Conducting Nonrevenue Vehicle Security Inspections

Abstract: This Recommended Practice establishes guidelines for implementation and oversight of a nonrevenue vehicle inspection protocol.

Keywords: inspection, nonrevenue, security, sweep, transit, vehicle

Summary: This Recommended Practice establishes guidelines for implementation and oversight. It includes criteria for basic searches by employees, law enforcement agents and security staff, including K9 teams scaled to transit agency size or transportation service(s) provided. This check is recommended to ensure that the vehicle is free from defects, tampering, sabotage, or suspicious objects and/or reconfiguration in the electromechanical systems and/or other components and wiring that could endanger passengers, employees or others, disrupt or deny service, or cause damage to surrounding vehicles or facilities. These procedures are in addition to routine pre-use operational safety inspections (i.e. fluid levels, tire pressures, etc).

Scope and purpose: This recommended practice is applicable to all transit agencies, regardless of size or mode. It is not intended to substitute for Federal, State, or local regulatory requirements. This document offers a baseline set of recommendations to assist transit agencies in their implementation of nonrevenue vehicle screening. The purpose of this recommended practice is to provide transit systems with guidance for security sweeps of nonrevenue vehicles or maritime vessels.

Summary of Recommendations:
- Conduct pre-use inspection in accordance with agencies policies and procedures
- Conduct periodic sweeps throughout the day
- Perform a post-use inspection
- Follow recommended techniques to improve sweeps and inspections

This Recommended Practice represents a common viewpoint of those parties concerned with its provisions, namely, transit operating/planning agencies, manufacturers, consultants, engineers 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 a rail transit system’s operations. In those cases, the government regulations take precedence over this standard. APTA recognizes that for certain applications, the standards or practices, as implemented by individual rail transit agencies, may be either more or less restrictive than those given in this document.
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1. Threat level awareness

The Homeland Security Advisory System (HSAS) provides a comprehensive and effective means to disseminate information regarding the risk of terrorist acts to federal, state and local authorities and to the American people. This system provides warnings in the form of a set of graduated “threat conditions” that increase as the risk of the threat increases. At each threat condition, federal departments and agencies implement a corresponding set of protective measures to further reduce the risk of a successful attack by reducing the vulnerability or increasing response capability during a period of heightened alert.

The U.S. Coast Guard Maritime Security Level (MARSEC) is a three-tiered security level system aligned closely with the DHS Homeland Security Advisory System. MARSEC levels are designed to easily communicate pre-planned, scalable responses to increased threat levels.

Particular attention should be paid to the HSAS and MARSEC threat levels. These advisories are published on several websites, including [www.dhs.gov](http://www.dhs.gov) and [www.uscg.mil](http://www.uscg.mil). There are multiple levels of predetermined risk. It is recommended that transit agencies have pre-established security inspection protocols dependent on the threat level affecting the agency. These levels are described in **Figure 1**.

**FIGURE 1**
Threat Level Warning Systems

[Image: Threat Level Warning Systems]

Additional information on threat levels and protective measures can be found in “Transit Agency Security and Emergency Management Protective Measures,” published by TSA and FTA.

1.1 Response to change in threat levels

The extent and frequency of an agency’s sweep inspections/procedures should reflect the threat level. A higher threat level should result in increased inspections and more meticulous procedures. It is recommended practice to contact local law enforcement or the U.S. Coast Guard for additional guidelines and to monitor intelligence sharing at the transit level. Various techniques can be employed to improve sweeps and inspections during higher threat levels.

Special events such as large gatherings or community events can increase the risk of criminal activity at a particular location. This heightens the need for increased system security regardless of the HSAS or
MARSEC threat level. See APTA Recommended Practice “Security and Emergency Management Aspects of Special Event Service” for further recommendations.

2. Vehicle security inspection procedures

Those conducting inspections should be trained on proper inspection procedures and what to look for.

2.1 Pre-use inspection

The pre-use inspection should be conducted by the operator or assigned staff. This should include those checks required by law, as well as a prescribed inspection for suspicious objects that may have been left or placed on, under or inside the vehicle. Because not all vehicles are configured in the same manner, each agency should define the particular areas of the vehicles to be inspected. Moreover, since some agencies may not have restricted parking space to store agency vehicles in a locked, secure area that is inaccessible to the public, it is also important to note conditions in the immediate vicinity where the vehicle has been parked.

For road vehicles, the operator or staff should examine the following areas, including but not limited to, the following:

- vehicle exterior
- vehicle interior
- wheel wells, tires and lugs
- engine compartment
- fueling compartment
- any unlocked panel

For rail vehicles, exterior inspection for functionality and foreign objects should include but not be limited to the following:

- brakes (including pneumatics and piping), cables and trucks
- coupling equipment
- high-voltage equipment
- fuel tanks
- liquid filled transformers
- other undercar systems

The operator or staff should also check the functionality of the following:

- communications equipment
- parking brakes
- pantograph controls

Each vehicle’s specific functionality should be tested and/or inspected prior to its use. For example, a tow truck’s crane motor and pulleys should be inspected or tested prior to use.

The operator or staff should examine the following:

- the interior of all vehicle types
- unlocked areas or access panels
- the operator’s compartment
Consideration should be given to inspecting the roof of a vehicle, especially where the vehicle could be parked in an area of increased accessibility to the roof. Since nonrevenue vehicles vary, agencies should develop inspection points dependent on the vehicle. The inspection points readily accessible to the public should be included in the areas to be inspected.

2.2 Layover security inspection/sweep

A layover sweep should be conducted whenever the operator of the vehicle leaves it unattended for any length of time, or at the end of line. When parking a road vehicle, the operator should always ensure that all doors are locked and secured. On the interior of any vehicle, the operator or staff should also check any unlocked storage areas or access panels and the driver’s area.

