Hazardous Materials
Transportation Security
Planning
Objectives

• To better understand security threats;
• To detail new security requirements; and
• To provide guidance and resources to assist in developing and adhering to a security plan.
PART I

Understanding the Security Threat
Purpose of Terrorism

• Mass casualties
• Spectacular images
• Economic impact
• Iconic value
• First, second, and third order effects
Who Represents the Threat?
The Human Aspect of Terrorism

- Worldwide activity
  Over 400 groups
  Over 60 countries
  U.S. based groups

- Highly intelligent leadership
  Advanced degrees
  Western education
  Technical expertise

- Highly motivated
  Religious
  Political
A Realistic Look at Terrorism

- Leadership is well educated
- They train and specialize
- They learn well from past successes and defeats
- They know you better than you know them
Steps Used to Carry Out an Attack

• Targeting
• Casing
• Surveillance
• Rehearsal
• Attack
Lessons Learned

• Terrorists are patient and persistent
• They learn from mistakes and successes
• Weapons are not always high-tech
PART II

Specific Requirements of HM-232
Summary of HM-232 Requirements

- Security awareness training
- Security plans
- In-depth security training
Security Awareness Training – 172.704(a)(4)

No later than first recurrent training after March 25, 2003, but in no case later than March 24, 2006

After March 25, 2003, new hazmat employees must receive security awareness training within 90 days after employment
Security Awareness Training Must Include:

• Security risks associated with HM transportation

• Methods designed to enhance HM transportation security

• How to recognize and respond to possible security threats
Hazmat Transportation Security Awareness Training Module on CD-ROM

Meets security awareness training requirement as long as record keeping requirements described in 172.704(d) are followed
Security Plan Requirements – 172.800

- Each person who offers for transportation in commerce or transports in commerce one or more of the HM listed in 172.800(b)(1-7) must develop and implement a security plan.
Required Components of a Security Plan – Part 172.802

- Assessment of possible transportation security threats and appropriate measures to address assessed threats.

- Security plans must include the following elements:
  - Personnel security
  - Unauthorized access
  - En route security
Required Components of a Security Plan (Cont’d)

- Security plans must be in writing
- Copies must be available to employees
- Plans must be revised and updated
- All current copies must be maintained
Security Plans Approved by Other Organizations

- Security plans that conform to regulations or standards issued by other Federal agencies, international organizations, or industry groups may be used to satisfy the HMR requirements.
- Examples may include security requirements imposed by DOD, NRC, UN, IMO, or TSA.
In-depth Security Training – 172.704(a)(5)

Each HM employee of a person required to have a security plan must be trained.
In-depth Security Training Must Include:

- Company security objectives
- Specific security procedures
- Employee responsibilities
- Actions to take in the event of a security breach
- Organizational security structure
Other Training

Training conducted by:

- OSHA
- EPA
- Other Federal or international agencies

may be used to satisfy training requirements in 172.704(a).
Administration

- Recurrent training at least once every three years
- Record of current training must be created and retained
PART III
How to Comply: Suggestions and Guidance
HM Security Planning

Four step process:

• Assess possible security risks
• Develop *performance standards* and identify *security measures*
• Develop and implement a security plan
• Administration and training
Security Threat Assessment Steps

1. Scoping
2. Knowledge of operations
3. Assessment
4. Strategy
5. Action
6. Verification
7. Evaluation

Risk assessment guidance is available on-line at: http://hazmat.dot.gov/rmsef
Step 1. Scoping

- Determine scope of operations that need security risk management
- Characterize your hazmat transportation operations
- Identify industry partners
- Determine vulnerabilities
Step 2. Knowledge of Operations

Collect detailed information about transportation operations
• Quantities of materials transported
• Baseline security programs
• Current security procedures
• Related safety programs
Step 3. Assessment

- Analyze security threats
- Assess baseline programs
- Identify security threat control points
- Assessment may be based on:
  - Impressions of experienced staff, brainstorming, or surveys
  - Formal, rigorous hazard assessment techniques
Step 4. Strategy

• Rank or group security threats (low, medium, or high)
• Prioritize opportunities for security threat reduction
• Decide on preventative or control actions
• Create a written document (security plan) summarizing decisions
Step 5. Action

Implement the written plan you develop

Step 6. Verification

Monitor implementation of your strategy
Step 7. Evaluation

- Determine if goals are being met
- Identify relevant performance indicators
- Compare your strategies and results with others in your field
SUGGESTED MEASURES
Required Elements

At a minimum a security plan must include the following elements:

• Personnel security
• Unauthorized access
• En route security
Personnel Security

• Encourage employees to report suspicious incidents or events
• Implement routine security inspections
• Meet regularly to discuss security measures and improve awareness
• Provide information on security issues
Unauthorized Access

- Partner with local law enforcement and emergency responders
- Request review of facility
- Restrict access to facility activities and procedures
- Add security guards/off-hour patrols as needed
- Improve fencing and lighting
- Limit visitor access
- Require identification badges for staff
Unauthorized Access (Cont’d)

- Improve security procedures for pick-up and deliveries
- Secure hazmat in locked buildings or fenced areas
- Lock vehicles and secure containers when stored at facilities
- Use tamper resistant seals and locks
- Inventory on-site hazmat periodically
- Keep records of security incidents
- Report suspicious activities to local FBI or local law enforcement
En Route Security

- Shippers know your carrier
- Identify preferred routes and alternatives
- Minimize stops
- If hazmat must be stored during transportation, ensure storage facility is secure
En Route Security (Cont’d)

- Consider escorts or guards
- Consider using advanced technologies
- Install tamper-proof seals on valves and package or container openings
- Establish communication system
- Consignees: alert shipper if shipment is late; check carrier’s identity
- Report suspicious activities to local FBI or local law enforcement
Security Plan “Check List”

Are the “threats” adequately defined?
Does the security plan address the “threats”?
Does the security plan define “performance standards”?
Are the security measures site specific?
Are the security measures appropriate to the operation, the threats, and the performance standards they are intended to support?
Are the defined threats, performance standards and their supporting security measures adequate to the operation?
Remember...

- Think prevention
- A security plan is not an emergency plan – it is supposed to reduce the potential as well as mitigate consequences of a security related incident
- Most effective measures don’t always involve high-tech or high-cost solutions
- A security plan is not a “silver bullet”
The Office of Hazardous Materials Safety (OHMS) formulates, issues and reissues Hazardous Materials Regulations (HMR) under the Federal Hazardous Materials Transportation Law. The HMR cover hazardous materials definitions and classifications, hazard communications, shipper and carrier operations, training and security requirements, and packaging and container specifications.

With responsibility for compliance with the HMR, other than those regulations applicable to a single mode of transportation, OHMS places emphasis on packaging manufacturers, vendors and reconditioners, and multimodal shippers of hazardous materials.

OHMS uses risk management principles and security threat assessments to understand, communicate, and reduce dangers inherent in hazardous materials transportation.
How Can Your Reach Us?

Hazardous Materials
INFO-LINE
1-800-HMR49-22
(1-800-467-4922)
Hours of Operation: 9 am – 5 pm EST

- Obtain answers to HMR questions
- Request copies of Federal Register, exemptions or training materials
- Report HMR violations
- Fax on Demand

E-mail: infocntr@rspa.dot.gov
Point of Contact

Barbara Waller
U.S. Department of Transportation
Research and Special Programs Administration
Office of Hazardous Materials Initiatives and Training
Des Plaines, IL
Barbara.Waller@rspa.dot.gov
Phone: (847) 294-8589
Fax: (847) 294-8590