SAN FRANCISCO FIRE DEPARTMENT
DIVISION OF TRAINING

TRAINING BULLETIN

TRAINING BULLETIN 21-1

SCENE SAFETY – TRAFFIC CONTROL

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Introduction

Every time a vehicle makes contact with our equipment at a call it is disruptive to the incident and it can cause serious injury or death. Motorists that run into our apparatus or over our hose lines despite all of the laws and warning lights could just as easily strike fire or EMS personnel. Nationally "Firefighter struck by a vehicle" is one of the leading causes of incident fatalities (NIOSH).

Drivers of motor vehicles are increasingly distracted and often in a hurry. Motorists accustomed to a clear unobstructed roadway may not recognize closed lanes or emergency responders on or near the roadway.

Whether the incident is a single resource (Engine responding to a leaking hydrant) or a 5th alarm fire, scene safety is a priority. Scene safety must be evaluated on arrival and reevaluated throughout the incident. In order to control our scenes, we must control access to and from that scene, whether it be civilian vehicles, mass transit, bicycles, pedestrians, or any other form of transportation.

Purpose

This Training Bulletin shall serve as a guide in the management and control of traffic, ingress and egress, at any incident. This Training Bulletin will identify Fire Department apparatus placement and traffic control practices that provide for the safety of personnel operating at emergency scenes.

The following general actions shall be employed at all incidents for the safety of responders:

- Never trust the traffic.
- Engage in protective apparatus placement.
- Report any observed unsafe traffic behavior immediately.
- Control the flow of traffic with cones and flares.
- Reduce motorist vision impairment by using warning lights purposefully.
- Use appropriate PPE. (General Order 08 A-91, *High Visibility Safety Vests*)
- At large or complex incidents establish a Unified Command if needed or identify a liaison to interact with SFPD, Traffic Control Officers or CHP.

- At incidents where bus or trolley traffic is to be controlled, an SFMTA supervisor shall be requested through the Communications Center.
- Upon arrival of SFMTA supervisor, the Incident Commander (IC) or their designee shall confirm SFMTA's understanding of our traffic control plan and shall note their arrival in the CAD Record.
- Reassess traffic safety at least every 15 minutes and revise as necessary.

Traffic Safety Considerations

It shall be the policy of the SFFD 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.

For the purposes of this Training Bulletin, the "incident" includes all streets where fire department personnel are operating. This expressly includes any adjacent streets where hose has been laid on the ground.

Listed below are guidelines for safe operations in or near moving vehicle traffic:

- An acute awareness of the high risk of working in or around moving traffic shall be maintained at all times. Never trust moving traffic. Always look before you step. Always keep an eye on the traffic.
- Whether hose lines have been deployed in the street or not, traffic moving through incidents shall be controlled.
- ICs shall determine the need for additional resources by estimating the potential scope (footprint, duration, expansion, etc.) of the incident.
- NO TRAFFIC shall be permitted through an incident without the permission of the IC.
- Traffic cones or other traffic control devices to direct traffic shall be placed. This should be initiated by the first arriving company and expanded, if needed. Always place and retrieve cones while facing on-coming traffic.
- Apparatus operating at the end of a block shall place a traffic cone as a warning to civilian drivers. SFFD apparatus responding past these warning cones will avoid them if safe to do so without delaying their response. Flares may be placed between cones to increase nighttime visibility.
- If it is determined that flares be placed as a warning to freeway traffic, they shall be placed at least one hundred feet back from the incident. It is recommended that flares be placed using the 4x method. Utilize the anticipated speed of oncoming traffic and multiply x 4. This results in the distance in feet that flares shall be placed. (i.e., 60 mph x 4 = 240. Place flares at least 240' prior to incident)

- Incidents on a curve may require flares to be placed at an even greater distance to provide for scene safety. Proximity to potential flammable materials shall be avoided.
- Drivers should utilize the directional lights (if available) to guide civilian drivers away from the scene.
- During DAYTIME operations, all emergency lights shall be on to provide warning to drivers. On older apparatus, it may be necessary to shut off the lightbar when the rig is stationary.
- For NIGHTTIME operations, turn off headlights. This reduces the blinding effect to approaching vehicle traffic. Other emergency lighting should be reduced to yellow lights and emergency flashers where possible.
- 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 of the scene. Where apparatus are limited in number, prioritize blocking the most critical direction of traffic. (see Image 1)

