



Transportation
Security
Administration

Security Action Item Training

Highway and Motor Carrier Division

Train-the-Trainer Keynotes

Purpose

- This Train-The-Trainer (TTT) presentation has extra slides to help company or organization trainers prepare themselves to present the SAIT course
- These slides complement the *Instructor's Guide* on the SAIT computer based training (CBT) CD-ROM
- Use the *SAIT Classroom slides* on the CD-ROM for training sessions



Introduction



Transportation
Security
Administration



Train-the-Trainer Keynotes

Course Outline

- Decide on your style, formal or informal
 - State the course is about TSA's SAIs
 - Students will learn about all 23 SAIs
 - Students will learn which SAIs apply to them
 - Introduce yourself, and your background
 - Ask students to introduce themselves, state their position, and reason for attending
 - Go over course outline in brief
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Course Outline

- Introductions
- Course Overview
- Definitions
- General Security
- Personnel Security
- Unauthorized Access
- En Route Security
- Exercise and Review



Train-the-Trainer Keynotes

Definitions

- Introduce definitions and explain in turn.
- Ask trainees for examples as you explain appropriate bullets (e.g. physical/virtual infrastructure)
- Stress critical infrastructure is highway assets not company/business assets



Definitions

- Highway Critical Infrastructure
- Hazardous Material (or HAZMAT)
- Highway Transportation Sector HAZMAT Employee/Employer
- Highway Security Sensitive Materials (HSSMs)



Highway Critical Infrastructure

- Vital Highway Systems and Assets
- Physical or Virtual
- Damage causes debilitating effect on national security, economic security or public health
- Replacement is time-consuming and costly
- All federal, state and local highway systems



Hazardous Materials (HAZMAT)

“[substances] capable of posing an unreasonable risk to health, safety, and property when transported in commerce ... designated as hazardous under the Federal Hazardous Materials Transportation Law. The term includes hazardous substances, hazardous wastes, marine pollutants, elevated temperature materials, and materials designated as hazardous in the Hazardous Materials Table.” 49 CFR 171.8



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HAZMAT Employer/Employee

- HAZMAT employees include drivers, those responsible for documentation, loading and unloading, GPS positioning systems operation, route scheduling and anyone with unescorted access to vehicles or shipment materials





Highway Transportation Sector HAZMAT Employee/Employer

- Employee: Anyone employed by a transportation sector HAZMAT employer who directly affects transportation security of HSSMs
 - Employer: A person or business that employs at least one HAZMAT employee involved in transportation of HSSMs
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Highway Security Sensitive Materials (HSSMs)

Materials which pose a significant risk to national security while being transported in commerce due to potential use of the material in an act of terrorism



Train-the-Trainer Keynotes

HAZMAT Classes review

Class 1 Explosives

1.1 to 1.6

Class 2 Compressed Gases

2.1 Flammable gas

2.2 Non-flammable, non-poisonous

2.3 Poisonous gas

Class 3 Flammable Liquids

Class 4.1 Flammable Solids

Class 4.2 Spontaneously
Combustible

Class 4.3 Dangerous when wet

Class 5 Oxidizers

5.1 Oxidizers

5.2 Organic peroxides

Class 6.1 Poisonous Materials

Class 6.2 Infectious Substances

Class 7 Radioactive

Fissile class I, II and III

Class 8 Corrosive

Acids and bases

Class 9 Miscellaneous

Any material not meeting definition of classes 1-8, but regarded as a risk during transportation

HAZMAT CLASSIFICATION

- Class 1 - Explosives
- Class 2 - Compressed Gases
- Class 3 - Flammable Liquids
- Class 4 - Flammable Solids
- Class 5 - Oxidizers
- Class 6 - Poisonous/Infectious Materials
- Class 7 - Radioactive Materials
- Class 8 - Corrosive
- Class 9 - Miscellaneous



Train-the-Trainer Keynotes

HAZMAT Class examples

- Give some common HAZMAT examples from various classes
 - Class 3 diesel/gasoline
 - Class 8 sulfuric acid
 - Class 2.3 anhydrous ammonia

Ask class to provide some more examples





HSSM Tiers

Two levels of HSSMs as designated by TSA

Tier 1: A HSSM transported by motor vehicle whose potential consequences from an act of terrorism include a highly significant level of adverse effects on human life, environmental damage, transportation system disruption, or economic disruption.



