

Recommended Practice for First Responder Familiarization of Transit Systems

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Abstract: This Recommended Practice covers familiarization of Transit Systems to First Responders.

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Introduction

Introduction

(This introduction is not a part of *APTA RP-SEM-002-08, Recommended Practice for First Responder Familiarization of Transit Systems.*)

This Recommended Practice for First Responder Familiarization of Transit Systems represents a common viewpoint of those parties concerned with its provisions, namely transit operating/planning agencies (transit systems), and general interest groups. The application of any standards, practices or guidelines contained herein is voluntary. In some cases, federal and/or state regulations govern portions of transit systems' operations. In those cases, the government regulations take precedence over this Recommended Practice. APTA recognizes that for certain applications, the practices implemented by transit systems may be either more or less restrictive than those given in this document.

The purpose of an APTA Security and Emergency Management Recommended Practice is to ensure that each transit system achieves a high level of safety and security for passengers, employees and the public. APTA Security and Emergency Management Recommended Practices represent an industry consensus of acceptable security and emergency management practices that should be used by a transit system. However, APTA recognizes that some transit systems have unique aspects of their operating environment, which when combined with levels of service that must be provided, may make strict compliance with every provision of an APTA Security and Emergency Management Recommended Practice impossible.

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Recommended Practice for First Responder Familiarization of Transit Systems

1. Overview

This document serves as a tool to identify appropriate training for first responders to transit system emergencies.

1.1 Scope

This document identifies a typical list of transit system assets that first responders need to understand in order to properly respond to incidents. The list is not intended to be all-inclusive, but rather representative of the more common elements found in most transit systems. Individual transit systems may have unique assets requiring familiarization that should be addressed locally.

1.2 Purpose

The purpose of an emergency response personnel familiarization program is to provide emergency responders with basic transit system information in regards to vehicles, facilities and equipment. The program provides emergency response personnel with a better understanding of the transit system and in so doing allows for a better coordinated and unified response to transit-related emergencies. The training will vary depending on the function of the response agency. Training should be structured with a primary focus on access to transit vehicles and facilities for rescue and medical attention. It should also include familiarization with possible system hazards such as alternative fuels, third rails or overhead power sources.

2. References

Connecting Communities Public Transportation Emergency Preparedness Workshops:
<http://www.connectingcommunities.net/ws.html>

3. Definitions, abbreviations and acronyms

3.1 Definitions

3.1.1 drill: Supervised activity to test a procedure which is a component of the overall Emergency Management Plan. A drill may be a step leading towards an exercise, but may be an actual field response. The true value of a drill lies in it's ability to highlight a limited portion of the overall Emergency Management Plan and to examine it closely.

3.1.2 first responder: Those individuals who in the early stages of an incident are responsible for the protection and preservation of life, property, evidence and the environment.

3.1.3 tabletop exercise: Exercise using paper (Powerpoint) and verbal scenarios to evaluate the Emergency Management Plan and procedures effectiveness with a minimum amount of stress. Paper drill intended to demonstrate the working and communication relationships of functions found within the plan.

3.2 Abbreviations and acronyms

| | |
|-------------|-------------------------------------|
| CNG | compressed natural gas |
| EOC | Emergency Operations Center |
| EOM | Emergency Operations Management |
| ICS | Incident Command System |
| NIMS | National Incident Management System |
| UASI | Urban Area Security Initiatives |

4. First responder familiarization of transit system

Experience has shown that anytime there is an incident on a transit system that requires action from first responders, it is mutually beneficial if the first responders are knowledgeable about the transit system environment. This awareness is necessary for the safety of the first responders, especially where there are inherent hazards found on the transit system, such as high voltage on rail transit systems, or high-pressure compressed natural gas (CNG) buses. Such awareness is also helpful to the passengers, for their safety and to minimize any service disruptions that occur as a result of the incident response.

4.1 Audience

The target audience for first responder familiarization includes but is not limited to local police, SWAT, bomb squad, transit security, fire, hazmat, and civil support teams. Others may be included as determined by local entities. The transit agency has its own first responders, and much of the information here applies to them as well. These guidelines emphasize outside agencies, in large part because they are not working in the transit system environment on a daily basis as are the transit system employees.

4.2 Organization

Transit system assets are categorized into three groups: facilities, equipment and vehicles. Another category of interest to first responders is operational procedures, included here to emphasize the importance of understanding how the transit system assets are operated or utilized. First responder training should cover all four in a level commensurate with the involved hazards and complexities at each transit system.

4.3 NIMS and ICS

The National Incident Management System (NIMS) and Incident Command System (ICS) are federally mandated programs that all first responders must know and practice. This includes the transit system staff who may serve as first responders. To the degree practical during the familiarization process, the unified command process in the transit environment should be discussed.