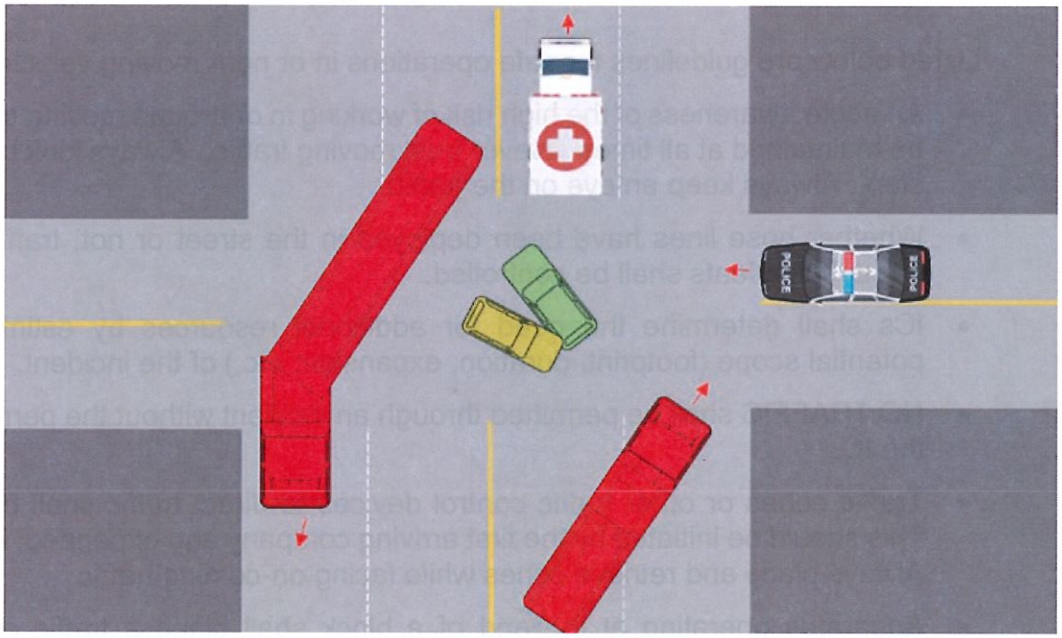

Image 1

- Apparatus positioning shall allow for adequate space for other apparatus, if needed, and a safe work area for emergency personnel. The initial company officer may need to direct the placement of these vehicles as they arrive to provide protective scene safety measures.
- Once enough fire apparatus have "blocked" the scene, park or stage unneeded vehicles off the street/out of immediate working area whenever possible. Ensure efficient and safe placement of ambulances. Ambulances may be backed at an angle into a protected loading area to prevent working in or near passing traffic.

- Crews should exit the curb side or non-traffic side of the vehicle whenever possible. Always look before opening doors, stepping out of apparatus, or into any traffic areas. When walking around fire apparatus parked adjacent to moving traffic, keep an eye on traffic and walk as close to fire apparatus as possible.
- When traffic is permitted to move through or adjacent to an incident in low light conditions, consider placing flares where safe and appropriate to do so. Placing flares adjacent to and in combination with traffic cones greatly enhances nighttime scene safety. Use spotters if available.
- SFPD and Parking Control shall be requested through communications at the discretion of the IC. When utilized for traffic control, specific direction shall be provided to officers as to exactly what your traffic control needs are.
- If any non SFFD vehicles are permitted to pass through an incident, they shall only do so with the approval of the IC and after a radio transmission has been made to all companies on the scene. All vehicles must be granted **"Safe Clearance"** to proceed. Excess radio traffic is disruptive to active incidents and should be considered a reason to deny requests for traffic to pass.

California Vehicle Code 12708

"No person shall drive or propel any vehicle or conveyance upon, over, or across, or in any manner damage any fire hose or chemical hose used by or under the supervision and control of any organized fire department."

