



Table Top Training Drills

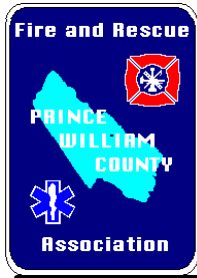
Roadway Incidents

January 2011

Roadway incidents can be a dangerous area required to operate for fire service personnel. Whether it is an intersection in our town or a divided highway, the danger of “the other driver” is ever present. It is the responsibility of everyone at the accident scene to remain alert, visible and cautious. Consider near miss report number [09-1145](#) located at www.firefighternearmiss.com. This is just one of many near- miss occurrences that personnel encounter on a daily basis. Place yourself and your responding crews at the scene, discuss your departments SOP/SOG’s and consider the attached safety procedure currently being used by Prince William County Department of Fire and Rescue (VA). Thank you to Prince William County Department of Fire and Rescue (VA) for sharing their procedure with Near-Miss. For additional operational safety procedures and other valuable resources please visit www.respondersafety.com.

Event Description

We were at the scene of a motor vehicle collision on the interstate, during icy conditions. Members of the department were in the process of laying out equipment. This was between the two pieces of apparatus needed to remove the roof of a car that had hit the ledges of the side of the roadway and came to rest of the driver’s side of the car. We had positioned our rescue truck just past the scene of the incident and the engine just prior to the incident to protect the scene and members, as is our protocol. Both trucks were off the driving portion of the roadway and well within the ten foot shoulder. The roadway was very slippery. The State Police had yet to arrive on scene, and road flares were in place behind our vehicles, prior to the scene. Another vehicle, being operated at a speed greater than what the road conditions would allow, and using a cellular phone, lost control and started to slide. One member, who happened to hear and see this yelled, to the other members, who were laying out the equipment, to look out. These members ran away from the equipment in the direction of the ledges along the side of the interstate. They were missed by the vehicle by split seconds. The vehicle, while out of control, hit the front of the engine, which slowed the car down a great deal, but it still drove into the equipment that was being laid out. The power unit was knocked into the ditch, and the spreader unit was run over along with a section of hose. No one was injured, including the operator of the out of control vehicle. The original vehicle was stabilized, the roof was removed, and the patient was removed.



PRINCE WILLIAM COUNTY
FIRE AND RESCUE ASSOCIATION
PROCEDURE

NUMBER: 5.5.4
PAGE: 1 of 6
EFFECTIVE DATE: 10/21/98
ISSUED BY: <i>MBM</i>

CHAPTER: 5-Emergency Operations _____	SUBJECT: Scene Safety – Apparatus Positioning at Roadway Incidents
SECTION: 5-Fire	

1. **Purpose:**

- 1.1. The purpose of this policy is to provide the incident officers and members of the Prince William County fire and rescue service a uniform guide for safe operations at incidents occurring on the highway system. It is intended to serve as a guideline for decision making and can be modified by the incident officer as necessary to address existing incident conditions.
- 1.2. It shall be the policy of the Prince William County fire and rescue system to position apparatus at the scene of emergencies in a manner that best protects the work area and personnel from vehicle traffic and other hazards.

2. **Authority:**

- 2.1. This procedure is established under the authority of the Fire and Rescue Association pursuant to Section 9-85(a) of Article VI, Code of Prince William County which states that the Association shall have the duty and responsibility of establishing uniform procedures and policies for the provision of a comprehensive fire and rescue system within the County.

3. **Definitions:**

- 3.1. **Traffic Cones/Flares** Traffic devices assist in channeling traffic away from the incident. Placement/removal of cones/flares shall begin closest to the incident, working toward on-coming traffic. They shall be placed diagonally across the roadway and around the incident. See Figures 3 - 6.