Tier 1 HSSMs

A Tier 1 HSSM includes Class 7 radioactive materials, division 1.1, 1.2, or 1.3 explosives, or materials poisonous or toxic by inhalation, including division 2.3 gases and division 6.1 materials.





Tier 2 HSSMs

Tier 2: HSSMs transported by motor vehicle whose potential consequences from an act of terrorism include a moderately significant level of adverse effects on human life, environmental damage, transportation system disruption, or economic disruption.

- Remainder hazard classes 1-9
 - e.g. 1.4S Explosives
 - Class 3 Flammable liquids
 - Class 8 Corrosives
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Train-the-Trainer Keynotes

HSSM Combinations

- Stress the danger of mixing hazard classes
- Example: Class 3 + Class 5 may equal a Class 1 high explosive (e.g. Oklahoma City bomb)
- Example: 1993 WTC bomb was made of small amounts of different hazardous materials
- Both were delivered by highway in rental vehicles





OKLAHOMA CITY



1993 WTC



Four Categories of HSSM Security Action Items

General Security

Personnel Security

Unauthorized Access

En Route Security





General Security

Train-the-Trainer Keynotes

General Security

- Try to use examples that are relevant to the trainees
- Ask them about their current communication methods/unauthorized access issues
- Have they had any incidents or problems?





General Security SAIs

Motor carriers are required to develop and implement security plans to address security risks related to hazardous material transportation. (49 CFR Part 172, Subpart I)

TSA recommends that employers review their security assessment and determine the security action items which may be appropriate to address their assessed risks.





General Security SAIs

Further guidance on the security planning process is available at:

- FMCSA Guide to Developing an Effective Security Plan
 - www.fmcsa.dot.gov
 - TSA Security Self-Assessment Training
 - www.tsa.gov/highway
- 
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General Security SAIs

- Become aware of Industry Security Practices such as:
 - American Chemistry Council's Responsible Care Program
 - Chlorine Institute's Security Management Plan
 - International Cargo Security Council



Train-the-Trainer Keynotes HAZMAT Association Links

More information available at:

www.americanchemistry.com

www.chlorineinstitute.org

www.cargosecurity.com

www.security-int.com

Also check State and local associations



General Security SAIs

- Wide range of security plans in existence
- Varying consistency from 1-40 pages
- SAIs attempt to standardize plans
- Keep plans relevant and concise yet adequate to meet security needs



General Security SAIs

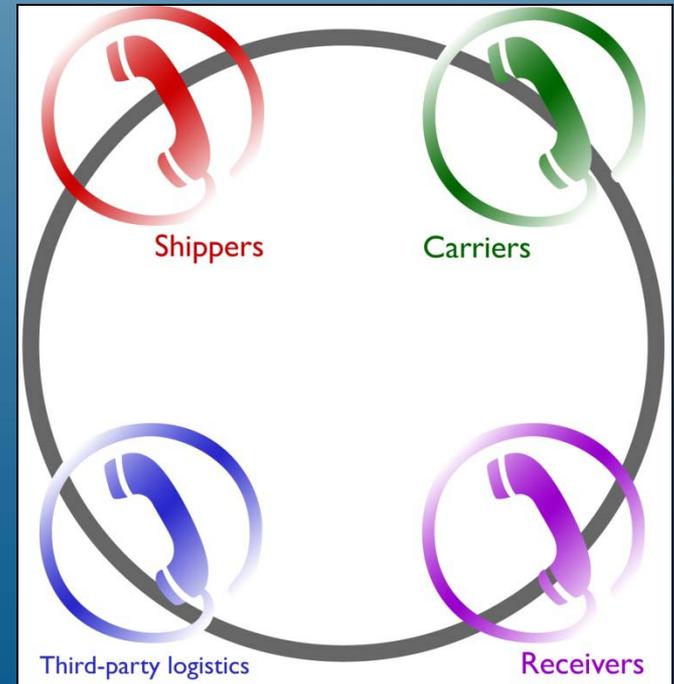
- Implement Accountability Procedures
 - Containers & Cylinders
 - Vehicle
- Inventory Control should include
 - Shipping info
 - Material location and tracking
 - Verification



General Security SAIs

Protect business and security critical information

- Address current communication methods
- Reduce information flow to that which is essential
- Protect from unauthorized access





Personnel Security

Train-the-Trainer Keynotes

Personnel Security

- Be aware you may be talking about issues that trainees already know about
- If a driver is present with HME ask that person to explain briefly the requirement to obtain it
- What background checks are being done already?



