varying degrees of training and experience for officers leaves us vulnerable. There is an increased chance that the incident action plan may not be as clearly understood by all or as well defined as some think if part of the response package is "New Age" and part is "Old School." The bottom line for all fireground decision makers is to carry a healthy dose of skepticism about how the situation will unfold. Once you have read the entire account of [13-305](#), and the related reports, consider the following:

1. Does your department use a pre-assigned task or task determined upon arrival SOP/SOG for structure fires?
2. If you run with automatic aid or mutual aid companies, are they using the same SOP/SOG?
3. If the neighboring departments use a different style SOP/SOG, what safeties have been built into joint response to ensure everyone knows what rules of engagement are to be followed?
4. Have you ever experienced a situation like the one described in [13-305](#)? What steps were taken to prevent a reoccurrence?
5. What can be inferred about the change in conditions that resulted from hoselines being applied externally while crews were operating on the interior?

Knowledge becomes the asset we use to improve service delivery. Without a concerted effort to stay current in field improvements, we end up using tactics that are more trying

and false than tried and true. The new knowledge about flow path is but one nugget in an emerging body that will require fire officers to rethink how and where the “wet stuff gets put on the red stuff.” The strategies haven’t changed. However, the tactics to achieve the strategies are going to require a retooling if we are to stay ahead of the increasingly destructive nature of fire.

### **Related Reports – Topical Relation: Disrupted Fire Flow Path**

[05-510](#)  
[10-653](#)

[07-895](#)  
[10-1049](#)

[09-789](#)

[10-222](#)

The National Fire Fighter Near-Miss Reporting System is looking for report submissions regarding opposing hoseline incidents. Submit your account to [www.firefighternearmiss.com](http://www.firefighternearmiss.com) today to do your part in preventing a future occurrence.

*Note: The questions posed by the reviewers are designed to generate discussion and thought in the name of promoting firefighter safety. They are not intended to pass judgment on the actions and performance of individuals in the reports.*

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## National Fire Fighter Near-Miss Report

**Report Number:** 13-0000305

**Report Date:** 02/25/2013 1440

### Synopsis

Simultaneous interior/exterior attack.

### Event Description

Note: Brackets denote reviewer de-identification.

On [date and time omitted], units responded to a reported residential fire. The fire was reported by neighbors. Initially, there was some confusion regarding the address, which was cleared up quickly.

A staff unit arrived on scene to find heavy smoke and fire showing from the B/C corner of a two-story duplex during the 360. The staff unit advised over the radio that the residence was "all clear" of potential civilian victims. Shortly after the staff unit went on scene, the first-in engine arrived and established a personnel staging area. The first-in engine's crew began to deploy two 1 3/4" lines for an offensive attack.

A rescue unit arrived and the captain assumed command. A mutual aid engine and mutual aid battalion chief had responded as automatic mutual aid. The mutual aid engine was directed to obtain a water supply by command. Crews from the first-in engine, med unit and rescue began an aggressive interior attack with a backup line manned on Side "A". The first-in engine's crew along with personnel from the med unit, and rescue quickly extinguished the fire on Division "1" and began moving to Division "2" to search for and extinguish the fire on Division "2".

The first-in battalion chief and others arrived on scene. After a face to face with the battalion chief, the captain was assigned Interior and the battalion chief assumed command. A lieutenant was initially assigned to Safety by the captain when he was incident commander. The mutual aid battalion chief was assigned to Safety by the battalion chief and lieutenant (Safety) was changed to Accountability. Assignments were made for additional lines manned by the mutual aid engine and RIT (Ladder crew). The third-in engine's crew was assigned to ventilation of the Division "2" windows on Side "A" and the roof. Command elected to deploy the second rescue's crew into a window near the "B/A" corner of Division "2" to assist interior crews with opening up the ceiling and walls. Additionally, the third-in engine's crew was advised to flow a hand line into the roof vent at the peak of the roof of Side "A". The line was also directed into the window of the involved part of the structure. Conditions became untenable where the second rescue's crew was and the captain gave the order for his crew to exit the structure by way of the ground ladder. At one point this crew was engulfed in fire prior to exiting the structure. One member fell about 15 feet when he was executing a ladder bailout. Command advised all members to exit the structure immediately to initiate defensive operations. After all members had exited the structure a PAR was conducted and confirmed. Defensive operations began and the main body of