- Although it is illegal to drive over both dry or charged hose lines, motorists may do just that. Precautions must be taken to ensure that hose lines are not run over.
- Unless absolutely necessary, no vehicles shall be permitted to drive over fire hoses, charged or dry! Only the IC may approve vehicles to pass over hose lines. Approved vehicles may only do so after a radio transmission has been made to all companies on the scene.
- The speed of vehicles shall be limited to 5 mph or less and each vehicle shall be monitored by a spotter to ensure hose lines are not interfered with.
- Be aware: uncharged hose lines are more likely to get caught between dual tires than charged hose lines.

Incidents in Buildings

- There are times, particularly at greater alarm fires, when SFFD apparatus running over hose lines cannot be avoided. However, these instances may be reduced when hose leads are properly placed.
- Whenever possible, the first hydrant lead should be taken on the same side of the street as the fire, with the hose lead laid parallel to the curb. Other apparatus crossing in front of the fire will not have to drive over this lead.

- Should no hydrant be available on the same side of the street as the fire, a hydrant on the opposite side of the street may be taken. The hose lead should be laid parallel to the curb on the hydrant side of the street up to a point opposite the fire where it should cross. Other apparatus reporting will not have to drive over this lead unless they must pass the hose line where it crosses the street to get to their assignment. (see Image 2)

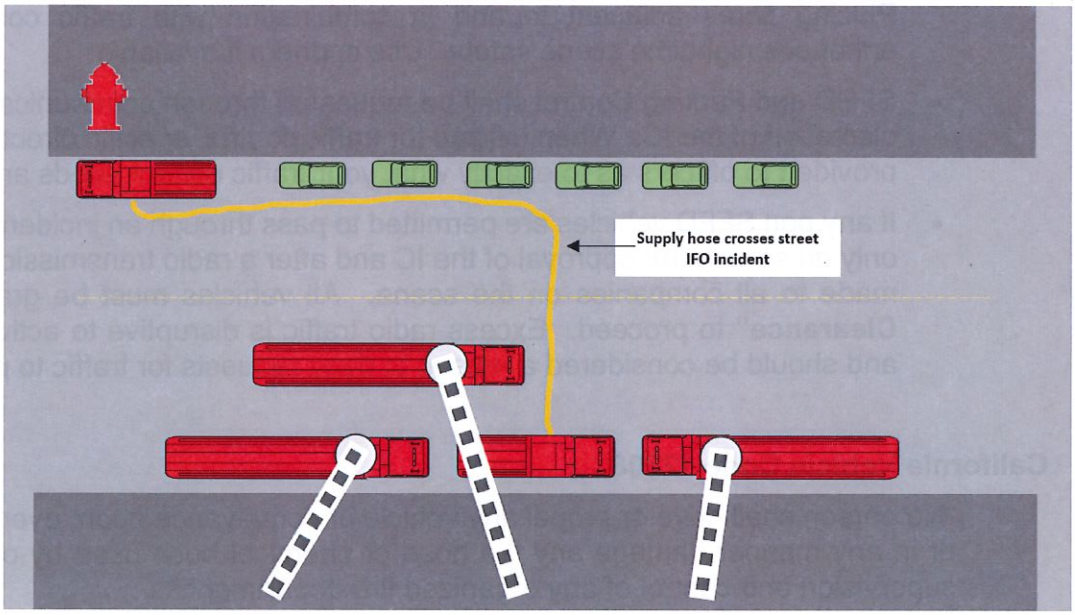

Image 2

- Whenever possible, hose leads should be laid across a street only in the vicinity of a fire, or at intersections in the case of exceptionally long leads.
- When fire hose is, or may be, deployed on the street, the street **must be closed to through traffic.**
- Any adjacent streets where hose has been laid on the ground shall be considered part of the incident where traffic shall be controlled.
- If practical, at incidents where the engine will be in pump, the engine shall be angled so that the pump panel is "downstream," on the opposite side of oncoming traffic. This will protect the pump operator. (see Image 3)