Personnel Security SAIs

Drivers must have a valid Commercial Drivers License with a Hazardous Materials Endorsement (CDL with HME) (49 CFR 1570 and 1572)

- Security Threat Assessment already performed
- Driver must maintain CDL and HME status
- Continue to pass background checks

Train-the-Trainer Keynotes

Background Checks

- Provide trainees with Attachment A-1 referred to on CBT and go through it briefly with them
- Federal checks may be purchased via third party organizations
- Use local police department checks





Personnel Security SAIs

Background checks for other HAZMAT personnel

- Applies to all non-CDL with HME staff who have access to vehicles, facilities or information
 - Criminal background check
 - Verify SSN and immigration status
 - Attachment guidance (see handout)
 - Drivers may still need to submit to employer checks
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Train-the-Trainer Keynotes

Security Policies

- Stress the importance of keeping programs and documentation systems simple. It's a lot easier to add later than to cut back on an existing system





Personnel Security SAIs

Security Awareness Training for Employees

- Support hazmat employee security training requirements (49 CFR 172.704)
- TSA-sponsored domain awareness
- TSA HAZMAT Motor Carrier Security Self-Assessment Training program or equivalent

See www.tsa.gov/highway for more info





Personnel Security SAIs

Security Awareness Training for Employees

Employers may establish their own programs to address:

- Restricting access to sensitive information
 - Shipping papers
 - Dates and destinations
 - Routes
 - Recognizing suspicious activities
 - Vulnerability recognition and resolution
 - Notification procedures
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Unauthorized Access

Train-the-Trainer Keynotes

Unauthorized Access - IDs

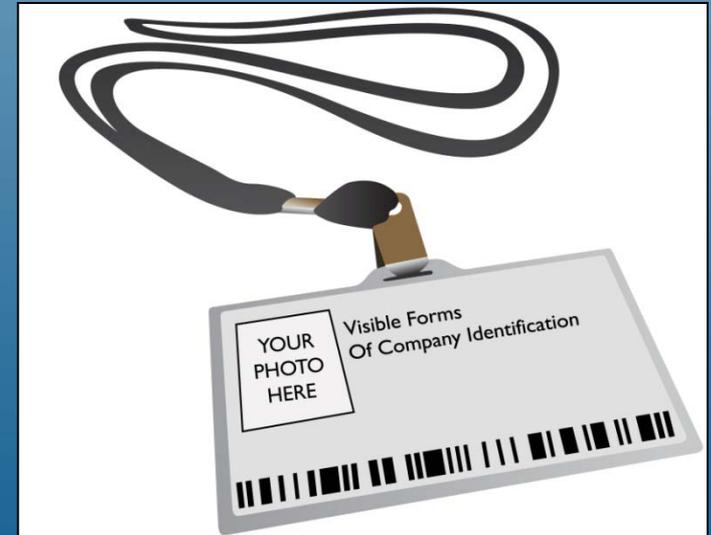
- Stress the need for continual ID checking
- Pass round an of an out-of-date ID card belonging to the instructor. Do the trainees spot it even though the photo is accurate?
- Always back up slides with personal stories, examples, additional photos or handouts



Unauthorized Access SAIs

Access Control System for Drivers

- Photo ID or similar
- Key cards
- Fingerprint scanners
- Use to gain access to restricted areas
- Allows other personnel to verify driver identity



Train-the-Trainer Keynotes

Unauthorized Access

- Instructor can collect and collate different images of available technologies
- Another opportunity for examples. Have trainees know of situations where they or others have had access issues
- Explain problems of reliance – need a back up plan (phone communication etc)



Unauthorized Access SAIs

Access Control System for Incidental Transport Facilities

Employers should implement an access control system that includes issuing company photo IDs or other visible forms of employee identification to all employees, vendors, contractors, and visitors who require unescorted access to restricted areas on a permanent or temporary basis, as appropriate.