- 3.2. **Glare Vision and Recovery** Glare vision and recovery is the amount of time required to recover from the effects of glare once a light source passes through the eye. It takes six seconds going from light to dark and three seconds going from dark to light for vision to recover. Eye glare and recovery needs to be kept to a minimum.
- 3.3. **White Light** High beams, wig wags, rotators, etc.
4. **Procedure:**
- 4.1. Safety Premises
- 4.1.1. Emergency personnel are at great risk while operating in or around moving traffic; therefore, certain axioms must be practiced to protect ourselves and other personnel because vehicular traffic is unpredictable:
- Engage in proper protective parking.
 - Wear high visibility reflective vests.
 - Reduce motorist vision impairment.
 - Use traffic cones/flares.
 - Establish adequate on-scene communications.
- 4.2. Approach and Arrival
- 4.2.1. The proper spotting and placement of apparatus is the joint responsibility of the driver and officer. The proper positioning of apparatus at the scene of an incident ensures other responding resources of easy access, a safe working area, and helps to contribute to an effective overall operation. Safety of the crew is foremost while operating in emergency and non-emergency situations.
- 4.2.2. Positioning (see attached figures 3 through 6).
- 4.2.3. Standard practice should be to position apparatus in such a manner as to ensure a safe work area at least one lane wider than the width of the incident (Figure 3). This may be difficult to accomplish on secondary roads; therefore, position the apparatus in such a manner as to provide the safest work area possible.

4.3. Response Vehicles

- 4.3.1. A work zone should be established to allow EMS units and rescue squads to position/egress in close proximity of the incident. The engine placement should be a reasonably safe distance from the incident, utilizing it as a shield to block those lanes necessary. The engine shall be placed at an angle to the lanes with the pump panel toward the scene and wheels turned away from the incident work zone in the event of being struck. As soon as possible, the engine driver/operator should position traffic cones/flares.
- 4.3.2. Cones/flares shall be used whenever emergency vehicles are parked on or near any road surface. Utilize the following chart to determine the furthest cone/flare from the incident scene. Intermediate distance between cones/flares will be based on situation, i.e., time of day, weather, traffic flow, etc.

Posted Speed Limit	Distance
35 mph	100 ft
45 mph	150 ft
55 mph	200 ft
>55 mph	250 ft plus

Figure 1

- 4.3.3. A four point system (Figure 2) will be used whenever vehicles are parked in an area that does not require the channeling of traffic. One cone will be placed diagonally from each corner of the vehicle, approximately four feet. This will assist the motorist and incoming units to identify the work zone.
- 4.3.4. Always position apparatus to protect the scene, patients, emergency personnel, and provide a protected work area. Where possible, angle apparatus at 45 degrees away from the curbside or shoulder. This will direct motorist around the scene (Figure 3-6). Apparatus positioning must also allow for adequate parking space for other response vehicles (if dispatched), and a safe work area for emergency personnel. Allow enough distance to prevent a moving vehicle from knocking fire apparatus into the work area.

- 4.3.5. At intersections or where the incident may be near the middle of the street, two or more sides of the incident may need to be protected. Block all exposed sides. Where apparatus is in limited numbers, prioritize the blocking from the most critical to the least critical (Figure 4).
 - 4.3.6. If first arriving engine company determines a charged hoseline may be needed, angle the engine so the pump panel is “downstream” on the opposite side of the on-coming traffic (Figure 3).
 - 4.3.7. The initial company officer must assess the parking needs of later-arriving fire apparatus and specifically direct the parking and placement (staging) of these vehicles as they arrive to provide protective blocking of the scene. This officer must operate as the initial safety officer.
 - 4.3.8. Crews should exit the curb/shoulder side or non-traffic side of the apparatus whenever possible. Always look before stepping out of apparatus or into traffic areas. Keep an eye on traffic and walk as close to the apparatus as possible when moving around apparatus adjacent to moving traffic.
- 4.4. Other Vehicles and Support Agencies
- 4.4.1. Once sufficient fire apparatus have “blocked” the scene, park/stage unneeded vehicles off the street whenever possible. Bring in ambulances one or two at a time and park them in a safe location at the scene. This may be “downstream” from other parked apparatus or the ambulance may be backed at an angle into a protected loading area to prevent working in or near passing traffic. At vehicle accidents in residential areas, park ambulances in driveways for safe loading. If driveways are inaccessible, park ambulances to best protect patient loading areas (Figures 3-6).
 - 4.4.2. At major intersections, a call for additional police response may be necessary. Provide specific direction to the police officer as to what your traffic control needs are (Figure 4).