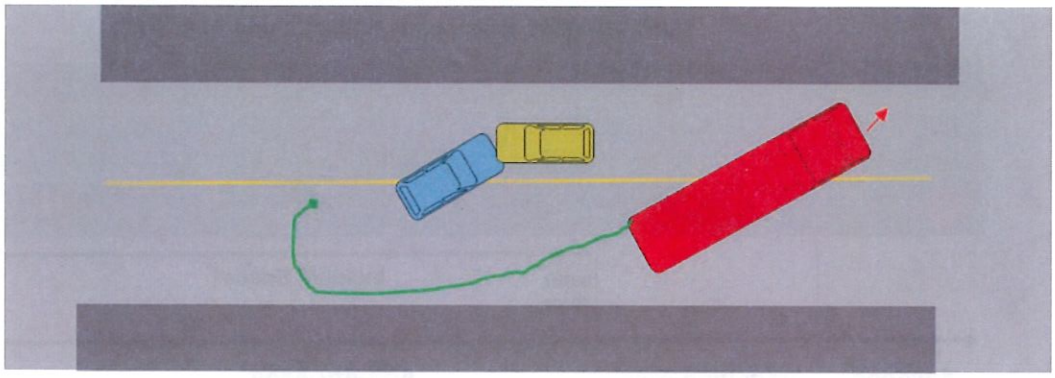

Image 3

Incidents on Roadways

- At incidents occurring in a roadway, 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 curbside. This will direct motorists around the scene. (see Image 3)
- Drivers should turn the front wheels away from the incident scene. This will ensure that, should the Department vehicle be rear ended, it will be less likely to be pushed into the active incident. (see Image 4)

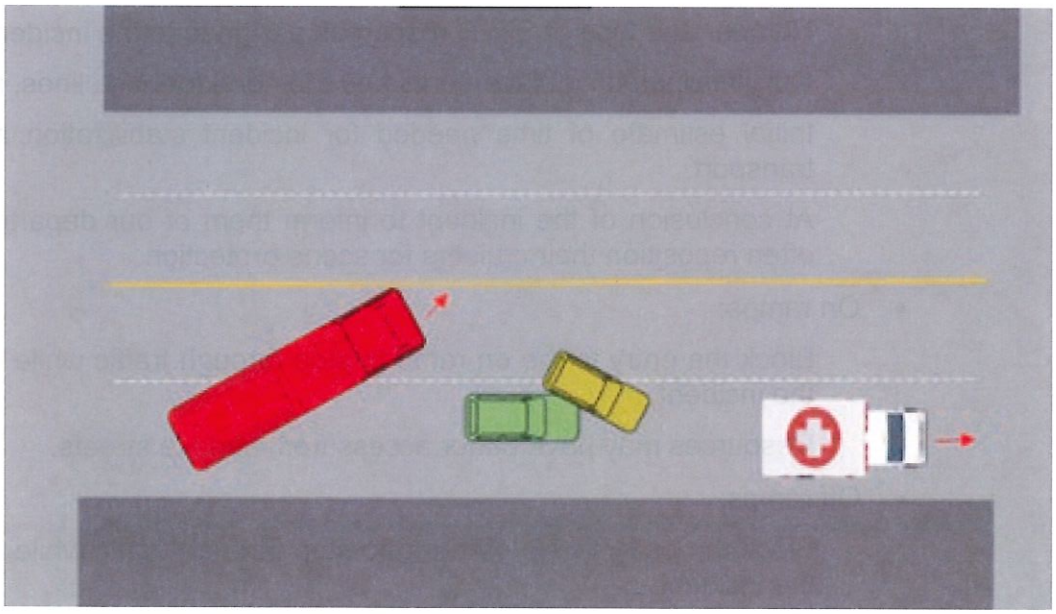

Image 4

- When positioning apparatus to protect the scene, be sure to protect the work area also. The area must be protected so that patients can be extricated, treated, moved about the scene, and loaded into Ambulances safely.