Unauthorized Access SAIs

Access Control System for Incidental Transport Facilities

System should control access to restricted areas:

- Plants
- Data centers and IT systems
- Loading and unloading facilities
- Storage facilities
- Other designated critical areas

Should be worn at all times















ATTENTION

**GUARD DOGS
ON PREMISES**

NO TRESPASSING



Train-the-Trainer Keynotes Summary and Break

- This about the halfway point
- Briefly review what you've covered then offer class a short break.





En Route Security

Train-the-Trainer Keynotes

En Route Intro & Examples

- Stress that HAZMAT en route is far less secure than in a depot or facility
- Away from physical defenses (locked warehouse/compound) and traveling at speed
- Prepare for and use examples – 1993 WTC attack, 1995 Oklahoma City, 2001 California State Capitol





1993 World
Trade Center
Bombing



1995
Oklahoma City
Bombing





2001 California State Capitol Attack

Train-the-Trainer Keynotes

Security Plans

- Talk about plans
- Stress need for concise plans with straightforward procedure
- The more complex the plan, the more likely problems with implementation will occur
- How do you communicate plan updates?



En Route Security SAIs

Establish Communication Plan

A communication plan should be established to include standard operating procedures (SOP) for communications between drivers, appropriate company personnel, and emergency services agencies.



En Route Security SAIs

Establish Appropriate Vehicle Security Program



Train-the-Trainer Keynotes

Discuss Securement Methods

- Discuss existing methods used by trainees
- Are existing secondary systems actually being used?



En Route Security SAIs

Establish Appropriate Vehicle Security Program

Secure ALL unattended vehicles with primary and secondary securement systems

Primary Systems:

- All vehicles should be lockable
- Adopt a written security policy that includes:
 - Key control program
 - Ensure vehicle is turned off, keys removed, windows closed and doors locked when unattended

En Route Security SAIs

Establish Appropriate Vehicle Security Program

Secondary Systems:

- Steering wheel locking system
- Air brake locking system
- Wheel locks
- Other appropriate lockout control

Drivers take a leading role in this SAI



En Route Security SAIs

Establish Appropriate Cargo Security Program to Prevent Theft or Sabotage of Cargo

Primary methods

- Capability to be locked
- Written security policy

Secondary methods

- Glad hand locks
- King pin locks
- Wheel locks











En Route Security SAIs

Implement a Seal/Lock Program to Prevent Theft or Sabotage of Cargo

- Tier 1 HSSMs: High security locks or electronic seals
- Tier 2 HSSMs: Tamper evident seals

“Users Guide on Security Seals for Domestic Cargo”
(January 2007) highwaysecurity@dhs.gov

Always check seals when returning to vehicle



Tamper-evident and electronic seal examples







En Route Security SAIs

High Alert Level Protocols

Current level can be found on
DHS homepage:

www.dhs.gov



En Route Security SAIs

High Alert Level Protocols

Employers should establish policies governing operations during periods of increased threat conditions under the Homeland Security Advisory System (for example when Threat Condition is raised from Orange to Red). These protocols should be capable of being implemented when deemed appropriate by an employer or appropriate law enforcement or homeland security officials.



En Route Security SAIs

High Alert Level Protocols

Alternatives to routine conditions include:

- Identify safe refuge locations
- Arrange potential security escorts for shipments over 200 miles
- Establish communication procedures with law enforcement and industry partners

Personnel should know Advisory System and written procedures



En Route Security SAIs

High Alert Level Protocols

Incorporate actions required at each threat level e.g.

- Orange: Increase driver communication
- Red: Return to base or seek pre-arranged safe refuge

Does increased alert apply to specific industry or region?