4.5. Limited Visibility Considerations

4.5.1. For nighttime operations, reduce the amount of white light on apparatus. This will reduce the blinding effect to approaching vehicle traffic. Other emergency lighting should be reduced to yellow lights and emergency flashers where possible. (Reference Section 3.2.)

4.6. Interstate Operations

4.6.1. The interstate can be completely shut down as needed for safety in operations. The incident commander should integrate command with VDOT and state police.

4.6.2. For interstate emergencies, block the scene with the first-arriving non-transport apparatus to provide a safe work area. (See Figures 3-6.) The initial company officer or command must thoroughly assess the need for apparatus on the interstate and their specific locations. Units should be directed to specific parking locations to protect the work area, patients, and emergency personnel.

4.6.3. Other apparatus should be parked downstream when possible. This provides a safe parking area. Staging of ambulances off the interstate may be required. Ambulances should be brought into the scene one or two at a time. A safe loading area must be established.

4.7. Clearing Traffic Lanes

4.7.1. While the safety of emergency personnel is the paramount concern for the officer-in-charge, the flow of traffic must be taken into consideration at all times.

4.7.2. When operational phases (extrications, medical care, and fire suppression) are completed, apparatus should be repositioned to allow traffic to flow on as many lanes as possible.

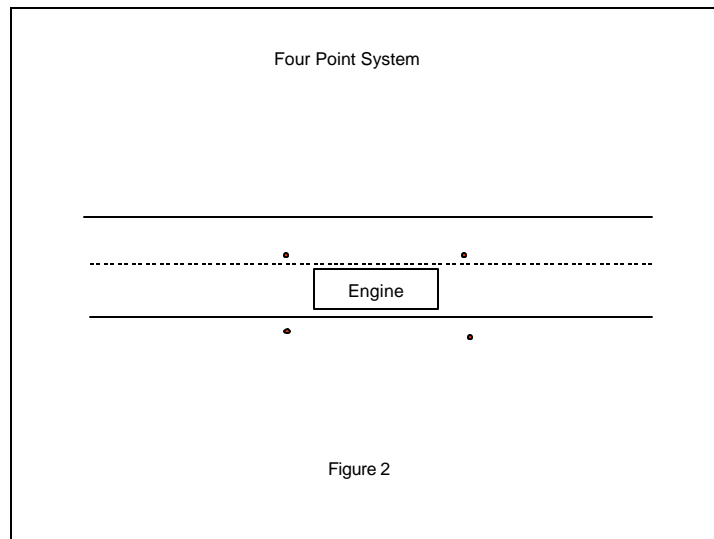
5. **Responsibilities:**

5.1. **First Arriving Tactical Unit Officer**

Units are positioned according to guidelines and all incoming units are made aware of apparatus positioning requirements. This officer will also act as the initial safety officer.