Traffic Incident Management Area (TIMA)

also known as a Temporary Traffic Control Zone (TTC)

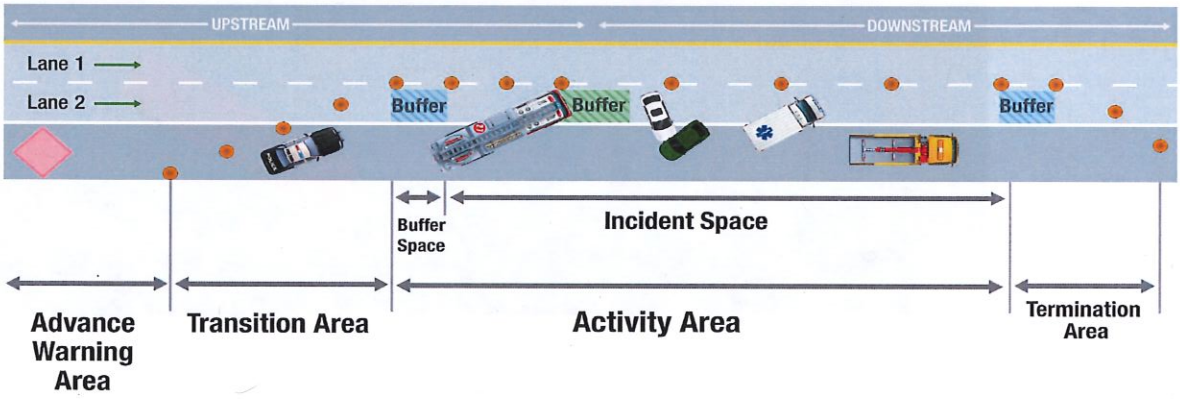

Image 5

Incidents on Freeways

- Officers are responsible for their crew's use of high visibility safety vests any time they are operating in proximity to freeway traffic.
- Request CHP if not already on scene.
- CHP has patrol jurisdiction over all California freeways.
- Communicate face to face with CHP to inform them of:

  Number and type of SFFD resources assigned to the incident.

  Our anticipated rig placements and the need for hose lines, if any.

  Initial estimate of time needed for incident stabilization and patient transport.

  At conclusion of the incident to inform them of our departure as they often reposition their cruisers for scene protection.

- On ramps:

  Block the entry to the on ramp to stop through traffic while engaged in the incident.

  Resources may have better access from surface streets.

- Off ramps:

  Block the entry to the off ramp to stop through traffic while engaged in the incident.

  If first arriving units confirm the incident is entirely off of the freeway it may be advisable to direct other units to respond from surface streets.

  Hand responsibility for the off ramp over to CHP prior to releasing control of through traffic.

- Clear freeway incidents quickly once they are stabilized and patients are transported.

Conclusion

Incident Commanders are ultimately responsible for incident safety. However, all responders to an incident are responsible for scene safety. Firefighting and Emergency Medical Response come with inherent risks. Therefore, hazards that can be, should be mitigated. It is all of our responsibility to take care of one another and the public we serve and maintain situational awareness throughout every incident.

INITIAL ACTION ITEMS

- ☐ Engage in protective apparatus placement
- ☐ Control traffic moving through incidents (mandated even if no hose lines are led)
- ☐ Don high visibility apparel
- ☐ Estimate potential magnitude, expected duration, and vehicle queue (backup) length
- ☐ Establish Incident Command/Unified Command Post
- ☐ Ensure hose on ground is out of traffic's path; only crossing street IFO incident, when possible
- ☐ Assign personnel to traffic control and to observe moving traffic
- ☐ Use cones and flares to control traffic (*4x Method* in higher speed areas: MPH x 4 = __feet prior to incident)
- ☐ Identify and request needed resources (HazMat, PD/DPT, Muni, CHP, DPW, medical examiner, etc.)
- ☐ Stage vehicles not active in response off-roadway/out of immediate working area when able
- ☐ Position blocking apparatus to protect responders
- ☐ Turn front wheels in direction away from incident when parked. This will ensure that, should the Department vehicle be rear ended, it will be less likely to be pushed into the active incident.
- ☐ Drivers should utilize the directional lights (if available) to guide civilian drivers away from the scene
- ☐ DAYTIME: leave all emergency lights on to provide warning to drivers. Older apparatus may need the lightbar shut off when the rig is stationary.
- ☐ NIGHTTIME: turn off headlights. Emergency lighting should be reduced to yellow lights and emergency flashers where possible.