For road vehicles, the exterior security sweeps should include but not be limited to the following:

- the wheel wells, tires and lugs
- engine compartment
- fueling compartment
- other undercar areas
- any unlocked panel

Exterior sweeps of rail and waterborne vehicles should be conducted when feasible at the end of line or layover locations.

2.3 Post-use inspection

The post-use inspection should be conducted when the vehicle returns to the garage, storage area, maintenance facility, parking area, yard or dock, and should be the last task operators perform prior to departing the vehicle. This should include those checks required by law, specific agency procedures, as well as a prescribed inspection for suspicious objects that may have been left or placed on, under or inside the vehicle. Because not all vehicles are configured in the same manner, each agency should define what areas should be checked.

On the interior of any type of nonrevenue vehicle, the operator or staff should examine the following:

- any unlocked areas
- access panels
- operator’s area
- other compartments holding sensitive documents, uniforms, radios or other communication equipment, etc.

Consideration should be made for inspecting the roof of a vehicle, especially where the vehicle could be parked in an area of increased accessibility to the roof.

For the exterior of road vehicles, the operator or staff inspection should include but not be limited to the following:

- wheel wells, tires and lugs
- engine compartment
- fueling compartment
- any unlocked panel

If the vehicle is large, the operator may have to board the vehicle to complete the exterior security sweep.
For rail vehicles, exterior inspection for functionality and foreign objects should include but not be limited to the following:

- brakes (including pneumatics and piping), cables and trucks
- coupling equipment
- high-voltage equipment
- fuel tanks
- liquid filled transformers

The operator or staff should also check the functionality of communications equipment, parking brakes and pantograph controls, if applicable. If the vehicle is large, then the operator may have to board the vehicle to complete the exterior security sweep.

2.4 K9 sweeps
K9 sweeps are highly effective in detecting explosives. K9 units should have environment-specific training to be familiar with the transit agency’s vehicles and facilities. Agencies should consider pooling resources to share K9 teams in order to fully leverage the existing K9 team resources. K9 teams from multiple sources and with varying capabilities, deployed randomly and unpredictably throughout a system, provide an effective visible deterrent.

3. Techniques to improve sweeps and inspections

- Use tamper-evident seals, locks or other identifiers to detect whether a compartment has been compromised.
- Implement a program of random dispatch and public service announcements to perform sweeps and inspections, and encourage reporting of suspicious behavior.
- Create agency-specific checklists of locations to inspect, executed randomly and unpredictably.
- Coordinate with local law enforcement and TSA to expand or augment the resources available to conduct random security sweeps and inspections and to enhance randomness and unpredictability for the greatest deterrent effect.
- Develop and implement training and certification programs for staff.
- Conduct training drills to test the effectiveness of the sweep plans and procedures.
- Develop and implement an audit program to ensure that the developed plans and procedures are properly implemented.
References
American Public Transportation Association *Recommended Practices.*
- APTA SS-SRM-RP-003-09: “Random Counterterrorism Measures on Transit Systems”
- APTA SS-SRM-RP-011-09: “Recognizing and Responding to Suspicious Unattended Packages, Devices and Baggage”
- APTA SS-SEM-RP-004-08: Security and Emergency Management Aspects of Special Event Service"


Definitions
**Homeland Security Advisory System (HSAS) threat level:** A threat-based, color-coded system used by the U.S. Department of Homeland Security to communicate its determination of risk so that protective measures can be implemented to reduce the likelihood or impact of an attack. The color-coded threat level system is used to communicate with both public safety officials and the public at large.

**K9 team:** K9 is the acronym for “canine” and refers to a dog that is accompanied by a human handler who directs the dog and interprets its signals. For purposes of this document, K9 refers to a dog that has been specially trained to detect explosives or accelerants through scent.

**layover security inspection/sweep:** A sweep conducted whenever the operator of the vehicle leaves it unattended for any length of time.

**nonrevenue vehicle:** A vehicle that assists in maintenance, construction, inspection or other functions that support the operation of the transit system. Nonrevenue vehicles include maritime nonrevenue vessels. They are not intended to transport passengers, but may do so in certain special circumstances such as emergencies and abnormal operating conditions.

**pre-use inspection:** An inspection conducted to ensure that the vehicle is operational and free from defects, tampering, sabotage, or suspicious objects. This inspection normally occurs before the vehicle leaves the garage, storage area, maintenance facility, parking area, yard or dock.

**post-use inspection:** An inspection conducted to ensure that the vehicle is free from defects, tampering, sabotage or suspicious objects upon return to the garage, storage area, maintenance facility, parking area, yard or dock.

**suspicious package:** Any package, parcel, container or other object that is out of place or unusual for that location and cannot be accounted for, or one that becomes suspicious because a threat has been received.

**vehicle sweep:** A broad term for the inspection of a mass transit vehicle. Depending on the type of inspection, a vehicle sweep can be conducted by law enforcement or security staff, including K9 teams. The purpose of the sweep is to inspect the vehicle at pre-determined points to ensure that the vehicle is free from defects, tampering, sabotage or suspicious objects that may be used to injure passengers and employees or disrupt or deny service, or cause damage to surrounding vehicles or facilities.
Abbreviations and acronyms

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<thead>
<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>DHS</td>
<td>Department of Homeland Security</td>
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<tr>
<td>HSAS</td>
<td>Homeland Security Advisory System</td>
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<tr>
<td>K9</td>
<td>canine</td>
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<tr>
<td>MARSEC</td>
<td>Maritime Security (U.S. Coast Guard Maritime Security Level)</td>
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