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Attachment (to Association procedure Scene Safety – 10/21/98)



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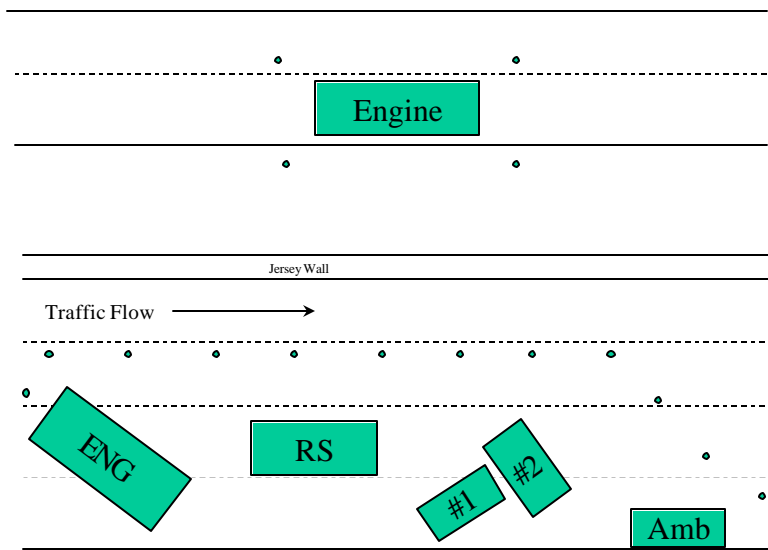
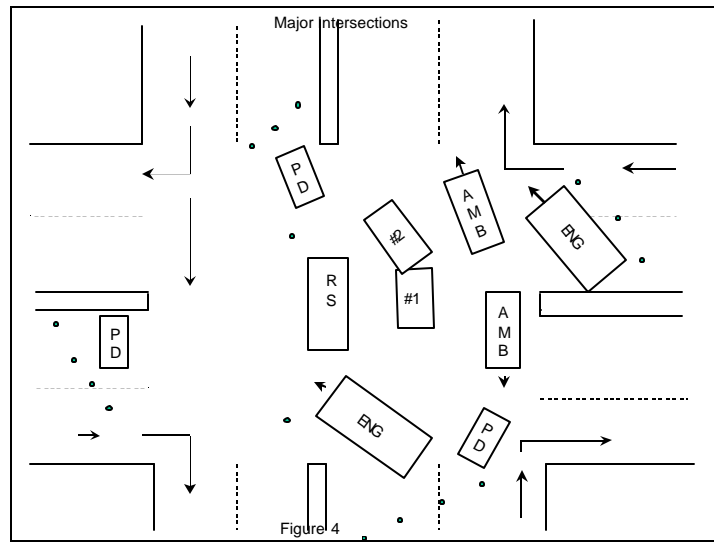
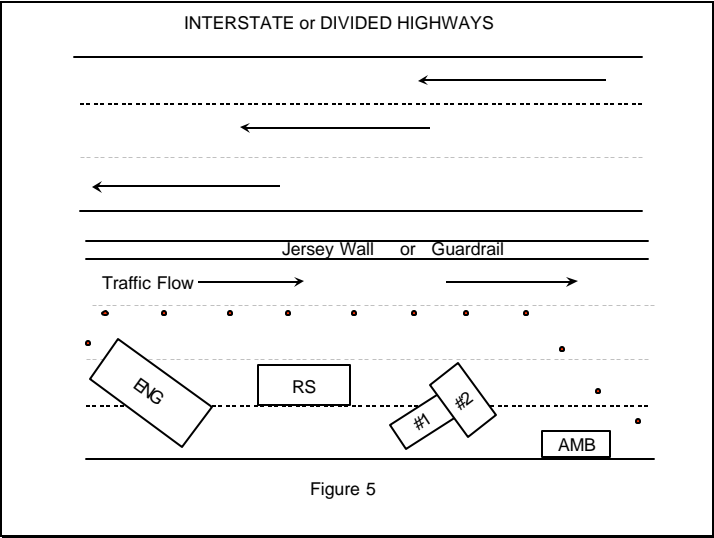


Figure 3

Attachment (to Association procedure titled Scene Safety – 10/21/98)



Attachment (to Association procedure titled Scene Safety – 10/21/98)



4 Lane Divided Highway or Interstate

Attachment (to Association procedure titled Scene Safety)