Incorporate local/regional response protocols in security plan



En Route Security SAIs

Establish Security Inspection Policy and Procedures

Policy required for drivers to perform inspections:

- Inspect at start of shift and after every stop
- Inspect after each time vehicle is left unattended
- Check all areas where a suspicious item could be placed
- Recognize suspicious items and know how to report and respond



Train-the-Trainer Keynotes

Security Inspections

- A safety inspection is mandatory (49 CFR 392.9)
- Drivers may efficiently incorporate security inspection with safety inspection
- Drivers need to identify:
 - What is suspicious
 - Where it is located
 - Appropriate response technique



En Route Security SAIs

Establish Security Inspection Policy and Procedures

What to check:

- Panel compartments
- Fuel tanks
- Engine compartment
- Space between truck and trailer
- Wheels and wheel wells
- Truck/trailer chassis and frame
- Truck/trailer doors and locks
- Other areas as appropriate (e.g. tankers/hose tubes)



En Route Security SAIs

Establish Reporting Policy and Procedures

Procedure required for drivers and non-drivers when reporting suspicious incidents, threats, or concerns regarding transportation facilities or company vehicles:

- Company points of contact
- Law enforcement agencies contact information
- Emergency response phone numbers

Follow procedure consistently and know that minor issues may be significant



Train-the-Trainer Keynotes

Tier 1 vs. Tier 2 HSSMs

- See if trainees remember difference between Tier 1 and Tier 2 HSSM
- Stress that many of the following SAIs are recommended for Tier 1, but may of course be used for Tier 2 if desired



En Route Security SAIs

Shipment Pre-Planning, Advance Notice of Arrival and Receipt Confirmation Procedures with Receiving Facility (Tier 1 only)

Pre-planning required by consignor (shipper), motor carrier and consignee (receiver) to ensure shipments are not released to the motor carrier until they can be transported to destination with the least public exposure and minimal delay in transit



En Route Security SAIs

Shipment Pre-Planning...etc.

Shipment planning should address:

- Establishing an agreed ETA
- Load specifics (shipping paper info)
- Driver identification

When in transit the motor carrier must communicate any delays or potential changes to the ETA

Consignee (receiver) should notify consignor (shipper) upon safe arrival of shipment

En Route Security SAIs

Shipment Pre-Planning...etc.

Methods for planned shipment notification:

- E-mail or fax
- Voice communication

Methods for communicating immediate alerts (failure of vehicle to arrive, material shortage etc.)

- Voice communication only and must be immediate

Consignor/consignee should agree on receipt procedure for out-of hours delivery or unmanned facilities

En Route Security SAIs

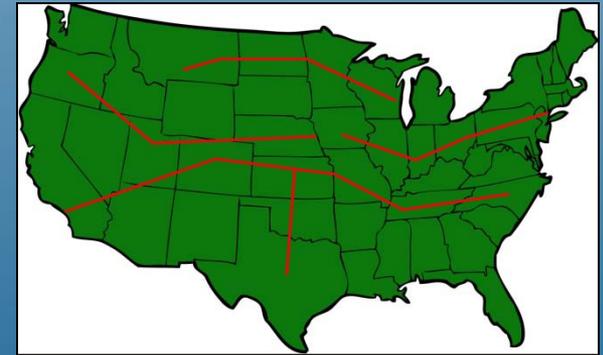
Pre-Planning Routes (Tier 1 only)

Make sure primary route is established and an alternative prior to departure

Avoid or minimize population centers and critical infrastructure (bridges, tunnels)

Plan alternate routes for Red or Orange Advisory System Levels

Drivers should notify dispatch when significant deviations are made



En Route Security SAIs

Security for Trips Exceeding Driving Time Under the Hours of Service of Drivers Regulation (Tier 1 only)

Examine security in light of service hours available

Mitigate vulnerabilities associated with extended rest stops and consider:

- Constant vehicle attendance
- Visual observation
- Driver teams
- Vetted companions
- Arrangement of secure rest locations on route



En Route Security SAIs

Dedicated Truck (Tier 1 only)