4.4 Familiarization training

4.4.1 Types of familiarization training

The types of first responder familiarization training may differ among transit agencies, but the end goal is the same. Among the more common training options are hands-on (field), classroom, tabletop exercises and drills. Hands-on training involves a field demonstration of transit system facilities, equipment or vehicles. This provides the first responders with a look of the actual system. Classroom training typically consists of lectures, discussions, presentations or demonstrations of scale models of actual equipment, among other formats. The benefit of this type of training is that it can be done without any impacts to revenue service operations. Tabletop exercises and drills are opportunities for the transit system staff and first responders to pre-plan operational responses to various potential scenarios that may occur on the transit system. These are often done once the transit agency has provided classroom or hands-on training.

As a component of emergency response drills, transit systems should include hands-on vehicle familiarization training to emergency response personnel. They should also provide orientation of key facilities and system components and structures by conducting walking tours to point out vital features and to highlight the specific physical configuration of each segment of the system.

In order to reduce the effects of an emergency situation and to incorporate a basic level of operating knowledge into the emergency response, emergency responders should be made familiar with the operator's environment, as well as the safety and security mechanisms that are available to the operator. Details of fixed facilities should be provided, and responders should also be knowledgeable about the capabilities, limitations and typical hazards and failure modes associated with vehicles, train control, power and communications systems. Be sure all security sensitive information is properly identified, handled and controlled.

It is recommended that the transit system staff be involved in the physical familiarization training process.

4.4.2 Familiarization training tools

The transit system may provide documentation to first responders to help them better understand and retain information about transit system elements. This will enable first responder agencies to learn more about the transit system on their own time and schedule and facilitate dissemination of information to other employees. Typically, the transit agency may provide such information via hard copies or electronic files on CDs or DVDs.

4.4.3 Frequency of refresher/retraining program

First responder familiarization should generally occur often enough such that responders maintain adequate awareness and understanding of the transit system in case of an incident. Some factors that influence the frequency are system complexity, extent of system hazards, responder staff turnover rate, transit system resources and staffing.

In order to ensure a continued skill level in transit trained emergency responders, and to provide familiarization training to new-hire emergency response personnel, transit systems should schedule a continuous cycle of familiarization training, followed by periodic refresher training to inform emergency response agencies of changes in procedure or equipment. The refresher training can be provided through updates to the written and/or audio-visual training components as applicable, based on the transit system's modification, addition or elimination of system elements. Transit agencies should regularly review the training frequency needs with local first responders.

Retraining should be initiated whenever first responders need system re-familiarization. Some trigger points for retraining include the following:

- New line extensions
- New equipment
- System complexities
- First responder staff turnover
- Incidents or accidents
- New or revised operating procedures

It is recommended that transit systems reach out to local Emergency Operations Management or Emergency Operations Centers (EOM/EOC) to coordinate joint participation of emergency response agencies in emergency response exercises and drills so that all participating agencies test the effectiveness of the training received. Facilities, equipment and vehicles

4.4.4 Facilities

The following is a list of some of the more noteworthy facility elements that may be included in familiarization training:

- Physical address of transit facilities
- Evacuation plans/staging areas for all facilities
- Transit headquarters and other administrative and operational locations
- Rail and bus stations/terminals:
 - Station overview
 - Street-level ventilation grates
 - Fire department connections
 - Fire hydrants
 - Street level emergency exits
 - Ancillary equipment rooms
- Rail and bus vehicle storage yards and maintenance facilities
 - Bus fueling and defueling islands
- Rail and bus right-of-way alignment and access points:
 - Tunnels
 - Tunnel cross-passages
 - Tunnel emergency exits
 - Bridge and aerial structures
- Rail traction power substations
- Rail and bus control centers

- Transit/transfer centers
- Hazmat chemicals contained in any facility

4.4.5 Equipment

The following is a list of some of the more noteworthy equipment elements that may be included in familiarization training:

- Subway emergency ventilation fans and controls
- Emergency or local control panels
- Rail traction power shut-off systems

- Fire detection and suppression systems
- Hazardous gas/chemical detection systems
- CCTV
- Communications systems (e.g., inter-operable systems, radio systems, automatic vehicle location (GPS), etc.)

4.4.6 Vehicles

The following is a list of some of the more noteworthy vehicle elements that may be included in familiarization training:

- Passenger rail cars, buses and paratransit vans
 - Basic operation.
 - Access/egress
 - Shutdown
 - Power isolation
 - Emergency lighting
- Bus and rail maintenance vehicles

4.5 Operational procedures

Operational procedures should be included as part of the familiarization training to help first responders better understand how to respond to an incident. The following are examples of transit elements that need awareness by first responders:

- Access into transit system and trackway
- Power removal and operational consequences
- Train operations
- Single track train operation
- Bus bridges
- System shutdown
- Partial or full loss of communication systems

4.6 Designated training facilities

Designated training facilities can be a highly valuable asset to both the transit agency and first responders where training can be scheduled at any time without needing to coordinate with normal transit operations. Such scheduling flexibility enables greater numbers of first responders

to be trained during the daytime without the constraint of time. Where such facilities exist, they may include a mock-up of the transit system environment, to include transit vehicles. While most transit systems accomplish their training needs without such a facility, this option is included here for consideration as a long-range capital planning project.