fire was knocked down. Immediately following the knock down, interior operations commenced and all “hot spots” were extinguished. Salvage and overhaul operations were completed with the residence being turned over to the investigator.

### **Lessons Learned**

We learned that although it does not appear that flowing a handline into a gable vent would have such a detrimental effect on the fire operations; it does and therefore should not be done. Also, we should review our tactics on scene and seek the advice of others if we are not certain that what we are doing is going to assist in extinguishment or put fire personnel in undue danger. It is best to have more than one person at the command post or an operations officer so we are sure that the procedures are being followed.

As firefighters, we must always be aware of conditions we are entering and how rapidly they may or may not be changing.

- Accountability**

A Lieutenant was assigned as the Accountability Officer after he was assigned as the Incident Safety Officer.

- Safety Officer**

Early assignment of an Incident Safety Officer was done. The mutual aid Battalion Chief was later assigned to this position.

- Communications Model**

Radio communications are a must in order for all members to be aware of what is happening on the scene. It is imperative for the receiver to repeat them over the radio to ensure reception.

- Tactical Considerations**

Exterior hose streams directed into the structure should not be used while interior operations are taking place.

A master stream should be considered to obtain a quick knock down and facilitate interior operations when a defensive attack is used.

- Preplanning**

All stations that have “Mill Houses” in their assigned areas must remember the construction type and hazards associated with them. Many of these have been remodeled but the tongue and groove construction is usually covered up by remodeling. Also, these residences have large open areas under the hip roof construction on Side “C” which will allow combustion products and fire to travel unimpeded.

- On-Deck Area**

Early recognition that additional resources most likely will be needed should be noted and called for prior to the depletion of on scene resources.

- Apparatus positioning**

The position of all responding vehicles must be carefully chosen; if all reports of fire are treated the same, the spotting of vehicles will become second nature. Care must be taken when laying 5" hose to move the hose to the curb prior to charging if at all possible.

- Communications Infrastructure

Some portable radios were not operating properly due to being wet. This is an ongoing problem.

- Evacuation Procedures

Personnel should exit the structure as soon as command determines that a change to defensive operations should commence. Some personnel were hesitant to exit due to concerns that members may be lost in the structure. This is understandable but, we must remain disciplined in order to maintain the highest safety of all personnel on the scene. Correct procedures for these situations are found in our SOP.

- Ladder Placement

Ladder placement for rescue should be at the bottom of the window seal. The ladder had to be adjusted for rescue after it was placed in service on side "B" for crews to enter the structure.

- Progress Reports/ Situational Awareness

All members should maintain a heightened awareness of their situation and the conditions within a structure. If the conditions deteriorate or the structure becomes unstable, command should be updated as soon as possible.

Regular and timely updates of progress or conditions within the structure are required to enable command to make necessary tactical decisions.

## **Demographics**

Department type: Paid Municipal

Job or rank: Lieutenant

Department shift: 24 hours on - 48 hours off

Age:

Years of fire service experience:

Region:

Service Area: Suburban

## **Event Information**

Event type: Fire emergency event: structure fire, vehicle fire, wildland fire, etc.

Event date and time: 01/02/2013 1507

Hours into the shift:

Event participation: Told to and submitted by safety officer

Weather at time of event: Cloudy and Dry

Do you think this will happen again?

What were the contributing factors?

- Decision Making
- Situational Awareness
- Command
- Communication

What do you believe is the loss potential?

- Lost time injury
- Property damage
- Life threatening injury