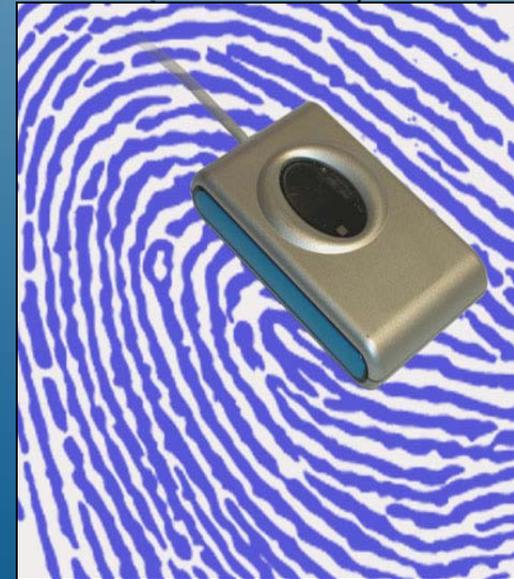
Employers should implement policies to ensure that, except under emergency circumstances, contracted shipments remain with the primary carrier and are not subcontracted, driver/team substitutions are not made, and transferring does not occur unless the subcontractor has been confirmed to comply with applicable federal safety and security guidance and regulations and company security policies.



En Route Security SAIs

Tractor Activation Capability (Tier 1 only)

Employers should implement security measures that require driver identification by login and password or biometric data to drive the tractor. Companies should provide written policies and instructions to drivers explaining the activation process.



En Route Security SAIs

Panic Button Capability (Tier 1 only)

Employers should implement means for a driver to transmit an emergency alert notification to dispatch. “Panic Button” technology enables a driver to:

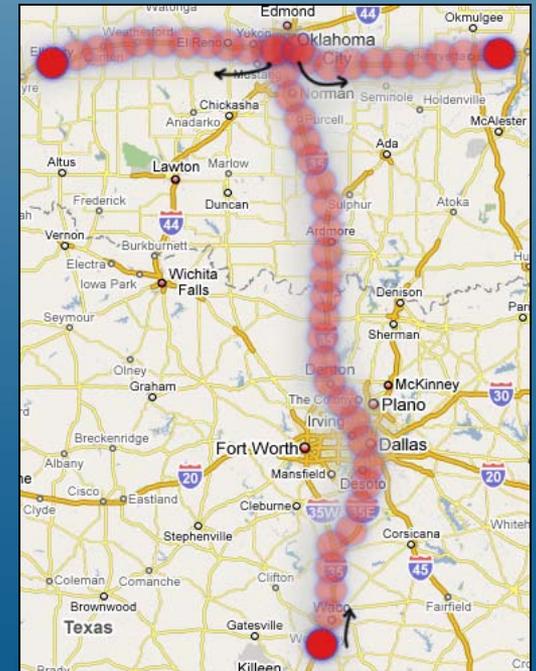
- Remotely send an emergency alert notification message
- Utilize the remote Panic Button to disable the vehicle.



En Route Security SAIs

Tractor and Trailer Tracking Systems (Tier 1 only)

Employers should have the ability of implementing methods of tracking the tractor and trailer throughout the intended route with satellite and/or land-based wireless GPS communications systems



En Route Security SAIs

Tractor and Trailer Tracking Systems (Tier 1 only)

Systems should be implemented to provide:

- Position tracking by longitude and latitude
- Geofencing and route monitoring capabilities
- Auto-Alert notifications for route deviations
- Remote monitoring of trailer “connect-disconnect” events
- Tractor/trailer polling to provide position and status report

En Route Security SAIs

Tractor and Trailer Tracking Systems (Tier 1 only)

Additional requirements:

- Position reporting frequency should be no more than 15 min. interval (max.)
- Trailer position reporting needs to be configured to provide regular polling during unauthorized disconnects
- Tracking system should be tested periodically and the results recorded

Train-the-Trainer Keynotes

En Route Review & HAZCO Introduction

- Review this section and offer question time
- Load the HAZCO exercise and go through it on screen. Let the trainees make decisions though. Try and encourage the wrong options and see if they steer you in right direction



Summary and Review

- Definitions
- General Security
- Personnel Security
- Unauthorized Access
- En Route Security
- My Role in HAZMAT Security



My Role in HAZMAT Security

CD-ROM
HAZCO Exercise



Train-the-Trainer Keynotes

Course Review and Final Review

- Briefly review all topics and invite questions
- Explain final review procedure and certificates



Final Review

- The SAIT review is not pass/fail
- The review is anonymous
- It is a tool to provide TSA with feedback on training effectiveness
 - Do the learners retain the information?
 - Are there any problem areas that need work?