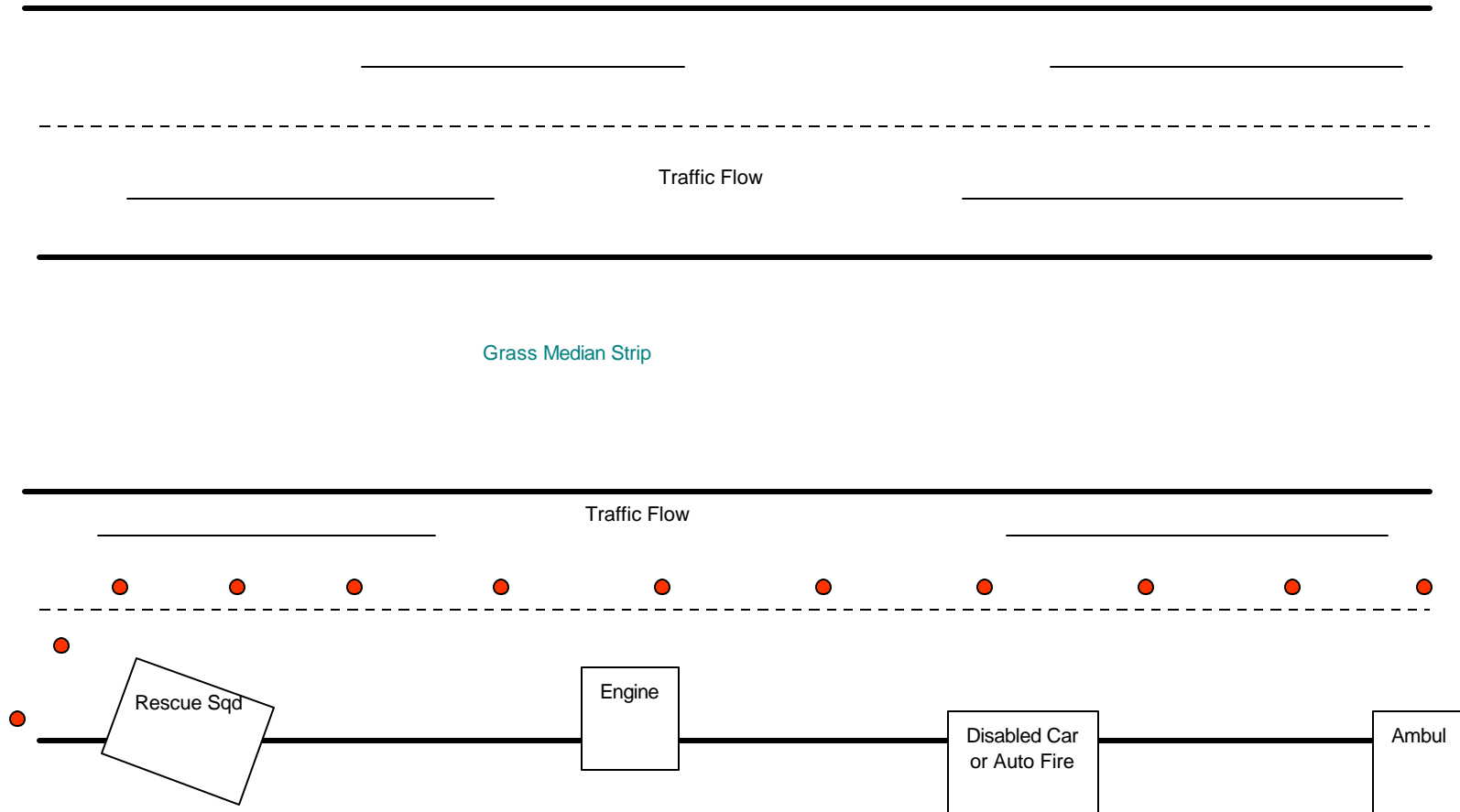


Figure 6